Inga Williams

From: Inga Williams <iwilliams@union-county.org>

Sent: Tuesday, July 29, 2025 8:30 AM

To: Weston Weaver

Subject: RE: Weston Weaver Notes, Testimony in Favor

Thanks Weston, I will use this to help the Planning Commission with their discussion at the meeting in August.

From: Weston Weaver < westonweaver 1@yahoo.com>

Sent: Tuesday, July 29, 2025 7:10 AM

To: Inga Williams <iwilliams@union-county.org>

Cc: haleyhines@eoni.com; Douglas L. Wright <dwright@union-county.org>

Subject: Weston Weaver Notes, Testimony in Favor

Good Morning Inga,

Just in case anything was lost in translation due to connectivity or other issues, I want to make sure you and your group have a written copy of my testimony:

To the members of the Planning Commission thank you for having me on. I know your time is valuable so I would like to keep my testimony short and to the point. Thank you also for keeping the focus on facts, and dismissing the repeat testimony, that we have now heard three times.

I'd like to enter a plea in support of the partition.

I'd like to call attention to the Anderson Perry memo which addresses the sight distance issue from last time. This was done by a licensed engineer and included a field visit per the county's direction. This was the last remaining item needed per the counties direction in the 2022 hearing.

My last request in the interest of moving forward is to defer the final direction for the game management plan and structures locating to the building permit process. This is my first time seeing this requirement, and I am unaware of other adjacent properties having the same conditions and/or restrictions. This will give the county additional time to refine this plan and/or requirement - as I am only requesting partition at this time, no structures.

Sincere Regards,

Weston Weaver

To the Union County Planning Department

I am writing to express my <u>opposition</u> to the Weston Weaver land development project on Mt Glen Road in its present form. The environmental evaluation of wetlands and hydrology impacts of this project as well as the **design** of the access road and **approach** to Mt Glen road are lacking enough evaluation to ensure that neighboring properties will not be negatively impacted. Finally, since each of these plots will have roads and structures associated with them, the location and size of these changes will significantly affect the runoff timing and volume, these factors must be evaluated as well. I will address each of these items separately, but the cumulative impacts of all of these factors need to be evaluated once each of the specific concerns are evaluated.

Wetlands

The NWI maps and the Union County Soil Surveys referenced in the materials given to us both indicate the potential presence of wetlands. An off-site review of these two resources was conducted by DSL in 2022 that indicated a certified wetlands determination and delineation would be necessary before this project was approved. While it was claimed that the "wetlands were already evaluated" at the latest public meeting, this is a gross misunderstanding or representation of this process. Federal and state law require a certified determination and delineation be conducted by a licensed wetlands consultant. This was not done by DSL in their report, but this is the process referred to in the DSL report and there is no indication that it has been completed. Without this wetlands evaluation, there is no way to know if wetlands exist here and where the boundaries of the wetlands are, so there is no way to know if the road location or driveways and structures impact a wetland or not.

In addition, a previous landowner of this property pursued the establishment of these parcels into an environmental easement to protect the potential wetlands, ephemeral stream channel and elk habitat. An evaluation was conducted by the USDA Natural Resources Conservation Service (NRCS), the CTUIR fisheries program, and the Blue Mountain Land Trust of this property as a potential site for inclusion into an environmental easement. While the property clearly qualified for inclusion into an easement based upon these environmental assets, limited funds were available at that time to pay for an easement. The site included the presence of hydrophytic vegetation and the obvious signs of an ephemeral channel. The site was determined to qualify for the Conservation Reserve Enhancement Program (CREP) by the NRCS, a USDA program that preserves qualified streams and wetlands, but the landowner at the time decided not to enter into that program.

These concerns were expressed at the public meeting on this proposal in 2022 and it appears that none of these concerns have been addressed or evaluated. To proceed without addressing these concerns would be shortsighted at best or possibly a violation of the spirit of state and federal wetland laws.

Hydrology

At the public meeting in 2022 I expressed concern that the development of these parcels could significantly modify the hydrograph to both increase the volume of peak flows and the timing flow during a weather event. The ephemeral channel on all three parcels flows each spring for 3 to 5 weeks. It can have significant peak flows during type two storm events, especially when soils are frozen in late winter/early spring events that commonly cause flooding in the Grande Ronde valley. Some 10 years ago, due to a poorly designed tile drainage of some of this property that outlets into that channel by a prior owner caused a change in both the peak volume and duration of flow, a 5' head cut was caused on my property further downstream. All of the several tons of sediment from that head cut was transported to the small perennial stream only 100' downstream. That stream is designated as T&E listed anadromous fish habitat by the ODFW and fish shocking studies have confirmed their presence in this stream. The tile drain is no longer functioning, and I have taken measures to arrest this head cut, but it remains a concern for me and my neighbor upstream. A five-foot drop in this channel would significantly limit use of some of my property and that of my upstream neighbor.

At the recent public meeting it was claimed that all engineering/hydrology had been completed, but the only engineering analysis given to us was exclusively for the design of the ditch and detention pond associated with the public road. This was fine, but there was no analysis given to us showing an evaluation of the before and after impacts of the roads, driveways, structures and other impermeable surfaces on the peak flows. This analysis needs to be done for the type II events and rain on snow events that are extremely common here. The ditch design given also does not include any detention pond on the area which drains to the north. The channel just dumps out on to the neighing property. Ironically, the northernmost two parcels actually constitute the majority acreage of the three parcels. At best, far more professional analysis needs to be done to address storm water runoff and the impacts to adjoining properties to this proposed project. This analysis should use some standard analysis techniques such as TR-20 or TR-55 or some other industry standard for hydrologic analysis. Once again, the potential impacts to T&E Species and habitat is a state and federal law issue and constitute a need for a quality evaluation by a certified engineering firm.

Mt Glen road approach

There is no design for the new public road approach to Mt Glen road. This will require a significant fill that is even more complex because it is shown in the submitted drawings to intersect the existing road right in the lowest area of this property and a 2:1 or 3:1 side slope would significantly affect the neighboring property and the hydrology of their property. Any design for this approach will be extremely difficult and increase the long-term risk of failure of the Mt Glen road prism if the complex culverts that are needed ever get plugged during a type II storm event.

Cumulative Impact

All of these identified concerns relate to one another as flows affect wetlands and wetlands attenuate floods. All of the changes associated with changing the amount of impermeable surfaces affect the hydrograph. Any changes in the meander waves of the ephemeral channel can cause erosion. Erosion this close to an anadromous fish stream will transport sediments that cause harm, and a potential "take" of a T&E listed species. This area is located in a very complex geographic position on the landscape with significant natural resource values and concerns and successful development that does not harm neighbors or public resources requires the highest degree of analysis and design. There is a reason why this property has never been developed in the past.

