

LAND USE PRE-APPLICATION CONFERENCE Thursday, March 6, 2014

City Hall 22500 Salamo Road

Willamette Conference Room

10:00 am Proposed pedestrian trail along the Willamette River from Bernert

Landing boat ramp east to the West Linn Paper Company pond.

Applicant: Ken Worcester, West Linn Parks and Recreation Dept.

Subject Property Address: See approximate location below in red

Neighborhood Assn: Willamette

Planner: Tom Soppe Project #: PA-14-13



NOTE: Photo represents approximate area under consideration and is not to scale.

PRE-APPLICATION CONFERENCE

	THIS SEC	TION FOR STAFF COMPL	ETION	
CONFERENCE DATE:	6/14	TIME: 10:00 am	PROJECT #: PA -14-13	
STAFF CONTACT:	1 JOPPE		FEE:	
be scheduled for application fee, a of the conference	a conference, this f and accompanying m e date. Twenty-four	orm including property of laterials must be submitt hour notice is required t	days of each month. In order to wner's signature, the pre- ed at least 14 days in advance to reschedule. Bernert Landing boat ramp, east to West Linn	
•		Paper Co. pond		
properties. We hope to a following approvals will	also obtain an easement from de needed: 1) Willamette Gre	West Linn Paper Co. to extend the tr	SE and Clackamas County WES-owned rail onto their property. It is believed that the n Review, 3) Drainageway Permit, 4) flood as expired.	
Applicant's Name:	West Linn Parks an	d Recreation Department	t (Ken Worcester)	
Mailing Address:	22500 Salamo Road, West Linn, OR 97068			
Phone No:	(503) 557-4700		cester@westlinnoregon.gov	
	ditional materials rel <u>in size</u> depicting the	following items:	cluding a site plan on paper <u>up</u> om the site, if applicable	
> Scale			ing trees, highly recommend a	
Property dimer	nsions	tree survey	,	
Streets abutting the property		Location of creel	Location of creeks and/or wetlands, highly	
	out, design and/or		etland delineation	
building ele Easements (acc	evations ess, utility, all others)	Location of exist	ing utilities (water, sewer, etc.)	
Have there been any c	hanges to the applicable ap		d review process which we will need to	
consider? is there any	advice the planning staff h	as to expedite the processing and	approval of the request?	
prepare for the p	re-application confe		e subject property in order to 02/20/20/4 Date	
Property owner's signature			Date	
Property owner's n	nailing address (if diffe	rent from above)		

To: City of West Linn Planning Department

CC: Grant Evenhus, Otak, Inc.

From: Ken Worcester, West Linn Parks and Recreation Director

Date: 2/20/2014

Re: Willamette River Trail Pre-application Conference

In 2005, the City of West Linn Parks Department received approval of the following permits for a pedestrian trail on the south side of Volpp Street from the east end of the Bernert Landing boat ramp facility to the West Linn Paper Company water treatment pond property:

Class II Parks Design Review

Willamette River Greenway Permit

Chapter 30 Wetland/Drainageway Permit

Floodplain Management Permit

Those approvals have since expired. The Parks Department would to reapply for these permits with a new combined application which would be quite similar to what had previously been approved. We would like to schedule a pre-application conference to discuss with the Planning Department the new application. In particular, we are interested in whether there have been changes to the applicable approval criteria or to the required review process which will need to consider.

I have enclosed materials from our 2005 application for your review as part of the pre-app request. These materials include the preliminary plan set and the application narrative. We would appreciate any advice that the Planning Department can provide with regard to how those materials need to be updated or supplemented as part of our current request.



Planning and Building

August 23, 2005

Brad Kilby, OTAK 17355 SW Boones Ferry Road Lake Oswego, OR 97035

Re: Completeness Review for DR-05-12 et. al. Willamette River Trail

Dear Brad:

In reviewing the application, there are three issues I wish to raise with you for discussion and resolution prior to scheduling a Planning Commission hearing on this application:

- You state that the viewing platforms are a "future" phase of the project, but also imply that they are approved by this application. While the location of the viewing platforms is clear. their design is not. I would propose that you prepare a "conceptual" platform, with wording that the precise design of each platform may vary according to individual site conditions. By doing this, you can avoid a second trip to a public hearing at a later date.
- 2. The proposal is for a long dead-end trail (I am assuming that negotiations with PGE are continuing, but that no connection to Willamette Falls Drive to the west has been secured as of yet). This raises issues of security, particularly emergency access. Please consider the necessity of providing a vehicle turnaround near the trail's eastern terminus, if not for fire vehicles, then at least for police or other maintenance vehicles that may need to use the trail as a makeshift roadway.
- While adequate parking exists at the primary trail access, you are proposing two additional trailheads, with no additional off-street parking. Please investigate the possibility of providing a small gravel area for two or three cars at these locations.

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Once we discuss these issues, I will schedule a hearing before the West Linn Planning Commission on your application.

Sincerely,

Gordon Howard Senior Planner

Devoler Honard

c: Ken Worcester, Director, West Linn Parks and Recreation

P:development review/completeness/incompl--DR 05-14 Gramor Phase 4

September 1, 2005

Gordon Howard City of West Linn 22500 Salamo Road #1000 West Linn, OR 97068

Re: Willamette River Trail — Otak Project No. 12884

Dear Gordon:

I am writing in response to your letter of August 23, 2005 regarding the three issues addressed below in your review of the Willamette River Trail project. With regard to the proposed viewing platforms that would be constructed in a future phase, I am enclosing pictures of a viewing platform constructed at Maddax Woods Park. The Parks Department would propose to build similar type platforms in the same fashion as identified in the photos. Of course, the size and construction type would be dependent on the location along the trail. Our proposed location and size would be sensitive to the surrounding environmental limitations. It is not our intent to disturb plant and wildlife habitat, but rather to provide a location where they can be observed and appreciated by the patrons of the trail.

Your second point is noted. A revised plan is provided that would locate an emergency turnaround at the end of the trail. The emergency turnaround will be either a small cul-de-sac or hammerhead. We are open to other ideas that may be effective and less intrusive to the surrounding natural areas.

With regard to parking at other access points along the trail, we are currently investigating the feasibility of utilizing the wider areas along Volpp Street to accommodate one or two additional cars. These locations are provided simply for the purpose of providing connectivity. It is not our intent to identify these areas as trailheads. Nevertheless, your point is well taken and we will continue to investigate other parking opportunities along Volpp Street.

Finally, I understand that Ken Worcester is in the process of negotiating the right-of-way with the other stakeholders. Please check with Ken prior to setting a hearing on this matter. I am sure that we

Willamette River Trail

Page 2 September 1, 2005

would gladly waive the 120-day review requirement in the interest of having any outstanding issues resolved prior to a hearing on this matter.

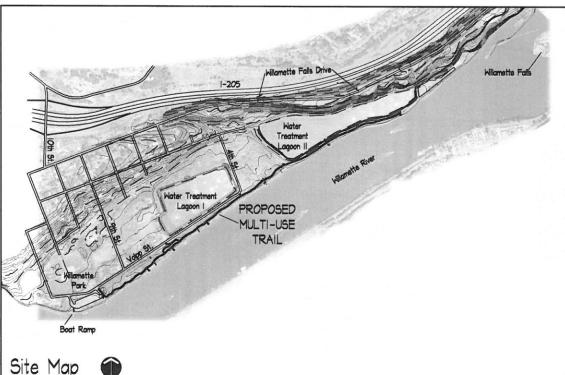
I am on vacation the week of September 5, 2005. Should you have any questions or decide that you need additional information, please feel free to contact Ron Heiden in my office. He can be reached at (503) 635-3618. If you have any questions after that week, please call me at (503) 699-2495.

Sincerely,

Otak, Incorporated

Brad Kilby, AICP Planner

BMK:sjs File



Rivergrove Area Map

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- LI FIRST AND SECOND TRAIL SEGMENT PLANS
- L2 THIRD SEGMENT PLAN AND SECONDARY TRAILHEAD ENLARGEMENT
- L3 PRIMARY TRAILHEAD AND BRIDGE ENLARGEMENT PLANS AND EROSION CONTROL
- 4 GENERAL DETAILS
- L5 GENERAL DETAILS CONT.
- L6 TRAIL SECTIONS

