

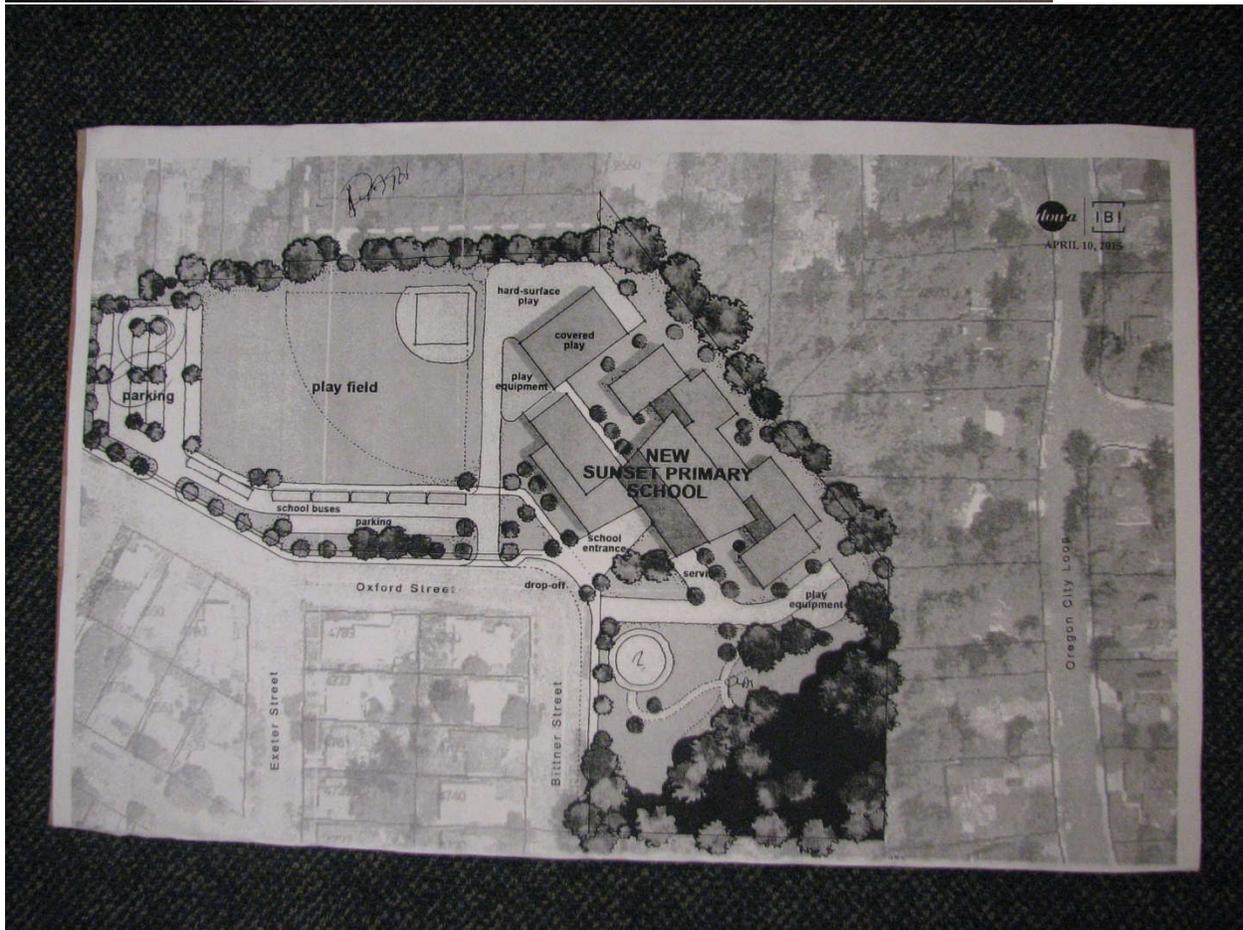
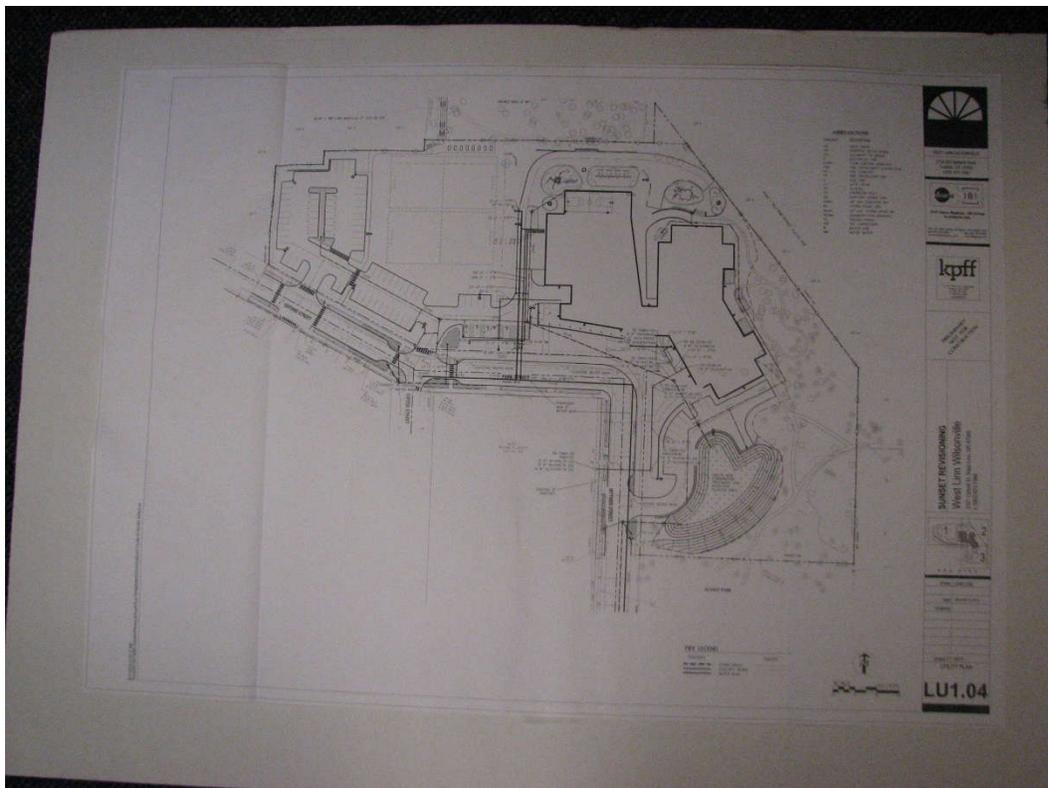


January 12, 2014
 To: City Council
 From: Sunset Neighborhood Association
 Subject: Sunset Neighborhood Association Boundary

**Sunset
 Neighborhood
 Association
 Boundary**

Map Legend
 Sunset Neighborhood Association

City Property by Type
 Park
 Open Space With Trails
 Open Space Natural Area
 City
 Other



RECEIVED
MAR 16 2016
By

March 3, 2016 West Linn Tidings

NEWS BRIEFS

Enter "If I were mayor" poster contest

The Oregon Mayors Association and the city of West Linn invite West Linn fourth and fifth graders to enter the "If I Were Mayor..." contest. Share your creative ideas in poster format about what you would do as mayor. Local winners are entered into the state contest for a chance to win an iPad Air 2. Entries due to West Linn City Hall by close of business on Monday, May 2, 2016.

Find rules and submission requirements at WestLinnOregon.gov/IfIWereMayor/Would. Only one submission per student will be accepted at the state level.

Previous statewide winners may participate but are not eligible to receive prizes.

League of Oregon Cities (LOOC) employees and dependents are not eligible to enter.

First-place statewide winners will receive their prizes during the OMA Summer Conference, to be held July 21-23, 2016 in Lincoln City.

Help McLean house 'grow'

Friends of McLean House, a historic home and gardens in West Linn, is looking for volunteers to help with spring clean up March 5 from 9 a.m. to noon. No special skills are required as crews will be moving bark dust and gravel and picking up leaves and fallen branches. Please bring work gloves, coffee and lunch will be provided. Contact Diane at info@mcleanhouse.org or 503-655-4268 to volunteer.

Zika virus from sex reported in Oregon

Oregon Health Authority reported the state's first case of sexually transmitted Zika infection. The illness was spread from a man who had traveled in a Zika-affected country to his female sex partner, who had not traveled. Both people later tested positive for Zika.

Zika seldom causes serious illness. Four out of five people who get Zika have no symptoms. When symptoms occur, they are generally mild and include fever, rash, joint pain and redness of the eyes.

"Though mosquito bites appear to be the most common way Zika is spread, there is increasing evidence for sexual transmission as well," says Richard Leman, MD, an OHA public health physician. "People who have been in Zika-affected areas in the previous two weeks and develop symptoms suggesting Zika should see their health care provider. CDC advises men with pregnant sex partners to use condoms or abstain from sex for the duration of pregnancy." The disease is concerning, however, because of its potential link to serious birth defects in babies born to women infected during pregnancy. For more Zika information and resources, visit the OHA Zika website at healthoregon.org/zika.

Cybersecurity Expo

Cybersecurity is a hot topic with cyber fraud and intrusions disrupting companies and individual's lives daily. Fortinet, a top international

cybersecurity firm, is in Wilsonville March 8-11 holding an expo in partnership with the Oregon Institute of Technology (Oregon Tech), to demonstrate cybersecurity platforms in their mobile FortiExpress. Companies and the public are invited to this free expo to tour the mobile cyber lab, attend mini-cyber sessions by industry experts (such as: How Companies Get Hacked, and From Caesar to Enigma, Intro to Cryptography), and take a tour of Oregon Tech's campus and high-tech labs. The four-day schedule offers a pop-in format and scheduled events. Go to oit.edu/cyberexpo for a schedule. Oregon Tech is located at 27500 SW Parkway Ave, Wilsonville.

