



Notice of Decision

Notice of Action

Case No(s): CUP15-037 SEP15-016
Applicant: James Essig, Frank Rowley

This notice is issued pursuant to Yakima County Code Chapter 16B.07 and RCW 36.70B.130

Decision made on project permits: The Yakima County Administrative Official hereby **Conditionally Approves** the requested expansion of an existing mining site by 100 acres in 4 phases. The Findings and Decision can be viewed online at: www.yakimap.com/permits/ or at the Planning Division on the 4th floor of the Courthouse.

SEPA threshold determination: The lead agency for this proposal has determined that it will not have a probable significant adverse impact on the environment and an Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(c), provided mitigation measures are taken to mitigate potential adverse impacts. This decision was made after a careful review of the completed environmental checklist and other information on file with the lead agency. This information (including all environmental documentation) is available to the public on request and can be examined in our offices during regular business hours or online at www.yakimap.com/permits/. Environmental documents include the SEPA checklist, this threshold determination, and submittal materials.

Appeal procedures:

SEPA: In accordance with Title 16B, Chapter 16B.06.070(1) of the Yakima County Code, administrative appeals of the SEPA threshold determinations on Type 1 or 2 project permits or on legislative actions are not allowed. Appeals of the SEPA threshold determination can be made to Superior Court within 21 days of this decision.

CUP: In accordance with Title 16B, Chapter 16B.09 of the Yakima County Code, any person of standing pursuant to 16B.09.020 may appeal the Administrative Official's land use decision to the Yakima County Hearing Examiner. A notice of the administrative appeal must be filed in writing and delivered to the Planning Division on the 4th Floor of the Yakima County Courthouse, Yakima, Washington **on or before 4:00 p.m., April 21, 2017**. The filing of an appeal does not stay the effectiveness or effective date of any enforcement action or decision of violation including cancellations and revocations of permits or approvals. The administrative appeal must be in writing, using the appropriate forms, accompanied by the appeal fee, and contain the following information:

- A. The appellant's name, address, and telephone number.
- B. Appellant's statement establishing standing to initiate the appeal under Section 16B.09.020 of this Chapter;
- C. An identification of the specific proposal and specific actions, omissions, conditions or determinations for which appeal is sought;
- D. Appellant's statement of the particular grounds for the appeal, setting forth the principal points of appeal and addressing why the appellant believes the decision to be wrong; and
- E. The desired outcome or relief sought by the appellant.

If you have any questions on this proposal, please call **Noelle Madera or Byron Gumz**, at (509) 574-2300 or 1-800-572-7354 ext. 2300.



Public Services

128 North Second Street • Fourth Floor Courthouse • Yakima, Washington 98901
(509) 574-2300 • 1-800-572-7354 • FAX (509) 574-2301 • www.co.yakima.wa.us

VERN M. REDIFER, P.E. - Director

DATE: April 7, 2017

TO: James Essig, Frank Rowley, and Interested Agencies

FROM: Byron Gumz, Yakima County Planning

SUBJ: CUP2015-00037/SEP2015-00016 – Rowley Quarry Expansion
Notice of Decision & Final Threshold Determination

Enclosed are the Decision and Final Threshold Determination - Mitigated Determination of Non-Significance for the proposal to expand an existing mine. Your proposal has been APPROVED. Please review the attached documents for information on conditions of approval, and your appeal options. If you have any questions on the project or the appeal process, please contact me at (509) 574-2300.

Encl. MDNS
Decision

Copy: Parties of Record
Agencies

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FINAL
MITIGATED DETERMINATION OF NON-SIGNIFICANCE
(Notice of Action)

1. **Description of Proposal:** Granite Northwest, Inc. has submitted a Type-II Conditional Use Permit application and Washington State Environmental Policy Act (SEPA) environmental checklist to expand an existing mine within the Rural-10/5, Mining Zoning District, and Remote/Extremely Limited Development Potential (R/ELDP) Zoning Districts. The expansion area is within the Mineral Resources Overlay established by Yakima County in 2007. The proposal includes an updated mining operation plan, Blast Vibration Monitoring Plan, and a cultural resource survey completed November 2016.
2. **File Number:** SEP2015-00016
3. **Owner(s):** Frank Rowley
101 East Selah Road
Yakima, WA 98901 Granite Northwest, Inc.
1525 E. Marine View Drive
Everett, WA 98201
4. **Proponent:** Granite Northwest, Inc.
Attn: James Essig
1525 E. Marine View Drive
Everett, WA 98201
4. **Location of Proposal:** 140 E. Selah Road, Selah, WA. The property is located on the south side of E. Selah Road; immediately south of the Interstate 82 and E. Selah Road interchange, approximately 1/4 miles east of the City of Selah. (Parcel Nos. 191306-24004, -24003, -12404, and -13001)
5. **Lead Agency:** Yakima County Planning Division
6. **Determination:** The lead agency for this proposal has determined that it will not have a probable significant adverse impact on the environment and an Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(c), provided the measures listed below are taken to mitigate potential adverse impacts. This decision was made after a careful review of the completed environmental checklist, and other information on file with the lead agency. This information (including all environmental documentation) is available to the public on request and can be examined in our offices during regular business hours or online at www.yakimap.com/permits. Environmental documents include the SEPA checklist, this threshold determination, and submittal materials.
7. **Identified Environmental Impacts and Mitigation Measures:**
Substantive authority to require mitigation for significant and non-significant impacts is derived from WAC 197-11-660, Yakima County Code Chapter

16.04.230 and, by reference, the policies contained in the Yakima County Comprehensive Plan.

A. Air (Air Quality)

The soils within the project area possess the potential to generate significant levels of dust when they are disturbed. Wind erosion and fugitive dust are likely during mining operations (including excavation, processing, and hauling), but also during non-use times, as large areas of disturbed ground may remain exposed (*Plan 2015* Policies NS 3.2 & NS 3.3)

Mitigation Measure A1: During both construction and normal operations, the applicant must comply with the provisions of all permitting and regulatory requirements set forth by the Yakima Regional Clean Air Authority (YRCAA). Copies of all permits obtained shall be provided to Yakima County Planning Division prior to mining in the expansion area.

B. Water (Ground and Surface water)

The project area has nearby surface water features. There will likely be impacts to drainage facilities, adjacent property owners, adjacent sensitive environments, or groundwater due to construction erosion, increased runoff, and/or stormwater infiltration unless development is properly designed and managed. Adequate site investigation and development planning will mitigate these impacts. (*Plan 2015* Policies NS 13.1, NS 13.3, & NS 14.2)

Mitigation Measure B1: The Washington State Department of Ecology (DOE) Sand and Gravel Permit includes requirements that address impacts relating to stormwater events. The applicant is required to obtain and maintain a valid DOE Sand and Gravel Permit throughout the life of the mine. If the operation is out of compliance with the DOE Sand and Gravel Permit, then it is out of compliance with SEP2015-00016.

C. Energy and Natural Resources (Nonrenewable Resources)

The extraction of nonrenewable resources in this location requires blasting to loosen the operating face of the mine, which is then processed as needed based on demand. Concerns have been raised over impacts the blasting may have to irrigation infrastructure near the proposed mine expansion. A Blast Vibration Monitoring Plan has been developed to monitor potential impacts due to blasting operations. (*Plan 2015* Policy LU-ER-MR 3.2)

Mitigation Measure C1: The Blast Vibration Monitoring Plan shall be implemented prior to any blasting activities within the mine expansion area.

D. Transportation (Traffic Hazards)

Potential exists for loose gravel to impact roadways if it is spilled or tracked out by vehicles leaving the mine site. Loose gravel can cause a hazard for the travelling public. (*Plan 2015* Policy LU-ER-MR 3.2)

Mitigation Measure D1: All vehicles hauling gravel from the site shall have a secured load to prevent gravel from spilling onto the roadway.

Mitigation Measure D2: A wheel wash or other method of preventing tire track-out onto East Selah Road shall be installed prior to mining the expansion area.

E. Land and Shoreline Uses (Aesthetics)

The operation of a mine has potential for significant visual impacts unless reclamation standards are met. The Washington State Department of Natural Resources (DNR) administers the Washington State Surface Mining Act, which regulates the reclamation of mines with the objective of reestablishing vegetative cover, soil stability, and water conditions. (*Plan 2015* Policy LU-ER-MR 3.4)

Mitigation Measure E1: A Reclamation Plan, approved by the Washington State Department of Natural Resources, shall be submitted to the Yakima County Planning Division prior to mining activities in the expansion area. The Reclamation Plan shall be implemented throughout the life of the mine.

F. Historic and Cultural Preservation (Cultural Resources)

The area of the proposed mine expansion lies within an identified cultural resources area. The extraction of mineral resources from this area has the potential to disturb cultural resources. (*Plan 2015* Policies NS 4.1 and NS 4.4)

Mitigation Measure F1: All pre-contact non-significant isolates shall be documented, collected, and identified in accordance with best practices.

Mitigation Measure F2: If unanticipated archaeological or historic resources are uncovered, developers and property owners shall immediately stop work and notify Yakima County Public Services, Yakima County Coroner (if human remains are discovered), the Washington State Department of Archaeology and Historic Preservation, and any affected Indian tribes.

Mitigation Measure F3: All archaeological resources that reveal evidence of human remains shall be protected with a 75-foot buffer. Any change in the mining operation resulting from discovery of archaeological resources shall be submitted to Yakima County Public Services, the Washington State Department of Archaeology and Historic Preservation, and the Washington State Department of Natural Resources.

8. **Comment and Appeal Information:** This Final MDNS is issued under WAC 197-11-340(2). There is no further comment on it. You may appeal this SEPA threshold determination to Yakima County Superior Court within 21 days. For information on the appeal processes, or on other issues relating to this proposal, contact Byron Gumz, Senior Project Planner, at (509) 574-2300.

9. **SEPA Responsible Official:** Lynn Deitrick, AICP



10. **Designee:** Thomas Carroll
11. **Address:** 128 N. 2nd St.
4th Floor Courthouse
Yakima, WA 98901
12. **Date:** April 7, 2017



Public Services

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VERN M. REDIFER, P.E. - Director

**YAKIMA COUNTY PLANNING DIVISION
Mining Site/Operation Expansion
- FINAL DECISION -**

PROJECT NAME:	Rowley Quarry Expansion
REVIEW PROCESS:	Type II
FILE NUMBER(s):	PRJ2014-000216/CUP2015-00037/SEP2015-00016
PARCEL NUMBER(s):	191306-12404 191306-24003 191306-13001 191306-24004
ZONING:	Valley Rural (VR), Mining (MIN), and Remote/Extremely Limited Development Potential (R/ELDP)
LAND USE DESIGNATION:	Rural Self-Sufficient, Remote/Limited Development, and Mineral Resource Overlay (MRO)
PROPOSAL:	Expand an existing 61-acre mining site by approximately 100 acres for mining and accessory uses. The expansion will occur in four phases; with each phase mined as mineral resource demand requires.
OWNERS:	Frank Rowley 101 East Selah Road Yakima, WA 98901
APPLICANT:	Granite Northwest, Inc. James Essig, Resource Manager 1525 E. Marine View Everett, WA 98201
PREPARED BY:	Noelle Madera, Senior Project Planner, Senior Project Planner
DECISION:	Approved with the following conditions:
<p>The following conditions must be obtained within three year of the date of this decision. Please note that this decision and time limit pertains to conditional authorization for the subject land use only and failure to comply with all conditions will result in the revocation of this permit.</p>	

1. Unless otherwise stated under specific conditions listed in this Decision, all local, state, and federal required mining related operating permits shall be obtained prior to the beginning of mining operations and maintained throughout the life of the mine.
2. All required permits from the Yakima Regional Clean Air Agency shall be obtained prior to the expansion of the mine.
3. The applicant shall obtain all necessary permits from the Washington State Department of Ecology.
4. The applicant shall obtain all necessary permits from the Washington State Department of Natural Resources.
5. The applicant shall obtain all necessary permits from the Washington State Department of Archaeology & Historic Preservation (DAHP).
6. Compliance with DNR reclamation plan requirements shall be met prior to mine operation in the expansion area. The applicant must notify Yakima County upon completion of their DNR reclamation responsibilities.
7. A portion of parcel number 191306-12404 is split zoned Mining and VR and the VR zoned portion is outside the MRO. Mining activities shall be contained within the area zoned Mining and/or within the MRO. The site plan shows that this will be met.
8. The property is adjacent to Interstate 82 (I-82), a fully controlled limited access facility with a posted speed limit of 70 miles per hour. No direct access to I-82 or the ramps [other than those already provided by WSDOT] will be allowed. (YCC 15.20.020).
9. Exterior lighting for all uses and signs shall be directed downward and otherwise arranged, shaded, screened, shielded, and of a design that results in the light being directed onto the site and of an intensity or brightness that does not reflect or cause glare into any adjacent or nearby residential use or interfere with the safe operation of motor vehicles (YCC 15.20.110).
10. Stormwater must be retained on site and upland drainage, if any, must be conveyed through the property in accordance with criteria found at YCC 12.10.130.
11. All mitigation measures outlined in SEP2015-00016 shall be met.
12. All setbacks for structures outlined in YCC 15.20.070 and 15.20.075 shall be adhered to.
13. Mining site/operation setback outlined in YCC 15.45.060(6)(a) shall be adhered to.
14. Mineral processing and batching, and manufacturing and fabricating plants shall not occur within 500 feet of an existing residence not on the subject property or under the same ownership, or within 25 feet of any exterior property line, unless the property is also zoned 'Mining' (YCC 15.45.060(6)(b)).
15. Mineral extraction shall not occur within 200 feet of an existing residence not on the subject property or under the same ownership, or within 25 feet of any exterior property line, unless the adjacent property is also zoned 'Mining' (YCC 15.45.060(6)(c)).

16. The mining area shall preserve existing trees and other vegetation, to a minimum width of 25 feet, adjacent to any residences and lands within the VR zoning district that aren't part of the mine expansion area.
17. All applicable local and state water quality regulations shall be met.
18. All future signage installed shall meet the requirements outlined in YCC 15.66.
19. Hours of operation on land not zoned MIN are limited to 6:00 a.m. to 6:00 p.m. daily for mineral batching. Excavation, hauling mineral products offsite, and mineral processing on lands outside of the Mining Zoning District is limited to 7:00 a.m. to 6:00 p.m. Monday through Friday, 8:00 a.m. to 5:00 p.m. on Saturdays. No activities are allowed on New Year's Day, the Fourth of July, Labor Day, Thanksgiving, and Christmas Day (YCC 15.18.030(j)(2)).
20. Hours of operation for lands zoned MIN are not limited.
21. Standard hours of operation for blasting shall be 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding New Year's Day, the Fourth of July, Labor Day, Thanksgiving and Christmas Day (YCC 15.45.060(7)(b)).
22. If there are residences located within one-half mile of the site, a property owner notification plan must be developed by the operator and filed with the Planning Division before blasting can occur. The operator/property owner shall be responsible for implementation of the blasting notification plan (YCC 15.45.060(7)(c)). Notifications to residences within one-half mile of the site and agencies with need for notification, including Selah-Moxee Irrigation District, are required to be notified of the blast 1-2 weeks in advance.
23. Upon request, a representative from Granite will be available for an annual inspection of the Selah-Moxee Irrigation District tunnel during a time that the tunnel can be inspected.
24. Upon request, the applicant (Granite) must make results of the blast monitoring available to Yakima County.
25. The owners, their grantees and assignees in interest will abide by the terms of YCC 16B.07.050 – Compliance, Extension, Expiration, and Reinstatement attached to this decision. The applicant shall complete all required conditions, submit documentation that all conditions were met and request County inspection or review to determine that the requirements have been fulfilled within the timeframe specified in the decision and any authorized extensions.
26. A complaint management plan shall be created to allow Yakima County to refer complaints to Granite if received. Granite shall be responsible for updating this plan.

The following are ongoing conditions that apply to the project for the life of the permitted use. Failure at anytime to comply with these conditions can result in the revocation of this permit.

27. Modifications to the approved Mining/Site Operations Plan, such as the use of berms, new stockpiles or change of hours of operation must be reviewed by the Planning Division prior to implementation to ensure that such changes fall within the scope of this permits and considered as part of the MDNS or other permit authorizations, but otherwise does not require a new permit review.

28. All conditions as described in SPU 1994-19 and ZON2000-00006/CUP2000-00006 are still applicable and must be met unless otherwise modified by this decision and/or the associated SEPA (SEP2015-00016).

Based upon information supplied by the applicant and a review of Yakima County Code Title 15, the Yakima County Zoning Ordinance (YCZO), the Administrator enters the following:

FINDINGS AND ANALYSIS

Location

1.. 101 East Selah Road. The proposal is located on the south side of East Selah Road; immediately south of the Interstate 82 and East Selah Road interchange; ¼ mile east of the City of Selah

Project Description

2. The existing mine was permitted at the site in 1994 (SPU 1994-19) for the extraction of basalt. The Mineral Resource Overlay (MRO) was expanded under ZON2000-00006 (Ordinance 10-2001) and the mining operation was expanded under CUP2000-00006.

The existing quarry is east of Selah, WA on the south side of Interstate 82 at the East Selah Road exist. The current and proposed land lies above the 100 year floodplain of the Yakima River and consists of steep and rolling slopes with rocky outcrops.

The applicants have now applied to expand the existing mining operation on the subject property. The expansion area is proposed to be mined in four phases:

Phase 1: Phase 1 will progress south from the existing Rowley East Quarry operations, away from the interstate. When enough space in the pit floor is established, the crusher location will be relocated from the eastern part of the current stockpile area to south of the current stockpile area, closer to the operating face. As Phase 1 nears completion it will be concurrently reclaimed as mining enters Phase 2. This will entail a “rolling reclamation” and the reclaimed slopes in Phase 1 will be covered in stored topsoil and vegetated.

Phase 2: Phase 2 will be developed in the same manner as Phase 1. The crusher and stockpiles will be moved into the pit floor of Phase 1 provided there is adequate room. Mining will progress east into Phase 2. As Phase 2 nears completion it will be concurrently reclaimed as mining enters Phase 3.

Phase 3: Phase 3 will be developed in the same manner as Phase 1. The crusher and stockpiles may be moved into the pit floor of Phase 2 provided there is adequate room. Mining will progress north and northeast into Phase 3. During Phase 3 “rolling reclamation” will occur.

Phase 4: Phase 4 will be developed in a similar manner to Phase 1. However, mining will not proceed until reclamation is initiated on all previous Phases. The crusher and stockpiles will be located in the existing Rowley East Quarry, west of Phase 4. Mining will progress east. As the pit floor is established, the crusher and stockpiles will be moved to the east, closer to the working face.

Upon completion of mining activities, the crusher and stockpiles will be removed and all mining related equipment taken off site. Final reclamation is designed to mimic the surrounding area, with varying slopes and rock outcroppings. Reclamation is expected to take two years after mining activities have ceased.

The quarry is active all year, with the bulk of the sales occurring between March and October. The application states a normal customer count during peak periods (between June and September) is up to 250 customers per day. The applicant has 5 parking spaces for employees.

Granite currently uses a water truck to water roads for dust suppression. The water truck is filled at an offsite pond located north of I-82 near the existing asphalt plant. Granite also leases a water source from Frank Rowley on parcel # 191306-24003, which has a well located on it that provides water to the Rowley residence as well as the quarry sprinkler system. The sprinkler system is utilized for dust suppression on stockpiles, roadways, and portable crushing equipment when on-site.

The application states that the proposed expansion will not increase the existing noise levels. They state the added acreage will provide increased mineral reserves and will not increase the intensity of the current noise levels in the short term. As mining progresses to the south, future operations will be setback further away from local residents and the freeway; which will reduce off-site noise levels in the long-term.

Typical operating hours are 7:00 am – 3:30 pm, Monday through Saturday. Occasional night-time operations occur when required by specific construction projects. Temporary crushing operations may occur 24-hours a day as needed. The current mine is accessed from East Selah Road and this entrance will continue to be utilized in this proposal. No new structures are proposed for this expansion.

The application material states that any blasting will be completed according to the rules and guidelines established in YCC 15.45.060(7)(b,c). "All blasting will occur between the hours of 9:00 am and 4:00 pm, Monday through Friday. Blasting will not occur on New Year's Day, the Fourth of July, Labor Day, Thanksgiving, or Christmas Day. The current blasting notification plan for the existing quarry will continue to be implemented to notify emergency response agencies and residences within one-half mile of the site of blasting event. This notice will also include the Selah-Moxee Irrigation District, WSDOT regional office, Yakima County Planning Department, and the WSY, PNSN Seismology Lab."

No new illumination is proposed in the existing mine area. Current lighting in the stockpile and scale area will continue to be utilized. When a crusher is operating in the mine, associated lights will be directed down at the ground or away from the interstate or other public roads into the quarry area. No direct lighting or glare will be directed towards drivers on the interstate or public roads. As mining progresses into the expansion, lighting will be further concealed by the Phase 4 slope separating the pit floor from the interstate.

Zoning and Land Use

3. The project is within three zoning districts; Valley Rural (VR), Remote/Extremely Limited Development Potential (R/ELDP), and Mining (MIN). The Unified Land Development Code (Title 19) went into effect 1 October 2015, changing the VR zoning district to the Rural – 10/5. This application is still vested under Title 15. Land uses in the area include the existing mine, vacant lands, a fruit stand, and low-density single family residences.

The VR Zoning District is intended to protect and maintain the openness and rural character of outlying areas of the County. Specifically, the intent of this zoning district is to establish minimum development standards that will assure a continuation of the open and rural character of the zoning district and to permit only those uses, and activities that are compatible with this rural character.

The purpose and intent of the Remote/Extremely Limited Development Potential zoning district is to protect the environment and retention of open spaces at a level consistent with the carrying capacity of the land and cost-effective service availability. The zoning district has two primary characteristics that may be found together or separately: remoteness and extreme development constraints.

The Mining Zoning District is intended for the principal purpose of providing long-term sites for heavy industrial uses in conjunction with a mining site/operation. Uses within this zoning district are likely to cause smoke, noise, odors, dust, fumes, visual impacts, and heavy equipment traffic.

The majority of the project area is within the Mineral Resource Overlay (MRO). The intent of Yakima County's Mineral Resource Overlay land use category is to implement the Growth Management Act planning goal related to maintaining and enhancing natural resource-based industries, which includes commercially viable mineral resource industries. The MRO is intended to identify, preserve and protect the mineral resource land base which is intended to be used for, or offers the greatest potential for, the continued production of aggregate products such as concrete or asphalt, while allowing the underlying land use to provide interim land use direction until such time that mineral extraction is permitted. The Mineral Resource Overlay land use category identifies review criteria, allowed uses, lot sizes, standards of operations and provisions for revisions.

A portion of parcel number 191306-12404 is split zoned Mining and VR and the VR portion is outside the MRO. Mining activities shall be contained within the area zoned Mining and/or within the MRO. The site plan shows that this will be met.

Jurisdiction and Process

4. The proposal lies in unincorporated Yakima County, and is subject to Yakima County Code (YCC) Title 15, the Yakima County Zoning Ordinance. A mining site/operation is considered a Type-II Land Use in the R/ELDP and VR Zoning Districts. A mining site/operation is considered a Type-I Land Use in the MIN Zoning District. When a proposed use requires more than one level of review, the highest level of review is required. Therefore, a Type-II Land Use review is required. Type-II applications must be reviewed and may be conditioned to ensure compatibility and compliance with the provisions of YCC Title 15 and applicable comprehensive plans (YCC 15.12.015).

This application was deemed complete May 8, 2015, prior to the adopted of Title 19, which superseded Title 15. Since the application was complete prior to the effective date of Title 19 (Oct 1, 2015), this application is vested under Title 15.

Environmental Review

5. The application is subject to review under the State Environmental Policy Act (SEPA) because it is not categorically exempt from the environmental review process. Yakima County is Lead Agency under SEPA and performed an environmental review under file number SEP2015-00016. A Final Mitigated Determination of Non-Significance is issued concurrently with this decision.

Notice of Application

6. A combined Notice of Application, Notice of Completeness, and Notice of Environmental Review was mailed to property owners within ½ mile of the property and to agencies having jurisdiction or interest in the proposal on May 13, 2015, with the comment period ending May 27, 2015. Seven comments were received; four from Interested Agencies and three from adjoining property owners.

- a. Yakima County Public Services – Water Resources Division: The Water Resources Division provided the following comments:

“Stormwater must be retained on site and upland drainage, if any, must be conveyed through the property in accordance with criteria found at YCC 12.10.130. A Washington State Department of Ecology Industrial Stormwater Permit and Construction Stormwater Permit may be required.”

Staff Response: The applicant shall be required to retain all stormwater onsite and any upland drainage must be conveyed through the property.

- b. Washington State Department of Ecology (Ecology): Ecology commented regarding Water Quality (for sites with S&G permit coverage that are expanding permit boundaries) that the proponent must submit a revised site map that includes the new sand and gravel permit boundaries (including discharge monitoring location if known). The proponent should email, mail, or fax the information to the Department of Ecology.

Staff Response: The applicant will be required to update a site plan with the Department of Ecology as a condition SEP2015-00016 (Mitigation Measure B1).

- c. The Selah-Moxee Irrigation District (SMID): SMID submitted a letter outlining concerns with blasting in proximity to their irrigation tunnel that flows through the Yakima Ridge and delivers irrigation to portions of Terrace Heights, East Valley, and Moxee. SMID also attached a copy of a letter from Halverson Northwest law group dated May 7, 2014. Their stated concerns are:

- i. Blasting will cause collapse of the tunnel, resulting in permanent crop damage;
- ii. Blasting may cause rock fall, diminishing water capacity, resulting in permanent crop damage;
- iii. Flooding resulting from the collapse of the tunnel or a rock fall;
- iv. SMID will suffer the burden of removing rock in case of tunnel collapse or rock fall; and
- v. Blasting may destabilize the tunnel, creating a safety concern for any maintenance and repair.

Staff Response: SEP2015-00016 Mitigation Measure C1 has required the blast vibration monitoring plan to be implemented prior to any blasting activities within the mine expansion area. As a condition of this decision the applicant will be required to meet the mitigation measures of SEP2015-00016.

- d. Yakima Regional Clean Air Agency (YRCAA): The YRCAA submitted the following comments:

- A new Source Review (NSR) may be required for this project. The proponent must contact YRCAA for further information;
- If demolishing any structures an asbestos survey must be done by a certified asbestos building inspector;
- Any asbestos found must be removed by a licensed asbestos abatement contractor prior to demolition; and,
- Contractors doing demolition, excavation, clearing, construction, or landscaping work must file a Dust Control Plan with YRCAA, prior to the start of any work.

Staff Response: The mitigation required through the SEPA Threshold Determination (Mitigation Measure A1) requires the applicant to comply with all permitting requirements of the YRCAA prior to mining operations within the expansion area.

e. Neighbor Comment: An adjoining property owner submitted the following comments:

“We have many concerns, including but not limited to: dust, noise, truck traffic, rock blasting and vibration, impact on wild life and water and the local environment in general. We do not believe there has been enough public comment or study on this proposed project. We have not read or heard of any serious plans to mitigate the concerns expressed above.

Needless to say, we wish to express our strong opposition to the proposed expansion of the quarry.”

Staff Response: The SEPA environmental review is designed to review and/or mitigate the above listed concerns. The final Mitigated Determination of Non-Significance (MDNS) has mitigation measure outlined for air, water, energy and natural resources (Blast Vibration Monitoring Plan), transportation, and land and shoreline uses (aesthetics, reclamation plan). Although there is no mitigation measure for impacts to wildlife, the SEPA environmental review does review the proposal for these impacts.

f. Neighbor Comment: An adjoining property owner submitted comments relating to air quality, aesthetics of the operation, and issues with the gravel on the roadways.

Staff Response: Air quality is mitigated through the Yakima Regional Clean Air Agency (YRCAA) permitting requirements, and SEP2015-00016 Mitigation Measure A1 will require the applicant to comply with the permitting and regulatory requirements set for by the YRCAA. The SEPA mitigation also requires the applicant to have an approved DNR Reclamation plan to mitigate against visual impacts (Mitigation Measure E1) and will require measures to prevent gravel on the roadways (Mitigation Measure D1 and D2).

g. Neighbor Comment: A neighboring property owner commented with concerns:

“The proposed expansion, in particular approval of a mining and conditional use permit for Parcel #191306-13001, will significantly increase the already-present danger of rotational and other landslides on the hill as a result of mining activity.

The Yakima County community experienced firsthand the devastation that erosion and landslides can cause when in 2009 a hillside near a gravel mining operation collapsed onto Highway 410, destroyed two homes, and cost the public millions of dollars in infrastructure rebuild costs.

The current proposal would more than double the hillside acreage on which mining may occur. In turn, the risks of erosion and landslide will increase exponentially in a location much less remote than the 2009 Highway 410 landslide. Over a dozen homes, including mine, and the I-82 Interstate are dead center in the danger zone underneath and behind the Rowley Quarry.

In addition to my concerns for the safety of my family and the structural integrity of our home, I also support the efforts of many in our community to improve the experience drivers passing through our I-82 corridor. The first impression many drivers experience while passing through Yakima on Eastbound I-82 is based on their observation of heavy equipment cutting away at the hillside of the Rowley Quarry. To allow expansion of current mining operations

will only further compromise efforts to beautify Yakima County's major transportation pathways.

Please deny the requested expansion and encourage mining operations to locate in less visible and less populated sections of our vast County.”

Staff Finding: In consultation with DNR and the Mine Safety Health Administration (MSHA) it was determined that the Nile landslide was not a result of the mining activities mentioned in this comment. A Reclamation Plan, approved by the Washington State Department of Natural Resources is a requirement of SEP2015-00016. Slope stability is addressed in the DNR permit. Safe mining practices for the public and employees are to be reviewed by the Mine Safety and Health Administration (MSHA). Visual impacts will be mitigated through SEPA Mitigation Measure E1.

On June 12, 2015, a Preliminary Threshold Mitigated Determination of Non-Significance (MDNS) was mailed to the applicant, interested agencies, and adjoining property owners with the comment period ending on June 26, 2015. Six additional comments were received during this comment period.

h. Washington State Department of Ecology (Ecology): Ecology provided the same comments as during the previous comment period.

i. Washington State Department of Natural Resources (DNR): DNR provided the following comments:

“The Department of Natural Resources (DNR) Surface Mine Reclamation Program will require an Expanded Surface Mine Reclamation Application. This will need to be submitted to the DNR before mining exceeds the current permit area of record.

The Expanded Surface Mine Reclamation Application is required when a permit holder intends to expand their permit under RCW 78.44.151.”

Staff Finding: A Reclamation Plan, approved by the Washington State Department of Natural Resources, is a requirement of SEP2015-00016 (Mitigation Measure E1).

j. Yakima Regional Clean Air Agency (YRCAA): The YRCAA provided comments that were similar to their previous comments.

k. Washington State Department of Transportation (WSDOT): WSDOT provided the following comments.

- The property is adjacent to Interstate 82 (I-82), a fully controlled limited access facility with a posted speed limit of 70 miles per hour. No direct access to I-82 or the ramps will be allowed [other than those access points already provided by WSDOT].
- All loads transported on WSDOT rights-of-way must be retained and treated on site in accordance with regulating agencies' standards, and not be allowed to flow onto WSDOT rights-of-way.
- Stormwater and surface runoff generated by this project must be retained and treated on site in accordance with regulating agencies' standards, and not be allowed to flow onto WSDOT rights-of-way.

- It is the applicant's responsibility to keep I-82 and the Exit 29 interchange free from dust and debris.
- Any proposed lighting should be directed down towards the site and away from I-82.

Staff Finding: The applicant will be required to adhere to all WSDOT requirements as a condition of this land use decision or through mitigation measures in the SEPA.

1. Halverson Northwest Law Group on behalf of Selah-Moxee Irrigation District (SMID): Halverson Northwest provided a comment letter stating that "because of the likelihood of significant environmental impacts resulting from the Project, SMID asks that an Environmental Impact Statement be prepared, or, in the alternative, that the MDNS be modified to include additional protections for SMID and its water users." This is based on the potential impacts blasting may have to SMID's tunnel.

Staff Finding: Through the SEPA review, it was determined that a Determination of Significance (which would trigger preparing an Environmental Impact Statement (EIS)) was not needed for this project, based on a review of the information provided by the applicants in the environmental checklist and from comments from agencies, adjoining property owner's, and interested parties during the application review.

m. Neighbor Comment:

- "Granite NW states they use a water truck for dust suppression. I have lived in the area 22 years and have rarely seen the truck being used. During times of wind the dust is so thick you cannot see very far in front of your vehicle. Dust from the mining area. Their idea of dust suppression is one garden hose running on a stock pile. This is not adequate. I do not see how approval can be given to use a common well system to adequately control dust from the project."

Staff Finding: As part of the SEPA mitigation the applicant is required to adhere to all permitting and regulatory requirements set forth by YRCAA. If at any time there is an issue with dust, the YRCAA can be contacted.