Mike Burton
Mike But

Natural Resource Consultant and Mt Glen resident

63904 Mt Glen Rd

La Grande OR 97850

Inga Williams

From: patkinson oregonwireless.net <patkinson@oregonwireless.net>

Sent:Friday, August 1, 2025 5:14 PMTo:iwilliams@union-county.orgCc:phall@union-county.orgSubject:Application 20250033

Before the Planning Commission makes a decision on the Weaver request, I would like to propose the following actions:

- 1. Commission members visit the proposed access road location. A person emerging from the proposed access site, would have limited vision of traffic coming from the north, because of the hill. There's a reason that there is a no passing line on this section of Mt Glen Road.
- 2. A traffic study needs to be done to determine the actual speed that drivers use on this road, beginning at the "End of Speed" 45mph restriction sign near Lizbeth Lane and continuing down the hill past Igo Lane. I believe this study will reveal that 55mph speed limit used by the engineering firm is not correct for the traffic on this road. Using the ODOT estimate of 70mph would give a more accurate listing for site distance determinations.
- 3. A current study (updated from the 2022 study) by a certified wetlands consultant regarding the status of wetland's presence.
- 4. A current hydrology study as proposed by Mike Burton. In the Spring, I have standing water in my backyard, during the runoff period. I've also had it in my basement. There definitely needs to be more testing and analysis done before houses are built on this property.

Thank You

Patricia Atkinsom 63766 Mt Glen Rd La Grande, OR 97850

541-786-1620

David Campbell 63658 Mt. Glen Rd

Regarding Application #2025-00031 Westen Weaver Major Partiton

I would like to comment on several conditions of approval and UCZPSO article 25.00 Land Division Regulations, and Offsite Wetland Determination Report.

Condition 5b.

The Road design on the preliminary partition plat is not feasible as shown. The side slopes are too steep; the road surface is not level with on grade at the intersection of Mt. Glen. There is no accommodation for curve widening at the intersection with Mt. Glen.

Condition 6 & UCZPSO article 25.00 #27

Our property is just north and east or the proposed road. This road will both cutoff the historic runoff across our property from the west and dam the water flowing off our property to the east. We need and want this historic flow of water across our property.

See attached map for approximate location of needed culverts.

Wetland Determination Report dated 07/11/22 (See attached report)

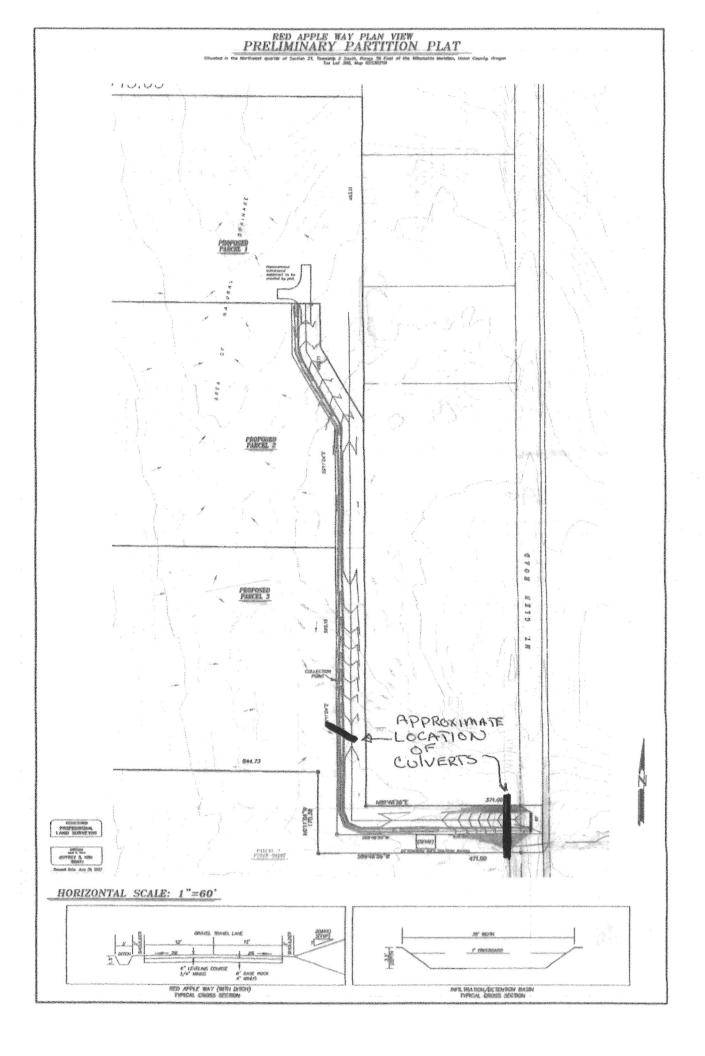
The Comment section.

Comments:

The Nation Wetland Inventory (NWI) does not appear to accurately reflect the location of wetlands on-site. Based on aerial imagery, it appears that the proposed road location, which was revised to avoid the NWI-mapped wetland, may still impact jurisdiction wetlands in excess of 50 cubic yards.

It is recommended that you have the project areas assed for jurisdictional waterways by a qualified wetland professional prior to earth disturbance act ivies A wetland delineation report should then be submitted to DSL fort review and approval.

I believe all the conditions should be addressed before any approval is given. Mister Weaver has demonstrated in the past that he likes to ignore the rules. One example, listing the Parcels individually for sale before the plat was approved. A violation of union county ordinance. Article 25.03 2.B.



OFFSITE WETLAND DETERMINATION REPORT OREGON DEPARTMENT OF STATE LANDS

1645 NE Forbes Rd., Suite 112, Bend OR 97701 (541) 388-6112

At your request, an offsite wetland determination has been conducted on the property described below. City: La Grande County: Union Owner Name & Address: Weston Weaver, 111 Aldeburgh Cir, Sacramento, CA 95834 Q/Q: B Range: 39E Section: 21 Tax Lot(s): 300 Township: 2S Project Name: Partition Plat – Revised Road Alignment Site Address/Location: 63708 Mt Glenn Rd, La Grande, OR 97850 The National Wetlands Inventory & National Hydrography Dataset show wetlands and waterways on the property. The county soil survey shows hydric (wet) soils on the property. Hydric soils indicate that there may be wetlands. ☐ It is unlikely that there are jurisdictional wetlands or waterways on the property based upon a review of wetlands maps. the county soil survey and other information. An onsite investigation by a qualified professional is the only way to be certain that there are no wetlands. ☐ There may be wetlands or waterways on the property that are subject to the state Removal-Fill Law. A state permit is required for ≥ 50 cubic yards of fill, removal, or ground alteration in the wetlands or waterways. A state permit may be required for any amount of fill, removal, or other ground alteration in the Essential Salmonid Habitat and hydrologically associated wetlands. A state permit may be required for any amount of fill, removal, or other ground alteration in a compensatory wetland mitigation site. A state permit will be required for project if the proposed development footprint (roads/driveways, grading, home construction) result in 50 cy or greater of jurisdictional wetland or waters impacts. The proposed parcel division may create a lot that is largely wetland and thus create future development problems. A wetland determination or delineation is needed prior to site development; the wetland delineation report should be submitted to the Department of State Lands for review and approval. ☑ A permit may be required by the Army Corps of Engineers: (503) 808-4373 Note: This report is for the state Removal-Fill Law only. City or County permits may be required for the proposed activity. Comments: The National Wetland Inventory (NWI) does not appear to accurately reflect the location of wetlands on-site. Based on aerial imagery, it appears that the proposed road location, which was revised to avoid the NWI-mapped wetland, may still impact jurisdictional wetlands or waterways in excess of 50 cubic yards. It is it is recommended that you have the project areas assessed for jurisdictional waterways by a qualified wetland professional prior to earth disturbance activities. A wetland delineation report should then be submitted to DSL for review and approval. Please refer to my email from 7/11/2022 for resources to consultants' contact information. Determination by: 1. Salayado Date: 07 / 11 / 2022 This jurisdictional defermination is valid for five years from the above date, unless new information necessitates a revision. Circumstances under which the Department may change a determination and procedures for renewal of an expired determination are found in OAR 141-090-0045 (available on our web site or upon request). The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within six months from the above date. This is a preliminary jurisdictional determination and is advisory only. Copy To: Owner Email: westonweaver1@vahoo.com Enclosures: NwiAerial, HydroSoilsLidar, Aerials ☑ Union Co. Planning Department: shartell@union-county.org