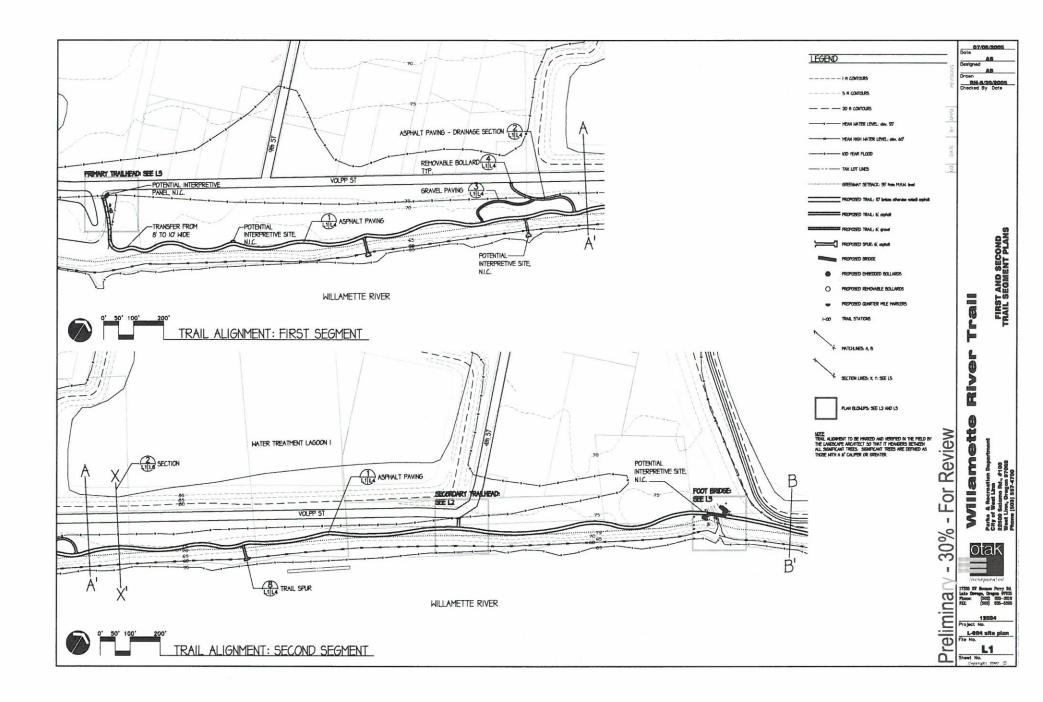
EXHIBIT INDEX

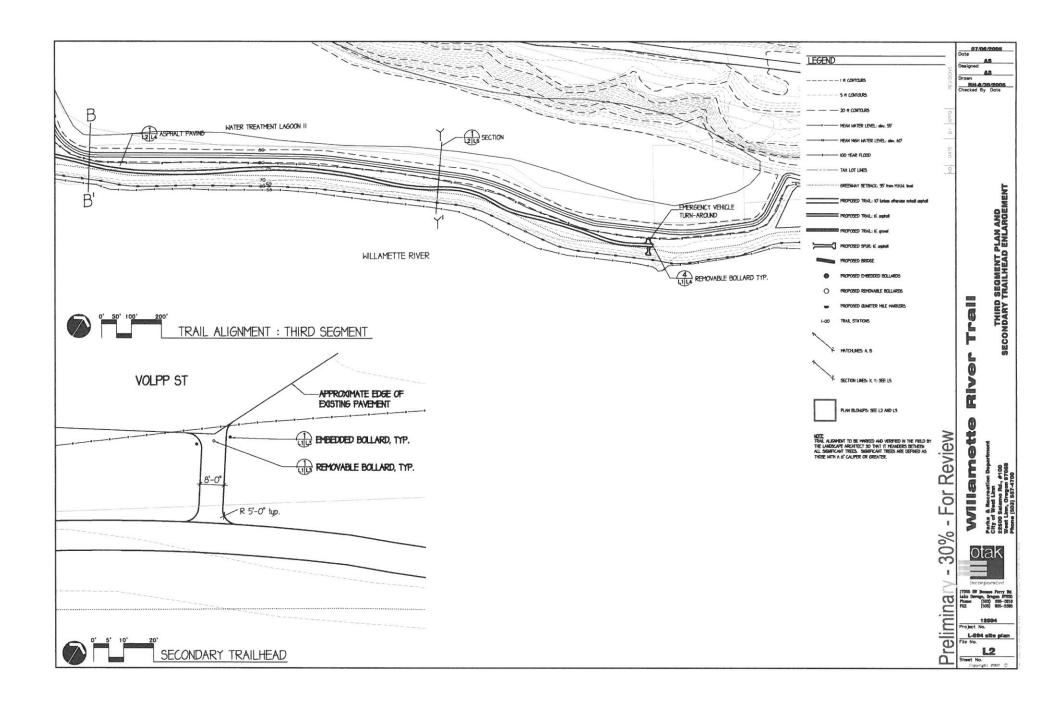
- EX. A FIELD OBSERVATIONS
- EX. B TAX LOTS
- EX. C TRAIL EASEMENT AND TOPOGRAPHY
- EX. D EASEMENT AND SURVEY AT TRAILHEAD AND BRIDGE

