Planning Application AR-20-05
Applicant Record Submittal

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BY EMAIL

Chair Salvage and Planning Commissioners
c/o Kelly Hart
925 Main Street
Lebanon, OR 97355

Re: Applicant's Open Record Submittal
File No. AR 20-05

Dear Chair Salvage and Commissioners:

As you know this office represents the applicant, Farmworker Housing Development Corporation ("Applicant" or "FHDC"), in the above-referenced file. The proposed development of 24-units of affordable housing is located at the western terminus of Weldwood Drive ("subject property" or "site"). FHDC has named the development Colonia Paz I. After considering comments made at the public hearing, and reviewing comments submitted to the record through July 15, 2020, the Applicant provides this additional information in response. Please accept these comments and additional information that further supports approval of this application and include this letter and the attachments in the record.

I. Colonia Paz Operations

While many comments did not address land use criteria, in an effort to be responsive to the range of information provided in public comments, the Applicant offers additional information to explain how the subject property is well-suited for the proposed use and how FHDC will offer services for the residents of Colonia Paz I. Before this description, FHDC alerts the Planning Commission to protections under the Fair Housing Act as amended ("FHA"). Since the comments the Applicant responds to here can be construed to be race-based comments, this letter points out that review of this application cannot be decided on race-based characteristics of the individuals who will live at the site, but must be based on the ability of the Applicant to meet the applicable land use approval criteria.

The FHA declares that "it is the policy of the United States to provide, within constitutional limitations, for fair housing throughout the United States." 42 U.S.C. § 3601. To achieve this goal, the FHA makes it unlawful to "make unavailable or deny, a dwelling to any person because of race, color, religion, sex, familial status, or national origin. 42 U.S.C. § 3604(a). A denial here based on comments such as the request to build a "wall" that is 10-20 feet, when the Lebanon Development Code ("LDC") provides for a maximum height of 8 feet if a developer uses masonry fencing under LDC 16.150.030.D and prohibits hedges over 8 feet tall

under LDC 16.15.060.A.4.c could violate the FHA. In Applicant's view, the commenter is submitting barely veiled race-based comments with reference to a wall being constructed in the southern United States to hinder illegal migration. See Attachment 1. These types of comments, as well as references to English as a second language for children who may live in Colonia Paz; fear that the neighborhood will no longer be quiet or safe; claims that property value will be reduced; that the residents themselves should be counseled about cultural differences, laws and rules "for their own protection;" potential threats of violence against farmworker residents; and requests for a "liaison officer" are race-based comments that do not address land use criteria. The comment about second language students, in addition to focusing on race, also violates the FHA as a comment based on familial status of the potential residents of the development. Further, comments that raise questions like "what kind of farmworkers would be housing in our area" also show unfounded race-based fears about the development. Given this background, the Applicant offers the following description of its development.

Tellingly, FHDC proposed the name Colonia Paz for this development. Colonia Paz translates to "Community of Peace." Based on its over 30 years of experience, FHDC is well-placed to begin development of the subject property with farmworker housing, with much financial support through the United States Department of Agriculture ("USDA"). The USDA will fund site acquisition and development. See Attachment 2, an excerpt of the government funding application the development, reflecting USDA's award of funds and the need for affordable housing in this poverty hotspot. Colonia Paz is targeted to farmworkers and their families earning less than 70% area median income ("AMI"), with 62% of the units targeted to families with incomes below 50% AMI, and 10% to families at or below 30% AMI. Colonia Paz has received Rental Assistance from USDA Rural Development, ensuring most tenants pay no more than 30% of their income toward rent. The operations of Colonia Paz are explained below to clarify any misconceptions and to provide a better understanding of the proposed use as stable housing for area farmworkers and attendant services, including benefits to surrounding property owners.

The consideration of surrounding property values are not one of the approval criteria for this development and in the context of the comments made improperly focus on the character of the potential residents at Colonia Paz. Nonetheless, FHDC reviewed property valuation for properties that share a direct boundary or are adjacent to an existing FHDC development in Marion County. See Attachment 3. For each property listed, the values have steadily increased over the summarized nine year period from 2009 – 2018. The only exception is an old quarry site that is now government owned, and is not comparable to any site near the proposed application. While 17 out of 74 properties in Attachment 3 show some reduction over the time period, all non-FHDC properties, including those with reductions, have equal or greater value than they did in 2009. These reductions are mentioned as reported facts, not as a correlation to the FHDC developments, as there are many reasons why a single property could see a reduction in value. Overall, the properties surrounding FHDC developments have increased in value over time, benefiting in wealth generation for the subject owners from the new construction and well-maintained FHDC developments.

FHDC is committed, as it has done across all of its developed properties in Oregon, to create a community. The development is intended to serve year-round agricultural workers in and near Lebanon. This community building is shown through the design elements that include pedestrian friendly design, ample bicycle parking, and outdoor recreation space including a covered eating area and children's' playground.

In addition, the funding for the development will include a budget for an onsite property manager to maintain the property in good repair, as well as fund a resident service coordinator. The resident service coordinator will link residents to service providers, including health providers, school representatives, and other resources to help the farmworkers stabilize other aspects of their lives and participate in Lebanon activities. Further, FHDC typically has neighborhood meetings to invite neighboring property owners to meet and learn about the farmworker community. Such activities have included community discussions, shared use of onsite garden harvests, community celebrations and other activities. Some of these activities to build community connections will be implemented at Colonia Paz.

As described at the Planning Commission hearing, FHDC has engaged with community leaders over the past year, including the school district, local volunteer-organizations, and faith-based communities, to learn about the fabric of support that will be available for future residents at Colonia Paz. Letters of support from community partners and individuals are included here as Attachment 4. Each letter has a consistent theme – that FHDC's developments do create a community that helps farmworkers and their families by providing new opportunities to help them reach the American Dream, while they work daily to feed America.

II. <u>Only clear and objective standards can be applied to this proposal.</u>

The application is for multifamily units that qualify as needed housing under state law. See ORS 197.303(1)(a). As a result, the Applicant reserves the right to request that the City apply only "clear and objective standards, conditions, and procedures" to the development. ORS 197.307(4). As a result of public comment, the Applicant is submitting a supplement narrative. See Attachment 5. The Applicant specifically identifies those criteria that do not contain clear and objective standards in the supplemental narrative and objects to the use of such standards in review of this application.

III. <u>FHDC addresses soil conditions and confirms the onsite stormwater control system is designed to collect runoff from new impervious surfaces and to better control offsite runoff.</u>

A member of the public, Ronald Edwards, generally raised concerns about whether the Applicant had performed a geotechnical study to determine the subject property could be developed as proposed. In addition, another comment raised concerns about whether the particular onsite soils would have poor infiltration.

The Applicant's materials included a preliminary grading and drainage plan as Sheet C-2.1. In addition, the Applicant performed a Geotechnical Report and provides findings pertinent

to Colonia Paz I in Attachment 6. This report concludes that the site can be engineered to address soil and groundwater conditions and recommends certain actions that the Applicant can feasibly undertake during development to address geotechnical matters.

All stormwater will be captured onsite. In addition, Applicant's civil engineer describes that water will infiltrate through landscaped bioswales, and underground infiltration chambers after capture, but will not change the course of natural flow from the predevelopment site conditions. Prior to release through infiltration, surface waters will run through sumps or swales to prevent pollutants from entering the environment. Attachment 7. The proposed development will not impact offsite flow direction, but will control stormwater on site through the drainage plan that is designed to capture runoff from new impervious surface.

Based on the Geotechnical Report included in this open record submittal and other application materials in the record, the proposed engineered stormwater system on the subject property provides information in the record to show the development can feasibly be constructed to meet the code requirements and addresses the vague concerns raised by the public.

IV. Well and Wetland Concerns

Several neighbors signed a joint letter raising concerns about potential impacts to their well water from development of this property. Other comments questioned whether the proposed development would adversely affect a wetland located northwest of the proposed development. FHDC attaches its Wetlands Delineation Report as Attachment 8. On page 45 of Attachment 8, the delineated wetlands area is depicted. The Applicant retained a EVREN Northwest, Inc. ("EVREN") to prepare a limited hydrogeological evaluation to analyze FHDC's Geotechnical Report, Wetlands Delineation, proposed stormwater design, and data about surrounding wells. The EVREN Technical Memorandum is attached hereto as Attachment 9.

As the memorandum describes and concludes:

> "nearby wells derive their water from a regional ground water aquifer at depths that are hydraulically separated from overlying perched ground water and local infiltration. The regional aquifer covers a broad geographic area and is likely recharged from areas distal to the site. Very little if an replenishment of the aquifer is from surface infiltration near the proposed development site."

Based on this review, EVREN concludes the development will not have a significant impact on surrounding well water quantity or quality.

Further, the memorandum describes the location of nearby wetlands and concludes that based on the storm water design, treatment plan, and infiltration, the shallow groundwater hydrology that feeds the wetlands will not be significantly impacted by the proposed development. Therefore, this application will not have significant impact on surrounding wells or wetlands.

V. Other neighborhood concerns are addressed.

Many public comments seek to direct the development of traffic improvements related to access, traffic impacts, and onsite parking. The Applicant has addressed the applicable criteria in greater detail in the attached supplemental narrative. Attachment 5, see especially Applicant's response to specific criteria raised in public comments, including LDC 16.12.030.G and I. Moreover, any future development on property surrounding the subject property will be required to submit application materials and be reviewed on its own merits.

In addition, all onsite parking requirements have been met. Although some comments make vague remarks about on-street parking demands, on-street parking is equally available to anyone who desires to use the spaces at a particular time. The City of Lebanon will govern on-street parking allowances on the extension of Weldwood Drive. Further, some comments were made about connecting Weldwood as a through street. However, the Applicant will not connect the Weldwood extension through the private road portion of Weldwood as it traverses the nearby manufactured home park. Therefore, the extension of Weldwood Drive will be limited to traffic impacts from this development, and there is no indication that pedestrians will be unable to follow traffic patterns associated with the driveway access to the proposed development, as both the right-of-way for Weldwood Drive, and the driveway width meet LDC requirements.

One comment related to maintenance of landscaped area. Under the code, failure to maintain landscaping is a code violation and subject to enforcement. Therefore, no separate condition of approval or response from Applicant is required.

Applicant's civil engineer and the City's environmental management staff corresponded about the availability of water and sewer to serve the proposed development. See Attachment 10. In addition, as this proposed development is an allowed use under the zoning, the City has planned adequate public facilities to serve the site as part of its comprehensive plan, and its facilities master plan. The City may rely on its own staff's expertise to find that adequate public facilities are available to serve this development.

Further, the public facilities approval criteria relate to utilities like water and sewer. The City's definition of public facilities does not include schools. The Lebanon Community Schools has been notified of this application and did not provide comments about interference with school planning and capacity. Further, the school district had an opportunity to comment when zoning decisions were made, and yet this parcel has been zoned for mixed use, where the multi-family use proposed here is listed as an allowed use. For these reasons, the Applicant is not required to take further action in meeting school district planning capacity. Notwithstanding the foregoing, the Applicant notes that the school district, in its Student Investment Action Grant Application, has requested nearly $1 million in funds to reduce class size. Attachment 11.

One public comment raised a question about why no archaeological study was included in the application materials. The subject property is not on the Lebanon historic register and has no identified historic resource of statewide significance, therefore, no archaeological study is

required. See also Attachment 5, Applicant's supplemental narrative with additional response to LDC 16.31.040.

Several comments suggest that the Applicant should be subject to the approval criteria for a planned development. Under LDC 16.23.010.E an applicant may elect to develop a project as a planned development. However, FHDC did not elect to apply for a planned development. Therefore, LDC Ch. 16.23 does not apply to this application.

Finally, other public comments appear to request direct application of Comprehensive Plan policies. However, the LDC implements the City's Comprehensive Plan for allowed uses, such as this proposed development, and no applicable code provision requires direct application of the Comprehensive Plan.

Based on the foregoing, none of the public comments raised during the review process provide grounds to deny the application.

VI. FHDC Requests Modification of the Conditions of Approval.

The Applicant requests a number of modifications of the conditions of approval to address concerns raised by the public, as well as to more accurately reflect the proposed development under consideration in this application.

First, for the reasons set forth in the supplement narrative in Attachment 5, condition of approval 1.a should be modified to reflect the Applicant's proposal and read as follows:

> 1.a. A landscape plan shall be submitted in compliance with Chapter 16.15 and approved prior to the issuance of a building permit, without application of subjective standards. The landscape plan shall include a six-foot tall site obscuring fence of chain link with vinyl slats along the south and east property lines as delineated in the Minor Land Partition in condition 1.d, with a minimum five foot landscape buffer.

Second, the Applicant's supplemental narrative in Attachment 5 proposes particular landscaping and illumination specifications. Based on this submittal, condition of approval 3 Engineering Department e should be modified to read,

> 1.e. Provide a landscape and illumination plan as part of the engineering site plan review plan set consistent with the Applicant's representations about landscaping and illumination in its supplemental narrative submitted July 22, 2020.

Third, the Applicant requests removal of conditions of approval 3, Transportation, c and d. As the staff report, and information requested in Applicant's July 16, 2020 letter to the Planning Director indicate, staff determines whether a traffic impact analysis is required. Since the staff determined no traffic impact analysis is required, the conditions of approval should not discuss the traffic impact analysis that will be required at a later date when the Applicant pursues

future development. No mitigation under a traffic impact analysis is required here, and references to the analysis in the conditions of approval should be removed.

Fourth, condition of approval 3, Storm Drainage a, needs to be modified. The current first sentence is not clear and objective and does not match the test for storm drainage impacts to adjacent properties. Where the Applicant does not change the natural flow of water to neighboring properties by the proposed development, it is under no duty to control the water runoff. *Garbarino v. Van Cleave*, 214 Or 554, 561 (1958). The Applicant's civil engineer has submitted Attachment 7 to show that the historical rate and natural flow of water to adjacent properties will be maintained. Therefore, the first sentence of this condition should be removed and the condition of approval should read:

a. Storm drainage facilities must be designed and constructed to ensure historical rates of discharge are not exceeded. Storm drain capacity shall be determined by the Rational Method for a 10-year event with a 15-minute minimum durations time using the curve (fig 5.3) in the master plan. A detailed design including engineering calculations shall be submitted as part of site plan review.

CONCLUSION

Based on the foregoing information, the Applicant's narrative, and the established need for farmworker housing in Lebanon, the Applicant respectfully requests approval of this application.

Sincerely,

Jennifer M. Bragar

Attachments
cc: client

Attachment #1

NEWS

Construction starts on border wall in Arizona with plans to build 450 miles of fencing by next year

This picture taken on August 28, 2019 shows a portion of the wall on the US-Mexico border seen from Chihuahua State in Mexico, some 100 km from the city of Ciudad Juarez. The US Defence Department said on September 3 it was freeing up $3.6 billion in funds budgeted for other projects to build a wall on the Mexican border as ordered by President Donald Trump. Six weeks after being confirmed by Congress, Defence Secretary Mike Esper has signed off on the diversion of funds, said Pentagon spokesman Jonathan Hoffmann. (Photo credit Herika Martinez/AFP/Getty Images)

YUMA, Ariz. (AP) — On a dirt road past rows of date trees, just feet from a dry section of Colorado River, a small construction crew is putting up a towering border wall that the government hopes will reduce — for good — the flow of immigrants who cross the U.S.-Mexico border illegally.

Cicadas buzz and heavy equipment rumbles and beeps before it lowers 30-foot-tall (9-meters-tall) sections of fence into the dirt. “Ahí está!” — “There it is!” — a Spanish-speaking member of the crew says as the men straighten the sections into the ground. Nearby, workers pull dates from palm trees, not far from the cotton fields that cars pass on the drive to the border.

South of Yuma, Arizona, the tall brown bollards rising against a cloudless desert sky will replace much shorter barriers that are meant to keep out cars, but not people.

This 5-mile (8-kilometer) section of fencing is where President Donald Trump’s most salient campaign promise — to build a wall along the entire southern border — is taking shape.

The president and his administration said this week that they plan on building between 450 and 500 miles (724 and 806 kilometers) of fencing along the nearly 2,000-mile (3,218-kilometer) border by the end of 2020, an ambitious undertaking funded by billions of defense dollars that had been earmarked for things like military base schools, target ranges and maintenance facilities.

Two other Pentagon-funded construction projects in New Mexico and Arizona are underway, but some are skeptical that so many miles of wall can be built in such a short amount of time. The government is up against last-minute construction hiccups, funding issues and legal challenges from environmentalists and property owners whose land sits on the border.

play out in immigration court.

In Yuma, the defense-funded section of tall fencing is replacing shorter barriers that U.S. officials say are less efficient.

It comes amid a steep increase since last year in the number of migrant families who cross the border illegally in the Yuma area, often turning themselves in to Border Patrol agents. Many are fleeing extreme poverty and violence, and some are seeking asylum.

So far this year, Border Patrol agents in the Yuma sector have apprehended over 51,000 family units. That's compared with just over 14,500 the year before — about a 250% increase.

The Yuma sector is the third busiest along the southern border, with officials building a temporary, 500-person tent facility in the parking lot of the Border Patrol's Yuma headquarters in June.

It spent just under $15 million for the setup and services for four months, including meals, laundry and security, but officials are evaluating whether to keep it running past next month as the number of arrivals in Yuma and across the southern border have fallen sharply in recent months.

The drop is largely due to the Mexican government's efforts to stop migrants from heading north after Trump threatened tariffs earlier this year to force Mexico to act.

The number of people apprehended along the southern border fell by 61 percent between this year's high point in May and the end of August. In Yuma, it fell by 86 percent, according to government figures. Most people apprehended are

past couple of months," Border Patrol spokesman Jose Garibay said. "They've just been pouring over the border due to the fact that we've only ever had vehicle bollards and barriers that by design only stop vehicles."

Victor Manjarrez Jr., a former Border Patrol chief who's now a professor at the University of Texas, El Paso, was an agent when the government put up the first stretch of barriers along the southern border — in San Diego.

He's seen barriers evolve from easily collapsible landing mats installed by agents and the National Guard to the sophisticated, multibillion-dollar projects now being done by private contractors.

Manjarrez says tall border fencing is crucial in some areas and less helpful in others, like remote stretches of desert where shorter barriers and more technology like ground sensors would suffice.

"One form doesn't fit in all areas, and so the fence itself is not the one solution. It's a combination of many things," Manjarrez said.

The ease of construction varies by place and depends on things like water, Manjarrez said, adding that just because a plot of land is flat "doesn't mean it's not complex."

He said building 450 to 500 miles (724 and 806 kilometers) of fence by the end of next year would be tough if that figure doesn't include sections of the wall that have been built recently.

"As it stands now, contractors are building pretty fast," Manjarrez said. The real question is whether the government needs to build that much fencing, he said.

The Trump administration may face those issues along with lawsuits from

along the border with Mexico.

Near Yuma, the Cocopah Indian Tribe's reservation is near the latest fencing project, and leaders are concerned it will block the view to its sacred sites, spokesman Jonathan Athens said.

Suggest a Correction

Attachment #2

Project Name: **Colonia Paz**

4.1A: Questionnaire

(B)
If New Construction or Acq/Rehab: Describe the numeric and percentage gap between your target population group and the funded affordable housing to serve that group in your community (county or city as listed above). If a project is scattered site, address this question for each project site.
Housing Inventory available online here: http://www.oregon.gov/ohcs/Pages/research-multifamily-housing-inventory-data.aspx

If Preservation; describe what percentage of the target geographies affordable housing is represented in this project. If a project is scattered site, address this question for each project site.

Colonia Paz is a new construction project. According to the OHCS affordable housing inventory, there is a shortage of 1,744 affordable housing units in Linn County. Linn County's equitable distribution is 2.7% when compared to the entire number of affordable hosuing units at the state level. Based on this inequitable distribution estimate in Linn County, even if we added 24 units of afforable housing per year, not adjusting for population growth, it would take the next 73 years to equitable distribution. Realistically, due to population growth and the limited resources for affordable housing, Linn County is likely to remain underserved for at least the next three decades. The addition of Colonia Paz's 24 units of affordable housing is particularly critical to address the need in Linn County.

According to OHCS data, most of the current rental stock in Linn County is newer than 1950 (81%), however, over 25% in Linn County are severly rent burdened, paying more than 50% of household income on rent. Additionally, 24% of the Lebanon's population received Food Stamps/SNAP benefits, and 11% are without health insurance, also considerably above County and State percentages. The majority of Farmworker Housing Development Corporation's (FHDC) communities are rurally located, low-income families averaging approximately $26,000 a year for a family of four.

According to the Linn-Benton Housing Authority (LBHA), there are 2,882 households on its waiting list for housing assistance, including 443 households in Lebanon, including 139 families with children. LBHA provided a letter of support for the development of Colonia Paz, and it's included in section 2 of this application.

Colonia Paz will be the first affordable housing property for agricultural workers and their families in Linn County. Colonia Paz will help ease the burden providing, quality affordable housing and create workforce housing critical to the agricultural industry in Linn County.

In September 2018, Colonia Paz received a $3,000,000 loan and grant combination from USDA Rural Development, and 23 units of Rental Assistance. This allows us to serve the lowest income farmworkers in Linn County.

Scoring Criteria:

Severity of Need Measures: city / county vs State	3 points	2 points	1 point	-1 point

Attachment #3

Summary of Change of Property Valuation for Properties near existing FHDC Developments in Marion County

Data Sourced from Marion County Assessor's Office Property Records Online - https://mcasr.co.marion.or.us/
FHDC Sites are the first entry in each list. All other properties share a direct bundary or are adjacent to the subject property.

Tax exempt sites are not included in these lists except for subject properties.
Entries in orange saw a decrease in value at some point between 2009 and 2018, see notes for details.

Colonia Libertad Limited Partnership (48 units)

Tax Account	2009	2018	Downturns?	SFH/MFH/Comm	Notes
CLLP/529424	$ 2,779,980	$ 2,641,220	Yes	MFH	Slip from 2.7 mil to 1.9 mil between 2009 and 2010. Continued increase every year since.
529425	$ 108,210	$ 141,150	No	SFH	Steady increase in value, no reductions.
529429	$ 131,280	$ 171,240	No	SFH	Steady increase in value, no reductions.
529430	$ 1,081,210	$ 1,410,680	No	MFH	Steady increase in value, no reductions.
529470	$ 1,591,560	$ 2,017,580	No	MFH	Steady increase in value, no reductions.
530037	$ 99,300	$ 126,950	No	Undeveloped	Steady increase in value, no reductions.
529507	$ 5,548,330	$ 1,687,360	Yes	Comm/City	Quarry space, bought by City of Salem in 2012. Large decline in value after purchase, which has increased steadily each year.

0.175676

Westside Apartments (24 units)

Tax Account	2009	2018	Downturns?	SFH/MFH/COMM	Notes
WS/534177	291,150	379,840	No	MFH	Steady increase in value, no reductions.
534173	1,237,480	1,352,210	Yes	MFH	Drop in 2013 and no growth until 2018, when it returns to 1.3 mil.
534168	284,900	371,670	No	MFH	Steady increase in value, no reductions.
534169	86,180	112,390	No	SFH	Steady increase in value, no reductions.
534170	288,660	376,560	No	SFH	Steady increase in value, no reductions.
534172	95,680	124,790	No	SFH	Steady increase in value, no reductions.
534174	102,840	134,140	No	SFH	Steady increase in value, no reductions.
534166	317,650	414,390	No	COMM	Steady increase in value, no reductions. Commercial site, restaurant.
103682	122,770	160,130	No	SFH	Steady increase in value, no reductions.

103681	138,840	181,110	No	SFH	Steady increase in value, no reductions.
103680	143,280	186,890	No	SFH	Steady increase in value, no reductions.
103673	188,060	245,320	No	SFH	Steady increase in value, no reductions.
103672	146,800	191,490	No	SFH	Steady increase in value, no reductions.

Summerset Apartments (24 units)

Tax Account	2009	2018	Downturns?	SFH/MFH/COMM	Notes
SS/529012	90,780	118,390	No	MFH	Steady increase in value, no reductions.
SS/528997	184,370	240,520	No	MFH	Steady increase in value, no reductions.
528998	118,700	154,820	No	SFH	Steady increase in value, no reductions.
529015	1,479,880	1,930,850	No	MFH	Steady increase in value, no reductions. Mobile home village.
528995	40,100	52,270	No	COMM	Steady increase in value, no reductions. Storage site, commercial zoned.
528994	1,626,860	2,122,630	No	MFH	Steady increase in value, no reductions. Apartments.
105485	193,650	245,260	Yes	SFH	One reduction in 2015 of around $1,000, otherwise all steady increases.
105487	362,870	473,400	No	MFH	Steady increase in value, no reductions. Apartments.

Colonia Jardines (20 units)

Tax Account	2009	2018	Downturns?	SFH/MFH/COMM	Notes
CJ/520660	241,980	274,720	No	MFH	2018 number is actually 2016. Property tax exemption started in 2017.
520926	131,820	131,820	No	SFH	Steady increase in value, no reductions.
520923	270,680	353,130	No	SFH	Steady increase in value, no reductions.
520921	171,760	224,060	No	SFH	Steady increase in value, no reductions.
520922	195,370	254,860	No	SFH	Steady increase in value, no reductions.
520930	135,830	155,810	Yes	SFH	SFH with an ADU. $14k loss in 2012, but steady increase in value since.
520661	67,140	87,560	No	SFH	Steady increase in value, no reductions.
334265	189,340	243,490	No	SFH	Steady increase in value, no reductions.
520647	192,500	383,580	No	SFH	Steady increase in value, no reductions.
334266	168,300	213,150	Yes	SFH	Decrease of $1,000 in 2013, steady increases ever since.
334267	170,100	218,240	No	SFH	Steady increase in value, no reductions.
334268	181,060	231,650	No	SFH	Steady increase in value, no reductions.

334269	240,510	298,710	Yes	SFH	Decrease of $5,000 in 2013, but steady increase in value since.
334270	228,620	228,620	Yes	SFH	Decrease of $3,000 in 2013, but steady increase in value since.
334271	231,590	300,320	No	SFH	Steady increase in value, no reductions.
334272	235,780	300,630	No	SFH	Steady increase in value, no reductions.

Nuevo Amanecer Next Generation (50 units) and RD Nuevo Amanecer (40 units) These two properties are adjacent tax lots and share the same space.

Tax Account	2009	2018	Downturns?	SFH/MFH/COMM	Notes
RDNA/512768	2,406,170	N/A	N/A	MFH	Tax exempt after 2009
NANG/512769	1,985,780	N/A	N/A	MFH	Tax exempt after 2009
512767	6,611,380	8,539,200	No	MFH	Steady increase in value, no reductions. Apartments.
512946	39,910	43,590	No	MFH	FHDC property Nuevo Amanecer IV. Tax exempt after 2012. Steady increase, no reductions. Apartments.
106469	64,850	84,570	No	SFH	Steady increase in value, no reductions.
512950	N/A	N/A	N/A	COMM	As of May 2020 undeveloped commercial site. Previously a church and tax exempt.
108522	63,060	94,830	No	SFH	Steady increase in value, no reductions.
108521	78,950	94,230	Yes	SFH	Decrease of $8,000 in 2013, steady increase in value since.
108515	78,890	102,880	No	SFH	Steady increase in value, no reductions.
108507	86,480	112,780	No	SFH	Steady increase in value, no reductions.
108506	95,180	124,130	No	SFH	Steady increase in value, no reductions.

Nuevo Amanecer IV (40 units)

Tax Account	2009	2018	Downturns?	SFH/MFH/COMM	Notes
NAIV/512946	39,910	43,590	No	MFH	Tax exempt after 2012. Steady increase, no reductions.
512768	2,406,170	N/A	N/A	MFH	Adjacent FHDC property. Tax exempt after 2009.
512769	1,985,780	N/A	N/A	MFH	Adjacent FHDC property. Tax exempt after 2009.
512767	6,611,380	8,539,200	No	MFH	Steady increase in value, no reductions. Apartments.
512942	86,470	112,770	No	SFH	Steady increase in value, no reductions.
512943	94,960	123,860	No	SFH	Steady increase in value, no reductions.
512945	97,420	175,060	No	SFH	Steady increase in value, no reductions.

512944	172,100	224,500	No	Comm	Steady increase in value, no reductions. Heating company.
512947	61,490	110,690	No	SFH	Steady increase in value, no reductions.
106948	71,560	93,310	No	SFH	Steady increase in value, no reductions.
106947	81,590	146,590	No	SFH	Steady increase in value, no reductions.
106946	54,550	67,050	Yes	SFH	Decrease of $600 in 2013, steady increase in value since.
108507	86,480	112,780	No	SFH	Steady increase in value, no reductions.
108506	95,180	124,130	No	SFH	Steady increase in value, no reductions.
108508	86,230	112,460	No	SFH	Steady increase in value, no reductions.
108509	67,430	87,940	No	SFH	Steady increase in value, no reductions.
110696	93,350	121,770	No	SFH	Steady increase in value, no reductions.
110697	93,130	121,460	No	SFH	Steady increase in value, no reductions.
110681	103,730	164,550	No	SFH	Steady increase in value, no reductions.

Colonia Unidad (44 units)

Tax Account	2009	2018	Downturns?	SFH/MFH/COMM	Notes
CU/513074	N/A	N/A	N/A	MFH	Undeveloped city owned site until Unidad was finished building in late 2019.
107139	161,940	193,330	Yes	SFH	Decrease of $16k in 2012, recovered by 2014 with steady increase in value since.
107136	142,250	169,820	Yes	SFH	Decrease of $6,000 in 2011, recovered by 2014 with steady increase in value since.
513072	N/A	N/A	N/A	COMM/State	Oregon National Guard installation, tax exempt.
107140	122,150	159,330	No	SFH	Steady increase in value, no reductions.
107138	124,770	148,950	Yes	SFH	Decrease of $13k in 2011, recovered by 2014 with steady increase in value since.
107137	135,390	161,630	Yes	SFH	Decrease of $14K in 2011, recovered by 2014 with steady increase in value since.
108699	111,970	146,020	No	SFH	Steady increase in value, no reductions.
108700	885,330	1,060,170	No	MFH	Steady increase in value, no reductions.
108348	49,290	64,260	No	SFH	Steady increase in value, no reductions.
108347	49,290	64,260	No	SFH	Steady increase in value, no reductions.
108342	49,290	64,260	No	SFH	Steady increase in value, no reductions.
347479	50,760	64,260	No	SFH	Steady increase in value, no reductions.
347480	50,760	64,260	No	SFH	Steady increase in value, no reductions.
347481	50,760	64,260	No	SFH	Steady increase in value, no reductions.
107919	518,290	675,680	No	MFH	Condo complex, 16 units bordering Unidad. Figures based off of these 16 units.

Attachment #4

WOODBURN
OREGON
Incorporated 1889

June, 20, 2020

To Whom It May Concern:

I am writing to describe the experience and relationship that Woodburn has had with our Farmworker Housing Development Corporation.

We began with land use planning and city council decisions regarding FHDC more than three decades ago that I imagine mirror the discussions you are having now. In those discussions many people in our community expressed wide ranging points of view and their fears. I can tell you that over the last 30 years none of the fears expressed have been realized.

Farmworker housing provided by FHDC is a net positive on many counts for any community. Structuring housing with on-site managers and staff that are there to provide support for their residents helps families maintain a stability that allows them stay in their jobs and their children in schools. Apart from the economic argument that farmworker families provide essential work that feeds our community and our nation and so should have the opportunity for decent housing, is the argument that stable families in our community are less of a drain on our city, county, police, health care system and other social service resources.

Before becoming mayor I served as a middle and high school principal in Woodburn for 12 years. I can tell you that the students living in the environments created by FHDC were, as a group, much more successful and less problematic than students that lived in regular apartment complexes, just like students from more stable neighborhoods.

We all know that when there is a sense of community and structures to support community in neighborhoods or apartment complexes, they become not only positive places to live but safer places, which makes an entire town more safe. FHDC has been amazing in providing stability and community within their apartments – enhancing the livability of our entire city.

Embracing the members of our community with the dignity and support that FHDC provides has provided untold benefits to our city as a whole. I can safely say that once through the storm of criticism and fear you are likely experiencing while weighing this decision, you will land in a place that is not only the right thing to do for your residents working on your farms, but the best thing to do for your entire city. I am more than happy to respond to any questions you have going forward in this process.

Sincerely,

Eric Swenson,
Mayor of Woodburn

Office of the Mayor
270 Montgomery Street • Woodburn, Oregon 97071
Ph. 503-982-5228 • Fax 503-982-5243

CASA LATINOS UNIDOS

7/18/2020

To Whom it May Concern,

Casa Latinos Unidos mission is to Build Our Community Together. We have been part of the community for over 10 years and we provide critical services to the Latinx community in Linn and Benton Counties. Today, I am writing in support of the development of Colonia Paz I. FHDC proposal for 24-units in AR 20-05. This project will contribute to the critical shortage of affordable housing for low income individuals and families in Linn County.

We, as a Community-Based Organization, have witnessed the affordable housing crisis through our direct contact with the community and this project will help alleviate some of that. Low-income families deserve a safe, comfortable, and affordable home to live. That is why, we support this housing project and we believe it will benefit not only the families but also the community-at-large and Lebanon's overall economy.

I hope you will consider FHDC application for the development of Colonia Paz I and please do not hesitate in contacting me if you have any questions.

Thank you,

Claudia Torres
ED, Casa Latinos Unidos

1435 SW 35th Street
Corvallis, OR 97333
Telephone: 541-766-4863
executive.director@casalatinosunidos.org
www.casalatinosunidos.org

ENLIVEN
FOUNDATION

Date: July 20, 2020

Attn: Lebanon Planning Commission

Re: FHDC proposal for 24-units in AR 20-05

This letter is in support of the development of Colonia Paz I. FHDC proposal for 24-units in AR 20-05 for affordable housing on the property that is zoned for multi-family use.

The Colonia Paz I will contribute to the critical shortage of affordable housing for low income individuals and families in Linn County. I encourage you to look at their website if you haven't done so already. Here is the link: fhdc.org This is not just low-income housing like the others we have in town. They have a program that supports and encourages success. What I can tell through their website and by speaking with directors Meg and Claudia, is they take pride in having high quality complexes with a beautiful exterior. It is my understanding that the neighboring residence are afraid of the population this may bring to the area. I believe this will bring; more to our economic growth, an answer to our ongoing problem of the need for affordable housing, a safe clean place for hard working residence to live and thrive, and be one more asset that pulls our community together.

As the CEO of Enliven Foundation, an organization that assist single-parents in achieving their academic goals to overcome poverty, I understand and see the need first hand at how important it is to have what they are offering our community. Low-income families are in high need of safe housing and the programs that are included, such as; free life-skill, budgeting, parenting, and nutrition training, ... and more. This is inline with the mission of Enliven Foundation. I really look forward to having them in our community. I look forward to housing my students in this complex, and to working together for the better good of our community.

I ask that you give your full consideration to FHDC application for the development of Colonia Paz I. Thank you for your time and attention to this matter.

Respectfully,

Becky Van Atta
CEO, Enliven Foundation
Nonprofit of the Year, 2018
C: (541) 409-2537
becky@enlivenfoundation.org

CSC Community Services CONSORTIUM

Helping People. Changing Lives.

July 17, 2020

City of Lebanon Planning Commission
925 S. Main St.
Lebanon, OR 97355

Dear Commissioners:

Community Services Consortium is the state and federally designated community action agency for Linn, Benton, and Lincoln Counties. We have been active in the community, serving the most vulnerable populations, for the past 40 years. Over the past two years, we have been working with FHDC, making plans to provide supportive services for the residents of Lebanon who will live in Colonia Paz I. As you well know, there is a tremendous need for affordable housing in Lebanon. I am writing this letter to demonstrate CSC's support of the development of Colonia Paz I, FHDC's proposal for 24-units in AR 20-05. This project will go a long way to meeting the affordable housing need on a property that is already zoned for multi-family housing and reflects an application that meets all the requisite code provisions.

Over the last 30-years, FHDC has worked to build and manage an average of 400 units in seven different cities in Polk and Marion County. FHDC's expertise in working with low-income families shows in their building design. These developments include a community room/center that supports many educational events and supportive services activities. The community rooms/centers are open to other social services organizations at no cost too. The centers have become heart of the community for youth summer and after school activities, early child education, adult education, and today a critical point for COVID 19 testing, food boxes distribution, PPE distribution and education about the virus. FHDC brings not only housing but an entire support system for its residents.

On a personal note, I have lived down the street from several FHDC properties for the past ten years. These properties are clean, well maintained, and a home to a wonderful group of residents. If you drive by and take a look at these sites, you will see they are an asset to the neighborhood.

CSC enthusiastically supports the development of Colonia Paz I.

Sincerely,

Pegge McGuire
Acting Director

Albany Regional Office
250 Broadalbin St. SW,
Suite 2A
Albany, OR 97321
541.928.6335

Corvallis Regional Office
545 SW 2nd St., Suite A
Corvallis, OR 97333
541.752.1010

Newport Regional Office
120 NW Avery St.
Newport, OR 97365
541.265.8505

Lincoln County Head Start
2130 SW Lee St., P.O. Box G
Lincoln City, OR 97367
541.996.3028

Children First for Oregon

OUR CHILDREN oregon
VOICES UNITED.
OPPORTUNITY REIMAGINED.

1209 SE Belmont St, Portland, OR 97214
www.cffo.org

July 20, 2020

To the Lebanon Planning Commission:

I am writing in support of the development of Colonia Paz I, FHDC proposal for 24-units in AR 20-05. This project will go a long way toward meeting the affordable housing need on property that is zoned for multi-family, and it's an application that meets all the requisite code provisions.

My organization, Our Children Oregon, is a statewide organization that recently brought together two historic Oregon organizations (Children First for Oregon and The Children's Trust Fund of Oregon). Our mission is centered on preventing child abuse and helping every child thrive. We know that one out of every four families in Linn County are spending more than 50% of their income in rent. The number of affordable units needed for every family in the county to be served is 3,025. Shockingly, one in every 20 students experienced homelessness in the 2018-2019 school year; time will tell the impact of COVID-19 on these young people. In our most recent KIDS COUNT Data Book, I would note that one out of five Linn County children are food insecure, and over 5000 young people live in poverty. These numbers are from before the pandemic began. FHDC's work to build affordable housing is a necessary and important step in supporting the families of this beautiful city.

The Colonia Paz I will contribute to the critical shortage of affordable housing for low income individuals and families in Linn County. For 30-years FHDC has worked to build and manage an average of 400 units in seven different cities in Polk and Marion County. FHDC's vision and expertise working with low-income families is apparent in their building designs, which includes a community room/center. The community spaces are open to other organizations at no cost, in order to offer vital services to community members. They also serve as a HUB for youth summer and after school activities, early childhood education, and adult education. Today they provide a critical point for COVID-19 testing, food box distribution, PPE distribution, and education about the virus. FHDC brings not only housing, but an entire support system for families.

I hope you will give your full consideration to FHDC's application for the development of Colonia Paz I. The children of Lebanon and Linn County are counting on us to make choices that support their future. I welcome the opportunity to share more if you have questions or would like to explore further how this effort supports the well-being of the children of Lebanon.

Respectfully,

Jenifer Wagley
Executive Director
Our Children Oregon

Together we can be a voice for the common good of all Oregon children.

Oregon FosterYouth CONNECTION

CHILDREN'S TRUST FUND of OREGON FOUNDATION

July 18, 2020

Dear City of Lebanon Planning Commission:

Thank you for the opportunity to provide testimony in **strong support of Colonia Paz I to be developed by Farm Worker Housing Development Corporation (FHDC).** Oregon is in an unprecedented housing crisis, with high unemployment due to COVID 19 and stagnant wages; 49.5% of renters spend more than 30% of their gross monthly income on rent and utilities, making Oregon the 37th least affordable state for renters. As Commissioners, you are well aware of the challenges faced by many in Oregon who lack affordable housing. Colonia Paz I will contribute to the critical shortage of affordable housing for low-income individuals and families in Linn County.

DevNW has had the opportunity to partner with FHDC over the years. They have a very impressive track record, developing quality affordable housing, and working with community stakeholders to integrate underserved families and individuals into the larger community. The community rooms are available to residents and other social services agencies. The community rooms are used for youth summer and after school activities, early childhood education, adult education, and today is a critical point for COVID 19 testing, food boxes distribution, PPE distribution, and education about the virus. FHDC brings not only housing but an entire support system for their residents.

Please approve the FHDC application for the development of Colonia Paz I. Thank you for your time and service to the City of Lebanon.

Sincerely,

B Olson

Brigetta Olson, COO

From: Miguel Arellano [mailto:arellano.orst@gmail.com]
Sent: Friday, July 17, 2020 3:46 PM
To: pmcguire@communityservices.us; Claudia Cantu
Cc: Brigetta Olson
Subject: Letter of support for City of Lebanon

_____

City of Lebanon,

My name is Miguel Arellano. I currently serve as the Basic Needs Navigator at Oregon State University. My role is dedicated to serving students who are homeless, food-insecure, and low-income. I serve quite a number of students from the Lebanon community.

As someone who grew up in low-income housing for farmworkers, and as a current board member for DevNW, I was excited to learn about the new development of affordable housing for farmworkers in Lebanon.

As a child, my earliest memories were formed under filbert orchards and in the berry fields of Marion county. My parents could not afford childcare, and with no other option, they would take me to work. In the summer, when it would become unbearably hot, my mom would make me a shelter out of the plastic berry crates so I can sleep and play underneath. My parents were homeless for some time- growing they would always point to the filbert orchards where they would park their car and live with some of my siblings. These were same orchards they tended to and harvested to feed America.

Eventually, through the support of FHDC, my parents got into permanent housing. The fondest memory I have growing up was moving into a brand new apartment complex- Nuevo Amanecer, a FHDC farmworker housing property! I was 4 or 5. Every day, I would go outside to look at the newly planted grass seeds sprouting. If you have ever planted grass seeds, you know how satisfying and calming it is to gently touch it and look at it. While everything around me was chaotic and uncertain, what I felt while watching the seeds sprout, is what I assumed home felt like- calm, peaceful, and at ease. I felt that through my stay at Nuevo Amanecer, until FHDC supported my parents in purchasing their own home in 1998.

If it was not for Farmworker housing- I would not be where I am today. I would see a glimpse of the American dream, if there is even such a thing. Through my parent's hard work ethic and perseverance, they were able to get out of homelessness, buy a home, and send their kids to college. Helping individuals in poverty is in the fabric of our American values. Farmworkers play a vital role in our society, economy, and community. And just like the rest of us, we all deserve a place to call home.

I am certain that my family and I would not be where we are today if it was not for FHDC. They gave us a roof over our heads, so we can thrive. I ask us today, please do

the right thing. Kids in our community deserve a roof over their heads so they can learn and thrive.

Thank you,
Miguel Arellano

Linn-Benton Housing Authority

July 21, 2020

Maria Elena Guerra
Executive Director
Farmworker Housing Development Corporation
1274 Fifth St, Suite 1-A
Woodburn, OR 97071

RE: Colonia Paz I, Lebanon, Oregon

Dear Ms. Guerra,

I'm writing to express my support for the proposed 24-unit complex known as Colonia Paz I, FHDC's proposed affordable housing development in Lebanon. There is a critical shortage of affordable housing for low income individuals and families in Linn County. Rents have increased considerably in Lebanon over the past several years, causing many more families to seek rental assistance. Lebanon is among the top three severely rent burdened cities in Oregon, with one in three households (34%) paying more than 50% of their income for rent.

The Linn-Benton Housing Authority (LBHA) contracts with the U.S. Department of Housing and Urban Development (HUD) to administer rental assistance programs in Linn and Benton counties, providing rental assistance to over 2,600 families.

Currently, the Linn-Benton Housing Authority has 2,882 households on its waiting list for housing assistance, including 833 families with children. In the city of Lebanon specifically, there are 443 households on the waiting list for housing assistance, including 139 families with children.

Colonia Paz I will help to fill the critical shortage of affordable housing in Lebanon by providing 24 units of affordable housing for families earning up to 60% of the area median income. The Linn-Benton Housing Authority will gladly work with FHDC to refer families from its waiting list to Colonia Paz I. LBHA will work with FHDC to inform households on its waitlist of this housing opportunity by making information available to families attending initial Section 8 Housing Choice Voucher Orientation, posting unit openings on the Housing Authority Bulletin Board, providing the information to searching families as they attend unit transfer meetings with case managers and other opportunities as they arise.

The land use application AR 20-50 with the city, will go a long way to meeting this need in the Lebanon Community. I look forward to working with you in your efforts to provide affordable housing to workforce families in Lebanon.

Sincerely,

Donna Holt
Executive Director
Linn-Benton Housing Authority

Improving the Quality of Life in Linn and Benton Counties through Affordable Housing

1250 QUEEN AVE. SE • ALBANY, OR 97322 • 541-926-4497 • FAX 541-926-3589 • E-mail: Mail@L-bha.org
OREGON RELAY (HEARING IMPAIRED) 711

Attachment #5

FHDC Supplemental Narrative Addressing the Lebanon Development Code
July 22, 2020

This narrative is submitted by the Applicant to supplement information in the record and staff report. The information contained herein, reflects further response to comments raised by members of the public, as well as identifying standards that should not apply to the application for needed housing because they are not clear and objective.

Bold language preceding "Applicant's Response" are quotes from the Lebanon Development Code. The un-bolded text following "Applicant's Response" contain responsive text from FHDC.

16.20.110.B. When a Traffic Impact Study is Required. The city or other road authority with jurisdiction may require a traffic impact study (TIS) as part of an application for development, a change in use, or a change in access. A TIS may be required when a land use application involves one or more of the following actions:

> **3. An increase in site traffic volume generation by three hundred average daily trips (ADT) or more;**

Applicant Response: The application requests approval for 24-units. The City has conferred with its traffic engineer to determine that the increase in traffic volume will not exceed 300 ADT. On July 16, 2020, Applicant requested the City staff include additional information in the record to verify that the proposed 24 units will not reach a 300 ADT threshold. Further information is expected to be included during this open record submittal.

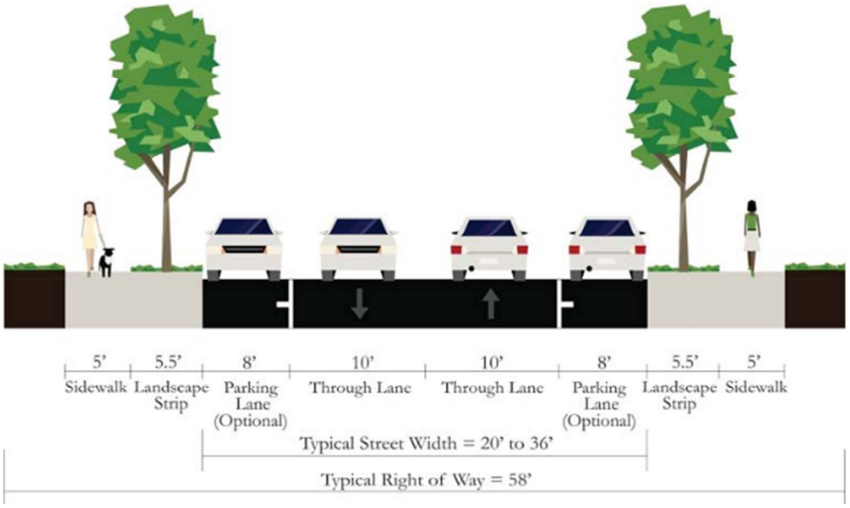
16.20.110.B. When a Traffic Impact Study is Required. The city or other road authority with jurisdiction may require a traffic impact study (TIS) as part of an application for development, a change in use, or a change in access. A TIS may be required when a land use application involves one or more of the following actions:

> ***7. A change in internal traffic patterns that may cause safety problems, such as back up onto a street or greater potential for traffic accidents.***

Applicant Response: This criterion cannot be applied to this application for needed housing because the terms "may cause safety problems" are subjective terms. Therefore the Applicant objects to this criterion. Notwithstanding Applicant's objection, Weldwood Drive extension is designed as a local road per Figure 13 below with a sixty foot right of way. See also Applicant's Response to LDC 16.12.030.G and 16.13.020.B. Further, the City of Lebanon requested that this extension be designed not to connect to the private road portion of Weldwood to the Northeast of the subject property. This

extension of Weldwood Drive will dead end into a cul de sac, or as it pertains to the proposed development at the Hammerhead within the site. The fire department has approved this design. Further, this criteria speaks to internal traffic patterns, not offsite influences. Since the hammerhead has been approved by the fire department, and the driveway leading to Weldwood Drive as it fronts the development has adequate site vision, and spacing from surrounding streets (see responses to findings under LDC 16.12) no abnormal traffic patterns nor potential for accidents are anticipated. Public comment about the behavior of pedestrians offsite does not implicate this criterion that is limited to internal traffic patterns – access through the driveway and parking lots.

Figure 13. Local Roadway



16.12.030.G. Access Spacing. When required to serve the proposed development, accesses shall be separated from driveways and street intersections in accordance with the following standards and procedures:

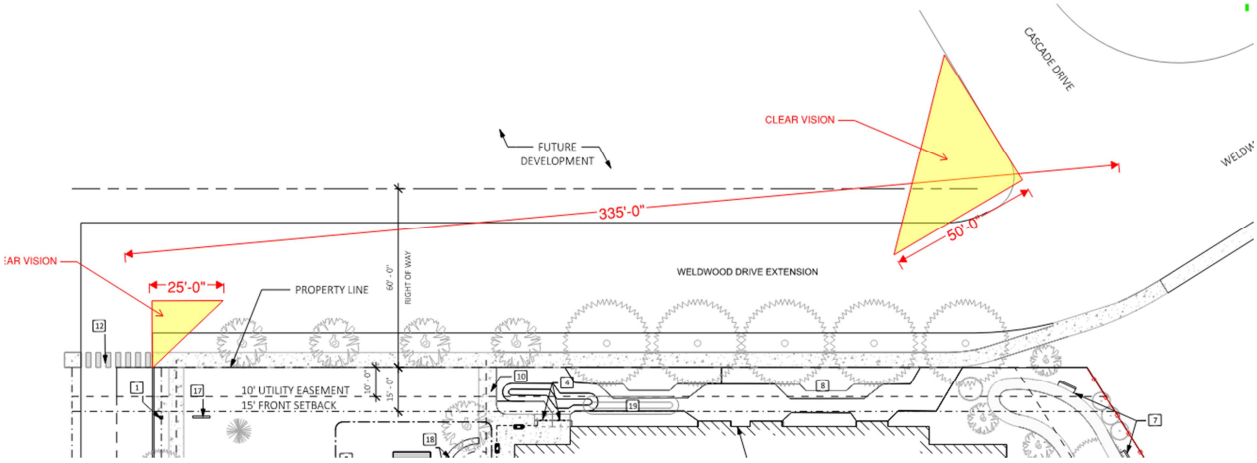
1.Local Streets. Driveways and alleys shall be placed as far away as practicable from an intersecting street, and on the street with the lowest classification possible.

2.Arterial and Collector Streets. Where a collector or arterial street or a controlled intersection is under the jurisdiction of the city of Lebanon (see Table 9 in the Lebanon TSP), access spacing shall be determined based on the policies and standards contained in the city's transportation system plan as well as the Manual for Uniform Traffic Control Devices. Exceptions to this may be granted by the city engineer. Evaluations of exceptions shall consider posted speed of the street on which access is proposed, constraints due to lot patterns, and effects on safety and capacity of the

adjacent public street, bicycle and pedestrian facilities. Access spacing on State Highways 20 and 34 (defined as principal arterials in the Lebanon TSP, as per Table 9) is subject to the requirements of applicable Oregon Administrative Rules as determined by Oregon Department of Transportation.

3.Special Provisions for All Streets. Direct street access may be restricted for some land uses, in conformance with the provisions of Chapters 16.05 through 16.11. For example, access consolidation, shared access, and/or access separation greater than that specified by subsections (G)(1) and (2) above, may be required for access to the city, county or state roadways for the purpose of protecting the function, safety and operation of the facility for all users (See Subsection "I," below). In some cases, directional connections (i.e., right in/out, right in only, or right out only) may be required.

Applicant Response: The TSP states that Weldwood Drive should be constructed as a collector with sidewalks and bike lanes. This use of "should" provides the City with flexibility, as necessary here because Weldwood Drive does not need to be constructed as a collector. The City staff's exercise of flexibility here makes sense because there is no way to connect Weldwood Drive through the private roadway portion, and as proposed the extension will end in a cul de sac. Since the street is not going to function as a collector street that connects to the broader street network, the City staff required the Applicant to design the Weldwood Drive extension as a local roadway. See also Applicant's Response to LDC 16.13.020.B below. The required spacing for a local roadway is a minimum block size of 150 feet, and minimum driveway spacing. The proposed development driveway is located 335 feet from the intersection of Cascade Drive and Weldwood, see figure below, and meets the minimum driveway spacing. Therefore these criteria have been meet.



16.12.030.H. Clear Vision Requirements. All street access points must meet the applicable clear vision requirements noted below.

1. Except within the central business commercial zone (Z-CCM), vision clearance areas shall be provided at intersections of all streets and at intersections of driveways and alleys with streets to promote pedestrian, bicycle and vehicular safety. The extent of vision clearance to be provided shall be determined from standards listed below, and as otherwise adopted by the city to further take into account functional classification of the streets involved, type of traffic control present at the intersection, street configuration, clear sight distance needed to see on coming traffic (motor vehicles, pedestrians, and bicyclists), and designated speed for the streets.

2. A clear vision area shall consist of a triangular area, two sides of which are lot lines measured from the corner intersection of the street lot lines for a distance specified in this regulation, and the third side of which is a line across the corner of the lot joining the nonintersecting ends of the other two sides. Where the lot lines have rounded corners, the lot lines shall be extended in a straight line to a point of intersection and so measured. In situations involving driveways, the two sides shall include the sides of the driveway and the adjacent property line or access easement line.

3. A clear-vision area shall contain no plantings, fences, walls, structures, utility pedestals, or temporary or permanent obstruction exceeding two and one-half feet in height, measured from the top of the curb, or where no curb exists, from the established street center line grade. Trees exceeding this height may be located in this area, provided all branches or foliage are removed to a height of eight feet above grade.4.The following measurements shall establish a clear vision area:

a. Corner Lots. The clear visions area for corner lots shall be twenty feet along the right-of-way of each intersecting street.

b. Street-Driveway. The clear vision area for a street-driveway intersection shall be ten feet along the driveway from its intersection with the street right-of-way and twenty feet along the street right-of-way at the point of intersection with the driveway.

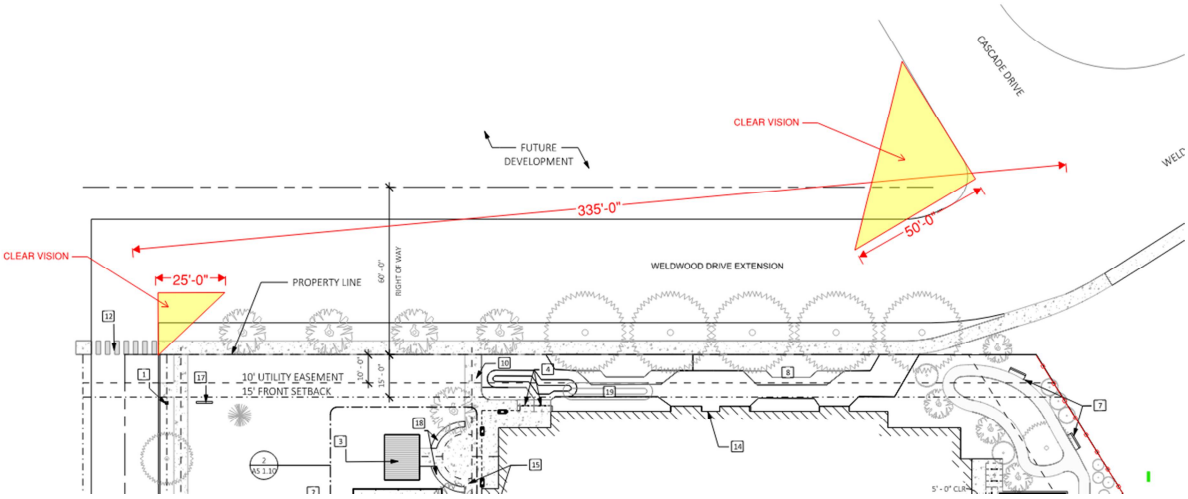
c. Street-Alley. The clear vision area for street-alley intersections shall be ten feet along the alley from its intersection with the street right-of-way and twenty feet along the street right-of-way at the point of intersection with the alley.

d. Street-Private Access Easement. The clear vision area for street-access easement intersections shall be ten feet along the access easement from its intersection with the street right-of-way and twenty feet along the street right-of-way at the point of intersection with the access easement.

e. Dimension Exceptions. When the angle of intersection between streets, other than an alley, is less than thirty degrees, the distance shall be twenty-five feet. Dimensions for clear vision areas for new development in the Central Business Commercial Zone (Z-CCM), shall be specified by the city engineer on a site by site basis given the near total build out of that zone.

5.Exceptions Within Vision Clearance Areas. Traffic control devices, streetlights, and utility installations meeting approval by the city engineer are permitted within vision clearance areas.

Applicant Response: The proposed project meets the criteria for clear vision see figure below. Therefore these criteria have been meet.



16.12.030.I Number of Access Points. For single-family (detached and attached), two-family, and three-family housing types, normally one street access point is permitted per lot, unless otherwise permitted by the city engineer, in consultation with the planning official. Two access points may be permitted for two-family and three-family housing on corner lots (no more than one access per street), subject to the access spacing standards in subsection "G," above. The number of street access points for multiple-family, commercial, industrial, and public/institutional developments shall be minimized to protect the function, safety and operation of the street(s) and sidewalk(s) for all users. Shared access may be required, in

conformance with subsection "J," below, in order to maintain the required access spacing, and minimize the number of access points.

Applicant Response: Consistent with these criteria for multifamily development, the Applicant has minimized street access points to one access point on the extension of Weldwood Drive, with a fire department approved hammerhead, ensuring safe access to the subject property and the function and operation of the newly extended Weldwood Drive for all users. As evidenced in the Applicant's submittals the driveway and right of way area for Weldwood will be designed to meet the requirements of the LDC.

16.12.030.K. Requirements for Street Connectivity and Formation of Blocks. In order to promote efficient vehicular and pedestrian circulation throughout the city, new land divisions and large site developments shall produce complete blocks bounded by a connecting network of public and/or private streets, in accordance with the following standards (see Figure 16.12.030-1):

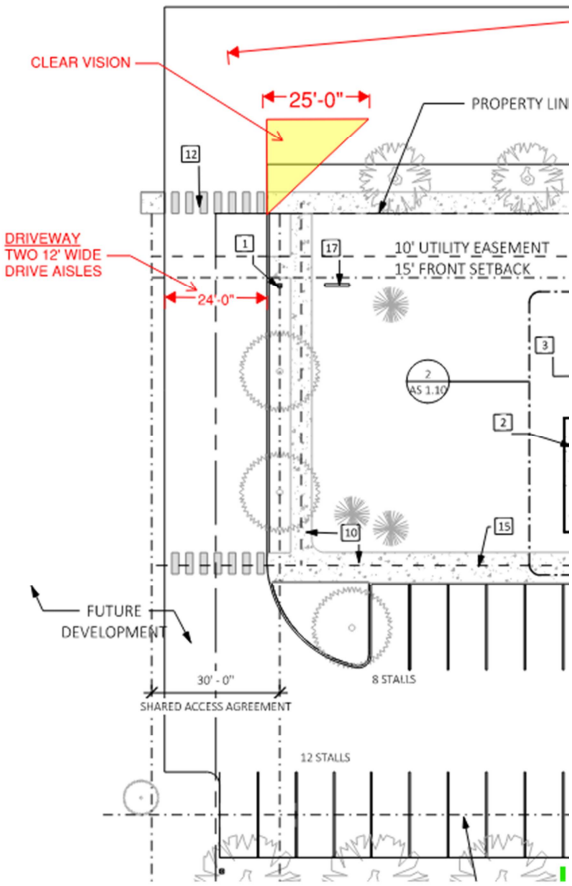
> **1. Block Length and Perimeter. The maximum block length and perimeter (measured along the edge of the right-of-way) should not exceed:**
>
> > **c. Six hundred to eight hundred feet length and one thousand six hundred to two thousand feet perimeter in the highway commercial zone (Z-HCM), and mixed-use zone (Z-MU), except as required for commercial developments subject to other provisions of this code or the subdivision ordinance;**

Applicant Response: The proposed development is for an infill lot with only one access point to a public right of way. The future dead-end street will be designed to meet the 600-800 foot cul-de sac maximum length requirements outlined in the Transportation System Plan and the Development Code for the City of Lebanon. The current extension of Weldwood measures 335 feet, falling within the limitation for block length.

16.12.030.L. Driveway Approaches. Driveway approaches or curb cuts shall be adequate width to provide safe and efficient access. The following standards (i.e., as measured where the front property line meets the sidewalk or right-of-way) are required to provide adequate site access, minimize surface water runoff, ensure an exiting vehicle with an unobstructed view, avoid conflicts between vehicles and pedestrians, and have appropriate signage for one-way connections. Unless otherwise permitted by the city engineer, in consultation with the planning official, or, for State Highways 20 and 34, by Oregon Department of Transportation, minimum driveway widths shall be as follows:

4. Access widths for all other uses shall be based on twelve feet of width for every travel lane, except that driveways providing direct access to parking spaces shall conform to the parking area standards in Chapter 16.14 (Off-Street Parking Requirements) of this code;

Applicant Response: Under LDC Ch. 16.14, a driveway is required to be 24 feet wide. The proposed design of the driveway is 24 feet wide with two 12' wide drive aisles, see figure on the following page. Therefore, this criterion has been meet.



16.13.020.A. Transportation Uses Permitted Outright. Except where otherwise specifically regulated by this code, the following standard transportation improvements are permitted outright:

8. Construction of a street or road as part of an approved subdivision or land partition approved consistent with the applicable land division ordinance;

Applicant Response: While the approval is conditioned on a pending partition approval, the partition approval itself does not require construction of a road. Therefore, this criterion is not applicable.

16.13.020.B. Transportation Conditional Uses Permitted.

1.Conditionally permitted transportation improvements include construction, reconstruction, or widening of highways, roads, bridges, or other transportation projects that:

> **b. Change the character, function, or operation of an existing transportation-related facility as proposed or designated in the transportation system plan (TSP). Such projects shall comply with the overall standards of the TSP and other applicable standards, and shall address the following criteria:**
>
> > **i .The project is designed to be compatible with existing land use and social patterns, including noise generation, safety and zoning,**
> >
> > **ii. The project is designed to minimize avoidable environmental impacts to identified wetlands, wildlife habitat, air and water quality, cultural resources and scenic qualities,**
> >
> > **iii. The project preserves or improves the safety and function of the facility through access management, traffic calming, or other design features,**
> >
> > **iv. The project includes provisions for bicycle and pedestrian circulation as consistent with the applicable requirements of the ordinance codified in this chapter.**

Applicant Response: As stated above, the TSP describes that Weldwood Drive should be designed as a collector street. However, the City staff determined that local roadway design would better fit the Weldwood Drive extension at this location because the collector characteristics will not be achieved. Collector street characteristics cannot be achieved because Weldwood Drive cannot be extended through the private roadway section that runs through the nearby manufactured home park to connect with the broader city street system. This local roadway design makes sense because the proposed development will be reached on the Weldwood Drive extension that will end in a cul de sac Comments raised early in the public review process of this application opposing a full extension of Weldwood Drive to connect with the broader city street system support this approach because it will be compatible with surrounding land uses, including the private road section of Weldwood Drive. Further, cul-de-sac design of the Weldwood Drive extension will keep noise from surrounding neighborhoods. No more environmental impact is expected by reducing the street designation from collector to local roadway as it is not located near surrounding wetlands, wildlife habitat, air or water quality, or cultural or scenic qualities. To the extent that environmental benefits are

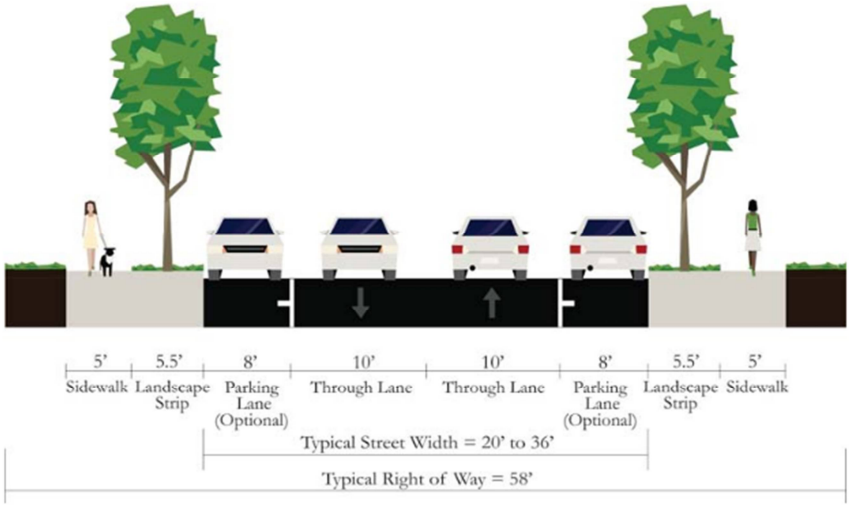
gained by reducing the right-of-way width for a local roadway as compared to a collector, those environmental benefits favor the approach taken here. As described in other responses, the project preserves safety and function with the design of the roadway to meet the City's standards, and the fire department's approved hammerhead for emergency response within the development. Further, the local roadway design provides pedestrian connectivity, and bicycles on a local roadway are acceptable in this location because of the short roadway length to Cascade, and the limited potential for additional surrounding development. For these reasons, these criteria are met.

16.13.030.**A. General Development Standards. Development shall not occur unless the development has frontage or approved access to a public street, in conformity with the provisions of Section 16.12.020 in Chapter 16.12, and the following additional standards are met:**

> **1.Streets within or adjacent to a development shall be improved to city standards in accordance with the transportation system plan, public improvement standards, and the provisions of this chapter;**
>
> **2.Development of new streets, additional street width or improvements planned as a portion of an existing street, shall be improved in accordance with this chapter, and other applicable city standards;**
>
> **3.All driveway approaches and driveways shall be paved, as per adopted city engineering standards;**
>
> **4.Minor sections of non-contiguous street improvements may be deferred until contiguous to city standard street improvements as determined by the city engineer.**

Applicant Response: The proposed development applies the design from City of Lebanon Transportation System Plan for a Local Roadway, see figure below and Applicant's Response to LDC 16.12.030.G and 16.13.020.B. No non-contiguous street improvements are proposed. Therefore, these criteria are met.

Figure 13. Local Roadway



16.13.030.D. Street Location, Width and Grade. Except as noted below, the location, width and grade of all new public streets shall conform to the transportation system plan, as applicable, and an approved street plan or subdivision plat. Street location, width and grade shall be determined in relation to existing and planned streets, topographic conditions, public convenience and safety, and in appropriate relation to the proposed use of the land to be served by such streets:

1.Street grades shall be approved by the city engineer in accordance with the design standards in the city's transportation system plan and public improvement standards;

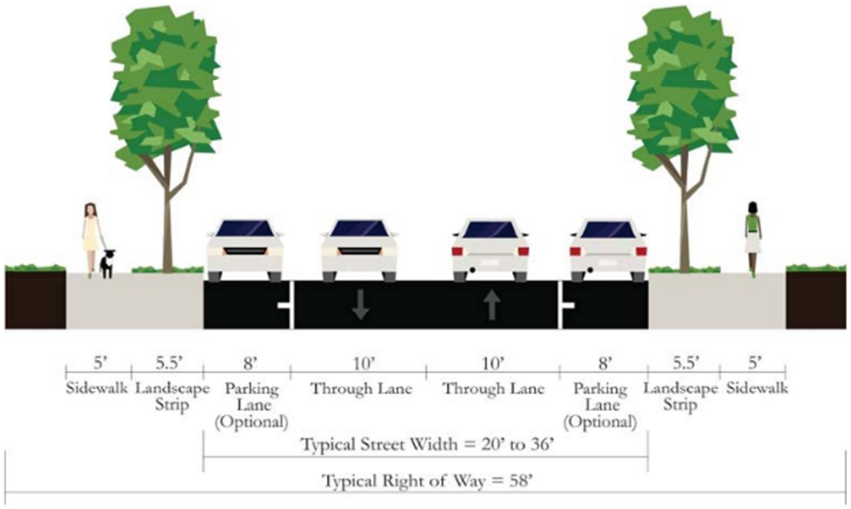
2. Where the location of a street is not shown in an existing street plan (See Subsection "H" below), the location of streets in a development shall either:

b. Conform to a site development plan approved by the review authority if it is impractical to connect with existing street patterns because of particular topographical or other existing conditions of the land. Such a plan shall be based on the type of land use to be served, the volume of traffic, the capacity of adjoining streets and the need for public convenience and safety.

Applicant Response: The proposed development is applying the design from City of Lebanon Transportation System Plan for a Local Roadway, see figure below and Applicant's Response to LDC 16.12.030.G and 16.13.020.B. Moreover, the proposed street was reviewed by and agreed to by the City Engineers and Fire Marshal prior to

submitting the land use application. The application materials contain Sheet C-2.1 and C-2.2 showing that the design adequately addresses the grading requirements for streets and driveways. Therefore, these criteria have been meet.

Figure 13. Local Roadway



16.13.030.H. Street Alignment and Connections.

> ***1. Spacing between street intersections shall have a minimum separation of two hundred sixty-five feet for arterial and collector streets and one hundred fifty feet for local roadways, except where more closely spaced intersections are warranted by site specific considerations.***
>
> ***2. Through Circulation of Local and Collector Streets. Unless superseded by a local street network plan, all local and collector streets that abut a development site shall be extended within the site to provide through circulation and connection to abutting streets unless prevented by environmental or topographical constraints, existing development patterns or compliance with other standards in this code.***

Applicant Response: The proposed development of this infill lot has only one access point to a public right of way. Further, with 335 feet between the driveway for the development and the intersection with Cascade the application meets the minimum separation requirements. The dead-end street extension of Weldwood will be designed to meet the cul de sac maximum length requirements outlined in the Transportation System Plan and the Development Code for the City of Lebanon, and will tie into the existing pedestrian path south of Wal-Mart. See also Applicant's Response to LDC 16.12.030.G and 16.13.020.B.

16.13.030.L. Cul-de-sacs.

1. The length of a cul-de-sac street shall not exceed four hundred feet. However, cul-de-sacs may be up to six hundred feet in length with a pedestrian/bicycle accessway to neighboring streets and/or pathways for connectivity that includes a dedicated right-of-way for utilities, and subject to approval of the Lebanon fire district.

2. The length of a cul-de-sac is measured from the edge of the street right-of-way along the length of the "stem" to the back of the "bulb."

3. All cul-de-sacs of more than one hundred fifty feet in length shall terminate with a circular turnaround. Such emergency vehicle turnarounds shall be constructed in compliance with the Oregon Fire Code and Lebanon fire district's requirements.

4. Also see Section 16.12.030(K)(7) (Chapter 16.12), and Table 16.13.030-1 (in this chapter).

Applicant Response: The proposed development of this infill lot has only one access point to a public right of way. The dead-end street extension of Weldwood will be designed to meet the cul-de sac maximum length requirements outlined in the Transportation System Plan and the Development Code for the City of Lebanon, and will tie into the existing pedestrian path South of Wal-Mart. Moreover, the internal driveways are designed in a manner that meets the Oregon Fire Code for fire truck turn arounds and been approved by the fire department.

16.13.030.M. Development Adjoining Arterial Streets. Where a development adjoins or is crossed by an existing or proposed arterial street, the development design shall separate residential access and through traffic, and shall minimize traffic conflicts. The design shall include one or more of the following:

* * *

Applicant Response: This section is not applicable, the proposed development does not interact with an Arterial Street.

16.13.030.N Private Streets Standards.

* * *

Applicant Response: This section does not apply, no private streets are proposed.

16.14.060.B Grading. All parking areas, except those in conjunction with a single-family or two-family dwelling, shall be graded (as approved by the city engineer) so as not to drain stormwater over sidewalks or onto any abutting property.

Applicant Response: All parking areas are graded to a low point onsite that will collect all site runoff. See application sheet C-2.1 and C-2.2. The onsite stormwater will be collected and infiltrated via underground storm chambers. See also Attachment 7.

16.14.060.I Off-Street Parking Areas Within or Abutting Residential Zones. All off-street parking areas within or abutting residential zones shall be provided with both of the following:

> **1. Sight-obscuring fence, wall or hedge as approved by the planning official to minimize disturbances to adjacent residents. The minimum height for this fence, wall or hedge shall be five feet;**
>
> **2. Five-foot landscaped buffer in addition to the fence, hedge, or wall as required above.**

Applicant Response: To the extent that this criteria allows for subjective approval by the planning official, the applicant objects. However, the Applicant is willing to accept a revised condition of approval where condition of approval 1.a will read:

a. A landscape plan shall be submitted in compliance with Chapter 16.15 and approved prior to the issuance of a building permit, without application of subjective standards. The landscape plan shall include a six-foot tall site obscuring fence of chain link with vinyl slats along the south and east property lines as delineated in the Minor Land Partition in condition 1.d, with a minimum five foot landscape buffer.

As conditioned, these criteria are met.

16.14.060.J Lighting of Off-Street Parking Facilities. Per Section 16.19.050 (in Chapter 16.19), exterior lighting shall be designed, constructed, located, shielded, and directed in such a manner so as to not face directly, shine, or reflect glare onto an adjacent residences, streets, and other land uses. Also see airport overlay zones (in Chapter 16.11) for additional lighting standards for that zone.

Applicant Response: Site pole lighting is designed to include cut offs/shields that prevent light from pointing directly to, shining on, or reflecting glare onto an adjacent residences, streets, and other land uses. See figure below for example. Therefore, this criterion has been meet.

16.14.080.B Vehicular Access to City Streets and Alleys.