Maleyhines@eoni.com

WD#: 2022-0327

Response Page

Department of State Lands (DSL) WN#

WN2022-0421

Responsible Jurisdiction

Staff Contact

Jurisdiction Type

Municipality

Stacy Warren

County

Union

Local case file #

County

5541

Union

Activity Location

| Township | Range | Section | QQ section | Tax Lot(s) |
|----------------|-------|------------|-----------------|------------|
| 028 | 38E | 21 | В | 300 |
| | | | | |
| Street Address | | | | |
| Address Line 2 | | | | |
| City | | State / Po | ovince / Region | |

Postal / Zip Code

Country

Union

Latitude

Longitude

45.37931

-118.069064

Wetland/Waterway/Other Water Features

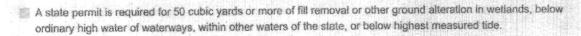
- There are/may be wetlands, waterways or other water features on the property that are subject to the State Removal-Fill Law based upon a review of wetland maps, the county soil survey and other available information.
- The National Wetlands Inventory shows wetland, waterway or other water features on the property

Your Activity

(4)

- It appears that the proposed project may impact wetlands and may require a State permit.
- An onsite inspection by a qualified wetland consultant is recommended prior to site development to determine if the site has wetlands or other waters that may be regulated. The determination or delineation report should be submitted to DSL for review and approval. Approved maps will have a DSL stamp with approval date and expiration date.

Applicable Oregon Removal-Fill Permit Requirement(s)



Closing Information

Additional Comments

DSL does not require permits for partitions, however, the included site map also includes road development. Based on available information, there are likely jurisdictional wetlands or waterways on the property, including in the location of the proposed road. An onsite wetland delineation by a qualified professional is the only way to know with certainty the geographic extent of any wetlands and if a wetland removal-fill permit is required for the proposed road (and any future homesite development). Information on finding a qualified wetland professional consultant is listed under Resources at https://www.oregon.gov/dsl/WW/Pages/WetlandConservation.aspx. A site inspection by a qualified wetland consultant is recommended prior to any site development to verify the presence or absence of wetlands. If wetlands are present, a wetland delineation submitted to DSL for review and approval is recommended prior to ground disturbing activities.

This is a preliminary jurisdictional determination and is advisory only.

This report is for the State Removal-Fill law only. City or County permits may be required for the proposed activity.

Contact Information

- For information on permitting, use of a state-owned water, wetland determination or delineation report requirements
 please contact the respective DSL Aquatic Resource, Proprietary or Jurisdiction Coordinator for the site county. The
 current list is found at: http://www.oregon.gov/dsi/ww/pages/wwstaff.aspx
- The current Removal-Fill permit and/or Wetland Defineation report fee schedule is found at: https://www.oregon.gov/ds/WW/Documents/Removal-FillFees.pdf

Response Date

5/16/2022

Response by:

Daniel Evans

Response Phone:

503-986-5271

Ramona Campbell

63658 Mount Glen Rd

I'd like to focus on the engineer's study that found this Road buildable. They found 1.6 seconds difference.

If you read the fine print, it was conducted during absolutely perfect weather, they admitted it was a very close call, and it comes with a "condition". Someone has to keep the grass mowed.

What wasn't clearly stated, but it quite evident to everyone in the neighborhood, are all the other <u>conditions</u> that are going to be experienced by motorists that travel on Mount Glen Road. Keep in mind that 1 in 4 of the vehicles driving down our road have an impaired driver behind the wheel – tired, inexperienced, medicated, drunk, drugged, distracted. You might say that's not something you need to consider, I disagree – those are our neighbors, friends and relatives.

Don't forget the <u>conditions</u> of cyclists, walkers, joggers, and lots of elk. There is no way for them to realize that traversing this stretch of road just became even more dangerous than it already was.

<u>Conditions</u> like fog, rain, hail, snow and ice are going to create a hazard. I bet if that study was done during any of those conditions, it would not have passed.

There is a fine line between science/math/engineer reports somehow finding 1.6 seconds made everything SAFE, and using common sense to admit that developing the ROW on the Plat Partition is a really bad idea. I hate to think that this development plan will come with the cost of human life/limb/property.

Please keep the 1.6 seconds in mind as you move forward with this decision, and Thank you.

Ramona Campbell

Ramora Campbell

Inga Williams

From: Haley Hines <haley.b.hines@gmail.com>
Sent: Wednesday, July 30, 2025 3:06 PM

To: iwilliams@union-county.org

Subject: Weaver Partition

Attachments: Weston Neighbor letter.pdf

To whom it may concern,

Please distribute this letter to the planning board prior to the next meeting. I have been representing Weston Weaver in the sale of his property since April of 2022. In the past three years Weston has jumped through multiple hoops to appease the county to partition his property into 10 acre parcels. Originally we had three buyers lined up with interest of purchasing said 10 acre parcels and in the final hour the partition was denied as you know due to sight distance. The county road dept. claimed the distance did not meet criteria. We then marketed the property as one parcel. The neighbors that have disputed the original attempt at partition continued to sabotage sales. I was showing Westons property on January 3rd of 2024 and I witnessed the neighbor to the North of the proposed driveway walk to my clients car and put the attached letter under his wiper blade. Not only are some of the statements false in this letter, it was incredibly out of line for such behavior. I attended the most recent meeting and continued to listen to the same neighbors complain about safety, water, animals, etc.....all of which are not parameters to allow a partition. These neighbors are coming up with every excuse possible to not have a home built next to them, when in all reality this property is zoned for further development and that is all this landowner is attempting to do. I have said to myself time and time again over the past three years, "If these neighbors have such an issue with another home near them why don't they purchase the property themselves?" They have no right preventing Weston from developing the land that he owns. I listened to the multiple complaints at the recent meeting about how dangerous their very own driveway is and thought to myself "If they find their own property so unsafe, why don't they sell?" It is all irrelevant when it comes to Weston's development. Weston has every intent in developing this property per county standards and as you know with further evaluation the sight distance was deemed acceptable. I would request you set the emotions of these neighbors aside and look at the facts of this partition. This landowner has been bullied by neighbors long enough and he deserves to develop his land as intended in the zoning.