- "In the SEPA Review under #7: Environmental Health Hazards #a1 Granite NW states 'highly controlled blasting. Adjacent areas will not be affected by blasting.' Under #a5 proposed measure Granite NW states, 'Blasting is performed by a professional contractor on a small scale. Notices to neighbors and emergency services.' We live within 2 miles of the current mining project and will be even closer to the new project. We have never received a notice about blasting. There was some blasting several weeks ago and it was so strong our windows rattled and we thought it was an earthquake. I am concerned about the Selah/Moxee Irrigation tunnel that is in close proximity to the new site and blasting area."

Staff Finding: YCC 15.45.060 outlines the Basics Standards of Operation for all mining operations. YCC 15.45.060(7)(c) requires if there are residences located within one-half mile of the site, "a property owner notification plan must be developed by the operator and filed with the planning department before blasting can occur. The operator/property owner shall be responsible for implementation of the blasting notification plan." Property greater than 1/2 mile from the subject property will not be notified prior to any blasting.

In regards to concerns of blasting in close proximity to the Selah-Moxee Irrigation tunnel, the applicants have submitted a Blast Vibration Monitoring Plan and following it is a requirement of the SEPA mitigation.

- “Granite NW has listed parcel 191306-21006 as stockpile area only. This is currently the Fruit Stand (retail food) owned by Frank Rowley. This parcel was not in last year’s proposal. The property designation is VR, Valley Rural. How does stockpiling come under Valley Rural? If allowed for stockpiling we would have aggregate on both sides of E. Selah Road. They would even store equipment on that site. This should not be allowed and they should use the mining property for stockpiling.

Staff Finding: That previous application (CUP2014-00027/SEP2014-00016) expired while waiting on additional information from the applicant. When the applicant reapplied under CUP2015-00037/SEP2015-00016 parcel number 191306-21006 was included in this application. With the submittal of the most recent revised SEPA and narrative, the applicant removed parcel number 191306-21006 from the proposal.

- “Has the Yakima Nation been notified of this expansion? There are Indian burial sites...[located on site]. Was this in the cultural survey? The Nation got involved back in 2000 when Superior owned the property (parcel #12404) but have they been notified about this new expansion?

Staff Finding: All land use applications that go out for public notice are sent to the Yakama Nation, including this proposal. The Yakama Nation has provided comment on this proposal. The applicant and County staff have also communicated with the Yakama Nation regarding this proposal.

- “Is there a Phase A/B/C plan? Will they be dividing Parcel #191306-13001 (the largest Parcel) in to separate phases? What area, N/S/E/W will they start work on in parcel #13001? Do we have any idea how many years this parcel will be providing them aggregate? This is not addressed in their application and the neighbors in the area would benefit in knowing.”

Staff Finding: The applicant has proposed a phased operation with “rolling reclamation”, which is described above in the project description and in their application material. The applicants have not proposed a timeline, and will likely depend on the demand of mining and resource available. The applicants will be required to adhere to the requirements of the land use approvals and SEPA mitigation measures. The site plans provided by the applicants also show that they will not be mining all of parcel number 191306-13001.

- “I understand there is a need for aggregate in the county. I have followed proposals since 2000 when Superior Asphalt was involved. I am still disappointed that the hillside, the entrance into the Yakima Valley, will be demolished. It is a hideous sight and blight on our community.”

Staff Finding: As a requirement of SEP2015-00016, a Reclamation Plan, approved by the Washington State Department of Natural Resources, shall be submitted to the Planning Division. This will address the aesthetic impacts the mining operation may cause.

It was noted that the second SEPA notice (Threshold Determination) mailed on June 12, 2015 and posted in the local newspaper (Yakima Herald Republic) on June 17, 2015 incorrectly stated that a public hearing was scheduled for August 6, 2015. This project is a Type 2 review

and does not require a public hearing; therefore, the notice of hearing was made in error. Due to the error in noticing, a corrected notice was again mailed on July 10, 2015 and posted in the Yakima Herald Republic on July 14, 2015; with the comment period ending July 24, 2015. One additional comment was received during this comment period.

n. Neighbor Comment: One neighbor commented with the following concerns:

- “Granite NW has listed parcel 191306-21006 as stockpile area only. This is currently the Fruit Stand (retail food) owned by Frank Rowley. This parcel was not in last year’s proposal. The proposal designation is VR, Valley Rural. How does stockpiling come under Valley Rural? If allowed for stockpiling we would have aggregate on both side of E. Selah Road. They would even store equipment on that site. This should not be allowed and they should use the mining property for stockpiling.”
- I have just found out that this parcel extends to the south of East Selah Road. It doesn’t seem that the parcel should be allowed to be a stockpile area. There are already over 200 truckloads being moved from the current stockpile area in any one day. If this parcel is approved it would move more semi-truck traffic and dust further east down the road and make normal vehicle (automobiles, etc.) access to East Selah Road even more difficult. Because this parcel is not that big it would make exiting of trucks difficult as well. It makes no sense because they already have a large stockpile area in the current quarry and NW Granite has a full facility with stockpile area across the freeway. I respectfully request that that parcel be denied in this expansion.”

Staff Finding: *As discussed above, parcel number 191306-21006 has been removed from the proposal.*

After the comment period ended we received comment letters from the Yakama Nation Cultural Resource Program (CRP, August 10, 2015) and the Department of Archaeology & Historic Preservation (DAHP, August 11, 2015). The DAHP comment letter stated that the proposed mine expansion is completely encompassed by archeological sites and that only part of the proposed East Rowley Mine Expansion area had been surveyed by a professional archaeologist. The comment letter states that a permit is required from DAHP for this project. Both comment letters stated that archaeological sites are protected from known disturbance on both public and private lands in Washington State (RCW 27.53.060 and RCW 27.53.090). Because these comments were significant, and may require updated mitigation as part of the environmental review, it was determined the applicant would need to work with DAHP and the Yakama Nation CRP (which possibly included updated archaeological study) prior to issuance of the final threshold determination. Due to the length of time it would take to complete and updated cultural resource survey, the applicants were notified Yakima County would not be able to issue the permit within the 120 calendar days, as required by YCC 16B.07.030(1) and YCC 16B.07.030(3).

While in the inactive status we received three additional comment letters, forwarded to us by the Selah-Moxee Irrigation District (via email September 28, 2015). One of these comment letters was a technical report from CH2M Hill (dated September 16, 2015) and in the letter they dispute a number of points from the GeoDesign Inc. report that was submitted with the application. This technical report from CH2M Hill is stamped by two professional engineers. Since the comment letter disputes the GeoDesign Inc. Blast Vibration Monitoring Plan submitted with the application, Yakima County has determined the applicant would need to respond to the issues raised in the comment letter. We sent a request for additional information and the three comment letters to the applicant outlining what we need to move forward. On July 19, 2016, Yakima County received a

Revised Blast Vibration Monitoring Plan that addressed the issues raised in these comment letter. This report is signed/sealed by State of Washington licensed geologist and professional engineer.

The other two comment letter forwarded to Yakima County by SMID included one from the Yakima Country Club (dated September 4, 2015; received September 28, 2015) and one from Hop Growers of Washington (dated August 31, 2015; received September 28, 2015 via email). Both letters were against the expansion of the mining activity and expressed concern over impacts associated with the loss of SMID water.

Three more correspondences were received outside the comment period. The first, received February 23, 2016, was the 2016 Tunnel Inspection and Maintenance Report (Yakima Ridge Tunnel) from the Selah-Moxee Irrigation District. The second, received March 2, 2016, was a copy of a letter from the Yakama Nation Cultural Resources Program to the Department of Archaeology and Historic Preservation (DAHP). The third correspondence was a letter from the Yakama Nation (Tribal Council) received March 14, 2016 (dated March 11, 2016). This letter addresses concerns that the Yakama Nation doesn't feel the Environmental Checklist provides sufficient information and that the project will have significant adverse effects on the environment, necessitating an Environmental Impact Statement (EIS).

On July 19, 2016 a revised Blast Vibration Monitoring Plan and on July 20, 2016 Yakima County received a revised environmental checklist from the applicant. Due to the changes in the checklist, an updated Preliminary Threshold Mitigated Determination of Non-Significance (MDNS) was mailed to the applicant, interested agencies, and adjoining property owners on July 29, 2016, with the comment period ending on August 12, 2016. After the notice was mailed, it was determined the notice stated it was a final decision (Notice of Action) of the SEPA and the updated application material was not made available on the website for public comment. Because of this, a revised notice was mailed August 4, 2016, with the comment period ending August 18, 2016, to allow for a two full weeks to comment with the current application material available. During this comment period three comments were received.

- o. Halverson Northwest on behalf of Selah Moxee Irrigation District (SMID): Halverson Northwest commented that they feel the blasting in the immediate vicinity of the SMID tunnel and canal threaten the structural and operational integrity of the SMID infrastructure and feels that the threat has not been sufficiently mitigated.

Staff Findings: The applicant has developed a Blast Vibration Monitoring Plan to monitor potential impacts due to blasting operations. SEP2015-00016 Mitigation Measure C1 requires the applicant to implement the Blast Vibration Monitoring Plan prior to any blasting within the mine expansion area.

- p. Department of Archaeology and Historic Preservation (DAHP): DAHP commented that there was no information in the application material regarding tribal consultation or any review for the project area, which is located within a large significant archaeological site. The comment letter also stated that they did not concur with the MDNS stating they feel it is "not sufficient, has not fully identified areas of cultural values and importance and therefore does not contain mitigation measures for those areas".

Staff Finding: Since Yakima County received comments from DAHP during the SEPA comment period stating that without a complete cultural resource analysis of the impacts to potential cultural resources cannot be identified, Yakima County required the applicant to provide a cultural resource survey of the expansion area. This cultural resource survey was provided to DAHP. SEP2015-00016 has three mitigation measures within the Historic and

Cultural Preservation (Cultural Resources) that mitigate any impact to potential cultural resources. (Mitigation Measure F1-F3).

q. Confederated Tribes and Bands of the Yakama Nation (Yakama Nation): The Yakama Nation commented that the MDNS should be withdrawn and a DS issued because “(A) Yakima County’s threshold determination is clearly erroneous, (B) Yakima County’s MDNS improperly defers its decision-making obligations to DAHP, and (C) the new information provided herein and Granite’s failure to disclose material facts legally obligates Yakima County to withdraw its MDNS.”

Staff Finding: Since Yakima County received comments from the Yakama Nation during the SEPA comment period stating that without a complete cultural resource analysis of the impacts to potential cultural resources cannot be identified, Yakima County required the applicant to provide a cultural resource survey of the expansion area. This cultural resource survey was provided to the Yakama Nation.

Based on comments received from the Yakama Nation and DAHP, Yakima County required a cultural resource survey to be completed prior to making a final SEPA determination. The cultural resource survey dated November 29, 2016 was provided to the Yakima County Planning Division December 12, 2016. Additionally, an updated environmental checklist was received, updating the applicants proposed mitigation in Section B. 13 (d) (Historical and Cultural Preservation) of the SEPA checklist. An updated Threshold Determination was mailed with the updated Historical and Cultural Preservation SEPA mitigation on January 23, 2017 with the comment period ending February 6, 2017. During this comment period it was determined that APOs and parties of record were not notified; therefore, a re-notice of the Threshold Determination was mailed February 2, with the comment period ending February 16, 2017. During that comment period five comments were received.

r. Confederated Tribes and Bands of the Yakama Nation Cultural Resource Program (Yakama Nation) dated February 1, 2017: The Yakama Nation responded that they feel the cultural resource survey report is legally and technically insufficient.

Staff Findings: Yakima County feels the mitigation measures outlined in SEP2015-00016 are sufficient to protect the cultural resources on site.

s. Washington State Department of Ecology (Ecology): Ecology provided the same comments as during the previous comment periods.

t. Confederated Tribes and Bands of the Yakama Nation Tribal Council (Yakama Nation) dated February 15, 2017: The Yakama Nation commented that “Yakima County MDNS should be withdrawn and, after sufficient information is gathered, replaced by a determination of significance because (A) Yakima County did not satisfy its duties under the State Environmental Protection Act (“SEPA”), (B) Yakima County’s proposed mitigation measures are insufficient, unreasonable, and impossible to perform, and (C) the Yakama Nation never consented to the excavation/destruction of the Yakama Nation’s ancestors or cultural resources.”

Staff Findings: Yakima County feels the mitigation measures outlined in SEP2015-00016 are sufficient to protect the cultural resources on site.

u. Department of Archaeology and Historic Preservation (DAHP): DAHP responded that they do not feel the MDNS is appropriate due to the effects of vibration from blasting, the individual

resources were not evaluated within the larger context of 45YA109 and it is not known how they related to other resources and features within 45YA109 but outside the current expansion area, and because the significance of the project area as a Traditional Cultural Property (TCP) and/or Cultural Landscape (CL) has not been addressed.

Staff Findings: Yakima County has included mitigation measures in the SEPA determination to protect cultural resources (mitigation measure F1-F3) that will protect cultural resources.

- v. Halverson Northwest Law Group on behalf of Selah-Moxee Irrigation District (SMID): Halverson Northwest responded regarding concerns of expanded mining operations within the vicinity of the SMID tunnel. They have also provided Declarations from CH2M (Mr. Dick Haapala and Mr. Kenneth Greene) and from the SMID District Manager (Nathan Draper) as part of the comment letter. The response also included a SMID Yakima Ridge Tunnel 2017 Tunnel Inspection and Maintenance Report (Dated February 14, 2017).

Staff Findings: The applicant has provided Yakima County with a Blast Vibration Monitoring Plan (GeoDesign, Inc.; dated July 18, 2016). This report was prepared by a Washington State Licensed Geologist (Erick J. Staley) and Professional Engineer (Jeffery D. Tucker). Yakima County feels that the report provided by licensed professional in the State of Washington is adequate to mitigate to potential impacts of this proposal, as conditioned in Mitigation Measure C1.

Both of the declarations from the CH2m engineers mentioned a report entitle Selah Moxee Irrigation District Yakima Ridge Tunnel – Condition Assessment and Improvements. Both declarations state this report was submitted by the [Irrigation] District and its legal counsel, Halverson Northwest, along with an executive summary entitled Yakima Ridge Tunnel Technical Report. Yakima County has no record of receiving the Condition Assessment and Improvements report, only the Technical Report. Yakima County contacted Halverson Northwest regarding this report to notify them we have no record of it. Halverson Northwest provided a copy of the report February 23, 2017. Yakima County provided a copy of that report to the applicant March 1, 2017. Yakima County staff have reviewed this report and have considered it when making the final threshold determination.

As a condition of this decision, a representative from Granite will be available for annual inspection of the SMID tunnel during a time that the tunnel can be inspected. Additionally, upon request, the applicant (Granite) must make results of the blast monitoring available to Yakima County.

Review Criteria for Conditional Use Permits:

- 7. In granting a permit for a Type-II use, YCC 15.12.040 states that the Administrative Official must ascertain that the proposed development complies with the standards and provisions of the zoning district in which it is located. The development standards that generally apply for the type of project being proposed are:
 - a. Access (YCC 15.20.020): A proposed use that accesses a county roadway must be reviewed by the County Engineer for compliance with YCC Title 10.08 (Approaches to County Roads). Verification of legal access and a valid road approach permit may be required prior to issuance of any permit.

Staff Findings: The existing mining site has access via East Selah Road. No new access points are proposed with the mine expansion.

b. Lot Coverage (YCC 15.20.041): The Valley Rural, R/ELDP, and Mining Zoning Districts do not specify maximum lot coverage.

Staff Findings: *The project does not involve construction of structures that would contribute to lot coverage.*

c. Height Restrictions (YCC 15.20.045): The height of buildings and structures within the Valley Rural Zoning District is 35-feet and not listed in the R/ELDP and Mining Zoning Districts.

Staff Findings: *There are no structures proposed with the quarry expansion.*

d. Setbacks (YCC 15.20.070/.075): YCC 15.20.070 (Setback from Roads) requires a minimum setback for all buildings or other structures and uses from the centerline of the right-of-way alignment. Setbacks are determined by the classification of the road. East Selah Road is classified as a minor collector, requiring a 65 foot setback from the centerline of the right-of-way. YCC 15.20.075 (Setback from Property Lines (Side and Rear)) identifies side and rear setbacks for proposed structures. For all three zoning districts, the side setback is required to be 10 feet from the property line and the rear setback is required to be 15 feet from the property line.

Staff Findings: *There are no permanent structures proposed. The location of the temporary crusher is proposed to be situated near the location of the operating face of the mine, which will meet all required setbacks. The setbacks for mining activity are identified below.*

e. Exterior Lighting (YCC 15.20.110): Lighting for all uses and signs shall be directed downward and otherwise arranged, shaded, screened, shielded, and of a design that results in the light being directed onto the site and of an intensity or brightness that does not reflect or cause glare into any adjacent or nearby residential use or interfere with the safe operation of motor vehicles.

Staff Findings: *The applicant has submitted an updated illumination plan for the mine expansion area. Lighting of the mine area is limited to the truck scale and areas of stockpiling and crushing. As mining progresses to the east, lighting will be further concealed by the landscape.*

f. Parking Requirements (YCC 15.64): There are no specific parking standards required for mining operations. The mining site does not require parking facilities, as Granite Northwest's facilities are located approximately 800 feet away, on the north side of Interstate 82.

Staff Findings: *The applicant has 5 parking spaces for employees. No parking spaces are required for the expansion of the mining operation.*

g. Signage (YCC 15.66): All signs shall meet requirements as outlined in YCC 15.66.

Staff Findings: *No signage is proposed. This decision requires that all future signage installed shall meet the requirements outlined in YCC 15.66.*

Review Criteria for a Type-II Mining Site/Operation Plan (YCC 15.45.020):

8. The establishment of this zoning district, or the review of a Type I, II, or III use or mining site/operations plan shall consider the following:

- Confirmed presence of large volumes of high-quality, mineral resource deposits that will sustain an operation over a long term.

Staff Findings: *The mineral resource deposits at the subject property have been confirmed by DNR, as part of their county-wide mineral resource inventory mapping project conducted in conjunction with Yakima County's Mineral Resource Update process in 2007. The subject property is designated by Plan 2015 as having large quantities of high quality basalt resources sufficient for long-term extraction.*

- b. Adequacy of state and local transportation systems, and private access and haul road(s), to accommodate heavy equipment and truck traffic.

Staff Findings: *Access to the site is via East Selah Road to Interstate 82. This segment of I-82 is an access managed highway with a posted speed limit of 60 miles per hour and is adequate for the proposal. The main entrance to the site is located on the northern edge of the mining operation. The commercial approach is designed with a turn-out area adjacent to East Selah Road for large semi-trucks to enter and leave the site safely.*

- c. Compatibility with existing or planned land use patterns in the area.

Staff Findings: *The subject property is zoned VR, R/ELDP, and MIN; and has the MRO land use designation. The land was placed in the MRO, in part, due to its location near undeveloped lands. The adjacent properties average five acres or larger, they are remote, and are generally undeveloped. Residential development that is closest in proximity to the mining area is owned by the applicants. The nearest residential properties not owned by the applicants are approximately 900 feet to 1/2 mile away.*

- d. Presence of fish and wildlife habitat, hydrologically related critical areas.

Staff Findings: *There are no known wildlife habitat or hydrologically related critical areas on the proposed site.*

- e. Impacts to air and water quality.

Staff Findings: *Air Quality - During the processing of basalt rock into gravel, dust will be generated. The information submitted with the proposal indicates that dust abatement will be handled by the application of water from a water truck. The Yakima Regional Clean Air Agency (YRCAA) may require a New Source Review (NSR) application to be submitted and an order of approval permit to be issued prior to any work to ensure that air quality standards are being followed. Prior to the start of any work in the expansion area, a Master Dust Control Plan may be required to be filed with the YRCAA. This decision and SEP2015-00016 mitigation measure A1 requires that the applicant obtain all required permits from the Yakima Regional Clean Air Agency prior to the expansion of the mine.*

Water Quality – The environmental checklist states that there will be no change to withdrawals of surface or ground water proposed from the existing operation. The checklist states “there is an existing well on parcel 191306-24003, which is owned by the Rowley Family Trust. This well currently supplies water for the existing sprinkler dust suppression system, and will continue to do so. Water will evaporate or discharge to ground, consistent with current practices”. Waste material will not be discharged into surface or ground water from septic tanks or other sources. Fuel used for mining equipment and vehicles is stored off-site.

- f. Impacts identified through environmental review.

Staff Findings: A Mitigated Determination of Non-Significance has been issued for this proposal requiring mitigation for air quality, ground and surface water, energy and natural resources, traffic hazards, aesthetics, and cultural resources. Based on comments received, the applicant will be required to create a complaint management plan to allow Yakima County to refer complaints to the applicant if received. At a minimum, the complaint management plan would need to consist of a contact person who will address neighbor complaints. The listed mitigation adequately addresses the impacts identified during the SEPA process.

- g. Proximity to major transportation corridors and market areas.

Staff Findings: The site's primary access is onto East Selah Road, with access to Interstate 82 less than 500 feet away. The mine is located roughly 1/2 mile from the City of Selah and 2 miles from City of Yakima.

Development Standards:

- 9. Pursuant to YCC 15.45.060, Basic Standards of Operation, all operations on lands within the Mining Zoning District must conform to the standards outlined in YCC 15.45.060. Operations outside of the Mining Zoning District that lie within the Mineral Resources Overlay are required to meet the operational standards listed in YCC 15.18.030(10).
 - a. Site Plan: Mining site/operations shall be conducted in accordance with an approved site plan and conditions of permit approval. The submitted site plan shall indicate the location of all mining activities, including excavation, processing, stockpiling, batching, product manufacture and sales areas, equipment maintenance and storage areas, as well as any excluded areas resulting from setbacks and other requirements of local, state or federal law.

Staff Findings: The mining proposal includes a site plan that identifies the anticipated location of the excavation area, stockpile, and mining equipment. The site plan complies with applicable requirements.

- b. Responsible Party: The landowner and operator shall be held jointly responsible for compliance with this title. If a permit is required for the activity, the landowner and operator shall be required to provide to the County a written designation of an agent residing within the County to receive notice in compliance matters.

Staff Findings: The application materials specify ownership responsibility.

- c. Visual Impact: Existing trees and other vegetation adjacent to any public park, residence, or MR, VR, RS, RT or urban residential zoning district shall be preserved for a minimum width of 25 feet.

Staff Findings: The existing vegetation is largely native grasses and sagebrush, with vegetation in the excavation area removed as part of the mining process. This decision conditions that the mining area preserve a minimum of 25 feet of vegetation from residences and lands within the VR zoning district that aren't part of the mine expansion area.

If topography, existing trees or other vegetation are insufficient to screen the site, the Administrative Official may require additional screening in the form of a fence, wall, berm, or vegetation. Berms may be removed when authorized as part of a final reclamation plan.

Staff Findings: *The design of the mining plan leaves Phase 4 as a visual and noise buffer from I-82. Since the reclamation is “rolling” reclamation, the previous phases of mining will have been reclaimed prior to removal of Phase 4.*

d. Water Quality: Mining site/operations shall be operated in compliance with all applicable local, state and federal or Tribal water quality regulations. The Administrative Official may require from the operator/owner a detailed hydrological report to address any questions of compliance with these regulations.

Staff Findings: *The application materials indicate no anticipated impacts to water quality. The applicant must comply with all applicable local and state water quality regulations.*

e. Air Quality: Mining site/operations shall be operated in compliance with all applicable local, state and federal air quality regulations.

Staff Findings: *The proposed mining operation will generate dust. The application lists that the application of water from a water truck as the primary dust control measure proposed for the mining operation. The applicants will be required to obtain all required permits from the YRCAA prior to any work (both during post construction and normal operations) as a requirement of Mitigation Measure A1 (SEP2015-00016).*

f. Setbacks: Each mining site/operation shall observe the following minimum setbacks, except where the operation is lawfully pre-existing and encroachment within the prescribed setbacks has already occurred. However, further encroachment shall only be permitted by revision under 15.45.070.

- i. No extraction or removal of aggregate/minerals within 60 feet of a public or private road shall occur which would result in the area being lower than the adjacent road. Reductions from this requirement may be authorized under 15.45.070, but in no case shall be less than 30 feet. When reduction of the 60 foot standard is requested from a public road, comments shall be solicited from the County Engineer or State Department of Transportation, as appropriate.

Staff Findings: *The submitted site plan indicates compliance with all applicable setback requirements.*

- ii. Mineral processing and batching, and manufacturing and fabricating plants shall not occur within 500 feet of an existing residence not on the subject property or under the same ownership, or within 25 feet of any exterior property line, unless the adjacent property is also zoned ‘Mining’.

Staff Findings: *The site plan indicates compliance with setback requirements regarding off-property residences or any exterior property lines. A portion of parcel number 191306-12404 is split zoned Mining and VR and is outside the MRO. Mining activities will have to be contained within the area zoned Mining and/or within the MRO. The site plan provided by the applicant show that this has been met.*

- iii. Mineral extraction shall not occur within 200 feet of an existing residence not on the subject property or under the same ownership, or within 25 feet of any exterior property line, unless the adjacent property is also zoned ‘Mining’.

Staff Findings: *The site plan indicates compliance with setback requirements*

regarding off-property residences. This decision requires that mining boundaries be no closer than 25 feet to an exterior boundary line.

g. Hours of Operation (YCC 15.45.060(7)): The MIN Zoning District is typically not subject to restrictions on hours of operation, except as may be established through SEPA review.

Hours of operation on lands not zoned MIN are limited to 6:00 a.m. to 6:00 p.m. daily for mineral batching. Excavation, hauling mineral products offsite, and mineral processing is limited to 7:00 a.m. to 6:00 p.m. Monday through Friday and 8:00 a.m. to 5:00 p.m. on Saturdays. None on New Year's Day, the Fourth of July, Labor Day, Thanksgiving, and Christmas Day (YCC 15.18.030).

The standard hours of operation for blasting shall be as follows: 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding New Year's Day, the Fourth of July, Labor Day, Thanksgiving and Christmas Day. Longer hours of operation for blasting may be requested at the time of initial application or later through the revision process of YCC 15.45.070.

If there are residences located within one-half mile of the site, a property owner notification plan must be developed by the operator and filed with the Planning Division before blasting can occur. The operator/property owner shall be responsible for implementation of the blasting notification plan.

Staff Findings: *The application states mining activity typically occurs between 7 a.m. and 5:30 p.m., with occasional nighttime activities. When blasting is necessary, it is proposed to occur between 9:00 a.m. and 4:00 p.m. Monday through Friday. The applicant's blasting protocol includes the notification of agencies and residential property owners within ½ mile of the mining site. Notifications to residences within one-half mile of the site and agencies with need for notification, including Selah-Moxee Irrigation District, are required to be notified of the blast 1-2 weeks in advance.*

The applicant has proposed mining on property that is not zoned Mining, but is located within the Mineral Resource Overlay. This decision conditions that the hours of operation be limited from 6:00 a.m. to 6:00 p.m. for mineral batching on lands outside of the Mining Zoning District. This decision also conditions that excavation, hauling mineral products offsite, and mineral processing be limited to 7:00 a.m. to 6:00 p.m. Monday through Friday, 8:00 a.m. to 5:00 p.m. on Saturdays, and not allowed on New Year's Day, the Fourth of July, Labor Day, Thanksgiving and Christmas Day for lands outside of the Mining Zoning District.

h. Slopes and Grading: Excavations, both above and below water level, shall be maintained in an operationally and environmentally safe condition by complying with standards established by the Department of Natural Resources.

Staff Findings: *The submitted site plan and SEPA checklist indicates compliance with all applicable slope requirements. Post development grades will be a maximum of 1.5 to 1.*

i. Land Reclamation: A land owner or an operator of a mining site/operation shall, in advance of any extraction of materials, prepare and submit a reclamation plan in accordance with the requirements of the Department of Natural Resources (DNR), or to the satisfaction of the Administrative Official using DNR standards if the site is not subject to a DNR permit. Reclamation must return the land to a state compatible with the land uses identified by the comprehensive plan, or conform to stipulated environmental mitigation. Sites to be operated

for more than five years shall conduct phased or segmented reclamation, unless determined to be unfeasible by DNR and the Administrative Official.

Staff Findings: *The applicant shall come into compliance with the DNR reclamation plan requirements prior to mine operation in the expansion area. The applicant must notify Yakima County upon completion of their DNR reclamation responsibilities.*

j. **Nuisance Mitigation:** Uses shall be maintained and operated consistent with the purpose of this title and the comprehensive plan. The owner/operator shall be required to take reasonable steps to ensure public health, safety, and welfare through installation of fencing and locked gates, advance notice to adjacent properties of blasting, and other measures necessary to mitigate nuisance hazards.

Staff Findings: *The subject property has a single access on to East Selah Road, which is gated to prevent unauthorized access to the mining site. Remoteness and steep slopes deter access to the site from means other than East Selah Road. The blasting protocol prescribed by the Zoning Ordinance and proposed by the applicant minimizes threats to public health, safety, and general welfare.*

k. **Setbacks:** Setbacks from right-of-way, adjoining residences, and exterior property lines as set forth in this section and Chapter 15.20 shall be excluded from applications, except as necessary to provide for access to the site or as part of final reclamation.

Staff Findings: *The site plan indicates compliance with setback requirements.*

l. **Additional Requirements:** The use shall comply with all other applicable rules, standards, or statutes governing such uses, including federal, state and local environmental protection requirements, and state law.

Staff Finding: *The applicant is responsible for obtaining all necessary local, state, and federal permits.*

DECISION

Based upon the above findings, the Yakima County Administrative Official hereby **APPROVES** the requested Type-II Mining Site/Operation, subject to the conditions listed above.

Administrative Official: LYNN DEITRICK, AICP



Thomas Carroll
Planning Section Manager, Long Range

Designee:

Date:

4/7/17

NOTICE OF ADMINISTRATIVE APPEAL

In accordance with Section 16B.09 of the Yakima County Code, any person of standing may appeal the Administrative Official's decision to the Yakima County Hearing Examiner. A notice of such appeal shall be filed in writing and delivered to the Planning Division on the 4th Floor of the Yakima County Courthouse, Yakima, Washington on or before 4:00 p.m., 4/31/17. The appeal shall be in writing, shall be accompanied by the filing fee, and shall include:

- A. The appellant's name, address, and telephone number.
- B. Appellant's statement establishing standing to initiate the appeal under Section 16B.09.020 of this Chapter;
- C. An identification of the specific proposal and specific actions, omissions, conditions or determinations for which appeal is sought;
- D. Appellant's statement of the particular grounds for the appeal, setting forth the principal points of appeal and addressing why the appellant believes the decision to be wrong; and
- E. The desired outcome or relief sought by the appellant.

It should be noted that there is no Administrative of the associated SEPA (SEP2015-00016). The Final SEPA MDSN is issued under WAC 197-11-340(2). The SEP2015-00016 threshold determination can be appealed to Yakima County Superior Court within 21 days. For information on the appeal processes, or on other issues relating to this proposal, contact Noelle Madera, Senior Project Planner, at (509) 574-2300.

Attachments:

- A. Yakima County Water Resource Division Comments (received in Tidemark April 22, 2015)
- B. Department of Ecology Comment Letter (May 22, 2015)
- C. Selah-Moxee Irrigation District Comment Letter (May 26, 2015)
- D. Yakima Regional Clean Air Agency Comment Letter (May 20, 2015)
- E. Neighbor Comment – Yakima Heights, LLC (May 27, 2015)
- F. Neighbor Comment – Thompson (May 27, 2015)
- G. Neighbor Comment – Politte (May 27, 2015)
- H. Department of Ecology Comment Letter (June 22, 2015)
- I. Department of Natural Resources Comment Letter (June 24, 2015)
- J. Yakima Regional Clean Air Agency Comment Letter (June 23, 2015)
- K. Department of Transportation Comment Letter (June 22, 2015)
- L. Halverson Northwest Law Group Comment Letter (June 24, 2015)
- M. Neighbor Comment – Buermann (June 25, 2015)
- N. Neighbor Comment – Buermann (July 24, 2015)
- O. Yakama Nation Cultural Resource Program Comment Letter (August 10, 2015)
- P. Department of Archaeology & Historic Preservation Comment Letter (August 11, 2015)
- Q. CH2M Hill Comment Letter (dated September 16, 2015, received September 28, 2015)
- R. Yakima Country Club Comment Letter (dated September 4, 2015, received September 28, 2015)
- S. Hop Growers of Washington Comment Letter (dated August 31, 2015, received September 28, 2015)
- T. Selah-Moxee Irrigation District Comment Letter (February 23, 2016)
- U. Yakama Nation Cultural Resource Program to DAHP (February 23, 2016)
- V. Yakama Nation Tribal Council Comment Letter (March 11, 2016)
- W. Halverson Northwest Law Group Comment Letter (August 17, 2016)
- X. Department of Archaeology & Historic Preservation Comment Letter (August 18, 2016)

- Y. Yakama Nation Tribal Council Comment Letter (August 18, 2016)
- Z. Yakama Nation Cultural Resource Program (February 1, 2017)
- AA. Department of Ecology Comment Letter (February 13, 2017)
- BB. Yakama Nation Tribal Council (February 15, 2017)
- CC. Department of Archaeology & Historic Preservation (February 15, 2017)
- DD. Halverson Northwest Law Group Comment Letter (February 16, 2017)
- EE. Halverson Northwest Law Group with CH2m Condition Assessments and Improvements Report dated January 19, 2015 (received February 23, 2017)
- FF. YCC 16B.07.050 – Compliance, Extension, Expiration and Reinstatement
- GG. Application material

G:\Development Services\Projects\2015\CUP\Type 2\CUP15-037 Rowley-Granite_VR RELDP_Mine Expansion\CUP2015-00037_GNW_Rowley Quarry Expansion_nm4_jwe_tc_FINAL.docx

Yakima County ensures full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination against any person on the basis of race, color, nation origin, or sex in the provision of benefits and services resulting from its federally assisted programs and activities. For questions regarding Yakima County's Title VI Program, you may contact the Title VI Coordinator at 509-574-2300.

