

Planning and Zoning Commission - Staff Report Obendorf - RZ2022-0007

Development Services Department

Findings of Fact, Conclusions of Law, and Order

Conditional Rezone - RZ2022-0007

Findings of Fact

- 1. The applicants, Gregory & Ann Obendorf, represented by Curtis Crystal, are requesting a conditional rezone of a 12.6-acre portion of parcel R32686 from an "A" (Agricultural) zone to a "CR-C-2" (Conditional Rezone Service Commercial) zone. The request includes a development agreement (Attachment A). The 40.4-acre property is located on the northeast corner of Farmway Road and Karcher Road, Caldwell; also referenced as a portion of the SW¼ of Section 09, Township 3N, Range 3W; BM; Canyon County, Idaho.
- 2. The subject property is designated as "Commercial" in the Future Land Use plan within the 2020 Canyon County Comprehensive Plan.
- 3. The subject property is located within the Caldwell Area of City Impact.
- 4. The subject property is located within the Canyon Highway District #4, Caldwell Rural Fire District, Valley View School District and the Boise Project Board of Control Irrigation District.
- 5. A neighborhood meeting was conducted on April 5, 2021 in accordance with CCZO Section 07-01-15.
- 6. Notice of the public hearing was provided in accordance with CCZO \$07-05-01. Affected agencies were noticed on April 26, 2022. Newspaper notice was published on June 29, 2022. Property owners within 600' were notified by mail on July 1, 2022. Full political notice was provided on April 26, 2022. The property was posted on July 11, 2022.
- 7. The record includes all testimony, the staff report, exhibits, and documents in Case File RZ2022-0007.

Conclusions of Law

For this request, the Planning and Zoning Commission finds and concludes the following regarding the Standards of Review for a Conditional Rezone (CCZO §07-06-07(6)):

A. Is the proposed conditional rezone generally consistent with the comprehensive plan?

Conclusion: The proposed conditional rezone is <u>not</u> consistent with the comprehensive plan.

Finding:

Although the subject parcel is designated at "commercial" in the Future Land use map within the Canyon County Comprehensive Plan, the request is not in general compliance with the following goals, policies and implementation actions of the 2020 Canyon County Comprehensive Plan:

- Economic Policy No. 1: "Canyon County should encourage the continued use of agricultural lands, land uses, and recognize the economic benefits they provide to the County."
- Economic Policy No. 7: "Canyon County should identify areas of the county suitable for commercial, industrial and residential development. New development should be located in close proximity to existing infrastructure and areas where agricultural uses are not diminished."
- Agricultural Policy #1: "Preserve agricultural lands and zoning classifications."

- Agricultural Policy #3: "Protect agricultural operations and facilities from land use conflicts or undue interference created by existing or proposed residential, commercial or industrial development."
- Natural Resources Policy #3: "Protect agricultural activities from land use conflicts or undue inference created by existing or proposed residential, commercial or industrial development."

B. When considering the surrounding land uses, is the proposed conditional rezone more appropriate than the current zoning designation?

Conclusion:

The proposed zone change is not more appropriate that the current zone.

Finding:

The subject parcel is actively farmed and located to the west, east and north east to other large agricultural properties. The property consists of 40 acres of moderately-suited soils which is considered prime farmland if irrigated. The Planning and Zoning Commission finds that the request is premature and should waiting until Caldwell city services are available to support the commercial development and the widening of SH-55 is completed. The City of Caldwell also requests the future commercial development be support by city services (City of Caldwell letter dated May 3, 2022).

C. Is the proposed conditional rezone compatible with surrounding land uses?

Conclusion:

The proposed use is compatible with the surrounding land uses.

Finding:

Directly across Highway 55, on parcel R32900216, is a mini-storage facility that operates under a conditional use permit, this parcel is zoned "C-1" (Neighborhood Commercial). To the south west of the subject parcel are several parcels that are zoned "CR-C-2" (Conditional Rezone-Service Commercial) and "CR-C-1" (Conditional Rezone-Neighborhood Commercial) and "C-1" (Neighborhood Commercial).

D. Will the proposed conditional rezone negatively affect the character of the area? What measures will be implemented to mitigate impacts?

Conclusion: As conditioned by the development agreement, the proposed use will not negatively affect the character of the area.

Finding:

The Canyon County Comprehensive Plan 2020 Future Land Use Map designates the subject property as commercial. The request is located within the Caldwell Area of City Impact and the land use is designated as Highway Corridor the purpose of which is to "identify key areas along a highway corridor that are highly visible and transitional in nature. This category includes land that is suitable for a blend of highway oriented commercial uses, business parks, limited light industrial, educational, office and high density residential"

As conditioned by the development agreement (Attachment A), the rezone only impacts 12.6 acre of a 40-acre parcels, retaining approximately 27 acres in agricultural uses. The agreement restricts the development to the first two phases which requires conditions regarding traffic improvements and reviews and complying with City of Caldwell requirements. The result allows commercial uses within the designated area incrementally with conditions that address traffic, services and operational concerns.

E. Will adequate facilities and services including sewer, water, drainage, irrigation and utilities be provided to accommodate the proposed conditional rezone?

Conclusion: Adequate sewer, drainage, and storm water retention facilities and utility systems will be provided to accommodate the proposed use at the time of development.

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Finding: The following adequate facilities can be provided and demonstrated at the time of development:

- Wells/Septic Systems: The property is located within the Caldwell Area of City Impact.
 City services are not available to the subject parcel at this time. Therefore, the gas
 station with convenience store and seasonal farmer's market will be required to meet
 IDWR, DEQ and SWDH requirements.
- Irrigation and Drainage: The property is located within the Boise Project Board of Control Irrigation District and has a valid water right. Future development will be required to provide irrigation water to all landscaping and retain stormwater on-site.
- F. Does legal access to the subject property for the conditional rezone exist or will it exist at the time of development?

Conclusion: Legal access to the property does exist.

Finding:

Finding: Legal access will be granted via a single point driveway on Farmway Road and another single point driveway on Highway 55.

G. Does the proposed conditional rezone require road improvements to provide adequate access to and from the subject property to minimize undue interference with existing or future traffic patterns created by the proposed development? What measures have been taken to mitigate road improvements or traffic impacts?

Conclusion: The rezone of the subject property will require improvements to prevent undue interference with existing or future traffic patterns as proposed.

The applicant commissioned a Traffic Impact Study (TIS) by TO Engineers which was completed in November, 2021. The proposed development is expected to generate a total of 1,770 net-new daily trips. Based upon the analysis contained within the TIS the following recommendations were provided:

- Access: Access to the property shall be located a minimum of 660' from the intersection of Karcher Road and Farmway Road.
- Farmway Road at Driveway A: Per standards outlined in the *ITD Traffic Manual* a northbound right-turn lane should be constructed concurrently with Driveway A which will provide full access with no turning restrictions.
- <u>State Highway 55 at Driveway B:</u> Per standards outlined in the *ITD Traffic Manual* a westbound turn lane should be constructed concurrently with Driveway B which will provide right-in, right-out access only.

Canyon Highway District #4 commented on the request and TIS. The comment letter does not oppose the request subject to conditions of approval which include a final traffic study addressing the full buildout, improvements to Farmway frontage per Transportation Impacts and Frontage Improvements section of the TIS, Driveway approach location, connection plan directly across from Drake Lane, and dedication. The letter is included as a condition of the development agreement.

Upon review of the staff report and considering all testimony at the August 4, 2022, the Planning and Zoning Commission finds the TIS does not address the cumulative impacts to traffic in the area. No comments were received from ITD (Idaho Transportation Department) regarding their review of the TIS. The request is found to be premature and impacts would be better addressed after SH-55 widening.

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H. Will the proposed conditional rezone impact essential public services and facilities, such as schools, police, fire and emergency medical services? What measures will be implemented to mitigate impacts?

Conclusion: Essential services will be provided to accommodate the use. No mitigation is proposed at

this time.

Finding: Staff has not found that the proposed use will require additional public funding to meet the

needs created by the requested use and police, fire, and emergency medical services will be provided to the property. As a condition of the development agreement, City of Caldwell requires the development to comply with applicable Caldwell Fire Department requirements and standards. All affected essential services were notified on April 26,

2022. No comments were received.

Conclusions of Law - Area of City Impact

The property is within the Caldwell Area of City Impact. The city designates the area as "Highway Corridor".

Pursuant to Canyon County Code §09-01-21 – Zoning Ordinance Amendment Proposals within the Caldwell Area of City Impact Agreement, a notice was provided to the City of Caldwell on April 26, 2022. A comment letter was received from the City of Caldwell identifying the request is consistent with their comprehensive plan subject to the following:

- Development meets applicable regulations within Caldwell's Landscaping Ordinance;
- Development connect to city services (water and sewer); and
- Development meet Caldwell Fire comments and conditions.

As conditioned by the development agreement (Attachment A), the request shall comply with Caldwell's landscaping requirements and Fire District Conditions. The agreement requires the developer to connect to city services prior to Phase 3. The applicant shall work with the City of Caldwell on a preannexation/services connection deferral agreement.

Order

Based upon the Findings of Fact, Conclusions of Law and Order contained herein, the Planning and Zoning Commission **recommends denial** of Case #RZ2022-0007, a conditional rezone of parcel R32686 from an "A" zone (Agricultural) to an "CR-C-2" zone (Conditional Rezone – Service Commercial).

| DENIED this /8 day of Av | <u>6057</u> , 2022. |
|---|---|
| BONNIE C PULEO COMMISSION #20215954 NOTARY PUBLIC STATE OF IDAHO MY COMMISSION EXPIRES 12/10/2027 | PLANNING AND ZONING COMMISSION CANYON COUNTY, IDAHO Robert Sturgill, Chairman |
| State of Idaho) | SS |
| County of Canyon County) | |
| On this 18th day of August personally appeared Robert Stur | , in the year 2022, before me Bonne Ruleo , a notary public, gill , personally known to me to be the person whose name is subscribed |
| to the within instrument, and acknowledged to r | |
| | My Commission Expires: 12/10/2027 |

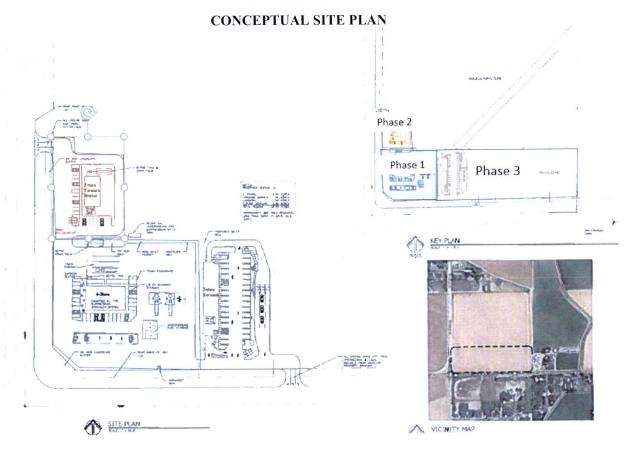
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ATTACHMENT A

DRAFT CONDITIONS OF APPROVAL

- 1. Development shall only occur within the 12.6 acres shown in the conceptual site plan (Attachment B) on Parcel R32686 zoned "CR-C-2". The remaining acreage shall remain zoned "A" (Agricultural).
- 2. <u>Prior to commencement of use</u>, development shall comply with all applicable federal, state, and county laws, ordinances, rules, and regulations and is subject to the following restrictions:
 - a. The development shall be phased in substantial compliance with the conceptual site plan (Attachment B) as follows:
 - i. Phase one shall consist of a fueling station to include 12 passenger vehicle pumps and 4 diesel pumps for commercial vehicles and, a 6,000 sq. foot convenience store with second floor caretaker residence.
 - ii. Phase two shall consist of a 3,000 square foot farmers market and is to include a paved parking lot.
 - iii. Phase three, consisting of a 7,000 square foot carwash and commercial development, shall not occur until such time as Caldwell has extended public utilities to the site.
 - b. The development shall comply with the following City of Caldwell requirements:
 - i. Development shall comply with City Landscaping Ordinance;
 - ii. The development shall comply with applicable Caldwell Fire Department requirements and standards as stated in Caldwell's letter dated May 3, 2022 (Exhibit 5a of the staff report); and
 - iii. A pre-annexation agreement/city services deferral agreement shall be completed by the development and the City of Caldwell.
 - c. A Final Traffic Study is required and is subject to review and acceptance by Canyon Highway District 4, City of Caldwell Engineering and Idaho Transportation Department. All improvements of the study shall be complied with unless other alternative measures are identified by the above agencies. Development shall comply with the following:
 - i. Requirements and conditions stated in the Canyon Highway District #4 letter dated July 14, 2022 (Exhibit 5c) of the staff report.
- 3. The developer shall comply with CCZO §07-06-07 (4): Time Requirements: "All conditional rezones for a land-use shall commence within two (2) years of the approval of the board."

ATTACHMENT B





CANYON COUNTY PLANNING & ZONING COMMISSION MINUTES OF REGULAR MEETING HELD Thursday, August 4, 2022 6:30 P.M.

1ST FLOOR PUBLIC MEETING ROOM SUITE 130, CANYON COUNTY ADMINISTRATION BUILDING

Commissioners Present:

Robert Sturgill, Chairman

Patrick Williamson, Vice Chairman Brian Sheets, Commissioner Ron Amarel, Commissioner Miguel Villafana, Commissioner

Staff Members Present:

Dan Lister, Planning Official

Elizabeth Allen, Planner

Bonnie Puleo, Recording Secretary

Chairman Robert Sturgill, called the meeting to order at 6:30 p.m.

Commissioner Sheets, read the testimony guidelines and proceeded to the business item on the agenda.

Chairman Sturgill asked if there were any changes to the agenda. Planner Elizabeth Allen said the applicant for case number SD2021-0034, Lago Vista Estates Subdivision, had requested to table their item until a date certain of October 20, 2022 to allow their attorney, Borton-Lakey Law, time to review the staff report and staff's recommendation of denial and termination of the development agreement. Planner Elizabeth Allen described the timeline in which they received the staff report and what the denial/termination of the development agreement entails.

MOTION: No motion to table the item. Case number SD2021-0034 will be heard on the night's agenda.

➤ Case No. RZ2022-0007/Greg & Ann Obendorf: The applicant, Curtis Crystal, representing Gregory & Ann Obendorf, is requesting a zoning map amendment (rezone) of a 12.6-acre portion of parcel R32686 from an "A" (Agricultural) zone to a "C-2" (Service Commercial) zone. The 40.4-acre property is located on the northeast corner of Farmway Road and Karcher Road, Caldwell; also referenced as a portion of the SW¼ of Section 09, Township 3N, Range 3W; BM; Canyon County, Idaho.

Planner Dan Lister, reviewed the Staff report for the record including late exhibits.

Chairman Robert Sturgill entered the late exhibits into the record and affirmed the witnesses to testify.

Testimony:

Curtis Crystal - Applicant (Representative) - IN FAVOR - 2301 Parkside Dr. Boise ID

Mr. Crystal agrees with staff's report and the conditions of approval. In answer to a Commissioner's question, he doesn't know what they are going to do with the remaining 10-plus acre water rights

associated with the property. He said he assumed they will use it for the remaining farmland. He also said for the indefinite future, the rest of the land will be used for farmland. They have plans for the petroleum-based storage tanks and have worked with Southwest District Health for plans on the fuel containment. It is a very strenuous, regulated process. Southwest District Health deferred a lot of that to the Department of Environmental Quality who was concerned about location of the water well in relation to the septic system. They would look at the food service portion when they apply for their building permit. The tanks in the ground are double-lined tanks with sensors active all the time and they will be checked monthly with additional annual tests. Mr. Crystal discussed the filters, drains and secondary containment chamber that would be put in place and which would be emptied periodically. The applicants, the Obendorfs, are farmers and they thought this (rezone) would be a good opportunity. Mr. Crystal said Southwest District Health had no concerns about the proximity of this development to Lake Lowell.

Patrick Colwell – IN FAVOR – 323 Broadmore Way Nampa ID 83677

Mr. Colwell said that Southwest District Health accepted their proposed septic system (in concept) and the Department of Environmental Quality accepted the well design and issued a permit. He said they have submitted traffic impact studies which were approved by Idaho Department of Transportation and Canyon Highway District #4. Access permits have been submitted and conceptually approved by the two agencies also. The access will be designed per Canyon Highway District #4 requirements and their plan meets all the requirements of the Highway 55 access plan. He said Idaho Department of Transportation has the ultimate authority on access and can put any requirements on the project they think are necessary. All stormwater would be retained on site. He said the remaining water rights will probably be retained by the owners as they have thousands of acres of agricultural ground in the valley and they will probably find a place to use them. He said the access point of the property is outside the widening plan of Highway 55.

John Kernkamp - IN OPPOSITION - 15635 Riverside Rd. Caldwell ID

Mr. Kernkamp lives about a ¼ of a mile south from the intersection of Karcher and Riverside. He said a gas station and convenience store is already there; it's off Karcher Road so people using it aren't trying to get on and off Karcher Road. It doesn't have the same impact on the ambience of Karcher Road because it is off the road. He said having a new station right on the road is the beginning of urban sprawl. The intersection of Karcher and Farmway is already very busy because long haul semi's try to take a short cut from Simplot to the highway. There is a huge amount of semi (truck) traffic on that road already. He has lived there ten years and now, semi's use their engine brakes at all hours of the night and he can't sleep with his windows open during summer because of it. He is amazed at the number of additional car trips quoted. It is one vehicle trip per minute, and it will really impact the quality of life in that area and not in a good way. He felt there was a lot of undefined possibilities for the use of this property.

Cheyne Weston - IN OPPOSITION - 16316 Orchard Ave. Caldwell ID 83607

Mr. Weston said long ago, these meeting used to start off with a public needs statement saying why the project is needed. He said there is a problem when you don't state the need for a gas station like this. There are already lots of gas stations around. He doesn't see where there is a need to begin with and most of the people who use this will be non-local. Mr. Weston said he is concerned about Caldwell's Dark Sky ordinance. Truck stops are generally well lit and the lights will obliterate the view of Bogus Basin. That disrupts the quality of life for him and his neighbors. He also has groundwater concerns. Lake Lowell is only a half mile away and any breach in the tanks will send adverse water conditions to the Lake. He is on the Board of Caldwell Parks and he said they want sidewalks along that stretch. He wants them to use city sewer or water; he thinks all phases should use city sewer and water when you come out this far. He feels this project is premature until Idaho Department of Transportation's project gets done.

Andrew Haumesser - IN OPPOSITION - 15981 Lunar Way Caldwell ID 83607

Mr. Haumesser lives less than half a mile south from this intersection. He wanted to talk about the need or the lack thereof for this project. He asked how convenient do convenience stores really need to be? They already have one 7/10's of a mile from this intersection with four more going into Caldwell. He said we need this like a hole in the head, especially when there is going to be one across the road on the other corner. He was a certified, professional geologist and part of his job was to remove buried fuel tanks. Mr. Haumesser said 75% of the tanks he removed were leaking and it was the plumbing going up to the pumps that leaked, not the tank itself. This project location is on the aquifer with several thousands of people using it for drinking water. It affects every irrigation well in the area and could affect Lake Lowell with pollution. He felt if they approve this project, one of the conditions should be the hours of operation: what is to prevent them from going to 24 hour-a-day operations in the future? That should be a restriction. He said they should be connected to city services and pointed out the letter from the City of Caldwell states the new development should be connected to city services such as sewer and water. He said no one has discussed how many gallons of fuel will be stored here.

Mike Gann - IN OPPOSITION - 15951 Malt Road Caldwell ID 83607

Mr. Gann lives on the corner of Malt Road and Highway 55. The prior testimony has expressed his concerns on traffic, traffic safety, environmental impacts, groundwater.

<u>Deborah Haumesser – IN OPPOSITION – 15981 Lunar Way Caldwell ID 83607</u>

Ms. Haumesser was part of the opposition to the development on adjacent land known as Karcher Farms. She believes they should have to do a traffic impact study and it needs to be done during peak hours: the photos presented are not the way traffic looks during peak hours. Prior to the Karcher Farms development approval, she counted 167 vehicles coming past her back patio in one hour. Because of the noise from the semi-trucks and double dump trucks, she can't sit on her patio anymore and have conversations. Ms. Haumesser said they wear earplugs at night to sleep because, beginning at 5:00 am in the morning, the traffic is very loud. They never have their windows open any more. It is a quality of life issue: they moved out to the area because of the cows and farmland. To have two adjacent fuel stations on those two corners; this is going to add another 1770 vehicle to that intersection each day. That is not good for their quality of life. She loves the blue sky and the fresh air. She said her home is no longer a quiet place in the county.

Curtis Crystal - Applicant (Representative) - REBUTTAL - 2301 Parkside Dr. Boise ID

Mr. Crystal said with regards to lighting, they are always conscious of making sure down lighting is a high priority. There will be improvements on Farmway with sidewalks, landscaping and pathways put in at the appropriate time. The intent of a convenience store is to provide food, products and services within walking distance of local neighborhoods. He has been out to the property a couple of times. He agrees with the owners of the property that there is a need there. He said they will be storing about 40,000 gallons of fuel and would agree to a permanent limit on the hours of operation.

MOTION: Commissioner Sheets moved to close public testimony on Case RZ2022-0007 seconded by Commissioner Amarel. Voice vote, motion carried.

DELIBERATION:

Commissioner Villafana questioned the number of one-way trips; would that be adding that number of trips or is that the amount traffic that flows through that area now? Staff was unable to answer. Commissioner Villafana said he hates to see the loss of farmland but he has seen tractors working up to the edge of Highway 55 and he thinks that is dangerous because traffic moves so fast. He thinks there is a need for a gas station because every time he drives down Karcher, all the gas stations are full. He

thinks the farmer's market is a nice idea. He is torn because he hates to see the loss of farmland but he but he thinks they do have a good plan. There is going to be a larger population in the area because of a development that is coming close to this parcel. He reiterated that he feels it is a good plan. Commissioner Sheets thinks this is a facility that is best suited within the city and cities are better equipped to handle these types of things. In that case, they would be using city services and applying city landscaping and lighting ordinances. He feels this development is better handled in a city jurisdiction rather than a county jurisdiction. He also said the Idaho Transportation Department information is critical to this: not having any information about what they think about it (is a concern). You can do a farmer's market on agricultural land; it's an allowed use. He doesn't think this intensive use is appropriate and he won't be able to support it. Commissioner Williamson said if city services were there it would make more sense to him. Sidewalks next to Highway 55 is an incredibly dangerous idea because of how fast the cars are moving. There are a lot of trucks on Farmway also and Idaho Transportation Department doesn't seem to be aware of that. He believes cities would handle this type of project better. He would feel better if they were bringing city services down to the property. Commissioner Williamson also believes this will cause a cascade of development although having two gas stations across from each other would be good because it will create competition and lower gas prices. As it stands right now, he is in favor of a farmer's market but the other two portions, he can't support. Commissioner Amarel said the 1770 trips are because it is a convenience store. He believes this is a better fit for a city environment.

MOTION: Commissioner Sheets moved to deny Case RZ2022-0007 including revising the Findings of Facts, Conclusions of Law and conditions of approval and bring them back to the next hearing, forwarding the recommendation to the Board of Canyon County Commissioners. Motion seconded by Commissioner Williamson. Roll call vote 3 in favor, 2 opposed, motion passed.

Case No. ZV2022-0004/RLM Investments: Ryan Myhre, representing RLM Investments I, LLC, is requesting a Variance of 4.4 feet and 16.9 feet to the front setback requirement of 30 feet within an "A" (Agricultural) Zoning District. The subject property is located at 10586 Lake Shore Dr, Nampa (R29612), also referenced as a portion of the NW ¼ of Section 17, Township 2N, Range 2W; BM; Canyon County, Idaho.

Planner Dan Lister reviewed the Staff report for the record.

Chairman Robert Sturgill affirmed the witnesses to testify.

Testimony:

Ryan Myhre - Applicant (Representative) - IN FAVOR - 301 E. Bower St., Meridian ID 83642

Mr. Myhre is the owner of the property and reviewed the background of the case. He was in contact with a County Planner before he bought the property: he was told he could move one lot to encompass the current manufactured home and he would have an additional administrative split, giving him access to three lots. When he submitted all the information, he was told no, he would need a private drive because there are more than two lots. He had already spent \$25,000 to build a foundation to put the mobile home on but then found out he couldn't do it (the split). He is asking for a variance so he can get to that third lot. He was going to sell the front two lots and keep the back (third) lot to build on for himself. He showed where his lot would be on the map. He said he can't keep any of the lots now because his holding costs have been so high (since January). Per the Highway District, it has to be accessed by the driveway and he can't build an access between his property and the neighbors. There was discussion about the distances

between the two existing homes, the new, proposed driveway length and the surveying the applicant has done in preparation for splitting the lot.

MOTION: Commissioner Williamson moved to close public testimony on Case ZV2022-0004 seconded by Commissioner Sheets. Voice vote, motion carried.

DELIBERATION:

Commissioner Sheets knows where the applicant is coming from; landlocked parcels have issues when it comes to access and frontage roads. He agrees that it is a hardship.

MOTION: Commissioner Sheets moved to approve Case ZV2022-0004 including the Findings of Facts, Conclusions of Law and conditions of approval and order. Motion seconded by Commissioner Williamson. Roll call vote: 5 in favor, 0 opposed, motion passed.

Case No. SD2021-0034/Lago Vista Estates Subdivision: The applicant, Mason and Associates, INC., representing IMH Boise Heritage LLC, is requesting approval of a preliminary plat (with drainage, grading, hillside, and irrigation plan) for Lago Vista Estates Subdivision which proposes 101 residential lots, and seven common lots. The two properties are zoned "CR-R-R" (Conditional Rezone – Rural Residential). The properties (R30072013 & R30072011) totaling approximately 206.93-acres is located southeast of the Locust Lane and Pump Road intersection; also referenced as a portion of the NE and SW ¼ of Section 11, T2N, R3W, Canyon County, Idaho.

Planner Elizabeth Allen, reviewed the Staff report for the record including late exhibits.

Chairman Robert Sturgill entered the late exhibits into the record and affirmed the witnesses to testify.

Testimony:

Darren Mann – Applicant (Representative) – IN FAVOR – 868 E. Riverside Dr. #200, Eagle ID 83616

Mr. Mann is the principle for IMH Companies in Idaho. He is requesting a continuance for this project based on the information contained in their attorney's letter submitted to the Commission. They only received knowledge of the staff report on Friday and that gave them only three days to review it. They would appreciate the time so they can address the concerns of the Commission and the neighbors. They are not interested in making trouble. They consider themselves a friendly builder and are not in the business of entitling land. Mr. Mann said they came to the project with a development agreement and took it on because it was what they like to build. It is a beautiful area. They plan on building beautiful estate homes and increasing the value of the neighbors' properties. He said they also have concerns when it comes to the water: they have hired a company to do all the work to alleviate those anxieties. There will be no sewer treatment. Brown water will be maintained on that one lot and each property will have holding tanks for the solids. They will be pumped out annually by the HOA and be taken off site. He said they are in the process of doing their research on the water (issues). It is a bit troubling that it has been 400 days since they have submitted: they are not sure why staff accepted their submittal if they were looking at getting rid of the development agreement. Mr. Mann said they don't understand why staff didn't bring this up when they met on February 7th. They have spent hundreds of thousands of dollars putting this project together with consultants, architects and engineers. They are able to perform all the requests that are required for traffic and water and are asking for a continuance until the second meeting in October so they can address everyone's concerns, including the neighbors. They are not here to fight; they are good neighbors and a good builder and are here to enhance the communities in which they do business. Mr. Mann said they hired HDR Incorporated and they are getting ready to drill test wells. They should have all that completed before the second meeting in October. He said they would like to talk to the owner of the apple orchard property next to them as their orchard well is on the property line and they may be able to get some well data from them. He explained the two lots for the sewer are leach fields for gray water only. Each lot will have its own tank for solids and those will be pumped out annually or as needed. It will be small high pressure lines which will pump the gray water into the fields. The system is almost completely designed. He said they haven't had any conversations with Upper Deer Flat Fire District but they are planning on having a fire suppression system on site and fire sprinklers in every home. He could not answer whether that information was contained on the preliminary plat. He reiterated they are doing fire hydrants and sprinklers in the homes. The community well will be for the 99 homes and the irrigation of lots. They are still in the process of designing the water system. He said it will be at least a two well system and there are two well lots on the plat right now. They will do another traffic study: they were not told when they first started this project that they needed to do a new traffic study. They will address Fire Department response time in their report in October.

Karryn Davlin – IN OPPOSITION – 9586 Pump Rd., Nampa ID 83686

Ms. Davlin doesn't mind progress but she is very concerned about the well system. She said we have had droughts for several years and this is the first time she has owned a home on a well system. Everyone needs water and she wants to be sure there is water for everyone. Wells are going dry in their area. She said the homes they are building are not little homes; they are family homes and they use lots of water. She asked where is it going to come from? Can it sustain that (all the homes)? If they don't have water, they aren't going to be able to live there anymore. She hopes they all see that and how important water is for them and their livestock.

Claudia Haynes – IN OPPOSITION – 8830 Deer Sky Ranch Trail Nampa ID 83686

Ms. Haynes lives within a half a mile of the proposed subdivision. She has lived there 20 years and was at the original hearing for the subdivision. They never submitted the plat drawing. Their attorney said the Nampa city impact area would come around Lake Lowell within a short period of time, but it has been 14 - 16 years and that hasn't happened. In that period of time, there has been a lot of development and people moving into the area. She has copies of bills totaling over half a million dollars from people who have had to drop their wells, drill new wells or put in new motors and electronics because the aquifer is dropping. She has provided this evidence over the past few years, submitted in writing to both the Planning and Zoning Commission and Board of County Commissioners from the head hydrologist from the State of Idaho. She said this application started a long time ago; it's great they are talking about new traffic studies. Ms. Haynes said whatever has to be done to finish his project, it looks like they are traveling down the right road. She talked to the Upper Deer Flat Fire Marshal directly; he said they don't have the facilities to support (fire service for) this property but he said they could apply to Marsing Fire. She provided documents showing the rest of her concerns and has given them documentation including articles in the newspaper showing conflicting information about water. She spent \$30,000 last October to drill down 20 feet: the next bill will be \$50,000. She also provided a copy of a bill from her neighbor that showed he just drilled a new well in May 2022 which cost \$50,000 and the reason was because he was out of water. She said we are not making this up or trying to stack what this applicant is trying to do. We would like to give him until October and let him do his studies. He can come back and do his presentation and they will come back and do a presentation also.

Kim Yanecko – IN OPPOSITION – 13038 Skyview Street Nampa ID 83686

Ms. Yanecko said she was there representing a group of 160 people in Canyon County. She read a letter from the group that discussed their concerns about residential development and the lack of regard for water resources, public safety and property rights protections. They cited the short amount of time that

the staff report was made available for review and response. Ms. Yanecko discussed the water resources in the area: she pointed out that the Taylor Jene plat was denied by the Board of County Commissioners because of water and even though the applicant has asked the Board to hear the project again, they expect it to be denied. She said just because Idaho Department of Water Resources granted the water right doesn't guarantee water will be available 365 days a year to the new homeowners, much less the existing homeowners. Ms. Yanecko talked about a 2020 statement from a Canyon County planner who noted that "South Canyon area has been identified by Boise River Basin feasibility study in this area as having water supply issues." She also discussed the lack of monitoring of wells during the irrigation season. She said their answer is if a well goes dry, turn off their pumps for hours or days and wait for the aquifer to recharge. The land is currently using for grazing and no irrigation is currently used. Ms. Yanecko said the newest residential well is 800+ feet west of this proposed subdivision. She said a community well is not the answer either. Her community wells (they have two) are stressed with 33 homes. The lot size of this proposal is also lower than the average 2 acre lot size. She said the school district needs to plan for 38,000 new students in grades K-8. They have asked to stop growth as there are not enough resources, especially if the bond doesn't pass. There will be more traffic on rural roads: West Lewis Lane is classified as a rural road, minor arterial. She said with 101 new homes, that would be 960 additional trips on the roadway. Ms. Yanecko said with the County's liability insurance being cancelled in October 2022 and the possibility of the County having to be self-insured, if there are problems with the lack of water, will the liability rest with the developer even if the County approved the development? There should have been an annual review of this agreement. 13 – 16 years doesn't constitute "time is of the essence" and she said allowing the development to continue could place the liability burden back on the County. She said this proposal should be required to comply with any new laws. The County should have a hearing and reverse the zoning decision, reverting it back to agricultural land, with a new application for a new zoning request for any development. She stated Idaho code 67-65-09 gives the County the ability to terminate this agreement and rezone it back to agricultural land.

Beverly Cavazos - IN OPPOSITION - 10140 Vista Del Lago Lane Nampa ID 83686

Ms. Cavazos lives about a half mile down the road from this new development. They had a meeting with Idaho Department of Water Resources at a local park by Sky Ranch and the Idaho Department of Water Resources explained to them with graphs and projections about water and aquifer levels. The Department of Water Resources showed them a presentation which showed the aquifer has so many wells on it right now, it periodically goes dry. It takes two to four days for the aquifer to replenish the water level with the number of people on it right now. She said that means for two days, they can't do anything: wash clothes, take showers, etc. She wonders with another 101 homes, how long they will be without water now? They are trying to get the Commission to understand that every time they approve even one home build, it makes it even worse for the aquifer. She can't imagine what it is going to be like with another 101 homes. They do not have the water to sustain these homes. She suggested the Commission request Idaho Department of Water Resources come and make a presentation to them. Developers twist the situation and claim there is going to be water. She said there will always be water but there is a possibility of a long period of time when there will be no water in these homes. People need to know this. The developers have been able to twist the figures and seem like there is plenty of water and there isn't.

Terry Mahoney - IN OPPOSITION - 13996 Lewis Lane Nampa ID 83686

Mr. Mahoney lives directly west of the property, in the middle of the apple orchard. His opposition is primarily the same as everyone else. He just drilled an 800 foot well two years ago. His big concern is what does he do when he has problems? How far down can he go? They were having trouble when they were drilling his agriculture-style well because they already knew there were problems and the driller was beginning to think they weren't going to find water. He said he may not have the opportunity to drill deeper. Mr. Mahoney's neighbors have also had problems. He showed the original well and other wells

that have had problems and spoke about the history of problems when drilling wells. He said having a development of this density in a rural area doesn't make sense. Not only is there aerial spraying but there is also 24 hour a day spraying with big jet propelled sprayers in the orchard itself. He said people are going to be surprised when they move in there.

Darren Mann - Applicant (Representative) - REBUTTAL - 868 E. Riverside Dr. #200, Eagle ID 83616

In response to questions from the Commission, Mr. Mann stated there are some surface water rights. He did not know if residents of the development would be allowed to use wells for irrigation water. Mr. Mann said he believes all the homes will be outside the 100 foot exclusion zone for aerial spraying. He also said there would be disclosures to the new residents about aerial spraying. There was discussion about the assessment of the risk of building homes with no water. Mr. Mann said they believe they have hired the best water consultant in the Treasure Valley to ascertain what they can and can't do. They were told when they began the project, there was 'substantial water' and multiple layers of aquifers to pull from and it would not endanger others. He said they are now in the test well phase. If there is not enough water, they would be foolish to move forward with 100 homes. They will need to start drilling test wells in the next three weeks.

MOTION: Commissioner Williamson moved to close public testimony on Case SD2021-0034 seconded by Commissioner Amarel. Voice vote, motion carried.

DELIBERATION: Commissioner Williamson said he was leaning towards voting for a continuation considering the applicant is willing to research the issues. While they can't complete a traffic study by the October hearing date, he would like a traffic impact study and to get additional information from the two Fire Districts. Commissioner Sheets said he comes from the school of thought that the Commission should evaluate the application that is in front of them. He said how many public hearings do we need to have on this? There is another step and that is going in front of the Board of County Commissioners. He hasn't seen any additional evidence to change his mind from agreeing with staff's recommendation. Commissioner Amarel said he was looking at the amount of information the Commission has had to review on the project and what the public has had to go through. He felt Mr. Mann seemed sincere; if he is doing the test wells, we could learn something from that. He said let's give him a chance to prove himself. Commissioner Williamson said that one of the parties in opposition also said that the applicant should be given the continuance. Commissioner Villafana said he is with Commissioner Sheets. He said there is no guarantee if they do a continuance that the applicant would have any of the information the Commission is asking for. He is in favor of making the decision based on what they have in front of them now. They will have the opportunity to address any questions brought up tonight with the Board of County Commissioners.

MOTION: Commissioner Williamson moved to continue Case SD2021-0034 until October 20, 2022 as requested by the applicant. Motion seconded by Commissioner Amarel. Roll call vote: 3 in favor, 2 opposed, motion passed.

APPROVAL OF MINUTES:

MOTION: Commissioner Sheets moved to approve the minutes from 7/7/2022, seconded by Commissioner Villafana. Voice vote motion carried.

DIRECTOR, PLANNER, COMMISSION COMMENTS:

Planner Elizabeth Allen discussed the County losing their liability insurance which means if there is a lawsuit, the County would need to defend itself. Planner Elizabeth Allen discussed the 2030

Comprehensive Plan hearing, scheduled from 5 pm to 10 pm and the public comments she has received. The presentation will be concise; the event will livestream on YouTube. There was discussion about the Commissioners providing short summaries on what was discussed during the public testimony portion of the Comprehensive Plan Hearing. Commissioner Amarel asked about having public entities providing information to the Commission on various topics, including traffic, water, fire and school capacity. Planner Elizabeth Allen said it was her plan to have some of the aforementioned agencies provide presentations to the Commission quarterly. She also felt that it would be helpful to have staff reports published more than one week in advance and is working on changing that timeframe.

ADJOURNMENT:

MOTION: Commissioner Williamson moved to adjourn, seconded by Commissioner Sheets. Voice vote motion carried. Hearing adjourned at 9:59 pm.

An audio recording is on file in the Development Services Departments' office.

Approved this 1st day of September, 2022.

Robert Sturgill, Chairman

ATTEST

Bonnie Puleo, Recording Secretary



CANYON COUNTY PLANNING & ZONING COMMISSION MINUTES OF REGULAR MEETING HELD Thursday, August 18, 2022 6:30 P.M.

1ST FLOOR PUBLIC MEETING ROOM SUITE 130, CANYON COUNTY ADMINISTRATION BUILDING

Commissioners Present:

Robert Sturgill, Chairman

Patrick Williamson, Vice Chairman

Brian Sheets, Commissioner Ron Amarel, Commissioner Harold Nevill, Commissioner

Staff Members Present:

Dan Lister, Planning Official Elizabeth Allen, Planner

Jenna Petroll, Planner

Bonnie Puleo, Recording Secretary

Chairman Robert Sturgill, called the meeting to order at 6:30 p.m.

Commissioner Sheets, read the testimony guidelines and proceeded to the business item on the agenda.