Haley Hines

Principal Broker/Owner, Blue Summit Realty Group

5417865285 | haley.b.hines@gmail.com www.halevhines.com

102 Greenwood St, La Grande OR | Licensed in the state of Oregon #200606397



Create your own email signature



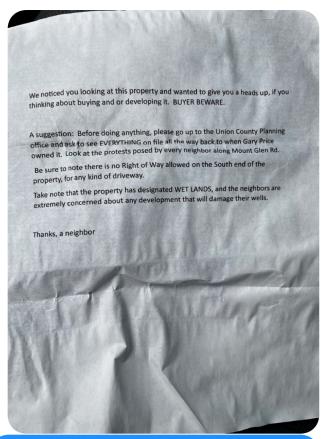








Jan 3, 2024 at 12:41 PM



When I was showing the property yesterday, Dave Campbell, one of the neighbors walked over and put this on my clients car while we were walking out in the field

That seems a little out of line, don't you think () Especially given the fact Scott has already told us we can have a single access driveway at the south end, also what about a protest??

VERY out of line







Gerald Lequerica 63974 Mt. Glen Road La Grande, Or 97850 July 29, 2025

Union County Planning Department 1001 4th Street Suite C La Grande, Or 97850

Union County Planning Commission members,

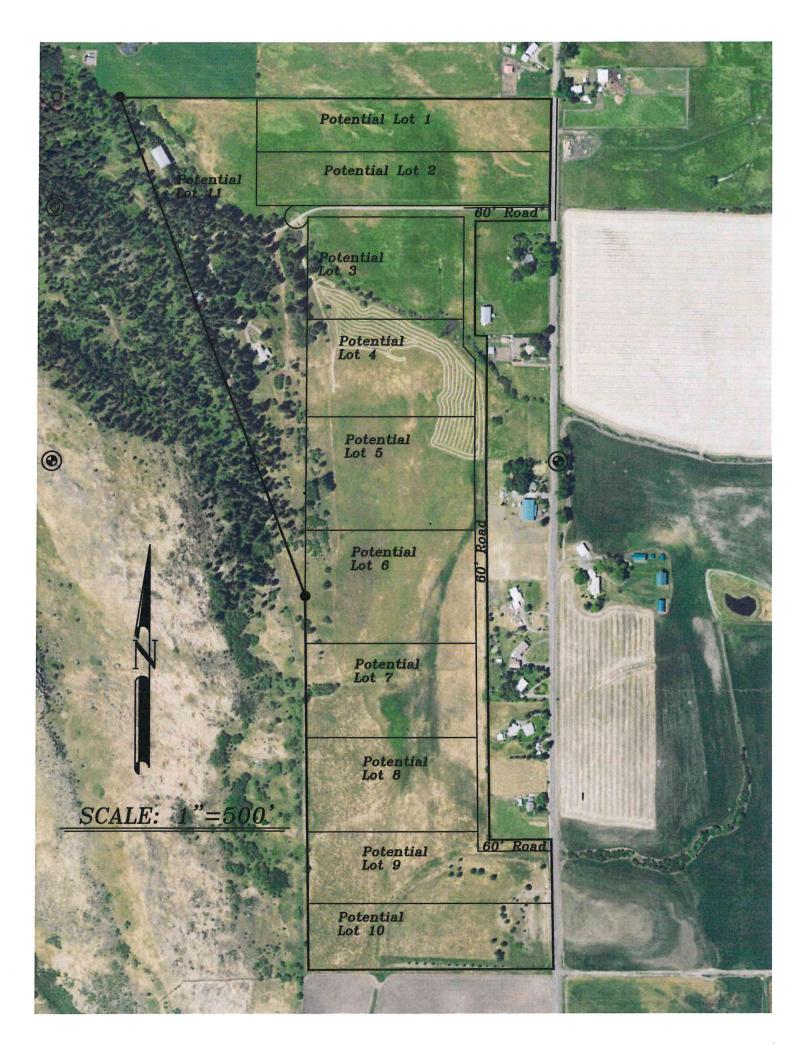
The partition hearing on July 28, 2025 for applicant Weston Weaver application # 20250033 has not answered many of the previous questions and has raised many new ones.

- 1. I find it very concerning that the planning department would consider approval of a partition with the number of potential problems without the answers to some critical questions. The following are some of the areas in question.
- 2. How will the approach be constructed to meet the county standards, the current road profile shows a 6% incline to Mt Glen Road, unacceptable to allow a vehicle to stop and get started again into traffic. If it was constructed to meet the standards, it appears that there is not enough width in the right of way to avoid encroaching on the adjacent property without retaining walls to support the fill. Do to lack of right of way width the retaining walls would have to be build near vertical, causing another safety concern for any vehicle leaving the roadway at the proposed approach. How will the drainage culverts be engineered to allow the large runoff to connect to the culvert crossing Mt. Glen, can this be done without the danger of flooding the property to the North? Where will the utilities be located in this area? It seems that this proposed approach should be engineered and approved prior to considering a partition that can't be developed. The current road profile is redirecting the drainage from sta. 10+41 north to the hammerhead increasing the amount of runoff onto our property where we currently have to deal with erosion, how will they contain this water on their property?
- 3. Has DEQ approved septic systems for this area, if so, how will they keep the drain fields from draining on top of the current clay layer and perking up on our downstream property? If approved, will we be notified of the building plan for each parcel prior to construction, as these plans will change the location of the current natural drainage and where it will be directed onto our property? Are any proposed drain fields located within the current natural drainage areas and if these drainage areas are intended to be relocated, will we have input on how the drainage will affect our and neighboring

- property? The natural area is very susceptible to erosion and also can carry sediment into the Ordell ditch/stream. The requirements can be found in **Article 25.06-2C and 25.09-27.**
- 4. The applicant, Weston Weaver made claim that everything except the site survey was approved in the previous hearing, it appears that is not the case, the Dept. of State Lands did an offsite wetland determination and found that it shows wetlands and waterways on the property. They would need a delineation report submitted to DSL and most likely a permit would be required by the Army Corps of Engineers, which as far as I can tell have not been taken care of, another item that seems necessary to obtain approval for a partition. The most likely areas of construction on all three parcels would land in these wet areas along with a portion of the road construction which would require the natural drainage locations and wet areas to be relocated. The definition can be found in Article 25.05-3M and 25.05-3R.7
- 5. There are several concerns for the future development of our property adjacent to this partition request, it states in multiple places, Article 25.09-3, 25.09-5 that when a partition joins land capable of further division, the right of way shall be carried to the boundaries of the tract to be partitioned. I believe this is a decision to be made by the planning department members, rather than an individual and should follow the previous standards that have been set. This future development had been planned for years prior to the purchase by Weston Weaver and he should not be able to disregard the current standards. (See attached prior partition option)
- 6. There are many questions that have been asked with very few definite answers. The applicant has tried several times now to push this partition through with vague responses to these questions and requirements, knowing that if it were to be approved that he could then disregard the concerns of the local property owners. I ask that the planning commission reject this application indefinitely or until all of these items of concern are addressed, knowing that it is not likely possible to do so, there are many reasons that this property has not been developed in the past and is a very poor choice of a property to partition. The applicant is no longer a local or even a state resident and is looking to sell the property, move on and leave the problems to others to deal with.

