

PLANNING DEPARTMENT
STAFF REPORT
TO CITY OF LAKE FOREST PARK HEARING EXAMINER

The following review by the City of Lake Forest Park Planning Department is based on information contained in the application and supplemental correspondence, information in the file, comments and letters received, on-site investigation, applicable scientific reports, applicable codes, development standards, adopted plans, and other information on file with the City.

SUMMARY INFORMATION

City File Numbers: 2018-PAUE-0001

Hearing Date: August 29, 2019

Requested Action: Replace and upgrade a structurally deficient 96" x 76" elliptical structural steel culvert with a new 70-foot long; 24-foot wide by 8-foot high, fish passable pre-cast concrete box culvert and wing walls. The road in the project area will be restored to its existing extent and the sidewalk on the south side of NE 178th east of 44th Ave NE will be replaced with modifications to address ADA requirements. The project is located at the intersection of 44 AVE NE and NE 178 ST.

Applicant: City of Lake Forest Park
Neil Jensen, PE
City Engineer
17425 Ballinger Way NE
Lake Forest Park, WA 98155

Site Location: Intersection of NE 178 ST & 44 AVE NE
Lake Forest Park, WA

Comprehensive Plan Designation: Conservation Residential, Moderate/High

Zoning Classifications: RS – 15,000, RS- 7.2

Recommendation: Approval with Conditions

**APPLICABLE CODES AND REGULATIONS FOR THE PUBLIC AGENCY UTILITY
EXCEPTION REQUEST (This list may not be exhaustive.)**

Lake Forest Park Municipal Code Sections Directly Applicable to the Proposal:

1. LFPMC 16.14.080 Environmentally Critical Areas and Buffers
2. LFPMC 16.16.230 – Authorized Work in Critical Areas...
3. LFPMC 16.16.260 – Critical area regulations for public agency and utility exceptions
4. LFPMC 16.16.360- .Streams-Permitted Alterations

BACKGROUND INFORMATION:

Description of the proposal: The project will replace and upgrade a structurally deficient 96” x 76” elliptical structural steel culvert, that is a partial fish barrier, with a new 70-foot long; 24-foot wide by 8-foot high, fish passable pre-cast concrete box culvert and wing walls. Culvert design will adhere to the stream simulation culvert design option, which will allow Lyon Creek to continue normal stream function during and after the culvert installation. Work will include excavation of the road prism, utility protection and/or relocation, erosion and sediment control, fish exclusion and stream bypass, and widening of the channel bank within the project limits. The sidewalk on the south side of NE 178th east of 44th Ave NE will be replaced with modifications to meet ADA requirements. Project limits will include areas outside the existing right of way. Approximately 281 square feet of mitigation planting will occur on a privately-owned property to the north of the culvert, along with 2,074 square feet of planting occurring on the undeveloped lot to the south. The road section will be restored and improved to meet pedestrian (ADA) and vehicle use standards. Graded channel bed sediment suitable for fish will be placed in the new culvert, which will be countersunk to a depth of 30% of culvert rise. All areas above the ordinary high water mark (OHWM) elevation that are disturbed by the work will be restored with native vegetation. Wetlands are present downstream of the culvert, only the buffers of which will be impacted. The project also includes removal of five trees within the stream buffer (the critical area report indicates the removal of only 4 trees, but the arborist report and the 90% design plans indicate that five trees are proposed for removal). The trees proposed for removal include a 44” Diameter at Breast Height (DBH) cottonwood (in good condition, with moderate risk potential), a 40.5” DBH western red cedar (in poor condition, with low risk potential), a 33” DBH western red cedar (in fair condition, with low risk potential), a 6.7” DBH pacific dogwood (in poor condition, with low risk potential), and a 22.4” DBH western red cedar (in fair condition, with low risk potential) See Exhibit 14, arborist report, for more information on the trees proposed for removal.

Site Characteristics: The project site is located within a residentially zoned area, and is adjacent to single family residences. The culvert installation will occur mainly within the public right of way on NE 178 ST at approximately 44 AVE NE, although some work will occur on adjacent private properties. Lyon Creek flows from north to south along this corridor. The stream is lined by vegetation creating a vegetated corridor through the urban area.

Adjacent Land Use Characteristics: The adjacent properties are located in the RS-15, and RS 7.2 residential zones respectively, with a comprehensive land use designation of Single Family Residential High, and Conservation Residential, Moderate. The site is surrounded by similar

land uses, with all adjacent properties zoned for residential use, with either a comprehensive land use designation of Conservation Residential, Moderate or Single Family Residential High. The northern boundary of the Town Center zone is approximately 400 feet to the south. (see Exhibit 6).