Free prom dress shopping for teens

Portland-based nonprofit organization, Abby's Closet, will host its 12th annual Prom Gown Giveaway on Saturday, April 2 from 8 a.m. to 4 p.m. and Sunday, April 3 from 10 a.m. to 2 p.m. at the Oregon Convention Center, 777 NE Martin Luther King, Jr. Blvd., Portland. The two-day event is the perfect prom dress shopping experience, giving local high school women a chance to shop the largest prom gown closet in Oregon and Southwest Washington. The event will feature more than 7,000 prom dresses ranging in sizes 0-26. All of the dresses featured at the event have been donated. Gown accessories will also be given away to each attendee at no cost. The event is free and open to the public. High school students must present their student ID or proof of high school registration to enter the event and receive their free dress and accessory. Abby's Closet is currently accepting new and gently used formal gowns, bridesmaid dresses, wraps and purses. Volunteers are needed to help at the event. Visit abbyscloset.org for more information.

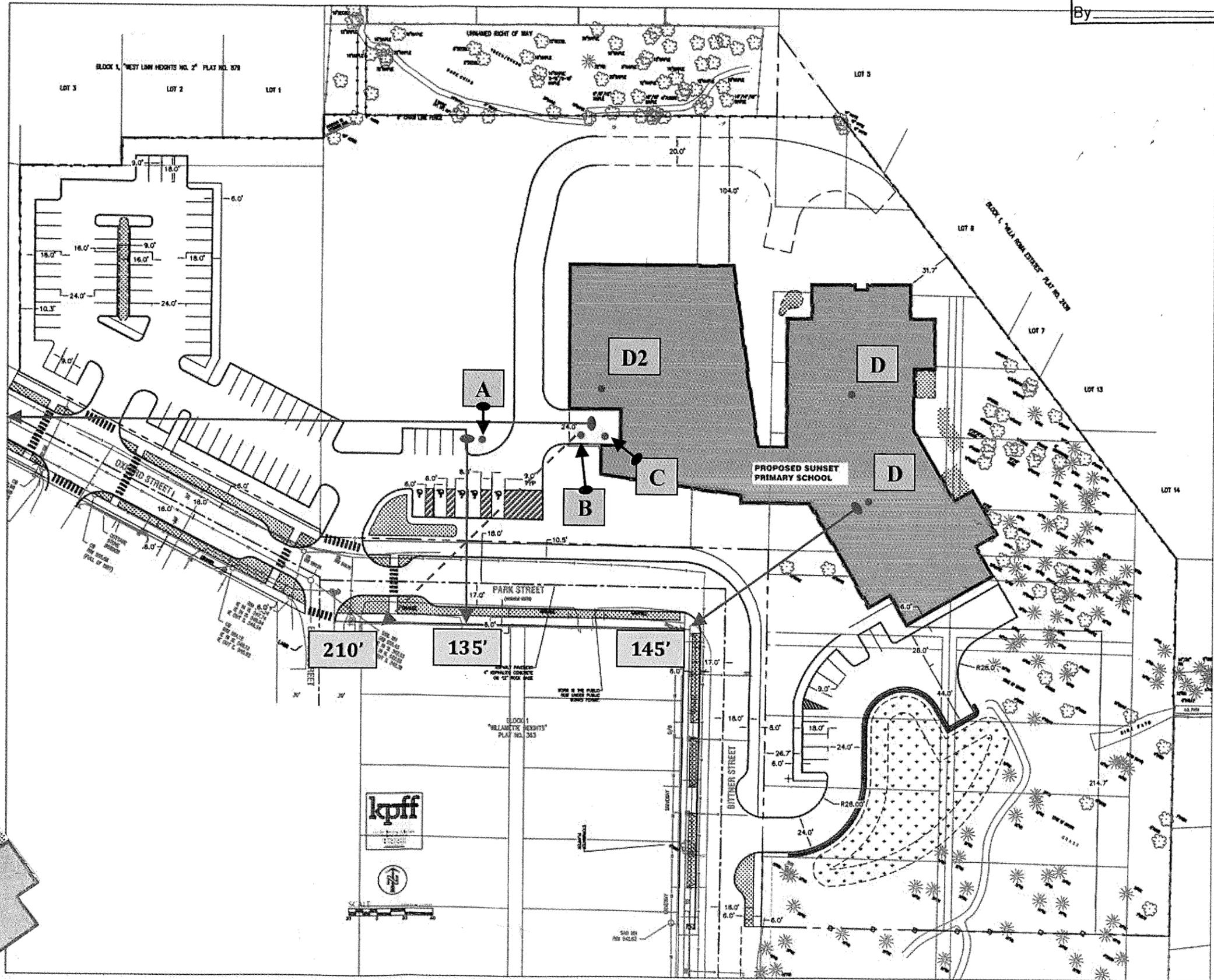
Is there a potential landslide near you?

A new landslide susceptibility map of Oregon helps identify regions of the state that may be at risk for future landslides. "This map points us toward priority areas for future in-depth mapping and study of our landslide hazards, and helps Oregonians better understand the potential hazard in their own communities," says Bill Burns, engineering geologist for the Oregon Department of Geology and Mineral Industries (DOGAMI). More than a third of Oregon's land has very high or high landslide susceptibility. Very high susceptibility means the area is an existing landslide; high susceptibility means landsliding is likely. Landslides can be triggered by factors such as intense rainfall, rapid snow melt and freeze/thaw cycles. In some areas of the state, particularly western Oregon, very high and high susceptibility percentages are much higher. Read the full report: bit.ly/1KHV2yZ. The mapping marks the first time since 1982, when the U.S. Geological Survey published a landslide overview map of the United States, that there's been a look at the landslide susceptibility of the entire state. The accompanying report includes susceptibility percentages for all Oregon counties, incorporated cities and some watersheds.

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Noise Sources:

- A: PGE transformer
- B: Trash compactor
- C: Emergency generator
- D: Mechanical rooftop equipment
- D2: Heat recovery unit

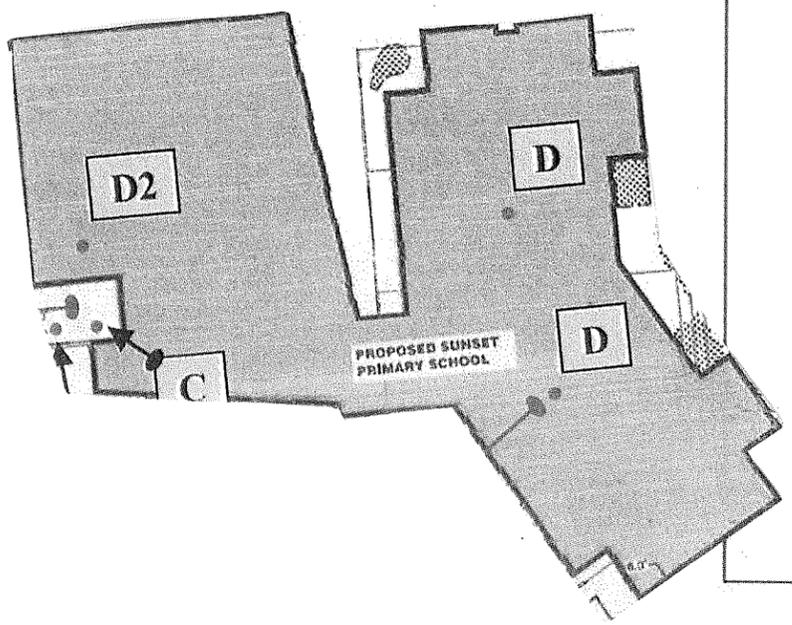


425'

210'

135'

145'

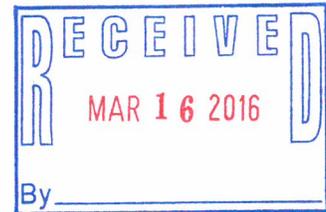


March 16, 2016

Memorandum to: The West Linn Planning Commission

Re: File No. CUP-15-03/DR-15-17/VAR-15-01/02/03

Proposed Sunset Primary School Development Application



This memo lists my concerns about the proposed plan for the new Sunset Primary School and surrounding property. Please note that I have no problem with plans for a new school that meets the community needs. My concerns have to do with the environmental and neighborhood impacts.

I am distressed and disappointed with the way the planning has been handled from the original proposal re: the 2010 Measure 3-358 to the current proposal. The latest proposal involves a Phase I loss of 65 trees, creates a negative impact on the environment, the soil, ground, and runoff water, the northeast storm water detention pond, and the entire storm water detention pond area southeast and downhill of the pond. The storm water detention pond is to be situated on an upslope site, totally contrary to traditional locations in low lying areas. The detention pond will change the soil, ground and runoff water, further saturating the already overly saturated ground southeast and downhill of the pond. The Phase II logging of any dead trees due to construction and newly elevated groundwater issues will cause even more change to soil, ground, and runoff water. It is both an irrational and irresponsible act to stay on this current course of action.

The initial explanatory statement on ballot measure 3-358 authorized the sale of 1.6 acres of Sunset Park to the school district stated: "If approved, the terms and conditions related to the sale *would include Sunset neighbors in the planning process* (emphasis mine) and would maximize recreational opportunities *while preserving significant trees at the site* (emphasis mine)." And now it seems that the currently proposed Sunset Primary School Development Application now under consideration appears to ignore this portion of the sale agreement by West Linn city government and the West Linn-Wilsonville School District, a clear violation of stewardship, integrity, and community responsibility.

It is in the best interest of all parties concerned to seriously reconsider the current path of planning including the park, the trees, the Sunset neighborhood and all homes that stand to be damaged due to the current plan, and the integrity of the planners.

I implore you to reconsider this path and seek a path that is much more amenable to the original proposal in the 2010 Ballot Measure 3-358.

Sincerely,

Caryn L. Aman
4740 Bittner Street
West Linn, Oregon 97068

City of West Linn Measure 3-358

Ballot Title

SALE OF PORTION OF CITY PARK LAND TO SCHOOL DISTRICT

QUESTION: Shall the City sell 1.6 acres of Sunset Park to the West Linn/Wilsonville School District for \$483,000?

SUMMARY: This measure, if approved, would allow the sale of 1.6 acres of Sunset Park to the West Linn/Wilsonville School District for the amount of \$483,000. The School District has indicated that Sunset Primary School needs to be replaced soon and that it's the District's desire to maintain the school at its current location, provided that the School District's property at this location can be expanded. The City-owned Sunset Park property is adjacent to Sunset Primary School. Agreeing to sell a portion of Sunset Park to the School District would provide sufficient land to allow the District to keep Sunset Primary School at this location. The West Linn Charter requires that the sale of any park property be approved by a vote of the community. If this sale is approved by the voters, the City would commit to using the proceeds from the sale of this property for acquiring or developing parks for the use of the West Linn community.