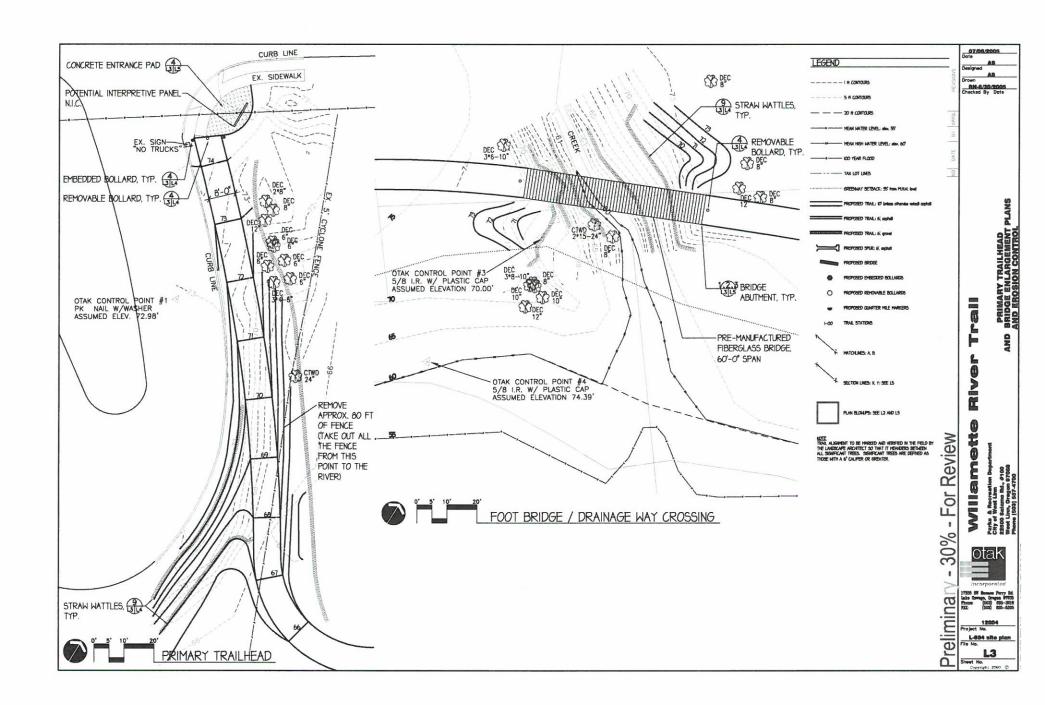
WILLAMETTE RIVER TRAIL

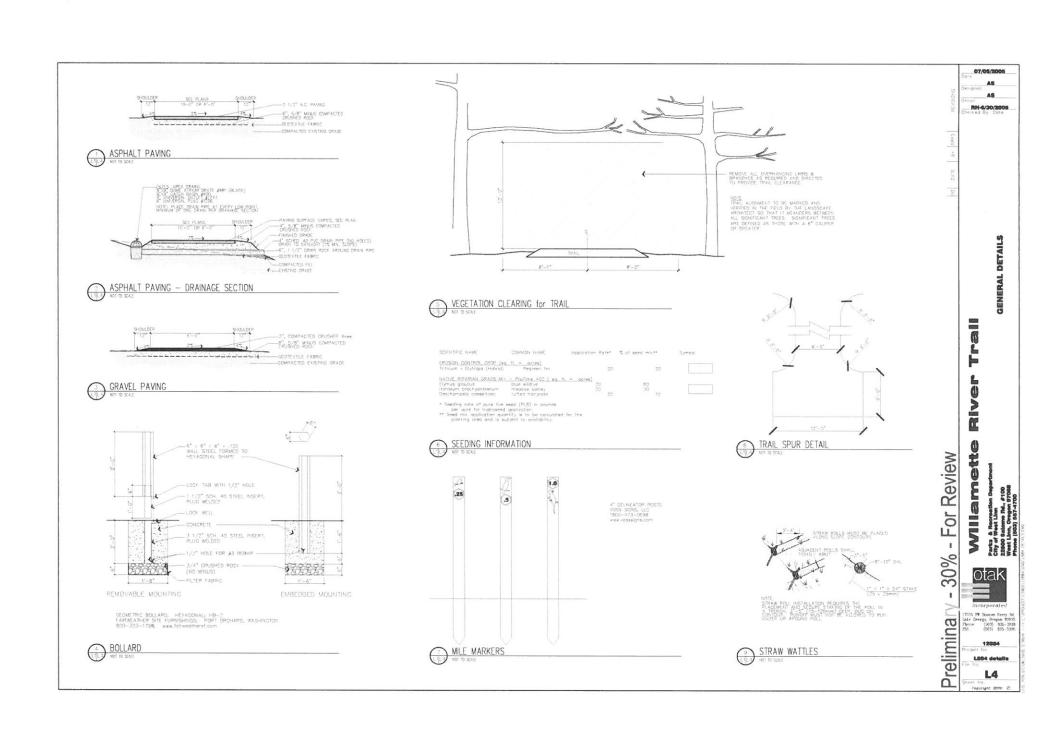
WEST LINN, OREGON

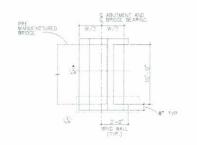


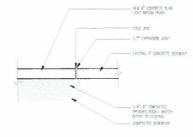






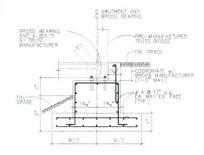




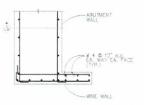


TYPICAL BRIDGE ABUTMENT

CONCRETE SLAB



TYPICAL BRIDGE ABUTMENT - SECTION

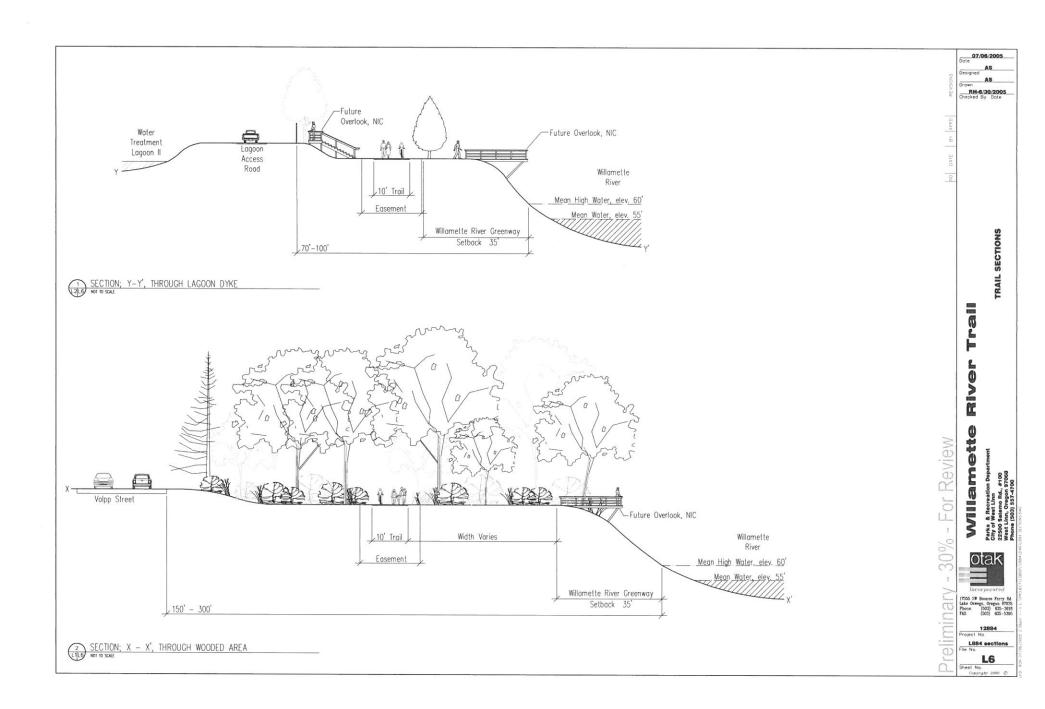


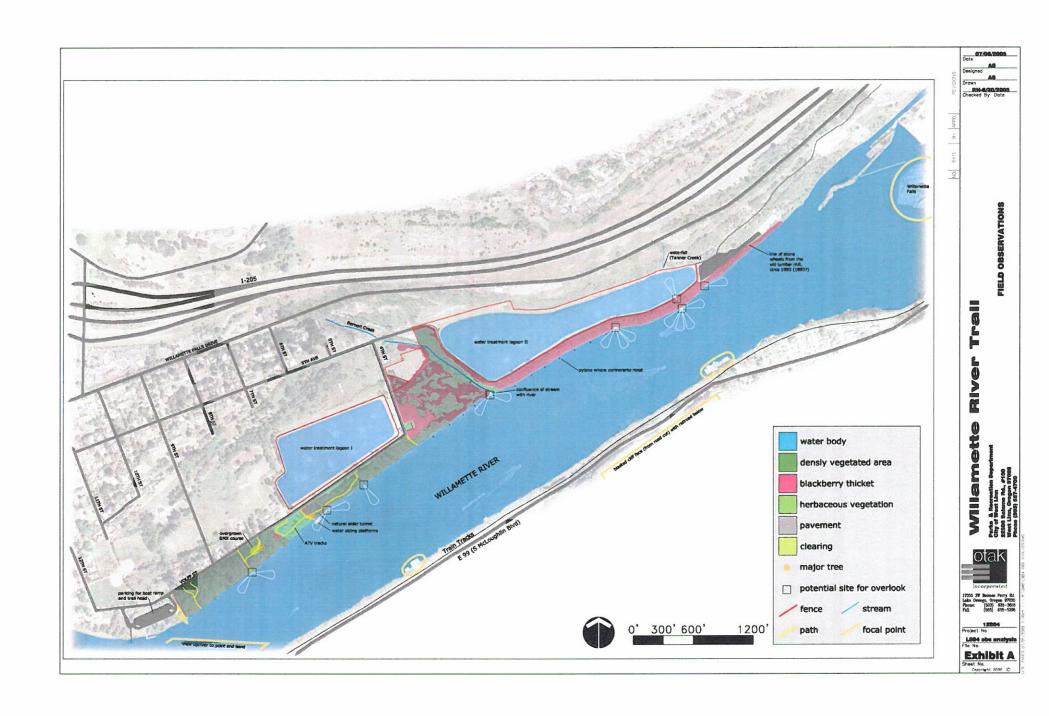
TYPICAL BRIDGE ABUTMENT - WING WALL

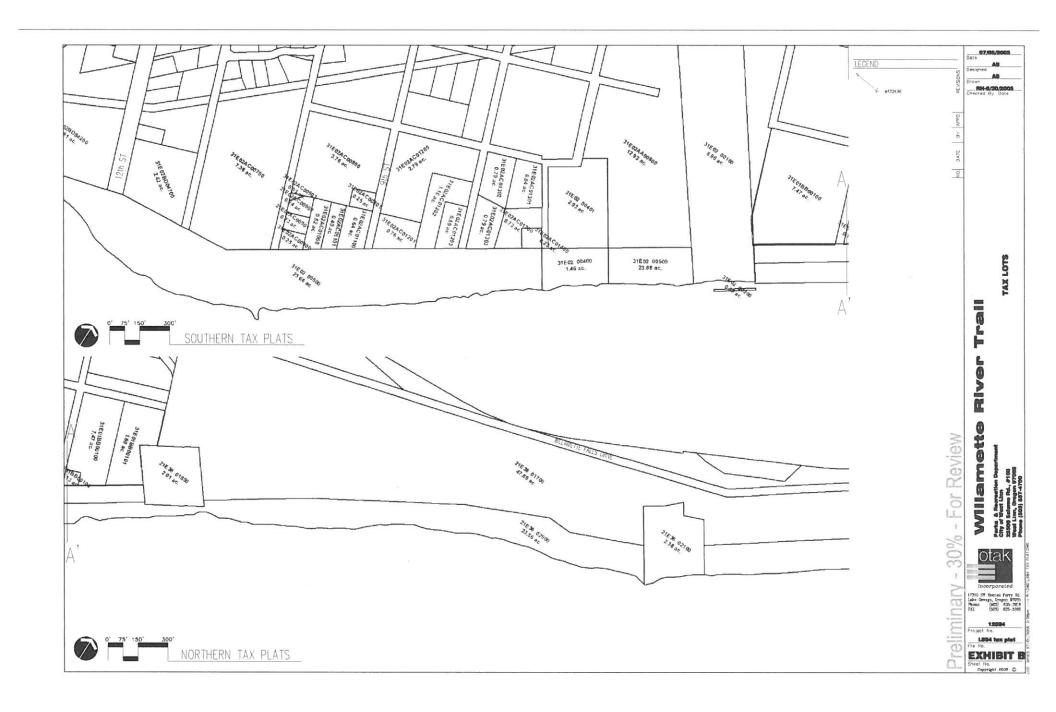


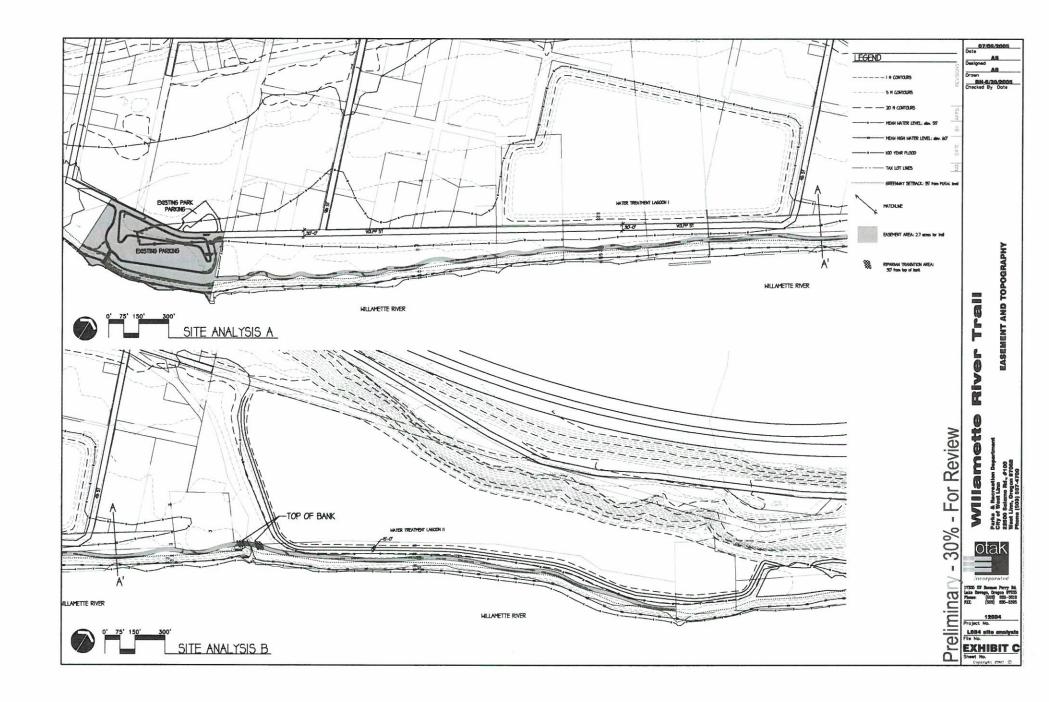
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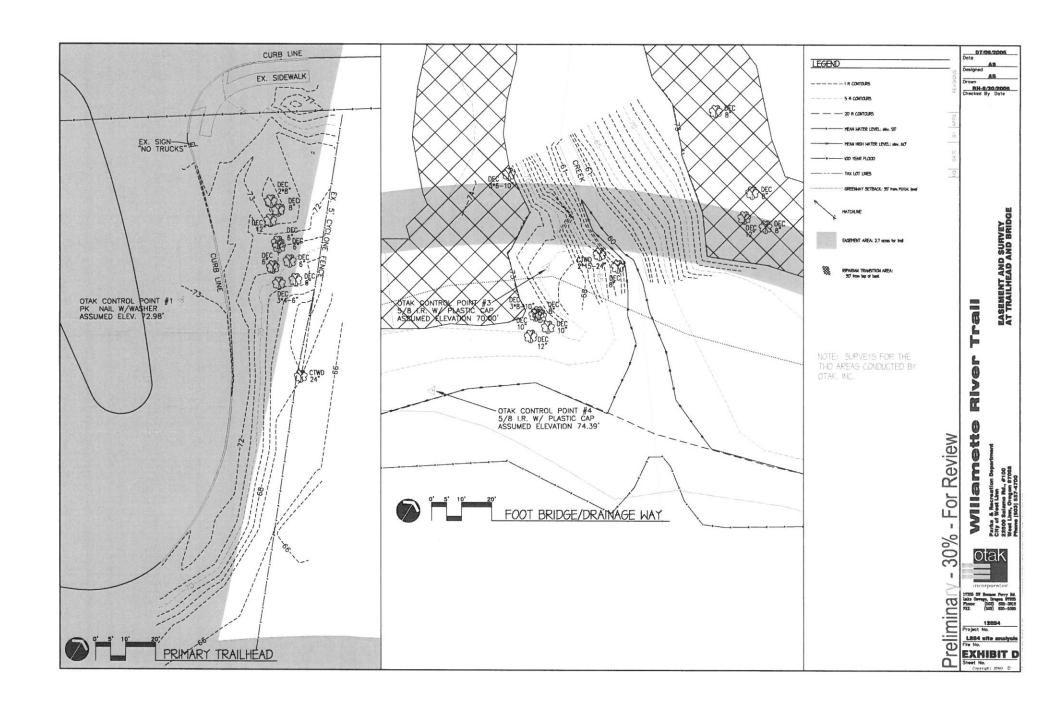
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Willamette River Trail West Linn, Oregon