Project Review Timeline:

The City applied for a Public Agency Utility Exception permit on September 13, 2018. The City determined the application to be complete on October 9, 2018. The notice of application was published on October 22, 2018, announcing the required 14-day public comment period. The City sent a request for additional information to the applicant on November 21, 2018. The applicant responded to the City's request for additional information on April 17, 2019. The City requested more information regarding the extent of tree removal on June 26, 2019. The applicant provided the requested arborist report on August 2, 2019. The City determined the proposal could be recommended for approval and published the notice public hearing on August 19, 2019.

This project was in review a total of 109 days. LFPMC 16.26.040 (F) (2) (a) exempts days counted while the applicant is correcting plans and providing additional information, and up to 14 days after the information has been provided.

CRITERIA ANALYSIS

The permittee has demonstrated through their critical area report that the requirements of the critical areas ordinance in the context of this project would prohibit the City's Capital Engineering Division from implementing the proposed project. Staff finds that the proposal is not an administratively approvable activity under LFPMC 16.16.230. As a result, the Permittee has requested a Public Agency Utility Exception (PAUE).

The following criteria are found in 16.16.260 (C) of the Lake Forest Park Municipal Code. The Permittee has the burden of meeting all the criteria for an approval. Staff's analysis with supporting findings and conclusions of the relevant criteria are listed below:

Lake Forest Park Municipal Code 16.16.260 Public Agency Utility Exception

C. The hearing examiner shall approve, approve with conditions, or deny the request according to the following criteria:

- 1. There is no other practical alternative to the proposed development with less impact on the critical areas; and*

Findings: The proposed project replaces an undersized and structurally deficient steel culvert with a fish passable concrete box culvert. The box culvert provides the same benefit to the stream as a bridge. The only identified alternative that would have less of an impact to the critical area would be to daylight the creek and eliminate the road and utilities within the public rights-of-way of NE 178th Street and 44th Ave NE. These public roadways provide essential public benefits including transportation circulation and passage ways for underground water, sewer, gas, and communication utilities.

In order to install all aspects of the proposal, five trees (as detailed in the arborist report, Exhibit 14) located within the stream buffer and associated wetland buffer need to be removed. Four of the trees, identified with the callout (18) on sheet 4 of 19 in the 90% design plans (Exhibit 4) are physically blocking the installation of the culvert, as they are located within the stream buffer. The applicant is also requesting removal of a 44" Diameter at Breast Height (DBH) cottonwood (in good condition, with moderate risk potential) located in the wetland buffer south of NE 178 ST. The cottonwood is proposed for removal because in its current condition, it is causing damage to the existing sidewalk. A new sidewalk is planned with this project, but given the risk category assigned by the applicant's arborist, removal of the cottonwood could be accomplished administratively, to ensure the long-term viability of the newly proposed sidewalk.

LFPMC 16.16.230 (G) (1), allows for removal of vegetation and trees within a critical area, pursuant to the regulations in the City's tree ordinance (LFPMC 16.14). Administrative approval under 16.14.080 (A) (1 through 3) is not possible for 4 of the trees (located within the stream buffer, north of NE 178 ST), since those trees do not meet the necessary risk criteria. The arborist evaluation (Exhibit 14) states that the four trees in the north end of the project area have a low risk for consequence and the only the cottonwood is listed as having a moderate risk. The regulations in LFPMC 16.14.080 (A) (4) indicate that trees and vegetation can be removed within a critical area or buffer when a part of an approved action under LFPMC 16.16, such as a PAUE. The Hearing Examiner has the authority to grant exceptions to public agencies under LFPMC 16.16.260, with the PAUE process, and therefore has the authority to allow removal of trees within critical areas, where removal would otherwise not be allowed.

Conclusions: Daylighting the creek, and the elimination of an essential collector roadway serving institutional, commercial, and residential areas would not be a practical alternative. The new culvert will bring improvements to critical area function, fish passage, and overall stream functionality, as well as upstream and downstream flood relief benefits. Removal of the four trees north of NE 178 ST trees is necessary for the installation of the culvert.

This criterion is met.