MOTION: Commissioner Sheets moved to approve & sign the revised Findings of Facts, Conclusions of Law and Conditions of Approval for Case RZ2022-0007, Greg & Ann Obendorf. Motion seconded by Commissioner Williamson. Commissioner Nevill abstained from the vote. Voice vote, motion carried.

Commissioner Sheets: Read item 1b from the agenda; CU2022-0019/Betty Lanum. Project was withdrawn at the request of the applicant.

Case No. RZ2021-0048 & SD2021-0060/Morgan & Cooper Subdivision: Aspen Engineers representing the property owners Kent Morgan and Gina Morgan are requesting a Conditional Rezone with a Development Agreement for approximately 3.00-acres (Parcel No. R29799018) from the current zoning designation of "A" (Agriculture) to an "R-R" (Rural-Residential) zone. The request also includes a Short Plat for Cooper Subdivision. The proposed plat contains one (1) lot. The subject property is located on the south side of Kuna Road, approximately 1,748-feet east of Southside Boulevard, Nampa, Idaho, in a portion of the SE ¼ of Section 25, T2N, R2W, BM, Canyon County, Idaho.

Planner Elizabeth Allen reviewed the Staff report for the record.

Chairman Robert Sturgill affirmed the witnesses to testify.

Testimony:

Lance Warnick - Applicant (Representative) - IN FAVOR - 7312 Wild Horse Way Nampa ID 83686

Mr. Warnick with Aspen Engineers said they have been working on this project for a year. He thanked the staff for their work. This parcel is a 3 acre property. The previous owner went through a conditional use permit process to get a buildable lot but then the economy crashed so he didn't move forward with it. Mr. Morgan now owns the property and wants it as a buildable lot. The area is a mix of residential rural lots with pastures and small farms. Mr. Warnick said if you look at a subdivision map of the area, there are numerous subdivisions in the area but they were created through the conditional use permit process in the past. He said that process was used because it could set specific parameters on the development of the property which you can't through a rezone. There will be 2.7 acres after a right of way dedication. There is an existing concrete ditch on the west side of the property for irrigation and a tail water ditch on the east side adjacent to a driveway. To the northeast corner of the property, there is a culvert that takes the tail water across the driveway to a drainage ditch. There will be no changes in irrigation; they will continue to use it as it is. He discussed letters in the staff report from neighboring property owners in support of the application: they view it as a compatible use. The Highway District is on board with only the two houses taking access from the existing driveway: they will keep the same access and no road improvements are needed. He said this is as low impact development as you can get. If you look at the map, this is compatible: 2.7 acre lot is a similar size as the surrounding properties. They have excavated a test hole with Southwest District Health and verified there was adequate soil for a septic system. He said there are not high concentrations of nitrates in the area; generally, there is good water. Considering the conditions that staff is recommending, limiting this to a single lot and preserving some space for agricultural use, it can continue to be a compatible neighbor with the other acreages around it. The services they need are minimal. He clarified that the Morgans will not be living on the parcel themselves. Nampa Highway District clarified that the paved apron is not required and the revised staff report reflects that the apron is not required. He said there are surface water rights. The owner purchased the property in 2019.

Kent Morgan – IN FAVOR – 6857 Kuna Road Nampa ID 83686

Mr. Morgan said he doesn't have much to add to the prior testimony. He bought this property for a future site for his kids to have a place to build. He thought the limit to the 1.75 acres was mainly there to prevent them from building over the entire 3 acres. His intent is to give this property to his kids. He said he would like to be able to have horses on the property.

MOTION: Commissioner Sheets moved to close public testimony on Case RZ2021-0048 & SD2021-0060, seconded by Commissioner Williamson. Voice vote, motion carried.

DELIBERATION:

Commissioner Sheets said he would stick with his concern about the building envelope and is willing to leave it to the applicant and his engineer where to put it. There is a lot of flexibility there. He feels they should have a condition that it be put in the final plat. Staff explained that the Planning and Zoning Commission can approve a preliminary plat but the Board of County Commissioners would have to approve the final plat. Commissioners Sheets said he would like condition #3 to state the home site and outbuildings should be located within a building envelope no greater than 1.75 acres to retain open space. He wanted to keep the same character of the area and limit the remaining area to open space/agricultural production. For Condition #7: there should be an additional condition of no secondary residence. Commissioner Nevill agreed with adding Condition #7. He also said he has one concern. He is concerned about a conditional rezone where there are no other conditional rezones nearby. There are some significantly larger parcels that individuals could look at this and say, "let's do a subdivision". This

would be a foot in the door to more subdivisions. He doesn't like the idea that the only option we have is a conditional rezone. He didn't know that there is anything else that can be done other than saying, "no". Commissioner Williamson said he agreed with Commissioner Sheets' recommended changes. He agrees with removing the agricultural production portion. He would like to see the building envelope in a fixed position but the Board of County Commissioners will review that portion.

MOTION: Commissioner Williamson moved to approve Case RZ2021-0048 with modifications to Condition #3 and adding Condition #7, including the Findings of Facts, Conclusions of Law and Conditions of Approval, forwarding the recommendation to the Board of Canyon County Commissioners. Motion seconded by Commissioner Sheets. Roll call vote 4 in favor 1 opposed, motion passed.

MOTION: Commissioner Williamson moved to approve Case SD2021-0060, adding conditions to the plat mirroring the amended conditions of the rezone, including the Findings of Facts, Conclusions of Law and conditions of approval, forwarding the recommendation to the Board of Canyon County Commissioners. Motion seconded by Commissioner Sheets. Roll call vote 4 in favor 1 opposed, motion passed.

➤ Case No. CU2022-0026/Phil Kildow: The applicant, Phil Kildow, is requesting a conditional use permit for a Staging Area on parcel R30635010. The parcel is zoned "A" (Agricultural). The subject property is located at 16 S Robinson Rd., Nampa; also referenced as a portion of the NW¼ of Section 29, Township 3N, Range 1W; BM; Canyon County, Idaho.

Planner Jenna Petroll, reviewed the Staff report for the record including late exhibits 6 & 7.

Chairman Robert Sturgill entered the late exhibits into the record and affirmed the witnesses to testify.

Testimony:

Phillip Kildow - Applicant (Representative) - IN FAVOR - 16 S. Robinson Rd., Nampa ID 83687

Mr. Kildow said his application is pretty straightforward; the only thing he wanted to say was that he already has a paved apron in front to the road. It looks like dirt, but it is paved. He is okay with the 8 conditions; they are not ideal but he tries to get along with his neighbors, so if that's a condition, he will comply. He said he does work on cars once and awhile and also performs light maintenance on the vehicles staged there. He was asked about oil containment and what goes on the staging area. He said contains the oil and disposes of it. He said the staging area is for starting up medium duty diesel trucks and loading equipment. They have specific equipment for tree maintenance and removal including an Avant which is like a skid steer. There are 5 vehicles and they are his friend's trucks and business; they also have a crane, a grapple truck, two F650 trucks and one F750 truck. Mr. Kildow confirmed that he would not be out any money if the conditional use permit was not approved. When asked about the prior code violations, he said he has not received any visits from Code Enforcement and did not respond to complaints from neighbors because they weren't said in a polite way. He does maintenance on the vehicles after 5 pm, Monday through Friday and on weekends. In response to the allegation of running an auto repair in shop behind his house, he admitted that he does work on cars but it's not a business. He felt 7:00 am was a better start time. Mr. Kildow confirmed that he is doing the maintenance on the (business') vehicles and is compensated for the work. Staff explained the difference between light maintenance work and vehicle service and repair which is not allowed in this zone. If he is doing service for someone else's vehicles and being compensated for it, it falls under 'vehicle service'.

Julie Shipley - IN OPPOSITION - 10 S. Robinson Rd., Nampa ID 83687

Ms. Shipley lives on the adjacent property just north of the subject property. She said Mr. Kildow indicated he didn't care for the way they approached him and it was inconvenient for him that they complained. She has lived there for 30 years and she feels it is rather inconvenient for him to purchase property and have his friend bring in a business. Up until a couple of months ago, he had chainsaws, wood splitters and people coming in to purchase wood. She said that was an inconvenience to them. They are concerned that there is also a fuel tank there and the Shipleys had to move some brush in order to burn it because of the location of the fuel tank. Prior business conducted there has created a lot of dust and bark. She can't enjoy her backyard because of it and they can't use their above ground pool which was on the side of the property next to the staging area. The (applicant's) property used to be a nice driveway and lawn; now it's dirt and dust. She had a realtor come to her property who said since there is a business there, it will difficult to sell and will diminish her property value. They have decided to wait to sell their property because of it. There also was an irrigation ditch that ran between the two properties which was filled in when they took out the fence. She showed her house on the map. She also showed where the fuel tank was on Mr. Kildow's property. She said it would be better to have the sight-obscuring fence than not having it. Ms. Shipley was asked about interactions between her and Mr. Kildow; she said she would go outside when he would start making noise at 6:30 or 7:00 am. Before Code Enforcement was involved, they did try to tell him there were problems. If the conditional use permit is approved, she would like an additional condition that makes them control the dust.

George Starr - IN OPPOSITION - 1130 N. Allumbaugh St. #103, Boise ID 83704

Mr. Starr said that most of his questions have been answered. He owns 105.4 acres across the street and to the west. His only concern is that City of Nampa's Comprehensive Plan is for low density single family residences for his area. He wouldn't want anything Kildow does to affect his property. It is being farmed right now and lends itself to what the Nampa City Comprehensive Plan is.

Phillip Kildow - Applicant (Representative) - REBUTTAL - 16 S. Robinson Rd., Nampa ID 83687

Mr. Kildow said since he has lived there, which is about 4 years, the ditch has always been weeds. It has never been irrigated. He has talked to Mrs. Shipley's husband a couple of times but nothing was said about the trucks or staging area. He tries to be a good neighbor. In response to a question about dust abatement, Mr. Kildow said he would be agreeable to doing the best they can to keep it down. When asked about the fuel storage on site, Mr. Kildow didn't know how many gallons the fuel tank was and said they were in approved containers. He would have to look up the codes on what State law was on fuel containment.

MOTION: Commissioner Williamson moved to close public testimony on Case CU2022-0026, seconded by Commissioner Amarel. Voice vote, motion carried.

DELIBERATION:

The Commissioners were reminded by Chairman Sturgill that a Conditional Use Permit is a decision by Planning and Zoning, not a recommendation to the Board of County Commissioners. Commissioner Nevill said he is not in favor of this application. Commissioner Sheets said based on the testimony tonight about a myriad of things and trying to get an explanation about what is really happening on site, it is difficult to divine what is really happening there. He feels this use is more appropriate in a commercial zone and he would be in favor of denial. Commissioner Nevill said the reason he is recommending denial is that Mr. Kildow doesn't have any skin in the game. It won't cost him any money (if not approved). There is no reason to put his neighbors through the pain if this is not something that takes away his livelihood. He is being an exceptional friend to someone who is running a business that has been declared a nuisance. He just doesn't see any reason to put the neighbors through the pain or to open Mr. Kildow to all the liabilities that could be a part of allowing this operation to continue.

MOTION: Commissioner Nevill moved to deny Case CU2022-0026 including the Findings of Facts, Conclusions of Law and conditions of approval. Motion seconded by Commissioner Sheets. Roll call vote 5 in favor 0 opposed, motion passed.

APPROVAL OF MINUTES:

MOTION: Commissioner Sheets moved to approve the minutes from 7/21/2022, seconded by Commissioner Amarel. Voice vote motion carried.

DIRECTOR, PLANNER, COMMISSION COMMENTS:

Planning Official Dan Lister said August 24th is the continuation of the 2030 Comprehensive Plan hearing. Planner Elizabeth Allen has provided updated FCO's and put together a packet with some changes based on comments as well as additional comment letters received from the public. Chairman Sturgill said he will not be able to attend the hearing on the 24th. Dan Lister said the Development Services Department has over 140 hearing cases and 63 Director's decisions they are working through. They are implementing a pre-application requirement for applications that need a public hearing, in hopes of having discussions with applicants to make sure their applications are complete and they understand all their options. He also said they are working on a new staff report template and he requested feedback from the Commissioners on the new format once they begin to see the changes. He feels it will be a better presentation of the information for the Commissioners. Commissioner Larison has stepped down and there will be a search for a replacement.

ADJOURNMENT:

MOTION: Commissioner Williamson moved to adjourn, seconded by Commissioner Amarel. Voice vote motion carried. Hearing adjourned at 8:45 pm.

An audio recording is on file in the Development Services Departments' office.

Approved this 15th day of September, 2022

Robert Sturgill, Chairman

ATTEST

Bonnie Puleo, Recording Secretary

Hearing Date: August 4, 2022

Development Services Department

Owner/Applicant:

Gregory and Ann Obendorf

Representative:

Curtis Crystal, BRS Architects

Staff: Juli McCoy, Planner II

Tax ID: R32686

Curent Zone: "A" (Agricultural)

2020 Comprehensive Plan:

Future Land Use Designation: Commercial

Lot Size: 40 acres

Applicable Zoning Land Use Regulations: §07-06-07

Notification

04-26-22: Agencies

07-01-22: Radius Notice

04-26-22: Newspaper

07-11-22: Posting

Exhibits:

- FCO's w/<u>Attachment A</u>: Development Agreement Conditions;
- 2. Letter of Intent/Site Plan;
- 3. Neighborhood Meeting;

4. Maps:

- a. Small Air Photo;
- b. Vicinity;
- c. Notification
- d. Zoning and Classification;
- e. Subdivision w/ Report
- f. Cases w/ Report
- g. Soils and Farmland w/ Report
- h. Dairy, Feedlots and Gravel Pits
- i. TAZ
- i. Future Land Use
- k. Future Land Use Caldwell
- I. Nitrates and Wells

5. Agency Comments:

- a. City of Caldwell
- b. Boise Project Board of Control
- c. Canyon Highway District No. 4
- 6. Public Comments:
 - a. Julie Harris (opposed)
 - b. Andrew Haumesser (opposed)
 - c. Tom Blaisdell (opposed)
 - d. Jennifer Babbitt (opposed)
- 7. Traffic Impact Study by T-O Engineers
- 8. Site Photos

Request

The applicants, Gregory & Ann Obendorf, represented by Curtis Crystal are requesting a conditional rezone of a 12.6-acre portion of parcel R32686 from an "A" (Agricultural) zone to a "C-2" (Service Commercial) zone. The request includes a development agreement (Exhibit 1, Attachment A). The 40.4-acre property is located on the northeast corner of Farmway Road and Karcher Road, Caldwell; also referenced as a portion of the SW¼ of Section 09, Township 3N, Range 3W; BM; Canyon County, Idaho.

Pursuant to the applicant's letter of intent (Exhibit 2), the 12.6-acre parcel will be completed in 3 phases: (1) gas station with convenience store at the corner of Farmway Road and Karacher Road within a 3-acre lot; (2) a seasonal farmers market along Farmway Road on approximately 1-acre; and (3) car-wash accessory to the gas station/convenience store (approximately 1.5 acres) and commercial lots along Karacher Road. Phase 3 will not occur until city services are available.

Background

The subject parcel is an original parcel (created prior to September 6, 1979, CCZO §07-02-03). The subject parcel was purchased by Gregory and Anne Obendorf September 17, 2021 (Instrument #2021-065151). An application to rezone the subject parcel for commercial development was received in April, 2022.



<u>CCZO §07-06-07(6)A – Conditional Rezone Approval – Standards of Evaluation</u>: The presiding party shall review the particular facts and circumstances of the proposed conditional rezone. The presiding party shall apply the following standards when evaluating the proposed conditional rezone:

- 1. Is the proposed conditional rezone generally consistent with the comprehensive plan;
 When considering the surrounding land uses, is the proposed conditional rezone more appropriate than the current zoning designation;
- 2. Is the proposed conditional rezone compatible with surrounding land uses?
- 3. Will the proposed conditional rezone negatively affect the character of the area? What measures will be implemented to mitigate impacts?
- 4. Will adequate facilities and services including sewer, water, drainage, irrigation and utilities be provided to accommodate proposed conditional rezone;
- 5. Does the proposed conditional rezone require public street improvements in order to provide adequate access to and from the subject property to minimize undue interference with existing or future traffic patterns? What measures have been taken to mitigate traffic impacts?
- 6. Does legal access to the subject property for the conditional rezone exist or will it exist at time of development; and
- 7. Will the proposed conditional rezone amendment impact essential public services and facilities, such as schools, police, fire and emergency medical services? What measures will be implemented to mitigate impacts?

<u>Analysis</u>

The property is zoned "A" (Agricultural). Pursuant to CCZO Section 07-10-25(1), the purposes of the "A" (Agricultural) zone are to:

- A. Promote the public health, safety, and welfare of the people of the County by encouraging the protection of viable farmland and farming operations;
- B. Limit urban density development to Areas of City Impact in accordance with the comprehensive plan;
- C. Protect fish, wildlife, and recreation resources, consistent with the purposes of the "Local Land Use Planning Act", Idaho Code title 67, chapter 65:
- D. Protect agricultural land uses, and rangeland uses, and wildlife management areas from unreasonable adverse impacts from development; and
- E. Provide for the development of schools, churches, and other public and quasi-public uses consistent with the comprehensive plan.

Pursuant to CCZO Section 07-10-25(6), the purpose of the "C-2" (Service Commercial) zone is to: "Provide areas where activities of a service nature, which are more intensive in character than in other Commercial Zones, may be carried out."

Surrounding Uses/Compatibility (see photos; Exhibit 8)

| Existing Conditions | | Primary Zone | Other Zones |
|---------------------|--|--------------|----------------|
| NW | R32672104 (1.21 acres), R32672104A (.99 acres), R32671102 (1.54 acres), R32672010 (1.00 acre), R32672100 (2.48 acres), R32671013 (1.19 acres), R3267101100 (1 acre), R326101200 (1 acre), R32671 (71.63 acres) | A | - |
| N | R32688011 (1.18 acres), R32689 (1 acre), R32688010 (3.45 acres), R326687 (1.94 acres), R32702 (24.75 acres), R28131 (.68 acres), | A | - |

| | R28130 (.51 acres), R28129004 (.51 acres), R28129003 (.51 acres), R281129001 (.40 acres), R28129 (.40 acres) | | | |
|--|---|---|-------------------------|--|
| NE | R32684010 (68.42 acres), R32706 (78.35 acres) | A | - | |
| Е | R32684 (1.29 acres), R32685 (2.01 acres), R32684011 (3.86 acres), R32684011A (5.17 acres), R26694 (.86 acres), R26707 (.42 acres), R26706 (.42 acres), R26683 (.32 acres), R26693 (.32 acres), R32683 (.47 acres) | A | R-R | |
| SE | R32862010 (3.21 acres), R32862 (65.95 acres), R32909 (.93 acres), R32908011 (.64 acres), R32908 (.74 acres), R3290812 (.77 acres), R32908206 (1 acre), R32908205 (1 acre), R32908204 (.99 acres) | A | - | |
| S | R32900216 (6.4 acres), R32900215 (1.29 acres), R32900201 (1.1 acres), R32900214 (1.28 acres), R32900213 (1.29 acres), R32900212 (1.27 acres), R32900211 (1.27 acres), R32900210 (1.4 acres) | A | C-1 | |
| SW | P32017011 A (0.73 cores) P32017011 (68.00) P32015 (45.21 | | CR-C-1, CR-C-2, A | |
| W | R32673 (80.40 acres) | A | - | |
| A=Agricultural, CR-R-1=Conditional Rezone Single Family, CR-C-1=Conditional Rezone Neighborhood Commercial, CR-C-2 Conditional Rezone Service Commercial | | | | |

Within the immediate vicinity, the majority of the properties are zoned "A" (Agricultural; Exhibit 4d) with an average lot size of 10.37 acres (Exhibit 4e). The property consists of 40 acres of moderately suited soils which is considered prime farmland if irrigated (Exhibit 4g). Aerial views (Exhibit 4a) show an area in transition, several fields are still in agricultural production but there are numerous subdivisions and some commercial use in the area.

There are twenty-eight (28) platted subdivisions in a one-mile radius of the subject property with an average lot size of 1.03 acres. There are two (2) subdivisions that currently in platting within a one-mile radius with an average lot size of 0.30 acres (Exhibit 5e). Directly across Highway 55/Karacher Road, on parcel R32900216 is a mini-storage facility that operates under a conditional use permit, this parcel is zoned "C-1" (Neighborhood Commercial) (Exhibit 4d). To the south west of the subject parcel are several parcels that are zoned "CR-C-2" (Conditional Rezone-Service Commercial) and "CR-C-1" (Conditional Rezone-Neighborhood Commercial) and "C-1 (Neighborhood Commercial).

Future Land Use/Anticipated Growth

The Canyon County Future Land Use Map designates the subject property as Commercial (Exhibit 4j). The Commercial land use classification is described in the 2020 Canyon County Comprehensive Plan as providing "for a variety of commercia uses that provides goods and services to businesses, travelers and residents of the county."

The request is located within the Caldwell Area of City Impact and the land use is designated as "Highway Corridor" (Exhibit 4k) the purpose of which is to "identify key areas along a highway corridor that are highly visible and transitional in nature. This category includes land that is suitable for a blend of highway oriented commercial uses, business parks, limited light industrial, educational, office and high density residential" (Exhibit 5a).

Services

- <u>Wells/Septic Systems</u>: The property is located within the Caldwell Area of City Impact. City services are not available to the subject parcel at this time. Therefore, the gas station with convenience store and seasonal farmer's market will be required to meet IDWR, DEQ and SWDH requirements.

The property is just outside of the delineated nitrate priority area (Exhibit 41). Wells in the immediate area showing low levels of nitrates. DEQ will require a public drinking water system if the gas station with convenience store or seasonal farmer's market serves 25 or more people for 60 more days a year which will address any nitrates issues.

- <u>Irrigation and Drainage</u>: The property is located within the Boise Project Board of Control Irrigation District and has a valid water right (Exhibit 5b). Future development will be required to provide irrigation water to all landscaping and retain stormwater on-site.
- Access/Traffic: The applicant commissioned a Traffic Impact Study (TIS) by T-O Engineers (Exhibit 7) which was completed in November, 2021 and updated March, 2022. The proposed development is expected to generate a total of 1,770 net-new daily trips. Based upon the analysis contained within the TIS the following recommendations were provided:
 - Access: Access to the property shall be located a minimum of 660' from the intersection of Karcher Road and Farmway Road.
 - <u>Farmway Road at Driveway A</u>: Per standards outlined in the *ITD Traffic Manual* a northbound right-turn lane should be constructed concurrently with Driveway A which will provide full access with no turning restrictions.
 - <u>State Highway 55 at Driveway B</u>: Per standards outlined in the *ITD Traffic Manual* a westbound turn lane should be constructed concurrently with Driveway B which will provide right-in, right-out access only.

Canyon Highway District #4 commented on the request and TIS (Exhibit 6c). The comment letter does not oppose the request subject to conditions of approval which include a final traffic study addressing the full buildout, improvements to Farmway frontage per Transportation Impacts and Frontage Improvements section of the TIS, Driveway approach location, connection plan directly across from Drake Lane, and dedication. The letter is included as a condition of the development agreement (Exhibit 1, Attachment A).

At the time of drafting this report, no comments were received from ITD regarding their review of the request and TIS. A condition has been included to the development agreement that requires compliance with ITD.

Comprehensive Plan

The 2020 Canyon County Comprehensive Plan designates the future land use of the parcel as Commercial (Exhibit 4j). The parcel is located within the Caldwell Area of City Impact and is designated as Highway Corridor on their comprehensive plan (Exhibit 4k). The request is in general compliance with the following goals, policies and implementation actions of the 2020 Canyon County Comprehensive Plan:

- Property Rights Policy No. 1: "No person shall be deprived of private property without due process of law."
- Property Rights Policy No. 8: "Promote orderly development that benefits the public good and protects the individual with a minimum of conflict."
- Population Goal No. 2: "To encourage economic expansion and population growth throughout the county plus increase economic diversity for continued enhancement of our quality of life to meet citizen needs."
- Population Goal No. 3: "To guide future growth in order to enhance the quality and character of the county while providing and improving the amenities and services available to Canyon County residents."
- Economic Development Goal No. 3: "Create new jobs that are sustainable and lasting."

- Economic Development Goal No. 4: "Provide an economically viable environment that builds and maintains a diverse base of business."
- Economic Development Policy No. 6: "Encourage commercial and residential development in a controlled, planned, and constructive manner, which will enhance, not destroy, the existing lifestyle and environmental beauty of Canyon County."
- Economic Development Policy No. 12: "Establish appropriate industrial and commercial zones to further increase business and economic development in various areas of Canyon County."
- Land Use Goal No. 1: "To encourage growth and development in an orderly fashion, minimize adverse impacts on differing land uses, public health, safety, infrastructure and services."
- Land Use Goal No. 4: "To encourage development in those areas of the county which provide the most favorable conditions for future community services."
- <u>Land Use Policy No. 1:</u> "Review all residential, commercial and industrial development proposals to determine the land use compatibility and impact to surrounding areas."
- Land Use Implementation Action: "Encourage commercial areas, zones or uses that are contiguous to existing county or city commercial areas, zones or uses but recognizing additional areas or zones, beyond those already existing, may be desirable and that some mixed uses are compatible."
- Land Use Policy No. 3: "Encourage the establishment of new development to be located within the boundaries of a rural fire protection district."

Potential Impacts

While the subject parcel and the majority of parcels in the immediate area still zoned "A", it is an area that is currently transitioning to residential and commercial uses. There are several platted subdivisions in the immediate vicinity that would benefit from the proposed rezone and development. The subject parcel is located at the corner of two major road ways at a signalized intersection allowing for safe and adequate access. It is also located within the Area of City Impact for the city of Caldwell which designates it as "Highway Corridor" on their land use map making the proposed use of a convenience store, fueling station, farmers market and car wash very appropriate and compatible.

The proposed development agreement (Exhibit 1, Attachment A) allows limited commercial uses to the area until city infrastructure can be provided to the rest of the property while still preserving over 27 acres in agricultural use. The conditions allow input from the City of Caldwell to ensure the development does not impact city growth plans.

Area of City Impact - Caldwell

Pursuant to Canyon County Code §09-01-21 – Zoning Ordinance Amendment Proposals within the Caldwell Area of City Impact Agreement:

All proposed amendments to the text and/or map of the Canyon County zoning ordinance or subdivision regulations, which may relate to the Caldwell area of city impact, shall be referred by the county to the city of Caldwell in the same manner as provided for in subsection 09-01-17(3) of this article. Any recommendation of the city of Caldwell shall be considered in the same manner as provided for in subsection 09-01-17(3) of this article.

- Canyon County Code §09-01-17(3): Notice of all proposals to amend the county comprehensive plan, which may pertain to the Caldwell area of city impact but which do not originate from the city of Caldwell, shall be given to the city of Caldwell community development director at least thirty (30) calendar days prior to the first county public hearing at which such proposal is considered by the county, and the city of Caldwell may make a recommendation before or at said public hearing. After the city receives its initial thirty (30) days' notice, any further notice of proposed changes to the proposal will be provided to the city of Caldwell at least seven (7) days prior to the public hearing. If

a recommendation is received by the county from the city of Caldwell, the <u>recommendation shall be</u> <u>given consideration by the county</u>, provided it is factually supported. <u>Such recommendation shall not be binding on the county</u>. If no recommendation is received, Canyon County may proceed without the recommendation of the city of Caldwell.

The property is within the Caldwell Area of City Impact. The city designates the area as "Highway Corridor" (Exhibit 4k).

Pursuant to the code sections stated above, a notice was provided to the City of Caldwell on April 26, 2022. A comment letter was received from the City of Caldwell (Exhibit 5a) identifying the request is consistent with their comprehensive plan subject to the following:

- Development meets applicable regulations within Caldwell's Landscaping Ordinance;
- Development connect to city services (water and sewer); and
- Development meet Caldwell Fire comments and conditions.

As conditioned by the development agreement (Exhibit 1, Attachment A), the request shall comply with Caldwell's landscaping requirements and Fire District Conditions. The agreement requires the developer to connect to city services prior to Phase 3. The applicant shall work with the City of Caldwell on a preannexation/services connection deferral agreement.

Comments

Public Comments

Newspaper notice was published on June 29, 2022, property owners within 600' were notified by mail on July 1, 2022 and the property was posted on July 11, 2022. Four letters of opposition were received (Exhibit 6) with the following concerns:

- The request is premature. City services and Karacher Road improvements should be completed prior to the requested development. The current conditions of Karacher Road/SH-55 are congested with inadequate highway capacity.
- The request promotes the incremental removal of valuable farm ground.
- The commercial use proposed in not needed in the area. There are five convenience stores within five miles.
- Environmental risks/concerns of groundwater contamination form the gas storage/fuel tanks.
- The proposal does not address noise and exterior lighting impacts.

Agency Comments

See Exhibit 5 for all comments received from affected agencies.

Decision Options:

- The Planning and Zoning Commission may <u>recommend approval</u> of the request and accept draft conditions of the development agreement as presented or as modified;
- The Planning and Zoning Commission may **recommend denial** of the request,
- The Planning and Zoning Commission may **continue the discussion** and request additional information on specific items.

Recommendation

Staff recommends the Planning and Zoning Commission open a public hearing and discuss this request.

Staff is **recommending approval** of this request subject to the conditions of the development agreement. Staff has provided draft Findings of fact, Conclusions of Law and Order for the Commission's consideration (Exhibit 1).



Planning and Zoning Commission - Staff Report Obendorf - RZ2022-0007

Development Services Department

Findings of Fact, Conclusions of Law, and Order

Conditional Rezone – RZ2022-0007

Findings of Fact

- 1. The applicants, Gregory & Ann Obendorf, represented by Curtis Crystal, are requesting a conditional rezone of a 12.6-acre portion of parcel R32686 from an "A" (Agricultural) zone to a "CR-C-2" (Conditional Rezone Service Commercial) zone. The request includes a development agreement (Attachment A). The 40.4-acre property is located on the northeast corner of Farmway Road and Karcher Road, Caldwell; also referenced as a portion of the SW¼ of Section 09, Township 3N, Range 3W; BM; Canyon County, Idaho.
- 2. The subject property is designated as "Commercial" in the Future Land Use plan within the 2020 Canyon County Comprehensive Plan.
- 3. The subject property is located within the Caldwell Area of City Impact.
- 4. The subject property is located within the Canyon Highway District #4, Caldwell Rural Fire District, Valley View School District and the Boise Project Board of Control Irrigation District.
- 5. A neighborhood meeting was conducted on April 5, 2021 in accordance with CCZO Section 07-01-15.
- 6. Notice of the public hearing was provided in accordance with CCZO §07-05-01. Affected agencies were noticed on April 26, 2022. Newspaper notice was published on June 29, 2022. Property owners within 600' were notified by mail on July 1, 2022. Full political notice was provided on April 26, 2022. The property was posted on July 11, 2022.
- 7. The record includes all testimony, the staff report, exhibits, and documents in Case File RZ2022-0007.

Conclusions of Law

For this request, the Planning and Zoning Commission finds and concludes the following regarding the Standards of Review for a Conditional Rezone (CCZO §07-06-07(6)):

A. Is the proposed conditional rezone generally consistent with the comprehensive plan?

Conclusion: The proposed conditional rezone is consistent with the comprehensive plan.

Finding: The request is in general compliance with the following goals, policies and implementation actions of the 2020 Canyon County Comprehensive Plan:

- Property Rights Policy No. 1: "No person shall be deprived of private property without due process of law."
- Property Rights Policy No. 8: "Promote orderly development that benefits the public good and protects the individual with a minimum of conflict."
- <u>Population Goal No. 2:</u> "To encourage economic expansion and population growth throughout the county plus increase economic diversity for continued enhancement of our quality of life to meet citizen needs."
- <u>Population Goal No. 3:</u> "To guide future growth in order to enhance the quality and character of the county while providing and improving the amenities and services available to Canyon County residents."
- Economic Development Goal No. 3: "Create new jobs that are sustainable and lasting."

- Economic Development Goal No. 4: "Provide an economically viable environment that builds and maintains a diverse base of business."
- Economic Development Policy No. 6: "Encourage commercial and residential development in a controlled, planned, and constructive manner, which will enhance, not destroy, the existing lifestyle and environmental beauty of Canyon County."
- Economic Development Policy No. 12: "Establish appropriate industrial and commercial zones to further increase business and economic development in various areas of Canyon County."
- <u>Land Use Goal No. 1:</u> "To encourage growth and development in an orderly fashion, minimize adverse impacts on differing land uses, public health, safety, infrastructure and services."
- <u>Land Use Goal No. 4:</u> "To encourage development in those areas of the county which provide the most favorable conditions for future community services."
- <u>Land Use Policy No. 1:</u> "Review all residential, commercial and industrial development proposals to determine the land use compatibility and impact to surrounding areas."
- Land Use Implementation Action: "Encourage commercial areas, zones or uses that are contiguous to existing county or city commercial areas, zones or uses but recognizing additional areas or zones, beyond those already existing, may be desirable and that some mixed uses are compatible."
- Land Use Policy No. 3: "Encourage the establishment of new development to be located within the boundaries of a rural fire protection district."

B. When considering the surrounding land uses, is the proposed conditional rezone more appropriate than the current zoning designation?

Conclusion: The proposed zone change is more appropriate that the current zone.

Finding:

While the subject parcel and the majority of parcels in the immediate area still zoned "A" agricultural it is an area that is currently transitioning to residential and commercial uses. There are twenty-eight (28) platted subdivisions in the immediate vicinity that would benefit from the proposed rezone and development. The subject parcel is located at the corner of two major arterial road ways at a signalized intersection which allows for adequate traffic control. It is also located within the Area of City Impact for the city of Caldwell which designates it as "Highway Corridor" on their land use map making the proposed use of a convenience store, fueling station, farmers market and car wash very appropriate and compatible.

C. Is the proposed conditional rezone compatible with surrounding land uses?

Conclusion: The proposed use <u>is</u> compatible with the surrounding land uses.

Finding: Directly across Highway 55, on parcel R32900216 is a mini-storage facility that operates

under a conditional use permit, this parcel is zoned "C-1" (Neighborhood Commercial). To the south west of the subject parcel are several parcels that are zoned "CR-C-2" (Conditional Rezone-Service Commercial) and "CR-C-1" (Conditional Rezone-

Neighborhood Commercial) and "C-1" (Neighborhood Commercial).

D. Will the proposed conditional rezone negatively affect the character of the area? What measures will be implemented to mitigate impacts?

Conclusion: As conditioned by the development agreement, the proposed use will not negatively affect

the character of the area.

Finding: The Canyon County Comprehensive Plan 2020 Future Land Use Map designates the

subject property as commercial. The request is located within the Caldwell Area of City Impact and the land use is designated as Highway Corridor the purpose of which is to "identify key areas along a highway corridor that are highly visible and transitional in nature. This category includes land that is suitable for a blend of highway oriented commercial uses, business parks, limited light industrial, educational, office and high

density residential"

As conditioned by the development agreement (Attachment A), the rezone only impacts 12.6 acre of a 40-acre parcels, retaining approximately 27 acres in agricultural uses. The agreement restricts the development to the first two phases which requires conditions regarding traffic improvements and reviews and complying with City of Caldwell requirements. The result allows commercial uses within the designated area incrementally with conditions that address traffic, services and operational concerns.

E. Will adequate facilities and services including sewer, water, drainage, irrigation and utilities be provided to accommodate the proposed conditional rezone?

Conclusion: Adequate sewer, drainage, and storm water retention facilities and utility systems will be provided to accommodate the proposed use at the time of development.

Finding: The following adequate facilities can be provided and demonstrated at the time of development:

- Wells/Septic Systems: The property is located within the Caldwell Area of City Impact. City services are not available to the subject parcel at this time. Therefore, the gas station with convenience store and seasonal farmer's market will be required to meet IDWR, DEQ and SWDH requirements.
- <u>Irrigation and Drainage</u>: The property is located within the Boise Project Board of Control Irrigation District and has a valid water right. Future development will be required to provide irrigation water to all landscaping and retain stormwater on-site.

F. Does legal access to the subject property for the conditional rezone exist or will it exist at the time of development?

Conclusion: Legal access to the property does exist.

Finding: Legal access will be granted via a single point driveway on Farmway Road and another

single point driveway on Highway 55.

G. Does the proposed conditional rezone require road improvements to provide adequate access to and from the subject property to minimize undue interference with existing or future traffic patterns created by the proposed development? What measures have been taken to mitigate road improvements or traffic impacts?

Conclusion: The rezone of the subject property will require improvements to prevent undue

interference with existing or future traffic patterns as proposed.

Finding: The applicant commissioned a Traffic Impact Study (TIS) by TO Engineers which was

completed in November, 2021. The proposed development is expected to generate a total

of 1,770 net-new daily trips. Based upon the analysis contained within the TIS the following recommendations were provided:

- Access: Access to the property shall be located a minimum of 660' from the intersection of Karcher Road and Farmway Road.
- <u>Farmway Road at Driveway A:</u> Per standards outlined in the *ITD Traffic Manual* a northbound right-turn lane should be constructed concurrently with Driveway A which will provide full access with no turning restrictions.
- <u>State Highway 55 at Driveway B:</u> Per standards outlined in the *ITD Traffic Manual* a westbound turn lane should be constructed concurrently with Driveway B which will provide right-in, right-out access only.

Canyon Highway District #4 commented on the request and TIS. The comment letter does not oppose the request subject to conditions of approval which include a final traffic study addressing the full buildout, improvements to Farmway frontage per Transportation Impacts and Frontage Improvements section of the TIS, Driveway approach location, connection plan directly across from Drake Lane, and dedication. The letter is included as a condition of the development agreement.

H. Will the proposed conditional rezone impact essential public services and facilities, such as schools, police, fire and emergency medical services? What measures will be implemented to mitigate impacts?

Conclusion: Essential services will be provided to accommodate the use. No mitigation is proposed at

this time.

Finding: Staff has not found that the proposed use will require additional public funding to meet the

needs created by the requested use and police, fire, and emergency medical services will be provided to the property. As a condition of the development agreement, City of Caldwell requires the development to comply with applicable Caldwell Fire Department requirements and standards. All affected essential services were notified on April 26,

2022. No comments were received.

Conclusions of Law - Area of City Impact

The property is within the Caldwell Area of City Impact. The city designates the area as "Highway Corridor".

Pursuant to Canyon County Code §09-01-21 – Zoning Ordinance Amendment Proposals within the Caldwell Area of City Impact Agreement, a notice was provided to the City of Caldwell on April 26, 2022. A comment letter was received from the City of Caldwell identifying the request is consistent with their comprehensive plan subject to the following:

- Development meets applicable regulations within Caldwell's Landscaping Ordinance;
- Development connect to city services (water and sewer); and
- Development meet Caldwell Fire comments and conditions.

As conditioned by the development agreement (Attachment A), the request shall comply with Caldwell's landscaping requirements and Fire District Conditions. The agreement requires the developer to connect to city services prior to Phase 3. The applicant shall work with the City of Caldwell on a preannexation/services connection deferral agreement.