Request for

Design Review Approval
Greenway Permit
Flood Management Permit
Drainageway Permit

Prepared for
City of West Linn Parks Department

Prepared by



Otak Project No. 12884 July 7, 2005

APPLICATION SUMMARY

APPLICANT:

City of West Linn c/o Ken Worcester 22500 Salamo Road West Linn, OR 97068

(503) 656-4106

OWNERS

REPRESENTATIVE:

Otak, Inc.

c/o Brad Kilby

17355 SW Boones Ferry Road Lake Oswego, OR 97035

(503) 699-2495

DESCRIPTION:

The trail will be located on portions of Map 31E02 tax lots 00500, 00400, and 00100, and Map 21E36 tax lot 02000 within the City of West Linn, Clackamas County, Oregon.

ZONING:

According to the West Linn zoning map, a portion of the property is designated within the Parks category; however, the larger portion of the properties that would include the trail are zoned General Industrial.

REQUEST:

A request for approval of a Type II Park Design Review, a Greenway Permit, a Flood Management Permit, and a Drainageway Permit to extend the Willamette River Trail northeast of Willamette Park from the boat dock at Bernert Landing approximately 1.5 miles along the Willamette River. The main portion of the trail will be located outside of the Willamette River Greenway; however, the proposal includes future spurs from the main trail to viewing platforms located along the river. The proposed trail would be approximately 12 feet wide, and meander along the alignment to avoid having to remove trees. The entire alignment is located within the 100-year floodplain, and a bridge will be required to cross Bernert Creek at its confluence with the River. The location of the bridge has been carefully chosen to minimize impacts to the creek.

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REQUEST

A request for approval of a Type II Park Design Review, a Greenway Permit, a Flood Management Permit, and a Wetlands/Drainageway Permit to extend the Willamette River Trail. The proposed trail would be located northeast of Willamette Park and extend from the boat dock at Bernert Landing for approximately 1.5 miles along the Willamette River.

The main portion of the trail will be located outside of the Willamette River Greenway; however, the proposal includes future spurs from the main trail to viewing platforms located along the river. The proposed trail would be between 10 and 12 feet wide and meander along the alignment to avoid tree removal. The entire alignment is located within the 100-year floodplain, and a bridge will be required to cross Bernert Creek at its confluence with the River. The location of the bridge has been carefully chosen to minimize impacts to the creek.

II. COMPLIANCE WITH APPLICABLE APPROVAL CRITERIA

A pre-application meeting was held with the City of West Linn on June 2, 2005 to discuss the proposed trail. At the meeting, City staff determined that a Class II Design Review, a Greenway Permit, Drainageway Permit, and Flood Management Permit would be required for the proposed development.

CHAPTER 27 Flood Management Areas

According to Community Panel 410024B of the FEMA maps, the BFE at this location is between 70 and 72 feet. The majority of the trail would be constructed at an elevation of 70 feet or higher.

The Planning Director shall make written findings with respect to the following criteria when approving, approving with conditions, or denying an application for development in flood management areas.

A. Development, excavation, and fill shall be performed in a manner to maintain or increase flood storage and conveyance capacity and not increase design flood elevations.

Response: No work is proposed that will increase the flood storage and conveyance capacity or increase the flood elevations. All work is proposed on existing grades with minimal disturbance. Construction of the trail will be completed by removing the organic materials and constructing the trail on existing grades.

B. No net fill increase in any floodplain is allowed. All fill placed in a floodplain shall be balanced with an equal amount of soil material removal. Excavation areas shall not exceed fill areas by more than 50 percent of the square footage. Any excavation below bankful stage shall not count toward compensating for fill.

Response: The proposed improvements do not require import of fill. The organics removed from the site will be balanced by the materials that will be used to construct the trail. There is no excavation proposed below the top of bank of any tributary.

C. Excavation to balance a fill shall be located on the same parcel as the fill unless it is not reasonable or practicable to do so. In such cases, the excavation shall be located in the same drainage basin and as close as possible to the fill site, so long as the proposed excavation and fill will not increase flood impacts for surrounding properties as determined through hydrologic and hydraulic analysis.

Response: All necessary excavation and fill for the trail will be located within the area of work. The amount of excavation and fill will be minimal and only necessary to provide a foundation for the trail.

D. Minimum finished floor elevations must be at least one foot above the design flood height or highest flood of record, whichever is higher, for new habitable structures in the flood area.

Response: There are no new habitable structures being proposed within the flood area.

E. Temporary fills permitted during construction shall be removed.

Response: There are no temporary fills proposed with the trail construction.

F. Prohibit encroachments, including fill, new construction, substantial improvements, and other development in floodways unless certification by a professional civil engineer licensed to practice in the state of Oregon is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

Response: Some excavation and filling will be required at the trailhead to provide an ADA accessible trail (See Sheet L3) down to the lower area where the trail will be constructed at existing grade. This area will parallel the eastern edge of the existing boat parking area. The amount of fill has been balanced with cut. The calculations comparing cut and fill show 4.9 CY more cut than fill. The flood carrying capacity of the site would be improved by the additional cut. Certification by Kevin Timmins, a licensed professional civil engineer in the State of Oregon, is provided as appendix 2.

G. All proposed improvements to the floodplain or floodway which might impact the flood carrying capacity of the river shall be designed by a professional civil engineer licensed to practice in the state of Oregon.

Response: Although portions of the trail will be located within the 100-year floodplain, no fill will be used to build the trail up. There is no evidence to suggest that a trail would impact the flood carrying capacity of the river. The viewing platforms that are proposed to be constructed within the second phase of the project

will be designed by a professional engineer licensed in the state of Oregon to ensure that the improvements are constructed in compliance with accepted building practices within floodplains.

H. New culverts, stream crossings, and transportation projects shall be designed as balanced cut and fill projects or designed not to significantly raise the design flood elevation. Such projects shall be designed to minimize the area of fill in flood management areas and to minimize erosive velocities. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable.

Response: A new pedestrian stream crossing will be required to cross Bernert Creek. The initial design includes a 10-foot-wide pedestrian bridge constructed of fiberglass and designed by E.T. Techtonics (See Appendix 3). Similar bridges have been used in the Gifford Pinchot National Forest in Washington. Minimal improvements will have to be made at each end of the bridge to ensure that the bridge is stable, but all improvements are proposed to be made following the existing grade. The bridge is designed to allow water to pass through, so there is no reason to believe that it would raise the design flood elevation.

I. Excavation and fill required for the construction of detention facilities or structures, and other facilities, such as levees, specifically shall be designed to reduce or mitigate flood impacts and improve water quality. Levees shall not be used to create vacant buildable land.

Response: No detention facilities, structures associated with detention, levees, or similar flood controls are proposed with this application.

27.070 Construction Materials and Methods

A. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage using methods and practices that minimize flood damage.

Response: The Parks Department will work with the Building Official to ensure that the proposed pedestrian bridge and viewing platforms are compliant with materials and equipment resistant to flood damage. The remaining portions of the trail consist of pavement on existing grade. Pavement is a widely accepted material in floodplain construction.

B. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

Response: No service facilities are proposed with this development. Patrons of the trail are expected to use the existing facilities located in nearby Willamette Park.

C. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

Response: No new or replacement water supply systems are proposed with this development.

D. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.

Response: No new or replacement sanitary sewage systems are proposed with this development.

E. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

Response: There are no new on-site waste disposal systems proposed with this development

F. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

Response: The proposed pedestrian bridge and viewing platforms will be anchored as prescribed to prevent flotation, collapse, or lateral movement of the structure.

CHAPTER 28 Willamette River Greenway

28.090 Approval Criteria

The approval authority shall make a finding on each of the following criteria when approving, approving with conditions, or denying an application for a Willamette River Greenway Permit:

- A. The development complies with each of the following criteria:
 - Public access to and along the river shall be provided to the maximum extent possible.
 Nothing in this criteria should be interpreted to infringe on private property rights. However, water that inundates or covers private property is in the public not private domain. (ORD. 1270)

Response: Currently, access for the public to this portion of the Willamette River is restricted, as it belongs to PGE and the Blue Heron Paper Company. However, as part of the recreation alternatives in the *Final Environmental Assessment, October 2004*, submitted for relicensing of the Willamette Falls Project, PGE indicated that they would work with West Linn Parks Department to negotiate a trail easement along the project boundary. The proposed trail in this application is a result of negotiations between the West

Linn Parks Department and PGE. Approval of this development will increase public access to and along this portion of the river.