2. Access Location and Design.

a. Location and design of all accesses to and/or from city streets are subject to review and approval by the city engineer.

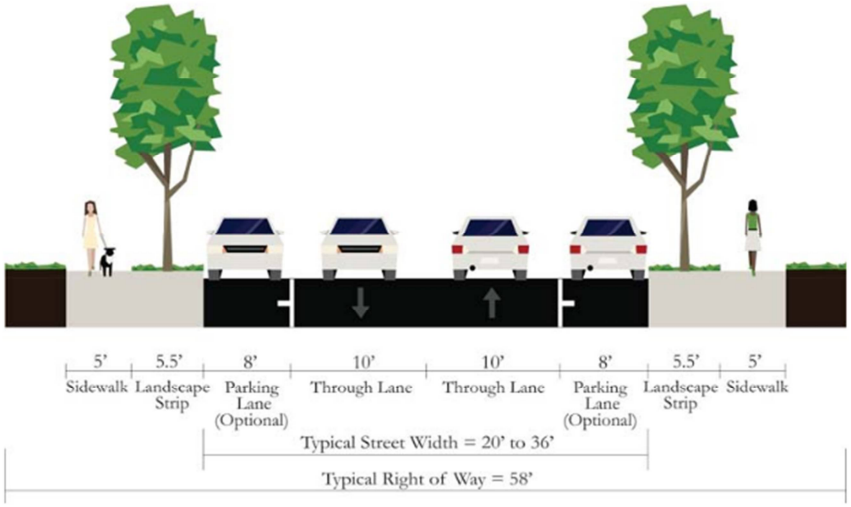
b. Access spacing on collector and arterial streets, and at controlled intersections, shall be determined based on the policies and standards in the city's transportation system plan, city public improvement standards, as well as Manual for Uniform Traffic Control Devices.

c. Exceptions may be granted by the city engineer.

d. Evaluations of exceptions shall consider posted speed of the street on which access is proposed, constraints due to lot patterns, and effects on safety and capacity of the adjacent public street, bicycle and pedestrian facilities.

Applicant Response: The proposed development includes the design of the street based on the City of Lebanon Transportation System Plan for a Local Roadway, see figure below and Applicant's Response to LDC 16.12.030.G and 16.13.020.B. Therefore, these criteria are met.

Figure 13. Local Roadway



16.14.120.B. Location.

1. Safe, well-lit and convenient pedestrian access shall connect the bicycle parking area to the main entrance of the principle use of the site.

2. If the bicycle parking area is located within the vehicle parking area, the bicycle facilities shall be separated from vehicular maneuvering areas by curbing or other barrier to prevent damage to parked bicycles.

3. Curb cuts shall be installed to provide safe, convenient access to bicycle parking areas.

4. Where bicycle parking facilities are not directly visible and apparent from the public right-of-way, entry and directional signs shall be used to direct bicyclists to the bicycle parking facility.

5. Bicycle parking facilities shall be placed within fifty feet of the main entrance of a building, or not farther than fifty feet from an entrance if several entrances exist.

6. For security and convenience purposes, bicycle-parking facilities shall be located in well-lit areas visible to the adjacent sidewalks and/or vehicle parking areas within the site.

7. If the bicycle parking facility is in a public right-of-way, a clear passageway of at least five feet in width for pedestrians shall be included.

Applicant Response: The proposed development's outdoor bicycle parking areas are adjacent to the building with a connecting sidewalk to the two main entrances, away from the vehicle parking area. They are all safely located by placement within fifty feet of entryways, and are visible from the public right-of-way and the development's vehicular parking lot In addition, the bicycle parking is located under well-lit canopies or enclosed inside the dwelling unit patio storage rooms for most of the units. Therefore, these criteria are met.

16.14.120.C. Dimensions.

1. Bicycle parking spaces shall be a minimum of six feet in length and two feet in width.

2. Overhead clearance in covered areas shall be at least seven feet.

3. A minimum five-foot wide aisle shall be provided beside or between each row of bicycle parking.

D. Rack/Enclosure Standards.

1. Bicycle parking facilities shall consist of either a lockable enclosure (locker) in which the bicycle is stored or a stationary object (rack) to which the bicycle may be locked.

2. Lockers and racks shall be securely anchored to the pavement or a structure.

3. Racks requiring user-supplied locks shall accommodate both cable and U-shaped locks. Racks shall be designed and installed to permit the frame and both wheels to be secured.

4. Bicycle racks shall be designed to hold bicycles securely by means of the frame, in a manner that will not cause damage to the wheels.

E. Covering (Roofing).

1. All required bicycle parking must be covered, unless more than eight spaces are required, in which case half of the total may be uncovered as long as a minimum of eight spaces are covered.

2. Covering for bicycle parking facilities shall be permanent and shall provide protection from weather.

3. Covering may be provided by an independent outdoor structure, a parking garage, a wide roof overhang, or a wide awning, or other suitable

protective covering. Bicycle parking facilities may also be located within buildings in secure, well-lit and accessible spaces, provided the other requirements of this section are met.

F. Lighting.

1. For security and convenience purposes, lighting shall be provided in bicycle parking areas such that all facilities are thoroughly illuminated and visible from adjacent sidewalks and/or vehicle parking areas during all hours of use.

2. As noted in Section 16.19.050 (Chapter 16.19), exterior lighting shall be designed, constructed, located, shielded, and directed in such a manner so as to not face directly, shine, or reflect glare onto an adjacent residences, streets, and other land uses. Also see Airport Overlay Zones (in Chapter 16.11) for additional lighting standards for that zone.

Applicant Response: All bicycle parking spaces conform to the required dimensions and clearance. The outdoor bicycle parking will have racks secured to the concrete pavement below and will accommodate both cable and U-shaped locks. They also will have a five-foot minimum aisle adjacent to the spaces for access. All required and most bicycle parking spaces are covered by either the well-lit canopies or enclosed inside the unit patio storage rooms. Therefore, these criteria have been met.

16.15.020.C. Landscaping and Screening Standards.

2. Applicability.

b. Landscape Areas.

ii. Parking Lots. Parking lots shall have landscaped islands (that include trees) at the ends of parking rows at a minimum to facilitate movement of traffic and to break large areas of parking surface. Open parking areas should include landscaping and trees distributed throughout, and long rows (thirty or more spaces) of parking spaces shall be interrupted by landscape breaks.

Applicant Response: Parking has been designed with landscape buffers and islands that break up stalls of greater than 30 stalls, see landscape plans attached to the application as L.3.00 and L3.01. Therefore this criterion is met.

16.15.020.C. Landscaping and Screening Standards.

2. Applicability.

f. Buffering and Screening Required for Parking Lots and Service Areas. Buffering and screening are required under the following conditions, except for single-family dwellings:

i. Parking/Maneuvering Area Adjacent to Buildings.

(A) Where a parking or maneuvering area, or driveway, is adjacent to a building, the area shall be separated from the building by a curb or landscaped strip and a raised walkway, plaza, landscaped buffer not less than five feet in width, or other approved structure or feature.

(B) Raised curbs or landscaped strips, bollards, wheel stops, or other design features shall be used to protect pedestrians, landscaping, and buildings from being damaged by vehicles.

(C) At a minimum, where parking areas are located adjacent to residential ground-floor living space, a four-foot wide landscape buffer with a curb, or other approved structure or feature.

(D) Parking lots shall be screened from abutting residential land uses by fencing, walls, landscaping, or a combination thereof adequate to provide privacy and separation for the abutting land use.

(E) Where parking areas project into required yards, the remaining yard shall be landscaped to provide screening of the parking area.

Applicant Response: Applicant objects to the application of subsection (D) above because it is not clear and objective as "privacy" is a subjective term. Notwithstanding this objection, earlier in this submittal the Applicant proposed revision to condition of approval 1.a and that proposed revision also addresses subsection (D) here. In addition, parking has been designed with landscape buffers and islands that break up stalls of greater than 30 stalls. See landscape plans attached to the application materials as Sheets L.3.00 and L3.01. Moreover, each parking area is surrounded by curbs and landscaping that buffer the building from the parking area. Therefore, these criteria are met.

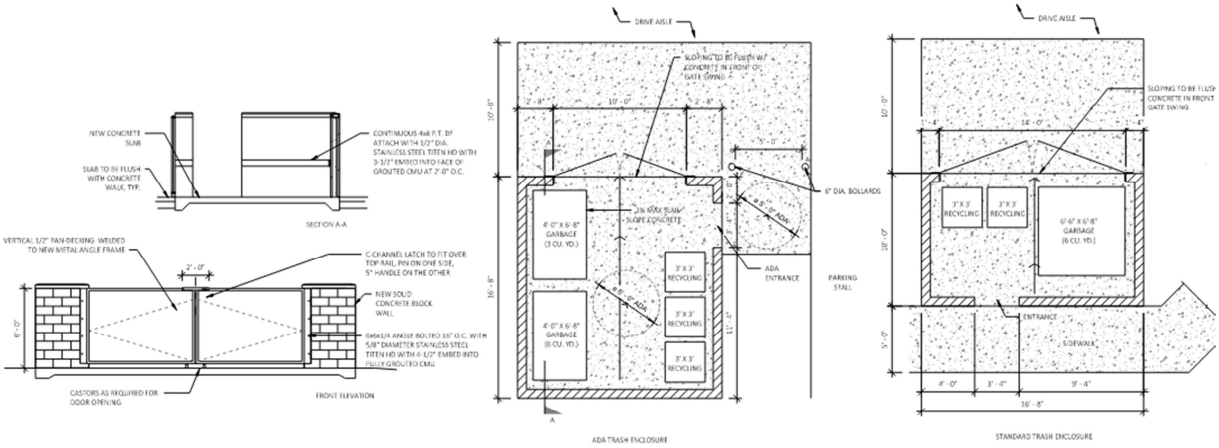
16.15.020.C. Landscaping and Screening Standards.

2. Applicability.

f. Buffering and Screening Required for Parking Lots and Service Areas. Buffering and screening are required under the following conditions, except for single-family dwellings:

ii. Screening of Mechanical Equipment, Outdoor Storage, Service and Delivery Areas, and Other Screening When Required. For commercial, industrial, and multifamily development, all ground level mechanical equipment, outdoor storage and manufacturing, and service and delivery areas, shall be screened from view from all public streets and adjacent residential properties.

Applicant Response: Trash enclosures are fully enclosed, see figure below and roof top mechanical equipment is hidden behind secondary roof elements. Therefore, this criteria is met.



16.15.030 Unless the review authority stipulates one of the following options as a condition of approval, applicants may select one of the following landscape options (subsections A through G of this section). The review authority may amend the following options during the review process (e.g., PD, CU, AR) without going through a variance process.

A. General Landscaping Standard.

1. Intent. The general landscaping standard is a landscape treatment for areas that are generally open. It is intended to be applied in situations where distance is used as the principal means of separating uses or developments and landscaping is required to enhance the intervening

space. Landscaping may include a mixture of groundcover, evergreen and deciduous shrubs, and coniferous and deciduous trees.

2. Required Materials. Shrubs and trees, other than street trees, may be grouped. Groundcover plants must fully cover the remainder of the landscaped area (see Figure 16.15.030-1: General Landscaping). The general landscaping standard has two different requirements for trees and shrubs:

a. Where the landscaped area is less than thirty feet deep, one tree is required for every thirty linear feet;

b. Where the landscaped area is thirty feet deep or greater, one tree is required for every eight hundred square feet and two high shrubs or three low shrubs are required for every four hundred square feet.

Figure 16.15.030-1: General Landscaping

*** * ***

C. High Screen Landscaping Standard.

1. Intent. The high screen landscaping standard is a landscape treatment that relies primarily on screening to separate uses or developments. It is intended to be applied in situations where visual separation is required. High screen treatments are at least six feet in height. A high screen landscaped buffer may not be less than five feet in width.

2 .Required Materials.

a. The high screen landscaping standard requires sufficient high shrubs to form a continuous screen at least six at maturity, feet high and sight-obscuring, year-round.

b. Groundcover plants or other approved landscaping treatments must fully cover the landscaped area.

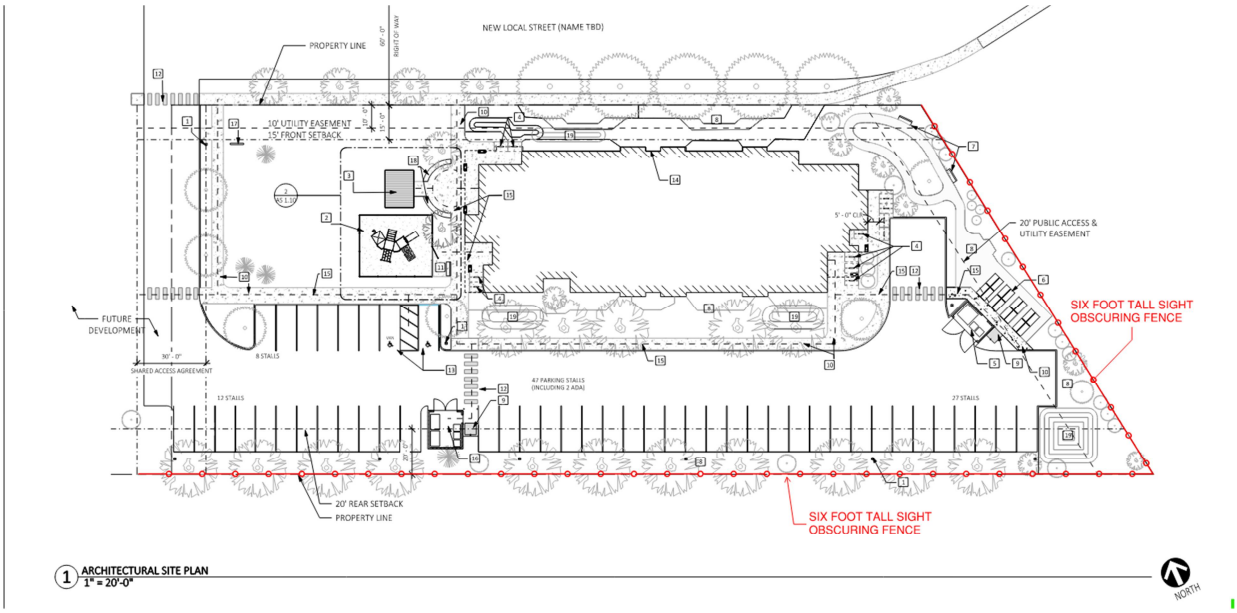
c. A six-foot high masonry wall or a berm may be substituted for the shrubs, but the trees and groundcover plants are still required.

d. When applied along street lot lines, the screen or wall is to be placed along the interior side of the landscaped area. (See Figure 16.15.030-3: High Screen Landscaping).

Applicant Response: The development will meet the high screening landscape standard with the adoption of the revised condition of approval 1.a, proposed to read,

a. A landscape plan shall be submitted in compliance with Chapter 16.15 and approved prior to the issuance of a building permit, without application of subjective standards. The landscape plan shall include a six-foot tall site obscuring fence of chain link with vinyl slats along the south and east property lines as delineated in the Minor Land Partition in condition 1.d, with a minimum five foot landscape buffer.

See application materials Sheets L3.00 and L3.01 for additional information on species and plant sizes. In addition, a depiction of the fence area is shown below.



16.15.040.A. Plant Materials.

1. Shrubs and Groundcover. Non-horticultural plastic sheeting or other impermeable surface shall not be placed under mulch. Areas exhibiting only surface mulch, compost or barkdust are not to be used as substitutes for plant areas.

a. Shrubs. All shrubs shall be well branched and typical of their type as described in current American Association of Nurserymen (AAN) Standards and shall be equal to or better than two-gallon containers and ten inches to twelve inches spread.

b. Groundcover.

i. Shall be equal to or better than the following depending on the type of plant materials used: gallon containers spaced at four feet on center minimum, four inches pot spaced two feet on center minimum, 2.25" pots spaced at eighteen-inch on center minimum.

ii. No bare root planting shall be permitted.

iii. Where wildflower seeds are designated for use as a groundcover, the city may require annual reseeding as necessary.

2.Non-Street Trees. All non-street trees should be well-branched and typical of their type as described in current American Association of Nurserymen (AAN) Standards and preferably be balled and burlapped. Non-street trees may be categorized as follows:

a. Primary Trees. Primary trees that define, outline or enclose major spaces, such as Oak, Maple, Linden, and Seedless Ash, shall be a minimum of two inches caliper;

b. Secondary Trees. Secondary trees that define, outline or enclose interior areas, such as Columnar Red Maple, Flowering Pear, Flame Ash, and Honeylocust, shall be a minimum of 1.75" to two inches caliper;

c. Accent Trees. Accent trees are used to add color, variation and accent to architectural features, such as Flowering- Pear and Kousa Dogwood, shall be 1.75" minimum caliper;

d. Large Conifers. Large conifer trees such as Douglas-Fir, Deodar Cedar, Shore Pine, Western Red Cedar, or Mountain Hemlock shall be installed at a minimum height of six feet.

3. Street Trees. For references to the city's policies and standards regarding street trees, please see the following section in this Chapter (16.15.050: Street Trees).

4.Tree Credits (Reduction in Required New Trees).

a. Existing trees in required landscaped areas that are in good health, as certified by an arborist at the end of construction, may count for landscaping tree credit as follows in Table 16.15.040-1

(measured at four and one-half feet above grade and rounded to the nearest inch):

Table 16.15.040-1: Tree Credits

b. It is the responsibility of the owner to use reasonable care to maintain preserved trees. Trees preserved under this section may only be removed if approved by the planning official. Required mitigation for removal shall be replacement with the number of trees credited to the preserved and removed tree.

6. Compliance with Standards. The burden of proof is on the applicant to show that proposed landscaping materials will comply with the purposes and standards of this chapter. Landscape materials that exceed the minimum standards of this section are encouraged, provided that height and vision clearance requirements are met.

B. Installation and Maintenance.

1. Installation. Plant materials shall be installed to current industry standards and shall be properly staked to assure survival. Support devices (guy wires, etc.) may not interfere with normal pedestrian or vehicular movement.

2. Maintenance. Maintenance of landscaped areas is the on-going responsibility of the property owner. Any landscaping installed to meet the requirements of this code, or any condition of approval established by a city decision-making body acting on an application, shall be continuously maintained in a healthy, vital and acceptable manner. Required landscaping that dies is to be replaced in kind, within one growing season, unless appropriate substitute species are approved by the city. Failure to maintain landscaping as required in this chapter constitutes a violation of this code for which appropriate legal remedies, including the revocation of any applicable land development permits, may result (see Chapter 16.02, Section 16.02.030: Enforcement).

3. Irrigation. Irrigation is required of all new development, except single-family homes. The intent of this standard is to assure that plants will survive the critical establishment period when they are most vulnerable due to a lack of watering and also to assure that water is not wasted through unnecessary or inefficient irrigation. Approved irrigation system plans shall specify one of the following:

a. A permanent, built-in, irrigation system with an automatic controller. Either a spray or drip irrigation system, or a combination of the two, may be specified;

b. A permanent or temporary system designed by a licensed professional in the field of landscape architecture or irrigation system design, sufficient to assure that the plants will become established and drought-tolerant;

c. Other irrigation system approved by the planning official.

C. Protection of Landscaped Areas. All required landscape areas, including all trees and shrubs, shall be protected from potential damage by conflicting uses or activities including vehicle parking and the storage of materials.

D. Landscaping on Corner Lots. All landscaping on corner lots shall meet the vision clearance standards of Section 16.12.030(H) in Chapter 16.12 (Transportation Access, Access Management, and Circulation). If high screening would ordinarily be required by this code, low screening shall be substituted within vision clearance areas. Taller screening may be required outside of the vision clearance area to mitigate for the reduced height within it.

E. Landscape Plans. Except for single-family dwelling on a single lot (but not excluding subdivisions), landscape plans shall be submitted showing all existing and proposed landscape areas. Plans must be drawn to scale and show the type, installation size, number and placement of materials. Plans shall include a plant material list. Plants are to be identified by both their scientific and common names. The condition of any existing plants and the proposed method of irrigation are also to be indicated.

F. Completion of Landscaping.

1. The installation of plant materials may be deferred for a period of time specified by the review authority acting on an application, in order to avoid hot summer or cold winter periods, or in response to water shortages.

2. Except for single-family dwelling on a single lot (but not excluding subdivisions), a final certificate of occupancy shall not be granted until either landscaping is completed or an adequate bond or other security is posted for the completion of the landscaping, and the city is given written authorization to enter the property.

G. Street Trees Not Typically Part of Site Landscaping. Street trees are not subject to the requirements of this section and are not counted toward the

required standards of this section. However, the review authority may, by granting a waiver or variance, allow for special landscaping within the right-of-way to compensate for a lack of appropriate on-site locations for landscaping.

Applicant Response: See application materials Sheets L3.00 and L3.01 for information on species and plant sizes. Further, proposed revisions to condition of approval 1.a requires applicant to meet these standards and based on the landscape plan contained in the application materials, these requirements can be met.

16.15.050 For the city's provisions regarding street trees, please refer to the following:

A. Lebanon Municipal Code Chapter 12.16: Street Trees;

B. City of Lebanon (Public Works Department):

> **1. Street Tree Policy and Potential Street Tree Guide;**
>
> **2. Acceptable Street Tree List, Including: Trees for Use Under Power Lines and Pruning Guide.**

Applicant Response: Along Weldwood Drive Applicant proposes a six-foot-wide planting strip without overhead utilities where nine medium size trees at thirty feet on center will be planted. Applicant proposes planting five Green Vase Zelkovas and four Armstrong Maples, both on the City of Lebanon Acceptable Street Tree List. They are all 2" caliper which meets the size requirements under the LDC.

16.15.060.A. General Standards. Construction of fences and walls shall conform to all of the following requirements:

> **4. Materials.**
>
> > **a. Permitted fence and wall materials: wood; metal; chain-link; bricks, concrete blocks stone; stucco, or similar masonry, and non-prohibited evergreen plants.**
> >
> > **b. Prohibited fence and wall materials, except where explicitly allowed under other provisions of the Lebanon Municipal Code: straw bales; barbed or razor wire; and scrap materials.**
> >
> > **c. Prohibited fence and wall materials: hedges over eight feet in required yards.**
> >
> > **d. Fences or walls constructed of brick or masonry exceeding four feet in height shall be subject to review and approval by the city**

engineer. Those that are taller than six feet also require a building permit.

Applicant Response: The development will meet these standards with the adoption of the revised condition of approval 1.a, proposed to read,

a. A landscape plan shall be submitted in compliance with Chapter 16.15 and approved prior to the issuance of a building permit, without application of subjective standards. The landscape plan shall include a six-foot tall site obscuring fence of chain link with vinyl slats along the south and east property lines as delineated in the Minor Land Partition in condition 1.d, with a minimum five foot landscape buffer.

16.16.020.C Adequacy of utility and infrastructure facilities is based on the standards established in the city's adopted master facility plans (e.g., stormwater and drainage, parks, wastewater).

Applicant Response: The Applicant coordinated with the City staff regarding the availability of water and sewer capacity to determine the development falls within the City's adopted master facility plans. See Attachment 10. Further the proposed development is in close proximity to Weldwood Park and will also include construction of its own playground equipment to serve residents.

16.16.040.E. Existing Watercourse.

1. Where a proposed development is traversed by a watercourse, drainage way, channel, or stream that is proposed or required to remain in its current condition and/or function, there shall be provided to the city a stormwater easement or drainage right-of-way (ROW). The easement or ROW shall include provisions for access and maintenance.

2. The easement or ROW shall conform substantially with the lines of the watercourse and additional width adequate for stormwater conveyance and maintenance of the stormwater conveyance to protect the public health and safety, and adjacent properties, as determined by the city engineer.

F. Stormwater Release Rate. All new site development shall maintain pre-development peak historic stormwater discharge rates as per city standards. The applicant for a development proposal shall demonstrate through calculations acceptable to the city engineer that this standard will be met by the proposed development.

Applicant Response: As stated in the attached the EVREN Northwest, Inc. Technical Memorandum, Attachment 9, subsurface flows to the nearby wetland will not be

significantly impacted because the Applicant is infiltrating stormwater onsite. Since the source of water to the wetlands is subsurface, no easement or right of way is required for a drainageway, and the site development will maintain pre-development peak historic stormwater discharge rates. As set forth in Attachment 7, stormwater design can be achieved to meet City standards for discharge rate. A full drainage report with calculations will be submitted to the city engineer with the construction documents.

16.16.050.A. Placement and Installation of Utilities.

1. Underground Placement. Unless otherwise exempted by subsection B of this section, all new utility lines including, but not limited to, those required for natural gas, electric, communication, lighting, and cable television services and related facilities shall be placed underground, except for surface-mounted transformers, surface-mounted connection boxes and meter cabinets (which may be placed above ground). Temporary utility service facilities, during construction, may also be placed above ground.

2. Installation. The following additional standards apply to all new utility installation, in order to facilitate underground placement of utilities.

a. The developer shall coordinate site improvements with the serving utility to provide the underground services. Above ground utility service facilities and equipment shall not obstruct vision clearance areas for vehicular traffic (See Section 16.12.030(H) in Chapter 16.12 of this code).

b. All underground utilities, including sanitary sewers, storm drains and water lines installed in streets by the developer, shall be constructed prior to the surfacing of the streets.

c. Stubs for service connections shall be long enough to avoid disturbing the street improvements when service connections are made.

3. City Approval for any Surface-Mounted Utility Support Facilities. The city reserves the right to approve the location of all surface-mounted utility support facilities, subject to department of public works permit.

B. Exception to Underground Placement Requirement.

1. An exception to the underground placement requirement may be granted by the city engineer due to physical constraints, such as steep topography, or existing development conditions.

2. High capacity electrical transmission lines that are infeasible to site underground are exempted from the underground placement requirement.

C. Provision of Utility Services to All New Residential Subdivisions. All lots in residential subdivisions shall be provided with access to natural gas, electrical power, cable TV, and landline phone facilities provided such utilities can reasonably be made available to the site, in addition to the public utilities provided for in this chapter.

Applicant Response: All new utilities are proposed to be buried. No exceptions are anticipated.

16.31.040.G .Employing the procedures and decision criteria in Sections 16.31.070 and 16.31.080 of this chapter, the commission shall review and act upon applications for the alteration, relocation, or demolition of designated landmarks, or the major exterior alteration, relocation, or demolition of historic resources of statewide significance.

1.When such applications are received, the city shall send official notice to the state office of historical preservation (SHPO) and local historical preservation groups that request such notification.

2.The city shall invite and encourage SHPO and any local historical preservation groups to submit written testimony and present verbal testimony at the hearings. Such testimony shall be taken into account by the commission in its decision-making on these applications.

3.Final decisions on demolitions shall be made by the city council after conducting required public hearings.

Applicant Response: One public comment raised a question about why no archaeological study was included in the application materials. The subject property is not on the Lebanon historic register and has no identified historic resource of statewide significance, therefore, no archaeological study is required. This criteria is not applicable.

Attachment #6

Carlson Geotechnical

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Report of
Geotechnical Investigation
Colonia Paz 1
Weldwood Drive & Cascade Drive
Lebanon, Oregon

CGT Project Number G2005323

Prepared for

Claudia Cantu
Farmworkers Housing Development Corporation
1274 5th Street, Suite 1-A
Woodburn, Oregon 97071

July 22, 2020

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Woodburn, Oregon 97071

Report of
Geotechnical Investigation
Colonia Paz 1
Weldwood Drive & Cascade Drive
Lebanon, Oregon

CGT Project Number G2005323

Dear Ms. Cantu:

Carlson Geotechnical (CGT), a division of Carlson Testing, Inc. (CTI), is pleased to submit this report summarizing the results of our geotechnical investigation for the proposed Colonia Paz 1 project. The site is located southwest of the intersection of Weldwood Drive and Cascade Drive in Lebanon, Oregon. We performed our work in general accordance with CGT Proposal GP9022, dated July 20, 2020. Written authorization for our services was received on July 21, 2020.

Subsurface information and data was collected within the subject project site during a previous geotechnical investigation for FHDC (CGT Project Number G1804982). That information and data was used to serve as a basis for the geotechnical engineering recommendations presented later in this report.

We appreciate the opportunity to work with you on this project. Please contact us at 503.601.8250 if you have any questions regarding this report.

Respectfully Submitted,
CARLSON GEOTECHNICAL

REGISTERED PROFESSIONAL ENGINEER
70773PE
OREGON
Jan. 10, 2007
BRAD MICHAEL WILCOX

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1.0 INTRODUCTION

Carlson Geotechnical (CGT), a division of Carlson Testing, Inc. (CTI), is pleased to submit this report summarizing the results of our updated geotechnical for the proposed Colonia Paz 1 project. The site is located southwest of the intersection of Weldwood Drive and Cascade Drive in Lebanon, Oregon, as shown on the attached Site Location, Figure 1.

CGT previously performed a geotechnical investigation for the FHDC Lebanon Housing Project, the results of which were presented in our January 3, 2019 report titled "Report of Geotechnical Investigation", CGT Project number G1804982. The Colonia Paz 1 project site is located within the southeast portion of that development area on a 1.39-acre lot.

1.1 Project Information

Based on our review of the provided development plans for the site, prepared by Pinnacle Architecture, dated June 12, 2020, development proposed within the subject 1.39-acre lot is consistent with that understood in the referenced 2019 report. The project will include construction of a multi-story residential building with an appurtenant parking lot and utilities. The project will also include construction of an extension of Weldwood Drive along the north site frontage. A lot-specific geotechnical report was requested for the referenced project. Updated geotechnical recommendations for seismic design have been presented later in this report recognizing a newer building code, 2019 Oregon Structural Specialty Code (2019 OSSC), was used to design the proposed building.

1.2 Scope of Services

Our scope of work included the following:

- Visit the site to confirm site conditions are consistent with those observed during our previous (2018) field investigation.
- Prepare this written geotechnical report that provides:
  - Updated seismic design parameters based on the 2019 OSSC.
  - Updated retaining wall design parameters based on the updated seismic design parameters.
  - Lot-specific geotechnical recommendations for site preparation and earthwork, wet weather construction, temporary excavations, and recommendations for design and construction of shallow foundations, floor slabs, and pavements.

2.0 SITE DESCRIPTION

2.1 Site Geology

Based on available geologic mapping[1] of the area, the site is underlain by Quaternary (Upper Pleistocene to Holocene) reworked gravel (Qrg) deposited by Willamette River tributaries. The gravel deposits consist of unconsolidated gravel with some sand, silt, and clay that form broad fans and terraces about 30 to 60 feet thick. Areas adjacent to the site are mapped as (Holocene and Pleistocene) reworked silt considered to have been derived largely from Willamette Silt.

[1] O'Connor, Jim E. et al., 2001. Origin, extent, and thickness of Quaternary geologic units in the Willamette Valley, Oregon: U.S. Geological Survey Professional Paper; 1620.

The reworked gravel is underlain by the lower Oligocene and middle Eocene Fisher Formation (Teof) of the Little Butte Volcanic Series. The Fisher Formation undivided consists of light gray to brown to light yellow, fine grained feldspathic sandstone and pebbly tuffaceous sandstone. The Fisher Formation is characterized by massive bedding, as well as finely laminated, fine-grained sandstone and siltstone, interbedded mafic lava flows and silicic ash-flow tuff. Beds and laminations include wood debris, bentonitic claystone, and minor coal beds. The Fisher Formation is commonly interfingered with gray-black, porphyritic Basaltic andesite, and light gray to brown to light yellow arkosic and tuffaceous marine sandstone and siltstone interbeds of the Eugene Formation.

2.2 Site Surface Conditions

CGT visited the site on July 21, 2020 to observe existing conditions. Site surface conditions were generally consistent with those described in our January 3, 2019, report. The roughly triangular, 1.39-acre site was bordered by grass fields to the north, Weldwood Drive to the east, a lightly forested area to the south and west. At the time of our site visit, the relatively level to very gently sloped site was vacant and vegetated primarily with grasses and scattered trees. Photographs taken during our recent site visit are shown on the attached Figure 3.

2.3 Subsurface Conditions

2.3.1 Subsurface Investigation & Laboratory Testing

Our 2018 subsurface investigation of the FHDC development site consisted of twenty-four test pits (TP-1 through TP-24) excavated on December 12 and 13, 2018. Test pits TP-6, TP-7, TP-8, TP-9, and TP-12 were located within the current project area; their approximate locations are shown on the attached Site Plan. In summary, those test pits excavated to depths ranging from about 6 to 9¾ feet bgs. Details regarding the subsurface investigation, logs of the explorations, and results of laboratory testing are presented in Appendix A. Subsurface conditions encountered during our investigation are summarized below.

2.3.2 Subsurface Materials

Logs of the referenced 2018 explorations have been reproduced and are presented in Appendix A. The following describes each of the subsurface materials encountered at the site.

Organic Soil (OL)
Organic Soil was encountered at the surface of the test pits. The organic soil was typically dark brown, moist, exhibited medium plasticity, and contained rootlets. This soil extended to depths ranging from about ½ to 1½ feet bgs in the test pits.

Fat Clay (CH)
Native fat clay was encountered below the organic soil in test pits TP-6 through TP-9 and extended to depths ranging from 2 to 5¾ feet bgs. This material was generally stiff to hard, brown, moist, exhibited high plasticity, and included trace subrounded to subangular gravel up to ¾ inch in diameter.

Lean Clay (CL)
Lean clay soil was encountered below the organic soil in test pit TP-12 and extended to a depth of 3½ feet bgs. The lean clay was generally medium stiff to very stiff, brown, moist, exhibited medium to high plasticity, and included trace subrounded to subangular gravel up to 3 inches in diameter.

Poorly Graded Gravel with Cobbles and Silt (GP)
Poorly graded gravel with cobbles and silt was encountered below the lean clay in TP-12, and extended to approximately 5½ feet bgs. This soil was encountered below the fat clay in TP-6 through TP-9, and extended to the full depths explored in those test pits, approximately 6 to 9½ feet bgs. The gravel was generally dense to very dense, moist, subrounded to subangular, up to 3 inches in diameter, and included subrounded to rounded cobbles up to 5 inches in diameter and trace coarse-grained sand.

Poorly Graded Sand with Cobbles (SP)
Poorly graded sand with cobbles was encountered below the poorly graded gravel with cobbles and silt in TP-12, and extended to the depth explored, approximately 6 feet bgs. This material was generally dense to very dense, gray-brown, moist, non-plastic, and included some subrounded to subangular gravel up to ¾ inch in diameter and trace cobbles up to 5 inches in diameter.

The soils encountered during our subsurface investigation were consistent with the reworked gravel and silt deposits described in Section 2.1. The fat clay (CH) and lean clay (CL) have a high percentage of fines and are referred to as "fine-grained deposits" throughout the remainder of this report. Likewise, the poorly graded gravel with cobbles and silt (GP) and poorly graded sand with cobbles (SP) are referred to as "coarse-grained deposits" throughout the remainder of this report.

2.3.3 Groundwater

Groundwater was encountered in test pits TP-6, TP-7, and TP-9 at depths ranging from about 4½ to 8 feet bgs on December 12 and 13, 2018. Groundwater was not encountered within the depths explored in the remaining test pits. To determine approximate regional groundwater levels in the area, we researched well logs available on the Oregon Water Resources Department (OWRD)[2] website for wells located within Section 23, Township 12 South, Range 2 West, Willamette Meridian. Our review indicated that groundwater levels in the area generally ranged from about 5 to 35 feet bgs. It should be noted groundwater levels vary with local topography. In addition, the groundwater levels reported on the OWRD logs often reflect the purpose of the well, so water well logs may only report deeper, confined groundwater, while geotechnical or environmental borings will often report any groundwater encountered, including shallow, unconfined groundwater. Therefore, the levels reported on the OWRD well logs referenced above are considered generally indicative of local water levels and may not reflect actual groundwater levels at the project site. We anticipate that groundwater levels will fluctuate due to seasonal and annual variations in precipitation, changes in site utilization, or other factors. In addition, the fine-grained deposits (CH, CL) are conducive to the formation of perched groundwater.

3.0 SEISMIC CONSIDERATIONS

3.1 Seismic Design

Section 1613.2.2 of the 2019 Oregon Structural Specialty Code (2019 OSSC) requires that the determination of the seismic site class be in accordance with Chapter 20 of the American Society of Civil Engineers Minimum Design Loads for Buildings and Other Structures (ASCE 7-16). We have assigned the site as Site Class D ("Stiff Soil") based on geologic mapping and subsurface conditions encountered during our investigation.

[2] Oregon Water Resources Department, 2020. Well Log Records, *accessed July 2020*, from OWRD web site: http://apps.wrd.state.or.us/apps/gw/well_log/.

Earthquake ground motion parameters for the site were obtained in accordance with the 2019 OSSC using the Seismic Hazards by Location calculator on the ATC website[3]. The site Latitude 44.514247° North and Longitude 122.899776° West were input as the site location. The following table shows the recommended seismic design parameters for the site.

Table 1 Seismic Ground Motion Values (2019 OSSC)

Parameter		Value
Mapped Acceleration Parameters	Spectral Acceleration, 0.2 second (S_s)	0.691g
	Spectral Acceleration, 1.0 second (S_1)	0.374g
Coefficients (Site Class D)	Site Coefficient, 0.2 second (F_A)	1.247
	Site Coefficient, 1.0 second (F_V)[1]	1.926
Adjusted MCE Spectral Response Parameters	MCE Spectral Acceleration, 0.2 second (S_{MS})	0.862g
	MCE Spectral Acceleration, 1.0 second (S_{M1})	0.720g
Design Spectral Response Accelerations	Design Spectral Acceleration, 0.2 second (S_{DS})	0.575g
	Design Spectral Acceleration, 1.0 second (S_{D1})	0.480g
Seismic Design Category (Risk Category II)		D

[1] Value determined from 2019 OSSC Table 1613.2.3(2).

3.2 Seismic Hazards

3.2.1 Liquefaction

In general, liquefaction occurs when deposits of loose/soft, saturated, cohesionless soils, generally sands and silts, are subjected to strong earthquake shaking. If these deposits cannot drain quickly enough, pore water pressures can increase, approaching the value of the overburden pressure. The shear strength of a cohesionless soil is directly proportional to the effective stress, which is equal to the difference between the overburden pressure and the pore water pressure. When the pore water pressure increases to the value of the overburden pressure, the shear strength of the soil approaches zero, and the soil can liquefy. The liquefied soils can undergo rapid consolidation or, if unconfined, can flow as a liquid. Structures supported by the liquefied soils can experience rapid, excessive settlement, shearing, or even catastrophic failure.

For fine-grained soils, susceptibility to liquefaction is evaluated based on penetration resistance and plasticity, among other characteristics. Criteria for identifying non-liquefiable, fine-grained soils are constantly evolving. Current practice to identify non-liquefiable, fine-grained soils is based on moisture content and plasticity characteristics of the soils[4,5,6]. The susceptibility of sands, gravels, and sand-gravel mixtures to liquefaction is typically assessed based on penetration resistance, as measured using SPTs, CPTs, or Becker Hammer Penetration tests (BPTs).

[3] Applied Technology Council (ATC), 2020. USGS seismic design parameters determined using "Seismic Hazards by Location," *accessed July 2020*, from the ATC website https://hazards.atcouncil.org/.

[4] Seed, R.B. et al., 2003. Recent Advances in Soil Liquefaction Engineering: A Unified and Consistent Framework. Earthquake Engineering Research Center Report No. EERC 2003-06.

[5] Bray, Jonathan D., Sancio, Rodolfo B., et al., 2006. Liquefaction Susceptibility of Fine-Grained Soils, Journal of Geotechnical and Geoenvironmental Engineering, Volume 132, Issue 9, September 2006.

[6] Idriss, I.M., Boulanger, R.W., 2008. Soil Liquefaction During Earthquakes, Earthquakes Engineering Research Institute Monograph MNO-12.

The Oregon Department of Geology and Mineral Industries' Oregon Statewide Geohazards Viewer (HazVu)[7] shows no hazard for liquefaction at the site. The Oregon Hazard Explorer for Lifelines Program (O-HELP)[8] show no hazard for liquefaction for the site or immediate vicinity due to a M9.0 Cascadia Subduction Zone earthquake.

Based on their plasticity characteristics, the fine-grained deposits (CH, CL) encountered within our explorations are considered non-liquefiable. Based on their dense to very dense relative density, the coarse-grained deposits (GP, SP) are also considered non-liquefiable. Based on review of geologic mapping and our previous experience in the area, we do not anticipate liquefiable conditions are present at depths below those explored as part of this assignment.

3.2.2 Slope Instability

Due to the relatively level topography at and surrounding the site, the risk of slope instability at the site is considered low. The proposed grading includes relatively minimal planned changes in site grades and is not anticipated to increase this significantly risk.

3.2.3 Surface Rupture

3.2.3.1 Faulting

Although the site is situated in a region of the country with known active faults and historic seismic activity, no known faults exist on or immediately adjacent to the site. Therefore, the risk of surface rupture at the site due to faulting is considered low.

3.2.3.2 Lateral Spread

Surface rupture due to lateral spread can occur on sites underlain by liquefiable soils that are located on or immediately adjacent to slopes steeper than about 3 degrees (20H:1V), and/or adjacent to a free face, such as a stream bank or the shore of an open body of water. During lateral spread, the materials overlying the liquefied soils are subject to lateral movement downslope or toward the free face. Based on the relatively level topography at the site and the non-liquefiable nature of the soils at the site, the risk of damage associated with lateral spread is very low to negligible

4.0 CONCLUSIONS

Based on the results of our field explorations and analyses, the site may be developed as described in Section 1.1 of this report, provided the recommendations presented in this report are incorporated into the design and development. The following are the primary geotechnical considerations for the project:

- The presence of potentially expansive soils near the surface of the site,
- The presence of shallow groundwater within proposed excavation depths, and
- The presence of near-surface, moisture-sensitive soils that are susceptible to disturbance during wet weather.

These considerations are described in more detail in the following sections.

---

[7] Oregon Department of Geology and Mineral Industries, 2020. Oregon Statewide Geohazards Viewer, *accessed July 2020*, from DOGAMI web site: http://www.oregongeology.org/sub/hazvu/index.htm.

[8] Oregon State University College of Engineering, 2020. Oregon Hazard Explorer for Lifelines Program (O-HELP), *accessed July 2020,* from O-HELP web site: http://ohelp.oregonstate.edu/#&ui-state=dialog.

4.1 Expansion Potential

As indicated above and shown on the attached Site Plan, Figure 2, we encountered high plasticity fat clay (CH) in several of the test pits at the site. Fat clay soils are highly sensitive to changes in moisture content and have a high potential for exhibiting shrink-swell (expansive-contractive) behavior. Foundations, floor slabs, and pavements founded directly on these soils may be subject to cyclic shrink-swell movements that can result in differential movements and distress. In the absence of additional laboratory testing to evaluate the expansive potential of those soils, we recommend measures be taken to protect foundations, slabs, and pavements from the potentially damaging effects of shrink-swell movements. Specific recommendations for foundation, floor slab, and pavement subgrade preparation are presented in Sections 5.5, 5.6, and 5.7, respectively.

4.2 Shallow Groundwater

As indicated above and shown on the attached Site Plan, Figure 2, we encountered groundwater in three test pits at depths of about 4¾ to 8½ feet bgs. Depending on the time of year construction occurs, we anticipate groundwater may be encountered during excavation of utility trenches at the site extending beyond depths of about 4 feet bgs. Geotechnical recommendations for temporary dewatering of trenches and excavations, if required, are provided in Section 5.2.3 of this report.

4.3 Subgrade Moisture Sensitivity

The near surface fine-grained deposits (CH, CL) are susceptible to disturbance during wet weather. Trafficability of these soils may be difficult, and significant damage to the subgrade could occur, if earthwork is undertaken without proper precautions at times when the exposed soils are more than a few percentage points above optimum moisture content. In the event that construction occurs during wet weather, CGT recommends that measures be implemented to protect the fine-grained subgrade in areas of repeated construction traffic. Geotechnical recommendations for wet weather construction are presented in Section 5.3 of this report. Re-use of the fine-grained deposits during wet times of the year will require special consideration as discussed in Section 5.4.1 of this report.

5.0 RECOMMENDATIONS

The recommendations presented in this report are based on the information provided to us, results of our field investigation and analyses, laboratory data, and professional judgment. CGT has observed only a small portion of the pertinent subsurface conditions. The recommendations are based on the assumptions that the subsurface conditions do not deviate appreciably from those found during the field investigation. CGT should be consulted for further recommendations if the design of the proposed development changes and/or variations or undesirable geotechnical conditions are encountered during site development.

5.1 Site Preparation

5.1.1 Stripping

Existing vegetation, rooted soils, and organic soil (OL) should be removed from within, and for a minimum 5-foot margin around, proposed structural fill, building pad and pavement areas. Based on the results of our field explorations, topsoil stripping depths are anticipated to vary from about 1 to 1½ feet bgs. These materials may be deeper or shallower at locations away from the completed explorations. Accordingly, the geotechnical engineer or his representative should provide recommendations for actual stripping depths

based on observations during site stripping. Stripped surface vegetation and rooted soils should be transported off-site for disposal, or stockpiled for later use in landscaped areas.

5.1.2 Grubbing

Grubbing of trees should include the removal of the root mass and roots greater than ½-inch in diameter. Grubbed materials should be transported off-site for disposal. Root masses from larger trees may extend greater than 3 feet bgs. Where root masses are removed, the resulting excavation should be properly backfilled with structural fill in conformance with Section 5.4.2 of this report.

5.1.3 Test Pit Backfills

The test pits conducted at the site in 2018 were loosely backfilled during our field investigation. Where test pits are located within finalized building, structural fill, or pavement areas, the loose backfill materials should be re-excavated. The resulting excavations should be backfilled with structural fill in conformance with Section 5.4 of this report.

5.1.4 Existing Utilities & Below-Grade Structures

All existing utilities at the site should be identified prior to excavation. Abandoned utility lines beneath the new building, pavements, and hardscaping features should be completely removed or grouted full. Soft, loose, or otherwise unsuitable soils encountered in utility trench excavations should be removed and replaced with structural fill in conformance with Section 5.4 this report. Buried structures (i.e. footings, foundation walls, retaining walls, slabs-on-grade, tanks, etc.), if encountered during site development, should be completely removed and replaced with structural fill in conformance with Section 5.4 of this report.

5.1.5 Subgrade Preparation – Building Pad & Pavement Areas

After site preparation as recommended above, but prior to placement of structural fill and/or aggregate base, the geotechnical engineer or their representative should observe the exposed subgrade soils in order to identify areas of excessive yielding through either proof rolling or probing. Proof rolling of subgrade soils is typically conducted during dry weather using a fully-loaded, 10- to 12-cubic-yard, tandem-axle, tire-mounted, dump truck or equivalent weighted water truck. Areas of limited access or that appear too soft or wet to support proof rolling equipment should be evaluated by probing. During wet weather, subgrade preparation should be performed in general accordance with the recommendations presented in Section 5.3 of this report. If areas of soft soil or excessive yielding are identified, the affected material should be over-excavated to firm, stable subgrade, and replaced with imported granular structural fill in conformance with Section 5.4.2 of this report.

5.1.6 Erosion Control

Erosion and sedimentation control measures should be employed in accordance with applicable City, County, and State regulations.

5.2 Temporary Excavations

5.2.1 Overview

Conventional earthmoving equipment in proper working condition should be capable of making necessary excavations for the anticipated site cuts as described earlier in this report. All excavations should be in

accordance with applicable OSHA and state regulations. It is the contractor's responsibility to select the excavation methods, to monitor site excavations for safety, and to provide any shoring required to protect personnel and adjacent improvements. A "competent person", as defined by OR-OSHA, should be on-site during construction in accordance with regulations presented by OR-OSHA. CGT's current role on the project does not include review or oversight of excavation safety.

5.2.2 OSHA Soil Type

For use in the planning and construction of temporary excavations up to 10 feet in depth, an OSHA soil type "C" should be used for the granular soils (GP, SP) encountered in the test pits. Similarly, an OSHA soil type "B" may be used for the fine-grained soils (CH, CL) encountered near the surface of the site.

5.2.3 Dewatering

As indicated in Section 2.3.3 above, groundwater was encountered at depths of about 4¼ to 8½ feet bgs within the test pits excavated at the site in early December 2018. The coarse-grained deposits (GP, SP) encountered at depth generally have low fines content and are anticipated to exhibit moderate to high rates of transmissivity. Therefore, we would expect moderate to heavy seepage during excavation. For excavations extending below the groundwater level, in order to maintain dry working conditions, pumping from multiple sump locations may be effective in managing seepage. If sumps are not effective, or a greater assurance of effectively managing groundwater is desired, well points may be required. We recommend that sumps or well points be installed to remove water to a depth of at least 2 feet below the lowest elevation of the excavation. Well points should be installed and put into operation prior to commencing excavation. The project civil engineer should evaluate requirements for disposal of the resultant discharge. In order to refine groundwater levels and estimate flow rates, piezometers or well points could be installed and drawdown tests could be performed prior to, or at the onset of, construction.

5.2.4 Utility Trenches

Temporary trench cuts should stand near vertical to depths of approximately 4 feet in the native, fine-grained deposits encountered near the surface of the site. If groundwater seepage undermines the stability of the trench, or if sidewall caving is observed during excavation, the sidewalls should be flattened or shored. Depending on the time of year trench excavations occur, trench dewatering may be required in order to maintain dry working conditions. A discussion of temporary dewatering measures is presented in Section 5.2.3 above. If groundwater is encountered, we recommend placing trench stabilization material at the base of the excavations. Trench stabilization material should be in conformance with Section 5.4.4 of this report.

5.2.5 Excavations Near Foundations

Excavations near footings should not extend within a 1H:1V plane projected out and down from the outside, bottom edge of the footings. In the event excavation needs to extend below the referenced plane, temporary shoring of the excavation and/or underpinning of the subject footing may be required. The geotechnical engineer should be consulted to review proposed excavation plans for this design case to provide specific recommendations.

5.3 Wet Weather Considerations

For planning purposes, the wet season should be considered to extend from late September to late June. It is our experience that dry weather working conditions should prevail between early July and mid-September.

Notwithstanding the above, soil conditions should be evaluated in the field by the geotechnical engineer or their representative at the initial stage of site preparation to determine whether the recommendations within this section should be incorporated into construction.

5.3.1 Overview

Due to their fines content, the on-site fine-grained deposits (CH, CL) are susceptible to disturbance during wet weather. Trafficability of these soils may be difficult, and significant damage to subgrade soils could occur, if earthwork is undertaken without proper precautions at times when the exposed soils are more than a few percentage points above optimum moisture content. For wet weather construction, site preparation activities may need to be accomplished using track-mounted equipment, loading removed material onto trucks supported on granular haul roads, or other methods to limit soil disturbance. The geotechnical engineer or their representative should evaluate the subgrade during excavation by probing rather than proof rolling. Soils that have been disturbed during site preparation activities, or soft or loose areas identified during probing, should be over-excavated to firm, stable subgrade, and replaced with imported granular structural fill in conformance with Section 5.4.2.

5.3.2 Geotextile Separation Fabric

We recommend a geotextile separation fabric be placed to serve as a barrier between the prepared subgrade and granular fill/base rock in areas of repeated or heavy construction traffic. The geotextile fabric should meet the requirements presented in the current Oregon Department of Transportation (ODOT) Standard Specification for Construction, Section 02320.

5.3.3 Granular Working Surfaces (Haul Roads & Staging Areas)

Haul roads subjected to repeated heavy, tire-mounted, construction traffic (e.g. dump trucks, concrete trucks, etc.) will require a minimum of 18 inches of imported granular material. For light staging areas, 12 inches of imported granular material is typically sufficient. Additional granular material, geo-grid reinforcement, or cement amendment may be recommended based on site conditions and/or loading at the time of construction. The imported granular material should be in conformance with Section 5.4.2 and have less than 5 percent material passing the U.S. Standard No. 200 Sieve. The prepared subgrade should be covered with geotextile fabric (Section 5.3.2) prior to placement of the imported granular material. The imported granular material should be placed in a single lift (up to 24 inches deep) and compacted using a smooth-drum, non-vibratory roller until well-keyed.

5.3.4 Footing Subgrade Protection

A minimum of 3 inches of imported granular material is recommended to protect fine-grained footing subgrades from foot traffic during inclement weather. The imported granular material should be in conformance with Section 5.4.2. The maximum particle size should be limited to 1 inch. The imported granular material should be placed in one lift over the prepared, undisturbed subgrade, and compacted using non-vibratory equipment until well keyed.

Surface water should not be allowed to collect in footing trenches. Trenches should be draped and/or provided with sumps to preclude water accumulation during inclement weather.

5.3.5 Cement Amendment

It is sometimes less costly to amend near-surface, moisture-sensitive, fine-grained soils with Portland cement than to remove and replace those soils with imported granular material. Successful use of soil cement amendment depends on use of correct techniques and equipment, soil moisture content, and the amount of cement added to the subgrade (mix design). The recommended percentage of cement is based on soil moisture contents at the time the work is performed. Based on our experience, 3 percent cement by weight of dry soil can generally be used when the soil moisture content does not exceed approximately 20 percent. If the soil moisture content is in the range of 25 to 35 percent, 4 to 6 percent by weight of dry soil is recommended. It is difficult to accurately predict field performance due to the variability in soil response to cement amendment. The amount of cement added to the soil may need to be adjusted based on field observations and performance.

If cement amendment is considered, we recommend additional sampling, laboratory testing, and a mix design be performed to determine the level of improvement in engineering properties (strength, stiffness) of the on-site soils when blended with Portland cement. We recommend project scheduling allow for a minimum of 4 weeks for this testing and design to be completed, prior to initiating cement amendment.

5.4 Structural Fill

The geotechnical engineer should be provided the opportunity to review all materials considered for use as structural fill (prior to placement). Samples of the proposed fill materials should be submitted to the geotechnical engineer a minimum of 5 business days prior their use on site[9]. The geotechnical engineer or their representative should be contacted to evaluate compaction of structural fill as the material is being placed. Evaluation of compaction may take the form of in-place density tests and/or proof roll tests with suitable equipment. Structural fill should be evaluated at intervals not exceeding every 2 vertical feet as the fill is being placed.

5.4.1 On-Site Soils – General Use

5.4.1.1 Lean Clay (CL)

Re-use of this soil as structural fill may be difficult because this soil is sensitive to small changes in moisture content and difficult, if not impossible, to adequately compact during wet weather. We anticipate the moisture content of this soil will be higher than the optimum moisture content for satisfactory compaction. Therefore, moisture conditioning (drying) should be expected in order to achieve adequate compaction. If used as structural fill, this soil should be free of organic matter, debris, and particles larger than 4 inches. When used as structural fill, this soil should be placed in lifts with a maximum pre-compaction thickness of about 8 inches at moisture contents within –1 and +3 percent of optimum, and compacted to not less than 92 percent of the material's maximum dry density, as determined in general accordance with ASTM D1557 (Modified Proctor).

5.4.1.2 High Plasticity Fat Clay (CH)

The recommendations presented in Section 5.4.1.1 of this report are applicable for re-using this on-site soil as structural fill, with the following provisions:

[9] Laboratory testing for moisture density relationship (Proctor) is required. Tests for gradation may be required.

- Where used as structural fill, this soil should be "capped" with a minimum of 1 foot of structural fill fitting the description of low plasticity material. Examples of low plasticity fill are presented in Section 5.4.1.1 and 5.4.1.3 of this report.
- Treating these soils with Portland cement is not recommended due to their high plasticity. Alternative treatment agent(s), such as lime, may be considered subject to review of the geotechnical engineer.

5.4.1.3 Coarse-Grained Deposits [Poorly Graded Gravel with Cobbles and Silt (GP) and Poorly Graded Sand with Cobbles (SP)]

Re-use of the on-site, relatively clean, granular soils as structural fill is feasible, provided the materials are kept clean of organics, debris, and particles larger than 4 inches in diameter. Re-use of the on-site gravels may require processing (removal) of large cobbles and, if encountered, occasional boulders. If re-used as structural fill, these materials should be prepared in general accordance with Section 5.4.2 of this report.

If the on-site materials cannot be properly moisture-conditioned and/or processed, we recommend using imported granular material for structural fill.

5.4.2 Imported Granular Structural Fill – General Use

Imported granular structural fill should consist of angular pit or quarry run rock, crushed rock, or crushed gravel that is fairly well graded between coarse and fine particle sizes. The granular fill should contain no organic matter, debris, or particles larger than 4 inches, and have less than 5 percent material passing the U.S. Standard No. 200 Sieve. For fine-grading purposes, the maximum particle size should be limited to 1½ inches. The percentage of fines can be increased to 12 percent of the material passing the U.S. Standard No. 200 Sieve if placed during dry weather, and provided the fill material is moisture-conditioned, as necessary, for proper compaction. Imported granular fill material should be compacted to not less than 95 percent of the material's maximum dry density, as determined in general accordance with ASTM D1557 (Modified Proctor). Proper moisture conditioning and the use of vibratory equipment will facilitate compaction of these materials.

Granular fill materials with high percentages of particle sizes in excess of 1½ inches are considered non-moisture-density testable materials. As an alternative to conventional density testing, compaction of these materials should be evaluated by proof roll test observation (deflection tests), where accepted by the geotechnical engineer.

5.4.3 Floor Slab Base Rock

Floor slab base rock should consist of well-graded granular material (crushed rock) containing no organic matter or debris, have a maximum particle size of ¾-inch, and have less than 5 percent material passing the U.S. Standard No. 200 Sieve. Floor slab base rock should be placed in one lift and compacted to not less than 95 percent of the material's maximum dry density as determined in general accordance with ASTM D1557 (Modified Proctor). We recommend "choking" the surface of the base rock with sand just prior to concrete placement. Choking means the voids between the largest aggregate particles are filled with sand, but does not provide a layer of sand above the base rock. Choking the base rock surface reduces the lateral restraint on the bottom of the concrete during curing. Choking the base rock also reduces punctures in vapor retarding membranes due to foot traffic where such membranes are used.

5.4.4 Trench Base Stabilization Material

If groundwater is present at the base of utility excavations, trench base stabilization material should be placed. Trench base stabilization material should consist of a minimum of 1 foot of well-graded granular material with a maximum particle size of 4 inches and less than 5 percent material passing the U.S. Standard No. 4 Sieve. The material should be free of organic matter and other deleterious material, placed in one lift (up to 24 inches thick), and compacted until well-keyed.

5.4.5 Trench Backfill Material

Trench backfill for the utility pipe base and pipe zone should consist of granular material as recommended by the utility pipe manufacturer. Trench backfill above the pipe zone should consist of well-graded granular material containing no organic matter or debris, have a maximum particle size of ¾ inch, and have less than 8 percent material passing the U.S. Standard No. 200 Sieve. As a guideline, trench backfill should be placed in maximum 12-inch-thick lifts. The earthwork contractor may elect to use alternative lift thicknesses based on their experience with specific equipment and fill material conditions during construction in order to achieve the required compaction. The following table presents recommended relative compaction percentages for utility trench backfill.

Table 2 Utility Trench Backfill Compaction Recommendations

Backfill Zone	Recommended Minimum Relative Compaction	
	Structural Areas[1,2]	Landscaping Areas
Pipe Base and Within Pipe Zone	90% ASTM D1557 or pipe manufacturer's recommendation	88% ASTM D1557 or pipe manufacturer's recommendation
Above Pipe Zone	92% ASTM D1557	90% ASTM D1557
Within 3 Feet of Design Subgrade	95% ASTM D1557	90% ASTM D1557

[1] Includes proposed buildings, pavement areas, structural fill areas, exterior hardscaping, etc.

[2] Or as specified by the local jurisdiction where located in the public right of way.

5.4.6 Controlled Low-Strength Material (CLSM)

CLSM is a self-compacting, cementitious material that is typically considered when backfilling localized areas. CLSM is sometimes referred to as "controlled density fill" or CDF. Due to its flowable characteristics, CLSM typically can be placed in restricted-access excavations where placing and compacting fill is difficult. If chosen for use at this site, we recommend the CLSM be in conformance with Section 00442 of the most recent, State of Oregon, Standard Specifications for Highway Construction. The geotechnical engineer's representative should observe placement of the CLSM and obtain samples for compression testing in accordance with ASTM D4832. As a guideline, for each day's placement, two compressive strength specimens from the same CLSM sample should be tested. The results of the two individual compressive strength tests should be averaged to obtain the reported 28-day compressive strength. If CLSM is considered for use on this site, please contact the geotechnical engineer for site-specific and application-specific recommendations.

5.5 Shallow Foundations

5.5.1 Subgrade Preparation

5.5.1.1 Design Case #1 - Expansive Soils Encountered at Design Subgrade Elevation

Satisfactory subgrade support for shallow foundations associated the proposed building can be obtained from a minimum of 12 inches of imported granular structural fill that is properly placed and compacted on the native, stiff to better, high plasticity fat clay (CH) during construction. During excavation, the subgrade soils should be kept moist, near optimum moisture content, and not allowed to dry out. If allowed to dry below optimum moisture content, to a point where surface cracking appears in the subgrade, the affected material should be over-excavated and replaced with imported granular structural fill.

The geotechnical engineer or his representative should be contacted to observe subgrade conditions prior to placement of granular backfill. If soft, loose, or otherwise unsuitable soils are encountered, they should be over-excavated as recommended by the geotechnical representative at the time of construction. The resulting over-excavation should be brought back to grade with imported granular structural fill in conformance with Section 5.4.2 of this report. The maximum particle size of over-excavation backfill should be limited to 1½ inches. All granular pads for footings should be constructed a minimum of 6 inches wider on each side of the footing for every vertical foot of over-excavation.

5.5.1.2 Design Case #2 – Non-Expansive Soils Encountered at Design Subgrade Elevation

Satisfactory subgrade support for shallow foundations can be obtained from the native, medium dense to better, coarse-grained deposits (GP, SP), the native, medium stiff to better, lean clay (CL), or new structural fill that is properly placed and compacted on these materials during construction. The geotechnical engineer or their representative should be contacted to observe subgrade conditions prior to placement of forms, reinforcement steel, or granular backfill (if required). If soft, loose, or otherwise unsuitable soils are encountered, they should be over-excavated as recommended by the geotechnical representative at the time of construction. The resulting over-excavation should be brought back to grade with imported granular structural fill in conformance with Section 5.4.2. The maximum particle size of over-excavation backfill should be limited to 1½ inches. All granular pads for footings should be constructed a minimum of 6 inches wider on each side of the footing for every vertical foot of over-excavation.

5.5.2 Minimum Footing Width & Embedment

Minimum footing widths should be in conformance with the current OSSC. As a guideline, we recommend individual spread footings have a minimum width of 24 inches. For two- and three-story, light-duty construction, we recommend continuous wall footings have minimum widths of 15 and 18 inches, respectively. All footings should be founded at least 18 inches below the lowest, permanent adjacent grade to develop lateral capacity and for frost protection.

5.5.3 Bearing Pressure & Settlement

Footings founded as recommended above should be proportioned for a maximum allowable soil bearing pressure of 2,500 pounds per square foot (psf). This bearing pressure is a net bearing pressure, applies to the total of dead and long-term live loads, and may be increased by one-third when considering seismic or wind loads. For foundations founded as recommended above, total settlement of foundations is anticipated to be less than 1 inch. Differential settlements between adjacent columns and/or bearing walls should not

exceed ½-inch. If an increased allowable soil bearing pressure is desired, the geotechnical engineer should be consulted.

5.5.4 Lateral Capacity

A maximum passive (equivalent fluid) earth pressure of 150 pounds per cubic foot (pcf) is recommended for design of footings cast neat into excavations in suitable native soil or confined by imported granular structural fill that is properly placed and compacted during construction. The recommended earth pressure was computed using a factor of safety of 1½, which is appropriate due to the amount of movement required to develop full passive resistance. In order to develop the above capacity, the following should be understood:

1. Concrete must be poured neat in excavations or the foundations must be backfilled with imported granular structural fill,
2. The adjacent grade must be level,
3. The static ground water level must remain below the base of the footings throughout the year.
4. Adjacent floor slabs, pavements, or the upper 12-inch-depth of adjacent, unpaved areas should not be considered when calculating passive resistance.

An ultimate coefficient of friction equal to 0.35 may be used when calculating resistance to sliding for footings founded on the native soils described above. An ultimate coefficient of friction equal to 0.45 may be used when calculating resistance to sliding for footings founded on a minimum of 6 inches of imported granular structural fill (crushed rock) that is properly placed and compacted during construction.

5.5.5 Subsurface Drainage

Recognizing the presence of predominantly near-surface fine-grained soils at this site, we recommend placing foundation drains at the exterior, base elevations of perimeter continuous wall footings. Foundation drains should consist of a minimum 4-inch diameter, perforated, PVC drainpipe wrapped with a non-woven geotextile filter fabric. The drains should be backfilled with a minimum of 2 cubic feet of open graded drain rock per lineal foot of pipe. The drain rock should also be encased in a geotextile fabric in order to provide separation from the surrounding fine-grained soils. Foundation drains should be positively sloped and should outlet to a suitable discharge point. The geotechnical engineer or their representative should observe the drains prior to backfilling. Roof drains should not be tied into foundation drains.

5.6 Floor Slabs

5.6.1 Subgrade Preparation

5.6.1.1 Design Case #1 - Expansive Soils Encountered at Design Subgrade Elevation

Satisfactory subgrade support for floor slabs constructed on grade, supporting up to 150 psf area loading, can be obtained from a minimum of 12 inches of imported granular structural fill (granular sub-base) that is properly placed and compacted on the native, stiff to better, high plasticity fat clay (CH) during construction. During excavation, the subgrade soils should be kept moist, near optimum moisture content, and not allowed to dry out. If allowed to dry below optimum moisture content, to a point where surface cracking appears in the subgrade, the affected material should be over-excavated and replaced with imported granular structural fill.

The geotechnical engineer or his representative should observe floor slab subgrade soils to evaluate surface consistencies. If soft, loose, or otherwise unsuitable soils are encountered, they should be over-excavated as recommended by the geotechnical representative at the time of construction. The resulting over-excavation should be brought back to grade with imported granular structural fill as described in Section 5.4.2 of this report.

5.6.1.2 Design Case #2 – Non-Expansive Soils Encountered at Design Subgrade Elevation

Satisfactory subgrade support for slabs constructed on grade, supporting up to 150 psf area loading, can be obtained from the native, medium dense to better, coarse-grained deposits (GP, SM, SP), the native, medium stiff to better, low plasticity soils (CL, ML), or new structural fill that is properly placed and compacted on these materials during construction. The geotechnical engineer or their representative should observe floor slab subgrade soils to evaluate surface consistencies. If soft, loose, or otherwise unsuitable soils are encountered, they should be over-excavated as recommended by the geotechnical representative at the time of construction. The resulting over-excavation should be brought back to grade with imported granular structural fill as described in Section 5.4.2 of this report.

5.6.2 Crushed Rock Base

Concrete floor slabs should be supported on a minimum 6-inch-thick layer of crushed rock (base rock) in conformance with the recommendations presented in Section 5.4.3 above. If a gas-permeable base rock is considered, the geotechnical engineer should be contacted to provide supplemental recommendations.

5.6.3 Design Considerations

For floor slabs constructed as recommended above, an effective modulus of subgrade reaction of 150 pounds per cubic inch (pci) is recommended for the design of the floor slab. A higher effective modulus of subgrade reaction can be obtained by increasing the base rock thickness. Please contact the geotechnical engineer for additional recommendations if a higher modulus is desired. Floor slabs constructed as recommended will likely settle less than ½-inch. For general floor slab construction, slabs should be jointed around columns and walls to permit slabs and foundations to settle differentially.

5.6.4 Subgrade Moisture Considerations

Liquid moisture and moisture vapor should be expected at the subgrade surface. The recommended crushed rock base is anticipated to provide protection against liquid moisture. Where moisture vapor emission through the slab must be minimized, e.g. impervious floor coverings, storage of moisture sensitive materials directly on the slab surface, etc., a vapor retarding membrane or vapor barrier below the slab should be considered. Factors such as cost, special considerations for construction, floor coverings, and end use suggest that the decision regarding a vapor retarding membrane or vapor barrier be made by the architect and owner.

If a vapor retarder or vapor barrier is placed below the slab, its location should be based on current American Concrete Institute (ACI) guidelines, ACI 302 Guide for Concrete Floor and Slab Construction. In some cases, this indicates placement of concrete directly on the vapor retarder or barrier. Please note that the placement of concrete directly on impervious membranes increases the risk of plastic shrinkage cracking and slab curling in the concrete. Construction practices to reduce or eliminate such risk, as described in ACI 302, should be employed during concrete placement.

5.7 Pavements

5.7.1 Subgrade Preparation

5.7.1.1 Design Case #1 - Expansive Soils Encountered at Design Subgrade Elevation

Satisfactory subgrade support for pavements can be obtained from a minimum of 12 inches of imported granular structural fill (granular sub-base) that is properly placed and compacted on the native, stiff to better, high plasticity fat clay (CH) during construction. During excavation, the subgrade soils should be kept moist, near optimum moisture content, and not allowed to dry out. If allowed to dry below optimum moisture content, to a point where surface cracking appears in the subgrade, the affected material should be over-excavated and replaced with imported granular structural fill. Pavement subgrade preparation should be in conformance with Section 5.1.5 of this report. Pavement subgrade surfaces should be crowned (or sloped) for proper drainage in accordance with specifications provided by the project civil engineer.

5.7.1.2 Design Case #2 – Non-Expansive Soils Encountered at Design Subgrade Elevation

Satisfactory subgrade support for pavements can be obtained from the native, medium dense to better, coarse-grained deposits (GP, SP), the native, medium stiff to better, lean clay (CL), or new structural fill that is properly placed and compacted on these materials during construction. Pavement subgrade preparation should be in conformance with Section 5.1.5 of this report. Pavement subgrade surfaces should be crowned (or sloped) for proper drainage in accordance with specifications provided by the project civil engineer.

5.7.2 Input Parameters

Our asphalt concrete (AC) pavement section designs were based on the American Association of State Highway and Transportation Officials (AASHTO) 1993 "Design of Pavement Structures" manual and the 2011 ODOT Pavement Design Guide. A number of design assumptions and variables were required in order to develop design sections for pavements proposed at the site. The following table presents the input parameters assumed for the design:

Table 3 Input Parameters Used in AC Pavement Design

Global Input			Condition Input			
Parameter	**Value**	**Note**	**Parameter**		**Value**	**Note**
Pavement Design Life (years)	20	---	Resilient Modulus – Subgrade (ksi)	Subgrade (Fine-Grained Soils)	3.0	2
Growth Rate (%)	0	---		Aggregate Base	20	1
Initial & Terminal Serviceability	4.2 | 2.5	1	Structural Coefficient - Asphalt		0.42	1
Standard Deviation	0.49	1	Structural Coefficient – Aggregate Base		0.10	1
Reliability (%)	85	1	Vehicle Traffic (See Note 3)	APAO Level I (Very Light)	Less than 10,000	
Drainage Coefficient – All Layers	1.0	1		APAO Level II (Light)	Less than 50,000	

Note 1 – Value based on guidelines presented in 2011 ODOT Pavement Design Manual.
Note 2 – Values based on experience with similar soils in their in-situ (unimproved) condtion.
Note 3 – ESAL = Total 18-Kip equivalent single axle load. Traffic levels taken from Table 3.1 of APAO manual. If actual traffic levels will be above those identified above, the geotechnical engineer should be consulted.

5.7.3 Recommended Minimum Sections

5.7.3.1 Design Case #1: Expansive Soils Encountered at Design Subgrade Elevation

The following table presents the minimum AC pavement sections for various traffic loads indicated in the preceding table, based on the referenced AASHTO procedures.

Table 4 Recommended Minimum Asphalt Pavement Sections (Expansive Soil Areas)

Material	APAO Traffic Loading	
	Level I (Passenger Car Traffic Only)	Level II (Entrance & Service Drive Lanes)
Asphalt Pavement (inches)	3	3½
Crushed Aggregate Base (inches)	4	4
Granular Sub-Base (inches)	12	12
Geotextile Separation Fabric	Placed in conformance with Section 5.3.2 of this report.	
Subgrade Soils	Prepared in conformance with Section 5.7.1.1 of this report.	

5.7.3.2 Design Case #2 – Non-Expansive Soils Encountered at Design Subgrade Elevation

The following table presents the minimum AC pavement sections for various traffic loads indicated in the preceding table, based on the referenced AASHTO procedures.

Table 5 Recommended Minimum Asphalt Pavement Sections (Non-Expansive Soil Areas)

Material	APAO Traffic Loading	
	Level I (Passenger Car Traffic Only)	Level II (Entrance & Service Drive Lanes)
Asphalt Pavement (inches)	3	3½
Crushed Aggregate Base (inches)[1]	8	8
Subgrade Soils	Prepared in conformance with Section 5.7.1.2 of this report.	

[1] Thickness shown assumes dry weather construction. A granular sub-base section and/or a geotextile separation fabric may be required in wet conditions in order to support construction traffic and protect the subgrade. Refer to Section 5.3 for additional discussion.

5.7.4 AC Pavement Materials

We recommend pavement aggregate sub-base consist of durable, relatively well-graded, granular fill in conformance with Section 00641.10.b of the most recent State of Oregon, Standard Specifications for Highway Construction (ODOT SSC), with the following considerations. We recommend the material have a maximum particle size of 4 inches and have less than 5 percent material passing the U.S. Standard No. 200 Sieve. Aggregate sub-base should be compacted to not less than 95 percent of the material's maximum dry density as determined in general accordance with ASTM D1557 (Modified Proctor), or visual equivalent as identified by deflection (proof roll) testing.

We recommend pavement aggregate base consist of dense-graded aggregate in conformance with Section 02630.10 of the most recent ODOT SSC, with the following additional considerations. We recommend the material consist of crushed rock or gravel, have a maximum particle size of 1½ inches, and have less than 5 percent material passing the U.S. Standard No. 200 Sieve. Aggregate base should be compacted to not less than 95 percent of the material's maximum dry density as determined in general accordance with ASTM D1557 (Modified Proctor).