2. The application of this chapter would unreasonably restrict the ability to provide utility services to the public; and

Findings: The application of stream and critical area regulations would prohibit the agency from installing the proposed culvert which will improve the City's drainage system and thereby protect the public from flooding events. Specifically, those regulations contained in LFPMC 16.16.230 (D) prohibit activities that alter a watercourse, such as culvert installations. Also, regulations in LFPMC 16.16.360 (H) (1) prohibit stream relocations, unless they are allowed in conjunction with a Public Agency Utility Exception. LFPMC 16.16.230 (G) (1), allows for removal of vegetation and trees within a critical area, pursuant to the

regulations in the City's tree ordinance (LFPMC 16.14). Administrative approval under LFPMC 16.14.080 (A) (1 through 3), however, is not possible since four of the trees do not meet the necessary risk criteria.

Conclusions: The applicant has applied for a public utility exception because the critical area regulations prevent the culvert from being installed in the stream bed. Administrative approval under 16.14.080 (A) for removing trees that stand in the way of the project is not possible since four of the trees do not meet the necessary risk criteria. This criterion has been met.

3. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site; and

Findings: The clearing of Lyon Creek and Wetland 1's buffers, and the work within Lyon Creek itself, could pose a threat to the public health, safety and welfare, and could extend to areas beyond the project site, if not appropriately mitigated and monitored.

Appropriate mitigation for critical area impacts during construction both on private property and within the channel habitat are included within the design (see Exhibit 4, design plans). According to the applicant's critical area report, retention of existing vegetation in certain areas is recommended to preserve vegetation which contributes to critical area function. Any vegetation removed (except that removal associated with Japanese Knotweed where the King County noxious weed control program has authorized mechanical removal) as a part of this project should be done with hand-held equipment to minimize impact.

Activities within private property and adjacent to Lyon Creek such as excavation, vegetation clearing, grading, equipment staging, and temporary in-water work to install the new culvert will result in only temporary impacts to the area (see page 6-4 of Exhibit 2, the critical area report) in the form of potential increases to turbidity, and suspended sediment within Lyon Creek. Increased turbidity and sedimentation can negatively affect fish behavior, degrade the riverbed, and affect other aquatic species. These impacts are unavoidable, because of the nature of the work associated with the fish passage improvement. Clearing limits, prior to construction activity, will be marked, and inspected by the Planning Department prior to activity, to avoid any unnecessary impact to critical areas or buffers (recommended condition of approval). Erosion related impacts and the potential for increases in turbidity and suspended sediment in Lyon Creek will be minimized by erosion control measures which are expected to result in only minor, short-term increases in turbidity and suspended sediment that will fall within the Department of Ecology's permit requirements (see Exhibit 2, critical area report).

The use and storage of materials and chemicals such as diesel fuel, lubricants, and uncured concrete near waterways could potentially impair water quality if these materials are spilled. As a recommended condition of approval, all construction

using these materials is to occur upland, and in the dry creek bed following dewatering. The applicant's strategies for spill prevention, control, and countermeasures will be a part of the environmental commitments for the project, so no anticipated impact is suspected.

According to the applicant's critical area report, all work occurring below the Ordinary High Water Mark (OHWM) of Lyon Creek will occur within the approved Washington Department of Fish and Wildlife (WDFW)-preferred in-water work window. The Permittee is obligated to repair any damage to critical area buffers and enhance the construction area with native plantings designed to provide greater stream and habitat function, per the mitigation measures outlined in Exhibit 2, the critical area report, and the conceptual mitigation plan (see Exhibit 4, sheet 9 of 19).

Some critical area mitigation will need to occur on adjacent private properties. Approximately 281 square feet of planting will occur on the north property adjacent to the culvert, and 2,074 square feet of mitigation will occur on the adjacent parcel to the south.

The City has secured temporary construction easements for that work occurring on private property during construction of the culvert. To minimize potential impact from adjacent properties, and the general public staff is recommending, as a condition of approval, that signage (designed pursuant to LFPMC 16.16.170) delineating the culvert boundaries and the critical areas and their buffers be installed at the project site and on private properties.

Conclusions: The project's design minimizes adverse impacts on critical areas and buffers, as well as unreasonable threats to the public health, safety and welfare, through consideration of construction equipment, methods, and timing, as well as mitigation measures for all temporary impacts of the project. This criterion is satisfied subject to compliance with the recommended conditions, and compliance with the recommendations in the applicant's critical area study.