2. Significant fish and wildlife habitats shall be protected.

Response: There is no evidence to suggest that significant fish and wildlife habitats will be adversely affected by the proposed improvements. The trail will provide passive opportunities for urban wildlife to be observed. The trail is passive in nature, will be constructed on existing grades with minimal disturbance to the vegetation, and will provide educational opportunities for portions of the river that were previously closed to the public. Even though those portions of the trail needed to get to the viewing platforms will be located within the setback area, the majority of the trail will be located outside of the Greenway setback.

3. Significant natural and scenic areas, viewpoints and vistas shall be preserved.

Response: Currently, one could not take advantage of the scenic areas that this reach has to offer. Approval of the proposed trail will provide more opportunities to take advantage of the scenic views that this reach of the Willamette River has to offer without the benefit of a boat.

4. The quality of the air, water and land resources in and adjacent to the Greenway shall be preserved in the development, change of use, or intensification of use.

Response: Water, land, and air quality will not be affected by the proposed development. The area will see more use in that people will walk where they were previously not permitted to do so without trespassing, but this trail and the proposed amenities provided along the trail will likely serve to increase an appreciation for the existing scenic and natural resources that West Linn has to offer.

5. Areas of annual flooding, flood plains and wetlands shall be preserved in their natural state to the maximum possible extent.

Response: A large portion of the proposed trail is located within or adjacent to the 100-year floodplain. The proposed method of construction is to remove the organic layer of topsoil and replace it with asphalt over the existing grade. Tree removal will be avoided to the extent possible by meandering and decreasing the overall width of the trail, and in no case will any significant trees or heritage trees be removed to accommodate the construction of the trail. The

proposed development will preserve the floodplain areas to the maximum extent possible.

6. The natural vegetative fringe along the river shall be maintained and enhanced to the maximum extent that is practical to assure scenic quality, protection of wildlife, protection from erosion, and screening of uses from the river.

Response: The proposed trail, for the most part, will remain outside of the Willamette River Greenway setback, and no vegetation along the banks of the river will be disturbed. Access to this portion of the area will increase the likelihood that this area will be enhanced through the removal of non-native vegetation and future enhancement efforts by local volunteer groups such as the Willamette Riverkeepers and SOLV.

7. Any public or private recreational use or facility shall not substantially interfere with the established uses on adjoining property or adjacent bodies of water. (ORD. 1270)

Response: The trail will be constructed on currently unused portions of the PGE and Blue Heron Paper Mill properties. The trail does not include an improved access to the river, as that already exists at the trailhead at Bernert Landing. Therefore, the trail would not substantially interfere with the established uses on the adjoining property or adjacent river.

8. Maintenance of public safety and protection of public and private property, especially from vandalism and trespass, shall be provided to the maximum extent practicable.

Response: Existing signage will be used to deter trespass onto the adjacent industrial properties, but in order to maintain the existing character of the natural areas, the Parks Department has indicated that they would prefer to monitor the use and only employ tactics such as lighting and limiting the hours of operation if they encounter problems with trespass and vandalism.

9. Extraction of aggregate deposits or dredging shall be conducted in a manner designed to minimize adverse effects on water quality, fish and wildlife, vegetation, bank stabilization, stream flow, visual quality, noise and safety, and to guarantee necessary reclamation. (ORD. 1270)

Response: No extraction of aggregate deposits or dredging is proposed with this application. Therefore, this criterion is not applicable.

10. Development, change or intensification of use shall provide the maximum possible landscape area, open space or vegetation between the activity and the river.

Response: As stated previously in this narrative, only those portions of the trail that lead to the proposed viewing platforms will be located in the Greenway setback. Natural vegetation and trees are the primary amenities provided to the patrons of this proposed trail extension.

- B. The site development plan complies with each of the following applicable standards:
 - 1. Site modifications:
 - a. Existing predominant topographical features of the bank line and escarpment shall be preserved and maintained except for disturbance necessary for the construction or establishment of a water related or water dependent use and measures necessary to reduce potential bank and escarpment erosion, landslides, or flood hazard conditions.
 - b. Stability of the development resulting from an intensification or change of use shall be assured considering the stress imposed on the bank and land area between the low water mark of the river and the top of the bank.
 - c. The hydraulic and flood carrying capacity of the river on the bank shall be considered in the design of the proposed intensification, development or change of use, and steps shall be taken to insure minimal adverse effect by and upon the proposal. The applicant shall establish to the satisfaction of the approval authority that steps have been taken to minimize the impact of the proposal on the riparian environment (areas between the top of the bank and the low water mark of the river including lower terrace, beach and river edge). The approval authority may require the applicant to submit a further study to determine whether such impact is acceptable.
 - d. If applicable, the applicant may be required to submit the certification of a registered professional engineer that the standards specified in (2) and (3) above have been met. Where necessary to properly evaluate a proposal, the approval authority may require the applicant to furnish further studies such as a soils survey, a foundation study, or a hydrologic study performed by competent professionals.

Response: The main body of the trail will be located well away from the top of bank and outside of the Greenway setback. Portions of the trail will encroach into the Greenway setback for the provision of viewing platforms but will be constructed away from the top of bank. No modifications to the bank are proposed with this application. The bank topography will remain intact. No vegetation will be removed from the bank of the river without prior City approval.

2. Riparian vegetation: Vegetative ground cover and trees upon the site shall be preserved, conserved, and maintained according to the following provisions:

- a. Areas that are to be protected shall be dedicated to the City by deeding the land title to the City for public open space purposes. Protective easements are an alternative when deeding the title is impractical, but are less preferred. Resource areas protected by easements have shown to be harder to manage and, thus, more susceptible to disturbance and damage. Protected areas shall be clearly identified with City approved permanent markers at all boundary direction changes and at 30- to 50-foot intervals which clearly delineate the extent of the protected area. (ORD. 1382)
- b. Riparian vegetation removed during development shall be replaced with indigenous vegetation which shall be compatible with and enhance the riparian environment.
- c. Trees of six-inch or greater caliper measured at a height of five feet shall not be removed between the top of the bank and the river's edge except as follows:
 - 1) Where it is necessary as approved by the approval authority to accommodate a water related or water dependent use; or
 - 2) Where the tree is determined by the City to be hazardous.
- d. Plans for removal and replacement of riparian vegetation shall be approved by the approval authority as part of the application.
- e. Vegetative improvements to areas within the greenway may be required if the site is found to be in an unhealthy or disturbed state. "Unhealthy or disturbed" includes those sites that are heavily populated by exotic or non-indigenous species, areas overgrown with invasive plants, or areas that lack the proper balance of canopy trees, understory plants, and soil stabilizing groundcovers. "Vegetative improvements" consists of submitting a plan which calls for removal of non-indigenous, exotic, or invasive species which will be replaced by plant species in a manner to be approved by the City Parks Director and consistent with the purposes of Chapter 30. Once approved, the applicant is responsible for implementing the plan prior to final inspection. (ORD. 1382)
- f. Tree cutting and grading shall be prohibited within the buffer area except that:
 - 1) Diseased trees or trees in danger of falling may be removed; and
 - 2) Tree cutting may be permitted in conjunction with those uses listed in Section 28.030 to the extent necessary to accommodate the listed uses.
- g. Selective cutting in accordance with the Oregon Forest Practices Act, if applicable, shall be permitted within the area between the buffer area and the greenway boundary provided the natural scenic qualities of the greenway are maintained.

Response: The site is not publicly owned, but the City of West Linn Parks Department has executed an easement agreement with the property owner to construct and operate the trail. Minimal disturbance to the existing vegetation will be required to construct the trail. No tree removal will be necessary, and

damage to existing trees will be minimized by the construction techniques discussed previously in this narrative. Should any vegetation be inadvertently removed during construction, new indigenous plants will be replanted to mitigate. As part of a long-term maintenance plan, the Parks Department will end up removing a lot of non-native Himalayan Blackberry from the easement area.

- 3. Landscaping: In addition to any landscaping requirement by this Code, the following provisions shall apply:
 - a. All areas of the site within the WRG shall be landscaped except areas covered by a structure, parking, and driveways and other permitted uses.
 - b. Required landscape areas shall be continuously maintained, irrigated with permanent facilities sufficient to maintain the plant material, and covered by living plant material capable of attaining 90 percent ground coverage within three years.
 - c. The living plant materials shall be compatible with and enhance the riparian environment.

Response: Landscaping is not proposed with this development. This proposal includes the incorporation of the existing riparian and upland vegetation into the overall trail experience for this reach of the river. The trail is proposed as a passive recreation opportunity for the enjoyment of the surrounding landscape.

4. Structures: All buildings and structures, including supporting members, and all exterior mechanical equipment shall be screened, colored, or surfaced so as to blend with the riparian environment. Colors shall be natural earth tones. Surfaces shall be non-reflective. Structures located on the water for water dependent uses shall be exempt from the setback requirements of Section 28.090(B)(8). All other provisions of Section 28.090 and Section 34.040 shall apply to water dependent uses, and any structure shall be no larger than the minimum size necessary to accommodate the use.

Response: The structures proposed in the second phase of this project include up to five interpretive locations or viewing platforms. The structures will be constructed of wood and will be stained so that they can be maintained. None of the structures will be located on the water.

5. Signs and graphics: In addition to compliance with all other applicable ordinance provisions relating to signs and graphics, no sign or graphic display inconsistent with the purposes of the Greenway shall have a display surface oriented toward or visible from the Willamette River.

Response: The only signage proposed will be at trailheads and at the interpretive locations. The proposed signage will be consistent with other

signage located in other West Linn Parks. Because this is a natural area, the preference would be to have as little signage as possible. The signage would only be for the purposes of directing patrons, identifying wildlife, and explaining the history of the area. The proposed signage does not appear to be inconsistent with the purposes of the greenway.