Order

Based upon the Findings of Fact, Conclusions of Law and Order contained herein, the Planning and Zoning Commission **recommends approval** of Case #RZ2022-0007, a conditional rezone of parcel R32686 from an "A" zone (Agricultural) to an "CR-C-2" zone (Conditional Rezone – Service Commercial).

| APPROVED this | day of _ | , 2022. |
|---------------------------------|----------------|--|
| | | PLANNING AND ZONING COMMISSION CANYON COUNTY, IDAHO |
| | | Robert Sturgill, Chairman |
| State of Idaho |) | cc |
| County of Canyon County |) | SS |
| On this day of | | _, in the year 2022, before me, a notary public, |
| | | , personally known to me to be the person whose name is subscribed |
| to the within instrument, and a | cknowledged to | me that he(she) executed the same. |
| | | Notary: |
| | | My Commission Expires: |

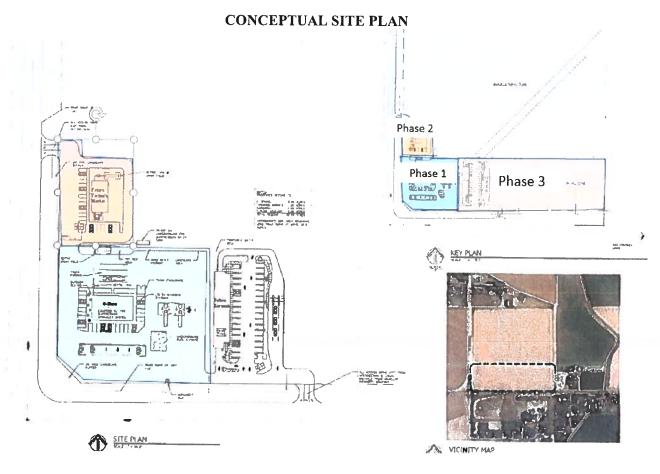
ATTACHMENT A

DRAFT CONDITIONS OF APPROVAL

- 1. The development shall comply with all applicable federal, state, and county laws, ordinances, rules, and regulations that pertain to the property.
- 2. Development shall only occur within the 12.6 acres shown in the conceptual site plan (Attachment B) on Parcel R32686 zoned "CR-C-2". The remaining acreage shall remain zoned "A" (Agricultural).
- 3. <u>Prior to commencement of use</u>, development shall comply with all applicable federal, state, and county laws, ordinances, rules, and regulations and is subject to the following restrictions:
 - a. The development shall be phased in substantial compliance with the conceptual site plan (Attachment B) as follows:
 - i. Phase one shall consist of a fueling station to include 12 passenger vehicle pumps and 4 diesel pumps for commercial vehicles and, a 6,000 sq. foot convenience store with second floor caretaker residence.
 - ii. Phase two shall consist of a 3,000 square foot farmers market and is to include a paved parking lot.
 - iii. Phase three, consisting of a 7,000 square foot carwash and commercial development, shall not occur until such time as Caldwell has extended public utilities to the site.
 - b. The development shall comply with the following City of Caldwell requirements:
 - i. Development shall comply with City Landscaping Ordinance:
 - ii. The development shall comply with applicable Caldwell Fire Department requirements and standards as stated in Caldwell's letter dated May 3, 2022 (Exhibit 5a of the staff report); and

- iii. A pre-annexation agreement/city services deferral agreement shall be completed by the development and the City of Caldwell.
- c. A Final Traffic Study is required and is subject to review and acceptance by Canyon Highway District 4, City of Caldwell Engineering and Idaho Transportation Department. All improvements of the study shall be complied with unless other alternative measures are identified by the above agencies. Development shall comply with the following:
 - i. Requirements and conditions stated in the Canyon Highway District #4 letter dated July 14, 2022 (Exhibit 5c) of the staff report.
- 4. The developer shall comply with CCZO §07-06-07 (4): Time Requirements: "All conditional rezones for a land-use shall commence within two (2) years of the approval of the board."

ATTACHMENT B





1010 S. Allante Place, Suite 100 Boise, Idaho 83709 Telephone 208 336-8370 Fax 208 336-8380 www.brsarchitects.com

Obendorf Commercial Rezone Letter of Intent

Proposed Use/ Project Description:

The existing property is currently zoned Agricultural as are the properties to the north, east and west. Immediately south is a mini storage facility and a residential subdivision. Canyon County's 2020 Comprehensive Plan, future land use map identifies this site for commercial development, lands to the north, south and east designated as future residential development. The lands west of Farmway Road are intended to remain agricultural at the present time. City of Caldwell's current area of impact boundary being Farmway Road then south approximately a quarter mile and parallel to Karcher Road.

The proposed commercial rezone of 12.6 acres of frontage land on the northside of Karcher Road which extends east a quarter mile from the intersection with Farmway Road. There will be two access points to the development: one from Farmway Road approximately 660 feet north of the Karcher intersection and the second on Karcher Road, 677 feet east of the Farmway intersection. Preliminary feedback from ITD and Canyon County Highway District support these site access locations.

First phase is a fueling station with convenience store on 3 acres at the northeast corner of the Farmway and Karcher roads. There will be two fueling canopies; one with 12 passenger vehicle fueling stations and a second with 4 decseil pumps. The site does not have access to public utilities at this time and will provide its own water well. The convenience store septic system will be an onsite septic tank with drain field. Each individual site will retain storm water drainage in either open swales or underground drain fields.

The convenience store has 6,000 square feet of ground floor sales and general operational space and approximately 1,000 s.f. second floor caretakers' residence. The convenience store will be protected by a fire sprinkler system that includes a water holding tank on site with pressurized lines as determined by the Caldwell Fire Marshall.

The site will have a twenty-foot landscape buffer between the adjacent roadways and internal paved driveways. Site amenities include an outdoor dining area, a pet rest area for travelers, EV charging stations and paved parking for passenger vehicles to semitrucks with trailers. Construction of phase one anticipated to start late fall 2022 and completed in 2023.

A 3,000 square foot farmers' market would be the second phase and be a new home for the existing Lakeview Fruit Market currently at the intersection of Riverside and Karcher Roads. The building would have refrigerated storage, public restrooms, and a produce sales floor. The site will have paved parking



areas, and open space for outdoor seasonal fruit and vegetable sales from local farmers.

Phase three is a 7,000 s.f. carwash adjacent to the fuel station, it is considered an accessory use in a C-2 Commercial zone. It will be a fully automated conveyor car wash tunnel with several detailing stations. The site will have three pay stations and ample stacking area for peak hours. This phase will occur after Caldwell utilities have been extended to the property, anticipated timeline is five plus years.

The remaining 5.6 acres of commercial frontage will also begin development after utility infrastructure has reached the area in next 5 to 10 years. During this time, residential growth along with other key public services will be able to economically sustain additional local businesses in the community.

Proposed Request and why it's being requested:

Our rezone application proposes to rezone 12.6 acres of frontage land on the northside of Karcher Road to C-2 Commercial Service. The frontage extends east a quarter mile from the intersection with Farmway Road.

The new Karcher Road frontage development is intended establish a commercial presence to serve as an economic foundation for future businesses that supports residential growth as the City of Caldwell expands into this area.

The first business will be a fueling station with convenience store on 3 acres at the northeast corner of Farmway and Karcher roads. It will be the anchor business for the remaining commercial development. Second phase is a seasonal farmers market that connects the existing agricultural lands to this development by selling fresh grown produce to residents in the area. At some point in the future after Caldwell public utilities are available, a carwash will be added as an accessory use to the fuel station.

The remaining commercial frontage will begin development after utility infrastructure is established approximately 5 to 10 years in the future. During this time, residential growth will create the need for additional local business opportunities on the site.

Expected Traffic counts and patterns:

The following information is part of a Traffic Impact Study for the gas station with convenience store and farmer's market.

The study focuses on traffic operations for the primary intersection associated with the proposed access points. These are the roadways anticipated to support the majority of approaching and departing project trips. The Idaho Statewide Functional Classification Map maintained by the ITD catalogs the classifications of these roadways.

Under 2021 existing conditions, SH 55 at Farmway Road operates well within acceptable level of service standards, when examining both the intersection overall and each lane group on the intersection approaches. The intersection operates at LOS B during both peak hours, and the worst lane group (NBLTR) operates at LOS C during the PM peak hour only. This analysis indicates that there is ample capacity at the intersection to accommodate additional traffic volume.

The fueling stations development is proposed to provide a gas station with 16 vehicle fueling positions and an ancillary 6,000 square-foot convenience store, in addition to a 3,000 square-foot farmer's market. Site access is proposed via two driveways: one full-access driveway with Farmway Road, located



to the north of SH 55, and one right-in, right-out driveway with SH 55, located to the east of Farmway Road. The proposed right-in, right-out access along SH 55 aligns with ITD's long-term plan for the corridor. Ultimate build-out of the site is anticipated to be completed in 2023.

When accounting the effect of pass-by trips, the proposed development is forecast to generate approximately 1,770 weekday trips, with 98 trips generated during the AM peak hour and 131 trips generated during the PM peak hour according to the ITE Trip Generation Manual. The majority of trips were forecast to/from SH 55 (Karcher Road), with 35- and 40-percent of trips anticipated to/from the east and west, respectively, along SH 55. 20-percent of project trips are forecast to/from the north via Farmway Road, with the remaining 5-percent expected to/from the south via Farmway Road.

Summary Results:

Intersection and street capacity analyses were performed based on review of year 2021 existing and 2023 forecasted, with and without consideration of the fueling stations site, traffic conditions for the AM and PM peak hours. This study concludes that the intersection of SH 55 at Farmway Road is expected to operate well within acceptable ITD and ACCHD level of service standards through the year 2023, with and without traffic from the development. The site access points are also anticipated to operate well within acceptable standards, even without consideration of turn lane warrants.

Traffic volumes under 2023 Future with Project conditions were compared against the turn-lane warrants established in NCHRP Report 457. Right-turn lanes are warranted at both site access points. Left-turn lane warrants were not met at Driveway A, and a left-turn lane is not permitted at Driveway B as it is proposed to provide right-in, right-out access only. Additionally, two approach lanes on the site access points are not warranted.

Recommendations and Conclusion:

This study concludes that the development of the fueling station is not likely to result in a significant degradation of traffic operations at the study intersection through the year 2023. A northbound right-turn lane is warranted along Farmway Road at Driveway A and a westbound right-turn lane is warranted along SH 55 at Driveway B based on 2023 future with project traffic volumes and a posted speed limit of 55 mph on these roadways. These right-turn lanes should be constructed in accordance with the guidelines contained in the Idaho Transportation Department Supplement to the MUTCD. The proposed location of Driveway A should be shifted further to the west as to not encroach upon the existing quarter mile driveway along SH 55, while maintaining adequate spacing between the access point and the SH 55 at Farmway Road intersection.

For detailed traffic impact information refer to the traffic study included in this rezone application submittal.

Phasing of Development:

Phase One: Fueling station and convenience store with a caretaker's residence on 3 acres.

Phase Two: Seasonal farmer's market on 1 acre.

Phase Three: Accessory Use carwash on 1.5 acres. To be developed after city utilities have been extended to the area, estimated timeline 5 to 10 years.

Phase Four: Remaining 5.6 acres of commercial C-2 frontage developed after city utilities are available and as demand new businesses in the community grow over time.



How proposed use may affect neighboring uses:

Once the property is fully developed these small businesses in rural areas thrive when residents shop locally. Consumers shopping at local small businesses are essentially giving money back to their community. A thriving local business will generate high levels of revenue, which means that the business will pay higher taxes, including local property taxes. This revenue is then used to fund local infrastructure projects like parks, bike/walking paths, schools, libraries, police, and fire departments.

The phase one fueling station with a convenience store will start the economic growth by offering goods and services close to residence homes and reducing long trips to a 'big-box store'. Studies show more people visit a convenience store each day than any other brick and mortar retail location. Meaning on average half the population is buying something at a convenience store every day. These customers frequent their favorite location to refuel and refresh with a snack, beverage, and fresh-prepared meal. Studies show in rural areas eight in ten residents frequent these locations for buying grocery items, fuel or their products or services. These stores are often a community gathering spot, proving essential services for the nearby residents.

The average convenience store collects about \$1.3 million in taxes for local, state and federal governments. This includes property taxes, payroll taxes, sales taxes and taxes that are assessed on a variety of products sold at stores. The average taxes collected is about \$17 per square foot per year. Convenience stores create economic stability and growth providing sales, services, and local jobs.

This new commercial development made up of small businesses will contribute to local economics by bringing growth to the community. Initial benefits are goods and services found close to home. Fewer long trips reduce fuel costs, decreased travel time, less vehicle wear and tear, accumulatively allows residents additional time and money for other activities. In the longer term, rural small businesses provide local employment opportunities, generating wages that in turn are spent in these same businesses and attributing to the community's economic growth.

Description of future site features:

The development will have a landscaping buffer between roadways and interior paved areas as determined by county and highway districts. Internal landscaping areas will also comply with county standards while enhancing the site esthetic by hiding or masking utilitarian elements from view.

A verity of landscaping techniques will be used to reduce landscape water consumption like drought tolerant plants in conjunction with hardscape decorative pavers and rock features.

The vehicle circulation and parking areas will be asphalt paved is such a way as to retain storm water on site using surface drainage swales and underground drain fields. All catch basins will have filtering devices to prevent petroleum contaminants from entering the soil.

The first phase fueling station with convenience store will start construction late fall 2022 and does not have access to public sewer or water utilities. For water service a water well will be drilled and sewer waste from the convenience store will go into a septic holding tank and underground drain field as approved by Southwest District Health.

The building will be protected by a fire sprinkler suppression system and water holding tank with pressurized lines as required by the Caldwell Fire Marshall.



Site amenities include an outdoor seating area for dining and relaxation, a fenced 'pet rest area' for travelers with dogs and charging stations for electric vehicles.

Describe business operations, no. of employees, hours, deliveries, shipping, Store operations:
Business operation hours will be 6am to 10pm Monday through Thursday, 6am to 11pm Friday,
Saturday and 7am to 9pm Sundays there are two work shifts with 4 individuals working per shift.
General product deliveries occur in the mornings twice a week. Beverages are delivered in the morning once a week and fuel deliveries are twice a week in the late evenings. After deliveries are received products are unpacked, stored and sales area restocked. Employees always being vigilant of health and safety regulations particularly when handling food products. Setting up displays and straightening up shelves so the store is clean and organized for customers. Providing good customer service to create a solid relationship with the community and becoming a solid fixture of the neighborhood.

The store will stock a range of everyday items such as: coffee, groceries, snack foods, confectionery, soft drinks, ice creams, alcohol & tobacco products, lottery tickets, over-the-counter drugs, toiletries, household products, newspapers, and magazines.

Food preparation for made-to-order include morning menu eggs, sausage, hashbrowns, breakfast burritos & sandwiches. Lunch/diner menu: fried chicken strips, deli sandwiches, hamburgers, fries, salads, and soups.

Describe how proposed use is consistent with the specific zoning or comprehensive plan policies. The existing property is zoned Agricultural as are most of the surrounding lands with some residential subdivisions to the east and south. West along the southside Karcher Road for approximately a half mile is frontage property zoned commercial (CR-C2).

Canyon County's 2020 Comprehensive Plan, future land use map identifies this property and adjoining lands within a quarter mile north and east as future commercial that would support residential development as the City of Caldwell expands into this area.

Our application proposes to rezone approximately 12.6 acres of frontage property along Karcher Road to C-2 Commercial Service for developing new businesses to serve a growing residential community. The initial businesses proposed are a fueling station with a convenience store, accessory use carwash and seasonal farmers market that are all allowed uses in a C-2 zone. The remainder of the commercial frontage would be developed into similar service-related businesses as demand is driven by residential growth over time.

Changing this property zoning designation to commercial is consistent with the county's future development goals for the following reasons:

- The county's comprehensive plan identifies this property for future commercial development.
- Commercial development in rural areas, is encouraged when located along major roadways or transportation infrastructure.
- The county's comprehensive plan supports locating commercial areas near residential customers.
- Design and development of commercial areas that allow opportunities to provide transit between commercial businesses and nearby residential developments.

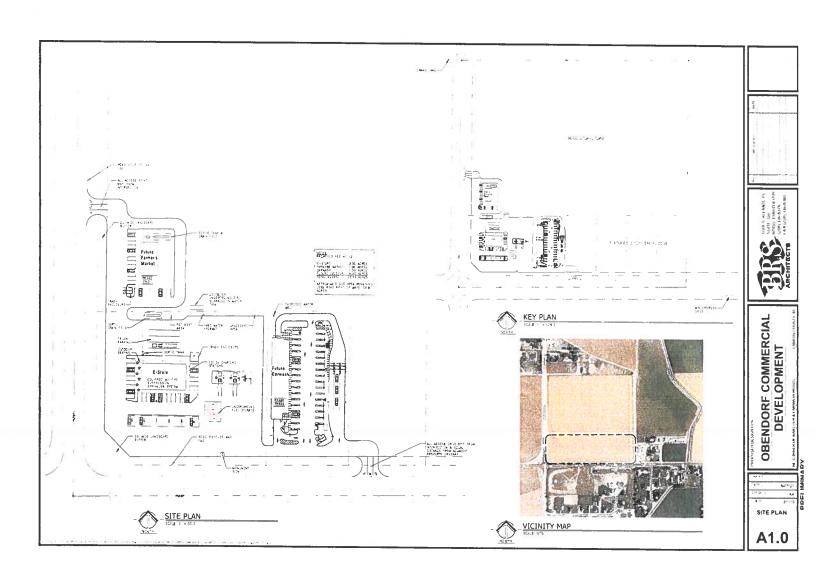


- Commercial zones increase business and economic development within Canyon County.
- The county's commercial designation for this property is intended for commercial uses with goods and services to businesses, travelers, and residents of the county.
- The county encourages commercial development in a planned and constructive manner to enhance the existing lifestyle and environmental beauty of Canyon County.

In summary, the new commercial development located on the western fringe of Caldwell's area of impact and at the intersection of two major roadways, offers a highly visible site for new businesses coming into the community. The phase one fueling station with convenience store will establish a commercial presence to serve as an economic foundation for future business growth that in turn supports residential expansion.

As a privately owned and operated business, they have a vested interest in the growth of the community by not only providing goods and services to residents and travelers, but also offering employment opportunities to residents, supporting local charities, and contributing to school fundraising events. These future small businesses in the development will be able to create partnerships with public and private community-based organizations creating lasting relationships contributing to the community's economic well-being.





NEIGHBORHOOD MEETING SIGN-UP

CANYON COUNTY DEVELOPMENT SERVICES DEPARTMENT

111 North 11th Avenue, #140, Caldwell, ID 83605

www.canyonco.org/dsd.aspx Phone: 208-454-7458

Fax: 208-454-6633



NEIGHBORHOOD MEETING SIGN UP SHEET CANYON COUNTY ZONING ORDINANCE \$07-01-15

Applicants shall conduct a neighborhood meeting for any proposed comprehensive plan amendment, zoning map amendment (rezone), subdivision, variance, conditional use, zoning ordinance map amendment, or other requests requifying a public hearing!

| SITE INFOR | | |
|--|----------------------|-------------------|
| Site Address: 15/622 KAZCHER ROAD PO | arcel Number: 2326 | 86 |
| | rate: 10 | ZIP Code: 83600 |
| Notices Malled Date: WARCH 15th 2022 N | umber of Acres: 12.6 | Current Zoning: A |
| Description of the Request: | | |
| | | |
| APPLICANT / REPRESENT | ATIVE INFORMATION | |
| Contact Name: CLIPTICS CHUSTOL | | |
| Company Name: PYS ARCHITECTS | | |
| Current address: 1010 S. ALLANTE PLAC | E, 5/E 100 | |
| City: 870196 | State: 1541 | ZIP Code: 37769 |
| Phone: 168.376.8370 | Cell: | Fax: |
| Emall: curtis, brearchitects, com | | |

| | MEETING INFORMATION | |
|-----------------------------|----------------------|--|
| DATE OF MEETING: 3-29.22 | MEETING LOCATION: FA | 2th EAST CONNER OF LEMMAY AND KARCHER POADS |
| MEETING START TIME: 5150 PM | l . | ' |
| ATTENDEES: | | |
| NAME (PLEASE PRINT) | SIGNATURE: | ADDRESS: |
| 1. Steve + Mary Clark | Strong Clark | 15934 Canyon Wood Ph. |
| 3. Page Jahelka | Careto Stale | 15633 Karcher Rd Column |
| 4. WEST | chayno Wester | 16316 onhard an when |
| 5. 6. | J | |
| 7. | | |
| 8. | | EXHIBIT |
| 9. | | applies 3 |
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| 15. |
| 16. |
| 17. |
| 18. |
| 19. |
| 20. |
| NEIGHBORHOOD MEETING CERTIFICATION: I certify that a neighborhood meeting was conducted at the time and location noted on this form and in accordance with Canyon County Zoning Ordinance § 07-01-15. |
| APPLICANT/REPRESENTATIVE (Please print): |
| CURTIS CHOUSTAL |
| APPLICANT/REPRESENTATIVE (Signature): |
| DATE: 3 129 122 |



March 15, 2022

Dear Neighbor.

We are in the process of submitting an application for a Zoning Ordinance Map Amendment to Canyon County Development Services (DSD). One of the requirements necessary prior to submitting the application is to hold a "neighborhood meeting" and provide information to our surrounding neighbors (Canyon County Zoning Ordinance § 07-01-15).

This meeting is for informational purposes and to receive feedback from you as we move through the application process. This is <u>not</u> a Public Hearing before a governing body of the County. Once our application has been submitted and processed, a public hearing date will be scheduled. Prior to the scheduled date you will receive an official notification from Canyon County DSD regarding the Public Hearing via postal mail, newspaper publication, and/or a display on the property for which the Zoning Ordinance Map Amendment is applied.

The Neighborhood Meeting details are as follows:

Date: Tuesday, March 29, 2022 Time: 6:00pm to 7:00pm

Location: 15622 Karcher Road Caldwell ID. 83605, northeast corner of Karcher and Farmway Roads, Canyon

County, Idaho

Property description: Agricultural farmland

The project is summarized below:

Site Location: Canyon County parcel: R32686, mailing address: 15622 Karcher Road, Caldwell, ID 83605.

Proposed access: Two proposed access points: Karcher Road access approximately 677' east of the Farmway

Road intersection. Farmway access approximately 660' north of the Karcher Road intersection.

Total acreage: 12.6 acres of frontage property to Karcher Road beginning at the intersection of Karcher and Farmway Roads then east approximately a quarter mile.

Proposed lots: Rezoning 12.6 acres of Agricultural land to C-2 Commercial Service for the purpose of developing a fueling station with a convenience store on a 3 acre portion and future commercial development along the frontage on Karcher Road.

We look forward to the neighborhood meeting and encourage you to attend. At that time we will answer any questions you may have.

Please do <u>not</u> call Canyon County Development Services regarding this meeting. This is a PRE-APPLICATION requirement and we have not submitted the application for consideration at this time. The County currently has no information on this project. If you have any questions prior to the meeting, please contact me at 208-336-8370 or <u>curtis a brearchitects.com</u>.

Sincerely, Curtis Crystal BRS Architects





Neighborhood Meeting for the proposed Obendorf Commercial Rezone

Date: Tuesday, March 29, 2022

Time: 6:00pm - 7:00pm

Location: Meeting will be held on the subject property at the northeast corner of Karcher and Farmway Roads, Canyon

County, Idaho.



| ROBERTSON RANDALL J |
|-----------------------|
| 17534 STIEHL CREEK DR |
| NAMPA, ID 83687 |

WESTERN FARMS INC 16909 MARSING RD CALDWELL ID 83607

| SILCO INC |
|------------------|
| 985 CORPORATE LN |
| NAMPA ID 83651 |

HOAG JARED M 16327 FARMWAY RD CALDWELL ID 83607 KAWAGUCHI BRENT 16189 DRAKES LN CALDWELL, ID 83607

SCHELLER LYNN MARIE 16200 DRAKES LN CALDWELL, ID 83607

CLARK MARY V 15934 CANYON WOOD PL CALDWELL, ID 83607

RODRIGUES LARRY J 15838 CANYON LAKE ST CALDWELL, ID 83607

JAHELKA PAMELA R 15633 KARCHER RD CALDWELL. ID 83607

JOB KARMA D 15914 WINTERGREEN DR CALDWELL, ID 83607

ANDERSON JASON W 15892 CANYON WOOD PL CALDWELL, ID 83607

HIBBENS RAY 15913 CANYON WOOD PL CALDWELL, ID 83607

BAYNE STEVEN 15964 CANYON LAKE ST CALDWELL. ID 83607

RRLS LLC PO BOX 5119 KETCHUM, ID 83340

ALPHA MORTGAGE FUND II TRUSTEE 7971 W MARIGOLD BOISE, ID 83714

CONELY CANDICE 15929 CANYON WOOD PL CALDWELL, ID 83607

DOWEN LARRY J 15622 KARCHER RD CALDWELL, ID 83607

MC KEE VICTORIA B 16308 FARMWAY RD CALDWELL, ID 83607

DUNDAS MIKE 16100 FARMWAY RD CALDWELL, ID 83607 GODINA GUSTAVO T 16312 FARMWAY RD CALDWELL, ID 83607

MC LANE EDWARD J 15920 CANYON WOOD PL CALDWELL, ID 83607 GUNTER REBEKAH 15880 CANYON LAKE ST CALDWELL, ID 83607

TOVAR RODOLFO 15922 CANYON LAKE ST CALDWELL, ID 83607

ANDERSON TERRY 15955 WINTERGREEN DR CALDWELL, ID 83607

LANE TOBY J 15939 WINTERGREEN DR CALDWELL, ID 83607

KNEER ERIK 15895 WINTERGREEN DR CALDWELL, ID 83607

WISEMAN ALLEN 15946 WINTERGREEN DR CALDWELL, ID 83607

FOWLER PHILLIP 15962 WINTERGREEN DR CALDWELL, ID 83607

KARCHER FARM LLC 5001 FIFESHIRE PLACE BOISE, ID 83713



VALLEY WIDE COOPERATIVE INC 2114 N 20TH ST NAMPA, ID 83687 SVW LLC 2009 S ROOSEVELT BOISE, ID 83705

CORESON DAVID E AND JUDY L REVOCABLE FAMILY TRUST 73837 DAVIS CREEK RD ENTERPRISE, OR 97828

OBENDORF GREGORY R 23299 FARGO RD PARMA, ID 83660

DOWEN LARRY J 15622 KARCHER RD CALDWELL, ID 83607

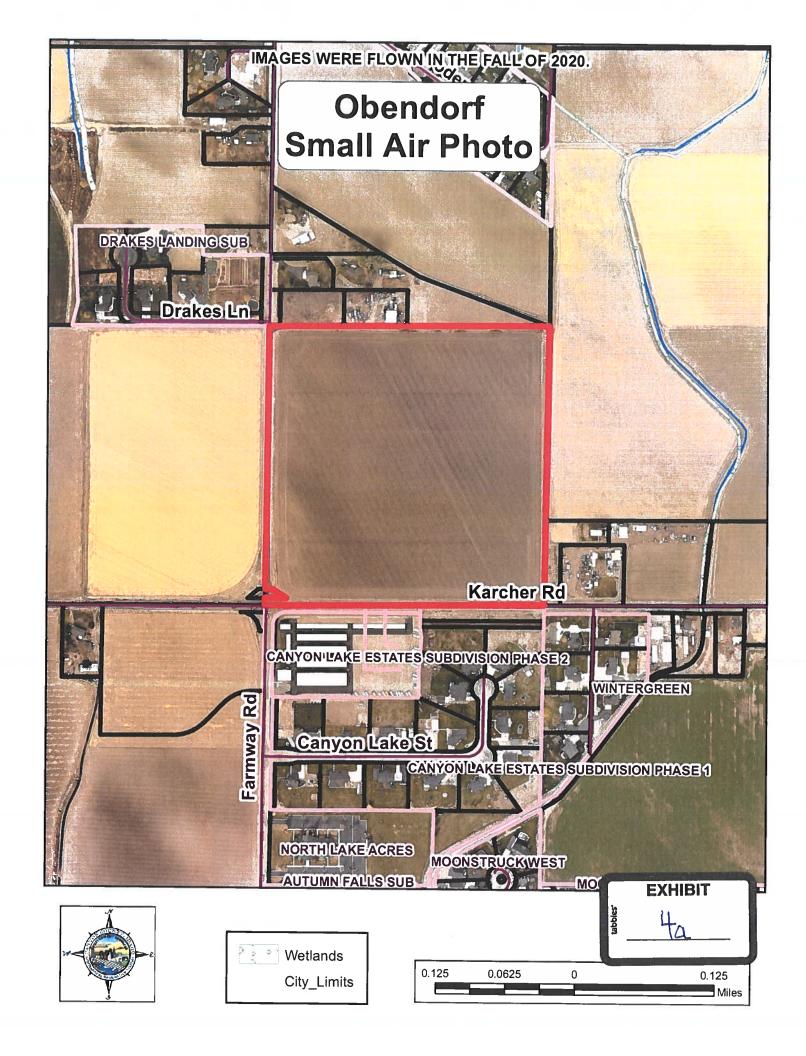
DANOS FAMILY REVOCABLE TRUST 618 TWIN VIEW RD JEROME, ID 83338

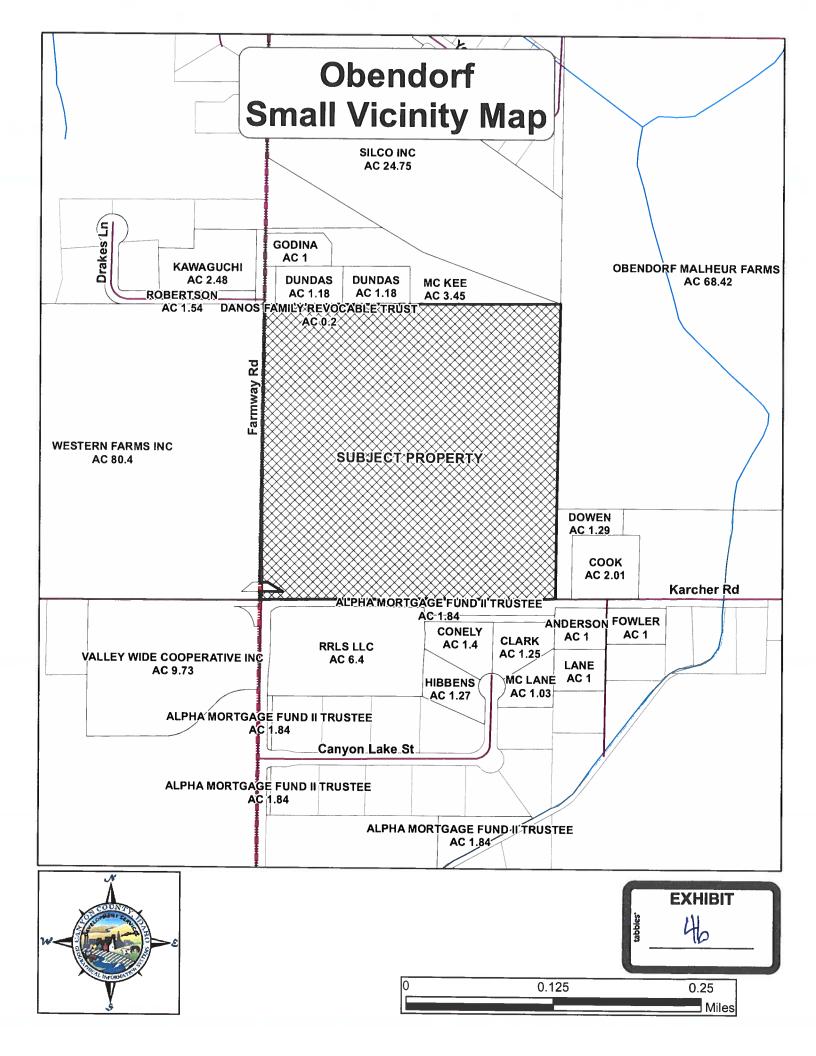
COOK ALBERT J 15656 KARCHER RD CALDWELL, ID 83607

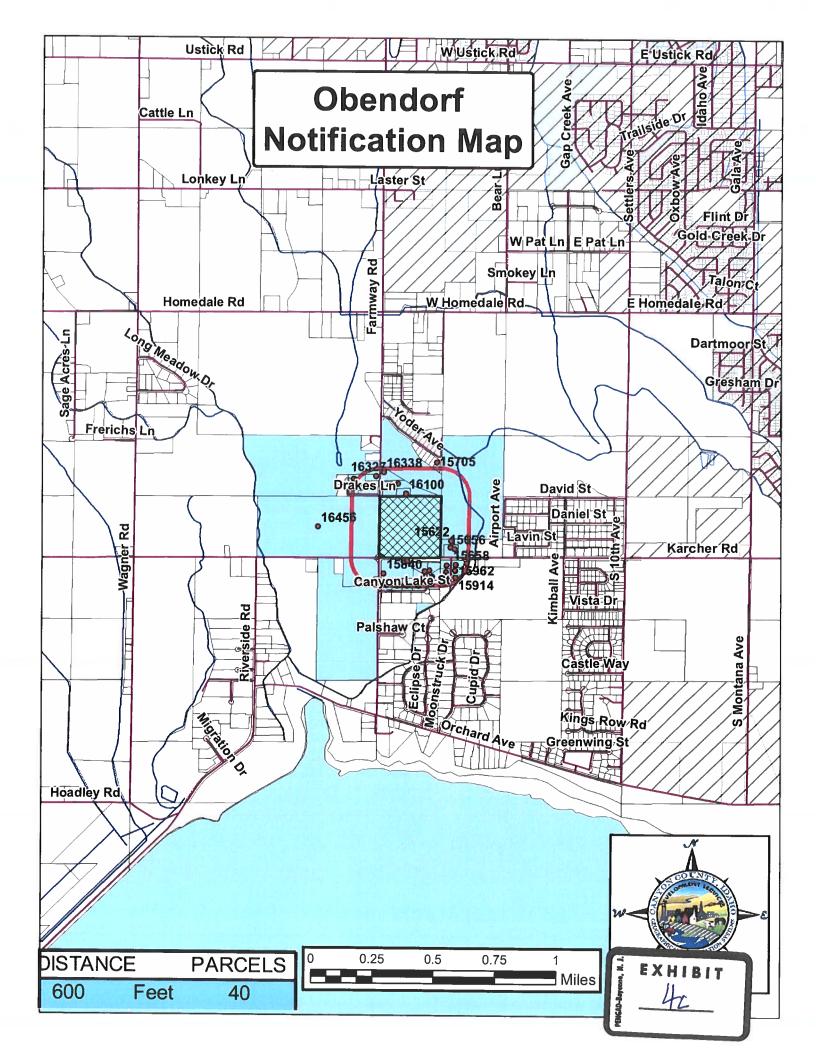
DUNDAS MIKE 12634 BROWNSTONE ST NAMPA, ID 83651

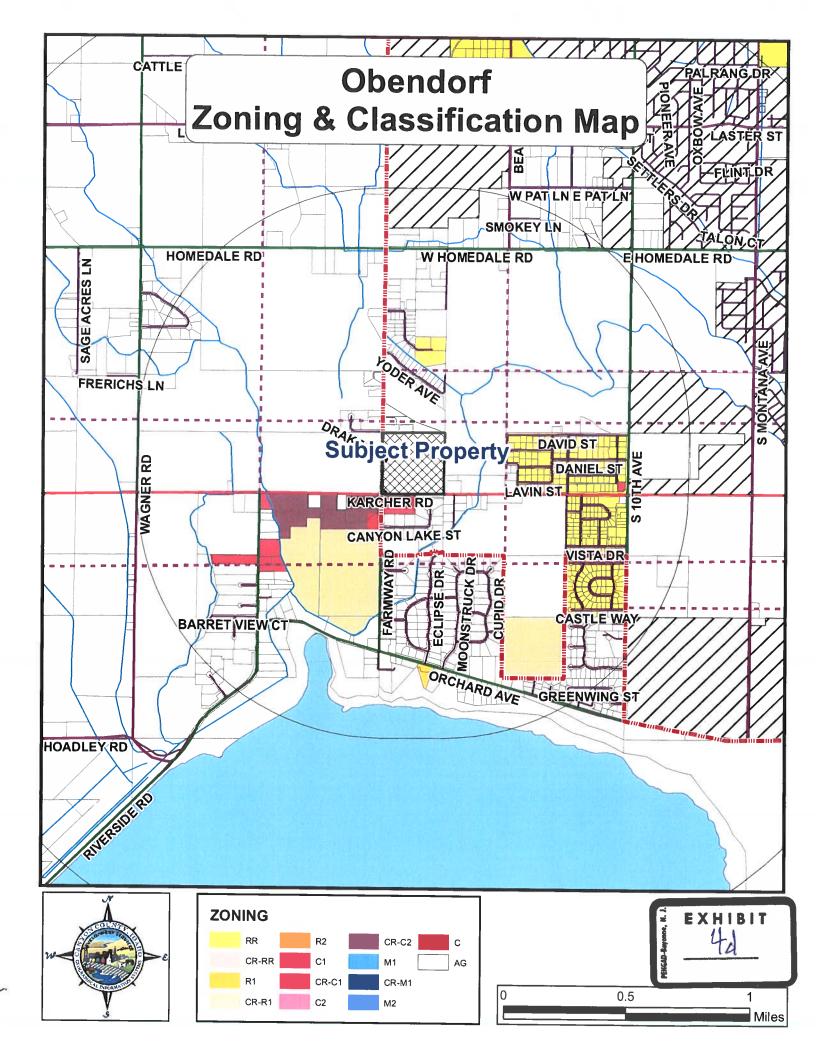
CARPENTER BRYAN KEITH 16338 FARMWAY RD CALDWELL, ID 83607

