



Meeting Notice

Please note that there will not be a 6:00 p.m. Newport Planning Commission work session meeting held prior to the regular 7:00 p.m. session on **Monday, May 13, 2013.**



AGENDA & NOTICE OF PLANNING COMMISSION MEETING

The Planning Commission of the City of Newport will hold a meeting at **7:00 p.m. Monday, May 13, 2013**, at the Newport City Hall, Council Chambers, 169 SW Coast Hwy., Newport, OR 97365. A copy of the meeting agenda follows.

The meeting location is accessible to persons with disabilities. A request for an interpreter for the hearing impaired, or for other accommodations for persons with disabilities, should be made at least 48 hours in advance of the meeting to Peggy Hawker, City Recorder, 541-574-0613.

The City of Newport Planning Commission reserves the right to add or delete items as needed, change the order of the agenda, and discuss any other business deemed necessary at the time of the meeting.

NEWPORT PLANNING COMMISSION Monday, May 13, 2013, 7:00 p.m. AGENDA

A. Roll Call.

B. Approval of Minutes.

1. Approval of the Planning Commission regular session meeting minutes of April 22, 2013.

C. Citizens/Public Comment.

1. A Public Comment Roster is available immediately inside the Council Chambers. Anyone who would like to address the Planning Commission on any matter not on the agenda will be given the opportunity after signing the Roster. Each speaker should limit comments to three minutes. The normal disposition of these items will be at the next scheduled Planning Commission meeting.

D. Consent Calendar.

E. Public Hearings.

Quasi-Judicial actions:

1. File No. 1-TIA-13-A. Deliberation and decision on an appeal of the Community Development Director's decision of approval of a Traffic Impact Analysis (TIA) regarding SE Moore Drive (a.k.a. John Moore Road) and SE Bay Boulevard submitted by Teevin Bros. Land and Timber Co., LLC. for a proposed log yard at 1650 SE Bay Blvd (Tax Assessor Map 11-11-9-D, Tax Lots 100 and 101).

F. New Business.

G. Unfinished Business.

H. Director Comments.

I. Adjournment.

Draft Minutes
City of Newport Planning Commission
Regular Session
Newport City Hall Council Chambers
Monday, April 22, 2013

Commissioners Present: Jim Patrick, Jim McIntyre, Rod Croteau, Glen Small, Mark Fisher, Bill Branigan, and Gary East (arrived at 6:11 p.m.).

Commissioners Absent: Rod Croteau (excused).

City Staff Present: Community Development Director Derrick Tokos and Executive Assistant Wanda Haney.

A. Roll Call. Chair Patrick called the meeting to order in the Council Chambers of Newport City Hall at 6:00 p.m. On roll call, McIntyre, Small, Patrick, Fisher, and Branigan were present; East didn't arrive until 6:11 p.m., and Croteau was absent but excused.

B. Approval of Minutes.

1. Approval of the Planning Commission work session and regular session meeting minutes of March 25, 2013, and the work session minutes of April 8, 2013.

MOTION was made by Commissioner Fisher, seconded by Commissioner McIntyre, to approve the Planning Commission minutes as presented. The motion carried unanimously in a voice vote.

C. Citizen/Public Comment. No comments on non-agenda items.

D. Consent Calendar. Nothing on the consent calendar.

E. Public Hearings.

Quasi-Judicial Actions:

1. **File No. 1-TIA-13-A:** *De novo* hearing on an appeal of the Community Development Director's decision of approval of a Traffic Impact Analysis (TIA) regarding SE Moore Drive (aka John Moore Road) and SE Bay Boulevard submitted by Teevin Bros. Land and Timber Co., LLC for a proposed log yard at 1650 SE Bay Blvd (Tax Assessor's Map 11-11-09-D, Tax Lots 100 & 101).

Chair Patrick opened the public hearing portion of the meeting at 6:02 p.m. by noting that this is a quasi-judicial hearing, and the proceedings are the same as in a court room. He read the summary of File 1-TIA-13-A from the agenda. Patrick asked the Commissioners for declarations of conflicts of interest, bias, ex parte contacts, or site visits. Fisher noted that this facility was used as a log yard when he was on the Port Commission for 8 1/2 years. He stated that he has not been on the Commission for six years. He hasn't talked to Teevin Brothers or the Port about this project. He has had no contacts about the project. He has read the articles in the newspaper and those comments provided by the public; but he has not studied those that the Commission just now received. Fisher said that he would be able to hear this matter without bias. He does have questions of his own. He wouldn't take either side. McIntyre declared a site visit. Branigan stated that he has not been to the international terminal site itself, but he has traveled these roads and is familiar with them. Patrick declared that he has read what was in the newspapers and on the websites. Patrick asked for objections to any of the Commissioners or the Commission as a whole hearing this matter; and none were heard. He read the land use statement and called for the staff report.

Tokos introduced information that was received up to 5:00 p.m. that the Planning Commission will have as part of the record. These included Exhibits H-1 through H-15, and Tokos went through the list and identified each exhibit. He noted that they are all in the record and noted that the entire case file was available at the hearing as well. As a point of reference, Tokos had displayed on the overhead screen the map of the traveled route that is Figure 7 from the TIA. He noted that the staff decision serves as the staff report, but that he would go through the approval standards and how they were addressed in the decision. He noted that the City Engineer was present and could answer questions as well.

At 6:11 p.m. Commissioner East joined the meeting. Patrick asked East for declarations of conflicts of interest, bias, ex parte contacts, or site visits; which East had none. Patrick asked the audience if there were any objections to East hearing this matter; and none were heard.

Tokos continued by noting that the approval standards are found in Chapter 14.45 of the Newport Municipal Code. Under Section 14.45.010, there are a number of different triggers for a TIA in the code. In this case, it was that the proposal may increase the use of any adjacent street by 10 or more vehicles that exceed 26,000 pound gross vehicle weight. Section 14.45.020 includes what should be submitted as part of the TIA. First is a pre-application conference. On November 30th the Kittelson and Associates' representative met with the City Engineer, and a copy is attached with the decision. The standard that the TIA shall be prepared by an Oregon Registered Professional Engineer was met because Diego Arguea is a registered engineer for Kittelson, and the supplemental study by Stuntzner Engineering and Forestry was done by Ralph Dunham, who is also a registered engineer. The third requirement pertains to typical average daily trips and peak hour trips, which can be determined either with the ITE manual, or it also allows whatever is approved by the city engineer. Documents approved by the city engineer are in the staff analysis. Requirement 'D' regarding intersection-level analysis is documented in the staff decision. 'E' is about Transportation Planning Rule compliance, which is when the City makes an amendment to land use regulation. This is not required in this case because there are no amendments needed. This is I-3 zoning where a log yard is a permitted use. This is documented in the decision. 'F' is about the structural conditions. The road was assessed by Kittelson and supplementally by Stuntzner Engineering and found to be adequate for truck traffic. Tokos assumes that the applicant may submit a supplemental TIA to address the useful life issue, which again likely leads to the same result. Requirement 'G' applies when there is heavy truck traffic. Kittelson and Associates and Stuntzner Engineering evaluated the whole route; so this was accomplished and documented. Section 14.45.030 addresses the study area and defines the area that needs to be evaluated in the report. This analysis was provided and documented and is discussed in the staff decision. Section 14.45.040 provides that if the TIA is submitted with another type of review, how it is evaluated will follow that process; if the TIA is by itself, it is handled as a Type II action with the initial decision by the Community Development Director (CDD). This TIA was submitted by itself, and the decision was made by the CDD. Section 14.45.050 provides the criteria. Criterion 'A' requires the TIA study to contain elements listed in 14.45.020. As noted, all information was submitted. 'B' requires that the TIA demonstrate that adequate transportation facilities exist to serve the development or mitigation measures satisfactory to the City Engineer are identified. This is addressed in the TIA and in the staff decision. Core samples are documented in those reports. There was an exception by the City Engineer for a small section of Yaquina Bay Road east of Vista where there is some settling that needs to be addressed. That area is under County jurisdiction, and Teevin Bros. should coordinate with the County to ensure repair of that road section. Criterion 'C' only pertains to changes to the Comprehensive Plan or land use regulation, which there are none. This is an I-3 zone where the log yard use is allowed. 'D' requires that the TIA establish that the City's Level of Service standards have been met and that the development will not cause excessive queuing as determined in the City Engineer's sole discretion. The City has not adopted standards, and the City Engineer determined that that standard has been satisfied. The last criterion deals with standards of proposed public improvements. In this case, there are none proposed. Section 14.45.060 provides that the City may impose conditions of approval if needed to meet operations, structural, and safety standards. The following conditions were noted in the decision: repair of the localized settling on Yaquina Bay Road, and also removing vegetation that restricts site at the entry to the property. Section 14.45.070 deals with fees in lieu of, which provides that if frontage improvements are required, the City allows them to pay a fee to cover those until the improvements are made. In this case, there are no frontage improvements required.

Tokos said that other issues were raised and are discussed in the staff decision even though they are not related to the standards of approval and are not relevant to the TIA. One was the designation of truck routes, and the City is not obligated by statute to designate truck routes. The issue about geologic hazards was discussed in the decision, but also is not relevant to the TIA. There were arguments made that the geologic hazards requirements should apply as in a subdivision. They do not, because the applicant is not dividing property. Vegetation removal and road repairs are exempt. Vehicle traffic does not trigger review of a geologic report. Tokos noted that Teevin's safety record has been brought up but is not relevant to approval of the TIA. The issue raised about the satisfaction of ODOT requirements is addressed in the staff decision as well. The TIA is required by the City, not ODOT. The project does not access directly onto a State facility; so therefore ODOT standards are not applicable in this case.

Fisher asked if the governmental bodies involved in this would be the State for Highway 20, the City for John Moore Road and Bay Boulevard, and the County for Bay Road. Regarding the actual structure requirements for the roadbed, the amount of rock, concrete, and blacktop would clearly be identified by those bodies; and if in fact it was not adequate, any one of those could require some upgrade. Tokos said that ODOT at Highway 20 could require that the applicant apply for a permit if required under their statutes. In this case they have not asked the applicant to do anything. The county received notice and had the opportunity to participate. If they had any concerns, they would have raised those in this process. If the City Engineer felt that the road was inadequate, that would have been raised in this process.

Branigan noted that one comment was to decrease the speed limit on Highway 20 to allow for trucks to slow down. He wondered if that is something the State is signed off on doing; or would we still have to get the State involved. Tokos said that is something the City is working on with the State to make conditions at US 20 and Moore Road safer than they are. He said that in terms of the TIA, there is what is safe and then there is "safer". We can always strive to make it safer. That is one of the things the task force has been working on.

TESTIMONY: The applicant and the appellant were allocated up to 20 minutes each for presentations. The applicant also received 10 minutes for rebuttal. All others testifying were given 3 minutes each.

Applicant: Eric Oien and Paul Langner of Teevin Bros. Land and Timber, PO Box 247, Rainier, Oregon. Oien stated that, having appeared at several of these meetings in the community, they wanted to reiterate that they stand by the traffic impact analysis and support the study. He said that they have nothing further to add at this time and have no additional analysis at this time.

Proponents: Yale Fogarty, 606 SW 13th St, Newport. Fogarty entered Exhibit H-17 into the record. It was a large-size photograph of the area where Teevin is locating. He thought it was a picture from the 1950s. He presented it to show the logs being there historically. Fogarty said that he is a lifelong resident of the Newport area. His family has been making a living on those docks for 60 years, and his extended family has been involved in moving cargo through Newport and Yaquina Bay for over a Century. He doesn't believe the road study should ever have been required. This is not a new operation. One of the first operations on the site was log storage for exports. Over several decades there have been millions of tons of cargo hauled to and from the international terminal; all hauled on trucks along the same route. Fogarty attended Yaquina View School, and at that time many more children walked to school than do today. The playgrounds were not fenced. No children were harmed by trucks using John Moore Road. That is no longer an active middle school. It has been closed since the last export activity at the terminal. Also, there have been widening and sidewalk improvements along Bay Boulevard that were not there during the last shipping operations. Fogarty said that a decades-long history of thousands of heavy trucks hauling millions of tons of cargo to and from the international terminal along the same exact route without safety concerns or roadway damage shows more proof than any study that this is a safe, stable route for moving cargo through the international terminal. Fogarty also pointed out that this property is extremely valuable and rare. There is very little deep draft heavy industrial property in Oregon. If this property is land-locked from its intended use by not allowing trucks to use the historical route, then it most likely will be lost forever. This is not like other industrial grounds that can be re-zoned and moved to another location. The deep water estuary of Yaquina Bay and the location of the international terminal have a wide-sweeping economic impact on the entire region and State. Proof of this is the substantial investments made by the State in this project because they recognize the value statewide. He reiterated that this property and facility cannot be replaced and is extremely rare. In closing, Fogarty said that he believes that the road study completed by Teevin Brothers required by the City provides proof beyond a doubt that this route is not just adequate but is totally suitable for the intended use. He asked that the Commission deny this appeal and approve the Teevin TIA allowing Teevin to put the Port of Newport's international terminal to work creating jobs and substantial economic benefit throughout the region and beyond. Small asked the approximate date of the photo, and Fogarty thought it might be about 1960. Branigan asked when the log operation ceased. Fogarty said that it ceased and started again. He believed that the last log shipped was in 1999. He noted that it ceased because of the failure of the dock. Port General Manager, Don Mann, was in the audience, and the Commission asked him that question. Mann said it was 2001 when the dock went out of service.

Pat Ruddiman, 209 NE 10th Ct, Newport, OR. Ruddiman noted that it was Caffle Bros. here before. He said that today he was in contact with Dwaine Smallwood who was yard manager for Caffle Bros. during the time they were in Newport. Caffle first came here in 1969 and stayed until 1975. In that period of time, Smallwood told him that they received 30-40 trucks a day loading the ships. Since one of their log suppliers had a yard elsewhere, they would do 100 trucks a day up and down John Moore Road. Caffle Bros. came back in 1985, and they were hauling logs for Georgia Pacific at a rate of 50 trucks per day, plus they were also buying logs from small timber owners of 20-30 loads on top of that. Their second customer was ITT Rainier, which had a yard in Toledo. Prior to the ship loading they would deliver 40 trucks per day to be stockpiled for the ship. During loading of the ship, they would send over 100 to 150 trucks a day on top of the 50 to 80 already going to Caffle. All of these trucks went up and down John Moore Road by a fully-operating grade school with buses and cars dropping off kids, kids running and walking to school; all with no fatalities or accidents. In 1989, ODOT widened the road to accommodate the truck traffic. He said that what he is getting at is that it worked then, so why can't it work now. Ruddiman highly recommended approval of the TIA.

Appellant: Mike Peterson, PO Box 1985, Newport, was one of the appellants and offered his testimony on behalf of the appellants. He noted that in the materials he submitted was a 2-part letter that included a short summary and a second letter, which contained quite a few attachments. The letters were in support of the appeal lodged against Tokos' approval of the Kittelson TIA. He noted that Kittelson visited Newport twice in December. They were told that crab season opened on December 1st, when it actually was December 31st. So, their traffic sampling was not representative of the month, or the year. He said Kittelson should revisit and resample. Kittelson uses a road outside Coos Bay for their ATR comparison. That road has four travel lanes and is not comparable to Highway 20. They should use another comparison. Kittelson states that parcel delivery, refuse collection, and septic pumping represent no change from before because they are already done. He doesn't think so, and they should rework this portion of their trip generation calculations. Peterson notes that their 95th percentile queuing is simulated traffic; a computer program. They came to the conclusion that there is adequate queuing; but if you observe that area, the westbound turn lane spills back to block all westbound traffic. That is flawed. The TIA recommends that foliage be removed ignoring a landslide hazard area. If they were property owners on the east side, they would be required to have a geologic permit. They assume thousands of log trucks can run on the road just because a few fish meal trucks use it now. In their structural analysis, no aggregate depth is provided. When they did their cores of these streets, they are saying that the base core material was not examined; so how do we know these streets are even viable. There are springs flowing beneath it and there are creeks in it. There should be a geologic permit because of high water. If we don't know what the base soil material is, how can we assume that this is a good road? The core samples don't include the base material; we have to assume. Core samples should be repeated to include base soil material. That information is critical in determining the effect of vibration on adjacent structures. Thicker asphalt does not stop vibrations. No core was taken from the collapsed section and none from the area with springs. The Port-appointed task force considered safety and recommended turn lanes and signs. They neglected looking at the safety record of Teevin Bros. At 25 mph the

stopping distance for a heavy truck on level dry pavement is 155 feet. That is in the CDL manual. These trucks will be driving down a 12 degree slope and through a flowing spring. Then the stopping distance is nearly 200 feet. Peterson said that besides traffic jams; impacts include noise levels, carbon monoxide levels, dust and insect introduction, truck vibration, and loss of millions of dollars in property values. Peterson recommended that the Planning Commission not adopt the TIA. There are obvious safety hazards. He said the TIA is an attempt to establish a de facto truck route without a citywide hearing. He said that the City is attempting to deny citizens due process by pretending this is an established truck route and also saying that this is not a truck route. This is just double talk. He said that there has been lots of testimony pertaining to the geologic hazards issue. The City says it doesn't apply; but it's not that clear. The City added a new geologic hazards overlay section (14.21.001) to the Municipal Code, which added new regulations to many parts of town; including Teevin. The stated purpose is "...to promote the public health, safety, and general welfare by minimizing public and private losses due to earth movement hazards..." Most people on the east side are not aware of this city code. Geologic permits are required of "all persons who are proposing development, construction, or site clearing" within a geologic hazard area. He said that the geologic permit should be part of this TIA permit. It is generally accepted that heavy trucks can cause landslides. Heavy truck vibration often is a triggering mechanism. He has references to that in his material. He said this is not a designated truck route; and adding a 100 log trucks raises a concern of earth movement hazard. He said that Moore Road and Bay Boulevard were never designated a truck route by the City. He said that City Manager Voetberg told him point blank that it is not a truck route; but Tokos has said the fact that log trucks used Moore Road for many years establishes it as an established truck route. Streets and roads have not been excluded from geologic hazard rules. Road maintenance and repair have been. Heavy truck traffic has not been exempted. He said that the log yard certainly is a development. Teevin Bros. are proposing to add 13 acres of asphalt. There is landslide hazard on the northeast corner of the property. They haven't shown that development will be outside the slide area. He added that the route passes through a landslide area in three different locations. He asked if the City meant to exempt large corporations from these rules. Peterson noted that if a home in one of these slide areas was destroyed by fire, the owner must submit a geologic report before it can be rebuilt. Teevin is rebuilding and paving a log yard, and its trucks drive through three different hazard areas; which represents a far greater hazard than a home being rebuilt on its existing foundation. He said that the regulation should be applied with public safety in mind. Teevin Bros. should not be granted a free ride.

Opponents: Jackie Trahan, 1328 SE Rio Vista Dr, PO Box 393, Newport. Trahan said that she moved here ten years ago to retire. She is in support of the appeal. She said that the entire analysis didn't take into account the safety and well being of Newport's residents and visitors. Reading the City's mission statement, she emphasized that it pledges to provide essential services, promote well being and public safety, and maintain fiscal responsibility and livability. She said that the use of Moore Road and Bay Blvd. as access through a residential area doesn't meet the City's criteria. A loaded log truck needs in excess of 190 feet to stop. Public safety is being ignored. She said that under livability, health issues to the homeowners who will be subjected to elevated levels of carbon monoxide from the exhaust of up to 100 log trucks per day passing through neighborhoods at approximately every six minutes have not been addressed. She said other concerns include loss of property values, loss of residents and tourism, inability to attract new businesses and residents. She noted that Teevin has publicly stated that they will contribute zero. They have also stated that they will not set aside ½ cent to fund an alternate route. The City is sacrificing its streets and public safety for nothing in return. She said this is not maintaining fiscal responsibility. She believes the studies need to be continued to determine the overall economic effects.

George Mpitsos, 747 SE Vista Dr, Newport. Mpitsos said that he is not totally against the project but has serious concerns regarding the quality of the marine environment and invasive species. He said that he reads many scientific publications. He had provided an excerpt from one entitled, "Global Spread of Microorganisms by Ships." The article notes that ships have spread many species around the world. The effects of transfers of microorganisms through discharge of ballast water are virtually unexplored. Mpitsos chose a publication headed by Dr. Gregory M. Ruiz because the DEQ representative, Rian Hooff, with whom Mpitsos spoke, referenced Ruiz as a good source. The conclusion of the article was that "given the magnitude of ongoing transfer and its potential consequences for ecological and disease processes, large-scale movement of microorganisms by ships merits attention from both invasion biologists and epidemiologists." The conclusion in the publication deals with ballast water; the same caveats need to be exercised with all invasive biota and pathogens that are brought to our waters as consequence of foreign shipping. Mpitsos said that as noted in the conclusion, we need to progress very cautiously or we could easily destroy our wonderful environment. He wondered, given the caveat, how or why Dr. Ruiz gave Rian the "thumbs up" about the safety of the proposed project.

Stella White, 923 SE Bay Blvd, Newport. White noted that she had already submitted a letter to the Planning Commission. She said that she and her husband had owned and operated a trucking company. She said that since the trucks stopped running in 1995, there was building of homes and this became a residential area. These homes have changed the springs, and they go under the road. Putting trucks on that road will destroy it. She said one of the biggest issues is the truckers themselves. She said that truckers today are cowboys. When she was trucking, they were taught road courtesy and respect. She said truckers today play road games. They don't take care of their equipment. She believes this is a bad plan. It will create noise, pollution, and safety issues. It will decrease tourism. She supports the appeal and believes it should be upheld.

Christy Peterson, PO Box 1985, Newport. Peterson noted that she had submitted written testimony, and many of the items she was going to speak about had already been addressed. But, she wanted to direct the Commission's attention to part of her presentation. She had included a Google map titled "what does 190 feet looks like". She said that the red lines on the map each represent 190

feet. She said that they took measurements on Moore Road, which goes from a 4% to a 12% grade. If a truck were on a flat road, it would take 155 feet to stop if they were going 25 mph. She noted that when you are talking about the grade on Moore Road, you are talking about increasing the stopping distance. Also, water is on that road year round. Peterson noted that when they took the core samples, they didn't go down and look at the underlying structure. You have to know what the water table is doing and what is under there. She said that none of the core samples did that. She said she took 190 feet just as an average. The other pictures she had included were photos that show what 190 feet looks like looking down Moore Road just south of the entrance to Oregon Coast Bank and where Moore meets Bay Boulevard. She asked the Commission to please reconsider this plan as it hasn't been thought out.

Lloyd "Oly" Olson, 882 SE Crescent Pl, Newport. Olson had submitted written testimony with various attachments. He noted that the TIA has authorized Teevin to use the truck circulation routes identified in Figure 7. It is his contention that by so doing, the City has established a de facto truck route without applying Oregon statutes. Therefore, the City is in direct violation of the Oregon statutes by not meeting State requirements to establish a local truck route. The City's actions deprived the citizens the safeguards of a thorough approval process in properly establishing a truck route under State statutes. It deprived the citizens their due process of providing testimony as to the approval of truck routes, which is the proper and fair way to conduct public business. Once a truck route is established in this proper manner, it will be identified by City ordinance and included in the Comprehensive Plan. It will be legal. Property owners will then be able to make decisions about their property. Olson summed up by saying that depriving citizens of their due process is a very serious matter and has placed the City in a very precarious situation.

Stan Shell, 895 SE Crescent Pl, Newport. Shell had submitted a written letter. He stated that tonight, the Commission has seen a push back on a truck route that would put loaded log trucks through a residential neighborhood. He said this is one of three main objections to the overall concept. The other two relate to invasive species being introduced into the Bay by foreign ships and the industrial activity authorized by the Port to allow debarking on site. Shell said that many citizens have weighed in on both sides of the issue. He said that pro-logging comments in the paper can be summed up that the area needs jobs; log trucks used to use John Moore Road to deliver logs to the Port in the 80s, so why not now; and all of those people who built houses there should have known the history of the area. Those that oppose the plan have searched for an alternative to allow the Port to proceed but have been told that there is no alternative if logs are going to be shipped. Shell said what if there is an alternative that still allows logs to be processed, stored temporarily at the Port, and then shipped. All of this up and down over the TIA, modifications to intersections, and setting up heavy industrial processing would go away. He said wouldn't that be nice if there was an alternative. Shell explained that there is. He said that two miles beyond the Toledo mill is vacant land on the deep side of the river, which was a log dump. The logs were debarked on this site, and then barged down the river. Why not look at this alternative. It eliminates the safety of John Moore road, the City's expense of reworking it, and the noise of debarking. All trucking jobs are returned to the Toledo site, and certain extra jobs are created; some would be needed to barge logs down the river. Shell said this discussion could be tabled. He said that unless somebody wanted to stand up and give rebuttal of this proposal, he feels it should be considered an alternative.

Nancy Smock, 923 SE Bay Blvd, Newport. Smock had submitted written comments. She said that she bought a retirement home in Harbor Village. She said that when walking, it takes a long time to get across Bay Boulevard now. It is an area with lots of elderly folks, children, and grandchildren. Smock noted that the zoning code states that the purpose is to conserve and stabilize the value of property; lessen the congestion on streets; and promote public health, safety, convenience, and general welfare. She said that all of this has been ignored by the TIA. Also, section 14.45.020(F) of the NMC requires that the TIA address conditions of the impacted roads and identify deficiencies. She noted that the TIA states that the data they collected is "not intended to address pavement life or for the use as a condition survey." She wondered how their application can be approved when they write that their analysis does not meet the basic criteria. Smock said that last summer everyone was so concerned about invasive species on the tsunami dock that washed ashore. That was 72 feet long. The log ships will be at least 600 feet long, and many will be from third-world countries. She asked what will be on the bottom of those ships. Smock believes that the citizens of Newport should vote. She asked that the TIA approval be rescinded and that the record remain open for 7 days.

Delores Williams, 448 SW Surf St Apt J, Newport. Williams had submitted a written letter in agreement with the appeal. She stated that it doesn't take a genius to realize that you don't want to run log trucks down through a residentially-populated place. It is wrong for safety and for repairs on the roads, which the residents pay for with tax dollars. There is too much foot traffic, there is the school, and there is a trailer park. She noted that there are a small number of special-needs children still going to that school. She wondered what happens if a truck breaks down and ties up the whole road while waiting for a tow truck. She said it only takes one accident for the lawsuits to begin. She asked the Commission if they want the City to be sued. She said logs may have been hauled here at one time, but this area has been built up enormously since then. Williams said that the noise and pollution from this industrial endeavor is a health hazard and involves the Endangered Species Act. The debarking and logging will affect habitats. She said that she would like to see the Port succeed but with changes. She was told that the logs can be brought to Toledo by truck, debarked there, and placed on a barge and brought down the river. She said that she is willing to let the ships into the Bay with their invasive species hoping that the State will help get rid of them. Williams asked the Commission to please find another way to bring logs down to the Port and get the debarking done some other place than Newport.

Ilene Young, Shermer Court, Newport. Young read the letter submitted by Taji Cooter in support of the appeal. Cooter's concerns are the traffic-related air pollution and health hazards caused by the 50-100 heavy log trucks daily on John Moore Road.

One of the reasons Cooter moved here from Santa Barbara seven years ago was because of asthma. Cooter's home in Santa Barbara was two miles from the highway, and the black soot from the traffic was visible in the home. The visible pollution was secondary to the impact on Cooter's asthma, requiring many visits to the emergency room. Now Cooter is concerned that her home may be within a block of major traffic-related air pollution. Cooter's letter states that air pollution has been linked to asthma and autism. Particularly vulnerable are the elderly (Cooter is 72) and the young; the two populations adequately represented in the neighborhood. This includes high school students who use the softball field closest to John Moore, and younger children use another field on campus. Also, Early Intervention (a program for children with developmental delays, disabilities, autism, etc) is housed in the building on that campus.

Rio Davidson, 123 NW Hurbert St, Newport. Davidson noted that the Newport Comprehensive Plan mentions seven options for McLean Point, but not a log yard. He talked about the condition of an Astoria log yard. He said this is an unwise use of land directly adjacent to residences. He said that Kittelson visited at the most traffic-free time of the year. The TIA compares the road to Coos Bay, where there are four lanes of traffic. He said that we are talking about quality of life. He asked if we want to be run down and have industry everywhere or stand out as the gem of the Oregon Coast. He says the report claims that Highway 20 has four lanes. There is no mention of the springs under Moore Road and no mention of the landslide into Moore Road two years ago. There is no mention of vibration. He said this TIA is an inadequate document. It is unscientific and shouldn't have been approved. Davidson told the Commission that they are just seeing the beginning of this. He said people don't want this logging terminal. It's not because of jobs. We will bring in several jobs, but at a cost to contractors and real estate agents because we will lose residents and businesses. Davidson noted that this is a 20-year contract being talked about. We are talking about making a commitment for Newport to be a new Coos Bay. We are trying to be a mark here as an environmentally and family friendly community. Again he said that the City is just seeing the very beginning of a push back, and they are not going to stop. He said that they will take it to the next level.

Lin Shubert, 557 SE 4th St, PO Box 1132, Newport. Shubert said that she lives not far off the Bay Front. She noted that there has been a lot of opposition in the newspapers. Then there are the opposite people saying they are used to seeing log trucks driving by their homes and haven't noticed any problem. Shubert said that she doesn't live in Siletz; she lives in Newport. She is used to seeing families walking together, bicyclists, joggers, and tourists looking at the sights. She said this type of environment is not conducive to log trucks. She said that many people are afraid to make their opinion known because of their employment or the like. She said that if it were put to a public vote, there would be more of an outcry than you are seeing now. Also an item not addressed is that Moore Road is a primary Tsunami and earthquake evacuation route. She said that she is not afraid of change but is opposed to this project. She said it seems that this was presented backward. There was no pre-planning. The cart was put before the horse. We need a by-pass road, covered debarking, and not to destroy the quality of life. Her letter also requested the record be left open for seven days.

Dee Shannon, Manager of The Landing, 890 SE Bay Blvd, Newport. Shannon said that she is against the TIA and in favor of the appeal. She said that the TIA fails to provide traffic counts. It is missing the impact of the fishing season. Intersection site vision is limited at the driveway, and there is no discussion of mitigation. The TIA lacks useful information. It states that the intersection of Highway 20 and Moore Road will operate near ODOT mobility standards. NMC Section 14.45.030 lists the areas that should be included in the site study. Shannon noted that Bay Blvd. is a minor arterial roadway and talked about site distances provided in the Transportation Plan. She said that it appears that these recommendations have not been adopted into the NMC. She said that there may be up to four locations that require analysis. She said that the TIA failed to provide reliable data.

Additional Proponents, Opponents, and Interested Parties: Ginny Goblisch, 6720 Otter Crest Loop, Otter Rock, OR 97369. Goblisch noted that she was a former Port of Newport Commissioner and is in favor of the TIA application and not in favor of the appeal. She wanted to point out the obvious and speak to the issue. She said that this log operation and trucking is being done in a zone designated for that and in an area where it has been historically. She said that this is nothing new. The zoning has been in place for many years. It should be no surprise to anybody that the Port would want to take advantage of an economic opportunity. The Port was able to secure some of the funding to upgrade the terminal in 2006 when a bond measure was passed to rebuild the terminal and clean up the facility. That what they have been planning to do is to continue operations has never been a secret. Goblisch said that she would like to publicly apologize to Teevin Bros. They want to come here and operate in good faith and should be shown more respect.

Ms. Meriwether. She said she is familiar with the site before there was an LNG plant. She has seen lots of log operations. She has seen log rafts come down the river. They cleaned and trimmed the logs right there in Toledo. She thinks in economic terms, this plan needs to be looked at in depth. She thinks we should not be shipping raw logs anywhere; we should be shipping lumber. She said the basic error is the product being shipped. Meriwether said that there need to be work done on research about invasive species.

John Riedell. He wanted to talk about liability. What Kittelson has done is provide a method to indicate traffic safety in a given area. That is the limit of their liability. But what could happen to the City is that a truck could hit somebody and hurt or kill them; and when that happens, the City will get sued, not Kittelson. The City would get no protection from them. He said that the Planning Commission is held to a high standard to ensure safety for the community. It is up to the Commission to make a decision of what is a safe operation. He said the Commission is hearing a lot from industries but have to rise above that and make a

personal decision about whether this is good for the community. He said they are looking at a very unusual case here involving very heavy log trucks going down the road. You are left with that decision.

Don Mann, General Manager for the Port of Newport. Mann said that at any of these meetings, the Port likes to go on the record in support of the findings and final approval of the TIA as presented in March 2013 in File No. 1-TIA-13. The Port is continuing to work with Teevin Bros. There is no agreement at this point, but they are working to achieve that. There is a lot of information that they are continuing to see. There has been more time spent on this because of the public investment in this facility. There have been some options presented by the task force that will be considered. He said that it is too early to tell what the conclusion might be. The Port will continue working on the project because they feel they owe that to the people who passed the bond measure. Fisher said that the claim was that Mann had said that Teevin Bros. will pay no taxes; he is assuming property taxes. Mann said that he didn't recall saying that. Once the Port releases the property to Teevin Bros., it goes on the tax role and they pay. Fisher asked if Teevin Bros. would be obligated to SDCs. Tokos said to the extent required under the methodology, Teevin is required to pay SDCs. He added that LCSD construction excise tax would apply to their office building, and they would be required to pay that as well.

Bob Wienert. He said that he has worked at his job for over 45 years. He said that he tried to keep quiet tonight, but when "cowboys" came up, he had to say something. His company has drivers who operate fourteen dump trucks, which falls under the same regulations as log trucks. Those trucks are checked on a quarterly basis by the State. The drivers receive physicals annually. The company is required by the federal government to have monthly safety meetings. He said that he heard that Teevin Bros. was not an environmentally friendly company. Wienert has put in three log yards. He did one in Tillamook whose next door neighbor is the high school. He said it is an extremely clean log yard. There are two blocks of a residential neighborhood. There are over 150 trucks coming in per day. Wienert said that he has lived here all his life and has driven truck for many years; and if he was down on the Bay Front and there was a tsunami, he would try to get up the hill also.

Rebuttal: Eric Oien and Paul Langner returned for rebuttal. Oien said that as a company, they are reaching their wits end. He said that people are saying that Teevin Bros. is not a family-friendly company, but they don't know anything about their company. He said he puts an invitation out there at every meeting, but nobody has come to visit. Oien said that Teevin is a company that likes to show off. They are happy about family-wage jobs and proud of their safety record. He asked those in attendance to come meet them. He said that the TIA did exactly what was required; they even did more; and if asked again, they will do more. Langner said he has heard many things tonight. One hundred truck trips are estimated; 50 inbound, and empty out. The site itself does not fall inside the geologic hazard overlay zone. Invasive species were raised. They brought in experts. This is an issue they are concerned about in projects they take out. He noted that Teevin is not doing the trucking; they are not their trucks. He said they are your friends and neighbors; not a bunch of cowboys coming in. Langner said that they took something like five core samples; all of which was coordinated with the City. They took them where the City said, and a member of City staff was with them. He noted that Kittelson's reported traffic counts were increased by 28% to accommodate for crabbing, fishing, and tourists.

City Engineer and Public Works Director Gross asked if it would be useful for him to explain the process that was used for structural analysis, the trip generation used, the level of service analysis, the queuing that was part of that, and what he was required to look at. Tokos said the Commission could ask staff to present that right now or present it in writing. Small said that had made a note to get an explanation about the core sampling. Gross noted that Road and Driveway did the core samples and he was in attendance. They got a cross cut section of south Moore Drive, halfway up the road where the road was cut and took the photograph. They went through the pavement to the sub-base. The shallowest was 9 inches, and the deepest was 17 inches. When doing a strength analysis, you take into consideration the thickness of the asphalt section in addition to the aggregate base to get structural loading. It was so thick that there was no need to provide structural analysis. The samples proved that the road had the integrity for the load. All the rest would be hand digging and wouldn't have changed the analysis. Gross said that he noticed in discussion in the appeal about the road surface at Moore Drive and Bay Blvd., where they got the thickest core sample. He said that area was probably overlaid many times. That is not structural failure, but aesthetic surface failure where the overlay is peeling back. Gross said there is nothing to indicate anything other than the road is sufficient to handle this traffic. Gross noted that the criteria for the TIA talks about peak hourly trips. We use the ITE manual as guidelines on trip generation unless something else is approved by the City Engineer. The engineer had better information than the ITE manual can provide. Teevin knows how much they will generate, so we used that model. Gross looked at the queuing analysis, which is left up to the City Engineer. He found that an almost negligible impact would be generated by this development. He determined there was no impact to the queuing on any intersection. He said they likely will have to go back and address the TIA for the area immediately adjacent to the site. Gross explained that as a point of comparison, if you take a look at Highway 20 and Moore Road; it is a .8. The developer would have to add 20% more traffic to that intersection before traffic gets to be as much as can fit. It is .01 at the driveway. He said that the volumes are so incredibly low that it won't make any difference at the intersections. Gross said that his responsibility as part of the TIA was to review the engineering estimates of the capacity of the infrastructure to handle the traffic; and his opinion was that the road can handle this traffic. He noted that the opponents may not have had the follow-up memo from Stuntzner Engineering. In answer to a question from McIntyre about the springs, Gross said that he doesn't think the water is coming from under the road. Although he noted that there's not a single road in Newport that doesn't have springs under it. He said that's not necessarily detrimental to the roadway unless there is pipe failure where it leaches the material out. Patrick noted people's concerns about the sub grade and wondered if there was any purpose of testing that. Gross said that he has done many excavations in that area, and it has generally been clear sand base; there is not any indication of leachy soil.

Patrick closed the oral testimony at 8:10 p.m. He noted that the Commission had received written and oral requests to leave the record open for seven days. Fisher was in favor of leaving the record open, but said that he would like a long enough period ahead of time to review the written materials before having to make a decision. He said he would love to see anything in writing though. Small agreed with Fisher. Tokos noted that the statutes require that if the request is made, the Commission will have to leave the record open for 7 days, which will close at 5:00 p.m. on April 29th. All documents must be received in the City office by that date. He suggested an additional seven days (until May 6th) for folks to respond to any new evidence submitted. Within that timeframe, the Commission can ask staff or the applicant to provide facts of finding for approval and the appellant to prepare findings for denial by 5:00 p.m. on May 6th. Tokos said all materials would be forwarded to the Commission. Unless waived by the applicant, they would have seven days for final written argument. On May 13th, the Commission could hold deliberation and make a decision.

MOTION was made by Commissioner Fisher, seconded by Commissioner Small, to hold the record open for seven days for written testimony and follow the timeline suggested by Tokos. The motion carried unanimously in a voice vote. Deliberation on File No. 1-TIA-13-A will be on May 13th at 7:00 p.m. here in the Council Chambers.

F. New Business. No new business.

G. Unfinished Business. No unfinished business.

H. Director's Comments.

1. Reminder that the Volunteer Dinner is scheduled for 6:00 p.m. on April 23rd at the Oregon Coast Aquarium. Tokos hoped someone could make it to the dinner. He won't be able to. Small said that he would be at the dinner to represent the Planning Commission.

I. Adjournment. Having no further business to discuss, the meeting adjourned at 8:17 p.m.

Respectfully submitted,

Wanda Haney
Executive Assistant

Sean T. Malone

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May 6, 2013

Via Email

Derrick Tokos, Community Development Director
Newport Community Development Department,
169 SW Coast Highway
Newport, OR 97365
(541) 574-0626
d.tokos@newportoregon.gov

re: Rebuttal Argument from ORCA et al. Appeal of Community Development Director's March 11, 2013, Final Order, Approving the Teevin Bros. Traffic Impact Analysis (File No. 1-TIA-13).

At the appeal hearing held on April 22, 2013, the Community Development Director stated that the issue of geologic hazards was not relevant to the TIA. The Community Development Director's determination is incorrect. Referring to the Geologic Hazard Map from "DOGAMI Open File Report OFR O-04-09, Evaluation of Coastal Erosion Hazard Zones Along Dune and Bluff Backed Shorelines in Lincoln County, Oregon," the northern part of the proposed log yard contains "other landslide hazard areas." *See* Exhibit A (Excerpt of Geologic Hazard Map)¹. Figure 2 of the Revised TIA from Kittleson & Associates indicates that the area identified as "other landslide hazard areas" will be used as part of the development. *See* Exhibit B (Excerpt of Revised TIA, Figure 2). Specifically, the area identified as "other landslide hazard areas" will be used as a "Log Roll-Out Area (Sort & Scale)." Accordingly, pursuant to NMC 14.21.030, the Applicant must obtain a geologic permit. The applicant has not obtained a geologic permit, and, therefore, the Applicant must comply with NMC 14.21.020(C). Pursuant to NMC 14.21.020(C), "[i]n circumstances where property owner establishes or a Geologic Report identifies that development, construction, or site clearing (including tree removal) will occur outside of a bluff or dune-backed shoreline hazard zone or landslide risk areas, as defined above, no further review is required under this Section 14.21.001." The applicant has not complied with NMC 14.21.020(C) though the development clearly contains "other landslide

¹ The exhibit excerpts attached to this submission have been previously submitted into the record. The excerpts attached hereto are provided as a matter of convenience.

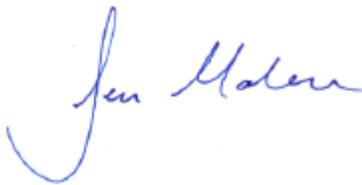
hazard areas.” The Community Development Director’s conclusion that the issue of geologic hazards is not relevant is incorrect, and the Community Development Director’s decision must be reversed.

ORCA also submitted a public notice for File No. 1-PAR-13, a partition that is subject to geologic hazard requirements and near the proposed log yard. This demonstrates that geologic hazards are relevant to the development of the proposed log yard.