6. Lighting: Lighting on the site of an intensity, development or change of use, shall not be focused or oriented onto the surface of the river. Notwithstanding the preceding provision, lighting provided for public or private walkways shall be that necessary for safety.

Response: Because the trail is passive and meant to open the area up to walkers as a natural area, no lighting is proposed with this development.

- 7. Parking and unenclosed storage areas:
 - a. Parking, loading and unenclosed storage areas located within the WRG District shall be screened from the river in accordance with Chapter 46, Off-Street Parking, and Chapter 35, Temporary Structures and Uses.
 - b. Parking, loading and unenclosed storage areas located outside but adjacent to the WRG District shall be screened from properties within the WRG District.

Response: No new parking or unenclosed storage areas are proposed with this development. Existing parking at Willamette Park and Bernert Landing can be used for this trail.

- 8. Greenway sethack: All buildings shall be set back 35 feet from the mean high water line of the Willamette River with the following exceptions: (ORD. 1211)
 - a. Setback distances shall not apply to water dependent uses which require a river bank location or water related uses which require direct access to the river.
 - b. Residential lots of record unable to meet this requirement, shall be subject to the provisions of the applicable base zone or the provision of Section 38.040, whichever yields the greatest possible rear yard setback from the river.

Response: Although they are not water dependent, the proposed viewing platforms and interpretive sites located within the Willamette River Greenway are river related in that they provide public access to the river and convey information regarding the river and surrounding natural area. These sites do not require direct river access, but do require river bank location to take advantage of the views.

CHAPTER 32 Natural Drainageway Protection

32.050 Approval Criteria

The Planning Commission shall make a written finding with respect to the following criteria when approving, approving with conditions, or denying an application for altering a natural drainageway, or for development projects that have natural drainageways within their project boundaries.

1. Proposed development submittals shall identify all natural drainageways on the project site.

Drainageways that may flow intermittently and may be dry during the summer months, shall be so noted. The Storm Drainage Master Plan (1996) shall be used as the basis for determining existence of drainageways. The exact location of drainageways identified in the Storm Drainage Master Plan, and drainageway classification (e.g., open channel vs. enclosed storm drains), may have to be verified in the field by the City Engineer.

Response: There is a major drainageway identified in Plate 3 of the City of West Linn Storm Drainage Master Plan in the middle section of the proposed trail. Because it is a major drainageway, and it has rained all the way into July, it is very likely that this drainageway does not flow intermittently. However, the landscape architects that have visited the site have indicated that the water level was very low both times they visited the site in May and early June.

2. Proposed developments shall be so designed as to maintain the existing natural drainageways and utilize them as the primary method of stormwater conveyance through the project site unless the Storm Drainage Master Plan (1996) calls for alternate configurations (culverts, piping, etc.). Proposed development shall, particularly in the case of subdivisions, facilitate reasonable access to the drainageway for maintenance purposes.

Response: The existing drainageway will remain undisturbed with the exception of the proposed trail crossing that was discussed previously in this narrative. It is necessary to cross through the drainageway, but the function of the drainageway will not be affected by the proposed development.

 Development should be conducted in a manner that will minimize adverse impact on natural drainageways.

Response: No physical work is proposed within the actual drainageway. Scaffolding may be used within the drainageway to allow construction of the bridge, but it would be immediately removed once the work on that section of the footbridge was completed. The proposed work will only include access to the drainageway to allow construction of the trail bridge that was discussed earlier in this narrative and identified on the enclosed plans. All work adjacent to the drainageway will be

- conducted at the dry time of the year. Erosion control measures will be employed prior to any construction activity adjacent to the drainageway.
- Natural drainageways and transition areas should be protected from development or encroachment 4. by dedicating the land title deed to the City for public open space purposes if either: a finding can be made that the dedication is roughly proportional to the impact of the development; or, the applicant chooses to dedicate these areas. Otherwise, these areas shall be preserved through a protective easement. Protective or conservation easements are not preferred because natural drainageways and transition areas protected by easements have shown to be harder to manage and, thus, more susceptible to disturbance and damage. Natural vegetation, habitat areas, water quality, storm carrying capacity, hillside stability, typically suffer when these areas are privately held or protected only by easement. The protected area shall include the drainage channel, creek, or wetlands, and the transition zone. The transition zone shall extend a minimum of 30 feet from the edge of the creek, drainage channel, or wetland in those cases where the land sloping away does so at less than 10 percent. A 25-foot transition shall apply when the drainage channel is determined to be a man-made drainage ditch identified on the Storm Drainage Master Plan, but not if it is a residential drainage swale as described in Section 32.020(C) When the slope is 10-25 percent, then the transition zone shall extend either: (a) 50 feet or, (b) to the point where the slope tapers off to less than 10 percent for more than 30 feet, whichever is less. If (b) applies, the transition shall be at a minimum of 30 feet. When the slope is over 25 percent and it is determined to be a ravine with clearly delineated edges, then the top of the ravine shall mark the transition area boundary. When the slope is over 25 percent and the drainageway boundary is ill-defined due to variations of grades, slumps, fill areas, etc., the transition boundary shall be either: (a) the point where the slope tapers off to less than 10 percent for more than 50 feet (the minimum transition shall be 30 feet, or (b) when the drainageway does not taper off, then the transition shall be 150 feet. The percentage of grade is determined by the average grade of the first 50 feet from the edge of the wetland or body of water. Alternately, the City Engineer may determine which type of drainageway category applies by site visit in those cases where there are significant variations in grade that defy classification using the above methodology. Distances are measured in plan view (i.e., as shown on the site plan). Roads, driveways, utilities, or passive use recreation facilities may be built in the transition zone and across drainageways when no other practical alternative exists. For utility purposes, the determination of what is practical shall be based upon prudent engineering practices so long as it has no significant negative impact on transition zone and wetlands. Construction shall minimize impacts. Construction to the minimum dimensional standards for roads is encouraged. Variances to reduce road widths are encouraged as a way to minimize impacts. Full mitigation and revegetation is required. Seasonal or intermittent streams are those streams, or portions of streams, that flow only in direct response to precipitation. They receive little or no water from springs. They carry no measurable flow for three months of the year. The transition area from the edge of these seasonal streams shall be 15 feet.

Response: Drainageways and transition zones are illustrated on Exhibit D and will be protected to the greatest extent practicable throughout the course of construction.

The trail will be located within an easement provided to the City by the adjacent landowners.

5. The transition area (an area that is to be protected) shall be identified with City-approved permanent markers at all boundary direction changes and at 30- to 50-foot intervals that clearly delineate the extent of the protected area.

Response: All transition areas will be identified and staked in the field prior to initiating construction. All construction will be within approved areas only.

6. Consideration should be given to development of passive recreational opportunities on major drainageways.

Response: The proposed trail is a passive recreational opportunity that is provided with a public access easement to provide pedestrian access through the site from the adjacent City parkland.

7. Sound engineering principles regarding downstream impacts, soil stabilization, erosion control, and adequacy of improvements to accommodate the intended drainage through the drainage basin are used. Storm drainage should not be diverted from its natural watercourse. Interbasin transfers of storm drainage shall not be permitted.

Response: No work is proposed within the drainageway; however, work will have to occur within the transition zone to provide landings for the bridge. All construction and design will be at the direction of a licensed engineer, and no storm water will be diverted from its natural course.

8. A construction fence and/or appropriate erosion control measures, as necessary, shall be established through all phases of construction along the perimeter of the transition area as described in Chapter 30 of this Code.

Response: An erosion control plan is included with this submittal. As illustrated in the plan, erosion control fencing is provided along the boundary of the transition area to prevent erosion into the drainageway during construction.

9. Vegetative improvements to areas within the natural drainageway area may be required if the site is found to be in an unhealthy or disturbed state. "Unhealthy or disturbed" includes those sites that are heavily populated by exotic or non-indigenous species, areas overgrown with invasive plants, or areas that lack the proper balance of canopy trees, understory plants, and soil stabilizing groundcovers. Disturbed areas also include areas which have fill, debris, garbage, old tires, etc., which must be removed.

"Vegetative improvements" consist of submitting a plan which calls for removal of non-indigenous, exotic, or invasive species which will be replaced by plant species in a manner to be approved by the City Parks Director and consistent with the purposes of Chapter 30.

Once approved, the applicant is responsible for implementing the plan prior to final inspection or the City's acceptance of dedication of the property.

Response: The drainageway onsite has been surveyed. The easement area generally consists of mature evergreen and deciduous trees, shrubs, and non-native blackberry. In the course of construction and maintenance of the trail, the non-native blackberry plants will be removed and replanted with a native grass seed. The applicant will take all necessary measures to ensure that the drainageway remains in a healthy state.

10. Setback area: development projects shall keep all foundation walls and footings at least 15 feet from the edge of the transition area. Decks and structural elements may not be built on or cantilever over the setback area. Roof overhangs of up to three feet are permitted in the setback.

Response: No structures will be located closer than 15 feet from the transition area, as required.

CHAPTER 56 Parks Design Review

The West Linn City Code Section 56.020(D)(5) states, "Any change or proposed development, which by its scale or scope of work, requires that a full and comprehensive review be undertaken in the public forum..."

Response: The proposal involves locating a trail within the Willamette River Greenway, the 100-year floodplain, and crossing a creek, so City staff, in the pre-application conference, determined that the proposed trail would warrant a comprehensive review due to the presence and location of natural resources along the trail alignment.

56.060 Phased Development

The applicant may elect to develop the site in phases, also known as stages. The applicant shall delineate the boundaries of the phases on a map and provide a narrative that explains what improvements or facilities can be expected with each phase and when development for each phase is to be initiated. The decision-making authority must approve phased development with a clearly stated timeline for each phase, per the provisions of Section 99.125. Once work on a phase is initiated by the approved timeline, it is not necessary that all the work of that phase be completed by the timeline date so long as reasonable progress is being made.