Sincerely,

Gerald (Las) Lequerica



A Division of Sisul Enterprises, Inc.

158 E. MAIN STREET, JOHN DAY, OREGON 97845 (541) 575-3777

FAX (541 575-3777

To: Union County Planning Commission

Aug. 5th, 2025

From: Sisul Engineering, Josef K. Hitz P.E

Subject: Evaluation of information pertaining to safety of the proposed new (3) resident access road onto Mt. Glen Rd.

This letter is to address concerns of a neighboring property owner, with the location of a proposed access for Tax Lot 300, (tax map 02S3821B) to Mt. Glen Rd. in Union County, Oregon. The information we considered was provided by this landowner, Union County Public Works, ODOT, and the Current OARs that ODOT follows.

Union County Public Works had a Memo prepared by Anderson Perry & Associates (AP) on June 4th, 2025, to address the Stopping Sight Distance (SSD) and Intersection Sight Distance (ISD) for this same proposed access. The AP Memo identifies Mt. Glen Rd. as a "major collect" with an estimated 1,200 to 1,400 average daily traffic.

Based on the 2020 Oregon Department of Transportation (ODOT) Traffic Flow Map (attached), these are similar average daily traffic flows that compare to ODOTS local area Highways like Hwy 82 Elgin to Lostine, Hwy 237 Island City to Cove or Hwy 204 Elgin to Weston.

Durning a site visit on July 29th, 2025, we observed a lath and pk-nail and whiskers, noting the proposed centerline of the proposed access. We double checked the Stopping Sight Distance using the same method used by AP, the distance was measured using a Leopold RX-Fulldraw Range Finder and found the SSD distance to be 187 yds (561 ft). (Note this is not survey grade equipment but, it has been found to be within the manufacturer's tolerances measuring know distances. Manufacturer's specifications are 0.5 yds accuracy to 125 yds and 2 yds accuracy to 1000 yds) The ISD was not measured based on the fact we could not physically get 14.5-ft from the edge of the existing travel way of Mt. Glen Rd. Below are photos of a 6-ft level extending out from the edge of pavement, edge of pavement is 12.5-ft from centerline, a normal travel way width, the surface at distance 14.5' is currently approximately 8-ft below the roadway elevation.



Photos of proposed access point on Mt. Glen Rd.

The memo by AP references the posted speed of 55 mph but does not reference the design speed of Mt. Glenn Rd. The posted speed is a limit set by a local jurisdiction, law, or other agency policy. Design speed is a selected speed used to determine the various geometric design features of the roadway. (Section 2.3.6.3 ASHTO 2018) Design speed would be the speed that the roadway could safely be negotiated based on the road's geometry, horizontal and vertical. The site is not limited by any horizontal factors since it is essentially a straight alignment, north of the proposed access point there is a crest vertical curve and south there is a sag vertical curve. The actual design speed of the road is unknow and no road construction plans were available from Union County Public Works or topography survey of the road to determine what the actual design speed of Mt. Glenn Rd is. Section 3.2.2 of ASHTO 2018 states "The available sight distance on a roadway should be sufficiently long to enable a vehicle traveling at or near the design speed to stop before reaching a stationary object in its path."

In June of 2023 a Technical Memorandum was prepared for Union County Public Works by ODOT (attached), about the results of a Speed Zone Investigation (Request I.D. No. 13173). This investigation was to determine if the speed limit should be reduced to improve safety for the users of this roadway. The investigation included the section of Mt. Glen Rd. approximately 175 ft south of May Lane to a point 0.14 miles south of Lizabeth Lane. The Northern part of the investigation is approximately 0.7 miles from the proposed access point and there are no horizontal curves between them. Per the Memorandum at this location southbound traffic, the 50th percentile speed is 53 mph, and the 85th percentile speed is 62 mph. The memorandum also states that the posted speed is 45 mph and the maximum speed is 73 mph. This information shows that over 50% of vehicles exceed the posted speed limit. The 50th percentile speed is the speed at or below which 50% of vehicles travel on a given road. Generally, it represents the speed that most drivers naturally feel comfortable and safe driving under normal conditions. This approach assumes that most drivers are reasonable and will not drive at a speed they perceive as unsafe.

The ODOT Technical Memorandum references sections of OAR 734 several times for recommendations on the speed limits for the area. Assuming Union County Follows these same guidelines, attached is information provided by ODOT on how they establish the design speed for determining SSD and ISD. ODOT assumes that the design speed is higher than the posted speed. Following OAR 734-051-4020(2)(c), the following is Table 2 from ODOT. (from attached ODOT Attachment A – Sight Distance Standards and Deviations)

From this table the posted speed of 55 mph would have a design speed of 70 mph and per Table 2 form ODOT the ISD distance needs to be 775 ft for a vehicle to make a left turn, crossing the south bound lane of Mt. Glen Rd., this exceeds both what AP and we measured on site. ODOTs assumption that the design speed should be greater than the posted speed is shown by the fact that 50% or more of the vehicles are exceeding the posted speed on this road, less than a mile away. This section of OAR also states that the ISD should never be less than the SSD (per ASHTO) which is 730 ft for 70 mph again greater than measured by AP and us in the field.