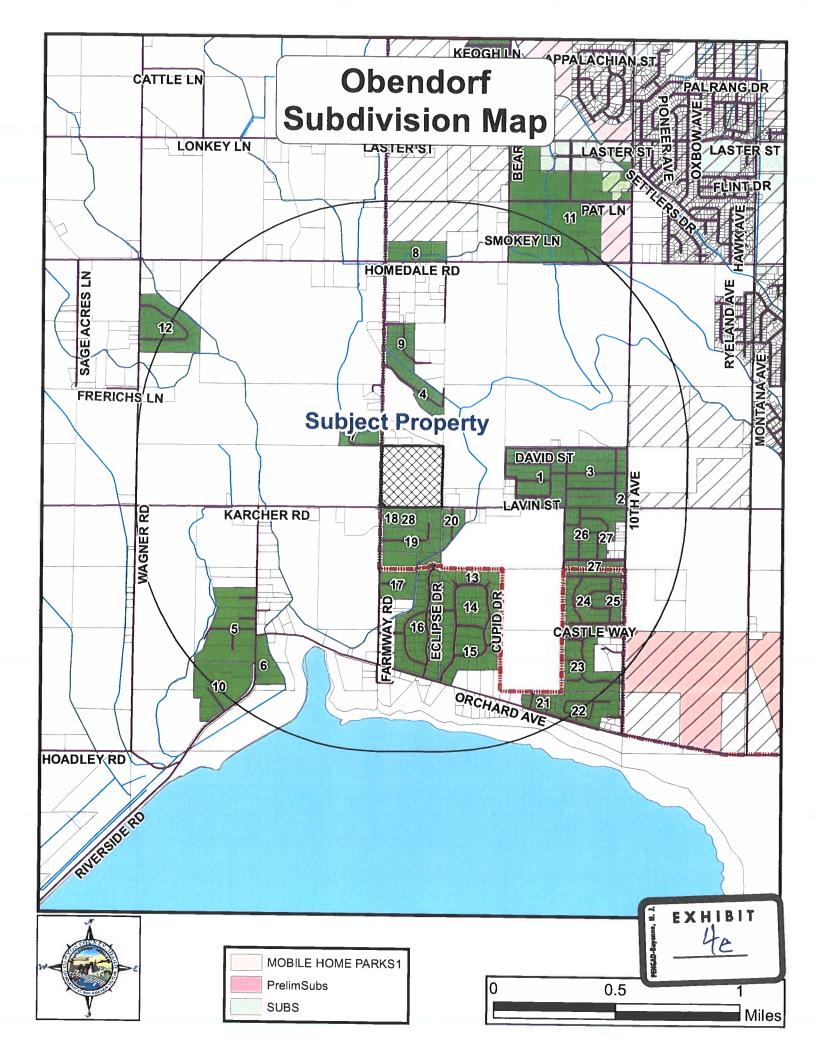
DOBSON RAYMOND L 15705 YODER AVE CALDWELL. ID 83607









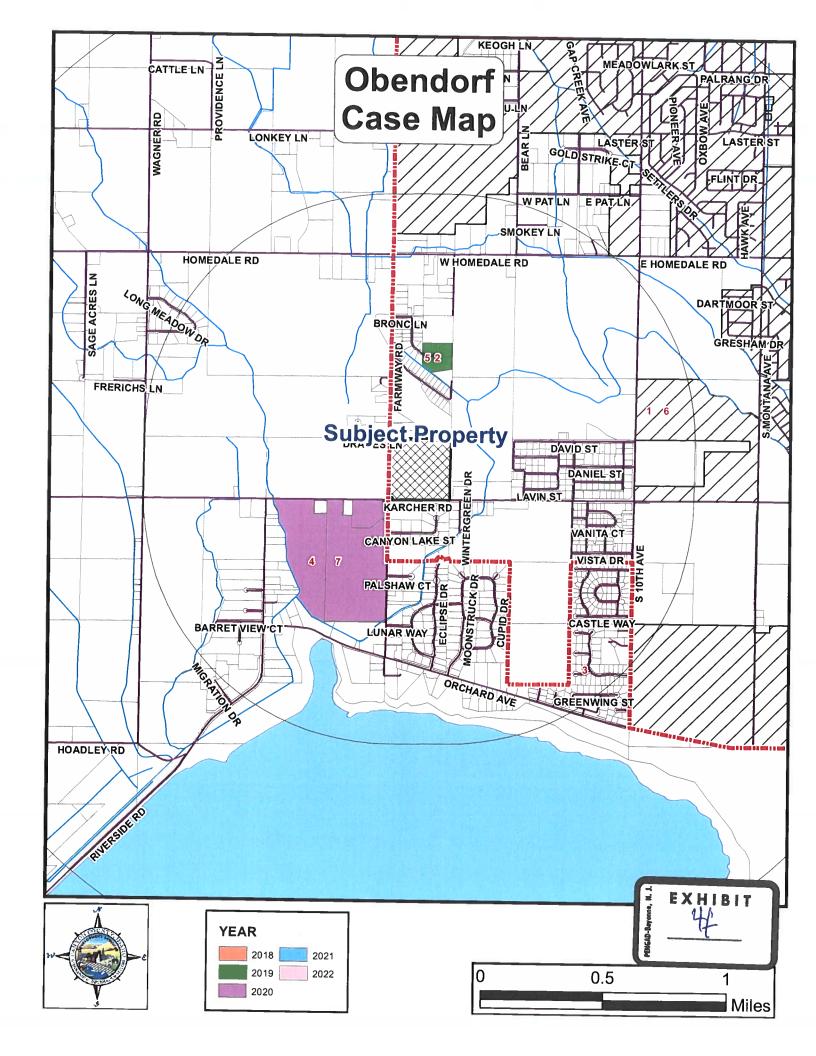


| | | SUBDIV | SUBDIVISION & LOT REPORT | r REPORT | |
|-----------------------------|--------------|-----------------|---|----------|--|
| NUMBER OF SUBS | ACRES IN SUB | NUMBER OF LOTS | AVERAGE LOT SIZE | | |
| 28 | 750.48 | 726 | 1.03 | | |
| NUMBER OF SUBS IN PLATTING | ACRES IN SUB | NUMBER OF LOTS | AVERAGE LOT SIZE | | |
| 2 | 122.79 | 387 | 0.32 | | |
| NAMES OF LOTS NOTE ED | AVERAGE | MEDAN | | | |
| 40 | 10.37 | 1.29 | 0.20 | 80.40 | |
| NUMBER OF MOBILE HOME PARKS | ACRES IN MHP | NUMBER OF SITES | ACRES IN MHP NUMBER OF SITES AVG HOMES PER ACRE | MAXIMUM | |
| | | | | | |
| | | | | | |

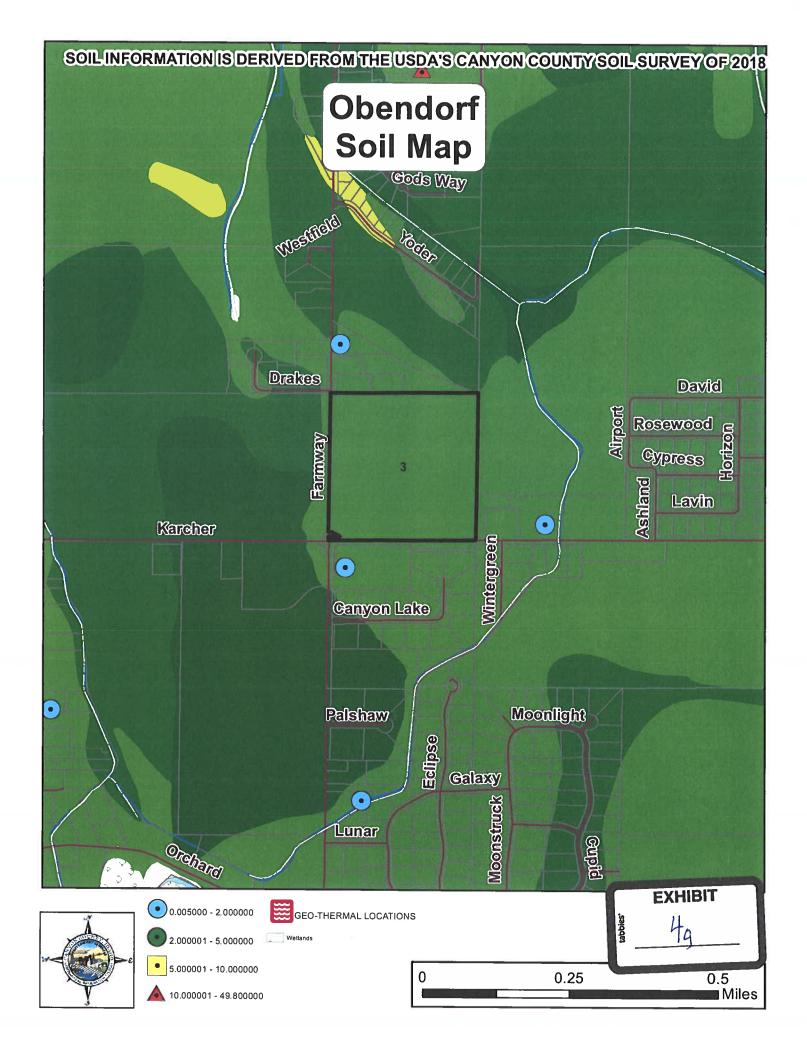
| | | PLATT | PLATTED SUBDIVISIONS | VISIONS | | | |
|----------------------------------|-------|----------|----------------------|------------|------------------|--------------------|--------|
| SUBDIVISION NAME | Label | LOCATION | ACRES | NO OF LOTS | AVERAGET OT SIZE | CITY OF | 2000 |
| | | | | | THE POLICE | :: | a a |
| SOMERSET WEST SUB | - | 3N3W09 | 36.89 | 25 | 0.68 | POLINITY (Capital) | 1074 |
| STECHER SUB | 2 | 3N3W09 | 10.07 | 14 | | POUNTY (Carryon) | 4 78 4 |
| STECHER SUB-AMENDED | 3 | 3N3W09 | 30.27 | 49 | | County (Canyon) | 1000 |
| YODER 1ST SUB | 4 | 3N3W09 | 14.77 | 23 | | Canyon) | 1062 |
| BARRETT HILLS ESTATES | 2 | 3N3W17 | 37.89 | 000 | | COUNTY (Canyon) | 1000 |
| BARRETT HILLS ESTATES #2 | 9 | 3N3W17 | 10.27 | 4 | 2.57 | COUNTY (Canyon) | 1080 |
| DRAKES LANDING SUB | 7 | 3N3W08 | 9:00 | 9 | | COUNTY (Canvon) | 2002 |
| DUNN'S PLAT | 8 | 3N3W09 | 13.39 | 8 | | COLINTY (Canyon) | 1976 |
| MAVERICK SUB | 6 | 3N3W09 | 12.30 | 25 | | COLINTY (Canyon) | 1973 |
| MIGRATION POINTE | 10 | 3N3W17 | 27.56 | 11 | | COUNTY (Canyon) | 2002 |
| ORCHARD HEIGHTS | 11 | 3N3W04 | 211.22 | 78 | | AI DWELL (CITY) | 1000 |
| IM CARRIES NORTHSTAR SUBDIVISIO | 12 | 3N3W08 | 30.80 | 29 | | COLINTY (Canyon) | 2000 |
| MOONSTRUCK SUB PH 3 | 13 | 3N3W16 | 11.98 | 11 | | OUNTY (Canyon) | 2003 |
| MOONSTRUCK SUB PH 2 | 14 | 3N3W16 | 25.75 | 27 | | CANYON (Canyon) | 2002 |
| MOONSTRUCK SUB PH 1 | 15 | 3N3W16 | 31.17 | 27 | | COUNTY (Canyon) | 2002 |
| MOONSTRUCK WEST | 16 | 3N3W16 | 44.44 | 56 | | COLINTY (Canyon) | 2007 |
| AUTUMN FALLS SUB | 17 | 3N3W16 | 11.49 | 5 | | COLINTY (Canyon) | 2005 |
| NORTH LAKE ACRES | 18 | 3N3W16 | 13.79 | 8 | | COUNTY (Canyon) | 2002 |
| YON LAKE ESTATES SUBDIVISION PHA | 19 | 3N3W16 | 22.94 | 19 | | COUNTY (Canyon) | 2002 |
| WINTERGREEN | 20 | 3N3W16 | 7.26 | | | CANYON (Canyon) | 2000 |
| LAKEVIEW ESTATES 1ST SUB | 21 | 3N3W16 | 7.85 | 14 | | COUNTY (Canyon) | 1964 |
| OVERLAKE EAST | 22 | 3N3W16 | 20.67 | 23 | | COUNTY (Canyon) | 19991 |
| DUBLIN LAKESIDE ESTATES | 23 | 3N3W16 | 27.85 | 40 | | COUNTY (Canyon) | 1993 |
| EL RANCHO HEIGHTS | 24 | 3N3W16 | 34.06 | 62 | | COLINTY (Canyon) | 1076 |
| EL RANCHO HEIGHTS #2 | 25 | 3N3W16 | 5.64 | 11 | | ANYON (Canyon) | 1000 |
| VANAL HEIGHTS SUB | 26 | 3N3W16 | 28.60 | 70 | | DOLINTY (Canyon) | 1080 |
| VANAL HEIGHTS RE-SUB | 27 | 3N3W16 | 6.08 | 21 | 0.29 | OINTY (Canyon) | 1073 |
| YON LAKE ESTATES SUBDIVISION PHA | 28 | 3N3W16 | 6.46 | | 6.46 | OI INTY (Canyon) | 2000 |
| | | | | | | 1/10/10/11/11/11 | 2122 |

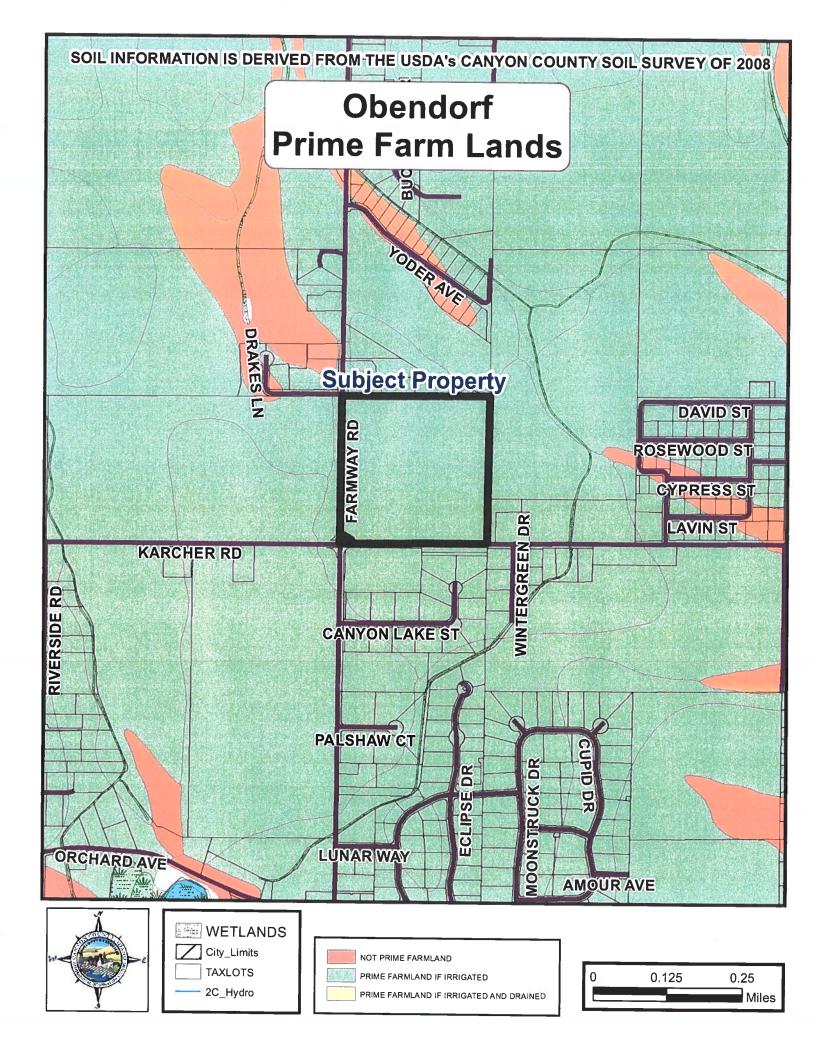
| | SUBDIV | SUBDIVISIONS IN PLATTING | PLATTING | |
|-----------------------------|--------|--------------------------|------------------|--|
| SUBDIVISION NAME | ACRES | NO. OF LOTS | AVERAGE LOT SIZE | |
| Coloh Detoto C. Judi. delan | | | | |
| Sciali Estates Subdivision | 18./4 | 19 | 0.31 | |
| Passero Ridge Subdivision | 104.05 | 326 | 0.32 | |
| | | | | |
| | | | | |

| | CITY OF |
|----------|------------------|
| | UNITS PER ACRE |
| RV PARKS | NO. OF SPACES |
| HOME & R | ACRES |
| MOBILE | SITE ADDRESS |
| | SUBDIVISION NAME |



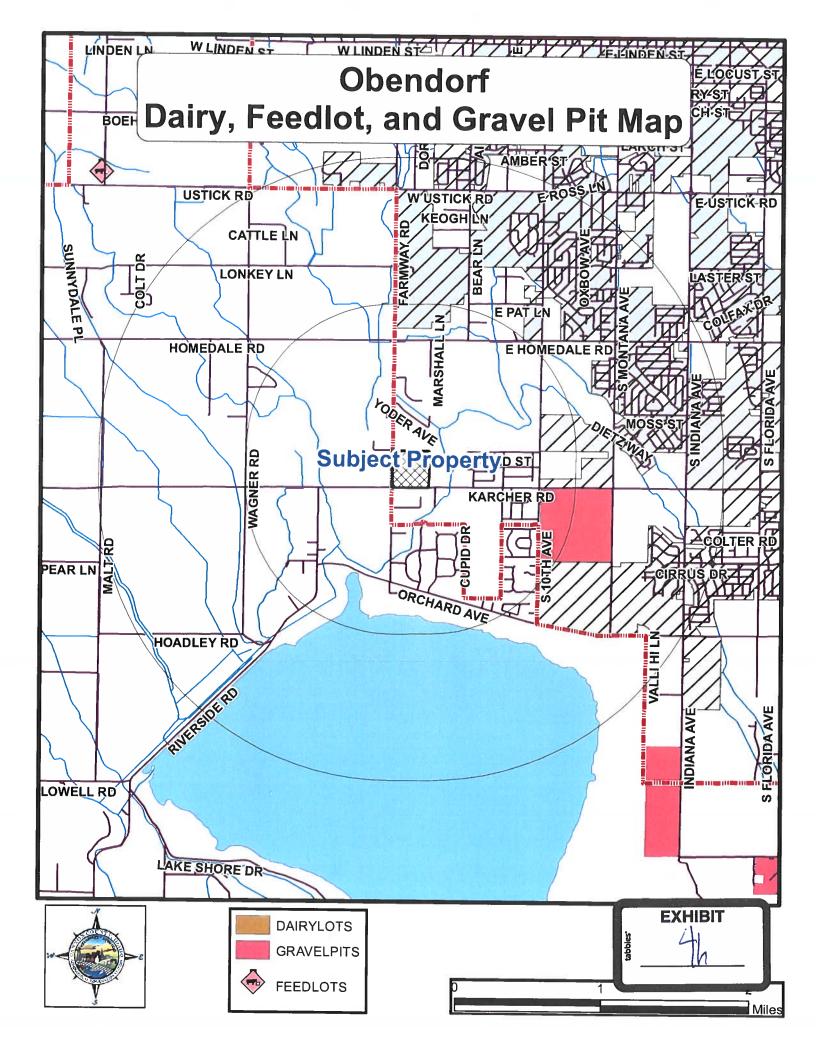
| | | LANIMINO BOAD | 大田 一日 一日 日日 | |
|----------|-------------|--|---|-------------|
| <u>0</u> | CASENUM | REQUEST | CASENAME | FINALDECIS |
| 1 | PH2018-16 | Wireless Communications Facility | Vallivue School District | APPROVED |
| 2 | PH2018-5 | Rezone AG to RR | Rodriguez Joe | WITHDBAWN |
| 3 | PH2018-21 | Variance | RARREI DAVID | NINEWALLINA |
| 4 | CR2018-0002 | Rezone A to CR-C1 CR-C2 CR-R1 & Comp Dian | VAPOUED EADM 1.0 | UBNOVITA |
| 4 | 072040 0022 | | DANCE IER FARIM, LEC | APPROVED |
| 2 | K22019-0022 | Rezone AG to RR | Rodriguez | APPROVED |
| 9 | CU2019-0024 | CUP school cafeteria | Vallivue School District | APPROVEN |
| 7 | CR2018-0002 | Rezone A to CR-C1, CR-C2, CR-R1 & Comp plan change | Karcher Farm 110 | OD OO OO |

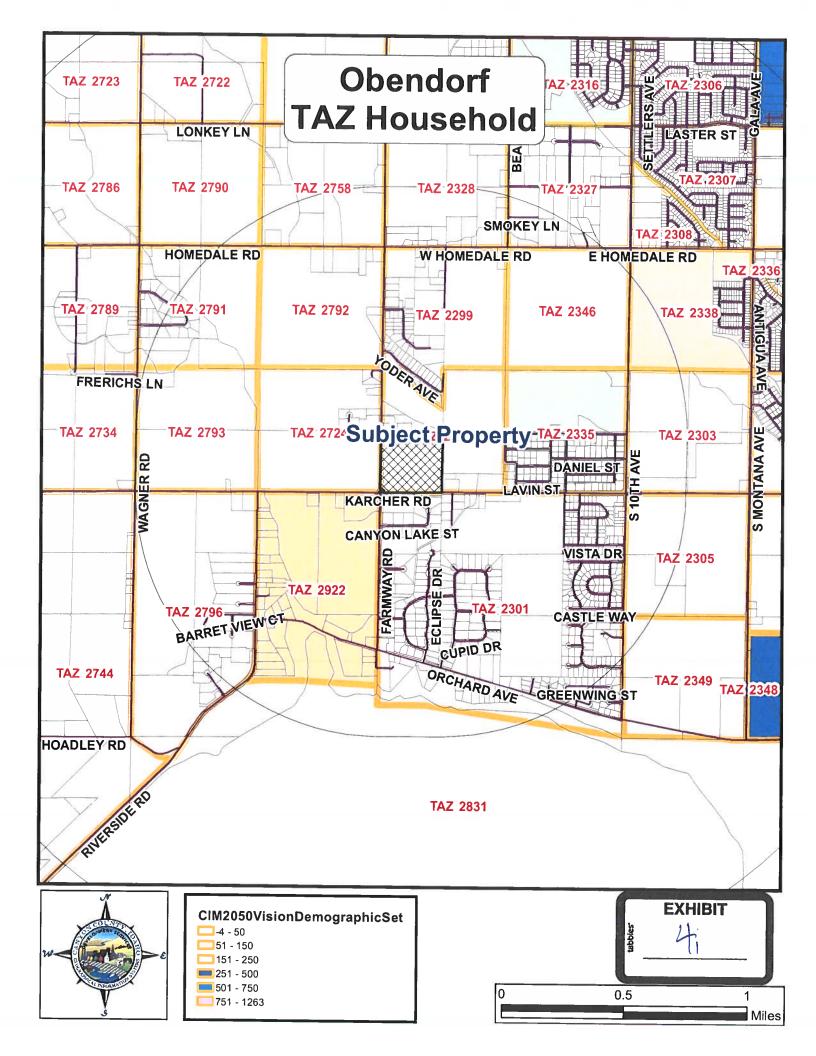


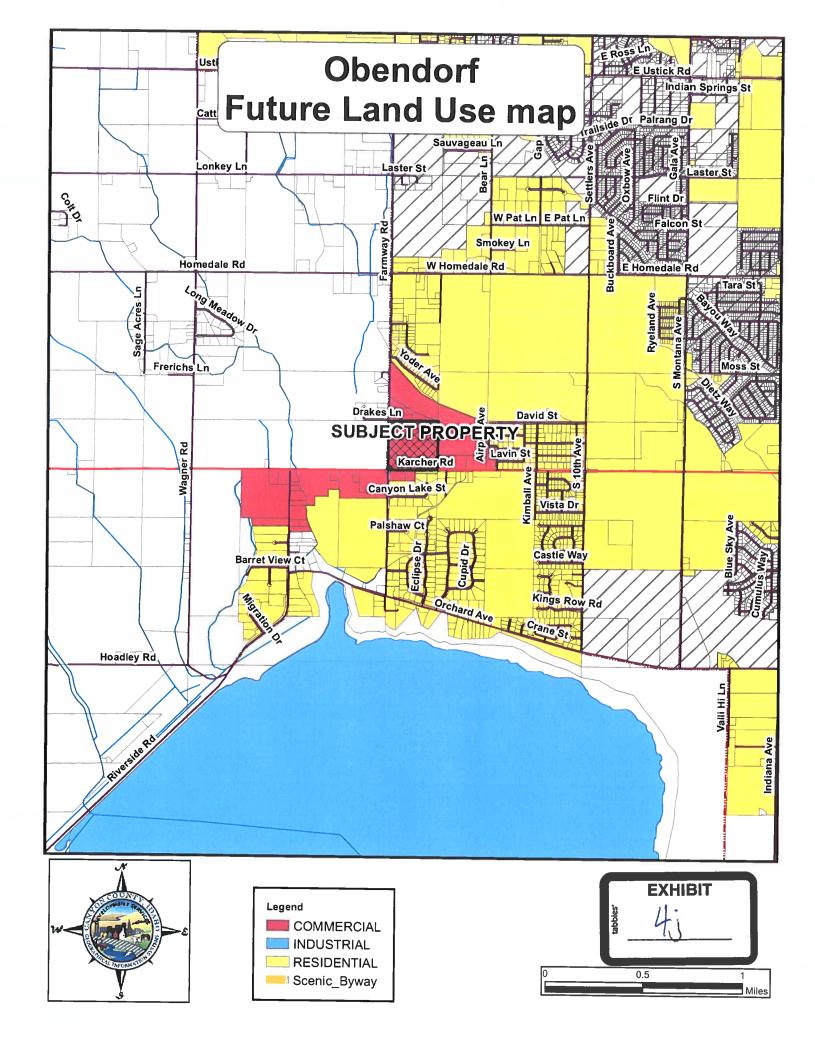


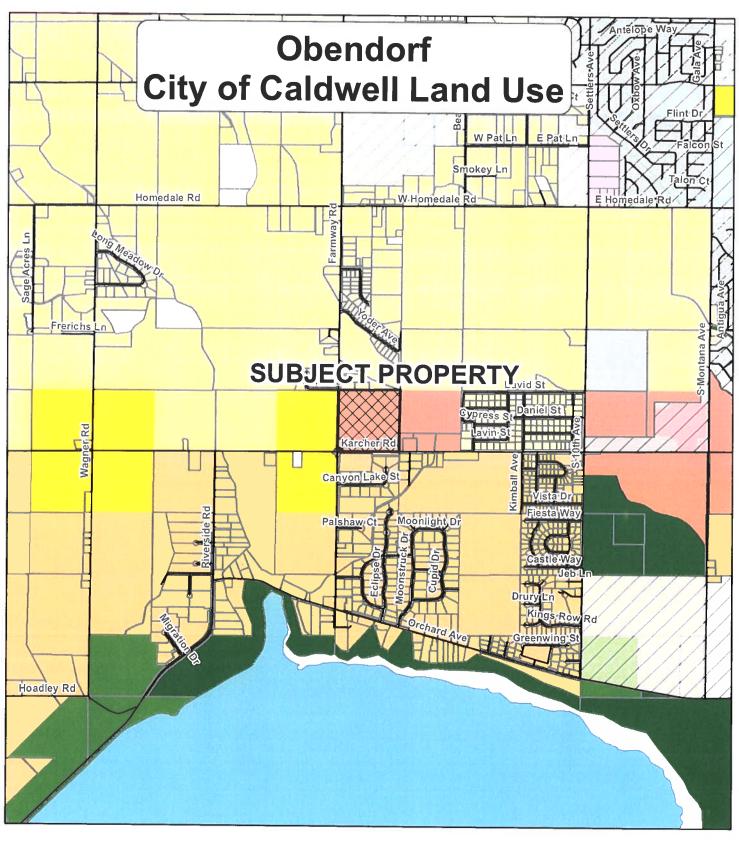
| | SOIL REPORT | PORT | | |
|-----------------------|------------------------|----------------|---------|------------|
| SOIL CAPABILITY CLASS | SOIL CAPABILITY | SQUARE FOOTAGE | ACREAGE | PERCENTAGE |
| 3 | MODERATELY SUITED SOIL | 1761479.28 | 40.44 | 100.00% |
| | | 1761479.28 | 40.44 | 100% |

| | FARMLAND REPORT | EPORT | | |
|-----------|---|------------------------|-----------|------------|
| SOIL NAME | FARMLAND TYPE | SQUARE FOOTAGE | ACREAGE | PERCENTAGE |
| PrA | Prime farmland if irrigated | 1761479.28 | 40.44 | 100.00% |
| | | | | |
| | | 1761479.28 | 40.44 | 100% |
| | SOIL INFORMATION IS DERIVED FROM THE USDA'S CANYON COUNTY SOIL SURVEY OF 2018 | YYON COUNTY SOIL SURVE | Y OF 2018 | |







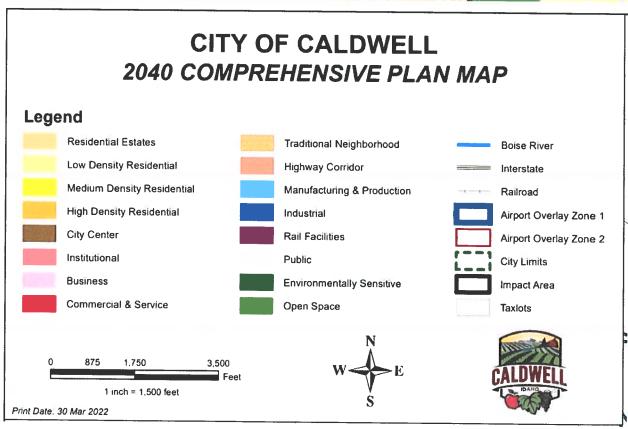




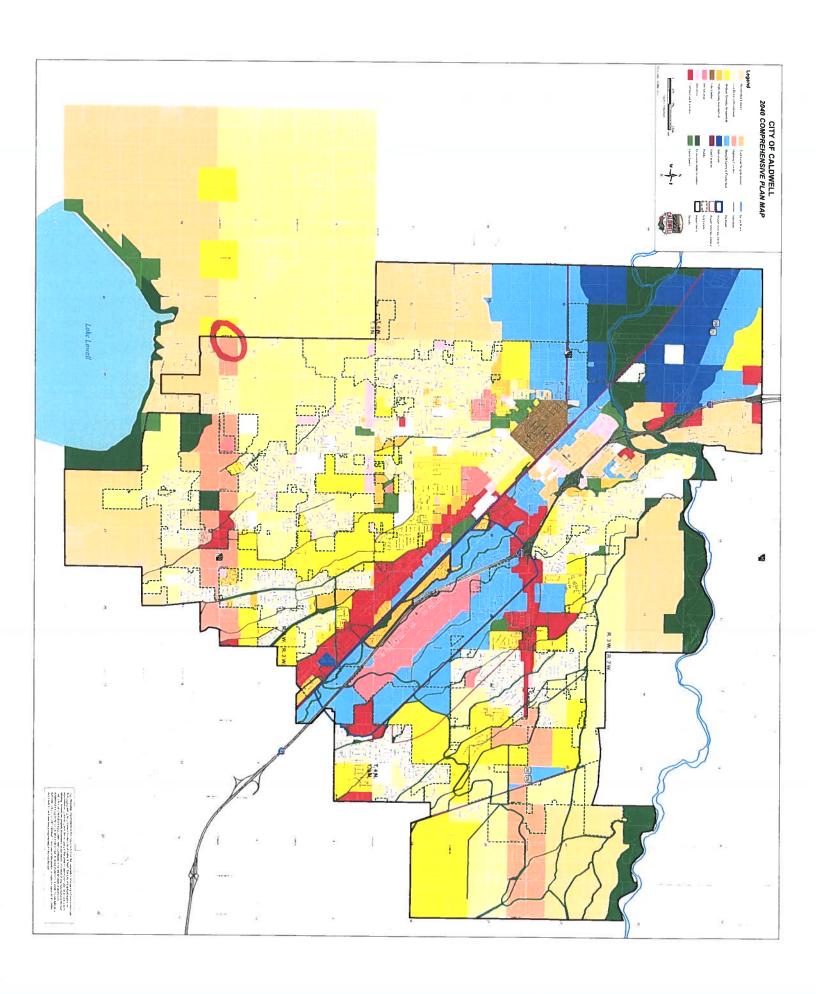
Cald Comp Plan Commercial & Service Residential Estates Traditional Neighborhood Highway Corridor Low Density Residential Medium Density Residential Manufacturing & Production 🖿 Industrial High Density Residential Rail Facilities City Center Public - Institutional Environmentally Sensitive Business Open Space

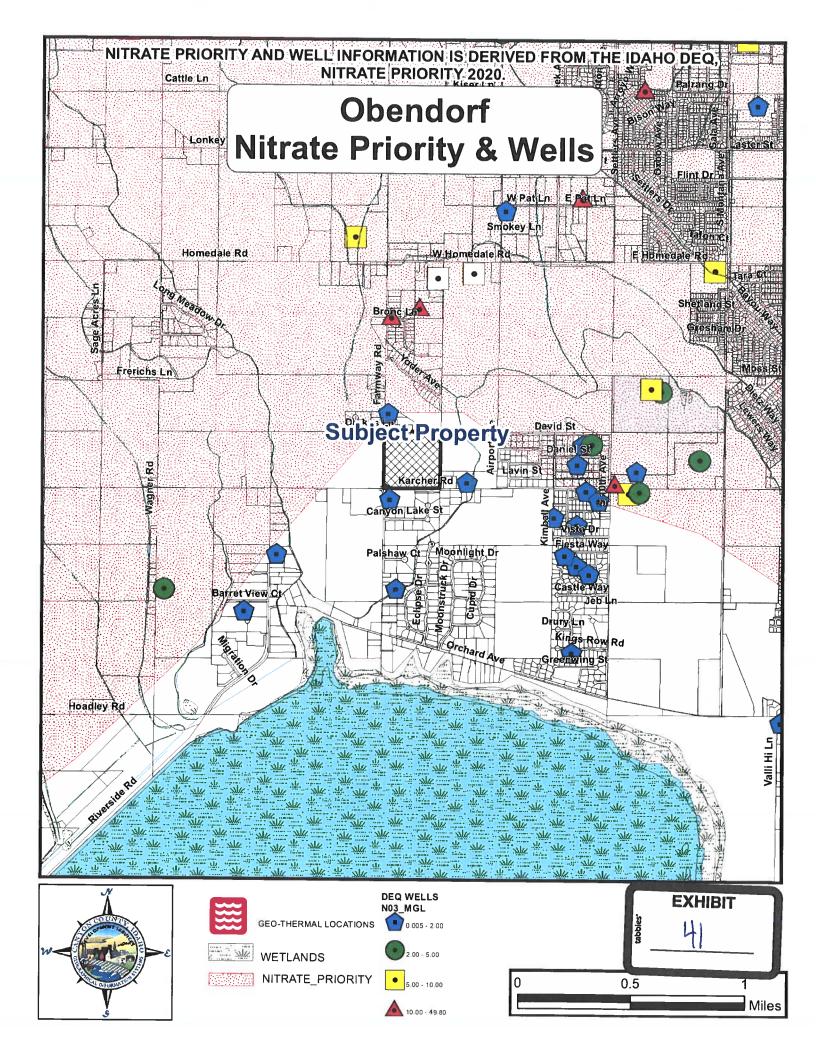






Close up of subject parcel (outlined in red) and legend indicating use







JAROM WAGONER Mayor

208.455,3011 (f) 208.455,3003

City Hall

411 Blaine Street Caldwell, Idaho 83605

Post Office Box

P.O. Box 1179 Caldwell, Idaho 83606

For a list of the City Council members, visit **Website**

www.cityofcaldwell.org

CITY OF Caldwell, Idaho

May 3, 2022

Canyon County Development Services Dept. 111 North 11th Ave. Ste. 140 Caldwell, Idaho 83605

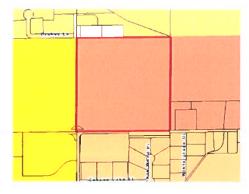
Re: Curtis Crystal (Representing Gregory & Ann Obendorf)

Case No. RZ2022-0007 Zoning Map Amendment

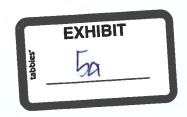
Dear Canyon County Planning Department,

Our office received a public agency notice regarding Curtis Crystal's request for a zoning map amendment (rezone) of a 12.6 acre portion of a parcel R32686 from an "A" (Agricultural) zone to a "C-2" (Service Commercial) zone. The subject property is located on the northeast corner of Farmway Road and Karcher Road, Caldwell, Idaho.

This parcel is with the city of Caldwell's Area of City Impact. See the map below:



Comprehensive Plan Land Use: Brown – Highway Corridor Light Brown – Traditional Neighborhood Yellow- Medium Density Residential



Planning and Zoning Department's comments:

- The parcel is identified on the City of Caldwell's 2040 Comprehensive Plan Map as Highway Corridor.
- Any improvements on the site should comply with Chapter 7 of the City of Caldwell's Landscaping Ordinance.
- The new development should be connected to city services, such as sewer and water.
- Per the Caldwell City Code, a convenience store with a gas station is only permitted in Highway Corridor with a Special Use Permit (SUP)

Fire Department Comments:

- The building, structure or facility shall not be occupied prior to the fire code official issuing a permit and conducting associates inspections indicating the applicable provisions of the adopted Internarial Fire Codes have been met.
- Smoking shall be prohibited in the construction site/structure at all times.
- A Knox Box / Key Box may be requires for this structure. Please contact the Fire Prevention
 Office at (208) 455-4703 for ordering information. Location shall be determined with the
 Fire Code Official at time of installation.
- Fire extinguishers shall be installed in accordance with the Fire Code.
- Premise Identification, Address Identification. New and existing building shall have
 approved address numbers, building numbers or approved building identification placed in
 a position that is plainly visible from the street or road fronting the property. These
 numbers or letters shall contrast with their background. Where required by the fire code
 official, address numbers shall be provided in additional approved locations to facilitate
 emergency response. Address numbers shall be Arabic numbers or alphabetical letters.
 Numbers shall be a minimum of 6" inches high a minimum stroke width of 0.5 inch.
- Fire apparatus access roads shall be designed and maintained to support the imposed loads
 of the fire apparatus and shall be surfaced as to provide all weather driving capabilities.
 Please show weight barring calculations for the all-weather surface of the emergency access
 roads that is capable of supporting the imposed loads of fire apparatus weighing at least
 75,000 pounds.
- Roads supporting fire hydrants shall be a minimum clear width of 26'
- A water supply will be required for this site based on construction type and classification
- Fire Sprinkler/ Alarm Plans may be required and shall be submitted to the Caldwell City for Fire Marshal's Office review and approval before installation.
- Utilities and infrastructure (i.e. fire hydrants and all weather access roads) shall be in place and functional prior to vertical construction.
- Approved / Stamped plans shall be on site during work and available for the Caldwell Fire Department during inspection. Work shall not be conducted/approved if plans are not on site.
- Any overlooked hazardous condition and or violation of the International building or fire code does not imply approval of such conditions or violation and shall be corrected prior to final occupancy.