Explanatory Statement

Voter approval is required for the sale of 1.6 acres of Sunset Park to the West Linn/Wilsonville School District for \$483,000 (Sunset Park is currently 5.1 acres).

The West Linn Charter Section 46 requires that the sale of any property owned by the City of West Linn and designated as a park be approved in advance by City voters. The West Linn City Council approved placing this measure on the May 18, 2010 ballot with a 5-0 vote.

This measure, if approved, would allow the sale of 1.6 acres of Sunset Park to the West Linn/Wilsonville School District. The School District has indicated that Sunset Primary School should be replaced soon. The School District would maintain Sunset Primary School at its current location, provided that the School District's property at this location could be expanded. The City-owned Sunset Park property is adjacent to Sunset Primary School. Agreeing to sell a portion of Sunset Park to the School District would provide sufficient land for the School District to keep Sunset Primary School at its current location.

The Sunset Neighborhood Association Neighborhood Plan includes a primary goal of keeping Sunset Primary School as an element of the Sunset neighborhood. If approved, the terms and conditions related to the sale would include Sunset neighbors in the school planning process, and would maximize recreational opportunities while preserving significant trees at the site. The City would use the property sale proceeds for acquiring or developing land for recreational use in West Linn.

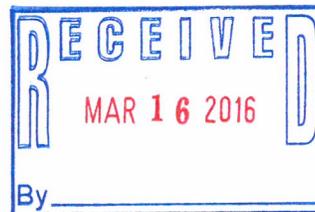
In addition to this ballot measure, the West Linn City Council has also submitted for the May 18, 2010 election two related but separate ballot measures. One ballot measure would authorize the issuance of up to \$10.8 million in general obligation bonds to fund the land acquisition and to construct, furnish and equip a new police and court facility at the Parker Road location. The other ballot measure would annex 7.5-acres of real property located at 3332 and 3151 Parker Road. Voter approval is required for each of the ballot measures.

If the three ballot measures are approved, the City would:

- Sell a portion of Sunset Park to the West Linn/Wilsonville School District so Sunset Primary School could be replaced at its current location;
- Purchase the Parker Road property being annexed; and
- Construct a new police and court facility on a portion of the annexed property.

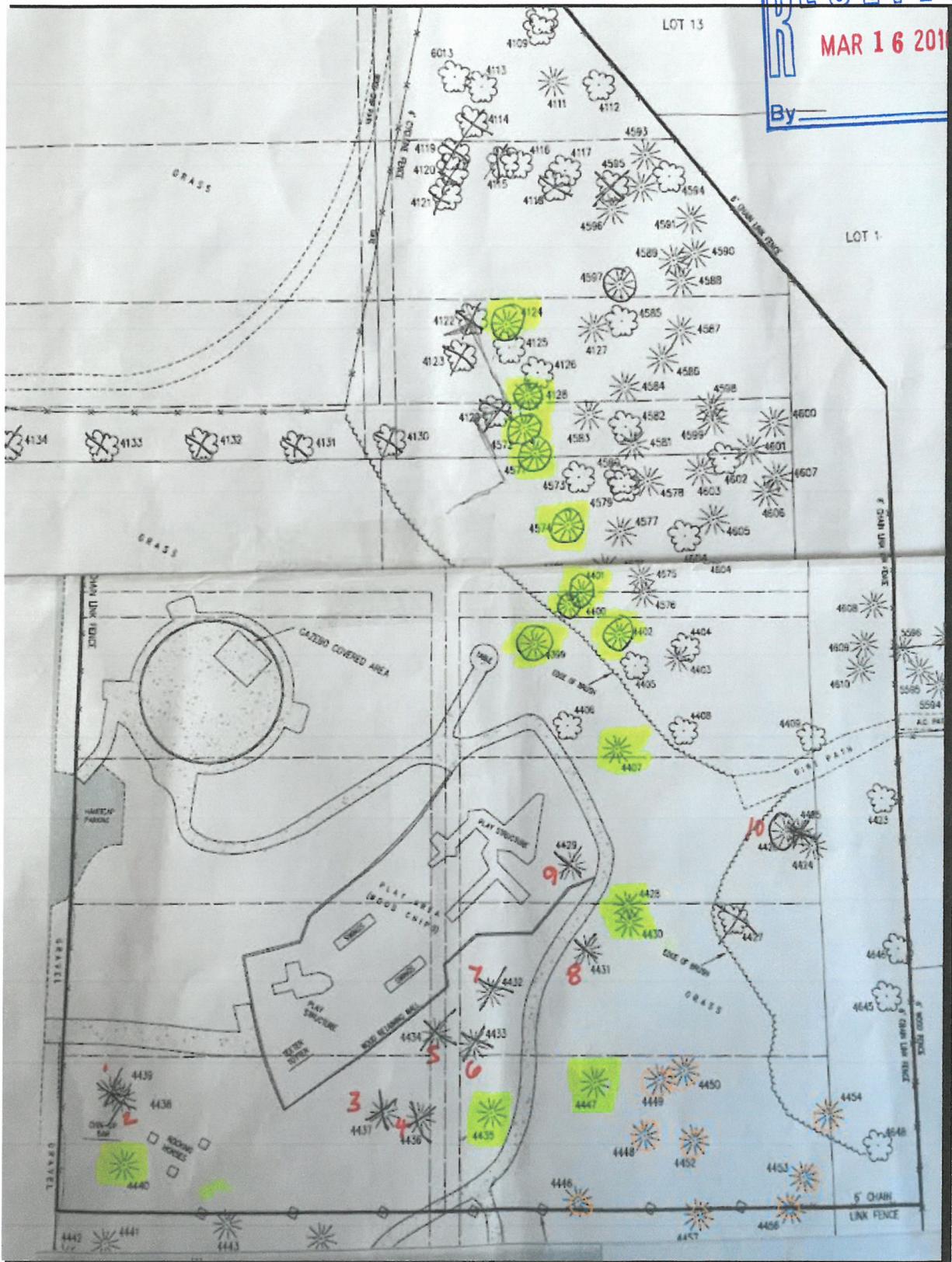
Voters can learn more about this ballot measure online at <http://westlinnoregon.gov>.

(This information furnished by Tina Lynch, City of West Linn.)



**NO ARGUMENTS WERE FILED
IN FAVOR OR IN OPPOSITION
TO THIS MEASURE.**

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red numbered = remove for Stormwater detention pond.

Yellow = risk + need to be monitored

Orange = risk Per Hydro-Geologist

To: The West Linn Planning Commission

March 15, 2016

Re: File No. CUP-15-03/DR-15-17/VAR-15-01/02/03

Proposed Sunset Primary School development application

Memoranda in opposition to proposed plan

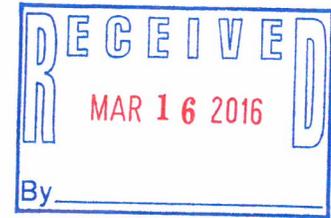
Primary Author of Memoranda

David Dodds

18931 Old River Drive

West Linn, OR 97068

Additional signers found at end of Memorandum



Commissioners:

The purpose of this memorandum is to state in detail the reasons why the signers oppose this specific proposal and consequently why this application should be denied. The reasons for denial will be tied directly to the relevant Community Development Code (CDC) approval and submittal requirements.

It is important to establish at the onset that the signers are not opposed to the construction of a primary school on the site, but merely to the characteristics and adverse impacts of this particular proposal. It is the sincere wish of the signers that when this proposal is denied or voluntarily withdrawn that the applicant will work directly with the neighbors and the Neighborhood Association to create a plan that can be enthusiastically supported. Furthermore, the signers believe that the dimensions of the site are more than adequate to accommodate a different school development plan that they could and would support.

In general terms there are two major objections to this application. The first is the orientation of the new building to the east and south of the site and the placement of the parking lot to the south of the new building. The second is the proposed construction of a very large water detention pond in the southern portion of the site. Objections to the pond are further divided into two issues: 1) being aesthetic, i.e. that it would be a very big exposed eyesore along Bittner St. and require the removal of at least 9 significant Douglas Fir trees (see site diagram LU 2.01), and 2) the very profound concern that the environmental and drainage impacts of such a detention facility have been insufficiently addressed or in many instances completely unaddressed by the applicant, the West Linn planning staff or the West Linn engineering staff.

The above concerns are directly related to the extreme unhappiness that a great many Sunset residents have at the prospect of seeing the 1.6 acres of the site that was formerly a part of Sunset Park and was sold to the School District in 2010 that is currently a much loved and heavily used play area transformed into part of a building, a parking lot and huge water detention pond. This unhappiness is exacerbated by the many representations over many years by the applicant that the 1.6 acres while part of the school would retain most of its park qualities. One need look no further than the explanatory statement of Ballot Measure 3-358 authorizing the Sale of the property which states in part "If approved, the terms and conditions related to the sale would include Sunset neighbors in the school planning process, and would maximize recreational opportunities while preserving significant trees at the site". Needless to say the opponents of this proposal can be forgiven for not finding a building, parking lot and stormwater detention pond a maximizing of recreational opportunities.

Before proceeding to the details, an underlying assumption of this proposal needs to be addressed. That assumption is that the existing Sunset Primary School needs to remain in use while a new school is built beside it. We believe that this assumption is merely the applicant's preference and should not be considered a given. In recent history there have been several instances where district students have been temporarily relocated to other facilities to accommodate new construction or remodeling. Neither the applicant nor planning staff have offered any analysis why this could not be done with this site. If this assumption is dispensed with then the new school could be oriented to the west either on or much closer to the existing school. Such a change in orientation would completely alleviate the need to remove any major fir trees along the eastern edge of the site (see applicant's arborist report on page 3 and site plan map LU 2.01). A western orientation would also almost certainly erase the need for all of the requested variances (with the possible exception of the sign variance) and as a consequence be much more compliant with the intent and purpose of the CDC.