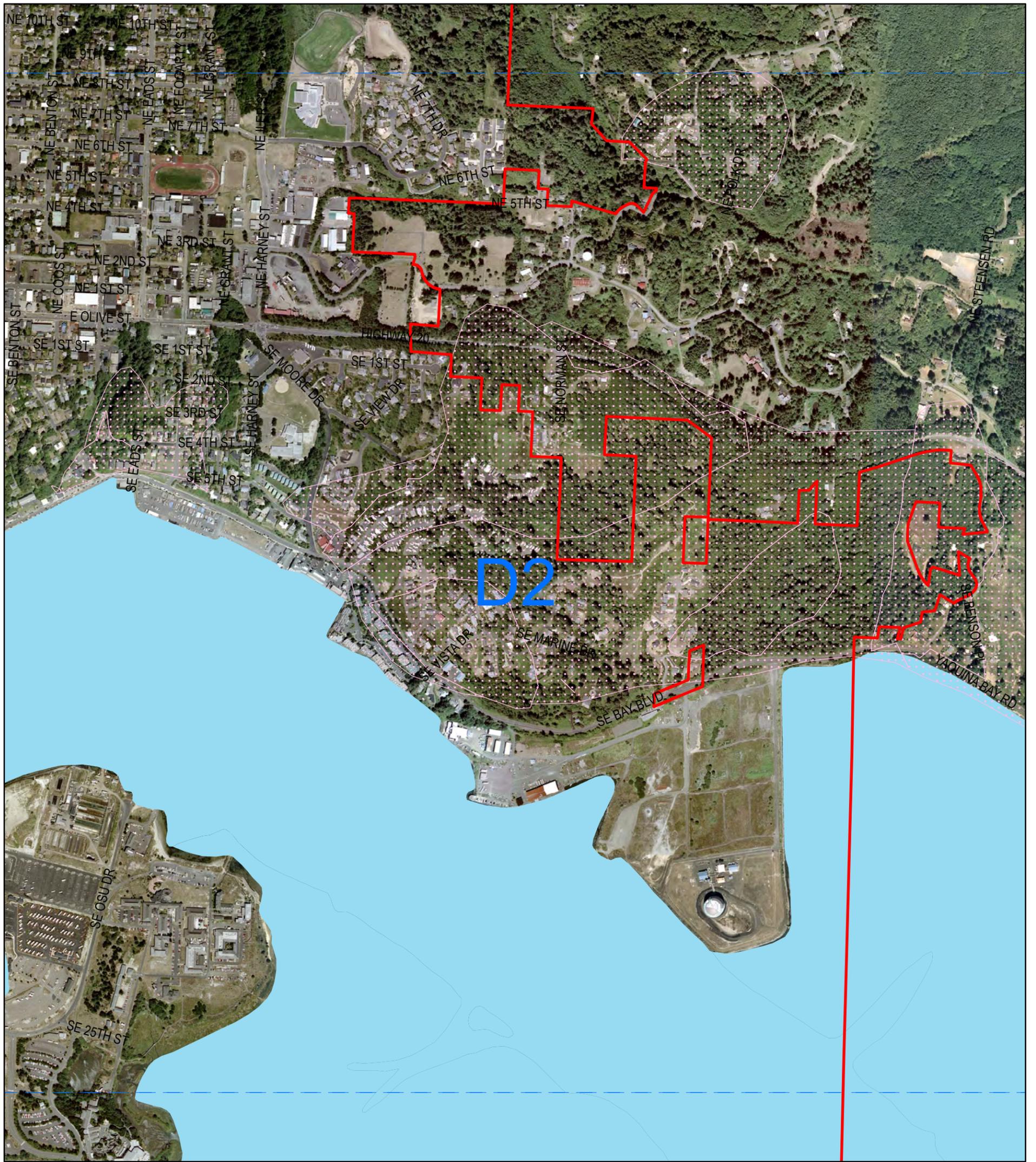
During the appeal hearing, the City’s Engineer stated that the springs located under Moore Road are “not something that would have a detrimental impact on the structure of the highway,” and that “the presence of water in and of itself is not something that would impact the ability of the road to handle truck traffic.” Petitioners submitted a memo from ODOT regarding the Hooskanaden Landslide, and, in that memo, ODOT stated that “[t]he ground surface, both above and below the highway, was extensively disturbed with tension cracks, folds, grabens and hummocks. Groundwater was found flowing from the many cracks throughout the slide mass.” Thus, as with the Hooskanaden Landslide, the springs under Moore Road have the potential to trigger a landslide, and the ODOT memo is further evidence that geologic hazards are relevant.

If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink that reads "Sean T. Malone". The signature is written in a cursive style with a large, sweeping initial "S".

Sean T. Malone
Counsel for Oregon Coast Alliance



**City of Newport
Community Development Department**

169 SW Coast Highway
Newport, OR 97365

Phone: 1.541.574.0626
Fax: 1.541.574.0644



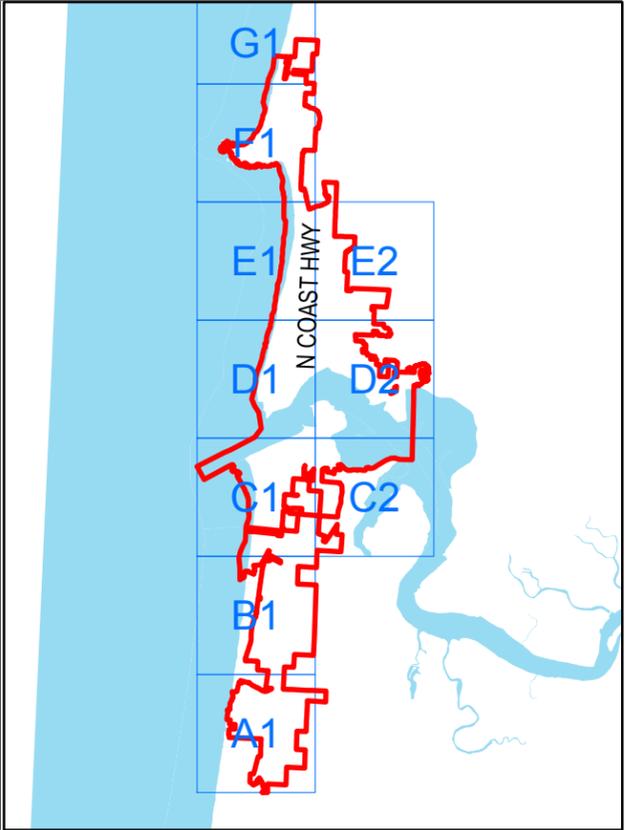
GEOLOGIC HAZARDS NEWPORT, OR

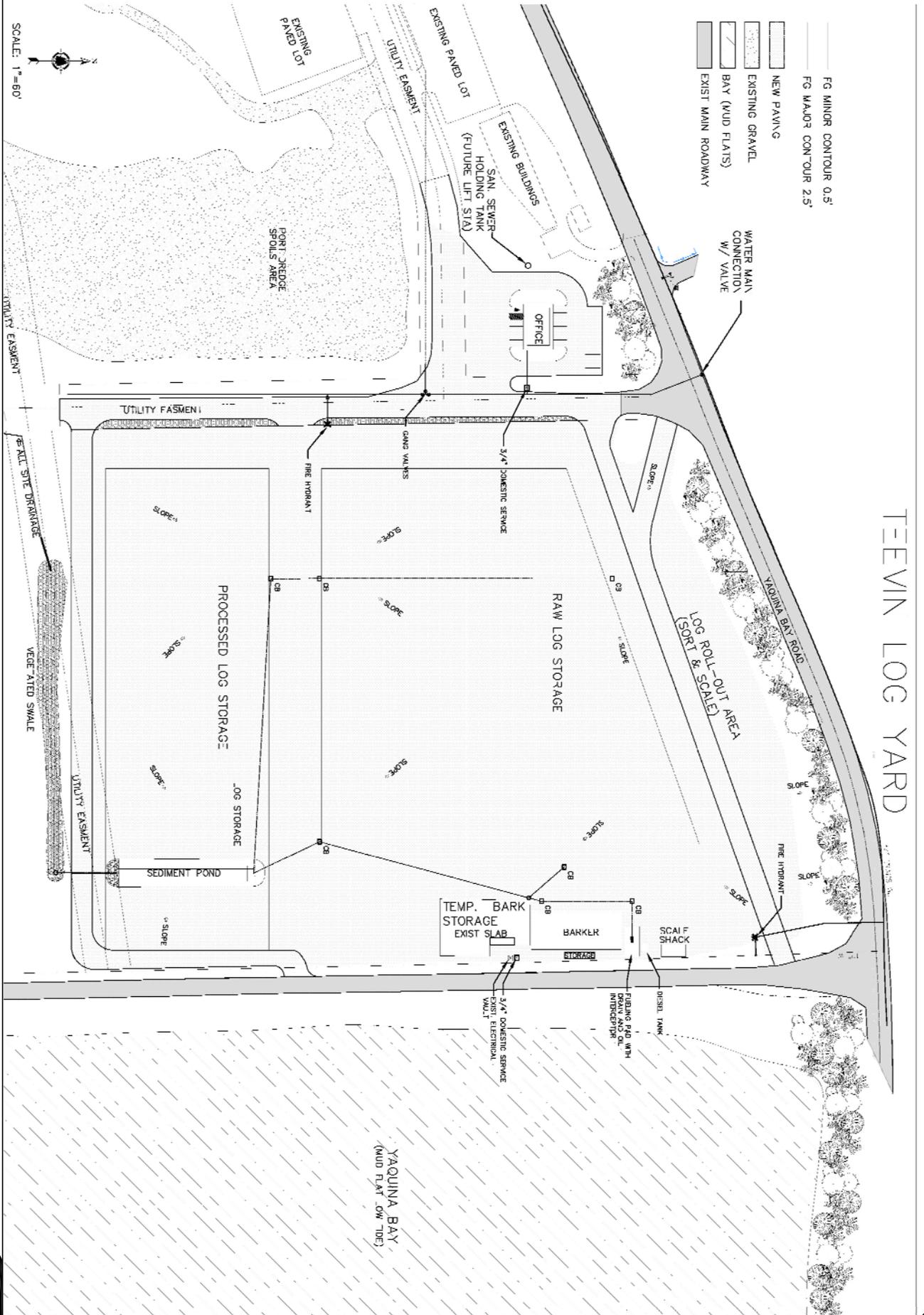
-  Newport City Boundary
-  Active Erosion Hazard Zone
-  Active Landslide Hazard Areas
-  High Risk Bluff Hazard Zone
-  High Risk Dune Hazard Zone
-  Other Landslide Hazard Areas
-  Geologic Hazards Map Index



*Geologic Hazard information derived from:
DOGAMI Open File Report OFR O-04-09, Evaluation of Coastal
Erosion Hazard Zones Along Dune and Bluff Backed Shorelines
in Lincoln County, Oregon*

This map is for informational use only and has not been prepared for, nor is it suitable for legal, engineering, or surveying purposes. It includes data from multiple sources. The City of Newport assumes no responsibility for its completion or use and users of this information are cautioned to verify all information with the the Newport Community Development Department.





TEEVIN LOG YARD

PROPOSED SITE PLAN
NEWPORT, OREGON

FIGURE
2

**BEFORE THE PLANNING COMMISSION
OF THE CITY OF NEWPORT,
COUNTY OF LINCOLN, STATE OF OREGON**

**IN THE MATTER OF LAND USE FILE NO. 1-TIA-13-A,)
APPLICATION FOR A TRAFFIC IMPACT ANALYSIS, AS) **FINAL**
SUBMITTED BY TEEVIN BROS. LAND & TIMBER CO.) **ORDER**
(PREPARED BY KITTELSON & ASSOC., INC.))**

ORDER DENYING A TRAFFIC IMPACT ANALYSIS pursuant to Newport Municipal Code (NMC) Chapter 14.45 for Teevin Bros. proposed log yard located at 1650 SE Bay Blvd. (identified in Lincoln County Assessment records as Tax Lots 100 and 101, Section 9D, Township 11 South, R11 West, Willamette Meridian).

WHEREAS:

- 1.) The Planning Commission has duly accepted the application, filed consistent with the Newport Zoning Ordinance; and
- 2.) The Planning Commission has duly considered the request and has given proper and timely notice to affected property owners; and
- 3.) At the public hearing on said application, the Planning Commission received testimony and evidence; and
- 4.) At the conclusion of said public hearing, after consideration and discussion, upon a motion duly seconded, the Planning Commission **DENIED** the request.

THEREFORE LET IT BE RESOLVED by the City of Newport Planning Commission that the attached Findings of Fact and Conclusions (Exhibit "A") support the denial of the request for a Traffic Impact Analysis for the Teevin Bros. development.

BASED UPON THE ABOVE, the Planning Commission determines that the applicant in the request for a Traffic Impact Analysis as submitted in the application has not met the burden of demonstrating compliance with all of the applicable criteria and therefore a determination that the request is in conformance with the provisions of the Comprehensive Plan and the Zoning Ordinance of the City of Newport cannot be made.

Accepted and approved this 13th day of May, 2013.

James Patrick, Chair
Newport Planning Commission

Attest:

Wanda Haney
Executive Assistant

FINDINGS OF FACT and CONCLUSIONS OF LAW

Appeal of Community Development Director Decision File No. 1-TIA-13

Appellants: Oregon Coast Alliance, Michael and Christy Peterson, and the Landing Condominiums at Newport

Owner & Applicant: Teevin Bros. Land and Timber Co., LLC (Port of Newport and Rondy's and Associates, Inc., property owner).

BACKGROUND

An application from Teevin Bros. Land and Timber Co., LLC was submitted seeking City of approval of a Traffic Impact Analysis (TIA), pursuant to Chapter 14.45 of the Newport Municipal Code (NMC), was submitted on January 9, 2013. A completed application form and filing fee was received by the City on January 14, 2013, and the applicant supplemented the TIA with new information on February 12, 2013 and February 28, 2013. Lincoln County Assessment records list the property owners as the Port of Newport and Rondys and Associates, Inc. Property owned by Rondys and Associated, Inc. is leased by the Port of Newport.

The TIA was prepared by Diego Arguea, P.E., a planner with Kittleson & Associates, Inc., a transportation engineering and planning firm. A supplemental analysis was submitted by Ralph Dunham of Stuntzner Engineering and Forestry, LLC.

The applicant proposes to develop a log yard at 1650 SE Bay Blvd. The operations will encompass approximately 15 acres. County Assessment records identify the property as Tax Lots 100 and 101, Section 9D, Township 11 South, R11 West, Willamette Meridian.

The property is zoned I-3/"Heavy Industrial" on the City of Newport's Zoning Maps. This zoning designation authorizes heavy manufacturing and warehouse, freight movement, and distribution as permitted uses pursuant to NMC 14.03.070(8)(b) and 14.03.070(9). A log yard qualifies under both of these categories considering the manufacturing aspect (i.e., debarking and preparing logs for shipment) and the freight and distribution element of the operation (i.e., truck terminal).

On March 11, 2013, the Community Development Director for the City of Newport's Community Development Department issued a Final Order and Findings of Fact, approving the Traffic Impact Analysis (TIA), File No. 1-TIA-13, for Teevin Bros. Land and timber Co., LLC, Port of Newport and Rondys and Associates, Inc., property owners (Applicant). On March 22, 2013, Appellants Oregon Coast Alliance (ORCA), Michael and Christy Peterson, and the Landing at Newport Condominium Association filed an appeal of the Community Development Director's decision to the Planning Commission.

On April 22, 2013, the Planning Commission held a public hearing, accepted evidence, held the record open for additional evidence to April 29, 2013, accepted rebuttal until May 6, 2013, and reviewed the Community Development Director's decision *de novo*.

TRAFFIC IMPACT ANALYSIS CRITERIA

The Newport Municipal Code (NMC) Section 14.45.010/"Applicability" requires a TIA to be submitted under any one or more of the following circumstances:

- A. To determine whether a significant effect on the transportation system would result from a proposed amendment to the Newport Comprehensive Plan or to a land use regulation, as specified in OAR 660-012-0060.
- B. ODOT requires a TIA in conjunction with a requested approach road permit, as specified in OAR 734-051-3030(4).
- C. The proposal may generate 100 PM peak-hour trips or more onto city streets or county roads.
- D. The proposal may increase use of any adjacent street by 10 vehicles or more per day that exceeds 26,000 pound gross vehicle weight.
- E. The proposal includes a request to use Trip Reserve Fund trips to meet the requirements of NMC Chapter 14.43 (South Beach Transportation Overlay Zone).

NMC Section 14.45.020/"Traffic Impact Analysis Requirements" lists the following requirements for a Traffic Impact Analysis:

- A. Pre-application conference. The applicant shall meet with the City Engineer prior to submitting an application that requires a TIA. This meeting will be coordinated with ODOT when an approach road to US-101 or US-20 serves the property so that the completed TIA meets both City and ODOT requirements.
- B. Preparation. The submitted TIA shall be prepared by an Oregon Registered Professional Engineer that is qualified to perform traffic engineering analysis and will be paid for by the applicant.
- C. Typical Average Daily Trips and Peak Hour Trips. The latest edition of the Trip Generation Manual, published by the Institute of Transportation Engineers (ITE) shall be used to gauge PM peak hour vehicle trips; unless a specific trip generation study that is approved by the City Engineer indicates an alternative trip generation rate is appropriate. An applicant may choose, but is not required, to use a trip generation study as a reference to determine trip generation for a specific land use which is not well represented in the ITE Trip Generation Manual and for which similar facilities are available to count.

D. Intersection-level analysis. Intersection-level analysis shall occur at every intersection where 50 or more peak hour vehicle trips can be expected as a result of the proposal.

E. Transportation Planning Rule compliance. The TIA shall comply with the requirements of OAR 660-012-000.

F. Structural conditions. The TIA shall address the condition of the impacted roadways and identify structural deficiencies or reduction in useful life of existing facilities related to the proposed development.

G. Heavy vehicle routes. If the proposal includes an increase in 10 or more of the vehicles described in Section 14.45.010(D), the TIA shall address the provisions of Section 14.45.020(F) for the routes used to reach US-101 or US-20.

Pursuant to NMC Section 14.45.030/”Study Area,” the following facilities shall be included in the study area for all TIAs:

A. All site-access points and intersections (signalized and unsignalized) adjacent to the proposed site. If the proposed site fronts an arterial or collector, the analysis shall address all intersections and driveways along the site frontage and within the access spacing distances extending out from the boundary of the site frontage.

B. Roads through and adjacent to the site.

C. All intersections needed for signal progression analysis.

D. In addition to these requirements, the City Engineer may require analysis of any additional intersections or roadway links that may be adversely affected as a result of the proposed development.

When a TIA is required, the applicable review process will be the same as that accorded to the underlying land use proposal. If a land use action is not otherwise required, then approval of the proposed development shall follow a Type II decision-making process.

Pursuant to NMC Section 14.45.050/”Approval Criteria,” when a TIA is required, a development proposal is subject to the following criteria, in addition to all criteria otherwise applicable to the underlying proposal:

A. The analysis complies with the requirements of NMC 14.45.020;

B. The TIA demonstrates that adequate transportation exist to serve the proposed development or identifies mitigation measures that resolve the traffic problems in a manner that is satisfactory to the City Engineer and, when state highway facilities are affected, to ODOT; and

C. Where a proposed amendment to the Newport Comprehensive Plan or land use regulation would significantly affect an existing or planned transportation facility, the TIA must demonstrate that solutions have been developed that are consistent with the provisions of OAR 660-012-0060; and

D. For affected non-highway facilities, the TIA establishes that any Level of Service standards adopted by the City have been met, and development will not cause excessive queuing or delays at affected intersections, as determined in the City Engineer's sole discretion; and

E. Proposed public improvements are designed and will be constructed to the standards specified in NMC Chapter 14.44 (Transportation Standards) or Chapter 13.05 (Subdivision and Partition), as applicable.

GEOLOGIC HAZARDS OVERLAY CRITERIA

Pursuant to NMC Chapter 14.21/"Geologic Hazards Overlay," the purpose is to promote the public health, safety, and general welfare by minimizing public and private losses due to earth movement hazards and limiting erosion and related environmental damage, consistent with Statewide Planning Goals 7 and 18, and the Natural Features Section of the Newport Comprehensive Plan.

NMC 14.21.020/"Applicability of Geologic Hazards Regulations" provides that

"A. The following are areas of known geologic hazards or are potentially hazardous and are therefore subject to the requirements of Section 14.21.001:

1. Bluff or dune backed shoreline areas within high or active hazard zones identified in the Department of Geology and Mineral Industries (DOGAMI) Open File Report O-04-09 Evaluation of Coastal Erosion Hazard Zones along Dune and Bluff Backed Shorelines in Lincoln County, Oregon: Cascade Head to Seal Rock. Technical Report to Lincoln County, dated 2004.
2. Active or potential landslide areas, prehistoric landslides, or other landslide risk areas identified in the DOGAMI Open File Report-O-04-09.
3. Any other documented geologic hazard area on file, at the time of inquiry, in the office of the City of Newport Community Development Department.

A "documented geologic hazard area" means a unit of land that is shown by reasonable written evidence to contain geological characteristics/conditions which are hazardous or potentially hazardous for the improvement thereof.

- B. The DOGAMI Open File Report O-04-09 is not intended as a site specific analysis tool. The City will use DOGAMI Open File Report O-04-09 to identify when a Geologic Report is needed on property prior to development. A Geologic Report is needed on property prior to development. A Geologic Report that applies to a specific property and that identifies a proposed development on the property as being in a different hazard zone than that identified in DOGAMI Open File Report O-04-09, shall control over DOGAMI Open File Report O-0409 and shall establish the bluff or dune-backed shoreline hazard zone or landslide risk area that applies to that specific property. The time restriction set forth in subsection 14.21.030 shall not apply to such determinations.
- C. In circumstances where a property owner establishes or a Geologic Report identifies that development, construction, or site clearing (including tree removal) will occur outside of a bluff or dune-backed shoreline hazard zone or landslide risk areas, as defined above, no further review is required under this Section 14.21.001.
- D. If the results of a Geologic Report are substantially different than the hazard designations contained in DOGAMI Open File Report O-04-09 then the city shall provide notice to the Department of Geology and Mineral Industries (DOGAMI) and Department of Land Conservation and Development (DLCD). The agencies will have 14 days to provide comments and the city shall consider agency comments and determine whether or not it is appropriate to issue a Geologic Permit.”

NMC 14.21.030/”Geologic Permit Required,” provides:

“All persons proposing development, construction, or site clearing (including tree removal) within a geologic hazard area as defined in 14.21.010 shall obtain a Geologic Permit. The Geologic Permit may be applied for prior to or in conjunction with a building permit, grading permit, or any other permit required by the city.

Unless otherwise provided by city ordinance or other provision of law, any Geologic Permit so issued shall be valid for the same period of time as a building permit issued under the Uniform Building Code then in effect.”

ISSUES ON APPEAL, FINDINGS OF FACT, AND CONCLUSIONS OF LAW

- I. Intersections and Driveways Required for Analysis were not Included in the Traffic Impact Analysis

Appellants argue that the TIA did not analyze all intersections and driveways as required by NMC 14.45.030(A). NMC 14.45.030(A) provides that the TIA shall include the following facilities:

“All site-access points and intersections (signalized and unsignalized) adjacent to the proposed site. If the proposed site fronts an arterial or collector, the analysis shall address all intersections and driveways along the site frontage and within the access spacing distances extending out from the boundary of the site frontage.”

Yaquina Bay Boulevard is classified as a minor arterial roadway. NMC 14.14.120(D) provides that “Driveway accesses onto Arterial streets shall be spaced a distance of 500 feet where practical, as measured from the center of driveway to center of driveway.”

On behalf of the applicant, Kittleson and Associates submitted the following response:

“The study intersections and time periods were scoped with City staff. Ultimately, City’s interpretation of code is what determines study intersections and time periods, not a third party review who has not been part of the public process from the beginning of the project.”

With regard to NMC 14.45.030, the Community Development Director concluded:

“Section 14.45.030/”Study Area” identifies the types of facilities that must be included as part of the study for all Traffic Impact Analysis (TIA) reports. This includes all site-access points and intersections (signalized and unsignalized) adjacent to the proposed log yard; roads through and adjacent to the site; all intersections needed for signal progression analysis, and any additional intersections or roadway links that the City Engineer believes may be adversely affected as a result of the proposed development. The City Engineer identified intersections and roadways requiring analysis in the pre-application meeting. The TIA prepared by Kittleson & Associates, Inc., and letter from Stuntzner Engineering and Forestry, LLC included these facilities in the scope of their analysis.”

The Planning Commission finds that the Community Development Director concedes that “all site-access points and intersections (signalized and unsignalized) adjacent to the proposed log yard” must be addressed, but failed to provide reasonable, non-conclusory findings addressing or rebutting Appellants’ argument. The Planning Commission also finds that Kittleson & Associates failed to provide a response to the Appellants’ argument. The Planning Commission finds that, at the very least, SE Running Spring is an unsignalized intersection adjacent to the proposed log yard, and, therefore, it must be addressed in the TIA. The Community Development Director’s decision with regard to this argument is reversed.

II. Traffic Counts Missing “Significant Impact” of Crab Season

Appellants argue that the TIA failed to consider a significant impact on truck traffic. Appellants cite an email from the City Engineer, Timothy Gross, directing applicant in an email dated December 10, 2012, to consider the peak fishing season because “[t]he fishing season has a significant impact on the truck traffic. . . . I think they should be taken into consideration for the study.” Mr. Gross identifies December 1st as the beginning of the crab season, but evidence in the record clearly demonstrates that the crab season was delayed until December 30th. The record also demonstrates that the Applicant conducted its turning movement counts in early to mid-December, thus failing to include the “significant impact” fishing/crab season.

The Applicant countered by arguing that the “east-west traffic volumes were increased by 28% to account for seasonal variation,” and concedes that “the focus was on Hwy 20 for the seasonal adjustment.” The Applicant further argued that “[i]t should be noted that although crabbing season attracts some seasonal traffic to the area, the impact is not as large as other seasonal variations, as represented by data collected annually by ODOT.”

Despite the Applicant’s argument to the contrary, the Planning Commission cannot ignore the City Engineer’s own statements regarding the “significant impact” from the fishing/crab season on truck traffic. While the Applicant may have adjusted and increased east-west traffic volumes by 28%, the Planning Commission finds no evidence that this increase was intended to account for fishing/crab season, and, therefore, had the Applicant accounted for this “significant impact,” then truck traffic from the crab/fish season would be in addition to the 28% increase. The Planning Commission finds that the Applicant’s analysis failed to consider a “significant impact” as identified by the City Engineer, and, therefore, the TIA is deficient. Because the City Engineer identified crab season as a “significant impact,” the Applicant was obligated to consider its impact on the TIA.

III. Intersection Sight Distance Limited at Site Driveway

Appellants argue that the TIA lacks adequate intersection sight distance, and, therefore, exiting trucks do not have sufficient sight distance to ensure that oncoming drivers will not have to slow down to avoid a collision. The Applicant argued that the code language describes that stopping sight distance must be met, not intersection sight distance, and that the intersection has sufficient stopping distance of 575 feet. The Planning Commission finds that code requires adequate stopping sight distance, not adequate intersection distance.

IV. Structural Conditions Analysis Incomplete and Fails to Satisfy Criteria

Appellants argue that the structural conditions analysis is incomplete. NMC 14.45.020(F) provides: “The TIA shall address the condition of the impacted roadways and identify structural deficiencies or reduction in the useful life of existing facilities related to the proposed development.” Appellants further argue that the pavement analysis fails to verify that trucks generated by the proposed development will not degrade the pavement condition of the roadways, reduce the life of the facilities, omits impact number and/or weight of vehicles, and

omits existing surface conditions. Appellants also point to the TIA, which concedes that the data collected is “not intended to address pavement life or for use as a condition survey.”

The Applicant, through their April 29, 2013, Stuntzner memo, argued that it was “tasked with the evaluation of these core samples in relation to suitability for highway legal truck traffic” and had the “expressed goal of verifying the existing section was constructed in a manner which was adequate for the expected use which included highway legal truck traffic.” The Stuntzner memo concludes “that it was constructed with adequate structural section to allow truck traffic.” The Planning Commission finds that the Stuntzner memo does not address the criteria in the code, which requires that the TIA address the “condition of the impacted roadways.” Instead, the Stuntzner memo states that the road was constructed to allow for truck traffic. The Planning Commission finds that Stuntzner memo fails to address the current conditions of the impacted roadways. The Planning Commission finds that regardless of what purpose the road was constructed to serve, roads deteriorate over time, and the current conditions must be addressed in order to gauge the impact from the new, incremental increase in truck traffic. The Planning Commission finds that the TIA is deficient for failing to “address the condition of the impacted roadways.”

Appellants also argue that pavement analysis fails to address “the reduction in the useful life of existing facilities related to the proposed development.” NMC 14.45.020(F). The Applicant, through the Stuntzner memo dated February 27, 2013, conceded that it was not intended to address “pavement life or for use as a condition survey.” In addition, the April 29, 2013, Stuntzner memo argued:

“The question has been raised regarding useful life analysis, and why that was not completed. The answer is simple. Roadways are designed and constructed for traffic, and it is both reasonably assumed based upon use (with the Port Facilities and other industrial applications accessed by this roadway) and was verified by pavement section that this roadway was constructed to allow more than casual truck traffic. No land use changes were occurring with the proposed use. The roadway is functioning today as an industrial access road, and has not apparently reached it [sic] terminal serviceability level as defined by AASHTO; therefore no life cycle analysis (related to design of new pavement or to address land use change) was warranted.”

(emphasis added). Notably, the Planning Commission finds that the April 29, 2013, Stuntzner memo unequivocally concedes that “no life cycle analysis” was prepared. The Planning Commission finds that the NMC 14.45.020(F) unequivocally requires that “the reduction in the useful life of existing facilities related to the proposed development” be addressed in a TIA. The Planning Commission further finds that the Stuntzner memo clearly concedes that the TIA did not address the reduction in the useful life of existing facilities related to the proposed development. The Planning Commission concludes the TIA is inadequate because it fails to conform to the clear requirements of NMC 14.45.020(F).

V. Highway 20/Moore Drive Operates Near ODOT Mobility Standard

Appellants next cite to NMC 14.45.050, arguing that the TIA must demonstrate “that adequate transportation facilities exist to serve the proposed development or identifies mitigation measures that resolve the traffic safety problems in a manner that is satisfactory... to ODOT,” and NMC 14.45.020, which requires that the TIA “meets both City and ODOT requirements.” Appellants cite to the ODOT Analysis Procedures Manual, which provides: “[u]sing a winter count with a high seasonal factor to represent the peak summer period will likely not represent traffic turning movements accurately, as driving patterns change in the winter compared to the summer.” Appellants argue that the intersection of Highway 20/Moore Drive, Highway 20 eastbound and westbound through traffic volumes were seasonally adjusted, thus failing to represent traffic turning movements accurately. Appellants also argue that traffic during December is estimated to be roughly 30 percent lower than the peak traffic season, but the traffic on Moore Drive was not adjusted to account for the likelihood that Moor Drive Traffic is higher during the summer season or during peak crab/fishing season.

The Applicant responded that the Highway 20/Moore Drive intersection is forecast to meet ODOT standard with the proposed site added future traffic, and that the intersection is not considered “significantly impacted,” thus not warranting investigation under ODOT standards.

The Planning Commission finds that NMC 14.45.020 requires compliance with ODOT requirements. The Planning Commission cannot ignore ODOT’s determination in the ODOT Analysis Procedures Manual that using a winter count with a high seasonal factor to represent peak summer period will not accurately represent traffic turning movements. Further, the Planning Commission cannot ignore that the Applicant used such a method here. Therefore, the Planning Commission finds that the Applicant’s TIA does not accurately represent traffic turning movements, and the TIA is, therefore, deficient.

VI. Geologic Hazard Permit

Appellants argue that a Geologic Hazard Permit is required under NMC Chapter 14.21/”Geologic Hazards Overlay.” Specifically, Appellants argue that a portion of the log yard falls within an area identified as “Other Landslide Hazard Areas” on the DOGAMI Open File Report OFR O-04-09, Evaluation of Coastal Erosion Hazard Zones Along Dune and Bluff Backed Shorelines in Lincoln County, Oregon.” Specifically, Appellants argue that the north-northeast portion of the proposed log yard is within the “Other Landslide Hazard Areas.” The Planning Commission finds that the north-northeast portion of the proposed log yard between Yaquina Bay Boulevard and the northernmost gravel road running east-west on the proposed log yard contains “Other Landslide Hazard Areas.” This is evident in the DOGAMI Open File Report O-04-09. Figure 2 from the TIA demonstrates that this site is proposed for a “Log Roll-Out Area (Sort & Scale).”

The Planning Commission finds that NMC 14.21.030 requires that “[a]ll persons proposing development, construction, or site clearing (including tree removal) within a geologic hazard area as defined in 14.21.010 shall obtain a Geologic Permit. The Geologic Permit may be applied for prior to or in conjunction with a building permit, grading permit, or any other permit required by the city.” The Planning Commission also finds that NMC 14.21.020 requires compliance with the Geologic Hazards Overlay section if “[a]ny other documented geologic hazard area on file, at the time of the inquiry, in the office of the City of Newport Community Development Department.” NMC 14.21.020(A)(3).

Appellants also argue that if the Applicant does obtain a geologic report, it must comply with NMC 14.21.020(C), which provides:

“In circumstances where a property owner establishes or a Geologic Report identifies that development, construction, or site clearing (including tree removal) will occur outside of a bluff or dune-backed shoreline hazard zone or landslide risk areas, as defined above, no further review is required under this Section 14.21.001.”

The Planning Commission finds that the Applicant has not established or provided a Geologic Report that identifies that development, construction, or site clearing (including tree removal) will occur outside of a shoreline hazard zone or landslide risk area. Because it is clear to the Planning Commission that a portion of the proposed log development falls within “Other Landslide Hazard Areas,” the Planning Commission finds either that the Appellant must obtain a Geologic Permit or comply with NMC 14.21.020(C).

OVERALL CONCLUSION

The appeal of the Community Development Director’s decision regarding File No. 1-TIA-13 is **REVERSED**.

**BEFORE THE PLANNING COMMISSION
OF THE CITY OF NEWPORT,
COUNTY OF LINCOLN, STATE OF OREGON**

**IN THE MATTER OF LAND USE FILE NO. 1-TIA-13-A,)
APPLICATION FOR A TRAFFIC IMPACT ANALYSIS, AS) **FINAL**
SUBMITTED BY TEEVIN BROS. LAND & TIMBER CO.) **ORDER**
(PREPARED BY KITTELSON & ASSOC., INC.))**

ORDER APPROVING A TRAFFIC IMPACT ANALYSIS pursuant to Newport Municipal Code (NMC) Chapter 14.45 for Teevin Bros. proposed log yard located at 1650 SE Bay Blvd. (identified in Lincoln County Assessment records as Tax Lots 100 and 101, Section 9D, Township 11 South, R11 West, Willamette Meridian).

WHEREAS:

- 1.) The Planning Commission has duly accepted the application, filed consistent with the Newport Zoning Ordinance; and
- 2.) The Planning Commission has duly considered the request and has given proper and timely notice to affected property owners; and
- 3.) At the public hearing on said application, the Planning Commission received testimony and evidence; and
- 4.) At the conclusion of said public hearing, after consideration and discussion, upon a motion duly seconded, the Planning Commission **APPROVED** the request.

THEREFORE LET IT BE RESOLVED by the City of Newport Planning Commission that the attached Findings of Fact and Conclusions (Exhibit "A") support the approval of the request for a Traffic Impact Analysis for the Teevin Bros. development with the following conditions(s):

1. Approval of this land use permit is based on the submitted materials from Kittleson & Associates, Inc., dated February 12, 2013 and April 29, 2013, and Stuntzner Engineering and Forestry, LLC, dated February 27, 2013 and April 29, 2013. No work shall occur under this permit other than that which is specified within these documents. It shall be Teevin Bros. responsibility to comply with these documents and the limitations of approval described herein.
2. Teevin Bros. shall complete the sight distance improvements recommended in the TIA prepared by Kittleson & Associates, Inc., dated February 12, 2013, prior to truck operations occurring on the site.

3. Prior to commencing truck operations, Teevin Bros. shall coordinate with Lincoln County to repair the section of the Yaquina Bay Road that is settling along the planned haul route.

BASED UPON THE ABOVE, the Planning Commission determines that the request for a Traffic Impact Analysis as submitted in the application is in conformance with the provisions of the Comprehensive Plan and the Zoning Ordinance of the City of Newport with the attached conditions(s) of approval.

Accepted and approved this 13th day of May, 2013.

James Patrick, Chair
Newport Planning Commission

Attest:

Wanda Haney
Executive Assistant

EXHIBIT "A"

Case File No. 1-TIA-13-A

FINDINGS OF FACT

1. An application seeking City approval of a Traffic Impact Analysis (TIA), pursuant to Chapter 14.45 of the Newport Municipal Code (NMC), was submitted on January 9, 2013. A completed application form and filing fee was received by the City on January 14, 2013 and the TIA was supplemented with new information on February 12, 2013 and February 28, 2013.
2. The applicant is Teevin Bros. Land and Timber Co., LLC. Lincoln County Assessment records list the property owners as the Port of Newport and Rondys and Associates, Inc. Property owned by Rondys and Associates, Inc. is leased by the Port of Newport.
3. The TIA was prepared by Diego Arguea, P.E., Senior Engineer, and Dan Seeman, Principal Planner, with Kittelson & Associates, Inc., a Transportation Engineering and Planning firm out of Portland, Oregon. Supplemental analysis of the suitability of SE Moore Drive (a.k.a. John Moore Road) and SE Bay Boulevard was performed by Ralph Dunham, P.E., Project Engineer, with Stuntzner Engineering and Forestry, LLC out of Coos Bay, Oregon.
4. The applicant is proposing to establish a log yard at 1650 SE Bay Blvd. The operation will encompass approximately 15 acres. County Assessment records identify the property as Tax Lots 100 and 101, Section 9D, Township 11 South, R11 West, Willamette Meridian.
5. The property is zoned I-3/"Heavy Industrial" on the City of Newport's Zoning Maps. This zoning designation authorizes heavy manufacturing and warehouse, freight movement, and distribution as permitted uses, pursuant to NMC 14.03.070(8)(b) and 14.03.070(9). A log yard qualifies under both of these categories considering the manufacturing aspect (i.e. debarking and preparing logs for shipment) and the freight and distribution element of the operation (i.e. truck terminal).
6. The Newport Municipal Code (NMC) Section 14.34.010/"Applicability" requires a TIA to be submitted under any one or more of the following circumstances:
 - A. To determine whether a significant effect on the transportation system would result from a proposed amendment to the Newport Comprehensive Plan or to a land use regulation, as specified in OAR 660-012-0060.
 - B. ODOT requires a TIA in conjunction with a requested approach road permit, as specified in OAR 734-051-3030(4).
 - C. The proposal may generate 100 PM peak-hour trips or more onto city streets or county roads.
 - D. The proposal may increase use of any adjacent street by 10 vehicles or more per day that exceeds 26,000 pound gross vehicle weight.
 - E. The proposal includes a request to use Trip Reserve Fund trips to meet the requirements of NMC Chapter 14.43 (South Beach Transportation Overlay Zone).

7. NMC Section 14.45.020/“Traffic Impact Analysis Requirements” lists the following requirements for a Traffic Impact Analysis:
 - A. Pre-application conference. The applicant shall meet with the City Engineer prior to submitting an application that requires a TIA. This meeting will be coordinated with ODOT when an approach road to US-101 or US-20 serves the property so that the completed TIA meets both City and ODOT requirements.
 - B. Preparation. The submitted TIA shall be prepared by an Oregon Registered Professional Engineer that is qualified to perform traffic engineering analysis and will be paid for by the applicant.
 - C. Typical Average Daily Trips and Peak Hour Trips. The latest edition of the Trip Generation Manual, published by the Institute of Transportation Engineers (ITE) shall be used to gauge PM peak hour vehicle trips; unless a specific trip generation study that is approved by the City Engineer indicates an alternative trip generation rate is appropriate. An applicant may choose, but is not required, to use a trip generation study as a reference to determine trip generation for a specific land use which is not well represented in the ITE Trip Generation Manual and for which similar facilities are available to count.
 - D. Intersection-level analysis. Intersection-level analysis shall occur at every intersection where 50 or more peak hour vehicle trips can be expected as a result of the proposal.
 - E. Transportation Planning Rule compliance. The TIA shall comply with the requirements of OAR 660-012-000.
 - F. Structural conditions. The TIA shall address the condition of the impacted roadways and identify structural deficiencies or reduction in the useful life of existing facilities related to the proposed development.
 - G. Heavy vehicle routes. If the proposal includes an increase in 10 or more of the vehicles described in Section 14.45.010(D), the TIA shall address the provisions of Section 14.45.020(F) for the routes used to reach US-101 or US-20.
8. Pursuant to NMC Section 14.45.030/“Study Area,” the following facilities shall be included in the study area for all TIAs:
 - A. All site-access points and intersections (signalized and unsignalized) adjacent to the proposed site. If the proposed site fronts an arterial or collector street, the analysis shall address all intersections and driveways along the site frontage and within the access spacing distances extending out from the boundary of the site frontage.
 - B. Roads through and adjacent to the site.
 - C. All intersections needed for signal progression analysis.
 - D. In addition to these requirements, the City Engineer may require analysis of any additional intersections or roadway links that may be adversely affected as a result of the proposed development.

