



CITY OF MEDINA

501 Evergreen Point Road, Medina WA 98039

425.233.6400 (phone) 425.451.8197 (fax) www.medina-wa.gov

July 15, 2016

**RE: DECISION – REVISED SHORELINE CONDITIONAL USE PERMIT NO. 278 FOR
SR 520 FLOATING BRIDGE REPLACEMENT PROJECT**

Dear Interested Party,

Enclosed is a decision to approve revisions to the Shoreline Conditional Use Permit No. 278 for the replacement of the SR 520 floating bridge project. The revision to the original permit includes refinements to demolition activities associated with decommissioning of the existing floating bridges and approaches. The refinements were found by the City and the Department of Ecology to be within the scope and intent of the original shoreline permit approval.

If you have any questions, please feel free to contact me at (425) 233-6416 or email rgrumbach@medina-wa.gov.

Sincerely,

Robert J. Grumbach, AICP
Director of Development Services

Enclosure: Ecology Letter of Approval and City of Medina's Determination on the Shoreline Permit



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

July 14, 2016

Washington State Department of Transportation
SR 520 Bridge Replacement and HOV Program
Attn: Scott White, Regulatory Compliance Manager
999 – 3rd Avenue,
Suite 2200, MS: NB82-99
Seattle, WA 98104

I certify that I mailed a copy of this document to the persons
and addresses listed herein, postage prepaid, in a receptacle
for United States mail in

Bellevue

Washington, on July 14, 2016

Signature Amelia Petri

Re: City of Medina Local Permit CUP No. 278
Revised Shoreline Conditional Use Permit 2011-NW-296

Dear Mr. White:

On July 13, 2016, the Department of Ecology (Ecology) received the City of Medina's decision on your revised Shoreline Conditional Use Permit (CUP). The original permit, approved February 17, 2012, intended to establish a state highway and bridge use and authorize the following: replacement of the existing SR 520 highway floating bridge; construction of a new east approach to the floating bridge; construction of a new stormwater treatment facility; construction of a new pedestrian overlook; and demolition of the existing floating bridge and east approach within the shoreline jurisdiction of Medina.

The revision to the original permit includes refinements to demolition activities associated with decommissioning of existing floating bridges and approaches. These refinements were found by the City to be within the scope and intent of the original shoreline permit approval. The revision is anticipated to result in a 6.5 percent increase in the amount of bridge concrete being rubblized on barges (on the water) rather than on land. As described in the materials submitted to Ecology, the applicant and the City concur that the proposed change is consistent with the revision criteria in WAC 173-27-100.

By law, Ecology must review revised Shoreline CUPs for compliance with:

- The Shoreline Management Act (Chapter 90.58 RCW).
- Ecology's permit revision criteria (Chapter 173-27-100 WAC).
- The City of Medina Local Shoreline Master Program.

After reviewing the revised Shoreline CUPs for compliance, Ecology must decide whether to approve, approve with conditions, or disapprove them.



WSDOT SR 520 Bridge Replacement
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Our Decision:

Ecology approves your revised CUP provided your project complies with the conditions required by the City of Medina, as listed in their decision on July 13, 2016. **Please note, however, that other federal, state, and local permits may be required in addition to this shoreline permit.**

What Happens Next?

At your own risk, you may immediately begin the activities authorized by the approved revised CUP. However, there is a 21-day appeal period, beginning on July 14, 2016, during which anyone may appeal the CUP revision to the State Shorelines Hearings Board. The Shorelines Hearings Board could deny or modify your CUP revision. The Shorelines Hearings Board will notify you by letter if they receive an appeal. They can be reached at (360) 664-9160 or <http://www.eho.wa.gov>.

If you want to appeal this decision, you can find appeal instructions (Chapter 461-08 WAC) at the Shorelines Hearings Board website above. They are also posted on the website of the Washington State Legislature at <http://apps.leg.wa.gov/wac/default.aspx?cite=461-08>.

If you have any questions, please contact me at (425) 649-7096 or Joe.Burcar@ecy.wa.gov.