If this letter pertains to a meeting and you need special accommodations, please call us at 509-574-2300 by 10:00 a.m. three days prior to the meeting. For TDD users, please use the State's toll free relay service 1-800-833-6388 and ask the operator to dial 509-574-2300.

Yakima County Water Resources Division

Stormwater must be retained on site and upland drainage, if any, must be conveyed through the property in accordance with criteria found at YCC 12.10.130. A Washington State Department of Ecology Industrial Stormwater Permit and Construction Stormwater Permit may be required.

Attachment: A



Public Services (JM)

MAY 27 2015

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

15 W Yakima Ave, Ste 200 • Yakima, WA 98902-3452 • (509) 575-2490

May 22, 2015

Vern _____ Gary _____ Dan _____ Steve _____
Dave _____ Libby _____ German _____

Ms. Noelle Madera
City of Yakima
Yakima County Planning Division
128 North 2nd Street, 4th Floor
Yakima WA 98901

RE: Granite Construction Company
CUP2015-00037/SEP2015-00016

Dear Ms. Madera:

Thank you for the opportunity to comment on the pre-threshold determination for the request to expand the Rowley Quarry Surface Mine in East Selah. We have reviewed the environmental checklist and have the following comment.

Water Quality Program – Sand and Gravel Operations

For sites w/S&G permit coverage that are expanding permit boundaries:

The proponent must submit a revised site map that includes the new sand and gravel permit boundaries. If the discharge monitoring locations are known, include them. The proponent should email, mail or fax (509/575-2809) the completed site map to:

Pam Perun, pamela.perun@ecy.wa.gov
Sand and Gravel General Permit Manager
Dept. of Ecology, Water Quality Program
15 West Yakima Avenue #200
Yakima, WA 98902

Sincerely,

Gwen Clear
Environmental Review Coordinator
Central Regional Office
(509) 575-2012

Attachment: B

(4233)



Noelle Madera

From: Nathan Draper <smidistrict@qwestoffice.net>
Sent: Tuesday, May 26, 2015 10:34 AM
To: Noelle Madera
Subject: CUP 2015-00037 & SEP 2015-0016 Comments
Attachments: Granite Comment Letter 5-26-15.pdf

Dear Noelle:

Attached are the Selah-Moxee Irrigation District's comments for the above-mentioned application.

Please let me know if you have any questions.

Sincerely,

Nathan Draper, Manager
Selah-Moxee Irrigation District
509-969-4274

Attachment: C

Selah-Moxee Irrigation District

113 East Moxee Avenue

P.O. Box 166

Moxee, WA 98936

(509) 469-0449 FAX (509) 469-0489

May 26, 2015

Yakima County Planning Division
128 North Second Street
Fourth Floor Courthouse
Yakima, WA 98901

Re: CUP 2015-00037/SEP2015-00016 Rowley Quarry Expansion Project

To Whom It May Concern:

The Selah-Moxee Irrigation District's comments concerning the above-mentioned application are as follows:

The proposed mining expansion project is located within 1,100 feet of the Selah-Moxee Canal Tunnel. As part of the mining operation the Rowley Quarry contemplates the use of controlled blasting, which presents several concerns to the Selah-Moxee Irrigation District. These concerns are addressed in the attached letter dated May 7, 2014 from Larry Martin, an attorney representing the Selah-Moxee Irrigation District. The district would like to include this letter as part of its official response to this most recent application.

Both the Selah-Moxee Irrigation District and Granite have completed a condition assessment of the Selah-Moxee Canal Tunnel. Granite has also developed a Blast Vibration Monitoring Plan that, for the most part, the district agrees with. However, the Selah-Moxee Irrigation District will require that a Mining Agreement be in place between SMID and Granite to ensure that the monitoring plan is followed, and require that Granite and any and all of its representatives obtain proper insurance against any blast-related damages that may occur resulting in damages to the canal system along with any crop damages.

Therefore, the Selah-Moxee Irrigation District request's that until there is a Mining Agreement in place with Granite, no permit or expansion should be authorized. If you have any questions or need any additional information, please contact me at 469-0449.

Sincerely,



Nathan Draper, Manager
Selah-Moxee Irrigation District

Enclosures

HALVERSON|NORTHWEST

LAW GROUP

Raymond G. Alexander
Adam K. Anderson
Alan D. Campbell
West H. Campbell
James C. Camody
J. Jay Carroll
Paul C. Dempsey
James G. Elliott
Robert N. Faber
Mark E. Fickes
Carter L. Fjeld
Frederick N. Halverson*
Paul E. Hart*
Kellen J. Holgate
Gary E. Lofland*
Lawrence E. Martin*
Lacey N. Orrill
Rachel B. Salmon
Terry C. Schmalz*
Linda A. Sellars
Michael F. Shinn
Sara L. Wadde*
Stephen R. Winkles

*Also Oregon Bar Member
+Of Counsel

May 7, 2014

HAND DELIVERED

Yakima County Planning Division
128 N. 2nd St.
4th Floor Courthouse
Yakima, WA 98901

Re: CUP 2014-00027/SEP2014-00016 - Rowley East Quarry
Expansion Project

To Whom It May Concern:

On behalf of the Selah-Moxee Irrigation District ("SMID"), we are writing regarding Granite Construction Company's future mining operations at the East Selah Quarry ("Quarry") and the pending expansion permit application.

SMID irrigates approximately 7,400 acres for the benefit of approximately 2,500 customers. SMID operates an irrigation canal and tunnel near East Selah Road, immediately northwest of the Selah Gap. The SMID tunnel and canal lay within, and parallels the eastern boundary of the Quarry. The SMID tunnel runs approximately 10,000 feet and averages six and one-half feet in width. The majority of the tunnel's interior is rough, exposed basalt with several short sections lined with concrete. Phase 2 of Granite's plan will occur within 1,100 feet of the tunnel entrance. The majority of Granite's activities will be adjacent to the first 3,500 feet of the tunnel.

The proposed expansion of the Rowley East Quarry contemplates the use of controlled blasting, which presents several concerns for the Selah-Moxee Irrigation District. Such blasting operations threaten the structural and operational integrity of the SMID tunnel and may compromise SMID's ability to deliver irrigation water through the SMID canal to customers within the SMID service area. The tunnel is the main source of all water for SMID. Specifically, SMID registers the following concerns related to the pending permit to expand operations to the east and south of the existing quarry:

1. Blasting may cause the SMID tunnel to collapse, eliminating SMID's ability to deliver irrigation water to approximately 85% of its customers within the District. Failure to deliver water to crops (e.g. hops, hay, grapes, and orchards) will result in permanent crop damage with an economic loss in excess of \$75,000,000.00.
2. Blasting may cause rock fall into the canal that will impede the flow of water and diminish water capacity, which will in turn reduce the water deliverable to irrigable

halversonNW.com

HALVERSON|NORTHWEST LAW GROUP P.C.

Yakima Office: 405 E. Lincoln Avenue | PO Box 22550 | Yakima, WA 98907 | p) 509.248.6030 | f) 509.453.6880

Sunnyside Office: 910 Franklin Avenue, Suite 1 | PO Box 210 | Sunnyside, WA 98944 | p) 509.837.5302 | f) 509.837.2465

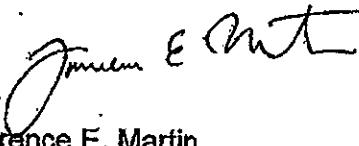
lands within the district. Such restriction on water flow may result in permanent crop damage.

3. Flooding damage to the canal and surrounding properties will occur in the event of a tunnel collapse or rock fall.
4. SMID will suffer additional burdens to remove the rock in the event of a tunnel collapse or rock fall. Fallen rock will need to be removed during non-irrigation season (November 1- March 15 yearly), resulting in continued water restriction to customers and potential crop damage should the event occur during irrigation season.
5. Blasting may result in destabilizing the tunnel and cause a serious safety concern for any necessary maintenance or repairs.

The above-numbered proposal fails to address the potential impacts to SMID. Until the concerns raised by SMID have been addressed to SMID's satisfaction, no permit or expansion should be authorized. SMID is prepared and available to provide additional comments or clarification on the project should the need and opportunity arise.

Sincerely,

HALVERSON | NORTHWEST LAW GROUP, P.C.


Lawrence E. Martin
Attorney for SMID



Public Services (W)

MAY 27 2015

Vern Gary Don Steve Phone: (509) 834-2050 Fax: (509) 834-2060
Dave Lisa Carmen Website: <http://www.yakimacleanair.org>

May 20, 2015

Noelle Madera, Senior Project Planner
Yakima County Planning Division
128 North Second Street, 4th Floor Courthouse
Yakima, WA 98901

RE: CUP2015-00037/SEP2015-00016-Granite Construction Co. on behalf of Frank Rowley

Dear Ms. Madera:

Thank you for providing the Yakima Regional Clean Air Agency (YRCAA) the opportunity to review and comment on CUP2015-00037/SEP2015-00016 for the expansion of the Rowley Quarry Mine, located at 140 E. Selah, Road, Selah, WA.

Following review YRCAA has the following comment(s):

1. A New Source Review (NSR) may be required for this project. The proponent must contact YRCAA for further information;
2. If demolishing any structures an asbestos survey must be done by a certified asbestos building inspector;
3. Any asbestos found must be removed by a licensed asbestos abatement contractor prior to demolition; and
4. Contractors doing demolition, excavation, clearing, construction, or landscaping work must file a Dust Control Plan with YRCAA, prior to the start of any work.

Thank you for the opportunity to connect with the county's continued support in protecting the air quality in Yakima County.

Best regards,


Hasan M. Tahat, Ph.D.
Engineering and Planning Division Supervisor
TOP

Cc: Proponent and File

Attachment: D

cup 15-037

Public Services (LH)

May 27, 2015

MAY 27 2015

Vern Gary Don Steve
Dave Lisa Carmen

Yakima County Planning Division
128 N. 2nd Street
4th Floor Courthouse
Yakima, WA 98901

Dear Sir:

This letter is in response to the Land Use Public Notice we recently received concerning the proposed expansion of the Rowley Quarry surface mine in East Selah. A copy of the notice is enclosed.

In reading the mine expansion SEPA Environmental Review form, we are dismayed by the lack of attention given to the mine's impact on the surrounding land. We believe that the proposed expansion of the Rowley Quarry will negatively impact most all of the adjacent property and surrounding landscape.

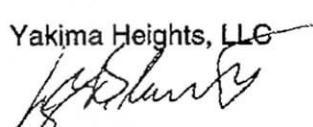
We are owners of approximately 296 acres of undeveloped land that is either directly adjacent to the proposed expansion area or in close proximity. We expect that all of our land will be significantly impacted in a negative way should the proposed mine expansion be approved.

We have many concerns, including but not limited to: dust, noise, truck traffic, rock blasting and vibration, impact on wild life and water and the local environment in general. We do not believe there has been enough public comment or study on this proposed project. We have not read or heard of any serious plans to mitigate the concerns expressed above.

Needless to say, we wish to express our strong opposition to the proposed expansion of the quarry. We are in the process of retaining a local land use attorney to represent us on this matter. In the meantime, please give either of us a call with any questions. Or, you may e-mail us at Larryb@kiddermathews.com.

Sincerely,

Yakima Heights, LLC


Larry Blackett, Manager (206-719-3635)
John Suryan, Manager (425-765-2423)

Attachment: E

Public Services (W)

MAY 27 2015

May, 27, 2015

Vern Gary Don Steve
Dave Lisa Carmen

Concerning Case numbers CUP2015-00037/SEP2015-00016
Granite Construction on behalf of Frank Rowley

The existing gravel pit is causing bad air quality,
gravel on the roadways, and
is an eyesore coming into the City of Yakima.
I am against the expansion of the Rowley Quarry.

I do travel on my bike to and from work and also
for exercise. The gravel on the road causes flats.

The gravel also hits windshields on E. Selah Road
and Hwy 82.

Thank you,
Kim Thompson
941 E. Selah Road
509 453-8260

Attachment: F



Notice of Application
Notice of Completeness
Notice of Environmental Review
Application Submitted: 04/10/2015
Completeness Date: 05/08/2015
Notice Date: 05/13/2015
Case No(s): CUP2015-0003//SEP2015-00016

Applicant: Granite Construction Company on behalf of Frank Rowley
Location: The property is located on the south side of E. Selah Road; immediately south of the Interstate 82 and E. Selah Road interchange, approximately 1/4 miles east of the City of Selah. Site address: 140 E. Selah Road, Selah, WA.
Parcel Nos. 191306-24004, -24003, -23004, -23002, -12404, -12403, -12402, -12401, -21006, -24003 and -13001.

Proposal: Expand the Rowley Quarry surface mine in East Selah within the Mineral Resource Overlay. The current mining and conditional use permit includes 4 parcels and the expansion will add another 7 parcels to the Rowley Quarry. The proposal includes an updated mining operations plan, a recent cultural survey, and a blasting vibration monitoring plan.

A land use application has been submitted near your property. To view the application materials and SEPA documents online go to: www.yakimacountywa.gov/permits/ or you can view a copy of application materials at the Planning Division on the 4th floor of the Courthouse. This proposal is subject to environmental review. The Planning Division is lead agency for this proposal under the State Environmental Policy Act (SEPA). Comments on the proposal will be used to prepare an environmental threshold determination, which will then be issued for additional comments. Your views on the proposal are welcome, and any person may provide written comments on issues related to the proposal. All written comments received by 4:00 p.m., May 27, 2015 will be considered prior to making the final decision. Mail your comments on this project to Yakima County Planning Division, 128 N. 2nd St., 4th Floor Courthouse, Yakima, WA 98901. Be sure to reference the above file number in your correspondence. Copies of the final decision will be sent to those who comment or may be obtained upon request. The final decision will contain specific appeal information and may be appealed within 14 days of the date of issuance. If you have any questions on this proposal, please call Noelle Madera, Senior Project Planner Zoning or Byron Gumz, Senior Project Planner Environmental, at (509) 574-2300 or 1-800-572-7354 ext. 2300.

Byron Gumz

From: Dan <danimaltnm@aol.com>
Sent: Wednesday, May 27, 2015 1:29 PM
To: Noelle Madera
Cc: Byron Gumz
Subject: CUP2015-00037/SEP2015-00016 - Comment in Opposition

> Ms. Madera & Mr. Gumz:
>
> The pending request to expand the Rowley Quarry in East Selah, if approved, will result in significant harm to my neighborhood and to I-82 corridor improvement efforts.
>
> I reside at 50 Hailey Drive, Yakima, WA 98901. My home is on the same hill as the Rowley Quarry, as are the homes of my neighbors in the Highpoint Development. The proposed expansion, in particular approval of a mining and conditional use permit for Parcel # 191306-13001, will significantly increase the already-present danger of rotational and other landslides on the hill as a result of mining activity.
>
> The Yakima County community experienced firsthand the devastation that erosion and landslides can cause when in 2009 a hillside near a gravel mining operation collapsed onto Highway 410, destroyed two homes, and cost the public millions of dollars in infrastructure rebuild costs.
>
> The current proposal would more than double the hillside acreage on which mining may occur. In turn, the risks of erosion and landslide will increase exponentially in a location much less remote than the 2009 Highway 410 landslide. Over a dozen homes, including mine, and the I-82 interstate are dead center in the danger zone underneath and behind the Rowley Quarry.
>
> In addition to my concerns for the safety of my family and the structural integrity of our home, I also support the efforts of many in our community to improve the experience of drivers passing through our I-82 corridor. The first impression many drivers experience while passing through Yakima on Eastbound I-82 is based on their observation of heavy equipment cutting away at the hillside of the Rowley Quarry. To allow expansion of current mining operations will only further compromise efforts to beautify Yakima County's major transportation pathways.
>
> Please deny the requested expansion and encourage mining operations to locate in less visible and less populated sections of our vast County.
>
> Sincerely,
> Dan Politte
> 509-952-3500

Public Services (1A)

JUN 24 2015

Vern Gary Don Steve
Dave Lisa Jerome



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

1250 W Alder St • Union Gap, WA 98903-0009 • (509) 575-2490

June 22, 2015

Noelle Madera
Yakima County Planning Division
128 North 2nd Street
4th Floor Courthouse
Yakima, WA 98901

Re: CUP2015-00037 SEP2015-00016

Dear Ms. Madera:

Thank you for the opportunity to comment on the mitigated determination of nonsignificance for the expansion of the Rowley Quarry surface mine in East Selah within the Mineral Resource Overlay, proposed by Granite Construction Company on behalf of Frank Rowley. We have reviewed the environmental checklist and have the following comments.

WATER QUALITY

The proponent must submit a revised site map that includes the new sand and gravel permit boundaries. If the discharge monitoring locations are known, include them. The proponent will also need to revise the site management plan and keep it onsite. The proponent should email, mail or fax (509/575-2809) the completed site map to:

Pam Perun, pamela.perun@ecy.wa.gov
Sand and Gravel General Permit Manager
Dept. of Ecology, Water Quality Program
15 West Yakima Avenue #200

If you have any questions or would like to respond to these Water Quality comments, please contact Pam Perun at (509) 454-7869 or pam.perun@ecy.wa.gov.

Sincerely,

Gwen Clear

Gwen Clear
Environmental Review Coordinator
Central Regional Office
(509) 575-2012
crosepacordinator@ecy.wa.gov

Julia White**JUN 25 2015**

From: Massey, Bryan (DNR) <Bryan.Massey@dnr.wa.gov>
Sent: Wednesday, June 24, 2015 3:58 PM
To: Julia White
Cc: Gillum, Carrie (DNR)
Subject: Comments for CUP15-037/SEP15-016 due June 26th 2015.
Attachments: img-624144838-0001.pdf

Vern ____ Gary ____
Dave ____ Lisa ____ Carter ____

Attached are the comments for CUP15-037/SEP15-016 due June 26th 2015 from the Department of Natural Resource's Surface Mine Program.

Thank you for the opportunity to comment.

Bryan Massey
Environmental Specialist 3
Surface Mine Reclamation Program
WA Department of Natural Resources
1111 Washington St
MS 47007
Olympia, WA 98504
Cell: 360-688-0724
Office: 360-688-0724



June 24, 2015

YAKIMA CITY PLANNING DIVISION
128 N. 2ND ST., 4TH FLOOR COURTHOUSE,
YAKIMA, WA 98901

RE: 2nd Notice of SEPA Threshold Determination CUP15-037/SEP15-016

Dear Yakima City Planning Division:

Thank you for the opportunity to comment on the proposed 120.85 acres expansion of the Rowley Borrow Site. Granite Construction Company on behalf of Frank Rowley intends to increase their current permit acreage from 62.01 acres to 120.85 acres. The Department of Natural Resources (DNR) Surface Mine Reclamation Program will require an Expanded Surface Mine Reclamation Application. This will need to be submitted to the DNR before mining exceeds the current permit area of record.

The Expanded Surface Mine Reclamation Application is required when a permit holder intends to expand their permit under RCW 78.44.151.

If you have any questions please feel free to contact me by calling.

Sincerely,

Bryan Massey
Surface Mine Reclamation Program
Division of Geology and Earth Resources

c: File #70-012774



329 North First Street, Yakima WA 98901
Phone: (509) 834-2050 Fax: (509) 834-2060
Website: <http://www.yakimacleanair.org>

Public Services (CS)

June 23, 2015

JUN 30 2015

Noelle Madera, Senior Project Planner
Yakima County Planning Division
128 North Second Street., 4th Floor Courthouse
Yakima, WA 98901

Vern Gary Don Steve
. Dave Lisa Carmen

RE: CUP2015-037 – Granite Construction Company

Dear Ms. Madera:

Thank you for providing the Yakima Regional Clean Air Agency (YRCAA) the opportunity to review and comment on CUP2015-037 for the expansion of the Rowley Quarry surface mine that will add another 7 parcels in East Selah within the Mineral Resource Overlay. The site is located at 140 E. Selah Road.

Following review YRCAA has the following comment(s):

1. A New Source Review (NSR) application must be submitted to YRCAA and an order of approval permit must be issued to any crushing operation, prior to the start of any crushing work; and
2. Dust Control Plan (DCP) for the land preparation work and for mining operation work must be filed with YRCAA and get approval, prior to the start of any work;

Thank you for the opportunity to connect with the county's continued support in protecting the air quality in Yakima County.

Best regards,

Hasan M. Tahat, Ph.D.
Engineering and Planning Division Supervisor

Cc: Proponent and File

Attachment: J



**Washington State
Department of Transportation**

Lynn Peterson
Secretary of Transportation

South Central Region

2809 Rudkin Road
Union Gap, WA 98903-1648

(509) 577-1600 / FAX: (509) 577-1603
TTY: 1-800-833-6388
www.wsdot.wa.gov

June 22, 2015

Public Services (CS)

Yakima County Planning Division
128 N. 2nd St, 4th Floor Courthouse
Yakima, WA 98901

JUN 20 2015

Vern Gary Don Steve
 Dave Lisa Carmen

Attention: Lynn Deitrick, AICP - SEPA Responsible Official

Subject: CUP2015-00037/SEP2015-00016-Rowley Quarry Expansion
I-82 MP 29.05 vicinity

We have reviewed the proposed project, and have the following comments.

- The property is adjacent to Interstate 82 (I-82), a fully controlled limited access facility with a posted speed limit of 70 miles per hour. No direct access to I-82 or the ramps will be allowed.
- All loads transported on WSDOT rights-of-way must be within the legal size and load limits, or have a valid oversize and/or overweight permit.
- Stormwater and surface runoff generated by this project must be retained and treated on site in accordance with regulating agencies' standards, and not be allowed to flow onto WSDOT rights-of-way.
- It is the applicants responsibility to keep I-82 and the Exit 29 interchange free from dust and debris.
- Any proposed lighting should be directed down towards the site and away from I-82.

Thank you for the opportunity to review and comment on this proposal. If you have any questions regarding our comments, please contact Rick Holmstrom at (509) 577-1633.

Sincerely,

Paul Gonseth, P.E.
Planning Engineer

PG: rh/wa

cc: File #5, SR 82
Les Turnley, Area 2 Maintenance Superintendent

Public Services (WV)

June 24, 2015

JUN 25 2015

HAND DELIVERED

Verh. Gary Don Steve
Dave Lisa Carmen

Lynn Deitrick, AICP
Public Services
128 N. 2nd St.
4th Floor Courthouse
Yakima, WA 98901

Raymond G. Alexander
Adam K. Anderson
Alan D. Campbell
J. Jay Carroll
James S. Elliott
Robert N. Faber
Mark E. Fickes
Carter L. Fjeld
Frederick N. Halverson+
Paul E. Hart+
Kellen J. Holgate
Lawrence E. Martin*
Terry C. Schmalz+
Linda A. Sellers
Michael F. Shinn
Sara L. Watkins*
Stephen R. Winfree

*Also Oregon Bar Member
+Of Counsel

RE: Comments re: CUP2015-00037/SEP2015-00016 – Rowley Quarry Expansion Threshold Determination – Mitigated Determination of Non-Significance (MDNS)

Dear Lynn Deitrick:

This office represents Selah-Moxee Irrigation District ("SMID"). On behalf of SMID, we are writing regarding the above-referenced quarry expansion project (the "Project"), which contemplates the use of controlled blasting near SMID's irrigation canal and tunnel. When the Yakima County Comprehensive Plan was amended in 2001 to apply the Mineral Resource Overlay to the Project Area, the Board of County Commissioners expressly reserved evaluation of the effects of blasting on SMID's facilities to the "SEPA and the mining/site operations plan review" for the site. See Ordinance No. 10-2001, Findings #3. In project review of similar mining projects near the SMID tunnel, SMID has received protection in the form of an agreement between the mine operator and SMID in the form of a blasting and indemnity agreement. (See File Numbers SPU-28-1996 and ER-27-1996 related to SMID's appeal of the County's MDNS, which was resolved by letter agreement between Columbia Ready Mix and SMID). Because of the likelihood of significant environmental impacts resulting from the Project, SMID asks that an Environmental Impact Statement be prepared, or, in the alternative, that the MDNS be modified to include additional protections for SMID and its water users.

Background

SMID provides irrigation water to approximately 7,400 acres for the benefit of approximately 2,500 customers. The vast majority of properties served by SMID irrigation water are south of the Selah Gap in Yakima County. To convey water to those customers, SMID operates an irrigation canal and tunnel near East Selah Road, immediately northeast of the Selah Gap. The north entrance of the SMID tunnel lies adjacent to the

halversonNW.com

HALVERSON | NORTHWEST LAW GROUP P.C.

Yakima Office: 405 E. Lincoln Avenue | PO Box 22550 | Yakima, WA 98907 | p) 509.248.6030 | f) 509.453.6880

Sunnyside Office: 910 Franklin Avenue, Suite 1 | PO Box 210 | Sunnyside, WA 98944 | p) 509.837.5302 | f) 509.837.5303

Attachment:

proposed Project boundary, after which the tunnel runs parallel to the eastern boundary of the Project area.

SMID's tunnel is approximately 10,000 feet in length and averages 6.5 feet in width. Over 92% of the tunnel is unsupported and unlined, consisting of rough, exposed basalt. The remainder (approximately 8%) of the tunnel is supported with concrete. The tunnel conveys irrigation water from mid-March through mid-October. A recent tunnel survey prepared on SMID's behalf indicates that, while the overall tunnel appears to be stable, there are 3 existing zones of the tunnel where there is current potential for instability, and future instability is possible in several locations within the tunnel.

The potential harm in event of a tunnel collapse or significant rockfall would be severe, as approximately 85% of SMID's water users receive water from the tunnel. The lands served by SMID are some of the most productive agricultural lands anywhere, and include substantial acres of hops, orchards, and vineyards. Significant economic loss from permanent crop damage would result because an alternative water source is not available to supplement SMID water in the event water cannot flow through the tunnel. These damages would likely exceed seventy-five million dollars (\$75,000,000.00) per year. Costs associated with flooding damage would be incurred in the event of the canal over-topping at the tunnel inlet, in addition to damage to surrounding properties. A tunnel failure would be a catastrophic event for SMID, its users, as well as for the local economy.

The Project

The Project contemplates the use of controlled blasting near SMID's tunnel, which presents several concerns for SMID. Such blasting operations threaten the structural and operational integrity of the SMID tunnel, and may compromise SMID's ability to deliver irrigation water from its canal, through the tunnel, to customers within SMID's service area. As noted above, the SMID tunnel is the primary source of water for 85% of SMID's users.

In light of the potential harm, Project proponent Granite Construction Company ("Granite")'s SEPA Checklist does not provide sufficient information to determine the likelihood of probable significant, adverse environmental impacts. SMID asks that either 1) an Environmental Impact Statement be prepared to properly analyze the environmental impacts of the Project or 2) that further conditions be placed within the MDNS to protect SMID and its users.

In particular, the following portions of Granite's SEPA checklist require further information:

Section 3 – Water:

SMID's canal and tunnel convey water in the immediate vicinity of the Project site, and potential effects on SMID users' water supply are not adequately analyzed in Granite's SEPA Checklist. More information is required of Granite to determine the water quality effects (including the effect if the water supply is interrupted) of the proposed expansion. Because Granite contemplates using controlled explosions as part of the Project, the effects of blasting may extend far beyond the immediate vicinity of the Project site.

Section 7 – Environmental Health:

Granite's proposed use of controlled explosions creates a significant risk of explosion-related environmental harm, including the potential for SMID's tunnel to fail with associated crop loss and flooding.

Granite's only proposed measures to reduce or control this hazard are to use professional contractors to perform the blasting and to notify neighbors. This is insufficient protection for SMID, its users, and other persons who may be affected by the blasting. Limitations must be included on the timing and size of the blast, and no blasting should occur during the irrigation season. At a minimum, SMID should have 14 days advanced notice of any blasting, and Granite should be required to indemnify SMID (and by extension SMID's users) against losses stemming from Granite's blasting activities.

In the alternative, additional information in the form of an Environmental Impact Statement is required to adequately analyze the potential for environmental impacts as a result of the blasting at the Project site.

Section 8 – Land and Shoreline Use:

Because SMID's tunnel conveys water far from the Project site, the potential effect on the environment extends not only on adjacent properties, but also to properties far from the project site that receive water through the tunnel. Environmental review must also analyze those broader potential effects on land use. As proposed, the Project could potentially affect SMID's water users (the majority of whom are working farms) miles away from the Project site in the event of a tunnel collapse or significant rock fall. Accordingly, the proposal has the potential to significantly affect surrounding working farms, their business operations, and the regional economy. More thorough environmental review is required to properly account for potential impacts of the Project.

For the reasons outlined above, further environmental review is necessary for the Project. SMID asks for an EIS be prepared, or for the MDNS to be withdrawn, unless it is appropriately conditioned to account for the potential significant environmental impacts presented by the Project.

Very truly yours,

Halverson | Northwest Law Group P.C.



Lawrence E. Martin

LEM/jk

G:\LEM\SELAH-MOXEE I.D.-20334\Granite comment letter.docx
KJH
6/24/2015 2:02:14 PM

Public Services (bjy)

RE: CUP15-037/SEP15-016-Rowley Quarry Expansion

JUN 26 2015

JUNE 25, 2015

Vern Gary Don Steve
Dave Lisa Garner

Concerns regarding the Rowley Quarry Expansion:

1. Granite NW states they use a water truck for dust suppression. I have lived in the area 22 years and have rarely seen the truck being used. During times of wind the dust is so thick you cannot see very far in front of your vehicle. Dust from the mining area. Their idea of dust suppression is one garden hose running on a stock pile. This is not adequate. I do not see how approval can be given to use a common well system to adequately control dust from the project.
2. In the SEPA Review under #7: Environmental Health Hazards #a1 Granite NW states "highly controlled blasting. Adjacent areas will not be affected by blasting." Under # a5 proposed measures Granite NW states, "Blasting is performed by a professional contractor on a small scale. Notices to neighbors and emergency services." We live in within 2 miles of the current mining project and will be even closer to the new project. We have never received a notice about blasting. There was some blasting several weeks ago and it was so strong our windows rattled and we thought it was an earthquake. I am concerned about the Selah/Moxee Irrigation tunnel that is in close proximity to the new site and blasting area.
3. Granite NW has listed parcel 191306-21006 as stockpile area only. This is currently the Fruit Stand (retail food) owned by Frank Rowley. This parcel was not in last year's proposal. The property designation is VR, Valley Rural. How does stockpiling come under Valley Rural? If allowed for stockpiling we would have aggregate on both sides of E. Selah Road. They would even store equipment on that site. This should not be allowed and they should use the mining property for stockpiling.
4. Has the Yakima Nation been notified of this expansion? There are Indian burial sites in parcel 191306-12404 and there could be more in 191306-13001. Was this in the cultural survey? The Nation got involved back in 2000 when Superior owned the property (parcel #12404) but have they been notified about this new expansion?
5. Is there a Phase A/B/C plan? Will they be dividing Parcel #191306-13001 (the largest Parcel) in to separate phases? What area, N/S/E/W will they start work on in parcel #13001? Do we have any idea how many years this parcel will be providing them aggregate? This is not addressed in their application and the neighbors in the area would benefit in knowing.

I understand there is a need for aggregate in the county. I have followed proposals since 2000 when Superior Asphalt was involved. I am still disappointed that the hillside, the entrance into the Yakima Valley, will be demolished. It is a hideous sight and blight on our community.