9. When a TIA is required, the applicable review process will be the same as that accorded to the underlying land use proposal. If a land use action is not otherwise required, as is the subject circumstance, then approval of the proposed development shall follow a Type II decision-making process. Pursuant to NMC 14.52.030(C), the Community Development Director is the initial approving authority for a Type II land use action.
10. Pursuant to NMC Section 14.45.050/ "Approval Criteria," when a TIA is required, a development proposal is subject to the following criteria, in addition to all criteria otherwise applicable to the underlying proposal:
 - A. The analysis complies with the requirements of NMC 14.45.020;
 - B. The TIA demonstrates that adequate transportation facilities exist to serve the proposed development or identifies mitigation measures that resolve the traffic safety problems in a manner that is satisfactory to the City Engineer and, when state highway facilities are affected, to ODOT; and
 - C. Where a proposed amendment to the Newport Comprehensive Plan or land use regulation would significantly affect an existing or planned transportation facility, the TIA must demonstrate that solutions have been developed that are consistent with the provisions of OAR 660-012-0060; and
 - D. For affected non-highway facilities, the TIA establishes that any Level of Service standards adopted by the City have been met, and development will not cause excessive queuing or delays at affected intersections, as determined in the City Engineer's sole discretion; and
 - E. Proposed public improvements are designed and will be constructed to the standards specified in NMC Chapter 14.44 (Transportation Standards) or Chapter 13.05 (Subdivision and Partition), as applicable.
11. On March 11, 2013, the Community Development Director issued a Final Order and Findings of Fact approving the TIA application. The decision was subject to a 15 day appeal period, as provided by NMC 14.52.100. The deadline for filing an appeal was March 26, 2013.
12. A timely appeal of the Director's decision was filed on March 22, 2013 by Sean Malone, attorney, on behalf of the Oregon Coast Alliance, Michael and Christy Peterson, and The Landing at Newport Condominium Association. The appeal documents list the grounds for appeal as follows:
 - A. Inadequate traffic impact analysis, including but not limited to:
 - i. Failure to demonstrate that adequate transportation facilities exist to serve the proposed development, NMC 14.45.050(B);
 - ii. Failure to demonstrate that the proposed development will not cause excessive queuing or delays at affected intersections, NMC 14.45.050(D);
 - iii. Limited intersection sight distance without proposed mitigation;

- iv. Failure to sufficiently evaluate queuing;
- v. Insufficient analysis of structural pavement conditions, NMC 14.45.020(F);
- vi. Failure to utilize industry standard for trip generation estimates, NMC 14.45.020;
- vii. Failure to satisfy Oregon Department of Transportation requirements, NMC 14.45.020.

B. Failure to account for increase in traffic during crab season.

C. Failure to address geologic hazards issues, NMC 13.05.070(A)(10).

D. Failure to prepare a geologic hazards report, NMC 13.05.070(A)(10).

E. Failure to demonstrate that the applicant will take erosion control measures, Newport Zoning Ordinance Section 2-4-7.045.

F. Failure to submit sufficient information regarding geologic hazards, NMC 13.050070(A)(10).

13. The appellants requested, and the Newport Municipal Code requires, that an appeal of a land use decision that was made without a public hearing be conducted as a *denovo* proceeding (NMC 14.52.100(B)(1)). The City of Newport Planning Commission is the approval authority for an appeal of the Community Development Director's decision (14.52.030(B)(13)).

14. A hearing date for the appeal was scheduled for April 22, 2013. Direct mail notice of the hearing was provided to the applicant, appellant, adjoining property owners within 200 feet of the subject site, and all persons who provided written testimony prior to the Director's decision being rendered (NMC 14.52.100(C)). Notice of the hearing was also published in the Newport News-Times on April 12, 2013.

15. A copy of the record was provided to the Newport Planning Commission and was available at the public hearing. At the hearing, the Commission read a prepared statement advising those in attendance of statutory requirements for the conduct of quasi-judicial hearings as outlined on ORS 197.763. The Commission received the staff report and took testimony from the applicant, appellants, and persons testifying in favor and in opposition to the application. The minutes of the April 22, 2013 hearing are hereby incorporated by reference. The Community Development Director's decision, which served as the staff report, is likewise incorporated by reference into the findings.

16. At the end of the hearing, the Commission closed the record to oral testimony. It then granted a request that was made to leave the record open for submittal of additional written evidence, argument or testimony until April 29, 2013. All parties were given until May 6, 2013 to submit responses to new evidence. The applicant was given until May 13, 2013 to submit final written arguments.

CONCLUSIONS

1. Pursuant to Section 14.45.010/“Applicability,” a TIA is required for any project that may increase use of any adjacent street by 10 vehicles or more per day that exceed 26,000 pounds gross vehicle weight. The applicant indicates that the project will generate up to 50 truck trips per day where the vehicles exceed 26,000 pounds gross vehicle weight; therefore, a TIA is required.
2. Section 14.45.020/“Traffic Impact Analysis Requirements” outlines requirements for a Traffic Impact Analysis (TIA). This is intended to ensure that the City has sufficient information to establish whether or not the approval criteria listed under NMC Section 11.45.050 have been satisfied. The applicant has satisfied the requirements of Section 14.45.020 as follows:
 - A. A pre-application meeting was conducted between Matt Hughart with Kittleson and Associates, Inc. and Tim Gross, City Engineer, via conference call on November 30, 2012, as documented in an email dated December 10, 2012 (Attachment A). The property does not take access off of US 20 or US 101, so it was not necessary that the meeting be coordinated with the Oregon Department of Transportation (ODOT).
 - B. The submitted TIA, dated February 12, 2013, was prepared by Diego Arguea, P.E., an Oregon Registered Professional Engineer qualified to perform traffic engineering analysis (Attachment B). His firm, Kittleson and Associates, Inc., was founded in 1985 and specializes in transportation engineering and planning work. The report was prepared at the expense of the applicant, as is required.
 - C. Given the unique nature of a log yard facility, an independent trip generation profile was developed by Kittleson and Associates based upon the projected maximum operating capacity of the log yard facility. This specific “trip generation study” was discussed and approved by the City Engineer at the pre-application meeting. NMC Section 14.45.020(C) allows use of a “trip generation study,” as has been prepared by Kittleson and Associates, Inc., to serve as an alternative to an applicant using the 9th Edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual to gauge PM peak hour trips associated with a proposed use.

At the hearing, project opponents questioned why the ITE Manual was not used. Timothy Gross, City Engineer, explained that the ITE manual contains sample trip generation data for a wide range of uses that are general in nature. He further noted that the amount of sampling varies; that more limited data is typically available for less common uses such as a log yard; and that when specific information about a use is available, as was the case with this project, it is appropriate that the City require the analysis be based upon the more specific information. This is a reasonable premise for relying upon a specific “trip generation” study, which NMC 14.45.020(C) clearly authorizes where deemed appropriate by the City Engineer.
 - D. Intersection-level analysis was performed at US 20 and SE Moore Drive, SE Bay Boulevard and SE Moore Drive, and two site access driveways off of the Yaquina Bay Road, as documented in the TIA. These are the only intersections where 50 or more peak hour vehicle trips can be expected as a result of the proposal.

- E. Compliance with the Transportation Planning Rule (OAR 660-012-0060) is required in circumstances where a functional plan, acknowledged comprehensive plan or land use regulation must be amended in order for a project to proceed. In this case a log yard is a permitted use within the I-3 zoning district, and the route that the haul trucks will be using (SE Moore Drive, SE Bay Boulevard, and Yaquina Bay Road) is a minor arterial roadway intended to connect employment areas to the highway system. There are no plans or land use regulations that need to be amended.
- F. The structural conditions of the impacted roadways, specifically SE Moore Drive, SE Bay Boulevard, and the Yaquina Bay Road, has been assessed, as required, in the Kittleson & Associates, Inc. report as supplemented by a February 27, 2013 letter from Stuntzner Engineering and Forestry, LLC (Attachment C).

Appellants rely upon a letter from Greenlight Engineering, dated April 18, 2013 (Attachment D), to assert that the pavement analysis failed to identify structural deficiencies or reduction in the useful life of existing facilities related to the proposed development. The report by Kittleson & Associates, Inc. and letter from Stuntzner Engineering and Forestry, LLC contain ample evidence that the structural condition of the haul roads were evaluated. However, these documents do not address the impact of the project upon the useful life of these roadways. That question is addressed in a letter from Stuntzner Engineering and Forestry, LLC, dated April 29, 2013 (Attachment E)

- G. Section 14.45.020(G) clarifies that structural analysis for projects generating 10 or more vehicle trips that exceed 26,000 pounds gross vehicle weight must address the routes that will be used by the vehicles to reach US 101 or US 20. The TIA prepared by Kittleson & Associates, Inc. and supplemental letter from Stuntzner Engineering and Forestry, LLC address this requirement.
3. Section 14.45.030/ "Study Area" identifies the types of facilities that must be included as part of the study for all Traffic Impact Analysis (TIA) reports. This includes all site-access points and intersections (signalized and unsignalized) adjacent to the proposed log yard; roads through and adjacent to the site; all intersections needed for signal progression analysis, and any additional intersections or roadway links that the City Engineer believes may be adversely affected as a result of the proposed development. The City Engineer identified intersections and roadways requiring analysis in the pre-application meeting. The TIA prepared by Kittleson & Associates, Inc., and letter from Stuntzner Engineering and Forestry, LLC included these facilities in the scope of their analysis.

The April 18, 2013 letter from Greenlight Engineer notes that the TIA failed to analyze driveways and road intersections within 150 to 500 feet of the site frontage along Yaquina Bay Road, including the intersection of Yaquina Bay Boulevard and Running Springs Road. Kittleson & Associates, Inc. supplemented the TIA to address this issue in a letter, dated April 29, 2013 (Attachment F).

4. Pursuant to Section 14.45.040/ "Approval Process," if a land use action is not otherwise required, then approval of the proposed development shall follow a Type II decision- making process. No other land use action was required for the proposed Teevin Bros. log yard development as it is a permitted use on the subject property.

- A. Chapter 14.52/“Procedural Requirements,” outlines the requirements for a Type II decision-making process. Prior to rendering a decision, the City must provide record property owners within 200 feet of the subject property with written notice and opportunity to comment (NMC 14.52.060). Required notice was provided on January 17, 2013. A copy of the TIA was posted to the City’s website on January 10, 2013. A revised copy of the TIA was posted to the City’s website on February 12, 2013. The letter from Stuntzner Engineering and Forestry, LLC was posted on February 28, 2013. Interested parties were given until March 7, 2013 to provide comment on the applicant’s supplemental information. Further, following the hearing on the appeal, all parties were given an opportunity to review and respond to information submitted at the hearing or during the open record period.
 - B. Prior to the Community Development Director’s decision, the City received 89 letters or emails from members of the public in support or opposition to the TIA application. An additional 16 letters were submitted prior to, or at the appeal hearing and 20 letters were submitted during the open record period. Copies are included in the case record. Comments in support of the application cite economic benefits to the port and commercial shipping generally; additional tax revenues; positive environmental impacts attributed to the reduced trucking distance for nearby forestland owners; and new employment opportunities. Opponents express concerns about noise from trucks and the debarking operation; the amount of traffic associated with the project; that the area is more “residential” in character since a log yard last operated on the property; and potential air contaminants. They also indicate that the project will have an adverse impact on the quality of life of nearby residents and will be a drain on the economy with respect to potential negative impacts to tourism and the desirability of the community as a destination for retirees. While these types of comments clearly demonstrate that citizens have strong feelings about the log yard project, they are not related to the approval criteria for a TIA and; therefore, cannot be addressed further in this decision. Comments related to approval criteria are addressed below.
5. Section 14.45.050/ “Approval Criteria” sets out the criteria that a TIA must satisfy. With regard to those criteria, the following conclusions can be drawn:
 - A. Subsection 14.45.050(A) requires that the TIA study contain all of the required elements listed under Section 14.45.020. Compliance with those requirements is addressed above under Conclusion No. 2. Comments were received expressing that the TIA should meet Oregon Department of Transportation standards for these types of reports. The TIA is required by the City and subject to the standards outlined herein. Should ODOT require analysis, which they have not to date, such a report would be evaluated by their office for compliance with whatever state standards are applicable.

Comments were also received requesting that geotechnical analysis be performed to determine if heavy truck traffic on the affected roads might impact residential properties on the nearby hillside. Such analysis is beyond the scope of what is required to be included in a TIA pursuant to this Section. Further, statements that a geologic hazards permit is required cite to the Newport Subdivision Ordinance (NMC Chapter 13) which is inapplicable to the project since the property is not being subdivided or partitioned, or they refer to a recommendation in the TIA that vegetation be cleared at the access points to improve vehicle line of sight. The removal of understory vegetation is not regulated by the geologic hazards chapter of the Newport Municipal Code (NMC Chapter 14.21). Tree removal can trigger the

requirement for a permit; however, it is limited to trees over 8-inches dbh (diameter breast height) and then only if the amount of the canopy area of the trees that are to be removed is more than 25 percent of the lot area (NMC 14.21.040(G)). The amount of clearing recommended in the TIA does not meet this threshold; therefore, a geologic hazard permit is not required on that basis. Comments were made that a geologic hazards permit should be required because of the additional truck traffic on the roads. This is not a condition that would trigger a geologic permit under the City's code. Lastly, testimony was provided at the hearing that NMC 14.45.060 authorizes the City to require the applicant prepare a geologic hazards permit as a condition of approving the TIA. This code provision authorizes the City to impose conditions needed to ensure that criteria for approving a TIA are satisfied. It cannot be used to require an applicant submit for a geologic permit, where the provisions of the City's code that are applicable to a geologic hazards do not require that a permit be obtained.

- B. Subsection 14.45.050(B) requires a TIA demonstrate that adequate transportation facilities exist to serve the proposed development or identify mitigation measures that resolve the traffic safety problems in a manner that is satisfactory to the City Engineer and, when state highway facilities are affected, to ODOT. The project does not access directly onto a state highway; therefore, ODOT approval is not required. In a memo dated March 11, 2013, Timothy Gross, City Engineer, indicates that the information contained in the documents prepared by Kittleson & Associates, Inc. and Stuntzner Engineering & Forestry, LLC demonstrate that the transportation facilities used to access the proposed Teevin Bros. log yard are both geometrically and structurally adequate as currently constructed (Attachment G). One exception is cited. Mr. Gross points out that a section of Yaquina Bay Road, east of SE Vista Drive, is settling due to what appears to be an embankment issue. A photograph of the road section depicts the settling problem (Attachment H). This portion of the road is under Lincoln County's jurisdiction, and Teevin Bros. should coordinate with the County to ensure the repair of this road section is complete before truck operations commence. With this condition, this standard is satisfied.

Comments received point out deficiencies in the applicant's initial draft of the TIA with regards to its description of existing conditions, lack of queuing analysis, and lack of information regarding the structural condition of the affected roadways. This has been addressed by the applicant in their supplemental reports. Further, the arguments were taken into consideration by the City Engineer, who found the applicant's analysis to be substantial enough to support approval.

The issue of safety was raised by the public both in support of, and in opposition to, the log yard project. The comments reflect individual perceptions about how the traffic functioned in the past, when a log yard last operated at the proposed location, or how it might operate in the future given that there are more residential property owners and tourists that use the same roads. Safety considerations are a major component of the TIA, which considered such factors as vehicle queuing, sufficiency of stopping distance, adequacy of vehicle site distance, and the geometry and structural condition of the roads. Deficiencies with vehicle line of site at the entrances to the proposed log yard facility is the only safety issue identified in the TIA, which can be remedied by the applicant via the removal of screening vegetation. While the analysis establishes that the route log trucks will use is safe from a traffic engineering perspective, which is the threshold that must be met in order for the City to

approve a TIA, it does not mean that the roads cannot be made “safer” through the implementation of further improvements. The City of Newport, Port of Newport, Oregon Department of Transportation or other partners may implement such changes where appropriate. The applicant may also choose to participate; however, they cannot be compelled to do so as a condition of the City’s approval of the TIA.

The April 29, 2013 letter from Kittleson and Associates, Inc., notes that the TIA’s analysis of the larger intersections along the haul route establish that existing and projected volumes are sufficiently low to facilitate efficient turn movements into and out of the smaller road and driveway intersections along the same route with very little delay. The letter also points out that while crabbing season was delayed, the seasonal congestion attributed to such traffic was nonetheless accounted for in the report because the traffic volumes were inflated by 28% to reflect peak traffic conditions. Any traffic increases attributed to the crabbing season are accounted for within this figure. Both of these concerns were raised in the Greenlight Engineering letter, and were cited by appellants as inadequacies in the original TIA. The supplemental work by Kittleson and Associates, Inc. adequately addresses those concerns. Kittleson & Associates April 29th letter also establishes that the stopping sight distance for trucks and passenger cars will be adequate provided the applicant completes the vegetation management activities recommended in their report. This also adequately addresses a concern raised in the Greenlight letter.

As noted above, it is the City Engineer’s opinion that the TIA has demonstrated that the transportation facilities used to access the proposed Teevin Bros. log yard are both geometrically and structurally adequate as currently constructed. Therefore, it is not necessary for the City to turn to the question of the whether or not the project will impact the useful life of these facilities because deterioration of the road surface and its supporting elements is effectively normal wear and tear that will be addressed as part of the City’s maintenance program. In its April 29th letter, Stuntzner Engineering considered the “useful life” question from the perspective of the terminal serviceability level of the roadway as defined by AASHTO, pointing out that the facilities have not reached that point and are functioning today as adequately constructed industrial access roads. This is a plausible approach to addressing the issue.

- C. Subsection 14.45.050(C) notes that where a proposed amendment to the Newport Comprehensive Plan or land use regulation would significantly affect an existing or planned transportation facility, the TIA must demonstrate that solutions have been developed that are consistent with the provisions of OAR 660-012-0060. As earlier noted, this project does not require an amendment to the Newport Comprehensive Plan or land use regulations in order for it to proceed; therefore, compliance with this administrative rule is not required.
- D. Subsection 14.45.050(D) applies to affected non-highway facilities. It requires that the TIA establish that any Level of Service standards adopted by the City have been met, and development will not cause excessive queuing or delays at affected intersections, as determined in the City Engineer’s sole discretion. In the March 11, 2013 memorandum, the City Engineer notes that although the City of Newport has not adopted Level of Service standards for its non-highway facilities, the analysis as defined within the submittal indicates that the traffic attributed to the Teevin Bros. project will not cause excessive queuing or delays at affected intersections. This standard is; therefore, satisfied.

Comments were received asserting that the queuing analysis is inadequate because it simulates impacts of the additional truck traffic and that the report should have included actual data. The truck traffic must be simulated because the use has not been established on the property. Actual traffic data was incorporated into the analysis, where appropriate.

- E. Subsection 14.45.050(E) requires that proposed public improvements be designed and constructed to the standards specified in NMC Chapter 14.44 (Transportation Standards) or Chapter 13.05 (Subdivision and Partition), as applicable. The only recommended public improvement is to a section of Yaquina Bay Road that is under Lincoln County's jurisdiction. As noted by the City Engineer, the repair of this road section should be coordinated with the Lincoln County Highway Department.
6. Section 14.45.060(F) notes that the City may impose conditions of approval needed to meet operations, structural, and safety standards and provide the necessary right-of-way and improvements to ensure consistency with the City's Transportation System Plan. The only conditions imposed are those that require the applicant adhere to the recommendations contained in the TIA and for the repair of a section of Yaquina Bay Road, as outlined below.
7. Opponents of this project argue that City approval of the TIA designates SE Moore Drive, and portions of SE Bay Boulevard and Yaquina Bay Road as a truck route in violation of the statutory process for establishing such routes. Dennis Bartoldus, representing Rondy's, Inc., specifically addresses this issue in a letter dated April 24, 2013 (Attachment I). He points out that the relevant statutes do not require that the City designate truck routes. Rather, they provide that the City may do so and set out the process by which such designations are to be perfected. Neither the TIA nor the City code upon which it is based assert that the subject roads are being designated as a truck route; therefore, the issue is not relevant to this application.

OVERALL CONCLUSION

The request complies with the criteria established for a Traffic Impact Analysis and is hereby **APPROVED** with the following condition(s):

1. Approval of this land use permit is based on the submitted materials from Kittleson & Associates, Inc., and Stuntzner Engineering and Forestry, LLC included as attachments to this decision. No work shall occur under this permit other than that which is specified within these documents. It shall be Teevin Bros. responsibility to comply with these documents and the limitations of approval described herein.
2. Teevin Bros. shall complete the sight distance improvements recommended in the TIA prepared by Kittleson & Associates, Inc., prior to truck operations occurring on the site.
3. Prior to commencing truck operations, Teevin Bros. shall coordinate with Lincoln County to repair the section of the Yaquina Bay Road that is settling along the planned haul route.

Derrick Tokos

From: Tim Gross
Sent: Monday, December 10, 2012 1:54 PM
To: 'Matt Hughart'
Cc: Derrick Tokos
Subject: RE: Teevin Bros. Traffic Study

Matt,

Sorry for the delay. Derrick wanted me to wait to reply until you had spoken with him.

This is substantially what we discussed on the phone. Couple of comments:

The fishing season has a significant impact on the truck traffic in the Bayfront area. I have included the season below and I think they should be taken into consideration for the study.

- Shrimp April 1 – October 31
- Hake June 15 Quota, this year the season ended in late November
- Crab December 1 this is good for a couple of month then drops off after that

Also, we have some traffic counts from the area if you are interested.

As part of the analysis, we need to know the impact to the areas in the study and then possible recommendations on ways to mitigate the impacts, if any. For example, turn lanes, lengthening an existing turn lane etc.

Thanks.

Timothy Gross, PE
 Public Works Director/City Engineer
 City of Newport
 169 SW Coast Highway
 Newport, OR 97365
 P 541-574-3369
 F 541-265-3301
 C 541-961-5313

From: Matt Hughart [<mailto:MHUGHART@kittelson.com>]
Sent: Friday, November 30, 2012 11:59 AM
To: Tim Gross
Subject: Teevin Bros. Traffic Study

Tim,

Thank you for taking the time to talk with me over the phone regarding the proposed Teevin Bros. operation. I wanted to follow up with this e-mail to make sure I captured all of your comments. Here is a summary of what was discussed:

- Traffic study would be needed to address Item D of the Newport Traffic Impact Analysis requirements.
- Critical study intersections include:
 - Highway 20/Southeast Moore Drive
 - Bay Boulevard/Southeast Moore Drive
 - Two site access driveways off of Bay Road

- Critical time periods include:
 - Weekday a.m. (7:00-9:00 a.m.) and weekday p.m. (4:00-6:00 p.m.) peak periods
- Items to address in addition to the intersection impacts noted above:
 - Develop a customized trip generation profile of the operation recognizing there are no ITE Trip Generation land uses that would be applicable for the proposed operation.
 - Analyze the anticipated truck routing and quantify usage of these routes. Analyze structural impacts per TIA guidelines.

Please let me know if there is anything that I overlooked for misinterpreted. Thanks.

Matt

Matt Hughart, AICP

Woodward Clyde

Transportation Engineering / Planning
910 SW Alder Street, Suite 700
Portland, Oregon 97205
503.223.5250
503-535-7425 (direct)
503 976-1463 (cell)

Derrick Tokos

From: Derrick Tokos
Sent: Friday, November 16, 2012 3:00 PM
To: 'Eric Oien'
Cc: Tim Gross
Subject: RE: Verification and follow up
Attachments: ord_2045.pdf; 2-CP-11 - Ch45 Traffic Impact Analysis Standards - Exhibit G.pdf; LAND_USE_Application_Fillable.pdf; Traffic_Impact_Analysis.pdf

Hi Eric,

Yes, I received your email and had hoped to set aside some time this afternoon to look into the issues we discussed. I may not have a response for you until Monday. Tim's number is 541-574-3369. I was planning on bringing up the City's new Traffic Impact Analysis requirements in my follow-up email, but will do so now so you can get a head start on it. The standards were put in place as part of a larger Transportation Plan update that we have been working on for a number of years. Attached is a copy of the implementing ordinance, the new code section specific to this requirement (Ch. 45), an application form and submittal checklist. The new code is effective December 5th and will apply to this project.

It is likely that you will need to retain a traffic engineer to prepare the report. I talked to Tim, and he mentioned that the analysis will need to include the intersections at US 20/101 and SE Moore Road/Bay Boulevard. The code requires a pre-application meeting with the City Engineer to confirm the scope of the analysis. Tim is comfortable handling that over the phone if that is more convenient for you.

I understand that this is an additional expense; however, the resulting information will clarify the extent to which the project is impacting the existing road network, and if any changes are required to ensure that the transportation system is adequate to handle the additional truck traffic.

Derrick I. Tokos, AICP
Community Development Director
City of Newport
169 SW Coast Highway
Newport, OR 97365
ph: 541.574.0626
fax: 541.574.0644
d.tokos@newportoregon.gov

From: Eric Oien [<mailto:eoien@teevinbros.com>]
Sent: Friday, November 16, 2012 2:27 PM
To: Derrick Tokos
Subject: Verification and follow up

Hi Derrick,

Just wanted to verify that you had received my email follow up on Wednesday and if you've made any progress on your end? Also, what is Tim Grosse's phone number? I would like to call him about the traffic study ordinance that was apparently passed November 1st of this year?

Eric Oien
General Manager
Teevin Bros Land & Timber
Cell: 360-880-1003
Fax: 503-556-4268

"It is OK to print this email. Paper is a plentiful, sustainable product supporting our economy by providing jobs to many Americans"



February 12, 2013

Project #: 13132.0

Paul Langner
Teevin Bros.
P.O. Box 247
Rainier, OR 97048

RE: Traffic Impact Analysis for the Proposed Teevin Bros. Log Yard - Newport, OR

Dear Paul,

This letter presents the results of the traffic impact analysis (TIA) for the proposed Teevin Bros. Log Yard development located at 1554 Yaquina Bay Boulevard, Newport, Oregon 97365. This study concludes that the industrial site can be developed while maintaining acceptable traffic operations and safety at the site driveways and study intersections. In addition, the analysis concludes that the public streets serving the site are capable of handling expected truck loads. Our analysis methodology, pertinent findings, and recommendations are documented herein¹.

INTRODUCTION

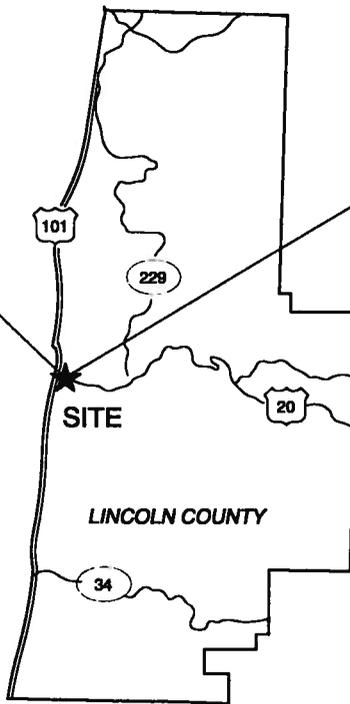
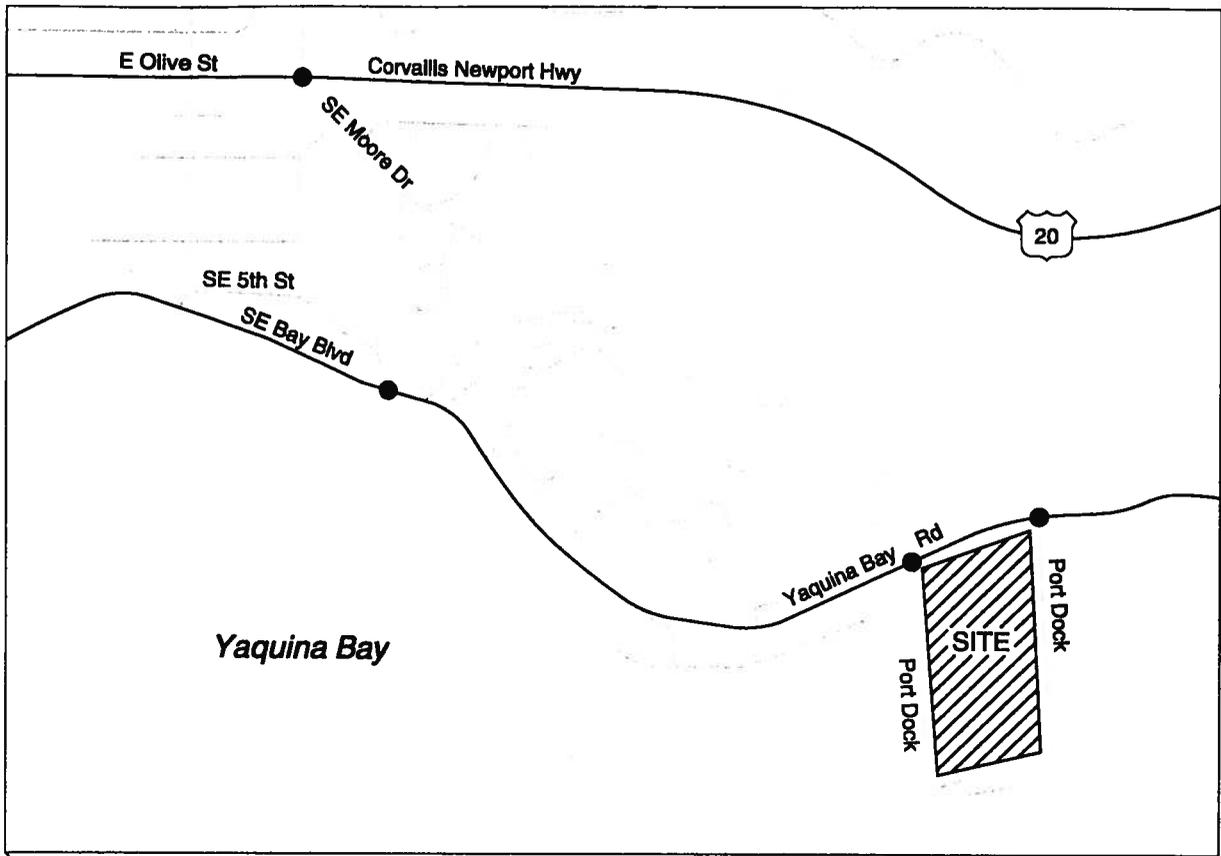
Teevin Bros. is proposing to develop a log yard located along Yaquina Bay Boulevard, east of the Port of Newport located in Newport, Oregon. The site is currently vacant and is appropriately zoned I-3 Industrial; as such, the site is proposed for development in conformance with the existing zoning. Per conversations with City staff, the site previously operated as a log yard in the late 1980s and early 1990s, at which point the site was vacated and has been unused for approximately the last 15 years.

The preliminary site plan proposes to use the two existing driveways from Yaquina Bay Boulevard to access the site. The site will be divided into areas of processed log storage, raw log storage, and log roll-out area toward the north of the site. Vehicles are anticipated to primarily use the west access, and the east access will provide an alternative access for larger, one-way circulating vehicles. The development is expected to be built out and occupied by 2013. Figure 1 illustrates the site location and vicinity and Figure 2 illustrates the proposed development plan.

SCOPE OF THE REPORT

This analysis determines the transportation-related impacts associated with the proposed development and has been prepared in accordance with City of Newport direction for a TIA. The study intersections and scope of this project were based on consultation of City of Newport Code and with City and County staff. Per the Newport Development Code, a TIA is required for this development

¹ Derrick Tokos requested additional information in a January 22, 2013 email, which is highlighted in this report using underlining.



LEGEND

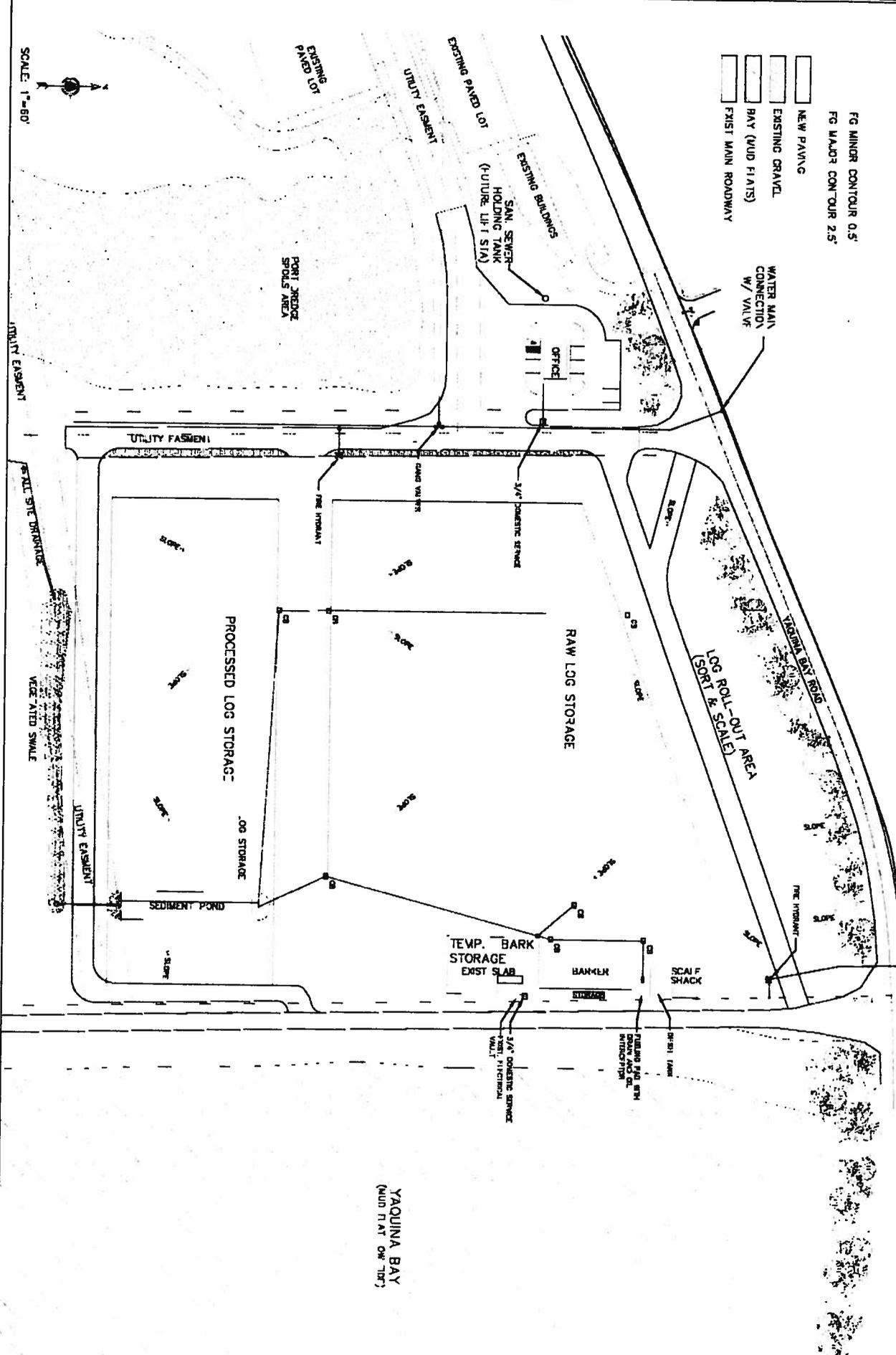
- - STUDY INTERSECTIONS

SITE VICINITY MAP
NEWPORT, OREGON

FIGURE
1

H:\profile\13132 - Newport Lumber Yard\dwg\lfigs\13132_Fig01.dwg Feb 12, 2013 - 3:59pm - jsonnerville Layout Tab: 01

I-EVIN LOG YARD



PROPOSED SITE PLAN
NEWPORT, OREGON

FIGURE
2

based solely on the size of anticipated log trucks (expected to exceed 26,000 pounds). The TIA requirements and scoping correspondence with City staff is included in *Attachment "A."*

Operational analyses were conducted at the following four intersections:

- SE Moore Drive/Highway 20
- SE Moore Drive/SE Bay Boulevard
- Site Driveway (west)/Yaquina Bay Boulevard
- Site Driveway (east)/Yaquina Bay Boulevard

This report evaluates the following transportation issues:

- Year 2012 existing transportation-system conditions within the site vicinity during the weekday a.m. and p.m. peak periods;
- Trip generation estimates and distribution for the proposed development; and
- Forecast year 2013 total traffic conditions during the weekday a.m. and p.m. peak periods with build-out of the site.

EXISTING CONDITIONS

The existing conditions analysis identifies the site conditions and current operational and geometric characteristics of roadways within the study area. These conditions will be compared with future conditions later in this report.

The proposed development site and surrounding study area was inventoried in December 2012. At that time, information was collected regarding site conditions, adjacent land uses, existing traffic operations, and transportation facilities in the study area.

Site Conditions and Adjacent Land Uses

The redevelopment site is approximately 15 acres and is currently vacant. The site is appropriately zoned as I-3 Industrial and no change to the zoning is proposed. The site is located directly east of the Port of Newport and is bordered by Yaquina Bay Boulevard to the north and Yaquina Bay to the east and south. Land uses surrounding the site are primarily residential to the east, with mixed industrial uses along Yaquina Bay Boulevard to the west. Access to the site will be provided from Yaquina Bay Boulevard, and, as shown in Figure 2, one driveway will be located along the east frontage and one along the west.

Transportation Facilities

Table 1 summarizes the existing transportation facilities and roadways in the study area.

Table 1 Existing Transportation Facilities and Roadway Designations

Roadway	Functional Classification ¹	Number of Lanes	Posted Speed (MPH)	Sidewalks	Bicycle Lanes	On-Street Parking
Highway 20	Principal Arterial	3 Lanes	30	No	No ²	No
SE Moore Drive	Minor Arterial	2 Lanes	25	Yes ³	No	Yes
SE Bay Boulevard/Yaquina Bay Boulevard	Minor Arterial	2 Lanes	35 ⁴	Partial ⁵	Yes	Partial ⁶

¹ Classifications from the Newport Transportation System Plan (TSP), 2008.

² Striped shoulder provided on state highway

³ Sidewalks are located along the east side of SE Moore Drive

⁴ Posted speed is 35 mph west of proposed West Site Driveway, and 45 mph to the east

⁵ Sidewalks provided along north side of Bay Boulevard from SE Moore Drive to SE Vista Drive, and along the south side from the intersection at SE Moore Drive to the Embarcadero Resort

⁶ On-street parking permitted between SE Moore Drive and SE Vista Drive (City jurisdiction)

Figure 3 illustrates the existing lane configurations and traffic control devices in place at the study intersections.

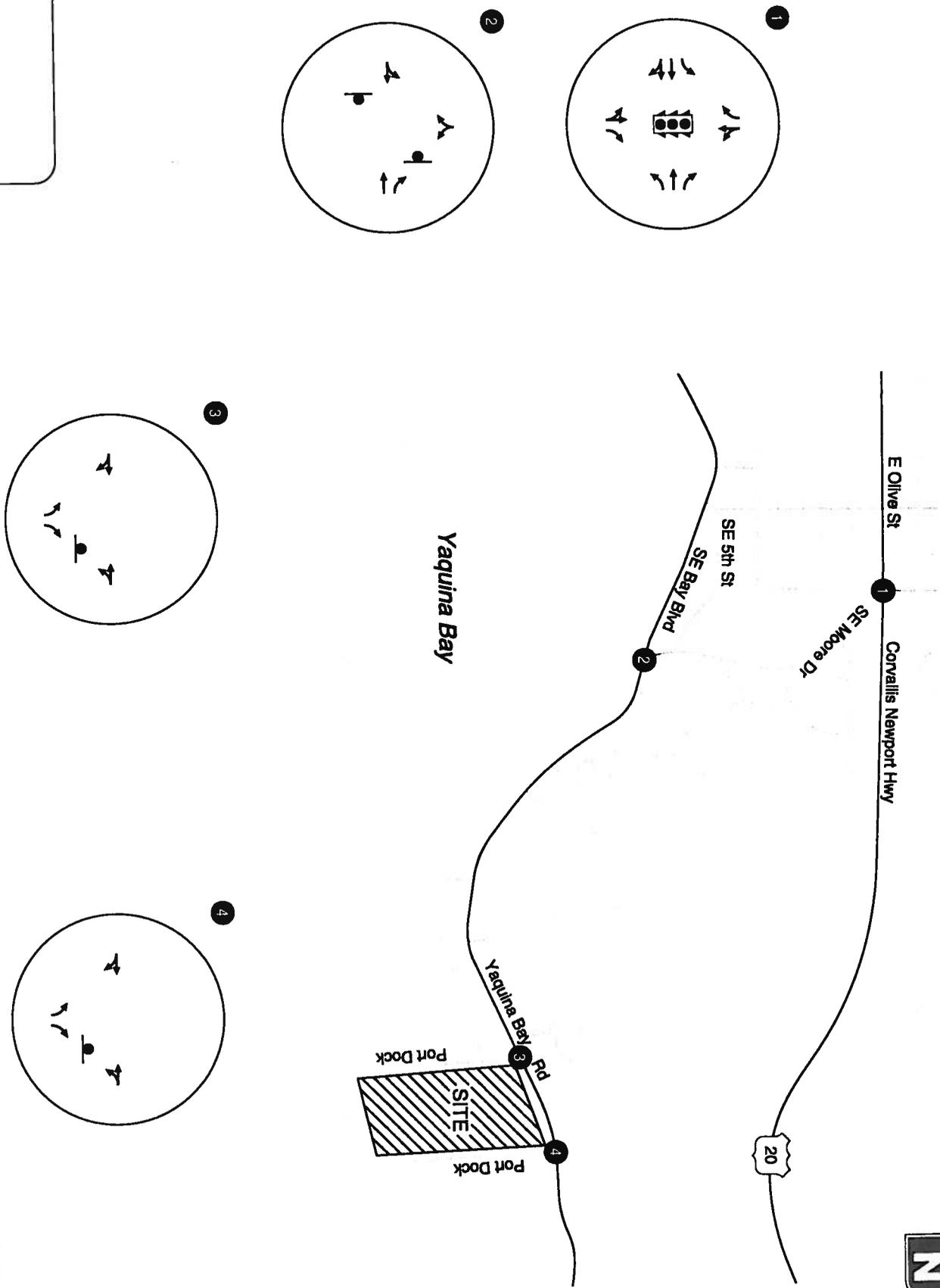
Pedestrian and Bicycle Facilities

Yaquina Bay Boulevard does not currently have sidewalks on either side of the roadway in the vicinity of the proposed site. Table 1 summarizes the locations where sidewalks are provided along Bay Boulevard. Moore Drive and Highway 20 both have partial sidewalk connections and provide wide shoulders that may be used as bicycle lanes.

Transit Facilities

Local transit service is provided via the Newport Loop route in the vicinity of the site, with stops at the Elks Club at the north end of SE Moore Drive and the Yacht Club, located west of the SE Moore Drive/SE Bay Boulevard intersection. The loop route runs seven days per week and charges one dollar per ride. A map of the local transit service and detailed scheduling information is provided in Attachment "A".