STORMWATER DETENTION POND:

We are extremely concerned that insufficient analysis has been done on the potential adverse impacts of the proposed pond either by the applicant, their consultants or City staff. In particular we are worried about potential significant trees loss in Sunset Park down slope from the Pond, increased ground water in down slope areas bounded by the streets respectively of Long, Charman, Oak, Walden, Leonard, Riverview Ave. and perhaps Oregon City Loop. Concerns in this regard include flooding or increase water damage to structures and soil instability. Structures in these areas, including the Sunset Fire Hall itself, have already suffered water infiltration damage in recent memory. Should the pond fail either due to a blockage of the overflow pipe or soil slippage due to soil saturation, the result could be (with no exaggeration) truly catastrophic. There is also concern about the effect that flow from the overflow pipe would have on Sunset Creek particularly during extreme storm events. These concerns are unaddressed by either the applicant's consultant or City staff. Except for the development review engineer's initials "KQL"

on the front page of the staff report we could find no written analysis of the detention pond from the City engineering department.

Before detailing our objections to some of the assumptions and methods used to justify the detention pond, as well as providing the Commission with information not included in the applicant's report, we would like to comment on the nature of the report entitled "Preliminary Stormwater Drainage Report" (PSDR). Engineering reports that are meant to be used by decision makers and members of the public who are not engineers should be written in a narrative fashion that are relatively easy to follow where important assumptions and critical data is clearly explained. Merely referencing the name of a computer modeling program or various government reference manuals is inadequate. CDC 99.030C (2) states in part "The application shall be complete and shall contain the information requested on the form, shall address the appropriate submittal requirements and approval criteria in sufficient detail for review and action". This means sufficient for both the Planning Commission and public to review.

We found this report poorly written and difficult to follow and as a consequence were forced to make a variety of assumptions in trying to interpret this report. For example, on page 6 of the PSDR is the statement "The Pond will have a total volume of 9,230 cubic feet of storage above the water quality requirement". We assume this means that the pond will hold something approximating 9,000 cf of water when full to the level of the overflow pipe. If that is the case, the pond will hold a little over 69,000 gallons (1 cubic foot of water = 7.48 gallons). This is the equivalent of a swimming pool 20 feet wide, 45 feet long and 10 feet deep. It takes little imagination to picture what would happen if one were to suddenly empty such a pool down a hill. As an aside, it should be mentioned that we were unable to corroborate this 9,230 cf figure from the PSDR data. Perhaps a civil engineer could deduce this figure from the page with the heading "Presumptive Approach Calculator ver. 1.2", but such material should be presented in a format that is readily understandable to both Planning Commissioner and members of the public.

Page 3 of the PSDR states "while the test results confirmed that 100% on-site infiltration is not possible, partial infiltration should be obtained by locating the facility in the vicinity of the better performing test pits". Since by applicant's consultant's own admission 100% on-site infiltration will not be possible, it would have been helpful for a clear narrative explaining at what intensity or volume of rainfall would trigger discharge into the overflow pipe and hence directly into Sunset Creek (a series of graphs without narrative explanation is not particularly helpful). Nor could we find any discussion of what the hydrologic effects of a 10, 25 or 100-year storm would have on Sunset Creek.

It is important to emphasize that once the pond has reached capacity all of the water reaching the pond from the entire 2.94 acres of impervious area of school site will be fed into the overflow pipe. How this could not change the flow characteristics of Sunset Creek, we do not understand. CDC 92.010E states in total "Surface drainage and storm sewer system. A registered civil engineer shall prepare a plan and statement which shall be supported by factual data that

clearly shows that there will be no adverse impacts from increased intensity of runoff off site of a 100-year storm, or the plan and statement shall identify all off-site impacts and measures to mitigate those impacts commensurate to the particular land use application. Mitigation measures shall maintain pre-existing levels and meet build out volumes, and meet planning and engineering requirements.” We believe that the PSDR clearly fails to meet this standard particularly as regards to the 100-year storm analysis. Failure to meet CDC 92010E alone is grounds for dismissal or at the very least referral back to applicant for further analysis.

In reference to the above-cited test pits, it is very valuable to note that Carlson Geotechnical who conducted the test pit study clearly states “Because stormwater infiltration facility locations have not been determined yet, the infiltration data presented in this report should be considered preliminary. We understand additional infiltration testing may be required once the civil engineer has a more refined knowledge of where stormwater infiltration facilities will be located” (page A4 appendix A, PSDR). Two questions arise from the above statement: Why was more testing not done when the location of the pond was determined, and why should the applicant, City staff, Planning Commission, or public rely on this original testing data in doing the due diligence to determine the safety and efficiency of this detention pond. This is especially important given the very wide variation in test pit results for a relatively small area. If some of the ground on which the pond would be located has particularly lower infiltration rates or reaches saturation more quickly than assumed, then discharge into the overflow pipe will occur much sooner during rain storms and require much less intense storms to trigger such discharge. This is quite relevant considering that of the 6 test pits 4 had poor to awful infiltration rates (page A-3 Appendix A, PSDR). Also unmentioned is the fact that according to maps contained in the City’s own West Linn Surface Water Management Plan, the soils at the site are identified as Cornelius variant silt loam and as hydric and hydric inclusion soil (page 3-5 and figures 3.7 and 3.8 Surface Water Management Plan) soils with moderate to low permeability.

A note of protest must be made that the Carlton report was not made available to the public until March 10, 2016 despite repeated requests well in advance of this date for all relevant material, and in violation of City policy that the Staff report and all available documents be available 10 days prior to the first Planning Commission hearing. It is also worth noting that these tests were conducted on June 18th and 22nd 2015 when May and June were particularly dry and hot; June 2015 breaking records for the Portland area for days above 80 degrees (21days), days above 90 degrees (9 days), and dryness (sixth driest June on record), with the last measurable rainfall in West Linn falling on June 3rd (see article from Stuart Tomilison, Oregonian July 1, 2015 and rain gauge data from USGS website for Sylvania campus rain gauge).

Up to this point we have focused on the impacts to Sunset Creek. Of even greater concern is what effect the pond would have on the soil, trees, buildings and soil stability down slope from the pond. Assuming that the pond works as outlined in the PSDR, the pond will be infiltrating thousands of gallons an hour into the ground water down slope (we were not able to determine exact figures given difficulty of interpreting poorly explained data from PSDR). This will

indisputably be a significant change and increase in volume to the hydrology of this area. However, the potential impacts to this change are completely unaddressed by the applicant or the PSDR with the exception to the bland assurance that “No downstream impacts are anticipated” (PSDR page 6). Essentially the runoff of almost 3 acres (2.94) will be concentrated into one detention pond and except when the overflow pipe is activated all that water is expected to infiltrate into the ground at this site, yet there is no analysis as to what the effect will be on down slope groundwater? How can this possibly satisfy the approval and submittal requirements of CDC 55.130B, C and CDC 92.010E? We maintain that it clearly doesn’t. Even if the trees in Sunset Park were the only issue this would be a major concern. We estimate that a minimum of 25 significant firs in Sunset Park would be in the direct drainage path of this pond. If only half of those were killed due to root rot or blown over due to soil saturation during strong winds, the character of the Park would be severely damaged.

Having covered at least somewhat the many environmental concerns associated with the detention pond, let’s turn to its visual aesthetic effect. Most detention ponds are located in natural low areas often abutting stream ways or natural drainage areas. As a consequence whatever lack of visual appeal they have is mitigated by they’re being often out of the way and at least somewhat out of sight. In contrast, an open grassy play area on a gentle slope would be replaced by a huge (175 feet at its longest and 100 feet at its widest) drainage pond right out in the open facing Bittner Street. In addition, the pond would for safety reasons certainly need to be fenced (big pond, stormwater surges, small children - doesn’t really need elaboration). Combine these two elements and you have a visual blight of tremendous ugliness that will daily confront not just the residents of Bittner Street but everyone who travels along it. Not to mention the 9 significant and beautiful Douglas fir trees that would be removed in the pond’s construction. We feel that this clearly runs counter to the intent of CDC60.070 which states that the plan has “*Adequate area for aesthetic design treatment to mitigate any possible adverse effect from the use on surrounding properties and uses*”.

Both the environmental and aesthetic concerns can in our opinion be fully mitigated by adopting the suggestions found in the report of Malia Kupillas of Pacific Hydro-Geology, that the applicant redesign their project using a combination of permeable parking and green building design to obviate entirely the need for a detention pond.

VARIANCES:

To begin, CDC 75.050E states “*Not more than two Class II variances may be approved for any one lot or parcel in a continuous 12-month period*”. The applicant is applying for three Class II variances (see staff report page 3 and page 34 of applicant submittal), Class II variances to CDC sections 46.070, 46.150 and 52.300. This mandatory and unambiguous criterion is clearly not met. Either the applicant can reduce the number of variances requested by withdrawing and resubmitting the application or the Commission should deny the application.

CDC 75.020B (1) c is one of the approval criteria for Class II variances and states very clearly “*The need for the variance was not created by the applicant and/or owner requesting the variance*”. We adamantly contend that all three variance requests are transparently the creation of the applicant. The applicant’s decision to build the new school adjacent to the existing school rather than demolish the old school and construct the new school with a westerly rather than easterly orientation is the applicant’s choice, not the result of physical constraints such as lot size, shape, topography. As to the sign, there is nothing in the applicant’s submittal (pages 23-24 of applicants report) to explain what is driving the need for a sign that exceeds the relevant code standard by over 100% except applicant’s desire for a large sign.

CDC 75.020B (1) a another approval criterion for Class II variances states in part “*The variance is the minimum variance necessary to make reasonable use of the property*”. While the applicant does briefly discuss the variance requests (on page 32-34 of the applicant’s submittal), there is only the barest discussion of how the applicant might either fully comply with the code standards or at the least request variances much closer to the standards (the difference between 200 ft and 540 ft is quite a difference) if alternative site designs were considered. In particular there is no discussion of site designs that did not presuppose retaining the existing school during construction of a new school as a foregone conclusion. We maintain that most if not all opposition (with of course the resolution of the drainage issues) to the application would disappear if the new school was moved to a western orientation. We also strongly suspect that such a site orientation could be designed without the need for any Class II variances.

CONDITIONAL USE PERMIT:

As was already alluded to in the introduction and the discussion of variances, one driving factor in opposition to this particular application is the east and southward orientation of the project and the proposed transformation of a beloved amenity to the residents of Bittner Street and many other Sunset residents (and even other West Linn residents) into a visual blight that will significantly and permanently reduce their quality of life and their enjoyment of this area. In the three some months that the main author of this memorandum has visited this area, I have been amazed at the almost ridiculous amount of use this 1.6 acres enjoys and the level of affection the residents of Sunset have towards it.