Judy Buermann
351 Sage Trail Road
Yakima, WA 98901
509-952-3591
Property Parcels #191305-22404 & 191305-22403

Attachment: M

Public Services (JG)

RE: CUP15-037/SEP15-016-Rowley Quarry Expansion

JUL 24 2015

July 24, 2015

Vern Gary Don Lynn
Dave Lisa Carmen

Additional comments regarding the Rowley Quarry Expansion:

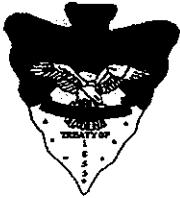
In my comments made on June 25, 2015 I stated the following:

Granite NW has listed parcel 191306-21006 as stockpile area only. This is currently the Fruit Stand (retail food) owned by Frank Rowley. This parcel was not in last year's proposal. The property designation is VR, Valley Rural. How does stockpiling come under Valley Rural? If allowed for stockpiling we would have aggregate on both sides of E. Selah Road. They would even store equipment on that site. This should not be allowed and they should use the mining property for stockpiling.

I have just found out that this parcel extends to the south of East Selah Road. It doesn't seem that the parcel should be allowed to be a stockpile area. There are already over 200 truckloads being moved from the current stockpile area in any one day. If this parcel is approved it would move more semi-truck traffic and dust further east down the road and make normal vehicle (automobiles, etc.) access to East Selah Road even more difficult. Because this parcel is not that big it would make exiting of trucks difficult as well. It makes no sense because they already have a large stockpile area in the current quarry and NW Granite has a full facility with stockpile area across the freeway. I respectfully request that that parcel be denied in this expansion.

Judy Buermann
351 Sage Trail Road
Yakima, WA 98901
509-952-3591
Parcels # 191305-22404 & 191305-22403

Attachment: N



Confederated Tribes and Bands of the Yakama Nation
Established by the Treaty of June 9, 1855

Post Office Box 151
Toppenish Washington 98948

Byron Gumz
Yakima County Planning Department
128 North Second Street
Yakima, WA 98901

August 10, 2015

Subject: Proposed Granite East Rowley Quarry Expansion

The Yakama Nation Cultural Resource Program (CRP) has been recently informed of the proposed East Rowley Quarry Expansion. The project is located within the Yakama Reservation, the legal rights to which were established by the Treaty of 1855 (12 Stat. 951) between the Yakama Nation and the United States Government. The treaty set forth that the Yakama Nation shall retain the rights to resources upon these lands and, therefore, it is with the assistance and backing of the United States Federal Government that Yakama Nation claims authority to protect traditional resources.

The Yakama Nation CRP is not in receipt of correspondence from Yakima County regarding the SEPA for the proposed expansion. The expansion area is entirely within well-documented archaeological site 45YA109 comprised of a complex of talus burials known as *Wanapine*. A review of the Department of Archaeology and Historic Preservation (DAHP) records indicates the proposed expansion area was surveyed in 2008 which resulted in the identification of numerous talus features. Such features have been associated with human remains.

While the comment period may have closed for this proposal, Yakama Nation CRP would like to remind the county that it is unlawful to disturb an archaeological site as provided in *RCW 27.53.060*, especially burials which are punishable as a Class C Felony under *9A.20 RCW* as defined in *68.05 RCW*.

This is a highly sensitive cultural area. Given the presence of burials, Yakama Nation CRP does not recommend continued and expanded mining of Yakima Ridge. We would appreciate correspondence from the county regarding the proposal including SEPA documents and copies of correspondence with DAHP. Please contact me at 509-865-5121 ext. 4737 or johnson@yakama.com regarding the above.

Sincerely,

Johnson Meninick, Program Manager
Cultural Resources Program

Public Services (S)

AUG 17 2015

CC: JoDe Goudy, Yakama Nation Tribal Chairman
Yakama Nation Culture Committee
Yakama Nation Roads, Irrigation, and Lands Committee
Phil Rigdon, Department of Natural Resources Deputy Director
Gretchen Kaehler, Department of Archaeology and Historic Preservation

Vern Gary Don Lynn
Dave Lisa Carmen

Attachment: 0

Public Services ()



AUG 13 2015

Veri Gary Don Lynn
Dave Lisa Carmen

Allyson Brooks Ph.D., Director
State Historic Preservation Officer

August 11, 2015

Mr. Lynn Deitrick
Planning Manager
Yakima County
Yakima County Courthouse
128 N 2nd Street, 4th Floor
Yakima, WA 98901

In future correspondence please refer to:

Log: 081015-11-YA

Property: Expansion of Surface Mine at East Rowley Quarry

Re: Archaeology-Permit from DAHP Required under RCW 27.53 and RCW 27.44

Dear Mr. Deitrick:

The Washington State Department of Archaeology and Historic Preservation (DAHP) has been advised of this project through a third party. We have not been forwarded any review documents from the County regarding this project. The proposed mind expansion is completely encompassed by archeological site 45YA109, a large archaeological site containing talus pits and human burials. Only part of the proposed East Rowley Mine Expansion are has been surveyed by a professional archaeologist. The expansion are also contains two additional archaeological sites 45YA694 and 45YA693 a talus burial and a grouping of talus pits which are likely burials.

Please be aware that archaeological sites are protected from knowing disturbance on both public and private lands in Washington States. Both RCW 27.44 and RCW 27.53.060 require that a person obtain a permit from our Department before excavating, removing, or altering Native American human remains or archaeological resources in Washington. Failure to obtain a permit is punishable by civil fines and other penalties under RCW 27.53.095, and by criminal prosecution under RCW 27.53.090.

Chapter 27.53.095 RCW allows the Department of Archaeology and Historic Preservation to issue civil penalties for the violation of this statute in an amount up to five thousand dollars, in addition to site restoration costs and investigative costs. Also, these remedies do not prevent concerned tribes from undertaking civil action in state or federal court, or law enforcement agencies from undertaking criminal investigation or prosecution. Chapter 27.44.050 RCW allows the affected Indian Tribe to undertake civil action apart from any criminal prosecution if burials are disturbed.

A permit from DAHP is required for this project prior to any ground disturbance. We request that the County hold their permit until the DAHP permit has been received and the DAHP permit conditions met. There are likely to be additional archaeological sites and human burials in the expansion area which have not been identified because the project area has not been completely surveyed. In addition, a permit is required for the disturbance of existing resources.

Please keep in mind that the DAHP permit requires the services of a professional archaeologist and that it may take between 45 and 60 days for a DAHP permit to be issued after DAHP has received a sufficient



permit application. This included a mandatory 30-day comment period for interested parties under statute.

Please feel free to contact me if you have any questions.

Sincerely,



Gretchen Kaehler
Assistant State Archaeologist, Local Governments
(360) 586-3088
gretchen.kaehler@dahp.wa.gov

cc. Johnson Meninick, Cultural Resources, Yakama Nation
Kate Valdez, THPO, Yakama Nation
Corrine Camuso, Archaeologist, Yakama Nation
James Essig, Resource Manager, Granite Construction Company

CH2M

Yakima Ridge Tunnel

PREPARED FOR: Selah-Moxee Irrigation District
PREPARED BY: Richard V. Haapala/CH2M
DATE: September 16, 2015
PROJECT NUMBER: 334186
REVIEWED BY: Ed Thomas, P.E./CH2M
 Ken Green, P.E./CH2M



The Yakima Ridge Tunnel is a vital component of the Selah-Moxee Irrigation District's (District) canal system that provides irrigation water to 7,400 acres of high value farmland, residential properties that include the City of Moxee, three cemeteries, and a golf course. The original tunnel construction was completed in 1930 and some relatively minor reinforcement was done in 1961. Even though there have been several tunnel inspections conducted over the subsequent years, no significant repair or reinforcement work has been found to be needed. The most recent inspection was done in November, 2014.

Approximately 85% of the land in the District is served by water that passes through the tunnel. That land does not have an alternative source of water. Therefore, a failure or blockage of the tunnel would cause a significant amount of damage to adjacent or downstream lands. Such a failure could cause the upstream portions of the canal to overtop and fail. Farmland, roads, residences, and businesses in the area would be adversely affected by the resulting flooding. With no supply of irrigation water, the downstream crops would suffer with even a short period of interrupted service. Any tunnel failure that blocks or impedes the flow of water will require a complete shutdown of water to the entire District to perform the repairs. The repairs could take days or months to complete. Damage to the current crops would be significant, but there would also be long term impacts to permanent and future crops. These impacts would directly affect other related industries (transportation, processors, end users, etc.), and the adverse effects on the local economy would be even greater. The direct losses from failure of the current crops such as hops, orchards, and other crops has been estimated to be in excess of \$75 million. Costs to replant and re-establish markets have not been estimated. Neither have the multiplier effects to the economy been calculated. Since hops represent a large portion of the crops within the District and they are marketed globally, the economic impacts would be far reaching.

Blasting operations have been used in the adjacent Rowley rock quarry to mine rock for production of aggregate for construction purposes since approximately 2001 under a Yakima County conditional use permit. The current operator, Granite Northwest, indicates that the existing quarry has limited quantities of suitable rock material remaining and has applied to Yakima County for an expansion of the mined area. The proposed expansion would bring the active mining area to within 1,100 feet of the SMID tunnel. The current mining operations are about twice that distance from the tunnel. Allowing future blasting closer to the tunnel will definitely increase the potential for an increased level of damage to the tunnel.

Granite Northwest has hired Geo Design, Inc. to give an opinion of the condition of the tunnel. A report of Geo Design's findings dated January 19, 2015 was presented to Granite. The Geo Design report

Attachment: Q

YAKIMA RIDGE TUNNEL

contains some unsubstantiated information and lacks details of several important issues, including the following:

Page 1 of the report states "SMID has not conducted any mitigation of the tunnel....." The District has actually done periodic inspections which have included some relatively minor moving of some of the fallen rock out of the flow path to improve the hydraulic conditions. Small rockfalls in unlined tunnels are quite common and are caused by naturally occurring vibrations and weathering, but could be aggravated by blasting activities.

Page 2 of the report states "SMID has not removed any of the rockfall from the tunnel...". As stated above, this statement is not correct.

Page 4 of the report states "...it would take vibration intensities significantly higher than 2 in/sec to cause rockfall...". Inspections by CH2M HILL have identified several areas within the tunnel that have a "Potential Failure Mechanism" and rock could easily fall with very low levels of vibration. Since the seismometers used have not been permanently installed and in direct contact with the rock, it is not known what the vibration levels actually are, especially when blasting would be done closer to the tunnel. Any small vibration whether natural or blast induced could cause rockfalls.

Page 4 of the report describes the vibration monitoring done by Granite. However, there is no discussion how the locations of the monitoring points were determined. It is known by direct observations by CH2M HILL that at least one of the vibration sensors was temporarily buried in soil near the tunnel entrance. It was not in contact with undisturbed rock. Higher and more consistent levels of vibration could likely have been recorded if the sensors were in direct contact with the rock. To provide accurate and consistent vibration data, the seismometer sensors need to be strategically and permanently installed in direct contact with undisturbed rock. The use of portable vibration monitoring equipment does not provide the consistency required.

Page 5 of the report states "Rockfalls may continue....but from causes not associated with the proposed blasting." CH2M HILL agrees that a certain amount of rockfall will occur due to naturally occurring vibrations and weathering. However, any vibration caused by blasting will induce more rockfalls than will naturally occur. The failure could be catastrophic. Geo Design has no basis to state that the rockfalls are "not associated" with the blasting and in fact rock fall conditions would most likely be aggravated by an increase in either the frequency or the magnitude of the blasting vibrations.

Page 6 of the report describes the type of vibration monitors to be used. However, there is no description of how many or where they are to be installed or the methods that will be used to attach them to solid rock. The data collected from the vibration monitors needs to be provided to the District shortly after (within two weeks) each blast is conducted.

Conclusions

While some blast induced vibrations have been measured, it appears that the level of intensity of those blasts may not have been accurately recorded by the portable vibration monitoring equipment. Even though the risk of a catastrophic tunnel failure is low, it does exist. Both Geo Design and CH2M HILL have identified areas of potential failure. Since a catastrophic failure could occur, no blasting should be allowed unless it is done under very strict requirements and is approved by the County and the District to substantially guarantee no damage will occur to the tunnel.

Inspections of the tunnel by CH2M HILL includes photographs of loose rock slabs that could fall with the slightest vibration. Any blasting induced vibrations would make the falling of rock slabs more likely. When one slab falls, it reduces the support of adjacent slabs. The likelihood of subsequent rockfalls increases. Rock debris on the tunnel floor demonstrate that some rock has already fallen. None of those rockfalls appear to be seriously impeding the flow of water at this time. Any rock that is within the flowing water will cause some interference.

YAKIMA RIDGE TUNNEL

Blasting at this site should only be approved under very limited circumstances, if at all. At a minimum, the following would be required:

- Any blasting plan will need to be reviewed by the County and SMID to prevent damage to the tunnel.
- A mitigation plan must be developed to provide for any loss of water and economic losses in case of canal blockage or failure.
- All blasting shall have limits on frequency, duration, intensity, and timing.
- At least one month prior notice of blasting must occur with blasting plans that include sizes and types of charges and frequencies of blasting.
- The County or other regulatory agency must provide oversight and have authority to stop or limit blasting when circumstances pose unacceptable risks.
- Install permanent seismometers near the tunnel in specific locations to most accurately measure vibration to the tunnel.
- Install audio instrumentation within the tunnel to detect rockfalls.
- Accept responsibility for damage to the tunnel caused by blasting by providing blasting insurance to protect the District and landowners.
- Contingency plans need to be developed to repair damage and restore irrigation service if damage should occur.
- Make provisions to modify blasting procedures if higher risks are identified.
- Blast during the non-irrigation season.
- Inspect the tunnel and remove fallen rock annually.

Alternatives to be Considered:

Rather than exposing the District's water users to risks associated with a tunnel failure several alternatives could be considered.

- Provide an alternative source of water from a location downstream of the tunnel. This could be from a river pump station or from the Roza Irrigation District canal. Limited water supplies, costs, and legal issues may make this alternative difficult to implement.
- Make improvements to the tunnel by installing a heavy steel liner throughout its two mile length at an estimated cost of approximately \$6 million.

Follow Up Activities:

The responsibility to perform the work described and liability for losses need to be discussed with Granite Northwest. To-date, no plans to mitigate risks have been proposed or developed between Granite Northwest and the District.

SEP 29 2015

September 4, 2015

Vern Gary Don Lynn
Dave Lisa Carmen

To Whom It May Concern,

The Yakima Country Club is a one hundred year old, private golf course and eating establishment. It sits on 130 acres, is covered wall-to-wall with several varieties of turfgrass, a smattering (over 730) of shade trees, many landscape shrubs and perrenials and over 1,000 annual flowers. Obviously, to support and grow that many plants takes water and lots of it. In an average growing season we will put down over 550,000 gallons during each evenings' irrigation cycle. The Selah-Moxee Canal passes right through the middle of the Country Club golf course and there-in lies our irrigation water-right. Over the years, the Selah-Moxee Canal has been a very dependable source of water with very few disruptions in service during the thirty-five years I've worked at the Yakima Country Club. The few times water delivery has been interrupted, the Club has been lucky enough to be able to use a supplemental well (puts out 700 GPM) to get us by for a few days until the canal has been repaired and restored to service. A serious long term interruption in canal water flow could potentially cause the Country Club some serious problems. I don't believe our supplemental well could continue pumping at 600 to 700 GPM long term without drawing down the water table significantly --- affecting our ability to pump that water and many homeowners to the north of us counting on that same water source. Without water in the canal or without our well (or if well output was greatly diminished) the golf course would be in serious trouble. During the heat of the summer, the bentgrass on our putting greens can only go two or three days without water before death occurs.

Attachment: R

If that happens it would cost approximately \$7,000 to re-turf each green or \$154,000 to restore healthy grass to all twenty two of our putting greens. Brown and/or dead grass on a golf course is not what current or potential members are too excited about. Some members would mostly likely leave the Club and drop their membership and we would be hard-pressed to get new people to join a Club that isn't in pristine condition -- almost certainly the Club would suffer some significant financial loss.

Currently, the Yakima Country Club relies heavily on the irrigation water being supplied by the Selah-Moxee Canal. Anything that could possibly put the Selah-Moxee Canal out of service for a time could potentially be devastating to the Country Club. Certainly, a long term disruption in flow would raise havoc with the grass, flowers, plants and trees on the course and ultimately deal the Yakima County Club a severe economic blow.

Sincerely,

Robert Robillard

Golf Course Superintendent

Yakima Country Club



Hop Growers of Washington

301 W. Prospect Place ♦ P.O. Box 1207 ♦ Moxee, Washington 98936 USA
(509) 453-4749 ♦ Fax (509) 457-8561

August 31, 2015

TO: Yakima County Commissioners

RE: Selah-Moxee Irrigation District Considerations

Commissioners:

The Washington hop industry has seen substantial increases in acreage and economic impact in recent years, with expectations this growth will continue for the next few years. Washington's Yakima Valley is home to 32,205 acres, 71% of the total US hop acreage. The US represents 36% of the world's hop acreage. Yakima Valley hop acreage increased 11% from 2014 to 2015, and 42% since 2012.

The Moxee area contributes nearly one-third of the total Washington hop production, with approximately 5,000 of these acres in the Selah-Moxee Irrigation District, or 15% of the US hop crop. In 2014 the USDA National Agriculture Statistics Service estimated the value of the Washington hop crop at \$217,299,000, which would result in a crop production value for the Selah-Moxee Irrigation District of \$32.6 million. As demand from the rapidly expanding craft brewing industry have shifted hop varieties from predominately alpha varieties to higher-value aroma varieties, the season average price has also increased annually in recent years (15% last year). Assuming a similar increase in the season-average price this year, the 2015 estimate for Washington's hop crop value is \$280 million, which would equate to a value of \$42 million for the Selah-Moxee Irrigation District's hop acreage, or \$8,400 per acre

Based on Washington State University's hop cost of production estimates (2010 report, with a conservative 5% adjustment applied for inflation over the past 5 years), the current average cost of producing an acre of established hops is \$8,270. This WSU enterprise budget may be found on our website, www.usahops.org, under the Statistics tab.

Hops are a perennial (permanent cropping system), and will produce for many years once they are established. If a field must be abandoned for a season due to lack of water, replanting would cost approximately \$3,500 per acre (land prep, planting stock, labor, and interest) assuming trellis and irrigation assets remain in place. For the estimated 5,000 acres of hops on the Selah-Moxee Irrigation District, this would equate to \$17.5 million.

Attachment: S

In addition to the jobs and economic activity resulting from hop production in the Yakima Valley, the infrastructure investments in trellis, harvesting facilities and other improvements to this property contributes favorably to the tax base in Yakima County.

As negotiations proceed on expansion of gravel mining activities in the vicinity of the Selah-Moxee irrigation tunnel, we urge Commissioners to consider the high value of the hop industry in Moxee and the need to insure its value, along with other high-value permanent and annual crops who rely on this system, are properly protected.

Please let me know if additional information is needed.

Best regards,

A handwritten signature in black ink, appearing to read "Jim E. George".

Executive Director

Selah-Moxee Irrigation District

Public Services

FEB 23 2016

Vern
Dave
Gary
Lisa
Don
Carmen
Lynn

Yakima Ridge Tunnel

2016 Tunnel Inspection and Maintenance Report

February 23, 2016

Introduction

The Selah-Moxee Irrigation District operates and maintains over 42 miles of canals and ditches to provide irrigation water to over 7,400 acres of land in the East Selah, Terrace Heights, and Moxee areas. The district diverts and conveys water from the Yakima River beginning on March 15 and ends irrigation deliveries around October 15 of every year. In addition to the many miles of canals and ditches, the canal system also contains a tunnel that is 9,600 feet in length that begins in East Selah and extends through the Yakima Ridge south to Terrace Heights.

The Yakima Ridge Tunnel is a vital component of the Selah-Moxee Irrigation District's canal system. The tunnel is located in the upper portions of the canal system, and therefore must transmit 85% of the water diverted from the river. The tunnel was constructed between the years of 1928-30 to replace a flume through the Selah Gap that was considered a hazard to the district and to the state highway below. During construction of the state highway blasting techniques were used in removing a portion of the hillside to make room for the highway, which had "loosened" the flume's foundation, causing the canal to leak¹. The Selah-Moxee Irrigation District funded the tunnel project through the sales of bonds for \$200,000.00² (\$2.73 million today³) to eliminate the hazard. The tunnel has since been used to supply irrigation water to the Terrace Heights and Moxee areas. However, over the past several years blasting activities near the tunnel has caused concern for the district, believing that blasting may damage or cause complete failure of the tunnel. Tunnel damage or failure will impede the district's ability to supply reliable irrigation water to its customers. This would result in a direct loss of crop and property damage in excess of \$75 million.

Current Blasting Operations

Blasting operations have continued in the adjacent property of the Rowley rock quarry located west of the Yakima Ridge Tunnel for some time. The quarry is currently operated by Granite Northwest to mine rock for the production of aggregate for construction purposes. Figure 1, identifies the blasting activities that have taken place and recorded by SMID personnel throughout the year of 2015. The chart depicts blast times, the depth of the water in the canal prior to and after each blast event, and canal flow in

¹ A Historical Study of The Selah and Moxee Irrigation District; by Alfred Moss, 1966

² A Historical Study of The Selah and Moxee Irrigation District; by Alfred Moss, 1966

³ www.saving.org Inflation Calculator

Attachment: T

cubic feet per second (cfs) during that time. Notes were also taken to identify changes in seismic equipment placement by the blasting crew and water surface elevation in the canal. According to Figure 1, it appears that the blast event on 9/3/15 changed the water surface elevation from 2.53 feet prior to the blast, to 2.55 feet sometime after the blast. The flow rate of the canal remained constant during this time period. This would suggest that a restriction had recently developed downstream of the tunnel entrance that would cause the water surface elevation in the canal to rise. This type of activity would be indicative of a rock fall within the tunnel. Also of note is that readings from subsequent blasts differ significantly from the blast held on 5/4/15. The May 4 blast indicates a water depth in the canal of 2.58 feet and a flow rate of 68.3 cfs, while on 9/21/15 the water depth had increased to 2.67 feet while the flow rate reduced to 58 cfs. Under normal operating conditions the depth of water in the canal would decrease as the flow in the canal decreased. Therefore the data would suggest that a restriction within the tunnel had occurred resulting in the increase in water depth within the canal.

Figure 1

Blasting Activity 2015

Date	Time	Blast	Depth of Water (ft) in Canal Prior to Blast	Depth of Water (ft) in Canal After Blast	Canal Q (cfs)	Notes
3/19/2015	N/A		1.92	1.92	29.3	
3/27/2015	12:50 PM		2.08	2.08	38.6	
4/14/2015	N/A		2.24	2.24	42.8	
5/4/2015	11:20 AM		2.58	2.58	68.3	
						Blast Equipment placed at a different Location. Rock fall near fruit stand, no blast horn. Increase in canal h after 2 hours.
9/3/2015	5:48 PM		2.53	2.55	55.8	Notice sent on same day. Seismic Equipment placed on south side of canal walkway on soil.
9/15/2015	11:10 AM		2.65	2.67	58	
9/21/2015	1:38 PM		2.67	2.67	58	

Figure 2 Blast Event at the rock quarry in East Selah 9-15-15



Tunnel Inspection

The Selah-Moxee Irrigation District began its annual tunnel inspection on January 26, 2016. The purpose of the inspection was to assess the overall condition of the tunnel and identify newly fallen rock and determine a mode of action to ensure the tunnel is operational for the 2016 irrigation season. Figure 3 identifies new rock fall locations relative to measured stations in the tunnel along with the type of material found that has fallen and the estimated quantities of fallen rock material in cubic yards. The district located a total of 6 new rock falls within the tunnel consisting mostly of basalt rock with a total quantity of 23 cubic yards.

Figure 3

Date	Location	Inspection	Cubic Yards
		Findings	
1/26/2016	2+50	Rock Fall (Basalt with Sediment)	1.25
1/26/2016	8+80	Rock Fall (Basalt)	8.5
1/26/2016	13+00	Rock Fall (Basalt)	6
1/26/2016	19+50	Rock Fall (Basalt)	3
1/26/2016	35+00	Rock Fall (Basalt)	1.75
1/26/2016	58+00	Rock Fall (Basalt with Sediment)	2.5
		Total	23

Figure 4 also identifies the rock fall locations in relation to the overall length of the tunnel. According to Figure 4 the majority of the rock falls have occurred within the first 2,000 feet from the tunnel entrance portal in East Selah. Also of note is that no rock falls were observed beyond the 5,800 ft. location leading to the tunnel exit portal near Terrace Heights.

Figure 4

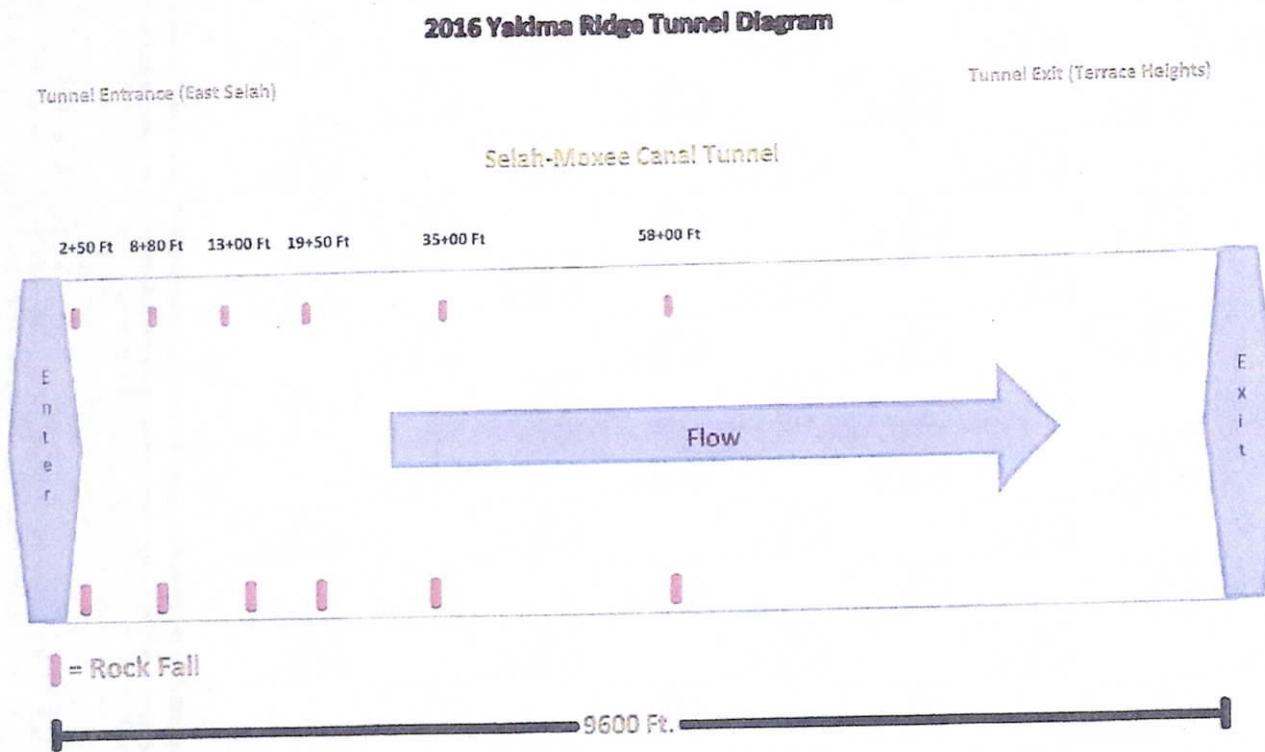
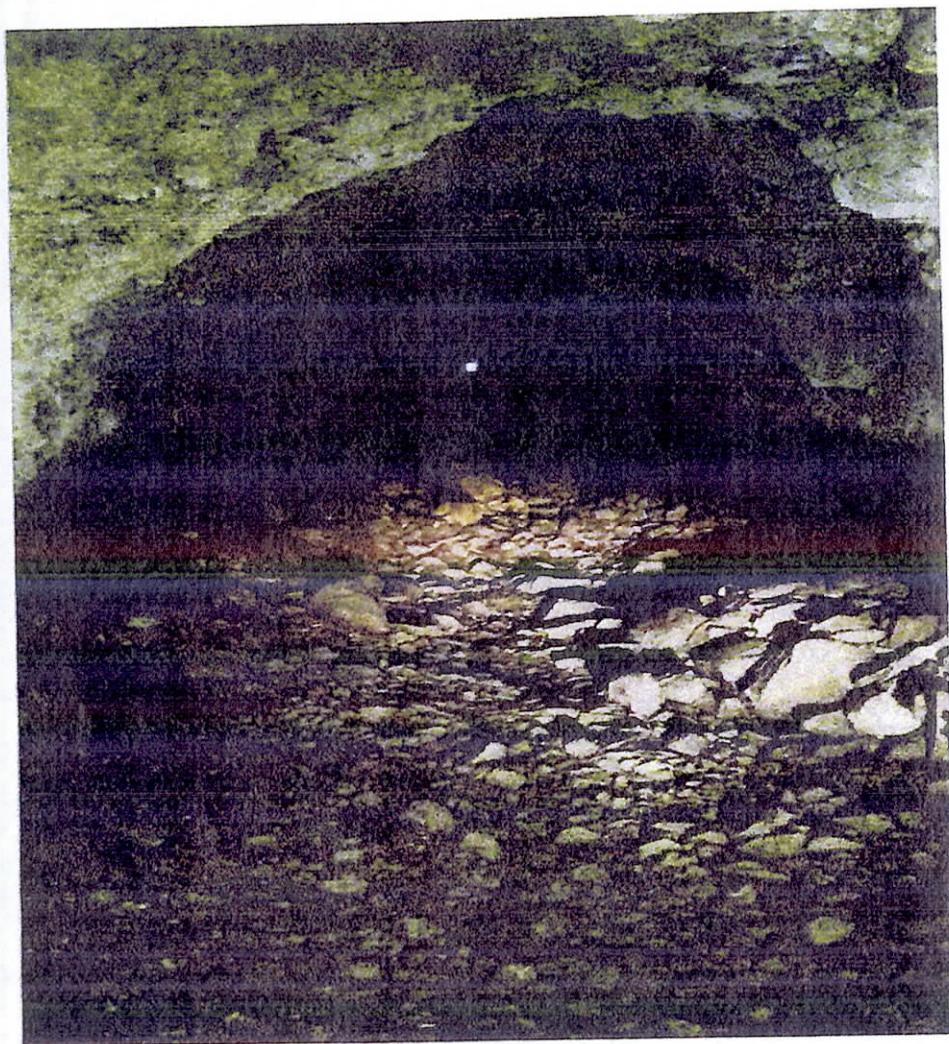


Figure 5 Station 13+00 rock fall



Tunnel Maintenance

As part of the tunnel maintenance program the district determined that the removal of fallen rock was necessary in order to increase flow capacity and return the water surface elevation to normal operational heights during the irrigation season. To accomplish this task, the district rented a utility vehicle with adequate size to operate in the tunnel and sufficient capabilities to transport rock. The vehicle was loaded by hand from the three stations identified in Figure 6, and then the rock was transported out of the tunnel and stock piled near the tunnel entrance in East Selah.

Figure 6: Utility Vehicle removing a load of rock from the Yakima Ridge Tunnel



Figure 7

Date	Location	Work Performed	Cubic Yards	Loads
1/26/2016	All	Relocate fallen rock for equipment passage		N/A
1/26/2016	2+50	Rock and sediment removal	1.25	2
1/27/2016	8+80	Rock Removal	5.25	7
1/28/2016	8+80	Rock Removal	8.25	11
1/29/2016	13+00	Rock Removal	3.75	5
2/1/2016		Water from storm events entering tunnel and mechanical issues with rental equipment	0	0
		Total	18.5	25

According to Figure 7, 3.75 cubic yards of rock was removed from station 13+00. Figure 8 is a photo after the work was completed in that area. The district removed a total of 18.5 cubic yards of rock from the tunnel. While this is significant progress to restoring the tunnel to full capacity, addition work remains in order to complete this task.

Figure 8 Station 13+00 after rock removal was completed.



Summary

The Yakima Ridge Tunnel is a vital component of the Selah-Moxee Irrigation District system and must maintain operational integrity to meet the demands of the district's customers. The district is faced with external challenges from blasting activities by its neighbors to keep the tunnel functional. There appears to be evidence that blasting activities may have unintended effects on the tunnel. Therefore, the district must have an active role in limiting the negative impacts to the tunnel, and a proactive approach to ensure the overall integrity of the tunnel for years to come.



Confederated Tribes and Bands of the Yakama Nation
Established by the Treaty of June 9, 1855

Public Services

MAR 02 2016

Post Office Box 151
Toppenish Washington 98948

Vern Gary Don Lynn
Dave Lisa Carmen

Lance Wollwage
Department of Archaeology and Historic Preservation
Post Office Box 48343
Olympia, WA

February 23, 2016

Subject: Archaeological Excavation Permit 45YA109 within the Granite East Rowley Quarry

The Yakama Nation Cultural Resource Program (CRP) has reviewed the archaeological permit for the proposed East Rowley Quarry Expansion. The project is located within the Yakama Reservation, the legal rights to which were established by the Treaty of 1855 (12 Stat. 951) between the Yakama Nation and the United States Government. The treaty set forth that the Yakama Nation shall retain the rights to resources upon these lands and, therefore, it is with the assistance and backing of the United States Federal Government that Yakama Nation claims authority to protect traditional resources.