We recommend asphalt pavement consist of Level 2, ½-inch, dense-graded HMAC in conformance with the most recent ODOT SSC. Asphalt pavement should be compacted to at least 91 percent of the material's theoretical maximum density as determined in general accordance with ASTM D2041 (Rice Specific Gravity).

5.8 Additional Drainage Considerations

Subsurface drains should be connected to the nearest storm drain or other suitable discharge point. Paved surfaces and grading near or adjacent to the building should be sloped to drain away from the building. Surface water from paved surfaces and open spaces should be collected and routed to a suitable discharge point. Surface water should not be directed into foundation drains or onto site slopes.

6.0 RECOMMENDED ADDITIONAL SERVICES

Satisfactory earthwork, foundation, floor slab, and pavement performance depends to a large degree on the quality of construction. Sufficient observation of the contractor's activities is a key part of determining that the work is completed in accordance with the construction drawings and specifications. Subsurface conditions observed during construction should be compared with those encountered during subsurface explorations, and recognition of changed conditions often requires experience. We recommend that qualified personnel visit the site with sufficient frequency to detect whether subsurface conditions change significantly from those observed to date and anticipated in this report. We recommend geotechnical engineer's representative attend a pre-construction meeting coordinated by the contractor and/or developer. The project geotechnical engineer's representative should provide observations and/or testing of at least the following earthwork elements during construction:

- Site Stripping
- Subgrade Preparation for Shallow Foundations, Structural Fills, Floor Slabs, and Pavements
- Compaction of Structural Fill and Utility Trench Backfill
- Compaction of Base Rock for Floor Slabs and Pavements
- Compaction of Asphalt Concrete for Pavements

It is imperative that the owner and/or contractor request earthwork observations and testing at a frequency sufficient to allow the geotechnical engineer to provide a final letter of compliance for the earthwork activities.

7.0 LIMITATIONS

We have prepared this report for use by the owner/developer and other members of the design and construction team for the proposed development. The opinions and recommendations contained within this report are forwarded to assist in the planning and design process and are not intended to be, nor should they be construed as, a warranty of subsurface conditions.

We have made observations based on our explorations that indicate the soil conditions at only those specific locations and only to the depths penetrated. These observations do not necessarily reflect soil types, strata thickness, or water level variations that may exist between or away from our explorations. If subsurface conditions vary from those encountered in our site explorations, CGT should be alerted to the change in conditions so that we may provide additional geotechnical recommendations, if necessary. Observation by experienced geotechnical personnel should be considered an integral part of the construction process.

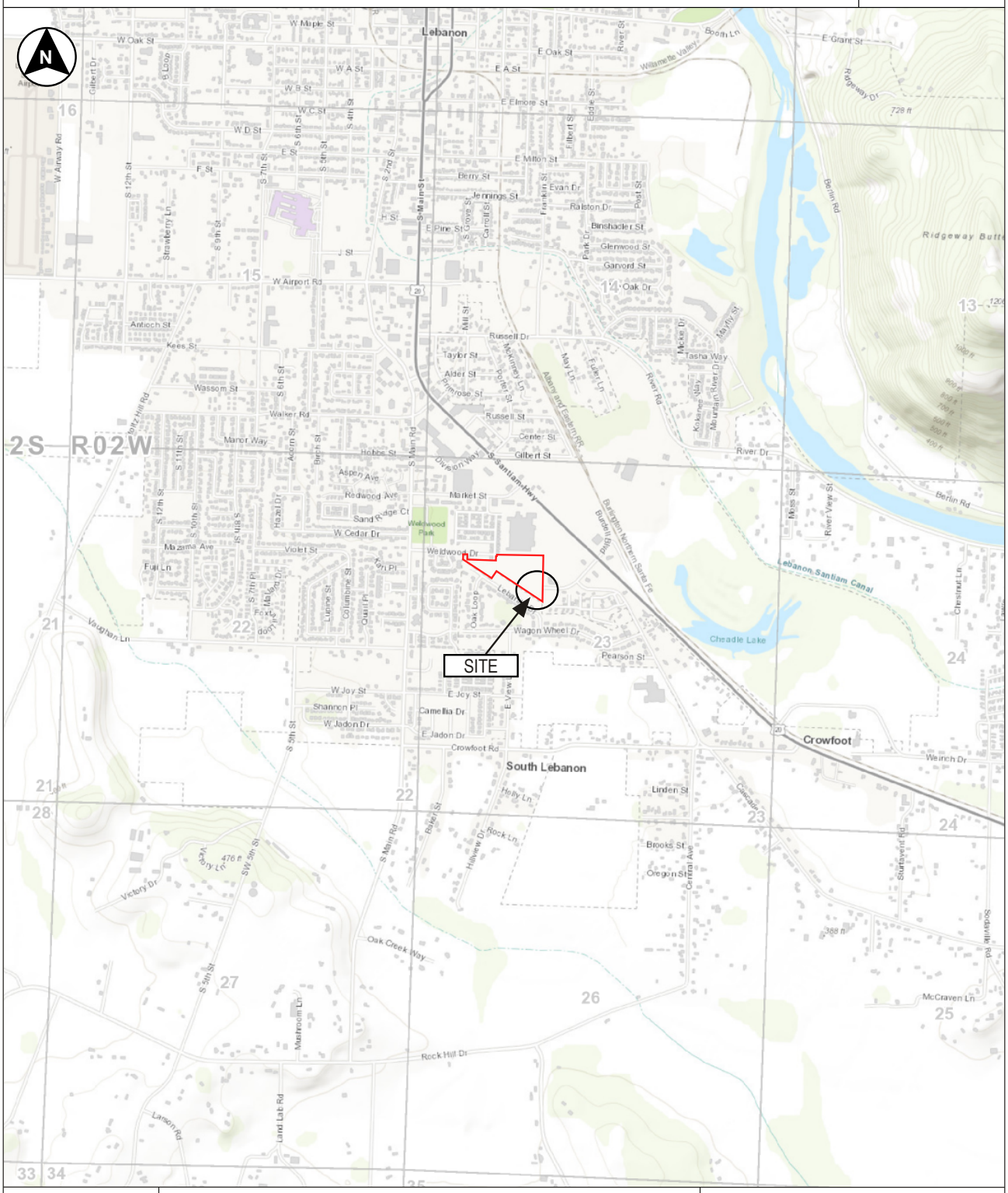
The owner/developer is responsible for ensuring that the project designers and contractors implement our recommendations. When the design has been finalized, prior to releasing bid packets to contractors, we recommend that the design drawings and specifications be reviewed by our firm to see that our recommendations have been interpreted and implemented as intended. If design changes are made, we request that we be retained to review our conclusions and recommendations and to provide a written modification or verification. Design review and construction phase testing and observation services are beyond the scope of our current assignment, but will be provided for an additional fee.

The scope of our services does not include services related to construction safety precautions, and our recommendations are not intended to direct the contractor's methods, techniques, sequences, or procedures, except as specifically described in our report for consideration in design.

Geotechnical engineering and the geologic sciences are characterized by a degree of uncertainty. Professional judgments presented in this report are based on our understanding of the proposed construction, familiarity with similar projects in the area, and on general experience. Within the limitations of scope, schedule, and budget, our services have been executed in accordance with the generally accepted practices in this area at the time this report was prepared; no warranty, expressed or implied, is made. This report is subject to review and should not be relied upon after a period of three years.

COLONIA PAZ 1 - LEBANON, OREGON
Project Number G2005323

FIGURE 1
Site Location



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Drafted by: AET

Map created with ArcGIS Pro 2.2.4, copyright 2018 Esri, Inc.
Township 12 South, Range 2 West, Section 23, Willamette Meridian

Latitude: 44.514302° North
Longitude: 122.899986° West

1 Inch = 2,000 feet
0 2000 4000

COLONIA PAZ 1 - LEBANON, OREGON
CGT Project Number G2005323

FIGURE 2

Site Plan

CARLSON CGT GEOTECHNICAL 503-601-8250

Drafted by: AET/bmw

LEGEND

TP-1 2018 Test Pit. Depth to groundwater, if encountered, indicated in ( ).

TP-3 2018 Test Pit with near-surface expansive soil. Depth to groundwater, if encountered, indicated in ( ).

1 Orientation of site photographs shown on Figure 3

1 Inch = 60 Feet

0 60 120

NOTES: Site layout obtained from Sheet C3.0 of provided civil plan set, prepared by Ashley Vance Engineering, and dated July 13, 2020. All test pit and photograph locations are approximate.

Photograph 1

Photograph 2

Photograph 3

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See Figure 2 for approximate photograph locations and directions. Photographs were taken on July 21, 2020.

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Appendix A: Subsurface Investigation and Laboratory Testing

Colonia Paz 1
Weldwood Drive and Cascade Drive
Lebanon, Oregon

CGT Project Number G2005323

July 22, 2020

Prepared For:

Ms. Maria Guerra
Farmworker Housing Development Corporation
1274 A North Fifth Street
Woodburn, Oregon 97071

Prepared by
Carlson Geotechnical

Exploration Key.....Figure A1
Soil Classification.....Figure A2
Test Pit Logs.....Figures A3 – A7

Office: 18270 SW Boones Ferry Road, Suite 6, Durham, Oregon 97224
Mailing: P.O. Box 230997, Tigard, Oregon 97281

A.1.0 SUBSURFACE INVESTIGATION

Our field investigation for the FHDC Housing Development project consisted of twenty-four test pits completed in December 2018. As shown on the Site Plan, five of the test pits (TP-6, TP-7, TP-8, TP-9, and TP-12) were excavated within the current development area. The exploration locations shown therein were originally determined in 2018 based on measurements from existing site features (buildings, etc.) and have been approximated onto the recently provided site layout plan. Surface elevations indicated on the logs were estimated based on the topographic contours as shown on the original Site Plan attached to the 2019 geotechnical report and should be considered approximate. A key for symbols and in-situ test methods shown on the logs is attached as Figure A1. The attached figures detail the exploration methods (Figure A1), soil classification criteria (Figure A2), and present detailed logs of the explorations (Figures A3 through A7).

A.1.1 Test Pits

CGT observed the excavation of the referenced eight test pits (TP-6, TP-7, TP-8, TP-9, and TP-12) at the site on December 12 and 13, 2018, to depths of about 6 to 9¾ feet bgs. The test pits were excavated using a Bobcat 337 mini-excavator provided and operated by our subcontractor, Douglas Shepherd Dirt Work of Keizer, Oregon. The test pits were loosely backfilled with the excavated materials upon completion.

A.1.2 In-Situ Testing - Pocket Penetrometer Tests

Pocket penetrometer readings were generally taken at approximate ½-foot intervals in the upper four feet of each test pit. The pocket penetrometer is a hand-held instrument that provides an approximation of the unconfined compressive strength of cohesive, fine-grained soils. The correlation between pocket penetrometer readings and the consistency of cohesive, fine-grained soils is provided on the attached Figure A2. Since some of the on-site soils were coarse-grained, those pocket penetrometer readings are for informational purposes only, and were not used in our analyses.

A.1.3 Material Classification & Sampling

Representative disturbed (grab) samples were obtained at select intervals within the test pits. A qualified member of CGT's geological staff collected the samples and logged the soils in general accordance with the Visual-Manual Procedure (ASTM D2488). An explanation of this classification system is attached as Figure A2. The grab samples were stored in sealable plastic bags and transported to our soils laboratory for further examination and testing. Our geotechnical staff visually examined all samples in order to refine the initial field classifications.

A.1.4 Subsurface Conditions

Subsurface conditions are summarized in Section 2.3 of the geotechnical report. Detailed logs of the test pits are presented on the attached test pit logs, Figures A3 through A7.

A.2.0 LABORATORY TESTING

Laboratory testing was performed on samples collected in the field to refine our initial field classifications and determine in-situ parameters. Laboratory testing conducted on samples collected from test pits within the current development area included five moisture content determinations (ASTM D2216), one percentage passing the U.S. Standard No. 200 Sieve test (ASTM D1140) and one Atterberg limits (plasticity) test (ASTM D4318). Results of the laboratory tests are shown on the exploration logs.

COLONIA PAZ 1 - LEBANON, OREGON Project Number G2005323	FIGURE A1 Exploration Key

PL — MC — LL	Atterberg limits (plasticity) test results (ASTM D4318): PL = Plastic Limit, LL = Liquid Limit, and MC= Moisture Content (ASTM D2216)
☐ FINES CONTENT (%)	Percentage passing the U.S. Standard No. 200 Sieve (ASTM D1140)

SAMPLING

GRAB	Grab sample
BULK	Bulk sample
SPT	**Standard Penetration Test** (SPT) consists of driving a 2-inch, outside-diameter, split-spoon sampler into the undisturbed formation with repeated blows of a 140-pound, hammer falling a vertical distance of 30 inches (ASTM D1586). The number of blows (N-value) required to drive the sampler the last 12 inches of an 18-inch sample interval is used to characterize the soil consistency or relative density. The drill rig was equipped with an cat-head or automatic hammer to conduct the SPTs. The observed N-values, hammer efficiency, and N_{60} are noted on the boring logs.
MC	**Modified California** sampling consists of 3-inch, outside-diameter, split-spoon sampler (ASTM G3550) driven similarly to the SPT sampling method described above. A sampler diameter correction factor of 0.44 is applied to calculate the equivalent SPT N_{60} value per Lacroix and Horn, 1973.
CORE	**Rock Coring** interval
SH	**Shelby Tube** is a 3-inch, inner-diameter, thin-walled, steel tube push sampler (ASTM D1587) used to collect relatively undisturbed samples of fine-grained soils.
WDCP	**Wildcat Dynamic Cone Penetrometer** (WDCP) test consists of driving 1.1-inch diameter, steel rods with a 1.4-inch diameter, cone tip into the ground using a 35-pound drop hammer with a 15-inch free-fall height. The number of blows required to drive the steel rods is recorded for each 10 centimeters (3.94 inches) of penetration. The blow count for each interval is then converted to the corresponding SPT N_{60} values.
DCP	**Dynamic Cone Penetrometer** (DCP) test consists of driving a 20-millimeter diameter, hardened steel cone on 16-millimeter diameter steel rods into the ground using a 10-kilogram drop hammer with a 460-millimeter free-fall height. The depth of penetration in millimeters is recorded for each drop of the hammer.
POCKET PEN. (tsf)	**Pocket Penetrometer** test is a hand-held instrument that provides an approximation of the unconfined compressive strength in tons per square foot (tsf) of cohesive, fine-grained soils.

CONTACTS

	Observed (measured) contact between soil or rock units.
	Inferred (approximate) contact between soil or rock units.
	Transitional (gradational) contact between soil or rock units.

ADDITIONAL NOTATIONS

Italics	Notes drilling action or digging effort
{ Braces }	Interpretation of material origin/geologic formation (e.g. { Base Rock } or { Columbia River Basalt })

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All measurements are approximate.

COLONIA PAZ 1 - LEBANON, OREGON
Project Number G2005323

FIGURE A2
Soil Classification

Classification of Terms and Content

NAME: Group Name and Symbol
Relative Density or Consistency
Color
Moisture Content
Plasticity
Other Constituents
Other: Grain Shape, Approximate Gradation
Organics, Cement, Structure, Odor, etc.
Geologic Name or Formation

Grain Size

		U.S. Standard Sieve
Fines		<#200 (0.075 mm)
Sand	Fine	#200 - #40 (0.425 mm)
	Medium	#40 - #10 (2 mm)
	Coarse	#10 - #4 (4.75 mm)
Gravel	Fine	#4 - 0.75 inch
	Coarse	0.75 inch - 3 inches
Cobbles		3 to 12 inches
Boulders		> 12 inches

Coarse-Grained (Granular) Soils

Relative Density

SPT N_{60}-Value	Density
0 - 4	Very Loose
4 - 10	Loose
10 - 30	Medium Dense
30 - 50	Dense
>50	Very Dense

Minor Constituents

Percent by Volume	Descriptor	Example
0 - 5%	"Trace" as part of soil description	"trace silt"
5 - 15%	"With" as part of group name	"**POORLY GRADED SAND WITH SILT**"
15 - 49%	Modifier to group name	"**SILTY SAND**"

Fine-Grained (Cohesive) Soils

SPT N_{60}-Value	Torvane tsf Shear Strength	Pocket Pen tsf Unconfined	Consistency	Manual Penetration Test
<2	<0.13	<0.25	Very Soft	Thumb penetrates more than 1 inch
2 - 4	0.13 - 0.25	0.25 - 0.50	Soft	Thumb penetrates about 1 inch
4 - 8	0.25 - 0.50	0.50 - 1.00	Medium Stiff	Thumb penetrates about ¼ inch
8 - 15	0.50 - 1.00	1.00 - 2.00	Stiff	Thumb penetrates less than ¼ inch
15 - 30	1.00 - 2.00	2.00 - 4.00	Very Stiff	Readily indented by thumbnail
>30	>2.00	>4.00	Hard	Difficult to indent by thumbnail

Minor Constituents

Percent by Volume	Descriptor	Example
0 - 5%	"Trace" as part of soil description	"trace fine-grained sand"
5 - 15%	"Some" as part of soil description	"some fine-grained sand"
15 - 30%	"With" as part of group name	"**SILT WITH SAND**"
30 - 49%	Modifier to group name	"**SANDY SILT**"

Moisture Content

Dry: Absence of moisture, dusty, dry to the touch

Moist: Leaves moisture on hand

Wet: Visible free water, likely from below water table

	Plasticity	Dry Strength	Dilatancy	Toughness
ML	Non to Low	Non to Low	Slow to Rapid	Low, can't roll
CL	Low to Medium	Medium to High	None to Slow	Medium
MH	Medium to High	Low to Medium	None to Slow	Low to Medium
CH	Medium to High	High to Very High	None	High

Structure

Stratified: Alternating layers of material or color >6 mm thick

Laminated: Alternating layers < 6 mm thick

Fissured: Breaks along definite fracture planes

Slickensided: Striated, polished, or glossy fracture planes

Blocky: Cohesive soil that can be broken down into small angular lumps which resist further breakdown

Lenses: Has small pockets of different soils, note thickness

Homogeneous: Same color and appearance throughout

Visual-Manual Classification

Major Divisions			Group Symbols	Typical Names
Coarse Grained Soils: More than 50% retained on No. 200 sieve	Gravels: 50% or more *retained* on the No. 4 sieve	Clean Gravels	GW	Well-graded gravels and gravel/sand mixtures, little or no fines
			GP	Poorly-graded gravels and gravel/sand mixtures, little or no fines
		Gravels with Fines	GM	Silty gravels, gravel/sand/silt mixtures
			GC	Clayey gravels, gravel/sand/clay mixtures
	Sands: More than 50% *passing* the No. 4 sieve	Clean Sands	SW	Well-graded sands and gravelly sands, little or no fines
			SP	Poorly-graded sands and gravelly sands, little or no fines
		Sands with Fines	SM	Silty sands, sand/silt mixtures
			SC	Clayey sands, sand/clay mixtures
Fine-Grained Soils: 50% or more Passes No. 200 Sieve	Silt and Clays Low Plasticity Fines		ML	Inorganic silts, rock flour, clayey silts
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean clays
			OL	Organic soil of low plasticity
	Silt and Clays High Plasticity Fines		MH	Inorganic silts, clayey silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic soil of medium to high plasticity
Highly Organic Soils			PT	Peat, muck, and other highly organic soils

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References:
ASTM D2487 Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)
Terzaghi, K., and Peck, R.B., 1948, Soil Mechanics in Engineering Practice, John Wiley & Sons.

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FIGURE A3

Test Pit TP-06

CLIENT Farmworker Housing Development Corporation
PROJECT NAME FHDC Lebanon Housing Project
PROJECT NUMBER G2005323
PROJECT LOCATION Tax Lot 1701 Weldwood Drive, Lebanon, Oregon
DATE STARTED 12/12/18 **GROUND ELEVATION** 364 ft
ELEVATION DATUM NAVD88 - See Figure 2
WEATHER Clear, 50° F **SURFACE** Grass
LOGGED BY MMS **REVIEWED BY** BMW
EXCAVATION CONTRACTOR Douglas Shepherd Dirt Works
SEEPAGE 5.0 ft / El. 359.0 ft
EQUIPMENT Bobcat 337
GROUNDWATER DURING DRILLING 5.5 ft / El. 358.5 ft
EXCAVATION METHOD 12-inch toothed/24-inch smooth edge
GROUNDWATER 2 HOURS AFTER EXCAVATION 8.5 ft / El. 355.5 ft

ELEVATION (ft)	GROUP SYMBOL	MATERIAL DESCRIPTION	DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	POCKET PEN. (tsf)
	OL	**ORGANIC SOIL:** Dark brown, moist, medium plasticity, abundant rootlets.	0			2.0
362	CH	**FAT CLAY:** Stiff to very stiff, brown with light brown mottling, moist, high plasticity, trace subrounded to subangular gravel up to ¾ inch in diameter, trace rootlets.	2	GRAB 1	100	1.75 1.75 2.25 1.75
360 358 356	GP	**POORLY GRADED GRAVEL WITH COBBLES AND SILT:** *Dense to very dense*, brown, moist, subrounded to rounded gravel up to 3 inches in diameter, subrounded to rounded cobbles up to 5 inches in diameter, trace medium- to coarse-grained sand, low plasticity fines.	4 6 8	GRAB 2	100	
354 352		• Test pit terminated at 9½ feet bgs. • Groundwater encountered at 5 feet bgs with some caving. • Test pit loosely backfilled with excavated material.				

GROUNDWATER: ≈ (seepage) ▽ (during drilling) ▼ (2 hours after excavation)

▲ WDCP N_{60} VALUE ▲ — PL ⊢●⊣ LL, MC

☐ FINES CONTENT (%) ☐ — 0 20 40 60 80 100

WDCP N_{60} VALUE: 29

CGT EXPLORATION WITH WDCP TP LOGS.GPJ 7/22/20 DRAFTED BY: ALS

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FIGURE A4

Test Pit TP-07

CLIENT Farmworker Housing Development Corporation
PROJECT NAME FHDC Lebanon Housing Project
PROJECT NUMBER G2005323
PROJECT LOCATION Tax Lot 1701 Weldwood Drive, Lebanon, Oregon
DATE STARTED 12/12/18 **GROUND ELEVATION** 365 ft
ELEVATION DATUM NAVD88 - See Figure 2
WEATHER Clear, 50° F **SURFACE** Grass
LOGGED BY MMS **REVIEWED BY** BMW
EXCAVATION CONTRACTOR Douglas Shepherd Dirt Works
SEEPAGE 7.3 ft / El. 357.8 ft
EQUIPMENT Bobcat 337
GROUNDWATER DURING DRILLING 8.0 ft / El. 357.0 ft
EXCAVATION METHOD 12-inch toothed/24-inch smooth edge
GROUNDWATER AFTER EXCAVATION ---

ELEVATION (ft)	GROUP SYMBOL	MATERIAL DESCRIPTION	DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	POCKET PEN. (tsf)
364	OL	**ORGANIC SOIL:** Dark brown, moist, medium plasticity, abundant rootlets.	0			3.25
						3.25
						1.25
	CH	**FAT CLAY:** Stiff to hard, brown, moist, high plasticity, trace subrounded to subangular gravel up to ¾ inch in diameter, some rootlets.	2			2.0
362		Brown with gray and orange mottling, trace rootlets and root casts at about 2½ bgs.				1.25
						4.25
			4	GRAB 1	100	2.75
360						
	GP	**POORLY GRADED GRAVEL WITH COBBLES AND SILT:** *Dense to very dense*, brown, moist, subrounded to rounded gravel up to 3 inches in diameter, subrounded to rounded cobbles up to 5 inches in diameter, trace medium- to coarse-grained sand, low plasticity fines.	6			
358						
			8			
356				GRAB 2	100	
354		• Test pit terminated at 9¾ feet bgs. • Groundwater encountered at 8 feet bgs with some caving. • Test pit loosely backfilled with excavated material.				

GROUNDWATER: ≈ SEEPAGE; ▽ GROUNDWATER

▲ WDCP N_{60} VALUE ▲ (PL — MC — LL)

☐ FINES CONTENT (%) ☐ (0, 20, 40, 60, 80, 100)

WDCP N_{60} VALUE: 30, 30, 62 (GRAB 1); 8 (GRAB 2)

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FIGURE A5

Test Pit TP-08

CLIENT Farmworker Housing Development Corporation
PROJECT NAME FHDC Lebanon Housing Project
PROJECT NUMBER G2005323
PROJECT LOCATION Tax Lot 1701 Weldwood Drive, Lebanon, Oregon
DATE STARTED 12/12/18 **GROUND ELEVATION** 365 ft
ELEVATION DATUM NAVD88 - See Figure 2
WEATHER Clear, 50° F **SURFACE** Grass
LOGGED BY MMS **REVIEWED BY** BMW
EXCAVATION CONTRACTOR Douglas Shepherd Dirt Works
SEEPAGE ---
EQUIPMENT Bobcat 337
GROUNDWATER DURING DRILLING ---
EXCAVATION METHOD 12-inch toothed/24-inch smooth edge
GROUNDWATER AFTER EXCAVATION ---

ELEVATION (ft)	GROUP SYMBOL	MATERIAL DESCRIPTION	DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	POCKET PEN. (tsf)
	OL	**ORGANIC SOIL:** Dark brown, moist, medium plasticity, abundant rootlets.	0			4.25
364				GRAB 1	100	3.75
	CH	**FAT CLAY:** Very stiff to hard, brown, moist, high plasticity, trace subrounded to subangular gravel up to 3 inches in diameter, trace rootlets.				4.25
			2			2.75
362						2.75
	GP	**POORLY GRADED GRAVEL WITH COBBLES AND SILT:** *Dense to very dense*, brown, moist, subrounded to rounded gravel up to 3 inches in diameter, subrounded to rounded cobbles up to 5 inches in diameter, trace medium- to coarse-grained sand, low plasticity fines.	4			
360				GRAB 2	100	
			6			
358		• Test pit terminated at 6 feet bgs. • No groundwater encountered. • Test pit loosely backfilled with excavated material.				
356						

GROUNDWATER | GRAPHIC LOG | WDCP N_{60} VALUE | DRY UNIT WT. (pcf)

▲ WDCP N_{60} VALUE ▲
PL — MC — LL
☐ FINES CONTENT (%) ☐
0 20 40 60 80 100

CGT EXPLORATION WITH WDCP TP LOGS.GPJ 7/22/20 DRAFTED BY: ALS

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FIGURE A6

Test Pit TP-09

CLIENT Farmworker Housing Development Corporation
PROJECT NAME FHDC Lebanon Housing Project
PROJECT NUMBER G2005323
PROJECT LOCATION Tax Lot 1701 Weldwood Drive, Lebanon, Oregon
DATE STARTED 12/12/18 **GROUND ELEVATION** 364 ft
ELEVATION DATUM NAVD88 - See Figure 2
WEATHER Clear, 50° F **SURFACE** Grass
LOGGED BY MMS **REVIEWED BY** BMW
EXCAVATION CONTRACTOR Douglas Shepherd Dirt Works
SEEPAGE ---
EQUIPMENT Bobcat 337
GROUNDWATER DURING DRILLING 5.0 ft / El. 359.0 ft
EXCAVATION METHOD 12-inch toothed/24-inch smooth edge
GROUNDWATER AFTER EXCAVATION ---

ELEVATION (ft)	GROUP SYMBOL	MATERIAL DESCRIPTION	DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	POCKET PEN. (tsf)
	OL	**ORGANIC SOIL:** Dark brown, moist, medium plasticity, abundant rootlets.	0			1.25
	CH	**GRAVELLY SANDY FAT CLAY:** Stiff to very stiff, brown, moist, high plasticity, subrounded to subangular gravel up to ¾ inch in diameter, trace rootlets.				2.0
362			2	GRAB 1	100	2.25
	GP	**POORLY GRADED GRAVEL WITH COBBLES AND SILT:** *Dense to very dense,* brown to gray-brown, moist, subrounded to rounded gravel up to 3 inches in diameter, subrounded to rounded cobbles up to 6 inches in diameter, trace medium- to coarse-grained sand, low plasticity fines.				3.0
360			4			
358			6			
356			8			
				GRAB 2	100	
354		• Test pit terminated at 9¼ feet bgs. • Groundwater encountered at about 5 feet bgs with some caving. • Test pit loosely backfilled with excavated material.				
352						

GROUNDWATER: ▽

▲ WDCP N_{60} VALUE ▲ (WDCP N_{60} VALUE column)

PL — MC — LL

☐ FINES CONTENT (%) ☐ (0 20 40 60 80 100)

28 (FINES CONTENT, 2 ft)

56 (FINES CONTENT, 4 ft)

CGT EXPLORATION WITH WDCP TP LOGS.GPJ 7/22/20 DRAFTED BY: ALS

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FIGURE A7

Test Pit TP-12

CLIENT Farmworker Housing Development Corporation
PROJECT NAME FHDC Lebanon Housing Project
PROJECT NUMBER G2005323
PROJECT LOCATION Tax Lot 1701 Weldwood Drive, Lebanon, Oregon
DATE STARTED 12/13/18 **GROUND ELEVATION** 363 ft
ELEVATION DATUM NAVD88 - See Figure 2
WEATHER Clear, 39° F **SURFACE** Grass
LOGGED BY MMS **REVIEWED BY** BMW
EXCAVATION CONTRACTOR Douglas Shepherd Dirt Works
SEEPAGE ---
EQUIPMENT Bobcat 337
GROUNDWATER DURING DRILLING ---
EXCAVATION METHOD 12-inch toothed/24-inch smooth edge
GROUNDWATER AFTER EXCAVATION ---

ELEVATION (ft)	GRAPHIC LOG	GROUP SYMBOL	MATERIAL DESCRIPTION	GROUNDWATER	DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	WDCP N_{60} VALUE	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ WDCP N_{60} VALUE ▲ PL–MC–LL / ☐ FINES CONTENT (%) ☐ 0 20 40 60 80 100
362		OL	**ORGANIC SOIL:** Dark brown, moist, medium plasticity, abundant rootlets.		0				2.5		
360		CL	**LEAN CLAY:** Very stiff, brown, moist, medium to high plasticity, trace subrounded to subangular gravel up to 3 inches in diameter, trace roots up to ½ inch in diameter, trace rootlets.		2				3.25 3.0		
358		GP	**POORLY GRADED GRAVEL WITH COBBLES AND SILT:** *Dense to very dense*, brown to gray-brown, moist, subrounded to rounded gravel up to 3 inches in diameter, subrounded to rounded cobbles up to 5 inches in diameter, trace medium- to coarse-grained sand, low plasticity fines.		4	GRAB 1	100				8
356		SP	**POORLY GRADED SAND WITH COBBLES:** *Dense to very dense*, gray-brown, moist, non-plastic, some subrounded to subangular gravel up to ¾ inch in diameter, trace cobbles up to 5 inches in diameter.		6	GRAB 2	100				
354			• Test pit terminated at 6 feet bgs. • No groundwater or caving encountered. • Test pit loosely backfilled with excavated material.								

CGT EXPLORATION WITH WDCP TP LOGS.GPJ 7/22/20 DRAFTED BY: ALS

Attachment #7

Ashley & Vance
ENGINEERING, INC

33 NW Franklin Ave., Ste. 110
Bend, OR 97703

(541) 647-1445

July 21, 2020

Claudia Cantu, Deputy Director
Farmworker Housing Development Corporation
1274 5th Street, Suite 1-A, Woodburn, OR 97071

RE: Stormwater Drainage Facilities at the Colonia Paz I Apartment Development in Lebanon, Oregon

Dear Claudia,

The Colonia Paz 1 Apartment development in Lebanon, Oregon is proposed on a vacant site off of Weldwood Drive just south of the Walmart Supercenter. The City of Lebanon code requires the following for stormwater drainage design:

> *Storm drainage facilities must be designed and constructed to ensure historical rates of discharge are not exceeded. Storm drain capacity shall be determined by the Rational Method for a 10-year event with a 15-minute minimum durations time using the curve (fig 5.3) in the master plan. A detailed design including engineering calculations shall be submitted as part of site plan review.*

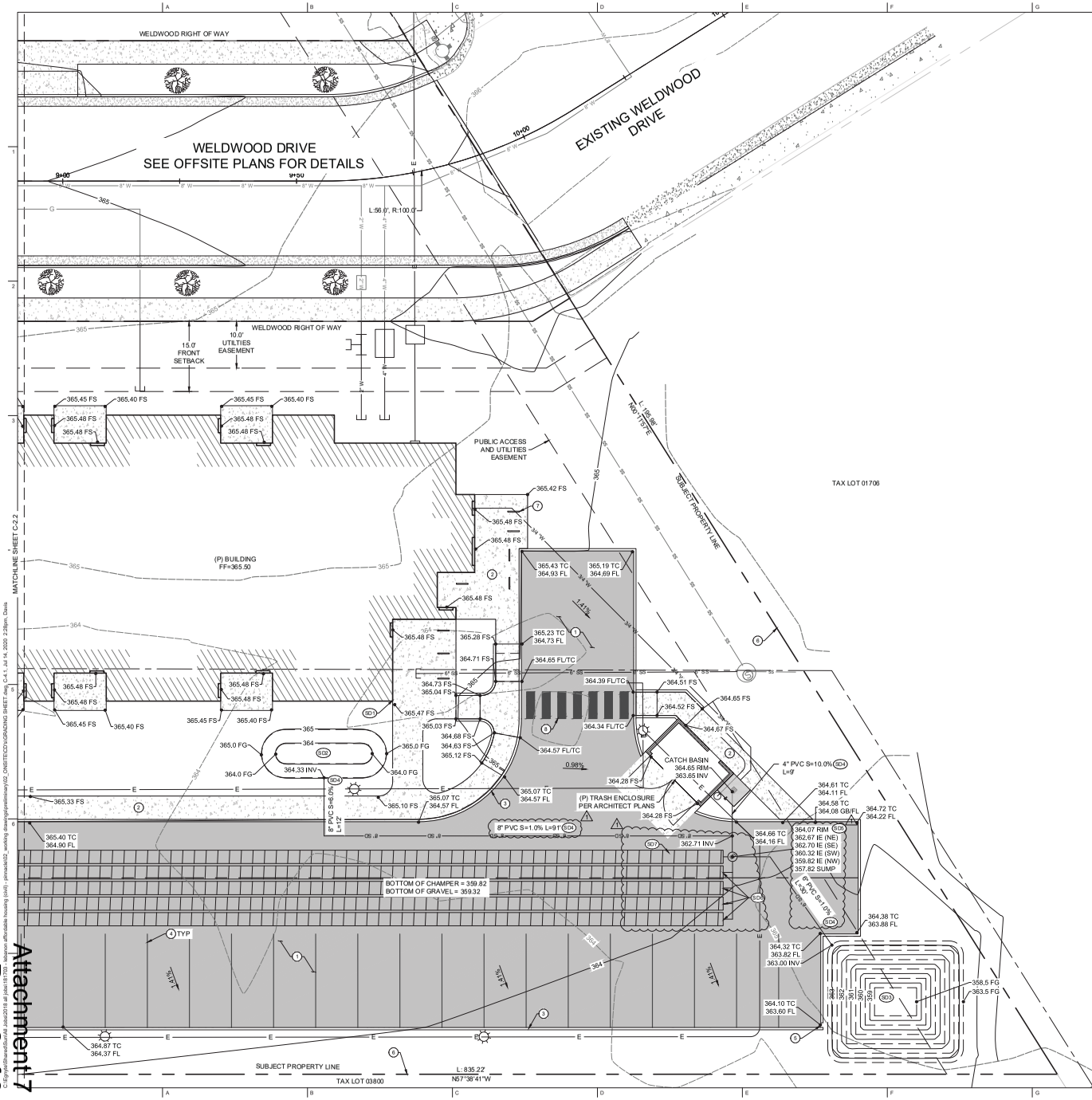
Ashley & Vance Engineering, Inc has designed a system the exceeds the City's standards. All stormwater runoff for the 25-year storm event will be collected and infiltrated onsite. No stormwater will overflow off of the site. As shown on the attached plans, C-4.0 and C-4.1, runoff from the proposed building roof and half of the parking lot will flow to new stormwater swales. Structures in the swales will then divert the runoff to underground stormwater chambers that will detain and infiltrate the stormwater. Runoff from the other half of the parking lot will be collected in catch basins and then piped to the storm chambers. The catch basins have 2-foot deep sumps, and there are manholes upstream of the chambers with 2-foot sumps as well. These sumps and the swales provide treatment of the runoff and system redundancy to eliminate pollutants and sediments from entering the chambers and the ground.

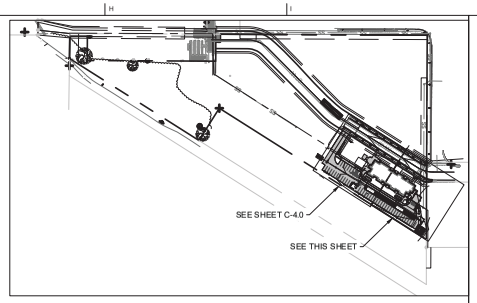
The proposed stormwater drainage system for the Colonia Paz 1 Apartments meets and exceeds the City of Lebanon and Oregon DEQ standards. Please let me know if you have any further questions or comments.

Sincerely,

Jim Lord, PE

Oregon PE No. 77331





SITE MAP
NTS

DOWNSPOUT NOTES:

FLOW FROM DOWNSPOUTS TO BE DIRECTED TO SWALES 1 AND 2.

SITE CONSTRUCTION NOTES:

1. CONSTRUCT ASPHALT DRIVEWAY SECTION PER DETAIL 1, SHEET C-5.0.
2. CONSTRUCT CONCRETE WALKWAY SECTION PER DETAIL 2, SHEET C-5.0.
3. CONSTRUCT 6" CONCRETE CURB PER DETAIL 3, SHEET C-5.0.
4. INSTALL PARKING STRIPING PER LEBANON CITY STANDARDS.
5. CONSTRUCT 1' CURB CUT PER DETAIL 4, SHEET C-5.0.
6. INSTALL FENCE. SEE ARCHITECTURAL PLANS FOR DETAILS.
7. INSTALL BIKE RACK. SEE ARCHITECTURAL PLAN FOR DETAILS. (TYP.)
8. INSTALL CROSSWALK PER DETAIL 6, SHEET C-5.0.,

STORM DRAIN CONSTRUCTION NOTES:

SD1. SPLASH BLOCK FOR CANOPY DOWNSPOUT. SEE ARCHITECTURAL PLANS FOR DETAILS.
SD2. CONSTRUCT STORMWATER RETENTION SWALE 2 WITH OVERFLOW CATCH BASIN PER DETAIL 7, SHEET C-5.0.
SD3. CONSTRUCT STORMWATER RETENTION SWALE 3 WITH OVERFLOW CATCH BASIN PER DETAIL 7, SHEET C-5.0.
SD4. INSTALL PVC STORM DRAIN PIPE.
SD5. INSTALL NYOPLAST DRAIN BASIN PER DETAIL 5, SHEET C-5.0.
SD6. INSTALL 30 STORMTECH SC-310 CHAMBERS PER DETAIL 1 AND 2, SHEET C-5.2.
SD7. INSTALL 30 STORMTECH SC-310 CHAMBERS PER DETAIL 1, 2, AND 3, SHEET C-5.2.

LEGEND

- 8" SD — 8" STORM DRAIN LINE
- 6" SD — 6" STORM DRAIN LINE
- 4" SD — 4" STORM DRAIN LINE
- SD — NYOPLAST DRAIN BASIN
- CATCH BASIN
- STORMTECH SC-310 CHAMBER
- SWALE
- PROJECT PROPERTY LINE
- CENTER LINE OF DRIVE AISLE
- TRAFFIC STRIPING
- PROPOSED BUILDING
- CONCRETE SIDEWALK
- AC PAVEMENT
- 3675 — PROPOSED MAJOR CONTOUR (5' INTERVAL)
- 3676 — PROPOSED MINOR CONTOUR (1' INTERVAL)

HORIZONTAL SCALE: 1" = 10'
10 0 10 20

Plan Prepared By:
Ashley & Vance ENGINEERING, INC.
33 NW Franklin Ave. Suite 110
Bend, OR 97703
(541) 647-7033
www.ashleyvance.com
CIVIL • STRUCTURAL

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Engineer of Record:

COLONIA PAZ 1
ONSITE IMPROVEMENT PLANS

TAX LOT 1701
LEBANON, OR 97355

Revisions:

1	BID ADDENDUM 1 2020/07/13
2	
3	
4	
5	

Project Engineer: EMD	Ext: 141
Project Manager: JML	
Date: 06.12.2020	Scale: PER PLAN
AV Job No.: 181703	Sheet Size: 24" x 36"

GRADING AND DRAINAGE PLAN

C-4.1

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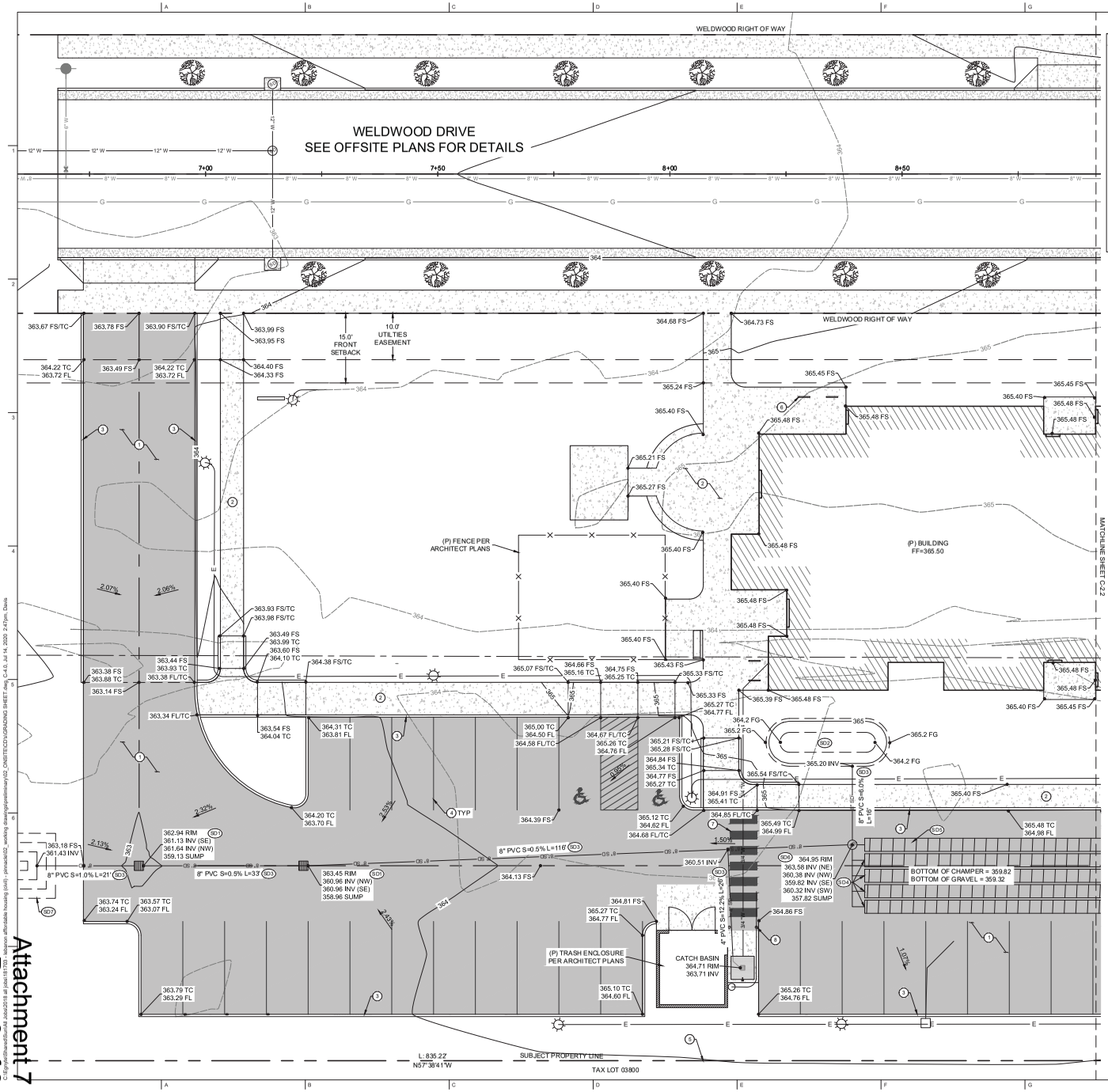

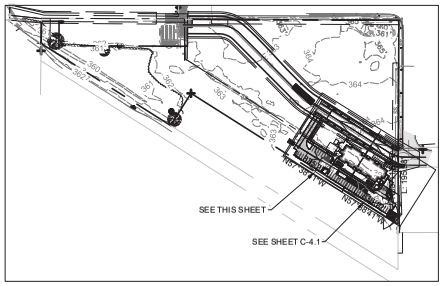

SITE MAP
NTS

DOWNSPOUT NOTES:

FLOW FROM DOWNSPOUTS TO BE DIRECTED TO SWALES 1 AND 2.

SITE CONSTRUCTION NOTES:

1. CONSTRUCT ASPHALT DRIVEWAY SECTION PER DETAIL 1, SHEET C-5.0.
2. CONSTRUCT CONCRETE WALKWAY SECTION PER DETAIL 2, SHEET C-5.0.
3. CONSTRUCT 6" CONCRETE CURB PER DETAIL 3, SHEET C-5.0.
4. INSTALL PARKING STRIPING PER LEBANON CITY STANDARDS.
5. INSTALL FENCE. SEE ARCHITECTURAL PLANS FOR DETAILS.
6. INSTALL BIKE RACK. SEE ARCHITECTURAL PLAN FOR DETAILS. (TYP.)
7. INSTALL CROSSWALK PER DETAIL 6, SHEET C-5.0.
8. INSTALL BOLLARDS PER CITY OF LEBANON STD. DWG 00800-01. (TYP. 2)

STORM DRAIN CONSTRUCTION NOTES:

- SD1 INSTALL CATCH BASIN PER CITY OF LEBANON STD. DWG 00400-08, 00400-09.
- SD2 CONSTRUCT STORMWATER RETENTION SWALE 1 WITH OVERFLOW CATCH BASIN PER DETAIL 7, SHEET C-5.0.
- SD3 INSTALL PVC STORM DRAIN PIPE.
- SD4 INSTALL 30 STORMTECH SC-310 CHAMBERS PER DETAIL 1 AND 2, SHEET C-5.2.
- SD5 INSTALL 30 STORMTECH SC-310 CHAMBERS PER DETAIL 1, 2, AND 3, SHEET C-5.2.
- SD6 INSTALL NYOPLAST DRAIN BASIN PER DETAIL 5, SHEET C-5.0.
- SD7 INSTALL TEMPORARY 24'X14' STORMWATER RETENTION SWALE AT 3' DEEP TO DAYLIGHT PROPOSED 8" OVER FLOW PIPE.

LEGEND

- 8" SD — 8" STORM DRAIN LINE
- 4" SD — 4" STORM DRAIN LINE
- SD NYOPLAST DRAIN BASIN
- CATCH BASIN
- STORMTECH SC-310 CHAMBER
- SWALE
- PROJECT PROPERTY LINE
- CENTER LINE OF DRIVE AISLE
- TRAFFIC STRIPING
- PROPOSED BUILDING
- CONCRETE SIDEWALK
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- 3675 — PROPOSED MAJOR CONTOUR (5' INTERVAL)
- 3676 — PROPOSED MINOR CONTOUR (1' INTERVAL)

HORIZONTAL SCALE: 1" = 10'
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Engineer of Record:

COLONIA PAZ 1
ONSITE IMPROVEMENT PLANS

TAX LOT 1701
LEBANON, OR 97355

Revisions:

1	
2	
3	
4	
5	

Project Engineer: EMD	Ext: 141
Project Manager: JML	
Date: 06.12.2020	Scale: PER PLAN
AV Job No.: 181703	Sheet Size: 24" x 36"

GRADING AND DRAINAGE PLAN

C-4.0

C:\Sync\Shared\Sandy\4 Jobs\2018 all jobs\181703 - Lebanon affordable housing (civil) - pinnacle\02_working drawings\preliminary\02_ONSITE\CD\GRADING SHEET.dwg C-4.0, Jul 14, 2020 2:47pm, Delta

Attachment #8

Colonia Paz Housing Complex
Lebanon, Oregon
Wetland Delineation Report

Date: November 26, 2018

Prepared for: Farmworker Housing Development Corporation
1274 5th Street, Suite 1-A
Woodburn, OR 97071

Prepared By: AKS Engineering & Forestry, LLC
Sonya Templeton and
Stacey Reed, PWS, Senior Wetland Scientist

Site Information: T12S, R2W, Section 23B, Tax Lot 1701
Lebanon, Linn County, Oregon

AKS ENGINEERING & FORESTRY
12965 SW Herman Road, Suite 100
Tualatin, OR 97062
(503) 563-6151

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Appendix A. WD#1994-0430 and WD#2001-0118 DSL Concurrence Letter

Appendix B. Google Earth Aerial Photographs

Appendix C. Precipitation Data

Appendix D. Wetland Determination Data Forms

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Introduction

This report was prepared by AKS Engineering & Forestry, LLC (AKS) in accordance with Oregon Administrative Rules (OAR) 141-090-0030 and 141-090-0035 (1-17) and describes the results of a wetland delineation conducted on a site south of Weldwood Drive in Lebanon, Linn County, Oregon (Figure 1). The wetland delineation study area is approximately ±9.53 acres in size and includes Tax Lot 1701 of Linn County's Assessor's Tax Map 12S 2W 23B (Figure 2). The on-site boundaries of one palustrine forested (PFO) wetland (referred to as Wetland A) located in the southwestern portion of the site and an isolated artificial pond were delineated in the study area. Our investigation determined that approximately ±0.55 acres of potentially jurisdictional wetlands are present within the study area.

A wetland delineation was previously conducted on the site in April of 1994 (which also included an off-site area to the south) by Jay Lorenz of A.G. Crook Company. The 1994 delineation received concurrence by the Oregon Department of State Lands (DSL) under DSL File WD# 1994-0430. Our delineation generally agrees with the 1994 boundaries delineated for Wetland A and the artificial pond; however, we did not document isolated wetland conditions in the central portion of the site that were previously present on the site.

Mr. Lorenz conducted an updated delineation for the adjacent tax lot to the south (tax lot 3800) in 2001. Mr. Lorenz determined site conditions on the adjacent tax lot had not significantly changed since his original 1994 wetland delineation. Although the updated delineation was for the adjacent site to the south, Mr. Lorenz implied wetland conditions for the entire wetland (including subject site) had not changed. DSL confirmed the updated 2001 wetland delineation boundaries under DSL File WD#2001-0118. The DSL concurrence letters are included in Appendix A for reference.

The western portion of the site contains a compensatory mitigation site associated with the Santiam Village project, DSL File FP-13676. The mitigation site included 22,242 square feet/0.51 acres of wetland creation located adjacent to the PFO wetland delineated in the southern portion of the site. The mitigation site was not protected under a deed restriction. We did not document wetland conditions within the compensatory mitigation area; however, this area is still protected as a compensatory mitigation site by DSL. The mitigation area is shown on the attached delineation figure. Any amount of removal or fill within the mitigation site requires authorization from DSL.

A. Landscape Setting and Land Use

The study area consists of an undeveloped field. An old farm road run through the central portion of the study area. The field is dominated with planted pasture grasses consisting of tall false rye grass (*Schedonorus arundinaceus*; FAC) and colonial bent (*Agrostis capillaris*; FAC), as well as scattered Himalayan blackberry (*Rubus armeniacus*; FAC), Queen Anne's-lace (*Daucus carota*; FACU), English plantain (*Plantago lanceolata*; FACU), and common dandelion (*Taraxacum officinale*; FACU). Few scattered balsam poplar (*Populus balsamifera*; FAC) are present in the field and around Wetland A.

General topography in the study area is flat (less than 5% overall slope), with a subtle southerly slope towards Wetland A.

The following soil units are mapped within the study area, according to the Natural Resources Conservation Service (NRCS) Linn, County Area Soil Survey Map and hydric soil list (Figure 3)

- (Unit 23) Clackamas gravelly silt loam – Non-hydric; and
- (Unit 2224A) Courtney gravelly silty clay loam, 0% to 3% slopes –Hydric

B. Site Alterations

Aerial photographs dated between 1995 to 2018 were obtained from Google Earth and are included in Appendix B.

According to the 1994 wetland delineation report prepared by Mr. Lorenz, the site has been planted with pasture grasses since as early as 1985. Based on google earth imagery, there does not appear to have been any significant on-site alterations that could have affected the site's hydrology between the 1994 delineation fieldwork and our current delineation fieldwork. However, development adjacent to the site, including the construction of Walmart and parking area, occurred over the years. It is possible the surrounding development has intercepted some of the surface and ground water that formerly drained to the site.

C. Precipitation Data and Analysis

Precipitation data was obtained from the Lacomb 3 NNE, OR weather station via the National Oceanic and Atmospheric Administration (NOAA) Applied Climate Information System (ACIS). The closest Wetlands Climate Analysis (WETS) station to the project site is the Lacomb 3 NNE, OR station. Table 2 represents the observed received rainfall the day of the site visit, within the two weeks prior, and the year-to-date rainfall. Table 3 shows the monthly precipitation averages according to the WETS Lacomb 3 NNE, OR station for the three months prior to the site visit (raw data included in Appendix C).

Table 1. Precipitation Data – Observed Rainfall (Inches) the Day of Site Visits and within the Two Weeks Prior

Field Date	Observed Rainfall on Field Date	Observed Rainfall Two Weeks Prior to Field Date	Observed Rainfall for the Water Year-to-Date (WYTD)	Departure from Average WYTD
October 18, 2018	0.00	1.24	1.24	-0.91

Table 2. Precipitation Data – Monthly Averages Based on the Climate Period 1971-2000 (Inches)

Prior Months	Observed Precipitation (Inches)	30% Chance Will Have		Condition Dry, Wet, Normal	Condition Value (1=dry, 2=normal, 3=wet)	Month Weight	Multiply Previous Two Columns
		Less Than	More Than				
October (1-18)	1.24	2.56	5.36	Dry (so far)	-	-	-
September	1.03	1.02	2.41	Normal	2	3	6
August	0.23	0.33	1.23	Dry	1	2	2
July	0.04	0.45	1.33	Dry	1	1	1
						Sum	**9**
Rainfall of prior period was: **drier** than normal (sum is 6-9), **normal** (sum is 10-14), **wetter** than normal (sum is 15-18)							

According to the WETS data, our site visits occurred during a drier than normal timeframe. No rain fell during our October 2018 site visit. Therefore, secondary indicators of wetland hydrology (geomorphic position and FAC-Neutral test) were used in plots determined to be wetland. The October 18 site visit was conducted during the growing season, which occurs from February 2 to December 28 according to the Lacomb WETS table.

D. Delineation Methods

The methodology used for determining the presence of wetlands followed the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Version

2.0) (Wakeley et al., 2010). *The National Wetland Plant List 2016* (Lichvar et al., 2016) was used to assign wetland indicator status for the appropriate region.

Site visit was conducted on October 18, 2018 by AKS's Natural Resource Specialist, Sonya Templeton, and Senior Wetland Scientist, Stacey Reed, PWS. Soils, vegetation, and indicators of hydrology were recorded at a total of six sample plot locations. Wetland determination data sheets are included in Appendix D.

The site visit was conducted within a below normal precipitation period; however, wetland conditions were still determined by the presence of secondary indicators of wetland hydrology during the site visits. Sample plot locations were selected based on changes in vegetation, changes in topography, and wherever possible, near Jay Lorenz's 1994 sample plot locations.

Representative ground level site photographs are included in Appendix E. Literature cited and referenced are listed at the end of this report.

E. Description of All Wetlands and Other Non-Wetland Waters

Wetland A

Wetland A is a PFO wetland located in the southwestern portion of the study area, in vicinity of the wetland delineated Jay Lorenz in the 1994 delineation. Wetland conditions extend off-site to the south, northwest, and southeast. Seasonal hydrology discharges from Wetland A into a ditched tributary located off-site to the south, parallel to Lebanite Road. The main hydrology sources for Wetland A include a seasonally high groundwater table and direct precipitation, along with some upland runoff, with water leaving the wetland unobstructed in one direction; therefore, Wetland A belongs to the Slopes hydrogeomorphic (HGM) sub classification. The off-site ditch lacked ponding and flow during the October 2018 site visit. The ditch is approximately 3-feet wide with 1 foot tall banks and was generally unvegetated.

Wetland A is dominated by Oregon ash (*Faxinus latifolia*; FACW) trees, with an understory generally dominated by dense sedge (*Carex densa*; OBL), field meadow-foxtail (*Alopecurus pratensis*; FAC), Himalayan blackberry, and Pacific ninebark (*Physocarpus capitatus*; FACW) as recorded at Plots 3 and 5. Soils are a low chroma (chroma 2 or less) with distinct redoximorphic features, meeting hydric soil indicator F6 redox dark surface. Wetland hydrology was based on secondary indicators including geomorphic position and FAC-Neutral test.

The wetland boundary was defined based on a slight change in landform from concave in the wetland to slightly convex landform in the upland. English ivy (*Hedera helix*; FACU), tall false rye grass, pineland sword fern (*Polystichum munitum*; FACU), and Himalayan blackberry were present in the upland. The adjacent upland plots (Plots 4 and 6) lacked hydric soil and wetland hydrology indicators. The wetland is approximately 0.04 acres smaller than the wetland delineated by Mr. Lorenz's delineation.

Artificial Pond

An artificial, isolated pond located in the northeastern portion of the study area was delineated in the vicinity of a pond delineated under the 1994 delineation. The pond was dry (lacked a surface groundwater table) during our October 2018 site visit and was partially vegetated with English hawthorn (*Crataegus mongyna*; FAC), red osier (*Cornus alba*; FACW), and slough sedge (*Carex obnupta*; OBL) with quaking aspen (*Populus tremuloides*; FACU) and balsam poplar around the perimeter. The pond consists of a closed depression, that lacks an inlet and outlet; therefore, belongs to the Depressional HGM classification.

The 1994 wetland delineation report describes a former ditch extending from the east feeding into the pond. The 1994 report describes the ditch and pond to have been potentially constructed to drain the former drive-in movie theater off-site to the east. The ditch is no longer present. A paved parking area associated with commercial development is now present off-site to the east in the vicinity of the former drive in theater. According to a DSL database search, a delineation concurrence was not received for the off-site development, which according to google earth imagery, occurred sometime between 2004-2005.

Conditions within the pond were documented at Plot 1. Soil in the pond lacked hydric soil indicators within 10 inches below ground surface (shovel refusal at 10 inches due to gravels). The pond lacked primary indicators of wetland hydrology. The pond lacked soil cracking, algal matting, and water stained leaves; however, due to the presence of hydrophytic vegetation and secondary wetland hydrology indicators, it is likely the area ponds seasonally, therefore, qualifies as a Problematic Hydric Soil listed in Chapter 5 of the Regional Supplement. A follow up site visit during the early portion of the growing season is recommended to confirm wetland hydrology.

Uplands

Plot 2 is in a subtle low spot in the field within the vicinity of a small isolated wetland delineated by Jay Lorenz in 1994. Vegetation was dominated by tall false rye grass, colonial bent, Queen Anne's-lace, and English plantain. The plot lacked hydric soil indicators. No plow layer was evident. Since the plot lacked hydric soil and wetland hydrology indicators, this area was determined to be upland. This area was also relatively flat, generally lacking a landform to develop wetland conditions.

Upland Plot 4 and 6 documents the boundary of Wetland A. Vegetation was dominated by English ivy, tall false rye grass, pineland sword fern, and Himalayan blackberry. Plots 4 and 6 were topographically higher in elevation than the adjacent wetland and lacked hydric soil and wetland hydrology indicators; therefore, were determined to be upland.

F. Deviation from National Wetland Inventory

The City of Lebanon does not have a DSL approved Local Wetland Inventory (LWI). No wetlands or waters are mapped within the study area according to the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) map (Figure 4); however, our study determined ± 0.55 acres of potentially jurisdictional features are present in the study area.

G. Mapping Method

Sample Plots 1 through 6, the on-site wetland and artificial pond boundaries were surveyed in the field by AKS using with a hand-held Trimble Geo7X Global Positioning System (GPS), with submeter accuracy. The resulting Wetland Delineation Map is attached as Figure 5 in Appendix A. The approximate extent of the compensatory mitigation site was hand mapped based on site plan figures provided in the 1997 permit application.

H. Additional Information

Wetland A within the study area would likely be determined jurisdictional by DSL and USACE. Water drains from Wetland A off-site to the northwest via a ditched natural tributary. The ditched tributary appears to have a direct hydrologic connection to Burkhart Creek (a relatively permanent water) which eventually reaches the Willamette River, a traditional navigable water.

The artificial pond was created from within NRCS mapped hydric soils and may therefore be determined to be jurisdictional by DSL, per OAR 141-085-0515(7)(i). The pond is isolated, lacking a direct hydrologic connection to nearby wetlands and waters. The pond is located greater than 100 feet from Wetland A and

is not located within or in part of a 100-year floodplain; therefore, is not adjacent to waters of the U.S. The pond is located within 4,000 feet of Wetland A; therefore, the pond may have a significant nexus to nearby waters of the U.S.

Under OAR 141-085-0520 (3), the compensatory mitigation site is protected and any amount of removal and/or fill or other ground alteration may require a permit from DSL. It is unknown whether this area is also documented as a compensatory mitigation site with USACE.

I. Summary of Results and Conclusions

Table 3 below provides a summary of the on-site areas of each feature, hydrologic connections to other nearby waters, the Cowardin and HGM classifications for the wetlands, and our prediction of whether each feature would likely be determined jurisdictional by DSL or the USACE.

Table 3. Summary of Features Delineated on the Site

Potentially Jurisdictional Feature	Latitude, Longitude	Size (acres)	Cowardin Class	HGM Subclass/ Flow Regime	Hydrologic Connection to Other Waters	USACE/DSL Predicted Jurisdiction
Wetland A	44.515294, -122.903060	±0.53	PFO	Slope	Burkart Creek	DSL and USACE
Artificial Pond	44.515759, -122.899801	±0.02	PSS	Depressional	None. Isolated.	Potentially DSL and USACE

J. Required Disclaimer

This report documents the investigation, best professional judgment, and conclusions of the investigators. It is correct and complete to the best of our knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk, unless it has been reviewed and approved in writing by the Oregon Department of State Lands in accordance with Oregon Administrative Rules (OAR) 141-090-0005 through 141-090-0055.

K. List of Preparers

Sonya Templeton
Natural Resource Specialist
Fieldwork and Report Preparation

Stacey Reed, PWS
Senior Wetland Scientist
Fieldwork and Report QA/QC

Appendix A: DSL Concurrence Letters

Oregon

DIVISION OF
STATE LANDS

STATE LAND BOARD

BARBARA ROBERTS
Governor

PHIL KEISLING
Secretary of State

JIM HILL
State Treasurer

July 5, 1994

Mr. Jay R. Lorenz
A. G. Crook Co.
1800 NW 169th Place, Suite B-100
Beaverton, Oregon 97006

Re: Wetland Delineation for Lebanite Site, Lebanon, Linn Co., T12S, R2W, section 23, tax lot 1701.

Dear Jay:

I have reviewed the above referenced wetland delineation. Based on the data presented, I concur with the delineation as shown on Figure 5 of your report and the attached survey.

The wetland area identified on the site is subject to the permit requirements of Oregon's Removal-Fill Law (ORS 196.800-196.990). The law places a preference on the avoidance of wetland impacts. I would urge you to remind your client of this preference.

If you have any questions concerning this matter, please feel free to call.

Sincerely,

Ken Bierly

Kenneth F. Bierly
Wetlands Program Manager

KFB/sz
ken:959

c: Jim Goudzwaard, Corps
John Court
City of Lebanon Planning
Tami Burness, DSL

775 Summer Street NE
Salem, OR 97310-1337
(503) 378-3805
FAX (503) 378-4844

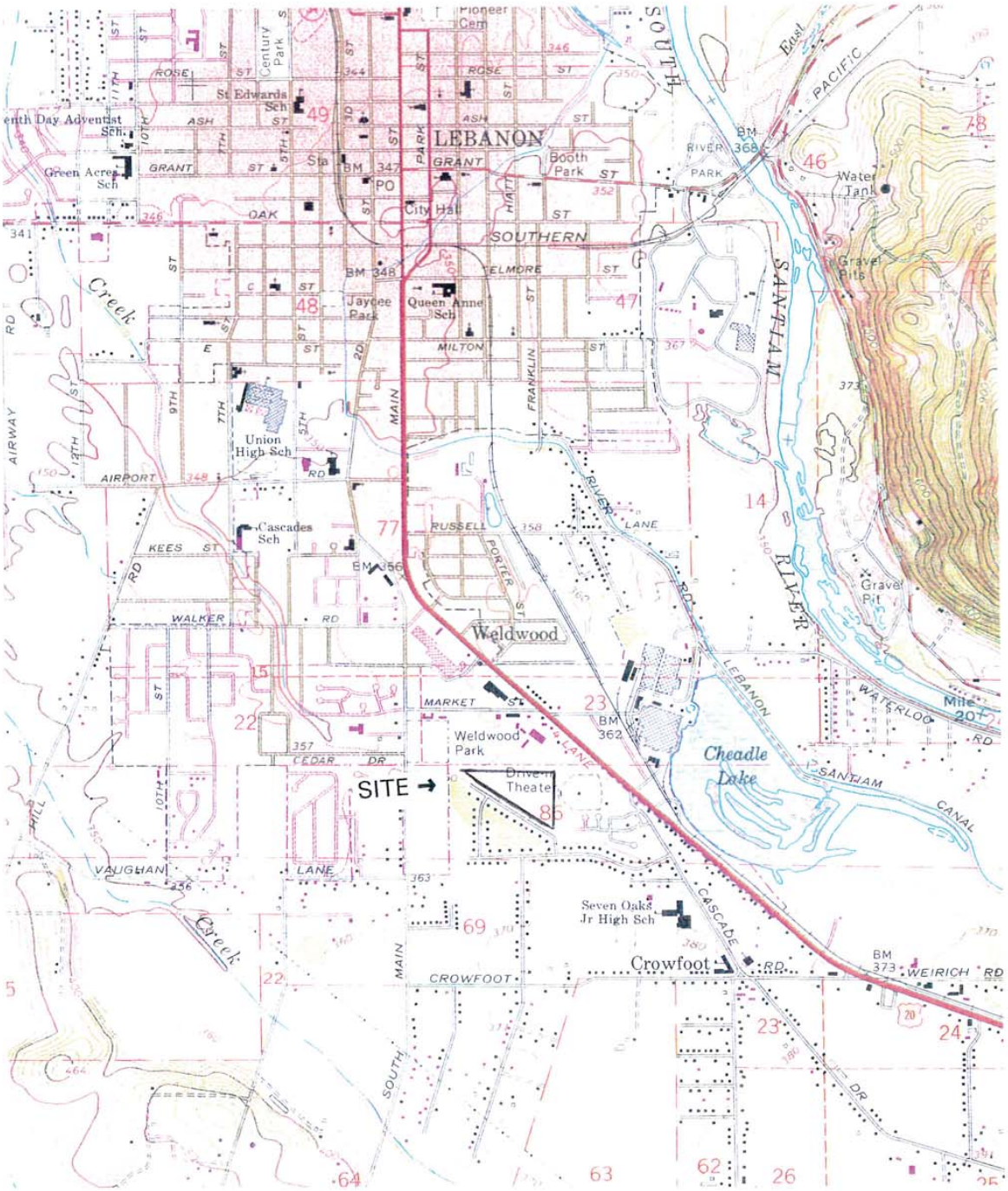


FIGURE 1 - A section of the USGS Quad map - Lebanon, OR quad - showing the site location

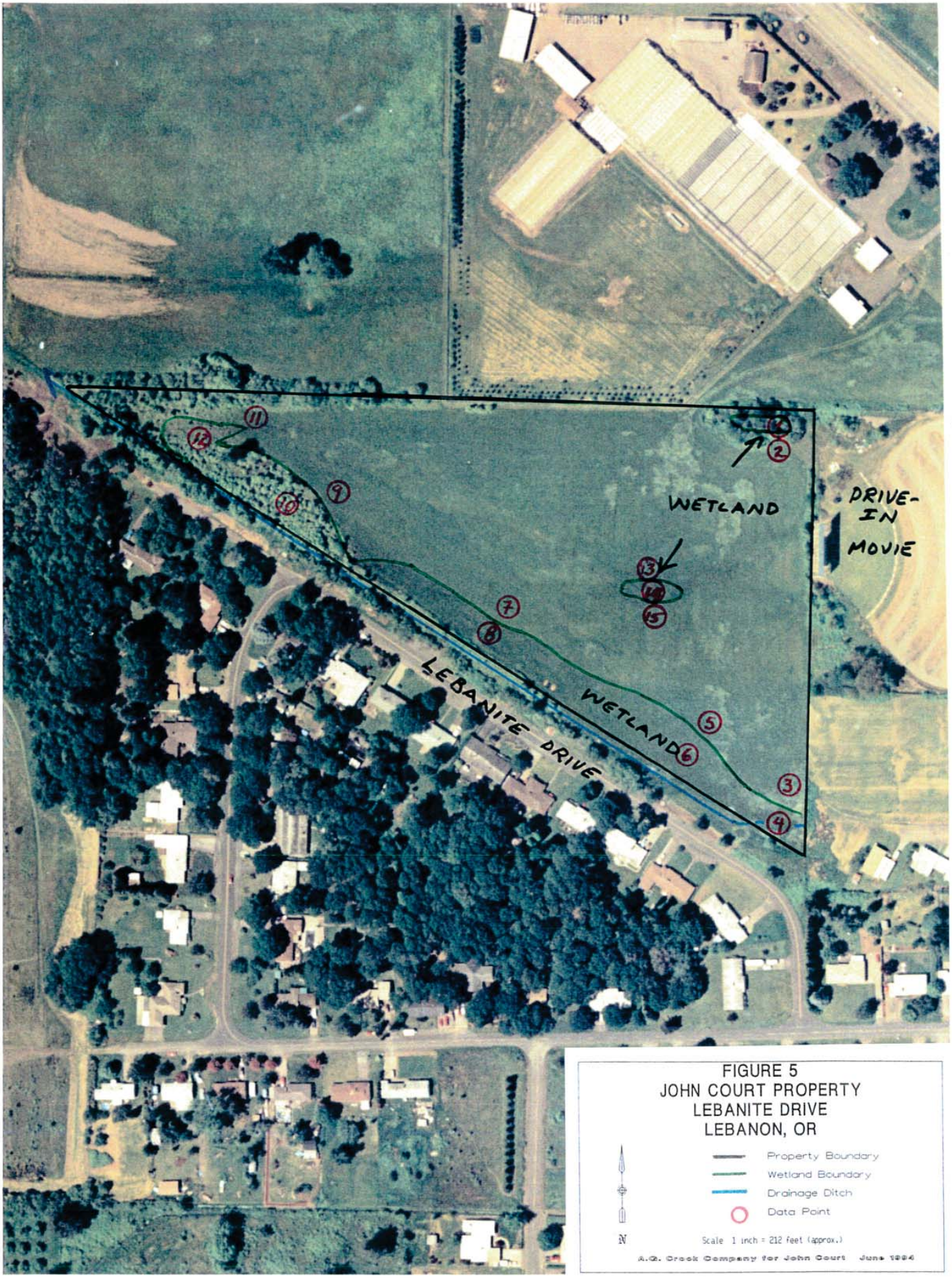


FIGURE 5
JOHN COURT PROPERTY
LEBANITE DRIVE
LEBANON, OR

Property Boundary
Wetland Boundary
Drainage Ditch
Data Point

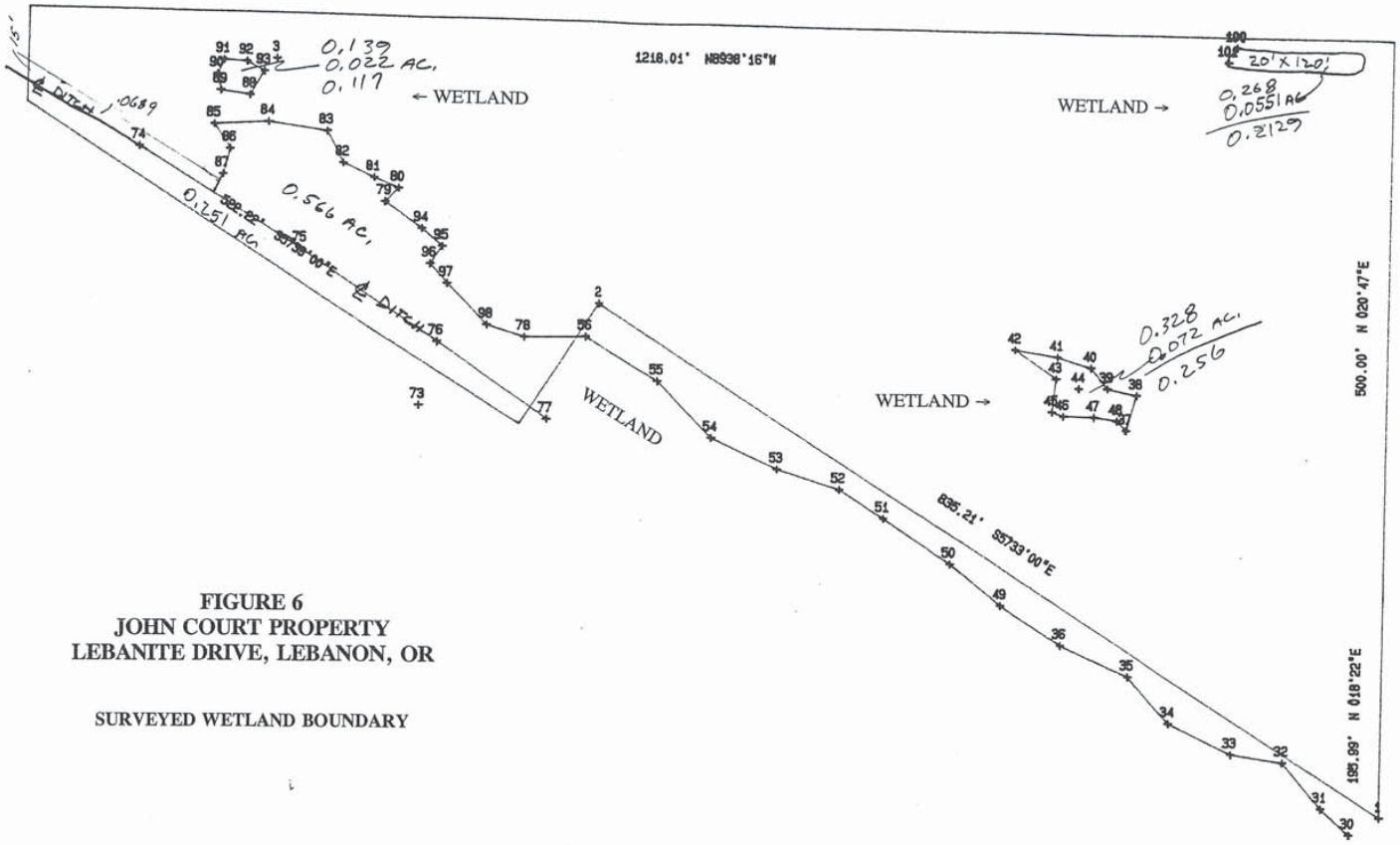


FIGURE 6
JOHN COURT PROPERTY
LEBANITE DRIVE, LEBANON, OR

SURVEYED WETLAND BOUNDARY

Oregon
John A. Kitzhaber, M.D., Governor

Division of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 378-3805
FAX (503) 378-4844
http://statelands.dsl.state.or.us

State Land Board

John A. Kitzhaber
Governor

Bill Bradbury
Secretary of State

Randall Edwards
State Treasurer

April 4, 2001

Jay Lorenz
J.R. Lorenz & Associates, Inc.
P.O. Box 796
Corvallis, OR 97339

Re: Wetland Delineation for Kingsley Property located in T12S R2W Section 23, Tax Lot 3800 in Lebanon; WD #2001-0118

Dear Mr. Lorenz:

I have reviewed your wetland determination letter for the above-referenced site and I concur with your findings. Based on the data submitted, the wetland area depicted in Figure 6 appears to have the same boundary as delineated in 1994.