In addition, there are currently two public transit systems operating north of the Yaquina Bay Bridge in Newport. Lincoln County provides a Free Shuttle and runs three bus services linking Newport with Yachats, Siletz / Toledo, and Lincoln City. Lincoln County's bus service operates year round, from Monday through Saturday, with all services beginning at the Newport City Hall. The Free Bay & Beach Shuttle currently operates year round, linking major business areas and tourist attractions in the city. During the summer months (July, August and September), the Shuttle operates between 9 am and 9 pm. The rest of the year the Shuttle runs on weekends (Saturday and Sunday) only, from 10 am to 5 pm.



LEGEND

-  - STOP SIGN
-  - TRAFFIC SIGNAL

**EXISTING LANE CONFIGURATIONS AND TRAFFIC CONTROL DEVICES
NEWPORT, OREGON**

**FIGURE
3**

Current Levels of Service

All level-of-service analyses described in this report were performed in accordance with the procedures stated in the 2000 *Highway Capacity Manual* (Reference 1). A description of level of service and the criteria by which they are determined is presented in Attachment "B". Attachment "B" also indicates how level of service is measured and what is generally considered the acceptable range of level of service.

All intersection level-of-service evaluations used the peak 15-minute flow rate during the weekday a.m. and p.m. peak hours. Using the peak 15-minute flow rate ensures that this analysis is based on a reasonable worst-case scenario. For this reason, the analysis reflects conditions that are only likely to occur for 15 minutes out of each average peak hour. The transportation system will likely operate under conditions better than those described in this report during all other time periods.

The City of Newport defaults to ODOT mobility targets along Highway 20. As defined by the latest edition of the 1999 *Oregon Highway Plan* (Reference 2), Highway 20 is considered a Statewide Highway, within the urban growth boundary, non-MPO, outside an STA (special transportation area), and where non-freeway speeds are 35 miles per hour or less. As such, the mobility target along Highway 20 is a volume-to-capacity (v/c) ratio of 0.80.

Traffic Volumes and Peak Hour Operations

Manual turning-movement counts were obtained for all the existing study intersections in December 2012. All counts used in this analysis were conducted on a typical mid-week day during the morning (7:00 a.m. to 9:00 a.m.) and evening (4:00 to 6:00 p.m.) peak time periods. The system-wide morning and evening peak hours were found to occur between 7:35 and 8:35 a.m. and 4:30 and 5:30 p.m., respectively. Attachment "C" contains the traffic count data used in this study

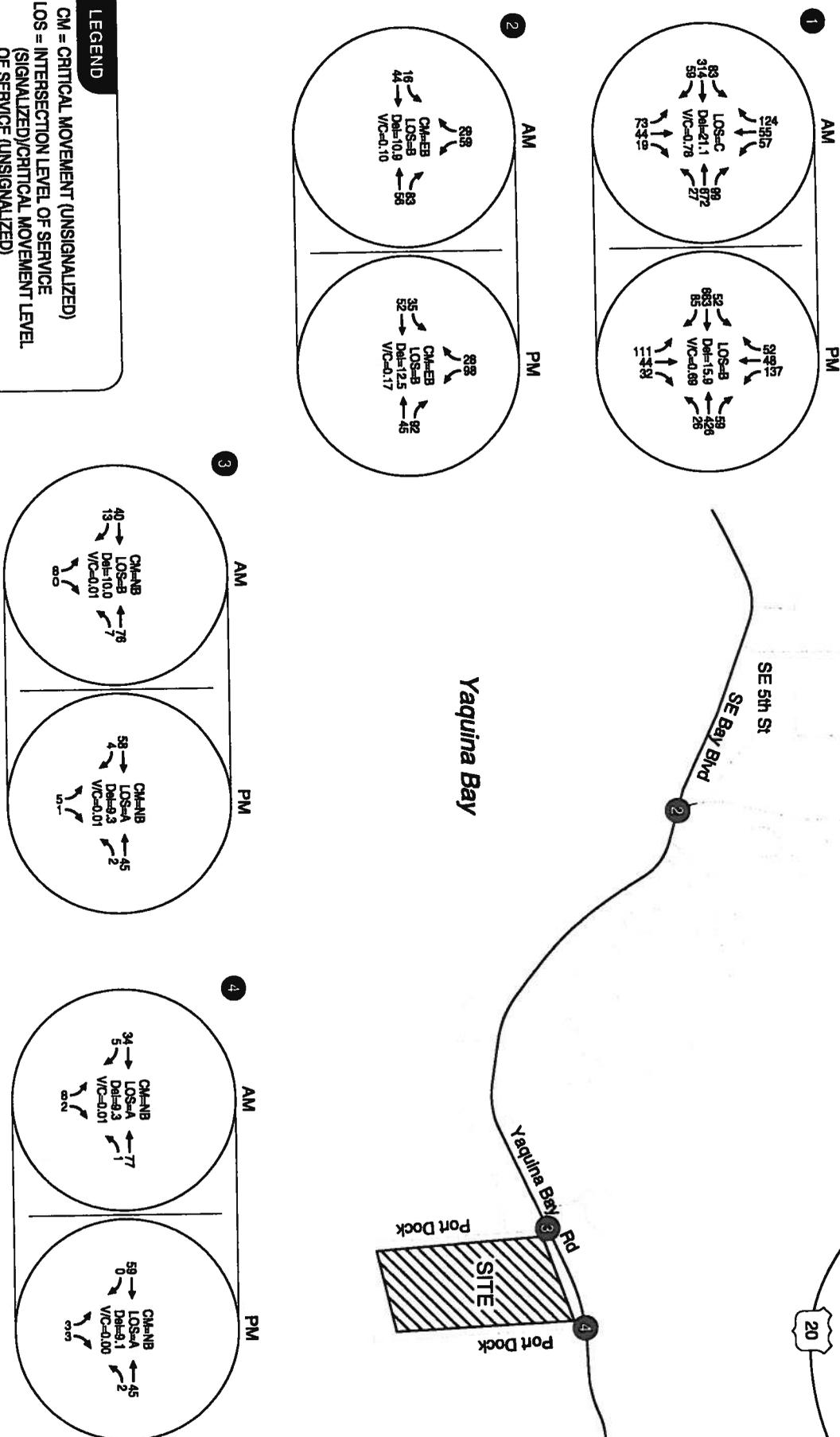
The existing traffic volumes along Highway 20 were adjusted to 30th highest hour design volumes (30HV) in accordance with the methodology described in the ODOT *Analysis Procedures Manual* (APM – Reference 3). Based on this methodology, the through volumes (east/west) along Highway 20 were adjusted by a factor of 1.28 to represent 30HV. Attachment "D" contains additional data on the calculation of the seasonal adjustment factor.

Figure 4 summarizes the intersection operations for the study intersections under the weekday a.m. and p.m. peak hour existing traffic conditions. As shown in Figure 4, all study intersections and site driveways currently operate acceptably during the seasonally-adjusted weekday a.m. and p.m. peak hours. Attachment "E" includes the level-of-service worksheets under year 2012 existing traffic conditions.

Tree s. Log Yard



February 2013



LEGEND

- CM = CRITICAL MOVEMENT (UN SIGNALIZED)
- LOS = INTERSECTION LEVEL OF SERVICE (SIGNALIZED)/CRITICAL MOVEMENT LEVEL OF SERVICE (UN SIGNALIZED)
- Del = INTERSECTION AVERAGE CONTROL DELAY (SIGNALIZED)/CRITICAL MOVEMENT CONTROL DELAY (UN SIGNALIZED)
- V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

EXISTING TRAFFIC OPERATIONS (SEASONALLY ADJUSTED VOLUMES) WEEKDAY AM AND PM PEAK HOURS NEWPORT, OREGON

FIGURE 4

TRANSPORTATION IMPACT ANALYSIS

The transportation impact analysis identifies how the study area's transportation system will operate with buildout of the proposed development. The impact of traffic generated by the proposed development during the typical weekday a.m. and p.m. peak hours was examined as follows:

- Planned developments and transportation improvements planned in the site vicinity were identified;
- Site-generated trips were estimated for build-out of the site;
- Site trip-distribution patterns were determined based on a review of the existing transportation network and the nature of the proposed development;
- Year 2013 (build-out year) total traffic conditions were analyzed at each of the study intersections and site-access points during the weekday a.m. and p.m. peak hours;
- Sight distance and circulation was reviewed.

Planned Developments and Transportation Improvements

City of Newport staff was contacted to identify any in-process developments or transportation improvements that may affect the roadway network in the vicinity of the proposed project. No in-process developments were identified. The following projects within the vicinity of the project study area have been identified in the Newport *North Side Local Street Plan, July 2008*, and are summarized in Table 2. However, these projects are not anticipated to occur within the buildout year of the proposed development and therefore have not been assumed as part of the future analysis scenarios.

Table 2 Newport Transportation System Plan Identified Improvements Within the Site Vicinity

Project Description	Functional Class	Sidewalks	Bicycle Lanes	Priority	Estimated Cost (\$2012)	Source
North Side Local Street Plan Street and Roadway Projects						
Alternative Port Access Road Improvements: Evaluate improvements to SE Benson Road and/or SE John Moore Drive to improve access to waterfront area	Collector (Benson) Arterial (John Moore)			Medium/Low	Planning study needed to determine alignment and cost	2008 North Side TSP update
Location/Limits	Project Description	Priority	Estimated Cost (\$ 2012)	Source		
North Side Local Street Plan TSM Improvement Projects						
US 20 at SE John Moore Drive	Add north/south left turn lanes and adapt signal phase. Combine northbound right/through lanes.	Medium	\$220,000	2008 North Side TSP update		
John Moore Drive at Bay Blvd.	Stripe John Moore for separate left and right turns. Modify curb radii to enhance right turns from John Moore onto Bay. Add eastbound left turn lane and pedestrian crossing.	High	\$400,000	2008 North Side TSP update		

Regional Background Traffic Growth

This analysis considers the impact of the proposed development's site-generated trips on the roadway network using future year (2013) traffic volumes. Although no in-process developments were identified, regional background traffic growth along Highway 20 was estimated based on ODOT future volume table forecasts. An excerpted piece of the future volume tables for Highway 20 (ODOT Hwy 033) is shown below in Table 3.

Table 3 Existing Transportation Facilities and Roadway Designations

HWY	MP	Direction	HS	Description	2009	2010	2011	2031	RSQ
033	0.76	I		East city limits of Newport	12300			18200	0.7321

Based on the data in Table 3, the east-west traffic volumes along Highway 20 were increased by 2.2 percent² to account for a one-year growth in volumes.

Proposed Development Plan

The proposed development (2013 buildout) includes redevelopment of approximately 15 acres of vacant I-3 zoned property into a log yard. The proposed log yard is expected to have 17 employees and generate approximately 30 truck trips per day at inception. Upon full development of the log yard operations, the site is estimated to generate up to 50 log trucks per day. **For a reasonable worst-case impact, this analysis considers 50 trucks on the adjacent street system. This full buildout is expected to occur gradually over the next five years with a full 50-truck fleet in year 2017.** The site plan shown in Figure 2 illustrates the proposed layout with the proposed site driveway locations.

Trip Generation

Typically, a trip generation estimate for a proposed development is based on empirical data from the standard reference manual *Trip Generation, 9th Edition*, published by the Institute of Transportation Engineers (ITE) (Reference 4) or from actual traffic counts at similar developments. However, given the uniqueness of the proposed facility, an independent trip generation profile was developed based on the projected maximum operating capacity. To develop the profile, projected employee and truck delivery information was obtained from Teevin Bros. as outlined in *Attachment F*. Using this information, Table 4 summarizes the estimated site trip generation of the proposed development plan during a typical weekday, as well as typical weekday a.m. and p.m. peak hours.

² $[(18,200/12,300) - 1] / 22 \text{ years} = 2.18 \text{ percent per year}$

Table 4 Estimated Trip Generation

Mode	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
		Total	In	Out	Total	In	Out
Passenger cars	42	4	4	0	6	0	6
Trucks	100	12	6	6	4	2	2
Total	142	16	10	6	10	2	8

As shown in Table 4, the estimated typical daily and peak hour trip generation is not anticipated to have a significant impact on existing vehicular circulation or existing travel patterns. At the site driveways, some support functions to the log yard may add additional vehicles (service, delivery, waste removal, etc.) several times per week—these vehicles are also not expected to have a significant impact to the capacity and circulation of the transportation system. Many of these support functions, such as parcel delivery, refuse collection, and septic pumping are vehicular trips that currently exist in support of existing business lines at the Port of Newport. Additional details to the schedule and type of support activities are provided in greater detail in Attachment "F".

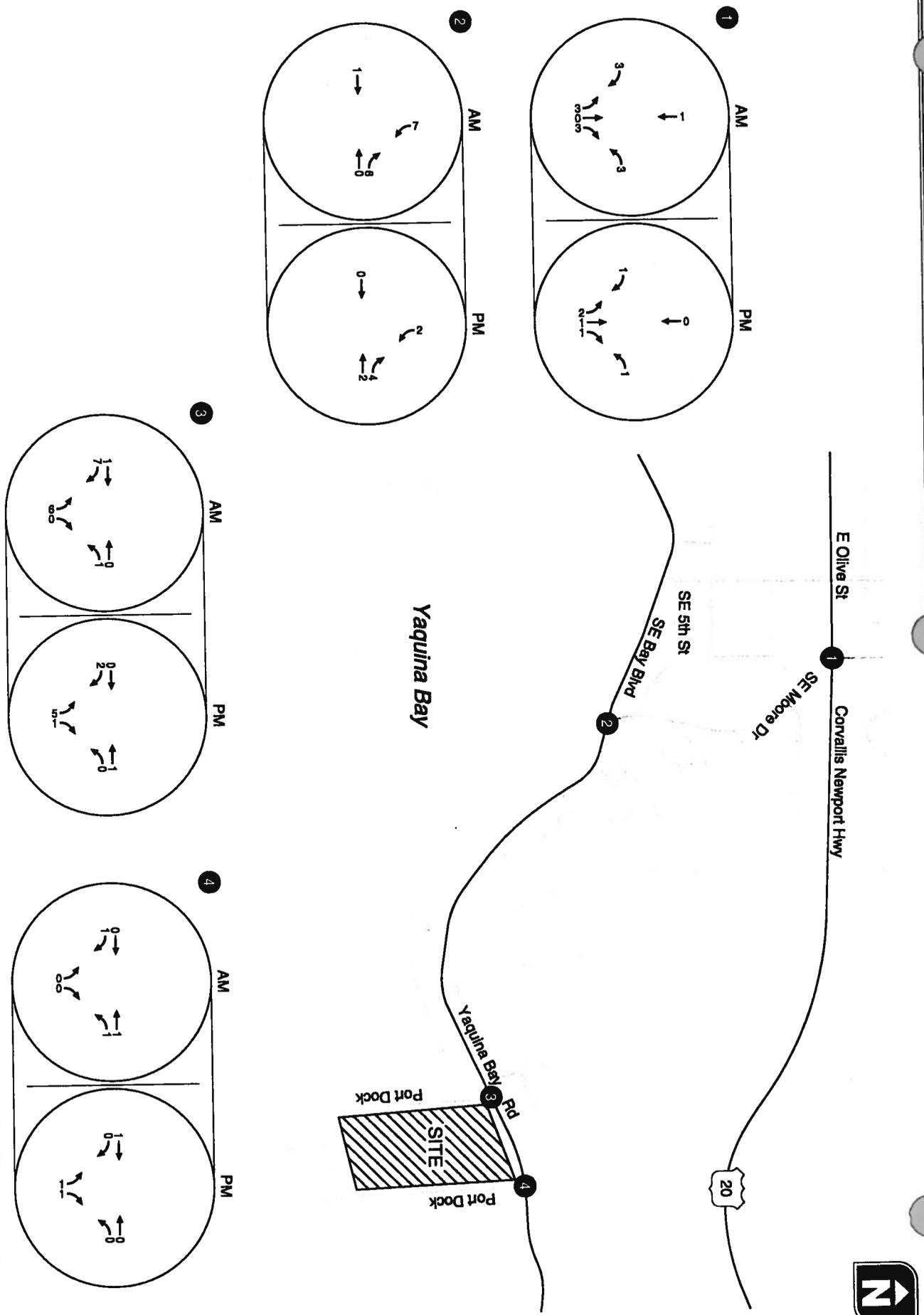
Site Trip Distribution/Trip Assignment

The distribution of site-generated trips was determined based on a review of the existing transportation network, current turning movement patterns, and the nature of the proposed development. The estimated trip distribution pattern is shown in Figure 5.

The estimated site-generated trips were assigned to the network by distributing the trips shown in Table 4 according to the trip distribution pattern shown in Figure 5. Figure 5 also illustrates the net new site-generated trips that are expected to use the roadway system during the weekday a.m. and p.m. peak hours.

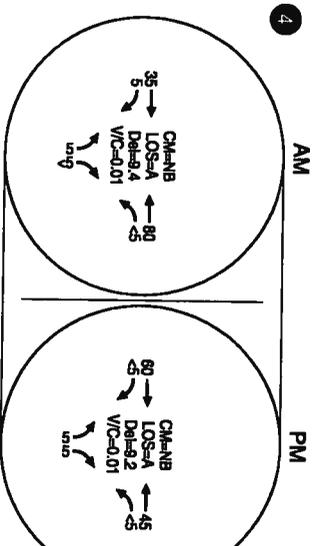
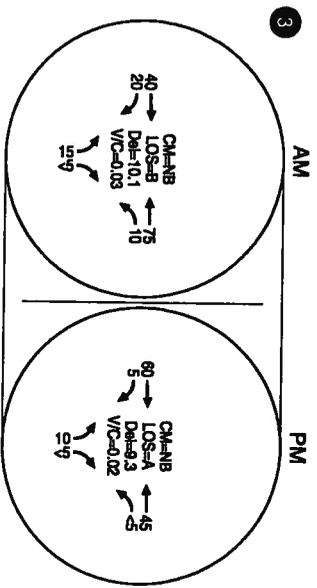
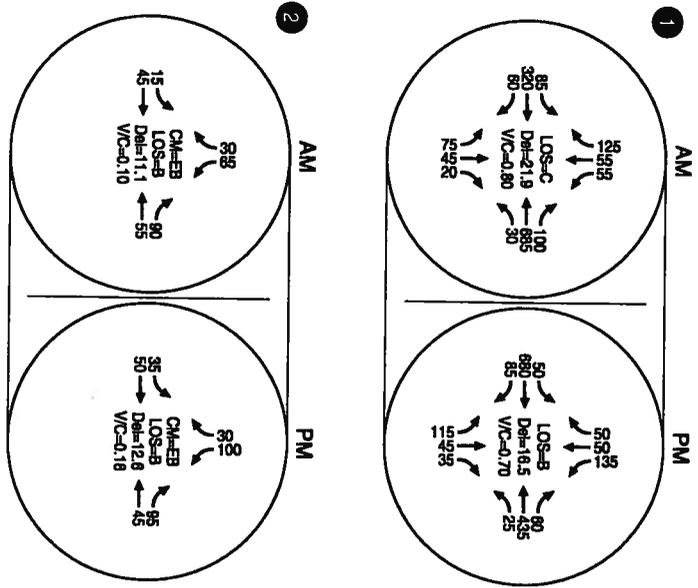
Year 2013 Total Traffic Conditions

The total traffic conditions analysis forecasts how the study area’s transportation system will operate with the traffic generated by the proposed development. As discussed previously, the appropriate growth rate for through volumes on Highway 20 were applied. As such, the forecast site-generated traffic (shown in Figure 5) was added to the existing traffic volumes during the weekday a.m. and p.m. peak hours (shown in Figure 4) to arrive at the total traffic volumes that are shown in Figure 6. Note that east-west through volumes at the Highway 20/Moore Drive intersection have been increased by 2.2 percent to account for anticipated background regional growth.



ESTIMATED TRIP DISTRIBUTION PATTERN AND SITE-GENERATED TRIPS WEEKDAY AM AND PM PEAK HOURS NEWPORT, OREGON

FIGURE 5



LEGEND

CM = CRITICAL MOVEMENT (UNSIGNALED)
 LOS = INTERSECTION LEVEL OF SERVICE (SIGNALIZED)/CRITICAL MOVEMENT LEVEL OF SERVICE (UNSIGNALED)
 Del = INTERSECTION AVERAGE MOVEMENT CONTROL DELAY (SIGNALIZED)/CRITICAL MOVEMENT CONTROL DELAY (UNSIGNALED)
 V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

**TOTAL TRAFFIC OPERATIONS
 WEEKDAY AM AND PM PEAK HOURS
 NEWPORT, OREGON**

Intersection Operations

The weekday a.m. and p.m. peak hour turning-movement volumes shown in Figure 6 were used to conduct an operational analysis at each study intersection. The results of the 2013 total traffic analysis shown in Figure 6 indicate that the site driveways and study intersections are forecast to continue to operate acceptably during the weekday a.m. and p.m. peak hours. Appendix "F" includes the level-of-service worksheets under year 2013 total traffic conditions.

95th Percentile Queuing

A 95th percentile queuing analysis was conducted for the SE Moore Drive intersections with Highway 20 and with SE Bay Boulevard. The analysis was prepared with the simulation software *SimTraffic*, and the results are based on the average of five simulation runs. Based on the analysis prepared herein, Table 5 below summarizes the 95th percentile queue impacts of the proposed development during the weekday a.m. and p.m. peak hours.

Table 5 **95th Percentile Queuing Analysis Summary – Weekday AM and PM Peak Hours (Existing and Forecast)**

Intersection	Approach	Weekday AM Peak Hour				Weekday PM Peak Hour		
		Available Storage (feet)	Existing (feet)	With Site (feet)	Sufficient Storage Provided?	Existing (feet)	With Site (feet)	Sufficient Storage Provided?
SE Moore Drive/ Highway 20	NBLT/TH	cont ¹	150	150	Yes	125	125	Yes
	NBRT	125	50	75	Yes	75	75	Yes
	WBLT	200	75	100	Yes	75	75	Yes
	WBTH	cont ¹	625	625	Yes	250	250	Yes
	WBRT	150	175	150 ²	No ³	75	75	Yes
	SBLT/TH	cont ¹	250	250	Yes	175	150	Yes
	SBRT	25	75	75	No ³	75	75	Yes
	EBLT	200	125	125	Yes	100	75 ²	Yes
	EBTH	cont ¹	100	100	Yes	150	175	Yes
	EBTH/RT	200	100	100	Yes	150	175	Yes
SE Moore Drive/ SE Bay Boulevard	WBTH	cont ¹	<25	<25	Yes	<25	<25	Yes
	EBTH/LT	cont ¹	<25	<25	Yes	<25	<25	Yes

¹ cont = continuous

² decrease in queue length due to re-allocation of green time based on vehicle approach demand (actuated signal control)

³ the queue storage available for these movements are not adequate under existing conditions and the proposed development does not add trips to these movements

As shown in Table 5, a 95th percentile queuing analysis at the SE Moore Drive/Highway 20 intersection indicates that the proposed development is forecast not to exceed the queue storage currently available. Per ODOT request, the westbound left turn movement at the SE Moore Drive/Highway 20 intersection was given additional consideration:

As shown in Table 5, the 95th percentile queue for this movement is expected to increase by approximately 25 feet during the weekday a.m. peak hour. As shown in Figure 6, there are approximately 30 vehicles (one vehicle every two minutes, including log trucks) making this movement during the a.m. peak hour. Based on field measurement, there is approximately an additional 100 feet of striped storage that could accommodate a random arrival event in which the 95th percentile queue length is exceeded by up to 100 feet.

Based on the analysis provided, the existing traffic counts, and the forecast traffic impacts, the available queue storage is expected to continue to be adequate for the expected increase in traffic due to the proposed development. The queuing analysis worksheets for existing and total traffic operations are provided in Attachments "E" and "G" respectively.

CIRCULATION ASSESSMENT

The following sections address on-site and off-site circulation of vehicles to the proposed development.

On-Site: Preliminary Sight Distance Verification

A preliminary sight distance evaluation was conducted at the Bay Boulevard intersections with each of the site driveways to assess whether sufficient stopping and intersection sight distance can be provided. Based on preliminary investigation, sufficient stopping sight distance exists under existing conditions and sufficient intersection sight distance is expected to be provided with removal of shrubbery along the south side of Bay Boulevard between the west and east driveways.

Per the standard reference manual *A Policy on Geometric Design of Highways and Streets*, published by the American Association of State Highway and Transportation Officials (AASHTO), the sight distance requirements for passenger cars and combination trucks are summarized in Table 6 below.

Table 6 AASHTO Sight Distance Requirements (assumes 45 mph posted speed)

Mode	Stopping Sight Distance Required (feet)	Intersection Sight Distance Required (feet)	West Driveway Facing West	West Driveway Facing East	East Driveway Facing West	East Driveway Facing East
Existing Sight Distance						
Passenger cars	360	496.1	> 800	700 ²	300 ³	575
Trucks	360 ¹	760.7				
Mitigated Sight Distance						
Passenger cars	360	496.1	> 800	>760	>760	575
Trucks	360 ¹	760.7				

¹ Passenger car stopping sight distances are typically also used for trucks due to the height advantage of trucks to see for longer distances (AASHTO).

² increases to >760 feet with clearance of shrubbery on south side of Bay Boulevard.

³ increases to >760 feet with clearance of shrubbery on south side of Bay Boulevard.

Per field observation, sight distance was measured to exceed the minimum recommended intersection and stopping sight distances for passenger cars as documented in the AASHTO reference manual at all driveways in all directions except at the east driveway facing west. Removal of the existing foliage and shrubbery on the south side of Bay Boulevard would provide adequate intersection and stopping sight distance for passenger cars on all approaches at both driveways.

For trucks, sight lines for obtaining adequate intersection sight distance are limited by existing shrubbery along the south side of Bay Boulevard. With the removal of the foliage and shrubbery, the west driveway is expected to have sight distance in the east and west direction that exceeds the 760-foot requirement for intersection sight distance. The east driveway is also expected to exceed the 760-foot requirement to the west. The sight line to the east at the east driveway is limited to 575 feet due to topographic features on the north side of Yaquina Bay Boulevard. However, the stopping sight distance requirement for trucks and passenger cars is met at the east driveway facing east and thus vehicles are expected to be able to slow down effectively for obstacles, based on the recommendations set forth in AASHTO reference manual.

As such, with the redevelopment of the site, it is recommended that the foliage and shrubbery on the south side of Bay Boulevard between the two driveways be removed to provide sight lines to allow for heavy vehicle entry and exit onto Yaquina Bay Boulevard.

It is further recommended that any landscaping, above ground utilities or signage associated with the proposed development be located and maintained to ensure that adequate intersection sight distance.

Off-Site Traffic Impacts

This section considers the routes of traffic expected to visit the site, composition of vehicle types, and the adequacy of those streets to accommodate expected loads.

Vehicles Visiting Site

Based on the trip generation summary in Table 4, there will be an expected 42 passenger car trips and 100 truck trips generated by the site on a typical weekday. Teevin Bros. expects to operate this log yard in a similar manner to the three yards it currently operates. Accordingly, Teevin Bros. currently operates log yards in three Oregon locations – Eugene, Crabtree (between Albany and Lebanon) and Rainier. Based on statistics from those yards, 44% of the trucks using the sites have a gross vehicle weight (GVW) of 80,000 lbs.; 54% of the trucks using the sites have a GVW of 88,000 lbs., and 4% of trucks accessing the sites have GVW greater than 88,000 and less than 105,000 lbs. No truck in the regular timber haul runs weighs in at more than 96,000 lbs.

Of the expected 100 weekday truck trips, half will be *entering* the site loaded, weighing an average of approximately 88,000 lbs., and half will be *departing* the site unloaded at approximately 29,000 lbs.

Truck Routes

Based on the distribution of trips to the site shown in Figure 5, the key streets expected to be impacted by trucks include: Highway 20, Moore Drive, and Bay Boulevard. All truck trips to/from the site will use Bay Boulevard west of the site to Moore Drive to Highway 20. Figure 7 illustrates the truck routes to be used. The adequacy of these streets to accommodate expected truck loads on these streets is discussed below. The expected loads to be generated by the site (less than 105,000 lbs. GVW) comply with legal limits for public streets, and thus, these streets can be expected to support these legal loads. Additional quantitative structural analysis based on core samples may be required by City of Newport staff in support of the qualitative assessment provided herein. Teevin Bros. and City of Newport staff should work collaboratively to identify the feasibility and methodology for conducting any required analysis, as needed.

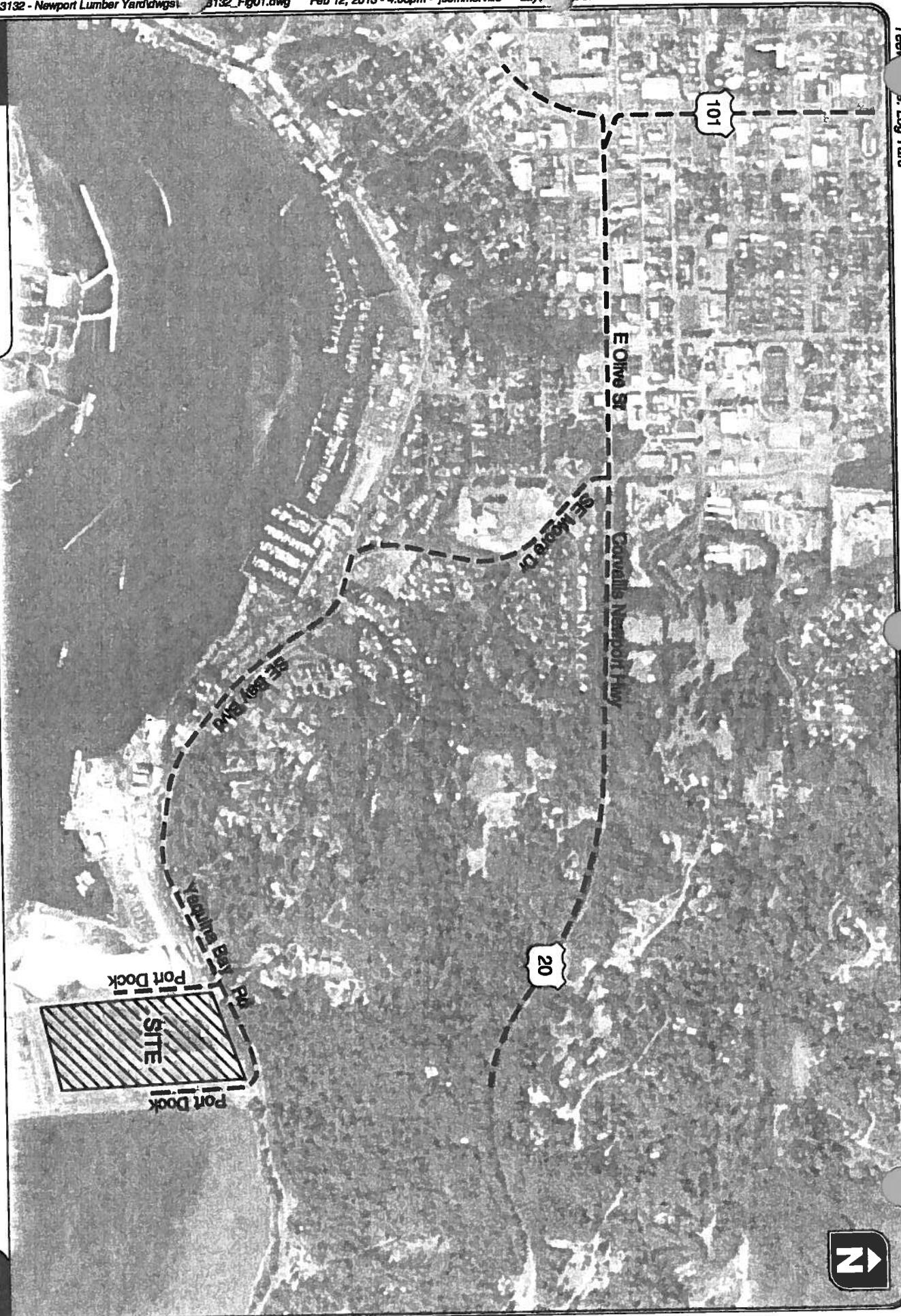
Bay Boulevard

Currently, a fish meal operation³ runs trucks that weigh approximately 98,000 lbs. (average weight) loaded with fish meal, and can weigh as much as 105,000 lbs. The fish meal operation (Trident Fisheries) processing plant and main office is located on the waterfront, west of the SE Moore Drive/SE Bay Boulevard intersection. As confirmed with Port of Newport and Trident Fisheries staff, the meal plant is located east of this intersection, on the international terminal property, and ships out fish meal along the same route on which the log trucks will travel. The fish meal is transported on trailers ranging in size from 40 to 53 feet in length, and can weigh as much as 105,000 pounds. Because these trucks use the section of Bay Boulevard that would be used by the subject site (Moore Drive to the Port

³ Trident's Newport facility is located midway along the Oregon coast. This seasonal facility typically operates from June through September as a shore-based frozen seafood and fishmeal operation. The Newport plant will process up to 1 million pounds of Pacific whiting per day, yielding a combination of surimi, fillet blocks, mince, fishmeal and oil. The plant employs approximately 120 people.

LEGEND

Proposed Truck Circulation Route



**PROPOSED TRUCK CIRCULATION ROUTES
NEWPORT, OREGON**

property), it is assumed that this section of Bay Boulevard is structurally capable of handling the expected logging loads. Based on discussions with County staff, information regarding the structural design of Bay Boulevard is not available. However, conversations with County staff indicated that Bay Boulevard currently appears to be capable of handling legal truck loads (less than 105,000 GVW).

Moore Drive

Trucks making deliveries to/from the fish meal operation also use Moore Drive to access Highway 20. Based on this continued use, it is assumed that Moore Drive is structurally capable of handling the expected loads from the logging operation. In addition, Moore Drive was reconstructed by ODOT in 1989 to ODOT Industrial standards adequate to support live truck loads above 88,000 lbs. Based on examination of the design plans, in 1989 Moore Drive was constructed with 12 inches of compacted aggregate and 6 inches of Class "B" mix asphalt. Since 1989, Moore Drive has been overlaid, and based on a physical examination currently has approximately 9 inches of asphalt. *Attachment H includes information documenting the structural capacity of Moore Drive including design drawings and cross-sections, and a recent cross-sectional photo taken in December 2012.*

Highway 20

Highway 20 is designated a Statewide Highway in the Oregon Highway Plan, and as such, is intended to carry truck freight movements. Accordingly, it is reasonable to assume that the highway is structurally adequate to accommodate the expected truck movements generated by the proposed site. In addition, in 1989 the intersection of Highway 20/Moore Drive was reconstructed to accommodate truck movements.

In summary, it is reasonable to conclude that the streets that will be expected to carry truck trips to and from the site are structurally capable of carrying projected loads.

CONCLUSIONS AND RECOMMENDATIONS

The results of the traffic impact analysis indicate that the proposed log yard can be constructed while maintaining acceptable levels of service and safety on the surrounding transportation system assuming implementation of the study recommendations. The findings of this analysis and our recommendations are discussed below.

Conclusions

Year 2012 Existing Conditions

- All of the study intersections operate acceptably and within operations thresholds during the weekday a.m. and p.m. peak hours.

Proposed Development Plan

- At full operating capacity, the proposed development is estimated to generate approximately 142 net new one-way daily trips (71 in / 71 out), 16 weekday a.m. (10 in / 6 out), and 10 weekday p.m. (2 in / 8 out) peak hour trips.

Year 2013 Total Traffic Conditions

- All of the study intersections and site-access points are forecast to continue to operate acceptably during the weekday a.m. and p.m. peak hours.
- A 95th percentile queuing analysis at the SE Moore Drive/Highway 20 intersection indicates that the existing queue storage is expected to continue to be adequate for the expected increase in traffic due to the proposed development.
- Sufficient stopping sight distance for passenger cars, trucks, and heavy vehicles is expected to continue to be available at both site-access driveways upon buildout with the removal of existing shrubbery.
- Sufficient intersection sight distance for passenger cars, trucks, and heavy vehicles is also expected to be available at both driveways upon removal of existing shrubbery. Due to topographic constraints, intersection sight distance is limited to approximately 575 feet to the west at the east driveway.
- Streets that will be expected to carry truck trips to and from the site, including Bay Boulevard, Moore Drive, and Highway 20, appear to be structurally capable of carrying projected loads based on conversations with City, County, and State staff.

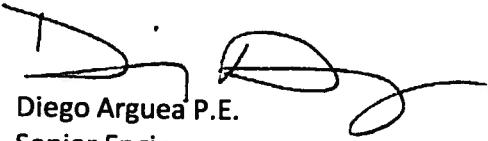
Recommendations

The following list summarizes the mitigation measures recommended as part of this proposed redevelopment.

- Site-development related landscaping as well as above-ground utilities or signing near the site access points should be located and maintained to ensure adequate stopping sight distance is provided.
- Foliage and shrubbery along the south side of Bay Boulevard between the two driveway locations should be trimmed and maintained to improve existing sight distance for trucks and heavy vehicles.

We trust that the methodology and analysis of the proposed Log Yard impacts on the local transportation system adequately addresses the requirements outlined in the City of Newport Traffic Impact Analysis submittal requirements (included in Attachment "A"). Please contact us with any questions.

Sincerely,
KITTELSON & ASSOCIATES, INC.


Diego Arguea P.E.
Senior Engineer


Dan Seeman
Principal Planner

Cc: *Derek Tokos, AICP*
City of Newport Community Development Director

Tim Gross, P.E.
City of Newport Public Works Director/City Engineer

Paul Langner
Teevin Bros.

Eric Oien
Teevin Bros.

REFERENCES

1. Transportation Research Board. *Highway Capacity Manual*. 2000.
2. Oregon Department of Transportation. *1999 Oregon Highway Plan*. 2012
3. Oregon Department of Transportation. *Analysis Procedures Manual*. Transportation Planning Analysis Unit (TPAU). April 2006.
4. Institute of Transportation Engineers (ITE). *Trip Generation, 9th Edition*. 2012.

ATTACHMENTS

- A. Scoping and Application Submittal Requirements
- B. Description of Level-of-Service Methods and Criteria
- C. Traffic Count Data
- D. Traffic Volumes Seasonal Adjustment
- E. Existing Conditions Traffic Operations Worksheets
- F. Background Conditions Traffic Operations Worksheets
- G. Total Conditions Traffic Operations Worksheets
- H. Yaquina Bay Boulevard and SE Moore Drive Pavement Quality

Attachment A
Scoping and Application
Submittal Requirements

APPLICATION SUBMITTAL REQUIREMENTS

Traffic Impact Analysis

A Traffic Impact Analysis (TIA) shall be submitted to the city with a land use application under any one or more of the following circumstances:

- To determine whether a significant affect on the transportation system would result from a proposed amendment to the Newport Comprehensive Plan or to a land use regulation, as specified in OAR 660-012-0060.
- ODOT requires a TIA in conjunction with a requested approach road permit, as specified in OAR 734-051-3030(4). (*ODOT District 4 development review phone number is 541-757-4211.*)
- The proposal may generate 100 PM peak-hour trips or more onto city streets or county roads.
- The proposal may increase use of any adjacent street by 10 vehicles or more per day that exceeds 26,000 pound gross vehicle weight.
- The proposal includes a request to use Trip Reserve Fund trips to meet the requirements of Chapter 14.43, South Beach Transportation Overlay Zone.

Pre-Application Conference:

- The applicant shall contact the City Community Development Department to request that a meeting be scheduled with the City Engineer prior to submitting an application that requires a TIA. This meeting will be coordinated with ODOT when an approach road to US-101 or US-20 serves the property so that the completed TIA meets both City and ODOT requirements.

Study Area:

The following facilities shall be included in the study area for all TIAs:

- All site-access points and intersections (signalized and unsignalized) adjacent to the proposed site. If the proposed site fronts an arterial or collector street, the analysis shall address all intersections and driveways along the site frontage and within the access spacing distances extending out from the boundary of the site frontage.
- Roads through and adjacent to the site.
- All intersections needed for signal progression analysis.
- In addition to these requirements, the City Engineer may require analysis of any additional intersections or roadway links that may be adversely affected as a result of the proposed development.

TIA Requirements:

- The submitted TIA shall be prepared by an Oregon Registered Professional Engineer that is qualified to perform traffic engineering analysis and will be paid for by the applicant.
- The latest edition of the Trip Generation Manual (published by the Institute of Transportation Engineers (ITE)) shall be used to gauge PM peak hour vehicle trips unless a specific trip generation study that is approved by the City Engineer indicates an alternative trip generation rate is appropriate. An applicant may choose, but is not required, to use a trip generation study as a reference to determine trip generation for a

specific land use which is not well-represented in the ITE Trip Generation Manual and for which similar facilities are available to count.

- Intersection-level analysis shall occur at every intersection where 50 or more peak hour vehicle trips can be expected as a result of the proposal.
- The TIA shall comply with the requirements of OAR 660-012-0060.
- The TIA shall address the condition of the impacted roadways and identify structural deficiencies or reduction in the useful life of existing facilities related to the proposed development.
- If the proposal includes an increase in 10 or more vehicles per day that exceed 26,000 pounds GVW, the TIA shall address the structural conditions above for the routes used to reach US-101 or US-20.

Approval Process:

When a TIA is required, the applicable review process will be the same as that accorded to the underlying land use proposal. If a land use action is not otherwise required, then approval of the proposed development shall follow a Type II decision making process.

Approval Criteria:

When a TIA is required, a development proposal is subject to the following criteria, in addition to all criteria otherwise applicable to the underlying proposal:

- The analysis complies with the TIA requirements;
- The TIA demonstrates that adequate transportation facilities exist to serve the proposed development or identifies mitigation measures that resolve the traffic safety problems in a manner that is satisfactory to the City Engineer and, when state highway facilities are affected, to ODOT; and
- Where a proposed amendment to the Newport Comprehensive Plan or land use regulation would significantly affect an existing or planned transportation facility, the TIA must demonstrate that solutions have been developed that are consistent with the provisions of OAR 660-012-0060; and
- For affected non-highway facilities, the TIA establishes that any Level of Service standards adopted by the City have been met, and development will not cause excessive queuing or delays at affected intersections, as determined in the City Engineer's sole discretion; and
- Proposed public improvements are designed and will be constructed to the standards specified in Chapter 14.44 Transportation Standards or Chapter 13.05, Subdivision and Partition, as applicable.