Who better to know whether something is an important community amenity, a part of its collective identity and an import additive to its quality of life than the people who live by it? It is with that consideration in mind that we think the Commission should look at whether the application meets the requirements of CDC 60.070A (1) b “*adequate area for aesthetic design treatment to mitigate any possible adverse effect from the use on surrounding properties and uses*”. With a western orientation we believe that this criterion can be easily met. On the other hand, the current proposal fails to meet it and fails badly. The applicant may believe this is an example of design excellence, we politely but emphatically disagree.

CONCLUSION:

Regarding the stormwater detention pond, if only a small part of the concerns raised by this memorandum, as well as those of Malia Kupillas, Peggy Hennessy and others come to fruition, then this pond will be a major problem. If the more severe problems manifest themselves the consequences would be too unpleasant to want to contemplate. In either case remedies would range from the difficult and expensive to the ridiculously difficult and hideously expensive.

Appendix C of the PSDR is a document entitled Preliminary Operation and Maintenance Plan. On page 6 of that plan is the optimistic statement that "the preparer has worked closely with personnel to design a system that be easily maintained by maintenance staff". Unfortunately almost everything about the rest of this document belies that rosy assessment. Page 4-5 lists numerous maintenance requirements, and a page entitled "Simplified O&M Specifications" listing even more maintenance requirements. On page 4 is the requirement that the facility has to be inspected within 48 hour of every rain event in which an inch of rain falls in 24 hours. In 2015 this happened on 8 separate occasions (USGS Sylvania Campus rain gauge; 3 of these were for .99, .96 and .96, others were 2.15, 1.59, 2.41, 2.02 and 1.76). Also on page 4 is this helpful warning: "All components of the system as described above must be inspected and maintained frequently or they will cease to function effectively".

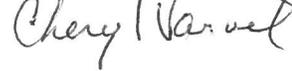
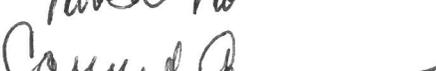
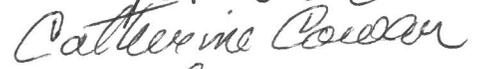
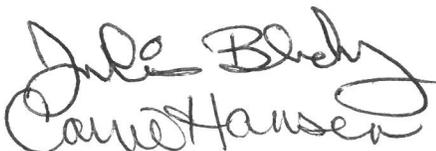
We included the above paragraph because it highlights a central premise about this pond plan, that it seems to us to have been devised as a direct challenge to Murphy's Law. The applicant has to be right about this detention pond all the time, we only have to be right about it once. And CDC 55.130B, C and 92.010E lie on the side of protection from adverse off-site impacts.

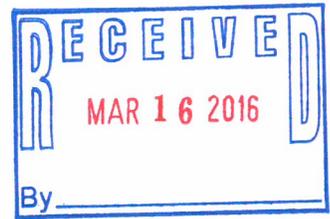
After a careful review of the concerns that have been raised and the various ways in which we believe that this application has failed to meet vitally important approval criteria, we urge the Planning Commission to deny this application; or the Planning Commission could allow the applicant to withdraw the proposal provided that there is a firm commitment from the applicant to work with the neighbors and Neighborhood Association to create a mutually acceptable plan.

Sincerely,



David Dodds





BEFORE THE PLANNING COMMISSION
FOR THE CITY OF WEST LINN, OREGON

In the Matter of WEST LINN-WILSONVILLE) FILE NOS: CUP-15-03, DR-15-17, and
SCHOOL DISTRICT 3JT's Application for) VAR-15-01/02/03
Conditional Use, Design Review, Director's)
Exception, and Class II Variance Approval to) SAVE OUR SUNSET PARK'S
allow construction of a new primary school) MEMORANDUM IN OPPOSITION
and related facilities in the R-10 zone.)

I. INTRODUCTION

This memorandum is filed on behalf of Save Our Sunset Park ("SOS Park"), which is comprised of a group of West Linn residents who live near Sunset Primary School and Sunset Park. The members of SOS Park are not opposed to replacement of the Sunset Primary School. However, they are opposed to the relocation of the school building to the area where the current playground and former portion of Sunset Park are located. If the new building was reconstructed in the footprint of the existing school, the adverse impacts, including potential flooding, threats to Douglas Fir trees, and increased risk of landslides could be minimized or avoided. In addition, there would be no need for the Director's Exceptions or all of the requested Class II Variances, which by definition, are inconsistent with the City's development code. Accordingly, SOS Park respectfully requests that this application, as proposed, be denied. Or, in the alternative, approval should be conditioned upon constructing the new school building on the approximate footprint of the existing building, elimination of the proposed storm water infiltration pond ("SWIP"), and reduction in the amount of impervious surfaces to address the offsite drainage issues, including adverse impacts on mature Douglas Fir trees, flooding, and potential landslides .

II. PRELIMINARY MATTERS

A. Postponement of Public Hearing

The March 16, 2016 public hearing should be postponed because the Carlson Report, which is part of the Staff Report, was not available to the public until March 11, 2016 – less than seven days before the hearing. Members of SOS Park have been monitoring the Sunset Primary School application. The partial Staff Report was available at least seven days prior to the initial evidentiary hearing; however, the available version was incomplete because it failed to include the Carlson Geotechnical infiltration testing results ("Carlson Report"). This information is important because SOS Park has significant concerns regarding offsite impacts of storm water drainage and had hired Milia Kupillas, an expert hydro-geologist with Pacific Hydro-Geology, Inc., to review the proposal and analyze the impacts.

On March 3, 2016, a member of SOS Park made a specific request for information regarding the location of the infiltration test pits, but was told by the City Planner that if it was not in the application, the City does not have it. A week later, on March 10, 2016, the same person made a second request for the Carlson Report and the same City Planner located the 6-page Carlson Report and arranged for an electronic version to be emailed to the SOS Park member on March 11, 2016 – five days before the public hearing. Prior to March 11, 2016, the Carlson Report was not available to the public.

The Carlson Report was listed as Appendix A to the Preliminary Stormwater Drainage Report (at page 174 of the Staff Report), but the reference was followed by a blank page. The Applicant submitted the Preliminary Stormwater Drainage Report as Exhibit F to the Sunset

Primary School application, and the Staff Report incorporated the application, as indicated in the table of contents.

ORS 197.763(4) (a) provides that

[a]ll documents or evidence relied upon by the applicant shall be submitted to the local government and be made available to the public.

Due to the previous unavailability of the Carlson Report, SOS Park made a formal request for postponement of the hearing to allow sufficient time to address the Applicant's evidence. Assistant City Attorney Megan Thornton stated that the Carlson Report "was not submitted to the Planning Department as part of the application by the applicant; therefore, it was not relied upon by the applicant." However, it was clearly part of the application – the Carlson Report was Appendix A to Exhibit F of the Sunset Primary School Application.

Ms. Thornton also states "planning staff did not require the Carlson Report to deem the application complete, nor did staff rely on the Carlson Report to determine that the application met any of the approval criteria in the staff report." The information in the Carlson Report relates to offsite impacts of storm water which is relevant to compliance with CDC 55.130 (B) as well as 92.010 (E), both of which are mandatory approval criteria for this application.

ORS 197.763 (4) requires that all documents upon which the applicant relies be made available to the public, and that the staff report be available at least seven days prior to the public hearing. Not only is the Carlson Report relevant evidence relied upon by the applicant, but it was specifically made part of the Staff Report. The table of contents for the Staff Report includes, "[EXHIBIT] PC-3 APPLICANT'S SUBMITTAL 61-225." The Carlson Report is referenced at page 174. Accordingly, the entire Staff Report, including the Carlson Report, should

have been – but was not - available seven days prior to the public hearing. Therefore, the initial evidentiary hearing should have been postponed to allow the parties sufficient time to review and analyze the omitted information.

It is not sufficient to allow a continuance after the initial public hearing has been opened because SOS Park has already been denied the opportunity to prepare adequately for the initial hearing. SOS Park has hired its own expert hydro-geologist, Malia Kupillas, to review and analyze the project, as proposed. The untimely disclosure of the Carlson Report has resulted in substantial prejudice to the members of SOS Park because the applicant's entire submittal (which was part of the Staff Report) was not available a full seven days prior to the hearing.

B. Continuance

If the Planning Commission proceeds with the public hearing on March 16, 2016, SOS Park requests a formal continuance of the hearing, as allowed by ORS 197.763 (4) (b) and 197.763 (6), to provide a reasonable opportunity to respond to new information, including but not limited to the Carlson Report regarding infiltration testing.

C. Open Record

In any event, at a minimum, if the Planning Commission chooses not to continue the hearing, then pursuant to ORS 197.763 (4) (b) and (6), SOS Park hereby requests that the record remain open for a period of at least fourteen (14) days to provide an adequate opportunity to respond to the information presented at the public hearing.

III. ARGUMENT

A. Purpose of Conditional Use Review

The purpose of conditional use review is to provide standards and procedures under which conditional uses may be permitted, enlarged, or altered if the site is appropriate and if other conditions can be met. CDC Section 60.010. Schools are allowed as conditional uses in the R-10 zone, but the site must be appropriate for the proposed design and adverse impacts on surrounding properties should be mitigated.

Here, the applicant proposes to alter the site in a manner that will adversely affect the surrounding residential and park properties, including impacts on Douglas Fir trees, increased flooding during storm events, potential landslides, and increased residential intrusion. These adverse impacts could be minimized or avoided by reconstructing the school buildings on the approximate footprint of the existing building, eliminating the storm water infiltration pond (“SWIP”), creating pervious parking areas, creating rain gardens around the new buildings and allowing storm water from impervious surfaces to be evenly distributed across the site.

B. Approval Criteria

CDC 60.070 sets forth the primary approval criteria for conditional uses. The burden of proof is on the Applicant to show compliance with each applicable criterion and failure to meet a single mandatory approval standard requires denial.

- 1. CDC Section 60.070 (1) (b) requires that the site size and dimensions provide adequate area for the needs of the school and aesthetic design treatment to mitigate any possible adverse effect on surrounding properties.**

Under the Applicant's proposed plan (locating a new building on the former playground and a portion of Sunset Park), the size and dimensions of the site are not adequate, as evidenced by the requested Director's Exception to reduce the setback requirement. In addition, the orientation of the proposed multi-story building will clearly intrude upon the privacy currently enjoyed by the residents of the single family homes located directly across a narrow street, with no buffer between the uses.