This wetland is subject to the permit requirements of the state Removal-Fill Law (ORS 196.800-196.990). A state permit will be required for fill or excavation of 50 cubic yards or more in the wetland areas. This concurrence is for purposes of the state Removal-Fill Law only; federal or local wetland permit requirements may apply as well.

Division approval of wetland delineation reports is based upon the information provided to us. Should additional information be brought to our attention or should site conditions change, we will consider the new information and re-evaluate the site and our jurisdictional determination as needed.

Thank you for your report. If I can answer any questions for you, please do not hesitate to contact me at (503) 378-3805, ext. 233.

Sincerely,

Jennifer Goodridge
Wetland Specialist
Wetlands Program

Approved by _____
John E. Lilly
Assistant Director

Enclosure: Figure 6

cc: Ken Kingsley
825 Lebanite Dr.
Lebanon, OR 97355

k:\wetlands\jennifer\wd letters\wd01-0118kingsley.doc

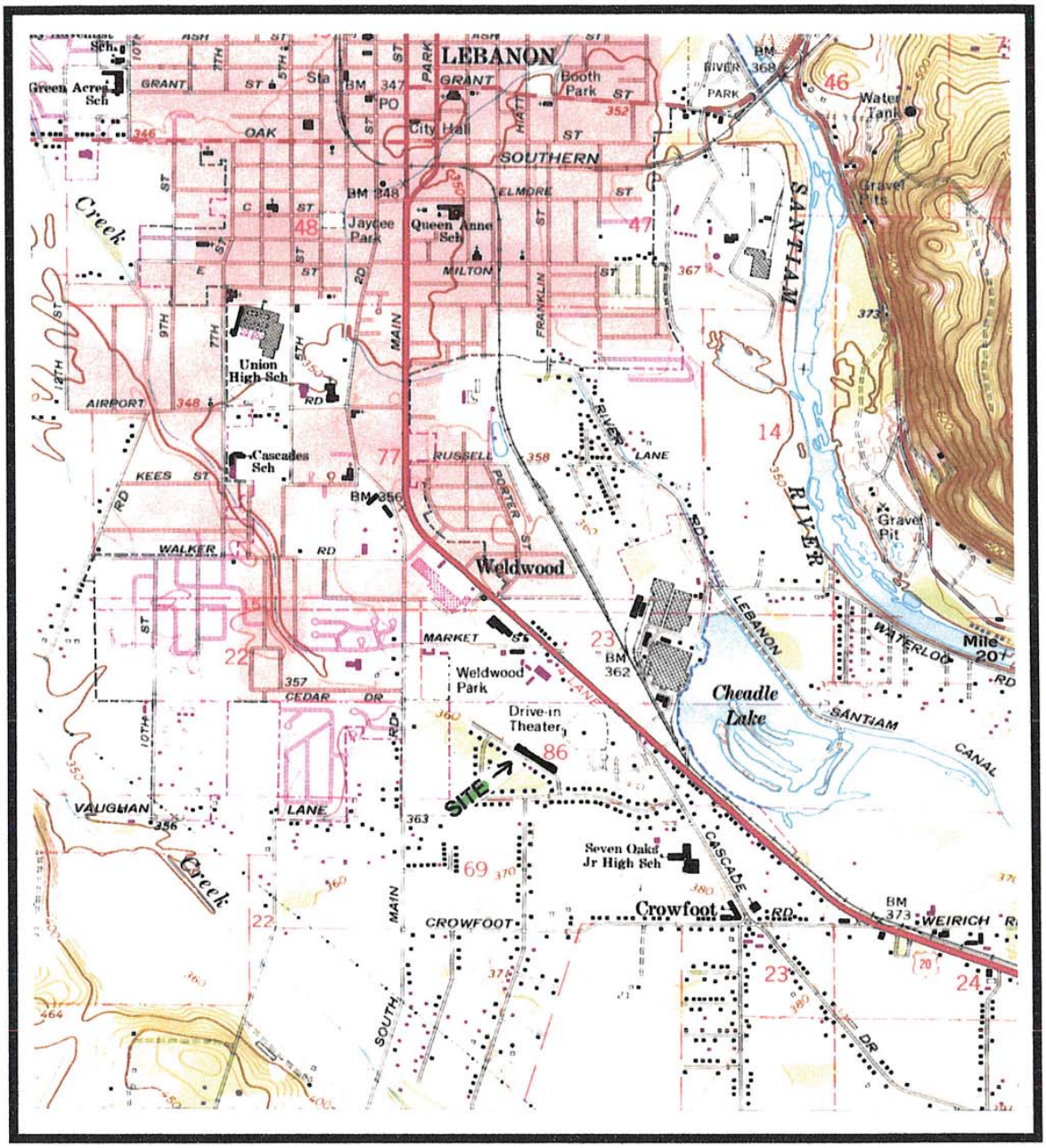


FIGURE 1. A portion of USGS topographic map (7.5 minute series), Lebanon, OR quadrangle showing study area.

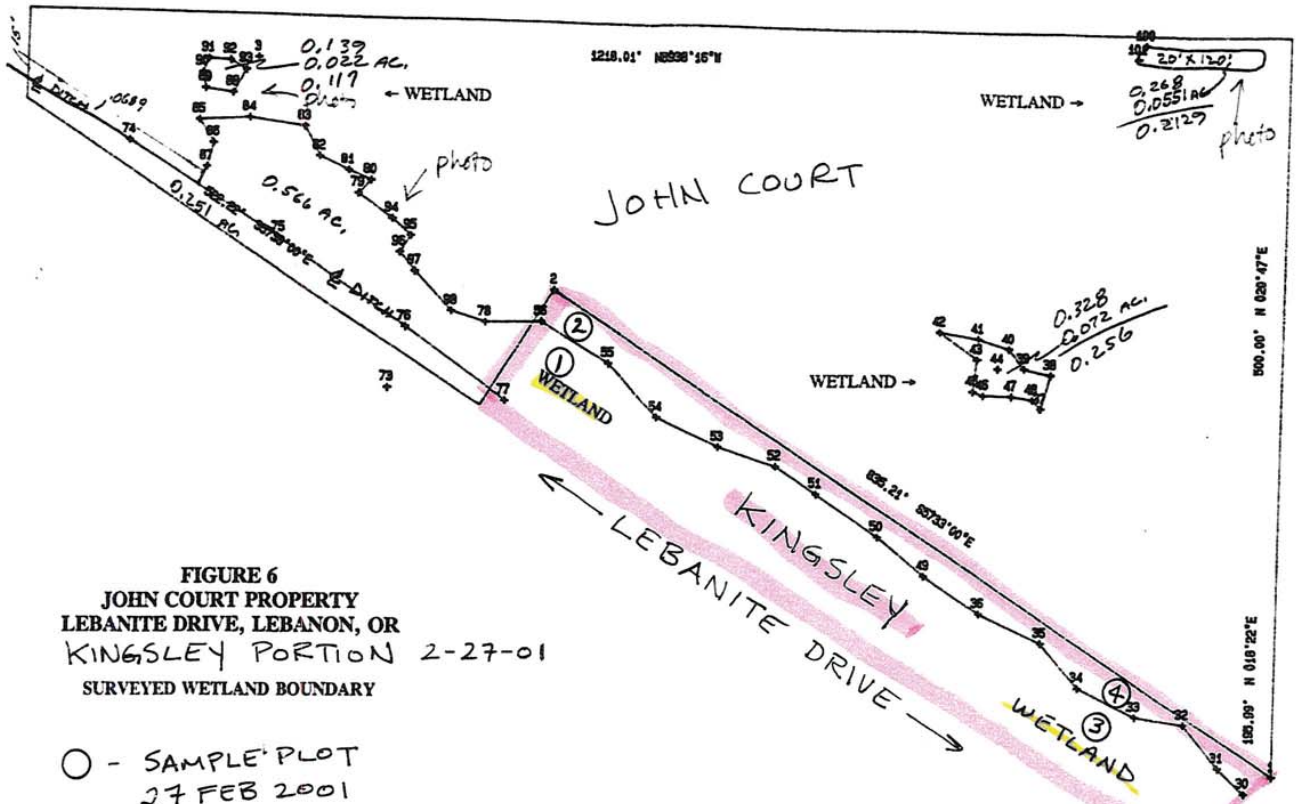


FIGURE 6
JOHN COURT PROPERTY
LEBANITE DRIVE, LEBANON, OR
KINGSLEY PORTION 2-27-01
SURVEYED WETLAND BOUNDARY

O - SAMPLE PLOT
27 FEB 2001

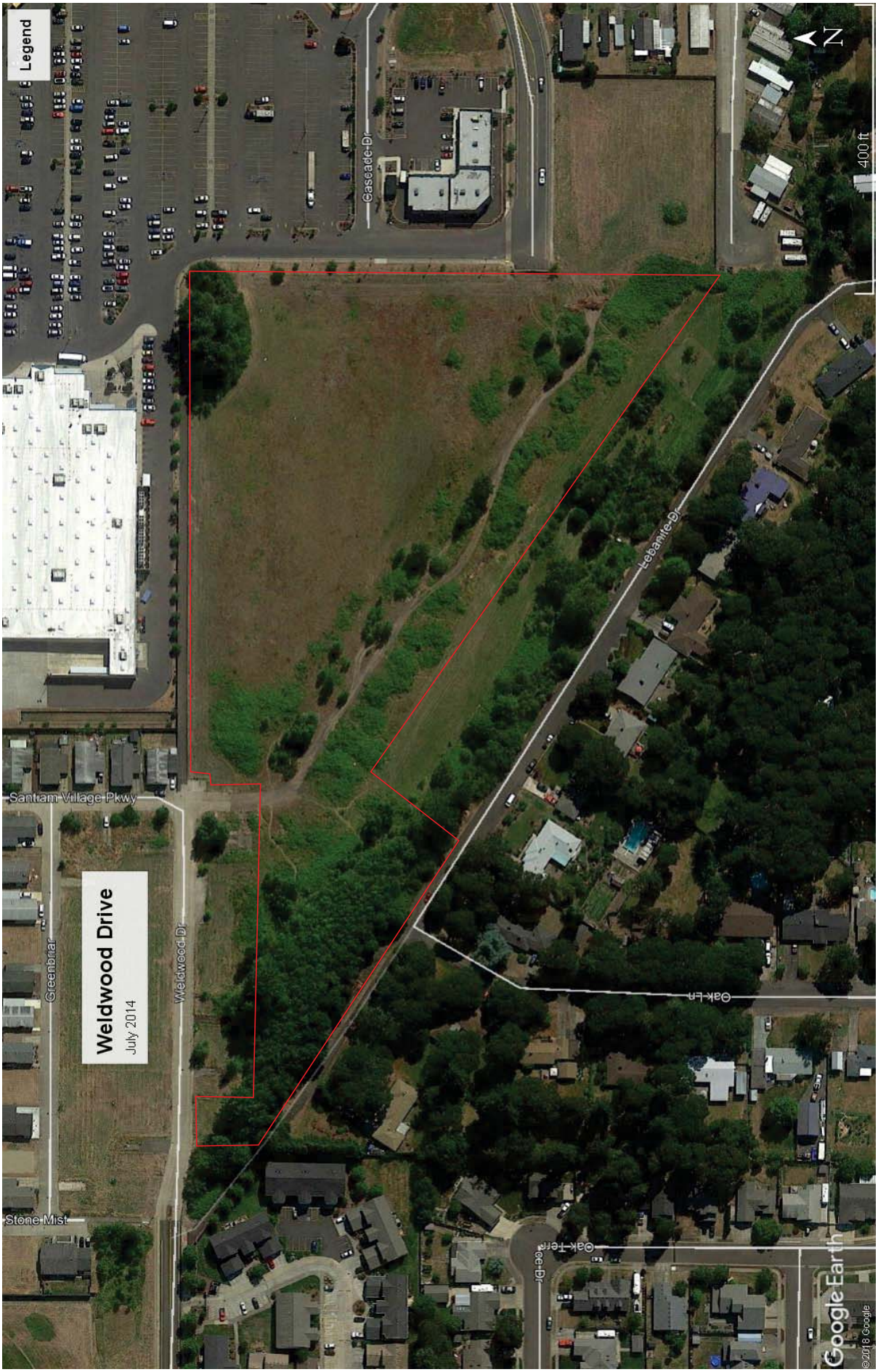
KINGSLEY ±2.5 ACRES
1.93 WETLAND
0.57 NON-WETLAND

Appendix B: Google Earth Aerials

Legend
Weldwood Drive
June 1995
Santiam Village Pkwy
Greenbriar
Weldwood Dr
Stone Mist
Cascade Dr
Lebanite Dr
Oak Ln
Oak Terr
Oak Pl
400 ft
N
Google Earth

Legend
Weldwood Drive
July 2000
Santiam Village Pkwy
Greenbriar
Weldwood Dr
Stone Mist
Cascade Dr
Lebanite Dr
Oak Ln
Oak Terr
Oak Terr
400 ft
N
Google Earth

Legend
Weldwood Drive
March 2005
Santiam Village Pkwy
Greenbriar
Weldwood Dr
Stone Mist
Cascade Dr
Lebanite Dr
Oak Ln
Oak Terr
Oak Terr
400 ft
N
Google Earth


Legend
Weldwood Drive
July 2014
Santiam Village Pkwy
Greenbriar
Weldwood Dr
Stone Mist
Cascade Dr
Lebanite Dr
Oak Ln
Oak Terr
Oak Ter
400 ft
N
Google Earth
©2018 Google

Legend
Weldwood Drive
July 2018
Santiam Village Pkwy
Greenbriar
Weldwood Dr
Stone Mist
Cascade Dr
Lebanite Dr
Oak Ln
Oak Terr
Oak Dr
400 ft
N
Google Earth
©2018 Google

Appendix C: Precipitation Data

WETS Table

WETS Station: LACOMB 3 NNE, OR								
Requested years: 1971 - 2000								
Month	Avg Max Temp	Avg Min Temp	Avg Mean Temp	Avg Precip	30% chance precip less than	30% chance precip more than	Avg number days precip 0.10 or more	Avg Snowfall
Jan	46.5	32.6	39.5	7.20	4.84	8.61	14	0.7
Feb	50.8	34.2	42.5	6.53	4.75	7.69	13	1.2
Mar	55.6	35.9	45.8	5.97	4.67	6.89	14	0.0
Apr	60.0	38.6	49.3	4.86	3.78	5.63	12	0.0
May	65.8	42.9	54.4	4.10	2.74	4.91	10	0.0
Jun	71.7	47.4	59.6	3.10	1.99	3.73	7	0.0
Jul	78.5	50.2	64.3	1.10	0.45	1.33	3	0.0
Aug	79.6	49.6	64.6	1.22	0.33	1.23	3	0.0
Sep	75.3	45.8	60.6	2.03	1.02	2.41	5	0.0
Oct	64.0	40.7	52.3	4.41	2.56	5.36	9	0.0
Nov	51.9	36.9	44.4	8.83	6.40	10.40	15	0.2
Dec	45.9	33.7	39.8	8.41	5.79	10.02	15	0.5
Annual:					50.73	61.62		
Average	62.1	40.7	51.4	-	-	-	-	-
Total	-	-	-	57.74			121	2.7

GROWING SEASON DATES			
Years with missing data:	24 deg = 5	28 deg = 5	32 deg = 2
Years with no occurrence:	24 deg = 8	28 deg = 0	32 deg = 0
Data years used:	24 deg = 25	28 deg = 25	32 deg = 28
Probability	24 F or higher	28 F or higher	32 F or higher
50 percent *	2/2 to 12/28: 329 days	3/16 to 11/21: 250 days	4/26 to 10/23: 180 days
70 percent *	No occurrence	3/9 to 11/29: 265 days	4/20 to 10/30: 193 days
* Percent chance of the growing season occurring between the Beginning and Ending dates.			

STATS TABLE - total precipitation (inches)													
Yr	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annl
1973			5.48	2.37	2.04	2.94	0.08	1.18	2.74	3.82	19.05	12.18	51.88
1974	10.60	8.17	9.27	4.63	2.92	1.34	2.28	0.50	0.30	2.82	7.74	10.73	61.30
1975	6.55	5.41	7.04	4.16	2.78	2.27	0.56	3.77	0.00	8.16	7.41	9.55	57.66
1976	8.31	6.91	5.33	5.31	3.04	1.47	1.20	3.68	1.66	2.22	2.82	1.77	43.72
1977	1.56	3.80	7.27	2.69	8.49	1.87	0.99	2.64	4.39	3.37	9.70	11.69	58.46
1978	7.60	3.83	2.63	7.42	5.00	2.30	1.06	5.37	3.71	0.91	6.96		46.79
1979	3.56	10.85	4.19	6.05	3.23	1.20	0.37	1.75	2.28	8.48	6.92	6.56	55.44
1980	7.38	4.53	6.31	4.24	2.34	2.79	0.41	T	1.90	2.45	6.33	11.14	49.82

1981	2.78	6.69	4.09	4.66	5.04	5.85	0.20	0.04	3.18	5.73	6.50	13.65	58.41
1982	M9.32	7.94	5.40	4.58	1.32	3.38	0.90	1.22	3.28	5.26	6.00	10.05	58.65
1983	9.41	10.63	9.02	4.39	3.41	4.41	4.95	2.85	0.86	2.15	11.61	7.66	71.35
1984		7.60	6.52	6.73	5.71	7.01	0.47	0.01	1.79	7.34	15.98		59.16
1985	0.74	6.07	5.73	2.56	1.53	2.38	1.35	1.11	3.68	5.87	8.48	2.98	42.48
1986	6.40	10.21	4.58	4.18	3.63	0.99	1.79	0.13	5.51	2.58	12.83		52.83
1987	8.30	3.13	5.50	3.52	3.38	0.61	3.42	0.10	0.67	0.48	5.24	11.20	45.55
1988	9.31	2.33	5.65	7.41	6.15	3.25	0.17	0.00	0.81	0.33	13.42	M4.62	53.45
1989	6.29	M3.33	10.65	1.93	3.36	2.28	1.05	1.73	0.88	2.62	5.02	2.90	42.04
1990	10.23	7.15	3.85	3.75	3.65	2.56	0.45	M1.72	0.48	9.27	8.74	4.82	56.67
1991	3.22	5.40	7.05	5.41	7.87	3.27	0.61	0.85	0.49	3.79	9.27	6.52	53.75
1992	4.56	5.39	1.67	7.14	0.66	1.77	1.38	0.38	1.16	4.21	7.72	9.08	45.12
1993	5.62	M2.06	7.38	10.69	6.79	5.31	2.68	0.63	0.10	2.01	2.89	6.57	52.73
1994	5.68	5.75	5.05	3.85	2.31	3.11	0.15	T	1.89	5.63	M12.80	6.76	52.98
1995	9.97	4.79	5.45	5.47	2.69	4.26	1.19	1.52	4.62	5.81	9.89	9.96	65.62
1996	12.30	15.18	3.59	6.24	5.64	1.64	1.24	0.22	2.75	8.03	13.08	19.62	89.53
1997	7.69	5.02	10.26	5.93	2.63	3.13	0.97	1.65	4.61	7.21	4.37	3.92	57.39
1998	9.69	6.14	6.39	4.26	9.33	9.88	0.06	0.00	1.96	5.42	11.57	10.70	75.40
1999	9.15	M10.10	6.89	3.26	4.76	2.54	0.32	0.89	0.00	3.78	M10.89	7.20	59.78
2000	10.85	M7.94	4.92	3.36	M5.05	2.85	0.45	0.08	1.22	3.72	3.91	4.58	48.93
2001	3.55	1.74	4.60	4.66	2.34	2.94	0.52	0.56	1.16	4.73	9.47	10.07	46.34
2002	9.39	4.16	6.77	4.20	2.38	2.41	0.05	0.35	1.31	1.21	4.89	12.14	49.26
2003	8.64	5.66	8.74	9.50	2.04	0.84	0.00	0.31	1.90	M3.15	8.09	13.66	62.53
2004	11.12	5.74	3.19	2.89	2.90	2.51	0.15	3.54	4.35	5.95	4.89	M5.48	52.71
2005	2.88	1.24	6.25	6.62	6.44	4.69	0.59	0.10	0.85	5.84	8.00	11.55	55.05
2006	16.91	3.99	5.11	4.47	4.82	2.30	0.25	0.00	1.53	2.12	M19.07	M8.16	68.73
2007	M5.94	8.41	8.04	4.75	2.08	1.39	0.66	1.02	3.11	5.37	6.26	M10.20	57.23
2008	M10.69	4.06	7.87	5.29	2.45	1.99	0.15	1.90	1.11	1.78	6.63	9.36	53.28
2009	5.50	4.87	4.82	4.01	5.14	M0.63	0.27	0.24	1.94	M5.17	8.24	5.48	46.31
2010	7.38	M3.78	M8.08	7.72	M4.94	5.08	0.36	0.20	M3.00	6.76	M10.43	10.76	68.49
2011	5.10	3.56	M11.44	M7.43	M3.74	1.87	2.07	0.20	M0.59	M4.31	7.09	M6.06	53.46
2012	12.10	M5.46	M13.17	M7.56	M3.32	M4.60	M0.55	M0.01	M0.13	M7.13	10.29	M11.52	75.84
2013	6.00	3.00	M2.79	M3.32	5.56	M2.06	0.06	0.55	9.79	M2.54	3.77	M3.56	43.00
2014	M4.76	9.37	8.71	4.79	3.08	M2.25	0.71	M0.04	2.53	9.55	7.18	9.21	62.18

2015	3.26	3.90	4.71	M3.14	1.68	0.58	0.00	1.41	2.17	3.53	8.21	14.89	47.48
2016	7.12	4.88	7.82	3.42	2.01	1.83	0.61	0.33	1.23	14.06	7.81	6.99	58.11
2017	5.55	12.03	11.28	5.54	3.33	1.97	0.00	0.00	3.28	7.67	9.34	4.45	64.44
2018	6.68	3.60	M6.05	6.29	0.64	1.76	0.00	M0.23	1.03	M1.24			27.52
Notes: Data missing in any month have an "M" flag. A "T" indicates a trace of precipitation.													
Data missing for all days in a month or year is blank.													
Creation date: 2016-07-22													

Almanac for LACOMB 3 NNE, OR
October 18, 2018

Daily Data	Observed	----	Normal	Record Highest	Record Lowest
Max Temperature	74		62	79 in 2003	48 in 1984
Min Temperature	37		40	53 in 2015	30 in 1976
Avg Temperature	55.5		51.3	62.0 in 2003	43.5 in 1994
Precipitation	0.00		0.15	1.55 in 2016	0.00 in 2018
Snowfall	0.0		0.0	0.0 in 2018	0.0 in 2018
Snow Depth	0		-	0 in 2018	0 in 2018
HDD (base 65)	9		14	21 in 1994	3 in 2003
CDD (base 65)	0		0	0 in 2018	0 in 2018
Month-to-Date Summary	Observed	----	Normal	Record Highest	Record Lowest
Avg Max Temperature	66.7		66.1	78.4 in 1991	58.1 in 2007
Avg Min Temperature	38.2		41.6	49.3 in 1988	35.9 in 1974
Avg Temperature	52.4		53.9	59.4 in 1991	48.3 in 2013
Total Precipitation	1.24		2.15	10.43 in 2016	0.00 in 1987
Total Snowfall	0.0		0.0	0.0 in 2018	0.0 in 2018
Max Snow Depth	0		-	0 in 2018	0 in 2018
Total HDD (base 65)	223		201	297 in 2013	99 in 1991
Total CDD (base 65)	0		0	6 in 1980	0 in 2018
Year-to-Date Summary	Observed	----	Normal	Record Highest	Record Lowest
Avg Max Temperature	65.7		65.4	68.9 in 2015	62.5 in 2011
Avg Min Temperature	41.1		42.0	43.9 in 1998	39.9 in 1985
Avg Temperature	53.4		53.7	56.1 in 1992	52.1 in 2011
Total Precipitation	27.52		37.81	52.09 in 1996	17.61 in 1973
Total Snowfall (since July 1)	0.0		0.0	0.0 in 2018	0.0 in 2018
Max Snow Depth (since July 1)	0		-	0 in 2018	0 in 2018
Total HDD (since July 1)	503		476	621 in 1973	233 in 2014
Total CDD (since Jan 1)	199		166	324 in 2017	72 in 1980

Climatological Data for LACOMB 3 NNE, OR - October 2018

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2018-10-01	71	51	61.0	21	11	0.00	0.0	0
2018-10-02	73	53	63.0	23	13	0.00	0.0	0
2018-10-03	71	35	53.0	13	3	0.00	0.0	0
2018-10-04	67	34	50.5	11	1	0.00	0.0	0
2018-10-05	63	37	50.0	10	0	0.00	0.0	0
2018-10-06	55	41	48.0	8	0	0.56	0.0	0
2018-10-07	57	36	46.5	7	0	0.00	0.0	0
2018-10-08	57	37	47.0	7	0	0.21	0.0	0
2018-10-09	59	52	55.5	16	6	0.47	0.0	0
2018-10-10	63	41	52.0	12	2	0.00	0.0	0
2018-10-11	61	34	47.5	8	0	0.00	0.0	0
2018-10-12	68	34	51.0	11	1	0.00	0.0	0
2018-10-13	70	35	52.5	13	3	0.00	0.0	0
2018-10-14	73	32	52.5	13	3	0.00	0.0	0
2018-10-15	71	31	51.0	11	1	0.00	0.0	0
2018-10-16	71	31	51.0	11	1	0.00	0.0	0
2018-10-17	76	36	56.0	16	6	0.00	0.0	0
2018-10-18	74	37	55.5	16	6	0.00	0.0	0
2018-10-19	71	37	54.0	14	4	0.00	0.0	0
2018-10-20	69	36	52.5	13	3	0.00	0.0	0
2018-10-21	67	37	52.0	12	2	0.00	0.0	0
2018-10-22	67	37	52.0	12	2	0.00	0.0	0
2018-10-23	67	37	52.0	12	2	0.00	0.0	0
2018-10-24	59	39	49.0	9	0	0.01	0.0	0
2018-10-25	63	43	53.0	13	3	0.00	0.0	0
2018-10-26	63	45	54.0	14	4	0.05	0.0	0
2018-10-27	61	49	55.0	15	5	0.08	0.0	0
2018-10-28	66	48	57.0	17	7	0.63	0.0	0
2018-10-29	56	47	51.5	12	2	0.71	0.0	0
2018-10-30	M	M	M	M	M	M	0.0	0
2018-10-31	53	37	45.0	5	0	0.25	M	0
Average|Sum	65.4	39.3	52.4	375	91	2.97	0.0	0.0

Climatological Data for LACOMB 3 NNE, OR - September 2018

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2018-09-01	75	43	59.0	19	9	0.00	0.0	0
2018-09-02	74	41	57.5	18	8	0.00	0.0	0
2018-09-03	80	41	60.5	21	11	0.00	0.0	0
2018-09-04	75	40	57.5	18	8	0.00	0.0	0
2018-09-05	80	40	60.0	20	10	0.00	0.0	0
2018-09-06	85	46	65.5	26	16	0.00	0.0	0
2018-09-07	83	44	63.5	24	14	0.00	0.0	0
2018-09-08	83	44	63.5	24	14	0.00	0.0	0
2018-09-09	75	44	59.5	20	10	0.00	0.0	0
2018-09-10	78	44	61.0	21	11	0.10	0.0	0
2018-09-11	73	50	61.5	22	12	0.00	0.0	0
2018-09-12	68	51	59.5	20	10	0.33	0.0	0
2018-09-13	62	47	54.5	15	5	0.05	0.0	0
2018-09-14	67	41	54.0	14	4	0.00	0.0	0
2018-09-15	70	41	55.5	16	6	0.00	0.0	0
2018-09-16	68	42	55.0	15	5	0.04	0.0	0
2018-09-17	63	41	52.0	12	2	0.36	0.0	0
2018-09-18	65	42	53.5	14	4	0.00	0.0	0
2018-09-19	70	39	54.5	15	5	0.00	0.0	0
2018-09-20	70	39	54.5	15	5	0.00	0.0	0
2018-09-21	72	42	57.0	17	7	0.00	0.0	0
2018-09-22	74	42	58.0	18	8	0.12	0.0	0
2018-09-23	68	40	54.0	14	4	0.02	0.0	0
2018-09-24	67	38	52.5	13	3	0.00	0.0	0
2018-09-25	70	36	53.0	13	3	0.00	0.0	0
2018-09-26	81	37	59.0	19	9	0.00	0.0	0
2018-09-27	83	40	61.5	22	12	0.00	0.0	0
2018-09-28	83	44	63.5	24	14	0.00	0.0	0
2018-09-29	85	45	65.0	25	15	0.00	0.0	0
2018-09-30	66	50	58.0	18	8	0.01	0.0	0
Average|Sum	73.8	42.5	58.1	552	252	1.03	0.0	0.0

Climatological Data for LACOMB 3 NNE, OR - August 2018

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2018-08-01	90	49	69.5	30	20	0.00	0.0	0
2018-08-02	87	49	68.0	28	18	0.00	0.0	0
2018-08-03	73	54	63.5	24	14	0.00	0.0	0
2018-08-04	77	48	62.5	23	13	0.00	0.0	0
2018-08-05	84	48	66.0	26	16	0.00	0.0	0
2018-08-06	87	49	68.0	28	18	0.00	0.0	0
2018-08-07	88	53	70.5	31	21	0.00	0.0	0
2018-08-08	92	54	73.0	33	23	0.00	0.0	0
2018-08-09	92	54	73.0	33	23	0.00	0.0	0
2018-08-10	94	54	74.0	34	24	0.00	0.0	0
2018-08-11	90	57	73.5	34	24	0.00	0.0	0
2018-08-12	78	49	63.5	24	14	0.00	0.0	0
2018-08-13	M	M	M	M	M	M	0.0	0
2018-08-14	95	49	72.0	32	22	0.00	0.0	0
2018-08-15	89	52	70.5	31	21	0.00	0.0	0
2018-08-16	84	54	69.0	29	19	0.00	0.0	0
2018-08-17	81	47	64.0	24	14	0.00	0.0	0
2018-08-18	80	43	61.5	22	12	0.00	0.0	0
2018-08-19	85	43	64.0	24	14	0.00	0.0	0
2018-08-20	86	48	67.0	27	17	0.00	0.0	0
2018-08-21	80	50	65.0	25	15	0.00	0.0	0
2018-08-22	95	50	72.5	33	23	0.00	0.0	0
2018-08-23	91	50	70.5	31	21	0.00	0.0	0
2018-08-24	64	48	56.0	16	6	0.00	0.0	0
2018-08-25	73	41	57.0	17	7	0.00	0.0	0
2018-08-26	74	41	57.5	18	8	0.03	0.0	0
2018-08-27	69	56	62.5	23	13	0.20	0.0	0
2018-08-28	76	45	60.5	21	11	0.00	0.0	0
2018-08-29	87	45	66.0	26	16	0.00	0.0	0
2018-08-30	85	47	66.0	26	16	0.00	0.0	0
2018-08-31	68	48	58.0	18	8	0.00	0.0	0
Average|Sum	83.1	49.2	66.2	791	491	0.23	0.0	0.0

Climatological Data for LACOMB 3 NNE, OR - July 2018

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2018-07-01	82	49	65.5	26	16	0.00	0.0	0
2018-07-02	80	43	61.5	22	12	0.00	0.0	0
2018-07-03	71	39	55.0	15	5	0.00	0.0	0
2018-07-04	76	40	58.0	18	8	0.00	0.0	0
2018-07-05	77	49	63.0	23	13	0.00	0.0	0
2018-07-06	84	50	67.0	27	17	0.00	0.0	0
2018-07-07	78	51	64.5	25	15	0.00	0.0	0
2018-07-08	80	46	63.0	23	13	0.00	0.0	0
2018-07-09	84	47	65.5	26	16	0.00	0.0	0
2018-07-10	67	52	59.5	20	10	0.00	0.0	0
2018-07-11	80	50	65.0	25	15	0.00	0.0	0
2018-07-12	88	55	71.5	32	22	0.00	0.0	0
2018-07-13	97	53	75.0	35	25	0.00	0.0	0
2018-07-14	92	50	71.0	31	21	0.00	0.0	0
2018-07-15	91	51	71.0	31	21	0.00	0.0	0
2018-07-16	97	54	75.5	36	26	0.00	0.0	0
2018-07-17	97	53	75.0	35	25	0.00	0.0	0
2018-07-18	M	M	M	M	M	0.00	0.0	0
2018-07-19	M	M	M	M	M	0.00	0.0	0
2018-07-20	M	M	M	M	M	0.00	0.0	0
2018-07-21	78	43	60.5	21	11	0.00	0.0	0
2018-07-22	81	44	62.5	23	13	0.00	0.0	0
2018-07-23	M	M	M	M	M	0.00	0.0	0
2018-07-24	M	M	M	M	M	0.00	0.0	0
2018-07-25	M	M	M	M	M	0.00	0.0	0
2018-07-26	95	52	73.5	34	24	0.00	0.0	0
2018-07-27	95	50	72.5	33	23	0.00	0.0	0
2018-07-28	90	48	69.0	29	19	0.00	0.0	0
2018-07-29	89	48	68.5	29	19	0.00	0.0	0
2018-07-30	96	53	74.5	35	25	0.00	0.0	0
2018-07-31	89	52	70.5	31	21	0.00	0.0	0
Average|Sum	85.4	48.9	67.1	685	435	0.00	0.0	0.0

Appendix D: Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Colonia Paz Housing Complex City/County: Lebanon/Linn Sampling Date: 10/18/2018

Applicant/Owner: Farmworker Housing Development Corporation State: OR Sampling Point: 1

Investigator(s): Stacey Reed and Sonya Templeton Section, Township, Range: Sec. 23, T. 12S., R. 2W

Landform (hillslope, terrace, etc.): Artifical Pond Local relief (concave, convex, none): Concave Slope (%): <3%

Subregion (LRR): A, Northwest Forests and Coast Lat: Long: Datum:

Soil Map Unit Name: Unit: 2224A, Courtney gravelly silty clay loam, 0% to 3% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ___ No X (If no, explain in Remarks)

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	

Precipitation:
According to the AgACIS, Lacomb 3 NNE, OR station, 0.00 inches of rainfall was received on the day of the site visit and 1.24 inches within the two weeks prior.

Remarks:
Plot is located within isolated pond.

VEGETATION

Tree Stratum (Plot Size: 30' r or)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus tremuloides*	25%	Yes	FACU
2.			
3.			
4.			
	25% = Total Cover		
Sapling/Shrub Stratum (Plot Size: 10' r or)			
1. *Cornus alba*	10%	Yes	FACW
2.			
3.			
4.			
5.			
	10% = Total Cover		
Herb Stratum (Plot Size: 5' r or)			
1. *Carex obnupta*	30%	Yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	30% = Total Cover		
Woody Vine Stratum (Plot Size: 10' r or)			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 70%

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	40 (A)		50 (B)
Prevalence Index = B/A =			1.25

Hydrophytic Vegetation Indicators:
- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation (Explain)[1]

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ___

Remarks:

SOIL

Sampling Point: 1

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100					SiL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix CS=Covered or Coated Sand Grains.
[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Loamy Mucky Mineral (F1) (except MLRA 1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:
Many roots throughout. Shovel refusal due to gravels at 10". Area likely ponds seasonally.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
___ Salt Crust (B11)
___ Aquatic Invertebrates (B13)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Stunted or Stressed Plants (D1) (LRR A)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Saturation Visible on Aerial Imagery (C9)
X Geomorphic Position (D2)
___ Shallow Aquitard (D3)
X FAC-Neutral Test (D5)
___ Raised Ant Mounds (D6) (LRR A)
___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): >10"
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): >10"

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Colonia Paz Housing Complex City/County: Lebanon/Linn Sampling Date: 10/18/2018

Applicant/Owner: Farmworker Housing Development Corporation State: OR Sampling Point: 2

Investigator(s): Stacey Reed and Sonya Templeton Section, Township, Range: Sec. 23, T. 12S., R. 2W

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Sl. Concave Slope (%): <3%

Subregion (LRR): A, Northwest Forests and Coast Lat: Long: Datum:

Soil Map Unit Name: Unit: 2224A, Courtney gravelly silty clay loam, 0% to 3% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ___ No X (If no, explain in Remarks)

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes ___ No X
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes	No X	

Precipitation:
According to the AgACIS, Lacomb 3 NNE, OR station, 0.00 inches of rainfall was received on the day of the site visit and 1.24 inches within the two weeks prior.

Remarks:
Plot is located in vicinity of wetland delineated under the 1994 delineation by Jay Lorenz.

VEGETATION

Tree Stratum (Plot Size: 30' r or)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0% = Total Cover		
Sapling/Shrub Stratum (Plot Size: 10' r or)			
1. *Rubus armeniacus*	5%	Yes	FAC
2. *Crataegus monogyna*	2%	Yes	FAC
3.			
4.			
5.			
	7% = Total Cover		
Herb Stratum (Plot Size: 5' r or)			
1. *Plantago lanceolata*	20%	Yes	FACU
2. *Daucus carota*	20%	Yes	FACU
3. *Schedonorus arundinaceus*	20%	Yes	FAC
4. *Agrostis capillaris*	20%	Yes	FAC
5. *Cirsium arvense*	5%	No	FAC
6. *Holcus lanatus*	5%	No	FAC
7. *Leucanthemum vulgare*	5%	No	FACU
8. *Trifolium repens*	5%	No	FAC
9.			
10.			
11.			
	100% = Total Cover		
Woody Vine Stratum (Plot Size: 10' r or)			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	62	x 3 =	186
FACU species	45	x 4 =	180
UPL species	0	x 5 =	0
Column Totals:	107 (A)		366 (B)

Prevalence Index = B/A = 3.42

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation (Explain)[1]

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ___

Remarks:

SOIL

Sampling Point: 2

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12+	10YR 2/2	100					GrSiL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix CS=Covered or Coated Sand Grains.
[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Loamy Mucky Mineral (F1) (except MLRA 1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
___ Salt Crust (B11)
___ Aquatic Invertebrates (B13)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Stunted or Stressed Plants (D1) (LRR A)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Saturation Visible on Aerial Imagery (C9)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ FAC-Neutral Test (D5)
___ Raised Ant Mounds (D6) (LRR A)
___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): >12
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): >12

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Soils dry throughout. No evidence of prior ponding.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Colonia Paz Housing Complex City/County: Lebanon/Linn Sampling Date: 10/18/2018

Applicant/Owner: Farmworker Housing Development Corporation State: OR Sampling Point: 3

Investigator(s): Stacey Reed and Sonya Templeton Section, Township, Range: Sec. 23, T. 12S., R. 2W

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Sl. Concave Slope (%): <3%

Subregion (LRR): A, Northwest Forests and Coast Lat: Long: Datum:

Soil Map Unit Name: Unit: 23, Clackamas gravelly silt loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ___ No X (If no, explain in Remarks)

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ___	**Is the Sampled Area within a Wetland?** **Yes X** **No ___**
Hydric Soil Present?	Yes X	No ___	
Wetland Hydrology Present?	Yes X	No ___	

Precipitation:
According to the AgACIS, Lacomb 3 NNE, OR station, 0.00 inches of rainfall was received on the day of the site visit and 1.24 inches within the two weeks prior.

Remarks:
Wetland A

VEGETATION

Tree Stratum (Plot Size: 30' r or)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus latifolia*	40%	Yes	FACW
2.			
3.			
4.			
	40% = Total Cover		
Sapling/Shrub Stratum (Plot Size: 10' r or)			
1. *Rubus armeniacus*	10%	Yes	FAC
2. *Rosa pisocarpa*	2%	No	FAC
3.			
4.			
5.			
	12% = Total Cover		
Herb Stratum (Plot Size: 5' r or)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0% = Total Cover		
Woody Vine Stratum (Plot Size: 10' r or)			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 100%

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	12	x 3 =	36
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	52 (A)		116 (B)

Prevalence Index = B/A = 2.23

Hydrophytic Vegetation Indicators:
- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation (Explain)[1]

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? **Yes X** **No ___**

Remarks:
Bare ground covered by leaf litter.

SOIL

Sampling Point: 3

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/1	100					GrSiL	
8-11	10YR 3/1	95	7.5YR 3/4	5	C	M	GrSiL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix CS=Covered or Coated Sand Grains.
[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Loamy Mucky Mineral (F1) (except MLRA 1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
_X_ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _X_ **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
___ Salt Crust (B11)
___ Aquatic Invertebrates (B13)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Stunted or Stressed Plants (D1) (LRR A)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Saturation Visible on Aerial Imagery (C9)
_X_ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
_X_ FAC-Neutral Test (D5)
___ Raised Ant Mounds (D6) (LRR A)
___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___	
Water Table Present?	Yes ___	No X	Depth (inches): >11"	
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): >11"	

Wetland Hydrology Present? **Yes** _X_ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Colonia Paz Housing Complex City/County: Lebanon/Linn Sampling Date: 10/18/2018

Applicant/Owner: Farmworker Housing Development Corporation State: OR Sampling Point: 4

Investigator(s): Stacey Reed and Sonya Templeton Section, Township, Range: Sec. 23, T. 12S., R. 2W

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Sl. Convex Slope (%): <3%

Subregion (LRR): A, Northwest Forests and Coast Lat: Long: Datum:

Soil Map Unit Name: Unit: 23, Clackamas gravelly silt loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ___ No X (If no, explain in Remarks)

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes ___ No X
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes	No X	

Precipitation:
According to the AgACIS, Lacomb 3 NNE, OR station, 0.00 inches of rainfall was received on the day of the site visit and 1.24 inches within the two weeks prior.

Remarks:

VEGETATION

Tree Stratum (Plot Size: 30' r or)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus latifolia*	20%	Yes	FACW
2. *Crataegus monogyna*	15%	Yes	FAC
3.			
4.			
	35% = Total Cover		
Sapling/Shrub Stratum (Plot Size: 10' r or)			
1. *Rubus armeniacus*	80%	Yes	FAC
2. *Rosa pisocarpa*	15%	No	FAC
3. *Oemleria cerasiformis*	2%	No	FACU
4.			
5.			
	97% = Total Cover		
Herb Stratum (Plot Size: 5' r or)			
1. *Hedera helix*	10%	Yes	FACU
2. *Mahonia aquifolium*	2%	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	12% = Total Cover		
Woody Vine Stratum (Plot Size: 10' r or)			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 88%

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across All Strata: 5 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 60% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	110	x 3 =	330
FACU species	14	x 4 =	56
UPL species	0	x 5 =	0
Column Totals:	144 (A)		426 (B)

Prevalence Index = B/A = 2.96

Hydrophytic Vegetation Indicators:
- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation (Explain)[1]

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ___

Remarks:

SOIL

Sampling Point: 4

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/1	100					GrSiL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix CS=Covered or Coated Sand Grains.
[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Loamy Mucky Mineral (F1) (except MLRA 1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
Shovel refusal at 10" due to dense gravels.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
___ Salt Crust (B11)
___ Aquatic Invertebrates (B13)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Stunted or Stressed Plants (D1) (LRR A)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Saturation Visible on Aerial Imagery (C9)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ FAC-Neutral Test (D5)
___ Raised Ant Mounds (D6) (LRR A)
___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): >12"
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): >12"

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Colonia Paz Housing Complex City/County: Lebanon/Linn Sampling Date: 10/18/2018

Applicant/Owner: Farmworker Housing Development Corporation State: OR Sampling Point: 5

Investigator(s): Stacey Reed and Sonya Templeton Section, Township, Range: Sec. 23, T. 12S., R. 2W

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Sl. Concave Slope (%): <3%

Subregion (LRR): A, Northwest Forests and Coast Lat: Long: Datum:

Soil Map Unit Name: Unit: 23, Clackamas gravelly silt loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ___ No X (If no, explain in Remarks)

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** **Yes X** **No**
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	

Precipitation:
According to the AgACIS, Lacomb 3 NNE, OR station, 0.00 inches of rainfall was received on the day of the site visit and 1.24 inches within the two weeks prior.

Remarks:
Wetland A

VEGETATION

Tree Stratum (Plot Size: 30' r or)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus latifolia*	40%	Yes	FACW
2.			
3.			
4.			
	40% = Total Cover		
Sapling/Shrub Stratum (Plot Size: 10' r or)			
1. *Rubus armeniacus*	5%	Yes	FAC
2. *Crataegus monogyna*	5%	Yes	FAC
3. *Physocarpus capitatus*	5%	Yes	FACW
4.			
5.			
	15% = Total Cover		
Herb Stratum (Plot Size: 5' r or)			
1. *Carex densa*	8%	Yes	OBL
2. *Alopecurus pratensis*	5%	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	13% = Total Cover		
Woody Vine Stratum (Plot Size: 10' r or)			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 87%

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	8	x 1 =	8
FACW species	45	x 2 =	90
FAC species	15	x 3 =	45
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	68 (A)		143 (B)
Prevalence Index = B/A =			2.10

Hydrophytic Vegetation Indicators:
- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation (Explain)[1]

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? **Yes X** **No** ___

Remarks:
Bareground covered by leaf litter.

SOIL

Sampling Point: 5

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/1	100					GrSiL	
5-9+	10YR 3/1	95	7.5YR 3/4	5	C	M	GrSiL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix CS=Covered or Coated Sand Grains.
[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Loamy Mucky Mineral (F1) (except MLRA 1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
_X_ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _X_ **No** ___

Remarks:
Shovel refusal at 9" due to dense gravels.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
___ Salt Crust (B11)
___ Aquatic Invertebrates (B13)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Stunted or Stressed Plants (D1) (LRR A)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Saturation Visible on Aerial Imagery (C9)
_X_ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
_X_ FAC-Neutral Test (D5)
___ Raised Ant Mounds (D6) (LRR A)
___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): >9"
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): >9"

Wetland Hydrology Present? **Yes** _X_ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No sediment marks on trees, subtle buttress roots roots present.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project/Site: Colonia Paz Housing Complex City/County: Lebanon/Linn Sampling Date: 10/18/2018

Applicant/Owner: Farmworker Housing Development Corporation State: OR Sampling Point: 6

Investigator(s): Stacey Reed and Sonya Templeton Section, Township, Range: Sec. 23, T. 12S., R. 2W

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Sl. Convex Slope (%): <3%

Subregion (LRR): A, Northwest Forests and Coast Lat: Long: Datum:

Soil Map Unit Name: Unit: 23, Clackamas gravelly silt loam13 NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes	No X	

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Precipitation:
According to the AgACIS, Lacomb 3 NNE, OR station, 0.00 inches of rainfall was received on the day of the site visit and 1.24 inches within the two weeks prior.

Remarks:
Plot is approximately 4-6" higher than Plot 5.

VEGETATION

Tree Stratum (Plot Size: 30' r or)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus latifolia*	20%	Yes	FACW
2.			
3.			
4.			
	20% = Total Cover		
Sapling/Shrub Stratum (Plot Size: 10' r or)			
1. *Rubus armeniacus*	15%	Yes	FAC
2. *Crataegus douglasii*	10%	Yes	FAC
3. *Quercus garryana*	5%	No	FACU
4.			
5.			
	30% = Total Cover		
Herb Stratum (Plot Size: 5' r or)			
1. *Schedonorus arundinaceus*	20%	Yes	FAC
2. *Holcus lanatus*	8%	Yes	FAC
3. *Polystichum munitum*	5%	No	FACU
4. *Hedera helix*	2%	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	35% = Total Cover		
Woody Vine Stratum (Plot Size: 10' r or)			
1.			
2.			
	0% = Total Cover		

% Bare Ground in Herb Stratum 65%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	53	x 3 =	159
FACU species	12	x 4 =	48
UPL species	0	x 5 =	0
Column Totals:	85 (A)		247 (B)

Prevalence Index = B/A = 2.91

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ 5 - Wetland Non-Vascular Plants[1]
- ____ Problematic Hydrophytic Vegetation (Explain)[1]

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks:

SOIL

Sampling Point: 6

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	100					GrSiL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix CS=Covered or Coated Sand Grains.
[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (LRR A)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (LRR A)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

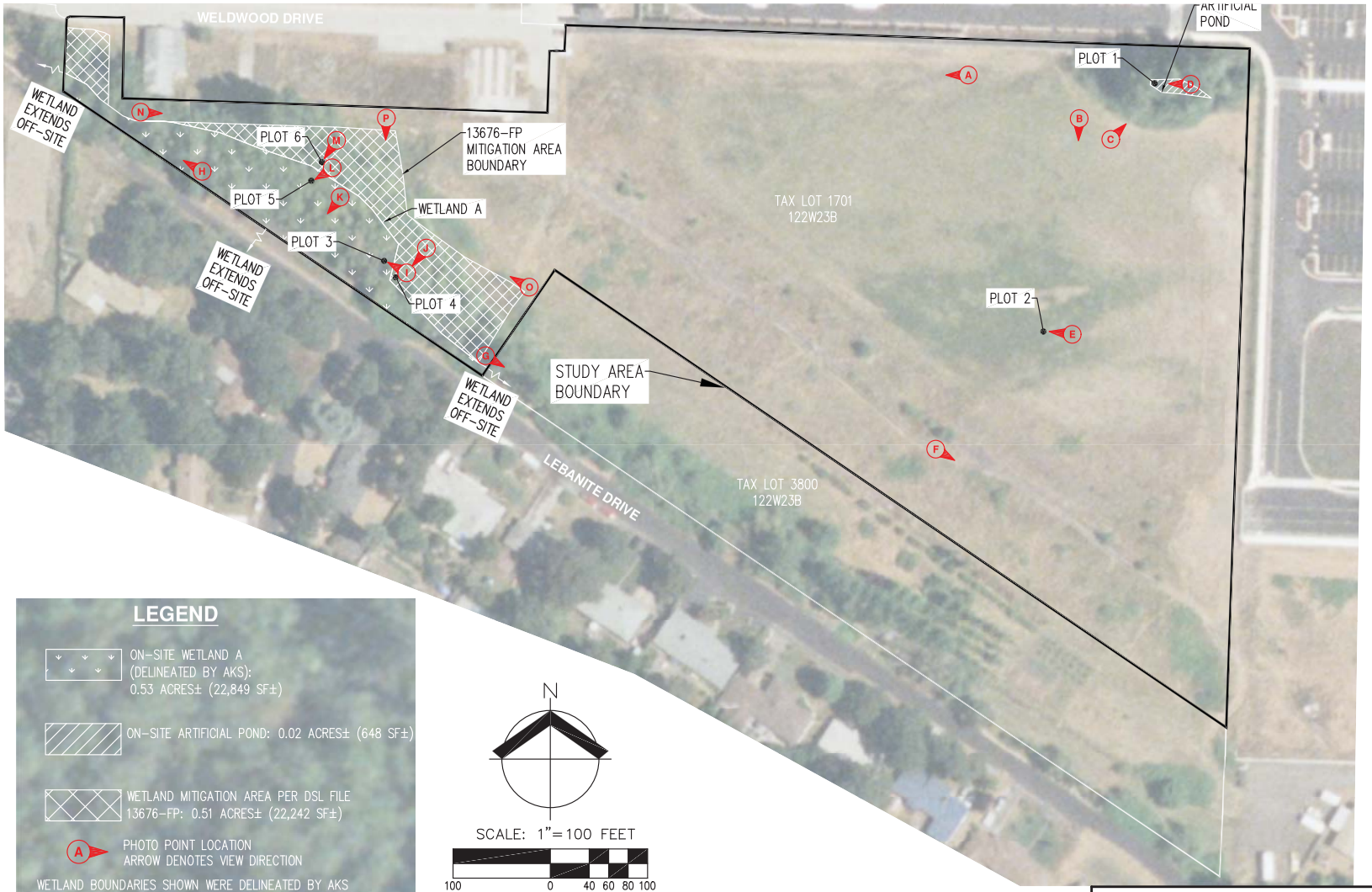
Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): >12"
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): >12"

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix E: Photo Location Map and Site Photographs



USGS HIGH RESOLUTION ORTHOIMAGERY JUNE, 2005

LEGEND

ON-SITE WETLAND A (DELINEATED BY AKS): 0.53 ACRES± (22,849 SF±)

ON-SITE ARTIFICIAL POND: 0.02 ACRES± (648 SF±)

WETLAND MITIGATION AREA PER DSL FILE 13676-FP: 0.51 ACRES± (22,242 SF±)

A PHOTO POINT LOCATION ARROW DENOTES VIEW DIRECTION

WETLAND BOUNDARIES SHOWN WERE DELINEATED BY AKS ENGINEERING & FORESTRY, LLC ON OCTOBER 18, 2018 AND WERE LOCATED USING A TRIMBLE GEO 7X HANDHELD GPS RECEIVER WITH SUB-METER ACCURACY.

N

SCALE: 1"=100 FEET

100 0 40 60 80 100

DATE: 11/26/2018

PHOTO LOCATION MAP	FIGURE 5
COLONIA PAZ HOUSING COMPLEX, LEBANON	
AKS ENGINEERING & FORESTRY, LLC 12965 SW HERMAN RD, STE 100 TUALATIN, OR 97062 P:503.563.6151 F:503.563.6152 aks-eng.com	DRWN: SKT CHKD: SAR AKS JOB: 7138

DWG: 7138 PHOTO LOCATION MAP | LAYOUT1

Photo A. View facing west of upland field.

Photo B. View facing south from the artificial pond of upland field.

Photo C. View north of the artificial pond.

Photo D. View facing west within the artificial pond and Plot 1.

Photos taken by Stacey Reed, October 18, 2018

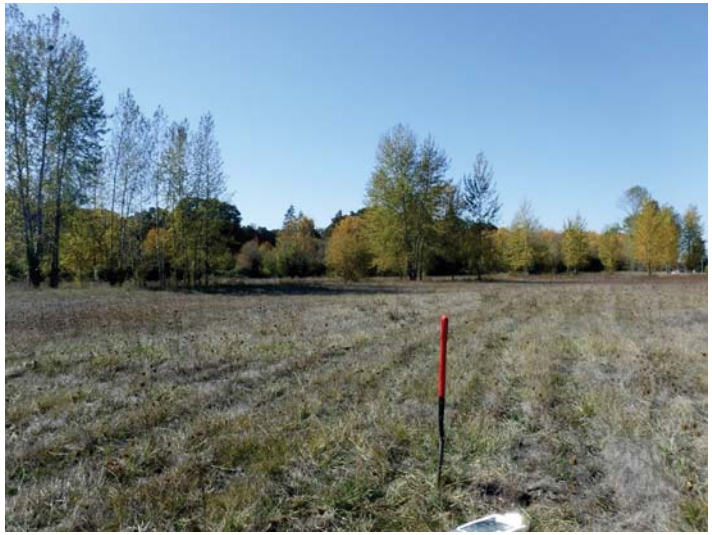


Photo E. View facing west of Plot 2 in subtle low spot in field.

Photo F. View facing east of farm road that runs through the central portion of the study area.

Photo G. View facing east of off-site portion of Ditch 1.

Photo H. View facing west of Wetland A

Photos taken by Stacey Reed, October 18, 2018

Photo I. View west at Plot 3 within Wetland A.

Photo J. View southwest of Plot 4.

Photo K. View southwest within Wetland A of small Oregon ash grove.

Photo L. View facing southwest of Plot 5 within Wetland A.

Photos taken by Stacey Reed, October 18, 2018

Photo M. View facing southwest of Plot 6 at edge of Wetland A boundary.

Photo N. View east along Wetland A and proposed mitigation area.

Photo O. View facing west of upland field, Wetland A, and proposed mitigation area.

Photo P. View facing south of proposed mitigation area.

Photos taken by Stacey Reed, October 18, 2018

Attachment #9

Technical Memorandum

Limited Hydrogeological Evaluation

Colonia Paz
Linn County Parcel 211280
(12S02W23B TL 01701)
Lebanon, OR

July 22, 2020

Prepared for:

FHDC
A Home is Just the Beginning

Attn: Claudia Cantu
1274 5th Street, Suite 1-A
Woodburn, OR 97071

Prepared by:

EVREN NORTHWEST INC.
environmental natural resource consultants

Offices in Portland and Bend, Oregon / San Rafael, California
P.O. Box 14488, Portland, Oregon 97293
T. 503-452-5561 / E. ENW@EVREN-NW.com

Project No. 382-18001-04

Technical Memorandum

Limited Hydrogeologic Evaluation

Colonia Paz
Linn County Parcel 211280
(12S02W23B TL 01701)
Lebanon, Oregon

Prepared for:

FHDC
A Home is Just the Beginning

Attn: Claudia Cantu
1274 5th Street, Suite 1-A
Woodburn, OR 97071

By:

EVREN NORTHWEST INC.
environmental natural resource consultants

CERTIFIED OREGON LYNN DELAVAN GREEN E2332 ENGINEERING GEOLOGIST
Exp 2/1/2021

Lynn D. Green, C.E.G., Principal Engineering Geologist

REGISTERED OREGON ERIK R. CHAPMAN G2208 GEOLOGIST
Exp 5/1/21

Erik RD Chapman, R.G., Senior Geologist

Contents

1.0 INTRODUCTION 1
1.1 Background 1
2.0 SITE SETTING 1
3.0 Review of Well Log Records 2
3.1 Water Well Records 2
3.2 Monitoring Well Records 3
4.0 Planned Storm Water Management (Future Development) 4
5.0 Impact of Development on Ground Water Resources 4
6.0 Impact of Development on Wetland Areas 4
7.0 Conclusion 5
8.0 LIMITATIONS 5

Figures (after text)

1 Site Vicinity Map
2 Site Plan
3 Well Location Diagram

Attachments

A Well Construction Reports

Technical Memorandum
Limited Hydrogeological Evaluation

Colonia Paz
Linn County Parcel 211280
(12S02W23B TL 01701)
Lebanon, Oregon

1.0 INTRODUCTION

This report presents the results of a limited hydrogeological evaluation conducted by EVREN Northwest, Inc. (ENW) at the site of the future Colonia Paz apartments on a portion of Linn County Parcel number 211280 in Lebanon, Oregon (see Figures 1 and 2). ENW understands that Farmworker Housing Development Corporation (FHDC) has requested this evaluation in response to public comments regarding potential effects on ground water quality in existing wells in the area and its impact on area wetlands.

1.1 Background

The subject property is identified by the Marion County Assessor's Office on tax map 12S02W23B as Tax Lot 1701 located in the SE quarter of the NW quarter of Section 23 of Township 12 South, Range 2 West, W.M. Surrounding properties are a mix of residential and commercial development in the south part of Lebanon, Oregon (see Figures 1 and 2).

ENW understands FHDC currently plans to develop a portion the subject property. This first phase of construction is planned for the southeastern corner of the site and amounts to just under two acres. Planned development includes an apartment building, paved parking, and common areas.

The City of Lebanon Community Development received written comments from the public in file AR20-05 through July 15, 2020 which have been shared and reviewed by the development team. This technical memorandum addresses issues strictly associated with potential impacts on nearby residents as they pertain to potential impacts to ground water and surface water resources.

2.0 SITE SETTING

The subject site is located within the US Geological Survey Lebanon, OR 7.5-minute quadrangle, at an approximate elevation of 360 feet above mean sea level (see Figure 1). The triangularly-shaped 9.51-acre property borders the north side of Lebanite Drive and is comprised of grass- and tree-covered land. The property is generally level, and the vicinity slopes very gently to the northeast toward Cheadle Lake. Site features are presented on the Site Plan on Figure 2.

The US Department of Agriculture Natural Resources Conservation Service Soil Survey of Linn County has mapped surface soils at the subject property as Clackamas gravelly silt loam. The typical soil profile consists of an upper 12 inches of gravelly silt loam, underlain by up to 48 inches of gravelly silty clay loam, and extremely gravelly clay loam.

The underlying geology beneath the subject area is described as lacustrine and fluvial basin-fill sediments of the Willamette Valley. In the Lebanon area, sediments have been derived from deposits from Eastern Idaho and Montana emplaced by floodwaters of the Missoula Floods (Willamette Silt). These deposits are underlain by sands and gravels of Cascade Range provenance, some of which were deposited as fluvial "fan deposits" by rivers. Large variations in sediment textures, mineralogy and grain size are attributed to Lebanon's position relative to "fan deposits," which deposit coarser materials near the slopes of origin and finer grained deposits further away from the source areas. Ground water beneath Lebanon occurs within the upper 100 to 200 feet of basin-fill sediments and provides water to numerous wells in the area.

A recent wetland delineation has identified a 0.53-acre wetland area within the 9-acre site. Other potential wetland areas within the subject site were determined to be manmade depressions and not directly hydraulically connected to adjacent wetland areas or nearby waters.[1] It is our understanding that the delineated 0.53-acre wetland area will be preserved during site development. The 1.93-acre Kingsley Wetland borders the site to the south.

The closest surface water body is an oxbow lake associated with the ancient Santiam River named Cheadle Lake, located approximately 0.25 miles to the east. The Santiam River is approximately ¾-miles east of the site.

3.0 Review of Well Log Records

To identify ground-water use in the area and to research local hydrostatigraphy, ENW searched available drillers' records of water wells and monitoring wells maintained by the Oregon Water Resources Department (OWRD). See Figure 3 for locations of select water wells and monitoring wells identified during the search.

3.1 Water Well Records

The OWRD lists 208 water well records within the same township, section, and range as the site. Results of this search indicate ground water is used extensively for domestic purposes as well as for irrigation and industrial use. The nearest wells to the site are all domestic wells and are summarized below in Table 1.

[1] AKS Engineering and Foresty. November 26, 2018. Wetland Delineation. Colonia Paz Housing Complex.

Table 1. Summary of Nearest Domestic Wells

Well Cty	Well No.	Name	Address of Well	Depth of First Water (feet bgs)	Depth Drilled (feet bgs)	Depth Water-Bearing Unit (feet bgs)	Static WL (feet bgs)	Max Yield (gpm)
LINN	14761	SCHEELE	455 CASCADE DR	39	59	39-59' (depth drilled)	12	150
LINN	8219	LADY	625 WAGON WHEEL DRIVE	---	58	48-58' (depth drilled)	24	20
LINN	53002	KENNEDY	3780 S SANTIAM HWY	42	50	42-46'	7	20
LINN	56389	RIES	WAGON WHEEL DR	42	83	43-83' (depth drilled)	16	40
LINN	61510	WALL	780 WAGON WHEEL DR	25	70	25-40' 50-70' (depth drilled)	16	30

A review of the closest water well records indicate wells draw water from depths of 39 to 83 feet bgs. The deepest well in the area is the Ries well, located on Wagon Wheel Drive south of the proposed development site. Well driller's notes describe the water-bearing zone in all of the closest wells as unconsolidated to indurated (i.e., cemented) sands and gravels. Maximum yields of the productive aquifer ranged from 20 to 150 gallons per minute.

In all of the closest well logs, driller's notes describe a confining unit above the regional aquifer. This confining unit consists of relatively fine-grained deposits, which are less porous and transmit less water and creates hydrostatic pressure in the productive aquifer below (confining head pressure). Confining conditions are reflected in elevated static water levels in completed wells in response to this confining head pressure. Due to low hydraulic conductivity of overlying sediments, the regional aquifer receives little recharge from surface infiltration, but rather is replenished from infiltration over a larger area, such as portions of Santiam River and from the foothills of the Cascades to the east.

3.2 Monitoring Well Records

ENW's search identified 13 monitoring wells, the details of which are presented in Table 2.

Table 2. Monitoring Well Details

Well No.	Depth to First Water (feet bgs)	Depth Drilled (feet bgs	Static Water Level (feet bgs)	Monitoring Well Address	Max Yield (gpm)
LINN4379	4	10	4	3092 S SANTIAM HIGHWAY	
LINN4380	5	10	4.5	3092 S SANTIAM HIGHWAY	
LINN4381	5	10	5	3092 S SANTIAM HIGHWAY	
LINN14528	6	20	10	3029 S SANTIAM HWY	
LINN14529	10	20	10	3029 S SANTIAM HWY	
LINN14530	7	20	10	3029 S SANTIAM HWY	
LINN8120	38	40	15	3092 S SANTIAM HWY	10
LINN53707	9	19	9	3510 S SANTIAM	
LINN53708	9	19	9	3510 S SANTIAM	
LINN53709	6	19	6	3510 S SANTIAM	
LINN57043		20	10	3029 S SANTIAM HWY	
LINN57044			10	3029 S SANTIAM HWY	
LINN57045		20	10	3029 S SANTIAM HWY	

Monitoring wells are typically used for shallow aquifer assessments and therefore tend to report any ground water encountered, including shallow, unconfined ground water and perched water

tables. Accordingly, most monitoring wells nearby are drilled to total depths of between 10 and 20 feet bgs (with one exception). First water was encountered in most monitoring wells at depths ranging from 4 to 10 feet bgs, which are consistent with shallow ground water depths encountered at the subject site during recent geotechnical investigations. In all but the deepest monitoring well, static water levels suggest unconfined conditions (no confining head pressure). Ground-water yields within the shallow, unconfined water-bearing unit is on the order of 10 gpm (see LINN 8120).

The monitoring well data suggests the presence of a shallow water table near the ground surface. The shallow "perched" water-bearing unit typically occurs when surface water such as precipitation infiltrates vertically downward through relatively porous near-surface sediments until vertical movement is impeded by non-porous sediment layers. Accumulation of "perched" infiltrating water by definition lies above the regional aquifer. The shallow water table is generally unconfined and affected by seasonal changes in local precipitation. Shallow ground water may be expressed at the surface and is likely in hydraulic connection with nearby wetland areas.

4.0 Planned Storm Water Management (Future Development)

Based on discussions with our Client, if is our understanding that storm-water flow generated at the planned development will be infiltrated into the ground utilizing infiltration swales and other structures. These swales will be constructed as pre-treatment water-quality facilities using bioretention soil and appropriate vegetation (swales) and other pre-treatment technologies, such as catch basin that can remove oil, grease and other floating material as well as sediment, will be installed and maintained by the owner, following a Storm Water Management Plan. This plan will include regular inspections as part of regular operation and maintenance.

5.0 Impact of Development on Ground Water Resources

Concern has been expressed by area residents that site development may inhibit the quality or quantity of well water in the area. As suggested in a review of available nearby water well logs, nearby wells derive their water from a regional ground water aquifer at depths and that are hydraulically separated from overlying perched ground water and local infiltration. The regional aquifer covers a broad geographic area and is likely recharged from areas distal to the site. Very little if any replenishment of the aquifer is from surface infiltration near the proposed project development site. Based on these hydrogeologic characteristics, the potential impact of development on aquifer recharge, water availability and well water quality is not significant.

6.0 Impact of Development on Wetland Areas

Another comment was related to the development's potential impact on wetlands within the proposed development site. As indicated, the proposed development has one delineated wetland area with additional adjacent wetland areas. The wetland areas are conservatively considered to be in hydraulic connection with the shallow, perched water table and therefore, may be partially sustained by hydraulic contributions by the shallow ground water system.

As outlined in Section 4.0, surface water recharge to wetlands will be maintained by diverting all storm water falling on hardscape surfaces (paved areas and roofs) to a water quality infiltration structures. These features gather the storm water, treat it for potential contaminants (i.e., oil and grease, suspended solids and other pollutants that are typical of parking lot runoff), and infiltrate the treated storm water into the subsurface. Since storm water system will be regularly monitored, inspected and maintained under an approved Storm Water Management Plan, the potential impact of development on shallow ground-water hydrology is not significant.

7.0 Conclusion

Based on our review of available information, it is our opinion that:

- The presence of low-porosity strata above the regional ground water aquifer, the broad occurrence of the regional aquifer, and substantial area from which ground water sources are replenished, the proposed development is not anticipated to adversely impact ground water quality or availability.
- The planned storm water treatment and management will employ engineered means of pre-treating and infiltrating storm water into the subsurface, and therefore replenish shallow ground water hydrology to the adjacent and other local wetland areas nearby.

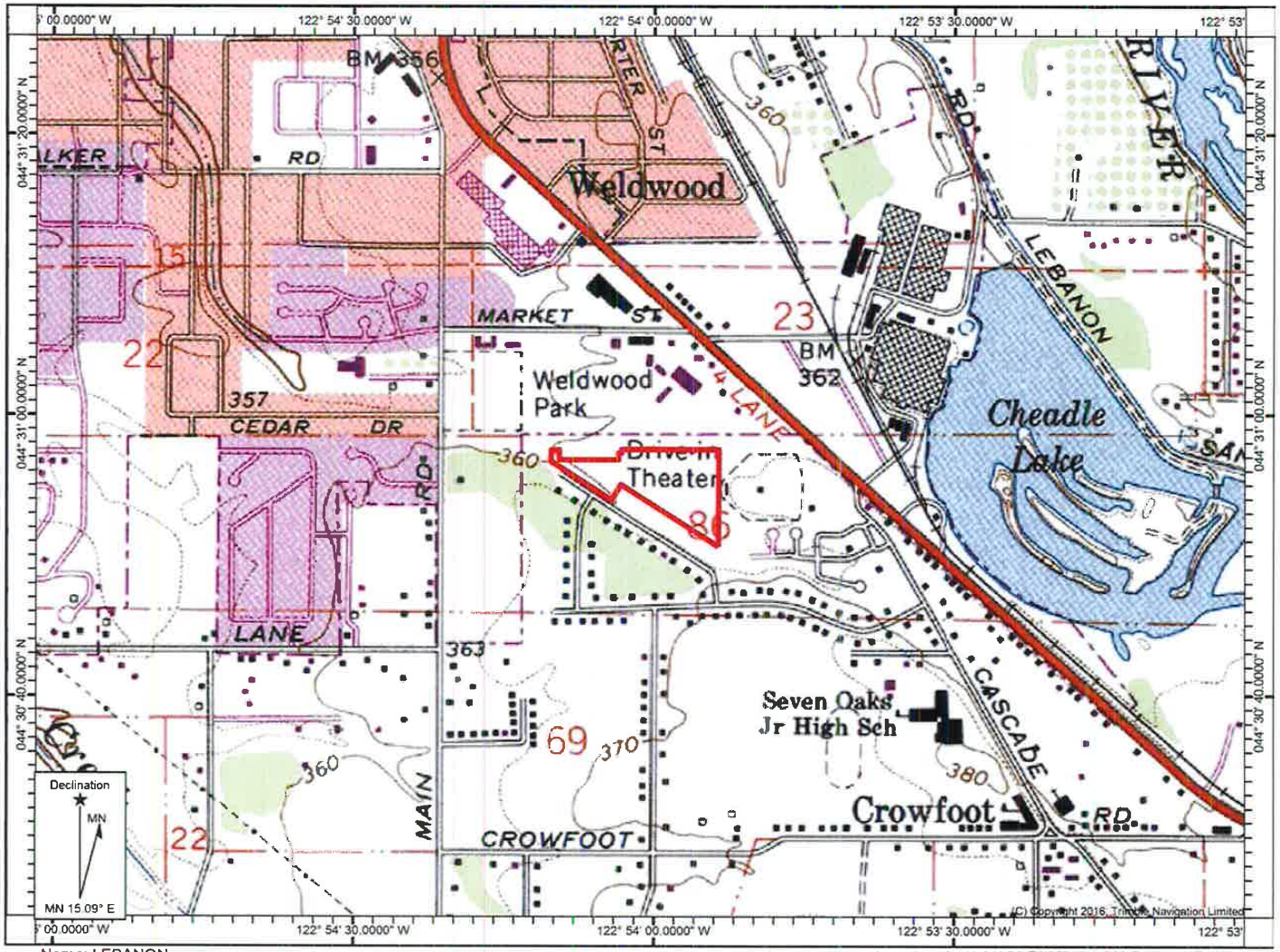
8.0 LIMITATIONS

The scope of this Technical Memorandum is limited to observations made during previous on-site work; interviews with knowledgeable sources; and review of readily available published and unpublished reports and literature. As a result, these conclusions are based on information supplied by others as well as interpretations by qualified parties.

No subsurface exploration has been performed in conducting this assessment, and detailed mapping has not been completed. Figures and findings presented herein are based on limited site reconnaissance. Conclusion and recommendation presented in this assessment were prepared in accordance with generally accepted professional geologic engineering principals and practice. We make no warranty, either express or implied.