Sincerely,



Joe Burcar, Interim Section Manager
Shorelands and Environmental Assistance Program

E-cc: Bullamore Bryant, WSDOT
Greg Meadows, WSDOT
Stephen Sax, WSDOT
Robert Grumbach, City of Medina
Josh Baldi, Ecology
Penny Kelley, Ecology



CITY OF MEDINA

501 Evergreen Point Road, Medina WA 98039

425.233.6400 (phone) 425.451.8197 (fax) www.medina-wa.gov

July 12, 2016

Washington State Department of Transportation
SR 520 Bridge Replacement and HOV Program
999 3rd Avenue, Suite 2200, MS: NB82-99
Seattle, WA 98104

RE: REVISION TO SHORELINE CONDITIONAL USE PERMIT FILE NO. 277

Dear Washington State Department of Transportation,

This letter is issued in approval of a Revision to a Shoreline Conditional Use Permit (SCUP) granted to the Washington State Department of Transportation (WSDOT) for the SR 520 Floating Bridge and Landings Project. The Revision is necessary because the means and methods of decommissioning and removal of the old SR 520 bridge have changed since the original SCUP approval in 2012.

The SR 520 Floating Bridge and Landings Project (Project) began in 2006 with a mandate from the State Legislature, which found replacement of the old bridge a matter of urgency for the safety and transportation needs of central Puget Sound. SR 520 is designated an essential public facility pursuant to RCW 36.70A.200. The City can impose reasonable permitting requirements and require mitigation of adverse impacts, but the City cannot deny approval or impose regulations that make the siting, development, or operation of an essential public facility impossible or impractical. Requirements for local shoreline permits under the Shoreline Management Act (RCW 90.58 and WAC 173-27) and the City's master program were determined to apply to the highway construction project.

WSDOT obtained the relevant shoreline permits¹ from the City in February 2012 for the bridge replacement project. Conditions and mitigation measures associated with the decommissioning and removal of the old SR 520 bridge were set forth under these permits. Although the substantial development permit included conditions associated with demolition through compliance with the *Draft Aquatic Mitigation Plan*², demolition of the old bridge is specifically called out in Condition 15 of the Shoreline Conditional Use Permit, which states:

¹ Shoreline Conditional Use Permit 277 and Substantial Development Permit SDP-2011-03 for the SR 520 Bridge Replacement & East Approach. WSDOT also obtained approvals for Shoreline Conditional Use Permit 278 and Substantial Development Permit SDP-2011-04 for the SR 520 Maintenance Facility and Pier.

² The *Draft Aquatic Mitigation Plan* references the WSDOT 2010a *Biological Assessment: SR 520, I-5 to Medina: Bridge Replacement and HOV Project* for a detailed breakdown of demolition activity. The Biological Assessment is included as Exhibit 2 of the hearing examiner's decision on the shoreline permits, and the breakdown of demolition activity is extracted and called out in Exhibit 3 cited in Condition 15.

“Approval of the new floating bridge and east approach is conditioned upon the existing floating bridge and east approach being removed consistent with the submitted plans set forth in Exhibit 3, 18, and 32. Only one cross-lake floating bridge is authorized within Medina’s jurisdiction.”

Removal of the old bridge was a condition to satisfy requirements set forth in the Medina Shoreline Master Program; and pursuant to WAC 173-27-160, special conditions for consistency with demolition plans were attached to prevent undesirable effects and to assure consistency with the Shoreline Management Act and the Medina Shoreline Master Program.

Condition 15: The Bridge Demolition Plan

The condition to remove the old bridge required compliance with three exhibits. The exhibits included “Additional Information for Shoreline and Critical Areas Applications” (Exhibit 3), “Bridge Site Plan, dated November 15, 2011” (Exhibit 18), and the “Draft Aquatic Mitigation Plan, dated August 2011” (Exhibit 32). Exhibit 3 outlined the plan for demolishing the old bridge. Exhibit 3 outlined the anticipated demolition sequence as follows:

Fixed Approach Structures

The superstructure will be completely demolished and the substructure will be demolished to about two feet below the mudline, and where feasible completely demolished and removed. The sequence identified for conducting this work included:

- Deploying containment best management practices to keep demolition materials and waste water from entering the lake.
- Demolish traffic barriers and rails.
- Remove superstructure including separating the decking from the girders with the girders loaded onto trucks or barges to be hauled offsite for demolition.
- Remove the entire column/ pile and load onto barges for subsequent disposal.