Response: The applicant intends to develop the trail in phases. The first phase of the trail includes the main body of the trail, while the second phase of the trail includes the spurs

and viewing platforms. The second phase of the trail is dependent on budget and funding, and while the timing of the second phase cannot be firmly determined, the City Parks Department intends to complete all improvements on this trail within five years.

56.100 Approval Standards - Class II Design Review

The Planning Director shall make a finding with respect to the following criteria when approving, approving with conditions, or denying a Class II design review application:

A. Park classification. The proposed park and park programs shall conform to, and agree with, the Parks Master Plan and the parks definitions of section 56.015. Re-classifying the purpose of a park and the programs shall require an amendment to the Parks Master Plan. Park facilities that are not discussed in the Parks Master Plan shall be classified using the criteria of CDC 56.015 and the Parks Master Plan. Once the classification is made, the approval criteria shall take into consideration those program needs and the standards for the specific park type and evaluate the application accordingly.

Response: The Parks Master Plan identifies this section of the trail as a part of the Willamette Greenway Trail. The proposed trail is consistent with the definition of "pathways and trails" as identified in CDC 56.015.

B. Visual and physical accessibility. Many of the City's parks suffer from inadequate visibility such as Sunburst Park and North Willamette Park, surrounded as they are by housing. Increased frontage on streets allows greater use of on-street parking and less park space being used for parking. The surrounding streets also provide transitions between on and off-site activities as discussed in section 56.100(C)(5). Physical access is also facilitated by having good cognitive locations that can be safely accessed by bike paths and sidewalks. Improved visual access amplifies the investment and positive benefits of parks in that many people who do not stop the car and actually use the park, derive emotional benefits by exposure to scenes of open space, trees, and grass fields in a world increasingly dominated by built environments.

Response: Due to the fact that the majority of this trail will be located on private property, it is not possible to increase the visibility of the site without utilizing existing facilities and tools to insure that the public is made aware of the new facilities. The trailhead is located at Bernert Landing adjacent to Willamette Park, which is one of the busiest parks in West Linn.

- C. Relationship to the natural environment.
 - 1. The buildings and other site elements shall be designed and located so that all heritage trees, as defined in the Municipal Code, shall be saved. Diseased heritage trees, as determined by the City Arborist, may be removed at the direction of the City Manager.

- 2. All heritage trees, as defined in the Municipal Code, all trees and clusters of trees (cluster is defined as three or more trees with overlapping driplines; however, native oaks need not have an overlapping dripline) that are considered significant by the City Arborist, either individually or in consultation with certified arborists or similarly qualified professionals, based on accepted arboricultural standards including consideration of their size, type, location, health, long term survivability, and/or numbers, shall be protected pursuant to the criteria of subsections 2(a-c) below. It is important to acknowledge that all trees are not significant.
 - a. Areas of the park that include non Type I and II lands shall protect all heritage trees, all significant trees through the careful layout of streets, building pads, playing fields, and utilities. The method for delineating the protected trees or tree clusters ("dripline + 10 feet") is explained in subsection (b) below. Exemptions of subsection (c) below shall apply.
 - b. Areas of the park that include Type I and II lands shall protect all heritage, significant and nonsignificant trees. Groundcover, bushes etc. shall be protected and may only be disturbed to allow the construction of trails or accessing and repairing utilities. Exemption of subsection (c) below shall apply.
- 3. In the case of natural resource areas, the topography shall be preserved to the greatest degree possible. Conversely, in non-natural resource areas, it is recognized that in order to accommodate a level playing fields in an active-oriented park, extensive grading may be required and the topography may be modified.
- 4. The structures shall not be located in areas subject to slumping and sliding. The Comprehensive Plan Background Report's Hazard Map, or updated material as available and as deemed acceptable by the Planning Director, shall be the basis for preliminary determination.
- 5. The park shall be designed in such a way as to take advantage of scenic views and vistas from the park site, as long as such views can be obtained without eliminating significant trees or other natural vegetated areas.

Response: The proposed trail will be constructed over the existing grade and will meander through the trees onsite. No significant or heritage trees will be removed for the proposed trail. The trail is a passive-oriented recreation facility for the City of West Linn, and although located within the 100-year floodplain, the trail will be designed so that it does not interfere with the natural systems onsite. The second phase of the trail that includes the interpretive centers and the viewing platform will help to insure that the public has access to the most scenic views and vistas along this portion of the trail.

D. Facility design and relationship to the human environment

- Architecture. Whereas most park buildings are small in size and compatible with existing 1. structure(s) on site and on adjoining sites, the possibility of larger facilities exists. Larger buildings are defined as those over 1,000 square feet and under 10,000 square feet in size. In those cases, contextual design is required. Contextual design means respecting and incorporating prominent architectural styles, building lines, roof forms, rhythm of windows, building scale and massing, materials and colors of surrounding buildings in the proposed structure. Also important is breaking the larger building into smaller visual components so that the mass of the building is not so apparent. This is especially relevant when the building is near the perimeter of the park. However, certain uses, by virtue of their functional and spatial requirements, are large and can never be made visually equal or even compatible with nearby homes. Such uses shall not be prohibited from locating at active-oriented park facilities on architectural grounds so long as the applicant's architect has broken down the building's horizontal plane into smaller visual components and stepped down the building at the end closest to the offsite structure(s). "Smaller visual components" shall be defined as changes in the horizontal plane every 100 feet created by indentations or pop-outs at least three feet in depth. "Stepping down" shall be defined as bringing the park building's end section that is closest to off-site dwellings to half the distance between the highest ridgeline of the park structure and the highest ridgeline of the nearest off- site structure. In those cases where visual component breakdown or stepping down is not feasible, the applicant may rely on transitions in terms of distance as reasonable mitigation between on and off-site buildings. An appropriate minimum distance to achieve mitigation shall be either 150 feet or an existing public right-of-way.
- Material. Park structures shall emphasize natural material: such as exposed timbers, wood with brick and stone detail. Colors are subdued earth tones: grays, brown, off-whites, black, slate, and greens.
- 3. Human scale is a term that seeks to accommodate the users of the building and the notion that buildings should be designed around the human scale (e.g., average range of human perception). For large buildings, defined as over 1,000 square feet and less than 10,000 square feet in size, human scale shall be accommodated by, for example, multi-light windows that are broken up into numerous panes, intimately scaled entryways, visual breaks (exaggerated eaves, indentations, belly boards, ledges, cornices, awnings, engaged columns, etc.) in the facades of buildings, both vertically and horizontally, but particularly within the first 10 to 15 feet as measured vertically.
- 4. Transparency. For all enclosed buildings in the park, with the exception of public restrooms, storage and utility buildings, the main/front building elevation shall provide at least 60 percent windows or transparency at the pedestrian level to create more interesting building elevation, allow natural/ambient interior lighting and enhance defensible space. One side elevation shall provide at least 30 percent transparency. Transparency on other elevations is optional. The transparency is measured in lineal fashion. For example, a 100-foot long building elevation shall have at least 60 feet (60% of 100) in length of windows. The window height shall be, at minimum, three feet tall. The exception to transparency would be cases where demonstrated functional constraints or topography restrict that elevation from being

used. When this exemption is applied to a building elevation(s), the square footage of transparency that would ordinarily be required by the above formula shall be installed on the remaining elevations in addition to any transparency required by a side elevation, and vice versa. The transferred transparency is not required to be at pedestrian level and may be incorporated into clerestories or dormers. The rear of the building is not required to include transparency. The transparency must be flush with the building elevation.

Response: There are no buildings or structures proposed with this application that would exceed 1,000 square feet. The viewing platforms are between four and five hundred square feet in size. Therefore, these standards are not applicable to this application.

- E. Transportation Planning Rule (TPR) compliance. The TPR is a state requirement to reduce dependence upon the private automobile, reduce the total number of vehicle miles traveled and reduce carbon monoxide emissions. One way this can be achieved is by providing greater connectivity within the city from one neighborhood to the next so that circuitous, fuel consuming trips are reduced. Where park space is bisected by a planned arterial connector as identified in the City's Transportation Master Plan, then that arterial shall be constructed as part of the park project. Where proposed collector or local streets are shown on the Transportation Master Plan or where existing roads stub out adjacent to the parks property, the road shall also go through, except in those cases where one of the following criteria is met:
 - 1. The road will eliminate or adversely affect the functional value of the park (e.g., it would go through the only reasonable location for a planned soccer field).
 - 2. The road will adversely affect the quality or quantity of a natural resource area/open space (e.g., construction of the road will require grading or fill in the resource area, the increased traffic associated with the road will diminish the restorative, contemplative, and natural interpretative opportunities associated with the resource; the impact of the traffic, such as noise, pollutants, and glare, will make the area less attractive as a wildlife habitat or corridor, and/or have adverse environmental impacts on the resource, etc.).
 - 3. The road will be in conflict with the city charter languages.

Response: The West Linn TSP does not show any recommended street connections through or adjacent to the proposed trail; therefore, this criterion is not applicable to the proposed development.

- F. Compatibility between adjoining uses.
 - 1. On-site screening from view from adjoining properties of such things, as service and storage areas shall be provided and the following factors will be considered in determining the adequacy of the type and extent of the screening:

- a. What needs to be screened?
- b. The direction from which it is needed.
- c. How dense the screen needs to be.
- d. Whether the viewer is stationary or mobile.
- e. Whether the screening needs to be year around.
- f. Consideration shall be given to the proper screening of lights so that no off-site glare is produced.
- 2. Roof top air-cooling and heating systems and other mechanical equipment shall be screened from view from adjoining properties.

Response: There are no service areas, storage areas, or other items that would be considered out of character for this area. The adjacent park and industrial uses are compatible with the proposed trail. However, if the review agency requires any aspect of the trail to be screened, the applicant can comply with the request.