It should also be noted that the preliminary plat shows a driveway approach of 6%, following ASHTO 2018 guidelines Section 9.5.3 Intersection Control, when the intersection approach exceeds 3% the, ASHTO 2018 Table 9-5 Adjustment Factors for Intersection Sight Distance Based on Approach Grade shows that the sight distances should be increased by a factor of 1.2.

| Table 2: Intersection Sight Distance Standards (ISD) ¹ (from OAR 734-051-4020(2)(c) | | | | | | |
|--|--|---|---------|----------------------------|------------------|--|
| Posted Speed (mph) | Assumed Design Speed ² (mph) | Two-Way Highway Number of Lanes Crossed by Vehicle Making Left Turn from Approach ³ | | Crossed by ft Turn from | One-way Highway⁴ | |
| | | 1 Lane | 2 Lanes | 3 Lanes | | |
| | | ISD (ft) | | | | |
| 20 | 25 | 280 | 295 | 315 | 240 | |
| 25 | 30 | 335 | 355 | 375 | 290 | |
| 30 | 35 | 390 | 415 | 440 | 335 | |
| 35 | 40 | 445 | 475 | 500 | 385 | |
| 40 | 45 | 500 | 530 | 565 | 430 | |
| 45 | 55 | 610 | 650 | 690 | 530 | |
| 50 | 65 | 720 | 765 | 815 | 625 | |
| 55 | 70 | 775 | 825 | 875 | 670 | |
| 60 | 70 | 775 | 825 | 875 | 670 | |
| 65 | 70 | 775 | 825 | 875 | 670 | |

¹Standards in Table 2 are based on the methodology for sight distance calculations for passenger vehicles in the 2004 AASHTO Policy on Geometric Design of Highways and Streets

ODOT also has standards for driveway spacing based on OAR 734-51-4020 and for a 55 mph, the driveway spacing should be 650 ft. The proposed access location would be placing an new access for (3) residents less than 200 feet from an existing driveway.

<u>Summary:</u> We feel that it is not appropriate to use the "posted speed" since ASHTO distance and ODOT distances for the determination of SSD and ISD distances are based on "design speed". The based on road geometry or any known actual speeds traveled on the roadway, are not known, therefore; ODOT's standard is to add 15 mph to a posted 55 mph zone, accounting for some of these unknowns when there has not been a speed study done or the design geometry of the existing roadway is unknow. Following ODOT's standard seem reasonable for addressing a county road that is a "major collector" in the same way ODOT address smaller rural highways based on speeds and traffic counts. Adding a new driveway approach within 200 feet of an existing driveway on a high-speed road would also be adding complications for drivers to negotiate potential multiple obstacles in a short distance.

² Assumed design speed is shown for purpose of correlating generally accepted highway design speeds with posted speeds. If the Department establishes a higher design speed for a highway segment, the higher design speed, rather than the assumed design speed, shall be used to determine intersection sight distance (ISD) in accordance with the methodology for sight distance calculations in the 2004 AASHTO Policy on Geometric Design of Highways and Streets.

³ Left turn made from approach to nearest lane in direction of travel. Number of lanes includes right and left turn lanes and traversable medians. Calculation of ISD in this table is based on the methodology for sight distance calculations in the 2004 AASHTO Policy on Geometric Design of Highways and Streets for left turn from stop-controlled minor road. Four or more lanes require calculation of ISD in accordance with AASHTO procedure.

⁴ Left or right turn made to nearest lane in direction of travel. Calculation of ISD in this table is based on 2004 AASHTO Policy on Geometric Design of Highways and Streets methodology for the right turn from stop- controlled minor road. Standards also apply to sections of highway where turning movements are restricted to right turns only by a non-traversable median and to approaches that prohibit left turns from the approach across opposing traffic.

ATTACHMENT A Sight Distance Standards and Deviations

PURPOSE

The information in this document is intended to provide information and guidance on the key factors involved in sight distance evaluation in accordance with OAR 734-051-4020(2)(c). Information is provided on sight distance measurement procedures and evaluation of deviation requests, "moving in the direction of" criteria and optimizing approach locations for landlocked properties.

DEFINITIONS

"85th Percentile Speed" refers to the speed at which 85 percent of the vehicular traffic is traveling at or below during free-flow conditions. An engineering study is typically required to determine the 85th percentile speed.

"Intersection Sight Distance" refers to the sight distance required for a motorist entering the highway from an approach to anticipate and avoid potential collisions.

"Landlocked" refers to property that has a right of access and no alternate access other than the proposed approach.

"Stopping Sight Distance" refers to the minimum distance required for a vehicle traveling at a particular design speed to come to a complete stop after an obstacle on the road becomes visible.

GUIDANCE

Sight Distance Measurement Procedure

The procedure for measuring sight distance is provided in Attachment B entitled "Sight Distance Measurement Procedure for Intersections with Stop Control at the Approach." The measured sight distances to objects #1 and #2 in the diagram correspond to the stopping sight distance at the subject approach. The measured sight distances to objects #3 and #4 in the diagram correspond to the intersection sight distance at the subject approach.

Sight Distance Standards and Deviations

OAR 734-051-4020 specifies the intersection sight distance standards for highway approaches to be used by ODOT. For all approach applications, the available sight distance at an existing or proposed approach will be compared to these standards.

For undivided two-way highways, the standards are based on the intersection sight distance for left turns from a stop-controlled minor road as determined using the methodology in the 2004 edition of AASHTO's "A Policy on Geometric Design of Highways and Streets" and assumed design speeds that are 5 to 15 miles per hour above the posted speed.

For divided highways (one-way streets), the standards are based on AASHTO's methodology for determining the intersection sight distance for right turns from a stop-controlled minor road using the same assumed design speeds.

Table 2: Intersection Sight Distance Standards (ISD)¹

(from OAR 734-051-4020(2)(c)

| Posted Speed (mph) | Assumed Design Speed ² (mph) | Two-Way Highway Number of Lanes Crossed by Vehicle Making Left Turn from Approach ³ | | Crossed by t Turn from | One-way Highway ⁴ |
|--------------------------|--|---|---------|---------------------------|------------------------------|
| | | 1 Lane | 2 Lanes | 3 Lanes | |
| | | ISD (ft) | | | |
| 20 | 25 | 280 | 295 | 315 | 240 |
| 25 | 30 | 335 | 355 | 375 | 290 |
| 30 | 35 | 390 | 415 | 440 | 335 |
| 35 | 40 | 445 | 475 | 500 | 385 |
| 40 | 45 | 500 | 530 | 565 | 430 |
| 45 | 55 | 610 | 650 | 690 | 530 |
| 50 | 65 | 720 | 765 | 815 | 625 |
| 55 | 70 | 775 | 825 | 875 | 670 |
| 60 | 70 | 775 | 825 | 875 | 670 |
| 65 | 70 | 775 | 825 | 875 | 670 |

¹Standards in Table 2 are based on the methodology for sight distance calculations for passenger vehicles in the 2004 AASHTO Policy on Geometric Design of Highways and Streets

² Assumed design speed is shown for purpose of correlating generally accepted highway design speeds with posted speeds. If the Department establishes a higher design speed for a highway segment, the higher design speed, rather than the assumed design speed, shall be used to determine intersection sight distance (ISD) in accordance with the methodology for sight distance calculations in the 2004 AASHTO Policy on Geometric Design of Highways and Streets.

³ Left turn made from approach to nearest lane in direction of travel. Number of lanes includes right and left turn lanes and traversable medians. Calculation of ISD in this table is based on the methodology for sight distance calculations in the 2004 AASHTO Policy on Geometric Design of Highways and Streets for left turn from stop-controlled minor road. Four or more lanes require calculation of ISD in accordance with AASHTO procedure.