Transition Spans

If practical, the two truss structures would be removed in one piece. Because of weight, the concrete roadway deck and barriers might be removed first. Once removed, the trusses would be loaded onto a barge and the steel truss structures would be taken to an offsite location to be demolished.

Elevated Roadway

Some or all of the existing bridge deck may need to be removed before the pontoons are transported out of the lake. The extent of elevated superstructure removal will be determined by the contractor based on criteria.

If it is determined that pontoons will be towed in the open ocean, the elevated superstructure and columns will be removed to maintain pontoon stability while under tow. This possibly

applies mostly to the pontoons at the end of the bridge. If the elevated superstructure and columns are removed:

- Superstructure demolition may occur on Lake Washington or at an existing facility similar to that used for pontoon outfitting;
- Demolition would be the same as that described for fixed bridges, except columns would be cut flush or near flush with the top of the pontoons.
- Disposal would be the same as the fixed bridges.

Pontoons

Pontoon removal consists of saw cutting joints, disconnecting the anchor cables, and towing the pontoons away. Pumps and hoses will be used to collect and transport concrete slurry from the cutting operations to holding tanks or land based facilities for disposal. Silt curtains will be used to isolate the work area and monitoring will take place.

Anchor and Anchor Cable Removal and Decommissioning

Underwater anchors will be abandoned in place with the exception of pile anchors. Pile anchors will be removed to below the mudline.

Exhibit 18 is a site plan of the floating bridge project and includes information on the Eastside Staging Area and Mooring Dolphins. It should be noted that according to Exhibit 3, the primary purposes of the staging area were to reduce conflicts and safety risks caused by the proximity of the new bridge alignment to the existing bridge, and to reduce boat traffic, safety risks, and costs by allowing for land-based workers and material access.

Exhibit 32 prescribed a “Draft Aquatic Mitigation Plan” (August 2011), which identifies the project’s permanent and temporary impacts to aquatic habitat and species, and describes the mitigation strategy for the project.

The plan addresses temporary impacts from demolition associated with the SR 520 project including the following:

- A concrete containment and disposal plan will need to be developed to maintain water quality during construction of bridge columns and during demolition of the existing bridge.
- Barges and floats could be used as catchment for demolition debris if located below a proposed demolition activity. Preventing debris from entering the water can be accomplished by using temporary barriers and protective panels, and containing or vacuuming water from concrete saw usage.
- Discharge from construction and operation activities will be monitored per the contractor’s Construction Water Quality Protection and Monitoring Plan approved by Ecology.
- Construction BMPs to control dust include wetting down concrete structures during demolition activity.

As noted previously, details of the demolition plan prescribed by the Draft Aquatic Mitigation Plan are set forth in the WSDOT 2010a *Biological Assessment: SR 520, I-5 to Medina: Bridge Replacement and HOV Project*.

SUMMARY OF RECORD FOR THE REVISION:

Exhibits

The following exhibits were reviewed:

1. Medina Hearing Examiner decision No. CUP 277/ SDP 2011-03 with the following exhibits:
 - a. Exhibit 3: Additional Information for Shoreline and Critical Areas Application, I-5 to Medina: SR 520 Bridge Replacement and HOV Project Bridge and Approach Structure Elements, dated November 15, 2011
 - b. Bridge Site Plan, dated November 15, 2011
 - c. Draft Aquatic Mitigation Plan, dated August 2011
2. WSDOT SR 520 I-5 to Medina: Bridge Replacement and HOV Project Demolition Update for Shoreline Substantial Development Permit 2011-04, dated June 17, 2016
 - a. Attachment 1: Updated SR 520 Evergreen Point Floating Bridge and Landings Demolition Narrative for the City of Medina Shoreline Substantial Development Permit (SDP 2011-03) [Track Changes Version]
 - b. Attachment 2: Clean version of Attachment 1
 - c. Attachment 4: Environmental Compliance Plan Revision 5, dated May 25, 2016
 - d. Email chain from Scott White showing approval of latest iteration of WQMPP
3. SR 520 I-5 to Medina: Bridge Replacement and HOV Project – Request for HPA Revision, dated March 25, 2016
 - a. Hydraulic Project Approval Issued April 15, 2016
4. SR 520 I-5 to Medina: Bridge Replacement and HOV Project – Request for DA Permit Modification
 - a. Seattle District U.S. Army Corps of Engineers Approval of modified approval plans, dated March 9, 2016
 - b. SR 520 I-5 to Medina: Bridge Replacement and HOV Project – Floating Bridge and Landings and West Approach Bridge Project Updates: ESA Reinitiation Memorandum
5. Decommission Details and Planning Demolition Schedule
 - a. Decommissioning Details
 - b. Decommission Planning Schedule
6. Email from Scott White, dated June 22, 2016, regarding updates to SDP 2011-03
7. Results from Concrete Testing, Cover letter dated June 16, 2016

Analysis of WAC 173-27-100

WAC 173-27-100 sets forth the requirements for considering revisions to shoreline permits. It outlines a two-step review process:

- Determine if the revision substantively alters the terms and conditions of the approved shoreline permit; and

- Determine if the revision is within the scope and intent of the original permit.

The following is an analysis of how WAC 173-27-100 applies to the revisions.

1. *“A permit revision is required whenever the applicant proposes substantive changes to the design, terms or conditions of a project from that which is approved in the permit. Changes are substantive if they materially alter the project in a manner that relates to its conformance to the terms and conditions of the permit...”*

SUMMARY OF REVISIONS:

Approval of the original shoreline permits included, among other things, removing superstructure and columns and piles to be hauled off-site for further demolition. On May 25, 2016, the City of Medina (City) became aware of an agreement between the City of Kenmore and KGM³ concerning demolition and removal of the old SR 520 bridge. The terms of the agreement set forth that rubblization of bridge concrete would not be done at or near Kenmore and that this activity would be accomplished on barges on Lake Washington outside of Kenmore’s jurisdiction. Subsequently, the City verified with KGM their plans to conduct rubblization of bridge concrete within the jurisdiction of Medina. Specifically, the barges where rubblization of the concrete would take place would be located in the Eastside staging area used previously for moorage of pontoons before their final placement. WSDOT’s materials submitted to the City in June 2016 indicate the Kenmore settlement resulted in an approximately 6.5 percent increase in the amount of bridge concrete being rubblized on the water rather than on land.

WSDOT stated in its June 17th, 2016 letter that they do not believe the changes to be substantive per the criteria of WAC 173-27-100 and that this update is within the scope of the original permit.

ANALYSIS:

- The terms and conditions of approval for Shoreline CUP 277 included the following:

“Approval of the new floating bridge and east approach is conditioned upon the existing floating bridge and east approach being removed consistent with the submitted plans set forth in Exhibit 3, 18, and 32.”

- A substantive change is interpreted to mean being of a substantial quantity that it is judged to not have been given due consideration during the original approval. Where the applicant’s revisions scale-back work and/ or impacts originally considered, these are non-substantive. However, the demolition plan presented during the original shoreline permit approval did not include use of the Eastside staging area for demolition activity. The Eastside staging area is within 400 feet of residential properties and within the

³ Kiewit-General-Manson, A joint Venture, was selected by WSDOT as the contractor for the bridge replacement and HOV segment of the SR 520, I-5 to Medina Bridge Replacement and HOV Project. The project includes decommissioning and removal of the old bridge.

eastern channel for boat traffic. While the original permit included means and methods for demolishing the East Approach Structure, the additional impacts from demolition of superstructure on barges moored in the Eastside staging area was not. This represents a substantive change to the terms outlined for demolition in the original permit.