4. *The proposal attempts to protect and mitigate impacts to the critical area functions and values consistent with the best available science with the objective of no net loss of critical area functions and values.*

Findings: According to the applicant's critical area report, the project is designed to have only temporary impacts on critical area and buffer functions, and to ultimately realize significant improvements to critical area and buffer functions. The project is intended to go beyond no net loss, and actually improve of critical area and buffer functions and values.

The applicant indicates that isolation (temporarily re-directing and the re-contouring) of Lyon Creek will be conducted during the replacement of the culvert and the re-grading of the creek bed. An area of 3,780 square feet will be isolated. Activities to isolate the creek could cause harm to fish in the isolated

work area due to affects such as increased water temperature, and decreased oxygen concentration. Prior to working in the isolated area, fish will be removed, and a qualified fishery biologist will conduct and supervise that activity. After the fish have been removed from that section of the creek, the creek bed will be dewatered (dried out), and all pumps used will be screened to prevent avoidable impacts on aquatic organisms. Dewatering, as a result of re-directing, and re-contouring, the creek bed will cause temporary impacts and loss of aquatic habitat, and create a temporary fish passage barrier while the diversion is in place. Once isolation measures are removed, rapid recovery of creek function is anticipated due to influx of water from adjacent areas, and the nutrients that will arrive with the drift.

This project will also create a temporary impact to 9,387 square feet of vegetation within the buffer of the Lyon Creek and Wetland 1. Riparian vegetation will need to be removed within the creek buffer, as well as removal of a total of 3 western red cedars (one 41" dbh, one 33" dbh, one 22" dbh), one pacific dogwood (6.7" dbh) located on the parcel to the north of the NE 178 ST. The applicant has provided an arborist report detailing characteristics and risk assessments for all trees on-site (see Exhibit 14), and is requesting removal of these four trees to facilitate the project. As a condition of this recommendation, a tree removal permit, shall be required to remove trees within the stream buffer, and on private property. Removal of vegetation and trees will temporarily alter the shading and input of organic matter into the stream area. Restoration and enhancement of the disturbed buffer area consistent with Exhibit 2 (critical area report), will provide the needed and increased buffer function lost from the impact.

Exhibit 2 (critical areas report) indicates that direct impact to wetland 1 itself (see map in Exhibit 2) will be avoided by limiting the construction boundary and area.

Preparation of a stormwater pollution prevention control plan will be a recommended condition of construction, and all construction activities will occur within upland areas, developed roadways, or select sections of dewatered creek bed.

According to the applicant's critical area report, all impacts to creek and buffer areas as a result of grading and culvert channel improvements are expected to be temporary. Following construction, all temporary structures will be removed and the ground surface will be restored to pre-existing grades. All disturbed areas will be seeded with native herbaceous species and planted with native trees and shrubs (recommended condition of approval through a vegetation management plan and grading permit). Where feasible, the trunks of the removed large trees, will be used as a feature of the stream's restoration and enhancement. Restoration of the temporarily disturbed areas will restore lost functions once vegetation becomes established. The applicant indicates that buffer functions could improve as a result of the project. Exhibit 2 states that the completed project will benefit the habitat and hydraulic conditions of the creek, and improve the fish passage within

that section. The report goes on to state that the project is essentially self-mitigating, and does not require any compensatory mitigation.

According to the applicant's critical area report, a critical component of success for critical area restoration projects is monitoring and contingency plans. In that context, staff recommends that the permittee provide an as-built version of the mitigation site to the Planning Department, after completion and acceptance of all of the work explained above (recommended condition of approval). The health of mitigation and restoration plantings, as well as the culvert's function, and associated hydrologic functions is proposed to be monitored over a five year period, with required annual reports submitted to the Planning Department to document conditions. Goals for establishing vegetation within the buffer areas, and minimum vegetative cover percentages, along with monitoring the presence of invasive species, and basic assessments of the site's conditions that could undermine achievement of performance standards for the project will be components of the annual reports. As a recommended condition of approval, these annual reports are to be provided to the Planning Department, as well as a signed copy of the written contract with a qualified professional who will perform the monitoring program. Any components of the desired goals and performance measures found not to meet desired outcomes will be corrected immediately in accordance with best available science. Early recognition and rectification of issues is often a key step in preventing major failures.

Conclusions: The project minimizes and mitigates impacts to critical area and buffer functions by using best available sciences and careful consideration of construction equipment, methods, and timing. Per the applicant's critical area report, the project, as designed, poses no net loss of function or values for critical areas or their buffers, and in most cases enhances functions and values for the areas temporarily impacted. This criterion is satisfied, subject to the recommended conditions of approval.