Application Fee:

No fee is required for the review of a TIA report that is submitted in conjunction with another required land use action. The application fee for City review of a TIA report that is independent of another land use action is \$487.

Diego Arguea

From: Matt Hughart
Sent: Friday, December 14, 2012 4:17 PM
To: Tim Gross
Cc: Derrick Tokos; darguea@kittelson.com
Subject: RE: Teevin Bros. Traffic Study

Thanks for the e-mail. Yes, we would like to obtain any counts you have within the site vicinity and at the study intersections. Please e-mail them at your next convenience. If they are too large to e-mail, let me know and I can arrange another transfer option. Thanks.

Matt and Diego

Matt Hughart, AICP

Associate Planner
503.228.5230
503-936-1463 (cell)

From: Tim Gross [<mailto:T.Gross@NewportOregon.gov>]
Sent: Monday, December 10, 2012 1:54 PM
To: Matt Hughart
Cc: Derrick Tokos
Subject: RE: Teevin Bros. Traffic Study

Matt,

Sorry for the delay. Derrick wanted me to wait to reply until you had spoken with him.

This is substantially what we discussed on the phone. Couple of comments:

The fishing season has a significant impact on the truck traffic in the Bayfront area. I have included the season below and I think they should be taken into consideration for the study.

- Shrimp April 1 – October 31
- Hake June 15 Quota, this year the season ended in late November
- Crab December 1 this is good for a couple of month then drops off after that

Also, we have some traffic counts from the area if you are interested.

As part of the analysis, we need to know the impact to the areas in the study and then possible recommendations on ways to mitigate the impacts, if any. For example, turn lanes, lengthening an existing turn lane etc.

Thanks.

Timothy Gross, PE
Public Works Director/City Engineer

City of Newport
169 SW Coast Highway
Newport, OR 97365
P 541-574-3369
F 541-265-3301
C 541-961-5313

From: Matt Hughart [mailto:MHUGHART@kittelson.com]
Sent: Friday, November 30, 2012 11:59 AM
To: Tim Gross
Subject: Teevin Bros. Traffic Study

Tim,

Thank you for taking the time to talk with me over the phone regarding the proposed Teevin Bros. operation. I wanted to follow up with this e-mail to make sure I captured all of your comments. Here is a summary of what was discussed:

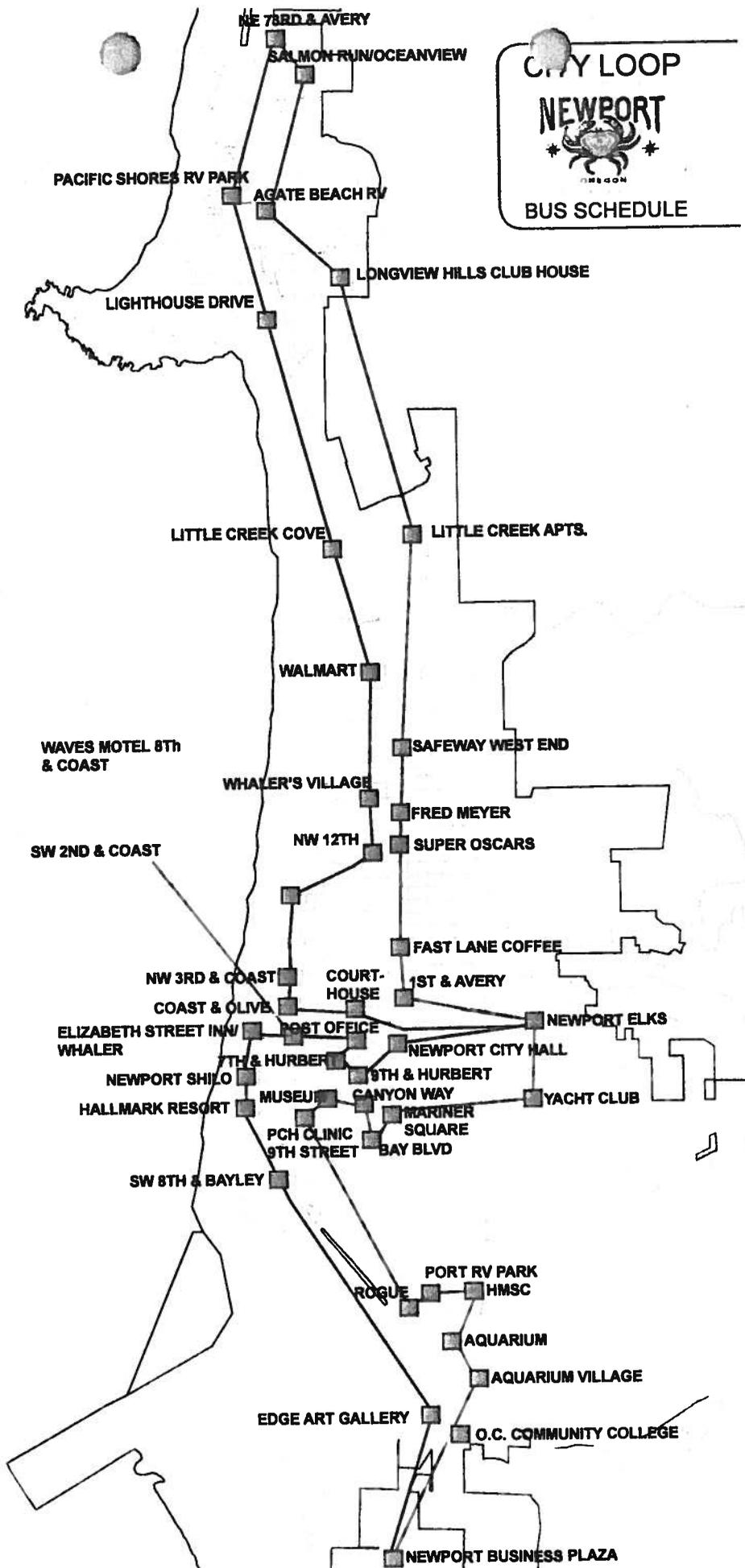
- Traffic study would be needed to address Item D of the Newport Traffic Impact Analysis requirements.
- Critical study intersections include:
 - Highway 20/Southeast Moore Drive
 - Bay Boulevard/Southeast Moore Drive
 - Two site access driveways off of Bay Road
- Critical time periods include:
 - Weekday a.m. (7:00-9:00 a.m.) and weekday p.m. (4:00-6:00 p.m.) peak periods
- Items to address in addition to the intersection impacts noted above:
 - Develop a customized trip generation profile of the operation recognizing there are no ITE Trip Generation land uses that would be applicable for the proposed operation.
 - Analyze the anticipated truck routing and quantify usage of these routes. Analyze structural impacts per TIA guidelines.

Please let me know if there is anything that I overlooked for misinterpreted. Thanks.

Matt

Matt Hughart, AICP
Associate Planner

Transportation Engineering / Planning
610 SW Alder Street, Suite 700
Portland, Oregon 97205
503.228.5230
503-535-7425 (direct)
503-936-1463 (cell)



CITY LOOP
NEWPORT

BUS SCHEDULE

Bus runs seven days a week. The cost is \$1 per ride.
 Includes holidays except Thanksgiving & Christmas Day.

NEWPORT CITY LOOP Bus Schedule



Salmon Run/Oceanview		7:23	8:37	10:22	11:50	2:25	3:55	5:41
NE 73rd & Avery Street		7:25	8:39	10:24	11:52	2:27	3:57	
Pacific Shores RV Park		7:27	8:41	10:26	11:54	2:29	3:59	
Lighthouse Drive		7:28	8:42	10:27	11:55	2:30	4:00	5:45
Little Creek Cove			8:43	10:28	11:56	2:31	4:01	
Wal-Mart			8:46	10:31	11:59	2:34	4:04	
Whaler's Village		7:32	8:47	10:32	12:00	2:35	4:05	
NW 12th			8:49	10:34	12:02	2:37	4:07	
Waves Motel - 8th & Coast			8:51	10:36	12:04	2:39	4:09	
NW 3rd & Coast			8:52	10:37	12:05	2:40	4:10	
Coast & Olive			8:53	10:38	12:06	2:41	4:11	
Courthouse			8:54	10:39	12:07	2:42	4:12	
Newport Elks		7:42						
Newport City Hall			8:59	10:42	12:12	2:47	4:17	
			layover	xxx	layover	xxx	layover	
Newport City Hall			9:19	10:47	1:22	2:52	4:37	
9th & Hurbert Parking			9:21	10:49	1:24	2:54	4:39	
SW 7th & Hurbert			9:22	10:50	1:25	2:55	4:40	
Post Office			9:23	10:51	1:26	2:56	4:41	
2nd & Coast			9:24	10:52	1:27	2:57	4:42	
Elizabeth St. Inn/Whaler			9:25	10:53	1:28	2:58	4:43	
Newport Shilo			9:25	10:53	1:28	2:58	4:43	
Hallmark Resort			9:26	10:54	1:29	2:59	4:44	
SW 8th & Bayley St			9:27	10:55	1:30	3:00	4:45	
The Edge Gallery			9:30	10:58	1:33	3:03	4:48	
Newport Business Plaza			9:32	11:00	1:35	3:05	4:50	
OCCC		7:55	9:37	11:05	1:40	3:10	4:55	
Aquarium Village			9:40	11:08	1:43	3:13	4:58	
Aquarium			9:41	11:09	1:44	3:14	4:59	
HMSC		7:58	9:43	11:11	1:46	3:16	5:01	
Port RV Park		8:00	9:45	11:13	1:48	3:18	5:03	
Rogue		8:01	9:46	11:14	1:49	3:19	5:04	
PCH Clinic 9th Street		8:05	9:50	11:18	1:53	3:23	5:08	
Museum		8:06	9:51	11:19	1:54	3:24	5:09	
Canyon Way Parking		8:07	9:52	11:20	1:55	3:25	5:10	
Bay Blvd		8:08	9:53	11:21	1:56	3:26	5:11	
Mariner Square		8:09	9:54	11:22	1:57	3:27	5:12	
Yacht Club		8:12	9:57	11:25	2:00	3:30	5:15	
Elks		8:13	9:58	11:26	2:01	3:31	5:16	
NE 1st & Avery		8:16	10:01	11:29	2:04	3:34	5:19	
Fast Lane Coffee on 101		8:18	10:03	11:31	2:06	3:36	5:21	
Oscar's on Hwy 101		8:19	10:04	11:32	2:07	3:37	5:22	
Fred Meyer		8:21	10:06	11:34	2:09	3:39	5:24	
Safeway - west end		8:23	10:08	11:36	2:11	3:41	5:26	
Little Creek Apts	7:15	8:26	10:11	11:39	2:14	3:44	5:29	
Long View Hills								
Agate Beach RV Park	***	8:29	10:14	11:42	2:17	3:47	5:33	

"Newport City Loop" runs from 7:30 a.m. to 5:30 p.m., seven days a week. Includes holidays except Thanksgiving & Christmas Day. The cost is \$1 per ride (Free passes available for visitors via their lodging facility management.)

The bus is wheelchair accessible and has a bike rack. Schedules are available: online, on any bus, & at the transit office: 410 NE Harney St., Newport.

541.265.4900

www.co.lincoln.or.us

Attachment B
Description of Level-of-Service
Methods and Criteria

ATTACHMENT B LEVEL-OF-SERVICE CONCEPT

Level of service (LOS) is a concept developed to quantify the degree of comfort (including such elements as travel time, number of stops, total amount of stopped delay, and impediments caused by other vehicles) afforded to drivers as they travel through an intersection or roadway segment. Six grades are used to denote the various level of service from "A" to "F".¹

SIGNALIZED INTERSECTIONS

The six level-of-service grades are described qualitatively for signalized intersections in Table B1. Additionally, Table B2 identifies the relationship between level of service and average control delay per vehicle. Control delay is defined to include initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Using this definition, Level of Service "D" is generally considered to represent the minimum acceptable design standard.

Table B-1 Level-of-Service Definitions (Signalized Intersections)

Level of Service	Average Delay per Vehicle
A	Very low average control delay, less than 10 seconds per vehicle. This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	Average control delay is greater than 10 seconds per vehicle and less than or equal to 20 seconds per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for a level of service A, causing higher levels of average delay.
C	Average control delay is greater than 20 seconds per vehicle and less than or equal to 35 seconds per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
D	Average control delay is greater than 35 seconds per vehicle and less than or equal to 55 seconds per vehicle. The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle length, or high volume/capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	Average control delay is greater than 55 seconds per vehicle and less than or equal to 80 seconds per vehicle. This is usually considered to be the limit of acceptable delay. These high delay values generally (but not always) indicate poor progression, long cycle lengths, and high volume/capacity ratios. Individual cycle failures are frequent occurrences.
F	Average control delay is in excess of 80 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with oversaturation. It may also occur at high volume/capacity ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also contribute to such high delay values.

¹ Most of the material in this appendix is adapted from the Transportation Research Board, Highway Capacity Manual, (2000).

Table B2 Level-of-Service Criteria for Signalized Intersections

Level of Service	Average Control Delay per Vehicle (Seconds)
A	<10.0
B	>10 and ≤20
C	>20 and ≤35
D	>35 and ≤55
E	>55 and ≤80
F	>80

UNSIGNALIZED INTERSECTIONS

Unsignalized intersections include two-way stop-controlled (TWSC) and all-way stop-controlled (AWSC) intersections. The 2000 Highway Capacity Manual (HCM) provides models for estimating control delay at both TWSC and AWSC intersections. A qualitative description of the various service levels associated with an unsignalized intersection is presented in Table B3. A quantitative definition of level of service for unsignalized intersections is presented in Table B4. Using this definition, Level of Service "E" is generally considered to represent the minimum acceptable design standard.

Table B3 Level-of-Service Criteria for Unsignalized Intersections

Level of Service	Average Delay per Vehicle to Minor Street
A	<ul style="list-style-type: none"> Nearly all drivers find freedom of operation. Very seldom is there more than one vehicle in queue.
B	<ul style="list-style-type: none"> Some drivers begin to consider the delay an inconvenience. Occasionally there is more than one vehicle in queue.
C	<ul style="list-style-type: none"> Many times there is more than one vehicle in queue. Most drivers feel restricted, but not objectionably so.
D	<ul style="list-style-type: none"> Often there is more than one vehicle in queue. Drivers feel quite restricted.
E	<ul style="list-style-type: none"> Represents a condition in which the demand is near or equal to the probable maximum number of vehicles that can be accommodated by the movement. There is almost always more than one vehicle in queue. Drivers find the delays approaching intolerable levels.
F	<ul style="list-style-type: none"> Forced flow. Represents an intersection failure condition that is caused by geometric and/or operational constraints external to the intersection.

Table B4 Level-of-Service Criteria for Unsignalized Intersections

Level of Service	Average Control Delay per Vehicle (Seconds)
A	<10.0
B	>10.0 and ≤ 15.0
C	>15.0 and ≤ 25.0
D	>25.0 and ≤ 35.0
E	>35.0 and ≤ 50.0
F	>50.0

It should be noted that the level-of-service criteria for unsignalized intersections are somewhat different than the criteria used for signalized intersections. The primary reason for this difference is that drivers expect different levels of performance from different kinds of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an unsignalized intersection. Additionally, there are a number of driver behavior considerations that combine to make delays at signalized intersections less galling than at unsignalized intersections. For example, drivers at signalized intersections are able to relax during the red interval, while drivers on the minor street approaches to TWSC intersections must remain attentive to the task of identifying acceptable gaps and vehicle conflicts. Also, there is often much more variability in the amount of delay experienced by individual drivers at unsignalized intersections than signalized intersections. For these reasons, it is considered that the control delay threshold for any given level of service is less for an unsignalized intersection than for a signalized intersection. While overall intersection level of service is calculated for AWSC intersections, level of service is only calculated for the minor approaches and the major street left turn movements at TWSC intersections. No delay is assumed to the major street through movements. For TWSC intersections, the overall intersection level of service remains undefined: level of service is only calculated for each minor street lane.

In the performance evaluation of TWSC intersections, it is important to consider other measures of effectiveness (MOEs) in addition to delay, such as v/c ratios for individual movements, average queue lengths, and 95th-percentile queue lengths. By focusing on a single MOE for the worst movement only, such as delay for the minor-street left turn, users may make inappropriate traffic control decisions. The potential for making such inappropriate decisions is likely to be particularly pronounced when the HCM level-of-service thresholds are adopted as legal standards, as is the case in many public agencies.

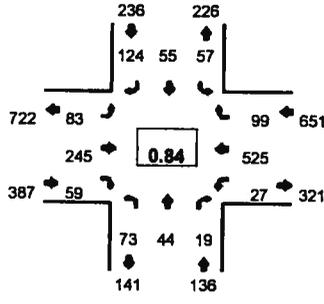
Attachment C
Traffic Count Data

Type of peak hour being reported: User-Defined

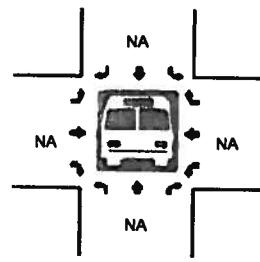
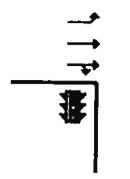
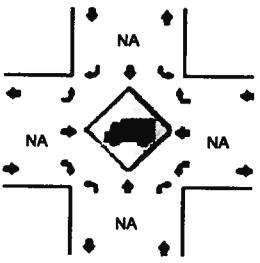
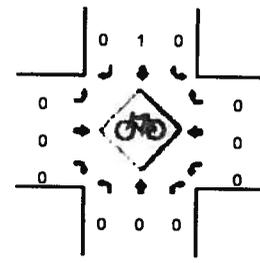
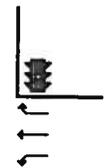
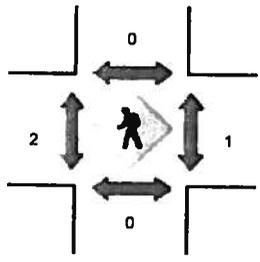
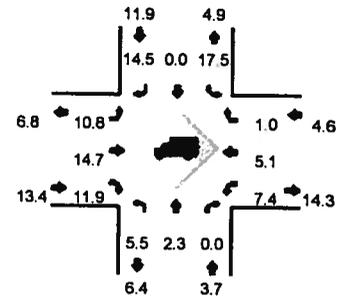
Method for determining peak hour: Total Entering Volume

LOCATION: NE Harney St/SE Moore Dr – Corvallis-Newport Hwy
 CITY/STATE: Newport, OR

QC JOB #: 10865307
 DATE: Thu, Dec 06 2012



Peak-Hour: 7:35 AM – 8:35 AM
 Peak 15-Min: 7:55 AM – 8:10 AM



5-Min Count Period	NE Harney St/SE Moore Dr (Northbound)				NE Harney St/SE Moore Dr (Southbound)				Corvallis-Newport Hwy (Eastbound)				Corvallis-Newport Hwy (Westbound)				Total	Hourly Totals	
	Beginning At	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right			U
7:00 AM	3	0	1	0	0	0	3	0	1	13	3	0	0	27	4	0	55		
7:05 AM	3	0	0	0	1	1	0	5	0	2	18	3	0	2	33	0	0	67	
7:10 AM	2	1	2	0	2	0	4	0	2	20	3	0	0	25	2	0	63		
7:15 AM	2	1	0	0	5	0	5	0	1	23	8	0	1	26	6	0	78		
7:20 AM	5	2	1	0	1	1	2	0	1	12	0	0	1	31	1	0	58		
7:25 AM	4	4	0	0	1	0	1	0	1	18	4	0	3	28	10	0	74		
7:30 AM	2	4	1	0	1	2	2	0	1	19	5	0	0	32	3	0	72		
7:35 AM	6	3	0	0	3	2	1	0	2	16	1	0	1	44	6	0	85		
7:40 AM	5	4	1	0	3	3	3	0	5	14	4	0	4	41	12	0	99		
7:45 AM	7	2	5	0	7	3	8	0	11	20	5	0	0	52	7	0	127		
7:50 AM	5	5	2	0	2	3	11	0	13	27	5	0	4	48	11	0	138		
7:55 AM	9	8	0	0	6	6	24	0	9	21	4	0	4	45	11	0	147	1061	
8:00 AM	5	7	1	0	3	8	10	0	11	22	9	0	3	43	7	0	129	1135	
8:05 AM	6	3	1	0	6	9	12	0	4	27	3	0	2	56	15	0	144	1212	
8:10 AM	7	4	1	0	7	5	17	0	5	23	6	0	1	31	12	0	119	1268	
8:15 AM	11	3	2	0	9	5	13	0	9	24	3	0	1	34	5	0	119	1309	
8:20 AM	3	3	3	0	6	4	7	0	4	19	7	0	4	39	7	0	108	1357	
8:25 AM	4	2	2	0	3	3	8	0	6	17	5	0	1	45	1	0	97	1380	
8:30 AM	5	0	1	0	2	4	10	0	4	15	7	0	2	47	5	0	102	1410	
8:35 AM	10	2	1	0	1	2	8	0	4	19	3	0	0	28	1	0	79	1404	
8:40 AM	10	0	0	0	2	2	6	0	0	30	4	0	1	34	1	0	90	1395	
8:45 AM	9	1	2	0	3	1	1	0	5	14	5	0	4	44	3	0	92	1360	
8:50 AM	5	2	3	0	5	0	7	0	0	18	6	0	1	59	3	0	109	1333	
8:55 AM	8	2	1	0	2	2	3	0	3	17	5	0	3	49	4	0	99	1285	
Peak 15-Min	Northbound				Southbound				Eastbound				Westbound				Total		
Flowrates	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
All Vehicles	80	72	8	0	60	92	184	0	98	280	64	0	38	578	132	0	1680		
Heavy Trucks	4	0	0		18	0	0		8	58	4		0	40	4		132		
Pedestrians	0	0	0		0	0	0		0	0	0		0	0	0		0		
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0		
Railroad																	0		
Stopped Buses																	0		

Comments:

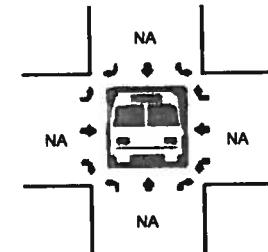
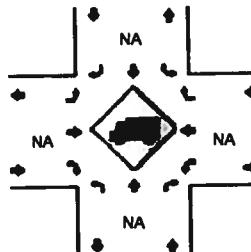
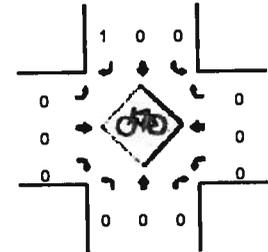
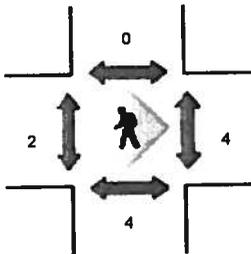
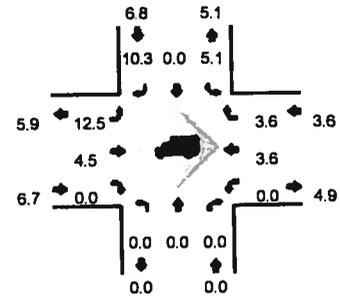
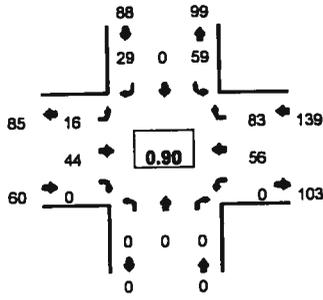
Type of peak hour being reported: User-Defined

Method for determining peak hour: Total Entering Volume

LOCATION: SE Moore Dr – SE Bay Blvd
CITY/STATE: Newport, OR

QC JOB #: 10865305
DATE: Thu, Dec 06 2012

Peak-Hour: 7:35 AM – 8:35 AM
Peak 15-Min: 7:45 AM – 8:00 AM



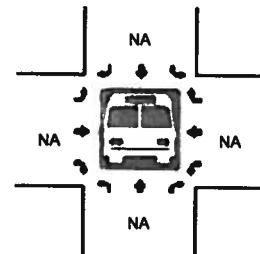
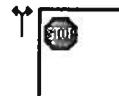
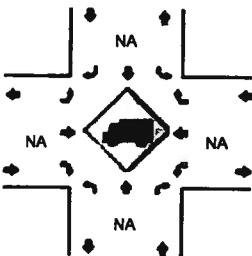
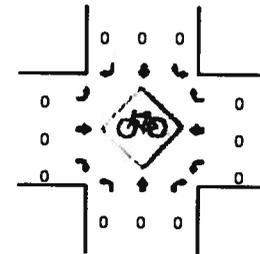
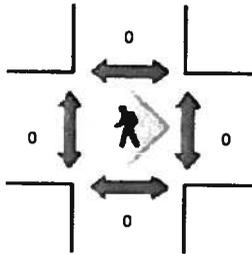
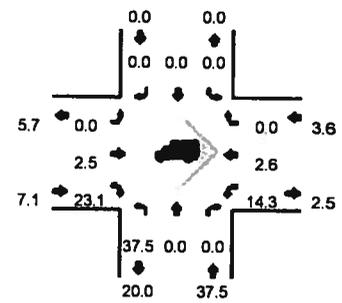
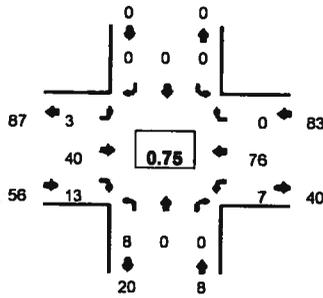
5-Min Count Period	SE Moore Dr (Northbound)				SE Moore Dr (Southbound)				SE Bay Blvd (Eastbound)				SE Bay Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	1	0	2	0	0	1	0	0	0	2	2	0	8	
7:05 AM	0	0	0	0	1	0	2	0	0	0	0	0	0	5	2	0	10	
7:10 AM	0	0	0	0	4	0	0	0	1	1	0	0	0	3	3	0	12	
7:15 AM	0	0	0	0	7	0	0	0	0	2	0	0	0	1	2	0	12	
7:20 AM	0	0	0	0	2	0	0	0	0	1	0	0	0	1	6	0	10	
7:25 AM	0	0	0	0	3	0	2	0	0	3	0	0	0	1	6	0	15	
7:30 AM	0	0	0	0	3	0	3	0	3	6	0	0	0	2	2	0	19	
7:35 AM	0	0	0	0	3	0	1	0	1	2	0	0	0	2	9	0	18	
7:40 AM	0	0	0	0	3	0	3	0	1	5	0	0	0	2	5	0	19	
7:45 AM	0	0	0	0	2	0	1	0	1	3	0	0	0	10	10	0	27	
7:50 AM	0	0	0	0	6	0	6	0	2	2	0	0	0	5	13	0	33	
7:55 AM	0	0	0	0	7	0	1	0	0	2	0	0	0	5	5	0	20	203
8:00 AM	0	0	0	0	5	0	1	0	1	2	0	0	0	7	8	0	24	219
8:05 AM	0	0	0	0	11	0	4	0	1	3	0	0	0	3	8	0	30	239
8:10 AM	0	0	0	0	2	0	2	0	3	5	0	0	0	6	7	0	25	252
8:15 AM	0	0	0	0	3	0	4	0	1	4	0	0	0	1	4	0	17	257
8:20 AM	0	0	0	0	7	0	3	0	2	3	0	0	0	9	6	0	30	277
8:25 AM	0	0	0	0	4	0	1	0	2	6	0	0	0	2	7	0	22	284
8:30 AM	0	0	0	0	7	0	2	0	1	7	0	0	0	4	1	0	22	287
8:35 AM	0	0	0	0	3	0	2	0	0	1	0	0	0	3	8	0	17	288
8:40 AM	0	0	0	0	1	0	2	0	1	0	0	0	0	3	7	0	14	281
8:45 AM	0	0	0	0	6	0	2	0	4	4	0	0	0	2	6	0	24	278
8:50 AM	0	0	0	0	3	0	2	0	0	4	0	0	0	3	7	0	19	264
8:55 AM	0	0	0	0	2	0	1	0	2	3	0	0	0	6	4	0	18	262
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	58	0	32	0	12	28	0	0	0	80	112	0	320	
Heavy Trucks	0	0	0	0	0	0	4	0	0	0	0	0	0	4	4	0	12	
Pedestrians		12												8			24	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: West Port Dock Rd -- Yaquina Bay Rd
 CITY/STATE: Newport, OR

QC JOB #: 10865303
 DATE: Thu, Dec 06 2012

Peak-Hour: 7:35 AM -- 8:35 AM
 Peak 15-Min: 7:40 AM -- 7:55 AM



5-Min Count Period Beginning At	West Port Dock Rd (Northbound)				West Port Dock Rd (Southbound)				Yaquina Bay Rd (Eastbound)				Yaquina Bay Rd (Westbound)				Total	Hourly Totals	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	6	
7:10 AM	0	0	0	0	0	0	0	0	0	0	1	2	0	0	2	0	0	5	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	2	0	0	6	
7:20 AM	1	0	0	0	0	0	0	0	0	0	0	5	0	0	3	0	0	9	
7:25 AM	0	0	0	0	0	0	0	0	0	0	3	2	0	0	4	0	0	9	
7:30 AM	1	0	0	0	0	0	0	0	0	0	5	4	0	0	3	0	0	13	
7:35 AM	1	0	0	0	0	0	0	0	0	0	2	1	0	0	6	0	0	10	
7:40 AM	0	0	0	0	0	0	0	0	0	0	8	1	0	0	7	0	0	16	
7:45 AM	2	0	0	0	0	0	0	0	0	0	1	3	0	0	11	0	0	17	
7:50 AM	0	0	0	0	0	0	0	0	0	0	3	3	0	1	8	0	0	16	
7:55 AM	1	0	0	0	0	0	0	0	0	0	2	0	0	0	8	0	0	11	121
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	2	0	8	0	0	11	129
8:05 AM	1	0	0	0	0	0	0	0	0	0	1	3	0	1	6	0	0	12	135
8:10 AM	2	0	0	0	0	0	0	0	0	0	9	0	0	1	9	0	0	21	151
8:15 AM	1	0	0	0	0	0	0	0	0	0	1	1	0	1	4	0	0	8	153
8:20 AM	0	0	0	0	0	0	0	0	0	0	1	1	1	0	5	0	0	8	152
8:25 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	2	1	0	0	6	149
8:30 AM	0	0	0	0	0	0	0	0	0	0	8	0	0	1	2	0	0	11	147
8:35 AM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	6	0	0	8	145
8:40 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	3	132
8:45 AM	1	0	2	0	0	0	0	0	0	0	3	0	0	0	2	0	0	8	123
8:50 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	7	114
8:55 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6	109
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total		
All Vehicles	8	0	0	0	0	0	0	0	0	48	28	0	4	108	0	0	198		
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	8		
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Railroad																			
Stopped Buses																			

Comments:

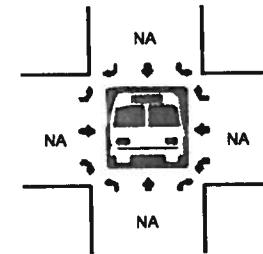
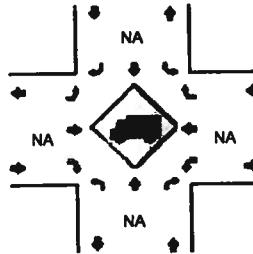
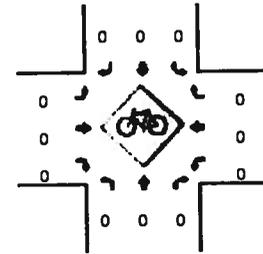
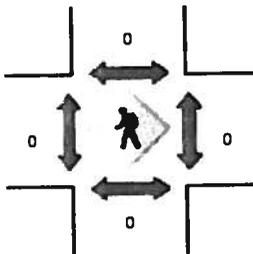
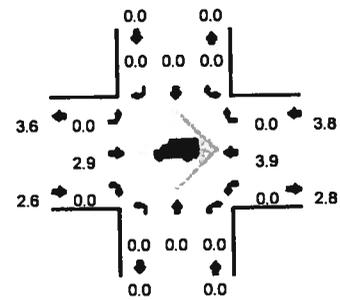
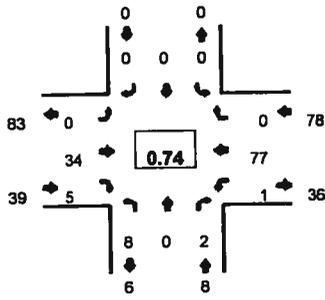
Type of peak hour being reported: User-Defined

Method for determining peak hour: Total Entering Volume

LOCATION: East Port Dock Rd – Yaquina Bay Rd
CITY/STATE: Newport, OR

QC JOB #: 10865301
DATE: Thu, Dec 06 2012

Peak-Hour: 7:35 AM – 8:35 AM
Peak 15-Min: 7:40 AM – 7:55 AM

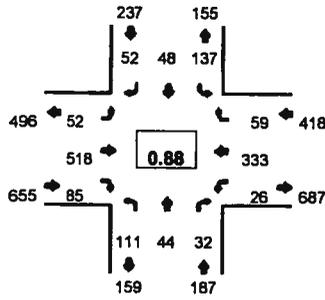


5-Min Count Period Beginning At	East Port Dock Rd (Northbound)				East Port Dock Rd (Southbound)				Yaquina Bay Rd (Eastbound)				Yaquina Bay Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	
7:10 AM	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	
7:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4	
7:25 AM	0	0	0	0	0	0	0	0	0	1	2	0	0	4	0	0	7	
7:30 AM	0	0	0	0	0	0	0	0	0	4	1	0	0	3	0	0	8	
7:35 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	6	0	0	8	
7:40 AM	0	0	0	0	0	0	0	0	0	7	1	0	0	7	0	0	15	
7:45 AM	1	0	1	0	0	0	0	0	0	1	0	0	0	10	0	0	13	
7:50 AM	3	0	0	0	0	0	0	0	0	1	2	0	0	8	0	0	14	
7:55 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	8	0	0	10	91
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	7	0	0	8	97
8:05 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	9	0	0	10	102
8:10 AM	0	0	0	0	0	0	0	0	0	8	0	0	0	8	0	0	18	115
8:15 AM	1	0	0	0	0	0	0	0	0	1	1	0	1	4	0	0	8	121
8:20 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	5	0	0	7	124
8:25 AM	1	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	6	123
8:30 AM	0	0	0	0	0	0	0	0	0	8	1	0	0	3	0	0	10	125
8:35 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	6	0	0	8	125
8:40 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	112
8:45 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	2	0	0	7	106
8:50 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	7	99
8:55 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	7	96
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	16	0	4	0	0	0	0	0	0	36	12	0	0	100	0	0	168	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

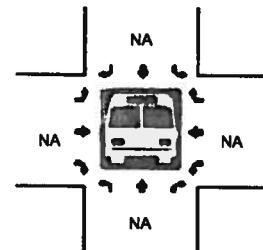
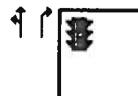
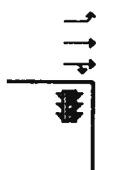
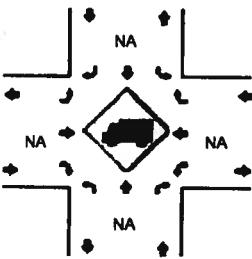
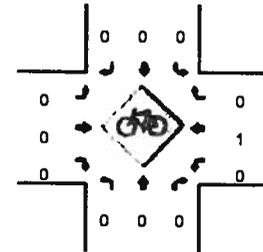
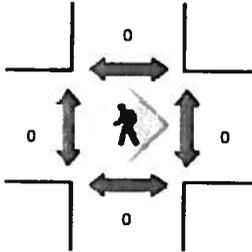
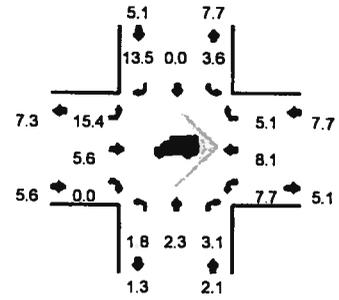
Comments:

LOCATION: NE Harney St/SE Moore Dr – Corvallis-Newport Hwy
 CITY/STATE: Newport, OR

QC JOB #: 10865308
 DATE: Tue, Dec 18 2012



Peak-Hour: 4:30 PM – 5:30 PM
 Peak 15-Min: 5:00 PM – 5:15 PM



5-Min Count Period Beginning At	NE Harney St/SE Moore Dr (Northbound)				NE Harney St/SE Moore Dr (Southbound)				Corvallis-Newport Hwy (Eastbound)				Corvallis-Newport Hwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	8	8	3	0	9	5	8	0	7	37	14	0	1	30	3	0	133	
4:05 PM	7	3	1	0	10	4	5	0	4	32	7	0	0	16	6	0	95	
4:10 PM	9	3	0	0	5	2	10	0	4	29	7	0	4	37	7	0	117	
4:15 PM	12	4	3	0	11	1	6	0	5	35	13	0	0	30	7	0	127	
4:20 PM	8	2	5	0	11	3	3	0	8	34	8	0	0	23	8	0	109	
4:25 PM	6	3	2	0	7	2	5	0	7	34	8	0	1	27	2	0	104	
4:30 PM	18	4	2	0	7	2	6	0	7	36	5	0	1	34	7	0	127	
4:35 PM	15	2	2	0	7	1	3	0	4	37	8	0	2	25	3	0	109	
4:40 PM	5	4	1	0	5	3	2	0	1	36	2	0	1	48	5	0	111	
4:45 PM	12	3	4	0	17	5	4	0	4	36	5	0	4	34	6	0	134	
4:50 PM	7	4	2	0	5	8	2	0	4	41	11	0	1	29	5	0	117	
4:55 PM	4	2	5	0	8	8	1	0	3	42	10	0	2	32	3	0	120	1403
5:00 PM	13	4	1	0	25	6	8	0	4	45	6	0	2	18	3	0	135	1405
5:05 PM	6	5	5	0	22	8	6	0	4	49	7	0	0	20	5	0	139	1449
5:10 PM	7	5	3	0	11	3	7	0	6	62	14	0	7	23	4	0	152	1484
5:15 PM	12	5	5	0	10	2	5	0	4	35	7	0	3	25	7	0	120	1477
5:20 PM	7	2	1	0	10	2	3	0	6	50	8	0	2	28	10	0	125	1493
5:25 PM	7	4	1	0	10	2	3	0	5	49	4	0	1	21	1	0	108	1497
5:30 PM	8	2	1	0	8	2	4	0	0	40	9	0	1	11	1	0	87	1457
5:35 PM	4	2	2	0	5	4	3	0	6	44	7	0	1	23	2	0	103	1451
5:40 PM	4	3	3	0	4	3	1	0	6	34	5	0	3	15	5	0	86	1426
5:45 PM	5	2	1	0	1	5	5	0	5	19	5	0	3	15	4	0	70	1362
5:50 PM	2	2	3	0	6	0	4	0	8	27	10	0	0	17	3	0	82	1327
5:55 PM	2	5	2	0	2	2	0	0	12	25	5	0	1	17	5	0	78	1285
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	104	56	36	0	232	68	92	0	56	624	108	0	38	244	48	0	1704	
Heavy Trucks	0	0	0		12	0	6		4	24	0		8	16	4		76	
Pedestrians																	0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																	0	
Stopped Buses																	0	

Comments:

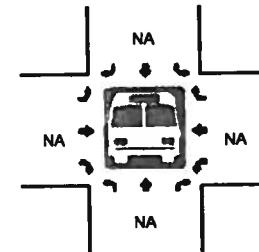
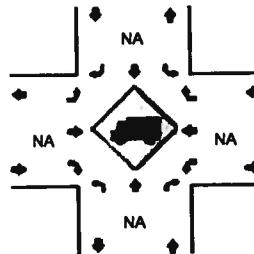
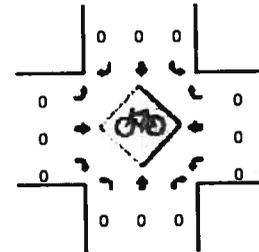
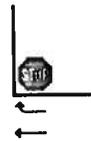
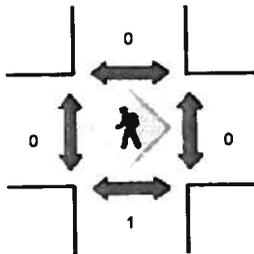
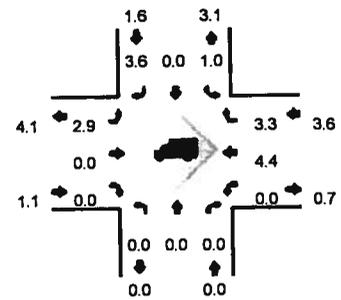
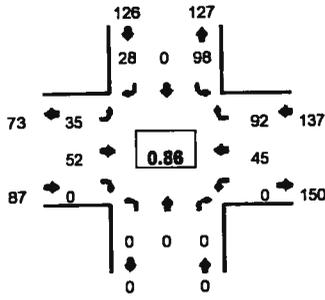
Type of peak hour being reported: User-defined

Method for determining peak hour: Total Entering Volume

LOCATION: SE Moore Dr -- SE Bay Blvd
CITY/STATE: Newport, OR

QC JOB #: 10865306
DATE: Tue, Dec 18 2012

Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 5:05 PM -- 5:20 PM



5-Min Count Period Beginning At	SE Moore Dr (Northbound)				SE Moore Dr (Southbound)				SE Bay Blvd (Eastbound)				SE Bay Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	8	0	1	0	3	8	0	0	0	9	7	0	34	
4:05 PM	0	0	0	0	9	0	1	0	1	4	0	0	0	8	6	0	29	
4:10 PM	0	0	0	0	7	0	2	0	3	4	0	0	0	2	11	0	29	
4:15 PM	0	0	0	0	2	0	1	0	1	7	0	0	0	1	9	0	21	
4:20 PM	0	0	0	0	8	0	2	0	5	6	0	0	0	1	4	0	26	
4:25 PM	0	0	0	0	3	0	1	0	1	8	0	0	0	2	4	0	19	
4:30 PM	0	0	0	0	4	0	2	0	2	4	0	0	0	3	14	0	29	
4:35 PM	0	0	0	0	6	0	3	0	1	5	0	0	0	2	8	0	25	
4:40 PM	0	0	0	0	5	0	2	0	3	3	0	0	0	5	7	0	25	
4:45 PM	0	0	0	0	5	0	2	0	4	4	0	0	0	2	9	0	28	
4:50 PM	0	0	0	0	11	0	2	0	2	3	0	0	0	1	9	0	28	
4:55 PM	0	0	0	0	17	0	3	0	2	3	0	0	0	3	5	0	33	324
5:00 PM	0	0	0	0	6	0	2	0	6	2	0	0	0	9	5	0	30	320
5:05 PM	0	0	0	0	11	0	2	0	3	4	0	0	0	4	9	0	33	324
5:10 PM	0	0	0	0	11	0	4	0	5	6	0	0	0	1	6	0	33	328
5:15 PM	0	0	0	0	11	0	4	0	6	5	0	0	0	2	6	0	36	343
5:20 PM	0	0	0	0	5	0	1	0	0	8	0	0	0	8	7	0	29	346
5:25 PM	0	0	0	0	6	0	1	0	1	5	0	0	0	5	5	0	23	350
5:30 PM	0	0	0	0	4	0	3	0	2	1	0	0	0	1	5	0	16	337
5:35 PM	0	0	0	0	7	0	3	0	2	2	0	0	0	1	2	0	17	329
5:40 PM	0	0	0	0	6	0	1	0	1	3	0	0	0	1	6	0	18	322
5:45 PM	0	0	0	0	10	0	2	0	2	2	0	0	0	2	3	0	21	317
5:50 PM	0	0	0	0	3	0	2	0	1	4	0	0	0	1	2	0	13	302
5:55 PM	0	0	0	0	4	0	1	0	3	0	0	0	0	5	5	0	18	287
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	132	0	40	0	58	60	0	0	0	28	92	0	408	
Heavy Trucks	0	0	0	0	4	0	4	0	4	0	0	0	0	0	4	0	18	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

Attachment D
Traffic Volumes Seasonal
Adjustment

SEASONAL ADJUSTMENT

The APM identifies three methods for identifying seasonal adjustment factors for highway traffic volumes. All three methods utilize information provided by Automatic Traffic Recorders (ATR) located in select locations throughout the State Highway System. The ATRs collect traffic data 24-hours a day/365 days a year. A preliminary evaluation of the methodologies indicated that the ATR Characteristics Table Method is the most appropriate method for the study area.