- Additionally, WSDOT acknowledges in its letter of June 17, 2016, that it has “continued to coordinate with the selected design-build contractor, Kiewit/General/Manson, on the project demolition proposal. Despite its claims that changes to the demolition plan are not substantive, in March of 2016 WSDOT submitted revised environmental documentation to both the Washington State Department of Fish and Wildlife (WDFW) and the U.S. Army Corps of Engineers, seeking revisions to the Hydraulic Project Approval (HPA) and the Department of the Army Permit, respectively (DA). WSDOT’s cited reason for seeking revisions to these permits was “to authorize activities associated with the demolition of the existing floating bridge and approach spans.”

With regard to the HPA, WSDOT stated that the demolition work will require additional construction means and methods not specifically disclosed in the original JARPA submittal, and a two-week extension on the in-water work was necessary. With regard to the DA, WSDOT stated that the native lakebed material must be “sidecast” to allow the bridge columns to be cut two feet below the mudline. In support of both revisions, WSDOT submitted an Endangered Species Act (ESA) memorandum, authored in November 2015.

The ESA memorandum detailed the demolition process, briefly outlined here as follows:

- Demolish east and west superstructures, including road deck, girders, and cross beams, using concrete saws, hydraulic concrete shears, hoe rams, and derrick cranes. Use barges below the work to contain debris, and haul debris offsite by barge for disposal.
- Demolish the east and west approach columns by side-casting the lakebed materials and using a vibratory pile driver or diamond wire saw to sever the columns. The columns would be hauled off-site for disposal.
- Demolish the east and west transition piers and footings by using a hoe ram to “rubblize” the concrete. Use barges with crane mats to contain the debris. Remove concrete rubblized in the water with a crane and clamshell bucket. The debris would be hauled offsite by barge for disposal.
- Separate the pontoons by removing the joining bolts and pulling the pontoons apart with tug boats.

Demolish the pontoon superstructure by using concrete saws, shears, hoe rams, and cranes to break up the concrete. The debris would be hauled offsite for disposal.

The ESA memorandum identifies two changes to the demolition plan: (1) demolition of the columns must occur in late August so that it can be accomplished before adverse weather presents a safety risk;⁴ and (2) transition piers at the ends of both the east and west approaches will be demolished using a hoe ram to “rubblize” the structures. The memorandum notes, “[T]he use of a hoe ram for in-water demolition was not previously considered. The hoe ram is a type of a breaker (or hammer) attachment for an excavator that uses rapid impacts to break the concrete into rubble.” It further states that barges will be used to contain the debris from above water demolition, while under-water rubble will be scooped with a crane and clamshell bucket.

WSDOT’s recognition that the revisions in the demolition plan required approval from federal and state agencies further supports that this is a substantive change to the shoreline permit as contemplated under WAC 173-27-100.

2. *When an applicant seeks to revise a permit, the City shall request from the applicant detailed plans and text describing the proposed changes.*

Detailed plans and text describing the changes have been received. See Exhibits.

3. *Pursuant to WAC 173-27-100(2), if the City determines that the proposed changes are within the scope and intent of the original permit, and are consistent with the applicable master program and the act, the City may approve the revision. Within the scope and intent of the original permit means all of the following:*
 - a. *No additional over water construction is involved except that pier, dock, or float construction may be increased by five hundred square feet or ten percent from the provisions of the original permit, whichever is less;*

ANALYSIS AND CONCLUSION: The proposed revision applies to the means and methods for demolition of the old bridge. No additional over water construction is involved as the use of barges in the demolition process will remain consistent. Best management practices will continue to be employed and the rubblization process will occur while other bridge demolition activity is occurring simultaneously. The applicant indicated that the timeline for demolishing the old bridge will be unaffected. The proposed revisions meet this criterion for being within the scope and intent of the original permit.