 Approval of shop drawings is not intended to imply waiver or modification of any requirements of the Idaho State Statutes or Rules, International Fire Code, NFPA Standards or any other applicable criteria

Sincerely,

Emma Hill

Associate Planner

City of Caldwell Planning and Zoning

Emma Flee

DAVID REYNOLDS CHAIRMAN OF THE BOARD

BOISE PROJECT BOARD OF CONTROL

DONALD BARKSDALE
VICE CHAIRMAN DE THE BOARD

ROBERT D. CARTER

THOMAS RITTHALER
ASSISTANT PROJECT MANAGER

APRYL GARDNER SECRETARY-TREASURER

MARY SUE CHASE ASSISTANT SECRETARY TREASURER (FORMERLY BOISE U.S. RECLAMATION PROJECT)

2465 OVERLAND ROAD BOISE IDAHO 83705-3155 OPERATING AGENCY FOR 167 000 ACRES FOR THE FOLLOWING IRRIGATION DISTRICTS

NAMPA-MERIDIAN DISTRICT BOISE-KUNA DISTRICT WILDER DISTRICT NEW YORK DISTRICT BIG BEND DISTRICT

> TEL (208) 344-1141 FAX: (208) 344-1437

28 April 2022

Canyon County Development Services 111 North 11th Ave., Ste. 140 Caldwell, Idaho 83605

RE: Greg Obendorf

Farmway and Karcher Rds. Wilder Irrigation District Terry Lateral 07+70

Sec. 09, T3N, R3W, BM.

RZ2022-0007

W-218

Jenifer Almeida:

There are no Boise Project facilities located on the above-mentioned properties, however they do in fact possess a valid water right.

Per Idaho State Statutes, title 42, local irrigation/drainage ditches that cross this property, in order to serve neighboring properties, must remain unobstructed and protected by an appropriate easement.

If you have any further questions or comments regarding this matter, please do not hesitate to contact me at (208) 344-1141.

Sincerely

Thomas Ritthaler

Assistant Project Manager, BPBC

tbr/tr

cc:

Tony Avermann

Lisa Sweet

Watermaster, Div; 4 BPBC

File

Secretary – Treasurer, WID



DISTRICT

CANYON HIGHWAY DISTRICT No. 4

15435 HIGHWAY 44 CALDWELL, IDAHO 83607

TELEPHONE 208/454-8135 FAX 208/454-2008

July 14, 2022

Canyon County Board of Commissioners and Planning & Zoning Commission 111 N. 11th Street
Caldwell, Idaho 83605

Attention: Juli McCoy, Planner

RE: **RZ2022-0007**

Rezone from Agricultural to C-2 Commercial Canyon County Parcel R32686 aka 0 Karcher Rd, Caldwell

Dear Commissioners:

Canyon Highway District No. 4 (CHD4) has reviewed the application to rezone 12.6 acres of a 40.4 acre parcel to C-2 Commercial. The 40.4 acre subject parcel is located in township 3N Range 3W Section 9 and is parcel number, R32686. CHD4 offers the following comments on the proposed rezone:

Summary

- Final traffic study shall analyze the entire rezone site, which also includes the car wash and assumed use (shopping center?) of the remaining 7 acres. This shall be submitted at time of commercial approach permit or preliminary plat
- Improve Farmway frontage per "Transportation Impacts and Frontage Improvements" section
 - Modified rural road cross section that generally reflects pavement width consistent with ½ of Caldwell City's principal arterial section (R-810A) and other improvements per Farmway Corridor Plan.
- Locate driveway approach at the midpoint between the loon and collector road. If the driveway approach at that location cannot accommodate left turn lane design for 50 mph, consideration can be given for locating the driveway approach south of midpoint assuming it does not conflict with the loon traffic.
- The applicant shall plan a connection to the planned collector road at the subject parcel's north property line, directly across from Drakes Lane.
- Dedicate ROW per "Right-of-Way Dedication" section
 - o ROW dedication consistent with the Farmway Corridor Plan
 - 56' half width (typical)
 - 68' where right turn lane required
 - ROW dedication for loon

General

CHD4 is unaware of the applicant's direction for splitting the property (administrative land division or subdivision). A subdivision or land division request will change the process for moving the development request forward; however, it is not anticipated to change the comments hereto.

The subject property has approximately 1,320-feet of frontage on both Farmway and Karcher Roads. Karcher Road is under the jurisdiction of the Idaho Transportation Department while Farmway Road is under the jurisdiction of CHD4. Please seek input from ITD for Karcher Road improvements.

The site plan dated 9/9/21 depicts a gas station, convenience store, farmers market, and carwash totaling 5.18 acres. These uses were referenced in the TIS dated 11/23/21 and revised TIS dated 3/18/22. Per TIS sections, "project description" and "trip generation", trips associated with the gas station and farmers market were analyzed; however, the car wash and balance of the site were not analyzed. Pertaining to Farmway Road, it is likely the dedicated left turn lane and right turn lane will mitigate site traffic; however, design could be affected with these trips omitted. Final traffic study shall analyze the entire rezone site, which also includes the car wash and assumed use (shopping center?) of the remaining 7 acres. This shall be submitted at time of commercial approach permit or preliminary plat.

The subject parcel is within 1 mile of Caldwell City Limits and within Caldwell's impact area. Per HSDP 2100.010, "the District may apply the standards and specifications of the City at the Highway District's discretion." Staff recommends the following:

- Modified rural road cross section that generally reflects pavement width consistent with ½ of Caldwell City's principal arterial section (R-810A) and other improvements per Farmway Corridor Plan.
- ROW dedication per the Farmway Corridor Plan

Please see Transportation Impacts and Frontage Improvements and Right-of-Way Dedication for further details

Outparcels

If the 12.6 acre rezone is split and developed prior to the remaining (40.4 acres-12.6 acres) 27.8 acres, then outparcels do not apply per HSDP 2030.040.

Farmway Corridor Plan—Access

CHD4 and Caldwell City are jointly reviewing the Farmway Corridor from Karcher Road to Highway 19. The study is underway and the preferred roundabout concept is attached.

The draft Corridor Plan depicts access to the subject property via a planned collector road approach located 1,320' north of Karcher Road (directly across from Drakes Lane). Said collector road access may be limited to a right-in-right-out (RIRO) as the parcel's frontage is restricted by a center median, with provisions for indirect left turns via loons or U-turn intersections up and down-stream.

Access

Buildout Conditions—2023

Traffic mitigation includes a SB left turn lane. The parcel's Farmway driveway approach location is partly dependent upon the left turn lane design. Per record of survey, instrument number 2009032399, CHD4 may have in possession ROW along Farmway Road that abuts the north property line of the subject parcel. This ROW could assist with the taper associated with the frontage improvements. The left turn lane design should accommodate the posted speed of 50 mph—this is also consistent with the draft Corridor Plan.

Ideally the driveway approach should be located at the midpoint between the loon and collector road. If the driveway approach at that location cannot accommodate left turn lane design for 50 mph. consideration can be given for locating the driveway approach south of midpoint assuming it does not conflict with the loon traffic.

This driveway approach will be temporary, but allow full access in the interim.

Future Conditions

As the area develops or when safety warrants, per the Farmway Corridor Plan the full access driveway approach will be reduced to a RIRO. South bound left turns can be made indirectly at the loon 660' north of Karcher Road. Left outs can be made at the quarter section line by U-turn (shown as Westfield Lane in the Corridor Plan).

The applicant shall plan a connection to the planned collector road at the subject parcel's north property line, directly across from Drakes Lane. Said connection could be made by easement and shall be depicted on any future subdivision/land division(s) requests. Said collector road could be considered to allow left turns in.

Transportation Impacts and Frontage Improvements

Per CHD4's TIS comments dated 2/3/22, using the historical growth rate of 6.9% for Farmway Road, a SB left turn lane at buildout (year 2023) is warranted. Assuming one through lane, a right-turn lane is warranted at buildout and if two through lanes a right turn lane is required within the build out plus 5 year horizon. The following traffic mitigation measures are required:

- Pavement width
 - ½ Caldwell's principal arterial R-810A (Pavement width is consistent with Corridor Plan)
 - 33' width (typical)
 - Where applicable, additional 12' of pavement for dedicated right turn lane
 - o Paving loon is required
- Construct dedicated right turn lane
 - o For driveway approach and for collector road (across from Drakes Lane)
 - Due to spacing of collector road and driveway approach likely a continuous right turn lane
- Stripe left turn lane
- 10' Pathway
- Rural improvements are acceptable
 - o Provide cash deposit for curb and gutter
- Corridor Plan calls out a center median
 - o Provide cash deposit
- Other improvements per Farmway Corridor Plan and CHD4 Highway Standards and Development Procedures Manual (HSDP)
- Depending on how the commercial site is developed, construction of the collector road at the north property line may be required with the commercial site.

Please seek input from ITD for Karcher Road improvements.

Right-of-Way Dedication

Per the Farmway Corridor Plan, ROW dedication varies for the subject parcel. Typical ROW is 112' for full width and 56' for half width. Typical half width cross section includes: half of a 14' wide raised median, 12' through lane, 14' through lane, 2' curb and gutter, 8' landscape and drainage swale area, 10' shared path, and 3' utility corridor. Additional ROW is required for dedicated right turn lane. Assuming a right turn lane width of 12', right-of-way dedication may be 68' along portions of the subject parcel's frontage. Furthermore, additional ROW may be necessary for loon construction. CHD4 can provide a CAD template to assist in ROW dedication of loon.

Right-of-way dedication shall apply at time of commercial access permit or subdivision (56' typical, 68' where dedicated right turn lane, and ROW for loon). The applicant shall provide a plan view showing all improvements per "Transportation Impacts and Frontage Improvements" section across the entire Farmway Road frontage (1,320'). Right-of-way dedication shall be based on said plan for the entire frontage and dedicated at time of administrative split or subdivision whichever comes first.

Approach Permit

If the applicant splits the property via an administrative land division, a commercial approach permit application is required. Said submittal shall be accompanied by improvement drawings.

To note, Board review of the permit is required. Development agreement may be used to facilitate timing of frontage improvements with site development.

It is recommended the applicant schedule a pre-application meeting prior to the commercial approach permit or preliminary plat submittal.

Section Line Setbacks

Canyon County Code § 7-10-19 provides for a minimum 70' setback from any section line or quarter-section line to any permanent structure to provide a buffer for future roadway construction unless the highway district having jurisdiction waives the seventy foot (70') setback requirement.

The centerline of Farmway Road is generally located on the section line; however, right-of-way dedication is greater than the 70' setback. Building setback per Canyon County code from the ROW line takes precedent

CHD4 does not oppose the request zone change; however, does request Canyon County include these comments in the development's conditions of approval.

Please feel free to contact me with any questions on this matter.

Respectfully,

Lenny Riccio, P.E. Assistant Engineer Transportation Planner





Farmway Road Corridor Planning Study

Design Year (2045) Corridor Improvement Option - Roundabout Corridor Karcher Road to Homedale Road







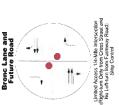
Corridor Plan



Karcher Road

Imited Access 1/4-Mile Intersection igni-turn Only from Cross Street an No Luft-turn from Furnway Roud! Stop Central

Closed Accoss Intersection Will Be Clased After New Intersection AI Westfield Yoder Avenue Intersection Configurations Limited Access 1/2-Mile Intersaction (Right-lum Only from Cross Street) Stop Control Westfield Lane and Future Yoder Avenue





Homedale Road







Souldon Sound hared Use Path





Shared Use Path

3. Utility Comfdor

| Access for ",crafte forenection is lettably tented to right-briggle-cut with belt-in and U-turn access. A future full-access Internacion will be constructed when needed to hardle sently demand. Right-of-way limits are shown for a multi-turn roundabout.

Access for the future development of Percel No, 3270200000 will be at the 's-mile road that will uxtend east to connect to Yoder Avenue.

O

The current Yoder Avenue approach on Farmway Road will be closed when the future collector road east of Farmway Road is constructed

Accass for the future development of Purcel No. 328801300 will be at the future collector road and at the 1/mile collector road abong the parcel's south boundary.

Russed mudium to limit uccess along Farmway Road to right-in and right-out, oxeapt as: at public stroot intersections.

30

Notes

-ult Access Intersection Traffic Signal Control

 Common provision to allow th-turns for pursurnger cars and pick-up teachs.

 Defeater cabelour trade for yor Cabbund's 2040 Comprehenshor Plan.

 Feature cabelour raced per the City of Cabbund's 2040 Comprehenshor Plan.

 Fourtre limited access internection located in-miss from neurost full-access.

 Tompourpy access for the Librare demolphoment of Parcel No. 2357 (2000) or Temporary access for the future development of Parcel No. 3267100000 will be abandoned when other public road access is available. Access is future "Armile prinesesion road or a future "Armile prinesesion road or a future "Armile collector road boated a |K| Full-access interaction. Roundabout shown is phased malitume configuration with one creatings are and one right-fun law on all opproaches. It is expendible to two through larte, on Farmery fload when needles to handle fulfic definance.

Existing property lines and right-of-way limits shown are 2020 Canyon County GIS.



Dan Lister

From:

Juli McCov

Sent:

Monday, July 25, 2022 6:03 PM

To:

Dan Lister

Subject:

Fwd: [External] Proposed Gas Station - corner of Karcher & Farmway

I'm still active. Yay, Obendorf :D! Hope you're well!

Sent from my iPhone

Begin forwarded message:

From: jaharris88@aol.com

Date: July 25, 2022 at 5:17:25 PM MDT

To: Juli McCoy < Juli. McCoy@canyoncounty.id.gov>

Subject: [External] Proposed Gas Station - corner of Karcher & Farmway

Reply-To: jaharris88@aol.com

I was just informed there is a proposed development on the corner of Karcher and Farmway Rd., for the building of a gas station/convenience store and future other business. May I suggest that the State highway (Karcher Rd) FIRST be addressed before ANY further development is considered. The influx of traffic presently is becoming a nightmare and the road hasn't been touched in the 50+ yrs. I have lived here, except for a few stop lights. Yet, planning and zoning continues to close their eyes to the fact that the infrastructure is completely inadequate to handle the ever increasing traffic, let along the expansive building of homes and businesses.

It's bad enough that the precious farmlands are being eaten away little by little with the building of subdivisions/busineses, but the lack of thoughtful planning on the part of those overseeing developments is criminal. It's been a joke for years that they would do a 4-lane expansion at Sunny Slope area to Karcher Rd., but allow commercial and residential over-growth along the area where it's still 2-lanes. Let's put the brakes on allowing any further development along Karcher Rd. until it's widened to at least 4 lanes and able to accommodate the present amount of vehicles, let alone those in the future, (after all, it is a State Highway). For decades, Karcher Rd. has been one of the deadliest highways in our State and it's time to think "smart" in how to handle the foreseeable future.

There are already 4 gas stations/convenience stores within a 5 mile area - is there a NEED for another one? Most people throughout this area have wells for drinking water - do we NEED gas tanks buried above our aquifers risking contamination?? This is a RURAL AREA and needs to be respected as such!!



I vote to put a stop to developments until roadways are improved to handle the ever growing population.

Julie (McCoy) Harris

I would like the following comments on Case No. RZ2022-0007 (Greg & Ann Obendorft) to be included in the official record of the upcoming Zoning Hearing scheduled for August 4, 2022.

I am <u>opposed</u> to this zoning change and the development of the proposed Convenience Store and Gasoline Station on the northeast corner of Karcher Road (SR 55) and Farmland Road for the following reasons:

NEED (OR LACK THEREOF):

- Five convenience stores with fueling stations already exist within five miles of the proposed site: Two Maverick Stations (5 mi. and 2 mi.), one Extra Mile Chevron Station (3.1 mi.), and the Lakeview Market/Gas station (0.7 mi.).
- How convenient do these convenience stores need to be? Is it necessary to have a convenience store with a fueling station located every 0.7 mile along the Karcher Road corridor?
- Is this development compatible with the vision statement in the proposed Canyon County 2030 Comprehensive Plan? The vision statement includes:
 - Ensuring the quality of life for Canyon County residents by preserving our agricultural heritage and planning for a smart growth future through physical and fiscal management.
 - (G4.09.00) Maintain and enhance the aesthetic beauty of the County.

TRAFFIC IMPACT:

This area is already very congested with inadequate highway capacity. A significant amount of commercial traffic already uses Farmway Road between Orchard and Karcher Roads (primarily a residential area) to avoid traffic congestion on S R 55. The application states that the development is forecast to generate 1,770 weekday trips, representing a significant amount of traffic to be handled at an already congested intersection. A major expansion of State Route 55 is in the planning stages at Idaho DOT and slated for a 2024 upgrade to five lanes.

- The proposed Canyon County 2030 Comprehensive Plan states:
 - o (P8.01.02) Consider the cumulative impact of rezones and subdivisions on **road** capacity and traffic congestion when making land-use decisions.

INADEQUATE CITY SERVICES:

- There are <u>no</u> city services provided to this property at this time. Commercial developments should be required to be located in areas serviced by city water and sewers.
- Our critical ground water resources should not be arbitrarily "sold" to commercial developments especially when the Western states, including Idaho, are experiencing (or facing the potential for) severe drought.
- Several sections of the proposed 2030 Comprehensive Plan address this very issue:
 - (P3.01.01) Direct business development to locate in areas that can provide necessary services and infrastructure.
 - (G4.04.00) Concentrate on future growth in and around existing communities while preserving and enhancing the County's agricultural and rural character.



 (P4.04.01) Support development in areas that provide services, utilities, and amenities

ENVIRONMENTAL:

The zoning application contains no specific data on fuel storage at the proposed new facility. A gasoline station requires sufficient fuel storage capacity to receive full tanker load deliveries of fuel in order to receive competitive pricing.

- A typical gasoline tanker truck holds 8,000 gallons of gasoline. The double tanker trucks commonly used in this area have a capacity of approximately 14,000-15,000 gallons.
- A station with three grades of gasoline plus diesel fuel could potentially have a storage capacity in excess of 30,000 gallons of fuel.
- This fuel would be buried on top of the aquifer that provides drinking water for several thousand people. The environmental risk of a leaking tank or faulty tank plumbing poses a significant risk of groundwater contamination (with benzene and methylbenzene) and ultimately contamination of Lake Lowell and the irrigation system.
- Once again the proposed 2030 Comprehensive Plan addresses the importance of protecting the County's water resources:
 - Surface water, groundwater, aquifer protection, and recharge are vital to sustaining the county's life.
 - (G5.05.00) Protect Canyon County inhabitants' health, safety, and welfare by reducing the risk and effects of natural and human-made hazards.
 - (P5.01.01) Protect and enhance waterways, groundwater, wetlands, wildlife habitat, air, soils, and other natural resources.
 - (A5.01.05a) Develop a wellhead area protection ordinance to safeguard aquifer recharge areas and groundwater supplies where relevant.

NOISE/LIGHT:

- The zoning application states that the proposed operating hours will be M-Th 6:00AM to 10:00PM, Fri & Sat 6:00AM-11:00PM, and Sun 7:00AM-9:00PM.
- Will these operating hours be enforced and by whom? What is there to prevent this development from being operated 24 hours per day in the future?
- Will the county require noise and lighting mitigation and indirect lighting?
- Will the lighting comply with the City of Caldwell Dark Sky Ordinance?
- The noise of heavy vehicle traffic along Farmway Road is already excessive. The addition of the convenience store/fueling station as proposed will result in increased traffic which already includes commercial vehicles, tractor trailers, gravel hauling rigs (double dumps), tanker trucks, and commuter traffic.

These are just some of the concerns that I have about the proposed development. I do not feel that this development is needed nor is it compatible with the with the goals of the Proposed Canyon County 2030 Comprehensive Plan.

Andrew F. Haumesser, 15981 Lunar Way, Caldwell, ID 83607

July 25, 2022

Case No. RZ2022-0007

Please include my comments in the official record for the Planning and Zoning hearing on August 4, 2022 for this case.

I am OPPOSED to the proposal to change the current land designation from agricultural to commercial (C-2):

- 1. I do not believe that there is a critical need for another convenience store and gas station in this vicinity. There are 2 Maverick Stores, 1 Jacksons food store (Chevron), and the Riverside gas station all within 5 miles of this corner.
- 2. To the southwest of this proposed corner, the county commissioners already passed and changed prime agricultural land, with blatant disregard to all the opposition from landowners and neighbors in the area, to C-2 and Valley Wide propane was planning to build a gas station/convenience store on 10 acres on the SAME corner. This should be investigated before allowing the northwest corner to be changed and allowed the same designation. Then, in theory, the board and commissioners would be allowing for the building of TWO convenience stores on the same corner. This seems like very poor planning to me.
- 3. In the 2020 comprehensive plan for canyon county, as the 2030 hasn't yet been finalized, it has specified on page 34, on bullets 5, 6, and 7, it reminds the county boards that "canyon county should not overdevelop and should retain agricultural lands/uses and environmental impacts", while also assuring that "new development should be located near existing infrastructure and in areas where agricultural uses are not diminished". The existing site will not have any city services, for water and sewer, which is unfortunate. I believe that this site can be great for commercial someday, however, it should be in accordance with what the county has outlined for its comprehensive plan, therefore, the rezoning should be denied until the owner has a plan to extend the city services to the property.
- 4. The environmental impact with the amount of fuel this site is proposing could affect the aquifer that thousands of existing landowners use each day. Something that was never considered is how close this site is, less than 1 mile to Lake Lowell, to a habitat that is federally protected. Is it necessary to place something this toxic near our aquifer and the Lake all just to appease one landowner? With the Riverside gas station less than 1 mile from the proposed site already putting us all at risk, is it worth it to do it again, all in the name of profit and letting a landowner do whatever they want? The county needs to consider the long term consequences of making this huge decision that will set a major precedent.

I am opposed to having this site rezoned right now, with a future date in mind when city water and sewer are in the area for commercial entities.

Tom Blaisdell

15883 Canyon Lake St

Caldwell, ID 83607



Dan Lister

From:

Juli McCov

Sent:

Wednesday, July 27, 2022 7:40 PM

To:

Dan Lister

Subject:

Fwd: [External] Karcher and Farmway Gas Station

Sent from my iPhone

Begin forwarded message:

From: Jennifer Babbitt < jenniferbabbitt@yahoo.com>

Date: July 27, 2022 at 1:30:16 PM MDT

To: Juli McCoy < Juli. McCoy@canyoncounty.id.gov>
Subject: [External] Karcher and Farmway Gas Station

I would like the following comments on Case No. RZ2022-0007 (Greg & Ann Obendorft) to be included in the official record of the upcoming Zoning Hearing scheduled for August 4, 2022.

I am <u>opposed</u> to this zoning change and the development of the proposed Convenience Store and Gasoline Station on the northeast corner of Karcher Road (SR 55) and Farmway Road for the following reasons:

Need (or lack thereof):

Five convenience stores with fueling stations already exist within five miles of the proposed site: Two Maverick Stations (5 mi. and 2 mi.), one Extra Mile Chevron Station (3.1 mi.), and the Lakeview Market/Gas station (0.7 mi.).

How convenient do these convenience stores need to be? Is it necessary to have a convenience store with a fueling station located every 0.7 mile along the Karcher Roadcorridor?

Is this development compatible with the vision statement in the proposed Canyon County 2030 Comprehensive Plan? The vision statement includes:

- Ensuring the quality of life for Canyon County residents by preserving our agricultural heritageand planning for a smart growth future through physical and fiscal management.
- o (G4.09.00) Maintain and enhance the **aesthetic beauty** of the County.

Traffic Impact:

This area is already very congested with inadequate highway capacity. A significant amount of commercial traffic already uses Farmway Road between Orchard and Karcher Roads (primarily a residential area) to avoid traffic congestion on S R 55. The application states that the development is forecast to generate 1,770



weekday trips, representing a significant amount of traffic to be handled at an already congested intersection. A major expansion of State Route 55 is in the planning stages at Idaho DOT and slated for a 2024 upgrade to five lanes.

The proposed Canyon County 2030 Comprehensive Plan states:

 (P8.01.02) Consider the cumulative impact of rezones and subdivisions on road capacity andtraffic congestion when making land-use decisions.

Inadequate City Services:

There are <u>no</u> city services provided to this property at this time. Commercial developments should be required to be located in areas serviced by city water and sewers.

Our critical ground water resources should not be arbitrarily "sold" to commercial developments especially when the Western states, including Idaho, are experiencing (or facing the potential for) severe drought.

Several sections of the proposed 2030 Comprehensive Plan address this very issue:

- (P3.01.01) Direct business development to locate in areas that can provide necessary services and infrastructure.
- o (G4.04.00) Concentrate on future growth in and around existing communities while preserving and enhancing the County's agricultural and rural character.
- o (P4.04.01) Support development in areas that provide services, utilities, and amenities

Environmental:

The zoning application contains no specific data on fuel storage at the proposed new facility. A gasoline station requires sufficient fuel storage capacity to receive full tanker load deliveries of fuel in order to receive competitive pricing.

A typical gasoline tanker truck holds 8,000 gallons of gasoline. The double tanker trucks commonly used in this area have a capacity of approximately 14,000-15,000 gallons.

A station with three grades of gasoline plus diesel fuel could potentially have a storage capacity in excess of 30,000 gallons of fuel.

This fuel would be buried on top of the aquifer that provides drinking water for several thousand people. The environmental risk of a leaking tank or faulty tank plumbing poses a significant risk of groundwater contamination (with benzene and methylbenzene) and ultimately contamination of Lake Lowell and the irrigation system.

Once again the proposed 2030 Comprehensive Plan addresses the importance of protecting the County's water resources:

- Surface water, groundwater, aquifer protection, and recharge are vital to sustaining the county's life.
- o (G5.05.00) Protect Canyon County inhabitants' health, safety, and welfare by reducing the risk and effects of natural and **human-made hazards**.

- o (P5.01.01) Protect and enhance waterways, **groundwater**, wetlands, wildlife habitat, air, soils, and other natural resources.
- o (A5.01.05a) Develop a wellhead area protection ordinance to safeguard aquifer recharge areas and groundwater supplies where relevant.

Noise/Light:

The zoning application states that the *proposed* operating hours will be M-Th 6:00AM to 10:00PM, Fri & Sat 6:00AM-11:00PM, and Sun 7:00AM-9:00PM.

Will these operating hours be enforced and by whom? What is there to prevent this development from being operated 24 hours per day in the future?

Will the county require noise and lighting mitigation and indirect lighting? Will the lighting comply with the City of Caldwell Dark Sky Ordinance?

The noise of heavy vehicle traffic along Farmway Road is already excessive. The addition of the convenience store/fueling station as proposed will result in increased traffic which already includes commercial vehicles, tractor trailers, gravel hauling rigs (double dumps), tanker trucks, and commuter traffic.

These are just some of the concerns that I have about the proposed development. I do not feel that this development is needed nor is it compatible with the with the goals of the Proposed Canyon County 2030 Comprehensive Plan.

Jennifer Babbitt 15337 Reminiscene Dr Caldwell, ID 83607

Sent from my iPhone

From: FERMENA PAT MONTGOMERY Sent: Thursday, July 28, 2022 1:08 PM

To: juli.mccoy@canyoncounty.gov <juli.mccoy@canyoncounty.gov>

Subject: Proposed Truck Stop corner of Karcher/Farmway?

Hello Juli,

We've seen information that there is application for the above business. It seems like there's a light at that intersection but that's a big amount of traffic as I don't remember any turn lanes. Also, there isn't any infrastructure, water, sewer?? It's currently zoned agriculture & sure hate to see any more agriculture land go away. There's terrible amount of traffic & this may lead to lots more accidents & again no infrastructure. The closet fire department is in Caldwell probably 5-7 miles & that's county out there not city?? Hopefully there'll be some thought when this is brought before planning/zoning whoever for approval. The property tax payers already take the burdensome share of paying for these new additions!

Concerned citizen/ tax payers, Fermena & Pat Montgomery



I would like the following comments on **Case No. RZ2022-0007** (Greg & Ann Obendorft) to be included in the official record of the Zoning Hearing on August 4, 2022.

I am <u>opposed</u> to this zoning change and the development of the proposed Convenience Store and Gasoline Station on the northeast corner of Karcher Road (SR 55) and Farmland Road for the following reasons:

- 1) There is an existing gas station /convenience store on Riverside Road, just under a mile away from the proposed new station.
- 2) The existing station is just off highway 55, providing accessibility without degrading the ambiance of the 55 corridor. The new station would certainly usher in increasingly unsightly additions in an area that has always been trending toward higher-end homes.
- 3) There are no city services available to the proposed new station. Commercial developments should be required to be located in areas serviced by city utilities.
- 4) I do not think that this proposed is compatible with the vision statement in the proposed Canyon County 2030 Comprehensive Plan. The vision statement includes:
 - a. Ensuring the quality of life for Canyon County residents by preserving our agricultural heritage and planning for a smart growth future through physical and fiscal management.
 - b. (G4.09.00) Maintain and enhance the aesthetic beauty of the County.
- 5) This intersection already has a large amount of commercial traffic, with semi-trailers using Farmway as a cutoff from Simplot Road to highway 95 west of Marsing. The quality of life in the area has seen a serious decline because of road noise and the use of compression brakes by these vehicles. The proposed new station will only make these issues worse.
- 6) The possibility of a leaking fuel tank at the new station, or of a fuel delivery accident, can not be ignored. With hundreds of existing homes already drawing water from the aquifer, and hundreds more proposed or anticipated, contamination would be a major disaster, with long-term, perhaps irreversible, consequences.

These are just some of the concerns that I have about the proposed new station. I think that this new station is not needed, will further degrade quality of life in the area, has the potential for disastrous long-term harm to the environment, and is not compatible with the with the goals of the Proposed Canyon County 2030 Comprehensive Plan.

John Kernkamp, 15635 Riverside Road, Caldwell, ID 83607



OBENDORF GAS STATIONS TRAFFIC IMPACT STUDY

SUBMITTED TO:

Canyon Highway District No. 4 Idaho Transportation Department

November 2021

PREPARED BY:

William (Bill) White, Senior Transportation Planner Garrett Scott, P.E., PTOE, Project Engineer



T-D ENGINEERS
332 N. Broadmore Way
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T-O PROJECT #: 210209

EXHIBIT

7



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APPENDICES

Technical Appendix A: Glossary of Terms
Technical Appendix B: Summary Traffic Counts
Technical Appendix C: LOS Summary Worksheets
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EXECUTIVE SUMMARY

The Obendorf Gas Stations development is a commercial development located on approximately 6 acres at the northeast corner of the intersection of Farmway Road and SH 55 (Karcher Road) in Canyon County, Idaho. Although the site lies outside of the city limits of Caldwell, the property is within Caldwell's impact area limits. The proposed development consists of a gas station with up to 20 vehicle fueling positions (VFP) and an accompanying 6,000 square-foot convenience store, as well as a 3,000 square foot farmer's market. Access to the site is proposed via one full-access driveway along Farmway Road, north of SH 55 (Driveway A), and one right-in, right-out driveway along SH 55, east of Farmway Road (Driveway B). The development is planned to be fully built-out by the year 2023.

RESULTS

The study intersection of SH 55 at Farmway Road was found to operate well within acceptable standards during 2021 existing and 2023 future without project conditions. Year 2023 conditions applied a 3-percent compounded annual growth rate to traffic volumes to conservatively estimate increasing travel demands in the region. No planned transportation improvements were incorporated into the year 2023 analysis, so intersection geometry and traffic signal timing are unchanged between the existing and future without project analyses.

Trips generated by the Obendorf Gas Stations site were estimated using the *ITE Trip Generation Manual*, 10th Edition. The proposed development is anticipated to generate a total of 1,770 netnew daily trips, with 98 and 131 trips occurring during the AM and PM peak hours, respectively. Site trips were distributed through the study network based on a comparison of existing turning movement counts at the study intersection as the development is not of a size warranting analysis through the COMPASS regional travel demand model.

Under year 2023 future with project conditions, the study intersection of SH 55 at Farmway Road is anticipated to continue to operate well within acceptable level of service thresholds. Additionally, the site access points operate acceptably even without consideration of turn lane warrants. However, a comparison of traffic volumes at the site access points against the turn-lane warrants established in NCHRP Report 457 reveal the need for right-turn lanes at both project approaches.

RECOMMENDATIONS

Based on the analysis and evaluation contained within this report, the following recommendations are provided:

- Farmway Road at Driveway A. Construct a northbound right-turn lane along Farmway Road at Driveway A. This turn lane should be constructed concurrently with Driveway A and meet the standards outlined in the ITD Traffic Manual. Driveway A should be constructed to provide full access with no turning movement restrictions.
- SH 55 (Karcher Road) at Driveway B. Construct a westbound right-turn lane along SH 55 at Driveway B. This turn lane should be constructed concurrently with Driveway B and meet the standards outlined in the *ITD Traffic Manual*. Driveway B should be constructed to provide right-in, right-out access only. Additionally, Driveway B should be located such that a right-turn lane does not encroach upon the existing quarter mile driveway on SH 55, while maintaining adequate spacing from the SH 55 at Farmway Road intersection.



1 INTRODUCTION

This report summarizes the Traffic Impact Study (TIS) prepared for the Obendorf Gas Stations development proposed in Canyon County, Idaho. This study was prepared per the guidelines outlined by the 2017 Association of Canyon County Highway Districts (ACCHD) Standards. The scope of this study was established in coordination with the Canyon Highway District No. 4 (CHD4), a member of the ACCHD, as well as the Idaho Transportation Department (ITD).

The CHD4 and ITD, in coordination with Canyon County, are the lead review agencies for this TIS as they are the agencies that maintain the roadways within the study network. The TIS will be submitted to CHD4, ITD, and Canyon County for review, and other agencies can review the TIS per invite of CHD4 and ITD.

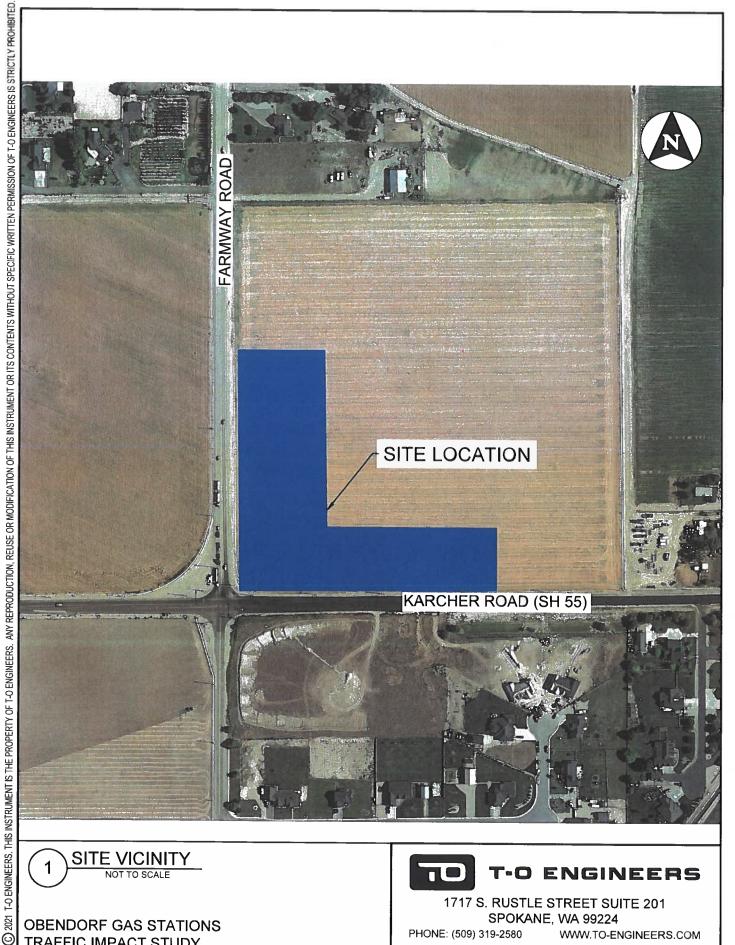
1.1 PROJECT DESCRIPTION

The Obendorf Gas Stations development is a commercial development located on approximately 6 acres at the northeast corner of the intersection of Farmway Road and SH 55 (Karcher Road) in Canyon County, Idaho. Although the site lies outside of the city limits of Caldwell, the property is within Caldwell's impact area limits. The development consists of a gas station with up to 20 vehicle fueling positions (VFP) and an accompanying 6,000 square-foot convenience store, as well as a 3,000 square foot farmer's market. The lot will provide parking spaces in accordance with the Canyon County zoning code for Service Commercial land use in relation to general commercial and gas station requirements.

The site is proposed to construct two driveways, with one each of Farmway Road and SH 55, 880 feet to the north and east of the Farmway Road at SH 55 intersection. These access points will alter the street landscape, as right of way will be utilized from the existing roads with a 20-footwide landscape buffer and 24-foot-wide drive isle leading into the site. Ultimate build-out of this development is anticipated to start summer of 2022 and be completed by 2023.

The existing site is an agricultural field a part of Ranes Ranch and New Meadows, but the Obendorf Gas Stations development will only encompass the farthest southwest 15 acres of the total 40-acre lot. The current zoning for the area is listed as AG (Agricultural) and the applicant is anticipating a zoning change to C2 (Service Commercial), as the current zoning does not permit commercial spaces. The northern most edge of the lot is also expected to be developed into medium density residential labor housing (R-2) with rezoning efforts. This development will have one access point and is not expected to interfere with the traffic analysis of the study area. A separate TIS is anticipated to be completed for all future land uses not specifically covered in this study.

Figure 1 provides a site location map, and **Figure 2** provides the most current preliminary site plan for the project. Note that the car wash use shown on the site plan is not covered in this study and that the site plan may evolve during design.





OBENDORF GAS STATIONS TRAFFIC IMPACT STUDY



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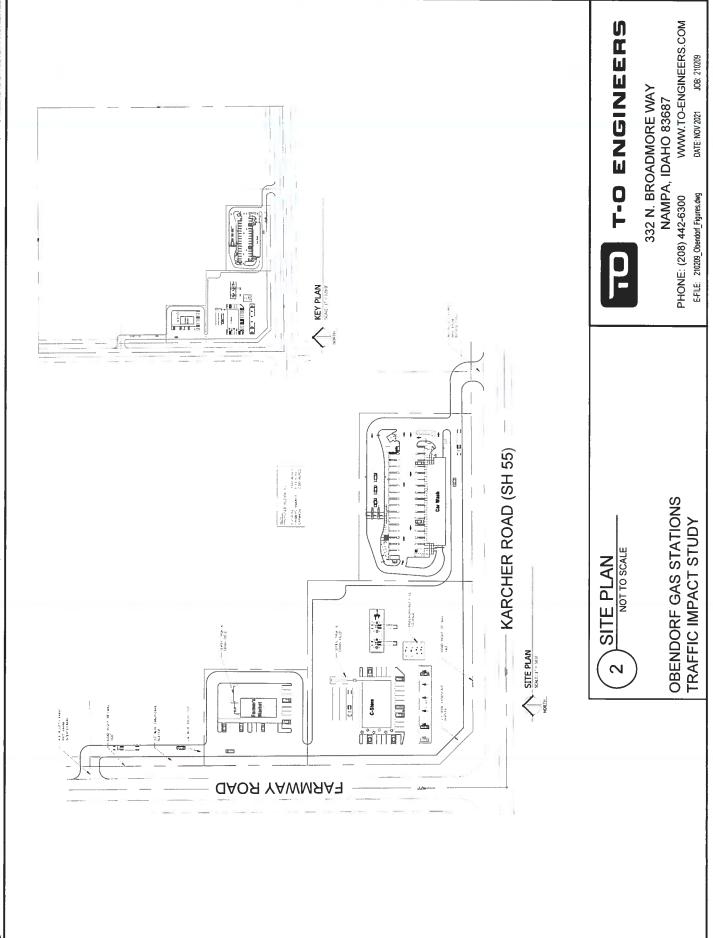
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1.2 SCOPE AND METHODOLOGY

A TIS reviews the transportation impacts of development on roadways and intersections located within reasonable proximity of a project and recommends strategies and improvements to address unacceptable impacts, as needed. This section describes the scope and methodologies used to evaluate transportation conditions and establish potential recommendations for the Obendorf Commercial development. The TIS was prepared per the "best" industry practices highlighted by resources such as *Traffic Impact Analyses for Site Development* (ITE, 2010).