⁴ Left or right turn made to nearest lane in direction of travel. Calculation of ISD in this table is based on 2004 AASHTO Policy on Geometric Design of Highways and Streets methodology for the right turn from stop- controlled minor road. Standards also apply to sections of highway where turning movements are restricted to right turns only by a non-traversable median and to approaches that prohibit left turns from the approach across opposing traffic.

If the available sight distance is less than the standard, further evaluation is necessary as follows:

- For applications prompted by a change of use, further evaluation consists of a
 collaborative process with the applicant to determine if agreement can be reached
 on improvements that "move in the direction of" the sight distance standard or if the
 existing condition without change is sufficient to support approval.
- For landlocked property, further evaluation consists of determining if agreement can be reached with the applicant on an optimum location.
- For all other applications where sight distance is less than the standard, further evaluation consists of determining if a deviation can be approved.

The process for determining whether ODOT can agree to a proposal based on "moving in the direction of" or an "optimized location" is essentially the same process as evaluating a sight distance deviation. In all cases, the objective is to establish a basis for concluding that the intersection sight distance at the approach is, or can be made acceptable. The main difference in the processes is who is responsible for providing the supporting documentation. In the case of a deviation, it is always the responsibility of the applicant to provide supporting documentation, unless waived by ODOT. In the case of "moving in the direction of" or "optimized locations," supporting documentation could be provided by ODOT, the applicant or both as part of a collaborative process.

Deviations and Mitigation

When the measured intersection sight distance is less than the standard in Table 2, the following actions should be considered in the order listed to determine if a deviation can be approved. Some of the actions are intended to increase the available sight distance at the approach, while others would reduce the intersection sight distance required. In some cases, it may be necessary to implement multiple actions to reach a determination that the intersection sight distance is adequate.

- Remove sight distance obstructions (vegetation, signs, utility apparatus, embankments, etc.)
- Use the intersection sight distance measurement taken 10 feet from the edge of the traveled way. This is most appropriate in urban areas where the posted speed is 35 mph or less or on the inside of horizontal curves.
 - (Note: The standard location for measuring sight distance is from a point on the approach 15 feet from the edge of the traveled way. According to AASHTO, this allows for a typical position of the driver's eye when a vehicle is stopped relatively close to the major road. The 10-foot distance assumes the motorist stops unusually close to the major road, with the front of the vehicle just outside the edge of the travel lane.)
- Determine if a lower design speed would be appropriate. In accordance with Chapter 2 of the Highway Design Manual, this requires consultation with the Region Roadway Manager if the private development involves any construction on the highway other than the access itself. The intersection sight distance standard is

based on an assumed design speed that is 5 to 15 miles per hour higher than the posted speed to help ensure a safe environment for motorists that may be going faster than the posted speed. The speed characteristics at a particular location may be different than the assumed design speed. The Region Access Management Engineer (or the Region Roadway Manager, when highway improvements in addition to the access are involved) needs to approve the use of a lower design speed and may require the collection of speed data and other information from the site to support approval. The formula for determining the intersection sight distance is linear using the design speed, so the sight distance required for a different design speed can be interpolated from the data in Table 2.

- On two-way highways with continuous left turn lanes, assume left turning vehicles turn into the continuous left turn lane, thus reducing the number of lanes crossed. This maneuver is commonly referred to as a "two-stage left turn." This assumption should only be used on highways with more than 15,000 AADT where there are fewer than 10 vehicles per hour making conflicting left turn movements in the continuous left turn lane.
- Relocate and/or regrade the driveway to improve sight distance.
- Use the stopping sight distance provided in the table below as the required intersection sight distance. Typically, this should only be done on low-volume approaches. (Note: In these cases, it may also be appropriate to assume the driver's point of view is 10 feet from the edge of the traveled way.)

| Design Speed | Stopping Sight Distance (feet) | | |
|-----------------|--------------------------------|--|--|
| (mph) | , , | | |
| 25 | 155 | | |
| 30 | 200 | | |
| 35 | 250 | | |
| 40 | 305 | | |
| 45 | 360 | | |
| 50 | 425 | | |
| 55 | 495 | | |
| 60 | 570 | | |
| 65 | 645 | | |
| 70 | 730 | | |

The values in the table are based on the stopping sight distances in the 2004 edition of AASHTO's A Policy on Geometric Design of Highways and Streets for locations with highway grades between -3 percent and +3 percent. For locations with highway grades outside this range, check with the Region Access Management Engineer to determine the appropriate stopping sight distance.

 Regrade and/or realign the highway. This should be considered for high-volume approaches and public streets.

EXAMPLES

Example 1

Two-lane highway

Posted Speed: 55

• Measured Intersection Sight Distance: 525 feet

Design Speed: 60 mph

For this example, assume the Region Access Management Engineer approved this design speed because there was no construction to be done on the highway other than the access. See Responsibilities section of Bulletin.

Intersection sight distance could be increased by 150 feet by removing vegetation

For a two-lane highway, a left turning vehicle must cross one lane of traffic. For a posted speed of 55 mph, Table 2 indicates the intersection sight distance standard to cross one lane is 775 feet. The measured intersection sight distance does not meet this standard.

If the vegetation was removed, the intersection sight distance would be 675 feet, which is less than the required 775 feet, so further measures are necessary.

There is no intersection sight distance standard corresponding with a 60 mph design speed in Table 2. Thus, the corresponding sight distance for 60 mph needs to be interpolated between the values for a 55 mph design speed (610 feet) and a 65 mph design speed (720 feet) as follows:

```
ISD_{60} = ISD_{55} + [((DS_{60} - DS_{55}) / (DS_{65} - DS_{55})) \times (ISD_{65} - ISD_{55})]

ISD_{mid} = 610 + [((60 - 55) / (65 - 55)) \times (720 - 610)]

ISD_{mid} = 610 + [((5) / (10)) \times (110)] = 610 + [55] = 665 feet
```

As noted above, if the vegetation is removed, there would be 675 feet of intersection sight distance, which is more than the intersection sight distance of 665 feet required for a 60 mph design speed. Therefore, the intersection sight distance could be made acceptable and a deviation approved if a 60 mph design speed is used and the vegetation is removed.

Example 2

Two-lane highway

Posted Speed: 35 mph

Measured Intersection Sight Distance: 300 feet

• Design Speed: 40 mph

For this example, assume the design speed was approved by the Region Roadway Manager because of highway improvements in addition to access. See Responsibilities section of Bulletin.

• Intersection sight distance could be increased by 100 feet by removing vegetation and by another 100 feet by measuring the intersection sight distance from a point 10 feet back from the edge of the travel way.

For a posted speed of 35 mph, Table 2 indicates the intersection sight distance standard to cross one lane is 445 feet. The measured intersection sight distance does not meet this standard.

If the vegetation was removed, the intersection sight distance would be 400 feet, which still is less than 445 feet, so further measures are necessary.