Construction of the new building in the approximate location of the old footprint would mitigate this significant intrusion on surrounding properties. The existing building is set back from the residential street and the existing single family homes. Moreover, it is buffered by open space and parking areas. Furthermore, construction of the new building on the old footprint will not require Director's Exceptions to the setback requirements, so it would be more consistent with the West Linn Community Development Code.

Because construction of the new school in the approximate location old footprint would mitigate some of the adverse impacts on surrounding uses while meeting the needs of the school, the Applicant's proposed location and current aesthetic design fail to meet the requirements of CDC 60.070 (1) (b).

2. CDC Section 60.070 (2) requires that the characteristics of the site be suitable for the proposed use considering size, shape, location, topography, and natural features.

The Applicant has failed to carry its burden to show compliance with CDC 60.070 (2). While the site may be generally appropriate for use as a primary school, the proposed location of the development on the site is not suitable because the new school building and storm water infiltration pond would be constructed where the current playground and a portion of Sunset Park

are located. This plan will result in significant adverse impacts, onsite and offsite, as a result of redirecting the storm water.

Based on review of the current Application, SOS Park's expert hydro-geologist, Malia Kupillas, concluded that the proposed configuration of the new primary school and SWIP will have the following impacts caused by concentrating all of the surface water into one small area for infiltration:

1. The amount of water that flows downgradient will increase and impact 14 trees within the area north of the bird houses/property line and a minimum of 6 Douglas Fir trees in the park, for a minimum of 20 trees. The Douglas fir trees will be more susceptible to disease or blow down, because the soils will be wetter around their roots. Douglas fir trees do not like wet roots.
2. The overflow from the SWIP will increase flooding and shorten the travel time for water to reach Sunset Creek during large storm events.
3. The back yards of the nearby homes, adjacent to the park on the east, will become wetter with potential flooding if the houses have basements and potentially trigger shallow landslides.
4. Existing shallow landslide areas will be more susceptible to reactivation.
5. Other areas down-slope of where the water from the SWIP flows on top of the bedrock may develop shallow landslides.

A copy of Pacific Hydro-Geology, Inc.'s March 15, 2016 Analysis is attached as Exhibit

1. The (location) of the onsite development results in adverse impacts on existing trees (natural features) and slope of the property (topography) which dictates its drainage patterns render the site unsuitable for the proposed plan. The Applicant plans to relocate the school building, create more impervious surfaces, and construct a SWIP which threatens the existing trees and creates a greater risk of floods and landslides. Therefore, CDC 60.070 (2) is not met.

3. **CDC Section 60.070 (3) requires a finding that approval will result in provision of a facility that is consistent with the overall needs of the community.**

While a new school may be consistent with the overall needs of this community, approval of this application, as proposed, will be adverse to the needs of the community because it will put mature Douglas Fir trees at risk – onsite and offsite. In addition, it will increase flooding and the potential for landslides.

If the new school building was built in the same approximate location as the old building, if a pervious parking area was installed, and if storm water was evenly distributed across the site, the new school building would be much more consistent with the overall needs of the community. SOS Park's expert hydro-geologist has recommended that impervious surfaces should be minimized by creating pervious parking areas. She also suggests that storm water from impervious surfaces should be evenly distributed across the site, rather than concentrated in an infiltration pond. Again, SOS Park is not opposed to construction of a new school. However, the members of SOS Park believe the project can be accomplished by reconstruction of the building in the same location, creation of pervious parking areas, and distribution of storm water across the entire site. Accordingly, the proposal does not satisfy the requirements of CDC 60.070 (3) because it is not consistent with the overall needs of the community.

4. **CDC 60.070 (6) requires satisfaction of the provisions of chapter 55 of the CDC as a conditional use approval criterion and the Applicant has failed to meet the requirements of CDC 55.130 (B).**

CDC 55.130 (B) requires that a registered civil engineer prepare a plan and statement that is supported by factual data that clearly shows that there will be no adverse impacts from increased intensity of runoff off site, or identify all off-site impacts and measures to mitigate those impacts.

The plan and statement shall, at a minimum, determine the off-site impacts from a 10-year storm. This is a mandatory approval standard and neither the Applicant nor Staff address it as such. Furthermore, as SOS Park's expert hydro-geologist has demonstrated, there will, indeed, be off-site impacts resulting from the current proposal, including impacts to mature Douglas Firs, flooding, and potential landslides. The hydro-geologist has also identified ways to avoid or mitigate those impacts, but none are proposed. The applicant has not submitted a plan or supported statement determining the off-site impacts from a 10-year storm. Because the Applicant has not demonstrated compliance with this mandatory approval criterion, the application, as proposed should be denied.

5. The Application, as proposed, fails to meet the requirements of CDC 92.010 (E).

CDC 92.010 lists the public improvements required for all developments and the Staff Report does include chapter 92, generally, as an applicable approval criterion for this application. 92.010 (E) requires that a registered civil engineer prepare a plan and statement which shall be supported by factual data clearly showing that there will be no adverse impacts from increased intensity of runoff off site of a 100-year storm, or the plan and statement shall identify all off-site impacts and measures to mitigate those impacts commensurate to the particular land use application. Mitigation measures shall maintain pre-existing levels and meet build out volumes, and meet planning and engineering requirements.

Staff has determined compliance with this standard based on the following finding:

Staff Finding 136:

The applicant has submitted a Preliminary Stormwater Report that complies with City of West Linn Public Works Standards. The applicant shall install improvements to meet the Standards per Condition of Approval 2, including the

proposed stormwater facility and overflow pipe the length of Bittner Street to connect at the existing infrastructure at Long Street. Subject to the Conditions of Approval, this criterion is met.

Staff appears to find that this standard can be met by installation of the stormwater facility and overflow pipe. However, there is no evidence to support a finding that there will be no adverse offsite impacts. Because no adverse impacts have been identified, there are no measures to mitigate those impacts which have been identified by a civil engineer. Rather the engineer's report merely concludes that "no downstream impacts are anticipated." Staff Report at 162. This statement is not supported by substantial evidence. As discussed above, SOS Park's expert hydro-geologist has shown that there will be adverse downstream impacts, including impacts to mature Douglas Firs, flooding, and potential landslides. Moreover, she has identified measures which could mitigate those impacts by redesigning the project.

The Applicant cannot meet this standard without addressing the increased intensity of offsite runoff from a 100-year storm. Therefore, this standard is not met.

6. CDC 75.050 (E) restricts the total number of Class II Variances to no more than two per year.

CDC 75.050 (E) provides:

Not more than two Class II variances may be approved for any one lot or parcel in a continuous 12-month period.

The Applicant has requested three Class II Variances at the same time. The City cannot approve more than two without violating CDC 75.050 (E). Therefore, the application, as proposed, should be denied.

IV. PROPOSED CONDITIONS

SOS Park does not support approval of this conditional use application, as proposed; however, if approved, SOS Park respectfully requests the imposition of the following conditions as mitigation measures to address the adverse impacts identified above and supported by the attached hydro-geological analysis, including but not limited to threats to mature Douglas Fir trees, increased potential flooding, potential landslides, and negative impacts on surrounding residential properties.

1. Applicant shall construct the new school building in the approximate location of the footprint of the existing school building.
2. Applicant shall eliminate the Storm Water Infiltration Pond and allow the storm water to disburse through the entire site.
3. Applicant shall construct the parking area with permeable material.
4. Applicant shall install rain gardens around the new buildings.

V. CONCLUSION

Because the entire Staff Report, including the Carlson Report, was not available seven days prior to the hearing, SOS Park respectfully requests that the hearing be postponed to allow additional time for the public to review and analyze the proposal. Alternatively, if the hearing does proceed, SOS Park requests a continuance pursuant to ORS 197.763 (6). Or, if both of these requests are denied, SOS Park requests that the record remain open for a minimum of fourteen (14) days.

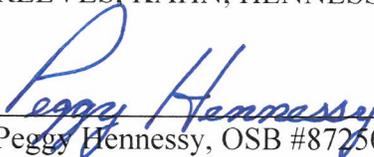
Alternatively, because the proposed conditions are necessary to achieve compliance with mandatory approval criteria, SOS Park respectfully requests that approval of this project be specifically conditioned upon the following conditions:

1. Applicant shall construct the new school building in the approximate location of the footprint of the existing school building.
2. Applicant shall eliminate the Storm Water Infiltration Pond and allow the storm water to disburse through the entire site.
3. Applicant shall construct the parking area with permeable material.
4. Applicant shall install rain gardens around the new buildings.

DATED this 16th day of March, 2016.

Respectfully submitted,

REEVES, KAHN, HENNESSY & ELKINS



Peggy Hennessy, OSB #872505
Attorney for the Save Our Sunset Park

Pacific Hydro-Geology Inc.

18487 S. Valley Vista Rd.
Mulino, OR 97042
(503) 632-5016

March 15, 2016

City of West Linn Planning Commission
22500 Salamo Road #1000
West Linn, OR 97068

RE: File CUP-15-03/DR-15-17/VAR-15-01/02/03. New Sunset Primary School and impacts to Sunset Park and downgradient property.

To City of West Linn Planning Commissioners:

The school district is planning on building a new primary school where the current playground and a portion of Sunset Park are located. The existing school facility will then be torn down and additional parking built where the school is currently located. The majority, if not all, of the runoff from precipitation on the all impervious surfaces is to be directed to a storm water infiltration pond (SWIP) located on the existing playground at Sunset Park and north of the birdhouses. It should be noted that this proposed new development increases the amount of impervious surfaces because there will be more parking spaces. The SWIP will hold 9,230 cubic feet (69,040 gallons) of water with overflow to a new public storm main on Bittner Street that discharges into Sunset Creek. Infiltration may occur at rates ranging from 1.5 to 12 inches per hour based on the design infiltration rate and observed infiltration rates from 6 infiltration tests.

On March 3, 2016, Malia Kupillas from Pacific Hydro-Geology (PHG) visited the park and made observations that will be discussed under the section titled "Site Visit." Malia also made a video that will be presented by Noelle Bledy. Malia's qualifications are enclosed with this letter. Malia has also reviewed the Preliminary Storm Water Report, building plans, West Linn Storm Water Management Plan, and other relevant planning, geologic and soils reports. This report also presents data not found in those reports that needs to be considered as a part of the planning process.