We have performed our services for this project in accordance with our agreement and understanding with the Client. This document and the information contained herein have been prepared solely for the use of the Client. We have performed this study under a limited scope of services per our agreement. It is possible, despite the use of reasonable care and interpretation that we may have failed to identify the presence of geological hazards other than those specifically mentioned in this assessment. We assume no responsibility for conditions that we did not specifically evaluate, or conditions that were not generally recognized at the time this report was prepared.

FIGURES



Name: LEBANON
Date: Jan 1, 1986

0 1000 2000 Feet

Location: 044° 30' 55.7269" N, 122° 54' 01.4074" W
Contour Interval: 10 ft

EVREN NORTHWEST	Date Drawn: 12/10/2018 CAD File Name: 382-18001-fig1sv_map(v01) Drawn By: JOB Approved By: LDG	Colonial Paz T12S R2W S23B TL 1701 Lebanon, Oregon	**Site Vicinity Map**	Project No. 382-18001 Figure No. 1

LEGEND:

- SUBJECT PROPERTY BOUNDARIES
- PROPOSED DEVELOPMENT AREA (APPROXIMATE)
- PAD TRANSFORMER
- WETLAND AREA DELINEATED IN 1996
- WETLAND MITIGATION AREA IN 1996
- WETLAND AREA DETERMINED BY OTHERS TO BE A MANMADE DEPRESSION, HYDRAULICALLY DISCONNECTED FROM OTHER WETLAND AREA AND NEARBY WATERS.

NOTES:

1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2017 AND ENW FIELD NOTES.
2. ALL BUILDING, STREET, AND FEATURE LOCATIONS ARE APPROXIMATE.
3. SYMBOLS REPRESENT LOCATION AND DO NOT ALWAYS REPRESENT EXACT SHAPE, SIZE, OR ORIENTATION.
4. WETLANDS DISPLAYED ARE BASED ON A MAP BY UDELL ENGINEERING AND STATES THAT "THE DELINEATION THAT DETERMINED THE ILLUSTRATED WETLAND LIMITS HAS EXPIRED" AND THEY MAKE NO CLAIM TO REPRESENT THE ACCURACY OF THEIR MAP. THEY ALSO RECOMMENDED THAT A NEW WETLAND DELINEATION BE PERFORMED TO ACCURATELY DETERMINE THE LIMIT OF WETLANDS THAT MAY EXIST ON THE PROPERTY AT THAT TIME.

APPROXIMATE SCALE

0 125 250 FEET

N

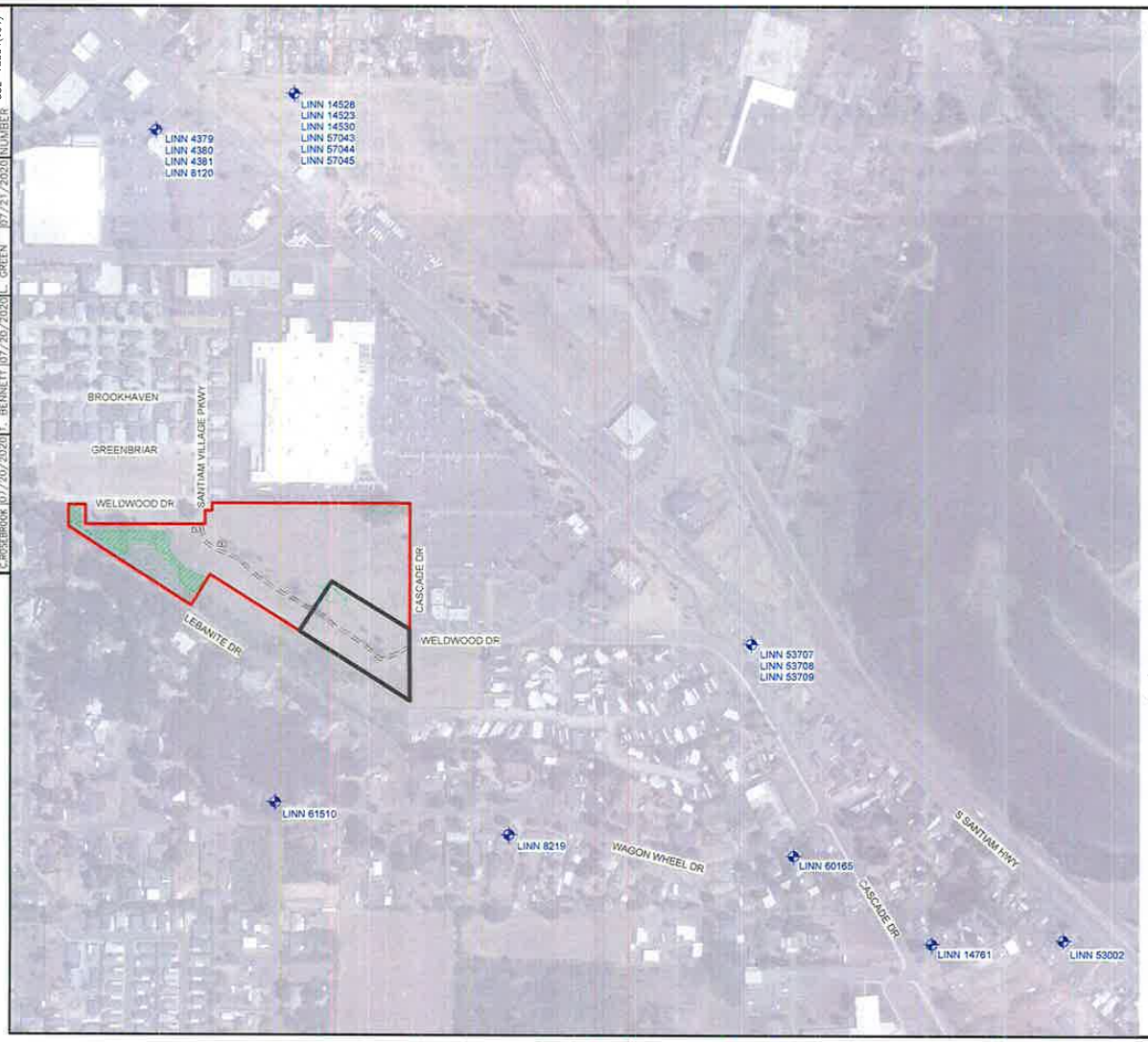
EVREN NORTHWEST INC
environmental natural resource consultants
PO BOX 14488, PORTLAND, OREGON 97293
P: (503)452-5561, E: ENW@EVREN-NW.COM

FIGURE 2

SITE PLAN

COLONIA PAZ
T12S R2W S23B TL 1701
LEBANON, OREGON

DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
C. ROSEBROOK 07/17/2020	P. TRONE 07/17/2020	L. GREEN 07/21/2020	382-18001(-01)



LEGEND:

- SUBJECT PROPERTY BOUNDARIES
- PROPOSED DEVELOPMENT AREA (APPROXIMATE)
- WETLAND AREA DELINEATED IN 1996
- WETLAND MITIGATION AREA IN 1996
- OFFSITE WELL LOCATIONS

NOTES:

1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2017 AND ENW FIELD NOTES.
2. ALL BUILDING, STREET, AND FEATURE LOCATIONS ARE APPROXIMATE.
3. SYMBOLS REPRESENT LOCATION AND DO NOT ALWAYS REPRESENT EXACT SHAPE, SIZE, OR ORIENTATION.
4. WETLANDS DISPLAYED ARE BASED ON A MAP BY UDELL ENGINEERING AND STATES THAT "THE DELINEATION THAT DETERMINED THE ILLUSTRATED WETLAND LIMITS HAS EXPIRED" AND THEY MAKE NO CLAIM TO REPRESENT THE ACCURACY OF THEIR MAP. THEY ALSO RECOMMENDED THAT A NEW WETLAND DELINEATION BE PERFORMED TO ACCURATELY DETERMINE THE LIMIT OF WETLANDS THAT MAY EXIST ON THE PROPERTY AT THAT TIME.

APPROXIMATE SCALE

0 350 700 FEET

N

EVREN NORTHWEST LLC
environmental natural resource consultants
PO BOX 14488, PORTLAND, OREGON 97293
P: (503)452-5561, E: ENW@EVREN-NW.COM

FIGURE 3

WELL LOCATION DIAGRAM

COLONIA PAZ
T12S R2W S23B TL 1701
LEBANON, OREGON

DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
G.ROSEBROOK [07/20/2020]	T. BENNETT [07/20/2020]	L. GREEN [07/21/2020]	382-18001(v01)

ATTACHMENT A

WELL REPORTS

ONLY ONE WHITE COPY,

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the STATE ENGINEER, SALEM, OREGON 97310 within 30 days from the date of well completion.

RECEIVED AUG 17 1970 STATE ENGINEER SALEM, OREGON

WATER WELL REPORT
STATE OF OREGON
(Please type or print)
(Do not write above this line)

Linn 8219

State Well No. 12/2W-23bd

State Permit No. .....

(1) OWNER:
Name Don Lady
Address 625 Wagon Wheel Drive, Lebanon Oregon

(2) TYPE OF WORK (check):
New Well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:
Rotary ☐ Driven ☐
Cable ☒ Jetted ☐
Dug ☐ Bored ☐

(4) PROPOSED USE (check):
Domestic ☒ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) CASING INSTALLED: Threaded ☐ Welded ☒
6" Diam. from -1½ ft. to 58 ft. Gage 250
..." Diam. from ... ft. to ... ft. Gage ...
..." Diam. from ... ft. to ... ft. Gage ...

(6) PERFORATIONS: Perforated? ☐ Yes ☒ No.
Type of perforator used
Size of perforations in. by in.
... perforations from ... ft. to ... ft.
... perforations from ... ft. to ... ft.
... perforations from ... ft. to ... ft.
... perforations from ... ft. to ... ft.
... perforations from ... ft. to ... ft.

(7) SCREENS: Well screen installed? ☐ Yes ☒ No
Manufacturer's Name ...
Type ... Model No. ...
Diam. ... Slot size ... Set from ... ft. to ... ft.
Diam. ... Slot size ... Set from ... ft. to ... ft.

(8) WATER LEVEL: Completed well.
Static level 24 ft. below land surface Date 8-12-70
Artesian pressure lbs. per square inch Date

(9) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? ☐ Yes ☒ No If yes, by whom?
Yield: gal./min. with ft. drawdown after hrs.
" " " "
" " " "
Bailer test 20 gal./min. with 2 ft. drawdown after 1 hrs.
Artesian flow g.p.m. Date
Temperature of water 55 Was a chemical analysis made? ☐ Yes ☒ No

(10) CONSTRUCTION:
Well seal—Material used Cement + Bentonite
Depth of seal 58 ft.
Diameter of well bore to bottom of seal 6 in.
Were any loose strata cemented off? ☐ Yes ☒ No Depth ...
Was a drive shoe used? ☒ Yes ☐ No
Did any strata contain unusable water? ☐ Yes ☒ No
Type of water? depth of strata
Method of sealing strata off
Was well gravel packed? ☐ Yes ☒ No Size of gravel: ...
Gravel placed from ... ft. to ... ft.

(11) LOCATION OF WELL:
County Linn Driller's well number
SE ¼ NW ¼ Section 23 T 12S R. 2W W.M.
Bearing and distance from section or subdivision corner
625 Wagon Wheel Drive
Lebanon, Ore.

(12) WELL LOG: Diameter of well below casing 6
Depth drilled 58' ft. Depth of completed well 58 ft.

Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level as drilling proceeds. Note drilling rates.

MATERIAL	From	To	SWL
Soil Sandy	0	4	
Clay Gravel	4	18	
Cemented Sand + Gravel	18	27	
Clay Brown	27	32	
Clay Blue	32	46	
Clay Blue Sandy	46	48	
Sand + Gravel	48	58	24'

Work started 8-10 19 70 Completed 8-11 19 70
Date well drilling machine moved off of well 8-12 19 70

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] [signature] (Drilling Machine Operator) Date 8-12, 19 70
Drilling Machine Operator's License No. 91

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
NAME H + H Drilling (Person, firm or corporation) (Type or print)
Address Rt. 3 Box 427 Lebanon, Ore.
[Signed] [signature] (Water Well Contractor)
Contractor's License No. 266 Date 8-12, 19 70

(USE ADDITIONAL SHEETS IF NECESSARY)

RECEIVED

OCT - 9 1995

WATER RESOURCES DEPT.
SALEM, OREGON

LINN 14761

12S/02W/23DB

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 537.765)

Instructions for completing this report are on the last page of this form.

(START CARD) # 83618

(1) OWNER: Well Number DR-1034

Name DON Schecle

Address 455 CASCADE DR.

City LEBANON State ORE Zip 97355

(2) TYPE OF WORK

☒ New Well ☐ Deepening ☐ Alteration (repair/recondition) ☐ Abandonment

(3) DRILL METHOD:

☒ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Auger

☐ Other

(4) PROPOSED USE:

☒ Domestic ☐ Community ☐ Industrial ☐ Irrigation

☐ Thermal ☐ Injection ☐ Livestock ☐ Other

(5) BORE HOLE CONSTRUCTION:

Special Construction approval ☐ Yes ☒ No Depth of Completed Well 59 ft.

Explosives used ☐ Yes ☒ No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Sacks or pounds
10"	0	21	BENTONITE	0	21	11 SACKS
6"	21	59				

How was seal placed: Method ☐ A ☐ B ☐ C ☐ D ☐ E

☒ Other POURED DRY

Backfill placed from ft. to ft. Material

Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	6"	+1	59	.250	☒	☐	☒	☐
Liner:								

Final location of shoe(s) 59'

(7) PERFORATIONS/SCREENS:

☒ Perforations Method HOLTE

☐ Screens Type SLOT Material STEEL

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
48	58	1 x 1/4	250	6"		☒	☐

(8) WELL TESTS: Minimum testing time is 1 hour

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
150+		55'	1 hr.

Temperature of water 53° Depth Artesian Flow Found

Was a water analysis done? ☐ Yes By whom

Did any strata contain water not suitable for intended use? ☐ Too little

☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other

Depth of strata:

(9) LOCATION OF WELL by legal description:

County LINN Latitude Longitude

Township 12 N or (S) Range 2 E or (W) WM.

Section 23 SE 1/4 NW 1/4

Tax Lot 3401 Lot Block Subdivision

Street Address of Well (or nearest address) SAME

(10) STATIC WATER LEVEL:

12 ft. below land surface. Date 9-26-95

Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:

Depth at which water was first found 39'

From	To	Estimated Flow Rate	SWL
39	59	150 + gpm	12'

(12) WELL LOG:

Ground Elevation

Material	From	To	SWL
TOP SOIL	0	2	
CLAY - BROWN W/GRAVEL	2	16	
CLAY - BROWN	16	39	
SAND W/GRAVEL	39	46	12'
GRAVEL	46	59	12'

Date started 9-26-95 Completed 9-26-95

(unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

WWC Number 1281

Signed GALE ABERNATHY Date 9-27-95

(bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 664

Signed Charles D. Lugt Date 9-27-95

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER

RECEIVED

LINN
53002

FEB 10 2000

WATER RESOURCES DEPT.
SALEM, OREGON

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

Instructions for completing this report are on the last page of this form.

WELL I.D. # L 14320
START CARD # 128424

(1) OWNER: Well Number 34de
Name Mary Kennedy
Address 3780 S. Santiam Hwy.
City Lebanon State Oregon Zip 97355

(2) TYPE OF WORK
☒ New Well ☐ Deepening ☐ Alteration (repair/recondition) ☐ Abandonment

(3) DRILL METHOD:
☒ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Auger
☐ Other

(4) PROPOSED USE:
☒ Domestic ☐ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☐ Livestock ☐ Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval ☒ Yes ☐ No Depth of Completed Well 46 ft.
Explosives used ☐ Yes ☒ No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Sacks or pounds
10	0	40	Cement	0	40	17 sacks
6	40	45	Bore			

How was seal placed: Method ☐ A ☐ B ☒ C ☐ D ☐ E
☐ Other
Backfill placed from ft. to ft. Material
Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	6	+1	39	250	☐	☐	☐	☐
Liner:	NONE				☐	☐	☐	☐

Final location of shoe(s) NONE

(7) PERFORATIONS/SCREENS:
☐ Perforations Method
☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
NONE						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
20 gpm		40	1 hr.

Temperature of water 56 Depth Artesian Flow Found
Was a water analysis done? ☐ Yes By whom
Did any strata contain water not suitable for intended use? ☐ Too little
☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other
Depth of strata:

(9) LOCATION OF WELL by legal description:
County Linn Latitude Longitude
Township 12 N or (S) Range 2 E or (W) WM.
Section 23 SE 1/4 NW 1/4
Tax Lot 800 Lot Block Subdivision
Street Address of Well (or nearest address) 3780 S. Santiam Hwy Lebanon, OR 97355

(10) STATIC WATER LEVEL:
7 ft. below land surface. Date 1-27-00
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:
Depth at which water was first found 42

From	To	Estimated Flow Rate	SWL
42	46	20 gpm	7

(12) WELL LOG:
Ground Elevation

Material	From	To	SWL
Topsoil	0	1	
Brown clay & gravel	1	19	
Brown clay	19	30	
Brown clay & gravel	30	42	
Cemented gravel	42	43	
Black brown sand	43	44	
Sand & gravel	44	50	7

Date started 1-26-2000 Completed 1-28-2000

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
WWC Number 1279
Signed Date 2-7-2000

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
WWC Number 514
Signed Date 2-7-2000

ORIGINAL – WATER RESOURCES DEPARTMENT FIRST COPY – CONSTRUCTOR SECOND COPY – CUSTOMER

LINN 56389

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)
Instructions for completing this report are on the last page of this form.

(WELL I.D.)# L 74190
(START CARD) # 171900

(1) OWNER: Well Number 4017
Name Kenneth & Patricia Ries
Address 61 H Street
City Lebanon State Oregon Zip 97355

(2) TYPE OF WORK
☑ New Well ☐ Deepening ☐ Alteration (repair/recondition) ☐ Abandonment

(3) DRILL METHOD:
☑ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Auger
☐ Other

(4) PROPOSED USE:
☑ Domestic ☐ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☐ Livestock ☐ Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval ☐ Yes ☑ No Depth of Completed Well 83 ft.
Explosives used ☐ Yes ☑ No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Sacks or pounds
10		20	Bentonite	0	20	16 sacks
6	20	83				

How was seal placed: Method ☐ A ☐ B ☐ C ☐ D ☐ E
☑ Other Poured dry
Backfill placed from ft. to ft. Material
Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	6	+1	49	250	☑	☐	☑	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:					☐	☐	☐	☐
					☐	☐	☐	☐

Final location of shoe(s)

(7) PERFORATIONS/SCREENS:
☐ Perforations Method
☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☐ Bailer ☑ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
40		83	1 hr.

Temperature of water 55 Depth Artesian Flow Found
Was a water analysis done? ☐ Yes By whom
Did any strata contain water not suitable for intended use? ☐ Too little
☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other
Depth of strata:

(9) LOCATION OF WELL by legal description:
County Linn Latitude Longitude
Township 12 S Range 2 W WM.
Section 23 SE 1/4 NW 1/4
Tax Lot 2000 Lot Block Subdivision
Street Address of Well (or nearest address) Wagon Wheel Dr.
Lebanon, OR 97355

(10) STATIC WATER LEVEL:
16 ft. below land surface. Date 2/14/2005
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:
Depth at which water was first found 42

From	To	Estimated Flow Rate	SWL
42	83	40 gpm	16

(12) WELL LOG:
Ground Elevation

Material	From	To	SWL
Cemented clay & gravel	0	22	
Sand & gravel	22	30	
Cemented clay & gravel	30	42	
Cemented gravel	42	83	

RECEIVED
FEB 16 2005
WATER RESOURCES DEPT
SALEM, OREGON

JONES DRILLING CO., INC.
29400 SANTIAM HWY.
LEBANON, OR 97355
541-367-2560 541-451-2686
1-800-915-8388

Date started 2/14/2005 Completed 2/14/2005

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
WWC Number 1411
Signed Date 2/15/2005

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
WWC Number 1684
Signed Date 2/15/2005

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765 & OAR 690-205-0210)

DRAFT

LINN 61510

WELL I.D. LABEL# L 119467
START CARD # 1028661
ORIGINAL LOG #

(1) LAND OWNER

Owner Well I.D. 5602
First Name David & Tracey Last Name Wall
Company
Address 780 Wagon Wheel Dr.
City Lebanon State OR Zip 97355

(2) TYPE OF WORK

☐ New Well ☒ Deepening ☐ Conversion
☒ Alteration (complete 2a & 10) ☐ Abandonment (complete 5a)

(2a) PRE-ALTERATION

	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
Casing:	1.25	☐	1	20	40	◉	○	☐	☐

Seal:	Material	From	To	Amt	sacks/lbs

(3) DRILL METHOD

☒ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Auger ☐ Cable Mud
☐ Reverse Rotary ☐ Other

(4) PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Community
☐ Industrial/ Commericial ☐ Livestock ☐ Dewatering
☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION

Special Standard ☐ (Attach copy)
Depth of Completed Well 70 ft.

BORE HOLE Dia	From	To	SEAL Material	From	To	Amt	sacks/lbs
10	0	19	Bentonite	0	19	10	S
6	19	70			Calculated	8	
					Calculated		

How was seal placed: Method ☐ A ☐ B ☐ C ☐ D ☐ E
☒ Other Poured dry
Backfill placed from ft. to ft. Material
Filter pack from ft. to ft. Material Size
Explosives used: ☐ Yes Type Amount

(5a) ABANDONMENT USING UNHYDRATED BENTONITE

Proposed Amount Pounds Actual Amount Pounds

(6) CASING/LINER

Casing	Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
◉	○	6	☒	1	59	250	◉	○	☒	☐
○	○		☐				○	○	☐	☐
○	○		☐				○	○	☐	☐
○	○		☐				○	○	☐	☐
○	○		☐				○	○	☐	☐

Shoe ☐ Inside ☐ Outside ☐ Other Location of shoe(s)
Temp casing ☒ Yes Dia 10 From 0 To 19

(7) PERFORATIONS/SCREENS

Perforations Method
Screens Type Material

Perf/Screen	Casing/Liner	Dia	From	To	Scrn/slot width	Slot length	# of slots	Tele/pipe size

(8) WELL TESTS: Minimum testing time is 1 hour

○ Pump ○ Bailer ◉ Air ○ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)
30		58	1

Temperature 53 °F Lab analysis ☐ Yes By
Water quality concerns? ☐ Yes (describe below) TDS amount 112

From	To	Description	Amount	Units

(9) LOCATION OF WELL (legal description)

County LINN Twp 12 S N/S Range 2 W E/W WM
Sec 23 SE 1/4 of the NW 1/4 Tax Lot 5100
Tax Map Number Lot
Lat ° ' " or DMS or DD
Long ° ' " or DMS or DD
◉ Street address of well ○ Nearest address
780 Wagon Wheel Dr., Lebanon, OR 97355

(10) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Pre-Alteration			☐	
Completed Well	11-03-2015		☐	16

Flowing Artesian? ☐ Dry Hole? ☐

WATER BEARING ZONES Depth water was first found 25

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
11-02-2015	25	40	12		☐	16
11-02-2015	50	70	30		☐	16
					☐	
					☐	
					☐	

(11) WELL LOG

Ground Elevation

Material	From	To
Brown clay	0	9
Cmeneted sand & gravel	9	35
Brown sandy clay	35	50
Cemented sand & gravel	50	70
Pulled a 20' drive point out and drilled in the same		
hole		

RECEIVED BY WRD
NOV 09 2015
SALEM, OR

JONES DRILLING CO., INC.
29400 SANTIAM HWY.
LEBANON, OR 97355
541-367-2560 541-451-2686
1-800-915-8388

Date Started 11-02-2015 Completed 11-03-2015

(unbonded) Water Well Constructor Certification

I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

License Number 1888 Date 11-04-2015
Signed

(bonded) Water Well Constructor Certification

I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

License Number 1684 Date 11-04-2015
Signed
Contact Info (optional) jonesdrilling@hotmail.com

ORIGINAL - WATER RESOURCES DEPARTMENT
THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK Form Version: 0.95

STATE OF OREGON

MONITORING WELL REPORT

(as required by ORS 537.765 & OAR 690-240-095)

Instructions for completing this report are on the last page of this form.

2 LINN 4379

RECEIVED APR 19 1995 WATER RESOURCES DEPT. SALEM, OREGON

DC01LV2.95E

12S/2W/23 bca

Start Card # W-71452

(1) OWNER/PROJECT: WELL NO. SB-3

Name Louis Schwindt

Address 740 16th Street

City Lebanon State OR Zip 97355

(2) TYPE OF WORK:

[X] New construction [ ] Alteration (Repair/Recondition)

[ ] Conversion [ ] Deepening [X] Abandonment

(3) DRILLING METHOD

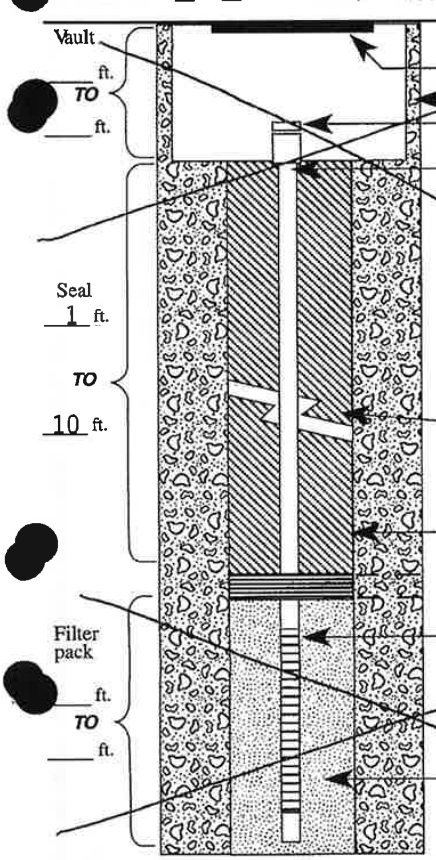
[ ] Rotary Air [ ] Rotary Mud [ ] Cable

[X] Hollow Stem Auger [ ] Other

(4) BORE HOLE CONSTRUCTION * NOT A WELL *

Yes No

Special Standards [ ] [X] Depth of completed well 10 ft.



(5) WELL TEST:

[ ] Pump [ ] Bailer [ ] Air [ ] Flowing Artesian

Permeability -- Yield -- GPM

Conductivity -- PH --

Temperature of water 55 °F/C Depth artesian flow found -- ft.

Was water analysis done? [X] Yes [ ] No

By whom? Pacific Northwest Laboratories

Depth of strata to be analyzed. From 4 ft. to 10 ft.

Remarks: Grab water sample.

Name of supervising Geologist/Engineer Jim Kooiman

(6) LOCATION OF WELL By legal description

Well Location: County Linn

Township T12S (N or S) Range R2W (E or W) Section 23B

1. NE 1/4 of NW 1/4 of above section.

2. Either Street address of well location 3092 South Santiam Highway, Lebanon, OR 97355

or Tax lot number of well location 1200

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:

4 Ft. below land surface. Date 3-16-95

Artesian Pressure -- lb/sq. in. Date --

(8) WATER BEARING ZONES:

Depth at which water was first found 4'

From	To	Est. Flow Rate	SWL
4'	10'	1-3 gpm	--

(9) WELL LOG: Ground elevation 360'

Material	From	To	SWL
Asphalt	0	4"	--
Fill, crushed gravel and sand.	4"	1.5'	--
Silty clay, (CL) medium brown.	1.5'	5'	--
Sandy gravel (GP), brown.	5'	10'	--

Date started 3/16/95 Completed 3/16/95

(unbonded) Monitor Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.

MWC Number --

Signed --------- Date --

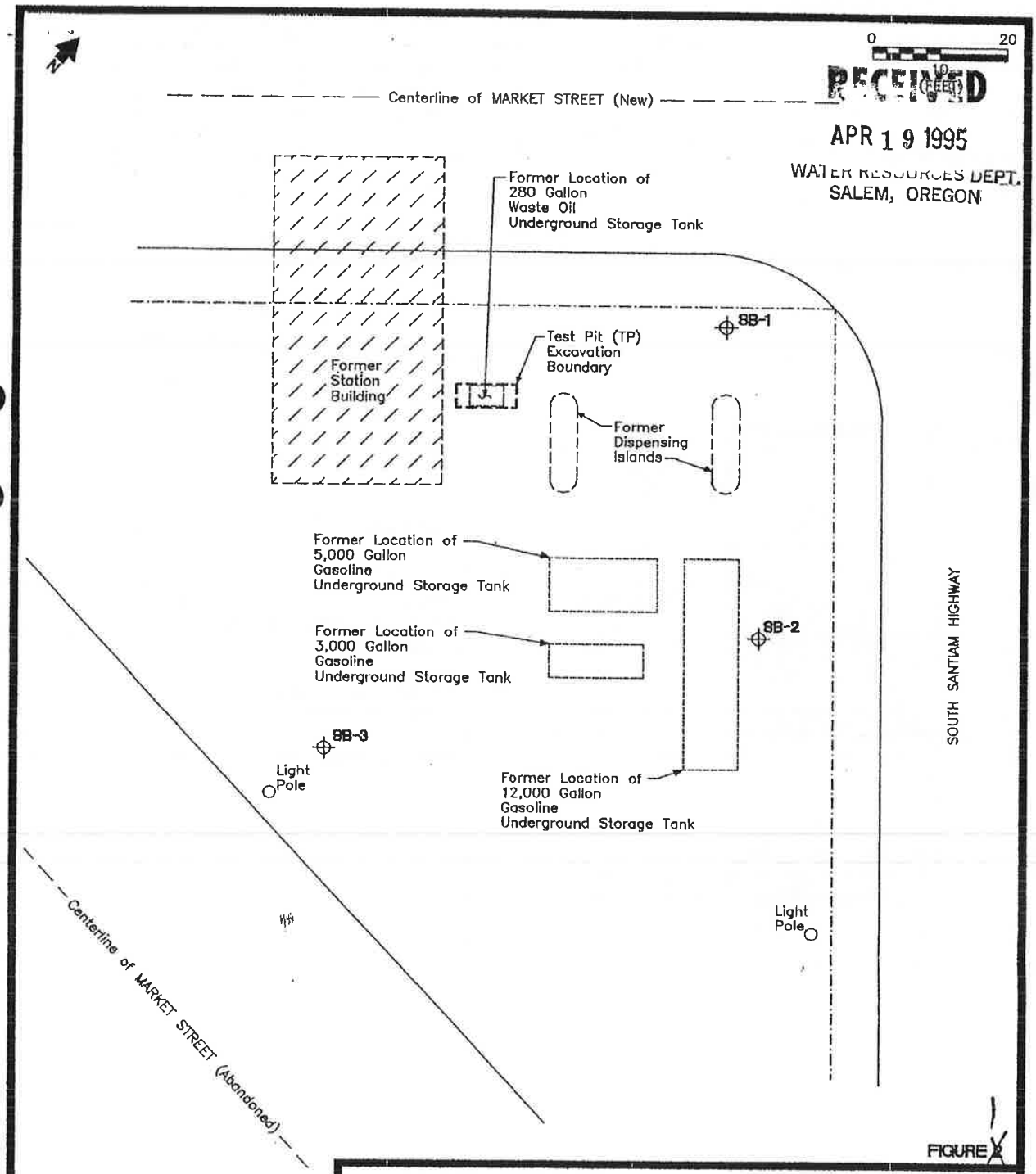
(bonded) Monitor Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

MWC Number 10288

Signed Robert L. Boese Date 4/16/95

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER



RECEIVED
APR 19 1995
WATER RESOURCES DEPT.
SALEM, OREGON

FIGURE 1

LEGEND

Property Line

SB-3 Soil Boring Location and Designation

FORMER D&W MOBIL STATION, 3092 S. Santiam Hwy., Lebanon, OR

SITE MAP AND BORING LOCATIONS

Bergeson–Boese & Associates, Inc.
Environmental Engineering
65 Centennial Loop
Eugene, Oregon 97401
(503) 484–9484

Job Code: DC01LV2.95E	
CADD File: ESA\LV2\DC01	
Scale: 1" = 20'	
Drawn: ERIC GRAPE	
Checked: JIM KOOIMAN	
Date: 3/31/95	

STATE OF OREGON

MONITORING WELL REPORT

(as required by ORS 537.765 & OAR 690-240-095)

Instructions for completing this report are on the last page of this form.

2 LINN 4380

RECEIVED APR 19 1995 WATER RESOURCES DEPT. SALEM, OREGON

DC01LV2.95E 12S/2W/23 ba

Start Card # W-71454

(1) OWNER/PROJECT: WELL NO. SB-1

Name Louis Schwindt

Address 740 16th Street

City Lebanon State OR Zip 97355

(2) TYPE OF WORK:

[X] New construction [ ] Alteration (Repair/Recondition)

[ ] Conversion [ ] Deepening [X] Abandonment

(3) DRILLING METHOD

[ ] Rotary Air [ ] Rotary Mud [ ] Cable

[X] Hollow Stem Auger [ ] Other

(4) LOCATION OF WELL By legal description

Well Location: County Linn

Township T12S (N or S) Range R2W (E or W) Section 23B

1. NE 1/4 of NW 1/4 of above section.

2. Either Street address of well location 3092 South Santiam Highway, Lebanon, Oregon 97355

or Tax lot number of well location 1200

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

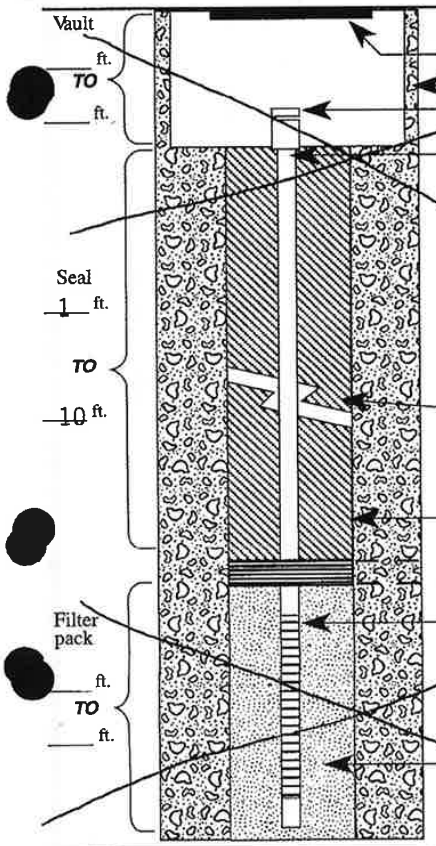
(7) STATIC WATER LEVEL:

4.5 Ft. below land surface. Date 3-16-95

Artesian Pressure -- lb/sq. in. Date --

(6) BORE HOLE CONSTRUCTION * NOT A WELL *

Special Standards [ ] Yes [X] No Depth of completed well 10 ft.



(8) WATER BEARING ZONES:

Depth at which water was first found 4.5'

From	To	Est. Flow Rate	SWL
4.5'	10'	1-2 gpm	---

(9) WELL LOG: Ground elevation 360'

Material	From	To	SWL
Sandy gravel (GP), rounded gravels to 2" OD, brown, moist.	0'	10'	--

Date started 3/16/95 Completed 3/16/95

(unbonded) Monitor Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.

MWC Number --

Signed ------- Date --

(bonded) Monitor Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

MWC Number 10288

Signed Robert L. Boese Date 4/16/95

(5) WELL TEST:

[ ] Pump [ ] Bailer [ ] Air [ ] Flowing Artesian

Permeability -- Yield -- GPM

Conductivity -- PH --

Temperature of water 55 °F/C Depth artesian flow found -- ft.

Was water analysis done? [X] Yes [ ] No

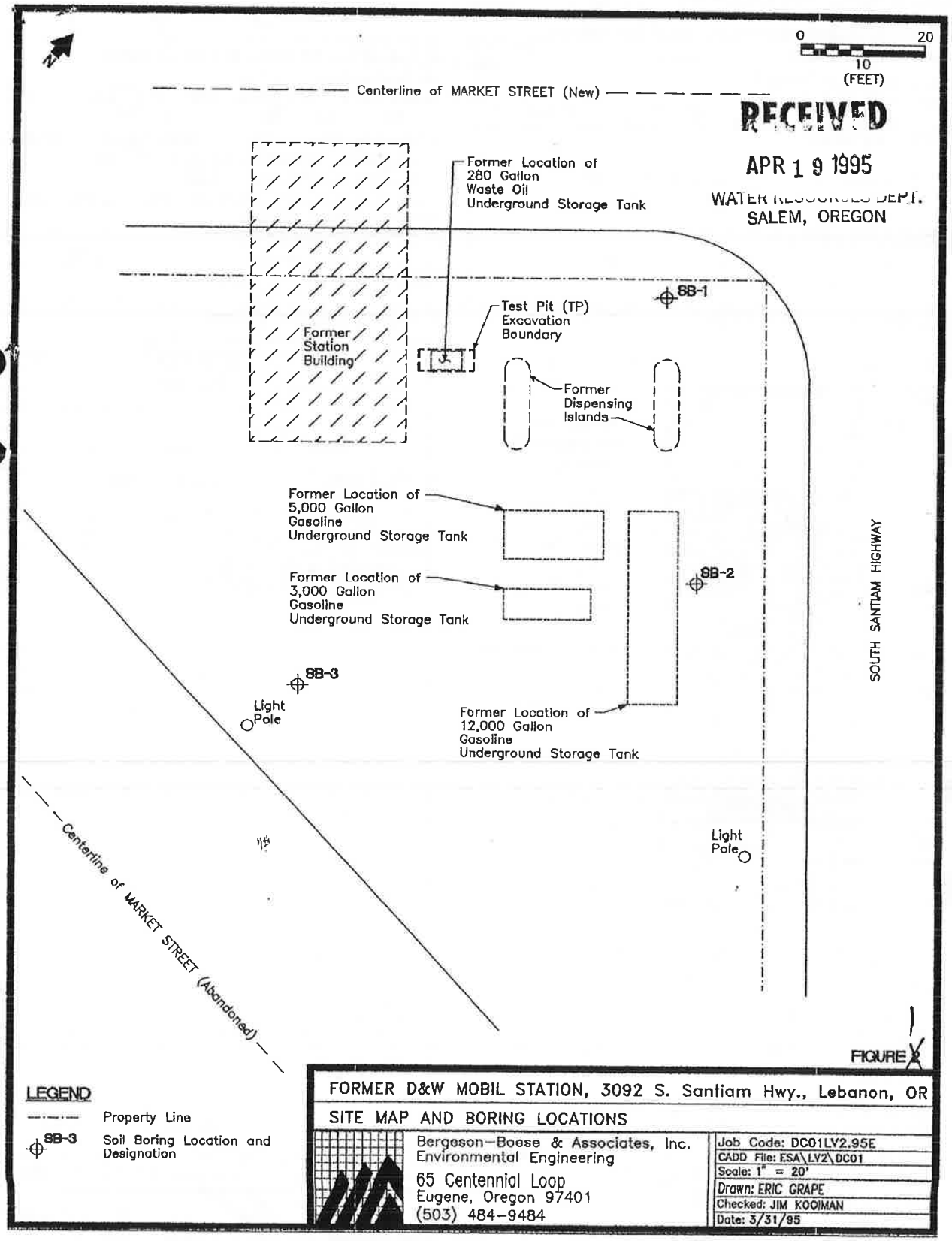
By whom? Pacific Northwest Laboratories

Depth of strata to be analyzed. From 4.5 ft. to 10 ft.

Remarks: Grab water sample.

Name of supervising Geologist/Engineer Jim Kooiman

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER



RECEIVED
APR 19 1995
WATER RESOURCES DEPT.
SALEM, OREGON

FIGURE 1

LEGEND

Property Line

SB-3 Soil Boring Location and Designation

FORMER D&W MOBIL STATION, 3092 S. Santiam Hwy., Lebanon, OR

SITE MAP AND BORING LOCATIONS

Bergeson–Boese & Associates, Inc.
Environmental Engineering
65 Centennial Loop
Eugene, Oregon 97401
(503) 484–9484

Job Code:	DC01LV2.95E
CADD File:	ESA\LV2\DC01
Scale:	1" = 20'
Drawn:	ERIC GRAPE
Checked:	JIM KOOIMAN
Date:	3/31/95

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 537.765)

Linn
8120

12s/2w/23

(START CARD) # 917174

(1) OWNER: Well Number:
Name Louis Schwendt
Address 38120 Weirick Dr.
City Lebanon State Ore Zip 97355

(2) TYPE OF WORK:
☐ New Well ☐ Deepen ☐ Recondition ☐ Abandon

(3) DRILL METHOD
☐ Rotary Air ☐ Rotary Mud ☐ Cable
☐ Other

(4) PROPOSED USE:
☐ Domestic ☐ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☒ Other monitoring

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes ☐ No ☐ Depth of Completed Well 40 ft.
Explosives used Yes ☐ No ☐ Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
6	0	40	Cement	15	40	5

How was seal placed: Method ☐ A ☐ B ☒ C ☐ D ☐ E
☐ Other
Backfill placed from ft. to ft. Material
Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:					☐	☐	☐	☐
					☐	☐	☐	☐

Final location of shoe(s)

(7) PERFORATIONS/SCREENS:
☐ Perforations Method
☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☒ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
10			1 hr.

Temperature of water 54 Depth Artesian Flow Found
Was a water analysis done? ☐ Yes By whom
Did any strata contain water not suitable for intended use? ☐ Too little
☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other
Depth of strata:

(9) LOCATION OF WELL by legal description:
County LINN Latitude ' " Longitude ' "
Township 12-S N or S, Range 2W E or W, WM.
Section 23 ¼ ¼
Tax Lot Tax no. 021118 Lot Block Subdivision HORN
Street Address of Well (or nearest address) 3092-S Santiam Highway

(10) STATIC WATER LEVEL:
15 ft. below land surface. Date 10-14-89
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:
Depth at which water was first found 38

From	To	Estimated Flow Rate	SWL
38	40	10 gal/min	

(12) WELL LOG: Ground elevation

Material	From	To	SWL
Sand + gravel Boulder Yellow-Clay	0	18	
Yellow-Clay	18	22	
Sand + gravel yellow Clay Hard	22	26	
Yellow Clay gravel	26	29	
Clay Blue	29	34	
Clay yellow	34	38	
Clay yellow + gravel + Water	38	40	
Pulled Casing out of well			

Date started 10-9-89 Completed 11-11-89

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.
Signed Robert E White WWC Number 121 Date 11-12-89

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. all work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.
Signed Robert E White WWC Number 121 Date 11-12-89

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER 9809C 3/88

DC01SGC.95U

STATE OF OREGON

MONITORING WELL REPORT

(as required by ORS 537.765 & OAR 690-240-095)

LINN 14528

RECEIVED AUG 31 1995 WATER RESOURCES DEPT. SALEM, OREGON

125/02W/23BB

Start Card # W-80273

Instructions for completing this report are on the last page of this form.

(1) OWNER/PROJECT: WELL NO. MW-2

Name Louis Schwindt

Address 740 16th Street

City Lebanon State OR Zip 97355

(2) TYPE OF WORK:

[X] New construction [ ] Alteration (Repair/Recondition)

[ ] Conversion [ ] Deepening [ ] Abandonment

(3) DRILLING METHOD

[ ] Rotary Air [ ] Rotary Mud [ ] Cable

[X] Hollow Stem Auger [ ] Other

(6) LOCATION OF WELL By legal description

Well Location: County Linn

Township T12S (N or S) Range R2W (E or W) Section 23

1. NW 1/4 of NW 1/4 of above section.

2. Either Street address of well location 3029 S. Santiam Hwy. Lebanon, OR 97355

or Tax lot number of well location Unknown

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

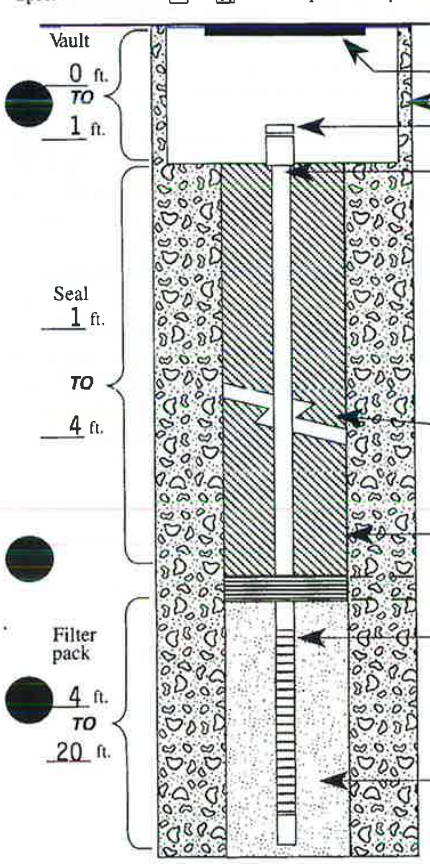
(7) STATIC WATER LEVEL:

10 Ft. below land surface. Date 7-28-95

Artesian Pressure -- lb/sq. in. Date --

(4) BORE HOLE CONSTRUCTION

Special Standards Yes [ ] No [X] Depth of completed well 20 ft.



Water-tight cover

Surface flush vault

Locking cap

Casing diameter 2 in.

material Sch. 40 PVC

Welded [ ] Threaded [X] Glued [ ]

Liner diameter -- in.

material --

Welded [ ] Threaded [ ] Glued [ ]

Well seal:

Material Bentonite

Amount 3/8" (150 lbs)

Grout weight 14.1 lbs/gal.

Borehole diameter 12 in.

[ ] Bentonite plug at least 3 ft. thick

Screen material Sch. 40 PVC

interval(s): From 5' To 20'

From -- To --

Slot size .020 in.

Filter pack:

Material Silica sand

Size 10-20 in.

(8) WATER BEARING ZONES:

Depth at which water was first found 6'

From	To	Est. Flow Rate	SWL
6'	20'	1 gpm	--

(9) WELL LOG: Ground elevation 360'

Material	From	To	SWL
Sandy gravel w/cobbles wet at 6'.	0	20'	

Date started 7/28/95 Completed 7/28/95

(unbonded) Monitor Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.

MWC Number --

Signed ---------- Date --

(5) WELL TEST:

[ ] Pump [ ] Bailer [ ] Air [ ] Flowing Artesian

Permeability -- Yield -- GPM

Conductivity -- PH --

Temperature of water 55 °F/C Depth artesian flow found -- ft.

Was water analysis done? [X] Yes [ ] No

By whom? Pacific Northwest Laboratories

Depth of strata to be analyzed. From 5 ft. to 20 ft.

Remarks:

Name of supervising Geologist/Engineer Michael Darling

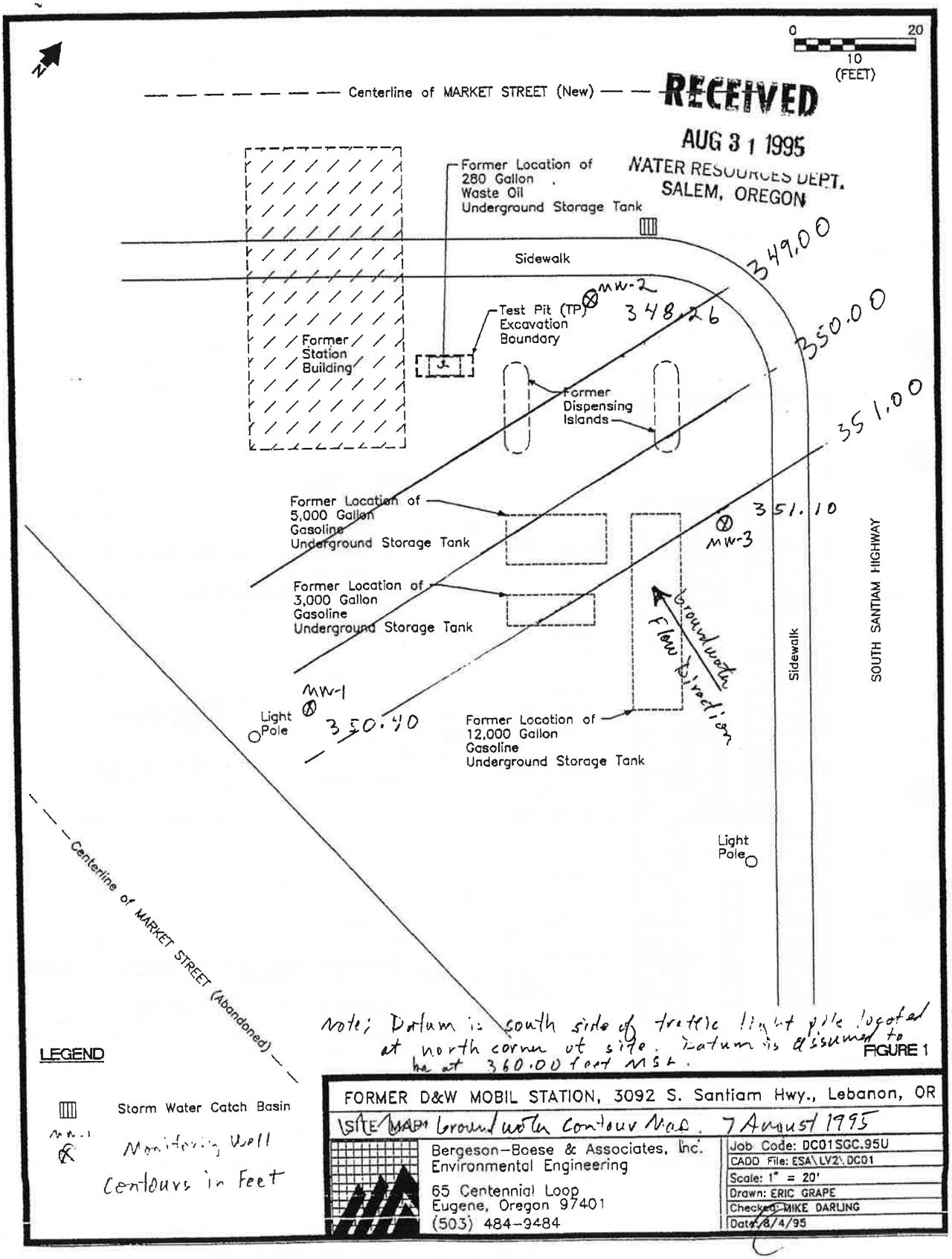
(bonded) Monitor Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

MWC Number 10288

Signed Robert L. Boese Date 8/28/95

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER


0
20
10
(FEET)
Centerline of MARKET STREET (New)
RECEIVED
AUG 31 1995
WATER RESOURCES DEPT.
SALEM, OREGON
Former Location of
280 Gallon
Waste Oil
Underground Storage Tank
Sidewalk
MW-2
348.26
349.00
350.00
351.00
Test Pit (TP)
Excavation
Boundary
Former
Station
Building
Former
Dispensing
Islands
Former Location of
5,000 Gallon
Gasoline
Underground Storage Tank
351.10
MW-3
Former Location of
3,000 Gallon
Gasoline
Underground Storage Tank
Groundwater
Flow Direction
Sidewalk
SOUTH SANTIAM HIGHWAY
MW-1
Light
Pole
350.40
Former Location of
12,000 Gallon
Gasoline
Underground Storage Tank
Light
Pole
Centerline of MARKET STREET (Abandoned)
Note; Datum is south side of traffic light pole located at north corner of site. Datum is assumed to be at 360.00 feet MSL.
LEGEND
Storm Water Catch Basin
MW-1
Monitoring Well
Contours in Feet
FIGURE 1
FORMER D&W MOBIL STATION, 3092 S. Santiam Hwy., Lebanon, OR
SITE MAP Groundwater Contour Map. 7 August 1995
Bergeson–Boese & Associates, Inc.
Environmental Engineering
65 Centennial Loop
Eugene, Oregon 97401
(503) 484–9484
Job Code: DC01SGC.95U
CADD File: ESA\LV2\DC01
Scale: 1" = 20'
Drawn: ERIC GRAPE
Checked: MIKE DARLING
Date: 8/4/95

STATE OF OREGON
MONITORING WELL REPORT
(as required by ORS 537.765 & OAR 690-240-095)

Instructions for completing this report are on the last page of this form.

LINN 14529

DC01SGC.95U

12S/02W/23BB

Start Card # W-80274

(1) OWNER/PROJECT:

WELL NO. MW-3

Name Louis Schwindt

Address 740 16th Street

City Lebanon State OR Zip 97355

(2) TYPE OF WORK:

[X] New construction [ ] Alteration (Repair/Recondition)

[ ] Conversion [ ] Deepening [ ] Abandonment

(3) DRILLING METHOD

[ ] Rotary Air [ ] Rotary Mud [ ] Cable

[X] Hollow Stem Auger [ ] Other

(4) BORE HOLE CONSTRUCTION

Special Standards Yes [ ] No [X] Depth of completed well 20 ft.

Land surface

Vault 0 ft. TO 1 ft.

Seal 1 ft. TO 4 ft.

Filter pack 4 ft. TO 20 ft.

Water-tight cover

Surface flush vault

Locking cap

Casing diameter 2 in.

material Sch. 40 PVC

Welded [ ] Threaded [X] Glued [ ]

Liner diameter -- in.

material --

Welded [ ] Threaded [ ] Glued [ ]

Well seal:

Material Bentonite

Amount 3/8" (150 lbs)

Grout weight 14.1 lbs/gal.

Borehole diameter 12 in.

Bentonite plug at least 3 ft. thick

Screen material Sch. 40 PVC

interval(s): From 5' To 20'

From -- To --

Slot size .020 in.

Filter pack:

Material Silica sand

Size 10-20 in.

(5) WELL TEST:

[ ] Pump [ ] Bailer [ ] Air [ ] Flowing Artesian

Permeability -- Yield -- GPM

Conductivity -- PH --

Temperature of water 55 °F/C Depth artesian flow found -- ft.

Was water analysis done? [X] Yes [ ] No

By whom? Pacific Northwest Laboratories

Depth of strata to be analyzed. From 5 ft. to 20 ft.

Remarks:

Name of supervising Geologist/Engineer Michael Darling

(6) LOCATION OF WELL By legal description

Well Location: County Linn

Township T12S (N or S) Range R2W (E or W) Section 23

1. NW 1/4 of NW 1/4 of above section.

2. Either Street address of well location 3029 S. Santiam Hwy. Lebanon, OR 97355

or Tax lot number of well location Unknown

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:

10 Ft. below land surface. Date 8-3-95

Artesian Pressure -- lb/sq. in. Date --

(8) WATER BEARING ZONES:

Depth at which water was first found 10'

From	To	Est. Flow Rate	SWL
10'	20'	2 gpm	--

(9) WELL LOG:

Ground elevation 360'

Material	From	To	SWL
Sandy gravels w/cobbles wet at 10'. Coarse sand lenses from 15' - 20'.	0	20'	

RECEIVED AUG 31 1995 WATER RESOURCES SALEM, OREGON

Date started 8/3/95 Completed 8/3/95

(unbonded) Monitor Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.

MWC Number --

Signed ------- Date --

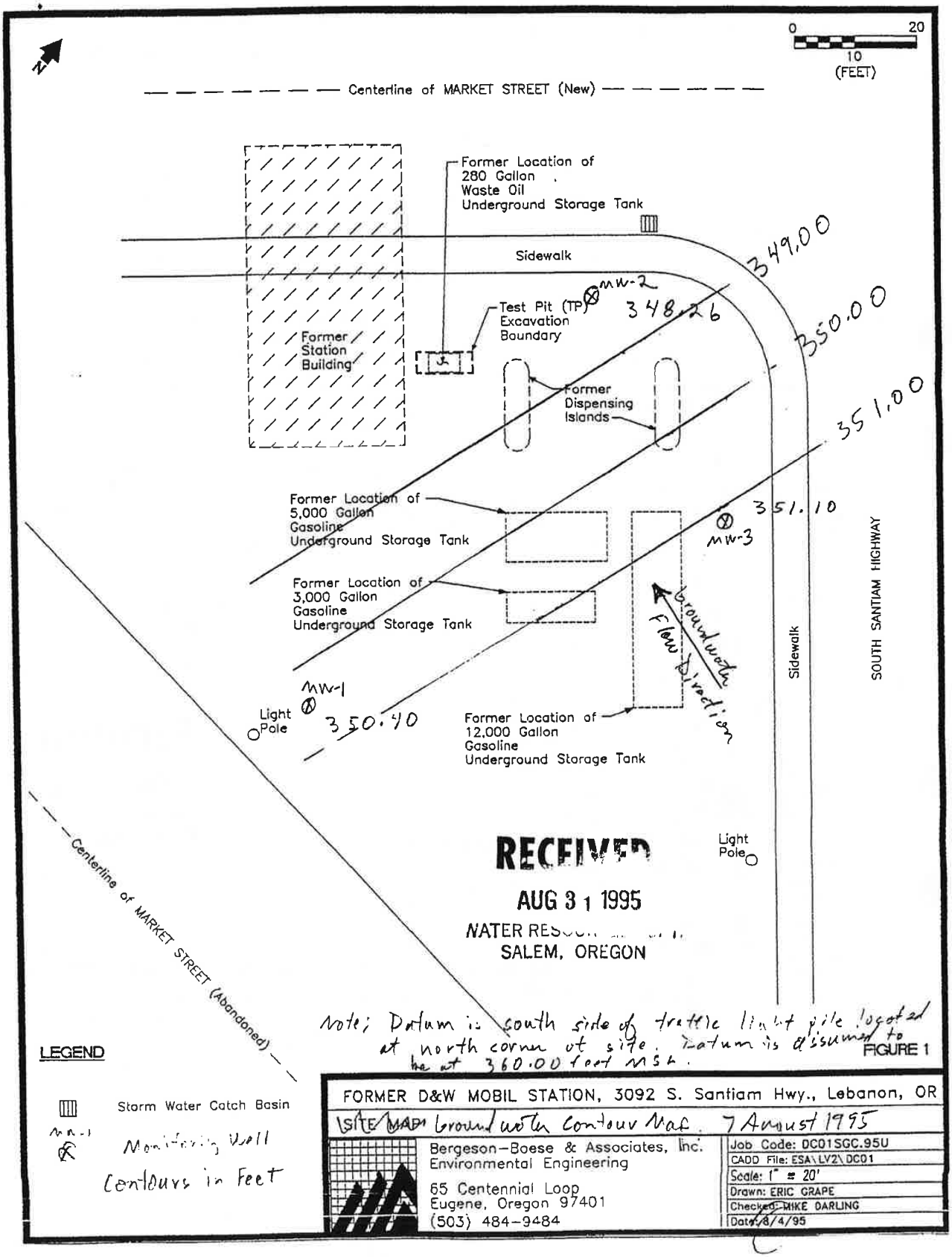
(bonded) Monitor Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

MWC Number 10288

Signed Robert L. Boese Date 8/29/95

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER


0
20
10
(FEET)
Centerline of MARKET STREET (New)
Former Location of
280 Gallon
Waste Oil
Underground Storage Tank
Sidewalk
Test Pit (TP)
Excavation
Boundary
Former
Station
Building
Former
Dispensing
Islands
Former Location of
5,000 Gallon
Gasoline
Underground Storage Tank
Former Location of
3,000 Gallon
Gasoline
Underground Storage Tank
Former Location of
12,000 Gallon
Gasoline
Underground Storage Tank
Light
Pole
Light
Pole
Sidewalk
SOUTH SANTIAM HIGHWAY
Centerline of MARKET STREET (Abandoned)
349.00
350.00
351.00
MW-2
348.26
MW-3
351.10
MW-1
350.40
Groundwater Flow Direction
RECEIVED
AUG 31 1995
WATER RESOURCES
SALEM, OREGON
Note; Datum is south side of traffic light pole located at north corner of site. Datum is assumed to be at 360.00 feet MSL.
LEGEND
Storm Water Catch Basin
MW-1
Monitoring Well
Contours in Feet
FIGURE 1
FORMER D&W MOBIL STATION, 3092 S. Santiam Hwy., Lebanon, OR
SITE MAP Groundwater Contour Map 7 August 1995
Bergeson-Boese & Associates, Inc.
Environmental Engineering
65 Centennial Loop
Eugene, Oregon 97401
(503) 484-9484
Job Code: DC01SGC.95U
CADD File: ESA\LV2\DC01
Scale: 1" = 20'
Drawn: ERIC GRAPE
Checked: MIKE DARLING
Date: 8/4/95

STATE OF OREGON
MONITORING WELL REPORT
(as required by ORS 537.765 & OAR 690-240-095)

LINN 14530

DC01SGC.95U
12S/2W/23 BB
Start Card # W-80272

Instructions for completing this report are on the last page of this form.

(1) OWNER/PROJECT: WELL NO. MW-1

Name Louis Schwindt
Address 740 16th Street
City Lebanon State OR Zip 97355

(2) TYPE OF WORK:

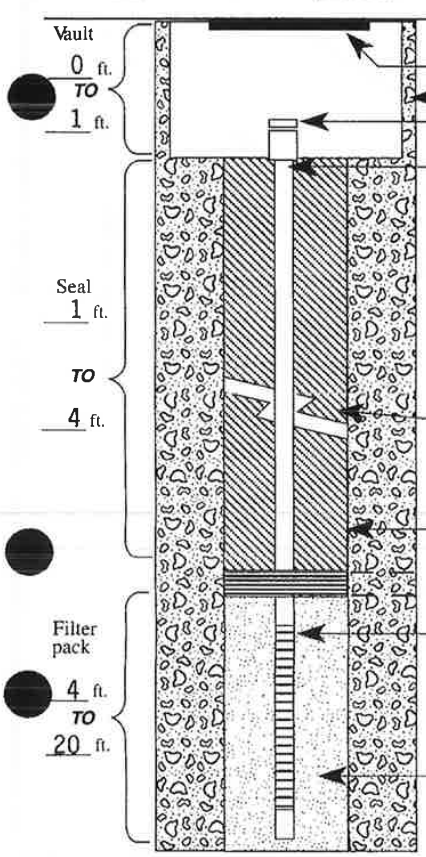
[X] New construction [ ] Alteration (Repair/Recondition)
[ ] Conversion [ ] Deepening [ ] Abandonment

(3) DRILLING METHOD

[ ] Rotary Air [ ] Rotary Mud [ ] Cable
[X] Hollow Stem Auger [ ] Other

(4) BORE HOLE CONSTRUCTION

Special Standards Yes [ ] No [X] Depth of completed well 20 ft.



Water-tight cover
Surface flush vault
Locking cap
Casing diameter 2 in.
material Sch. 40 PVC
Welded [ ] Threaded [X] Glued [ ]
Liner diameter -- in.
material --
Welded [ ] Threaded [ ] Glued [ ]
Well seal:
Material Bentonite
Amount 3/8" (150 lbs)
Grout weight 14.1 lbs/gal.
Borehole diameter 12 in.
[ ] Bentonite plug at least 3 ft. thick
Screen material Sch. 40 PVC
interval(s):
From 5' To 20'
From -- To --
Slot size .020 in.
Filter pack:
Material Silica sand
Size 10-20 in.

(5) WELL TEST:

[ ] Pump [ ] Bailer [ ] Air [ ] Flowing Artesian
Permeability -- Yield -- GPM
Conductivity -- PH --
Temperature of water 55 °F/C Depth artesian flow found -- ft.
Was water analysis done? [X] Yes [ ] No
By whom? Pacific Northwest Laboratories
Depth of strata to be analyzed. From 5' ft. to 20 ft.
Remarks:

Name of supervising Geologist/Engineer Michael Darling

(6) LOCATION OF WELL By legal description

Well Location: County Linn
Township T12S (N or S) Range R2W (E or W) Section 23
1. NW 1/4 of NW 1/4 of above section.
2. Either Street address of well location 3029 S. Santiam Hwy. Lebanon, OR 97355
or Tax lot number of well location Unknown
3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:

10 Ft. below land surface. Date 7-28-95
Artesian Pressure -- lb/sq. in. Date --

(8) WATER BEARING ZONES:

Depth at which water was first found 6.5'

From	To	Est. Flow Rate	SWL
6.5'	20'	1 gpm	--

(9) WELL LOG: Ground elevation 360'

Material	From	To	SWL
Dark brown silty clay w/gravels	0	6.5'	
Sandy gravel, brown w/cobbles, saturated.	6.5'	20'	

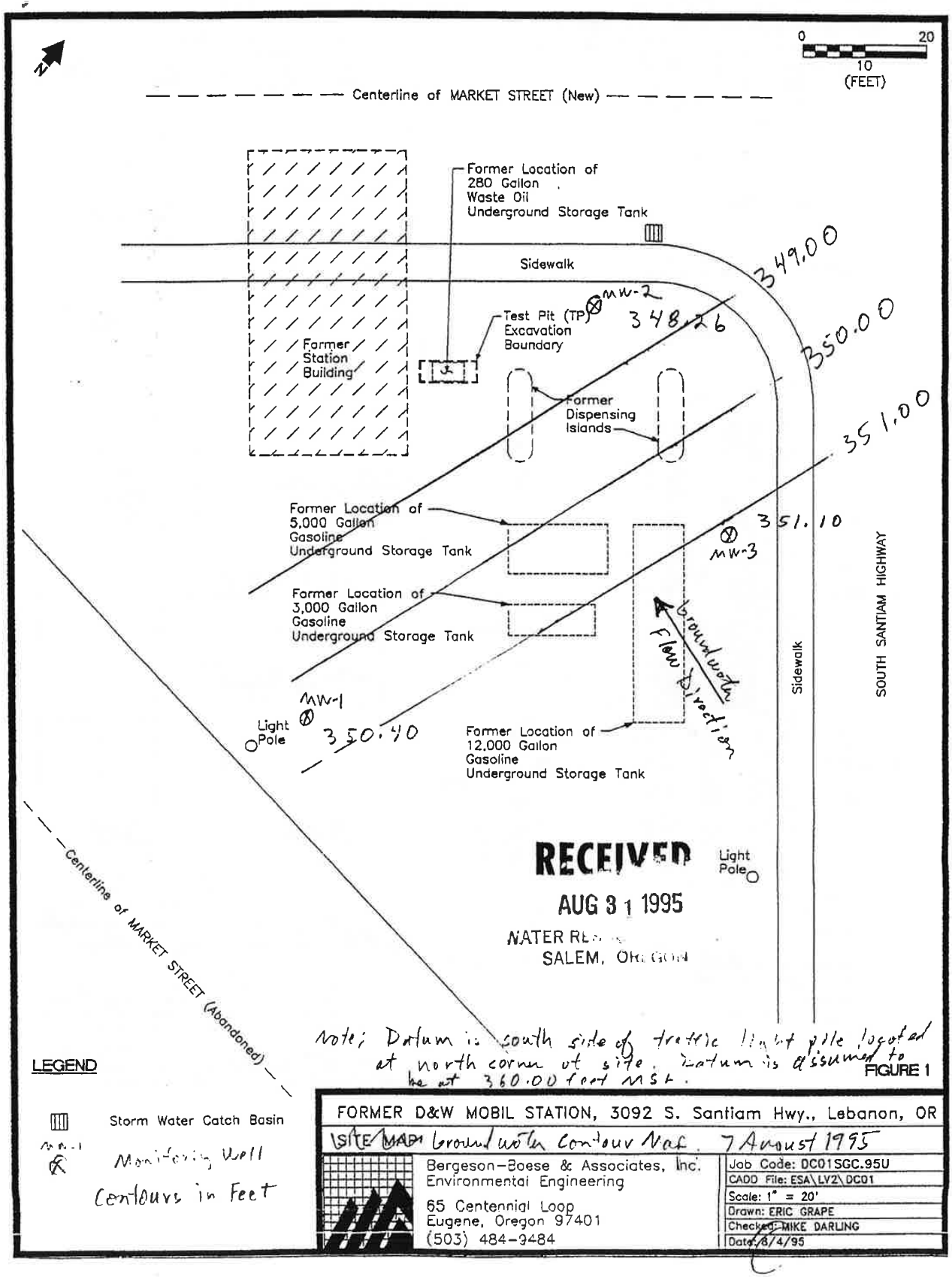
RECEIVED
AUG 31 1995
WATER RESOURCES DEPT.
SALEM, OREGON

Date started 7/28/95 Completed 7/28/95

(unbonded) Monitor Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.
MWC Number --
Signed -------- Date --

(bonded) Monitor Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.
MWC Number 10288
Signed Robert L. Boese Date 8/28/95

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER



RECEIVED
AUG 31 1995
WATER RESOURCES
SALEM, OREGON

Note; Datum is south side of traffic light pole located at north corner of site. Datum is assumed to be at 360.00 feet MSL.

FIGURE 1

FORMER D&W MOBILE STATION, 3092 S. Santiam Hwy., Lebanon, OR

SITE MAP Groundwater Contour Map 7 August 1995

Bergeson-Boese & Associates, Inc.
Environmental Engineering
65 Centennial Loop
Eugene, Oregon 97401
(503) 484-9484

Job Code: DC01SGC.95U
CADD File: ESA\LV2\DC01
Scale: 1" = 20'
Drawn: ERIC GRAPE
Checked: MIKE DARLING
Date: 8/4/95

STATE OF OREGON

MONITORING WELL REPORT

(as required by ORS 537.765 & OAR 690-240-0045)

LINN 53707 — 34

Amended Start Card #: 134734

Instructions for completing this report are on the last page of this form.

WATER RESOURCES DEPT. SALEM, OREGON

(1) OWNER/PROJECT:

Name: Yoncer Oil Company

Address: PO Box 87

City: Albany State: OR Zip: 97321

(2) TYPE OF WORK:

[X] New construction Alteration (Repair/Recondition)

[ ] Conversion [ ] Deepening Abandonment

(3) DRILLING METHOD

Rotary Air Rotary Mud Cable

Hollow Stem Auger Other

(4) BORE HOLE CONSTRUCTION

Special Standards: Yes [ ] No [X] Depth of completed well: 19 ft. Land surface

Vault: 0 in TO 1 in

Seal: 1 in TO 4 in

Filter pack: 4 in TO 19 in

Water tight cover

Surface Bushwall

Locking cap

Casing: diameter 2 in; material PVC; Welded Threaded Glued X

Well seal: Material Bent; Amount 1/2 bags; Cement weight

Borehole diameter: 10 in

Horizontal plug at least 3 ft. thick: Material PVC; diameter 9; From 8 To 18

Screen: From 19 To; Size 100 in

Filter pack: Material Sand; Size 10-20 in

(5) WELL TEST:

Pump Bailer Air Flowing Artesian GPM

Permeability: Visual

Conductivity: PH

Temperature of water: 63 °F/°C Depth artesian flow found: ft

Was water analysis done? Yes [ ] No

By whom?

Depth of strata to be analyzed: From To ft

Remarks:

Name of supervising Geologist/Engineer:

(6) LOCATION OF WELL (By legal description)

Well Location County: Linn

Township: 12 (N/S) Range: 2 (E/W) Section: 23

Tax lot: 300 Lot: SE Lot size: acres

Address of well location: 3510 S. Santiam

or Tax Lot number of well location: 1000

ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:

9 ft below land surface Date: 1/23/01

Artesian Pressure: lbs/sq in Date:

(8) WATER BEARING ZONES:

Depth at which water was first found: 9

From	To	Est. Flow Rate	SWL
9	19		9

(9) WELL LOG: Ground Elevation

Material	From	To	SWL
Gravels	0	2	
Sandy Silts	2	7	
Silty Gravels	7	8.5	
Silty Clay	8.5	19	

RECEIVED JUN 25 2001 WATER RESOURCES DEPT SALEM, OREGON

Date started: 1/23/01 Completed: 1/23/01

(unedited) Monitor Well Construction Certification

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

MWC Number: 10467

Signed: Date: 2/2/01

(unedited) Monitor Well Construction Certification

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the time I was in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

MWC Number: 10011

Signed: Date: 2/2/01

WHITE COPY - CONTRACTOR THIRD CUSTOMER

ORIGINAL & FIRST COPY WATER RESOURCES DEPARTMENT

STATE OF OREGON

MONITORING WELL REPORT

(as required by ORS 537.765 & OAR 690-240-095)

Instructions for completing this report are on the last page of this form.

LINN 53707 — 134

Start Card # 134734

FEB 23 2001 WATER RESOURCES DEPT. SALEM, OREGON

(1) OWNER/PROJECT:

Name Yonger Oil Company

Address PO Box 87

City Albany State OR Zip 97321

(2) TYPE OF WORK:

[✓] New construction [ ] Alteration (Repair/Recondition)

[ ] Conversion [ ] Deepening [ ] Abandonment

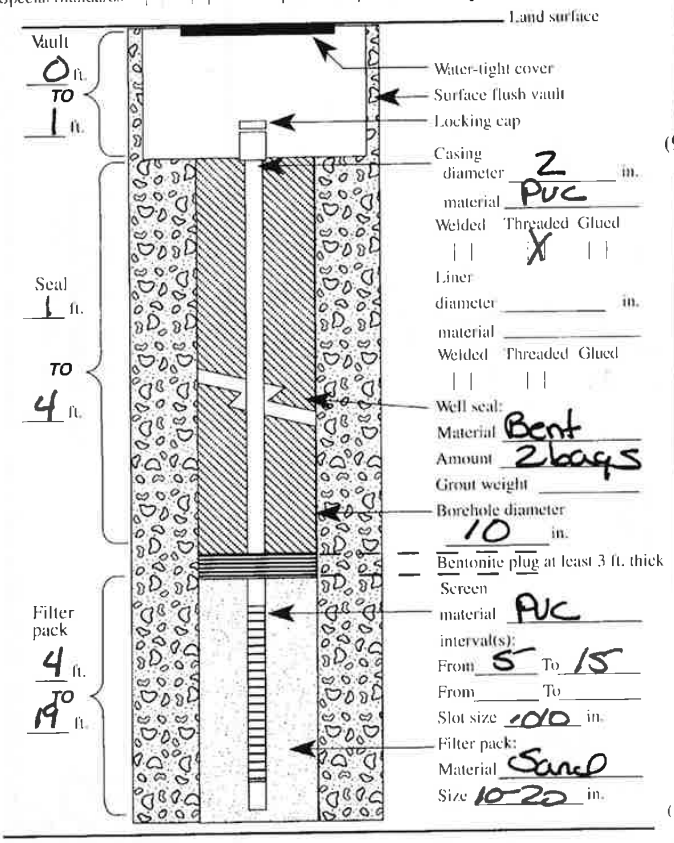
(3) DRILLING METHOD

[ ] Rotary Air [ ] Rotary Mud [ ] Cable

[✓] Hollow Stem Auger [ ] Other

(4) BORE HOLE CONSTRUCTION

Special Standards Yes [ ] No [✓] Depth of completed well 19 ft.