The ATR Characteristic Table Method requires that the ATR be located on a facility that shares similar characteristics with the facility to be adjusted, such as seasonal traffic trends, area type, and number of lanes and OHP Classification. The ATR Characteristic Table Method also requires that the AADT collected by the ATR must be within 10 percent of the AADT near the project area.

The ATR selected for this analysis (ATR #06-009) is located along Oregon Coast Highway No. 9 (US 101), approximately 0.28 miles north of Coos Bay-Roseburg Highway No. 35 (OR 42). This segment of US 101 has a coastal destination seasonal traffic trend, is located on a small urban fringe, has 4 travel lanes, is and classified as a Statewide highway, similar to Hwy 20 in Newport. The AADT at the ATR is also within 10 percent of the AADT along Hwy 20. The ATR was installed in September 1954 and has been collecting traffic data ever since. Based on the data provided by the ATR, the Peak Month generally occurs in July and August. Table 1 summarizes the percent of average daily traffic (ADT) reported by the ATR for the past five years during the peak month (July/August) and the count month (December).

Table D-1 Seasonal Adjustment Factor (ATR #06-009)

Year	2006	2007	2008	2009	2010
Peak Month (July/August)	115	114	113	115	115
Count Month (December)	92	89	88	89	91

Note: Shaded values dropped from average calculation per ODOT methodology.

Based on the data in Table 1, average monthly factors were determined as follows:

- Peak month average (July/August): $(114 + 115 + 115) / 3 = 114.67$
- Count month average (December): $(89 + 89 + 91) / 3 = 89.67$

Therefore, the east-west traffic volumes collected in December 2012 along Hwy 20 were adjusted by a factor of 1.28 (114.67/89.67).

Attachment E
Existing Conditions Traffic
Operations Worksheets

HCM Signalized Intersection Capacity Analysis

1: Hwy 20 & Moore Dr

Existing Traffic Operations

Weekday AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕	↗	↖	↕	↗		↕	↗		↕	↗
Volume (vph)	83	245	59	27	525	99	73	44	19	57	55	124
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frbp, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	0.99		1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00		0.98	1.00
Satd. Flow (prot)	1498	2835		1554	1667	1473		1620	1468		1563	1262
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.70	1.00		0.78	1.00
Satd. Flow (perm)	1498	2835		1554	1667	1473		1172	1468		1248	1262
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Growth Factor (vph)	100%	128%	100%	100%	128%	100%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	98	369	69	32	791	116	86	52	22	67	65	146
RTOR Reduction (vph)	0	16	0	0	0	39	0	0	18	0	0	92
Lane Group Flow (vph)	98	422	0	32	791	77	0	138	4	0	132	54
Confl. Peds. (#/hr)							2		1	1		2
Heavy Vehicles (%)	11%	15%	12%	7%	5%	1%	6%	2%	0%	18%	0%	15%
Turn Type	Prot			Prot		Perm	Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	7.3	45.5		3.0	41.2	41.2		14.2	14.2		14.2	14.2
Effective Green, g (s)	7.3	45.5		3.0	41.2	41.2		14.2	14.2		14.2	14.2
Actuated g/C Ratio	0.10	0.61		0.04	0.55	0.55		0.19	0.19		0.19	0.19
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	146	1727		62	919	812		223	279		237	240
v/s Ratio Prot	c0.07	0.15		0.02	c0.47			c0.12	0.00		0.11	0.04
v/s Ratio Perm						0.05		0.62	0.01		0.56	0.22
v/c Ratio	0.67	0.24		0.52	0.86	0.10		27.8	24.6		27.4	25.6
Uniform Delay, d1	32.5	6.7		35.1	14.3	7.9		1.00	1.00		1.00	1.00
Progression Factor	1.00	1.00		1.00	1.00	1.00		5.0	0.0		2.8	0.5
Incremental Delay, d2	11.5	0.1		7.1	8.3	0.1		32.8	24.6		30.2	26.1
Delay (s)	44.0	6.8		42.2	22.6	8.0						
Level of Service	D	A		D	C	A		C	C		C	C
Approach Delay (s)		13.6			21.5			31.7			28.0	
Approach LOS		B			C			C			C	

Intersection Summary

HCM Average Control Delay	21.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	74.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 1: Hwy 20 & Moore Dr, Interval #1

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	R	LT	R	LT	R
Maximum Queue (ft)	136	92	114	122	680	172	141	76	302	66
Average Queue (ft)	72	50	59	39	493	69	87	18	160	51
95th Queue (ft)	136	110	117	120	846	192	151	64	302	65
Link Distance (ft)		672			744		855		423	
Upstream Blk Time (%)					6				0	
Queuing Penalty (veh)					0				0	
Storage Bay Dist (ft)	200		200	200		150		125		25
Storage Blk Time (%)					27	0	3	0	53	22
Queuing Penalty (veh)					40	0	1	0	77	29

Intersection: 1: Hwy 20 & Moore Dr, Interval #2

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	R	LT	R	LT	R
Maximum Queue (ft)	124	100	116	63	505	174	133	36	267	76
Average Queue (ft)	57	34	43	21	225	41	64	11	93	49
95th Queue (ft)	112	79	89	52	433	138	118	36	196	70
Link Distance (ft)		672			744		855		423	
Upstream Blk Time (%)					0				0	
Queuing Penalty (veh)					0				0	
Storage Bay Dist (ft)	200		200	200		150		125		25
Storage Blk Time (%)					11	0	1		34	23
Queuing Penalty (veh)					13	0	0		39	24

Intersection: 1: Hwy 20 & Moore Dr, All Intervals

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	R	LT	R	LT	R
Maximum Queue (ft)	145	117	134	130	680	174	145	81	302	76
Average Queue (ft)	61	38	47	25	290	48	69	13	110	49
95th Queue (ft)	119	88	97	75	604	154	129	44	232	69
Link Distance (ft)		672			744		855		423	
Upstream Blk Time (%)					2				0	
Queuing Penalty (veh)					0				0	
Storage Bay Dist (ft)	200		200	200		150		125		25
Storage Blk Time (%)					15	0	1	0	39	22
Queuing Penalty (veh)					20	0	0	0	49	25

HCM Unsignalized Intersection Capacity Analysis
 2: Bay Blvd & Moore Dr

Existing Traffic Operations
 Weekday AM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↑	↗	↘	
Volume (veh/h)	16	44	56	83	59	29
Sign Control		Stop	Stop		Free	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	18	49	62	92	66	32
Pedestrians		2	4			
Lane Width (ft)		12.0	12.0			
Walking Speed (ft/s)		4.0	4.0			
Percent Blockage		0	0			
Right turn flare (veh)				10		
Median type					None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	180	153	169	4	4	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	180	153	169	4	4	
tC, single (s)	7.2	6.5	6.5	6.2	4.1	
tC, 2 stage (s)						
tF (s)	3.6	4.0	4.0	3.3	2.2	
p0 queue free %	97	93	91	91	96	
cM capacity (veh/h)	621	699	687	1070	1593	

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	67	154	98
Volume Left	18	0	66
Volume Right	0	92	32
cSH	677	1705	1593
Volume to Capacity	0.10	0.09	0.04
Queue Length 95th (ft)	8	7	3
Control Delay (s)	10.9	9.5	5.0
Lane LOS	B	A	A
Approach Delay (s)	10.9	9.5	5.0
Approach LOS	B	A	

Intersection Summary

Average Delay	8.4		
Intersection Capacity Utilization	22.2%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
 3: Yaquina Bay Blvd & West Dwy

Existing Traffic Operations
 Weekday AM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	↑
Volume (veh/h)	40	13	7	76	8	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Hourly flow rate (vph)	53	17	9	101	11	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			71		182	62
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			71		182	62
tC, single (s)			4.2		6.8	6.2
tC, 2 stage (s)						
tF (s)			2.3		3.8	3.3
p0 queue free %			99		99	100
cM capacity (veh/h)			1457		727	1003

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	71	111	11	0
Volume Left	0	9	11	0
Volume Right	17	0	0	0
cSH	1700	1457	727	1700
Volume to Capacity	0.04	0.01	0.01	0.00
Queue Length 95th (ft)	0	0	1	0
Control Delay (s)	0.0	0.7	10.0	0.0
Lane LOS		A	B	A
Approach Delay (s)	0.0	0.7	10.0	
Approach LOS			B	

Intersection Summary			
Average Delay		0.9	
Intersection Capacity Utilization		19.8%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis
4: Yaquina Bay Blvd & East Dwy

Existing Traffic Operations
Weekday AM Peak Hour

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	←	↖
Volume (veh/h)	34	5	1	77	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74
Hourly flow rate (vph)	46	7	1	104	8	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			53		156	49
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			53		156	49
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1566		839	1025

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	53	105	8	3
Volume Left	0	1	8	0
Volume Right	7	0	0	3
cSH	1700	1566	839	1025
Volume to Capacity	0.03	0.00	0.01	0.00
Queue Length 95th (ft)	0	0	1	0
Control Delay (s)	0.0	0.1	9.3	8.5
Lane LOS		A	A	A
Approach Delay (s)	0.0	0.1	9.1	
Approach LOS			A	

Intersection Summary				
Average Delay			0.6	
Intersection Capacity Utilization		14.9%		ICU Level of Service
Analysis Period (min)		15		A

HCM Signalized Intersection Capacity Analysis
1: Hwy 20 & Moore Dr

Existing Traffic Operations
Weekday PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	518	85	26	333	59	111	44	32	137	48	52
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00		0.96	1.00
Satd. Flow (prot)	1446	3103		1539	1620	1417		1656	1444		1639	1305
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.59	1.00		0.66	1.00
Satd. Flow (perm)	1446	3103		1539	1620	1417		1019	1444		1119	1305
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Growth Factor (vph)	100%	128%	100%	100%	128%	100%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	59	753	97	30	484	67	126	50	36	156	55	59
RTOR Reduction (vph)	0	11	0	0	0	36	0	0	27	0	0	35
Lane Group Flow (vph)	59	839	0	30	484	31	0	176	9	0	211	24
Heavy Vehicles (%)	15%	6%	0%	8%	8%	5%	2%	2%	3%	4%	0%	14%
Turn Type	Prot			Prot		Perm	Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	3.9	25.0		2.4	23.5	23.5		12.2	12.2		12.2	12.2
Effective Green, g (s)	3.9	25.0		2.4	23.5	23.5		12.2	12.2		12.2	12.2
Actuated g/C Ratio	0.08	0.48		0.05	0.46	0.46		0.24	0.24		0.24	0.24
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	109	1503		72	738	645		241	341		265	309
v/s Ratio Prot	c0.04	0.27		0.02	c0.30							
v/s Ratio Perm						0.02		0.17	0.01		c0.19	0.02
v/c Ratio	0.54	0.56		0.42	0.66	0.05		0.73	0.02		0.80	0.08
Uniform Delay, d1	23.0	9.4		23.9	10.9	7.8		18.2	15.1		18.5	15.3
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	5.4	0.5		3.9	2.1	0.0		10.8	0.0		15.2	0.1
Delay (s)	28.4	9.9		27.8	13.0	7.9		29.0	15.2		33.7	15.4
Level of Service	C	A		C	B	A		C	B		C	B
Approach Delay (s)		11.1			13.2			26.6			29.7	
Approach LOS		B			B			C			C	

Intersection Summary

HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	51.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 1: Hwy 20 & Moore Dr, Interval #1

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	R	LT	R	LT	R
Maximum Queue (ft)	61	177	160	37	280	90	165	76	158	51
Average Queue (ft)	30	98	110	20	158	21	78	29	114	42
95th Queue (ft)	65	171	172	46	289	86	164	82	172	59
Link Distance (ft)		672			744		855		423	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	200		200	200		150		125		25
Storage Blk Time (%)		0	0		7		2		45	9
Queuing Penalty (veh)		0	1		7		1		27	18

Intersection: 1: Hwy 20 & Moore Dr, Interval #2

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	R	LT	R	LT	R
Maximum Queue (ft)	113	159	167	97	274	97	122	92	166	66
Average Queue (ft)	31	73	81	20	114	19	59	22	75	33
95th Queue (ft)	79	132	139	65	210	72	108	66	141	66
Link Distance (ft)		672			744		855		423	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	200		200	200		150		125		25
Storage Blk Time (%)		0	0		3	0	0	0	38	5
Queuing Penalty (veh)		1	0		2	0	0	0	19	10

Intersection: 1: Hwy 20 & Moore Dr, All Intervals

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	R	LT	R	LT	R
Maximum Queue (ft)	113	191	179	97	306	122	183	102	178	66
Average Queue (ft)	31	79	88	20	125	19	64	23	85	35
95th Queue (ft)	76	144	150	61	235	75	125	70	155	66
Link Distance (ft)		672			744		855		423	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	200		200	200		150		125		25
Storage Blk Time (%)		0	0		4	0	1	0	40	6
Queuing Penalty (veh)		0	0		4	0	0	0	21	12

HCM Unsignalized Intersection Capacity Analysis
 2: Bay Blvd & Moore Dr

Existing Traffic Operations
 Weekday PM Peak Hour

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↗	↖	↗	
Volume (veh/h)	35	52	45	92	98	28
Sign Control		Stop	Stop		Free	
Grade		0%	0%		0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	41	60	52	107	114	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)				10		
Median type					None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	270	244	260	0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	270	244	260	0	0	
tC, single (s)	7.1	6.5	6.5	6.2	4.1	
tC, 2 stage (s)						
tF (s)	3.5	4.0	4.0	3.3	2.2	
p0 queue free %	92	90	91	90	93	
cM capacity (veh/h)	542	615	596	1082	1630	

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	101	159	147
Volume Left	41	0	114
Volume Right	0	107	33
cSH	583	1611	1630
Volume to Capacity	0.17	0.10	0.07
Queue Length 95th (ft)	16	8	6
Control Delay (s)	12.5	9.7	5.9
Lane LOS	B	A	A
Approach Delay (s)	12.5	9.7	5.9
Approach LOS	B	A	

Intersection Summary			
Average Delay		9.0	
Intersection Capacity Utilization		25.1%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis
 3: Yaquina Bay Blvd & West Dwy

Existing Traffic Operations
 Weekday PM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	↔
Volume (veh/h)	58	4	2	45	5	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Hourly flow rate (vph)	76	5	3	59	7	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			82		143	79
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			82		143	79
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1529		852	987

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	82	62	7	1
Volume Left	0	3	7	0
Volume Right	5	0	0	1
cSH	1700	1529	852	987
Volume to Capacity	0.05	0.00	0.01	0.00
Queue Length 95th (ft)	0	0	1	0
Control Delay (s)	0.0	0.3	9.3	8.7
Lane LOS		A	A	A
Approach Delay (s)	0.0	0.3	9.2	
Approach LOS			A	

Intersection Summary

Average Delay	0.6
Intersection Capacity Utilization	14.0%
Analysis Period (min)	15
ICU Level of Service	A

HCM Unsignalized Intersection Capacity Analysis
 4: Yaquina Bay Blvd & East Dwy

Existing Traffic Operations
 Weekday PM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	↑
Volume (veh/h)	59	0	2	45	3	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	69	0	2	53	4	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			69		127	69
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			69		127	69
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1544		871	999
Direction, Lane #	EB 1	WB 1	NB 1	NB 2		
Volume Total	69	55	4	4		
Volume Left	0	2	4	0		
Volume Right	0	0	0	4		
cSH	1700	1544	871	999		
Volume to Capacity	0.04	0.00	0.00	0.00		
Queue Length 95th (ft)	0	0	0	0		
Control Delay (s)	0.0	0.3	9.1	8.6		
Lane LOS		A	A	A		
Approach Delay (s)	0.0	0.3	8.9			
Approach LOS			A			
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization			14.0%	ICU Level of Service		A
Analysis Period (min)			15			

Attachment F
Trip Generation and
Assignment

Memorandum to Kittelson

Date: 04 December 2012

From: Langner

Subject: Newport Log Yard – Truck Trip and Staff Trip Projections

1. From our preliminary discussion with surrounding timberland owners in early 2012 and reaffirmed as recently as last week, the volume of timber diverted to a Newport timber operations will grow to fifty (50) truck trips per day, by year 2017. These data were developed by determining volume of timber to be harvested excluding volume of timber that will remain in the domestic market. We have preferred to provide the high end counts since beginning discussions with the Port of Newport and the City of Newport.
2. At start-up, trucking volumes will be at thirty (30) truck trips (deliveries) per day.
3. Based upon Teevin operations in Rainier, Eugene and Crabtree, Oregon, we anticipated daily deliveries at the following volumes during the operating day in CY 2017:

a. 0600 – 0800	12
b. 0800 – 1000	8
c. 1000 – 1200	10
d. 1200 – 1400	6
e. 1400 – 1600	10
f. 1600 – 1800	4
4. On-site employment will average seventeen during the average day. Carpooling, use of public transportation, walking and bicycling will be encouraged. Again, based upon Teevin operations in Rainier, Eugene and Crabtree, Oregon, we anticipated daily vehicle use by employees and contracted service personnel at eleven (11) vehicles per day. We anticipate seven (07) vehicles arriving at the start of the shift (0600) and the remaining four (04) vehicles arriving between 0600 and 0800. At the end of the shift, plan on six (06) vehicles departing between 1600 and 1800; the remaining five (05) vehicles to depart between 1800 and 2000.

P W Langner



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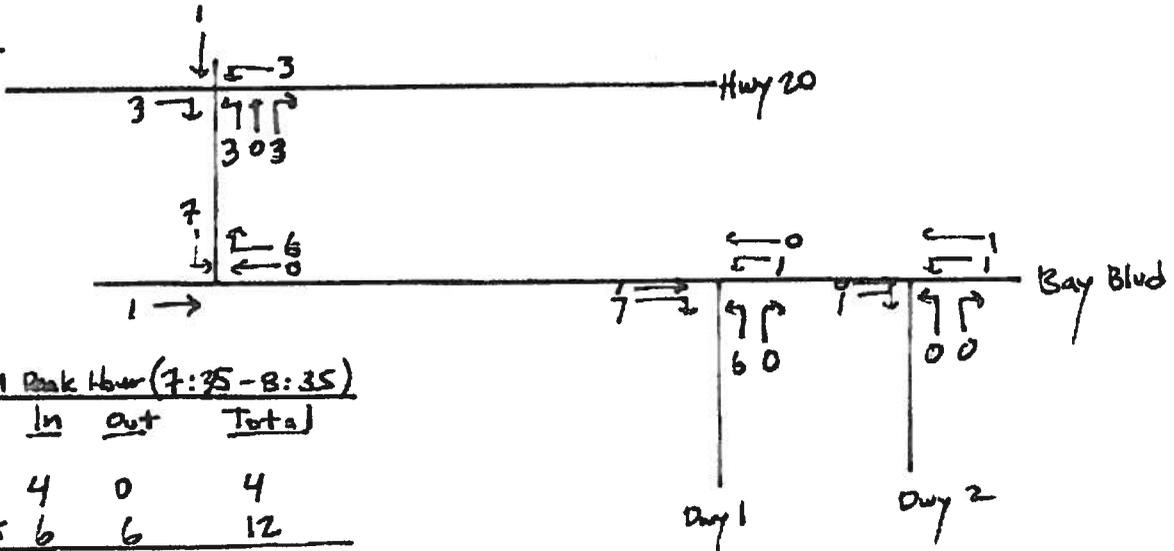
DATE 12/2012 PROJECT # 13132

PROJECT NAME Termin Log Yard

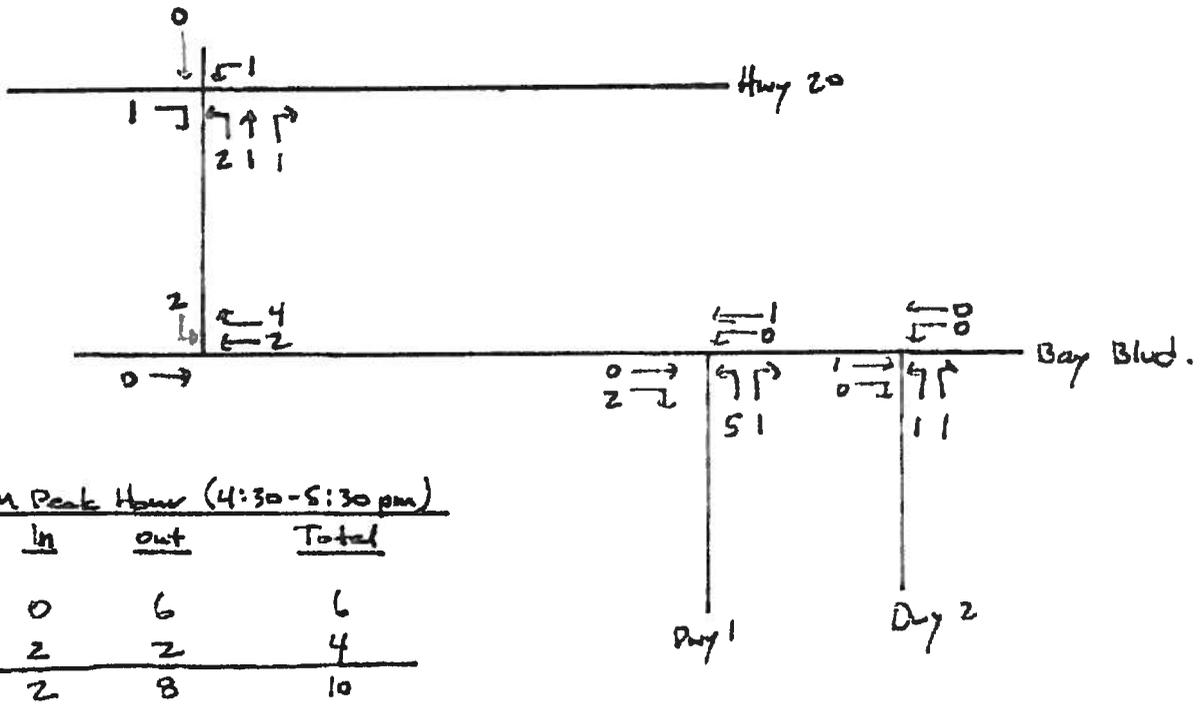
SUBJECT frip distribution

BY DFA SHEET # 1 OF 1

AM



PM



Memorandum to Kittelson

Date: 25 January 2013

From: Langner

Subject: Newport Log Yard – Ancillary Related and Support Traffic

1. During ship loading or discharge, all of the cargo will move internally to the Port. No cargo products will move directly to or from the vessel from city streets. Specifically, all logs will move from the proposed log yard via off-road hostlers to the gear quayside of the receiving ship. Should there be any cargo discharge from the ship, it too moves from quayside to the log yard to await further processing, shipment or both.
2. During ship loading evolutions, stevedore personnel will mobilize to and from the International Terminal via routes established by the Port of Newport and the stevedore service provider; consistent with the established protocols for all other marine terminal business worked by stevedores.
3. In our day to day operations, we will encounter inbound and outbound traffic in support of our operations:
 - a. Waste removal / garbage truck – we will require one haul-off per week. This route is currently served by a refuse service.
 - b. Fuels/Lubricants/Parts and Maintenance service – twice per week, after hours (1800 or later)
 - c. Delivery vehicles (primarily single-axle), e.g., UPS, FEDEX, DHL – approximately three per week. We assume weekday postal service. (These vehicle operate on routes that have them frequent adjoining businesses daily)
 - d. Bark removal – On average, once per day, midday
 - e. Septic system pumping – once per month, in conjunction with current service at adjoining businesses.
 - f. Vendor sales calls – average one per week, primarily in cars or pickups.
 - g. Technical support personnel – based upon Rainier and Eugene operations, on average two trips, by car or pickup, each month.
4. Many of the support functions, such as parcel delivery, refuse collection, septic pumping, etc. are traffic movements that currently occur in support of existing business lines at the port.

P Langner

Attachment G
Total Conditions Traffic
Operations Worksheets

HCM Signalized Intersection Capacity Analysis
1: Hwy 20 & Moore Dr

Total Traffic Operations
Weekday AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↕		↙	↕	↗		↕	↗		↕	↗
Volume (vph)	83	321	62	30	687	99	76	44	22	57	56	124
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frbp, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	0.99		1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00		0.98	1.00
Satd. Flow (prot)	1498	2833		1554	1667	1473		1619	1468		1564	1262
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.69	1.00		0.77	1.00
Satd. Flow (perm)	1498	2833		1554	1667	1473		1147	1468		1235	1262
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	98	378	73	35	808	116	89	52	26	67	66	146
RTOR Reduction (vph)	0	16	0	0	0	37	0	0	21	0	0	91
Lane Group Flow (vph)	98	435	0	35	808	79	0	141	5	0	133	55
Confl. Peds. (#/hr)							2		1	1		2
Heavy Vehicles (%)	11%	15%	12%	7%	5%	1%	6%	2%	0%	18%	0%	15%
Turn Type	Prot			Prot		Perm	Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	7.4	46.5		3.1	42.2	42.2		14.5	14.5		14.5	14.5
Effective Green, g (s)	7.4	46.5		3.1	42.2	42.2		14.5	14.5		14.5	14.5
Actuated g/C Ratio	0.10	0.61		0.04	0.55	0.55		0.19	0.19		0.19	0.19
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	146	1731		63	924	817		219	280		235	240
v/s Ratio Prot	c0.07	0.15		0.02	c0.48							
v/s Ratio Perm						0.05		c0.12	0.00		0.11	0.04
v/c Ratio	0.67	0.25		0.56	0.87	0.10		0.64	0.02		0.57	0.23
Uniform Delay, d1	33.2	6.8		35.8	14.7	8.0		28.4	25.0		27.9	26.1
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	11.5	0.1		10.2	9.2	0.1		6.3	0.0		3.1	0.5
Delay (s)	44.7	6.9		46.0	23.9	8.0		34.8	25.0		31.1	26.5
Level of Service	D	A		D	C	A		C	C		C	C
Approach Delay (s)		13.6			22.8			33.2			28.7	
Approach LOS		B			C			C			C	

Intersection Summary

HCM Average Control Delay	21.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	76.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 1: Hwy 20 & Moore Dr, Interval #1

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	R	LT	R	LT	R
Maximum Queue (ft)	110	109	109	161	632	147	144	77	269	66
Average Queue (ft)	65	50	55	52	455	60	93	23	137	51
95th Queue (ft)	113	111	109	145	819	178	168	90	249	63
Link Distance (ft)		672			744		855		423	
Upstream Blk Time (%)					7					
Queuing Penalty (veh)					0					
Storage Bay Dist (ft)	200		200	200		150		125		25
Storage Blk Time (%)				0	25	0	8	0	52	25
Queuing Penalty (veh)				0	38	0	2	0	76	33

Intersection: 1: Hwy 20 & Moore Dr, Interval #2

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	R	LT	R	LT	R
Maximum Queue (ft)	126	112	118	87	524	144	142	62	264	74
Average Queue (ft)	55	42	48	23	254	32	67	10	102	49
95th Queue (ft)	106	92	95	68	476	115	129	42	216	72
Link Distance (ft)		672			744		855		423	
Upstream Blk Time (%)					0					
Queuing Penalty (veh)					0					
Storage Bay Dist (ft)	200		200	200		150		125		25
Storage Blk Time (%)					14	0	1	0	40	24
Queuing Penalty (veh)					17	0	0	0	47	26

Intersection: 1: Hwy 20 & Moore Dr, All Intervals

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	R	LT	R	LT	R
Maximum Queue (ft)	133	137	129	193	636	148	160	109	280	75
Average Queue (ft)	58	44	50	30	302	39	73	13	110	49
95th Queue (ft)	108	97	99	94	602	133	141	57	227	70
Link Distance (ft)		672			744		855		423	
Upstream Blk Time (%)					2					
Queuing Penalty (veh)					0					
Storage Bay Dist (ft)	200		200	200		150		125		25
Storage Blk Time (%)				0	17	0	3	0	43	24
Queuing Penalty (veh)				0	22	0	1	0	54	27

HCM Unsignalized Intersection Capacity Analysis
 2: Bay Blvd & Moore Dr

Total Traffic Operations
 Weekday AM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		←	↑	↗	↘	
Volume (veh/h)	16	45	56	89	66	29
Sign Control		Stop	Stop		Free	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	18	50	62	99	73	32
Pedestrians		2	4			
Lane Width (ft)		12.0	12.0			
Walking Speed (ft/s)		4.0	4.0			
Percent Blockage		0	0			
Right turn flare (veh)				10		
Median type					None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	196	169	185	4	4	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	196	169	185	4	4	
tC, single (s)	7.2	6.5	6.5	6.2	4.1	
tC, 2 stage (s)						
tF (s)	3.6	4.0	4.0	3.3	2.2	
p0 queue free %	97	93	91	91	95	
cM capacity (veh/h)	599	682	670	1070	1593	

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	68	161	106
Volume Left	18	0	73
Volume Right	0	99	32
cSH	658	1735	1593
Volume to Capacity	0.10	0.09	0.05
Queue Length 95th (ft)	9	8	4
Control Delay (s)	11.1	9.6	5.2
Lane LOS	B	A	A
Approach Delay (s)	11.1	9.6	5.2
Approach LOS	B	A	

Intersection Summary			
Average Delay		8.5	
Intersection Capacity Utilization		22.6%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis
 3: Yaquina Bay Blvd & West Dwy

Total Traffic Operations
 Weekday AM Peak Hour

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	↔
Volume (veh/h)	41	20	8	76	14	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Hourly flow rate (vph)	55	27	11	101	19	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			81		191	68
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			81		191	68
tC, single (s)			4.2		6.8	6.2
tC, 2 stage (s)						
tF (s)			2.3		3.8	3.3
p0 queue free %			99		97	100
cM capacity (veh/h)			1444		718	995

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	81	112	19	0
Volume Left	0	11	19	0
Volume Right	27	0	0	0
cSH	1700	1444	718	1700
Volume to Capacity	0.05	0.01	0.03	0.00
Queue Length 95th (ft)	0	1	2	0
Control Delay (s)	0.0	0.8	10.1	0.0
Lane LOS		A	B	A
Approach Delay (s)	0.0	0.8	10.1	
Approach LOS			B	

Intersection Summary			
Average Delay		1.3	
Intersection Capacity Utilization		20.7%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis
 4: Yaquina Bay Blvd & East Dwy

Total Traffic Operations
 Weekday AM Peak Hour

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	↔
Volume (veh/h)	34	6	2	78	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74
Hourly flow rate (vph)	46	8	3	105	8	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			54		161	50
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			54		161	50
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1564		833	1024

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	54	108	8	3
Volume Left	0	3	8	0
Volume Right	8	0	0	3
cSH	1700	1564	833	1024
Volume to Capacity	0.03	0.00	0.01	0.00
Queue Length 95th (ft)	0	0	1	0
Control Delay (s)	0.0	0.2	9.4	8.5
Lane LOS		A	A	A
Approach Delay (s)	0.0	0.2	9.2	
Approach LOS			A	

Intersection Summary				
Average Delay			0.7	
Intersection Capacity Utilization		15.7%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Signalized Intersection Capacity Analysis
1: Hwy 20 & Moore Dr

Total Traffic Operations
Weekday PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WB	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑		↙	↑	↗		↖	↗		↖	↗
Volume (vph)	52	678	86	27	435	59	113	45	33	137	48	52
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		1.00	0.85
Fit Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00		0.96	1.00
Satd. Flow (prot)	1446	3104		1539	1620	1417		1656	1444		1639	1305
Fit Permitted	0.95	1.00		0.95	1.00	1.00		0.59	1.00		0.65	1.00
Satd. Flow (perm)	1446	3104		1539	1620	1417		1012	1444		1102	1305
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	59	770	98	31	494	67	128	51	38	156	55	59
RTOR Reduction (vph)	0	11	0	0	0	36	0	0	29	0	0	35
Lane Group Flow (vph)	59	857	0	31	494	31	0	179	9	0	211	24
Heavy Vehicles (%)	15%	6%	0%	8%	8%	5%	2%	2%	3%	4%	0%	14%
Turn Type	Prot			Prot		Perm	Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases						8	2		2	6		6
Actuated Green, G (s)	4.0	25.6		2.4	24.0	24.0		12.2	12.2		12.2	12.2
Effective Green, g (s)	4.0	25.6		2.4	24.0	24.0		12.2	12.2		12.2	12.2
Actuated g/C Ratio	0.08	0.49		0.05	0.46	0.46		0.23	0.23		0.23	0.23
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	111	1522		71	745	651		237	337		258	305
v/s Ratio Prot	c0.04	0.28		0.02	c0.30							
v/s Ratio Perm						0.02		0.18	0.01		c0.19	0.02
v/c Ratio	0.53	0.56		0.44	0.66	0.05		0.76	0.03		0.82	0.08
Uniform Delay, d1	23.2	9.4		24.2	11.0	7.8		18.6	15.4		18.9	15.6
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	4.8	0.5		4.3	2.2	0.0		12.8	0.0		17.9	0.1
Delay (s)	28.0	9.8		28.5	13.2	7.8		31.4	15.5		36.8	15.7
Level of Service	C	A		C	B	A		C	B		D	B
Approach Delay (s)		11.0			13.4			28.6			32.2	
Approach LOS		B			B			C			C	

Intersection Summary

HCM Average Control Delay	16.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	52.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 1: Hwy 20 & Moore Dr, Interval #1

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	R	LT	R	LT	R
Maximum Queue (ft)	62	245	184	46	254	80	146	72	179	54
Average Queue (ft)	31	114	112	24	158	23	81	26	108	41
95th Queue (ft)	64	248	184	50	289	85	147	77	195	65
Link Distance (ft)		672			744		855		423	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	200		200	200		150		125		25
Storage Blk Time (%)		1	1		7	0	2		48	7
Queuing Penalty (veh)		3	2		7	0	1		28	14

Intersection: 1: Hwy 20 & Moore Dr, Interval #2

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	R	LT	R	LT	R
Maximum Queue (ft)	89	168	179	62	289	111	114	86	148	64
Average Queue (ft)	29	75	85	20	115	18	60	21	71	35
95th Queue (ft)	66	129	141	51	219	65	106	62	124	66
Link Distance (ft)		672			744		855		423	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	200		200	200		150		125		25
Storage Blk Time (%)		0	0		3	0	0	0	38	6
Queuing Penalty (veh)		0	0		3	0	0	0	19	11

Intersection: 1: Hwy 20 & Moore Dr, All Intervals

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	R	LT	R	LT	R
Maximum Queue (ft)	89	250	194	63	320	111	150	91	193	65
Average Queue (ft)	29	84	92	21	125	19	65	23	80	36
95th Queue (ft)	66	170	155	51	241	71	119	66	148	66
Link Distance (ft)		672			744		855		423	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	200		200	200		150		125		25
Storage Blk Time (%)		0	0		4	0	1	0	41	6
Queuing Penalty (veh)		1	1		4	0	0	0	21	12

HCM Unsignalized Intersection Capacity Analysis

2: Bay Blvd & Moore Dr

Total Traffic Operations
Weekday PM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↑	↗	↘	
Volume (veh/h)	35	52	47	96	100	28
Sign Control		Stop	Stop		Free	
Grade		0%	0%		0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	41	60	55	112	116	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)				10		
Median type					None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	276	249	265	0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	276	249	265	0	0	
tC, single (s)	7.1	6.5	6.5	6.2	4.1	
tC, 2 stage (s)						
tF (s)	3.5	4.0	4.0	3.3	2.2	
p0 queue free %	92	90	91	90	93	
cM capacity (veh/h)	532	610	592	1082	1630	

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	101	166	149
Volume Left	41	0	116
Volume Right	0	112	33
cSH	576	1612	1630
Volume to Capacity	0.18	0.10	0.07
Queue Length 95th (ft)	16	9	6
Control Delay (s)	12.6	9.7	5.9
Lane LOS	B	A	A
Approach Delay (s)	12.6	9.7	5.9
Approach LOS	B	A	

Intersection Summary			
Average Delay		9.0	
Intersection Capacity Utilization		25.3%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis

3: Yaquina Bay Blvd & West Dwy

Total Traffic Operations
Weekday PM Peak Hour

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↖			↗	↘	↙
Volume (veh/h)	58	6	2	46	10	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Hourly flow rate (vph)	76	8	3	61	13	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			84		146	80
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			84		146	80
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	100
cM capacity (veh/h)			1525		850	985

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	84	63	13	3
Volume Left	0	3	13	0
Volume Right	8	0	0	3
cSH	1700	1525	850	985
Volume to Capacity	0.05	0.00	0.02	0.00
Queue Length 95th (ft)	0	0	1	0
Control Delay (s)	0.0	0.3	9.3	8.7
Lane LOS		A	A	A
Approach Delay (s)	0.0	0.3	9.2	
Approach LOS			A	

Intersection Summary

Average Delay	1.0		
Intersection Capacity Utilization	14.0%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
 4: Yaquina Bay Blvd & East Dwy

Total Traffic Operations
 Weekday PM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	↑
Volume (veh/h)	60	0	2	45	4	4
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	71	0	2	53	5	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			71		128	71
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			71		128	71
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1543		870	998

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	71	55	5	5
Volume Left	0	2	5	0
Volume Right	0	0	0	5
cSH	1700	1543	870	998
Volume to Capacity	0.04	0.00	0.01	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.3	9.2	8.6
Lane LOS		A	A	A
Approach Delay (s)	0.0	0.3	8.9	
Approach LOS			A	

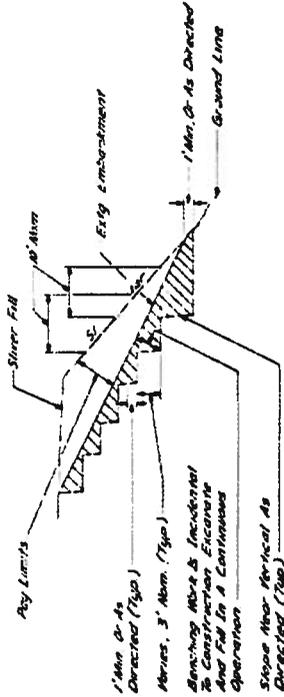
Intersection Summary			
Average Delay		0.8	
Intersection Capacity Utilization		14.0%	ICU Level of Service
Analysis Period (min)		15	A

Attachment H
Yaquina Bay Boulevard and SE
Moore Drive Pavement Quality

CORVALLIS/NEWPORT HWY - BAY BLVD. (NEWPORT) SEC. JOHN MOORE ROAD (CITY STREET)		2A	
LINCOLN COUNTY		SHEET NO.	
10 OREGON 14-0005(13)		DATE	
BY		CHECKED	
DESIGNED		APPROVED	
DRAWN		SCALE	

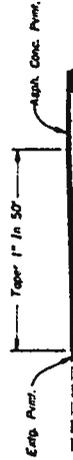
41-140 AS SUPPLEMENTED
BASED ON CONTRACT 1428E

DETAILS



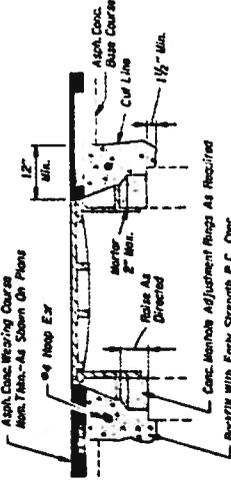
NOTE
CARRY BACKS ON ALL SLOPES TO PROVIDE
POSITIVE BAND WITH EMBANKMENT

SLIVER EMBANKMENT EXCAVATION
(Excavation As Directed)

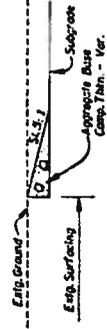


METHOD OF FEATHERING AT PROJECT ENDS

MANHOLE ADJUSTMENT SEQUENCE
(For Details Not Shown, See Sheet 1, Manhole Drg. Nos. 1)



1. Cover Manhole With Raising Paper And Coat Asphalt Conc. Base Course.
2. Cut Square Or Circular Excavation Around Manhole 12" Min. From H. Frame.
3. Raise Manhole Frame And Cover To Finish Grade By Installing Conc. Rings And Leveling Manhole.
4. Backfill With Early Strength P. C. Conc.
5. Cover Asphalt Conc. Weaving Course.