5. *The proposal is consistent with other applicable regulations and standards.*

Findings: The permittee is responsible for securing all other agency approvals. At this time, there are no known inconsistencies with other applicable zoning, environmental, and right of way standards besides those that the Permittee is asking for relief from.

Conclusions: This criterion is satisfied subject to compliance with the recommended conditions.

PUBLIC COMMENT

During the comment period for the Notice of Application, the City received comments from four concerned agencies (see specific comments in Exhibit 3). The City re-noticed the project on July 8, 2019, due to new information regarding tree removal that was not included in the original application. The City received one additional comment since the re-notice was published. The

concerns raised include general questions regarding the design of the culvert, suggestions on possible stream mitigation strategies, concerns over utility locations and utility restoration methods, and general comments regarding the potential for archeological discovery. Staff has considered these comments while drafting the recommendation and creating the recommended conditions of approval. Staff finds that the concerns are addressed through the project's design or through the recommended conditions herein. Further public comment may become available, as the public hearing notice was published on August 19, 2019.

CONCLUSIONS AND RECOMMENDATION

Planning Staff recommends allowing installation of the culvert and installation of the suggested mitigation for critical areas. In combination, these measures should allow the City to install the culvert with the least amount of impact on critical areas.

The City of Lake Forest Park Planning Department recommends approval of the proposal, subject to the conditions listed below:

1. All design/implementation, recommendations and statements included in the critical areas report (Exhibit 2), shall be strictly adhered to throughout the project and monitoring period.
2. The Permittee shall obtain tree removal, grading, and right of way permits needed for construction level activity. Specific designs illustrating the vegetation to be retained, as well as mitigation planting shall be included, as well as any other designs required to support the work outlined in the critical area report (Exhibit 2).
3. All vegetation removal within a critical area or buffer, except that removal associated with Japanese Knotweed, shall be conducted with hand-held, non-motorized equipment. Removal of Japanese Knotweed shall be in accordance with the King County noxious weed program.
4. Prior to any construction, clearing limits shall be marked and inspected by Planning Department staff to avoid any unnecessary impact to critical areas or buffers.
5. All construction activities involving hazardous chemicals shall occur only in the upland area or in the dry creek bed following dewatering.
6. Permanent signage (designed pursuant to LFPMC 16.16.170) shall be installed to the satisfaction of the Planning Director to delineate the culvert area, critical areas and their buffers at the project site, and on private property.
7. A stormwater pollution prevention plan shall be required, and is subject to Planning Department approval.
8. The Permittee shall provide the Planning Department with an as-built drawing (prepared by a licensed professional) of the final mitigation after it has been inspected and accepted. The permittee shall provide the Planning Department with annual monitoring reports of all mitigation for a period of five years. A signed copy of the written contract with the qualified professional who will perform the monitoring program shall also be provided to the Planning Department prior to final inspection.

ATTACHMENTS

The following documents are attached to or referenced, and made a part of this report:

Attached:

Exhibit 1: Staff Report and Recommendation

Exhibit 2: Critical Area Report date stamped April 17, 2019 by the City of Lake Forest Park.

Exhibit 3: Public Comments

Exhibit 4: 90% Design Plans date stamped April 17, 2019 by the City of Lake Forest Park; Sheets 1 through 19.

Exhibit 5: Comprehensive Plan Map

Exhibit 6: Zoning Map

Exhibit 7: PAUE application date stamped September 13, 2018 by City of Lake Forest Park

Exhibit 8: SEPA checklist date stamped September 13, 2018 by City of Lake Forest Park

Exhibit 9: Letter of Complete application

Exhibit 10: Notice of Application

Exhibit 11: Determination of Non-significance dated November 7, 2018

Exhibit 12: Updated Notice of Application

Exhibit 13: Updated Determination of Non-significance dated July 24, 2019

Exhibit 14: Arborist Report date stamped August 2, 2019 by City of Lake Forest Park

Exhibit 15: Notice of Public Hearing

Exhibit 16: Ariel photo of project site

Submitted:



Nick Holland
Senior Planner

Date: August 22, 2019

For information about this proposal or questions about this staff report, please contact the Lake Forest Park Planning Department at Lake Forest Park City Hall, 17425 Ballinger Way NE, (206) 368-5440 or e-mail aplanner@cityofflp.com.