Yakama Nation CRP has reviewed the archaeological permit. We have previously identified concerns with mining within the archaeological site of 45YA109 known as *Wanapine* in a letter to the DAHP on October 23, 2000 and to the Yakima County on August 10, 2015. As written, the archaeological permit documents the known history of this area to contain burials and the high potential for encountering human remains. Yakama Nation CRP cannot condone the disturbance of burials, and we oppose the permit as written.

Furthermore, Yakama Nation CRP is aware of an undocumented talus complex within 45YA109 immediately adjacent to the proposed expanded mining area. This feature complex is within the original mining permit area and consists of several large deep depressions. These yet undocumented features need to be formally recorded and evaluated within the context of the larger cultural landscape. While Granite has avoided this talus complex, we recommend continued avoidance and protection of these features.

This is a highly sensitive cultural area, and Yakama Nation CRP does not support mining within 45YA109 including the parcel previously permitted by the county. Please contact me at 509-865-5121 ext. 4737 or johnson@yakama.com if you have any questions regarding the above.

Sincerely,

Johnson Meninick, Program Manager
Cultural Resources Program

Attachment: U



Confederated Tribes and Bands
of the Yakama Nation

Established by the
Treaty of June 9, 1855

Public Services (c)

March 11, 2016

MAR 14 2016

Sent via U.S.P.S. Certified Mail

Vern Gary Don Lynn
Dave Lisa Carmen

Byron Gumz, Senior Project Planner
Environmental Planning Department
Yakima County Public Services
128 North Second Street
Yakima, Washington 98901

Re: PRELIMINARY COMMENTS ON SEPA ENVIRONMENTAL REVIEW APPLICATION REGARDING PROPOSED
EXPANSION OF ROWLEY EAST QUARRY

Dear Mr. Gumz:

The Confederated Tribes and Bands of the Yakama Nation ("Yakama Nation") respectfully submits the following preliminary comments and concerns regarding Granite Construction Company's ("Applicant") April 30, 2015 SEPA Environmental Review Checklist ("Checklist") supporting Applicant's proposed expansion of the Rowley East Quarry (the "Project"). The Checklist is insufficient because it provides incomplete and incorrect information on the Project's potential impacts on the Yakama Nation's Treaty reserved interest in its cultural and archaeological resources – including a high likelihood of exposing, damaging, injuring, removing, and/or destroying our Ancestors' human remains and their final resting places (i.e., graves) – and fails to offer any measures to protect the existing cultural resources. The Checklist further fails to disclose that Granite Construction Company has been excavating within a recorded archaeological site that may be eligible for listing on the National Register of Historic Places for more than a decade without an Archaeological Excavation and Removal Permit in apparent violation of, *inter alia*, Title 25-48 of the Washington Administrative Code.

To ensure the accuracy of the administrative record and to limit the extent of Applicant's apparent unpermitted mining operations within a known archaeological site, we respectfully request that Yakima County (1) initially require Applicant to revise its Checklist to accurately reflect the archaeological landscape of the Project area and provide proposals addressing treatment of cultural and archaeological resources, and (2) ultimately make a threshold determination that the Project is a proposed major action that will have probable significant adverse impacts on the quality of the environment, necessitating issuance of a determination of significance.

Yakama Nation, Post Office Box 151, Toppenish, WA 98948 (509) 865-5121

Attachment:

LETTER TO YAKIMA COUNTY RE GRANITE CONSTRUCTION CO.'S PROPOSED EXPANSION OF ROWLEY EAST QUARRY
MARCH 11, 2016

A. SEPA Requires Yakima County to Obtain and Consider Sufficient Information About the Project's Effects on Cultural and Archaeological Resources

Under State law and the Yakima County Code, Yakima County is obligated to solicit and consider sufficient information about the impacts of proposed projects on the environment, including effects on cultural and archaeological resources.¹ Specifically, when making a SEPA threshold determination, a SEPA responsible agency must show that its decision was based on information sufficient to evaluate a proposal's environmental impact, and that it considered the relevant environmental factors.² SEPA expressly protects cultural and archaeological resources, and a SEPA responsible agency must consider and address a project's potential impact on them³ – a task which first requires that sufficient information be obtained by the agency, typically via the SEPA Environmental Checklist. Critically, § 13 of the Environmental Checklist, entitled “Historic and cultural preservation,” requires project proponents to identify any evidence of Indian cultural resources located within a proposed project area.⁴

If information relevant to assessing significant adverse project impacts is not known, and the cost of obtaining it is not exorbitant, SEPA requires the responsible agency to obtain the information.⁵ Alternatively, if such information cannot be obtained, SEPA requires the responsible agency to present a worst-case analysis in its threshold determination,⁶ which here would require the reasonable assumption that the entire proposed project site contains significant archeological resources, Indian graves, and the human remains laid to rest in those graves.

B. Applicant's SEPA Environmental Review Checklist Is Insufficient

Initially, Yakima County should supplement or require Applicant to supplement Applicant's Checklist because Applicant failed to provide Yakima County with sufficient information on known cultural and archaeological resources within the proposed Project area. Specifically, Applicant ignored known cultural resources and failed to provide any suggestion for mitigating adverse effects to those resources – to the extent that mitigation is even possible. For example, Applicant addressed the presence of cultural resources within the proposed Project area as follows:

“Archaeological [sic] survey has designated areas of interest. These sites are buffered from the proposed mining area and will not be disturbed.”⁷

¹ Yakima County Code § 16.04.010 (acknowledging and adopting SEPA rules, WAC 197-11, by reference).

² WAC 197-11-335; *Lanzce G. Douglass, Inc. v. City of Spokane Valley*, 154 Wn. App. 408, 423, 225 P.3d 448 (2010), (citing RCW 43.21C.030(2)(c)); *Wenatchee Sportsmen Ass'n v. Chelan County*, 141 Wn.2d 169, 176, 4 P.3d 123 (2000).

³ RCW 41.21C.020(2) (the responsible agency has the responsibility to use “all practicable means . . . to . . . preserve important historic, cultural, and natural aspects of . . . national heritage . . .”).

⁴ SEPA Environmental Checklist § 13(b), codified at WAC 197-11-960 (“Are there any landmarks, features, or other evidence of Indian or historic use or occupation? . . . Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.”)

⁵ WAC 197-11-080.

⁶ WAC 197-11-080.

⁷ Checklist at 13(b).

Despite Applicant's assurances, Applicant intends to destroy and remove the ground surface within the proposed project area, the entirety of which is a well-documented archaeological site (45YA109) comprised of a complex of talus burials that will be directly impacted. In other words, Applicant proposes to continue and expand its ongoing desecration of a known Yakama burial site. According to Applicant's Checklist, Applicant will address project impacts by "No proposed measures as resources will not be disturbed."⁸ Applicant's cultural resource information is woefully inadequate and entirely insufficient for Yakima County to consider Applicant's SEPA application. In order to comply with the letter and the spirit of SEPA, Yakima County must supplement or require Applicant to supplement Applicant's Checklist regarding cultural resources within the proposed Project area to reflect reality.⁹

C. Applicant's Project Will Have Significant Adverse Effects on the Environment Necessitating An Environmental Impact Statement

To the extent that Yakima County or Applicant are able to sufficiently supplement Applicant's Checklist, or in the alternative using a worst-case scenario, Yakima County should make a threshold determination that Applicant's proposed Project is (1) a major action that, (2) will have probable significant adverse impacts on the quality of the environment, requiring (3) Yakima County to issue a determination of significance.

Under SEPA, Agencies are required to make a threshold determination of whether proposals are major actions that will have probable significant adverse impacts on the quality of the environment.¹⁰ An 'action' is defined to include activities that are "regulated, licensed, or approved by agencies."¹¹ An action is a 'major action' if it will have significant adverse environmental impacts.¹² In the case of regulatory permits, a project will have significant adverse environmental impacts where the proposed project will have sufficient absolute and relative impacts flowing from the project's intensity and the surrounding environment's sensitivity.¹³ Where a major action will have probable significant adverse impacts on the quality of the environment the lead agency is required to issue a determination of significance, which triggers the need for an environmental impact statement.¹⁴

Here, Applicant's proposed Project is a major action that will have probable significant adverse impacts on the quality of the environment, requiring Yakima County to issue a Determination of Significance. Applicant's proposed project is an 'action' because it requires Yakima County to make a regulatory decision approving or denying Applicant's proposed change in land use. The action is a 'major action' because it contemplates the removal and/or destruction of significant archaeological and cultural resources (i.e. environment) -- likely including the human remains of the Yakama Nation's ancestors --

⁸ Checklist at 13(d).

⁹ WAC 197-11-310(2).

¹⁰ WAC 197-11-330.

¹¹ WAC 197-11-704(1)(a).

¹² WAC 197-11-764.

¹³ RICHARD L. SETTLE, THE WASHINGTON STATE ENVIRONMENTAL POLICY ACT § 13.01(1) (Matthew Bender, 2014).

¹⁴ WAC 197-11-360(1).

LETTER TO YAKIMA COUNTY RE GRANITE CONSTRUCTION CO.'S PROPOSED EXPANSION OF ROWLEY EAST QUARRY
MARCH 11, 2016

within a sensitive archaeological site, constituting a significant adverse impact to the environment. Because the Applicant's proposed project is a major action that will have probable significant adverse impacts on the environment, Yakima County is required to issue a determination of significance that will trigger an environmental impact statement that more thoroughly details Applicant's proposal to destroy a known cultural and archaeological site.

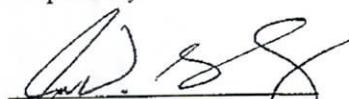
D. Conclusion and Requested Action

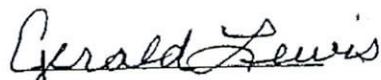
Under Washington law, Yakima County, as the SEPA responsible agency for the proposed Project, has a duty to ensure that its SEPA threshold decisions are based on sufficient information to determine likely environmental impacts of proposed projects, including impacts on cultural and archaeological resources. Applicant's Checklist does not provide Yakima County with sufficient information about cultural resources that will be adversely impacted by the proposed Project, and fails to offer a single mitigation proposal. Critically, the Checklist does not provide sufficient information about known and unknown human remains in the area, or the project's very high potential to impact undiscovered cultural and archaeological resources.

To remedy these issues, the Yakama Nation requests that Yakima County (1) supplement, or require Applicant to supplement, Applicant's Checklist to accurately reflect the archaeological landscape of the Project area and provide proposals addressing treatment of cultural and archaeological resources, and (2) ultimately make a threshold determination that the Project is a proposed major action that will have probable significant adverse impacts on the quality of the environment, necessitating a determination of significance. Please note that the Yakama Nation is still evaluating the potential impacts of Applicant's proposed project on 45YA109, and therefore reserves the right to supplement these initial comments with additional information at a later date.

Thank you for your consideration of these comments. Please direct your response to Mr. Joe Sexton, Attorney for the Yakama Nation, at (509) 910-8842 or joe@galandabroadman.com.

Respectfully,


JODE L. GOUDY, CHAIRMAN
YAKAMA NATION TRIBAL COUNCIL


GERALD LEWIS, CHAIRMAN
CULTURAL COMMITTEE
YAKAMA NATION TRIBAL COUNCIL

cc: Allyson Brooks, Washington State Dept. of Archaeology and Historic Preservation

Raymond G. Alexander
 Alan D. Campbell
 J. Jay Carroll
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HAND DELIVERED

AUG 17 2016

August 17, 2016

Vern Gary Don Lynn
 Dave Lisa Carmen

Mr. Byron Gumz

Senior Project Planner (Environmental)
 Yakima County Planning Division
 128 N. 2nd St.
 4th Floor Courthouse
 Yakima, WA 98901

Re: CUP 2015-00037/SEP2015-00016 – Rowley Quarry Expansion Project

Dear Mr. Gumz:

This comment letter is submitted on behalf of the Selah-Moxee Irrigation District ("SMID") in response to the July 27, 2016, notice from your office regarding Yakima County's proposed Mitigated Determination of Non-Significance ("MDNS") in connection with the above-referenced application. Under that application, Granite Northwest, Inc. proposes to dramatically expand the size and scope of mining operations at the East Selah Quarry without sufficient safeguards to protect SMID's immediately adjacent tunnel and irrigation canal from seismic threats posed by Quarry blasting operations.

SMID's tunnel and canal are located immediately east of Quarry lands now proposed for active mining operations. As we understand, the current application proposes to expand the overall Quarry "footprint" from four parcels comprising approximately 60 acres to 11 parcels comprising nearly 220 acres. Of greatest concern to SMID is the proposed inclusion of Parcel No. 191306-13001, a 120+ acre parcel on which active mining operations – including blasting – would be permitted to occur within approximately 1,000 feet of the SMID tunnel entrance east of the Selah Gap. The tunnel, which is nearly 10,000 feet in length, carries 85 percent of all Yakima River water diverted and carried by SMID for irrigation use by its patrons.

Consistent with SMID's prior earlier-submitted comments on this project¹, expanded Quarry operations – particularly blasting in the immediate vicinity of the SMID tunnel and canal – threaten the structural and operational integrity of vital SMID infrastructure in ways *still* not adequately acknowledged or sufficiently mitigated. Unfortunately, the July 18, 2016, Revised Blast Vibration Monitoring Plan prepared by applicant's consultant, GeoDesign, Inc. (the "Revised BVM Plan"), which the County apparently deems sufficient to mitigate against blasting-related threats to mining and mineral resources, contains few (if any) substantive improvements over the original, 2015 Blast Vibration Monitoring Plan.

¹ See, May 7, 2014, SMID comment letter re CUP 2014-00027/SEP20145-00016, already on file with the Planning Division.

halversonNW.com

As a basis for mitigating against blasting-related risks, the Revised BVM Plan is flawed in two fundamental ways: (1) it understates and mischaracterizes the available evidence of likely blasting effects on the SMID tunnel; and (2) it proposes inadequate, future monitoring protocols that effectively screen SMID and Yakima County out of the monitoring and assessment process.

Available Evidence of Blasting Risks

The Revised BVM Plan suggests that SMID does not conduct regular assessments of the condition of the tunnel (p. 1). In fact, SMID has – for more than ten years – conducted an annual inspection of the entire tunnel. Most recently, SMID's tunnel observations and initial conclusions were documented the February 23, 2016, Tunnel Inspection and Maintenance Report compiled by SMID Manager Nathan Draper (the "SMID Report"), which is already on file with the Planning Division. Ignoring key findings under the SMID Report, the Revised BVM Plan relies almost exclusively on its own unverified data obtained in connection with only six Quarry blasting events. Not surprisingly, the Revised BVM Plan concludes, "[W]e do not anticipate that the proposed blasting [under the now-pending permit expansion application] would result in rockfall or failure of the tunnel." (P. 5)

Also on file with the Planning Division is a September 16, 2015, Technical Report issued by Mr. Richard Haapala of CH2M, SMID's geologic consulting firm. As described on page 2 of that Technical Report, the data obtained from the SMID tunnel entrance site by GeoDesign, Inc. and described in the original 2015 Blast Vibration Monitoring Plan were obtained from seismic equipment that was improperly installed. (Attached hereto are two photographs that confirm one of applicant's monitors was located on loose soil and another on an SMID wood structure.) The fact that such seismic equipment was improperly installed, as GeoDesign, Inc. has apparently conceded under the Revised BVM Plan, essentially invalidates applicant's previous conclusions regarding blasting impacts to the SMID tunnel. Furthermore, and if (as we suspect) GeoDesign, Inc. was not present at the time of the blasting events analyzed in the Revised BVM Plan, there is *additional* basis for concern as to the soundness of other technical decisions concerning placement and use of the seismic equipment in question.²

In contrast, the SMID Report suggests a strong correlation between nearby Quarry blasting and the presence of higher, concentrated collection of debris in the tunnel and canal. The SMID Report evaluated all Quarry blasting events that occurred throughout 2015 and observed by SMID personnel; it included an analysis of canal water depth and flow rate within the tunnel prior to and following each blast event. Key findings under the SMID Report included the following:

- A blast event on September 3, 2015, changed the canal water surface elevation from 2.53 feet prior to the blast to 2.55 feet within two hours following the blast. The flow rate of the canal remained constant during this time period, suggesting that a restriction had recently developed downstream of the tunnel entrance that caused the water surface elevation to rise. Quite likely such restriction was new rockfall in the tunnel that occurred roughly contemporaneously with the September 3rd blasting event. (Also noted: no blast warning horn for safety purposes sounded prior to the event.)

² We acknowledge improvements under the Revised BVM Plan for mounting of monitoring equipment in solid rock in order to better ascertain the extent of blast-related vibrations. However, insofar as prior blasting data analyzed under the Revised BVM Plan was obtained under flawed testing conditions, there is inadequate support under the MDNS for the conclusion that Quarry blasting is unlikely to harm the tunnel and canal.

- When comparing canal depth within the tunnel across the entire irrigation season, levels should peak in late spring when mainstem Yakima River flows are highest and decease during the hotter, dryer months of late summer and fall. However, when comparing canal depths as recorded in connection with the May 4, 2015, and September 21, 2015, blasting events, canal depths *increased* dramatically during that period – from 2.58 feet to 2.67 feet. Meanwhile, flow rate decreased during that same period from 68.3 to 58.0 cubic feet per second (as would be expected with commensurately lower flows at the canal point of diversion on the Yakima River. So again, the data strongly suggest the presence of a new and significant restriction within the tunnel that occurred after one (or more) of four Quarry blasting events conducted during the 2015 SMID peak irrigation season period.
- During SMID's 2016, inspection, crews identified a total of six (6) new areas of concentrated rockfall within the tunnel, comprising approximately 23 cubic yards of mostly basalt rock. This was rockfall that did not exist at the time of the 2015 inspection. Crews removed 18.5 cubic yards of the observed new rockfall. Importantly, virtually all newly observed rockfall was located within 2,000 feet of the SMID tunnel entrance, i.e., closest to current and proposed blasting operations. (Again, the tunnel runs almost 10,000 feet from its entrance in East Selah to its termination near Terrace Heights.)

Inadequate Monitoring and Safeguards under the Revised BVM Plan

As described above, evidence of Quarry blasting-related damage to the tunnel and canal under the SMID Report is compelling. The Revised BVM Plan ignores or dismisses SMID's anecdotal observations and experience with the tunnel and canal during the past 10+ years. Accordingly, applicant's recommended monitoring protocols to mitigate blasting risks under the Revised BVM Plan are wholly inadequate. Without limitation, the following items under the Revised BVM Plan should be explained or developed in more detail before the County issues a final MDNS:

- Without explanation, the Revised BVM Plan now recommends a different make and model of seismograph monitoring equipment than provided for under the original, 2015 Blast Monitoring Plan.
 - Did applicant or its consultant identify shortcomings or inconsistencies in the data obtained from the monitoring equipment employed during 2015 and prior thereto?
- Apparently, the locations of all three seismographs under the Revised BVM Plan will be fixed.
 - The 2015 Plan allowed for relocation of at least one monitor, presumably in order to obtain more complete data regarding seismic impacts at different locations along the length of the SMID tunnel.
- There is no provision under the Revised BVM Plan for sharing of blasting data with outside parties. In fact, the applicant will not even share results with its paid consultant, GeoDesign, Inc., unless or until specified vibration intensity data are obtained.

- Neither SMID as the party at risk of blasting related damage or the County in its capacity as the permitting and regulating body are to receive applicant's testing data.
- The Revised BVM Plan offers no proposed schedule for blasting operations.
 - Blasting-related damages to the tunnel and canal will be far easier (and less costly) to repair outside of SMID's irrigation season.
- The Revised BVM Plan is critical of SMID and its geologic consultant, CH2M, for not undertaking extensive and costly modifications of the tunnel to remediate against risks posed by applicant's expanded blasting activities at the Quarry.
 - The tunnel has existed – and functioned properly – for more than 85 years. It was designed and built to be resistant to naturally occurring seismic events – not blasting-induced conditions occurring within 1,000 feet of the tunnel entrance.
 - Blasting operations commenced at the Quarry 70+ years following installation of the SMID tunnel and canal. Fairness dictates that applicant must bear the expense and responsibility for fully remediating against blasting related risks to SMID infrastructure.

Conclusion and Requested Next Steps

SMID appreciates this opportunity to participate in the County's MDNS deliberations. We have attempted on several occasions in the past to collaborate with applicant and its blasting contractor(s) on voluntary arrangements to ensure SMID can participate in a meaningful way in the monitoring process. Unless or until applicant is willing to resolve these concerns with SMID, we ask that the following additional or revised items be included in any mitigated blasting arrangements under the final MDNS:

- Since the blast vibration monitoring data analyzed under the Revised BVM Plan appears to be unreliable, SMID requests that additional and reliable monitoring be performed to evaluate the actual effects blasting has on the SMID tunnel and surrounding area. At applicant's expense and in consultation with SMID, seismic monitoring equipment should be installed at agreed locations, including *inside* the tunnel, in order to establish a mutually agreed "baseline" for background vibration. The equipment should be installed after the 2016 irrigation season concludes.
- Except in exigent circumstances and following consultation with SMID, Quarry blasting should be limited to the period November 1 through March 15.
- Applicant or its blasting contractor(s) should provide written notice to SMID at least five business days prior to all blasting events – no exceptions.
- SMID personnel and consultants should be allowed to observe the siting and installation of seismic monitoring equipment prior to all blasting.

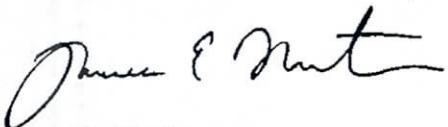
- SMID, at its option, should be allowed to place its own seismic monitoring equipment at the same locations selected by applicant or its blasting contractor(s), or at such other locations as SMID may elect to assess the reliability of applicant's blasting data.
- SMID shall, on advance notice to applicant, be allowed to inspect all blasting data and analyses compiled by applicant and its contractors or consultants. (Likewise, SMID is prepared to share with applicant such independent data as SMID may otherwise obtain.)
- Seismic monitoring equipment should be sufficiently sensitive and accurate enough to identify a vibration threshold value of 0.5 inches.
- Applicant shall install permanent water level gauges and transmitters at both the entrance and termination of the tunnel in order to immediately identify changes in canal water level following all blasting events.
- In consultation with the SMID and Yakima County, applicant shall agree on metrics for determining on a more-probable-than-not basis whether Quarry blasting events have caused or contributed to tunnel damage, including tunnel collapse or restriction, as well as rockfall and debris accumulations, at any time subsequent to issuance of applicant's requested permit for expansion of mining operations.
 - Such metrics should include, but need not be limited to: (1) distance from blasting location(s) to observed tunnel damage; (2) intensity of seismic events as recorded by applicant's monitoring equipment and measured against the above-described background vibration baseline data; (3) canal water level changes as recorded by applicants monitoring equipment; and (4) timing/sequencing of Quarry blasting and observed new tunnel damage.
 - When Quarry blasting is determined, under the agreed metrics, to have damaged the SMID tunnel or canal on a more-probable-than-not basis, applicant shall bear sole financial responsibility for necessary SMID infrastructure repairs (with work to be performed by SMID or contractor(s) selected by SMID in consultation with applicant).
- Applicant shall obtain appropriate blasting insurance of a value agreed to by SMID and naming SMID as an additional insured party.

As we have stated in connection with earlier-provided comments regarding expansion of Quarry operations, a catastrophic failure of the SMID tunnel and canal – particularly during the irrigation season – will have a direct and proximate impact on SMID and its patrons throughout the Yakima Valley, with economic losses conservatively estimated at \$75,000,000.00 in crop losses alone. As such, SMID asks that it be allowed to participate meaningfully in Quarry blast monitoring, as well as the establishment of fair and reasonable requirements for applicant's remediation of blast-related damage to SMID infrastructure. The above-requested revisions and improvements to applicant's Revised BVM should go a long way toward confirming that blasting-related risks are adequately mitigated under any final MDNS decision.

As always, SMID is prepared and available to provide additional comments or clarifications as may be helpful to the Planning Division's evaluation of the pending application for expansion of Quarry operations.

Very truly yours,

HALVERSON | NORTHWEST LAW GROUP, P.C.



Lawrence E. Martin
Attorney for SMID

Enclosures

cc: Mr. Nathan Draper, SMID
Mr. Richard Haapala, CH2M
Ms. Noelle Madera, Planning Division (*Hand Delivered*)





AUG 18 2016

Vern Gary Don Lynn
Dave Lisa Carmen Allyson Brooks Ph.D., Director
State Historic Preservation OfficerCUP 15-037
SEP 15 -011

August 18, 2016

Mr. Byron Gumz
 Senior Project Planner
 Yakima County
 128 N 2nd St., 4th Floor Courthouse
 Yakima, WA98901

In future correspondence please refer to:

Project Tracking Code: 081015-11-YA

Property: MDNS for SEP2015-00016/CUP2015-00037 Expansion of Surface Mine at East Rowley Quarry

Re: Archeology-MDNS Review Comments

Dear Mr. Gumz:

Thank you for contacting the Washington State Department of Archaeology and Historic Preservation (DAHP). The above referenced project has been reviewed on behalf of the State Historic Preservation Officer (SHPO). The project area is located within a large significant archaeological site 45YA109. While we have some information regarding archaeological materials within the project, there is no information regarding tribal consultation or any review undertaken for cultural values.

- RCW 43.21C.020 recognizes the responsibility to "Preserve important historic, cultural, and natural aspects of our national heritage." Further, RCW 43.21.030 (b) Guidelines for state agencies, local governments—Statements—Reports—Advice—Information states (e) Study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.
- Question 13(b) of the SEPA checklist asks: Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

We are not aware of any studies or consultation with the interested Tribe(s) regarding the cultural and historic value of the area. While a permit from DAHP is the minimum requirement under state law for archaeological resources the larger issue of **cultural values and importance** is still unresolved. No mitigation measures have been proposed for those cultural resources. Because we lack this information and are not aware of any completed cultural analyses, we would contend that the County cannot make a fully informed Threshold Determination regarding this project without this critical and required information.

In addition, from the data that we do possess and have evaluated, there is a high probability that the project area contains human burials, areas of cultural value and spiritual importance to the Tribes, and additional archaeological resources that have not been identified. The project area would qualify as both



a Traditional Cultural Property (TCP) as well as a Cultural Landscape (CL) and would be eligible for listing in the National Register of Historic Places (NRHP).

We cannot concur with the MDNS for this project as we believe it is not sufficient, has not fully identified areas of cultural value and importance and therefore does not contain mitigation measures for those areas. In our opinion an MDNS is not appropriate for this project and we believe that a Determination of Significance (DS) should be issued so that the appropriate studies and consultation can take place. This path would ensure that sufficient information was available for the County to make a fully informed decision for this project.

Thank you for the opportunity to review. If you have any questions, please contact me.

Sincerely,



Gretchen Kaebler
Assistant State Archaeologist, Local Governments
(360) 586-3088
gretchen.kaehler@dahp.wa.gov

cc. Johnson Meninick, Cultural Resources, Yakama Nation
Kate Valdez, THPO, Yakama Nation
Corrine Camuso, Archaeologist, Yakama Nation
James Essig, Resource Manager, Granite Construction Company
Dr. Allyson Brooks, SHPO, DAHP
Sandra Adix, AAG,



Confederated Tribes and Bands
of the Yakama Nation

Established by the
Treaty of June 9, 1855

August 18, 2016

Sent via Electronic Mail and Hand Delivery

Lynn Deitrick, AICP – SEPA Responsible Official
Planning Services Division
Yakima County Public Services
128 North Second Street
Yakima, Washington 98901

Re: COMMENTS/OBJECTIONS ON YAKIMA COUNTY'S MDNS FOR CUP2015-00037/SEP2015-00016

Dear Ms. Deitrick:

We write on behalf of the Confederated Tribes and Bands of the Yakama Nation ("Yakama Nation") to strongly object to Yakima County's August 3, 2016 Mitigated Determination of Non-Significance ("MDNS") for Granite Construction Company's ("Granite") proposed expansion of the Rowley East Quarry (CUP2015-00037/SEP2015-00016). Yakima County's determination that there will not be a significant impact on the environment when Granite uses explosives and heavy machinery to excavate a Yakama burial ground, dedicated historical cemetery, and recorded archaeological site both fails to comply with applicable environmental review laws and regulations governing Yakima County's actions in this matter and ignores other applicable laws protecting the resources and burial sites imperiled by Granite's proposed expansion of the Rowley East Quarry. Specifically, the Yakama Nation seeks Yakima County's withdrawal of its MDNS and issuance of a determination of significance necessitating a full environmental impact statement.

In reaching the conclusions laid out in this letter and underpinning our objections to Yakima County's MDNS, the Yakama Nation offers (1) a factual background of the targeted burial ground, (2) legal arguments in favor of preserving and protecting the Yakama Nation's ancestors from desecration, and (3) the conclusion that Yakima County is legally bound to withdraw its MDNS, gather sufficient information, and issue a determination of significance. The Yakama Nation expressly incorporates its March 11, 2016 Initial Comment Letter into this letter by reference, which is attached as Exhibit A. This letter should be read as broadly as is necessary to protect the environment – including the Yakama Nation's ancestors and cultural resources – from Granite's proposed mine expansion. The Yakama Nation does not waive its sovereign immunity from suit by virtue of this letter.

I. FACTUAL BACKGROUND

The Yakama Nation is a sovereign, federally-recognized Nation pursuant to the Treaty of 1855 (12 Stat. 951). With roughly 11,000 members, a 1.4 million acre Reservation, and 10 million acre ceded territory, the Yakama Nation exercises its inherent and Treaty-reserved authority and jurisdiction throughout much of what is now considered the State of Washington, and all of present day Yakima

Yakama Nation, Post Office Box 151, Toppenish, WA 98948 (509) 865-5121

Attachment: Y

LETTER TO YAKIMA COUNTY RE GRANITE CONSTRUCTION CO.'S PROPOSED EXPANSION OF ROWLEY EAST QUARRY
AUGUST 18, 2016

County. Such Yakama Territory encompasses the vast cultural resources that are the foundation for the Yakama Nation's culture, heritage, and religion, and the Yakama People's spiritual relationship to their land and ancestors.

The Rowley East Quarry falls squarely within Yakama territory, and is situated entirely within and/or in close proximity to a Yakama burial ground and recorded Archaeological Site 45YA109 (hereafter the "Burial Ground"),¹ which lies at the confluence of the Yakima River and Naches River at Selah Gap. The Burial Ground sits on the talus slope above *Wanapine*,² a historic Yakama fishing village near a section of what used to be fast water on the Yakima River before the Roza Dam was constructed.³ *Wanapine* has been associated with two other significant burial sites in the immediate area: YA110 and YA610.⁴

The earliest written account of the Burial Ground is from Mr. George Gibbs, as excerpted by Mr. Henry Rowe Schoolcraft, in 1854.⁵ Mr. Gibbs was a geologist and member of Captain George B. McClellan's expedition to scout paths for roads, trails, and railroad passes across the West, which brought him within the general area of *Wanapine* for two weeks. During his time there, Mr. Gibbs recorded:

"At many points on these [valley] walls there were also many graves, generally made in regular form, covered with loose stones to protect them from cayotes [sic], and marked by poles decorated with tin cups, powder-horns, and articles of dress . . ."⁶

In other words, Mr. Gibbs noticed a complex of talus-pit burials along the hillsides throughout the *Wanapine* area – including the Burial Ground – which dates the identified graves to well before Washington's statehood in 1889.

In 1910, Archaeologist Harlan Smith confirmed Mr. Gibb's documentation of talus-pit burials in the Burial Ground and surrounding areas.⁷ Specifically, Mr. Smith noted "a number of scattered graves covered with rock-slide material," some of which had already been disturbed with remains scattered nearby. Mr. Smith also identified intact burials within the Burial Ground, and excavated at least one talus pit burial that held the remains of two individuals.

¹ Letter from Gretchen Kaehler, Assistant State Archaeologist, to Lynn Deitrick, Yakima County Planning Manager (Aug. 11, 2015) (on file with Yakima County Planning Division) (stating "The proposed mind [sic] expansion is completely encompassed by archaeological site 45YA109 . . .").

² Letter from Johnson Meninick, Yakama Nation Cultural Resources Program Manager, to Byron Gumz, Yakima County Planning Department (Aug. 10, 2015) (on file with Yakima County Planning Division).

³ YAKAMA NATION CULTURAL RESOURCES PROGRAM, ARCHAEOLOGICAL SITE INVENTORY FORM: 45YA109 (2016) (on file with Washington State Department of Archaeology and Historic Preservation).