- G. Crime prevention and safety/defensible space.
 - 1. Windows shall be located so that areas vulnerable to crime can be surveyed by the occupants.
 - The exterior lighting levels shall be selected and the angles shall be oriented towards areas
 vulnerable to crime, to enhance public safety and away from natural resource areas to
 minimize disturbance of wildlife.
 - 3. Light fixtures shall be provided in areas having heavy pedestrian or vehicular traffic and in potentially dangerous areas such as large parking lots, stairs, ramps, and abrupt grade changes during hours of intended use or operation.
 - 4. Fixtures shall be placed at a height so that light patterns overlap at a height of seven feet, which is sufficient to illuminate a person. All projects undergoing design review shall use low-or high-pressure sodium bulbs and be able to demonstrate effective shielding so that the light is directed downwards rather than omni-directional.
 - 5. Playing fields and court areas shall not be illuminated unless they are separated from nearby homes by adequate distance and/or screening. Adequate distance shall be at least 150 feet. Adequate screening shall be on or off-site fences, walls, terrain variation or vegetation. (trees, etc.)
 - Lines of sight shall be reasonably established so that the park and its facilities are visible to
 police and nearby residents.
 - Large or visually inaccessible parks should ensure that at least some emergency vehicle access
 is provided to the park's interior.
 - 8. Closure times may be posted and/or gates may be installed at city parks to discourage their use at night if necessary for crime prevention and/or public safety.
 - 9. Park landscaping shall accommodate safety concerns with appropriate use of plant types and ease of maintenance.

Response: No new buildings are proposed with this development, and it is the intent of the applicant to maintain as natural an area as possible. The trail will be lineal and should provide reasonable lines of site for security, but no new lighting or landscaping is proposed. The Parks Department would like to monitor the use of the facility and impose hours of operation only if it is deemed necessary.

H. Public facilities.

- 1. Streets. Sufficient right-of-way and slope easement shall be dedicated to accommodate all abutting streets to be improved to City's Improvement Standards and Specifications. In determining the appropriate sizing of the street, the street should be the minimum necessary to accommodate anticipated traffic load and needs and should provide substantial accommodations for pedestrians and bicyclists and in keeping with the character of the neighborhood. Road and driveway alignment should consider and mitigate impacts on adjacent properties and in neighborhoods in terms of increased traffic loads, noise, vibrations, and glare. Streets shall be installed per chapter 85 standards. Sidewalks shall be installed per Sections 85.200(A)(16) and 92.010(H). Both chapters allow reduced sidewalk widths to accommodate topographic limitations or to preserve trees.
- 2. Parking lots. CDC Section 46.090 explains the parking requirements for the various categories of parks and open space areas. City squares, malls or plazas are exempt from the parking requirements of Chapter 46. Reduced parking requirements are explained in Section 56.170. Except for areas accommodating ADA disabled parking and ADA access, parking lots may be constructed with grasscrete.

Response: Trailheads are required to provide four spaces, including one ADA accessible space. Since there is adequate parking for the adjacent park and across Volpp Street, no new parking is proposed with this application.

- I. Paths and trails. Paths and trails connect the various activity areas within the park. They can also serve as part of a greater system of connective trails from one neighborhood or destination to another. Just like streets, there is a hierarchy of paths and trails.
 - 1. Paths that connect the right-of-way and/or parking lot with the main activity area(s) of the park need to accommodate pedestrians, bicyclists, and persons with disabilities (as grades allow). The path shall be paved and 5 to 8 feet wide. Lesser dimensions are allowed where topography and trees limit width. The grade shall be kept to fewer than five percent where the terrain allows. The path may be illuminated if the facility is programmed for night use.
 - 2. Paths that provide a link through the park to neighborhoods on either side must be recognized for their value in addressing the TPR, particularly in those cases where connecting roads through the park or natural area are not provided per Section 56.100(C)(6). These trails or paths may be paved, 5-8 feet wide and may be illuminated. Narrower path sections are permitted in response to topography and to preserve trees. Illumination is especially

- important for this group if these paths are used by early morning and early evening bicycle and pedestrian commuters. Directional signs are needed for this type of trail and user group.
- 3. Smaller or reduced width paths, within park boundaries, can be built to link lesser activity areas or areas of attraction. Walkers, cyclists, or runners who do multiple loops for exercise often use these paths. These paths may be crushed gravel or paved and at least six feet wide.
- 4. Nature trails are typically three to six feet wide, gravel, hog fuel, or packed earth. These trails are especially attractive to persons seeking quieter parts of the park for natural interpretation or solitude. Other user groups often use them for exercise loops. Trails and footbridges in natural areas should be designed to minimize disturbance of significant resources. Limiting access to creek beds, potentially erosive slopes, or wetlands by humans and dogs is an important measure if habitat or resource protection is to be addressed. At least initially, the use of these trails by all user groups should be encouraged. Changes or restrictions to some user groups shall be based on empirical observations at that specific site.
- 5. Disabled access paths allow disabled persons to access specific activity areas in the park at grades that meet ADA standards. Many parks have special disabled access paths with interpretive areas and viewpoints to allow visual, if not physical, access to natural resource areas. Usually, these paths are 50-200 meters long, 8 feet wide, and clearly identified.
- 6. Paths or trails that link parks, schools, neighborhoods, and the community and even integrate with adjacent cities or regional trails may be paved, 5-10 feet wide. The paths or trails should follow easily identified cognitive routes with good surveillance and defensible space.
- 7. All paths and trails shall be clearly identified with signs. They shall be laid out to attract use and to discourage people from cutting across landscaped areas or impacting environmentally sensitive areas.

Response: The proposed trail is one section of an integrated trail system that will eventually connect to Lake Oswego and, eventually, Portland along the Tualatin River. This particular section of the trail is proposed to be between 10 and 12 feet wide and ADA accessible. The trail will be signed and the second phase includes interpretive stops and viewing platforms for trail patrons.

J. Provisions for persons with disabilities. The needs of a person with a disability shall be provided for.

Accessible routes shall be provided between parking lot(s) and principal buildings and site facilities.

The accessible route shall be the most practical direct route between accessible building entries, accessible site facilities, and the accessible entry to the site. All facilities shall conform to, or exceed, the Americans with Disabilities Act (ADA) standards, including those included in the Uniform Building Code.

Response: There are no new buildings or service facilities associated with the proposed development. The trail will be paved and has been designed to be ADA accessible as required.

- K. Miscellaneous criteria. Selected elements of the following chapters shall be met. It is not necessary to respond to all the submittal standards or approval criteria contained in these chapters, only those elements that are found to be applicable by the Planning Director at the pre-application conference pursuant to CDC Chapter 99.030(B) and (C):
 - 1. Chapter 33, Storm Water Quality and Detention.
 - 2. Chapter 34, Accessory Structures.
 - 3. Chapter 38, Additional Yard Area Required.
 - 4. Chapter 40, Building Height Limitations and Exceptions.
 - 5. Chapter 42, Clear Vision Areas.
 - 6. Chapter 44, Fences & Screening Outdoor Storage.
 - 7. Chapter 46, Off-Street Parking and Loading.
 - 8. Chapter 48, Access.
 - 9. Chapter 52, Signs.
 - Chapter 54, Landscaping. In addition, landscape plans shall incorporate plants which
 minimize irrigation needs without compromising recreational facilities or an attractive park
 environment.

Response: None of the chapters listed above were identified as applicable within the pre-application conference. The above listed chapters are not applicable to the proposed development.

III. CONCLUSION

This application narrative demonstrates that all applicable provisions of the City of West Linn Zoning Ordinance are satisfied by the plans for the proposed Trail. The applicant, therefore, respectfully requests approval of this application.

Peter Spir City of West Linn 22500 Salamo Road, #100 West Linn, OR 97068

Re: Willamette River Trail Floodplain Ordinance — Otak Project No. 12884

Dear Peter,

I have reviewed the Willamette River Trail design for compliance with Chapter 27 "Flood Management Areas" of the City of West Linn Development Code.

The project is planned for two phases. The second phase includes some trail spurs and future interpretive sites that I have not reviewed because they are not yet designed.

The first phase of the Willamette River Trail project includes a trail along the Willamette River that is located within the 100-year floodplain. Most of the project will be constructed at existing grade. There are two locations that I was asked to review, where the project will require the placement of fill and includes more than equivalent excavation to provide compensatory flood storage above the bank-full channel elevation. The two locations are (1) the Primary Trailhead and (2) the foot bridge over Bernert Creek.

Primary Trailhead

Grading shown in the attached Sheet L3 requires placement of approximately 81 cubic yards of fill material and excavation of over 85 cubic yards of material between elevation 66 feet and elevation 74 feet to construct an acceptable trail cross-slope between the trailhead and the main trail alignment along the river. The proposed excavation provides slightly more flood storage than currently exists. Changes to the grading in this location are not expected to influence the conveyance capacity of the River.

Bernert Creek Foot Bridge

Construction of the proposed foot bridge over Bernert Creek includes approximately 28 cubic yards of excavation between elevation 70 feet and elevation 73 feet to compensate for flood storage displaced by the volume of the bridge itself. The proposed bridge is estimated to displace less than 23 cubic yards of flood storage. The proposed excavation shown in the attached sheet L3 provides slightly more flood storage than currently exists. Changes to the grading in this location are not

Willamette River Trail

expected to influence the conveyance capacity of the Willamette River. During large flood events, flow in Bernert Creek is controlled by the water level in the Willamette River. The proposed foot bridge is well above the elevation of Bernert Creek and is not expected to influence the flow of Bernert Creek.

Conclusions

Phase 1 of the proposed Willamette River Trail project provides compensatory flood storage to mitigate for fill within the floodplain required for the project. Design of the trail and footbridge are not expected to influence the conveyance of the Willamette River or Bernert Creek.

Sincerely,

Otak, Incorporated

Kevin Timmins, PE Water Resource Engineer

KT/lt