(5) WELL TEST:

[ ] Pump [ ] Bailer [ ] Air [ ] Flowing Artesian

Permeability Yield GPM

Conductivity PH

Temperature of water 53 °F/C Depth artesian flow found ft.

Was water analysis done? [✓] Yes [ ] No

By whom?

Depth of strata to be analyzed. From ft. to ft.

Remarks:

Name of supervising Geologist/Engineer

(6) LOCATION OF WELL By legal description

Well Location: County Linn

Township 12 (N or S) Range 2 (E or W) Section 23

1. SW 1/4 of SE 1/4 of above section.

2. **Either** Street address of well location 3570 S. Santiam

or Tax lot number of well location 1000

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:

6 Ft. below land surface. Date 1/25/01

Artesian Pressure lb/sq. in. Date

(8) WATER BEARING ZONES:

Depth at which water was first found 6

From	To	Est. Flow Rate	SWL
6	19		6

(9) WELL LOG: Ground elevation

Material	From	To	SWL
Gravels	0	2	
Sandy Silts	2	7	
Silty Gravels	7	18.5	
Silty Clay	18.5	19	

Date started 1/25/01 Completed 1/25/01

(unbonded) Monitor Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.

MWC Number 10468

Signed [signature] Date 2/24/01

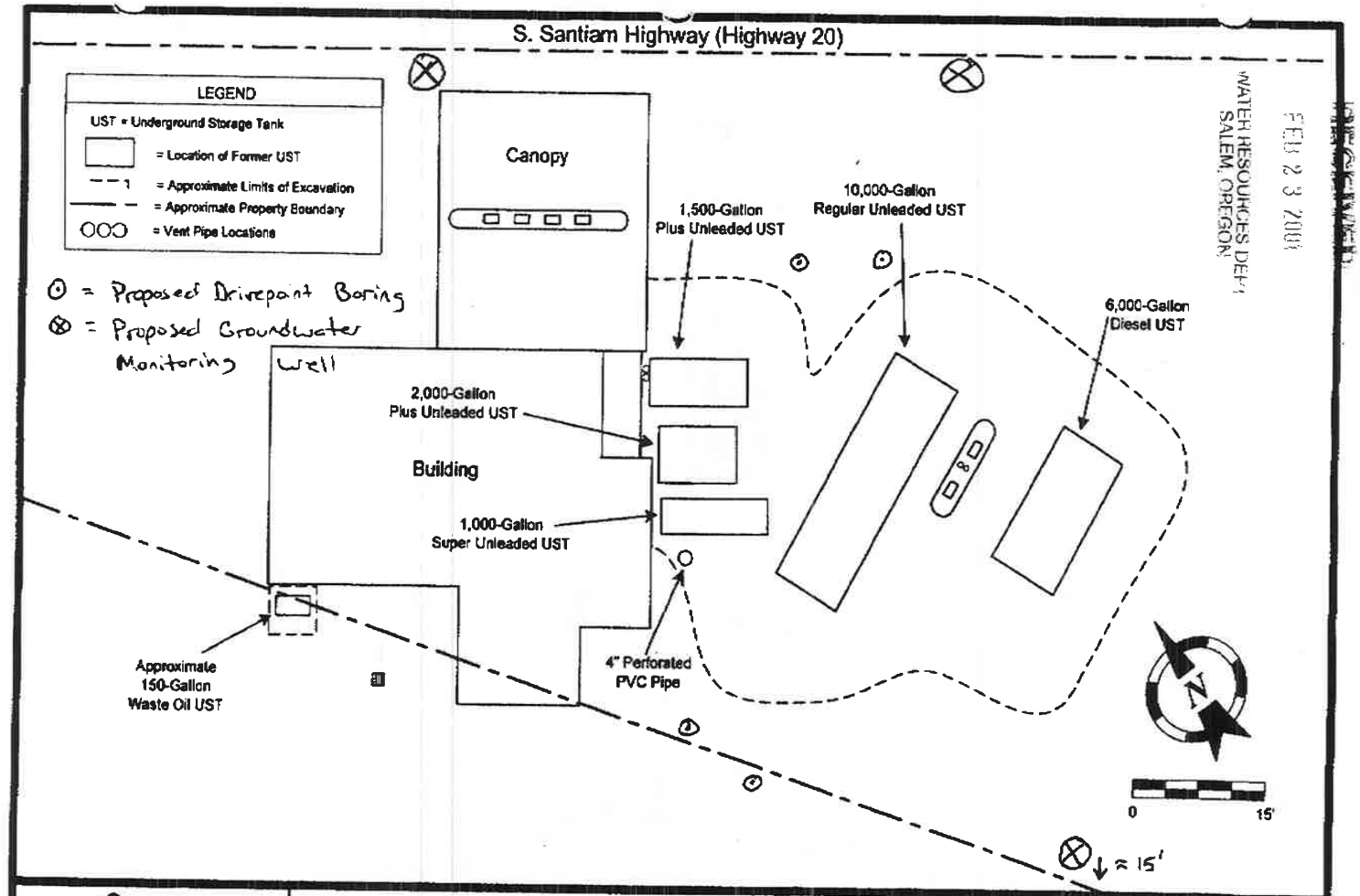
(bonded) Monitor Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

MWC Number 10011

Signed [signature] Date 2/21/01

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER



FEB 2 3 2001
WATER RESOURCES DEPT
SALEM, OREGON

WOHLERS
ENVIRONMENTAL SERVICES, INC.

FIGURE 2

SITE MAP

YOUNGER OIL/LEBANON
3510 S. SANTIAM HIGHWAY
LEBANON, OREGON

PROJECT NO.:	99-0106
DATE:	08/30/99
SCALE:	1" = 15'
FILE:	FG990106
DRAWN BY:	MDW

STATE OF OREGON

LINN 53708

MONITORING WELL REPORT

(as required by ORS 537.765 & OAR 690-240-0951)

Amended Card # 134723 — 143685

Instructions for completing this report are on the last page of this form

WATER RESOURCES DEPT. SALEM, OREGON

(1) OWNER/PROJECT:

Name: Yunger Oil Company

Address: PO Box 87

City: Albany State: OR Zip: 97321

(2) TYPE OF WORK:

X New construction — Alteration (repair/recondition) — Abandonment

Conversion — Deepening — Monitoring

(3) DRILLING METHOD

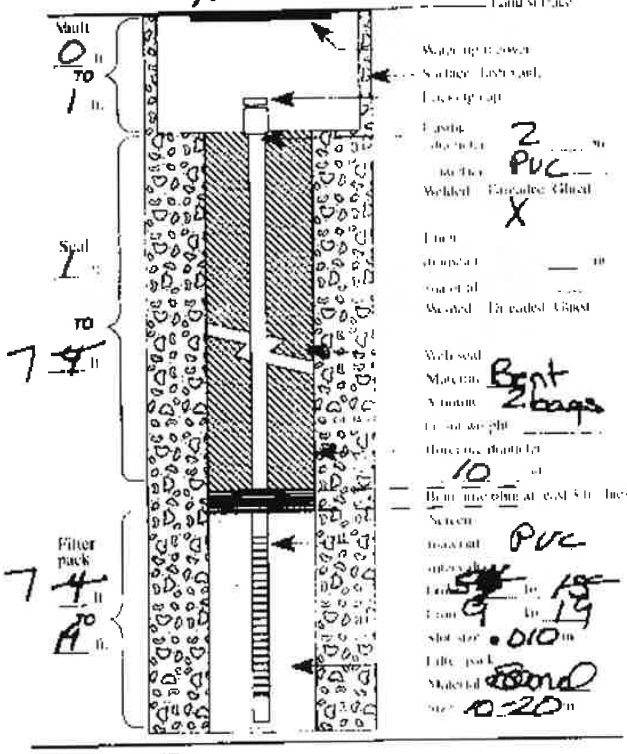
Rotary Air — Rotary Mud — Cable

X Hollow Stem Auger — Other

(4) BORE HOLE CONSTRUCTION

Special Standards: Yes — No X

Depth of completed well: 19 ft



(5) WELL TEST:

Pump — Bailer — Air — Flowing Artesian

Permeability _____ Yield _____ GPM

Conductivity _____ µmhos

Temperature of water 53 °F Depth artesian flow found _____ ft

Was water analysis done? Yes X No

By whom? _____

Depth of static to be analyzed: From _____ ft To _____ ft

Remarks _____

Name of supervising Geologist/Engineer _____

(6) LOCATION OF WELL By legal description

Water Location County: Linn

Township 12 (N or S) Range 2 (E or W) Section 23

¼ SW ¼ of ¼ SE ¼ of above section

Either Street address of well location: 8570 S. Santiam

or Tax lot number of well location: 1000

X ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:

6 ft below land surface — Date: 1/25/01

9 Artesian Pressure ____ lbs/sq in — Date

(8) WATER BEARING ZONES:

Depth at which water was first found: 6 9

From	To	Est. Flow Rate	SWL
6 9	19		6 9

(9) WELL LOG: Ground elevation _____

Material	From	To	SWL
Gravel	0	2	
Sandy Silt	2	7	
Silt, Gravel	7	18.5	
Silty Clay	18.5	19	

RECEIVED
JUN 25 2001
WATER RESOURCES DEPT
SALEM, OREGON

Date started 1/25/01 Completed 1/25/01

Contractor's Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.

Signed _____ MWC Number 10468 Date 2/21/01

Licensed Operator Well Construction Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this date is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

Signed _____ MWC Number 1004 Date 2/21/01

ORIGINAL & FIRST COPY: WATER RESOURCES DEPARTMENT — SECOND COPY: CONSTRUCTOR — THIRD COPY: CUSTOMER

STATE OF OREGON

MONITORING WELL REPORT

(as required by ORS 537.765 & OAR 690-240-095)

Instructions for completing this report are on the last page of this form.

LINN 53708

FEB 2 3 2001

WATER RESOURCES DEPT. SALEM, OREGON

L43685

Start Card # 134735

(1) OWNER/PROJECT:

Name Yunger Oil Company

Address PO Box 87

City Albany State OR Zip 97321

(2) TYPE OF WORK:

X New construction | | Alteration (Repair/Recondition)

| | Conversion | | Deepening | | Abandonment

(3) DRILLING METHOD

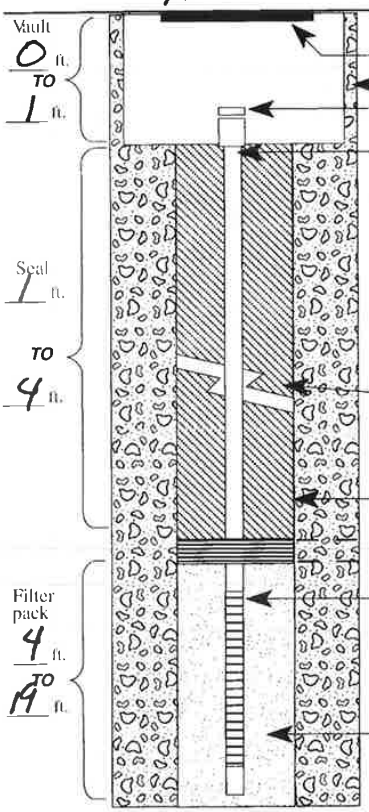
| | Rotary Air | | Rotary Mud | | Cable

X Hollow Stem Auger | | Other

(4) BORE HOLE CONSTRUCTION

Special Standards | | Yes | X | No

Depth of completed well 19 ft.



Water-tight cover

Surface flush vault

Locking cap

Casing diameter 2 in.

material PVC

Welded | | Threaded X Glued | |

Liner diameter ____ in.

material ____

Welded | | Threaded | | Glued | |

Well seal: Material Bent

Amount 2 bags

Grout weight ____

Borehole diameter 10 in.

Bentonite plug at least 3 ft. thick

Screen material PVC

intervals: From 5 To 15

From ____ To ____

Slot size .010 in.

Filter pack: Material Sand

Size 10-20 in.

(5) WELL TEST:

| | Pump | | Bailer | | Air | | Flowing Artesian

Permeability ____ Yield ____ GPM

Conductivity ____ PH ____

Temperature of water 53 °F/C Depth artesian flow found ____ ft.

Was water analysis done? X Yes | | No

By whom? ____

Depth of strata to be analyzed. From ____ ft. to ____ ft.

Remarks: ____

Name of supervising Geologist/Engineer ____

(6) LOCATION OF WELL By legal description

Well Location: County Linn

Township 12 (N or S) Range 2 (E or W) Section 23

1. SW 1/4 of SE 1/4 of above section.

2. **Either** Street address of well location 8570 S. Santiam

or Tax lot number of well location 1000

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:

6 Ft. below land surface. Date 1/25/01

Artesian Pressure ____ lb/sq. in. Date ____

(8) WATER BEARING ZONES:

Depth at which water was first found 6

From	To	Est. Flow Rate	SWL
6	19		6

(9) WELL LOG: Ground elevation ____

Material	From	To	SWL
Gravel	0	2	
Sandy Silt	2	7	
Silty Gravel	7	18.5	
Silty Clay	18.5	19	

Date started 1/25/01 Completed 1/25/01

(unbonded) Monitor Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.

MWC Number 10468

Signed [signature] Date 2/21/01

(bonded) Monitor Well Constructor Certification:

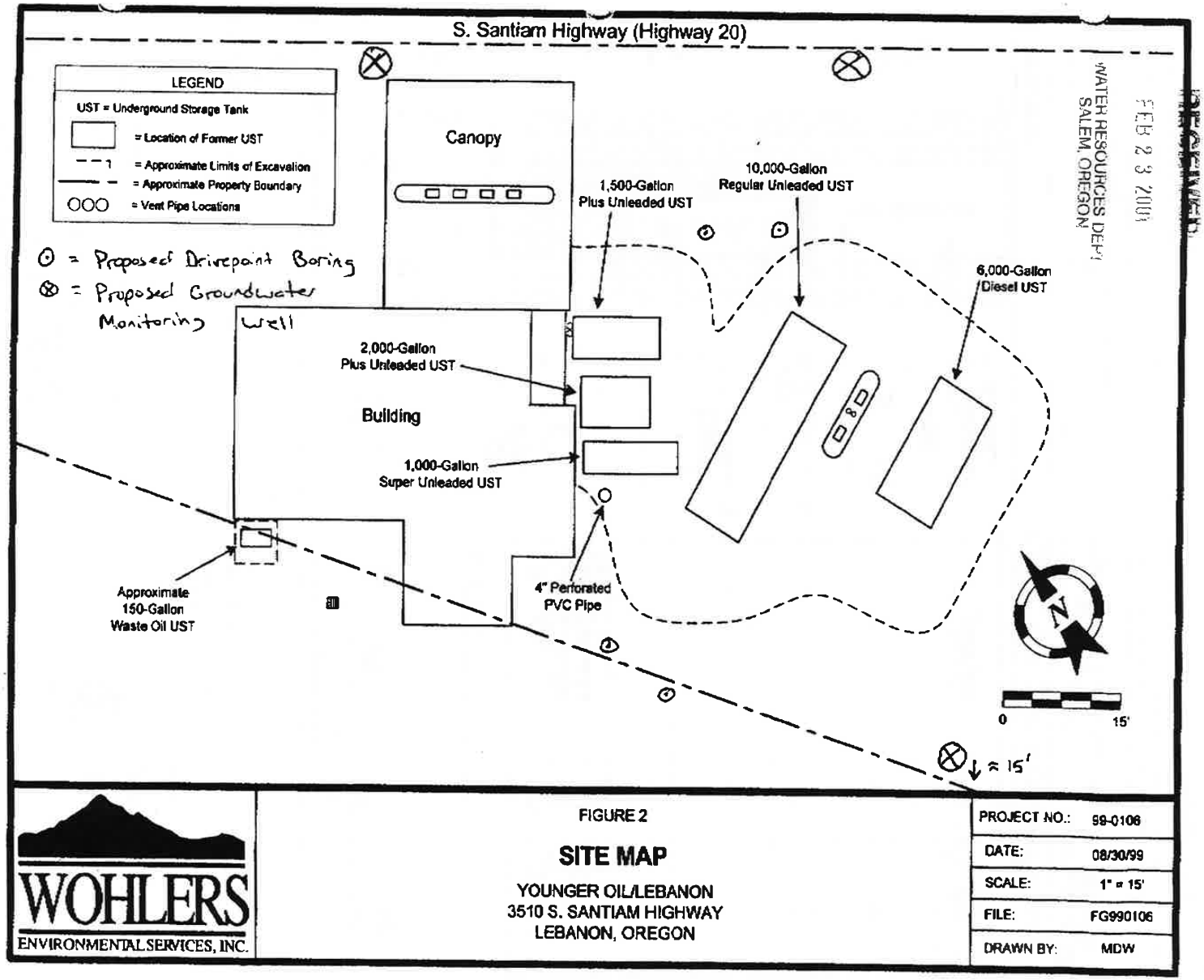
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

MWC Number 10011

Signed [signature] Date 2/21/01

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER

RECEIVED
FEB 23 2001
WATER RESOURCES DEPT
SALEM, OREGON



WOHLERS ENVIRONMENTAL SERVICES, INC.

FIGURE 2

SITE MAP

YOUNGER OIL/LEBANON
3510 S. SANTIAM HIGHWAY
LEBANON, OREGON

PROJECT NO.:	99-0106
DATE:	08/30/99
SCALE:	1" = 15'
FILE:	FG990106
DRAWN BY:	MDW

STATE OF OREGON

RECEIVED FEB 23 2001 WATER RESOURCES DEPT SALEM, OREGON

LINN 53709

MONITORING WELL REPORT

(as required by ORS 537.765 & OAR 690-240-095)

Start Card # 134786 L43686

Instructions for completing this report are on the last page of this form.

(1) OWNER/PROJECT: WELL NUMBER

Name Yanger Oil Company

Address PO Box 87

City Albany State OR Zip 97321

(2) TYPE OF WORK:

[X] New construction [ ] Alteration (Repair/Recondition)

[ ] Conversion [ ] Deepening [ ] Abandonment

(3) DRILLING METHOD

[ ] Rotary Air [ ] Rotary Mud [ ] Cable

[X] Hollow Stem Auger [ ] Other

(4) BORE HOLE CONSTRUCTION

Special Standards Yes [ ] No [X] Depth of completed well 19 ft.

Vault 0 ft. TO 1 ft.

Seal 1 ft. TO 4 ft.

Filter pack 4 ft. TO 19 ft.

Land surface

Water-tight cover

Surface flush vault

Locking cap

Casing diameter 2 in.

material PVC

Welded [ ] Threaded [X] Glued [ ]

Liner diameter ____ in.

material ____

Welded [ ] Threaded [ ] Glued [ ]

Well seal: Material Bent

Amount 2 bags

Grout weight ____

Borehole diameter 10 in.

Bentonite plug at least 3 ft. thick

Screen material PVC

interval(s): From 5 To 19

From ____ To ____

Slot size .010 in.

Filter pack: Material Sand

Size 10-20 in.

(5) WELL TEST:

[ ] Pump [ ] Bailer [ ] Air [ ] Flowing Artesian

Permeability ____ Yield ____ GPM

Conductivity ____ PH ____

Temperature of water 51 °F/C Depth artesian flow found ____ ft.

Was water analysis done? [X] Yes [ ] No

By whom? ____

Depth of strata to be analyzed. From ____ ft. to ____ ft.

Remarks: ____

Name of supervising Geologist/Engineer ____

(6) LOCATION OF WELL By legal description

Well Location: County Linn

Township 12 (N or S) Range 2 (E or W) Section 23

1. SW 1/4 of SE 1/4 of above section.

2. **Either** Street address of well location 3570 S Santiam

or Tax lot number of well location 1000

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:

6 Ft. below land surface. Date 1/25/01

Artesian Pressure ____ lb/sq. in. Date ____

(8) WATER BEARING ZONES: 6

Depth at which water was first found 6

From	To	Est. Flow Rate	SWL
6	19		6

(9) WELL LOG: Ground elevation ____

Material	From	To	SWL
Gravels	0	2	
Sandy Silts	2	7	
Silty Gravels	7	18.5	
Silty Clay	18.5	19	

Date started 1/25/01 Completed 1/25/01

(unbonded) Monitor Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.

MWC Number 1062

Signed [signature] Date 2/21/01

(bonded) Monitor Well Constructor Certification:

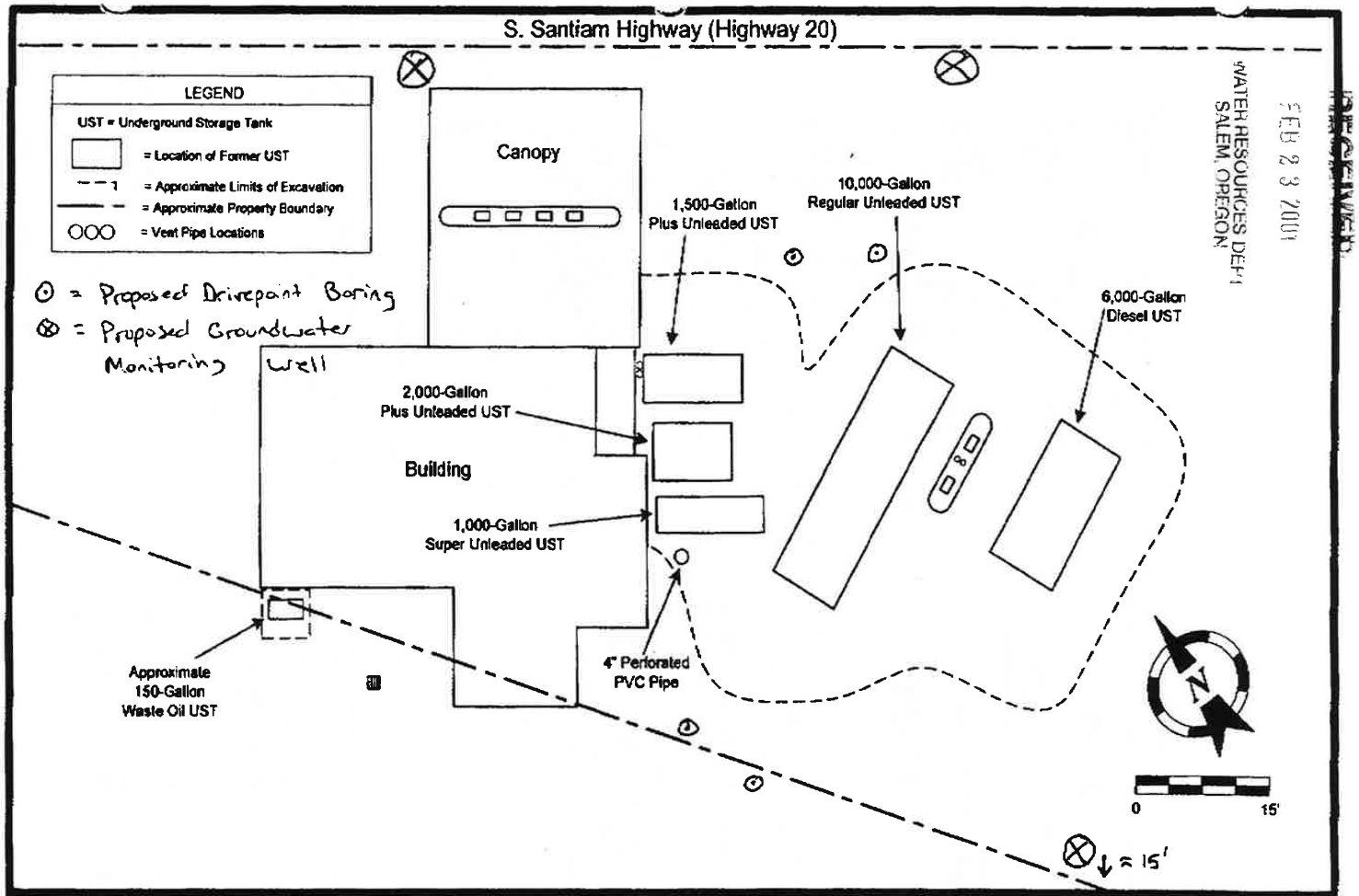
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

MWC Number 1001

Signed [signature] Date 2/21/01

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER

RECEIVED FEB 23 2001 WATER RESOURCES DEPT SALEM, OREGON



WOHLERS ENVIRONMENTAL SERVICES, INC.

FIGURE 2

SITE MAP

YOUNGER OIL/LEBANON
3510 S. SANTIAM HIGHWAY
LEBANON, OREGON

PROJECT NO.:	99-0106
DATE:	08/30/99
SCALE:	1" = 15'
FILE:	FG990106
DRAWN BY:	MDW

STATE OF OREGON

MONITORING WELL REPORT

(as required by ORS 537.765 & OAR 690-240-095)

Instructions for completing this report are on the last page of this form.

LINN 57043 Linn 57043

Start Card # 183928

(1) OWNER/PROJECT: WELL NO. DR-2000-B

Name Louis Schwindt

Address 797 Glen Oak Dr.

City Lebanon State Oregon Zip 97355

(2) TYPE OF WORK:

☐ New construction ☐ Alteration (Repair/Recondition)

☐ Conversion ☐ Deepening ☒ Abandonment

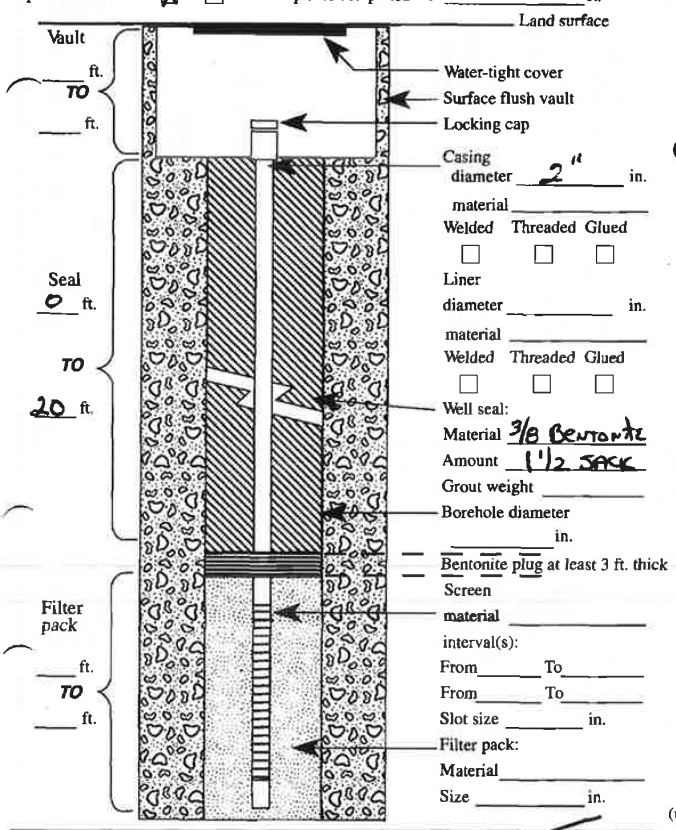
(3) DRILLING METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Cable

☐ Hollow Stem Auger ☐ Other N/A

(4) BORE HOLE CONSTRUCTION

Special Standards Yes ☒ No ☐ Depth of completed well 0 ft.



(5) WELL TEST:

☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Permeability Yield GPM

Conductivity PH

Temperature of water °F/C Depth artesian flow found ft.

Was water analysis done? ☐ Yes ☐ No

By whom?

Depth of strata to be analyzed. From ft. to ft.

Remarks:

Name of supervising Geologist/Engineer

(6) LOCATION OF WELL By legal description

Well Location: County Linn

Township 12 (N) or (S) Range 2 (E) or (W) Section 23

1. NW 1/4 of NW 1/4 of above section.

2. **Either** Street address of well location 3029 S. Santiam Hwy Lebanon, Ore. 97355

or Tax lot number of well location

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:

10 Ft. below land surface. Date 12-1-05

Artesian Pressure lb/sq. in. Date

(8) WATER BEARING ZONES:

Depth at which water was first found N/A.

From	To	Est. Flow Rate	SWL

(9) WELL LOG: Ground elevation

Material	From	To	SWL
Filled 2" PVC with 3/8 Bentonite to minus one foot to 20'			
Removed vaults & Topped of with Bentonite			
Abandon well in accordance with Specific Standards			

RECEIVED MAR 07 2006 WATER RESOURCES DEPT SALEM, OREGON

RECEIVED JAN 10 2006 WATER RESOURCES DEPT SALEM, OREGON

Date started 12-1-05 Completed 12-1-05

(unbonded) Monitor Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.

MWC Number

Signed Date

(bonded) Monitor Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

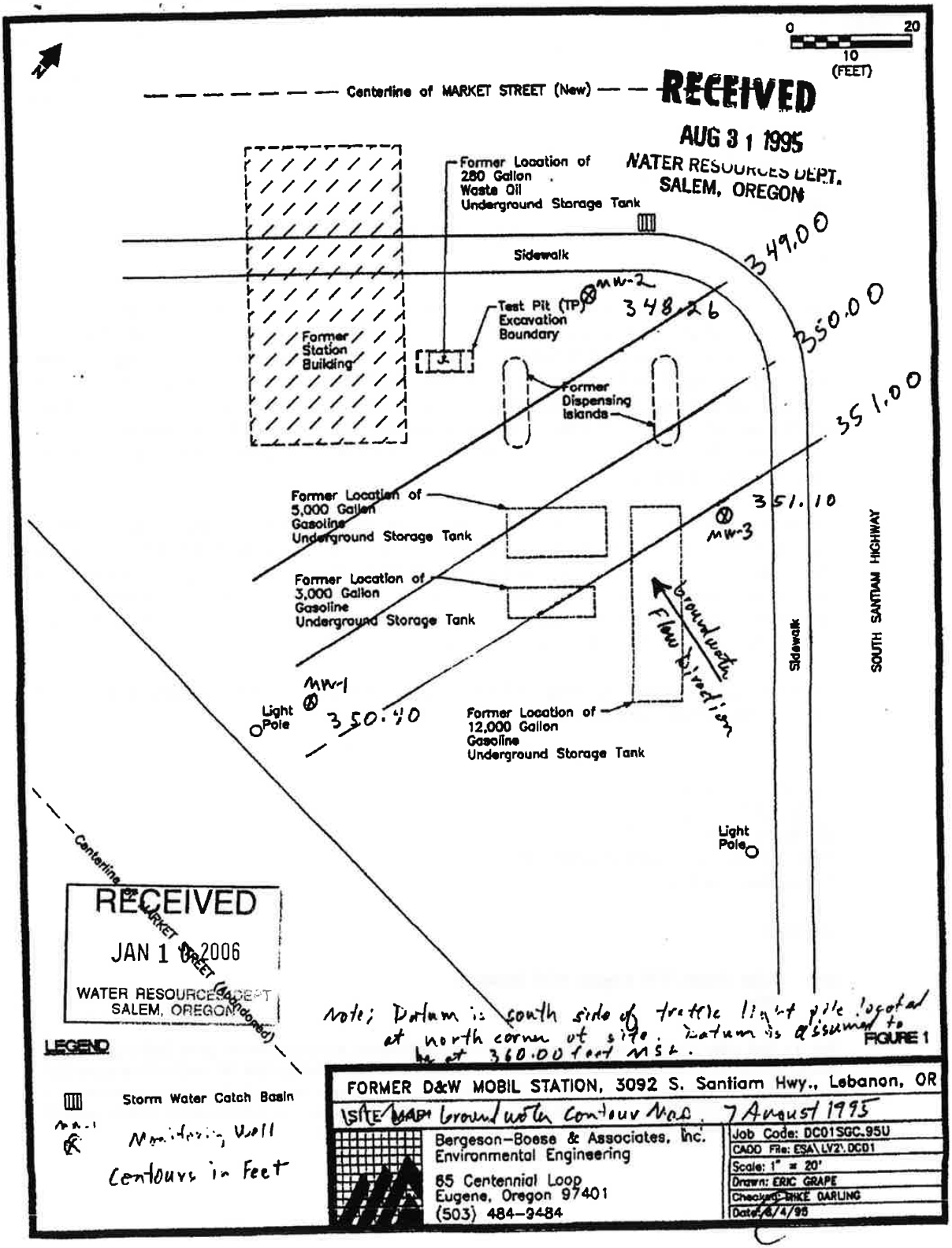
MWC Number 0118

Signed Date 12-2-05

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER

LINN 57043

LINN 57043



RECEIVED
AUG 31 1995
WATER RESOURCES DEPT.
SALEM, OREGON

RECEIVED
JAN 1 0 2006
WATER RESOURCES DEPT
SALEM, OREGON

Note; Datum is south side of traffic light pole located at north corner of site. Datum is assumed to be at 360.00 feet MSL.

FIGURE 1

FORMER D&W MOBIL STATION, 3092 S. Santiam Hwy., Lebanon, OR

SITE MAP Groundwater Contour Map 7 August 1995

Bergeson-Boese & Associates, Inc.
Environmental Engineering
85 Centennial Loop
Eugene, Oregon 97401
(503) 484-2484

Job Code:	DC01SGC.95U
CADD File:	ESA\LV2\DC01
Scale:	1" = 20'
Drawn:	ERIC GRAPE
Checked:	MIKE DARLING
Date:	8/4/95

LINN 57043

CV

Oregon

Theodore R. Kulongoski, Governor

Water Resources Department
North Mall Office Building
725 Summer Street NE, Suite A
Salem, OR 97301-1271
503-986-0900
FAX 503-986-0904

December 20, 2005

NUGENT DRILLING CO.
CHARLES D NUGENT MWC 10118
36969 ROCK HILL DR
LEBANON OR 97355

FINAL ORDER

Dear Chuck:

The Special Standard requests you submitted for owner: Louis Schwindt, Start Card numbers 183927, 183928 and 183929, are hereby approved for the following: You may abandon these wells in place as described in OAR 690-240-0510(2). If you plan on abandoning the wells using bentonite then the placement of the bentonite shall conform to the Department's rules and the manufacturers specifications and result in a seal that is free of voids or bridges. Care shall be taken to minimize the introduction of bentonite dust. Only sodium bentonite chips manufactured to be greater than 1/4 inch or tablets shall be used below the water level in the sealing interval. Copies of your Special Standard Request forms are attached.

The Well Construction Standards serve to protect ground water resources. By approving and issuing this special construction standard the Oregon Water Resources Department is not representing that a well constructed in accordance with this condition will maintain structural integrity or that it meets engineering standards. The well constructor/or landowner is responsible for ensuring that a well is constructed in a manner that protects ground water resources as required under Oregon Administrative Rules 690-200 through 690-240.

If you have any questions regarding this letter, I may be contacted at (503) 986-0851, or by e-mail at Kristopher.R.Byrd@wrd.state.or.us.

Sincerely,

Kristopher Byrd
Well Construction Program Coordinator
Enforcement Section

enclosure

cc: John Unger, NW Region Well Inspector
File

This is a final order in other than a contested case. This order is subject to judicial review under ORS 183.484. Any petition for judicial review must be filed within the 60 day time period specified by ORS 183.484(2). Pursuant to ORS 536.075 and OAR 137-004-0080 you may either petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied.

LINN 57043
LINN 57043

RECEIVED
JAN 1 0 2006
WATER RESOURCES DEPT
SALEM, OREGON

Oregon Water Resources Department

REQUEST FOR WRITTEN APPROVAL TO USE CONSTRUCTION METHODS NOT INCLUDED IN OREGON ADMINISTRATIVE RULES 690-200 THROUGH 690-240

Before the request can be considered, this form must be completed. Requests shall be submitted to the Well Construction Specialist, Water Resources Department, 158 12th Street NE, Salem OR 97301. Requests may also be considered by the appropriate Regional Manager.

Date of request: 11-28-05 **Oral approval date (if applicable):** 11-14-05

Bonded Well Constructor (name, license #, and mailing address): Charles D. Nugent
36969 Rock Hill Dr. Lebanon, Ore 97355 #10118

(1) **Location of Well:** NW **1/4** NW **1/4 of Section** 23,

Township 12 **N(S)** **Range** 2 **E(W)** Linn **County**

Address at well site: 3029 S. Santiam Hwy
Lebanon, Ore.

(2) **Start Card Number(s)(for work to be done):** 183928

(3) **Name and Address of Land Owner:** Louis Schwinor
797 Glen Oak Dr. ~~7311 16th St.~~ Lebanon, Ore 97355

(4) **Distance to the nearest septic tank, drainfield, closed sewage line (if water supply well)**
N/A

(5) **The unusual site conditions which necessitate this request:** N/A.

(6) **The proposed construction methods that the bonded well constructor believes will be adequate for this well: (attach additional pages if needed)**
Fill monitoring well (20') with 3/8 Bentonite to ground level - Remove surface vault.

LINN 57043

LINN 57043

(7) Diagram showing the pertinent features of the proposed well design and construction: (attach additional pages if needed)

RECEIVED
JAN 1 0 2006
WATER RESOURCES DEPT
SALEM, OREGON

---

(1) The Well Construction Standards serve to protect ground water resources. By approving and issuing this special construction standard the Oregon Water Resources Department is not representing that a well constructed in accordance with this condition will maintain structural integrity or that it meets engineering standards. The well constructor/or landowner is responsible for ensuring that a well is constructed in a manner that protects ground water resources as required under Oregon Administrative Rules 690-200 through 690-240.

(2) If it should be determined at some future date that the well, due to its construction, is allowing ground water contamination, waste or loss of artesian pressure, the undersigned shall return to the site and rectify the problem.

(3) If oral approval was granted, a written request must be submitted to the Department either within three (3) working days of the date of approval or prior to the completion of the associated well work. Failure to submit a written request as described above may void prior oral approval.

I have read and understand the above information. I further attest that the information provided is accurate to the best of my knowledge.

Bonded Constructor Signature: _____

revised 07/07/2003

STATE OF OREGON

MONITORING WELL REPORT

(as required by ORS 537.765 & OAR 690-240-095)

Instructions for completing this report are on the last page of this form.

LINN 57044 Linn 57044

Start Card # 183927

(1) OWNER/PROJECT: WELL NO. DR-2000

Name Louis Schwindt

Address 797 Glen Oak Dr.

City Lebanon State Oregon Zip 97355

(2) TYPE OF WORK:

☐ New construction ☐ Alteration (Repair/Recondition)

☐ Conversion ☐ Deepening ☒ Abandonment

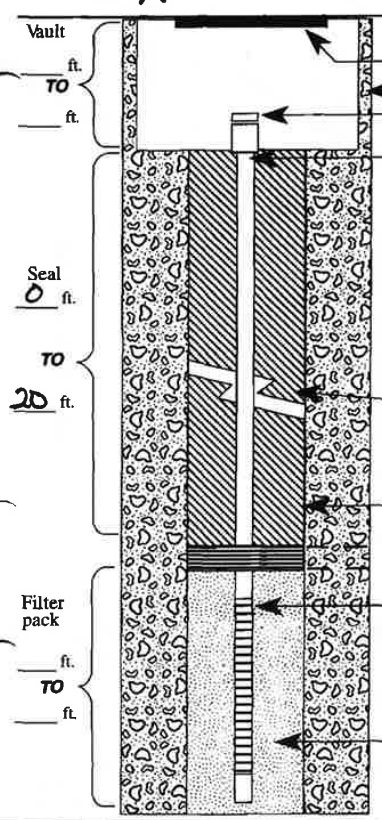
(3) DRILLING METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Cable

☐ Hollow Stem Auger ☐ Other N/A

(4) BORE HOLE CONSTRUCTION

Special Standards Yes ☒ No ☐ Depth of completed well ___ ft.



Water-tight cover

Surface flush vault

Locking cap

Casing diameter 2" in.

material

Welded Threaded Glued

☐ ☐ ☐

Liner diameter ___ in.

material

Welded Threaded Glued

☐ ☐ ☐

Well seal: Material Bentonite 3/8

Amount 1 1/2 sacks

Grout weight

Borehole diameter ___ in.

Bentonite plug at least 3 ft. thick

Screen material

interval(s): From ___ To ___

From ___ To ___

Slot size ___ in.

Filter pack: Material ___

Size ___ in.

(5) WELL TEST:

☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Permeability ___ Yield ___ GPM

Conductivity ___ PH ___

Temperature of water ___ °F/C Depth artesian flow found ___ ft.

Was water analysis done? ☐ Yes ☐ No

By whom?

Depth of strata to be analyzed. From ___ ft. to ___ ft.

Remarks:

Name of supervising Geologist/Engineer

(6) LOCATION OF WELL By legal description

Well Location: County Linn

Township 12 (N) or (S) Range 2 (E) or (W) Section 23

1. NW 1/4 of NW 1/4 of above section.

2. **Either** Street address of well location 3029 S. Santiam Hwy Lebanon, Ore. 97355

or Tax lot number of well location

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:

10 Ft. below land surface. Date 12-1-05

Artesian Pressure ___ lb/sq. in. Date

(8) WATER BEARING ZONES:

Depth at which water was first found N/A.

From	To	Est. Flow Rate	SWL

(9) WELL LOG: Ground elevation

Material	From	To	SWL
Filled 2" P.V.C. with 3/8 Bentonite to minus 1 foot.			
Removed vaults & topped off with Bentonite to ground level.			
Abandon well in accordance to Special Standards.			

RECEIVED JAN 10 2006 WATER RESOURCES DEPT SALEM, OREGON

RECEIVED MAR 07 2006 WATER RESOURCES DEPT SALEM, OREGON

Date started 12-1-05 Completed 12-1-05

(unbonded) Monitor Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.

MWC Number ___

Signed ___ Date ___

(bonded) Monitor Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

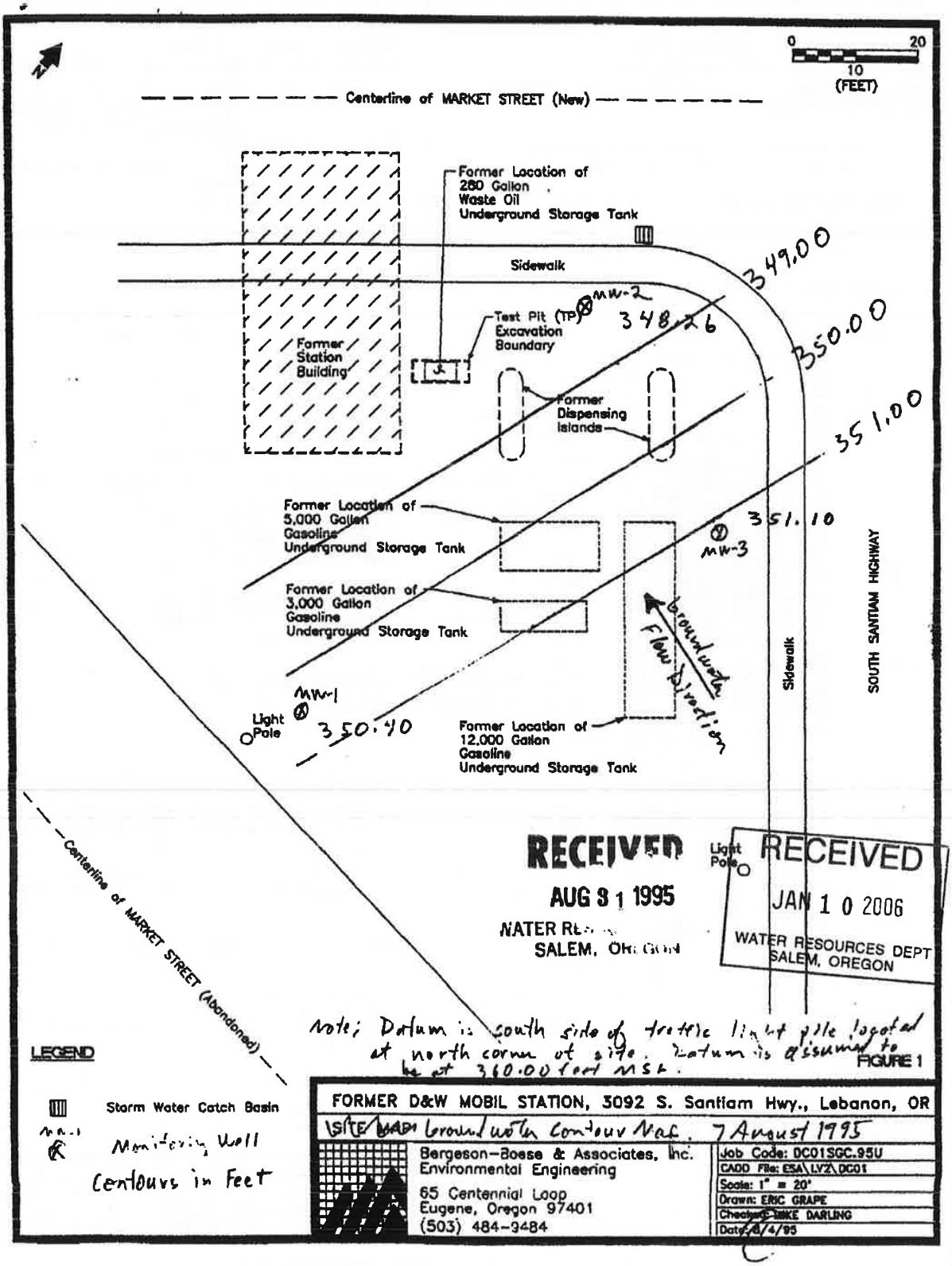
MWC Number 10118

Signed [signature] Date 12-2-05

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER

LINN 57044

LINN 57044



LINN 57044

CV

Oregon

Theodore R. Kulongoski, Governor

Water Resources Department
North Mall Office Building
725 Summer Street NE, Suite A
Salem, OR 97301-1271
503-986-0900
FAX 503-986-0904

December 20, 2005

NUGENT DRILLING CO.
CHARLES D NUGENT MWC 10118
36969 ROCK HILL DR
LEBANON OR 97355

FINAL ORDER

Dear Chuck:

The Special Standard requests you submitted for owner: Louis Schwindt, Start Card numbers 183927, 183928 and 183929, are hereby approved for the following: You may abandon these wells in place as described in OAR 690-240-0510(2). If you plan on abandoning the wells using bentonite then the placement of the bentonite shall conform to the Department's rules and the manufacturers specifications and result in a seal that is free of voids or bridges. Care shall be taken to minimize the introduction of bentonite dust. Only sodium bentonite chips manufactured to be greater than 1/4 inch or tablets shall be used below the water level in the sealing interval. Copies of your Special Standard Request forms are attached.

The Well Construction Standards serve to protect ground water resources. By approving and issuing this special construction standard the Oregon Water Resources Department is not representing that a well constructed in accordance with this condition will maintain structural integrity or that it meets engineering standards. The well constructor/or landowner is responsible for ensuring that a well is constructed in a manner that protects ground water resources as required under Oregon Administrative Rules 690-200 through 690-240.

If you have any questions regarding this letter, I may be contacted at (503) 986-0851, or by e-mail at Kristopher.R.Byrd@wrd.state.or.us.

Sincerely,

Kristopher Byrd
Well Construction Program Coordinator
Enforcement Section

enclosure

cc: John Unger, NW Region Well Inspector
File

This is a final order in other than a contested case. This order is subject to judicial review under ORS 183.484. Any petition for judicial review must be filed within the 60 day time period specified by ORS 183.484(2). Pursuant to ORS 536.075 and OAR 137-004-0080 you may either petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied.

LINN 57044

LINN 57044

RECEIVED
JAN 1 0 2006
WATER RESOURCES DEPT
SALEM, OREGON

Oregon Water Resources Department

REQUEST FOR WRITTEN APPROVAL TO USE CONSTRUCTION METHODS NOT INCLUDED IN OREGON ADMINISTRATIVE RULES 690-200 THROUGH 690-240

Before the request can be considered, this form must be completed. Requests shall be submitted to the Well Construction Specialist, Water Resources Department, 158 12th Street NE, Salem OR 97301. Requests may also be considered by the appropriate Regional Manager.

Date of request: 11-28-05 **Oral approval date (if applicable):** 11-14-05

Bonded Well Constructor (name, license #, and mailing address): Charles D. Nugent
36969 Rock Hill Dr. Lebanon, Ore 97355 #10118

(1) **Location of Well:** NW 1/4 NW 1/4 of Section 23,

Township 12 N(S) **Range** 2 E(W) Linn **County**

Address at well site: 3029 S. Santiam Hwy
Lebanon, Ore.

(2) **Start Card Number(s)(for work to be done):** 183927

(3) **Name and Address of Land Owner:** Louis Schwinot
797 Glen Oak Dr. ~~[illegible]~~. Lebanon, Ore 97355

(4) **Distance to the nearest septic tank, drainfield, closed sewage line (if water supply well)**
N/A

(5) **The unusual site conditions which necessitate this request:** N/A.

(6) **The proposed construction methods that the bonded well constructor believes will be adequate for this well: (attach additional pages if needed)**
Fill monitoring well (20') with 3/8 Bentonite to Ground Level - Remove surface vault.

LINN 57044
LINN 57044

(7) Diagram showing the pertinent features of the proposed well design and construction: (attach additional pages if needed)

RECEIVED
JAN 1 0 2006
WATER RESOURCES DEPT
SALEM, OREGON

(1) The Well Construction Standards serve to protect ground water resources. By approving and issuing this special construction standard the Oregon Water Resources Department is not representing that a well constructed in accordance with this condition will maintain structural integrity or that it meets engineering standards. The well constructor/or landowner is responsible for ensuring that a well is constructed in a manner that protects ground water resources as required under Oregon Administrative Rules 690-200 through 690-240.

(2) If it should be determined at some future date that the well, due to its construction, is allowing ground water contamination, waste or loss of artesian pressure, the undersigned shall return to the site and rectify the problem.

(3) If oral approval was granted, a written request must be submitted to the Department either within three (3) working days of the date of approval or prior to the completion of the associated well work. Failure to submit a written request as described above may void prior oral approval.

I have read and understand the above information. I further attest that the information provided is accurate to the best of my knowledge.

Bonded Constructor Signature: _____

revised 07/07/2003

STATE OF OREGON

MONITORING WELL REPORT

(as required by ORS 537.765 & OAR 690-240-095)

Instructions for completing this report are on the last page of this form.

LINN 57045

Start Card # 183929

(1) OWNER/PROJECT: WELL NO. DR-2000-C

Name Louis Schwindt

Address 797 Glen Oak Dr.

City Lebanon State Oregon Zip 97355

(2) TYPE OF WORK:

☐ New construction ☐ Alteration (Repair/Recondition)

☐ Conversion ☐ Deepening ☒ Abandonment

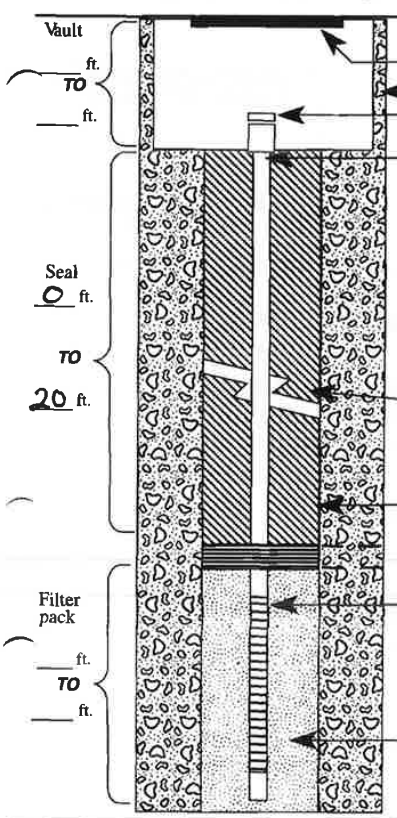
(3) DRILLING METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Cable

☐ Hollow Stem Auger ☐ Other

(4) BORE HOLE CONSTRUCTION

Special Standards Yes ☒ No ☐ Depth of completed well ____ ft.



(5) WELL TEST:

☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Permeability ____ Yield ____ GPM

Conductivity ____ PH ____

Temperature of water ____ °F/C Depth artesian flow found ____ ft.

Was water analysis done? ☐ Yes ☐ No

By whom? ____

Depth of strata to be analyzed. From ____ ft. to ____ ft.

Remarks: ____

Name of supervising Geologist/Engineer ____

(6) LOCATION OF WELL By legal description

Well Location: County Linn

Township 12 (N) or (S) Range 2 (E) or (W) Section 23

1. NW 1/4 of NW 1/4 of above section.

2. Either Street address of well location 3029 S. Santiam Hwy Lebanon, Ore. 97355

or Tax lot number of well location ____

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:

10 Ft. below land surface. Date 12-1-05

Artesian Pressure ____ lb/sq. in. Date ____

(8) WATER BEARING ZONES:

Depth at which water was first found N/A.

From	To	Est. Flow Rate	SWL

(9) WELL LOG: Ground elevation ____

Material	From	To	SWL
Filled 2" P.V.C. with 3/8 Bentonite to minus one foot to 20'.			
Removed vaults & topped of with Bentonite			
Abandon well in accordance with special standards			

RECEIVED JAN 10 2006 WATER RESOURCES DEPT SALEM, OREGON

RECEIVED MAR 07 2006 WATER RESOURCES DEPT SALEM, OREGON

Date started 12-1-05 Completed 12-1-05

(unbonded) Monitor Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.

MWC Number ____

Signed ____ Date ____

(bonded) Monitor Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

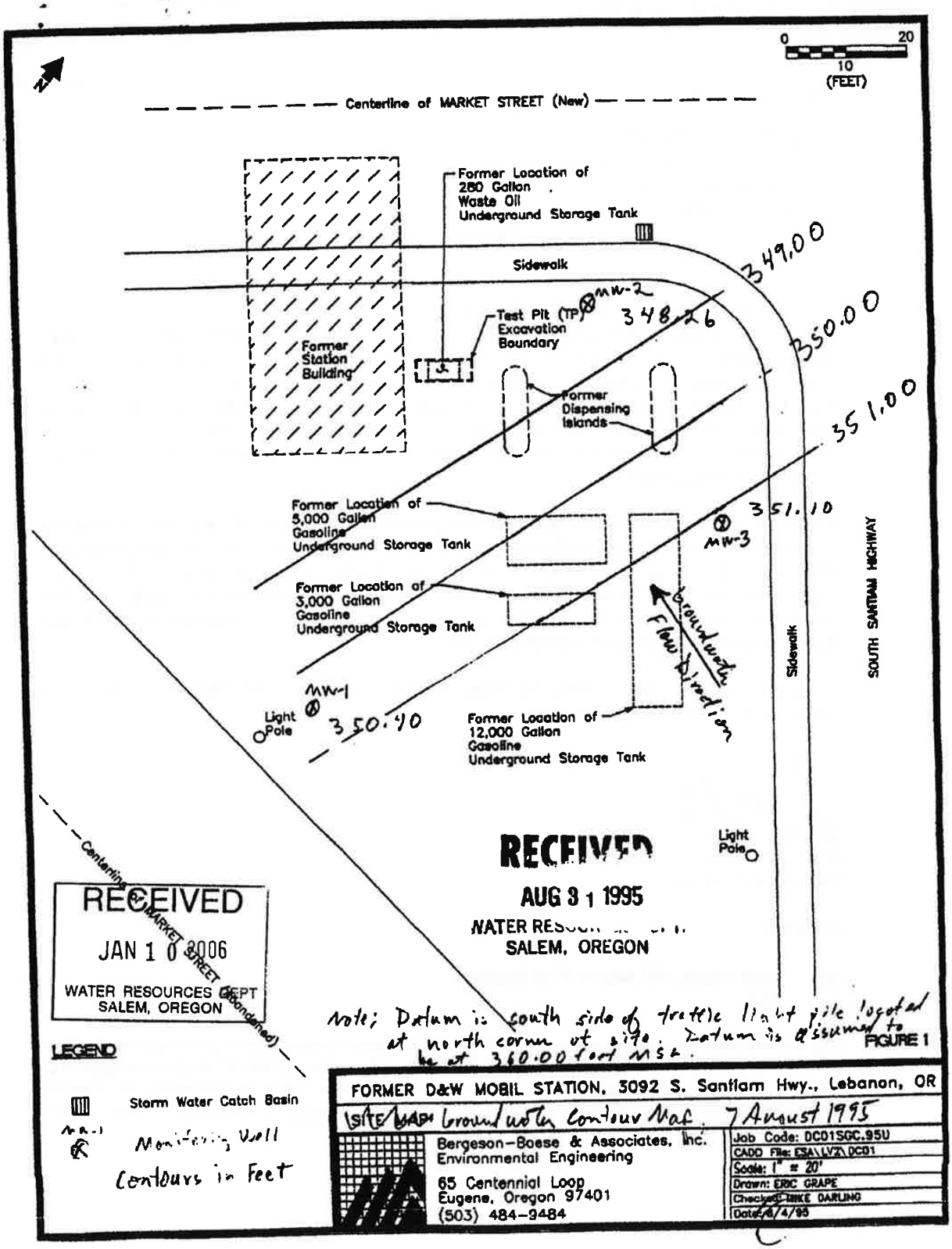
MWC Number 1011B

Signed [signature] Date 12-2-05

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER

LINN 57045

LINN 57045



RECEIVED
JAN 10 2006
WATER RESOURCES DEPT
SALEM, OREGON

RECEIVED
AUG 31 1995
WATER RESOURCES DEPT.
SALEM, OREGON

Note; Datum is south side of traffic light pole located at north corner of site. Datum is assumed to be at 360.00 feet MSL.

FIGURE 1

FORMER D&W MOBIL STATION, 3092 S. Santiam Hwy., Lebanon, OR

SITE MAP Groundwater Contour Map 7 August 1995

LINN 57045

CV

Oregon

Theodore R. Kulongoski, Governor

Water Resources Department
North Mall Office Building
725 Summer Street NE, Suite A
Salem, OR 97301-1271
503-986-0900
FAX 503-986-0904

December 20, 2005

NUGENT DRILLING CO.
CHARLES D NUGENT MWC 10118
36969 ROCK HILL DR
LEBANON OR 97355

FINAL ORDER

Dear Chuck:

The Special Standard requests you submitted for owner: Louis Schwindt, Start Card numbers 183927, 183928 and 183929, are hereby approved for the following: You may abandon these wells in place as described in OAR 690-240-0510(2). If you plan on abandoning the wells using bentonite then the placement of the bentonite shall conform to the Department's rules and the manufacturers specifications and result in a seal that is free of voids or bridges. Care shall be taken to minimize the introduction of bentonite dust. Only sodium bentonite chips manufactured to be greater than 1/4 inch or tablets shall be used below the water level in the sealing interval. Copies of your Special Standard Request forms are attached.

The Well Construction Standards serve to protect ground water resources. By approving and issuing this special construction standard the Oregon Water Resources Department is not representing that a well constructed in accordance with this condition will maintain structural integrity or that it meets engineering standards. The well constructor/or landowner is responsible for ensuring that a well is constructed in a manner that protects ground water resources as required under Oregon Administrative Rules 690-200 through 690-240.

If you have any questions regarding this letter, I may be contacted at (503) 986-0851, or by e-mail at Kristopher.R.Byrd@wrd.state.or.us.

Sincerely,

Kristopher Byrd
Well Construction Program Coordinator
Enforcement Section

enclosure

cc: John Unger, NW Region Well Inspector
File

This is a final order in other than a contested case. This order is subject to judicial review under ORS 183.484. Any petition for judicial review must be filed within the 60 day time period specified by ORS 183.484(2). Pursuant to ORS 536.075 and OAR 137-004-0080 you may either petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied.

LINN 57045

LINN 57045

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JAN 10 2006
WATER RESOURCES DEPT
SALEM, OREGON

Oregon Water Resources Department

REQUEST FOR WRITTEN APPROVAL TO USE CONSTRUCTION METHODS NOT INCLUDED IN OREGON ADMINISTRATIVE RULES 690-200 THROUGH 690-240

Before the request can be considered, this form must be completed. Requests shall be submitted to the Well Construction Specialist, Water Resources Department, 158 12th Street NE, Salem OR 97301. Requests may also be considered by the appropriate Regional Manager.

Date of request: 11-28-05 **Oral approval date (if applicable):** 11-14-05

Bonded Well Constructor (name, license #, and mailing address): Charles D. Nugent
36969 Rock Hill Dr. Lebanon, Ore 97355 #10118

(1) **Location of Well:** NW **1/4** NW **1/4 of Section** 23,

Township 12 ☒(S) **Range** 2 ☒(W) Linn **County**

Address at well site: 3029 S. Santiam Hwy
Lebanon, Ore.

(2) **Start Card Number(s)(for work to be done):** 183929

(3) **Name and Address of Land Owner:** Louis Schwindt
797 Glen Oak Dr. ~~[illegible]~~ Lebanon, Ore 97355

(4) **Distance to the nearest septic tank, drainfield, closed sewage line (if water supply well)**
N/A

(5) **The unusual site conditions which necessitate this request:** N/A.

(6) **The proposed construction methods that the bonded well constructor believes will be adequate for this well: (attach additional pages if needed)**
Fill monitoring well (20') with 3/8 Bentonite to ground level - Remove surface vault.

LINN 57045

LINN 57045

(7) Diagram showing the pertinent features of the proposed well design and construction: (attach additional pages if needed)

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WATER RESOURCES DEPT
SALEM, OREGON

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(1) The Well Construction Standards serve to protect ground water resources. By approving and issuing this special construction standard the Oregon Water Resources Department is not representing that a well constructed in accordance with this condition will maintain structural integrity or that it meets engineering standards. The well constructor/or landowner is responsible for ensuring that a well is constructed in a manner that protects ground water resources as required under Oregon Administrative Rules 690-200 through 690-240.

(2) If it should be determined at some future date that the well, due to its construction, is allowing ground water contamination, waste or loss of artesian pressure, the undersigned shall return to the site and rectify the problem.

(3) If oral approval was granted, a written request must be submitted to the Department either within three (3) working days of the date of approval or prior to the completion of the associated well work. Failure to submit a written request as described above may void prior oral approval.

I have read and understand the above information. I further attest that the information provided is accurate to the best of my knowledge.

Bonded Constructor Signature: _____

revised 07/07/2003

Attachment #10

Mark Rossi

From: Jim Lord <jim@ashleyvance.com>
Sent: Wednesday, July 15, 2020 5:16 PM
To: Mark Rossi
Subject: Fwd: Colonia Paz 1 Affordable Housing Project

Here you go!

Jim Lord, PE

Ashley & Vance Engineering
Civil • Structural
33 NW Franklin Ave | Bend, OR 97703
o. (541) 647-1445 x179 | c. (541) 318-9132

www.ashleyvance.com

In response to COVID-19, we are doing our part to flatten the curve by working remotely. We welcome any and all social interaction via video, email, and phone extension, all of which are functioning perfectly even in our distributed environment. Thank you and be well!

---------- Forwarded message ---------
From: **Shana Olson** <solson@ci.lebanon.or.us>
Date: Wed, Jul 15, 2020 at 5:12 PM
Subject: RE: Colonia Paz 1 Affordable Housing Project
To: Jim Lord <jim@ashleyvance.com>

Hi Jim,

The City's existing water and sewer systems have been sized to meet current zoning for vacant properties including treatment plant capacities. This development is anticipated as part of the existing facility master plans and the City services located in Weldwood Dr have been sized accordingly.

Let me know if you need anything else.

Thank you,

Shana Olson

Project Manager – Development Engineering Environmental

City of Lebanon | 925 Main Street | Lebanon OR 97355

Tel: 541.258.4265 | Fax: 541.258.4955

From: Jim Lord <jim@ashleyvance.com>
Sent: Wednesday, July 15, 2020 4:50 PM
To: Shana Olson <solson@ci.lebanon.or.us>
Subject: Colonia Paz 1 Affordable Housing Project

[NOTICE: This message originated outside of your organization -- DO NOT CLICK on links or open attachments unless you are sure the content is safe.]

Hi Shana,

I know we have discussed this in meetings and over the phone, but can you provide me a written response (email reply is fine) that the existing sewer main and water line in Weldwood Drive that we will be connecting to the new apartment building too has sufficient capacity to support this development?

Let me know if you need any additional information from me.

Thanks!

Jim Lord, PE

Ashley & Vance Engineering

Civil • Structural

33 NW Franklin Ave | Bend, OR 97703

o. (541) 647-1445 x179 | c. (541) 318-9132

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Attachment #11

Lebanon Community School District
Student Investment Account (SIA) Grant Application

Part One: General Information

Lebanon Community School District
485 S. 5th Street
Lebanon, OR 97355
Superintendent: Bo Yates
Assistant Superintendent: Jennifer Meckley

Part Two: Narrative

Brief description of your school district/eligible charter school:

Lebanon Community School District (LCSD) serves approximately 4202 students in a semi-rural bedroom community with a growing population and recent surges in the business and academic community. There are eight schools; four K-5/6, two K-8, one middle school, and one high school. There is an alternative option academy for secondary students who are at-risk. There is one charter school that is K-8, Sandridge. 52% of our students are male, 48% female, and we have 4 students who identify as non-binary. Less than one percent of our students are migrant or from officially recognized Native American tribes. Five percent of our students' first language is not English, and one percent were born outside of the US. Student ethnic demographics are as follows: 6% mixed race; 11% Hispanic/Latinx; 1% Native American; 1% Asian, .5% Black, and 80% White.

Lebanon hosts the sixth largest osteopathic medical college in the US. A brand new, state-of-the-art Veteran's Home has been added, and these two entities, along with the Good Samaritan Hospital organization, the city of Lebanon, and the school district, have created a large multi-use area which houses a four-star hotel and fine dining. The downtown area is growing new businesses. There are many organizations that have come alongside the district, and this sets the stage for a wealth of support in terms of partnerships and planning.

In 2010 we did a long-term visioning process that collected input from almost 15% of the city's population, and the 2020 vision was born. From the direction of that vision, we have spent significant funds on training and professional development. We currently have early releases in every building K-12 every Wednesday for afternoon Professional Development (PD) and Professional Learning Communities (PLCs). We provide training for new teachers outside of the school year. We are an Achievement Via Individual Determination (AVID) district with trained staff in every building. We have implemented Positive Behavior Interventions and Supports (PBIS), Response to Intervention (RTI), Educational Non-Verbal Yardsticks (ENVoY). We have done professional development in the areas of Social Emotional Learning (SEL) and Equity work. We participated in the Equal Opportunity Schools (EOS) Grant to focus on Advanced Placement (AP) enrollment of historically underserved students and developed support systems for academic success. We have devoted time and funds in mental health support, suicide prevention, racial-equity work, culturally responsive teaching strategies, and more.

Our Overarching District Goals are as follows:

1. Increase student achievement by 3% each year.
2. Ensure that 90% of each cohort read at grade level (40% or higher on the STAR assessment) by the end of 3rd grade.
3. 90% cohort graduation on-time (4 years).

LCSD has directed targeted support toward programs that provide immediate supports for students below grade level or at-risk. We implemented a limited summer school program for Kindergarten through 6th grade last summer for six weeks. We have a strong commitment to helping all students rise to grade-level achievement standards and pursue this goal with aggressive passion.

Our focal groups require specific and targeted supports which we are addressing as we learn from the data and engagement activities. However, the one area we have been working on for years, which remains a significant challenge is in Special Education (Sped). LCSD has 19% of students receiving services, with more referred and reviewed daily. Teacher caseloads are high, and our ability to increase staffing has proved challenging. We continue to develop systems with a strong foundation that supports both academic and behavioral issues.

We already have ongoing professional development, training, and program implementation imbedded in our district culture. Still, even with all of these efforts, the academic and social and emotional growth and progress of our students need more resources and support. The fact of the matter is that we do not have sufficient personnel to implement the programs, systems, and processes for which we have been trained. Our staff produce results, but the scope is limited due to staffing and resources.

Exact need(s) or issue(s) SIA funding will address as outlined in your three-year plan and as it relates to the two purposes stated in the law (meeting students' mental & behavioral health needs and reducing disparities and increasing academic achievement)

Based on the data we have collected and the input we have gathered, we know that the areas we must address are as follows:

- Kindergarten transition/preparation
- Early Literacy K-3 including English Language acquisition
- Social, emotional, mental, and behavioral support for students
- Personal safety in terms of a positive and inclusive climate, the elimination of bullying, and improved inclusion of our diverse sub-groups.
- A well-rounded program that increases academic and extra-curricular opportunities for all students and extends access to all students by mitigating barriers.

Kindergarten transition is vital because, according to the Oregon Department of Education (ODE) Kindergarten-readiness data LCSD has the lowest Kindergarten readiness scores in the county, and Linn County is one the lowest in the state. We need to assess which areas are of greatest need among the students so we can determine staffing and resource levels.

Early literacy support is an immediate need due to the fact that only 46% of our 3rd graders are at grade level, as reported by the state report card. There is a small outlying school that will need a 0.5 FTE ELA specialist who can address the needs of Emerging Bilingual EB) students to help with language acquisition and support general instructional goals in the regular education classrooms. We need Instructional Assistants (IAs) in each Kindergarten class to decrease the ratios of student to teacher in order to support the readiness deficiencies and provide additional literacy supports for the classroom teachers. We also want to have one dedicated IA each for grades 1st through 3rd to ensure the fidelity of the interventions. Middle school instructional assistants will support those students who arrive at 6th grade underperforming and utilize intervention as well as decrease the ratios of student to teacher, decreasing overall class size. The addition of a bilingual IA will significantly increase support for EB students in terms of general learning and language acquisition.

Summer school and extended day programs that will allow the district to provide increased support in the form of interventions and small-group or individual instruction. Summer school will also decrease the amount of time students who struggle, go-between school years, which supports the retention of learning.

Our largest subgroup of students with behavioral, social/emotional, or mental issues is in Special Education. There are 194 students in grades Kindergarten through 3rd grade on Special Education Individual Education Plans (IEPs) with 45 currently in the referral process and another 25 projected to be referred before they end of the school year. Of our 800 Sped students K-12, 22% have behavior as part of the IEP. Sped students have disproportionate numbers of referrals, suspensions, and expulsions as related to the size of their population as compared to other subgroups. Among Sped students there are also EB students and students of color or other historically underserved populations who need support, so we need to add a Sped certified teacher who is trained in issues of EB students and equity issues as well. Sped IAs are vital to ensuring that all IEP requirements are met and students receive services.

The need for behavioral support in the form of TOSAs who are trained in Equity and Cultural Responsiveness will allow the district to analyze and reflect on the data from an equity perspective they interact with and learn from students and staff as they identify systems issues and inequities and develop better processes and systems to support all parties. However, some behaviors are rooted much more deeply and need specialized support. Mental health specialists are needed to deal with those issues that are currently bogging down our behavioral staff, academic counselors, teachers, and administrators. The periodic support received through the county is simply not sufficient to meet the needs.

The TOSAs will work with all of our other system teams (PBIS, RTI, AVID, etc.) to develop comprehensive building systems to address climate and safety issues presented in our findings as we gather data and observe current practices with the intent of implementation of rules and procedures that are fair and equitable while still manageable for staff. Inclusivity is a need that can be addressed with a systemic solution that involves all stakeholders and meets the diverse needs of our focal group populations.

The addition of support for an alternative education program to prevent drop-out and support at-risk students is necessary due to the particular needs of students who have reached the secondary level, and the supports of the primary level were not able to bring the students in line academically, behaviorally or in both areas. Specifically, adding a counselor to address the behavioral and social-emotional needs of students will provide much needed one-on-one support and guidance.

LCSD wants to increase access to Physical Education (PE), Music, and Career and Technical Education (CTE) programs with funds used to add Full-time employees (FTE) and resources, as well as use capital outlay to add a PE classroom and a playground to support the facility needs of a base for a well-rounded education. Additional course offerings at the middle school level and opportunities for exploration of career-related programs at the younger grades will help to provide knowledge of post-secondary options and potentially encourage completion through high-school. Providing more electives and activities will increase student buy-in and help to impact attendance and behavior positively.

In order to truly impact the achievement gap in a meaningful way, there needs to be an ongoing program of communication with families in our focal groups. Our largest sub-group that is not related to Sped is our Hispanic and Latinx group. The need for a Bilingual Liaison is evident and pressing. Communication with families and transmitting information back and forth between the schools, students and families requires a single-point of contact to coordinate events, activities and school-related information in an effective manner. A translator who is proficient at writing and communicating in Spanish is important to ensure all documents are as accurate as possible. An engagement coordinator will work with the district leadership and involve the Bilingual Liaison in creating a plan for communication to involve all stakeholders. This person will design a survey that will be used annually to provide a continuous flow of input and communication of results between stakeholders.

PART THREE: Community Engagement and Input

Describe your approach to community engagement. Include who you engaged, frequency/occurrence, how you ensured engagement of staff and focal student groups, key information you collected, who you partnered with in the engagement efforts. (250 words or less)

Community engagement work focused on discovery of pertinent information to identify areas of concern. Groups needing support include the following groups (all groups engaged in the process and will participate continuously from now on): Special Education; low SES; Minorities; and other groups with gaps, needs, or deficiencies. The focus is on improving academic achievement, closing achievement gaps; and, addressing social/emotional/behavioral issues and barriers. Input collected includes disaggregated stakeholder perception data and longitudinal academic and behavioral data.

We developed and disseminated surveys, conducted evening invitational meetings in the schools, conducted round table discussions with various stakeholder groups, and invited as many community members as possible to participate. We provided time for staff during paid work

hours and meeting times to seek input and encourage contributions from classified and certified employee groups. We partnered with numerous groups and official entities. The local Chamber of Commerce; Optimist Club; Athletic Booster Club; Boys and Girls Club; Samaritan Medical Organization; the local medical college, the community college; as well as Live Longer Lebanon community coalition group all provided access to diverse community member groups and helped encourage participation of stakeholders in the surveys, meetings, and conversations conducted to solicit information and input.