In Table 2, the assumed design speed for a 35 mph posted speed is 40 mph, the same design speed approved by the Region Roadway Manager in this example. Therefore, no adjustments to the intersection sight distance requirements can be made based on the design speed.

If the vegetation was removed and the sight distance measured from 10 feet back from the edge of the traveled way, the available intersection sight distance would be 500 feet, which is more than the intersection sight distance standard of 445 feet. (Again, using the sight distance measurement 10 feet back is most appropriate when the approach is located in a low-speed urban area or on the inside of a horizontal curve.)

Therefore, the intersection sight distance could be made acceptable and a deviation could be approved if the vegetation is removed and the intersection sight distance is based on the available sight distance measured 10 feet back from the edge of the traveled way.

SPECIAL INSTRUCTIONS

The Region Access Management Engineer shall determine what sight distance is required at a location if:

- The approach has a high percentage of truck traffic (roughly more than 10 percent), as trucks require larger gaps to enter and accelerate on to the highway and have a taller height of eye (7.6 feet);
- Approximately 20 percent or more of the traffic exiting the approach is crossing the highway rather turning into a travel lane, as a larger gap may be required on oneway, multilane highways, to cross the highway than to make a turn into a travel lane; or
- The approach or highway has grades in excess of 3 percent, as grades steeper than -3 percent on an approach can affect the gap required to enter the highway, and grades more than +3 percent on a highway can affect the stopping sight distance on the highway

Attachment B -- Sight Distance Measurement Procedure For Intersections with Stop Control at the Approach

PROCEDURE:

If the highway has only two lanes, you may stop measuring at 900'. If the highway has more than two lanes, then you can stop measuring at 1500'.

Step 1: Record the number of lanes on the highway and their widths.

Step 2: Measure Roadway Grades (Highway and Approach Road)

- Measure the grade of the highway with a Smartlevel at the steepest section within 900/1500', left and right of the intersection.
- Measure the grade of the approach with a Smartlevel at a point 20' behind the fog stripe, curb or back of sidewalk if the approach is on an upgrade.

Step 3: Record the Posted Speed: Record the posted speed (PS) in each direction of the intersection. Record any curve rider speed (CRS) that applies to curves within 900'/1500' of the intersection. Record observations of the apparent running speed (RS) in the area; does it appear to be slower than the PS or higher?

Step 4: Measure Sight Distance: Measure the Sight Distance (Y), left and right of the intersection as shown on Exhibit "A" using the following values:

Set out four (4) Object Height (OH) markers inline with the center of the proposed intersection at the (X) locations shown below.

#1: (X) = 0' (Opposite fog stripe or curb), OH = 2.0'

#2: (X) = 0' (near fog stripe or curb), OH = 2.0'

#3: (X) = 10' (behind the near fog stripe or curb), OH = 3.5'

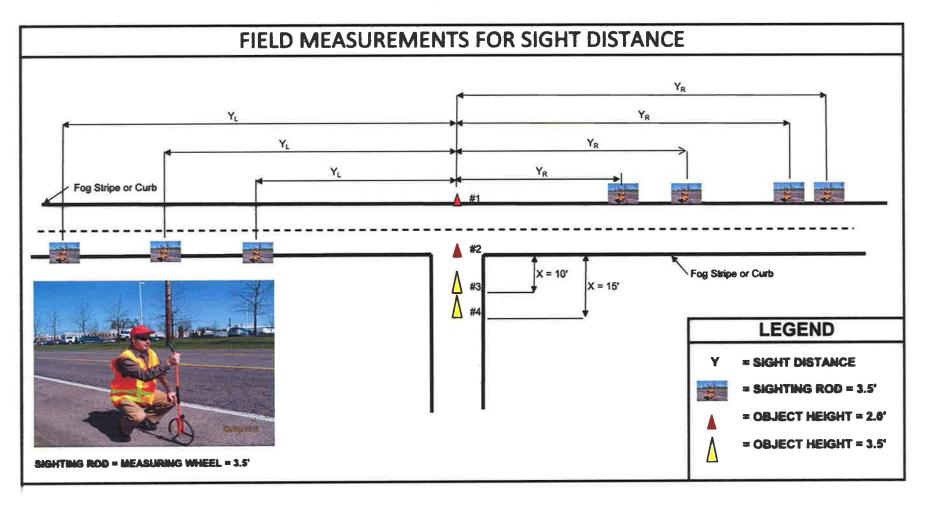
#4: (X) = 15' (behind the near fog stripe or curb), OH = 3.5'

Use a sighting height (Driver's Eye Height) = 3.5'. All measurements to the <u>left</u> should be taken from the near fog stripe or curb. All measurements to the <u>right</u> should be taken from the opposite fog stripe or curb. This is where you will be sighting and measuring from, for your safety. Starting on or near the fog stripe and at the centerline of the approach, with your measuring wheel set to 0', walk along the highway until you cannot see one of the markers, record the distance (YL#/R#) and marker# ($X_{1, 2, 3 \text{ or } 4}$). Continue the process of walking and recording information for the remaining markers or until you reach the maximum distance of 900'or 1500'.

- Take measurements from Right of the approach to Objects: #1, #2, #3 & #4
- Take measurements from Left of the approach to Objects: #2, #3 & #4

If the "Y" distance is 900/1500' or more, and the sight triangle is clear of obstructions, then an actual measurement past 900'/1500' is not necessary. In this case, record the "Y" distance as 900'+/1500'+. This will signify that a measurement was taken at 900'/1500' but the actual sight distance is greater than 900'/1500'.

EXHIBIT A



Task 5 - Spacing Tables

Select Spacing Standard from applicable table 3-6.

If AADT is 5000 or less then use the selection criteria in Table 3.

| TABLE 3 OAR 734-51-4020 (8) | | | | | | |
|---|--------------------------------|------------------------|------------------------|-------------------------|--|--|
| Access Management Spacing Standards for Highways with AADT ≤ 5000 | | | | | | |
| | Region & District Highways* | Statewide Highways* | Statewide Highways* | Statewide Highways* | | |
| | Rural and Urban Areas | Rural Areas | Urban Areas | UIC - Rural Areas | | |
| Speed in (mph) | Distance in feet | Distance in feet | Distance in feet | Distance in feet | | |
| 55 mph or higher | 650 feet | 1,320 feet | 1,320 feet | 1,320 feet | | |
| 50 mph | 425 feet | 1,100 feet | 1,100 feet | 1,100 feet | | |
| 40 & 45 mph | 360 feet | 990 feet | 360 feet | 750 feet | | |
| 30 & 35 mph | 250 feet | 770 feet | 250 feet | 425 feet | | |
| 25 mph & Lower | 150 feet | 550 feet | 150 feet | 350 feet | | |

^{*} If the Highway has been designated as an expressway, then the access spacing standard is 5280 feet in rural areas and 2640 feet in urban areas.