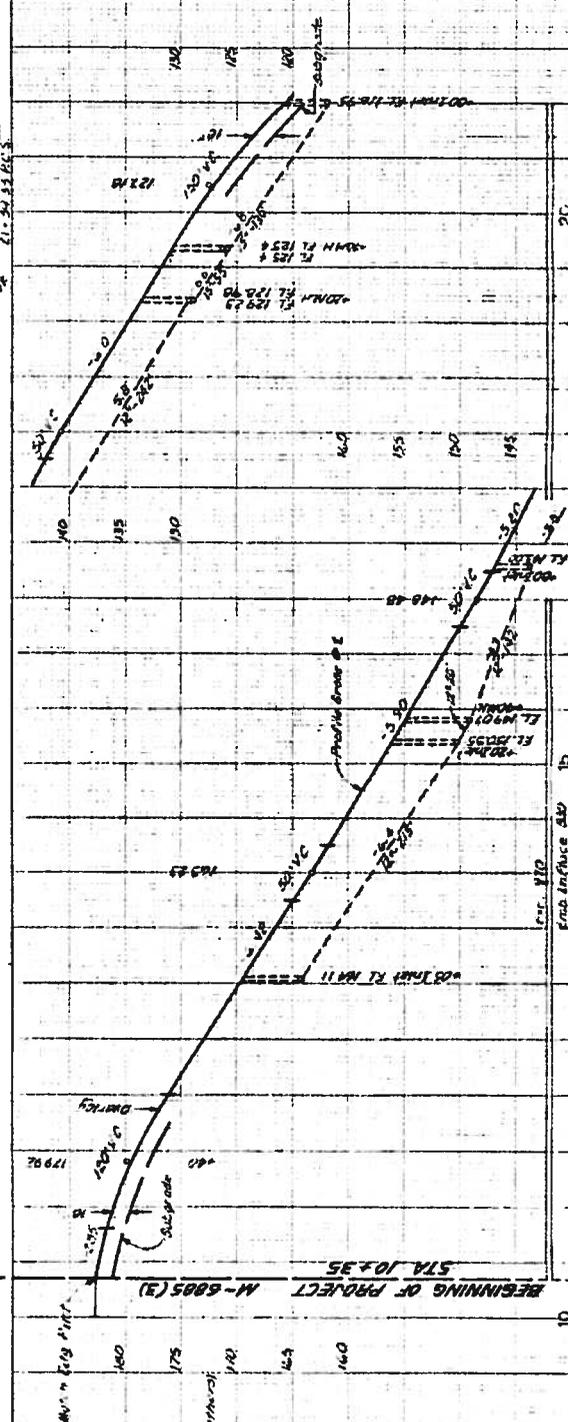
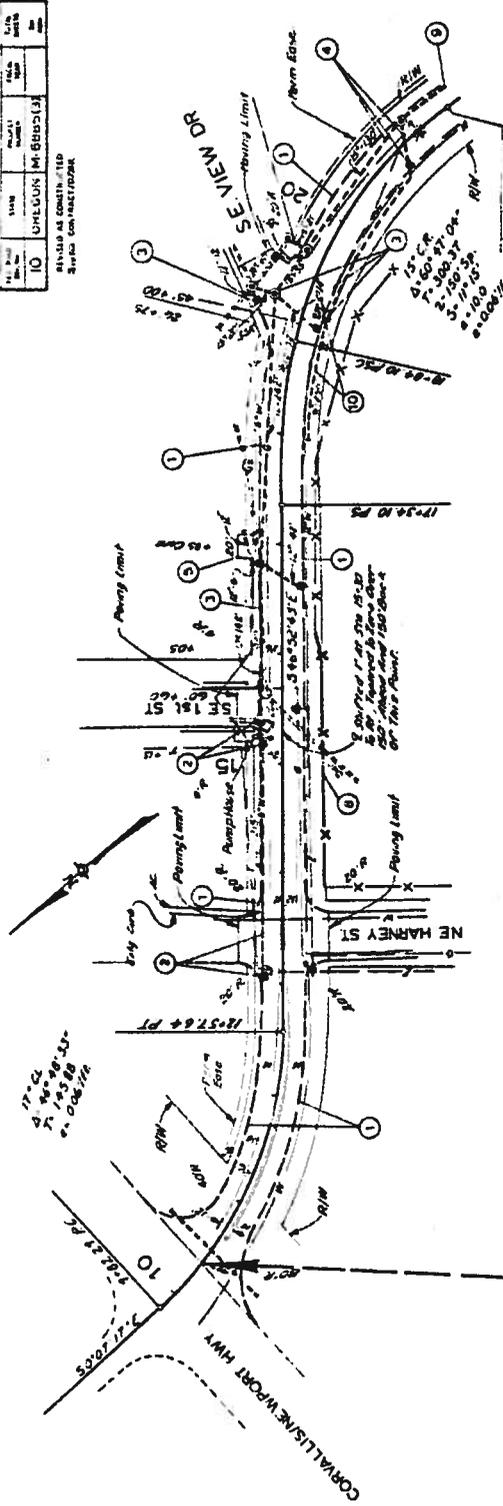


ABRUPT PAVEMENT EDGE DETAIL

SEC 9 T 11 S. R 11 W. W.M.
NEWPORT

Project No.	22V-28
Sheet No.	3
Scale	1" = 40'
City	NEWPORT
County	CLATSOP
Division	Highway
Contract No.	10
Contractor	UHLERSON INC. BBS(5) (A)

REVISIONS
DATE
BY
REASON FOR REVISION



- 1) Const. Type "C" Curb
(See Dwg. No. 2077)
- 2) STA 15+45.17
Recessed Manhole
12" Dia. Inlet - 5
Inst. 12" Sew. Pipe - 40'
Tr. Exc. - 85 C.Y.
(See Dwg. No. 2105)
- 3) STA 19+24.17
Const. Manhole - 4
Const. Type "C" Inlet - 5
Inst. 12" Sew. Pipe - 40'
Inst. 15" Sew. Pipe - 10'
Gravel Drain Mat 17' - 3 CY
Geotextile Fabric - 40 S.Y.
Under Pmt - 120'
Tr. Exc. - 220 C.Y.
(See Dwg. No. 2050, 2121)
- 4) STA 21+00.17
Const. Manhole
Const. Type "C" Inlet - 5
Inst. 12" Sew. Pipe - 42'
Inst. 15" Sew. Pipe - 100'
Under Pmt - 20'
Tr. Exc. - 105 C.Y.
- 5) STA 16+95.17
Const. Curb, Chg. Type "C"
(See Dwg. No. 2071B)
- 6) STA 13+90 To STA 16+20
Reinstall Entry Forme (by Other)
- 7) (See Sht. 4, Note 3)
- 8) Inst. 6" Dia. Inlet - 50'
Inst. 6" Plastic Abr. Pipe - 250'

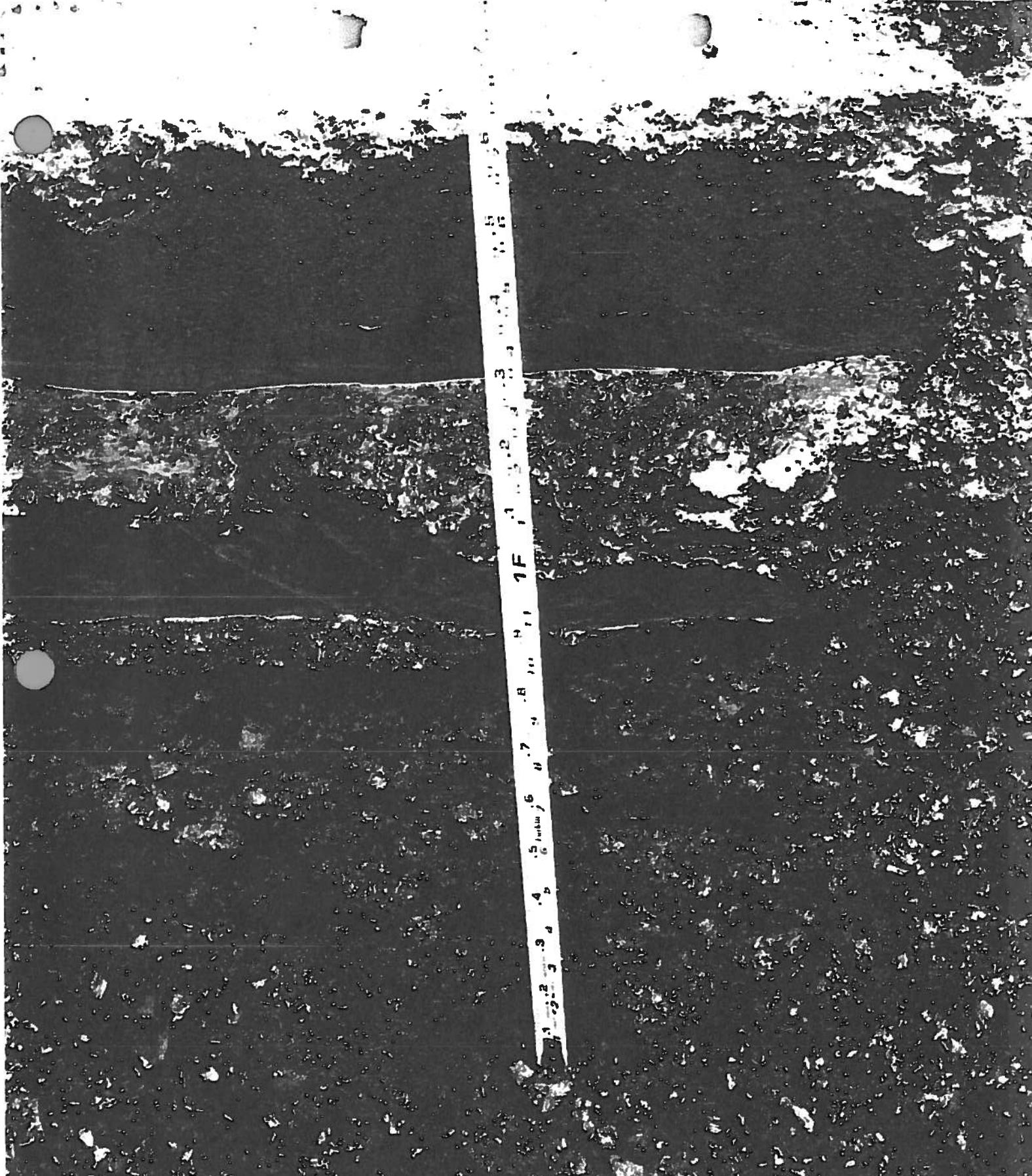


Photo taken: Dec 27, 2012
Location: SE Moore Drive, Newport, Oregon
Photo credit: Road and Driveway
Photo provided by Teevin Bros. on December 28, 2012

Notes:
- compacted coarse aggregate exceeds 10 inches



LAND SURVEYING

PLANNING

ENGINEERING

WATER RIGHTS

FORESTRY

MATERIAL TESTING



TELEPHONE (541) 267-2872
FAX (541) 267-0588
ralphdunham@stuntzner.com

705 SO. 4TH, P.O. BOX 118
COOS BAY, OREGON 97420

COOS BAY - DALLAS - FOREST GROVE

February 27, 2013

Teevin Bros. Land & Timber Co.
Attn: Mr. Paul Langner
P.O. Box 247
Rainier, OR 97048

RE: Evaluation of Suitability of John Moore Road and SE Bay Blvd pavement section for use by highway legal trucks, including standard allowed overloads in Newport, Oregon

Dear Mr. Langner:

On February 25th, 2013 I was contacted and presented with the photographs of asphalt core samples from John Moore Road and SE Bay Blvd in Newport, Oregon and tasked with the evaluation of these core samples in relation to suitability for highway legal truck traffic.

OBJECTIVE AND SCOPE

Teevin Bros. Land & Timber contacted Stuntzner Engineering & Forestry, LLC to review the process and verify the suitability of the pavement sections based upon core samples taken by Road & Driveway of Newport, Oregon on February 14th, 2013. The locations of cores were established in conjunction with the City of Newport Public Works Dept., and witnessed by either (or both in most cases) Tim Gross, City Engineer and/or Ted Jones, Senior Project Manager. The purpose of the cores was to verify the asphalt section in John Moore Road and SE Bay Blvd between U.S. Hwy 20 and the Teevin Bros. Land & Timber project site. This is the route utilizing City maintained roadways expected for traffic utilizing the project site. The intent of the coring was to establish if adequate structural section existed for legal highway loads, and was not intended to address pavement life or for use as a condition survey.

AUTHORIZATION

This investigation and limited scope of review were made in accordance with an existing agreement with Teevin Bros. Land & Timber.

SITE & PURPOSE DESCRIPTION.

LOCATION AND METHODOLOGY:

Attached is an exhibit 1 showing the general locations which pavement cores were taken with three core samples in John Moore Road and SE Bay Blvd, in Newport, clustered around the intersection of the two roadways, and the other three cores on SE Bay Blvd heading easterly along the roadway, approximately 1000 feet on center. The City of Newport Public Works staff established the proposed core locations, and documented these locations with a GPS system for record of location. Attached also are 6 exhibits showing the core locations (exhibits 2-7) with the easterly most core located approximately 500 feet west of the proposed entrance to the Teevin Bros. project site, and the westerly most located on John Moore Rd approximately 200 feet north of the intersection. As noted above, all cores were taken in the existing travel lane, typically where the pavement showed evidence of wear if it existed at the site. The reason for this is the travel lane is the key area, and the evidence of wear would indicate likely the least structural section in any specific run. Note that asphalt is a "flexible" pavement, or in other words it deflects under loading, therefore some evidence of flexure with age is normal. I do not have records of when SE Bay Blvd was constructed, or improved, however John Moore Road was originally constructed to its current state through an Oregon State Highway Project (#M-6885) in 1989. The structural section included 12 inches of base aggregate and 6 inches of asphaltic concrete. This is a relatively standard structural section for highway use. ODOT's minimum section for highway use has been 4" of asphaltic concrete and 12 inches of aggregate base for highway use since the middle 1980's, and a thicker section of asphalt will provide a longer life.

The core samples were taken by means of a standard concrete core saw, similar to a hole saw, with a guide bit and a hollow "auger" exterior for removal of a sample of the material. Cores were 6 inches in diameter and backfilled with cement. Concrete core saws (used for asphalt coring) use water as a lubricant and for heat transfer, and cores were taken to a depth to where the water drained away, indicating base aggregate was encountered. The only anomaly to this system was core No. 2, taken in SE Bay Blvd on the west side of the intersection with John Moore Road, where either a treated base apparently exists which would not allow water to drain until a depth of 9" below the bottom of the asphalt section. As noted above, all core locations were established by the City of Newport, and witnessed by the City of Newport staff, although were performed by Road & Driveway Co. Core samples were logged by location and tagged. Any anomalies were noted by Road & Driveway (See exhibits 8-15).

No aggregate depth samples were taken, therefore the only information available other than asphalt depth in relation to the total structural section (which includes base and/or other elements such as treated base materials) were anomalies in the cores (i.e. evidence of treated base).

DISCUSSION:

As no aggregate depth information is provided, the only evidence of a proper design section I have to evaluate is based upon the plans provided by the Oregon Dept. of Transportation for John Moore Road. As we are aware this roadway was designed for highway traffic loads, and we assume as it is from the ODOT design section that the base soil material was taken into account for the design. As noted above, ODOT's minimum

section is 4" asphaltic concrete (AC) and 12" of aggregate base (AB) for its State Hwy system, and John Moore Road plans show 6" of AC and 12" of AB.

The common method of establishing a structural section includes the soil strength, base strength and surface material. A system utilizing these relative strength coefficients or structural number (SN) coefficients allows comparison of different sections (i.e. is 18" of AB and 4" of AC a better system than 6" of AC/12" of AB). The commonly used SN coefficients are 0.14 for AB and 0.44 for hot mix AC pavement. In other words 1" of AC has roughly the equivalent load bearing strength of 3.1" of AB. Other coefficients exist (i.e. road mix asphalt (chip seal) is 0.20 and cement or asphalt treated base range from 0.2-0.34. With this in mind, the John Moore Road structural section has a structural number equivalent of 4.32 and is deemed adequate for legal highway loads. In simple terms, any AC section consisting of 9 & 3/4" of AC, regardless of the base aggregate section, is equivalent or better.

Based upon this simple equivalency, cores taken from location 1,3,4 and 6 all have from 9.5 inches to over 15 inches of AC in the section, and therefore the relative support value of this pavement section is in excess of the section as designed by ODOT for legal highway loads. Note Core #1 was 9-9.5" of AC, but included a 3" of base and a chip seal between the original 6" AC construction and a 3" overlay. The equivalent SN based upon 9" of AC would therefore be 4.4. Core #2 included the shallowest section of asphalt, with 6.5 inches of AC. In addition however, it had an additional 8"-9" of treated base, evidenced by the drainage characteristic. Utilizing the low end of a treated base section with a coefficient of 0.2, the overall section SN would be 4.46 which are larger than the design section of 4.32, therefore stronger. Core # 5 included 8 1/4" of AC, which appears to be a 5 inch depth original section and an overlay. Base aggregate was encountered at the bottom of the core, depth unknown. No surficial pavement distress is evident in the photo. The structural number of the AC by itself is 3.63 which are larger than ODOT's minimum highway section (SN 3.44) and we know it includes base aggregate which is not accounted for. In my 30 years of experience with road construction projects, the absolute minimum base aggregate in a public roadway I have ever seen utilized is 6 inches for asphaltic concrete, as it requires some base support. Based upon the lack of distress in the pavement (which indicates adequate base), and minimum construction requirements, the actual SN equivalent would be 4.47 which again is in excess of the 4.32 SN ODOT design.

ENGINEERS OPINION:

Based upon the evidence included, the pavement sections that exist on John Moore Road and SE Bay Blvd were constructed with adequate asphaltic concrete and base depth to allow highway legal loads (including normal permitted overloads).

If you have any questions, please feel free to contact me at (541) 267-2872.

Sincerely;



Ralph Dunham, PE
Project Engineer.



EXPIRES 12/31/13



Exhibit 1
Core Locations

Exhibit 2 – Core 1 Location

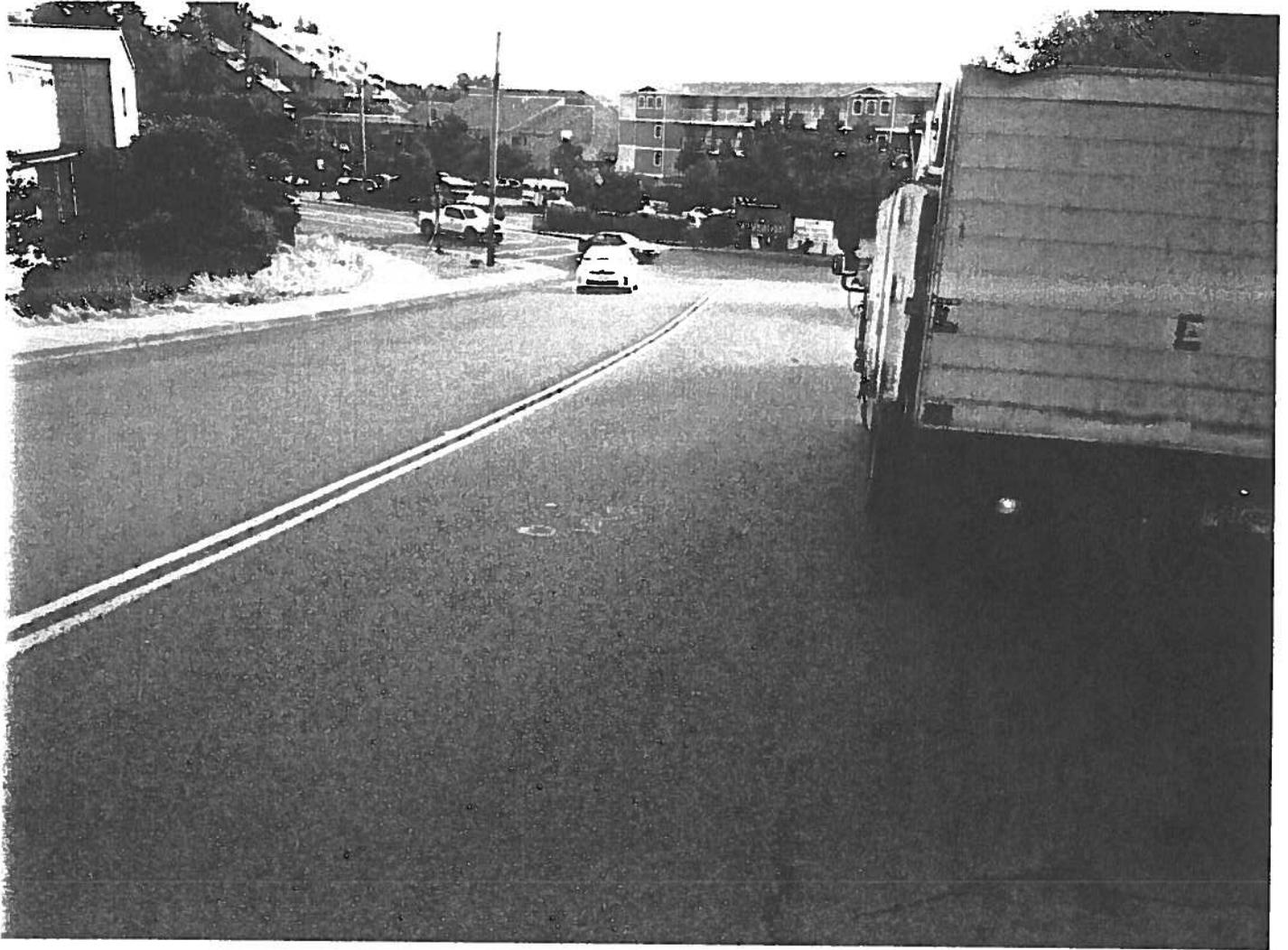


Exhibit 3 – Core 2 Location



Exhibit 4 – Core 3 Location



Exhibit 5 – Core 4 Location

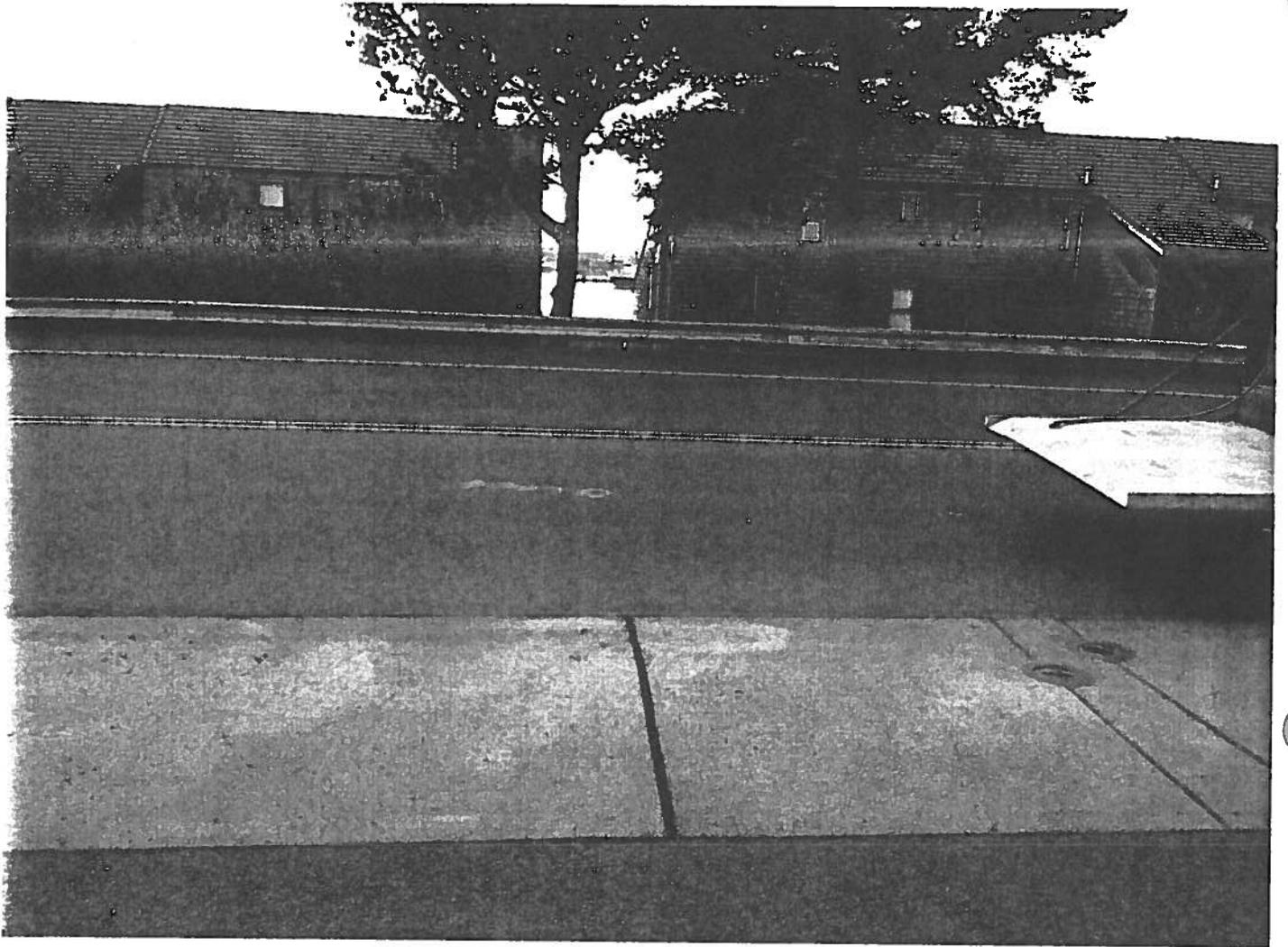


Exhibit 6 – Core 5 Location



Exhibit 7 – Core 6 Location



Exhibit 8 – Core 1 AC Depth



Exhibit 9 – Core 1 Showing Chip Seal Location

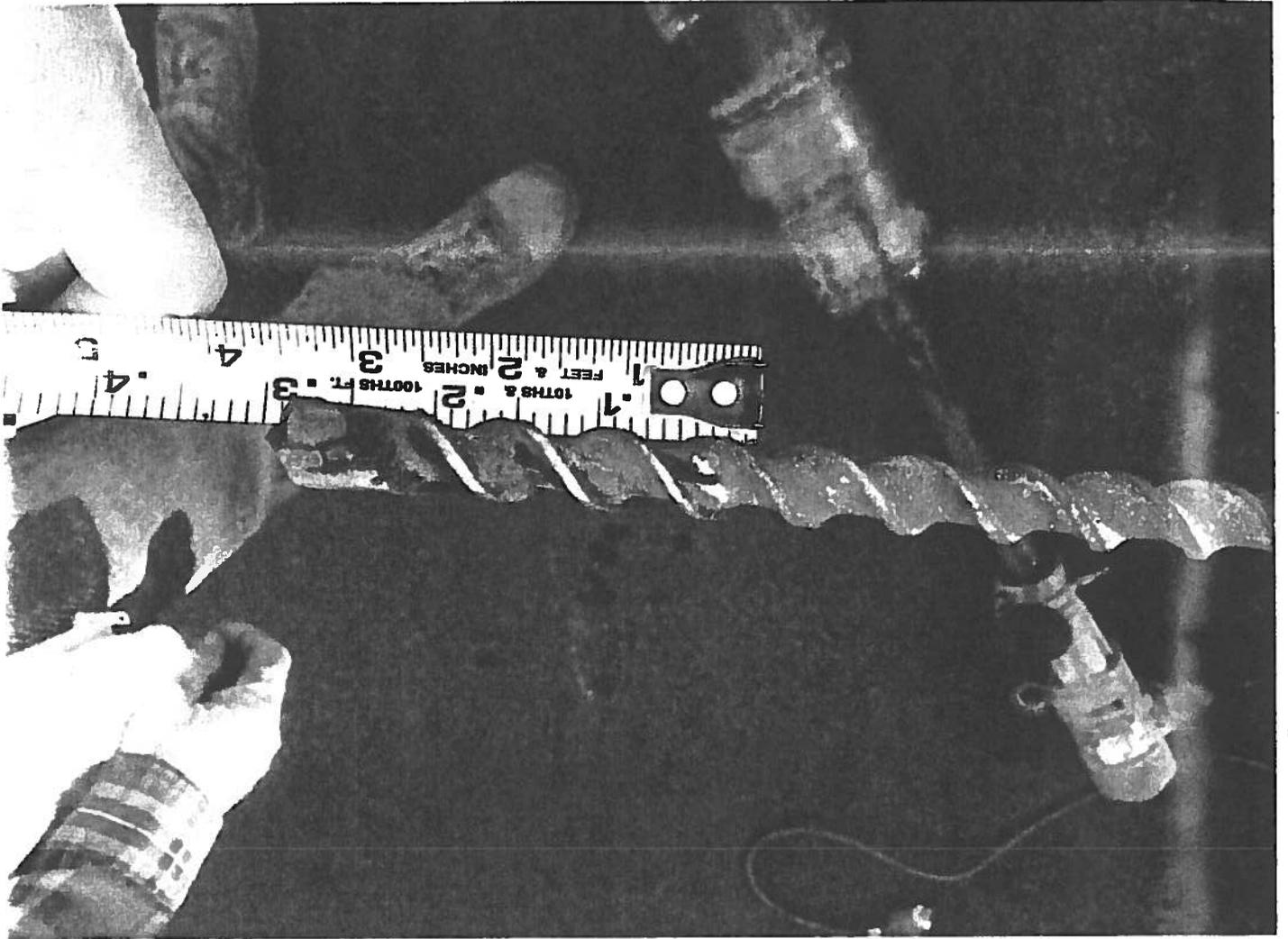


Exhibit 10 – Core 2

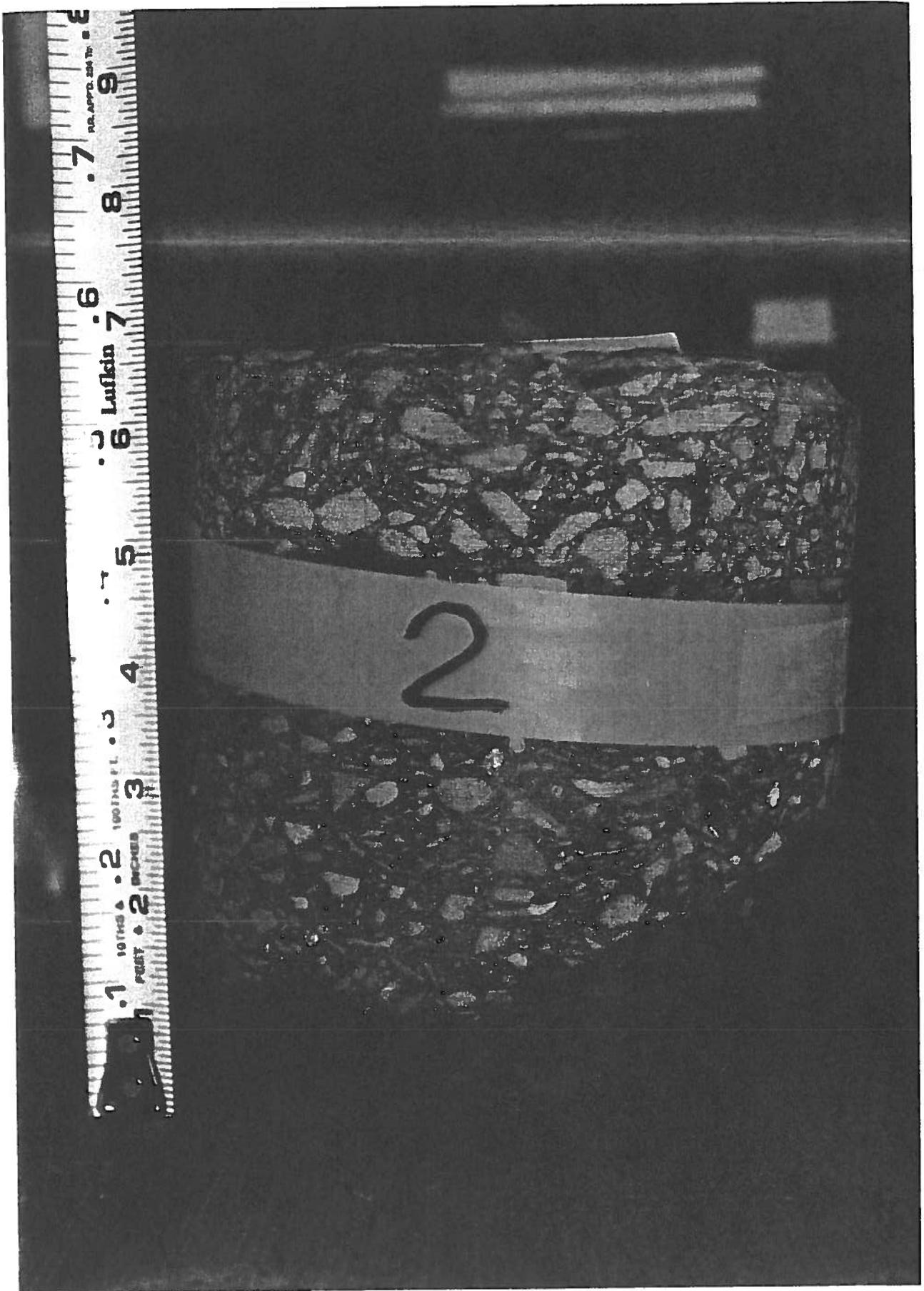


Exhibit 11 – Core 2 Treated Base Depth

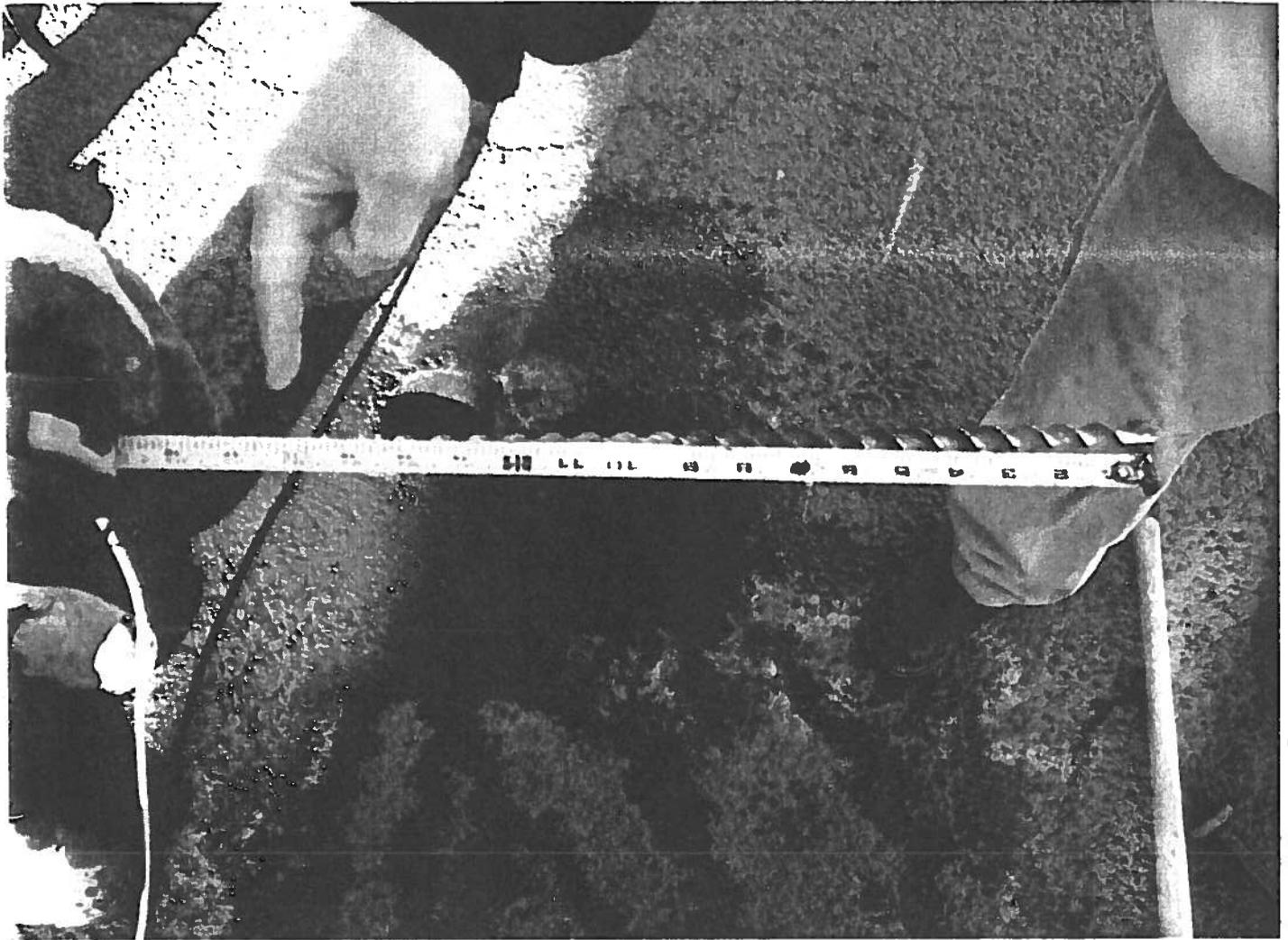


Exhibit 12 – Core 3

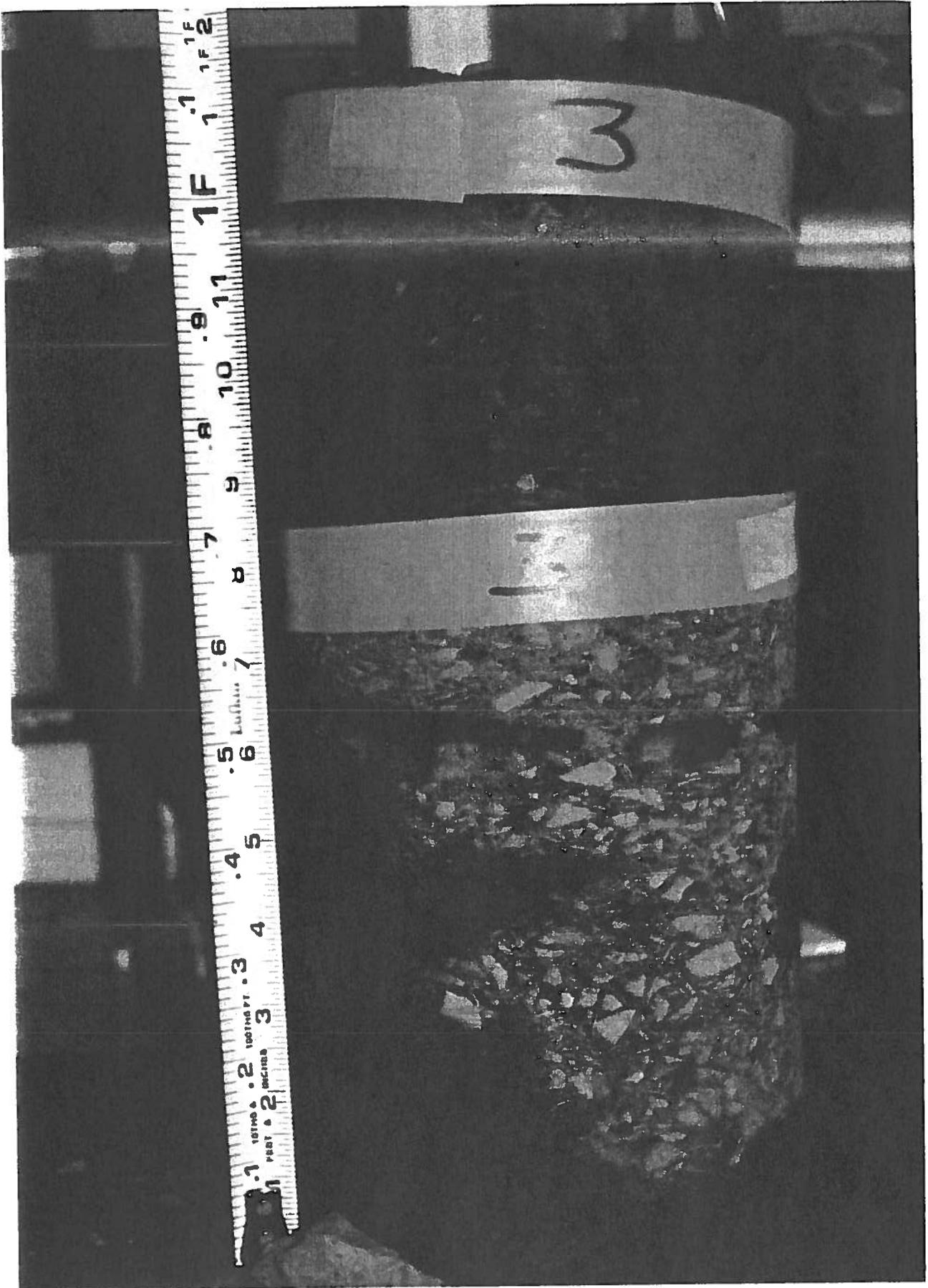


Exhibit 13 – Core 4

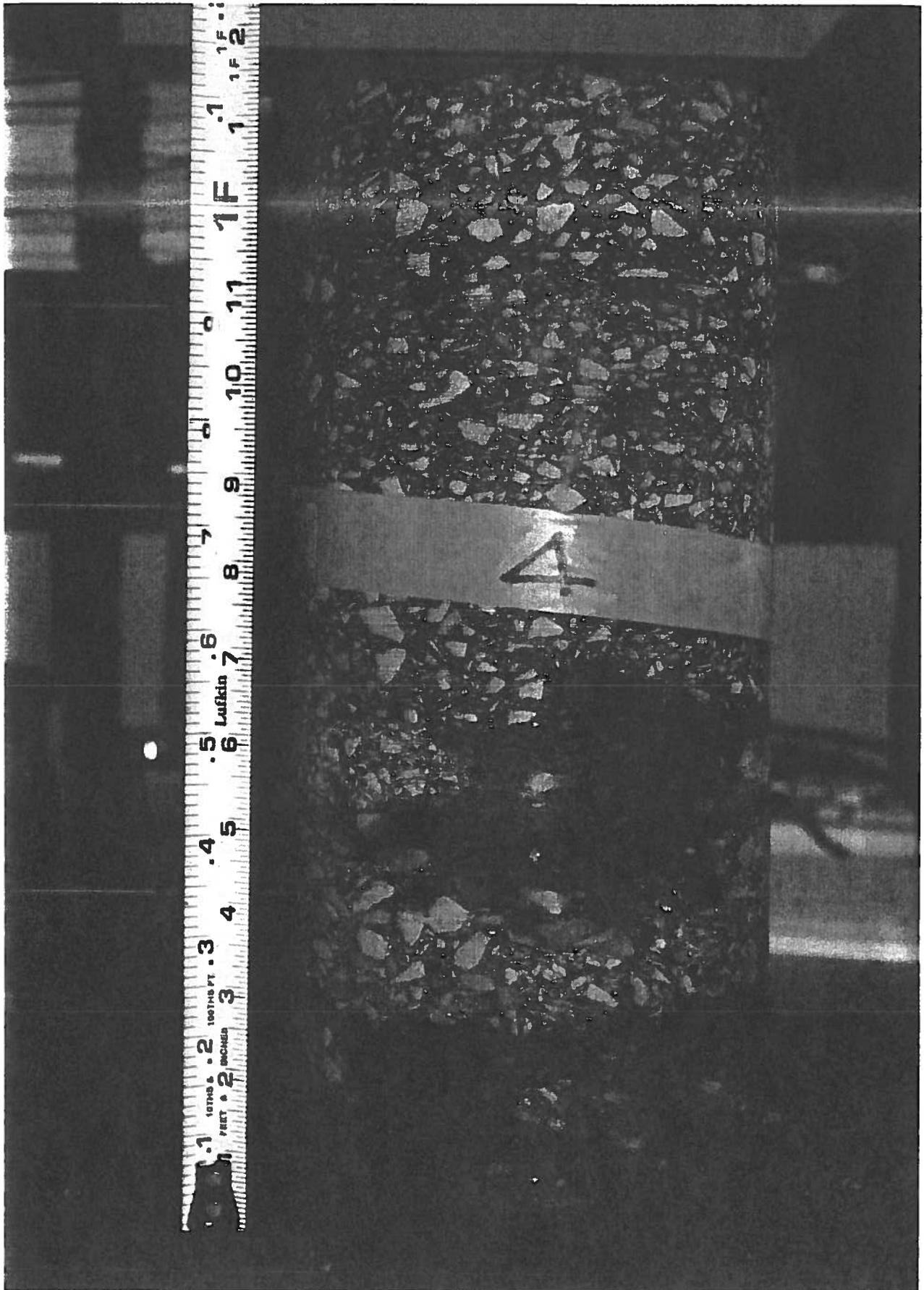


Exhibit 14 – Core 5



Exhibit 15 – Core 6



April 18, 2013

City of Newport City Council
169 SW Coast Highway
Newport, OR 97365

RE: 1-TIA-13 Teevin Brothers Log Yard Appeal

Greenlight Engineering has been asked by the Oregon Coast Alliance (“ORCA”) to evaluate the transportation related impacts of the proposed Teevin Brothers log yard to be located in Newport, Oregon. We submitted a letter dated February 1, 2013 based upon the materials in the record at that time. Subsequently, the applicant submitted a February 12, 2013 traffic impact analysis (TIA) revision and a February 27, 2013 pavement analysis. We have completed a review of the revised TIA and pavement analysis. Many aspects of our original letter remain unanswered by the applicant or City staff. Several are expanded upon or repeated herein along with a few new issues. We offer the following comments.