All invitations and information for families and community members were produced in bi-lingual format to ensure inclusion of the local Latino community, which is our largest minority group. Engagement activities monthly and ensure that targeted populations have activities to which they are proactively invited.

Self-assessment about the quality and nature of your engagement of focal students, families, and staff. If the goal is meaningful, authentic, and ongoing community engagement, where are you at in that process? What barriers, if any, were experienced, and how might you anticipate and resolve these issues in future engagements? (500 words or less)

This process must be meaningful and productive, so we have taken care to ensure that the work is done with forethought and planning to include all groups and connect with stakeholders. Our focus was and continues to be two-fold; identifying and addressing student issues and supporting staff to effect change. The impetus is helping students with needs that impact success. Focal groups of this process are Special Education students; students with disabilities, behavioral issues, or mental health issues; students impacted by issues of equity due to race, ethnicity, or gender; students with gaps in learning due to mobility or other socioeconomic circumstances; underprivileged students; and, families in need.

Providing staff with the resources and training to implement the systems and processes is vital for success. Staff has been provided surveys, included in focus group conversations, and given opportunity to give input regularly. Classified and certified staff have provided significant information to the process and will be included continuously.

The process has been guided by the precepts that we must gather enough accurate information to assess the situation effectively and then address issues effectively. We utilized external specialists to develop and implement an engagement process to disseminate information, solicit needed input, and review feedback. In order to ensure that information is accurate, we provide opportunities for input that are confidential.

As part of the process, there were glitches in learning the best methods for communicating with parents about the nature of our efforts. We discovered that having multiple points of communication is vital. We now ensure that bi-lingual information and survey links are included on the district website and all school websites. We provide hardcopy and electronic information to all stakeholder groups. We also discovered areas that our surveys can be adjusted to become annual data collection tools.

In general, our system of engagement has developed into a sustainable cycle-model of input solicitation from stakeholder groups; examination and analysis of student data; examination of input from stakeholders; adjustments in practice as determined by the data; and, communication back to the stakeholders.

What relationships or partnerships will you cultivate to improve future engagement? (150 words or less)

The district enjoys established relationships with the local Chamber; Optimist Club; Booster Club; Boys and Girls Club; Samaritan Health; Western COMP (medical college) LBCC; Live Longer Lebanon community coalition; City of Lebanon; Veteran's Home; and, the local Ministerial association. We will continue to work with them as we develop options for our students. We are part of the Regional Racial Equity group focused on engagement and support for our focal groups and will involve that in our SIA implementation.

We collaborate with all stakeholders to improve our community. LCSD will continue reaching out to groups as we discover them. We will utilize established communication and input methods to maintain interactive support for our efforts. Website updates and a newsletter outline the work, the process, upcoming opportunities for engagement and results as discovered will be disseminated through all existing communication methods as well as provided at district and building-level events.

What resources would enhance your engagement efforts? How can ODE support your continuous improvement? (150 words or less)

Schools need a comprehensive support system from the state that includes: interim SBAC assessments and results or other assessment information; state-funded support systems for academic and behavioral issues; state provided best-practice trainings that are concise and efficient and do not require extensive professional development; and processes where the state provides the data and information in a simple format that does not require district staff to duplicate information from the state into other forms and documents.

A district collaboration page on the ODE website that shares strategies and processes for other districts to see what is being done in other parts of the state would be helpful as well. Any processes or systems that can be coordinated at the regional or state level to leverage funding or support would also help districts to provide more for their students and families.

Districts are required to upload 5 artifacts of engagement (survey data, meeting minutes, photos, other documents, etc.). Why did you select the artifacts you did? How do they show evidence of engaging student populations, families, and the community? (250 words or less)

Artifact 1 – Parent/Guardian Survey & Community Survey, Responses, and Summaries of Quantitative Responses

Rationale: This document shows the number of individuals who participated in our survey from the parent/guardian (608 responses) and the community (47 responses) groups. It reflects the

opinions and perceptions of these stakeholders. It was a bilingual survey to ensure as much access as possible. It was also an anonymous survey allowing for freedom of response. The comments were added to the comments collected from parent/guardian focus group conversations and other input sessions. All comments were coded and assessed in a qualitative format, and the summary is found in Artifact 5

Artifact 2 – Student Survey, Responses, and Summaries of Quantitative Responses

Rationale: This document shows the responses of 1614 students. There were 524 who self-identified as of an ethnicity in our focal groups. The comments of those students are reflected in a separate section in the qualitative data from our focal groups in Artifact 5. It was a bilingual survey to ensue as much access as possible. It was also an anonymous survey allowing for freedom of response. The comments were coded and assessed in a qualitative format and the summary is found in Artifact 5.

Artifact 3 – Staff Survey, Responses, and Summaries of Quantitative Responses

Rationale: This document shows the responses from 137 staff members. It reflects opinions and perceptions of these stakeholders. It was an anonymous survey allowing for freedom of response. The comments were added to the comments collected from teacher focus group conversations and other input from staff. All comments were coded and assessed in a qualitative format, and the summary is found in Artifact 5

Artifact 4 – Qualitative Data Analysis and Summary

Rationale: This document shows a summary of the primary perceptions of participants in our surveys, focus groups, presentations, and other input sessions. The comments were reviewed to determine which category of expression they fit best: generally positive, e.g., “my school is great” or “my child is happy at school”; expressing a barrier to learning for students, e.g., “math is too hard for me”; or, requesting change or improvement, e.g., “we need more electives.” Each specific concept stated was categorized whenever possible to allow for quantitative analysis (e.g., teachers, food, climate, etc.) The areas with the most comments are reflected in the summary.

Artifact 5 – Photos from Presentations and Focus Group Conversations

Rationale: These photos show physical engagement of stakeholders in the process. They were taken during presentations and focus group conversations. There were no photos taken in small student classes or focal groups due to a desire to make the conversations as comfortable as possible.

Describe the strategies (at least two) that you executed to engage each of the focal student groups, and their families present within your district and community. Your response should include why the strategies were used. (500 words or less).

Strategy 1 – Design an informational communication plan in multi-modal, bi-lingual formats to provide a foundation for the request for engagement from student and family stakeholder groups.

We developed a message for all stakeholders explaining: the need for change in our district; the purpose of the upcoming activities; the nature of our process; and, the future opportunities to participate in the process. The message was presented verbally or in written (hardcopy and electronic) format to each group as part of the activities listed in the next section. The message was translated into Spanish and disseminated to the Latino community and Spanish-speaking students and family stakeholders.

Rationale: It is vital to have a clear and concise message to explain the need for input to improve student achievement and address the issues and barriers that confront students. The message needed to be disseminated to each stakeholder group and as many community partners and members as possible.

The need for multiple modalities and Spanish language translations was evident due to the fact that it would significantly increase ease of access for participation for all student and family stakeholders. Verbal information was stated at meetings (with bi-lingual meetings as an option), in focus group conversations (with bi-lingual options), and in presentations to stakeholder groups. Printed information was produced and translated to Spanish and included in all documents and handouts. Written information is also posted on all pertinent websites where students and families can access the information.

Strategy 2 – Coordinated multi-modal, bi-lingual input opportunities to engage students and family stakeholders.

Information has been solicited from our students and families as part of the data collection needed to assess our current situation as well as inform new work to be done to effect change. The methods for input (surveys, meetings, and focus groups) are fully described in the activities listed in the next section. All input options include the confidentiality of responses to ensure optimum levels of honesty in response from participants.
Rationale: Input directly from the students and their families related to the needs, barriers, and issues surrounding their success academically or in the social/emotional realm is necessary to gauge improvement efforts. Only by requesting engagement in the process and offering opportunity for input and engagement in the process can we address the situation.

Describe the ACTIVITIES (at least two) that you executed to engage each of the focal student groups and their families. Your response should include why the activities were used. (500 words or less)

Activity 1 – Presentations

Presentations were made to student groups and families during the school day (students) and in the evenings (families). Presentations included the informational background and data that informed the district's impetus for implementing a process to solicit information to initiate the creation of a support system for addressing issues that negatively impact students. Information

was presented that related to the disparity in academic achievement due to ability, equity, behavioral issues, social/emotional issues, economic disparity, or other barriers to learning. During the presentations, participants were given information about providing input in open or in confidential/anonymous ways. Presentations were held in English and in Spanish to students and families.

Rationale: Getting the information out was inherently necessary to create awareness of the issues and the opportunities to participate. Presentations were a primary vehicle of communication due to the level of efficiency, ease of implementation, and the ability to increase the scope of implementation on a continuous basis.

Activity 2 - Focus Groups

Focus groups of students and focus groups for parents/families were held in schools during the school day (students) and evenings (families). Groups participated in a guided process with questions. Notes were taken to reflect the responses and input.

Rationale: Focus groups allow for investigation into the perceptions of targeted groups. Groups of similar characteristics can expand upon thoughts generated by the group and provide fuller understanding of the responses. Groups can also increase the comfort of participants and allow for frank and honest input. Focus groups also eliminate any communication barriers due to language or literacy issues.

Activity 3 – Surveys

Anonymous, bi-lingual surveys were sent out in electronic format to students and parents/guardians requesting demographic and other data as well as input for the process. There were multiple-choice, fill-in-the-blank, and open-ended questions.

Rationale: Survey format provided an anonymous platform for enhanced, frank, and honest input. Survey data could be analyzed quantitatively and qualitatively. Limited scope questions (multiple-choice, etc.) allowed for quantitative analysis. Open-ended questions allowed for anecdotal responses and personal opinion data.

Describe the STRATEGIES (at least two) that you used to engage staff. Your response should include why the strategies were used. (500 words or less)

Strategy 1 – Design an informational communication plan to provide a foundation for the request for engagement from staff.

We developed a message for all stakeholders explaining: the need for change in our district, the purpose of the upcoming activities, the nature of our process; and, the future opportunities to participate in the process. The message was presented verbally or in written (hardcopy and electronic) format to each group as part of the activities listed in the next section.

Rationale: It is vital to have a clear and concise message to explain the need for input to improve student achievement and address the issues and barriers that confront students. The message needed to be disseminated to each stakeholder group and as many community partners and members as possible. The need for multiple modalities was evident due to the fact that it would significantly increase ease of access for participation for all staff. Verbal information was stated at meetings, in focus group conversations, and in presentations during meetings. Printed information was included in all documents and handouts. Written information is also posted on all pertinent websites where staff can access the information.

Strategy 2 – Coordinated multi-modal opportunities to engage staff.

Information has been solicited from staff as part of the data collection needed to assess our current situation as well as inform new work to be done to effect change. The methods for input (surveys, meetings, and focus groups) are fully described in the activities listed in the next section. All input options include the confidentiality of responses to ensure optimum levels of honesty in response from participants.

Rationale: Input directly from staff related to the needs, barriers, and issues surrounding student success academically or in the social/emotional realm is necessary to gauge improvement efforts. Only by requesting engagement in the process and offering opportunity for input and engagement in the process can we address the situation.

Describe the ACTIVITIES (at least two) that you used to engage staff. Your response should include why the activities were used. (500 words or less)

Activity 1 – Presentations
Presentations were made to staff during the workday. Presentations included the informational background and data that informed the district's impetus for implementing a process to solicit information to initiate the creation of a support system for addressing issues that negatively impact students. Information was presented that related to the disparity in academic achievement due to ability, equity, behavioral issues, social/emotional issues, economic disparity, or other barriers to learning. During the presentations, staff were given information about providing input in open or in confidential/anonymous ways.

Rationale: Getting the information out was inherently necessary to create awareness of the issues and the opportunities to participate. Presentations were a primary vehicle of communication due to the level of efficiency, ease of implementation, and the ability to increase the scope of implementation on a continuous basis.

Activity 2 – Group Input
During meetings and presentations, staff participated in a guided process with questions. Notes were taken to reflect the responses and input.

Rationale: Group conversation allows for investigation into the perceptions of staff. Collectively, staff can expand upon thoughts generated by the group and provide fuller understanding of the

responses. Groups can also increase the comfort of participants and allow for frank and honest input.

Activity 3 – Surveys
Anonymous surveys were sent out in electronic format to staff requesting demographic and other data as well as input for the process. There were multiple-choice, fill-in-the-blank, and open-ended questions.

Rationale: Survey format provided an anonymous platform for enhanced, frank, and honest input. Survey data could be analyzed quantitatively and qualitatively. Limited scope questions (multiple-choice, etc.) allowed for quantitative analysis. Open-ended questions allowed for anecdotal responses and personal opinion data.

Describe and distill what you learned from your community and staff. What you learned or are actively learning. How you applied the input to inform your planning (250-500 words)

LCSD reached out to all stakeholder groups. The students, staff, parents, and community groups were all offered the opportunity to answer a survey with quantitative and qualitative answer options. Students in the focal groups and their parents were also invited to participate in focus group and small group conversations to gather qualitative information.

- 1614 students - 3729 comments: 47% positive responses, 37% changes desired, 16% felt there were barriers to their education. Primary areas for change were: climate, inclusivity, safety, bullying, rules, disengagement, and specific course issues with core subjects.
- 545 focal group students - 1636 comments: 39% positive, 38% changes desired, 23% felt there were barriers. Primary areas for change were: climate, inclusion, bullying issues, academic support needs, disengagement, and specific core course issues
- 608 parents - 1137 comments: 66% positive, 33% change desired, 1% barrier mentioned. Primary areas for change were: communication, climate, inclusion, bullying, and content-specific issues.
- 150 staff – 517 comments: 13% positive, 87% change desired. Primary areas for change were: work-load, prep/planning time, professional development, increasing instructional time, and addressing behavior.
- 47 Community members – 335 comments: 7% positive, 93% change desired. Primary areas for change were: college-career preparation, communication, and teacher quality.

These findings have been incorporated in our SIA plan in the following ways:

1. Inclusivity of focal groups will be supported by the addition of language-specific supports provided by the bilingual Liaison, the translator, and the engagement coordinator. Ongoing community engagement will be the primary focus. Working with the administration at the building and district level, these positions will provide information for all district programs with input from all focal groups.
2. Climate, behavior, and rules issues will be part of the TOSA work in coordination with existing district programs. Mental health professionals will support this work. The alternative education program is an important part of this strategy as well.

3. Academic support will be addressed with the additional IAs, Sped staff, and the extended day and summer school programs.
4. A well-rounded education program addresses many of the comments about disengagement, preparing for college and careers, and increasing courses and programs that meet diverse student interests and increases intrinsic motivation and engagement in school.

PART FOUR: Data Analysis

Describe the data sources used and how the data informs equity-based decision making (150 words)

Data sources included: Summative Assessment Data (SBAC, EasyCBM, STAR); Behavioral Data (SWIS, Attendance Data); Academic Achievement (3rd Grade Literacy and Math, 9th Grade On-Track, Graduation Rates); and Survey Responses from focal student groups/families, staff, and the community (Quantitative and Qualitative).

Information solicited from the focal groups was the primary data source for the development of a district-wide understanding of who these students and families are and what their perceived needs are as things stand now. We understand clearly that emotional needs must be met in order for school to be a safe and positive place for all students. Academic achievement is contingent on many things, but attendance and participation are two of the largest contributors, and for the focal groups, this data supports the need for significant support at the small group and individual level to develop a cohesive system of academic and social/emotional support to bridge the achievement gap.

EQUITY LENS: Describe how you used the equity lens or tool (250 words or less)

Lebanon Community School District has a history of disaggregating data down to the sub-group level to determine gaps and needs for equitable responses to the needs of historically underserved populations. The equity lens was reviewed by the SIA grant writing team and disseminated to all leaders involved in the engagement process, the data collection and analysis, and the overarching design of the proposed plan for the SIA grant.

All data was reviewed in light of the equity lens. All plan aspects are designed to address the needs uncovered in the engagement and data analysis and reflect the priorities of ODE and the district in the identified areas of the grant. The need for additional instructional staff was showcased in the input from staff who overwhelmingly concurred that there is not enough time for them to implement all of the strategies they have been trained in due to large class sizes, or classes with many students with diverse needs.

Our district plan involves providing enough staff to meet the needs of early learners, emerging bilingual students, students with special needs, and historically underserved and marginalized population students. Increasing staff who have been trained in Culturally Responsive Teaching practices, Socio-Emotional Learning curriculum, Racial Equity practices, and ENVoY behavior management strategies will ensure that every student has at least one staff member who is paying

attention to their needs and helping to develop the academic and social/emotional strategies that will lead to success in all areas.

PART FIVE: Student Investment Account (SIA) Plan Outcomes:

Outcome #1: Increase academic achievement for students, including reducing academic disparities for identified student groups

Outcome #2: Meet students' mental or behavioral health needs

Outcome #3: Ongoing Community Engagement

1.How are the resource allocations in your budget reflective of the outcomes you are trying to achieve?

Our goals are very clearly aligned to student to teacher ratios and access to resources.

We have 52 activities or sub-activities in total. Of those, 21, less than half, are also budget line items. In Plan A, we are strategically funding 66.5 FTE to do the work reflected in the non-monetary line items. Seven of those line items are for licensed ($544,000), six are classified and only one is administrative. 22 of the positions are for summer school or extended day and do not involved additional overhead of insurance to allow for more staff in a fiscally responsible manner.

Information needed for cultural changes in our district and improvement of our inclusion and support for our focal groups will be provided regardless of staffing, but will be much more effective with the resources allocated in this budget.

The other items in Plan A are providing the necessary facilities ($60,000) services ($130,000) and resources (other non-dedicated funds) for the plan to work.

Theory of Action for the Budget: If we provide competent staff to organize and lead our programs, there will be efficiencies and creativity to effect change. Additionally, coordination will create monetary savings and provide for more funds to go to activities that directly impact students.

2.Where do you expect to put most of your focus, resources and energy in the first year?

Our priorities for the first year are as follows:

1. Staffing of the positions we need filled in order to do the work we have set before us.
2. PD and training to ensure fidelity of implementation
3. Comprehensive calendar of programs and events to coordinate district work
4. Collaboration for planning
5. Implementation of the following:
    a. Extended day and summer school programs

b. Pre-K transition program
c. ELA and Early Literacy support and interventions
d. Alt Ed/Drop-Out Prevention Program
e. Inclusion of focal groups
f. Ongoing community engagement

3. In what ways might your priorities shift within your plan based on resource availability?

Understanding that districts across the state will be looking for employees to meet their SIA objectives, here are the secondary activities/interventions we will implement to work toward each area:

- Climate/Culture of access, compassion, understanding, acceptance and equity.
  - PD related to behavior management from an equity standpoint.
  - Substitutes to provide time for committees to work and provide recommendations.

- Class size/work load issues
  - Shared additional staff, rather than dedicated
  - Potentially staggered start/end times
  - Activities for students with other staff to provide prep/planning time.
  - Provide substitutes for teams to review/address assessment issues and needs and make suggestions for limiting instructional time used for testing.
  - Substitutes to provide time for committees to work and provide recommendations.

- Summer School
  - Increased involvement with other organizations.
  - Shared staffing for whole district rather than building specific
  - Decreased scope
  - Decreased time
  - Substitutes to provide time for committees to work and provide recommendations.

- Kindergarten transition
  - Extended year contracts for current employees
  - Periodic staffing of invitational opportunities for incoming kindergarten students.
  - PD and training of staff to provide individual and small group interventions for students who are not ready for school
  - Substitutes to provide time for committees to work and provide recommendations.

- Early Literacy
  - Grade-level appropriate curriculum purchases and associated training
  - Extended contract time of current employees to work longer year or day.
  - Shared personnel across levels or buildings
  - AVID strategies PD for later grades (post 3rd grade) to support students who arrive under grade level.
  - Substitutes to provide time for committees to work and provide recommendations.

- Equitable support and interventions to close the achievement gap for historically underserved populations in our district
    - PD for all staff to understand and address inequities and cultural difference issues
    - Purchase of and training for programs to inform/teach students
    - Building climate surveys
    - Substitute and Additional compensation for committees/teams to address issues
    - PD and Training of all behavior staff about racial/ethnic disparities and awareness

- Social/emotional/mental health supports
    - Expand current contracted services
    - PD/Training for staff related to identification and referral options
    - Substitute and Additional compensation for committees/teams to address issues

- Alternative Educational Supports to prevent drop-outs and support at-risk students.
    - Create and staff an "in-house" program at the high school for 9th and 10th graders.
    - Substitute and Additional compensation for committees/teams to address issues

- Well-rounded educational options and opportunities
    - Shared programs across buildings
    - Stipends for current staff to support new clubs and programs
    - Curriculum materials
    - Support staff who want to add endorsements
    - Coordinate a volunteer program to solicit helpers and relationships with other organizations
    - Substitute and Additional compensation for committees/teams to address issues

Student Investment Account: Year One, Plan A (2020-2021)

ODE Outcome #1: Increase academic achievement for students, including reducing educational disparities for identified student groups

LCSD Strategy #1: Kindergarten Transition Program

Theory of Action: If we assess pre-Kindergarten students for academic and social/emotional readiness, we can ensure appropriate staffing and resources at the Kindergarten level to address disparity and inequities.

Measures of Evidence for Strategy #1
1. Disaggregated benchmark data in ELA for Kindergarten
2. Purchase and implementation of evidence-based reading intervention materials
3. Teacher feedback on the effectiveness of the program
4. Number of students at grade level at the end of each year.

Activity 1.1 – **Pre-K Transition Program - Materials & Resources**

ODE Outcome #1 (Cont.)

LCSD Strategy #2: Early Literacy Focus

Theory of Action: If we focus on literacy in the early grades, more students will be on track by the end of third grade and ready to progress at the appropriate level.

Measures of Evidence for Strategy #2

1. Disaggregated benchmark data in ELA for grades Kindergarten through Third Grade.
2. Decreasing numbers of students needing interventions.
3. Aligned systems and programs (scope and sequence, etc.)
4. Number of students at grade level in each grade at the end of each year.

Activity 2.1 – **Special Education Teachers and Instructional Assistants (IAs) trained in EB, Equity and Culturally Responsive Teaching practices**

2.1a - 24 - K-3rd Grade IAs (one in each Kindergarten, and one per grade level)
2.1b - Four – 6th-8th Grade IAs
2.1c - Four – Special Education trained IAs
2.1d – 0.5 FTE EB/ELA Teacher
2.1e – One – Special Education Teacher trained in EB, Equity and Culturally Responsive Teaching practices

Activity 2.2 – **English Language Acquisition Support**

2.2a One bilingual IA
2.2b Resources for EB/ELA instruction and support

Activity 2.3 – **Summer School/Extended Day Programs**

2.3a – 11 - K-6 summer school and extended day certified instructors
2.3b – 11 - K-6 summer school and extended day IAs
2.3c - Resources for summer school and extended day instruction and support
2.3d – Funding for Charter School Summer School and Extended Day Program

Activity 2.4 – **ELA Intervention Resources**

K-3rd Grade programs for ELA interventions

Activity 2.5 – **Professional Development**

2.5a - Alignment of practices
2.5b - Teamwork and Collaboration
2.5c – Training
2.5d - Planning and Implementation

ODE Outcome #1 (Cont.)

LCSD Strategy #3: Assessment Coordination

Theory of Action:

If we have one person to oversee all testing in the district, we can streamline processes and utilize testing in a comprehensive system that maximizes the usefulness of data and minimizes classroom interruptions.

Measures of Evidence for Strategy #3

1. Hiring of Assessment Coordinator who will coordinate a district-wide program with teams and leadership at the building and district level.
2. Development of assessment program K-12
3. Development and implementation of an assessment calendar
4. Development of meaningful communication and reports for stakeholders.
5. Development of a longitudinal data collection program with reports

Activity 3.1 – **Hire 0.5 FTE Assessment Coordinator**

Activity 3.2 – **Evaluate current assessment practices and systems**

Activity 3.3 – **Determine changes in program**

Activity 3.4 – **Develop comprehensive program and calendar**

Activity 3.5 – **Develop longitudinal maintenance of data process**

ODE Outcome #2: Meet students' mental or behavioral health needs

LCSD Strategy #4: Teachers on Special Assignment (TOSAs)

Theory of Action:
If our behavior program is based in best-practices associated with closing the gap and ensuring equity, our students will have a safe learning environment. If all of our behavior and academic programs have one primary point of leadership, our resources will be concentrated and focus and limit overlap and redundancy, making effectiveness, efficiency, and fiscal responsibility possible.

Measures of Evidence for Strategy #4

1. Hiring of TOSAs who are trained in best-practice equity processes and procedures to work with students with behavioral issues and their families in order to; examine the data related to behavior, attendance, and other issues; identify and rectify systemic issues that interfere with the students' academic experience; and, provide support and appropriate recommendations and referrals.
2. Data collection and analysis by TOSAs
3. Collaboration activities with PBIS, RTI, PD teams and other leadership
4. Development and ongoing review and refinement of processes and systems
5. Behavior and academic data of students

Activity 4.1 – **Hire Five TOSAs**

Activity 4.2 – **Design framework for collaboration between teams and leadership**

Activity 4.3 – **Determine data collection and analysis process**

Activity 4.4 – **Train teams in collaboration expectations and outcomes**

Activity 4.5 – **Develop system for ongoing review with clear rubric for evaluating program**

Activity 4.5 **– Ongoing Professional Development**

ODE Outcome #2 (Cont.)

LCSD Strategy #5: Two District-Wide Mental Health Specialists

Theory of Action:
If we have mental health specialists that can address more serious issues with students, counselors, Special Education Staff, and other building-level personnel can provide services and effective systems for the general population of the school and create stability.

Measures of Evidence for Strategy #5

1. Hiring of Specialists
2. Referral information
3. Data related to students served

Activity 5.1 – **Hire Two Mental Health Specialists**

Activity 5.2 – **Provide training and PD related to district programs and systems**

Activity 5.3 – **Develop a referral process**

Activity 5.4 – **Collect and analyze data related to the program**

ODE Outcome #2 (Cont.)

LCSD Strategy #6: Alternative Education Program for Drop-Out Prevention at the Secondary Level

Theory of Action:
If we provide a program that meets the needs of at-risk students by providing appropriate supports and resources, students will be able to complete formal secondary education with a Diploma or GED.

Measures of Evidence for Strategy #6

1. Development of process and system
2. Handbooks and other related documents
3. Student behavioral and academic data
4. Completion data (Diploma acquisition or GED)

Activity 6.1 – **Alternative Ed. /Drop-Out Prevention Administrator**

Activity 6.2 – **Alternative Ed. /Drop-Out Prevention Counselor**

Activity 6.3 – **Review data on at-risk students & Determine need**

Activity 6.4 – **Develop comprehensive program w/ system for data collection and analysis**

Activity 6.5 – **Create documents (handbooks etc.) for communication**

Activity 6.6 – **Determine systems for coordination for student to enter and exit program**

ODE Outcome #2 (Cont.)

LCSD Strategy #7: Well-Rounded Educational System

Theory of Action:
If we provide a variety of programs and activities that enhance the experiences of students, the following will occur: attendance and behavior will improve; engagement in academic learning will increase; graduation rates will increase; and overall positivity towards school, relationships, and self-image will result.

Measures of Evidence for Strategy #7

1. Behavioral and academic data
2. Climate/Engagement surveys
3. Graduation rate

Activity 7.1 – **CTE Teacher**

Activity 7.2 – **PE Classroom**

Activity 7.3 – **Playground Area**

Activity 7.4 – **Instruments for the Music Program**

ODE Outcome #3: Ongoing Community Engagement

LCSD Strategy #8: Culturally Responsive Resources

Theory of Action:
If all programs, systems, and processes are communicated and developed with input from all focal groups and other stakeholders in a manner that respects cultural, ethnic, racial, and other social or individually determined identifiers, our schools will be welcoming and engaging for students and families. Attendance and engagement will increase, which will positively impact behavior, academic investment and achievement, and completion of secondary formal education.

Measures of Evidence for Strategy #8

1. Hiring of a bilingual Community Liaison to act as a communicator and resource for families and students
2. Contract a translator to produce documents in Spanish and act as a communicator in coordination with the needs of the District
3. Contracting an Engagement Coordinator
4. Climate/Engagement surveys
5. Communication documents
6. Systems created for ongoing reflection and input
7. Bilingual resources
8. Building and District websites

Activity 8.1 – **Bilingual Liaison**

Activity 8.2 – **Contracted Translator**

Activity 8.3 – **Develop a comprehensive scope of work for Bilingual Liaison**

Activity 8.4 – **Translate relevant documents and plan for ongoing updates**

Activity 8.5 – **Update building and district websites and plan for updates**

ODE Outcome #3 (Cont.)

LCSD Strategy #9: Stakeholder and Focal Group Engagement

Theory of Action:
If we have a coordinator of all engagement activities who can develop and implement an annual climate/engagement survey and then analyze and report out the findings to stakeholders in a comprehensive and informative manner, we will create a climate of communication and respect for all stakeholders.

Measures of Evidence for Strategy #9

1. Contract an engagement coordinator to develop, implement and maintain an annual survey and other ongoing engagement activities
2. Climate/Engagement surveys
3. Communication documents
4. Systems created for ongoing reflection and input

5. Data analysis and reports from survey input.

Activity 9.1 – **Contracted Engagement Coordinator**

Activity 9.2 – **Development of annual survey, process, and implementation plan**

Activity 9.3 – **Survey implementation**

Activity 9.4 – **Analysis of surveys and recommendations to leadership**

Activity 9.5 – **Development of communication plan for disseminating information**

Artifact 1 – Parent/Guardian Survey & Community Survey, Responses, and Summaries of Quantitative Responses

Parent/Guardian Survey-Fall 2019 / Encuesta de Padre/Guardian - Otoño 2019

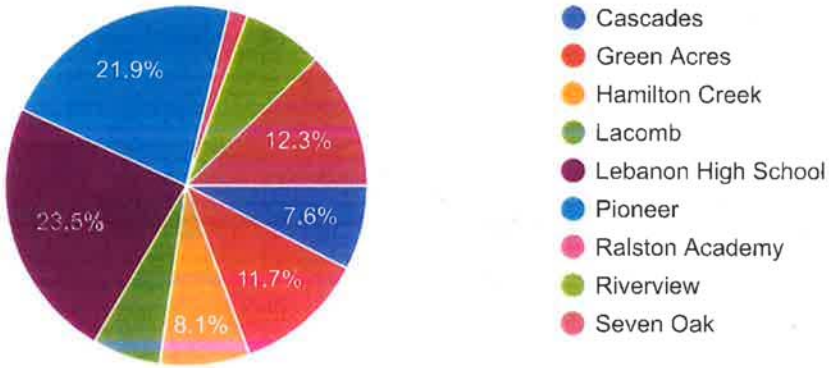
608 responses

Publish analytics

Untitled Section

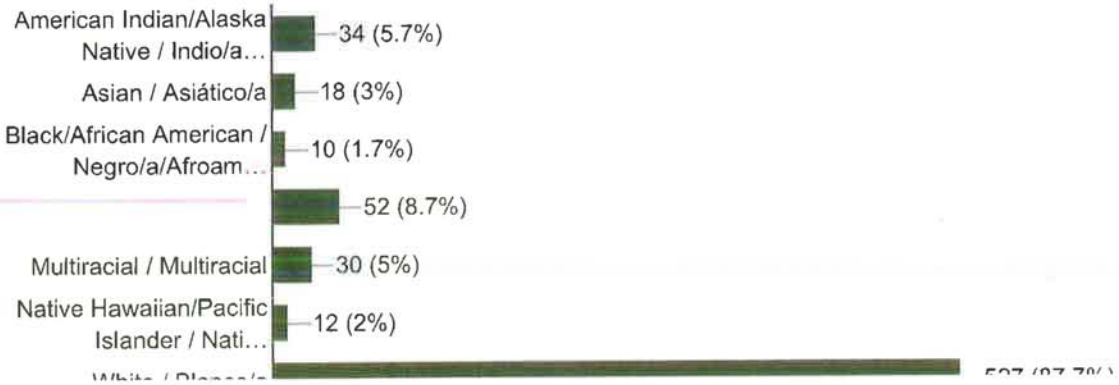
What school does your child attend?/ ¿A qué escuela asiste su hijo/a?

608 responses



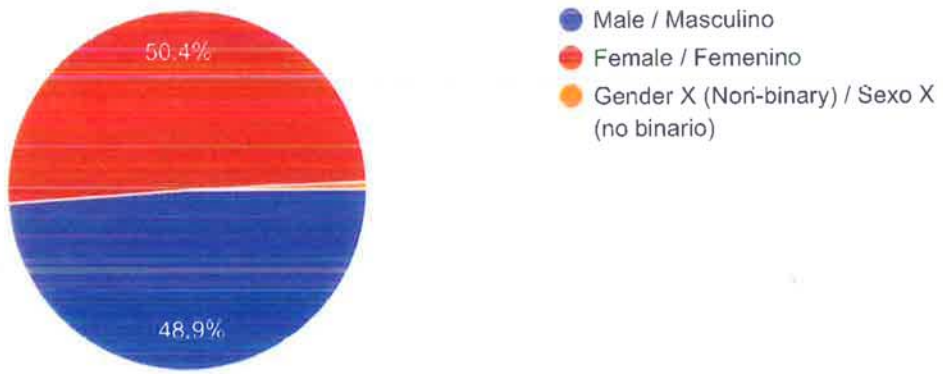
Please check all that apply. My child is: / Por favor marque todos los que apliquen. Mi hijo/a es:

601 responses



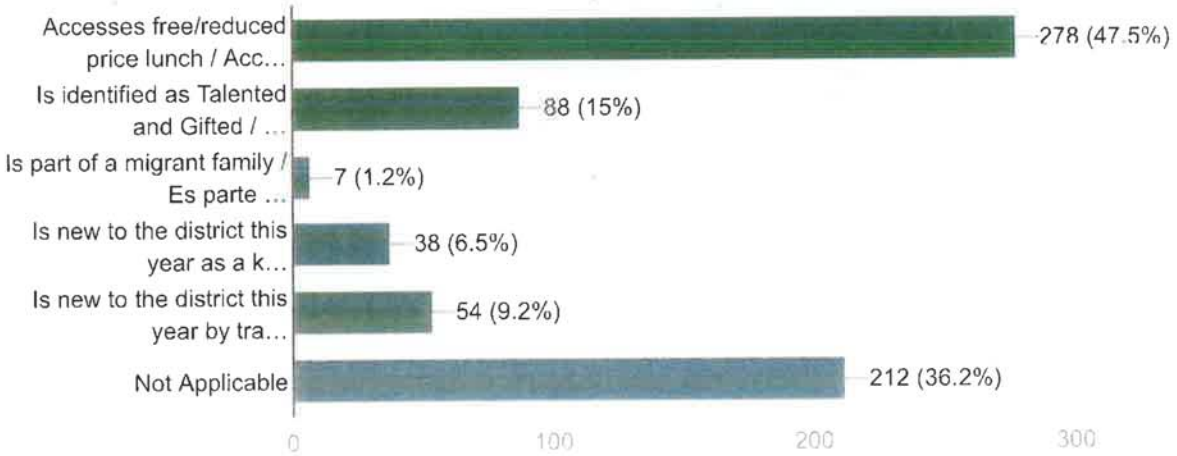
What is your child's gender: /¿Cuál es el género de su hijo/a?

603 responses



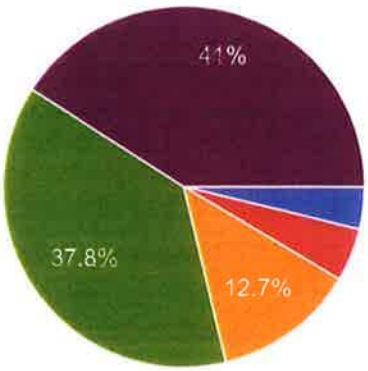
Please check all that apply. My child: / Por favor marque todos los que apliquen. Mi niño/a:

585 responses



I feel informed about my child's education (through ClassDojo, e-mail, planners, phone, Pinnacle, etc.). / Me siento informado sobre la educación de mi hijo/a (a través de ClassDojo, correo electrónico, planificadores, teléfono, Pinnacle, etc.).

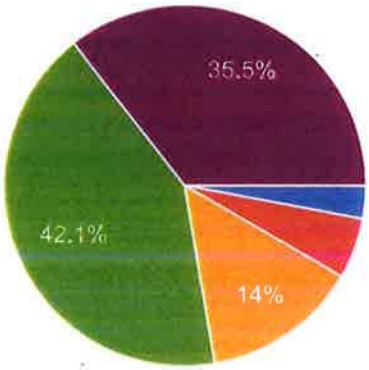
608 responses



- Strongly Disagree / Muy en Desacuerdo
- Disagree / Desacuerdo
- Neutral
- Agree / Deacuerdo
- Strongly Agree / Muy en Acuerdo

The information I receive about my child's education is useful and timely./ La información que recibo sobre la educación de mi hijo/a es útil y oportuna.

608 responses



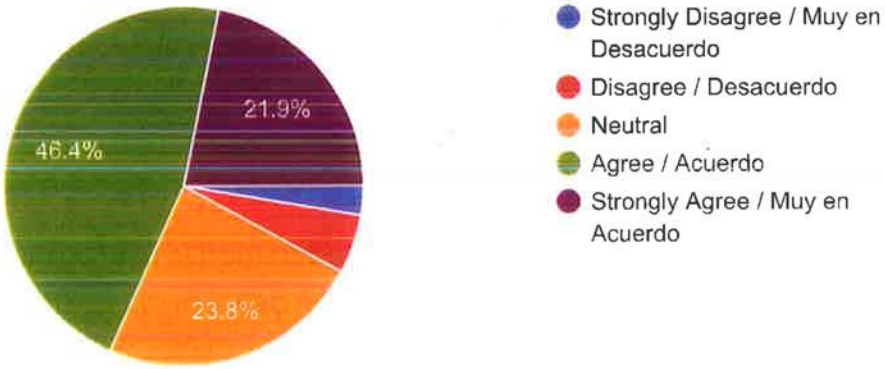
- Strongly Disagree / Muy en Desacuerdo
- Disagree / Desacuerdo
- Neutral
- Agree / Acuerdo
- Strongly Agree Muy en Acuerdo

My child's teacher(s) keeps me up-to-date on the progress my child is making in school. / Los/Las maestros/as de mi hijo/a me mantienen actualizado sobre el progreso que mi hijo/a está haciendo en la escuela.

608 responses

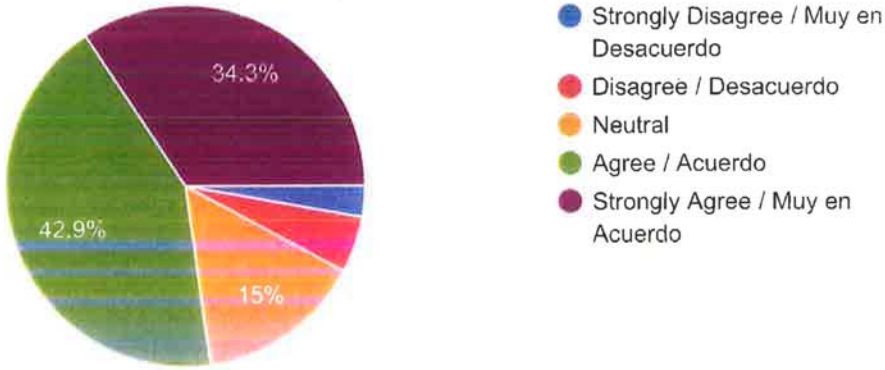
The school's website is easy to navigate, updated, and helpful. / El sitio web de la escuela es fácil de navegar, actualizado y útil.

608 responses



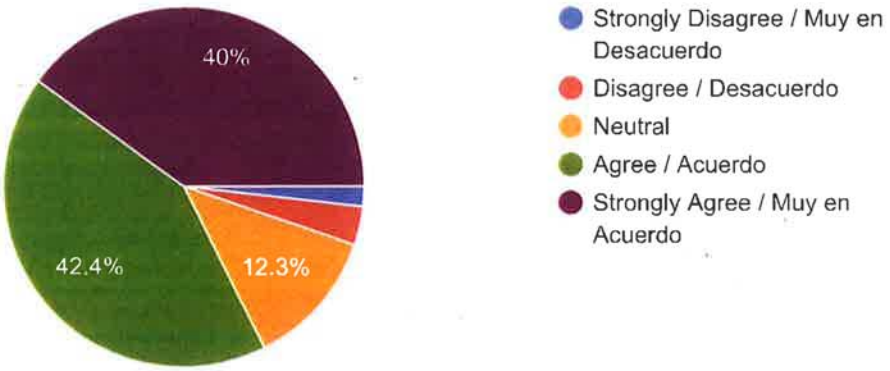
At school, my child feels he/she/they belong. / En la escuela, mi hijo/a siente que él / ella / ellos pertenecen.

539 responses



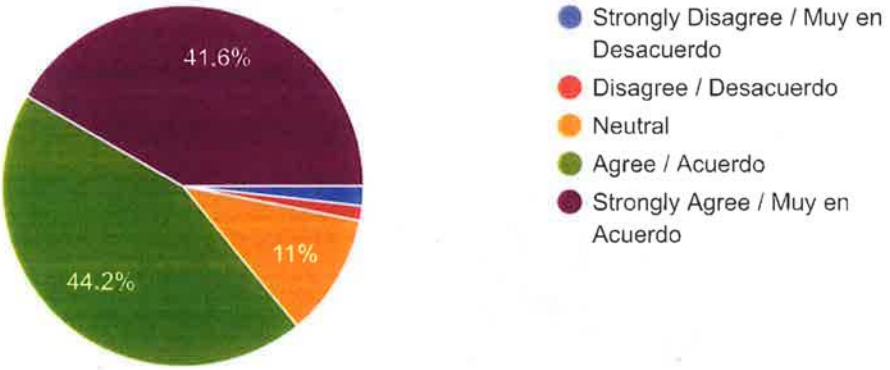
My child has at least one adult in the school building with whom they feel connected. / Mi hijo/a tiene al menos un adulto en el edificio de la escuela con quien se sienten conectados.

608 responses



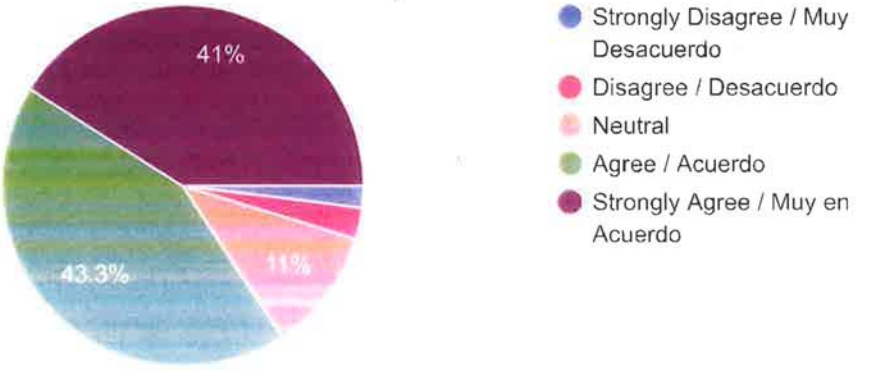
I feel welcome and safe at school. / Me siento bienvenido/a y seguro/a en la escuela

608 responses



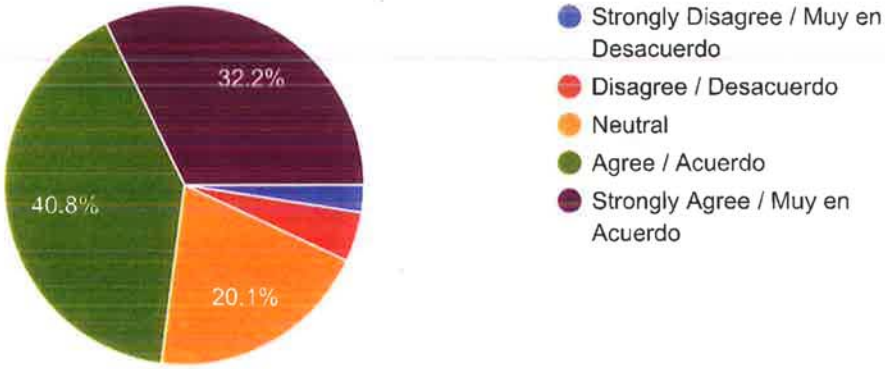
My child feels welcome and safe at school. / Mi hijo/a se siente bienvenido/a y seguro/a en la escuela.

608 responses



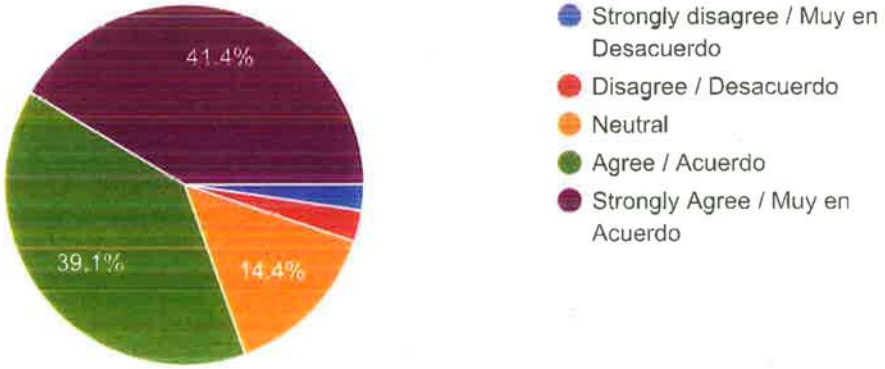
My child's teachers and principal value my opinion. / Los/Las maestros/as y el/la director/a de mi hijo/a valorán mi opinión.

606 responses



At this school, the staff really cares about my child. / En esta escuela, el personal realmente se preocupa por mi hijo/a.

604 responses

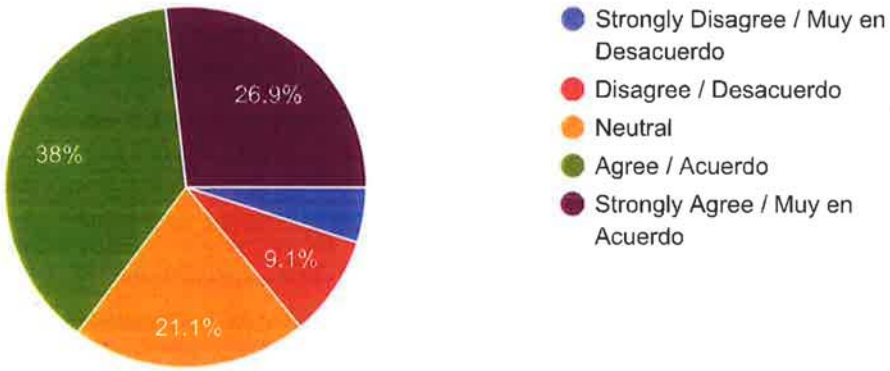


The staff at my child's school make decisions that are in the best interest of my child. / El personal de la escuela de mi hijo/a toma decisiones que son en el mejor interés de mi hijo/a.

608 responses

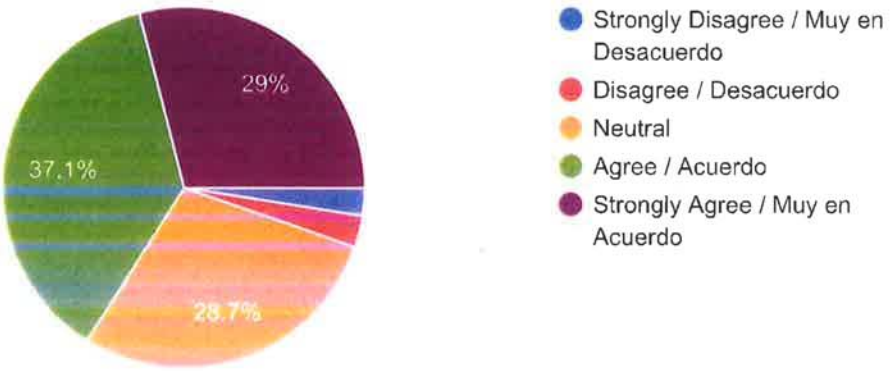
School rules are applied equally to all students. / Las reglas escolares se aplican por igual a todos los/las estudiantes.

606 responses



This school encourages students to take challenging classes no matter the race, ethnicity, nationality and/or cultural background (honors level courses, / Advanced Placement, gifted courses). / Esta escuela anima a los/las estudiantes a tomar clases desafiantes sin importar la raza, el origen étnico, la nacionalidad y/o los antecedentes culturales (cursos de nivel de honor, colocación avanzada, cursos de superdotados).

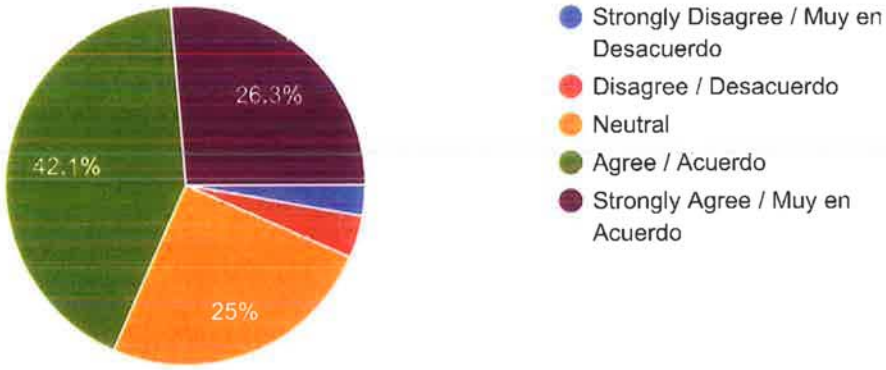
607 responses



The culture of my student's school is engaging and inclusive of students from diverse backgrounds. / La cultura de la escuela de mi estudiante es

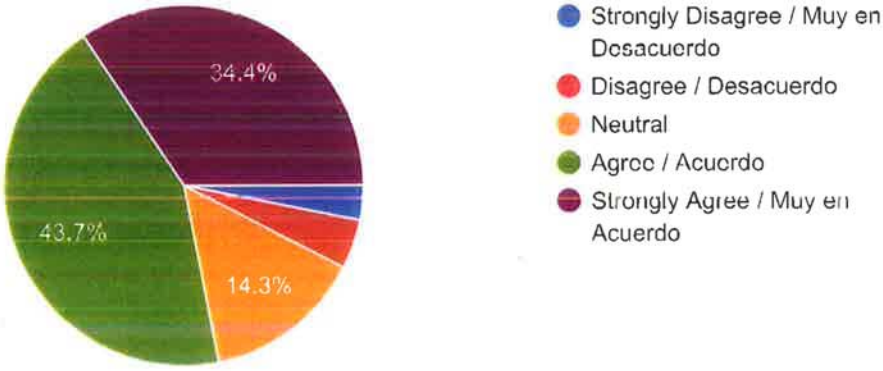
atractiva e inclusiva de estudiantes de diversos orígenes.

608 responses



All students and families are respected and included in my school community, no matter their ability, race, religion, gender identity or economic/background. / Todos los estudiantes y sus familias son respetados e incluidos en la comunidad de mi escuela, sin importar su habilidad, raza, religión, identidad de género o antecedentes económicos.

607 responses

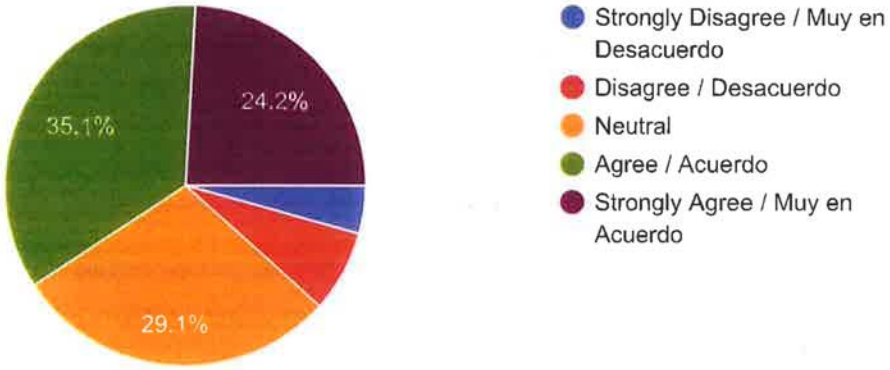


Every student can excel academically in my school. / Cada estudiante puede sobresalir académicamente en mi escuela.

606 responses

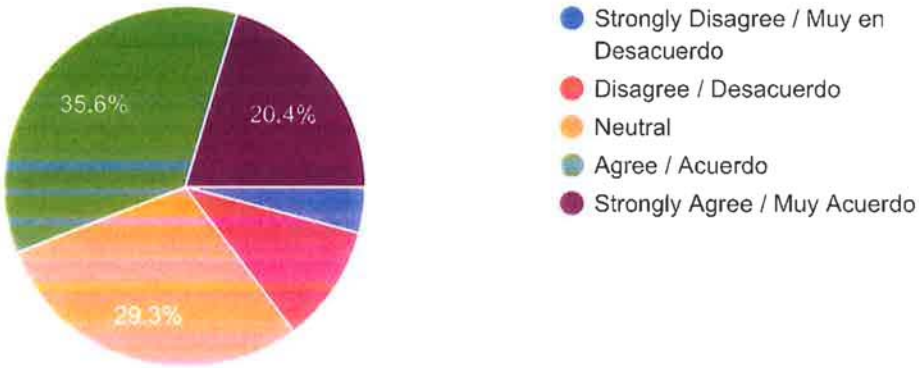
The school provides high quality services to help students with social and emotional needs. / La escuela ofrece servicios de alta calidad para ayudar a los/las estudiantes con necesidades sociales y emocionales.

604 responses



The school has enough programs that develop students' social and emotional skills (e.g., self-control, problem solving or getting along with others). / La escuela tiene suficientes programas que desarrollan las habilidades sociales y emocionales de los/las estudiantes (por ejemplo, autocontrol, resolución de problemas o llevarse bien con los demás).

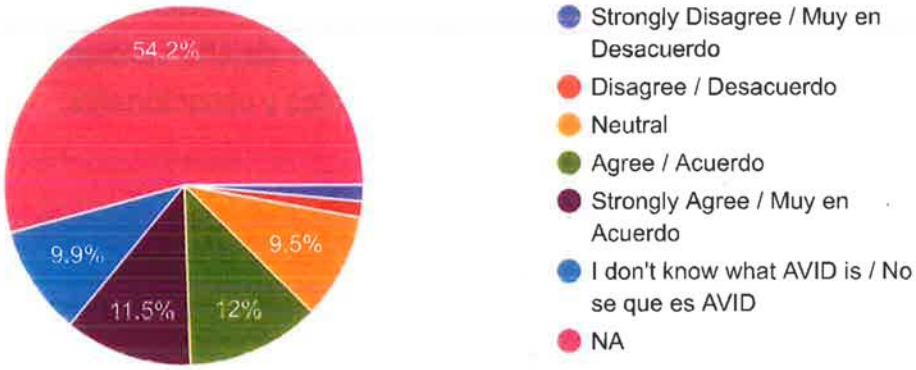
604 responses



For AVID students only...AVID strategies (binder, planner, note-taking, goal setting, etc.) help support my child's growth academically and behaviorally.

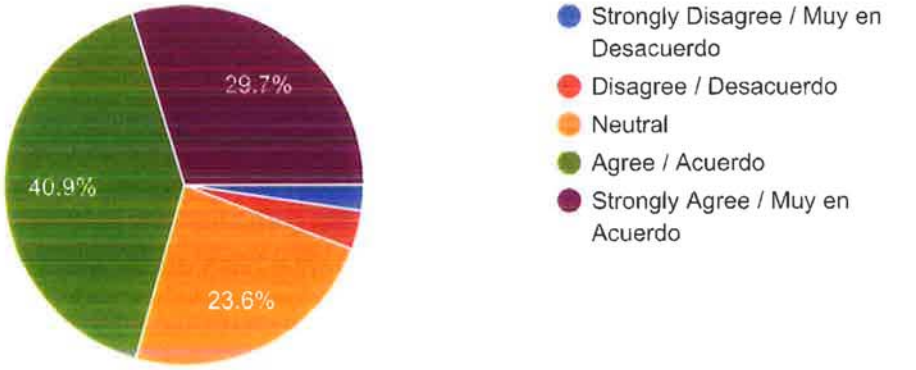
/ Solo para estudiantes AVID ... Las estrategias AVID (portafolio, planificador, toma de notas, fijación de objetivos, etc.) ayudan a apoyar el crecimiento académico y conductual de mi hijo/a.

548 responses



The principal at my child's school is helpful and approachable. / El/La director/a de la escuela de mi hijo/a es servicial y accesible.

602 responses

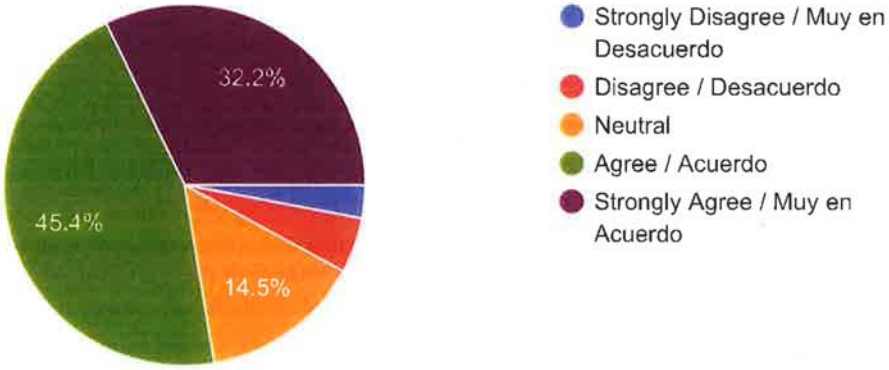


The front office staff at my child's school are helpful and approachable. / El personal de recepción en la escuela de mi hijo/a es servicial y accesible.

602 responses

I am optimistic that my child's school is moving in a positive direction. / Soy optimista de que la escuela de mi hijo/a se está moviendo en una dirección positiva.

608 responses



I know my child is getting an excellent education because / Sé que mi hijo/a está recibiendo una excelente educación porque

402 responses

yes

.

Yes

NA

agree

He is learning.

They are excited to go to school to learn

Grades

N/a

What are some strengths of my child's school? What is working well? / ¿Cuáles son algunas de las fortalezas de la escuela de mi hijo/a? ¿Qué está funcionando bien?

363 responses

communication

Communication

math

na

NA

N/a

The staff is welcoming, it feels like a warm/loving place when we walk in.

I think they always strive to better themselves

What are some areas in which your child's school could improve? / ¿Cuáles son algunas áreas en las que la escuela de su hijo/a podría mejorar?

339 responses

n/a

N/A

na

reading

unsure

Communication

Unsure

Not sure

Thinking about the answers you have previously given, what suggestions do you have that could potentially improve your student's experience at school? / Pensando en las respuestas que ha dado anteriormente, ¿qué sugerencias tiene que podrían mejorar la experiencia de su hijo/a en la escuela?

253 responses

None

n/a

na

N/A

.

nothing

I'm not sure how things can be fixed.

Listening to students more and calling parents when needed.

None at this time.

If you have other feedback to give us, please use the space below. / Si tiene otros comentarios para darnos, utilice el espacio a continuación.

91 responses

n/a

N/A

na

.

No

n

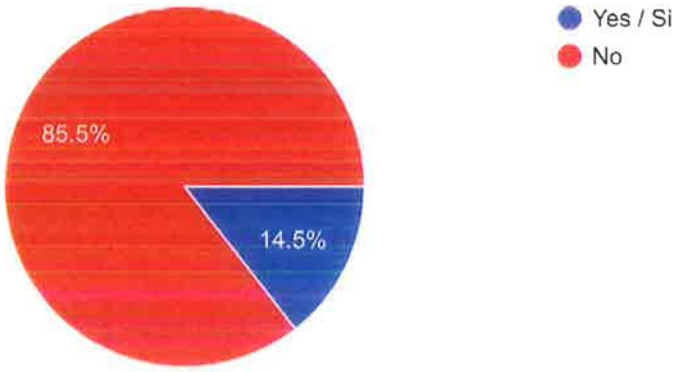
Strongly Agree should be the first response.

cascades rocks

My kid's direct quote, "They don't care."

Are you interested in participating in a Community Focus group? / ¿Está interesado en participar en un grupo de enfoque comunitario?

546 responses



If you are willing to participate in a Community Focus group, please provide your name and preferred contact information. / Si está dispuesto a participar en un grupo de Foro Comunitario, proporcione su nombre e información de contacto preferida.

92 responses

no

N/A

.

n

Waste of time

Suzanne Smallen 503-840-4100

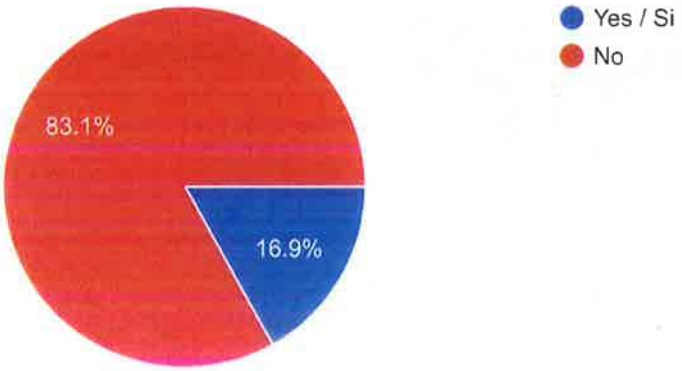
daniel mitchell #541-409-8771

N/a

No

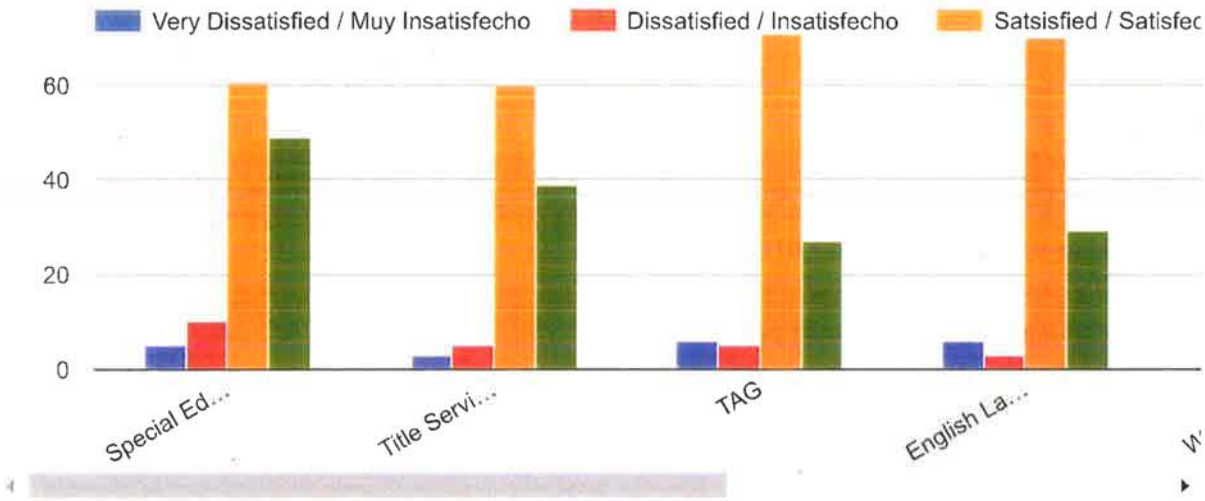
Is your child or family receiving any special services provided by the district? Please select YES if any of the following apply: IEP, medical support, behavior support, family support, translation or reading support. ¿Su hijo/a o familia recibe algún servicio especial provisto por el distrito? Seleccione SÍ si se aplica alguno de los siguientes: IEP, apoyo médico, apoyo conductual, apoyo familiar, apoyo de traducción o lectura.

574 responses



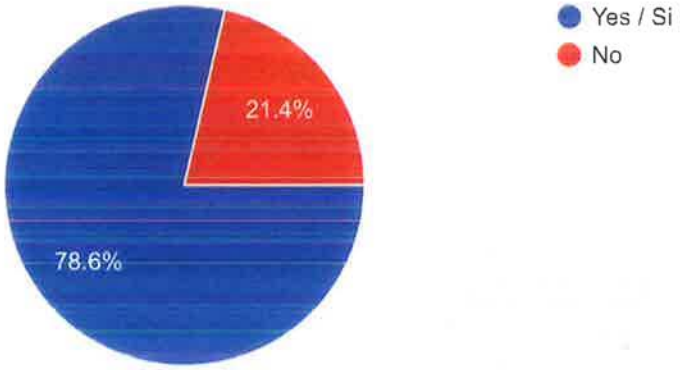
Special Services Feedback / Comentarios de Servicios Especiales

Please rate your satisfaction with the services your child receives. Select all that apply. My child receives the following service(s): / Califique su satisfacción con los servicios que recibe su hijo/a. Seleccione todas las que correspondan. Mi hijo/a recibe los siguientes servicios



Do you feel that your student is meeting their academic goals with these services? / ¿Siente que su estudiante cumple con sus objetivos académicos con estos servicios?

131 responses



If you do not, please provide feedback regarding the service: / Si no lo hace, envíe sus comentarios sobre el servicio:

24 responses

not at this time

The IEP teacher does not help the children in his class with their homework

Behaviors and emotional setbacks have taken us a few steps back resulting in an academic setback.

NA

I have asked many times for information on the HS LBCC classes and get no answer

They don't access these services.

my son just learns at a different pace more hands on ... think it works great for 80 % of students! my son is just in that other 20%! untill we all work as a team, and get on the same page to teach my don a different way that works better for him, we eill continue to have these issues!

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Google Forms

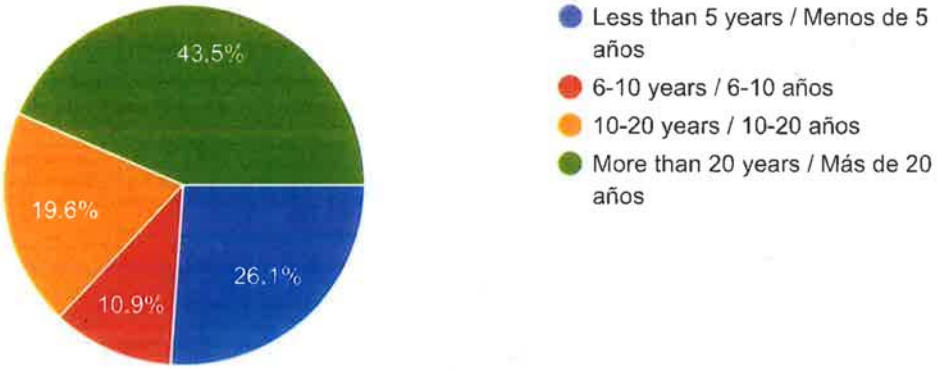
Lebanon Community School District Community Survey 2019-20 / Encuesta de la Comunidad del Distrito Escolar de la Comunidad de Lebanon

47 responses

Publish analytics

How long have you lived in the Lebanon Community School District? / ¿Cuánto tiempo ha vivido en el Distrito Escolar de la Comunidad de Lebanon?

46 responses

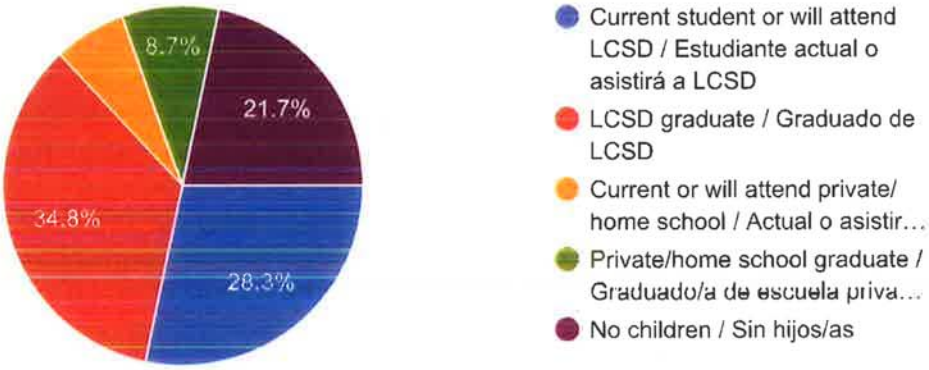


How satisfied are you with the quality of public schools in Lebanon? / ¿Qué tan satisfecho está con la calidad de las escuelas públicas en Lebanon?

46 responses

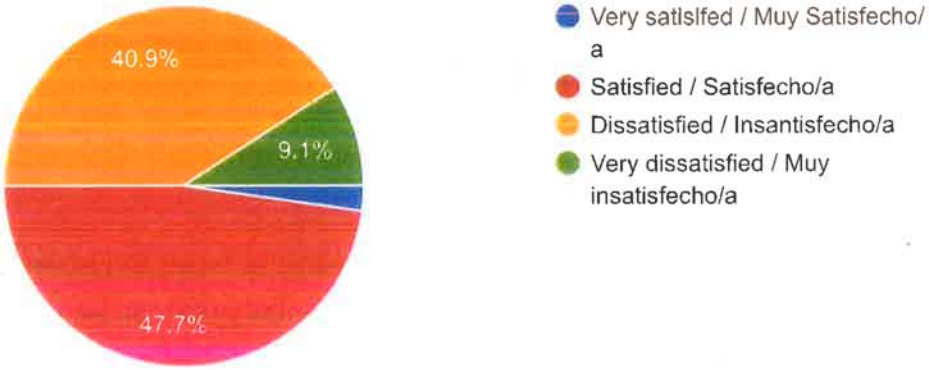
Do you have any children who currently attend Lebanon Schools, have graduated, attend private school or are home schooled? / ¿Tiene algún niño/a que actualmente asista a las Escuelas de Lebanon, se haya graduado, asista a una escuela privada o esté en casa?

46 responses



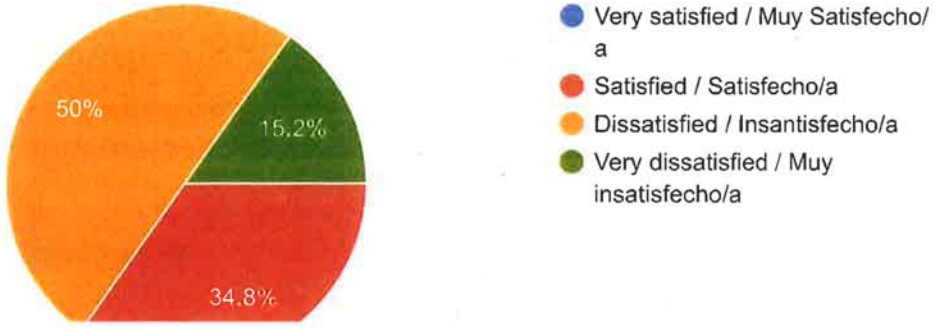
How satisfied are you with how the District plans for the future? / ¿Qué tan satisfecho/a está con cómo el Distrito planea para el futuro?

44 responses



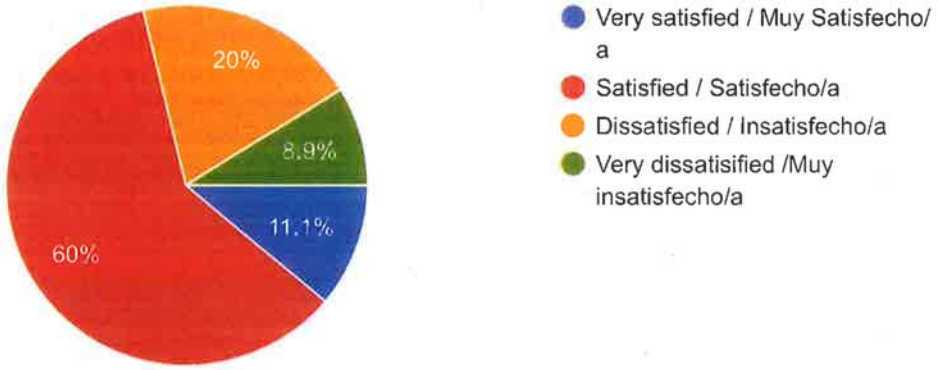
How satisfied are you with how the District prepares students for success? / ¿Qué tan satisfecho está con cómo el Distrito prepara a los/as estudiantes para el éxito?

46 responses



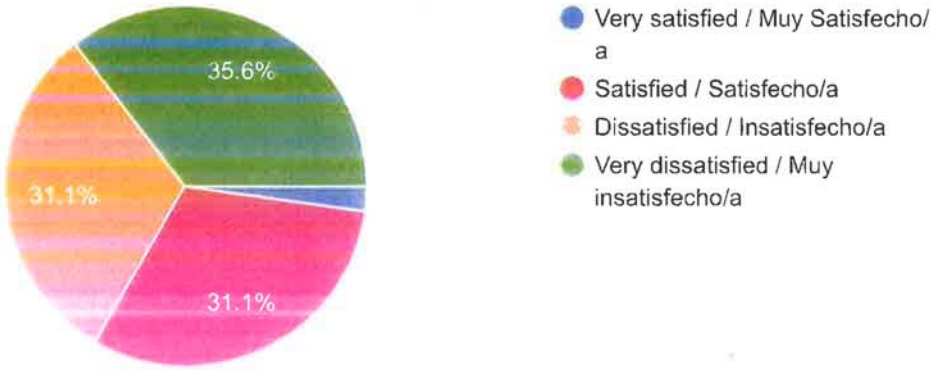
How satisfied are you with how the District maintains facilities? / ¿Qué tan satisfecho está con cómo el Distrito mantiene las instalaciones?

45 responses



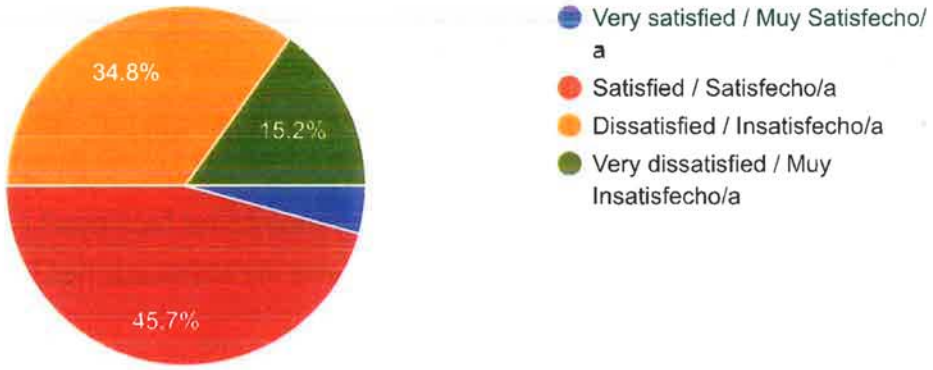
How satisfied are you with how the District addresses students' mental and behavioral health needs? / ¿Qué tan satisfecho está con cómo el Distrito aborda las necesidades de salud mental y conductual de los/las estudiantes?