1.2.1 Project Scope

A TIS evaluates capacity primarily through an examination of intersection operations. Congestion and vehicle delay are experienced more rapidly at intersections versus road segments (between intersections) due to the frequency of vehicle conflicts (e.g. turning, slowing, or stopping vehicles). The study reviews traffic conditions for the AM and PM peak hours, the confirmed hours of peak traffic congestion for the weekday. These are typically known as the morning and evening "rush" hours of the work commute.

Per coordination with the CHD4 and ITD, this TIS was tasked with reviewing traffic performances for one intersection located in reasonable proximity of the project, in addition to the proposed site access points. A year 2023 analysis horizon was used for this TIS, which addresses traffic activities following project construction and full occupancy. A summary of identified study intersections is as follows:

- SH 55 and Farmway Road
- Farmway Road and Driveway A (site access point)
- SH 55 and Driveway B (site access point)

The need for right- and left-turn lanes were evaluated at the site access points based on the warrants detailed in NCHRP Report 457 – Evaluating Intersection Improvements: An Engineering Study Guide.

1.2.2 Methodology – Intersection Capacity & Operations

Intersection delay, capacity, and traffic operations were evaluated using the level-of-service (LOS) procedures of the *Highway Capacity Manual*, *Sixth Edition* (Transportation Research Board, 2016). The *Highway Capacity Manual* (HCM) is a nationally recognized and locally accepted method of measuring traffic flow and congestion. Criteria range from LOS A, indicating free-flow with minimal vehicle delay, to LOS F, indicating congestion with significant vehicle delays.

LOS for a signalized intersection is defined in terms of the average control delay experienced by all vehicles at the intersection, as measured over a specific timeframe such as a peak hour. LOS for a one or two-way stop-controlled intersection or driveway is the function of average control delays experienced by vehicles in an approach or approach movement over a specific timeframe. Typically, the stopped approach or movement experiencing the worst LOS is reported. Finally, LOS at an all-way stop is defined by the average control delays experienced by all vehicles at an intersection, as with signalized intersections, while the LOS thresholds are associated with delays for unsignalized intersections.

Table 1 on the following page outlines the LOS criteria for signalized and unsignalized intersections from the *Highway Capacity Manual*. LOS delay thresholds vary between signalized and unsignalized intersections. This is because driver tolerances for delay have been documented to be higher at traffic signals.



| Table 1. Intersection Level of Service Criteria | | | | | | | | |
|--|------------------------|------------|--|--|--|--|--|--|
| Level of Signalized Control Unsignalized Control Service Delay (sec/veh) Delay (sec/veh) | | | | | | | | |
| Α | ≤10 | ≤10 | | | | | | |
| В | >10 - 20 | >10 - 15 | | | | | | |
| С | >20 – 35 | >15 - 25 | | | | | | |
| D | >35 - 55 | >25 - 35 | | | | | | |
| Ε | >55 – 80 | >35 - 50 | | | | | | |
| F | > 80 | >50 | | | | | | |
| Source: High | way Capacity Manual (T | TRB, 2016) | | | | | | |

Levels-of-service were determined using Synchro Version 11.0, (Trafficware, 2019). This tool can apply the analysis methodologies of HCM 2016 and is a standard industry software application. Per ACCHD, LOS C and D are the minimum design level of service thresholds for rural and suburban intersections, respectively. For this study, LOS D was considered to be the minimum acceptable level of service. Improvements may be necessitated for intersections that do not meet this capacity standard.



2 EXISTING CONDITIONS

This section provides an existing conditions analysis describing the study street network, traffic volumes, and capacities for study intersections. The existing conditions analysis is established to help measure changes in forecast roadway conditions and performances.

2.1 ROADWAY NETWORK

The study focuses on traffic operations for the primary intersection associated with the proposed access points. These are the roadways anticipated to support the majority of approaching and departing project trips. The Idaho Statewide Functional Classification Map maintained by the ITD catalogs the classifications of these roadways.

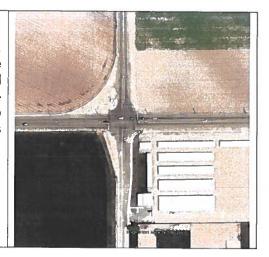
A description of primary study roadways is provided below.

- SH 55 (Karcher Road) is classified as a two-lane Principal Arterial in the vicinity of the site. The posted speed limit in the vicinity of the site is 55 miles per hour (mph).
- Farmway Road is classified as a two-lane Principal Arterial north of SH 55. South of SH 55, Farmway Road is classified as a Minor Arterial. The posted speed limit in the vicinity of the site is 55 mph.

Under existing conditions, one intersection was addressed. A summary of intersection geometrics and traffic controls is provided below.

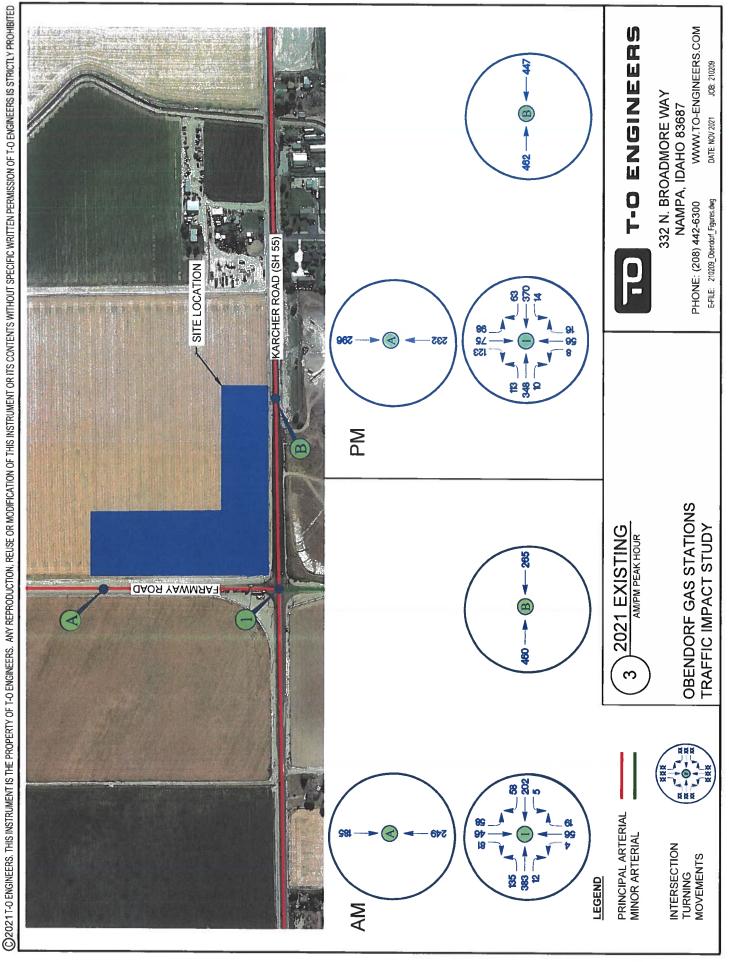
SH 55 (Karcher Road) at Farmway Road

This is a signalized intersection. The eastbound, westbound, and southbound approaches each provide on left-turn lane and one through/right-turn shared lane. The northbound approach provides on left-turn/through/right-turn shared lane. There are no marked pedestrian crossings and no curb-ramps located at any corners of the intersection.



2.2 TRAFFIC COUNTS

This TIS was developed using intersection turning movement counts. Turning movement counts for the study intersection of SH 55 at Farmway Road were collected by L2 Data Collection on behalf of T-O Engineers on October 5, 2021, specifically in support of this TIS. Counts were performed from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM, per industry standard. The peak hour from the intersection was used in the capacity analyses. Existing turning movements volumes are shown with **Figure 3** on the following page for the AM and PM peak hours. Traffic count worksheets are provided with **Appendix B**.





Traffic Capacity & Operations

This section summarizes existing traffic capacities and operations for the study area. A review of year 2021 intersection capacity and operations is discussed.

2.2.1 Intersection Capacity & Operations

The LOS analysis was performed for the study intersection based on a review of the traffic volumes summarized in Section 2.2 and the geometric conditions described in Section 2.1. **Table 2** shows a summary of LOS for the study intersection during the AM and PM peak hours. Also shown are average control vehicle delays. As the intersection of SH 55 at Farmway Road is signalized, overall intersection level of service (LOS) and delay are reported, as well as the LOS and delay for each lane group.

| Table 2. 2021 Existing Intersection Operations – AM and PM Peak Hours | | | | | | | | | | |
|---|-------------------|-------------|----------------------|-------|---------|--------------------|---------|--------------------|--|--|
| Intersection | Control | Intersectio | Intersection AM / PM | | AM Peak | | PM Peak | | | |
| | Control | LOS1 | Delay ² | Group | LOS1 | Delay ² | LOS1 | Delay ² | | |
| SH 55 (Karcher Road) at Farmway Road | Traffic Signal | В/В | B/B 15.9/ 16.9 | EBL | В | 13.0 | В | 13.1 | | |
| | | | | EBTR | В | 15.8 | В | 14.2 | | |
| | | | | WBL | В | 12.3 | В | 11.3 | | |
| | | | | WBTR | В | 18.2 | В | 19.0 | | |
| at rainway reda | | | | NBLTR | В | 18.8 | С | 22.5 | | |
| | | | | SBL | В | 16.0 | В | 19.1 | | |
| | | | SBTR | В | 12.7 | В | 16.3 | | | |
| LOS = level of service Average control delay | | | | | | | | | | |

Under 2021 existing conditions, SH 55 at Farmway Road operates well within acceptable level of service standards, when examining both the intersection overall and each lane group on the intersection approaches. The intersection operates at LOS B during both peak hours, and the worst lane group (NBLTR) operates at LOS C during the PM peak hour only. This analysis indicates that there is ample capacity at the intersection to accommodate additional traffic volume. LOS summary sheets are provided in **Appendix C** at the end of this report.



3 YEAR 2023 TRAFFIC CONDITIONS

This section describes forecast year 2023 traffic conditions, without and with consideration of the Obendorf Gas Stations development. Summarized are the anticipated background street network modifications, forecast traffic volumes, and operations/capacity for study intersections.

3.1 ROADWAY NETWORK

Future transportation improvements within Ada County and Canyon County are planned and programmed by the Community Planning Association of Southwest Idaho (COMPASS) in a cooperative process alongside various municipalities, highway districts, public transit agencies, and other stakeholders within the COMPASS planning area, as well as ITD. These transportation improvements are documented in the Fiscal Year (FY) 2022 to 2028 Transportation Improvement Program (TIP).

The TIP indicates that there are several projects by ITD in the planning and/or development stages along the SH 55 (Karcher Road) corridor in the vicinity of the site. These projects are encompassed by the ITD Idaho 55: Pear Lane to Middleton Road study. Broadly, this study proposes to widen SH 55 to a five-lane section, with a rural section and a suburban section to be built to the west and east of Farmway Road, respectively. Only a portion of the improvements planned in this study are currently funded, all of which are outside the boundaries of this study. Furthermore, at the time of this TIS, there is no timeline on when improvements would be implemented along SH 55 in the vicinity of the site. However, proposed access along SH 55 for the Obendorf Gas Stations site should conform to the long-term vision and goals for the corridor identified through the planning studies conducted by ITD. Therefore, it is understood that the proposed site access point on SH 55 (Driveway B in this TIS) should be restricted to right-in, right-out movements only.

No further roadway improvements were identified within the study area and as such, forecast operations and capacity analyses were performed based on existing geometric and traffic control conditions.

3.2 TRAFFIC FORECASTS

Year 2023 forecasted traffic volumes are comprised of baseline growth and any trips generated by concurrent "pipeline" developments. This section describes the year 2023 traffic forecasts developed for streets and intersections in the study area.

Baseline traffic growth refers to an increase of traffic not typically related to land use development within a TIS study area. Baseline traffic is forecast using annual growth rates established based upon a review of historical count data, or as identified from a regional travel demand model. A baseline growth rates of three (3) percent was identified through the scoping process performed with CHD4. This calculates to a total overall baseline traffic growth of approximately 6.1-percent by year 2023. These are conservative growth rates used to forecast moderately higher, yet reasonable, future volumes.

Through the scoping process and discussions with CHD4 and ITD, no concurrent pipeline developments within the vicinity of the Obendorf Gas Stations site were identified. Therefore, the baseline traffic growth discussed previously constitutes total 2023 forecasted traffic conditions. A summary of resulting turning movement volumes for year 2023 future without project conditions is shown with **Figure 4** for the AM and PM peak hours.

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3.2.1 Trip Generation

Trip generation for the proposed Obendorf Gas Stations development was forecast based on the methodologies of the Trip Generation Manual (ITE, 10th Edition, 2017). The manual is a nationally recognized and locally accepted resource for forecasting traffic for commercial, institutional, and residential developments. The methods were developed based on the survey of other existing land uses located with the United States.

Trip generation was developed using ITE Land Use Codes 820 for Shopping Center and 945 for Gasoline/Service Station with Convenience Market. Although a land use code exists for Farmer's Market uses (858), there is limited trip generation data for this land use and land use code 820 provides a more conservative estimate of trips generated by the Obendorf Gas Stations site. Descriptions of these land uses are provided below:

- Shopping Center (ITE Code 820). An integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. A shopping center's composition is related to its market area in terms of size, location, and type of store. A shopping center also provides on-site parking facilities sufficient to service its own parking demands.
- Gasoline/Service Station with Convenience Market (ITE Code 945). Includes gas stations with convenience markets where the primary business is the fueling of motor vehicles. The site includes in this land use category generally have a convenience market with a gross floor area of between 2,000 and 3,000 square feet and at least 10 vehicle fueling positions.

Calculations from the Trip Generation Manual yield unadjusted new trips. Studies have shown that retail and service land uses will capture between twenty and sixty percent of their traffic as pass-by trips, depending on their size and the specific land use. Pass-by trips are those that are attracted to/from a site from adjacent streets as travelers commute between origins and destinations. These are addressed as turning trips diverted from an existing through movement at a project approach or intersection, noted as an impact only to streets in-route between the initial travel route and proposed land use. Thus, they are only considered to impact a project approach and streets/intersections are along the diverted routes of travel. These are not considered a gain in traffic as they already exist within a commute.

Based on the recommendations contained in the ITE Trip Generation Manual, pass-by trip reductions were applied to both the Shopping Center and Gas Station with Convenience Market land uses. A 34-percent pass-by reduction was applied to the Shopping Center land use during the PM peak hour only, while pass-by reductions of 62-percent and 56-percent were applied to the Gas Station with Convenience Market land use during the AM and PM peak hours, respectively.

Trip generation was forecast for the AM and PM peak hours of adjacent street traffic, representing the impacts of the project upon the morning and evening rush hours of commute traffic. Traffic generated over the course of a typical weekday is also provided for reference. **Table 3** on the following page provides a summary of trip generation for the 2023 occupancy year of the project.



| | Table 3. Summary of Daily and Peak Hour Trip Generation | | | | | | | | | | | |
|---------------|---|----------|---------|--------------|------|-------|--------------|------|-------|--|--|--|
| ITE Land | Land Use | Size | Weekday | AM Peak Hour | | | PM Peak Hour | | | | | |
| Use Code | Description | | | Enter | Exit | Total | Enter | Exit | Total | | | |
| 820 | Shopping Center | 3,000 SF | 113 | 2 | 1 | 3 | 5 | 6 | 11 | | | |
| 945 | Gas Station with Convenience Market | 20 VFP1 | 4,107 | 127 | 122 | 249 | 143 | 137 | 280 | | | |
| | Unadjusted New Trips | | | 129 | 123 | 252 | 148 | 143 | 291 | | | |
| Pass-By Trips | | | 2,4502 | 77 | 77 | 154 | 80 | 80 | 160 | | | |
| | | 1,770 | 52 | 46 | 98 | 68 | 63 | 131 | | | | |

Source: ITE Trip Generation Manual (10th Edition)

1. VFP = vehicle fueling positions

. Weekday pass-by trips estimated by using the ratio between unadjusted weekday and peak hour trips

As shown, approximately 1,770 net-new weekday trips are forecast with development of the Obendorf Gas Stations development. Approximately 98 of these trips would be generated during the AM peak hour and 131 during the PM peak hour. These peak hourly trips would comprise approximately 12.9-percent of total weekday trips.

3.2.2 Trip Distribution and Assignment

Trip distribution and assignment is the process of identifying the probable destinations, directions, and traffic routes that development related traffic will likely affect. The estimated traffic generated by the development must be distributed and assigned to analyze impacts on the roadway system within the study area.

This project is not of a size warranting an analysis with the COMPASS travel demand model. Therefore, for this study, the distribution of trips was based on a comparison of existing intersection turning movement counts, as count densities indicate how roadways are being utilized in relation to the region. A summary of resulting trip distribution assumptions for the study area is provided in **Table 4** below.

| Table 4. Forecasted Overall Directional Distribution of Site Oriented Traffic | | | | | | | |
|--|--|--|--|--|--|--|--|
| Direction / Roadway % Overall Distributio | | | | | | | |
| 20 | | | | | | | |
| 5 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| West SH 55 (Karcher Road) 40 Total 100 | | | | | | | |
| | | | | | | | |

Trips were assigned to study roadways based on the described distribution pattern and routed to site driveways in a way that conforms to the assumed right-in, right-out restriction for Driveway A (SH 55 access point). The resulting trip assignments are shown in **Figures 5 and 6** for non pass-by and pass-by trips, respectively, during the AM and PM peak hours. The combined, total site trips are shown in **Figure 7.** Finally, total site tips are combined with 2023 future without project traffic volumes to produce 2023 future with project volumes, as shown in **Figure 8**.

32021T-0 ENGINEERS. THIS INSTRUMENT IS THE PROPERTY OF T-0 ENGINEERS. ANY REPRODUCTION, REUSE OR MODIFICATION OF THIS INSTRUMENT OR ITS CONTENTS WITHOUT SPECIFIC WRITTEN PERMISSION OF T-0 ENGINEERS IS STRICTLY PROHIBITED T-O ENGINEERS WWW.TO-ENGINEERS.COM JOB: 210209 332 N. BROADMORE WAY NAMPA, IDAHO 83687 DATE: NOV 2021 0 8 PHONE: (208) 442-6300 E-FILE: 210209_Obendorf_Figures.dwg KARCHER ROAD (SH 55) SITE LOCATION 2 SITE TRIPS (NON PASS-BY) P⊠ **OBENDORF GAS STATIONS** TRAFFIC IMPACT STUDY AM/PM PEAK HOUR 20% GAOR YAWMRAT 2 PRINCIPAL ARTERIAL MINOR ARTERIAL INTERSECTION TURNING MOVEMENTS LEGEND

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©2021 TO ENGINEERS. THIS INSTRUMENT IS THE PROPERTY OF TO ENGINEERS. ANY REPRODUCTION, REUSE OR MODIFICATION OF THIS INSTRUMENT OR ITS CONTENTS WITHOUT SPECIFIC WRITTEN PERMISSION OF T-O ENGINEERS IS STRICTLY PROHIBITED WWW.TO-ENGINEERS.COM T-O ENGINEERS JOB: 210209 332 N. BROADMORE WAY NAMPA, IDAHO 83687 DATE: NOV 2021 E-FILE: 210209_Obendorf_Figures.dwg PHONE: (208) 442-6300 KARCHER ROAD (SH 55) SITE LOCATION 88 PM TOTAL SITE TRIPS **OBENDORF GAS STATIONS** TRAFFIC IMPACT STUDY **GAOR YAWMRAR** PRINCIPAL ARTERIAL MINOR ARTERIAL INTERSECTION TURNING MOVEMENTS ន្តគូ០ LEGEND

32021T-0 ENGINEERS. THIS INSTRUMENT IS THE PROPERTY OF T-0 ENGINEERS. ANY REPRODUCTION, REUSE OR MODIFICATION OF THIS INSTRUMENT OR ITS CONTENTS WITHOUT SPECIFIC WRITTEN PERMISSION OF T-0 ENGINEERS IS STRICTLY PROHIBITED T-O ENGINEERS WWW.TO-ENGINEERS.COM JOB: 210209 332 N. BROADMORE WAY NAMPA, IDAHO 83687 DATE: NOV 2021 E-FILE: 210209_Obendorf_Figures.dwg PHONE: (208) 442-6300 KARCHER ROAD (SH 55) SITE LOCATION 233 134 83 214 E 8 2023 FUTURE WITH PROJECT PM **OBENDORF GAS STATIONS** TRAFFIC IMPACT STUDY AM/PM PEAK HOUR DAOR YAWMRA ∞ PRINCIPAL ARTERIAL MINOR ARTERIAL INTERSECTION TURNING MOVEMENTS 37 25 LEGEND AM



3.3 TRAFFIC CAPACITY & OPERATIONS

This section summarizes forecast traffic capacities and operations for the study area. Provided are a review of year 2023 conditions for study intersections, without and with project development.

3.3.1 Intersection Capacity & Operations

LOS were forecast for study intersections based on future without and with-project traffic volumes versus the geometric conditions described for the existing conditions analysis. Again, there are no improvements shown with Section 3.1 that would impact travel or provide additional capacities in the study area. Thus, the future LOS analysis was developed based on existing geometric and traffic control conditions for study intersections and roadways. A summary of the resulting, forecast intersection LOS is provided with Table 5 for the AM and PM peak hours.

| Intersection | Control | Intersection AM / PM | | Lane | AM Peak | | PM Peak | |
|---|-------------------|----------------------|--------------------|-------|---------|--------------------|---------|--------------------|
| | Control | LOS1 | Delay ² | Group | LOS1 | Delay ² | LOS1 | Delay ² |
| SH 55 (Karcher Road) at Farmway Road | Traffic Signal | B/B | 16.1 / 17.2 | EBL | В | 13.0 | В | 13.3 |
| | | | | EBTR | В | 15.9 | В | 14.2 |
| | | | | WBL | В | 12.3 | В | 11.2 |
| | | | | WBTR | В | 18.5 | В | 19.2 |
| | | | | NBLTR | В | 19.4 | С | 23.4 |
| | | | | SBL | В | 16.4 | В | 19.8 |
| | | | | SBTR | В | 13.2 | В | 17.1 |

| Table 6. 2023 Future With Project Intersection Operations – AM and PM Peak Hours | | | | | | | | | | | |
|--|-------------------|----------------------|--------------------|-------|---------|--------------------|---------|--------------------|--|--|--|
| Intersection | Control | Intersection AM / PM | | Lane | AM Peak | | PM Peak | | | | |
| | | LOS1 | Delay ² | Group | LOS1 | Delay ² | LOS1 | Delay ² | | | |
| | | B/B | B 16.7 / 18.9 | EBL | В | 13.7 | В | 14.9 | | | |
| | | | | EBTR | В | 14.9 | В | 14.3 | | | |
| OH SE Week Deal | | | | WBL | В | 12.0 | В | 11.4 | | | |
| SH 55 (Karcher Road) at Farmway Road | Traffic Signal | | | WBTR | C | 20.2 | С | 21.5 | | | |
| at i amiway itoau | | | | NBLTR | C | 21.7 | С | 27.2 | | | |
| | | | | SBL | В | 18.2 | С | 21.9 | | | |
| | | | | SBTR | В | 14.5 | В | 18.8 | | | |
| Farmway Road at Driveway A | TWSC | N/A | N/A | WBLR | В | 13.3 | С | 15.2 | | | |
| SH 55 (Karcher Road) at Driveway B | TWSC | N/A | N/A | SBR | В | 10.2 | В | 12.1 | | | |
| LOS = level of service Average control delay | | | | | | | | | | | |



As shown, all study intersections are anticipated to operate at LOS C or better under 2023 forecasted conditions, with and without consideration of the Obendorf Gas Stations development. It should be noted that the addition of site trips causes in some of lane groups of the SH 55 at Farmway Road intersection to degrade from LOS B to LOC C; however, overall intersection operations remain at LOS C with the addition of site trips. Regardless, intersection operations are anticipated to be well within acceptable standards through the year 2023 with the addition of site traffic from the development, and no mitigation measures are need based on this operational analysis alone. LOS summary sheets are provided in **Appendix C** at the end of this report.

3.3.2 Turn Lane Analysis

Per the study scope with CHD4 and ITD, 2023 future with project AM and PM peak hour traffic volumes at the site access points were compared against the turn lane warrants provided in NCHRP Report 457. Warrants for right- and left-turn lanes along major roads were examined, in addition to warrants for providing two approach lanes along stop-controlled, minor road approaches.

Based on this analysis, a right-turn lane is warranted at both site access points. These right-turn lanes should be constructed according to the standards in the *ITD Traffic Manual: Idaho Supplementary Guidance to the MUTCD*. Specifically, given a posted speed limit of 55 miles per hour on both SH 55 (Karcher Road) and Farmway Road, the right-turn lanes should provide 340 feet of full-width deceleration length and 180 feet of gap/taper length, assuming a 12-foot wide turning lane.

It should be noted that the tapered section of a westbound right-turn lane constructed for the SH 55 access point (Driveway B) at its current location would encroach upon the existing driveway located a quarter mile east of the SH 55 at Farmway Road intersection. It is recommended that this access point be relocated to the west such that a right-turn lane would not impact the quarter-mile driveway, while still maintaining the required spacing of 690 feet between the access point and the SH 55 at Farmway Road intersection.

Turn lane warrant worksheets are provided in **Appendix D** at the end of this report.



4 SUMMARY, RECOMMENDATIONS, AND CONCLUSION

The Obendorf Gas Stations development is proposed to provide a gas station with 20 vehicle fueling positions and an ancillary 6,000 square-foot convenience store, in addition to a 3,000 square-foot farmer's market. Site access is proposed via two driveways: one full-access driveway with Farmway Road, located to the north of SH 55, and one right-in, right-out driveway with SH 55, located to the east of Farmway Road. The proposed right-in, right-out access along SH 55 aligns with ITD's long-term plan for the corridor. Ultimate build-out of the site is anticipated to be completed in 2023.

When accounting the effect of pass-by trips, the proposed development is forecast to generate approximately 1,770 weekday trips, with 98 trips generated during the AM peak hour and 131 trips generated during the PM peak hour according to the ITE Trip Generation Manual. The majority of trips were forecast to/from SH 55 (Karcher Road), with 35- and 40-percent of trips anticipated to/from the east and west, respectively, along SH 55. 20-percent of project trips are forecast to/from the north via Farmway Road, with the remaining 5-percent expected to/from the south via Farmway Road.

4.1 SUMMARY RESULTS

Intersection and street capacity analyses were performed based on review of year 2021 existing and 2023 forecasted, with and without consideration of the Obendorf Gas Stations site, traffic conditions for the AM and PM peak hours. This study concludes that the intersection of SH 55 at Farmway Road is expected to operate well within acceptable ITD and ACCHD level of service standards through the year 2023, with and without traffic from the development. The site access points are also anticipated to operate well within acceptable standards, even without consideration of turn lane warrants.

Traffic volumes under 2023 Future with Project conditions were compared against the turn-lane warrants established in NCHRP Report 457. Right-turn lanes are warranted at both site access points. Left-turn lane warrants were not met at Driveway A, and a left-turn lane is not permitted at Driveway B as it is proposed to provide right-in, right-out access only. Additionally, two approach lanes on the site access points are not warranted.

4.2 RECOMMENDATIONS AND CONCLUSION

This study concludes that the development of Obendorf Gas Stations is not likely to result in a significant degradation of traffic operations at the study intersection through the year 2023.

A northbound right-turn lane is warranted along Farmway Road at Driveway A and a westbound right-turn lane is warranted along SH 55 at Driveway B based on 2023 future with project traffic volumes and a posted speed limit of 55 mph on these roadways. These right-turn lanes should be constructed in accordance with the guidelines contained in the Idaho Transportation Department Supplement to the MUTCD. The proposed location of Driveway A should be shifted further to the west as to not encroach upon the existing quarter mile driveway along SH 55, while maintaining adequate spacing between the access point and the SH 55 at Farmway Road intersection.

This concludes the TIS performed for Obendorf Gas Stations. No further conclusions or recommendations are provided.



Appendix A

Glossary of Terms



This section of the Technical Appendix provides a glossary of terms. The *Highway Capacity Manual* (TRB, 2010) and the *Transportation Impact Analyses for Site Development* (ITE, 2005) were used to help with the development of the following definitions:

- Access point An intersection, driveway, or opening on a roadway that provides access to a land use or facility.
- All-way stop-controlled An intersection with stop signs located on all approaches.
- Arterial (General Definition) A signalized street that primarily serves through-traffic and secondarily provides access to abutting properties.
- Average daily traffic (ADT) The average 24-hour traffic volume at a given location on a roadway.
- Capacity The number of vehicles or persons that can be accommodated on a
 roadway, roadway section, or at an intersection over a specified period of time. Capacity
 is also a term used to define limits for transit, pedestrian, and bicycle facilities. Concept
 typically expressed as vehicles per hour, vehicles per day, or persons per hour or per
 day.
- Collector street (General Definition) A surface street providing land access and traffic circulation within residential, commercial, and industrial areas.
- Cycle A complete sequence of cycle indicators.
- Cycle length The total time for a signal to complete one cycle.
- Delay The additional travel time experienced by a driver, passenger, or pedestrian.
- Demand The number of users desiring service on a highway system or street over a specified time period. Concept typically expressed as vehicles per hour, vehicles per day, or persons per hour or per day.
- Departing sight distance The length of road required for a vehicle to turn from a stopped position at an intersection (or driveway) and accelerate to travel speed.
- Design Hour The peak hour of traffic volumes/conditions; typically used in traffic studies, design analyses, and design. Typically recognized as the 85th percentile hours and often one of the peak/commute hours.
- Downstream The direction of traffic flow.
- Functional class A transportation facility defined by the traffic service it provides.
- **Growth factor** A percentage increase applied to current traffic demands or counts to estimate future demands/volumes.
- Intersection Control Analysis An intersection control analysis (ICA) is a traffic/transportation study used to recommend geometric and traffic control improvements for an intersection or intersections.
- Level of Service The standard used to evaluate traffic operating conditions of the
 transportation system. This is a qualitative assessment of the quantitative effect of
 factors such as speed, volume of traffic, geometric features, traffic interruptions, delays,
 and freedom to maneuver. Operating conditions are categorized as LOS A through LOS
 "F". LOS A generally represents the most favorable driving conditions and LOS F
 represents the least favorable conditions.
- Mainline The primary through roadway as distinct from ramps, auxiliary lanes, and collector-distributor roads.
- Major Street The street not controlled by stop signs at a two-way stop-controlled intersection.



- Minor arterial (General Definition) A functional category of a street allowing trips of moderate length within a relatively small geographical area.
- Operational analysis A use of capacity analysis to determine the level of service on an existing or projected facility, with known projected traffic, roadway, and control conditions.
- Peak Generator Hour The single hour (or hours) in a day during which trip generation for a development or land use is highest.
- Peak hour Single hour (or hours) in a day during which the maximum traffic volume
 occurs on a given facility (roadway, intersection, etc.). Typically, the peak hour is known
 as the "rush" hour that occurs during the AM or PM work commutes of the typical
 weekday. The absolute peak hour of the day can also be referred to as the design hour.
- Peak Generator Hour The peak hourly volume generated by a particular development or land use. In the context of traffic reports, the generator hour can occur in the morning and afternoon, described as AM and PM peak generator hours, respectively.
- Peak hour factor The hourly volume during the maximum-volume hour of the day divided by the peak 15-minute flow rate within the peak hour; a measure of traffic demand fluctuation within the peak hour.
- **Principal Arterial** (General Definition) A major surface street with relatively long trips between major points, and with through-trips entering, leaving, and passing through the urban area.
- Queue A line of vehicles, bicycles, or persons waiting to be served by the system in
 which the flow rate from the front of the queue determines the average speed within the
 queue. Slower moving vehicles or people joining the rear of the queue are usually
 considered a part of the queue.
- Roadside obstruction An object or barrier along a roadside or median that affects traffic flow, whether continuous (e.g., a retaining wall) or not continuous (e.g., light supports or a bridge abutment).
- Road characteristic A geometric characteristic of a street or highway, including the type of facility, number and width of lanes, shoulder widths and lateral clearances, design speed, and horizontal and vertical alignment.
- Roundabout An unsignalized intersection with a circulatory roadway around a central island with all entering vehicles yielding to the circulating traffic.
- Shoulder A portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, emergency use, and lateral support of the subbase, base, and surface courses.
- Stopping sight distance The length of road needed for a moving vehicle to come to a complete stop prior to an obstruction sighted on the road.
- Traffic conditions A characteristic of traffic flow, including distribution of vehicle types in the traffic stream, directional distribution of traffic, lane use distribution of traffic, and type of driver population on a given facility.
- Travel speed The average speed, in miles per hour, of a traffic computed as the length of roadway segment divided by the average travel time of the vehicles traversing the segment.
- Travel time The average time spent by vehicles traversing a highway segment, including control delay, in seconds per vehicle of minutes per vehicle.



- Trip Distribution and Assignment The predicted travel patterns of vehicle trips as they approach and depart a land use. Distribution refers to the travel pattern, usually defined in percentages or fractions, and assignment refers to vehicle trip ends.
- Traffic forecast The predicted traffic volume of the analysis horizon year or time period. Most typically predicted for the weekday, AM peak hour, PM peak hour, or AM or PM peak generator hours of the typical weekday.
- ▼ Traffic impact analysis A traffic impact analysis (TIS) is an engineering and planning study that forecasts the potential traffic and transportation impacts of a proposed development on an area, neighborhood, or community. Reports can also be referred to as a traffic impact study (TIS).
- Trip generation The number of vehicle trips generated by a development or land use. Most typically predicted for the weekday, AM peak hour, PM peak hour, or AM or PM peak generator hours of the typical weekday.
- ▼ Two-way left-turn lane A lane in the median area that extends continuously along a street or highway and is marked to provide a deceleration and storage area, out of the through-traffic stream, for vehicles traveling in either direction to use in marking left turns at intersections and driveways.
- Two-way stop-controlled The type of traffic control at an intersection where drivers on the minor street or driver turning left from the major street wait for a gap in the majorstreet traffic to complete a maneuver. Typically, the minor approaches are stopcontrolled.
- Unsignalized intersection An intersection not controlled by traffic signals.
- Upstream The direction from which traffic is flowing.
- Volume The number of persons or vehicles passing a point on a lane, roadway, or other traffic-way during some time interval, often one hour, expressed in vehicles, bicycles, or persons per hour.
- Volume-to-capacity ratio The ratio of flow rate to capacity for a transportation facility.
- Walkway A facility provided for pedestrian movement and segregated from vehicle traffic by a curb or provide for on a separate right-of-way.