Executive Summary

The application fails to provide the necessary evidence to support approval of the project for the following reasons:

- Intersections and driveways required for analysis were not analyzed.
- The traffic counts are missing the “significant impact” of the fishing season.
- Intersection sight distance is limited at the site driveway with no discussion regarding mitigation or need.
- The analysis of structural pavement conditions lacks useful information and admits that it fails to meet city requirements.
- The intersection of Highway 20/Moore Drive will operate near the ODOT mobility standard. There are several issues that may further degrade the operations beyond what is reported in the TIA.
- Issues related to our February 1, 2013 remain unanswered.

Intersections and Driveways Required for Analysis were not Included in TIA

Section 14.45.030 of the Newport Municipal Code (“NMC”) states that “[t]he following facilities shall be included in the study area for all TIAs”:

“All site-access points and intersections (signalized and unsignalized) adjacent to the proposed site. If the proposed site fronts an arterial or collector street, the analysis shall address all intersections and driveways along the site frontage and within the access spacing distances extending out from the boundary of the site frontage.” (emphasis added)

Yaquina Bay Boulevard is classified as a minor arterial roadway. NMC 14.14.120 indicates that the access spacing distance on a minor arterial roadway is 500 feet. The City of Newport Transportation System Plan recommends that the city code adopt a residential spacing of 150-300 feet on minor arterial roadways and a non-residential spacing of 200-400 feet. However, it does not appear that these recommendations have been incorporated into the NMC.

Depending upon how this requirement is interpreted, there may be up to four locations (public road intersections and driveways) that require analysis that are within 150 to 500 feet of the western boundary of the site frontage along Yaquina Bay Boulevard. One such intersection would be Yaquina Bay Boulevard/Running Spring Road, which is located approximately 150 feet from the westernmost site driveway of the proposed development.

Neither the TIA nor the City decision address the requirement to study additional intersections or the driveways clearly required by the NMC.

Traffic Counts Missing “Significant Impact” of Fishing Season

Turning movement counts were conducted by the applicant in early to mid December of 2012¹.

The City Engineer, Timothy Gross, directed the applicant in an email dated December 10, 2012², to consider the peak fishing season as “[t]he fishing season has a significant impact on the truck traffic...I think they should be taken into consideration for the study”. Mr. Gross goes on to describe that crab season begins on December 1st. Again, traffic counts were conducted early to mid-December, typically well within the crab season. However, the crab season didn't start in 2012 until December 30th³. The traffic counts missed crab harvesting season altogether and the “significant impact on the truck traffic” is not reflected in the TIA at all.

The applicant has failed to produce an analysis that is reliable and based upon the requirements of the City.

Intersection Sight Distance Limited at Site Driveway

As originally reported in the January 8, 2013 TIA and again reported in the February 12, 2013 TIA revision, the intersection of Bay Boulevard and the eastern site driveway currently has inadequate intersection sight distance. Looking to the east on Yaquina Bay Boulevard from the eastern site driveway, the TIA reports that intersection sight distance is limited to 575 feet, while “required intersection sight distance is 760 feet” and is restricted by “topographic features”. By lacking adequate intersection sight distance,

¹ Appendix C of TIA

² Attachment “A” of land use application

³ <http://www.dfw.state.or.us/news/2012/December/121012.asp>

exiting trucks do not have sufficient sight distance to ensure that oncoming drivers won't have to slow down to avoid a collision.

Based upon conversations with City staff⁴, the City of Newport relies upon the Oregon Department of Transportation's *Highway Design Manual* for design criteria. Section 3.2.4 of the *Highway Design Manual* states the following:

"It is desirable to provide intersection sight distance at every road approach, whether it is a signalized intersection or private driveway. In no case is the sight distance to be lower than stopping sight distance. On high speed, high volume roadway intersections, providing intersection sight distance, rather than the minimum stopping sight distance, will minimize operational and safety problems."

Yaquina Bay Boulevard is classified as a minor arterial, the second highest functional classification in the City of Newport⁵, and is posted with a speed of 45 MPH.

The applicant has substantial property frontage to Bay Boulevard. The TIA has failed to offer any alternatives to the lack of adequate intersection sight distance issue. For example, the TIA does not evaluate a scenario without the second access to Bay Boulevard or a scenario where the driveway could be slightly moved or otherwise modified. The TIA does not establish that a second driveway is even needed to serve the development. The site is large enough that conceivably all circulation for the site could occur on-site rather than using the public road system for circulation. It does not appear necessary to put drivers in the position to watch out for trucks exiting this driveway from which there is no apparent public benefit or need.

The TIA has failed to describe the conditions that create the sight distance deficiency and whether mitigation is feasible. The City staff decision fails to address this issue at all.

Under the proposed conditions, exiting trucks will necessitate that vehicles traveling westbound on Bay Boulevard slow down to avoid a collision, an unfortunate and unnecessary situation that at least warrants discussion.

Structural Conditions Analysis Incomplete and Admittedly Does Not Meet Criteria

Section 14.45.020.F of the NMC requires that "[t]he TIA shall address the condition of the impacted roadways and identify structural deficiencies or reduction in the useful life of existing facilities related to the proposed development". The pavement analysis neither addresses the condition of impacted roadways or the reduction in the useful life, a fact that the applicant's analysis freely admits.

The pavement analysis continues to provide little useful information and does nothing to verify that the trucks generated by the proposed development will not degrade the pavement condition of the subject roadways or reduce the life the facilities as very clearly required by the approval criteria. The report makes no mention of the number or weight

⁴ Telephone conversation with Tim Gross, City Engineer, January 25, 2013

⁵ City of Newport Transportation System Plan, June 1997

of the proposed development's vehicles and the impact on the roadways. The report makes no mention of the existing surface conditions of the roadway. The report establishes only that the "pavement sections...were constructed with adequate asphaltic concrete and base depth to allow highway legal loads...". Unfortunately, this analysis fails to take into account the deterioration of pavement conditions that can occur as a result of any number of things, including construction deficiencies, normal wear and tear, weather, etc.

The applicant's pavement analysis states that the data collected is "not intended to address pavement life or for use as a condition survey". Basically, the report very clearly establishes that the analysis fails to meet the very clear requirements for approval of the application. Again, the City's criteria specifically states that the analysis "shall address the condition and...reduction in the useful life of existing facilities". The report does nothing to address these issues.

For this reason alone, this application cannot be approved. The City's staff report fails to address this issue.

It is important to note that the City staff identified an issue and conditioned an improvement along Yaquina Bay Boulevard that was not apparently identified in the applicant's pavement analysis. In looking at the pavement condition at that particular location, it is clear there is cracking and displacement at that location. It is also clear that there are numerous other locations that show pavement distress and failures along the subject roadways. These locations have been well documented in our previous letter as well as by the public. It is unclear what criteria this conditioned improvement is based upon, however, it is clear it is not based upon the applicant's study. It is also clear that the applicant's analysis is substantially incomplete.

Again, the pavement analysis does little to nothing to address the impacts of these surface failures and the City's clear criteria of Section 14.45.020.F of the NMC. If an adequate analysis based upon the clear requirements of the City were to be provided, it would be interesting to discover if that analysis would find similar locations where failures currently exist.

Highway 20/Moore Drive Operates near ODOT Mobility Standard

The mobility standard for the intersection of Highway 20/Moore Drive is a v/c ratio of 0.80⁶. The TIA reports that the intersection is expected to operate at a v/c ratio of 0.78 under 2013 total traffic conditions (with the development in place) during the weekday AM peak hour⁷.

⁶ Page 7 of TIA

⁷ Appendix G of TIA

It is important to note that any errors or omissions in the TIA that affect the capacity analysis of this intersection could result in the intersection operating above the mobility standard.

Based upon a review of the Synchro capacity analysis outputs, it does not appear that the appropriate yellow and red times were utilized in the analysis.

As previously discussed, turning movement counts were conducted in early to mid December of 2012⁸. Coastal communities are typically characterized with higher traffic volumes in the summer. As referenced in the ODOT Analysis Procedures Manual, “[u]sing a winter count with a high seasonal factor to represent the peak summer period will likely not represent traffic turning movements accurately, as driving patterns change in the winter compared to the summer.”

As described in the TIA, at the intersection of Highway 20/Moore Drive, Highway 20 eastbound and westbound through traffic volumes were seasonally adjusted. Turning movements to and from Moore Drive were not adjusted to estimate traffic operations during the 30th highest hour. Traffic during December was estimated to be roughly 30 percent lower than the peak traffic season. However, the traffic on Moore Drive was not adjusted to account for the likelihood that Moore Drive traffic is higher during the summer or possibly even during peak fishing season.

It is again important to note that Timothy Gross, City Engineer, directed the applicant to consider the peak fishing season as “[t]he fishing season has a significant impact on the truck traffic...I think they should be taken into consideration for the study”.

Section 14.45.050 of the NMC requires that the “TIA demonstrates that adequate transportation facilities exist to serve the proposed development or identifies mitigation measures that resolve the traffic safety problems in a manner that is satisfactory...to ODOT”. Additionally, Section 14.45.020 requires that the TIA “meets both City and ODOT requirements” and 14.45.050.A requires compliance with 14.45.020.

⁸ Appendix C of TIA

Conclusion

The land use application fails to provide substantial evidence, or in some cases any evidence at all, to support the conclusion that the requirements to approve this land use application are met.

In addition, issues related to our February 1, 2013 report also remain largely unanswered by the applicant or city staff.

Should you have any questions, feel free to contact me at 503-317-4559.

Sincerely,

A handwritten signature in black ink that reads "Rick Nys". The signature is written in a cursive, slightly slanted style.

Rick Nys, P.E., PTOE
Principal Traffic Engineer

LAND SURVEYING PLANNING ENGINEERING WATER RIGHTS FORESTRY MATERIAL TESTING



TELEPHONE (541) 267-2872
FAX (541) 267-0588
ralphdunham@stuntzner.com

705 SO. 4TH, P.O. BOX 118
COOS BAY, OREGON 97420

COOS BAY - DALLAS - FOREST GROVE

April 29, 2013

Teevin Bros. Land & Timber Co.
Attn: Mr. Paul Langner
P.O. Box 247
Rainier, OR 97048

RE: Evaluation of Suitability of John Moore Road and SE Bay Blvd pavement section for use by highway legal trucks, including standard allowed overloads in Newport, Oregon

Dear Mr. Langner:

On February 25th, 2013 I was contacted and presented with the photographs of asphalt core samples from John Moore Road and SE Bay Blvd in Newport, Oregon and tasked with the evaluation of these core samples in relation to suitability for highway legal truck traffic. I performed the evaluation dated 2/27/13 based upon the expressed goal of verifying the existing section was constructed in a manner which was adequate for the expected use which included highway legal truck traffic. My opinion is as stated, that it was constructed with adequate structural section to allow truck traffic.

The question has been raised regarding useful life analysis, and why that was not completed. The answer is simple. Roadways are designed and constructed for traffic, and it is both reasonably assumed based upon use (with the Port Facilities and other industrial applications accessed by this roadway) and was verified by pavement section that this roadway was constructed to allow more than casual truck traffic. No land use changes were occurring with the proposed use. The roadway is functioning today as an industrial access road, and has not apparently reached it terminal serviceability level as defined by AASHTO; therefore no life cycle analysis (related to design of new pavement or to address land use change) was warranted.

If you have any questions, please feel free to contact me at (541) 267-2872.

Sincerely;


Ralph Dunham, PE
Project Engineer.



**KITTELSON & ASSOCIATES, IN**

TRANSPORTATION ENGINEERING / PLANNING

810 SW Alder Street, Suite 700, Portland, OR 97205 503.228.5230 503.273.8189

MEMORANDUM

Date: April 29, 2013**Project #:** 13132**To:** Derrick Tokos, AICP
City of Newport Community Development Director
169 SW Coast Highway
Newport, OR 97365**From:** Diego Arguea, P.E. and Dan Seeman, Kittelson & Associates**Project:** Newport Teevin Bros. Traffic Impact Analysis**Subject:** Public Hearing Rebuttal - Traffic Impact Analysis Response to Comments

We have prepared this memorandum on behalf of Teevin Bros. as supplemental testimony in response to City of Newport public hearing that occurred on April 22, 2013. In particular, two issues raised by City of Newport staff and in public testimony are addressed herein. In addition, a response to the Greenlight Engineering *Appeal Report* (prepared on April 18 and attached to this memorandum) is provided within this memorandum. Each of the comments identified in the Greenlight Engineering report has been restated below and addressed.

BACKGROUND

Per City of Newport requirements, a Traffic Impact Analysis (TIA) was prepared by Kittelson & Associates and submitted to City of Newport staff for review and comment on January 8, 2013. After a period of review, City staff had various comments that were addressed in a follow-up revised TIA that was submitted to City staff on February 12, 2013. A public hearing was held on April 22, 2013 to allow for public testimony and comment, and two additional questions were raised and are addressed herein. In addition to City comments, an independent third party was hired by ORCA (Oregon Coast Alliance) to review the February 12 TIA and a report was prepared by Greenlight Engineering that identified various issues with said TIA. Following the Hearing issues below, issues raised in the Greenlight Engineering report are addressed.

ISSUES IDENTIFIED AT THE APRIL 22, 2013 PUBLIC HEARING

Issue #1: Driveways along Moore Drive and SE Bay Boulevard were not considered

Response: As shown in the January 2013 TIA (page 8), the existing traffic volumes along Yaquina Bay Road and SE Bay Boulevard are in the range of 100 to 300 vehicles (bi-directional) during each of the typical weekday a.m. and p.m. peak hours. Along Moore Drive, bi-directional volumes were observed to be in the 200-400 vehicle range during the same peak hours. The proposed development is forecast to add approximately 16 total vehicles during the a.m. peak hour and 10 total vehicles during the weekday p.m. peak hour. The existing and projected volumes are sufficiently low to facilitate efficient turning movements into and out of driveways along these streets, with very little delay. Moreover, the low volume of additional traffic contributed by the proposed project is not anticipated to have a measurable effect on driveway capacities along said roadways. As identified in the TIA, no capacity constraints were identified at any arterial or highway intersections when considering the impact of additional project traffic.

Issue #2: Crabbing season was delayed until January and thus seasonal congestion was not adequately captured.

Response: In order to assess peak traffic conditions, traffic volumes along Highway 20 were increased by 28% per the methodologies described in the ODOT Analysis Procedures Manual for estimating the 30th Highest Hour (30HV) Volumes based on seasonal variation (January 2013 TIA, Page 7).

It should also be noted that although crabbing season attracts some seasonal traffic to the area, the impact is not as large as other seasonal variations, as represented by data collected annually by ODOT. As shown in Attachment D of the TIA report, the peak months occur in July/August, not in January, and the 28% increase in traffic volumes captures a larger increase than crabbing season alone.

ISSUES IDENTIFIED IN THE GREENLIGHT ENGINEERING APPEAL REPORT

This section addresses each of the issues raised in the Greenlight Engineering report.

Issue #1: Intersections and driveways required for analysis were not analyzed.

Response: The study intersections and time periods were scoped with City staff. Ultimately, City's interpretation of code is what determines study intersections and time periods, not a third party reviewer who has not been part of the public process from the beginning of the project.

Issue #2: The traffic counts are missing the “significant impact” of the fishing season.

Response: Along Highway 20, east-west traffic volumes were increased by 28% to account for seasonal variation (see page 7 of our report). Along Moore Drive, no additional capacity constraints at the study intersections were anticipated by City staff given the low volumes (approximately 3,500 daily vehicles) and the focus was on Hwy 20 for the seasonal adjustment.

Issue #3: Intersection sight distance is limited at the site driveway with no discussion regarding mitigation or need.

Response: See Greenlight’s report, top of page 3—the code language describes that STOPPING sight distance must be met, not INTERSECTION sight distance. At this location, there is sufficient STOPPING sight distance with the 575 feet provided. From the Kittelson report (page 16), this is specifically addressed (see below):

“The sight line to the east at the east driveway is limited to 575 feet due to topographic features on the north side of Yaquina Bay Boulevard. However, the stopping sight distance requirement for trucks and passenger cars is met at the east driveway facing east and thus vehicles are expected to be able to slow down effectively for obstacles, based on the recommendations set forth in AASHTO reference manual.”

Issue #4: The analysis of structural pavement conditions lacks useful information and admits that it fails to meet city requirements.

Response: Teevin Bros. has submitted a structural analysis report of the roadway under separate cover.

Issue #5: The intersection of Highway 20/Moore Drive will operate near the ODOT mobility standard. There are several issues that may further degrade the operations beyond what is reported in the TIA.

Response: This intersection is forecast to meet ODOT standards with the proposed site added future traffic. It should be noted that per Section 3.3.04 of the ODOT Analysis Procedures Manual (APM), this intersection is not considered “significantly impacted” and would not otherwise meet the ODOT threshold to warrant investigation¹.

¹ Section 3.3.04 of the APM indicates that “Any public or private approach intersection where the proposed development can be expected to add 300 vehicle trips in a single day or more than 50 additional vehicle trips in any single hour, or an approach to the intersection” should be included in the analysis area. These thresholds generally indicate the volume at which an intersection or roadway facility is significantly impacted. As shown in Page 11 of the February 12, 2013 TIA, the entirety of the proposed development doesn’t meet this threshold, much less at one particular intersection (Forecast trips: 142 daily trips, 16 a.m. peak hour trips, and 10 p.m. peak hour trips).

Issue #6: Issues related to our February 1, 2013 remain unanswered.

Response: While this statement is vague, we feel that the information provided in the remainder of this memorandum, combined with information provided in the TIA and the previous response memorandum, addresses the concerns.

SUMMARY AND CONCLUSIONS

The January 2013 TIA, the February 2013 response memorandum, the final revised February 2013 TIA, and this memorandum (April 29, 2013) respond to the salient issues raised by the City, Greenlight Engineering, and the general public with regard to the transportation impact of the Teevin Bros. proposed logging operation.

Please feel free to contact us if you have further questions or comments at 503-228-5230.

Attachment: Greenlight Engineering Appeal Report

April 18, 2013

City of Newport City Council
169 SW Coast Highway
Newport, OR 97365

RE: 1-TIA-13 Teevin Brothers Log Yard Appeal

Greenlight Engineering has been asked by the Oregon Coast Alliance (“ORCA”) to evaluate the transportation related impacts of the proposed Teevin Brothers log yard to be located in Newport, Oregon. We submitted a letter dated February 1, 2013 based upon the materials in the record at that time. Subsequently, the applicant submitted a February 12, 2013 traffic impact analysis (TIA) revision and a February 27, 2013 pavement analysis. We have completed a review of the revised TIA and pavement analysis. Many aspects of our original letter remain unanswered by the applicant or City staff. Several are expanded upon or repeated herein along with a few new issues. We offer the following comments.

Executive Summary

The application fails to provide the necessary evidence to support approval of the project for the following reasons:

- Intersections and driveways required for analysis were not analyzed.
- The traffic counts are missing the “significant impact” of the fishing season.
- Intersection sight distance is limited at the site driveway with no discussion regarding mitigation or need.
- The analysis of structural pavement conditions lacks useful information and admits that it fails to meet city requirements.
- The intersection of Highway 20/Moore Drive will operate near the ODOT mobility standard. There are several issues that may further degrade the operations beyond what is reported in the TIA.
- Issues related to our February 1, 2013 remain unanswered.

Intersections and Driveways Required for Analysis were not Included in TIA

Section 14.45.030 of the Newport Municipal Code (“NMC”) states that “[t]he following facilities shall be included in the study area for all TIAs”:

“All site-access points and intersections (signalized and unsignalized) adjacent to the proposed site. If the proposed site fronts an arterial or collector street, the analysis shall address all intersections and driveways along the site frontage and within the access spacing distances extending out from the boundary of the site frontage.” (emphasis added)

Yaquina Bay Boulevard is classified as a minor arterial roadway. NMC 14.14.120 indicates that the access spacing distance on a minor arterial roadway is 500 feet. The City of Newport Transportation System Plan recommends that the city code adopt a residential spacing of 150-300 feet on minor arterial roadways and a non-residential spacing of 200-400 feet. However, it does not appear that these recommendations have been incorporated into the NMC.

Depending upon how this requirement is interpreted, there may be up to four locations (public road intersections and driveways) that require analysis that are within 150 to 500 feet of the western boundary of the site frontage along Yaquina Bay Boulevard. One such intersection would be Yaquina Bay Boulevard/Running Spring Road, which is located approximately 150 feet from the westernmost site driveway of the proposed development.

Neither the TIA nor the City decision address the requirement to study additional intersections or the driveways clearly required by the NMC.

Traffic Counts Missing “Significant Impact” of Fishing Season

Turning movement counts were conducted by the applicant in early to mid December of 2012¹.

The City Engineer, Timothy Gross, directed the applicant in an email dated December 10, 2012², to consider the peak fishing season as “[t]he fishing season has a significant impact on the truck traffic...I think they should be taken into consideration for the study”. Mr. Gross goes on to describe that crab season begins on December 1st. Again, traffic counts were conducted early to mid-December, typically well within the crab season. However, the crab season didn't start in 2012 until December 30th³. The traffic counts missed crab harvesting season altogether and the “significant impact on the truck traffic” is not reflected in the TIA at all.

The applicant has failed to produce an analysis that is reliable and based upon the requirements of the City.

Intersection Sight Distance Limited at Site Driveway

As originally reported in the January 8, 2013 TIA and again reported in the February 12, 2013 TIA revision, the intersection of Bay Boulevard and the eastern site driveway currently has inadequate intersection sight distance. Looking to the east on Yaquina Bay Boulevard from the eastern site driveway, the TIA reports that intersection sight distance is limited to 575 feet, while “required intersection sight distance is 760 feet” and is restricted by “topographic features”. By lacking adequate intersection sight distance,

¹ Appendix C of TIA

² Attachment “A” of land use application

³ <http://www.dfw.state.or.us/news/2012/December/121012.asp>

exiting trucks do not have sufficient sight distance to ensure that oncoming drivers won't have to slow down to avoid a collision.

Based upon conversations with City staff⁴, the City of Newport relies upon the Oregon Department of Transportation's *Highway Design Manual* for design criteria. Section 3.2.4 of the *Highway Design Manual* states the following:

"It is desirable to provide intersection sight distance at every road approach, whether it is a signalized intersection or private driveway. In no case is the sight distance to be lower than stopping sight distance. On high speed, high volume roadway intersections, providing intersection sight distance, rather than the minimum stopping sight distance, will minimize operational and safety problems."

Yaquina Bay Boulevard is classified as a minor arterial, the second highest functional classification in the City of Newport⁵, and is posted with a speed of 45 MPH.

The applicant has substantial property frontage to Bay Boulevard. The TIA has failed to offer any alternatives to the lack of adequate intersection sight distance issue. For example, the TIA does not evaluate a scenario without the second access to Bay Boulevard or a scenario where the driveway could be slightly moved or otherwise modified. The TIA does not establish that a second driveway is even needed to serve the development. The site is large enough that conceivably all circulation for the site could occur on-site rather than using the public road system for circulation. It does not appear necessary to put drivers in the position to watch out for trucks exiting this driveway from which there is no apparent public benefit or need.

The TIA has failed to describe the conditions that create the sight distance deficiency and whether mitigation is feasible. The City staff decision fails to address this issue at all.

Under the proposed conditions, exiting trucks will necessitate that vehicles traveling westbound on Bay Boulevard slow down to avoid a collision, an unfortunate and unnecessary situation that at least warrants discussion.

Structural Conditions Analysis Incomplete and Admittedly Does Not Meet Criteria

Section 14.45.020.F of the NMC requires that "[t]he TIA shall address the condition of the impacted roadways and identify structural deficiencies or reduction in the useful life of existing facilities related to the proposed development". The pavement analysis neither addresses the condition of impacted roadways or the reduction in the useful life, a fact that the applicant's analysis freely admits.

The pavement analysis continues to provide little useful information and does nothing to verify that the trucks generated by the proposed development will not degrade the pavement condition of the subject roadways or reduce the life the facilities as very clearly required by the approval criteria. The report makes no mention of the number or weight

⁴ Telephone conversation with Tim Gross, City Engineer, January 25, 2013

⁵ City of Newport Transportation System Plan, June 1997

of the proposed development's vehicles and the impact on the roadways. The report makes no mention of the existing surface conditions of the roadway. The report establishes only that the "pavement sections...were constructed with adequate asphaltic concrete and base depth to allow highway legal loads...". Unfortunately, this analysis fails to take into account the deterioration of pavement conditions that can occur as a result of any number of things, including construction deficiencies, normal wear and tear, weather, etc.

The applicant's pavement analysis states that the data collected is "not intended to address pavement life or for use as a condition survey". Basically, the report very clearly establishes that the analysis fails to meet the very clear requirements for approval of the application. Again, the City's criteria specifically states that the analysis "shall address the condition and...reduction in the useful life of existing facilities". The report does nothing to address these issues.

For this reason alone, this application cannot be approved. The City's staff report fails to address this issue.

It is important to note that the City staff identified an issue and conditioned an improvement along Yaquina Bay Boulevard that was not apparently identified in the applicant's pavement analysis. In looking at the pavement condition at that particular location, it is clear there is cracking and displacement at that location. It is also clear that there are numerous other locations that show pavement distress and failures along the subject roadways. These locations have been well documented in our previous letter as well as by the public. It is unclear what criteria this conditioned improvement is based upon, however, it is clear it is not based upon the applicant's study. It is also clear that the applicant's analysis is substantially incomplete.

Again, the pavement analysis does little to nothing to address the impacts of these surface failures and the City's clear criteria of Section 14.45.020.F of the NMC. If an adequate analysis based upon the clear requirements of the City were to be provided, it would be interesting to discover if that analysis would find similar locations where failures currently exist.

Highway 20/Moore Drive Operates near ODOT Mobility Standard

The mobility standard for the intersection of Highway 20/Moore Drive is a v/c ratio of 0.80⁶. The TIA reports that the intersection is expected to operate at a v/c ratio of 0.78 under 2013 total traffic conditions (with the development in place) during the weekday AM peak hour⁷.

⁶ Page 7 of TIA

⁷ Appendix G of TIA

It is important to note that any errors or omissions in the TIA that affect the capacity analysis of this intersection could result in the intersection operating above the mobility standard.

Based upon a review of the Synchro capacity analysis outputs, it does not appear that the appropriate yellow and red times were utilized in the analysis.

As previously discussed, turning movement counts were conducted in early to mid December of 2012⁸. Coastal communities are typically characterized with higher traffic volumes in the summer. As referenced in the ODOT Analysis Procedures Manual, “[u]sing a winter count with a high seasonal factor to represent the peak summer period will likely not represent traffic turning movements accurately, as driving patterns change in the winter compared to the summer.”

As described in the TIA, at the intersection of Highway 20/Moore Drive, Highway 20 eastbound and westbound through traffic volumes were seasonally adjusted. Turning movements to and from Moore Drive were not adjusted to estimate traffic operations during the 30th highest hour. Traffic during December was estimated to be roughly 30 percent lower than the peak traffic season. However, the traffic on Moore Drive was not adjusted to account for the likelihood that Moore Drive traffic is higher during the summer or possibly even during peak fishing season.

It is again important to note that Timothy Gross, City Engineer, directed the applicant to consider the peak fishing season as “[t]he fishing season has a significant impact on the truck traffic...I think they should be taken into consideration for the study”.

Section 14.45.050 of the NMC requires that the “TIA demonstrates that adequate transportation facilities exist to serve the proposed development or identifies mitigation measures that resolve the traffic safety problems in a manner that is satisfactory...to ODOT”. Additionally, Section 14.45.020 requires that the TIA “meets both City and ODOT requirements” and 14.45.050.A requires compliance with 14.45.020.

⁸ Appendix C of TIA

Conclusion

The land use application fails to provide substantial evidence, or in some cases any evidence at all, to support the conclusion that the requirements to approve this land use application are met.

In addition, issues related to our February 1, 2013 report also remain largely unanswered by the applicant or city staff.

Should you have any questions, feel free to contact me at 503-317-4559.

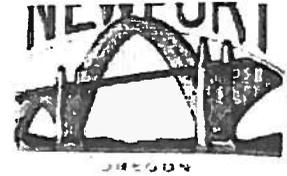
Sincerely,

A handwritten signature in black ink that reads "Rick Nys". The signature is written in a cursive, slightly slanted style.

Rick Nys, P.E., PTOE
Principal Traffic Engineer

City of Newport

169 SW Coast Highway
Newport, OR 97365
P|541-574-3366 F|541-574-3301
<http://www.thecityofnewport.net/>



Memo

To: Derrick I. Tokos, AICP, Community Development Director
From: Timothy Gross, Director of Public Works/City Engineer 
Date: 3/11/2013
RE: PROPOSED TEEVIN BROTHERS LOG PROCESSING YARD – NEWPORT, OR
TRAFFIC IMPACT ANALYSIS

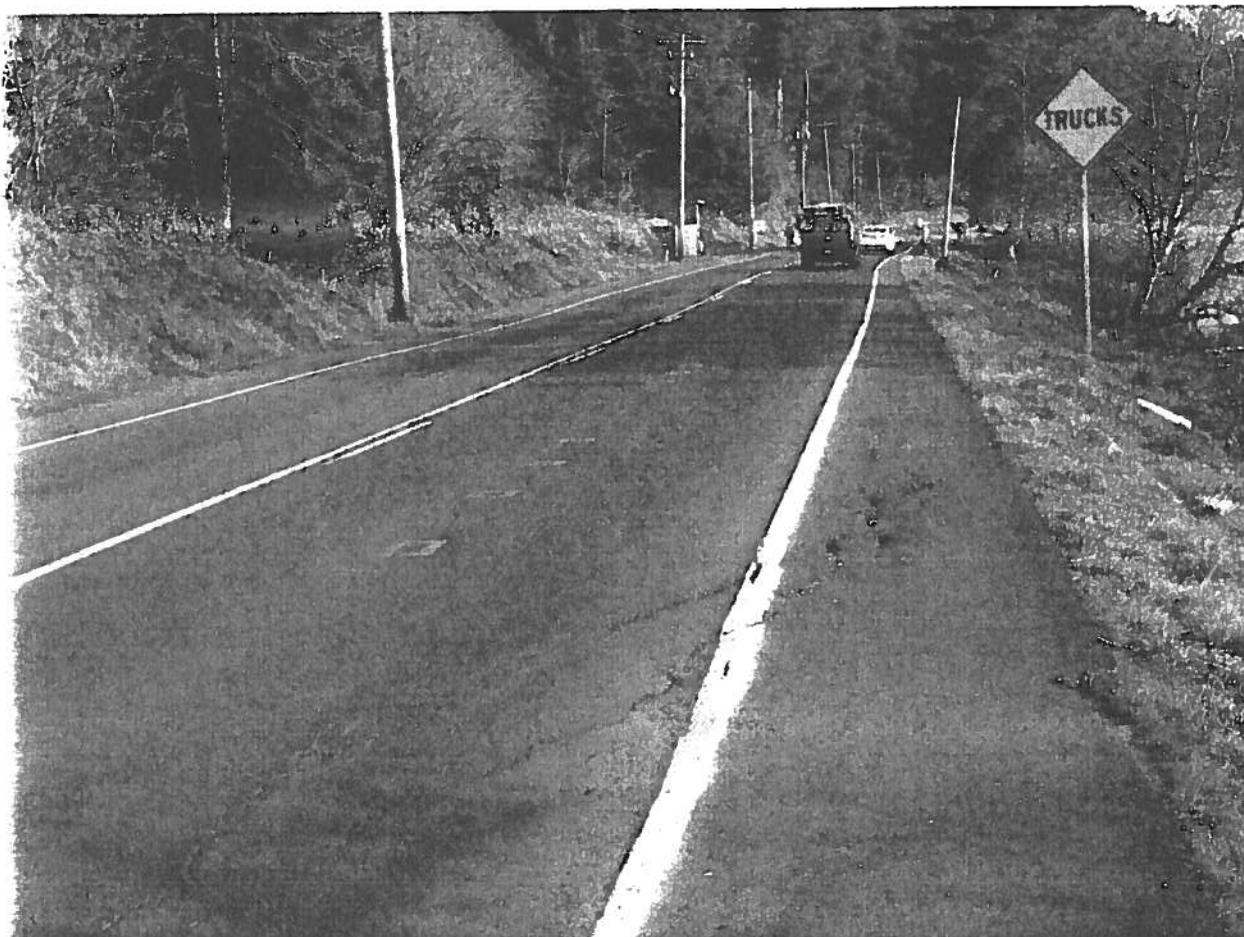
I have reviewed the Traffic Impact Analysis for the proposed Teevin Brothers Log Processing Yard dated February 12, 2013 by Kittleson & Associates, Inc. and the supplementary memo addressing pavement structure and condition dated February 27, 2013 submitted by Stuntzner Engineering & Forestry, LLC. It is my opinion that the information contained within these documents demonstrates that the transportation facilities used to access the proposed Teevin Brothers log yard are both geometrically and structurally adequate as currently constructed, with the following exception.

SE Bay Road east of SE Vista Drive, which falls within the jurisdiction of the Lincoln County Highway Department, is settling due to what appears to be an embankment issue. Teevin Brothers should coordinate with the Lincoln County Highway Department to ensure the repair of this section of roadway is complete before trucking operations commence.

In addition, after reviewing the capacity analysis contained within the submittal, the volumes of traffic attributed to the Teevin Bros. project will not cause excessive queuing or delays at affected intersections. Although the City of Newport has not adopted Level of Service standards for its non-highway facilities, the analysis as defined within the submittal indicates that the traffic attributed to the Teevin Bros. project will not cause excessive queuing or delays at affected intersections.

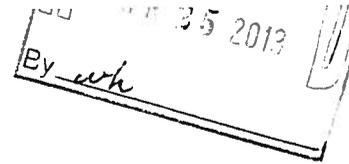
Attachment E
Yaquina Bay Road Settling Issue

Traffic Impact Analysis
File No. 1-TIA-13



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April 24, 2013

VIA EMAIL (D.Tokos@NewportOregon.gov) AND FIRST CLASS MAIL

Newport Planning Commission
City of Newport
169 SW Coast Hwy.
Newport, OR 97365

RE: 1-TIA-13

Dear Planning Commissioners:

This letter is submitted on behalf of Rondys, Inc. Rondys is listed on the application as an applicant and is a property owner where part of the log shipping operation is proposed. Rondys supports the application and believes the traffic impact analysis should be approved.

I want to confine my comments in this letter to one particular issue that was raised by some of the opponents. The issue deals with whether or not John Moore Road is designated a truck route or whether it has to be. Opponents cited two statutes indicating that John Moore had to be a designated truck route and that it was not. Simply stated, the opponents misquoted and misinterpreted both the statutes they cited.

The first statute they cited was ORS 810.040. That statute reads as follows:

810.040 Designation of truck routes; limitations. Each road authority may designate any of its highways or any section of any of its highways as a truck route and may prohibit the operation of trucks, machinery or any other large or heavy vehicles upon any other of its highways that serves the same route or area served by the truck route designated. The authority granted under this section is subject to all of the following:

(1) The governing body of an incorporated city shall not designate a truck route or prohibit the operation of any vehicle on a:

(a) State highway that is within the boundaries of the city without the written consent of the Department of Transportation.

(b) County road that is within the boundaries of the city without the written consent of the governing body of the county.

(2) Any designation or prohibition made under authority of this section must be imposed by appropriate order, resolution or ordinance.

(3) A road authority exercising authority under this section shall erect and maintain signs in a conspicuous manner and place at each end of the highway or section of highway where a designation or prohibition is imposed to give notice of the prohibitions or designations imposed. The road authority shall erect and maintain signs giving notice of any prohibitions or designations imposed under this section at such other places as may be necessary to inform the public.

(4) A prohibition or designation imposed under this section is effective when signs giving notice thereof are posted as required by this section.

(5) Penalties are provided under ORS 811.450 for violation of requirements imposed under this section. [1983 c.338 §148]

The opponents interpreted that statute to say that the city must designate truck routes. That is not what the statute says. The statute says that each road authority **may** designate any of its highways or any section of any of its highways as a truck route. There is no requirement that truck routes be designated. The statute simply give cities the ability to establish truck routes if it so desires. The remainder of the statute discusses what roads the city would not have authority over and also discusses the signing that must take place if a truck route is designated. In short, the opponents are absolutely wrong when they try to suggest that the statute imposes some duty on behalf of the city to designate a truck route.

The second statute that was incorrectly cited by the opponents is ORS 227.400. That statute reads as follows:

227.400 Truck routes; procedures for establishment or revision; notice; hearing. (1)

A city council shall not establish a new truck route or revise an existing truck route within the city unless the council first provides public notice of the proposed truck route and holds a public hearing concerning its proposed action.

(2) The city council shall provide notice of a public hearing held under this section by publishing notice of the hearing once a week for two consecutive weeks in some newspaper of general circulation in the city. The second publication of the notice must occur not later than the fifth day before the date of the public hearing.

(3) The notice required under this section shall state the time and place of the public hearing and contain a brief and concise statement of the proposed formation of the truck route, including a description of the roads and streets in the city that will form the truck route.

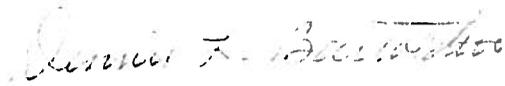
(4) As used in this section:

(a) "Truck" includes motor truck, as defined in ORS 801.355, and truck tractor, as defined in ORS 801.575.

(b) "Truck route" means the roads or streets in a city which have been formally designated by the city council as the roads or streets on which trucks must travel when proceeding through the city. [1985 c.564 §1]

That statute simply provides that a city council shall not establish a new truck route or revise an existing truck route within the city unless the city council provides public notice of the proposed truck route and holds a public hearing concerning its proposed action. There is no requirement imposed by this statute that the city establish a truck route or designate a particular route as a truck route. Section (4)(b) of the statute states, “ ‘Truck route’ means the roads or streets in a city which have been formally designated by the city council as the roads or streets on which trucks must travel when proceeding through the city.” It appears that the statute was passed for the benefit of truckers so that if a route were changed, they would be able to participate in the discussion of the route and that truck routes would be clearly marked. In summary, there is absolutely no requirement in the statute that the city designate truck routes. The talk about requiring a truck route or establishment of a “de facto” truck route was totally misplaced.

Very truly yours,



DENNIS L. BARTOLDUS

DLB/pkh
cc: Client