PHG has concluded, based on the above information, that the proposed configuration of the new primary school and SWIP will have the following impacts caused by concentrating all of the surface water into one small area for infiltration:

- The amount of water that flows downgradient will increase and impact 14 trees within the area north of the bird houses/property line and a minimum of 6 Douglas fir trees in the park, for a minimum of 20 trees. The Douglas fir trees will be more susceptible to disease or blow down, because the soils will be wetter around their roots. Douglas fir trees do not like wet roots.
- The overflow from the SWIP will increase flooding and shorten the travel time for water to reach Sunset Creek during large storm events.
- The backyards of the nearby homes, adjacent to the park on the east, will become wetter with potential flooding if the houses have basements and potentially trigger shallow landslides.
- Existing shallow landslide areas will be more susceptible to reactivation. See Figures 1 and 2 and section titled "Shallow and Deep Landslide Potential" for additional discussion of landslides.
- Other areas downslope of where the water from the SWIP flows on top of the bedrock may develop shallow landslides.

Site Visit:

On March 3, 2016, Malia Kupillas from PHG visited the park and made the following observations:

First, the topography of the park forms a gentle swale from northwest to southeast. Photo 1 shows this swale and the steepness of the slope looking northwest towards the proposed SWIP pond. The majority of the water from the SWIP will follow the slope of the topography and flow to the east or southeast towards areas that have been mapped as intermediate risk for shallow landslides (See section titled "Shallow and Deep Landslide Potential" for additional discussion of landslides).



Photo 1: Looking northwest from near Long St. and the tennis/basketball courts.

Second, many of the Douglas fir trees in the park have buttressed tree roots, which indicate steep and/or wet slopes. Wet slopes are consistent with the hydric soils shown on Figure 3.8 of the West Linn Surface Water Management Plan, 2006. These buttressed tree roots can be seen in Photo 1 above and Photos 2 and 3 below.

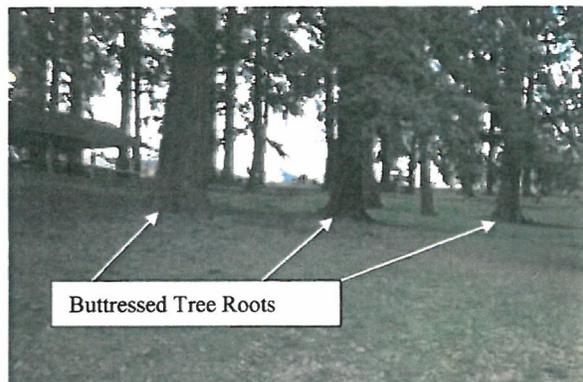
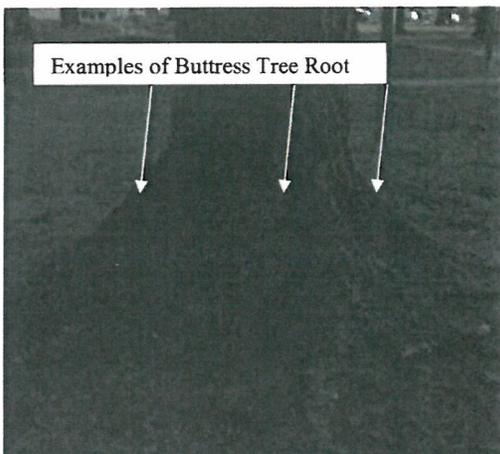


Photo 2 (left). Buttressed roots on Douglas fir (tree number 4446) in park.
Photo 3 (right). Three Douglas fir trees with buttressed roots.

Third, just the filling of the wading pool has changed the hydrology of the site and created areas with saturated soils days after rain. Infiltrating storm water from the pond will increase the amount of saturated of soils. Photo 4 shows areas of saturated soils below the filled wading pool. Photo 5 shows a close-up the saturated soils.



Photo 4. View looking south from the former wading pool towards the playground. The areas of saturated soils can be seen more easily in the playground area where storm water will try to infiltrate.



Photo 5. View of saturated soils more visible in the playground area. The Douglas fir trees below the playground have buttressed roots.

Fourth, the current plan (Storm Water Drainage Report, January 2016) is to pipe excess water from the pond directly to Sunset Creek at a time when surface water flow will be at its maximum. This will increase

the peak flow level and flooding of properties adjacent to Sunset Creek, which does not meet the West Linn Storm Water Plan Goals (2006) on Pages 2-5 and 2-6 of not influencing the hydrograph of the watershed and prevent new development from increasing the flood threat. In addition, moving all or the majority of the storm water runoff to an infiltration pond will also significantly alter the timing, volume and path the storm water will take to reach the Willamette River through the McLean watershed.

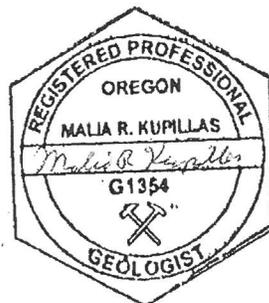
Land Use Planning Codes:

PHG has reviewed Community Development Code 92.010E, and Chapter 55.130B,C (design review) and found that the applicant has not fulfilled all the analyses required for offsite impacts.

Shallow and Deep Landslide Potential:

The Department of Geology and Mineral Industries (DOGAMI) has mapped this area using Lidar to evaluate landslide hazards and risks and published the information in 2013 as Open-File Report O-13-08 by Burns, Mickelson, Jones, Pickner, Hughes, and Skeeter. This report and corresponding plates are available from DOGAMI's website under publications. The primary school and park are both shown on Plates 45 and 46 of the report for shallow and deep landslides. The areas east of the park where the infiltrated water will flow are shown on Plates 51 and 52. Figure 1 shows an enlarged area of Plates 45 and 51 combined to provide a better picture of where the existing and/or moderate risk for shallow landslides have been mapped, and Figure 2 combines Plates 46 and 52 for the deep landslides. Both of these figures show there are areas nearby or adjacent to the park at intermediate risk for landslides with the current hydrology. Thus, this is an area where it is not good to concentrate storm water into a single area and increase the amount of impervious surface. This is an area where unstable slopes should be avoided and the existing hydrology should be maintained, which is consistent with the West Linn Storm Water Management Plan. Goal 7 should also apply here with areas adjoining the park that are subject to the natural disaster of landslides. Therefore, impervious surfaces should be minimized by creating pervious parking areas, and storm water from impervious surfaces should be evenly distributed across the site. We recommend that the applicant adopt other viable alternatives that would minimize the risks from adverse impacts to the park and adjacent residents. We suggest rain gardens around the buildings, combined with permeable parking, will eliminate the need for the SWIP and maintain current hydrology. These viable alternatives would be more consistent with meeting the requirements of the West Linn Storm Water Management Plan, Community Development Code 92.010E, and Chapter 55.130B,C (design review).

Sincerely,



Malia R. Kupillas, R.G., C.W.R.E.

Expiration Date 5/31/2016

Enclosures: Figure 1. Site Location Map and Shallow Landslide Risk
Figure 2. Site Location Map and Deep Landslide Risk
Statement of Qualifications

MALIA ROSNER KUPILLAS, R.G., C.W.R.E.
Pacific Hydro-Geology Inc.

PROFESSIONAL REGISTRATIONS:

Licensed Hydrogeologist, Washington (914) - 2002
Certified Water Rights Examiner, Oregon (60772WRE) - 1999
Registered Professional Geologist, Oregon (G1354) - 1993

PROFESSIONAL COMMITTEES:

Served six years on the State of Oregon's Ground Water Advisory Committee and was chair for two years
Oregon Water Resources Department Rules Advisory Committee for Well Construction
Oregon Geology Map Advisory Committee

PROFESSIONAL HISTORY:

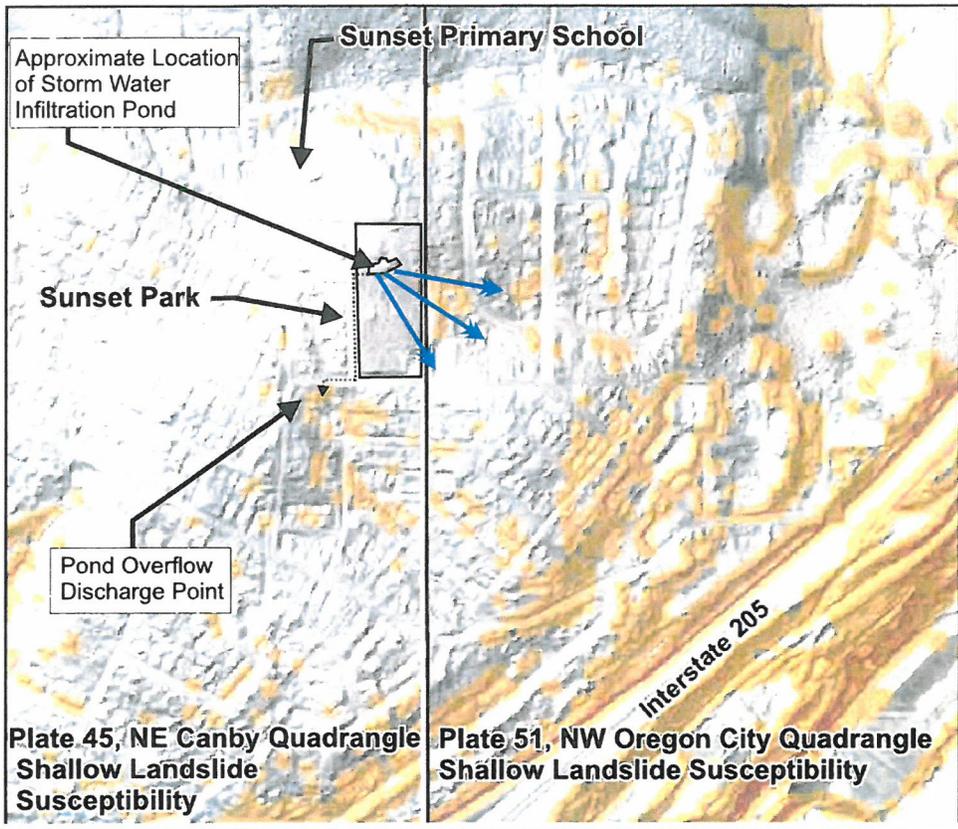
Pacific Hydro-Geology Inc., President, 5/1994 to Present
ATEC Associates, Inc., Staff Scientist, 5/1994 to 2/1995
Landau Associates, Inc., Senior Staff Hydrogeologist, 8/1988 to 2/1994
Kansas Geological Survey, Groundwater Section, Research Assistant, 9/1986 to 6/1988
Ground Water Associates, Subcontractor, June 1986