Appendix B

Summary Traffic Counts

L2DataCollection.com Idaho (208) 860-7554 Utah (801) 413-2993

Study: TO0016

Intersection: Farmway Rd / Karcher Rd

City, State: Canyon County, Idaho

Control: Signalized

File Name: Farmway Rd & Karcher Rd

Site Code : 00000000

Start Date : 10/5/2021

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|------------------------------|-------|------|--------------|------|------------|-------|------|--------|------|------------|----------|-------|---------------|--------------|------------|-------|------|---------|------------|------------|------------|
| _ | | | nway om N | | | | | cher l | | | | | nway om So | Road outh | | | | rcher l | | | |
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 07:00 AM | 18 | 3 | 11 | 0 | 32 | 12 | 46 | 1 | 0 | 59 | 6 | 14 | 1 | 0 | 21 | 2 | 107 | 29 | 0 | 138 | 250 |
| 07:15 AM | 20 | 12 | 22 | 0 | 54 | 12 | 56 | 0 | 0 | 68 | 9 | 6 | 0 | 0 | 15 | 3 | 100 | 32 | 0 | 135 | 272 |
| 07:30 AM | 23 | 17 | 13 | 0 | 53 | 18 | 45 | 0 | 0 | 63 | 3 | 16 | 2 | 0 | 21 | 4 | 103 | 38 | 0 | 145 | 282 |
| 07:45 AM | 20 | 14 | 12 | 0 | 46 | 16 | 55 | 4 | 0 | 75 | 1 | 20 | 1 | 0 | 22 | 3 | 73 | 36 | 0 | 112 | 255 |
| Total | 81 | 46 | 58 | 0 | 185 | 58 | 202 | 5 | 0 | 265 | 19 | 56 | 4 | 0 | 79 | 12 | 383 | 135 | 0 | 530 | 1059 |
| 08:00 AM | 22 | 9 | 15 | 0 | 46 | 10 | 61 | 3 | 0 | 74 | 5 | 8 | 1 | 0 | 14 | 2 | 87 | 27 | 0 | 116 | 250 |
| 08:15 AM | 14 | 8 | 9 | 0 | 31 | 10 | 51 | 7 | 0 | 68 | 7 | 14 | 1 | 0 | 22 | 0 | 67 | 33 | 0 | 100 | 221 |
| 08:30 AM | 17 | 11 | 16 | 0 | 44 | 14 | 46 | 1 | 0 | 61 | 3 | 10 | 1 | 0 | 14 | 0 | 81 | 24 | 0 | 105 | 224 |
| 08:45 AM | 21 | 7 | 13 | 0 | 41 | 10 | 57 | 3 | 0 | 70 | 1 | 7 | 3 | 0 | 11 | 2 | 61 | _ 28 | 0 | 91 | 213 |
| Total | 74 | 35 | 53 | 0 | 162 | 44 | 215 | 14 | 0 | 273 | 16 | 39 | 6 | 0 | 61 | 4 | 296 | 112 | 0 | 412 | 908 |
| | | | | | | | | | | | | | | | | | | | | | |
| 04:00 PM | 22 | 10 | 13 | 0 | 45 | 15 | 88 | 4 | 0 | 107 | 1 | 17 | 1 | 0 | 19 | 1 | 88 | 26 | 0 | 115 | 286 |
| 04:15 PM | 34 | 20 | 24 | 0 | 78 | 18 | 92 | 2 | 0 | 112 | 2 | 10 | 6 | 0 | 18 | 2 | 81 | 33 | 0 | 116 | 324 |
| 04:30 PM | 36 | 17 | 14 | 0 | 67 | 17 | 92 | 5 | 0 | 114 | 2 | 11 | 1 | 0 | 14 | 0 | 86 | 35 | 0 | 121 | 316 |
| 04:45 PM | 25 | 17 | 29 | 0 | 71 | 12 | 100 | 3 | 0 | 115 | 4 | 11 | 2 | 0 | 17 | 2 | 85 | 24 | 0 | 111 | 314 |
| Total | 117 | 64 | 80 | 0 | 261 | 62 | 372 | 14 | 0 | 448 | 9 | 49 | 10 | 0 | 68 | 5 | 340 | 118 | 0 | 463 | 1240 |
| 05:00 PM | 27 | 20 | 20 | 0 | 67 | 14 | 86 | 3 | 0 | 103 | 5 | 11 | 0 | 0 | 16 | 2 | 106 | 28 | 0 | 136 | 322 |
| 05:15 PM | 37 | 23 | 27 | 0 | 87 | 19 | 89 | 1 | 0 | 109 | 6 | 18 | 2 | 0 | 26 | 2 | 77 | 37 | 0 | 116 | 338 |
| 05:30 PM | 34 | 15 | 22 | 0 | 71 | 18 | 95 | 7 | 0 | 120 | 1 | 16 | 4 | 0 | 21 | 4 | 80 | 24 | 0 | 108 | 320 |
| 05:45 PM | 36 | 10 | 18 | 0 | 64 | 14 | 90 | 5 | 0 | 109 | 6 | 18 | 1 | 0 | 25 | 1 | 83 | 22 | 0 | 106 | 304 |
| Total | 134 | 68 | 87 | 0 | 289 | 65 | 360 | 16 | 0 | 441 | 18 | 63 | 7 | 0 | 88 | 9 | 346 | 111 | 0 | 466 | 1284 |
| Grand Total | 406 | 213 | 278 | 0 | 897 | 229 | 1149 | 49 | 0 | 1427 | 62 | 207 | 27 | 0 | 296 | 30 | 1365 | 476 | 0 | 1871 | 4491 |
| Apprch % | 45.3 | 23.7 | 31 | 0 | | 16 | 80.5 | 3.4 | 0 | | 20.9 | 69.9 | 9.1 | 0 | | 1.6 | 73 | 25.4 | 0 | | |
| Total % | 9 | 4.7 | 6.2 | 0 | 20 | 5.1 | 25.6 | 1.1 | 0 | 31.8 | 1.4 | 4.6 | 0.6 | 0 | 6.6 | 0.7 | 30.4 | 10.6 | 0 | 41.7 | |
| General Traffic | 372 | 208 | 274 | 0 | 854 | 225 | 1111 | 49 | 0 | 1385 | 62 | 202 | 26 | 0 | 290 | 30 | 1328 | 442 | 0 | 1800 | 4329 |
| % General Traffic | 91.6 | 97.7 | 98.6 | 0 | 95.2 | 98.3 | 96.7 | 100 | 0 | 97.1 | 100 | 97.6 | 96.3 | 0 | 98 | 100 | 97.3 | 92.9 | 0 | 96.2 | 96.4 |
| 3+ for e-many fraces: | 34 | 5 | 4 | 0 | 43 | 4 | 38 | 0 | 0 | 42 | 0 | 5 | 1 | 0 | 6 | 0 | 37 | 34 | 0 | 71 | 162 |
| To 3+ Acts Male by Trucks | 8.4 | 2.3 | 1.4 | 0 | 4.8 | 1.7 | 3.3 | 0 | 0 | 2.9 | 0 | 2.4 | 3.7 | 0 | 2 | 0 | 2.7 | 7.1 | 0 | 3.8 | 3.6 |

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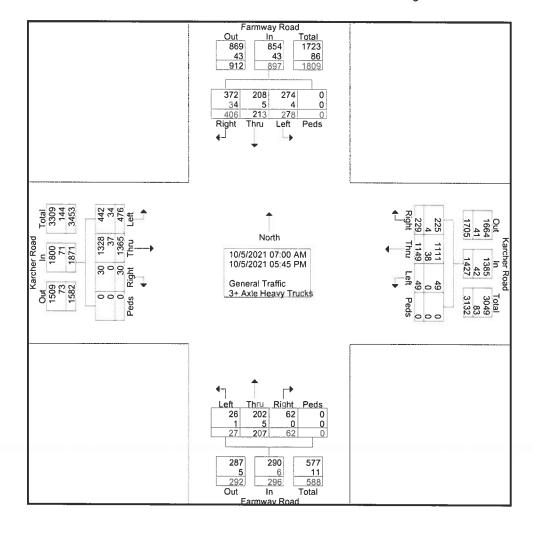
Study: TO0016

Intersection: Farmway Rd / Karcher Rd City, State: Canyon County, Idaho

Control: Signalized

File Name ; Farmway Rd & Karcher Rd

Site Code : 00000000 Start Date : 10/5/2021



L2DataCollection.com Idaho (208) 860-7554 Utah (801) 413-2993

Study: TO0016

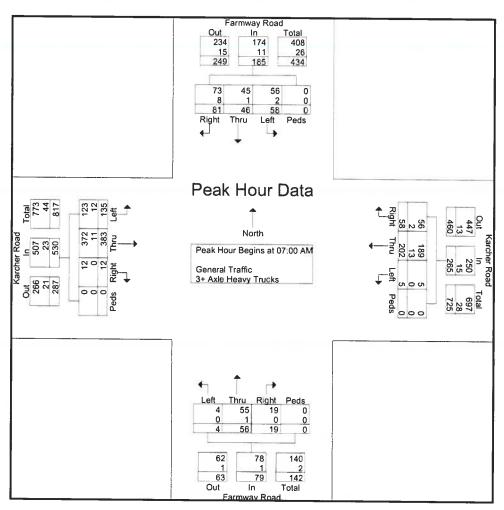
Intersection: Farmway Rd / Karcher Rd City, State: Canyon County, Idaho

Control: Signalized

File Name: Farmway Rd & Karcher Rd

Site Code : 00000000 Start Date : 10/5/2021

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| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App Total | Right | Thru | Left | Peds | App. Total | Int, Total |
| Peak Hour | Analy | sis Fr | om 0 | 7:00 A | M to 11 | :45 A | M - Pe | ak 1 | of 1 | | | | | | | | | | | | |
| Peak Hour f | | | | | | | | | | | | | | | | | | | | | |
| 07:00 AM | 18 | 3 | 11 | 0 | 32 | 12 | 46 | 1 | 0 | 59 | 6 | 14 | 1 | 0 | 21 | 2 | 107 | 29 | 0 | 138 | 250 |
| 07:15 AM | 20 | 12 | 22 | 0 | 54 | 12 | 56 | 0 | 0 | 68 | 9 | 6 | Ó | 0 | 15 | 3 | 100 | 32 | 0 | 135 | 272 |
| 07:30 AM | 23 | 17 | 13 | 0 | 53 | 18 | 45 | 0 | 0 | 63 | 3 | 16 | 2 | Ō | 21 | 4 | 103 | 38 | ñ | 145 | 282 |
| 07:45 AM | 20 | 14 | 12 | 0 | 46 | 16 | 55 | 4 | 0 | 75 | 1 | 20 | 1 | ō | 22 | 3 | 73 | 36 | 0 | 112 | 255 |
| Total Volume | 81 | 46 | 58 | 0 | 185 | 58 | 202 | 5 | 0 | 265 | 19 | 56 | 4 | 0 | 79 | 12 | 383 | 135 | 0 | 530 | 1059 |
| % App. Total | 43.8 | 24.9 | 31.4 | 0 | | 21.9 | 76.2 | 1.9 | 0 | | 24.1 | 70.9 | 5.1 | 0 | | 2.3 | 72.3 | 25.5 | ő | 000 | 1000 |
| PHF | .880 | .676 | .659 | .000 | .856 | .806 | .902 | .313 | .000 | .883 | .528 | .700 | .500 | .000 | .898 | .750 | .895 | .888 | .000 | .914 | .939 |
| General Traffic | 73 | 45 | 56 | 0 | 174 | 56 | 189 | 5 | 0 | 250 | 19 | 55 | 4 | 0 | 78 | 12 | 372 | 123 | 0 | 507 | 1009 |
| % General Traffic | 90.1 | 97.8 | 96.6 | 0 | 94.1 | 96.6 | 93.6 | 100 | 0 | 94.3 | 100 | 98.2 | 100 | Õ | 98.7 | 100 | 97.1 | 91.1 | Ô | 95.7 | 95.3 |
| 3-Armenay Tools | 8 | 1 | 2 | 0 | 11 | 2 | 13 | 0 | 0 | 15 | 0 | 1 | 0 | Ö | 1 | 0 | 11 | 12 | 0 | 23 | 50.5 |
| Trucke Heavy | 9.9 | 2.2 | 3.4 | 0 | 5.9 | 3.4 | 6.4 | 0 | 0 | 5.7 | 0 | 1.8 | 0 | 0 | 1.3 | _ | 2.9 | 8.9 | 0 | 4.3 | 4.7 |



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Study: TO0016

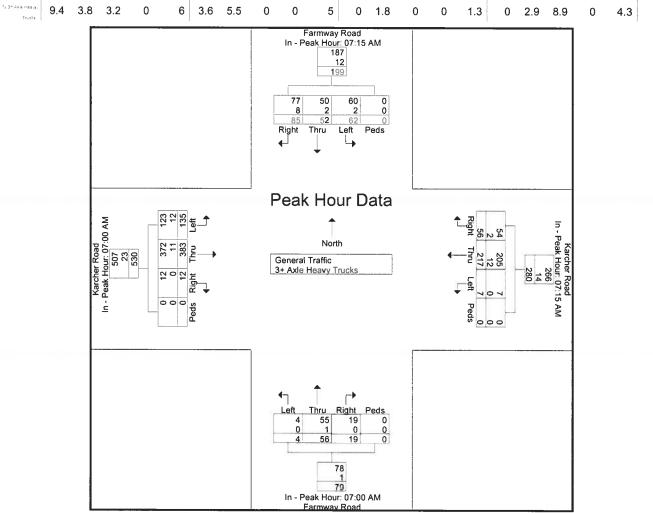
Intersection: Farmway Rd / Karcher Rd City, State: Canyon County, Idaho

Control: Signalized

File Name: Farmway Rd & Karcher Rd

Site Code : 00000000 Start Date : 10/5/2021

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| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Tota |
| Peak Hour | Analy | sis Fr | om 07 | 7:00 A | M to 11 | :45 A | M - Pe | ak 1 | of 1 | | | | | | | | | | | | |
| Peak Hour f | or Ead | ch App | roach | Begir | ıs at: | | | | | | | | | | | | | | | | |
| | 07:15 AN | • | | | | 07:15 AN | | | | | 07 00 At | 5 | | | | 07 00 At. | ! | | | | |
| +0 mins. | 20 | 12 | 22 | 0 | 54 | 12 | 56 | 0 | 0 | 68 | 6 | 14 | 1 | 0 | 21 | 2 | 107 | 29 | 0 | 138 | |
| +15 mins. | 23 | 17 | 13 | 0 | 53 | 18 | 45 | 0 | 0 | 63 | 9 | 6 | 0 | 0 | 15 | 3 | 100 | 32 | 0 | 135 | |
| +30 mins. | 20 | 14 | 12 | 0 | 46 | 16 | 55 | 4 | 0 | 75 | 3 | 16 | 2 | 0 | 21 | 4 | 103 | 38 | 0 | 145 | |
| +45 mins. | 22 | 9 | 15 | 0 | 46 | 10 | 61 | 3 | 0 | 74 | 1 | 20 | 1 | 0 | 22 | 3 | 73 | 36 | 0 | 112 | |
| Total Volume | 85 | 52 | 62 | 0 | 199 | 56 | 217 | 7 | 0 | 280 | 19 | 56 | 4 | 0 | 79 | 12 | 383 | 135 | 0 | 530 | |
| % App. Total | 42.7 | 26.1 | 31.2 | 0 | | 20 | 77.5 | 2.5 | 0 | | 24.1 | 70,9 | 5.1 | 0 | | 2.3 | 72.3 | 25.5 | 0 | | |
| PHF | .924 | .765 | .705 | .000 | .921 | .778 | .889 | .438 | .000 | .933 | .528 | .700 | .500 | .000 | .898 | .750 | .895 | .888 | .000 | .914 | ĺ |
| General Traffic | 77 | 50 | 60 | 0 | 187 | 54 | 205 | 7 | 0 | 266 | 19 | 55 | 4 | 0 | 78 | 12 | 372 | 123 | 0 | 507 | |
| % General Traffic | 90. 6 | 96. 2 | 96. 8 | 0 | 94 | 96. 4 | 94. 5 | 100 | 0 | 95 | 100 | 98. 2 | 100 | 0 | 98.7 | 100 | 97. 1 | 91. 1 | 0 | 95.7 | |
| 3* Arie Heavy Trucks | 8 | 2 | 2 | 0 | 12 | 2 | 12 | 0 | 0 | 14 | 0 | 1 | 0 | 0 | 1 | 0 | 11 | 12 | 0 | 23 | |



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Study: TO0016

Intersection: Farmway Rd / Karcher Rd

City, State: Canyon County, Idaho

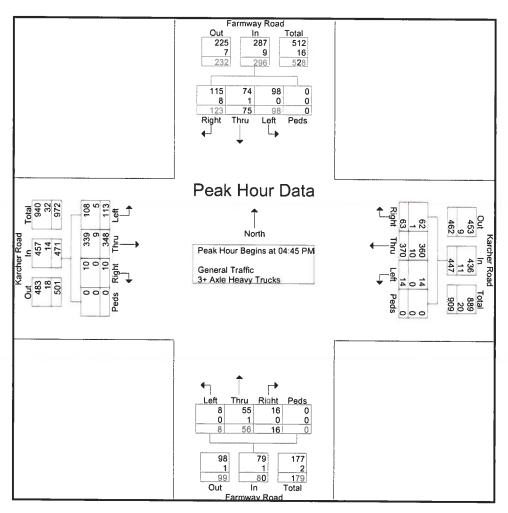
Control: Signalized

File Name: Farmway Rd & Karcher Rd

Site Code : 00000000

Start Date : 10/5/2021

| | | | nway om No | | | | | cher I | | | | | nway om So | Road | | | | cher l | | - | |
|----------------------|--------|----------|---------------|--------|------------|-------|--------|--------|------|-----------|-------|------|---------------|------|------------|-------|------|--------|------|------------|------------|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | înt. Total |
| Peak Hour | Analy | sis Fr | om 12 | 2:00 P | M to 05 | :45 P | M - Pe | ak 1 c | of 1 | | | | | | | | | | | | |
| Peak Hour f | or Ent | ire Inte | ersecti | ion Be | gins at | 04:45 | PM | | | | | | | | | | | | | | |
| 04:45 PM | 25 | 17 | 29 | 0 | 71 | 12 | 100 | 3 | 0 | 115 | 4 | 11 | 2 | 0 | 17 | 2 | 85 | 24 | 0 | 111 | 314 |
| 05:00 PM | 27 | 20 | 20 | 0 | 67 | 14 | 86 | 3 | 0 | 103 | 5 | 11 | 0 | 0 | 16 | 2 | 106 | 28 | 0 | 136 | 322 |
| 05:15 PM | 37 | 23 | 27 | 0 | 87 | 19 | 89 | 1 | 0 | 109 | 6 | 18 | 2 | 0 | 26 | 2 | 77 | 37 | ō | 116 | 338 |
| 05:30 PM | 34 | 15 | 22 | 0 | 71 | 18 | 95 | 7 | 0 | 120 | 1 | 16 | 4 | 0 | 21 | 4 | 80 | 24 | Ō | 108 | 320 |
| Total Volume | 123 | 75 | 98 | 0 | 296 | 63 | 370 | 14 | 0 | 447 | 16 | 56 | 8 | 0 | 80 | 10 | 348 | 113 | 0 | 471 | 1294 |
| % App. Total | 41.6 | 25.3 | 33.1 | 0 | | 14.1 | 82.8 | 3.1 | 0 | | 20 | 70 | 10 | 0 | | 2.1 | 73.9 | 24 | Ō | | |
| PHF | .831 | .815 | .845 | .000 | .851 | .829 | .925 | .500 | .000 | .931 | .667 | .778 | .500 | .000 | .769 | .625 | .821 | .764 | .000 | .866 | .957 |
| General Traffic | 115 | 74 | 98 | 0 | 287 | 62 | 360 | 14 | 0 | 436 | 16 | 55 | 8 | 0 | 79 | 10 | 339 | 108 | 0 | 457 | 1259 |
| % General Traffic | 93.5 | 98.7 | 100 | 0 | 97.0 | 98.4 | 97.3 | 100 | 0 | 97.5 | 100 | 98.2 | 100 | 0 | 98.8 | 100 | 97.4 | 95.6 | Ō | 97.0 | 97.3 |
| 34 Arie Heavy Trucks | 8 | 1 | 0 | 0 | 9 | 1 | 10 | 0 | 0 | 11 | 0 | 1 | 0 | 0 | 1 | 0 | 9 | 5 | Ö | 14 | 35 |
| Trucks | 6.5 | 1.3 | 0 | 0 | 3.0 | 1.6 | 2.7 | 0 | 0 | 2.5 | 0 | 1.8 | 0 | 0 | 1.3 | 0 | 2.6 | 4.4 | 0 | 3.0 | 2.7 |



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Study: TO0016

Intersection: Farmway Rd / Karcher Rd City, State: Canyon County, Idaho

Control: Signalized

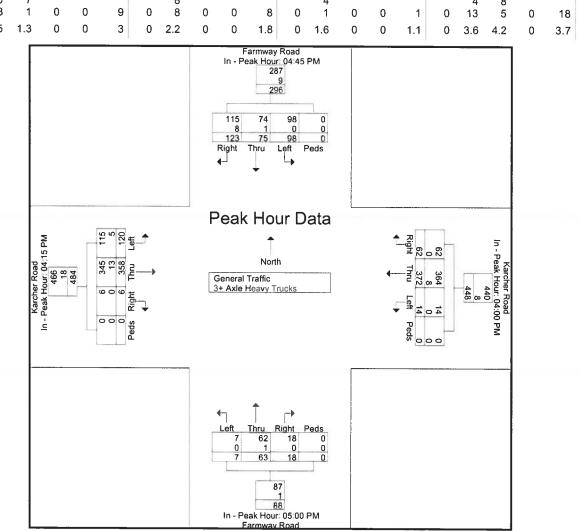
8

6.5

File Name :: Farmway Rd & Karcher Rd

Site Code : 00000000 Start Date : 10/5/2021

| | | | nway om N | Road orth | | | | cher l | | | | | nway om Sc | Road outh | | | | rcher I | | | |
|-------------------------------------|----------|----------|--------------|--------------|------------|----------|----------|--------|------|------------|----------|------|---------------|--------------|-----------|----------|------|---------|------|------------|-----------|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App Total | Right | Thru | Left | | App. Total | Int. Tota |
| <mark>eak Hour</mark> eak Hour f | | | | | | :45 P | M - Pe | ak 1 | of 1 | | | | | | | | | | | | |
| | 04 45 PA | 1 | | | | 04 00 PM | | | | | 05 00 Ph | | | | | 04.15 PM | | | | | ĺ |
| +0 mins. | 25 | 17 | 29 | 0 | 71 | 15 | 88 | 4 | 0 | 107 | 5 | 11 | 0 | 0 | 16 | 2 | 81 | 33 | 0 | 116 | |
| 15 mins. | 27 | 20 | 20 | 0 | 67 | 18 | 92 | 2 | 0 | 112 | 6 | 18 | 2 | 0 | 26 | 0 | 86 | 35 | 0 | 121 | |
| ·30 mins. | 37 | 23 | 27 | 0 | 87 | 17 | 92 | 5 | 0 | 114 | 1 | 16 | 4 | 0 | 21 | 2 | 85 | 24 | ō | 111 | |
| 45 mins. | 34 | 15 | 22 | 0 | 71 | 12 | 100 | 3 | 0 | 115 | 6 | 18 | 1 | 0 | 25 | 2 | 106 | 28 | ō | 136 | |
| otal Volume | 123 | 75 | 98 | 0 | 296 | 62 | 372 | 14 | 0 | 448 | 18 | 63 | 7 | 0 | 88 | 6 | 358 | 120 | 0 | 484 | |
| % App. Total | 41.6 | 25.3 | 33.1 | 0 | | 13.8 | 83 | 3.1 | 0 | | 20.5 | 71.6 | - 8 | 0 | | 1.2 | 74 | 24.8 | Ö | | |
| PHF | .831 | .815 | .845 | .000 | .851 | .861 | .930 | .700 | .000 | .974 | .750 | .875 | .438 | .000 | .846 | .750 | .844 | .857 | .000 | .890 | |
| General Traffic | 115 | 74 | 98 | 0 | 287 | 62 | 364 | 14 | 0 | 440 | 18 | 62 | 7 | 0 | 87 | 6 | 345 | 115 | 0 | 466 | |
| General Traffic | 93. 5 | 98. 7 | 100 | 0 | 97 | 100 | 97. 8 | 100 | 0 | 98.2 | 100 | 98. | 100 | 0 | 98.9 | 100 | 96. | 95. | 0 | 96.3 | |



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Study: TO0016

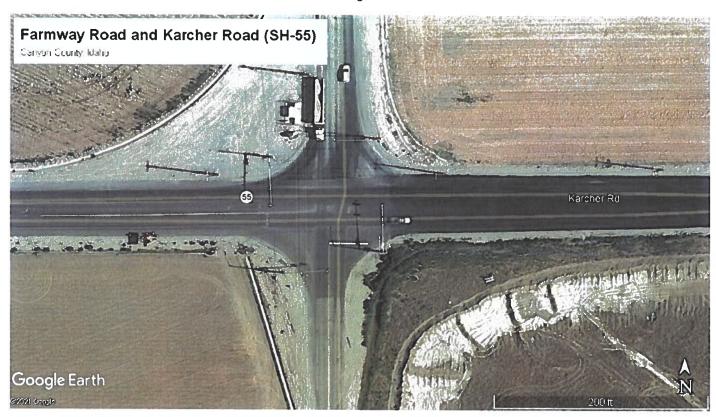
Intersection: Farmway Rd / Karcher Rd City, State: Canyon County, Idaho Control: Signalized

File Name: Farmway Rd & Karcher Rd

Site Code : 00000000 Start Date : 10/5/2021

Page No : 7

Image 1





Appendix C

LOS Summary Worksheets

| | ۶ | - | * | • | — | 4 | 4 | † | 1 | - | + | 1 |
|------------------------------|------|--------|--------|---------|----------|--------|---------|-------|-------------|-------------|--------|----------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | 7 | 1 | | 7 | ₽ | | | 4 | | 7 | 1 | |
| Traffic Volume (veh/h) | 135 | 383 | 12 | 5 | 202 | 58 | 4 | 56 | 19 | 58 | 46 | 81 |
| Future Volume (veh/h) | 135 | 383 | 12 | 5 | 202 | 58 | 4 | 56 | 19 | 58 | 46 | 81 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/in | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 |
| Adj Flow Rate, veh/h | 144 | 407 | 13 | 5 | 215 | 62 | 4 | 60 | 20 | 62 | 49 | 86 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Cap, veh/h | 384 | 520 | 17 | 247 | 286 | 83 | 87 | 157 | 51 | 438 | 173 | 303 |
| Arrive On Green | 0.09 | 0.30 | 0.30 | 0.01 | 0.21 | 0.21 | 0.12 | 0.12 | 0.12 | 0.06 | 0.29 | 0.29 |
| Sat Flow, veh/h | 1739 | 1760 | 56 | 1739 | 1362 | 393 | 39 | 1281 | 412 | 1739 | 595 | 1044 |
| Grp Volume(v), veh/h | 144 | 0 | 420 | 5 | 0 | 277 | 84 | 0 | 0 | 62 | 0 | 135 |
| Grp Sat Flow(s),veh/h/ln | 1739 | 0 | 1816 | 1739 | 0 | 1755 | 1732 | 0 | 0 | 1739 | 0 | 1638 |
| Q Serve(g_s), s | 2.9 | 0.0 | 9.7 | 0.1 | 0.0 | 6.8 | 0.0 | 0.0 | 0.0 | 1.4 | 0.0 | 2.9 |
| Cycle Q Clear(g_c), s | 2.9 | 0.0 | 9.7 | 0.1 | 0.0 | 6.8 | 2.0 | 0.0 | 0.0 | 1.4 | 0.0 | 2.9 |
| Prop In Lane | 1.00 | | 0.03 | 1.00 | | 0.22 | 0.05 | | 0.24 | 1.00 | | 0.64 |
| Lane Grp Cap(c), veh/h | 384 | 0 | 537 | 247 | 0 | 369 | 294 | 0 | 0 | 438 | 0 | 476 |
| V/C Ratio(X) | 0.37 | 0.00 | 0.78 | 0.02 | 0.00 | 0.75 | 0.29 | 0.00 | 0.00 | 0.14 | 0.00 | 0.28 |
| Avail Cap(c_a), veh/h | 1169 | 0 | 2093 | 1181 | 0 | 2023 | 1325 | 0 | 0 | 1280 | 0 | 1186 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 12.8 | 0.0 | 14.8 | 12.3 | 0.0 | 17.0 | 18.6 | 0.0 | 0.0 | 15.9 | 0.0 | 12.6 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 1.0 | 0.0 | 0.0 | 1.2 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.8 | 0.0 | 2.9 | 0.0 | 0.0 | 2.1 | 0.8 | 0.0 | 0.0 | 0.4 | 0.0 | 0.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 13.0 | 0.0 | 15.8 | 12.3 | 0.0 | 18.2 | 18.8 | 0.0 | 0.0 | 16.0 | 0.0 | 12.7 |
| LnGrp LOS | В | Α | В | В | Α | В | В | Α | Α | В | Α | В |
| Approach Vol, veh/h | | 564 | | | 282 | A BANK | | 84 | Marie . | Contract to | 197 | |
| Approach Delay, s/veh | | 15.1 | | | 18.1 | | | 18.8 | | | 13.8 | |
| Approach LOS | | В | | | В | | | В | | | В | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | 7 | 8 | | | 897038 | 1724 |
| Phs Duration (G+Y+Rc), s | 5.3 | 20.6 | 36000 | 20.1 | 9.2 | 16.7 | 7.7 | 12.3 | | | | \$1 D B. |
| Change Period (Y+Rc), s | 5.0 | 7.0 | | 6.7 | 5.0 | 7.0 | 5.0 | 6.7 | | | | |
| Max Green Setting (Gmax), s | 25.0 | 53.0 | | 33.3 | 25.0 | 53.0 | 25.0 | 33.3 | | | | |
| Max Q Clear Time (g_c+l1), s | 2.1 | 11.7 | | 4.9 | 4.9 | 8.8 | 3.4 | 4.0 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.3 | | 0.2 | 0.2 | 0.9 | 0.1 | 0.2 | | | | |
| Intersection Summary | | ALC: Y | W. Kin | | | | World. | A PER | SENT | garty a | 4000 | 450 |
| HCM 6th Ctrl Delay | | 000000 | 15.9 | Labor 1 | | THE W | Sec Tip | | Fig. Spring | | 11883 | |
| HCM 6th LOS | | | В | | | | | | | | | |

| | ۶ | - | * | 1 | 4 | 4 | 4 | † | ~ | - | + | 4 |
|------------------------------|-------|------|----------|------|-------|----------|-------|------|----------|---------|----------|------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | 4 | 1 | | M | 1 | | | 4 | | N | ₽. | |
| Traffic Volume (veh/h) | 113 | 348 | 10 | 14 | 370 | 63 | 8 | 56 | 16 | 98 | 75 | 123 |
| Future Volume (veh/h) | 113 | 348 | 10 | 14 | 370 | 63 | 8 | 56 | 16 | 98 | 75 | 123 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 |
| Adj Flow Rate, veh/h | 118 | 362 | 10 | 15 | 385 | 66 | 8 | 58 | 17 | 102 | 78 | 128 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Cap, veh/h | 331 | 641 | 18 | 362 | 460 | 79 | 83 | 143 | 39 | 427 | 175 | 287 |
| Arrive On Green | 0.08 | 0.36 | 0.36 | 0.02 | 0.30 | 0.30 | 0.11 | 0.11 | 0.11 | 0.07 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1767 | 1797 | 50 | 1767 | 1543 | 265 | 88 | 1295 | 356 | 1767 | 632 | 1037 |
| Grp Volume(v), veh/h | 118 | 0 | 372 | 15 | 0 | 451 | 83 | 0 | 0 | 102 | 0 | 206 |
| Grp Sat Flow(s),veh/h/ln | 1767 | 0 | 1847 | 1767 | 0 | 1808 | 1739 | 0 | 0 | 1767 | 0 | 1669 |
| Q Serve(g_s), s | 2.4 | 0.0 | 8.7 | 0.3 | 0.0 | 12.5 | 0.0 | 0.0 | 0.0 | 2.7 | 0.0 | 5.5 |
| Cycle Q Clear(g_c), s | 2.4 | 0.0 | 8.7 | 0.3 | 0.0 | 12.5 | 2.3 | 0.0 | 0.0 | 2.7 | 0.0 | 5.5 |
| Prop In Lane | 1.00 | | 0.03 | 1.00 | | 0.15 | 0.10 | | 0.20 | 1.00 | | 0.62 |
| Lane Grp Cap(c), veh/h | 331 | 0 | 658 | 362 | 0 | 539 | 265 | 0 | 0 | 427 | 0 | 461 |
| V/C Ratio(X) | 0.36 | 0.00 | 0.57 | 0.04 | 0.00 | 0.84 | 0.31 | 0.00 | 0.00 | 0.24 | 0.00 | 0.45 |
| Avail Cap(c_a), veh/h | 1018 | 0 | 1824 | 1152 | 0 | 1786 | 1131 | 0 | 0 | 1122 | 0 | 1036 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 12.9 | 0.0 | 13.9 | 11.3 | 0.0 | 17.6 | 22.3 | 0.0 | 0.0 | 19.0 | 0.0 | 16.0 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 0.3 | 0.0 | 0.0 | 1.4 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/In | 0.7 | 0.0 | 2.6 | 0.1 | 0.0 | 4.1 | 0.9 | 0.0 | 0.0 | 0.9 | 0.0 | 1.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 13.1 | 0.0 | 14.2 | 11.3 | 0.0 | 19.0 | 22.5 | 0.0 | 0.0 | 19.1 | 0.0 | 16.3 |
| LnGrp LOS | В | A | <u>B</u> | В | Α | В | С | Α | Α | В | Α | В |
| Approach Vol, veh/h | | 490 | | | 466 | | | 83 | | | 308 | |
| Approach Delay, s/veh | | 13.9 | | | 18.7 | | | 22.5 | | | 17.2 | |
| Approach LOS | | В | | | В | | | С | | | В | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | 7 | 8 | | | 41191105 | 100 |
| Phs Duration (G+Y+Rc), s | 6.0 | 26.1 | | 21.5 | 9.1 | 23.0 | 8.9 | 12.6 | N. A. S. | | | |
| Change Period (Y+Rc), s | 5.0 | 7.0 | | 6.7 | 5.0 | 7.0 | 5.0 | 6.7 | | | | |
| Max Green Setting (Gmax), s | 25.0 | 53.0 | | 33.3 | 25.0 | 53.0 | 25.0 | 33.3 | | | | |
| Max Q Clear Time (g_c+l1), s | 2.3 | 10.7 | | 7.5 | 4.4 | 14.5 | 4.7 | 4.3 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.1 | | 0.3 | 0.1 | 1.5 | 0.1 | 0.2 | | | | |
| Intersection Summary | HAVE. | | With the | | WANT. | i in | 10:30 | | | ie ale. | | |
| HCM 6th Ctrl Delay | | | 16.9 | | | arith (S | | | | | 12 313 | |
| HCM 6th LOS | | | В | | | | | | | | | |

| | ٠ | → | * | • | 4- | 4 | 4 | † | 7 | - | + | 1 |
|---|-----------|----------|------------|--------|------|-------|---------|------|---------|----------------|-------------|--|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | M | 1 | | 7 | 7+ | | | 4 | | N | - ↑ | |
| Traffic Volume (veh/h) | 143 | 406 | 13 | 5 | 214 | 62 | 4 | 59 | 20 | 62 | 49 | 86 |
| Future Volume (veh/h) | 143 | 406 | 13 | 5 | 214 | 62 | 4 | 59 | 20 | 62 | 49 | 86 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 |
| Adj Flow Rate, veh/h | 152 | 432 | 14 | 5 | 228 | 66 | 4 | 63 | 21 | 66 | 52 | 91 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Cap, veh/h | 385 | 542 | 18 | 241 | 298 | 86 | 84 | 155 | 50 | 436 | 172 | 301 |
| Arrive On Green | 0.10 | 0.31 | 0.31 | 0.01 | 0.22 | 0.22 | 0.12 | 0.12 | 0.12 | 0.06 | 0.29 | 0.29 |
| Sat Flow, veh/h | 1739 | 1759 | 57 | 1739 | 1361 | 394 | 37 | 1282 | 414 | 1739 | 596 | 1043 |
| Grp Volume(v), veh/h | 152 | 0 | 446 | 5 | 0 | 294 | 88 | 0 | 0 | 66 | 0 | 143 |
| Grp Sat Flow(s),veh/h/ln | 1739 | 0 | 1816 | 1739 | 0 | 1755 | 1733 | 0 | 0 | 1739 | 0 | 1638 |
| Q Serve(g_s), s | 3.1 | 0.0 | 10.6 | 0.1 | 0.0 | 7.4 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 3.2 |
| Cycle Q Clear(g_c), s | 3.1 | 0.0 | 10.6 | 0.1 | 0.0 | 7.4 | 2.2 | 0.0 | 0.0 | 1.5 | 0.0 | 3.2 |
| Prop In Lane | 1.00 | | 0.03 | 1.00 | | 0.22 | 0.05 | 0.0 | 0.24 | 1.00 | 010 | 0.64 |
| Lane Grp Cap(c), veh/h | 385 | 0 | 560 | 241 | 0 | 384 | 290 | 0 | 0 | 436 | 0 | 472 |
| V/C Ratio(X) | 0.39 | 0.00 | 0.80 | 0.02 | 0.00 | 0.76 | 0.30 | 0.00 | 0.00 | 0.15 | 0.00 | 0.30 |
| Avail Cap(c_a), veh/h | 1140 | 0 | 2040 | 1151 | 0 | 1972 | 1292 | 0 | 0 | 1251 | 0.00 | 1156 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 12.8 | 0.0 | 15.0 | 12.3 | 0.0 | 17.3 | 19.2 | 0.0 | 0.0 | 16.4 | 0.0 | 13.1 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 1.0 | 0.0 | 0.0 | 1.2 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.8 | 0.0 | 3.1 | 0.0 | 0.0 | 2.3 | 0.8 | 0.0 | 0.0 | 0.5 | 0.0 | 0.8 |
| Unsig. Movement Delay, s/veh | | | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| LnGrp Delay(d),s/veh | 13.0 | 0.0 | 15.9 | 12.3 | 0.0 | 18.5 | 19.4 | 0.0 | 0.0 | 16.4 | 0.0 | 13.2 |
| LnGrp LOS | В | Α | В | В | A | В | В | A | A | В | A | В |
| Approach Vol, veh/h | 11000 | 598 | HILDIE AND | AVES E | 299 | W/CIR | EU ZUSE | 88 | | HRIVE II | 209 | All the last |
| Approach Delay, s/veh | | 15.2 | | | 18.4 | | | 19.4 | | | 14.2 | |
| Approach LOS | | В | | | В | | | В | | | B | |
| Timer - Assigned Phs | 1 | 2 | | 1 | | C | 7 | | | Water State of | War and the | |
| Phs Duration (G+Y+Rc), s | 5.3 | 21.6 | | 20.2 | 9.5 | 47.2 | | 8 | MEDICAL | | No. | DESCRIPTION OF THE PERSON OF T |
| Change Period (Y+Rc), s | 5.0 | | | 20.3 | | 17.3 | 7.9 | 12.4 | | | | |
| Max Green Setting (Gmax), s | | 7.0 | | 6.7 | 5.0 | 7.0 | 5.0 | 6.7 | | | | |
| | 25.0 | 53.0 | | 33.3 | 25.0 | 53.0 | 25.0 | 33.3 | | | | |
| Max Q Clear Time (g_c+l1), s Green Ext Time (p_c), s | 2.1 | 12.6 | | 5.2 | 5.1 | 9.4 | 3.5 | 4.2 | | | | |
| 4-7 | 0.0 | 1.4 | | 0.2 | 0.2 | 0.9 | 0.1 | 0.2 | | 40415 | reality) | ES COM |
| Intersection Summary | Mary Mary | | | | | | | | HEAR | | | |
| HCM 6th Ctrl Delay | | | 16.1 | | | | | | | | | |
| HCM 6th LOS | | | В | | | | | | | | | |