⁴ *Id.*

⁵ H.R. SCHOOLCRAFT, HISTORICAL AND STATISTICAL INFORMATION RESPECTING THE HISTORY, CONDITION AND PROSPECTS OF THE INDIAN TRIBES OF THE UNITED STATES (1854).

⁶ *Id.*

⁷ H.I. SMITH, THE ARCHAEOLOGY OF THE YAKIMA VALLEY (1910).

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In support of Mr. Smith's findings, the Burial Ground was further identified as a burial site in 1958 by Archaeologist Bruce Stallard,⁸ in 1966 and 1969 by Archaeologist David Rice,⁹ in 2000 by Yakama Nation Archaeologists Greg Cleveland and David Powell,¹⁰ and in 2016 by the Yakama Nation Cultural Resources Program.¹¹ In an August 11, 2015 letter, DAHP sent Yakima County a letter that characterizes the burial ground as containing "talus pits and human burials."¹² Archaeological Investigations Northwest – Granite's currently contracted archaeologist – also surveyed limited portions of the Burial Ground in 2000 and 2008 and, in its recent Archaeological Excavation Permit Application recognizes that "[o]verall, the talus features at 45YA109 are considered likely to have been used for human burials as well as for food storage."¹³

Today, Granite is actively mining the Burial Ground. Granite is a California-based publicly-traded construction and construction-materials corporation with 5,000 employees and \$2.3 billion in annual revenue.¹⁴ Granite does not have an Archaeological Excavation and Removal Permit from the Washington State Department of Archaeology and Historic Preservation for the necessary archaeological and cultural resource survey, its current mining operations, or its proposed mine expansion in apparent violation of Washington State law.¹⁵ According to the Washington State Department of Natural Resources, Granite is also in violation of its reclamation permit for failing to mine within its permitted area, maintain adequate setbacks, comply with its plan and permit conditions, and pay its annual fees.¹⁶

II. COMMENTS AND OBJECTIONS

Yakima County's MDNS should be withdrawn and, after sufficient information has been gathered, replaced by a determination of significance because (A) Yakima County's threshold determination is clearly erroneous, (B) Yakima County's MDNS improperly defers its decision-making obligations to DAHP, and

⁸ B. STALLARD, ARCHAEOLOGICAL SITE INVENTORY FORM: 45YA109 (1958) (on file with Washington State Department of Archaeology and Historic Preservation).

⁹ D. RICE, ARCHAEOLOGICAL SITE INVENTORY FORM: 45YA109 (1966) (on file with Washington State Department of Archaeology and Historic Preservation); D. RICE, ARCHAEOLOGICAL RECONNAISSANCE SOUTH-CENTRAL CASCADES (Washington Archaeological Society 1969) (on file with Washington State Department of Archaeology and Historic Preservation).

¹⁰ G. CLEVELAND, ARCHAEOLOGICAL SITE INVENTORY FORM: 45YA109 (1999) (on file with Washington State Department of Archaeology and Historic Preservation).

¹¹ YAKAMA NATION CULTURAL RESOURCES PROGRAM, ARCHAEOLOGICAL SITE INVENTORY FORM: 45YA109 (2016) (on file with Washington State Department of Archaeology and Historic Preservation).

¹² Letter from Gretchen Kaehler, Assistant State Archaeologist, to Lynn Deitrick, Yakima County Planning Manager (Aug. 11, 2015) (on file with Yakima County Planning Division).

¹³ JOHN L. FAGAN, ARCHAEOLOGICAL INVESTIGATIONS NORTHWEST, INC., DEPARTMENT OF ARCHAEOLOGY AND HISTORIC PRESERVATION ARCHAEOLOGICAL SITE EXCAVATION AND REMOVAL PERMIT APPLICATION (May 27, 2016) (on file with the Yakima County Planning Division).

¹⁴ Granite Construction Co., Granite Construction Overview (last visited Aug. 16, 2016)

<https://www.graniteconstruction.com/sites/default/files/2016-03/2016%20Granite%20Fact%20Sheet.pdf>.

¹⁵ Email from Gretchen Kaehler, Assistant State Archaeologist, to Thomas Carroll, Yakima County Planning Division (Aug. 18, 2015) (on file with Yakima County Planning Division).

¹⁶ BRYAN MASSEY, WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES, SURFACE MINE RECLAMATION INSPECTION REPORT (January 20, 2016) (on file with the Washington State Department of Natural Resources).

(C) the new information provided herein and Granite's failure to disclose material facts legally obligates Yakima County to withdraw its MDNS.

A. Yakima County's Threshold Determination that Mining Within a Burial Ground Will Not Significantly Impact the Environment is Clearly Erroneous.

When making a SEPA threshold determination, the lead SEPA agency must consider whether a given proposal will significantly impact the quality of the environment.¹⁷ Lead SEPA agencies' threshold determinations are reviewed by state courts under the clearly erroneous standard.¹⁸ When courts apply the clearly erroneous standard, they consider whether the lead SEPA agency's consideration of the environmental factors established *prima facie* evidence of SEPA compliance, and whether the resulting MDNS was based on "information sufficient to evaluate the proposal's environmental impact."¹⁹ An MDNS may be clearly erroneous even if there is some evidence to support the issuance of the MDNS.²⁰

Here, Yakima County's MDNS is clearly erroneous because (a) Yakima County lacks sufficient information to make a threshold determination, (b) Washington common law recognizes that determinations of significance are proper where cultural resources will be impacted, and (c) Yakima County failed to adequately consider all environmental factors.

a. *Yakima County does not have sufficient information to make a threshold determination at this time.*

Prior to issuing its MDNS, a lead SEPA agency must demonstrate that its decision was based on "information sufficient to evaluate a proposal's environmental impact . . ."²¹ Yakima County failed to meet this standard because its MDNS was not based on sufficient information as demonstrated by Yakima County's failure to seek comments from DAHP or the Yakama Nation, failure to consider a technically sufficient cultural resources survey, and Yakima County's implicit admission that it lacked sufficient information to issue its threshold determination.

Yakima County cannot have considered sufficient information where it did not formally seek out DAHP's archaeological expertise and the Yakama Nation's archaeological and cultural expertise on the environmental impacts of Granite's proposal to expand its mining operations within the Burial Ground. SEPA explicitly requires lead SEPA agencies to "consult with and obtain the comments of any public agency which has jurisdiction by law or special expertise with respect to any environmental impact involved . . ." in a proposed project.²² These specialized agency statements must be made available to the public for review, and it is not a stretch to assume that such publication is required during the public's SEPA-provided comment period.²³ To be clear, lead SEPA agencies *must* engage specialized agencies, *must* obtain their formal comments, and *must* make those comments available for public review. There is no evidence in the

¹⁷ RCW 43.21C.030(2)(c).

¹⁸ *Anderson v. Pierce County*, 86 Wn. App. 290, 302 (Div. II 1997).

¹⁹ *Id.*

²⁰ *Wenatchee Sportsmen Ass'n v. Chelan County*, 141 Wn.2d 169, 176 (2000).

²¹ WAC 197-11-335; *Lanzce G. Douglass, Inc. v. City of Spokane Valley*, 154 Wn. App. 408, 423 (Div. III 2010), (citing RCW 43.21C.030(2)(c)); *Wenatchee Sportsmen Ass'n*, 141 Wn.2d at 176.

²² RCW 43.21C.030(2)(d).

²³ *Id.*

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administrative record that Yakima County fulfilled these legal requirements by seeking and obtaining formal comments from DAHP and the Yakama Nation.

A technically sufficient cultural and archaeological survey of the Burial Ground does not exist, making it impossible for Yakima County to have considered sufficient information when issuing its MDNS. The elder testimony, historical research, and site visits to the Burial Ground dating back to 1854 have generally identified the wealth of cultural resources and archaeological resources in the Burial Ground, but the Yakama Nation is unaware of any intensive field-tested cultural resource survey of the proposed mine expansion area or the immediate surrounding land. Yakima County's administrative record does not include a field-tested archaeological survey of Granite's proposed mine expansion area, and DAHP's communications with Granite suggest that Granite still has not even received a sufficient Archaeological Site Excavation and Removal Permit application for its cultural resource survey, let alone its actual mine expansion proposal.²⁴ Without a technically sufficient cultural and archaeological survey of the Burial Ground, Yakima County does not know with any specificity what cultural resources will be impacted by Granite's proposal and therefore does not have sufficient information to have issued its MDNS.

Yakima County also indicated that it did not have sufficient information to make an adequate threshold determination before Granite satisfied Yakima County's information requests. Yakima County's September 18, 2015 Request for Information to Granite provides that Granite must satisfy its permitting requirements with DAHP prior to Yakima County issuing its threshold determination.²⁵ DAHP's permitting requirements include, among other things, conducting a cultural resource survey of the proposed mine expansion area.²⁶ Yakima County's letter appears to be based on DAHP's August 11, 2015 letter to Yakima County, which states, in part:

"The proposed mine expansion is completely encompassed by archaeological site 45YA109, a large archaeological site containing talus pits and human burials . . .

The expansion [area] also contains two additional archaeological sites 45YA694 and 45YA693 a talus burial and a grouping of talus pits which are likely burials . . .

There are likely to be additional archaeological sites and human burials in the expansion [area] which have not been identified because the project area has not been completely surveyed."²⁷

²⁴ Letter from Dr. Lance Wollwage, Assistant State Archaeologist, to Dr. John Fagan, Archaeological Investigations Northwest, Inc. (June 10, 2016) (on file with the Washington State Department of Archaeology and Historic Preservation) (rejecting AINW's Archaeological Site Excavation and Removal Permit Application as incomplete).

²⁵ Letter from Noella Madera, Yakima County Senior Project Planner, to James Essig, Granite Construction (Sept. 18, 2015) (on file with Yakima County Planning Division).

²⁶ *Id.*

²⁷ Letter from Gretchen Kaehler, Assistant State Archaeologist, to Lynn Deltrick, Yakima County Planning Manager (Aug. 11, 2015) (on file with Yakima County Planning Division); *see also* Email from Gretchen Kaehler, Assistant State Archaeologist, to Thomas Carroll, Yakima County Planning Division (Aug. 18, 2015) (on file with Yakima County Planning Division) (stating "The

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Thus, over a year ago, DAHP identified archaeological resources and human burials that will be impacted or are likely to be impacted by Granite's proposed mine expansion. This assumedly prompted Yakima County to require additional information from Granite to support its threshold determination.

There has been no cultural resource survey of the proposed mine expansion area. Granite has failed to satisfy DAHP's permitting requirements for its proposed mine expansion area. And, consequently, Granite has failed to provide Yakima County with the information it indicated was necessary for a threshold determination in September 2015.

Yet, nearly a year later, Yakima County issued its threshold determination.

If Yakima County didn't have sufficient information to make its threshold determination in September 2015 and Granite failed to take the basic and legally required steps Yakima County indicated were necessary before a threshold determination could be properly issued, it follows that Yakima County's August 2016 MDNS is not supported by information sufficient to evaluate a proposal's environmental impact.

b. *Existing Washington State Case Law Supports a Determination of Significance Where Proposed Projects Will Impact Cultural Resources.*

While the scope of relevant Washington State case law is limited, the Washington State Supreme Court's opinion in *Klickitat County Citizens Against Imported Waste v. Klickitat County*²⁸ ("KCCAIW") supports the Yakama Nation's position that Yakima County is required to issue a threshold determination of significance for Granite's permit application. In *KCCAIW*, Klickitat County issued a determination of nonsignificance on a plan to expand a local landfill into a site with cultural significance to the Yakama Nation.²⁹ A citizens' group sued Klickitat County to challenge the DNS, and the Yakama Nation intervened as a plaintiff.³⁰ In holding that Klickitat County erred in issuing its DNS, the Skamania County Superior Court stated:

"The purpose of the Declaration of Nonsignificance is not merely to [pay] lip service to the environment in going through the planning process, but to make a meaningful analytic decision based upon all available information that can be gathered, from all existing agencies, that may be affected prior to any action."³¹

project area is within archaeological site 4SYA 109 . . . [w]e have not agreed to any protective measures or buffers and are not sure how the [sic] anything would be buffered since the project area is encompassed by the archaeological site.")

²⁸ *Klickitat County Citizens Against Imported Waste v. Klickitat County*, 122 Wn.2d 619 (1993).

²⁹ *Klickitat County Citizens Against Imported Waste*, 122 Wn.2d at 624.

³⁰ *Id.* at 625.

³¹ *Id.*

In other words, Klickitat County was required to take the time to meaningfully consider the proposed project's impact on the environment, which Klickitat County did by issuing a determination of significance and completing an environmental impact statement.³²

After Klickitat County issued its EIS, the Yakama Nation again challenged Klickitat County because its EIS did not adequately address protections for the Yakama Nation's cultural resources.³³ The challenge reached the Washington State Supreme Court, it went out of its way to point out the failings of Klickitat County's consideration of cultural resources in its EIS.³⁴ Concerning cultural resources, the Court called Klickitat County's EIS "simply inadequate" and insufficient to "adequately inform the [County's] decision."³⁵ Were it not for the EIS's express incorporation of an extensive cultural and historical resource survey by an anthropology and archaeology contractor, the EIS would not have been deemed adequate.³⁶

The Superior Court's initial holding and the Supreme Court's scrutiny into the utter inadequacy of Klickitat County's EIS in *KCCAIW* are informative here. Klickitat County was required by court order to complete an EIS, and upon completing its EIS, was scolded by the Supreme Court for its failure to adequately consider cultural resources. In other words, Klickitat County issued a determination of significance, completed an EIS, dedicated a portion of that EIS to cultural resources, completed a cultural resources survey, and expressly incorporated that survey into its EIS, and it still barely passed muster for the Supreme Court. Here, Yakima County did not even issue a determination of significance for the threatened destruction of a burial ground. Yakima County should take guidance from *KCCAIW* and withdraw its MDNS, issue a determination of significance, and complete an EIS that thoroughly considers the potential impacts of Granite's proposed mine expansion on the Burial Ground.

c. *Yakima County Failed to Consider Other Relevant Environmental Factors.*

Yakima County failed to adequately consider other relevant environmental effects of Granite's proposed mine expansion, including impacts to the surrounding air, water, and land from Granite's blasting operations. Significantly, on April 20, 2016 there was a chemical explosion at the Burial Ground that triggered a 2.1 magnitude earthquake.³⁷ According to the United States Geological Survey ("USGS"), the epicenter of the earthquake was within the Burial Ground, and USGS received public reports of the earthquake from residents in both Yakima and Selah.³⁸ While Granite discloses its intent to continue with periodic explosions to release rock from the Burial Ground, earthquake-triggering chemical explosions are not contemplated in Granite's SEPA checklist, its Blast Vibration Monitoring Plan, or Yakima County's MDNS. This suggests that Yakima County did not consider the significant impacts of these earthquake-

³² *Id.* at 626-628.

³³ *Id.* at 628.

³⁴ *Id.* at 641-645.

³⁵ *Id.* at 643.

³⁶ *Id.* at 644 (stating "Given that the [Archaeology] Study was incorporated into the 1990 [Solid Waste Management] Plan Update and EIS, it substitutes for an otherwise inadequate level of analysis.")

³⁷ NBC Right Now, *Explosion causes 2.1-magnitude earthquake in Selah* (April 20, 2016)

<http://www.nbcrightnow.com/story/31777994/explosion-causes-21-magnitude-earthquake-in-selah>.

³⁸ United States Geological Survey, *M2.1 Explosion – 2 km SE of Selah, Washington* (April 20, 2016)
<http://earthquake.usgs.gov/earthquakes/eventpage/uw61128842#executive>.

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triggering explosions on the environment. Yakima County must withdraw its MDNS and gather sufficient information to determine the impact of, among other environmental impacts, Granite's earthquake-triggering explosions on the air, water, land, and cultural and historic resources – including the Selah-Moxee Irrigation District's irrigation tunnel – before issuing its determination of significance.

B. Yakima County's Deferral of its Obligation to Make an Informed Threshold Determination to DAHP is Clearly Erroneous.

In its MDNS Mitigation Measure F1, Yakima County defers outright its obligation to consider the significant impacts of Granite's proposed project on the Yakama Nation's ancestors and cultural resources to DAHP without legal basis, and without consideration for the substantially different legal frameworks applicable to Yakima County and DAHP in this instance. Because Yakima County cannot defer its obligation to make a threshold determination to DAHP, Yakima County should withdraw its MDNS and properly consider the environmental impacts of Granite's proposed project on the environment.

a. *The Legal Burden is on the SEPA Lead Agency to Make a Threshold Determination, not a Specialized Agency Like DAHP.*

SEPA obligates lead SEPA agencies to consider whether a proposed project will significantly affect the quality of the environment.³⁹ The lead SEPA agency has the sole responsibility for issuing a threshold determination on a given project proposal.⁴⁰ Put another way, SEPA does not contemplate that a lead SEPA agency may defer its substantive consideration of a proposed project's environmental impacts to a separate specialized agency.

In Yakima County's MDNS, Yakima County attempted to defer its substantive obligation to make a threshold determination to DAHP without providing any legal authority or basis for such a deferral. In Section F of Yakima County's MDNS, Yakima County says that Granite's proposed mine expansion has the "potential to disturb cultural resources . . ." which does not actually express whether Granite's proposed mine expansion will significantly affect cultural resources (i.e. the environment).⁴¹ Instead, Yakima County defers its threshold determination to DAHP in Mitigation Measure F1, which provides:

"An Archaeological Site Alteration and Excavation Permit, approved by the Washington State Department of Archaeology and Historic Preservation, shall be obtained and all conditions of approval implemented prior to ground disturbing activities within the mine expansion area."⁴²

Simply put, Yakima County is relying on DAHP to determine whether Granite's proposed project will significantly impact the environment (i.e. the Yakama Nation's ancestors and cultural resources) without providing any legal support or justification for such a deferral. It is unclear why Yakima County changed its initial correct analysis that before a threshold determination can be made, Granite must meet DAHP's

³⁹ RCW 43.21C.030(2)(c); WAC 197-11-330.

⁴⁰ WAC 197-11-050(2); *Harris v. Hornbaker*, 98 Wn.2d 650, 663 (1983).

⁴¹ LYNN DEITRICK, YAKIMA COUNTY PLANNING DIVISION, CUP2015-00037/SEP2015-00016 – ROWLEY QUARRY EXPANSION THRESHOLD DETERMINATION – MITIGATED DETERMINATION OF NON-SIGNIFICANCE 4 (Aug. 3, 2016).

⁴² *Id.*

LETTER TO YAKIMA COUNTY RE GRANITE CONSTRUCTION CO.'S PROPOSED EXPANSION OF ROWLEY EAST QUARRY
AUGUST 18, 2016

permit application requirements, which will, in turn, furnish Yakima County with the information it needs for a threshold determination. But in any event, Yakima County must now withdraw its MDNS and gather sufficient information to make its own threshold determination on whether mining the Burial Ground will have a significant impact on the cultural resources and human remains located therein.

b. *Yakima County's Deferral to DAHP is Improper Because Yakima County's SEPA Obligations Differ Significantly from DAHP's Archaeological Excavation Permitting Considerations.*

Under SEPA, lead SEPA agencies are required to issue a threshold determination that considers whether a proposed project will significantly affect the environment, and whether those significant impacts can be adequately mitigated.⁴³ In stark contrast, when DAHP considers an Archaeological Site Removal and Excavation Permit application, DAHP looks to whether the archaeological and cultural resources can be removed from an archaeological site by the project proponent in accordance with legal and technical specifications.⁴⁴ While SEPA requires lead SEPA agencies to consider whether removing cultural resources will significantly affect the environment, DAHP considers whether a plan to remove cultural resources is legally and technically sufficient.

To illustrate the significant difference between these legal frameworks, consider a hypothetical proposal to excavate *your* family's historic graveyard to build a new strip mall. SEPA requires that the lead SEPA agency consider whether digging up *your* family members' bodies in the interest of economic gain will significantly affect the environment. DAHP, on the other hand, would consider whether the strip mall developer's archaeologist can adequately protect and document *your* family members' remains when they are excavated, boxed up, and handed to *you* to re-inter in some geographic location that another business hopefully won't develop in the future. The former considers the impacts of removal, while the latter considers the methods for removal.

Here, Yakima County's attempt to defer its SEPA obligations to DAHP improperly conflates SEPA's requirements with DAHP's permitting considerations. Specifically, Section F of Yakima County's MDNS equivocates on whether Granite's proposed project will have a significant impact on cultural resources, undermining the sufficiency of Yakima County's threshold determination.⁴⁵ To fill the void in its threshold determination, Yakima County inserts DAHP and expressly relies on the ultimate outcome of DAHP's consideration of Granite's permit application as the means to meeting Yakima County's obligations under SEPA.⁴⁶ However – given the significant difference between SEPA's threshold considerations and DAHP's permit considerations – Yakima County's actions only ensure that the removal of human remains and cultural resources will be done in a technically sufficient manner and fail to address whether the removal and destruction of such resources will have a significant affect on the environment in the first place. Somebody has to make a threshold determination here and Yakima County has assumed the title of lead SEPA agency, not DAHP.

⁴³ WAC 197-11-350(2).

⁴⁴ See generally WAC 25-48-105.

⁴⁵ LYNN DETRICK, YAKIMA COUNTY PLANNING DIVISION, CUP2015-00037/SEP2015-00016 – ROWLEY QUARRY EXPANSION THRESHOLD DETERMINATION – MITIGATED DETERMINATION OF NON-SIGNIFICANCE 4 (Aug. 3, 2016).

⁴⁶ *Id.*

C. Yakima County is Required to Withdraw Its MDNS Based on the Factual Information Provided
Herein and Applicant's Failure to Disclose Material Facts.

Lead SEPA agencies must withdraw an MDNS if (1) there are substantial changes to the project that make a DS and preparation of an EIS appropriate, (2) there is significant new information received regarding a project's probable significant adverse impacts, or (3) the MDNS was procured through misrepresentation or lack of material disclosure on the part of the applicant.⁴⁷ In this case, the Yakama Nation provided significant new information concerning the Burial Ground and Granite failed to disclose material information when completing its SEPA checklist, thereby legally obligating Yakima County to withdraw its MDNS.

The Yakama Nation provided substantial new information in this letter and its attachments that makes a determination of significance and EIS appropriate, which legally requires Yakima County to withdraw its MDNS. By virtue of this letter, the Yakama Nation informed Yakima County that the Burial Ground is the final resting place for a number of the Yakama Nation's ancestors interred prior to 1889, making it a dedicated historic cemetery protected under RCW 68.60. There is a significant complex of talus pit burials located directly within the proposed mine expansion area that warrants further research and study, as does the entirety of the proposed mine expansion area. The Yakama Nation also informed Yakima County of Granite's earthquake-triggering chemical explosion earlier this year, which may have had significant environmental impacts and should be considered by Yakima County. All of these facts lend themselves to a determination that Granite's proposed project will significantly affect the environment, and as a result, Yakima County must withdraw its MDNS to consider the new information that the Yakama Nation provided.

Further, Granite failed to disclose material facts about its past and present conduct that Yakima County should have considered when issuing its MDNS, which obligates Yakima County to withdraw its MDNS. Granite failed to disclose that an adequate cultural resources survey for the proposed mine expansion area does not exist. Granite does not discuss its recent earthquake-triggering chemical explosion, which was not contemplated in its Blast Vibration Monitoring Report or its conversations with the Selah-Moxee Irrigation District about the structural integrity of the nearby irrigation tunnel. Granite did not mention that for nearly a decade it has mined a recorded archaeological site without the legally required permit from DAHP, and mined a dedicated historic cemetery that cannot legally be excavated. Granite has not even sent DAHP a permit application to allow it to continue mining within the current mine boundaries, let alone the proposed mine expansion area.⁴⁸

III. CONCLUSION

Yakima County's MDNS fails under SEPA and should be withdrawn because Yakima County did not obtain and rely on sufficient information, improperly deferred its decision-making obligations to

⁴⁷ WAC 197-11-340(3).

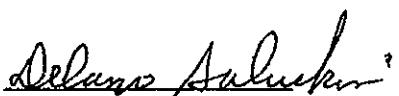
⁴⁸ Letter from Dr. Lance Wollwage, Assistant State Archaeologist, to Dr. John Fagan, Archaeological Investigations Northwest, Inc. (June 10, 2016) (on file with the Washington State Department of Archaeology and Historic Preservation) (stating "Lastly, the permit [application] addressed only proposed archaeological testing and survey. It does not address mining activities that will occur after the proposed testing is complete.").

LETTER TO YAKIMA COUNTY RE GRANITE CONSTRUCTION CO.'S PROPOSED EXPANSION OF ROWLEY EAST QUARRY
AUGUST 18, 2016

DAHP, and received new information from the Yakama Nation about the proposed mine expansion and Granite's actions that must be considered before a threshold determination is issued. Instead, Yakima County should follow the Washington State Supreme Court's guidance in *KCCAIW* and issue a determination of significance and prepare an EIS that thoroughly considers the potential environmental impacts of Granite's proposal to mine a burial ground, recorded archaeological site, and dedicated historic cemetery.

If you have any questions or concerns, please contact Mr. Joe Sexton, Legal Counsel for the Yakama Nation, at (509) 910-8842 or joe@galandabroadman.com.

Respectfully,


JODE L. GOUDY, CHAIRMAN
YAKAMA TRIBAL COUNCIL


GERALD LEWIS, CHAIRMAN
YAKAMA TRIBAL COUNCIL CULTURAL COMMITTEE

Attached Exhibits:

- (A) March 11, 2016 Letter from Yakama Nation to Yakima County Environmental Planning Department re: Preliminary Comments on SEPA Environmental Review Application regarding proposed expansion of Rowley East Quarry.
- (B) August 2, 2016 Letter from Yakama Nation Cultural Resource Program to Yakima County Planning Section Manager re: Rowley Quarry Expansion Threshold Determination - MDNS

EXHIBIT A



Confederated Tribes and Bands
of the Yakama Nation

Established by the
Treaty of June 9, 1855

March 11, 2016

Sent via U.S.P.S. Certified Mail

Byron Gumz, Senior Project Planner
Environmental Planning Department
Yakima County Public Services
128 North Second Street
Yakima, Washington 98901

Re: PRELIMINARY COMMENTS ON SEPA ENVIRONMENTAL REVIEW APPLICATION REGARDING PROPOSED EXPANSION OF ROWLEY EAST QUARRY

Dear Mr. Gumz:

The Confederated Tribes and Bands of the Yakama Nation ("Yakama Nation") respectfully submits the following preliminary comments and concerns regarding Granite Construction Company's ("Applicant") April 30, 2015 SEPA Environmental Review Checklist ("Checklist") supporting Applicant's proposed expansion of the Rowley East Quarry (the "Project"). The Checklist is insufficient because it provides incomplete and incorrect information on the Project's potential impacts on the Yakama Nation's Treaty reserved interest in its cultural and archaeological resources – including a high likelihood of exposing, damaging, injuring, removing, and/or destroying our Ancestors' human remains and their final resting places (i.e., graves) – and fails to offer any measures to protect the existing cultural resources. The Checklist further fails to disclose that Granite Construction Company has been excavating within a recorded archaeological site that may be eligible for listing on the National Register of Historic Places for more than a decade without an Archaeological Excavation and Removal Permit in apparent violation of, *inter alia*, Title 25-48 of the Washington Administrative Code.

To ensure the accuracy of the administrative record and to limit the extent of Applicant's apparent unpermitted mining operations within a known archaeological site, we respectfully request that Yakima County (1) initially require Applicant to revise its Checklist to accurately reflect the archaeological landscape of the Project area and provide proposals addressing treatment of cultural and archaeological resources, and (2) ultimately make a threshold determination that the Project is a proposed major action that will have probable significant adverse impacts on the quality of the environment, necessitating issuance of a determination of significance.

A. SEPA Requires Yakima County to Obtain and Consider Sufficient Information About the Project's Effects on Cultural and Archaeological Resources

Under State law and the Yakima County Code, Yakima County is obligated to solicit and consider sufficient information about the impacts of proposed projects on the environment, including effects on cultural and archaeological resources.¹ Specifically, when making a SEPA threshold determination, a SEPA responsible agency must show that its decision was based on information sufficient to evaluate a proposal's environmental impact, and that it considered the relevant environmental factors.² SEPA expressly protects cultural and archaeological resources, and a SEPA responsible agency must consider and address a project's potential impact on them³ – a task which first requires that sufficient information be obtained by the agency, typically via the SEPA Environmental Checklist. Critically, § 13 of the Environmental Checklist, entitled "Historic and cultural preservation," requires project proponents to identify any evidence of Indian cultural resources located within a proposed project area.⁴

If information relevant to assessing significant adverse project impacts is not known, and the cost of obtaining it is not exorbitant, SEPA requires the responsible agency to obtain the information.⁵ Alternatively, if such information cannot be obtained, SEPA requires the responsible agency to present a worst-case analysis in its threshold determination,⁶ which here would require the reasonable assumption that the entire proposed project site contains significant archeological resources, Indian graves, and the human remains laid to rest in those graves.

B. Applicant's SEPA Environmental Review Checklist Is Insufficient

Initially, Yakima County should supplement or require Applicant to supplement Applicant's Checklist because Applicant failed to provide Yakima County with sufficient information on known cultural and archaeological resources within the proposed Project area. Specifically, Applicant ignored known cultural resources and failed to provide any suggestion for mitigating adverse effects to those resources – to the extent that mitigation is even possible. For example, Applicant addressed the presence of cultural resources within the proposed Project area as follows:

"Archaeological [sic] survey has designated areas of interest. These sites are buffered from the proposed mining area and will not be disturbed."⁷

¹ Yakima County Code § 16.04.010 (acknowledging and adopting SEPA rules, WAC 197-11, by reference).

² WAC 197-11-335; *Lanzen G. Douglass, Inc. v. City of Spokane Valley*, 154 Wn. App. 408, 423, 225 P.3d 448 (2010), (citing RCW 43.21C.030(2)(c)); *Wenatchee Sportsmen Ass'n v. Chelan County*, 141 Wn.2d 169, 176, 4 P.3d 123 (2000).

³ RCW 41.21C.020(2) (the responsible agency has the responsibility to use "all practicable means . . . to . . . preserve important historic, cultural, and natural aspects of . . . national heritage . . .").

⁴ SEPA Environmental Checklist § 13(b), codified at WAC 197-11-960 ("Are there any landmarks, features, or other evidence of Indian or historic use or occupation? . . . Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.")

⁵ WAC 197-11-080.

⁶ WAC 197-11-080.

⁷ Checklist at 13(b).

LETTER TO YAKIMA COUNTY RE GRANITE CONSTRUCTION CO.'S PROPOSED EXPANSION OF ROWLEY EAST QUARRY
MARCH 11, 2016

Despite Applicant's assurances, Applicant intends to destroy and remove the ground surface within the proposed project area, the entirety of which is a well-documented archaeological site (45YA109) comprised of a complex of talus burials that will be directly impacted. In other words, Applicant proposes to continue and expand its ongoing desecration of a known Yakama burial site. According to Applicant's Checklist, Applicant will address project impacts by "No proposed measures as resources will not be disturbed."⁸ Applicant's cultural resource information is woefully inadequate and entirely insufficient for Yakima County to consider Applicant's SEPA application. In order to comply with the letter and the spirit of SEPA, Yakima County must supplement or require Applicant to supplement Applicant's Checklist regarding cultural resources within the proposed Project area to reflect reality.⁹

C. Applicant's Project Will Have Significant Adverse Effects on the Environment Necessitating An Environmental Impact Statement

To the extent that Yakima County or Applicant are able to sufficiently supplement Applicant's Checklist, or in the alternative using a worst-case scenario, Yakima County should make a threshold determination that Applicant's proposed Project is (1) a major action that, (2) will have probable significant adverse impacts on the quality of the environment, requiring (3) Yakima County to issue a determination of significance.

Under SEPA, Agencies are required to make a threshold determination of whether proposals are major actions that will have probable significant adverse impacts on the quality of the environment.¹⁰ An 'action' is defined to include activities that are "regulated, licensed, or approved by agencies."¹¹ An action is a 'major action' if it will have significant adverse environmental impacts.¹² In the case of regulatory permits, a project will have significant adverse environmental impacts where the proposed project will have sufficient absolute and relative impacts flowing from the project's intensity and the surrounding environment's sensitivity.¹³ Where a major action will have probable significant adverse impacts on the quality of the environment the lead agency is required to issue a determination of significance, which triggers the need for an environmental impact statement.¹⁴

Here, Applicant's proposed Project is a major action that will have probable significant adverse impacts on the quality of the environment, requiring Yakima County to issue a Determination of Significance. Applicant's proposed project is an 'action' because it requires Yakima County to make a regulatory decision approving or denying Applicant's proposed change in land use. The action is a 'major action' because it contemplates the removal and/or destruction of significant archaeological and cultural resources (i.e. environment) – likely including the human remains of the Yakama Nation's ancestors –

⁸ Checklist at 13(d).