45 responses



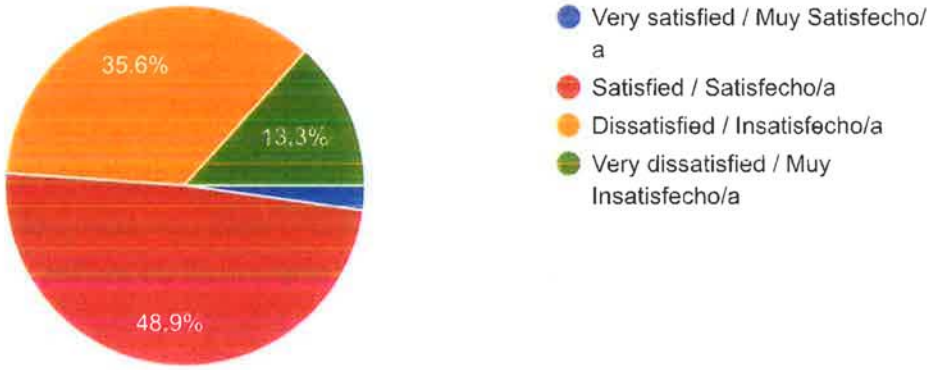
How satisfied are you with how the District communicates with community members? / ¿Qué tan satisfecho/a está con la forma en que el Distrito se comunica con los/las miembros/as de la comunidad?

46 responses



How satisfied are you with how the District reflects the values of our community? / ¿Qué tan satisfecho/a está con cómo el Distrito refleja los valores de nuestra comunidad?

45 responses

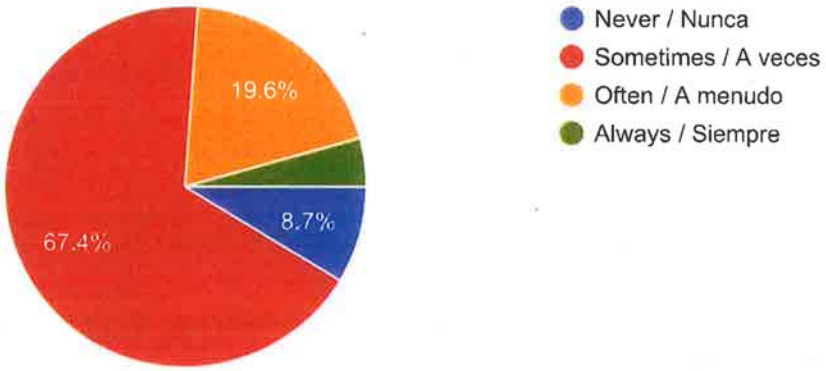


What is your age? / ¿Cuál es su edad?

45 responses

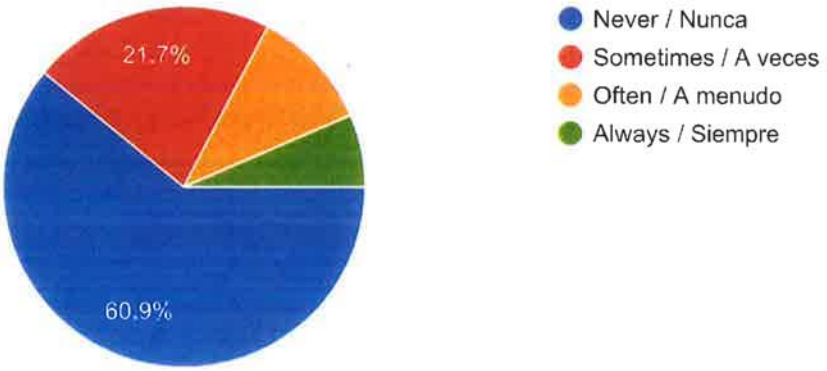
I feel our schools are headed in the right direction. / Siento que nuestras escuelas van en la dirección correcta.

46 responses



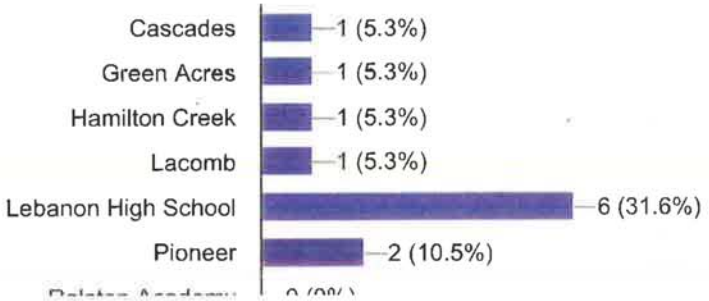
I volunteer at my nearby school. / Soy voluntario/a en mi escuela cercana.

46 responses



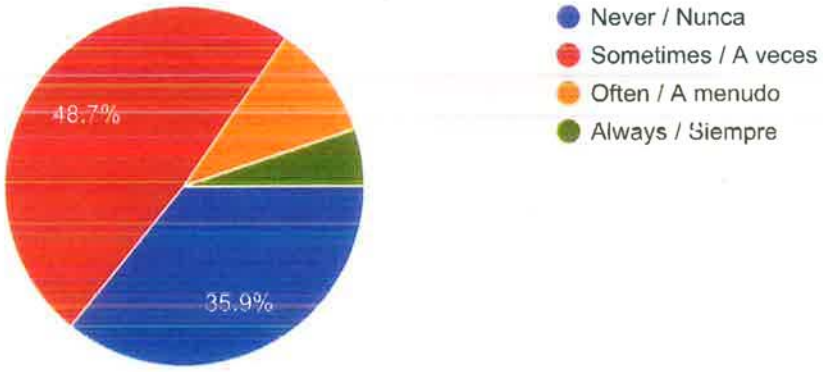
The name of the school(s) at which I volunteer is: / El nombre de la(s) escuela(s) en las que soy voluntario/a es:

19 responses



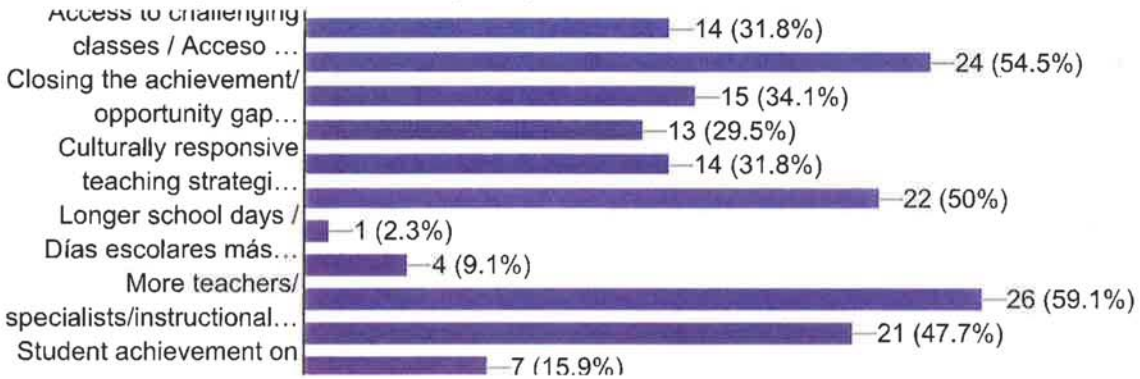
I would like to be more engaged in my nearby school. / Me gustaría estar más involucrado/a en mi escuela cercana.

39 responses



Review the following list. Please choose the top FIVE items that you would rate as having the highest priority for our school district. / Revise la siguiente lista. Elija los CINCO artículos principales que calificaría como de mayor prioridad para nuestro distrito escolar.

44 responses



I think my nearby school could benefit from partnering with this organization: / Creo que mi escuela cercana podría beneficiarse al asociarse con esta organización:

12 responses

Lebanon has many strong businesses in our area that have offered in the past to work with our schools

CARDV

?

Nearby businesses - specifically, those with internship or apprenticeship programs.

???

Churches

College

The Buzz in Lebanon, Oregon

None.

What is one thing our schools are doing well? / ¿Qué es lo que nuestras escuelas están haciendo bien?

21 responses

None.

Beginning to change leadership

Keeping the buildings and grounds in working order.

Having great staff members

Transporting children

Soliciting feedback.

Supporting homeless families and those in need.

???

Helping kids in need.

What skills and qualities should a Lebanon Community School District graduate possess? / ¿Qué habilidades y cualidades debe poseer un/a graduado/a del Distrito Escolar Comunitario de Lebanon?

26 responses

Foreign language skills.

Strong reading/language/research skills so they can talk, communicate, and know how to find reliable information. This also helps all other skill areas.

Punctuality, hard work, teachable, can work with others well

Seriously???

Critical thinking skills, basic math and reading skills, a curious and inquisitive mind.

Motivation- self-generated initiative

Ability to read, write, and do math at a minimum of an 8th grade level. Have appropriate social skills necessary for a minimum wage entry position, the ability to advocate for themselves and be willing to ask for help, respectful, responsible and safe.

What is one thing our schools could improve upon? / ¿Qué es lo que nuestras escuelas podrían mejorar?

29 responses

Better ie kinder teachers.

Teach our students manners and how to communicate effectively.

Leadership

Making sure everyone working directly with students show kindness.

Better facilities - Seven Oak needs classrooms and updates

Dealing with bullying

All of the 5 suggestions of priority above.

Transparency to the broader community. Outreach and presence with local governance.

Teaching personal responsibility

What would you like to do to help improve our schools? / ¿Qué le gustaría hacer para ayudar a mejorar nuestras escuelas?

15 responses

Nothing.

Serve on hiring committees of future principals.

Continue to support through taxes and community events.

I would be willing to volunteer.

Community involvement with tutoring and social emotional support.

Get rid of the superintendent

Hire someone to organize the volunteers.

More physical education opportunities and more electives at the middle school level.

inform you where you are letting the students down

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Google Forms

Artifact 2 – Student Survey, Responses, and Summaries of Quantitative Responses

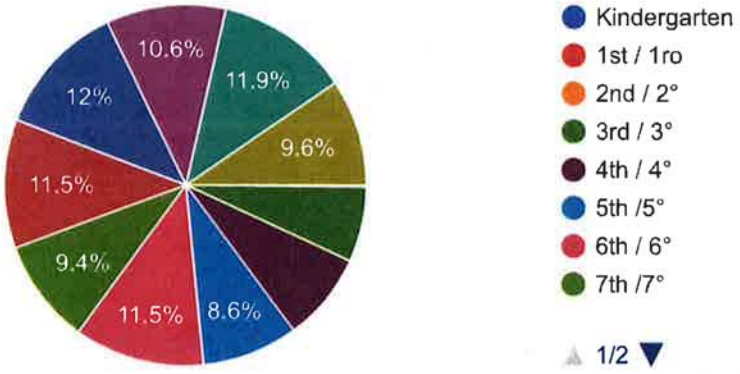
Student Climate Survey / Encuesta de Clima Estudiantil

1,614 responses

Publish analytics

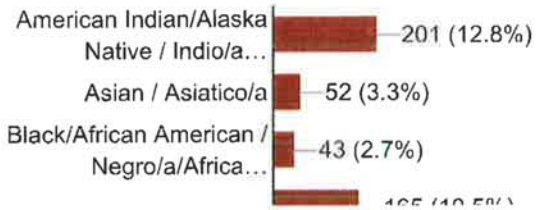
My grade level is: / Mi nivel de grado es:

1,614 responses



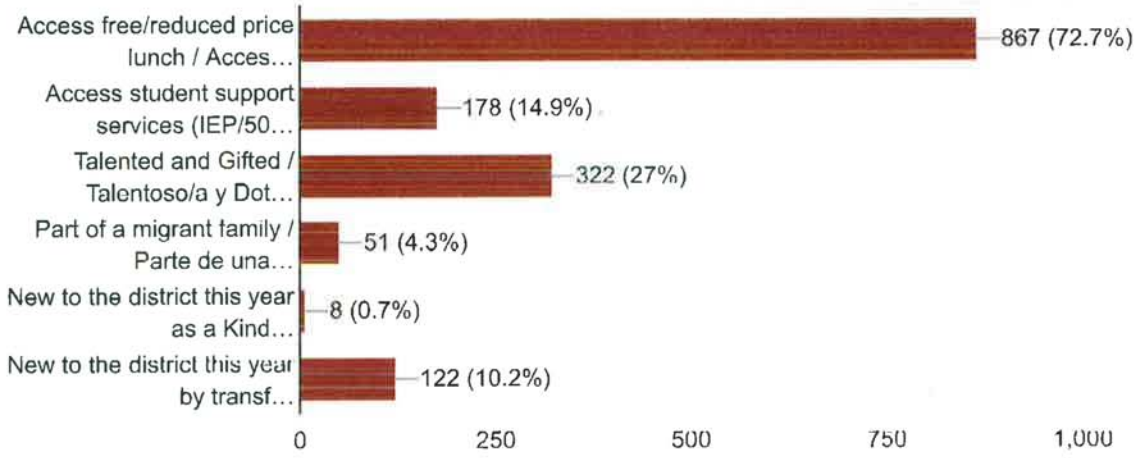
Please check all that apply. I am: / Por favor marque todos los que apliquen. Soy:

1,569 responses



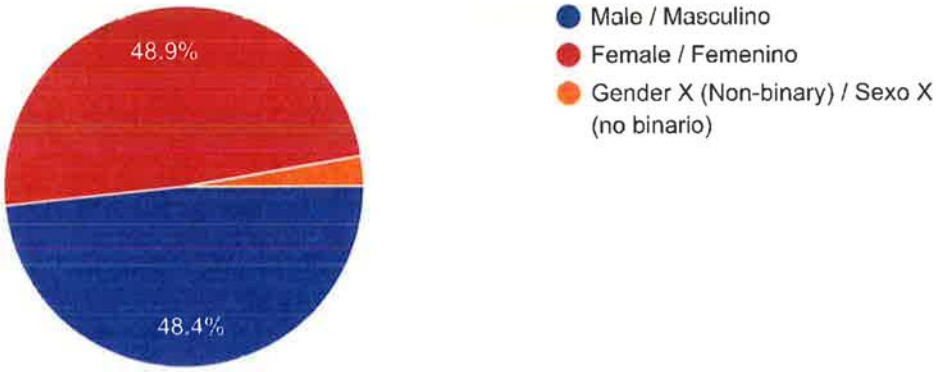
Please check all that apply to you: / Por favor marque todo lo que corresponda a usted:

1,193 responses



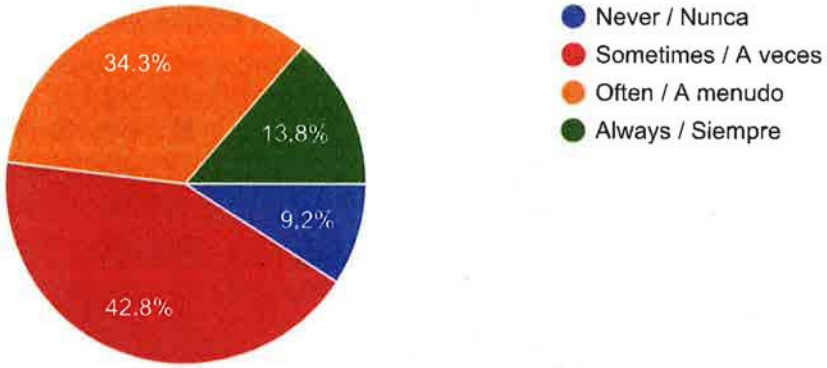
What is your gender? / ¿Cuál es su género?

1,600 responses



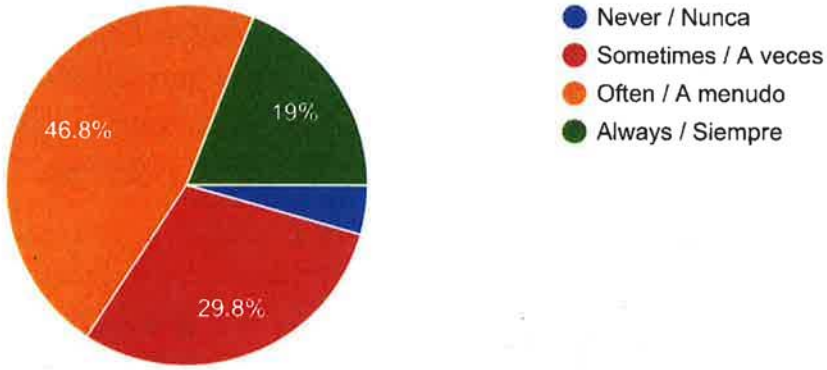
I like school. / Me gusta la escuela.

1,614 responses



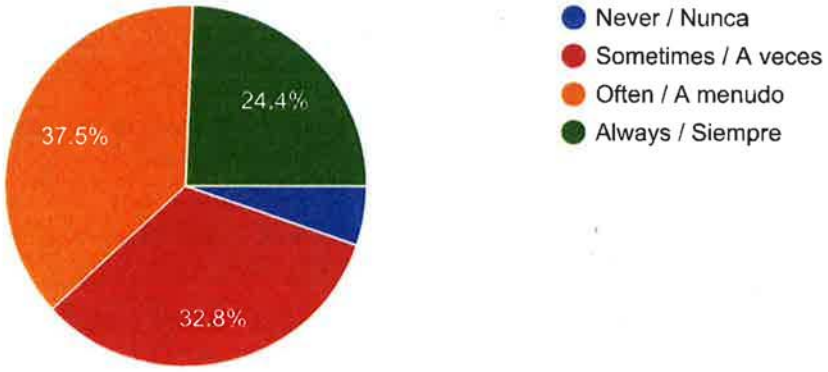
I feel like I do well in school. / Siento que me va bien en la escuela.

1,614 responses



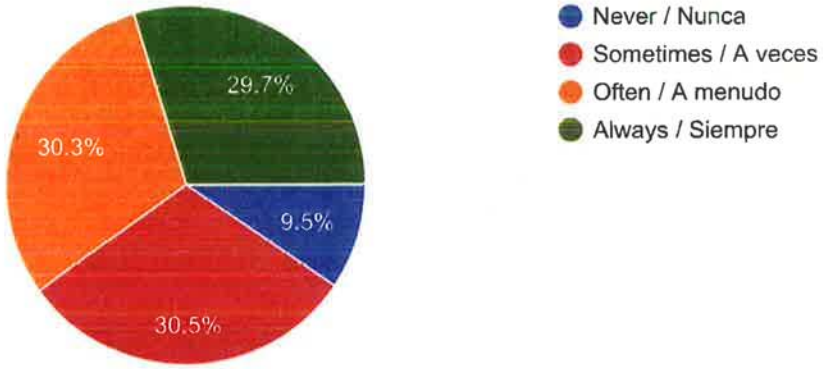
I feel like my classes make me think. / Siento que mis clases me hacen pensar.

1,602 responses



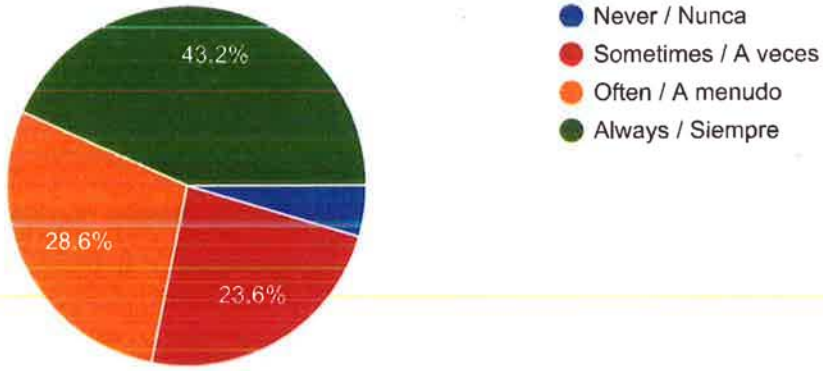
I feel like I belong here at this school. / Siento que pertenezco aquí en esta

escuela.
1,611 responses



All students and families are respected and included in my school community, no matter their ability, race, religion, gender identify or economic background. / Todos los/las estudiantes y familias son respetados e incluidos en mi comunidad escolar, sin importar su habilidad, raza, religión, identidad de género o antecedentes económicos.

1,603 responses

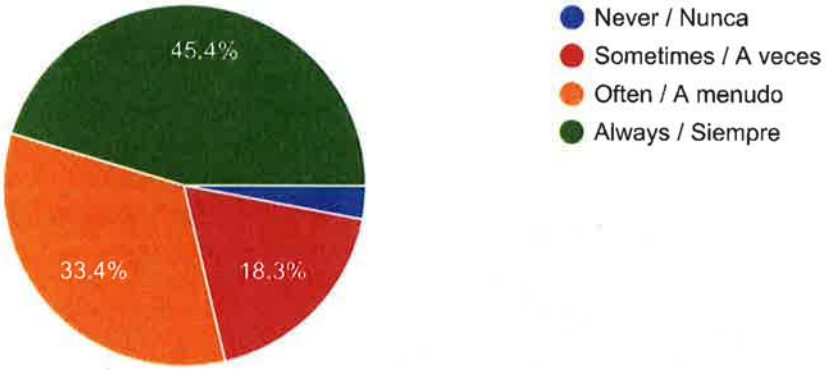


Adults at my school want me to do well. / Los adultos en mi escuela quieren que me vaya bien.

1,614 responses

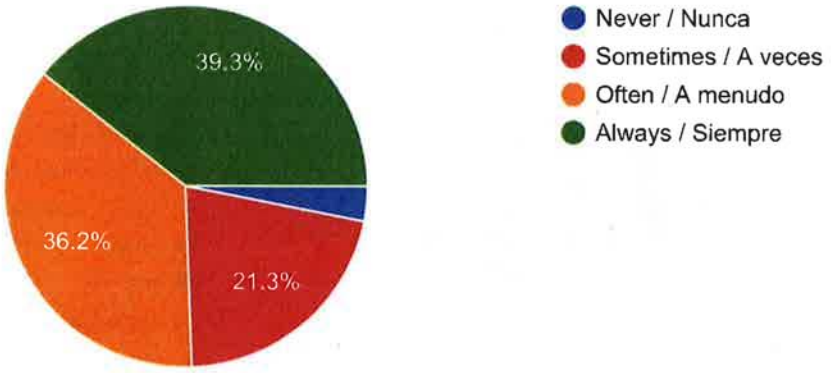
My school has clear rules for behavior. / Mi escuela tiene reglas claras de comportamiento

1,614 responses



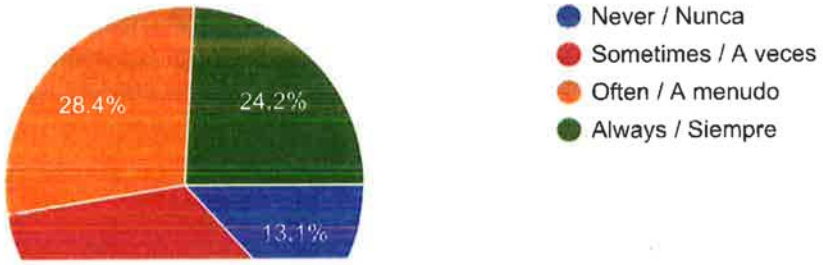
School staff treat me with respect. / El personal de la escuela me trata con respeto.

1,614 responses



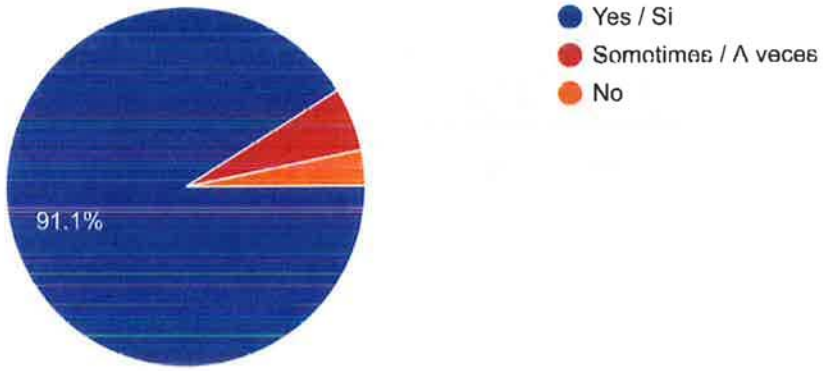
Good behavior and attendance is celebrated at my school. / El buen comportamiento y la asistencia se celebra en mi escuela.

1,614 responses



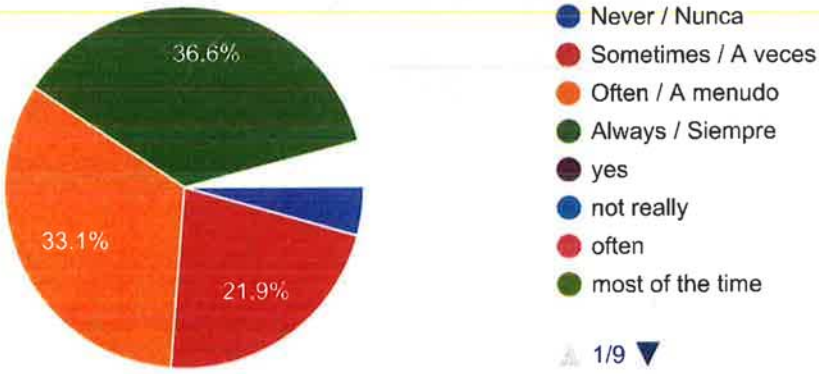
I have at least one friend at my school. / Tengo al menos un amigo/a en mi escuela.

1,614 responses



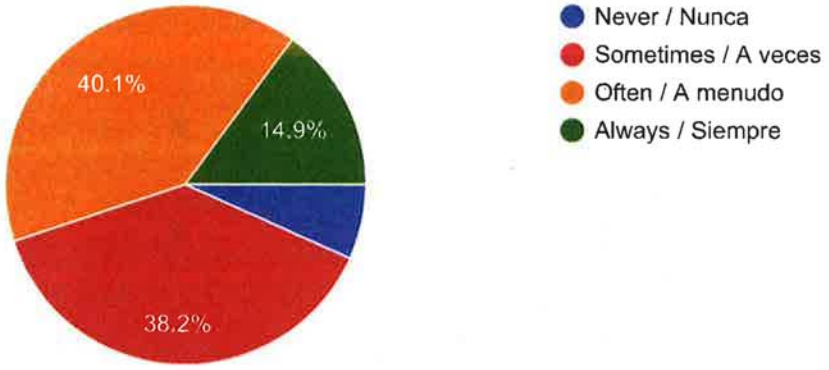
I feel safe at my school. / Me siento seguro/a en mi escuela.

1,614 responses



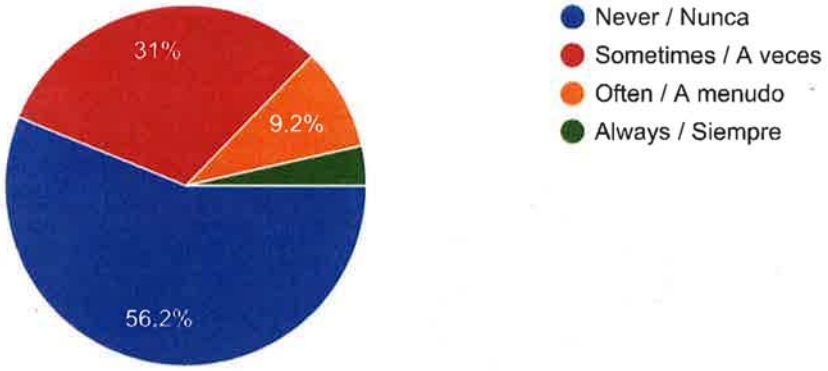
Students at school treat me with respect. / Los/Las estudiantes en la escuela me tratan con respeto.

1,614 responses



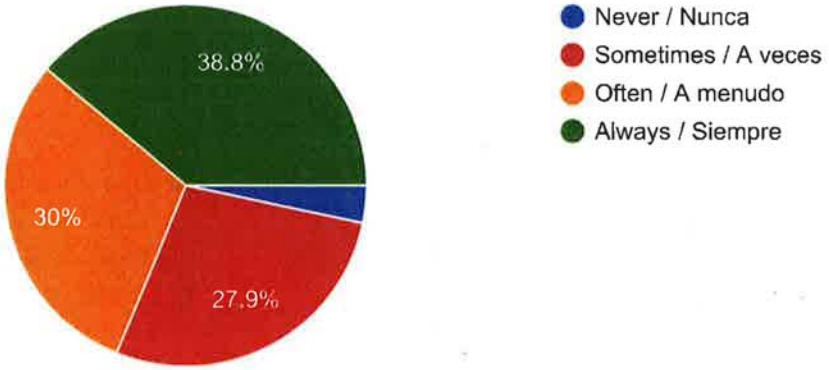
I have been bullied at school. / He sido intimidado/a en la escuela.

1,602 responses



My teachers know me and care about me. / Mis maestros/as me conocen y se preocupan por mí.

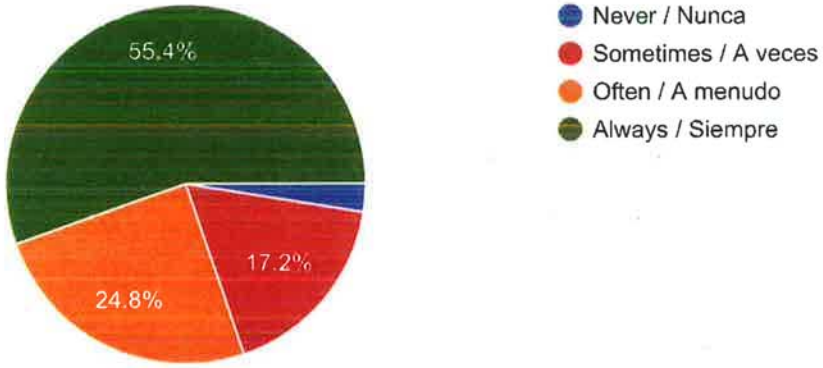
1,602 responses



There is an adult at school that will help me if I need it. / Hay un adulto en la

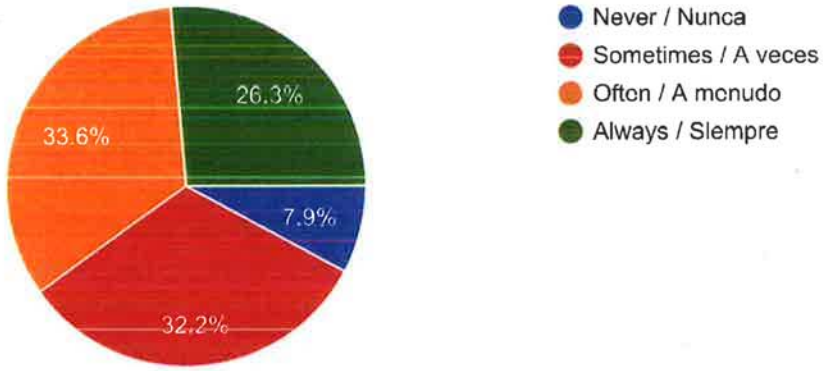
escuela que me ayudará si lo necesito.

1,614 responses



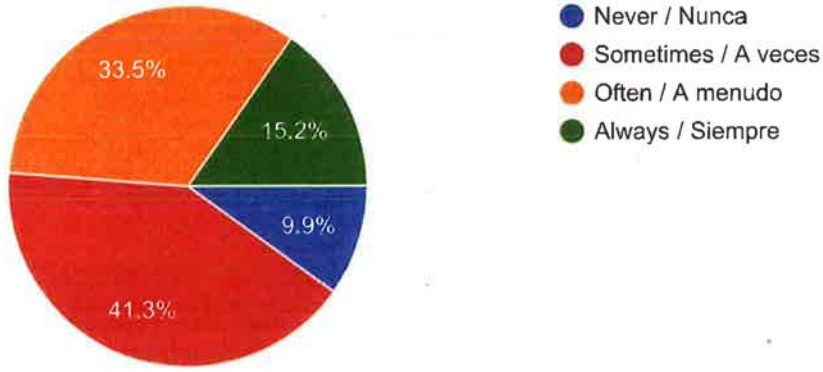
I set goals at my school and have a plan to achieve them. / Establezco metas en mi escuela y tengo un plan para alcanzarlas

1,614 responses



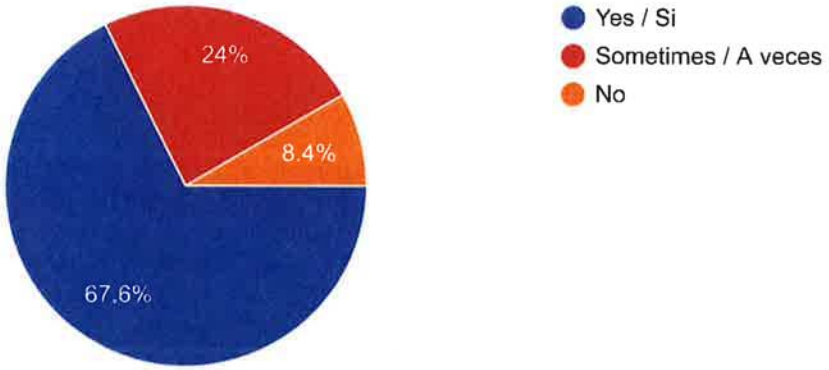
If feel academically challenged at school. / Si se siente retado académicamente en la escuela.

1,598 responses



I know what it means to be a successful student (AVID). / Sé lo que significa ser un/a estudiante exitoso/a (AVID).

1,597 responses



What is one thing that you appreciate about your school? / ¿Qué es algo que aprecias de tu escuela?

1,614 responses

nothing

my friends

the teachers

The teachers

lunch

friends

My friends

Sports

idk

What advice would you give your principal to make our school better? / ¿Qué

consejo le daría a su director/a para mejorar nuestra escuela?

1,440 responses

nothing

none

idk

i dont know

I don't know

N/A

None

Nothing

i don't know

Are there any barriers to you taking harder and more challenging classes? If yes, what are they? / ¿Hay alguna barrera para tomar clases más difíciles y desafiantes? Si es así, ¿qué son?

1,298 responses

no

No

No.

idk

N/A

nope

No

yes

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Artifact 3 – Staff Survey, Responses, and Summaries of Quantitative Responses

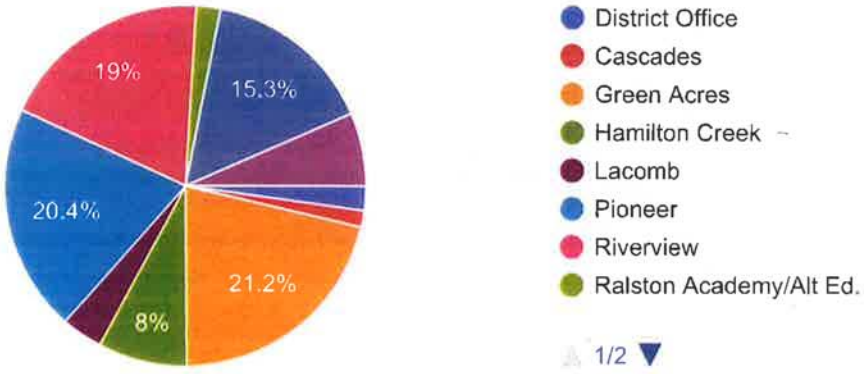
2019-20 Staff Climate Survey

137 responses

Publish analytics

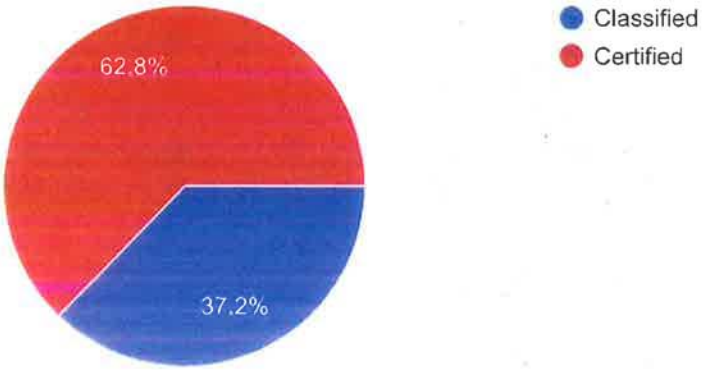
Site

137 responses



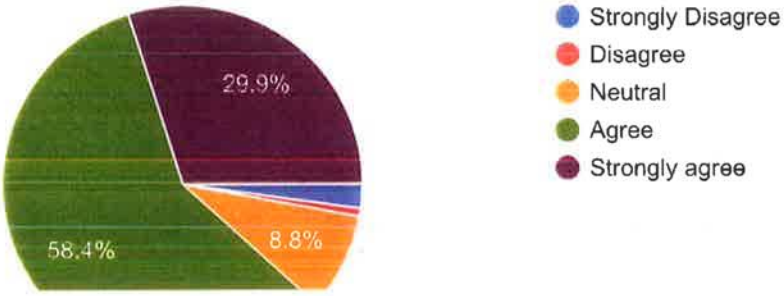
Position

137 responses



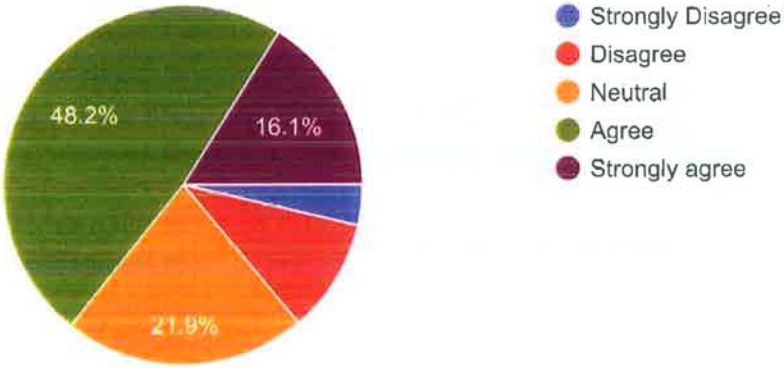
I feel like my colleagues care about me.

137 responses



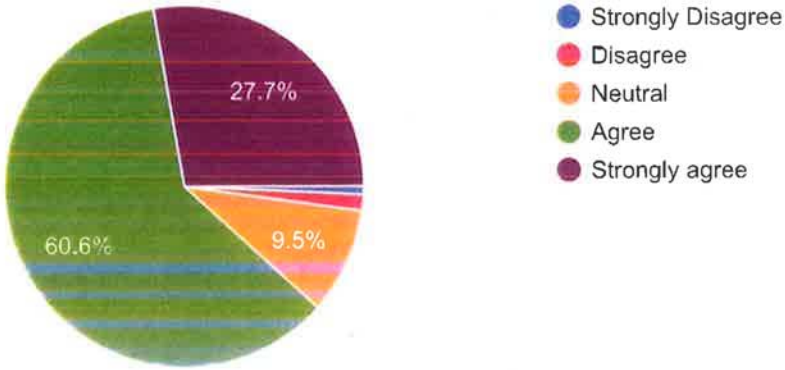
I feel recognized for the work I do.

137 responses



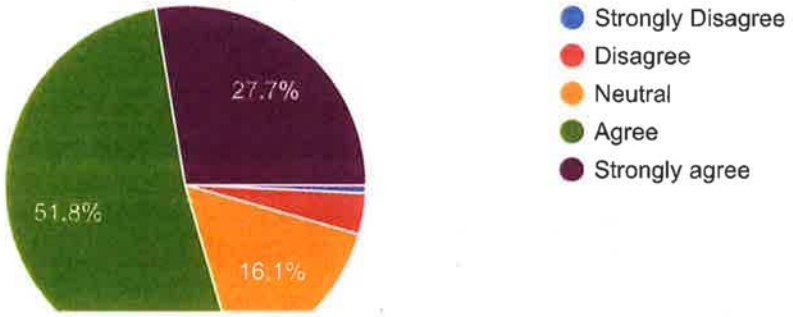
I feel clear about what my responsibilities are.

137 responses



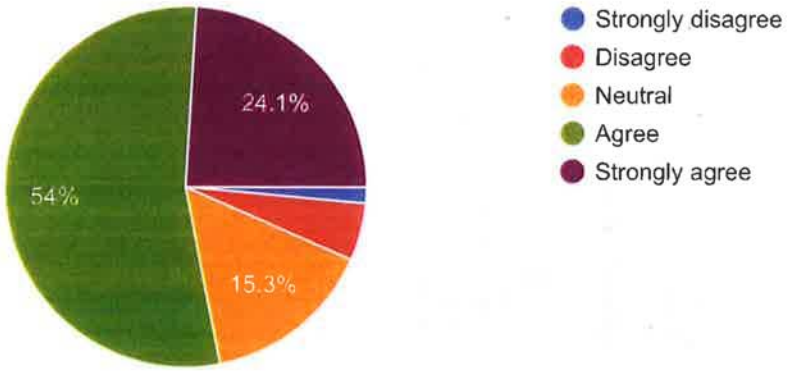
I enjoy coming to work each day.

137 responses



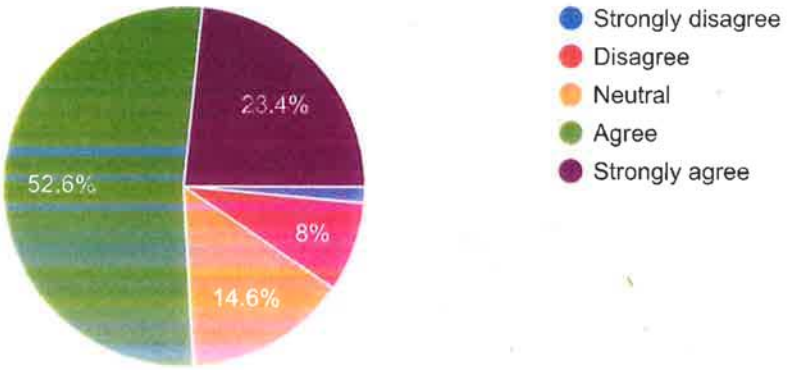
The culture of this school is engaging and inclusive of students from diverse backgrounds.

137 responses



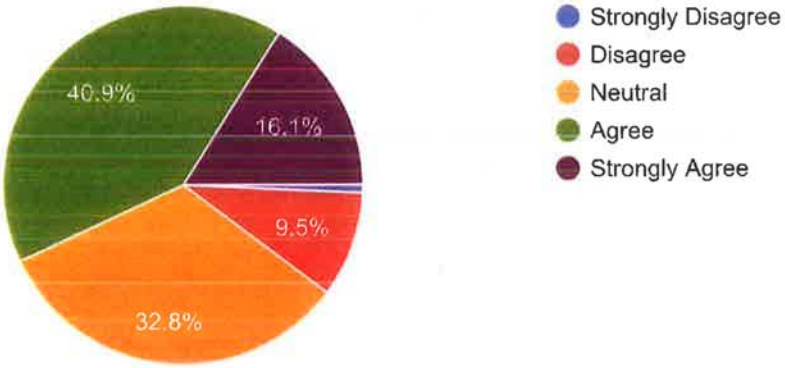
The culture of this school is inclusive and affirming of students and families from diverse cultural backgrounds.

137 responses



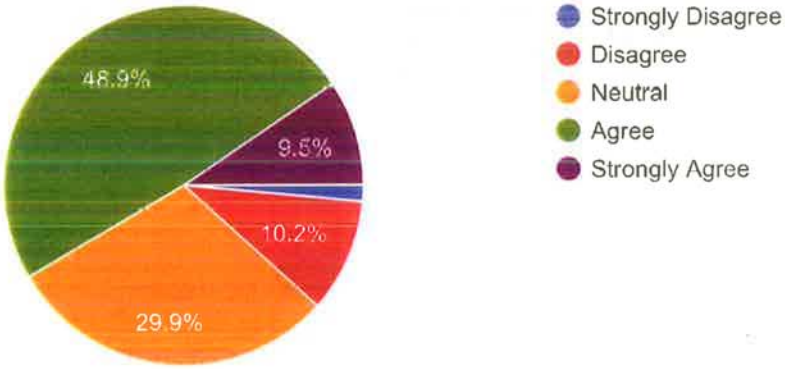
The content and curriculum that I teach is multicultural and inclusive of students and families from diverse backgrounds.

137 responses



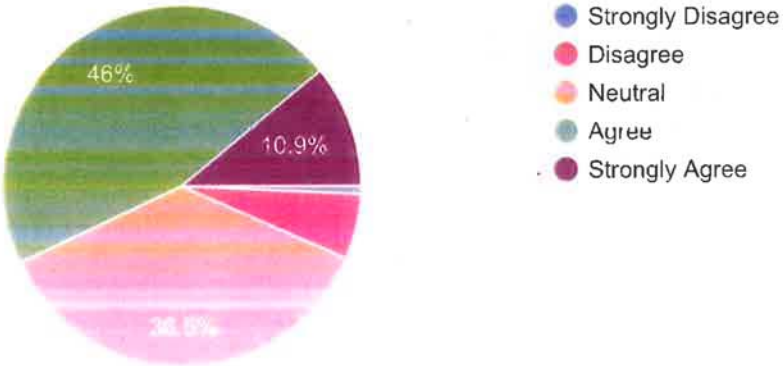
I am knowledgeable about opportunity and achievement gaps and inequities at LCSD.

137 responses



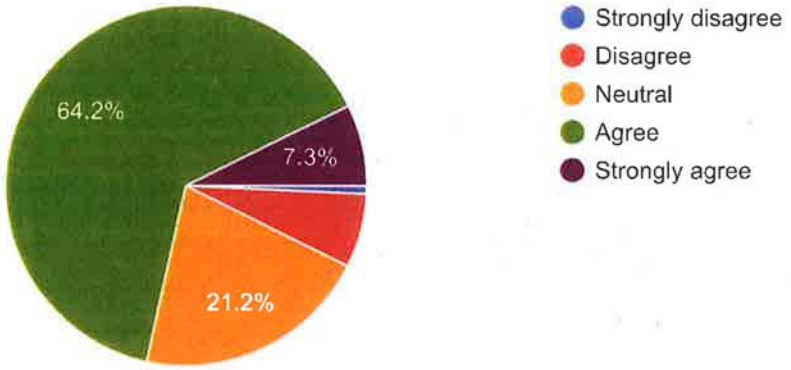
I am knowledgable and skilled in culturally responsive teaching.

137 responses



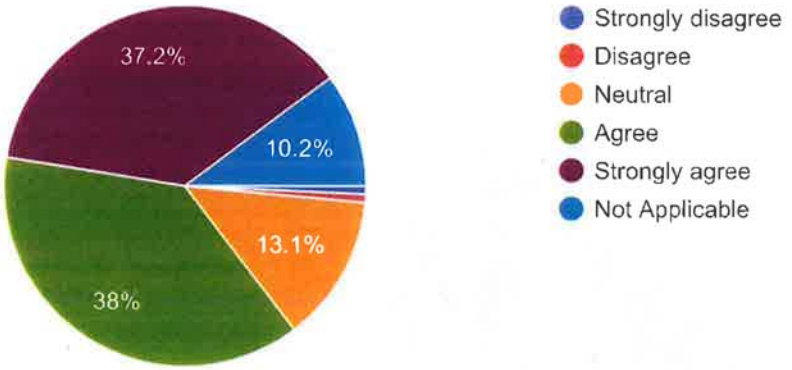
I believe that students at LCSD feel connected to the school, the staff and the programs.

137 responses



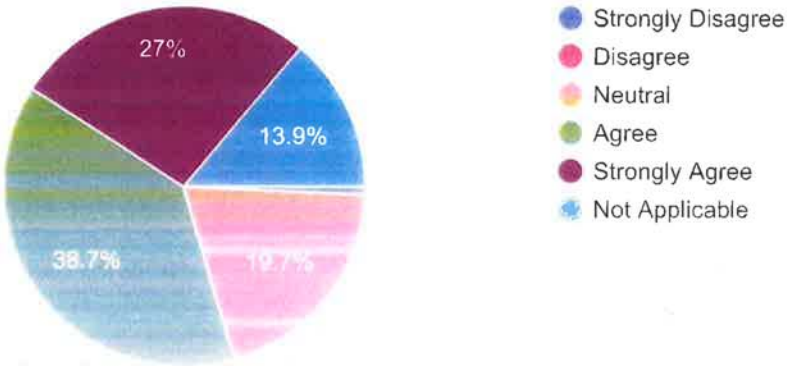
I maintain effective communication with families of my students.

137 responses



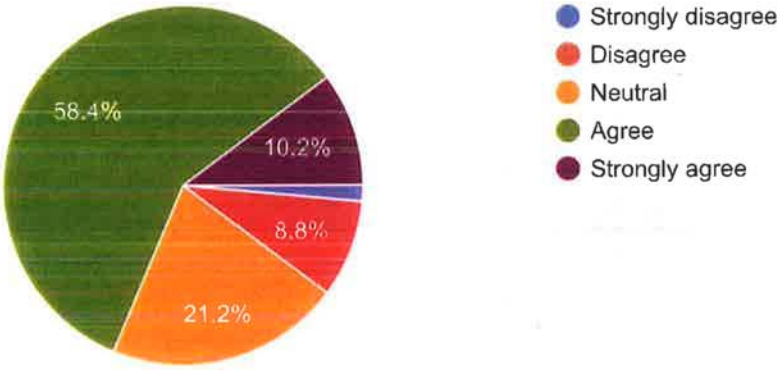
I maintain effective communication with families of diverse students.

137 responses



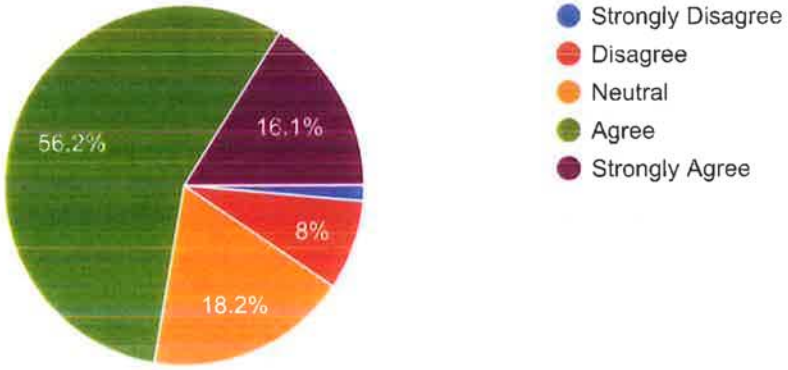
I have sufficient knowledge, skills and support to effectively partner and communicate with diverse families.

137 responses



I actively and effectively connect students to services and supports necessary for their success.

137 responses

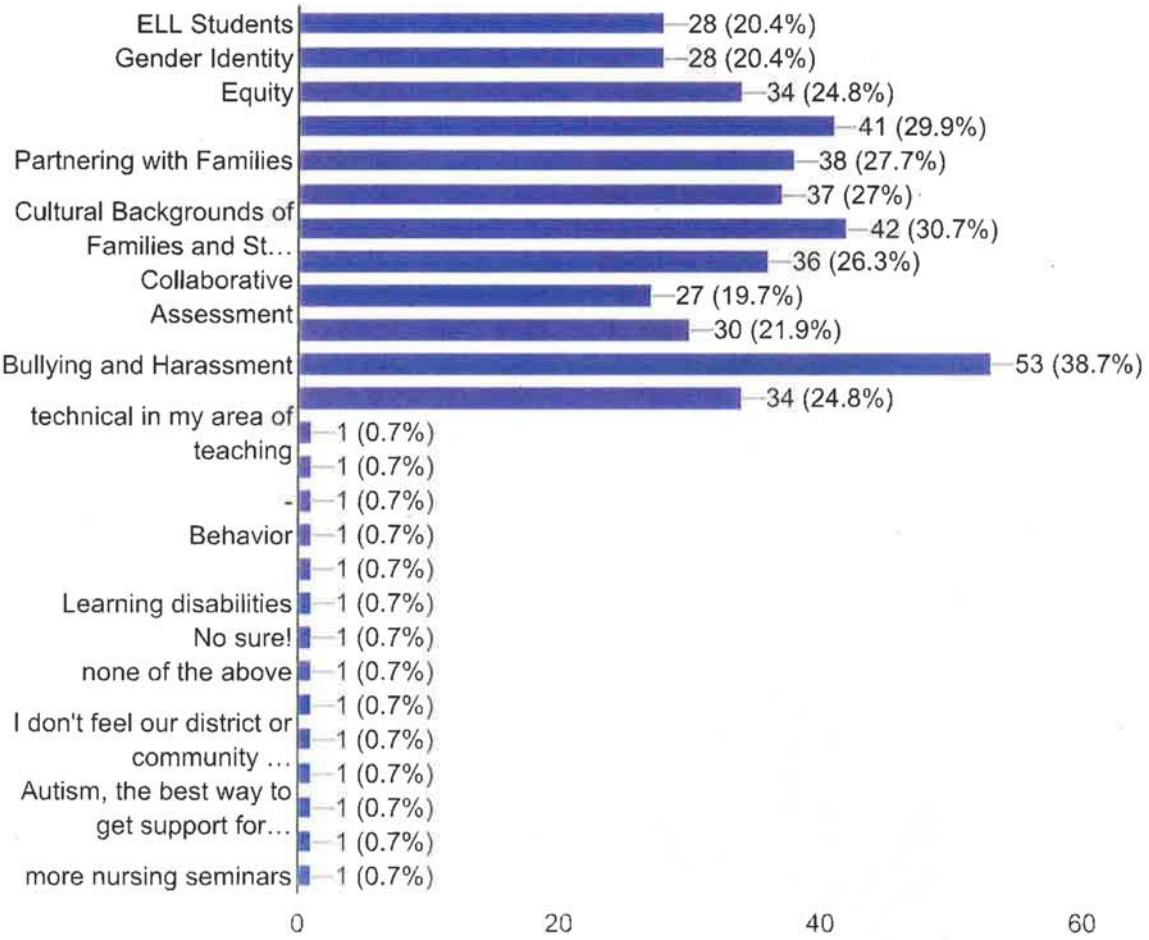


I have received meaningful professional development at my building and through the district regarding equity, diversity and inclusion.

137 responses

I am interested in future professional development on the following:

137 responses

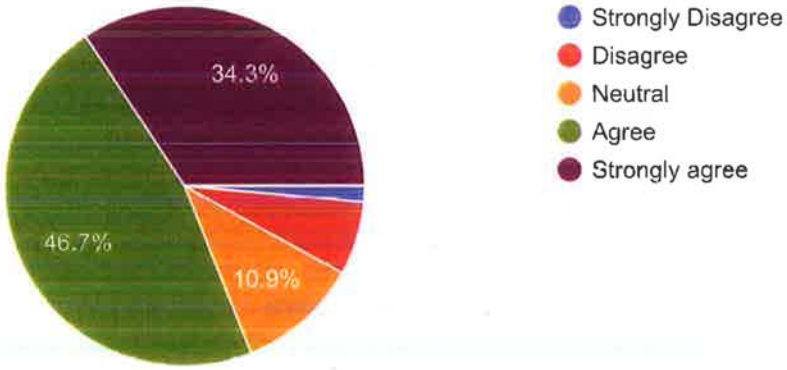


Discipline in this school is fair.

137 responses

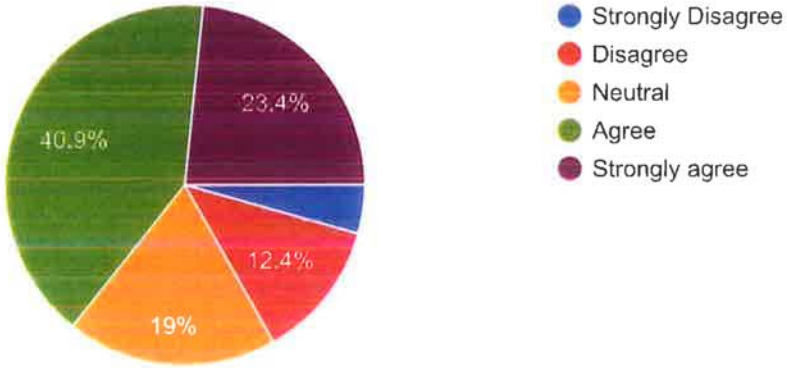
My supervisor encourages/supports me.

137 responses



My supervisor communicates effectively.

137 responses

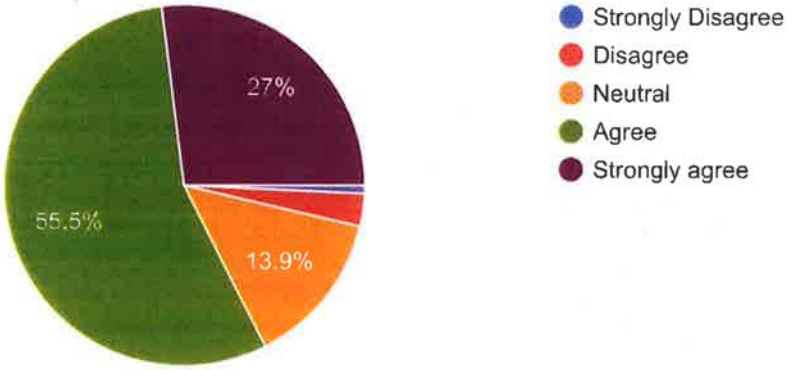


My supervisor supports me in my work with students and families.

137 responses

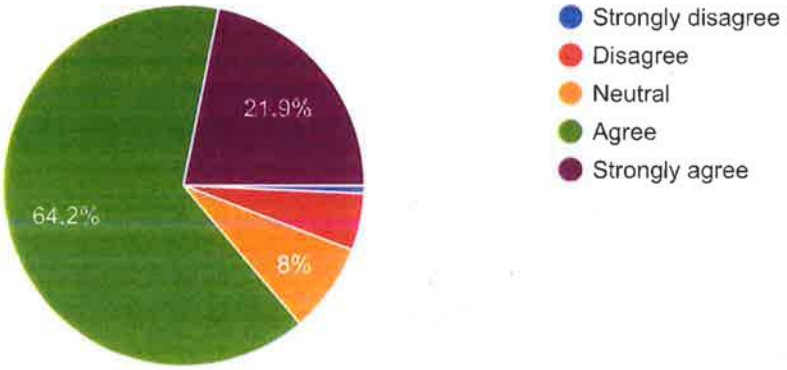
I am proud of the work we provide the community. .

137 responses



I have opportunities to learn at work.

137 responses

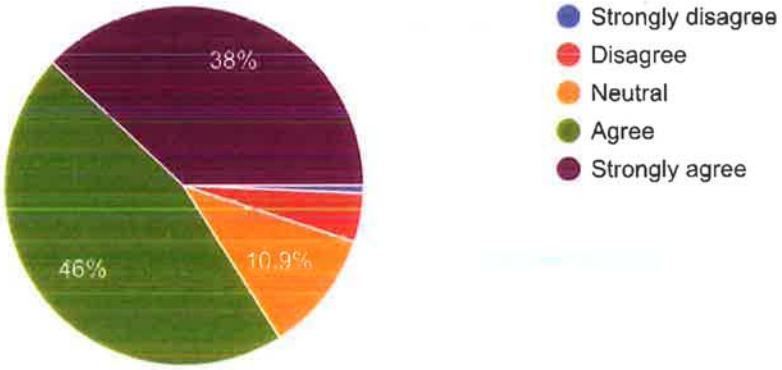


I have the necessary resources to do my job well.

137 responses

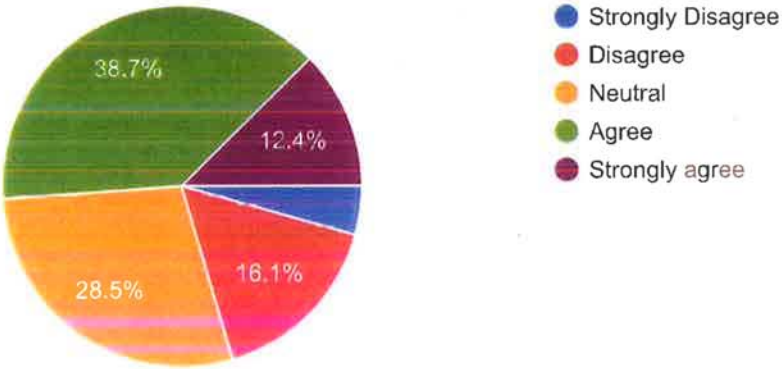
My school is respectful of different races, ethnicities, genders and backgrounds.

137 responses



I feel that we have an effective professional development plan for our school.

137 responses



How can the district improve?

137 responses

Adopt a new math curriculum.

Continue with opportunities to grow with understanding of the changes in our community.

Continue to offer more trainings that directly relate to our job classification.

More diversity in staff

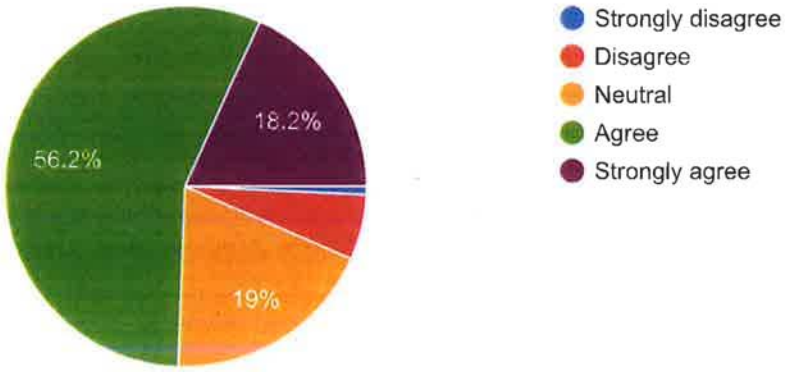
Smaller class sizes, more culturally relevant curriculum, less wasteful curriculum purchases that are only implemented for a year (PAX, handwriting w/o tears, etc.)

Keeping teaching teams consistent

We need an Alternative school for the middle school level. There is a small percent of students who can not function well in this setting for various reasons. The middle school needs more electives to allow for more flexibility in the schedule. Electives that

I am optimistic the school is moving in a positive direction.

137 responses



What are the strengths of the school?

137 responses

The best principal in the state of Oregon, ongoing AVID PD, staff and student culture for caring and support, organized processes, great balance between work and celebrations, staff who truly care for their students.

Our building staff works really well together to make improvments for students and families.

Staff teamwork, positive work environment and people who generally care for students and one another.

Close knit community

We have amazing students, we just don't have all that we need to meet all of their needs.

Loving, friendly atmosphere

Please provide any additional information or feedback you would like to share.

41 responses

n/a

The PD Sessions where we can choose where to go has been helpful as it caters to our own individual needs/professional learning desire.

Please make Wednesdays more meaningful and realistic to a teacher's time. We would love to be learning innovative, ground breaking new teaching and learning topics on Wednesdays. On the other hand, "filler" professional developments are not helpful. Prep time is not wasted time, it is vital to our success as teachers. This first quarter, it felt like our time wasn't valued. It seemed like our hand was forced to do work on our own time to keep up. Every Wednesday was full and being prepared for conferences was impossible unless we worked hours from home. AVID Pathways training the day before conferences was not our best use of time. Just some food for thought.

Better security / locked doors with cameras before anyone enters building. Keys for all staff

We have had many positive things happen at Green Acres. We work hard to improve academics and behavior. Once we have plans in place that are working for students

Enter name (optional) if you would like the district to follow up on any of the above responses.

12 responses

Annette Roberts

Darlene Calahan

Martha Moore, SpEd teacher at Hamilton Creek. You may contact me if you wish, but I am not specifically asking for followup.

Eric J. Frazier

Will Bower

Madeline Tait

Summer Crawford

Bruce Little

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Artifact 4 – Qualitative Data Analysis and Summary

Survey Comments - Qualitative Data Analysis

Group	Total Made Viable Comments	Total Comments	General Positive	% Pos	Primary Positives	Improve/ Change	% Imp	Primary area	Secondary area	Tertiary area	Barriers - Yes	% Barr
TOTALS	**2964**	**7354**	**3220**	**44%**		**3145**	**43%**				**987**	**13%**
Focal Groups	545	1636	632	39%	Friends/ Teachers/ Staff	626	38%	Climate/ Inclusion/ Safety/ Bullying issues	Support Academic	Specific Classes	378	23%
Students	1614	3729	1746	47%	Friends/ Teachers/ Specific class	1385	37%	Climate/Inclusion/Safety /Bullying issues	Rules	Specific Classes	598	16%
Parents	608	1137	751	66%	Teachers/ Staff	375	33%	Communication	Climate/ Inclusion/ Safety/ Bullying issues	Content Specific	11	1%
Community	47	335	25	7%	Teachers/ Staff	310	93%	College/Career prep	Communication	Teacher quality	0	0%
Staff	150	517	66	13%	Colleagues/ Collaboration	449	87%	Work Load - Prep/Plan Time	PD - Decrease, change	Incease instructional time, address behaviors	0	0%

Select your institution from the drop down list to the right	**District / Charter**

Estimated Allocation	Estimated Allocation	
Maximum Administrative Costs	Maximum Administrative Costs	

Please provide contact information for the person completing this budget

Name	
Phone	
Email	

Additional Resources

SIA Engagement Toolkit
SIA Comprehensive Guidance
SIA Webpage

The "INFO" tab provides brief descriptions of the activities described in the "allowable use" categories.

The "Expenditures" tab is an activities-based budget tool to list and categorize budgeted activities.

The "Summary" tab provides a summary of categorized expenditures.

Below are brief descriptions of some of the allowed activities pertaining to the categories listed in the Student Investment Account.

OCG *Ongoing Community Engagement*

Activities aimed to continue engaging focal student groups, communities and staff for input and feedback on planned activities and priorities.

IIT *Increased Instructional Time*

More hours and/or days.
Summer programs; before or after school programs.
Technological investments that minimize class time used for assessments administered to students.

H&S *Improving Student Health & Safety*

Social and emotional learning, trauma-informed practices; student mental and behavioral health.

RCS *Reducing Class Size*

Use evidence-based criteria to ensure appropriate student-teacher ratios or staff caseloads;
Increasing the use of instructional assistants.

WRE *Well-Rounded Education*

Developmentally appropriate and culturally responsive early literacy practices and programs in pre-K through third grade.
Culturally responsive programs and practices in grades 6-8, including learning, counseling and student support that is connected to colleges and careers.
Broadened curricular options at all grade levels including: Art, Music, PE, STEM, CTE, engaging electives, accelerated college credit programs, including dual credit, IB, AP, Life Skills, TAG, dropout and prevention programs, and transition supports.
Access to licensed educators with a library media endorsement.

ADMIN *Administrative Indirect Costs*

1. Briefly describe the proposed activity (Column "E").
2. Select the appropriate "Allowable Use Category" that best fits the activity from the drop down list (Column "C").
3. Select the appropriate "Object Code" that best fits the activity from the dropdown list (Column "D").
If the desired object code is not listed, select "OTHER" and include a note in the justification narrative.
4. Enter FTE, if any is associated with the activity item (Column "B").
5. Enter budgeted amount (Column "F").
6. Provide a brief narrative justification for the activity and budgeted amount (Column "H"). The sheet will auto sum the budgeted amounts as long as an OBJECT code is selected.

$ 3,400,000.00

Budget Justification Narrative

Total Expenditures: $ 3,396,030.00

Allowable Administrative Costs:

Unbudgeted Funds: $ 3,970.00

Proposed Activity

Activity #	FTE	Allowable Use Category	Object Code			Budget Justification Narrative
1.1		IIT	31x	Pre-K to Kindergarten Transition Program	$ 90,000.00	LCSD has the lowest Kindergarten readiness scores in the county, and Linn County is one the lowest in the state.
2.1a	24	RCS	112	K-3rd Grade IAs (one in each Kindergarten, and one per grade level)	$ 648,000.00	We need Instructional Assistants (IAs) in each Kindergarten class to decrease ratio of student to teacher to support readiness deficiencies and provide additional literacy supports. Also,one dedicated IA for grades 1st through 3rd to ensure the fidelity of interventions.
2.1b	4	RCS	112	6th-8th Grade IAs	$ 108,000.00	Middle school instructional assistants will support those students who arrive at 6th grade underperforming and utilize intervention as well as decrease the ratios of student to teacher, decreasing overall class size.
2.1c	4	RCS	112	Special Education trained IAs	$ 108,000.00	Sped IAs are vital to ensuring that all IEP requirements are met and students receive services.
2.1d	1	RCS	111	EB/ELA Teacher	$ 27,500.00	There is a small outlying school that will need a 0.5 FTE ELA specialist who can address the needs of Emerging Bilingual EB) students to help with language acquisition and support general instructional goals in the regular education classrooms.
2.1e	2	RCS	111	Special Education Teacher trained in EB, Equity and Culturally Responsive Teaching practices	$ 55,000.00	Among Sped students there are also EB students and students of color or other historically underserved populations who need support, so we need to add a Sped certified teacher who is trained in issues of EB students and equity issues as well.
2.2a	1	RCS	112	One bilingual IA	$ 27,500.00	A bilingual IA will significantly increase support for EB students in terms of general learning and language acquisition
2.3a	11	IIT	111	K-6 summer school and extended day certified instructors	$ 27,500.00	We need to decrease the amount of time students who struggle, go-between school years, which supports the retention of learning
2.3b	11	IIT	112	K-6 summer school and extended day IAs	$ 27,500.00	We need IAs to provide increased support in the form of interventions and small-group or individual instruction.
3.1	0.5	IIT	111	Assessment Coordinator to develop a program and calendar that streamlines assessment and minimizes the use of instructional time for testing.	$ 27,500.00	We need to develop a program and calendar that streamlines assessment and minimizes the use of instructional time for testing.
4.1	5	H&S	111	Hiring of TOSAs who are trained in best-practice equity processes and procedures to work with students with behavioral issues and their families	$ 247,500.00	We need behavior and academic support leaders who are trained in best-practice equity and EB processes and procedures to work with students with behavioral or socla/emotional issues and their families

5.1	2	H&S	111	Mental Health Specialists	$ 100,000.00	Mental Health professionals are needed to deal with non-academic mental health student issues that are currently bogging down our behavioral staff, academic counselors, teachers, and administrators.
6.1	0.5	H&S	113	Alternative Ed. /Drop-Out Prevention Administrator	$ 41,500.00	Preventing drop-outs and supporting at-risk students is necessary due to the particular needs of students who have reached the secondary level, and the supports of the primary level were not able to bring the students in line academically, behaviorally or in both areas.
6.2	0.5	H&S	111	Alternative Ed. /Drop-Out Prevention Counselor	$ 27,500.00	Adding a counselor to address the behavioral and social-emotional needs of students will provide much needed one-on-one support and guidance.
7.1	1	WRE	111	CTE Teacher 6th-8th	$ 55,000.00	Additional course offerings at the middle school level and opportunities for exploration of career-related programs at the younger grades will help to provide knowledge of post-secondary options and potentially encourage completion through high-school. Providing more electives and activities will increase student buy-in and help to impact attendance and behavior positively.
7.3		WRE	5xx	PE Classroom	$ 45,000.00	PE classes have instructional needs that cannot be met in an outdoor or gymnasium setting. A classroom will allow for acoomodation of academic needs and provide alternative options during inclement weather.
7.4		WRE	5xx	Playground Area	$ 15,000.00	A playground to encourage physical ativity and relieve stress supports the facility needs of a base for a well-rounded education
7.5		WRE	5xx	Instruments for the Music Program	$ 30,000.00	Our instruments are very old and have been used to the point they are unavailable often due to consistent need of repairs.
8.1	1	OCE	112	Bilingual Liaison	$ 27,500.00	Our largest sub-group that is not related to Sped is our Hispanic and Latinx group. Communication with families and transmitting information back and forth between the schools, students and families requires a single-point of contact to coordinate events, activities and school-related information in an effective manner.
8.2		OCE	31x	Translator	$ 25,000.00	A translator who is proficient at writing and communicating in Spanish is important to ensure all documents are as accurate as possible.
9.1		OCE	31x	Engagement Coordinator: Develop an engagement program, an annual survey, collect results and analyze the data.	$ 25,000.00	work with the district leadership and involve the Bilingual Liaison in creating a plan for communication to involve all stakeholders. This person will design a survey that will be used annually to provide a continuous flow of input and communication of results between stakeholders.
		8xx		PERS Pick-Up	$ 139,995.00	
		8xx		Charter School Allotment	$ 220,000.00	
		8xx		Insurance Costs	$ 675,000.00	
				"Benefits" from next page	***$ 575,535.00***	

CODE	Description	Total Line Items	Total Budgeted
111	Licensed Salaries	8	$ 567,500.00
112	Classified Salaries	6	$ 946,500.00
113	Administrative Salaries	1	$ 41,500.00
12x	Substitute Salaries	0	$ -
13x	Additional Salaries	0	$ -
2xx	Benefits	0	$ 575,535.00
31x	Instructional, Professional and Technical Services	3	$ 140,000.00
33x	Transportation	0	$ -
34x	Travel	0	$ -
35x	Communications	0	$ -
4xx	Supplies and Materials	0	$ -
5xx	Capital Outlay	3	$ 90,000.00
640	Dues and Fees	0	$ -
8xx	Miscellaneous	3	$ 1,034,995.00
ADMIN	Administrative Indirect Costs	0	$ -
OTHER	Other codes not listed		
		TOTAL	**$ 3,396,030.00**
		Total FTE	**66.5**

Allowable Use Category	Total Line Items	Total Budgeted
Administrative	0	$ -
(Ongoing Community Engagement	3	$ 77,500.00
Increased Instructional Time	4	$ 43,125.00
Improving Student Health & Safety	4	$ 416,500.00
Reducing Class Size	6	$ 974,000.00
Well Rounded Education	4	$ 145,000.00
	TOTAL	**$ 1,656,125.00**