| | • | → | * | • | 4 | 4 | 4 | † | <i>></i> | - | + | ✓ |
|------------------------------|------|----------|------|------|------|-------|------|----------|-------------|--------------|----------|----------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | 7 | 1+ | | ħ | 1> | | | 4 | | ሻ | 1 | |
| Traffic Volume (veh/h) | 120 | 369 | 11 | 15 | 393 | 67 | 8 | 59 | 17 | 104 | 80 | 130 |
| Future Volume (veh/h) | 120 | 369 | 11 | 15 | 393 | 67 | 8 | 59 | 17 | 104 | 80 | 130 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 |
| Adj Flow Rate, veh/h | 125 | 384 | 11 | 16 | 409 | 70 | 8 | 61 | 18 | 108 | 83 | 135 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Cap, veh/h | 326 | 664 | 19 | 360 | 483 | 83 | 80 | 139 | 39 | 423 | 173 | 281 |
| Arrive On Green | 0.08 | 0.37 | 0.37 | 0.02 | 0.31 | 0.31 | 0.11 | 0.11 | 0.11 | 0.07 | 0.27 | 0.27 |
| Sat Flow, veh/h | 1767 | 1795 | 51 | 1767 | 1544 | 264 | 85 | 1295 | 360 | 1767 | 636 | 1034 |
| Grp Volume(v), veh/h | 125 | 0 | 395 | 16 | 0 | 479 | 87 | 0 | 0 | 108 | 0 | 218 |
| Grp Sat Flow(s),veh/h/ln | 1767 | 0 | 1846 | 1767 | 0 | 1808 | 1739 | 0 | 0 | 1767 | 0 | 1669 |
| Q Serve(g_s), s | 2.6 | 0.0 | 9.5 | 0.3 | 0.0 | 13.7 | 0.0 | 0.0 | 0.0 | 2.9 | 0.0 | 6.0 |
| Cycle Q Clear(g_c), s | 2.6 | 0.0 | 9.5 | 0.3 | 0.0 | 13.7 | 2.5 | 0.0 | 0.0 | 2.9 | 0.0 | 6.0 |
| Prop In Lane | 1.00 | | 0.03 | 1.00 | | 0.15 | 0.09 | | 0.21 | 1.00 | | 0.62 |
| Lane Grp Cap(c), veh/h | 326 | 0 | 683 | 360 | 0 | 565 | 258 | 0 | 0 | 423 | 0 | 454 |
| V/C Ratio(X) | 0.38 | 0.00 | 0.58 | 0.04 | 0.00 | 0.85 | 0.34 | 0.00 | 0.00 | 0.26 | 0.00 | 0.48 |
| Avail Cap(c_a), veh/h | 988 | 0 | 1770 | 1124 | 0 | 1734 | 1098 | 0 | 0 | 1091 | 0 | 1006 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 13.0 | 0.0 | 14.0 | 11.2 | 0.0 | 17.8 | 23.1 | 0.0 | 0.0 | 19.7 | 0.0 | 16.8 |
| Incr Delay (d2), s/veh | 0.3 | 0.0 | 0.3 | 0.0 | 0.0 | 1.4 | 0.3 | 0.0 | 0.0 | 0.1 | 0.0 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.7 | 0.0 | 2.9 | 0.1 | 0.0 | 4.5 | 1.0 | 0.0 | 0.0 | 1.0 | 0.0 | 1.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 13.3 | 0.0 | 14.2 | 11.2 | 0.0 | 19.2 | 23.4 | 0.0 | 0.0 | 19.8 | 0.0 | 17.1 |
| LnGrp LOS | В | Α | В | В | Α | В | С | Α_ | Α | B | Α | В |
| Approach Vol, veh/h | | 520 | | | 495 | | | 87 | | | 326 | |
| Approach Delay, s/veh | | 14.0 | | | 18.9 | | | 23.4 | | | 18.0 | |
| Approach LOS | | В | | | В | | | C | | | В | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | 7 | 8 | | | and Real | 8.07 |
| Phs Duration (G+Y+Rc), s | 6.1 | 27.5 | | 21.7 | 9.3 | 24.3 | 9.1 | 12.6 | | | | WEIGHT ! |
| Change Period (Y+Rc), s | 5.0 | 7.0 | | 6.7 | 5.0 | 7.0 | 5.0 | 6.7 | | | | |
| Max Green Setting (Gmax), s | 25.0 | 53.0 | | 33.3 | 25.0 | 53.0 | 25.0 | 33.3 | | | | |
| Max Q Clear Time (g_c+l1), s | 2.3 | 11.5 | | 8.0 | 4.6 | 15.7 | 4.9 | 4.5 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.2 | | 0.3 | 0.1 | 1.6 | 0.1 | 0.2 | | | | |
| Intersection Summary | | البارتو | | | | A del | 1 1% | | | | N-AUE | |
| HCM 6th Ctrl Delay | | | 17.2 | | | | | | PUTT | Television I | | |
| HCM 6th LOS | | | В | | | | | | | | | |

| | 1 | → | * | 1 | — | 4 | 1 | † | - | 1 | | 1 |
|------------------------------|---------|----------|------|-------------|----------|-------|-----------|-----------|------------|---------|--------------|----------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ř | } | | ħ | 1> | | | 4 | | 7 | - }- | |
| Traffic Volume (veh/h) | 195 | 375 | 13 | 5 | 230 | 62 | 4 | 62 | 20 | 109 | 51 | 88 |
| Future Volume (veh/h) | 195 | 375 | 13 | 5 | 230 | 62 | 4 | 62 | 20 | 109 | 51 | 88 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 |
| Adj Flow Rate, veh/h | 207 | 399 | 14 | 5 | 245 | 66 | 4 | 66 | 21 | 116 | 54 | 94 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Cap, veh/h | 416 | 600 | 21 | 292 | 311 | 84 | 77 | 146 | 45 | 445 | 173 | 301 |
| Arrive On Green | 0.12 | 0.34 | 0.34 | 0.01 | 0.22 | 0.22 | 0.11 | 0.11 | 0.11 | 0.08 | 0.29 | 0.29 |
| Sat Flow, veh/h | 1739 | 1753 | 62 | 1739 | 1385 | 373 | 36 | 1299 | 400 | 1739 | 598 | 1041 |
| Grp Volume(v), veh/h | 207 | 0 | 413 | 5 | 0 | 311 | 91 | 0 | 0 | 116 | 0 | 148 |
| Grp Sat Flow(s), veh/h/ln | 1739 | 0 | 1815 | 1739 | 0 | 1759 | 1735 | 0 | 0 | 1739 | 0 | 1639 |
| Q Serve(g_s), s | 4.5 | 0.0 | 10.0 | 0.1 | 0.0 | 8.6 | 0.0 | 0.0 | 0.0 | 3.0 | 0.0 | 3.6 |
| Cycle Q Clear(g_c), s | 4.5 | 0.0 | 10.0 | 0.1 | 0.0 | 8.6 | 2.5 | 0.0 | 0.0 | 3.0 | 0.0 | 3.6 |
| Prop In Lane | 1.00 | | 0.03 | 1.00 | | 0.21 | 0.04 | | 0.23 | 1.00 | 0.0 | 0.64 |
| Lane Grp Cap(c), veh/h | 416 | 0 | 621 | 292 | 0 | 394 | 268 | 0 | 0 | 445 | 0 | 474 |
| V/C Ratio(X) | 0.50 | 0.00 | 0.67 | 0.02 | 0.00 | 0.79 | 0.34 | 0.00 | 0.00 | 0.26 | 0.00 | 0.31 |
| Avail Cap(c_a), veh/h | 1041 | 0 | 1863 | 1122 | 0 | 1805 | 1182 | 0 | 0 | 1147 | 0 | 1057 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 13.3 | 0.0 | 14.5 | 12.0 | 0.0 | 18.9 | 21.5 | 0.0 | 0.0 | 18.0 | 0.0 | 14.3 |
| Incr Delay (d2), s/veh | 0.3 | 0.0 | 0.5 | 0.0 | 0.0 | 1.3 | 0.3 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.3 | 0.0 | 3.0 | 0.0 | 0.0 | 2.8 | 1.0 | 0.0 | 0.0 | 1.0 | 0.0 | 1.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | 0.0 | 110 |
| LnGrp Delay(d),s/veh | 13.7 | 0.0 | 14.9 | 12.0 | 0.0 | 20.2 | 21.7 | 0.0 | 0.0 | 18.2 | 0.0 | 14.5 |
| LnGrp LOS | В | Α | В | В | Α | С | С | Α | Α | В | Α | В |
| Approach Vol, veh/h | | 620 | | TENNY I | 316 | EL TA | | 91 | pa pa pang | MINE TO | 264 | |
| Approach Delay, s/veh | | 14.5 | | | 20.1 | | | 21.7 | | | 16.1 | |
| Approach LOS | | В | | | С | | | C | | | В | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 5.3 | 24.7 | | 21.6 | 11.4 | 18.6 | 9.1 | 12.5 | | 101010 | | |
| Change Period (Y+Rc), s | 5.0 | 7.0 | | 6.7 | 5.0 | 7.0 | 5.0 | 6.7 | | | | |
| Max Green Setting (Gmax), s | 25.0 | 53.0 | | 33.3 | 25.0 | 53.0 | 25.0 | 33.3 | | | | |
| Max Q Clear Time (g c+l1), s | 2.1 | 12.0 | | 5.6 | 6.5 | 10.6 | 5.0 | 4.5 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.3 | | 0.2 | 0.2 | 1.0 | 0.1 | 0.2 | | | | |
| Intersection Summary | Night E | | | | | | San de la | dans. | 10000000 | 1000 | (Jos Val | o librar |
| HCM 6th Ctrl Delay | | | 16.7 | THE RESERVE | | There | | PART NAME | | | | 1 |
| HCM 6th LOS | | | В | | | | | | | | | |

| Intersection | | | V | | en grije | 451 |
|--------------------------------------|-----------|----------|------------|----------|----------|----------|
| Int Delay, s/veh | 2.2 | | | | | |
| Movement | WBL | WBR | NBT | MPD | CDI | CDT |
| | | VVDK | | NBR | SBL | SBT |
| Lane Configurations | 64 | 00 | 740 | 74 | 00 | 404 |
| Traffic Vol, veh/h Future Vol, veh/h | 64 64 | 26 26 | 248 248 | 71 71 | 23 | 184 |
| Conflicting Peds, #/hr | 0 | 0 | 248 | 71 | 23 | 184 |
| | | | | | | 0 |
| Sign Control RT Channelized | Stop | Stop | Free | Free | Free | Free |
| | - | None | • | None | • | None |
| Storage Length | 0 | _ | - | - | | - |
| Veh in Median Storage | | • | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - 00 | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 70 | 28 | 270 | 77 | 25 | 200 |
| | | | | | | |
| Major/Minor | Minor1 | 1 | /lajor1 | | Major2 | |
| Conflicting Flow All | 559 | 309 | 0 | 0 | 347 | 0 |
| Stage 1 | 309 | - | - | | ודט | - |
| Stage 2 | 250 | _ | - | | | |
| Critical Hdwy | 6.42 | 6.22 | | | 4.12 | |
| Critical Hdwy Stg 1 | 5.42 | 0.22 | - | • | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | Allow H | | | · | 5,000 |
| Follow-up Hdwy | 3.518 | 3.318 | | | 2.218 | |
| Pot Cap-1 Maneuver | 490 | 731 | | | 1212 | |
| Stage 1 | 745 | 101 | | | 1212 | |
| Stage 2 | 792 | | | - | misken. | erye Si |
| | 192 | - | - | • | • | - |
| Platoon blocked, % | 470 | 704 | diamento: | - | 4040 | vervonte |
| Mov Cap-1 Maneuver | 479 | 731 | L III A | | 1212 | |
| Mov Cap-2 Maneuver | 479 | - | - | | - | - |
| Stage 1 | 745 |) (O = | - | 100 | | i gh-f |
| Stage 2 | 774 | | | - | | - |
| | | | | | | |
| Approach | WB | \$5T** | NB | u/stank | SB | N 10 |
| HCM Control Delay, s | 13.3 | | 0 | | 0.9 | |
| HCM LOS | 13.3 B | | U | | 0.5 | |
| TOW LOS | D | | | | | |
| | | | | | | |
| Minor Lane/Major Mvm | ıt | NBT | NBRV | VBLn1 | SBL | SBT |
| Capacity (veh/h) | | Will S | | | 1212 | |
| HCM Lane V/C Ratio | | - | - | 0.184 | 0.021 | - |
| HCM Control Delay (s) | | | | 13.3 | 8 | 0 |
| HCM Lane LOS | | - | - | В | Α | Α |
| HCM 95th %tile Q(veh) | | | | 0.7 | 0.1 | |
| ` | | | | | | |

| lutura eti ev | | | . EU 10 | | | |
|-------------------------|--------|----------|---------|------------|-----------|---------|
| Intersection | 0.4 | | | | | |
| Int Delay, s/veh | 0.4 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | † | 4 | | | 7 |
| Traffic Vol, veh/h | 0 | 505 | 264 | 36 | 0 | 34 |
| Future Vol, veh/h | 0 | 505 | 264 | 36 | 0 | 34 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - 1 | None | | None | 91.35 | None |
| Storage Length | - | - | | - | | 0 |
| Veh in Median Storage | ,# - | 0 | 0 | - 10-2 | 0 | |
| Grade, % | | 0 | 0 | | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mymt Flow | 0 | 549 | 287 | 39 | 0 | 37 |
| manici IOW | U | 040 | 201 | JJ | U | J1 |
| | | | | | | |
| Major/Minor 1 | Major1 | 1 | Major2 | N | /linor2 | |
| Conflicting Flow All | - | 0 | - | 0 | - | 307 |
| Stage 1 | | _ | | | | - 0 |
| Stage 2 | - | - | | | | _ |
| Critical Hdwy | VIII Y | | | CHON | | 6.22 |
| Critical Hdwy Stg 1 | - | | _ | _ | | - |
| Critical Hdwy Stg 2 | | nii ku | Jak's | | | (- DET |
| Follow-up Hdwy | - | | - | ALL HES | | 3.318 |
| Pot Cap-1 Maneuver | 0 | | | | 0 | 733 |
| Stage 1 | 0 | _ | - | _ | 0 | 100 |
| Stage 2 | 0 | | | | 0 | NG VI S |
| Platoon blocked, % | U | • | - | | U | |
| | | | | ntiviacies | | 700 |
| Mov Cap-1 Maneuver | • | W/100/10 | • | | • | 733 |
| Mov Cap-2 Maneuver | - | _ | - | - | - | - |
| Stage 1 | | - | • | - | - | - |
| Stage 2 | • | _ | • | | - | |
| | | | | | | |
| Approach | EB | 1916 | WB | 100 | SB | Holiza |
| HCM Control Delay, s | 0 | | 0 | | 10.2 | |
| HCM LOS | U | | U | | 10.2 B | |
| HOW LOS | | | | | D | |
| | | | | | | |
| Minor Lane/Major Mvm | t | EBT | WBT | WBR S | SBLn1 | |
| Capacity (veh/h) | | | | | 733 | E CTV |
| HCM Lane V/C Ratio | | - | | _ | 0.05 | |
| HCM Control Delay (s) | | | | 200 | 10.2 | |
| HCM Lane LOS | | _ | - | - | В | |
| HCM 95th %tile Q(veh) | | | | 9/11/2 | 0.2 | |
| TION SOUT MILE CA(VEIL) | | - | - | | 0.2 | |

| | ۶ | → | * | 1 | 4 | 4 | 1 | † | 1 | - | + | 4 |
|------------------------------|--------|----------|------------|--------|------|------|------|------|-----------|------|------|-------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | 7 | 1> | | 7 | ĵ» | | | 4 | | N. | - 1} | |
| Traffic Volume (veh/h) | 173 | 343 | 11 | 15 | 415 | 67 | 8 | 63 | 17 | 152 | 83 | 134 |
| Future Volume (veh/h) | 173 | 343 | 11 | 15 | 415 | 67 | 8 | 63 | 17 | 152 | 83 | 134 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 | 1856 |
| Adj Flow Rate, veh/h | 180 | 357 | 11 | 16 | 432 | 70 | 8 | 66 | 18 | 158 | 86 | 140 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Cap, veh/h | 340 | 712 | 22 | 399 | 498 | 81 | 71 | 127 | 33 | 451 | 179 | 292 |
| Arrive On Green | 0.10 | 0.40 | 0.40 | 0.02 | 0.32 | 0.32 | 0.10 | 0.10 | 0.10 | 0.11 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1767 | 1790 | 55 | 1767 | 1558 | 252 | 82 | 1320 | 341 | 1767 | 635 | 1034 |
| Grp Volume(v), veh/h | 180 | 0 | 368 | 16 | 0 | 502 | 92 | 0 | 0 | 158 | 0 | 226 |
| Grp Sat Flow(s),veh/h/ln | 1767 | 0 | 1846 | 1767 | 0 | 1810 | 1743 | 0 | 0 | 1767 | 0 | 1669 |
| Q Serve(g_s), s | 4.1 | 0.0 | 9.3 | 0.3 | 0.0 | 16.2 | 0.4 | 0.0 | 0.0 | 4.9 | 0.0 | 7.0 |
| Cycle Q Clear(g_c), s | 4.1 | 0.0 | 9.3 | 0.3 | 0.0 | 16.2 | 3.1 | 0.0 | 0.0 | 4.9 | 0.0 | 7.0 |
| Prop In Lane | 1.00 | | 0.03 | 1.00 | | 0.14 | 0.09 | | 0.20 | 1.00 | | 0.62 |
| Lane Grp Cap(c), veh/h | 340 | 0 | 734 | 399 | 0 | 579 | 231 | 0 | 0 | 451 | 0 | 471 |
| V/C Ratio(X) | 0.53 | 0.00 | 0.50 | 0.04 | 0.00 | 0.87 | 0.40 | 0.00 | 0.00 | 0.35 | 0.00 | 0.48 |
| Avail Cap(c_a), veh/h | 879 | 0 | 1574 | 1075 | 0 | 1543 | 979 | 0 | 0 | 975 | 0 | 894 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 14.4 | 0.0 | 14.1 | 11.4 | 0.0 | 19.9 | 26.8 | 0.0 | 0.0 | 21.7 | 0.0 | 18.5 |
| Incr Delay (d2), s/veh | 0.5 | 0.0 | 0.2 | 0.0 | 0.0 | 1.6 | 0.4 | 0.0 | 0.0 | 0.2 | 0.0 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.3 | 0.0 | 3.0 | 0.1 | 0.0 | 5.6 | 1.3 | 0.0 | 0.0 | 1.7 | 0.0 | 2.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 14.9 | 0.0 | 14.3 | 11.4 | 0.0 | 21.5 | 27.2 | 0.0 | 0.0 | 21.9 | 0.0 | 18.8 |
| LnGrp LOS | В | Α | В | В | Α | С | С | A | Α | C | Α | B |
| Approach Vol, veh/h | | 548 | | | 518 | | | 92 | | | 384 | |
| Approach Delay, s/veh | | 14.5 | | | 21.2 | | | 27.2 | | | 20.1 | |
| Approach LOS | | В | | | С | | | С | | | С | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 6.2 | 31.7 | | 24.3 | 11.0 | 26.9 | 11.6 | 12.7 | 1/18 | | | NEW M |
| Change Period (Y+Rc), s | 5.0 | 7.0 | | 6.7 | 5.0 | 7.0 | 5.0 | 6.7 | | | | |
| Max Green Setting (Gmax), s | 25.0 | 53.0 | | 33.3 | 25.0 | 53.0 | 25.0 | 33.3 | | | | |
| Max Q Clear Time (g_c+l1), s | 2.3 | 11.3 | | 9.0 | 6.1 | 18.2 | 6.9 | 5.1 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.1 | | 0.3 | 0.2 | 1.7 | 0.2 | 0.2 | | | | |
| Intersection Summary | Me bol | | The little | | | | | | Kijari ir | | | |
| HCM 6th Ctrl Delay | | | 18.9 | TYPE S | | | | | | | | |
| HCM 6th LOS | | | В | | | | | | | | | |

| Intersection | | | | | | nigeje |
|------------------------|-----------|-------|---------|---------|---------|--------|
| Int Delay, s/veh | 2.3 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | CDT |
| | | YICIV | | NOK | ODL | SBT |
| Lane Configurations | 74 | 0.0 | 122 | 70 | 20 | 4 |
| Traffic Vol, veh/h | 71 | 26 | 233 | 70 | 30 | 298 |
| Future Vol, veh/h | 71 | 26 | 233 | 70 | 30 | 298 |
| Conflicting Peds, #/hr | 0 | 0 | _ 0 | _ 0 | _ 0 | _ 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | 1 (| None | - | None | - | None |
| Storage Length | 0 | - | - | - | | - |
| Veh in Median Storage | e, # 0 | TW HE | 0 | | - | 0 |
| Grade, % | 0 | - | 0 | - | | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mymt Flow | 77 | 28 | 253 | 76 | 33 | 324 |
| | | | | | | 021 |
| | | | | | | |
| | Minor1 | | Major1 | | Major2 | |
| Conflicting Flow All | 681 | 291 | 0 | 0 | 329 | 0 |
| Stage 1 | 291 | 400 | 5 1/2 | 7 | | 9 |
| Stage 2 | 390 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | | - | 4.12 | N T 2 |
| Critical Hdwy Stg 1 | 5.42 | | | | - | |
| Critical Hdwy Stg 2 | 5.42 | 1885 | Ti Line | | Ev i | |
| Follow-up Hdwy | 3.518 | 3.318 | | - | 2.218 | - |
| Pot Cap-1 Maneuver | 416 | 748 | | | 4004 | |
| Stage 1 | 759 | 140 | | VE L | 1201 | |
| Stage 2 | 684 | | | Til And | t in a | |
| | 004 | | - | 1 | - 2 / - | - |
| Platoon blocked, % | 400 | 740 | | ga u m | 4004 | |
| Mov Cap-1 Maneuver | 402 | 748 | | | 1231 | • |
| Mov Cap-2 Maneuver | 402 | | - | - | | - |
| Stage 1 | 759 | | 35 | | | - |
| Stage 2 | 661 | - | - | - | | - |
| | | | | | | |
| Approach | WB | e mar | NB | | SB | |
| HCM Control Delay, s | 15.2 | | 0 | 1101 | 0.7 | |
| HCM LOS | 13.2 C | | U | | 0.7 | |
| HOW LOS | U | | | | | |
| | | | | | | |
| Minor Lane/Major Mvn | nt | NBT | NBRV | VBLn1 | SBL | SBT |
| Capacity (veh/h) | | | | 459 | 1231 | |
| HCM Lane V/C Ratio | | - | | | 0.026 | - |
| HCM Control Delay (s) | | | | 15.2 | 8 | 0 |
| HCM Lane LOS | | - | - | C | A | A |
| | 1 | | | | | |
| HCM 95th %tile Q(veh |) | | • | 0.9 | 0.1 | |

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| 2023 Future With Project PM | |

| Intersection | | | | | DE RO | ALTE |
|---|-------------|--|--------------|-----------|--------|----------|
| Int Delay, s/veh | 0.5 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | EDL | | | VVDIX | ODL | |
| | 0 | † | 1 | 40 | ۸ | 47 |
| Traffic Vol, veh/h | 0 | 512 | 449 | 49 | 0 | 47 |
| Future Vol, veh/h | 0 | 512 | 449 | 49 | 0 | 47 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | | None | 100 | |
| Storage Length | | - | | - | - | 0 |
| Veh in Median Storage | | 0 | 0 | - | 0 | - |
| Grade, % | | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 557 | 488 | 53 | 0 | 51 |
| | | | | | | |
| Major/Minor | Major1 | | Major2 | N | Minor2 | |
| Conflicting Flow All | - | 0 | - | 0 | - | 515 |
| Stage 1 | | _ | | _ | | |
| Stage 2 | | | | | - | - |
| Critical Hdwy | | illes i La | KATITE . | | | 6.22 |
| Critical Hdwy Stg 1 | 22.11.10.21 | DESCRIPTION OF THE PARTY OF THE | | _ | _ | 0.22 |
| Critical Hdwy Stg 2 | necessia. | SCHOOL S | - | HENRY AND | OTILLE | |
| Follow-up Hdwy | | | | | 4 | 2 240 |
| | - | - | | VENERO | | 3.318 |
| Pot Cap-1 Maneuver | 0 | Y" . | Mark Service | • | 0 | 560 |
| Stage 1 | 0 | - | | _ | 0 | |
| Stage 2 | 0 | 9 -1 | | 100 pt | 0 | |
| Platoon blocked, % | | - | _ | - | | |
| Mov Cap-1 Maneuver | - | - | 100 | | - | 560 |
| Mov Cap-2 Maneuver | - | - | | - | - | - |
| Stage 1 | 100 | | - 11 | FYE S | | |
| Stage 2 | - | - | | _ | - | - |
| | | | | | | |
| Approach | EB | (ALESS | WB | FROM: | SB | |
| HCM Control Delay, s | 0 | | 0 | | 12.1 | |
| HCM LOS | U | | U | | | |
| HOW LOS | | | | | В | |
| Million Delisining | | | | | | |
| Minor Lane/Major Mvm | ıt | EBT | WBT | WBR S | SBLn1 | |
| THINTOI CUITCHINGO HITTI | | | - | 1 | 560 | TO STATE |
| Capacity (veh/h) | | | | | | |
| Capacity (veh/h) | | a lavaria | | - | 0.091 | |
| Capacity (veh/h) HCM Lane V/C Ratio | | | | - | 0.091 | |
| Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s) | | | | | 12.1 | |
| Capacity (veh/h) HCM Lane V/C Ratio | | | | - | | |



Appendix D

Turn Lane Warrant Worksheets

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

| Value Sa Sa Sa Sa Sa Sa Sa S | Roadway geometry: | 2-lane roadw ay | • | | | | | | | |
|--|--|-----------------|------------|-------|---------|----------|-----------|--------------|--------------|------|
| Value Value 80 Pro 600 | Variable | Value | 140 140 | | | | P00 | richt - turn | \[\rac{1}{2} | |
| Value Value 60 Right-Turn Volume, volu | Major-road speed, mph: | 55 | - | | | | | | 1 | |
| Value | Major-road volume (one direction), veh/h: | 299 | | | | | | | | |
| Value | Right-turn volume, veh/h: | 36 | | | | | | | | |
| Value 23 Right-Tur Right-Tur 20 200 400 600 800 1000 | THEFT | | | | | | | | | |
| Right-70 Right-700 A00 600 800 1000 | | Value | | | | | | | | |
| (元) | Limiting right-turn volume, veh/h: | 23 | | | | | | | | |
| 200 400 600 800 1000 | Guidance for determining the need for a major-road | | | | | | i i | | | |
| 200 400 600 800 1000 | right-turn bay for a 2-lane roadway: | | | 1 | | | | - | - | |
| | Add right-turn bay. | | 200 | 400 | 009 | 800 | 1000 | 1200 | 1400 | 1600 |
| Major-Road Volume (one direction) veh/h | | | | Major | Posd Vo | o) omiij | no direct | lov (noi | 4/4 | |

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

| INFO | | 010 | | | | | | | |
|--|-----------------|-------------|--------|---------|-----------|---|---|-------|------|
| Roadway geometry: | 2-lane roadw ay | , | | | | | | | |
| Variable | Value | 1 40 | | | | 700 | Add maht turn bay | Lye 4 | |
| Major-road speed, mph: | 55 | 150 150 | | | | | 1 | , and | |
| Major-road volume (one direction), veh/h: | 498 | | | | | | | | |
| Right-turn volume, veh/h: | 49 | e au | | | | | | | |
| High | | % 0∧ u | • | | | | | | |
| of desiron. | - 1-y | uri | • | | | | | | |
| Valiable | Agine | | | | | | | | |
| Limiting right-turn volume, veh/h: | 16 | | | | | | | | |
| Guidance for determining the need for a major-road | | B i | | | | | 7 | | |
| right-turn bay for a 2-lane roadway: | | 0 | | - | | | _ | _ | |
| Add right-turn bay. | | 200 | 400 | 009 | 800 | 1000 | 1200 | 1400 | 1600 |
| | | | Marion | 000 A | o) omin | 4000 | 7.001 | 4 | |
| | | | Majo | שמת אכו | o) allini | Major-Road volume (one unection), venim | 11011), ve | | |
| | | | | | | | | | |

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

| Roadway geometry: | - | | | | | | | |
|--|-----------------|-----|-----|-----|------|----------------------|------|------|
| Variable | ſ | | | | 700 | Add right - turn bay | Į, | |
| Major-road speed, mph: 55 | 120 146 | | | | | | | |
| Major-road volume (one direction), veh/h: | οΛ ['] | | | | | | | |
| Right-turn volume, veh/h: | e eu | | | | | | | |
| OUTPUT | οΛ n | • | | | | | | T |
| Variable | | | | | | | | |
| Limiting right-turn volume, veh/h: 22 | -14 | | | | | | | _ |
| Guidance for determining the need for a major-road | Bi; | | | | | | | |
| right-turn bay for a 2-lane roadway: | A N | - | - | | - | | - | |
| Add right-turn bay. | 200 | 400 | 009 | 800 | 1000 | 1200 | 1400 | 1600 |

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

| Variable Value Add right-turn bay. Add right-tur | | | | | | | | | |
|--|--|-------------------|-----|---------|-------------|------------|-------------------|------|------|
| Value Naive Naiv | Roadway geometry: | Z-lane roadw ay ▼ | | | | | | | |
| Value Valu | Variable | Value | | | | 1 | deinh turn | | |
| Value Value So | Major-road speed, mph: | 22 | | | | | י וומון - וומון ו | Day | |
| Value No No No No No No No N | Major-road volume (one direction), veh/h: | 303 | | | | | | | |
| Value Value 23 | Right-turn volume, veh/h: | 70 | | | | | | | |
| Value | | | | | | | | | |
| Value 123 120 120 1400 1200 14 | OUTPUT | | | | | | | | |
| 23 | Variable | Value | | | | | | | |
| Signature Sign | Limiting right-turn volume, veh/h: | 23 | | | | | | | |
| turn bay. Maior-Road Volume (one direction). veh/h | Guidance for determining the need for a major-road | | | | | | | 1 | |
| turn bay. 200 400 600 800 1000 1200 1400 Major-Road Volume (one direction), veh/h | right-turn bay for a 2-lane roadway: | | | | | - | | - | |
| Major-Road Volume (one direction). veh/h | Add right-turn bay. | | 200 | 400 | | | 1200 | 1400 | 1600 |
| | | | • | Major-F | soad Volume | (one direc | tion). ve | h/h | |

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

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| Opp 0 100 300 400 500 | nis Zuu | 303 61 | | əwn | 319 | 207 | √el 700 | प/u | | | 54 | 989 | | Left-turn treatment not warranted. | | | | 85 th percentile speed, mph: Percent of left-turns in advancing volume (V _A), %: Advancing volume (V _A), veh/h: Opposing volume (V _O), veh/h: OUTPUT Variable Limiting advancing volume (V _A), veh/h: Guidance for determining the need for a major-road left-turn bay: Left-turn treatment NOT warranted. |
|-----------------------|---------|--------|--|-----|-----|-----|---------|-----|--|--|----|-----|--|--|--|--|--|---|
|-----------------------|---------|--------|--|-----|-----|-----|---------|-----|--|--|----|-----|--|--|--|--|--|---|

200

CALIBRATION CONSTANTS

| Variable | Value |
|--|-------|
| Average time for making left-turn, s. | 3.0 |
| Critical headway, s: | 5.0 |
| Average time for left-turn vehicle to clear the advancing lane, s: | 1.9 |

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

2-lane roadway (English)

| ne (V _A), %: for a major-road left-turn bay: nent NOT warranted. | Variable | Value | | | | | | | | |
|--|--|-------|-------------|----------------------------|----------|----------|-----------------------|-----------|-----------|-----|
| 336 Solution | 1 | 85 | 08 4/I | | | | | | | [|
| 326 | of left-turns in advancing volume (V _A), %: | %6 | 19 / | 1 | / | | | Left-turn | treatment | |
| 336 | ng volume (V _A), veh/h: | 328 | | | | | | warrante | | - 1 |
| Second S | g volume (V_{\odot}) , veh/h: | 303 | | | | | | | | |
| Value 50 300 Left-turn Freatment not po 100 100 200 300 400 500 100 200 300 400 500 Advancing Volume (V _A), veh/h | | | | | | / | | | | |
| 336 200 Left-turn treatment not Left-turn treatment not Left-turn treatment not Left-turn Left-tur | Variable | Value | | | | / | | | | |
| 200 Lest-turn | advancing volume (V _A), veh/h: | 336 | | | | | | | | |
| P 100 warranted. O 0 100 200 300 400 500 Advancing Volume (V _A), veh/h | e for determining the need for a major-road left-turn ba | ay: | | Left-furn treatment not | | | / | | | |
| 0 100 200 300 400 500 Advancing Volume (V _A), veh/h | Left-turn treatment NOT warranted. | | | warranted. | | | / | | | |
| 0 100 200 300 400 500 Advancing Volume (V _A), veh/h | | | do | 0.000 | | | | 7 | | |
| Advancing Volume (V _A), veh/h | | |) | 100 | 200 | 300 | 400 | 200 | 009 | |
| | | | | | Advancii | ng Volur | ne (V _A), | veh/h | | |

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| Variable | Valu |
|--|------|
| Average time for making left-turn, s: | 3.0 |
| Critical headway, s: | 6.0 |
| Average time for left-turn vehicle to clear the advancing lane, s: | 1.9 |

| Auvainching volume (VA), verin | | |
|--------------------------------|--|--|
| AUVAII | | |
| | | |
| | | |

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Figure 2 - 4. Guideline for determining minor-road approach geometry at two-way stop-controlled intersections.

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|----------|--|---|---|----------------|------------|--|--|---------------------------|---------|
| Value | 804 | 100% | 34 | | Value | 457 | | | |
| Variable | Major-road volume (total of both directions), veh/h: | Percentage of right-turns on minor road, %: | Minor-road volume (one direction), veh/h: | OUTPUT | Variable | Limiting minor-road volume (one direction), veh/h: | Guidance for determining minor-road approach geometry: | ONE approach lane is o.k. | |

| Variable | Value |
|--|-------|
| Limiting minor-road volume (one direction), veh/h: | 457 |
| Guidance for determining minor-road approach geometry: | |
| ONE approach lane is o.k. | |

CALIBRATION CONSTANTS

200 400 600

0

One approach lane is o.k.

100

Major-Road Volume (total of both directions), veh/h

| Minor Road | Critical gap, s: | Critical gap, s: Follow-up gap, s: |
|---------------------------------------|------------------|--------------------------------------|
| Right-turn capacity, veh/h: | 6.2 | 3.3 |
| Left-turn and through capacity veh/h: | 6.5 | 4.0 |

^{*} according to Table 17 - 5 of the HCM

Figure 2 - 4. Guideline for determining minor-road approach geometry at two-way stop-controlled intersections.

500

400

300

200

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|----------|--|---|---|------------------|----------|--|--|---------------------------|---------|
| Value | 1010 | 100% | 47 | | Value | 400 | | | |
| Variable | Major-road volume (total of both directions), veh/h: | Percentage of right-turns on minor road, %: | Minor-road volume (one direction), veh/h: | OUTPUT | Variable | Limiting minor-road volume (one direction), veh/h: | Guidance for determining minor-road approach geometry: | ONE approach lane is o.k. | |

| Variable | Value |
|--|-------|
| Limiting minor-road volume (one direction), veh/h: | 400 |
| Guidance for determining minor-road approach geometry: | |
| ONE approach lane is o.k. | |

CALIBRATION CONSTANTS

900

200 400

0

One approach lane is o.k.

100

Major-Road Volume (total of both directions), veh/h

| | | E L |
|---------------------------------------|------------------|--------------------------------------|
| MINOF Koad | Unitical gap, s. | Critical gap, s: Follow-up gap, s: |
| Right-turn capacity, veh/h: | 6.2 | 3.3 |
| Left-turn and through capacity veh/h: | 6.5 | 4.0 |

^{*} according to Table 17 - 5 of the HCM

Figure 2 - 4. Guideline for determining minor-road approach geometry at two-way stop-controlled intersections.

400

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|----------|--|---|---|-----------------|-------------------|--|--|---------------------------|---------|
| Value | 525 | 29% | 90 | | Value | 304 | | | |
| Variable | Major-road volume (total of both directions), veh/h: | Percentage of right-turns on minor road, %: | Minor-road volume (one direction), veh/h: | OUTPUT | Variable | Limiting minor-road volume (one direction), veh/h: | Guidance for determining minor-road approach geometry: | ONE approach lane is o.k. | |

CALIBRATION CONSTANTS

009

200 400

One approach lane is o.k.

100

Major-Road Volume (total of both directions), veh/h

| Minor Road | Critical gap, s: | Critical gap, s: Follow-up gap, s: |
|---------------------------------------|------------------|------------------------------------|
| Right-turn capacity, veh/h: | 6.2 | 3.3 |
| Left-turn and through capacity veh/h: | 6.5 | 4.0 |

^{*} according to Table 17 - 5 of the HCM

Figure 2 - 4. Guideline for determining minor-road approach geometry at two-way stop-controlled intersections.

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| Value | 630 | 27% | 96 | | | Value | 265 | | | | | |
| Variable | Major-road volume (total of both directions), veh/h: | Percentage of right-turns on minor road, %: | Minor-road volume (one direction), veh/h: | | OUTPUT | Variable | Limiting minor-road volume (one direction), veh/h: | Guidance for determining minor-road approach geometry: | ONE approach lane is o.k. | | | |

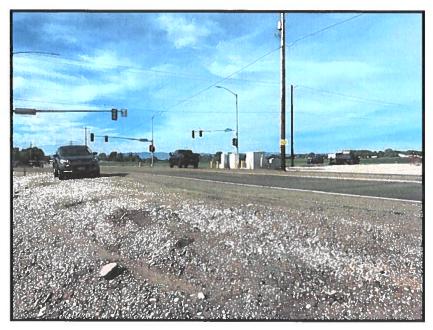
CALIBRATION CONSTANTS

| Minor Road | Critical gap, s: | Critical gap, s: Follow-up gap, s: |
|---------------------------------------|------------------|------------------------------------|
| Right-turn capacity, veh/h: | 6.2 | 3.3 |
| Left-turn and through capacity veh/h: | 6.5 | 4.0 |

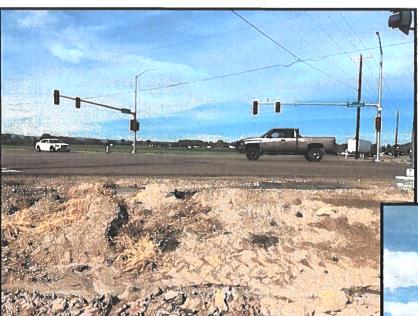
^{*} according to Table 17 - 5 of the HCM

| 700 | 004 | 000 | 000 | 000 | 1200 | 1400 | 0091 | 1800 | 7000 | |
|-----|-------|-------|-------|---|---------|--------|---------|-------|------|--|
| Maj | or-Ko | ad Vo | nme (| Major-Road Volume (total of both directions), veh/h | of both | direct | tions), | veh/t | _ | |

One approach lane is o.k.

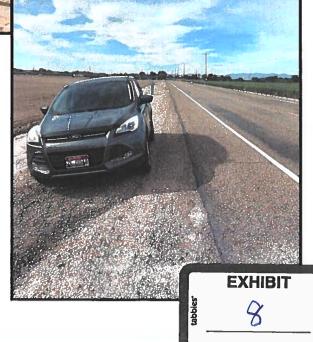


Highway 55 and Farmway Rd. facing east



Highway 55 and Farmway Rd. facing south east

Looking east down Farmway Rd.





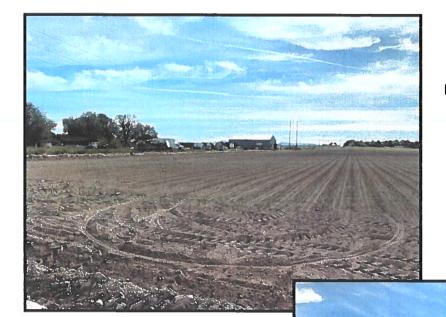
Looking North down Highway 55



Looking over site toward Farmway Rd.



Looking over site toward Highway 55



Looking over site toward the north

Looking over site toward the east



Looking over site toward the north west