ACADEMIC/TRAINING HISTORY:

Certified Water Rights Examiner Workshop, Sponsored by the Oregon Water Resources Department - Fall, 2003 through 2016
Wetland Sedges, Grasses, and Rushes, Portland State University - 2000
Wetland Mitigation, Construction, and Installation, Portland State University - 2000
Native Plant Identification and Use, Oregon State Extension Service, Tree School - 1999
Rare Plant Identification and Habitat, Oregon State Extension Service, Tree School - 1999
How to Evaluate Wetland Functions for Wetland Planning Workshop, Society of Wetland Scientists - 1997
DEQ Certificate of Training for Wellhead Protection Plan - 1996
Basic Wetland Delineation Training Course, Portland State University - 1996
Managing Forest Riparian Areas, Field Exercise, Oregon State University Extension Service - 1996
Managing Your Woodlands, Oregon State University Extension Service - 1995
Protecting Stream Corridors Workshop - Oregon State University Extension Service - 1995
DEQ Soil Matrix Cleanup License, Oregon (14262) - 1994 to 1996
Behavior of Dissolved Organic Contaminants in Groundwater, University of Waterloo - 1992
OSHA Training
 OSHA 8-Hour Refresher Course - 2016
 OSHA 8-Hour Hazardous Waste Supervisor Training - 1990
 OSHA 40-Hour Hazardous Waste Training - 1988
M.S. in Geology (Hydrogeology), University of Kansas, Lawrence, Kansas - 1988
 Thesis: Stratigraphy of the Quaternary Alluvium in the Great Bend Prairie, Kansas.
B.S. in Geology (minor in mathematics), Wichita State University, Wichita, Kansas - 1986

PUBLISHED WORKS:

Geology near Blue Lake County Park, Eastern Multnomah County, Oregon. Oregon Geology. 1993. Bet, J. N. and Rosner, M. L. (Describes and maps the subsurface stratigraphy in east Multnomah County).

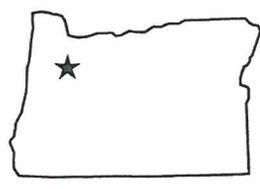
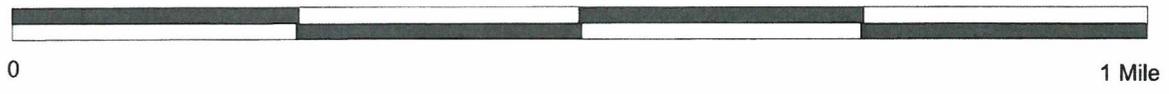


Contributing Factors *	Final Hazard Zone		
	High	Moderate	Low
① Factor of Safety (FOS)	less than 1.25	1.25 - 1.5	greater than 1.5
② Landslide Deposits & Head Scarps (Shallow)	included	—	—
③ Buffers	2H:1V (head scarps)	2H:1V (FOS less than 1.5)	—

Direction of surface and subsurface flow



Scale: Enlarged from a scale of 1:8,000 to 1:773



Source: Landslide Hazard and Risk Study of Northwestern Clackamas County, Oregon. State of Oregon Oregon Department of Geology and Mineral Industries, Open-File Report O-13_08, Plates 45 and 51.

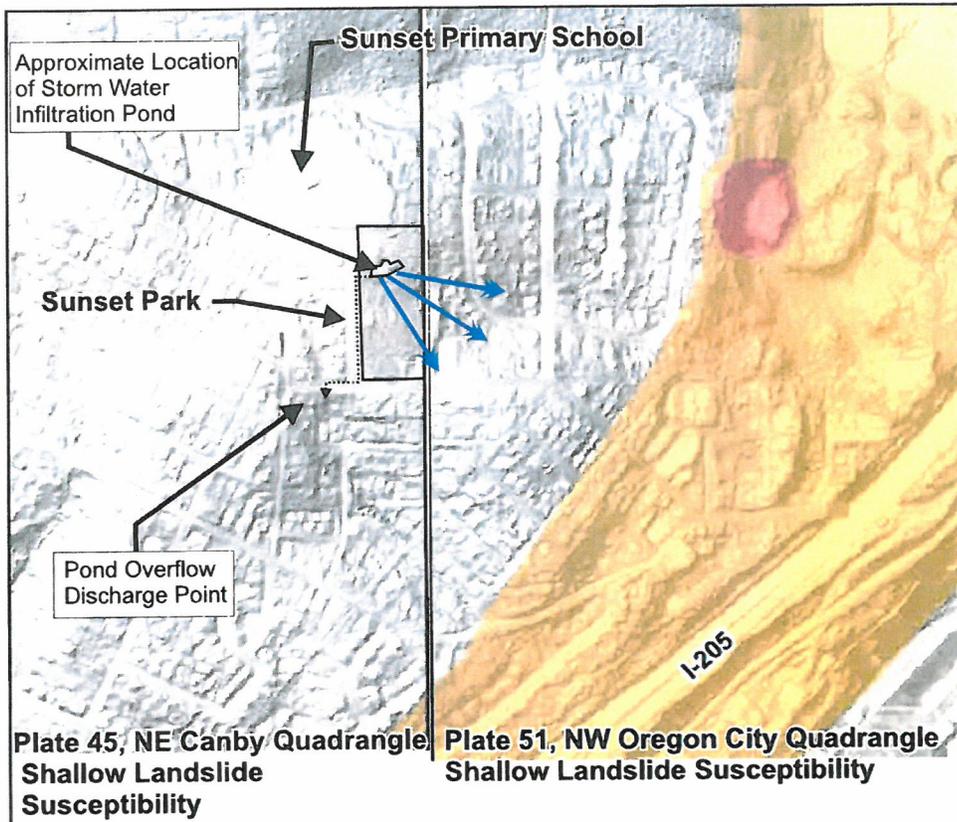
Figure 1. Site Location Map and Shallow Landslide Risk

Proposed Sunset Primary School Storm Water Infiltration Pond

Pacific Hydro-Geology Inc.

03/2016

SunsetParkFig1Topo.cdr



Contributing Factors *	Final Hazard Zone		
	High	Moderate	Low
① Factor of Safety (FOS)	less than 1.25	1.25 - 1.5	greater than 1.5
② Landslide Deposits & Head Scarps (Shallow)	included	—	—
③ Buffers	2H:1V (head scarps)	2H:1V (FOS less than 1.5)	—

 Direction of surface and subsurface flow



Scale: Enlarged from a scale of 1:8,000 to 1:773



0

1 Mile



Source: Landslide Hazard and Risk Study of Northwestern Clackamas County, Oregon. State of Oregon Oregon Department of Geology and Mineral Industries, Open-File Report O-13_08, Plates 45 and 51.

Figure 1. Site Location Map and Deep Landslide Risk

Proposed Sunset Primary School Storm Water Infiltration Pond

Pacific Hydro-Geology Inc.

03/2016

SunsetParkFig1Topo.cdr

MALIA ROSNER KUPILLAS, R.G., C.W.R.E.
Pacific Hydro-Geology Inc.

PROFESSIONAL REGISTRATIONS:

Licensed Hydrogeologist, Washington (914) - 2002
Certified Water Rights Examiner, Oregon (60772WRE) - 1999
Registered Professional Geologist, Oregon (G1354) - 1993

PROFESSIONAL COMMITTEES:

Served six years on the State of Oregon's Ground Water Advisory Committee and was chair for two years
Oregon Water Resources Department Rules Advisory Committee for Well Construction
Oregon Geology Map Advisory Committee

PROFESSIONAL HISTORY:

Pacific Hydro-Geology Inc., President, 5/1994 to Present
ATEC Associates, Inc., Staff Scientist, 5/1994 to 2/1995
Landau Associates, Inc., Senior Staff Hydrogeologist, 8/1988 to 2/1994
Kansas Geological Survey, Groundwater Section, Research Assistant, 9/1986 to 6/1988
Ground Water Associates, Subcontractor, June 1986

ACADEMIC/TRAINING HISTORY:

Certified Water Rights Examiner Workshop, Sponsored by the Oregon Water Resources Department - Fall, 2003 through 2016
Wetland Sedges, Grasses, and Rushes, Portland State University - 2000
Wetland Mitigation, Construction, and Installation, Portland State University - 2000
Native Plant Identification and Use, Oregon State Extension Service, Tree School - 1999
Rare Plant Identification and Habitat, Oregon State Extension Service, Tree School - 1999
How to Evaluate Wetland Functions for Wetland Planning Workshop, Society of Wetland Scientists - 1997
DEQ Certificate of Training for Wellhead Protection Plan - 1996
Basic Wetland Delineation Training Course, Portland State University - 1996
Managing Forest Riparian Areas, Field Exercise, Oregon State University Extension Service - 1996
Managing Your Woodlands, Oregon State University Extension Service - 1995
Protecting Stream Corridors Workshop - Oregon State University Extension Service - 1995
DEQ Soil Matrix Cleanup License, Oregon (14262) - 1994 to 1996
Behavior of Dissolved Organic Contaminants in Groundwater, University of Waterloo - 1992
OSHA Training
 OSHA 8-Hour Refresher Course - 2016
 OSHA 8-Hour Hazardous Waste Supervisor Training - 1990
 OSHA 40-Hour Hazardous Waste Training - 1988
M.S. in Geology (Hydrogeology), University of Kansas, Lawrence, Kansas - 1988
 Thesis: Stratigraphy of the Quaternary Alluvium in the Great Bend Prairie, Kansas.
B.S. in Geology (minor in mathematics), Wichita State University, Wichita, Kansas - 1986

PUBLISHED WORKS:

Geology near Blue Lake County Park, Eastern Multnomah County, Oregon. Oregon Geology. 1993. Bet, J. N. and Rosner, M. L. (Describes and maps the subsurface stratigraphy in east Multnomah County).