⁹ WAC 197-11-310(2).

¹⁰ WAC 197-11-330.

¹¹ WAC 197-11-704(1)(a).

¹² WAC 197-11-764.

¹³ RICHARD L. SETTLE, THE WASHINGTON STATE ENVIRONMENTAL POLICY ACT § 13.01(1) (Matthew Bender, 2014).

¹⁴ WAC 197-11-360(1).

LETTER TO YAKIMA COUNTY RE GRANITE CONSTRUCTION CO.'S PROPOSED EXPANSION OF ROWLEY EAST QUARRY
MARCH 11, 2016

within a sensitive archaeological site, constituting a significant adverse impact to the environment. Because Applicant's proposed project is a major action that will have probable significant adverse impacts on the environment, Yakima County is required to issue a determination of significance that will trigger an environmental impact statement that more thoroughly details Applicant's proposal to destroy a known cultural and archaeological site.

D. Conclusion and Requested Action

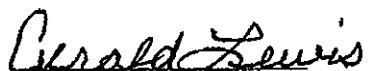
Under Washington law, Yakima County, as the SEPA responsible agency for the proposed Project, has a duty to ensure that its SEPA threshold decisions are based on sufficient information to determine likely environmental impacts of proposed projects, including impacts on cultural and archaeological resources. Applicant's Checklist does not provide Yakima County with sufficient information about cultural resources that will be adversely impacted by the proposed Project, and fails to offer a single mitigation proposal. Critically, the Checklist does not provide sufficient information about known and unknown human remains in the area, or the project's very high potential to impact undiscovered cultural and archaeological resources.

To remedy these issues, the Yakama Nation requests that Yakima County (1) supplement, or require Applicant to supplement, Applicant's Checklist to accurately reflect the archaeological landscape of the Project area and provide proposals addressing treatment of cultural and archaeological resources, and (2) ultimately make a threshold determination that the Project is a proposed major action that will have probable significant adverse impacts on the quality of the environment, necessitating a determination of significance. Please note that the Yakama Nation is still evaluating the potential impacts of Applicant's proposed project on 45YA109, and therefore reserves the right to supplement these initial comments with additional information at a later date.

Thank you for your consideration of these comments. Please direct your response to Mr. Joe Sexton, Attorney for the Yakama Nation, at (509) 910-8842 or joe@galandabroadman.com.

Respectfully,


JOE L. GOUDY, CHAIRMAN
YAKAMA NATION TRIBAL COUNCIL


GERALD LEWIS, CHAIRMAN
CULTURAL COMMITTEE
YAKAMA NATION TRIBAL COUNCIL

cc: Allyson Brooks, Washington State Dept. of Archaeology and Historic Preservation

EXHIBIT B



Confederated Tribes and Bands of the Yakama Nation
Established by the Treaty of June 9, 1855

Post Office Box 151
Toppenish Washington 98948

Tommy Carroll
Planning Section Manager
128 N. 2nd Street
Fourth Floor Courthouse
Yakima, WA 98901

August 2, 2016

RE: CUP2015-00037/SEO2015-00016 Rowley Quarry Expansion Threshold Determination -- MDNS

Dear Mr. Carroll,

Thank you for providing our office notification of the MDNS issued for the Rowley Quarry Expansion. We are highly concerned with the County's decision to issue this determination, given that the County is aware of Yakama Nation's opposition, and the need for an extensive archeological permitting process with the Washington State Department of Archaeology and Historic Preservation (DAHP). Our office finds the MDNS insufficient and premature, demonstrating neglect in the execution of Yakima County's duties. Our specific comments are as follows:

- We are highly disappointed that the County has not considered our request for a full EIS. The wholesale destruction of an archeological site, burial ground, and Traditional Cultural Property should be treated with greater concern. By issuing an MDNS, the County has demonstrated a lack of understanding and respect for Yakama Nation burial grounds, traditional places, and the laws that govern such sites.
- The MDNS is insufficient in that it fails to define any mitigation—it simply states that various permits will be required. Legally required permits are not mitigation. It is insufficient to say that an MDNS is based upon mitigation that has not yet been agreed to and accepted. The MDNS would have been slightly more appropriate after terms of various permits had been negotiated.
- Yakama Nation does not feel that scientific documentation is an appropriate or sufficient means of mitigation for the destruction of ancestral burial grounds. Yakima County must find another manner to address this issue. We are aware that DAHP has advised the County that an archeological permit cannot be denied. We disagree with their interpretation and urge the county to look beyond this narrow view.
- The County is aware that Yakama Nation CRP considers YA109 a burial site according to the state law (RCW 27.44, RCW 68.60). The MDNS should address how the County proposes to legally excavate a cemetery/burial sites under these laws. To state that a permit will be obtained is insufficient as 68.60 does not allow for permitted removal.
- The County is aware that Yakama Nation considers YA109 a Traditional Cultural Property. By what means does the county propose to address damages to such a site?

Yakama Nation CRP has submitted additional documentation of site YA109 to the Washington State Department of Archeological and Historic Preservation. We will be asking the various regulatory agencies to consider the site in light of the data we have provided and will continue to provide as this process moves forward.

Sincerely,



Johnson Meninick

Yakama Nation Cultural Resources Program Manager

509-865-5121 x4737

CC: Yakama Nation Tribal Council Cultural Committee
Ethan Jones, Yakama Nation Office of Legal Counsel
Joe Sexton, Galanda Broadman, PLLC
Lance Wollwage, Department of Archaeology and Historic Preservation
David Powell, Yakama Nation



Confederated Tribes and Bands of the Yakama Nation
Established by the Treaty of June 9, 1855

Post Office Box 151
Toppenish Washington 98948

Tommy Carroll
Public Services
128 North Second Street
Fourth Floor Courthouse
Yakima, Washington 98901

February 1, 2017

Public Services ()

FEB 06 2017

Byron Gumz
Public Services
128 North Second Street
Fourth Floor Courthouse
Yakima, Washington 98901

Vern Gary Don Lynn
Dave Lisa Carmen

RE: Rowley Quarry MDNS CUP2015-00037/SEP2015-00016

Dear Mr. Carroll and Mr. Gumz,

The Yakama Nation Cultural Resources Program has reviewed the recently issued MDNS for Rowley Quarry, and the accompanying archeological survey report completed by Archaeological Investigations Northwest (AINW). We find the survey report legally and technically insufficient. Based on the resources located within the proposed project area, we urge Yakima County to make a Determination of Significance regarding this proposal. Our technical concerns are as follows:

- AINW recorded archaeological sites and isolates within the previously identified 45YA109 site boundary. They state in text that the 45YA109 site boundary was disregarded due to the fact that the boundary was "based on ethnohistoric data" without "comprehensive field survey". Archaeological site boundaries are not to be dismissed. Once accepted by the Department of Archaeology and Historic Preservation, site boundaries should be considered with respect and the legal care that an accepted boundary would require. The decision to disregard this boundary is not within AINW's authority. Failure to comply with legally defined archaeological boundaries, laws, and processes can be misleading to the both the county and the client. The Register of Professional Archaeologists Code and Standards states that members shall "know and comply with all federal, state, and local laws, ordinances, and regulations applicable to her/his archeological research and activities".
- AINW has misapplied the regulatory law for this project. Throughout the report, AINW considers precontact archaeological material in light of the resource's eligibility to the National Register of Historic Places. It is inaccurate to consider precontact resources in this manner within the State of Washington. Under RCW 27.53 precontact archeological material is to be protected regardless of significance until and unless a permit can be obtained. All statements in this report to the effect that a precontact site is "not eligible" and that a site "need not be avoided" should be disregarded.
- AINW states that talus features will be "tested" for subsurface archeological material. They fail to indicate how this will be achieved without full-scale excavation of the features. A detailed testing plan will be expected within the archaeological permit application.
- Page 2 of the report states that the mining permit issued by Yakima County for quarry operations did not have any requirement to protect 45YA694. This permit is out of compliance with state laws governing cultural resources (See RCW 27.53 and RCW 27.44).

Attachment: 2

- Page 2 also indicates that artifacts were removed from site 45YA694 in 2000 and are currently curated with AINW. We request to know if these were removed under an archaeological permit. If not, these artifacts were removed in violation of state law.
- AINW's survey failed to take into account the detailed site form provided by this office (Yakama Nation CRP, Archaeological Site Inventory Form: 45YA109; August 2, 2016), and associated Cemetery Record (ID 1978) available on the statewide WISAARD database. These documents would have been integral to the understanding and consideration of 45YA109. The Yakama Nation based their research on satellite imagery, air photos, previous research, archival work, and elder testimony, as limited in-field analysis was allowed by the proponent.
- The analysis of Unusual Natural Rock Features indicates a unique problem in the practice of breaking up the original site boundary. It is difficult for cultural resource practitioners that are not affiliated with, and do not understand Yakama culture, to discern and accept the presence of a significant cultural/archaeological landscape. Further, it is equally difficult to disprove the presence of previously identified burial grounds within the proposed permitted area. Researchers have verified that talus burials have been discovered within the vicinity (Smith), and this fact corroborates specific locales with a greater talus burial complex identified through elder testimony. Archaeological material in the Columbia Basin has document human occupation since at least 11,000 BP. Since that time, a considerable amount of slope process may have covered early burials to a significant degree. Often a talus slope burial is used to provide additional protection over time as the natural function of the slope causes the burial to be covered. They are also used in winter deaths when the adjacent ground freezes. Talus burials involve different practices at different times based upon the individual(s) who are buried and the individual(s) who buried them. For instance, the items buried with them, how they are positioned (standing, laying, and the direction they face), and the landscape they overlook. Burials at Missoula Flood Gaps are of particular importance in oral history and in spiritual protection from future floods. These burials are living evidence of our ancestors. We do not expect cultural resource practitioners to understand our teachings but instead respect and acknowledge a number of professional archaeologists and regulatory archaeologist that have identified and concurred on this site previously. Further, we expect that cultural resource practitioners will work objectively towards following the appropriate guidelines defined in Washington States laws governing cultural resources. Work in the interest of the task (evaluation), not for a specified outcome.

For the above stated reasons, the Yakama Nation Cultural Resources Program finds this report unacceptable. Any acceptable survey should comply with appropriate law, have considered current research, and respect accepted site boundaries. Past research has indicated a high likelihood that the features within 45YA109 are burial sites. Given this, Yakima County should make a Determination of Significance regarding the Rowley Quarry Expansion.

Sincerely,


 Johnson Meninick
 Yakama Nation Cultural Resources Program

CC: Lance Wollwage, Washington State Department of Archaeology and Historic Preservation
 Gretchen Kaehler, Washington State Department of Archaeology and Historic Preservation
 Ethan Jones, Yakama Nation Office of Legal Counsel
 Joe Sexton, Galanda Broadman



Public Services ()

FEB 13 2017

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
1250 W Alder St • Union Gap, WA 98903-0009 • (509) 575-2491

Vern Gary Don Lynn
Dave Lisa Carmen

February 13, 2017

Byron Gumz
Planning Division
Yakima County Public Services
128 North 2nd Street
Yakima, WA 98901

Re: CUP2015-00037, SEP2015-00016

Dear Mr. Gumz:

Thank you for the opportunity to comment on the mitigated determination of nonsignificance for the expansion of an existing mine, proposed by Frank Rowley and Granite Northwest, Inc. We have reviewed the documents and have the following comments.

WATER QUALITY

The proponent must submit a revised site map that includes the new sand and gravel permit boundaries. If the discharge monitoring locations are known, include them. The proponent will also need to revise the site management plan. The proponent should email, mail or fax (509/575-2809) the completed site map to:

Pam Perun, pamela.perun@ecy.wa.gov
Sand and Gravel General Permit Manager
Dept. of Ecology, Water Quality Program
15 West Yakima Avenue #200
Yakima, WA 98902

If you have any questions or would like to respond to these Water Quality comments, please contact Pam Perun at (509) 454-7869 or pamela.perun@ecy.wa.gov.

Sincerely,

Gwen Clear

Gwen Clear
Environmental Review Coordinator
Central Regional Office
(509) 575-2012
crosepaccoordinator@ecy.wa.gov





Confederated Tribes and Bands
of the Yakama Nation

Established by the
Treaty of June 9, 1855

Public Services ()

FEB. 16 2017 *[Signature]*

February 15, 2017

Sent via Electronic Mail and Hand Delivery

Vern Gary Don Lynn
Dave Lisa Carmen

Lynn Deitrick, AICP – SEPA Responsible Official
Planning Services Division
Yakima County Public Services
128 North Second Street
Yakima, WA 98901

Re: COMMENTS/ OBJECTIONS ON YAKIMA COUNTY'S MDNS FOR CUP2015-00037/SEP2015-00016

Dear Ms. Deitrick:

We write on behalf of the Confederated Tribes and Bands of the Yakama Nation ("Yakama Nation") to express the Yakama Nation's objections to Yakima County's February 2, 2017 Mitigated Determination of Non-Significance ("MDNS") for Granite Construction Company's ("Granite") proposed expansion of the Rowley East Quarry (CUP2015-00037/SEP2015-00016). The Yakama Nation incorporates by reference the following documents and reasserts every factual assertion, argument, and objection offered therein against Yakima County's revised MDNS, all of which are attached for your convenience:

- Letter from Yakama Nation Cultural Resources Program to Yakima County titled "Rowley Quarry MDNS CUP2015-0037/SEP2015/00016" (February 1, 2017);
- Letter from Yakama Nation to Yakima County titled "Comments/ Objections on Yakima County's MDNS for CUP2015-00037/SEP2015-00016" (August 18, 2016);
- Letter from Yakama Nation Cultural Resources Program to Yakima County titled "CUP2015-00037/SEO2015-00016 Rowley Quarry Expansion Threshold Determination – MDNS" (August 2, 2016); and
- Letter from Yakama Nation to Yakima County titled "Preliminary Comments on SEPA Environmental Review Application Regarding Proposed Expansion of Rowley East Quarry" (March 11, 2016).

Yakima County's threshold determination that Granite can mitigate the significant impacts of detonating and mining a Yakama burial ground, dedicated historical cemetery, and recorded archaeological site (hereafter the "Burial Ground") is without basis in applicable law and culturally offensive. The Yakama Nation reiterates our request that Yakima County withdraw its MDNS and issue a determination of significance necessitating a full environmental impact statement. The Yakama Nation does not waive its sovereign immunity from suit by virtue of this letter.



Confederated Tribes and Bands
of the Yakama Nation

Established by the
Treaty of June 9, 1855

I. COMMENTS AND OBJECTIONS

Yakima County's MDNS should be withdrawn and, after sufficient information is gathered, replaced by a determination of significance because (A) Yakima County did not satisfy its duties under the State Environmental Protection Act ("SEPA"), (B) Yakima County's proposed mitigation measures are insufficient, unreasonable, and impossible to perform, and (C) the Yakama Nation never consented to the excavation/destruction of the Yakama Nation's ancestors or cultural resources.

A. Yakima County's Revised MDNS Largely Ignores the Yakama Nation's Objections To Date.

The Yakama Nation submitted public records requests on August 5, 2016, and January 31, 2017, seeking the administrative record that Yakima County relied upon when making its threshold determinations.¹ Yakima County produced an administrative record that contains all of the aforementioned letters from Yakama Leadership and Staff.² Despite indicating reliance on these materials, Yakima County's revised MDNS does not actually address the Yakama Nation's previously expressed concerns in every paragraph of our February 1, 2017 letter, paragraphs 1-22 and 28-32 of our August 18, 2016 letter, paragraphs 1-2 and 4-7 of our August 2, 2016 letter, and every paragraph of our March 11, 2016 letter. As a result, the Yakama Nation maintains our previously stated position that Yakima County improperly issued its MDNS in violation of applicable law.

B. Yakima County's Mitigation Measures Violate SEPA Because They are Insufficient, Unreasonable, and Impossible to Perform.

Yakima County's proposed mitigation measures are insufficient to mitigate the significant harm that Granite's proposed mine expansion will have on the Yakama Nation's ancestors and cultural resources. RCW 43.21C.060 assumes that a determination of significance will be issued where "reasonable mitigation measures are insufficient to mitigate the identified impact."³ In this case, Yakima County's identified impact is "the potential to disturb cultural resources . . ." which Granite will purportedly mitigate with buffers, and by stopping work when they hit something.⁴ Such mitigation measures completely ignore the actual landscape and proposed project. Talus rock slopes are unstable and constantly shift towards a given angle of repose. Talus pit burials use this natural feature to constantly cover and protect the ancestors buried within, which means there could be numerous burials on the hillside that have already been covered over time. For both identified and unidentified talus pit burials within the Burial Ground, Yakima County failed to explain how Granite can detonate explosives, use heavy machinery, or excavate materials anywhere near

¹ See Public Records Request Form from Yakama Nation to Yakima County (August 5, 2016) (on file with Yakima County Planning Division); Public Records Request Form from Yakama Nation to Yakima County (January 31, 2017) (on file with Yakima County Planning Division).

² See Email from Mr. Thomas Carroll to Mr. Ethan Jones (Feb. 9, 2017 at 4:54 pm) (on file with author); Email from Mr. Thomas Carroll to Mr. Ethan Jones (Feb. 9, 2017 at 4:56 pm) (on file with author); Email from Mr. Thomas Carroll to Mr. Ethan Jones (Feb. 9, 2017 at 4:57 pm) (contains confidential information subject to redaction) (on file with author).

³ Wash. Rev. Code § 43.21C.060.

⁴ Yakima County, Preliminary Mitigated Determination of Non-Significance for SEP2015-00016 § (7)(F) (Feb. 2, 2016).



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such talus pits without damaging them. Further, Granite's employees are assumedly not archaeologists, so it will be nearly impossible for them to identify human remains or cultural resources. Narrow buffers and self-reporting requirements are not sufficiently protective of such important cultural resources and are not appropriate for this site.

In addition, such mitigation measures appear impossible to perform. RCW 43.21C.060 and WAC 197-11-660(1)(c) require that "Mitigation measures shall be reasonable and capable of being accomplished."⁵ Here, Yakima County failed to explain how Granite will be able to identify whether talus pit burials "reveal evidence of human remains" without excavating those talus pits.⁶ If Yakima County intends for Granite to dig up the Yakama Nation's ancestors and cultural resources to confirm their presence – to which the Yakama Nation strongly objects – it is unclear how Granite or its archaeological contractor can dig into such a steep slope of unstable rock without destroying the talus pit burials they are supposed to protect. For those talus pit burials that have already been covered, it is unreasonable to assume that Granite's employees are capable of identifying talus pit burials, human remains, and cultural resources as they detonate and mine the hillside. Yakima County's mitigation measures are unreasonable and impossible, and should be withdrawn and replaced with a determination of significance.

C. Yakima County and Granite Never Requested and Were Never Granted Permission to Excavate/Destroy the Yakama Nation's Ancestors and Cultural Resources.

The Yakama Nation asserts its Treaty-reserved right to protect its ancestors and cultural resources from destruction and desecration, wherever they may be. When the Yakama Nation signed the Treaty of 1855, the Yakama Nation reserved all inherent sovereign rights not expressly ceded therein.⁷ At no point during the Treaty negotiations or at any time since did the Yakama Nation cede its inherent sovereign rights to protect its ancestors or cultural resources. Neither Yakima County, nor Granite, have the authority to take any actions impacting the Yakama Nation's cultural resources without the Yakama Nation's express permission. To date, Yakima County and Granite have never asked the Yakama Nation for permission to excavate/destroy our ancestors and cultural resources, and the Yakama Nation has never granted such permission.

II. CONCLUSION

The Yakama Nation objects to Yakima County's threshold determination that Granite can mitigate the significant impacts of detonating and mining a Yakama burial ground, dedicated historical cemetery, and recorded archaeological site. This Letter and all those letters incorporated by reference should be read as

⁵ WASH. REV. CODE § 43.21C.060; WASH. ADMIN. CODE § 197-11-660(1)(c).

⁶ Yakima County, Preliminary Mitigated Determination of Non-Significance for SEP2015-00016 § (7)(F)(Mitigation Measure F2) (stating "All archaeological resources that reveal evidence of human remains shall be protected with a 75-foot buffer.").

⁷ Treaty with the Yakamas of 1855, Yakama Nation-U.S., June 9, 1855, 12 Stat. 951; U.S. v. Winans, 198 U.S. 371, 381, 25 S. Ct. 662, 49 L. Ed. 1089 (1905) (stating "In other words, the treaty was not a grant of rights to the Indians, but a grant of rights from them – a reservation of those not granted.").



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broadly as is necessary to protect the environment – including the Yakama Nation's ancestors and cultural resources – from Granite's proposed mine expansion. The mine expansion proposed poses a real and undeniable threat to our ancestors who have been laid to rest in the area.

If you have any questions or concerns, please contact either Mr. Joe Sexton, Attorney for the Yakama Nation, at (509) 910-8842 or joe@galandabroadman.com, or Mr. Ethan Jones, Attorney for the Yakama Nation, at (509) 865-7268 or ethan@yakamanation-olc.org.

Respectfully,

Joe De L. Goudy, Chairman
Yakama Tribal Council

Gerald Lewis, Chairman
Yakama Tribal Council Cultural Committee

CC: Allyson Brooks, Washington State Dept. of Archaeology and Historic Preservation



Confederated Tribes and Bands of the Yakama Nation
Established by the Treaty of June 9, 1855

Post Office Box 151
Toppenish Washington 98948

Tommy Carroll
Public Services
128 North Second Street
Fourth Floor Courthouse
Yakima, Washington 98901

February 1, 2017

Byron Gumz
Public Services
128 North Second Street
Fourth Floor Courthouse
Yakima, Washington 98901

RE: Rowley Quarry MDNS CUP2015-00037/SEP2015-00016

Dear Mr. Carroll and Mr. Gumz,

The Yakama Nation Cultural Resources Program has reviewed the recently issued MDNS for Rowley Quarry, and the accompanying archeological survey report completed by Archaeological Investigations Northwest (AINW). We find the survey report legally and technically insufficient. Based on the resources located within the proposed project area, we urge Yakima County to make a Determination of Significance regarding this proposal. Our technical concerns are as follows:

- AINW recorded archaeological sites and isolates within the previously identified 45YA109 site boundary. They state in text that the 45YA109 site boundary was disregarded due to the fact that the boundary was "based on ethnohistoric data" without "comprehensive field survey". Archaeological site boundaries are not to be dismissed. Once accepted by the Department of Archaeology and Historic Preservation, site boundaries should be considered with respect and the legal care that an accepted boundary would require. The decision to disregard this boundary is not within AINW's authority. Failure to comply with legally defined archaeological boundaries, laws, and processes can be misleading to the both the county and the client. The Register of Professional Archaeologists Code and Standards states that members shall "know and comply with all federal, state, and local laws, ordinances, and regulations applicable to her/his archeological research and activities".
- AINW has misapplied the regulatory law for this project. Throughout the report, AINW considers precontact archaeological material in light of the resource's eligibility to the National Register of Historic Places. It is inaccurate to consider precontact resources in this manner within the State of Washington. Under RCW 27.53 precontact archeological material is to be protected regardless of significance until and unless a permit can be obtained. All statements in this report to the effect that a precontact site is "not eligible" and that a site "need not be avoided" should be disregarded.
- AINW states that talus features will be "tested" for subsurface archeological material. They fail to indicate how this will be achieved without full-scale excavation of the features. A detailed testing plan will be expected within the archaeological permit application.
- Page 2 of the report states that the mining permit issued by Yakima County for quarry operations did not have any requirement to protect 45YA694. This permit is out of compliance with state laws governing cultural resources (See RCW 27.53 and RCW 27.44).

- Page 2 also indicates that artifacts were removed from site 45YA694 in 2000 and are currently curated with AINW. We request to know if these were removed under an archaeological permit. If not, these artifacts were removed in violation of state law.
- AINW's survey failed to take into account the detailed site form provided by this office (Yakama Nation CRP, Archaeological Site Inventory Form: 45YA109; August 2, 2016), and associated Cemetery Record (ID 1978) available on the statewide WISAARD database. These documents would have been integral to the understanding and consideration of 45YA109. The Yakama Nation based their research on satellite imagery, air photos, previous research, archival work, and elder testimony, as limited in-field analysis was allowed by the proponent.
- The analysis of Unusual Natural Rock Features indicates a unique problem in the practice of breaking up the original site boundary. It is difficult for cultural resource practitioners that are not affiliated with, and do not understand Yakama culture, to discern and accept the presence of a significant cultural/archaeological landscape. Further, it is equally difficult to disprove the presence of previously identified burial grounds within the proposed permitted area. Researchers have verified that talus burials have been discovered within the vicinity (Smith), and this fact corroborates specific locales with a greater talus burial complex identified through elder testimony. Archaeological material in the Columbia Basin has document human occupation since at least 11,000 BP. Since that time, a considerable amount of slope process may have covered early burials to a significant degree. Often a talus slope burial is used to provide additional protection over time as the natural function of the slope causes the burial to be covered. They are also used in winter deaths when the adjacent ground freezes. Talus burials involve different practices at different times based upon the individual(s) who are buried and the individual(s) who buried them. For instance, the items buried with them, how they are positioned (standing, laying, and the direction they face), and the landscape they overlook. Burials at Missoula Flood Gaps are of particular importance in oral history and in spiritual protection from future floods. These burials are living evidence of our ancestors. We do not expect cultural resource practitioners to understand our teachings but instead respect and acknowledge a number of professional archaeologists and regulatory archaeologist that have identified and concurred on this site previously. Further, we expect that cultural resource practitioners will work objectively towards following the appropriate guidelines defined in Washington States laws governing cultural resources. Work in the interest of the task (evaluation), not for a specified outcome.

For the above stated reasons, the Yakama Nation Cultural Resources Program finds this report unacceptable. Any acceptable survey should comply with appropriate law, have considered current research, and respect accepted site boundaries. Past research has indicated a high likelihood that the features within 45YA109 are burial sites. Given this, Yakima County should make a Determination of Significance regarding the Rowley Quarry Expansion.

Sincerely,


 Johnson Menlnick
 Yakama Nation Cultural Resources Program

CC: Lance Wollwage, Washington State Department of Archaeology and Historic Preservation
 Gretchen Kaehler, Washington State Department of Archaeology and Historic Preservation
 Ethan Jones, Yakama Nation Office of Legal Counsel
 Joe Sexton, Galanda Broadman



Confederated Tribes and Bands
of the Yakama Nation

Established by the
Treaty of June 9, 1855

August 18, 2016

Sent via Electronic Mail and Hand Delivery

Lynn Deitrick, AICP – SEPA Responsible Official
Planning Services Division
Yakima County Public Services
128 North Second Street
Yakima, Washington 98901

Re: COMMENTS/OBJECTIONS ON YAKIMA COUNTY'S MDNS FOR CUP2015-00037/SEP2015-00016

Dear Ms. Deitrick:

We write on behalf of the Confederated Tribes and Bands of the Yakama Nation (“Yakama Nation”) to strongly object to Yakima County’s August 3, 2016 Mitigated Determination of Non-Significance (“MDNS”) for Granite Construction Company’s (“Granite”) proposed expansion of the Rowley East Quarry (CUP2015-00037/SEP2015-00016). Yakima County’s determination that there will not be a significant impact on the environment when Granite uses explosives and heavy machinery to excavate a Yakama burial ground, dedicated historical cemetery, and recorded archaeological site both fails to comply with applicable environmental review laws and regulations governing Yakima County’s actions in this matter and ignores other applicable laws protecting the resources and burial sites imperiled by Granite’s proposed expansion of the Rowley East Quarry. Specifically, the Yakama Nation seeks Yakima County’s withdrawal of its MDNS and issuance of a determination of significance necessitating a full environmental impact statement.

In reaching the conclusions laid out in this letter and underpinning our objections to Yakima County’s MDNS, the Yakama Nation offers (1) a factual background of the targeted burial ground, (2) legal arguments in favor of preserving and protecting the Yakama Nation’s ancestors from desecration, and (3) the conclusion that Yakima County is legally bound to withdraw its MDNS, gather sufficient information, and issue a determination of significance. The Yakama Nation expressly incorporates its March 11, 2016 Initial Comment Letter into this letter by reference, which is attached as Exhibit A. This letter should be read as broadly as is necessary to protect the environment – including the Yakama Nation’s ancestors and cultural resources – from Granite’s proposed mine expansion. The Yakama Nation does not waive its sovereign immunity from suit by virtue of this letter.

I. FACTUAL BACKGROUND

The Yakama Nation is a sovereign, federally-recognized Nation pursuant to the Treaty of 1855 (12 Stat. 951). With roughly 11,000 members, a 1.4 million acre Reservation, and 10 million acre ceded territory, the Yakama Nation exercises its inherent and Treaty-reserved authority and jurisdiction throughout much of what is now considered the State of Washington, and all of present day Yakima

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County. Such Yakama Territory encompasses the vast cultural resources that are the foundation for the Yakama Nation's culture, heritage, and religion, and the Yakama People's spiritual relationship to their land and ancestors.

The Rowley East Quarry falls squarely within Yakama territory, and is situated entirely within and/or in close proximity to a Yakama burial ground and recorded Archaeological Site 45YA109 (hereafter the "Burial Ground"),¹ which lies at the confluence of the Yakima River and Naches River at Selah Gap. The Burial Ground sits on the talus slope above *Wanapine*,² a historic Yakama fishing village near a section of what used to be fast water on the Yakima River before the Roza Dam was constructed.³ *Wanapine* has been associated with two other significant burial sites in the immediate area: YA110 and YA610.⁴

The earliest written account of the Burial Ground is from Mr. George Gibbs, as excerpted by Mr. Henry Rowe Schoolcraft, in 1854.⁵ Mr. Gibbs was a geologist and member of Captain George B. McClellan's expedition to scout paths for roads, trails, and railroad passes across the West, which brought him within the general area of *Wanapine* for two weeks. During his time there, Mr. Gibbs recorded:

"At many points on these [valley] walls there were also many graves, generally made in regular form, covered with loose stones to protect them from cayotes [sic], and marked by poles decorated with tin cups, powder-horns, and articles of dress . . ."⁶

In other words, Mr. Gibbs noticed a complex of talus-pit burials along the hillsides throughout the *Wanapine* area — including the Burial Ground — which dates the identified graves to well before Washington's statehood in 1889.

In 1910, Archaeologist Harlan Smith confirmed Mr. Gibb's documentation of talus-pit burials in the Burial Ground and surrounding areas.⁷ Specifically, Mr. Smith noted "a number of scattered graves covered with rock-slide material," some of which had already been disturbed with remains scattered nearby. Mr. Smith also identified intact burials within the Burial Ground, and excavated at least one talus pit burial that held the remains of two individuals.

¹ Letter from Gretchen Kaehler, Assistant State Archaeologist, to Lynn Deitrick, Yakima County Planning Manager (Aug. 11, 2015) (on file with Yakima County Planning Division) (stating "The proposed mind [sic] expansion is completely encompassed by archaeological site 45YA109 . . .").

² Letter from Johnson Meninick, Yakama Nation Cultural Resources Program Manager, to Byron Gumz, Yakima County Planning Department (Aug. 10, 2015) (on file with Yakima County Planning Division).

³ YAKAMA NATION CULTURAL RESOURCES PROGRAM, ARCHAEOLOGICAL SITE INVENTORY FORM: 45YA109 (2016) (on file with Washington State Department of Archaeology and Historic Preservation).

⁴ *Id.*

⁵ H.R. SCHOOLCRAFT, HISTORICAL AND STATISTICAL INFORMATION RESPECTING THE HISTORY, CONDITION AND PROSPECTS OF THE INDIAN TRIBES OF THE UNITED STATES (1854).

⁶ *Id.*

⁷ H.I. SMITH, THE ARCHAEOLOGY OF THE YAKIMA VALLEY (1910).

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In support of Mr. Smith's findings, the Burial Ground was further identified as a burial site in 1958 by Archaeologist Bruce Stallard,⁸ in 1966 and 1969 by Archaeologist David Rice,⁹ in 2000 by Yakama Nation Archaeologists Greg Cleveland and David Powell,¹⁰ and in 2016 by the Yakama Nation Cultural Resources Program.¹¹ In an August 11, 2015 letter, DAHP sent Yakima County a letter that characterizes the burial ground as containing "talus pits and human burials."¹² Archaeological Investigations Northwest – Granite's currently contracted archaeologist – also surveyed limited portions of the Burial Ground in 2000 and 2008 and, in its recent Archaeological Excavation Permit Application recognizes that "[o]verall, the talus features at 45YA109 are considered likely to have been used for human burials as well as for food storage."¹³

Today, Granite is actively mining the Burial Ground. Granite is a California-based publicly-traded construction and construction-materials corporation with 5,000 employees and \$2.3 billion in annual revenue.¹⁴ Granite does not have an Archaeological Excavation and Removal Permit from the Washington State Department of Archaeology and Historic Preservation for the necessary archaeological and cultural resource survey, its current mining operations, or its proposed mine expansion in apparent violation of Washington State law.¹⁵ According to the Washington State Department of Natural Resources, Granite is also in violation of its reclamation permit for failing to mine within its permitted area, maintain adequate setbacks, comply with its plan and permit conditions, and pay its annual fees.¹⁶

II. COMMENTS AND OBJECTIONS

Yakima County's MDNS should be withdrawn and, after sufficient information has been gathered, replaced by a determination of significance because (A) Yakima County's threshold determination is clearly erroneous, (B) Yakima County's MDNS improperly defers its decision-making obligations to DAHP, and

⁸ B. STALLARD, ARCHAEOLOGICAL SITE INVENTORY FORM: 45YA109 (1958) (on file with Washington State Department of Archaeology and Historic Preservation).