- b. *Ground area coverage and height may be increased a maximum of ten percent from the provisions of the original permit;*

ANALYSIS AND CONCLUSION: The proposed revisions affect changes to the means and methods for demolition activity and will not affect ground area coverage or height. The proposed revisions meet this criterion for being within the scope and intent of the original permit.

⁴ An opinion from National Marine Fisheries Service (NMFS) generally prohibits turbidity generating activities before September 1, due to effects on fish.

- c. *The revised permit does not authorize development to exceed height, lot coverage, setback, or any other requirements of the applicable master program except as authorized under a variance granted as the original permit or a part thereof;*

ANALYSIS AND CONCLUSION: The proposed revisions affect changes to the means and methods for demolition activity and will not affect dimensional development standards in the Medina Shoreline Master Program. The proposed revisions meet this criterion for being within the scope and intent of the original permit.

- d. *Additional or revised landscaping is consistent with any conditions attached to the original permit and with the applicable master program;*

ANALYSIS AND CONCLUSION: The proposed revisions affect changes to the means and methods for demolition activity and will not affect landscaping. The proposed revisions meet this criterion for being within the scope and intent of the original permit.

- e. *The use authorized pursuant to the original permit is not changed;*

ANALYSIS AND CONCLUSION: Changes to the means and methods for demolition of the old bridge will not change the use. The Shoreline Conditional Use Permit authorized a state highway use to continue that was not listed as a permitted use under the master program in effect at the time. Removal of the old bridge was required as a mitigation measure for impacts from the construction of the new bridge, and to comply with requirements set forth in the Medina Shoreline Master Program. The proposed revisions meet this criterion for being within the scope and intent of the original permit.

- f. *No adverse environmental impact will be caused by the project revision.*

ANALYSIS AND CONCLUSION: No adverse environmental impacts were identified to be caused by the project revisions. WSDOT submitted modifications to the demolition plan to various state and federal agencies that approved the changes. This includes the HPA (Permit Number 2014-4-448+05), the Construction Water Quality Monitoring and Protection Plan (Order No. 9011), and the Department of the Army permit (NWS-2008-1246). As found in each of these permits, environmental impacts can be addressed through use of Best Management Practices (BMPs) and consistent monitoring of water quality. Additionally, the concrete was tested for metals and found to meet EPA requirements.

CONCLUSION

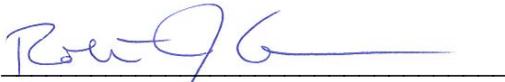
Per the analysis above, the City concludes that the proposed revisions are within the "scope and intent of the original permit" as outlined in WAC 173-27-100(2).

Decision

Per the analysis and conclusion above, the City finds that the revisions are within the scope and intent of the original approval as set forth in WAC 173-27-100(2) and therefore **approves** the revisions set forth in Exhibit 2, subject to the conditions below.

1. To the extent feasible, the breaking up of concrete on barges shall take place west of the Eastside staging area. In implementing this condition, it is recognized that the east and west end pontoons (rafts) containing superstructure connected to the east and west transition spans are not feasible in being demolished outside of the Eastside staging area.
2. Conditions set forth in the Revised Hydraulic Project Approval (Permit Number 2014-4-448+05), the Construction Water Quality Monitoring and Protection Plan (Order No. 9011), and the U.S. Army Corps of Engineers permit (NWS-2008-1246), especially conditions requiring use of Best Management Practices and water quality monitoring, shall be included as conditions for approving this revision.
3. All other conditions set forth in Shoreline Conditional Use Permit 277 and Substantial Development Permit SDP-2011-03 shall continue to apply.

SIGNATURE OF APPROVING AUTHORITY



Robert J. Grumbach, AICP
Development Services Director

Date: July 12, 2016

Note:

Pursuant to WAC 173-27-100(6) this revision to the Shoreline Conditional Use Permit shall be submitted to the Washington State Department of Ecology for the department's approval, approval with conditions, or denial. The department shall render and transmit to local government and the applicant its final decision within fifteen days of the date of the department's receipt of the submittal from local government.