⁹ D. RICE, ARCHAEOLOGICAL SITE INVENTORY FORM: 45YA109 (1966) (on file with Washington State Department of Archaeology and Historic Preservation); D. RICE, ARCHAEOLOGICAL RECONNAISSANCE SOUTH-CENTRAL CASCADES (Washington Archaeological Society 1969) (on file with Washington State Department of Archaeology and Historic Preservation).

¹⁰ G. CLEVELAND, ARCHAEOLOGICAL SITE INVENTORY FORM: 45YA109 (1999) (on file with Washington State Department of Archaeology and Historic Preservation).

¹¹ YAKAMA NATION CULTURAL RESOURCES PROGRAM, ARCHAEOLOGICAL SITE INVENTORY FORM: 45YA109 (2016) (on file with Washington State Department of Archaeology and Historic Preservation).

¹² Letter from Gretchen Kaehler, Assistant State Archaeologist, to Lynn Deitrick, Yakima County Planning Manager (Aug. 11, 2015) (on file with Yakima County Planning Division).

¹³ JOHN L. FAGAN, ARCHAEOLOGICAL INVESTIGATIONS NORTHWEST, INC., DEPARTMENT OF ARCHAEOLOGY AND HISTORIC PRESERVATION ARCHAEOLOGICAL SITE EXCAVATION AND REMOVAL PERMIT APPLICATION (May 27, 2016) (on file with the Yakima County Planning Division).

¹⁴ Granite Construction Co., Granite Construction Overview (last visited Aug. 16, 2016)

<https://www.graniteconstruction.com/sites/default/files/2016-03/2016%20Granite%20Fact%20Sheet.pdf>.

¹⁵ Email from Gretchen Kaehler, Assistant State Archaeologist, to Thomas Carroll, Yakima County Planning Division (Aug. 18, 2015) (on file with Yakima County Planning Division).

¹⁶ BRYAN MASSEY, WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES, SURFACE MINE RECLAMATION INSPECTION REPORT (January 20, 2016) (on file with the Washington State Department of Natural Resources).

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(C) the new information provided herein and Granite's failure to disclose material facts legally obligates Yakima County to withdraw its MDNS.

A. Yakima County's Threshold Determination that Mining Within a Burial Ground Will Not Significantly Impact the Environment is Clearly Erroneous.

When making a SEPA threshold determination, the lead SEPA agency must consider whether a given proposal will significantly impact the quality of the environment.¹⁷ Lead SEPA agencies' threshold determinations are reviewed by state courts under the clearly erroneous standard.¹⁸ When courts apply the clearly erroneous standard, they consider whether the lead SEPA agency's consideration of the environmental factors established *prima facie* evidence of SEPA compliance, and whether the resulting MDNS was based on "information sufficient to evaluate the proposal's environmental impact."¹⁹ An MDNS may be clearly erroneous even if there is some evidence to support the issuance of the MDNS.²⁰

Here, Yakima County's MDNS is clearly erroneous because (a) Yakima County lacks sufficient information to make a threshold determination, (b) Washington common law recognizes that determinations of significance are proper where cultural resources will be impacted, and (c) Yakima County failed to adequately consider all environmental factors.

a. *Yakima County does not have sufficient information to make a threshold determination at this time.*

Prior to issuing its MDNS, a lead SEPA agency must demonstrate that its decision was based on "information sufficient to evaluate a proposal's environmental impact . . ."²¹ Yakima County failed to meet this standard because its MDNS was not based on sufficient information as demonstrated by Yakima County's failure to seek comments from DAHP or the Yakama Nation, failure to consider a technically sufficient cultural resources survey, and Yakima County's implicit admission that it lacked sufficient information to issue its threshold determination.

Yakima County cannot have considered sufficient information where it did not formally seek out DAHP's archaeological expertise and the Yakama Nation's archaeological and cultural expertise on the environmental impacts of Granite's proposal to expand its mining operations within the Burial Ground. SEPA explicitly requires lead SEPA agencies to "consult with and obtain the comments of any public agency which has jurisdiction by law or special expertise with respect to any environmental impact involved . . ." in a proposed project.²² These specialized agency statements must be made available to the public for review, and it is not a stretch to assume that such publication is required during the public's SEPA-provided comment period.²³ To be clear, lead SEPA agencies *must* engage specialized agencies, *must* obtain their formal comments, and *must* make those comments available for public review. There is no evidence in the

¹⁷ RCW 43.21C.030(2)(c).

¹⁸ *Anderson v. Pierce County*, 86 Wn. App. 290, 302 (Div. II 1997).

¹⁹ *Id.*

²⁰ *Wenatchee Sportsmen Ass'n v. Chelan County*, 141 Wn.2d 169, 176 (2000).

²¹ WAC 197-11-335; *Lance G. Douglass, Inc. v. City of Spokane Valley*, 154 Wn. App. 408, 423 (Div. III 2010), (citing RCW 43.21C.030(2)(c)); *Wenatchee Sportsmen Ass'n*, 141 Wn.2d at 176.

²² RCW 43.21C.030(2)(d).

²³ *Id.*

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administrative record that Yakima County fulfilled these legal requirements by seeking and obtaining formal comments from DAHP and the Yakama Nation.

A technically sufficient cultural and archaeological survey of the Burial Ground does not exist, making it impossible for Yakima County to have considered sufficient information when issuing its MDNS. The elder testimony, historical research, and site visits to the Burial Ground dating back to 1854 have generally identified the wealth of cultural resources and archaeological resources in the Burial Ground, but the Yakama Nation is unaware of any intensive field-tested cultural resource survey of the proposed mine expansion area or the immediate surrounding land. Yakima County's administrative record does not include a field-tested archaeological survey of Granite's proposed mine expansion area, and DAHP's communications with Granite suggest that Granite still has not even received a sufficient Archaeological Site Excavation and Removal Permit application for its cultural resource survey, let alone its actual mine expansion proposal.²⁴ Without a technically sufficient cultural and archaeological survey of the Burial Ground, Yakima County does not know with any specificity what cultural resources will be impacted by Granite's proposal and therefore does not have sufficient information to have issued its MDNS.

Yakima County also indicated that it did not have sufficient information to make an adequate threshold determination before Granite satisfied Yakima County's information requests. Yakima County's September 18, 2015 Request for Information to Granite provides that Granite must satisfy its permitting requirements with DAHP prior to Yakima County issuing its threshold determination.²⁵ DAHP's permitting requirements include, among other things, conducting a cultural resource survey of the proposed mine expansion area.²⁶ Yakima County's letter appears to be based on DAHP's August 11, 2015 letter to Yakima County, which states, in part:

"The proposed mine expansion is completely encompassed by archaeological site 45YA109, a large archaeological site containing talus pits and human burials . . .

The expansion [area] also contains two additional archaeological sites 45YA694 and 45YA693 a talus burial and a grouping of talus pits which are likely burials . . .

There are likely to be additional archaeological sites and human burials in the expansion [area] which have not been identified because the project area has not been completely surveyed."²⁷

²⁴ Letter from Dr. Lance Wollwage, Assistant State Archaeologist, to Dr. John Fagan, Archaeological Investigations Northwest, Inc. (June 10, 2016) (on file with the Washington State Department of Archaeology and Historic Preservation) (rejecting AINW's Archaeological Site Excavation and Removal Permit Application as incomplete).

²⁵ Letter from Noella Madera, Yakima County Senior Project Planner, to James Essig, Granite Construction (Sept. 18, 2015) (on file with Yakima County Planning Division).

²⁶ *Id.*

²⁷ Letter from Gretchen Kaehler, Assistant State Archaeologist, to Lynn Deitrick, Yakima County Planning Manager (Aug. 11, 2015) (on file with Yakima County Planning Division); *see also* Email from Gretchen Kaehler, Assistant State Archaeologist, to Thomas Carroll, Yakima County Planning Division (Aug. 18, 2015) (on file with Yakima County Planning Division) (stating "The

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Thus, over a year ago, DAHP identified archaeological resources and human burials that will be impacted or are likely to be impacted by Granite's proposed mine expansion. This assumedly prompted Yakima County to require additional information from Granite to support its threshold determination.

There has been no cultural resource survey of the proposed mine expansion area. Granite has failed to satisfy DAHP's permitting requirements for its proposed mine expansion area. And, consequently, Granite has failed to provide Yakima County with the information it indicated was necessary for a threshold determination in September 2015.

Yet, nearly a year later, Yakima County issued its threshold determination.

If Yakima County didn't have sufficient information to make its threshold determination in September 2015 and Granite failed to take the basic and legally required steps Yakima County indicated were necessary before a threshold determination could be properly issued, it follows that Yakima County's August 2016 MDNS is not supported by information sufficient to evaluate a proposal's environmental impact.

b. *Existing Washington State Case Law Supports a Determination of Significance Where Proposed Projects Will Impact Cultural Resources.*

While the scope of relevant Washington State case law is limited, the Washington State Supreme Court's opinion in *Klickitat County Citizens Against Imported Waste v. Klickitat County*²⁸ ("KCCAIW") supports the Yakama Nation's position that Yakima County is required to issue a threshold determination of significance for Granite's permit application. In KCCAIW, Klickitat County issued a determination of nonsignificance on a plan to expand a local landfill into a site with cultural significance to the Yakama Nation.²⁹ A citizens' group sued Klickitat County to challenge the DNS, and the Yakama Nation intervened as a plaintiff.³⁰ In holding that Klickitat County erred in issuing its DNS, the Skamania County Superior Court stated:

"The purpose of the Declaration of Nonsignificance is not merely to [pay] lip service to the environment in going through the planning process, but to make a meaningful analytic decision based upon all available information that can be gathered, from all existing agencies, that may be affected prior to any action."³¹

project area is within archaeological site 45YA109 . . . [w]e have not agreed to any protective measures or buffers and are not sure how the [sic] anything would be buffered since the project area is encompassed by the archaeological site.")

²⁸ *Klickitat County Citizens Against Imported Waste v. Klickitat County*, 122 Wn.2d 619 (1993).

²⁹ *Klickitat County Citizens Against Imported Waste*, 122 Wn.2d at 624.

³⁰ *Id.* at 625.

³¹ *Id.*

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In other words, Klickitat County was required to take the time to meaningfully consider the proposed project's impact on the environment, which Klickitat County did by issuing a determination of significance and completing an environmental impact statement.³²

After Klickitat County issued its EIS, the Yakama Nation again challenged Klickitat County because its EIS did not adequately address protections for the Yakama Nation's cultural resources.³³ The challenge reached the Washington State Supreme Court, it went out of its way to point out the failings of Klickitat County's consideration of cultural resources in its EIS.³⁴ Concerning cultural resources, the Court called Klickitat County's EIS "simply inadequate" and insufficient to "adequately inform the [County's] decision."³⁵ Were it not for the EIS's express incorporation of an extensive cultural and historical resource survey by an anthropology and archaeology contractor, the EIS would not have been deemed adequate.³⁶

The Superior Court's initial holding and the Supreme Court's scrutiny into the utter inadequacy of Klickitat County's EIS in *KCCAIW* are informative here. Klickitat County was required by court order to complete an EIS, and upon completing its EIS, was scolded by the Supreme Court for its failure to adequately consider cultural resources. In other words, Klickitat County issued a determination of significance, completed an EIS, dedicated a portion of that EIS to cultural resources, completed a cultural resources survey, and expressly incorporated that survey into its EIS, and it still barely passed muster for the Supreme Court. Here, Yakima County did not even issue a determination of significance for the threatened destruction of a burial ground. Yakima County should take guidance from *KCCAIW* and withdraw its MDNS, issue a determination of significance, and complete an EIS that thoroughly considers the potential impacts of Granite's proposed mine expansion on the Burial Ground.

c. *Yakima County Failed to Consider Other Relevant Environmental Factors.*

Yakima County failed to adequately consider other relevant environmental effects of Granite's proposed mine expansion, including impacts to the surrounding air, water, and land from Granite's blasting operations. Significantly, on April 20, 2016 there was a chemical explosion at the Burial Ground that triggered a 2.1 magnitude earthquake.³⁷ According to the United States Geological Survey ("USGS"), the epicenter of the earthquake was within the Burial Ground, and USGS received public reports of the earthquake from residents in both Yakima and Selah.³⁸ While Granite discloses its intent to continue with periodic explosions to release rock from the Burial Ground, earthquake-triggering chemical explosions are not contemplated in Granite's SEPA checklist, its Blast Vibration Monitoring Plan, or Yakima County's MDNS. This suggests that Yakima County did not consider the significant impacts of these earthquake-

³² *Id.* at 626-628.

³³ *Id.* at 628.

³⁴ *Id.* at 641-645.

³⁵ *Id.* at 643.

³⁶ *Id.* at 644 (stating "Given that the [Archaeology] Study was incorporated into the 1990 [Solid Waste Management] Plan Update and EIS, it substitutes for an otherwise inadequate level of analysis.")

³⁷ NBC Right Now, *Explosion causes 2.1-magnitude earthquake in Selah* (April 20, 2016)

<http://www.nbcrightnow.com/story/31777994/explosion-causes-21-magnitude-earthquake-in-selah>.

³⁸ United States Geological Survey, *M2.1 Explosion – 2 km SE of Selah, Washington* (April 20, 2016)

<http://earthquake.usgs.gov/earthquakes/eventpage/uw61128842#executive>.

LETTER TO YAKIMA COUNTY RE GRANITE CONSTRUCTION CO.'S PROPOSED EXPANSION OF ROWLEY EAST QUARRY
AUGUST 18, 2016

triggering explosions on the environment. Yakima County must withdraw its MDNS and gather sufficient information to determine the impact of, among other environmental impacts, Granite's earthquake-triggering explosions on the air, water, land, and cultural and historic resources – including the Selah-Moxee Irrigation District's irrigation tunnel – before issuing its determination of significance.

B. Yakima County's Deferral of its Obligation to Make an Informed Threshold Determination to DAHP is Clearly Erroneous.

In its MDNS Mitigation Measure F1, Yakima County defers outright its obligation to consider the significant impacts of Granite's proposed project on the Yakama Nation's ancestors and cultural resources to DAHP without legal basis, and without consideration for the substantially different legal frameworks applicable to Yakima County and DAHP in this instance. Because Yakima County cannot defer its obligation to make a threshold determination to DAHP, Yakima County should withdraw its MDNS and properly consider the environmental impacts of Granite's proposed project on the environment.

a. *The Legal Burden is on the SEPA Lead Agency to Make a Threshold Determination, not a Specialized Agency Like DAHP.*

SEPA obligates lead SEPA agencies to consider whether a proposed project will significantly affect the quality of the environment.³⁹ The lead SEPA agency has the sole responsibility for issuing a threshold determination on a given project proposal.⁴⁰ Put another way, SEPA does not contemplate that a lead SEPA agency may defer its substantive consideration of a proposed project's environmental impacts to a separate specialized agency.

In Yakima County's MDNS, Yakima County attempted to defer its substantive obligation to make a threshold determination to DAHP without providing any legal authority or basis for such a deferral. In Section F of Yakima County's MDNS, Yakima County says that Granite's proposed mine expansion has the "potential to disturb cultural resources . . ." which does not actually express whether Granite's proposed mine expansion will significantly affect cultural resources (i.e. the environment).⁴¹ Instead, Yakima County defers its threshold determination to DAHP in Mitigation Measure F1, which provides:

"An Archaeological Site Alteration and Excavation Permit, approved by the Washington State Department of Archaeology and Historic Preservation, shall be obtained and all conditions of approval implemented prior to ground disturbing activities within the mine expansion area."⁴²

Simply put, Yakima County is relying on DAHP to determine whether Granite's proposed project will significantly impact the environment (i.e. the Yakama Nation's ancestors and cultural resources) without providing any legal support or justification for such a deferral. It is unclear why Yakima County changed its initial correct analysis that before a threshold determination can be made, Granite must meet DAHP's

³⁹ RCW 43.21C.030(2)(c); WAC 197-11-330.

⁴⁰ WAC 197-11-050(2); *Harris v. Hornbaker*, 98 Wn.2d 650, 663 (1983).

⁴¹ LYNN DEITRICK, YAKIMA COUNTY PLANNING DIVISION, CUP2015-00037/SEP2015-00016 – ROWLEY QUARRY EXPANSION THRESHOLD DETERMINATION – MITIGATED DETERMINATION OF NON-SIGNIFICANCE 4 (Aug. 3, 2016).

⁴² *Id.*

LETTER TO YAKIMA COUNTY RE GRANITE CONSTRUCTION CO.'S PROPOSED EXPANSION OF ROWLEY EAST QUARRY
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permit application requirements, which will, in turn, furnish Yakima County with the information it needs for a threshold determination. But in any event, Yakima County must now withdraw its MDNS and gather sufficient information to make its own threshold determination on whether mining the Burial Ground will have a significant impact on the cultural resources and human remains located therein.

b. *Yakima County's Deferral to DAHP is Improper Because Yakima County's SEPA Obligations Differ Significantly from DAHP's Archaeological Excavation Permitting Considerations.*

Under SEPA, lead SEPA agencies are required to issue a threshold determination that considers whether a proposed project will significantly affect the environment, and whether those significant impacts can be adequately mitigated.⁴³ In stark contrast, when DAHP considers an Archaeological Site Removal and Excavation Permit application, DAHP looks to whether the archaeological and cultural resources can be removed from an archaeological site by the project proponent in accordance with legal and technical specifications.⁴⁴ While SEPA requires lead SEPA agencies to consider whether removing cultural resources will significantly affect the environment, DAHP considers whether a plan to remove cultural resources is legally and technically sufficient.

To illustrate the significant difference between these legal frameworks, consider a hypothetical proposal to excavate *your* family's historic graveyard to build a new strip mall. SEPA requires that the lead SEPA agency consider whether digging up your family members' bodies in the interest of economic gain will significantly affect the environment. DAHP, on the other hand, would consider whether the strip mall developer's archaeologist can adequately protect and document your family members' remains when they are excavated, boxed up, and handed to you to re-inter in some geographic location that another business hopefully won't develop in the future. The former considers the impacts of removal, while the latter considers the methods for removal.

Here, Yakima County's attempt to defer its SEPA obligations to DAHP improperly conflates SEPA's requirements with DAHP's permitting considerations. Specifically, Section F of Yakima County's MDNS equivocates on whether Granite's proposed project will have a significant impact on cultural resources, undermining the sufficiency of Yakima County's threshold determination.⁴⁵ To fill the void in its threshold determination, Yakima County inserts DAHP and expressly relies on the ultimate outcome of DAHP's consideration of Granite's permit application as the means to meeting Yakima County's obligations under SEPA.⁴⁶ However – given the significant difference between SEPA's threshold considerations and DAHP's permit considerations – Yakima County's actions only ensure that the removal of human remains and cultural resources will be done in a technically sufficient manner and fail to address whether the removal and destruction of such resources will have a significant affect on the environment in the first place. Somebody has to make a threshold determination here and Yakima County has assumed the title of lead SEPA agency, not DAHP.

⁴³ WAC 197-11-350(2).

⁴⁴ See generally WAC 25-48-105.

⁴⁵ LYNN DETRICK, YAKIMA COUNTY PLANNING DIVISION, CUP2015-00037/SEP2015-00016 – ROWLEY QUARRY EXPANSION THRESHOLD DETERMINATION – MITIGATED DETERMINATION OF NON-SIGNIFICANCE 4 (Aug. 3, 2016).

⁴⁶ *Id.*

C. Yakima County is Required to Withdraw Its MDNS Based on the Factual Information Provided Herein and Applicant's Failure to Disclose Material Facts.

Lead SEPA agencies must withdraw an MDNS if (1) there are substantial changes to the project that make a DS and preparation of an EIS appropriate, (2) there is significant new information received regarding a project's probable significant adverse impacts, or (3) the MDNS was procured through misrepresentation or lack of material disclosure on the part of the applicant.⁴⁷ In this case, the Yakama Nation provided significant new information concerning the Burial Ground and Granite failed to disclose material information when completing its SEPA checklist, thereby legally obligating Yakima County to withdraw its MDNS.

The Yakama Nation provided substantial new information in this letter and its attachments that makes a determination of significance and EIS appropriate, which legally requires Yakima County to withdraw its MDNS. By virtue of this letter, the Yakama Nation informed Yakima County that the Burial Ground is the final resting place for a number of the Yakama Nation's ancestors interred prior to 1889, making it a dedicated historic cemetery protected under RCW 68.60. There is a significant complex of talus pit burials located directly within the proposed mine expansion area that warrants further research and study, as does the entirety of the proposed mine expansion area. The Yakama Nation also informed Yakima County of Granite's earthquake-triggering chemical explosion earlier this year, which may have had significant environmental impacts and should be considered by Yakima County. All of these facts lend themselves to a determination that Granite's proposed project will significantly affect the environment, and as a result, Yakima County must withdraw its MDNS to consider the new information that the Yakama Nation provided.

Further, Granite failed to disclose material facts about its past and present conduct that Yakima County should have considered when issuing its MDNS, which obligates Yakima County to withdraw its MDNS. Granite failed to disclose that an adequate cultural resources survey for the proposed mine expansion area does not exist. Granite does not discuss its recent earthquake-triggering chemical explosion, which was not contemplated in its Blast Vibration Monitoring Report or its conversations with the Selah-Moxee Irrigation District about the structural integrity of the nearby irrigation tunnel. Granite did not mention that for nearly a decade it has mined a recorded archaeological site without the legally required permit from DAHP, and mined a dedicated historic cemetery that cannot legally be excavated. Granite has not even sent DAHP a permit application to allow it to continue mining within the current mine boundaries, let alone the proposed mine expansion area.⁴⁸

III. CONCLUSION

Yakima County's MDNS fails under SEPA and should be withdrawn because Yakima County did not obtain and rely on sufficient information, improperly deferred its decision-making obligations to

⁴⁷ WAC 197-11-340(3).

⁴⁸ Letter from Dr. Lance Wollwage, Assistant State Archaeologist, to Dr. John Fagan, Archaeological Investigations Northwest, Inc. (June 10, 2016) (on file with the Washington State Department of Archaeology and Historic Preservation) (stating "Lastly, the permit [application] addressed only proposed archaeological testing and survey. It does not address mining activities that will occur after the proposed testing is complete.").

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DAHP, and received new information from the Yakama Nation about the proposed mine expansion and Granite's actions that must be considered before a threshold determination is issued. Instead, Yakima County should follow the Washington State Supreme Court's guidance in *KCCAIW* and issue a determination of significance and prepare an EIS that thoroughly considers the potential environmental impacts of Granite's proposal to mine a burial ground, recorded archaeological site, and dedicated historic cemetery.

If you have any questions or concerns, please contact Mr. Joe Sexton, Legal Counsel for the Yakama Nation, at (509) 910-8842 or joe@galandabroadman.com.

Respectfully,

Delores Aulneke
JODE L. GOUDY, CHAIRMAN
YAKAMA TRIBAL COUNCIL

Gerald Lewis
GERALD LEWIS, CHAIRMAN
YAKAMA TRIBAL COUNCIL CULTURAL COMMITTEE

Attached Exhibits:

- (A) March 11, 2016 Letter from Yakama Nation to Yakima County Environmental Planning Department re: Preliminary Comments on SEPA Environmental Review Application regarding proposed expansion of Rowley East Quarry.
- (B) August 2, 2016 Letter from Yakama Nation Cultural Resource Program to Yakima County Planning Section Manager re: Rowley Quarry Expansion Threshold Determination - MDNS

EXHIBIT A



Confederated Tribes and Bands
of the Yakama Nation

Established by the
Treaty of June 9, 1855

March 11, 2016

Sent via U.S.P.S. Certified Mail

Byron Gumz, Senior Project Planner
Environmental Planning Department
Yakima County Public Services
128 North Second Street
Yakima, Washington 98901

Re: **PRELIMINARY COMMENTS ON SEPA ENVIRONMENTAL REVIEW APPLICATION REGARDING PROPOSED EXPANSION OF ROWLEY EAST QUARRY**

Dear Mr. Gumz:

The Confederated Tribes and Bands of the Yakama Nation ("Yakama Nation") respectfully submits the following preliminary comments and concerns regarding Granite Construction Company's ("Applicant") April 30, 2015 SEPA Environmental Review Checklist ("Checklist") supporting Applicant's proposed expansion of the Rowley East Quarry (the "Project"). The Checklist is insufficient because it provides incomplete and incorrect information on the Project's potential impacts on the Yakama Nation's Treaty reserved interest in its cultural and archaeological resources — including a high likelihood of exposing, damaging, injuring, removing, and/or destroying our Ancestors' human remains and their final resting places (i.e., graves) — and fails to offer any measures to protect the existing cultural resources. The Checklist further fails to disclose that Granite Construction Company has been excavating within a recorded archaeological site that may be eligible for listing on the National Register of Historic Places for more than a decade without an Archaeological Excavation and Removal Permit in apparent violation of, *inter alia*, Title 25-48 of the Washington Administrative Code.

To ensure the accuracy of the administrative record and to limit the extent of Applicant's apparent unpermitted mining operations within a known archaeological site, we respectfully request that Yakima County (1) initially require Applicant to revise its Checklist to accurately reflect the archaeological landscape of the Project area and provide proposals addressing treatment of cultural and archaeological resources, and (2) ultimately make a threshold determination that the Project is a proposed major action that will have probable significant adverse impacts on the quality of the environment, necessitating issuance of a determination of significance.

LETTER TO YAKIMA COUNTY RE GRANITE CONSTRUCTION CO.'S PROPOSED EXPANSION OF ROWLEY EAST QUARRY
MARCH 11, 2016

A. SEPA Requires Yakima County to Obtain and Consider Sufficient Information About the Project's Effects on Cultural and Archaeological Resources

Under State law and the Yakima County Code, Yakima County is obligated to solicit and consider sufficient information about the impacts of proposed projects on the environment, including effects on cultural and archaeological resources.¹ Specifically, when making a SEPA threshold determination, a SEPA responsible agency must show that its decision was based on information sufficient to evaluate a proposal's environmental impact, and that it considered the relevant environmental factors.² SEPA expressly protects cultural and archaeological resources, and a SEPA responsible agency must consider and address a project's potential impact on them³ – a task which first requires that sufficient information be obtained by the agency, typically via the SEPA Environmental Checklist. Critically, § 13 of the Environmental Checklist, entitled "Historic and cultural preservation," requires project proponents to identify any evidence of Indian cultural resources located within a proposed project area.⁴

If information relevant to assessing significant adverse project impacts is not known, and the cost of obtaining it is not exorbitant, SEPA requires the responsible agency to obtain the information.⁵ Alternatively, if such information cannot be obtained, SEPA requires the responsible agency to present a worst-case analysis in its threshold determination,⁶ which here would require the reasonable assumption that the entire proposed project site contains significant archeological resources, Indian graves, and the human remains laid to rest in those graves.

B. Applicant's SEPA Environmental Review Checklist Is Insufficient

Initially, Yakima County should supplement or require Applicant to supplement Applicant's Checklist because Applicant failed to provide Yakima County with sufficient information on known cultural and archaeological resources within the proposed Project area. Specifically, Applicant ignored known cultural resources and failed to provide any suggestion for mitigating adverse effects to those resources – to the extent that mitigation is even possible. For example, Applicant addressed the presence of cultural resources within the proposed Project area as follows:

"Archaeological [sic] survey has designated areas of interest. These sites are buffered from the proposed mining area and will not be disturbed."⁷

¹ Yakima County Code § 16.04.010 (acknowledging and adopting SEPA rules, WAC 197-11, by reference).

² WAC 197-11-335; *Lance G. Douglass, Inc. v. City of Spokane Valley*, 154 Wn. App. 408, 423, 225 P.3d 448 (2010), (citing RCW 43.21C.030(2)(c)); *Wenatchee Sportsmen Ass'n v. Chelan County*, 141 Wn.2d 169, 176, 4 P.3d 123 (2000).

³ RCW 41.21C.020(2) (the responsible agency has the responsibility to use "all practicable means . . . to . . . preserve important historic, cultural, and natural aspects of . . . national heritage . . .").

⁴ SEPA Environmental Checklist § 13(b), codified at WAC 197-11-960 ("Are there any landmarks, features, or other evidence of Indian or historic use or occupation? . . . Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.")

⁵ WAC 197-11-080.

⁶ WAC 197-11-080.

⁷ Checklist at 13(b).

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Despite Applicant's assurances, Applicant intends to destroy and remove the ground surface within the proposed project area, the entirety of which is a well-documented archaeological site (45YA109) comprised of a complex of talus burials that will be directly impacted. In other words, Applicant proposes to continue and expand its ongoing desecration of a known Yakama burial site. According to Applicant's Checklist, Applicant will address project impacts by "No proposed measures as resources will not be disturbed."⁸ Applicant's cultural resource information is woefully inadequate and entirely insufficient for Yakima County to consider Applicant's SEPA application. In order to comply with the letter and the spirit of SEPA, Yakima County must supplement or require Applicant to supplement Applicant's Checklist regarding cultural resources within the proposed Project area to reflect reality.⁹

C. Applicant's Project Will Have Significant Adverse Effects on the Environment Necessitating An Environmental Impact Statement

To the extent that Yakima County or Applicant are able to sufficiently supplement Applicant's Checklist, or in the alternative using a worst-case scenario, Yakima County should make a threshold determination that Applicant's proposed Project is (1) a major action that, (2) will have probable significant adverse impacts on the quality of the environment, requiring (3) Yakima County to issue a determination of significance.

Under SEPA, Agencies are required to make a threshold determination of whether proposals are major actions that will have probable significant adverse impacts on the quality of the environment.¹⁰ An 'action' is defined to include activities that are "regulated, licensed, or approved by agencies."¹¹ An action is a 'major action' if it will have significant adverse environmental impacts.¹² In the case of regulatory permits, a project will have significant adverse environmental impacts where the proposed project will have sufficient absolute and relative impacts flowing from the project's intensity and the surrounding environment's sensitivity.¹³ Where a major action will have probable significant adverse impacts on the quality of the environment the lead agency is required to issue a determination of significance, which triggers the need for an environmental impact statement.¹⁴

Here, Applicant's proposed Project is a major action that will have probable significant adverse impacts on the quality of the environment, requiring Yakima County to issue a Determination of Significance. Applicant's proposed project is an 'action' because it requires Yakima County to make a regulatory decision approving or denying Applicant's proposed change in land use. The action is a 'major action' because it contemplates the removal and/or destruction of significant archaeological and cultural resources (i.e. environment) — likely including the human remains of the Yakama Nation's ancestors —

⁸ Checklist at 13(d).

⁹ WAC 197-11-310(2).

¹⁰ WAC 197-11-330.

¹¹ WAC 197-11-704(1)(a).

¹² WAC 197-11-764.

¹³ RICHARD L. SETTLE, THE WASHINGTON STATE ENVIRONMENTAL POLICY ACT § 13.01(1) (Matthew Bender, 2014).

¹⁴ WAC 197-11-360(1).

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within a sensitive archaeological site, constituting a significant adverse impact to the environment. Because Applicant's proposed project is a major action that will have probable significant adverse impacts on the environment, Yakima County is required to issue a determination of significance that will trigger an environmental impact statement that more thoroughly details Applicant's proposal to destroy a known cultural and archaeological site.

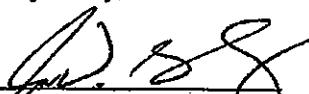
D. Conclusion and Requested Action

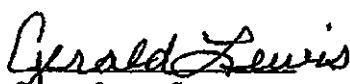
Under Washington law, Yakima County, as the SEPA responsible agency for the proposed Project, has a duty to ensure that its SEPA threshold decisions are based on sufficient information to determine likely environmental impacts of proposed projects, including impacts on cultural and archaeological resources. Applicant's Checklist does not provide Yakima County with sufficient information about cultural resources that will be adversely impacted by the proposed Project, and fails to offer a single mitigation proposal. Critically, the Checklist does not provide sufficient information about known and unknown human remains in the area, or the project's very high potential to impact undiscovered cultural and archaeological resources.

To remedy these issues, the Yakama Nation requests that Yakima County (1) supplement, or require Applicant to supplement, Applicant's Checklist to accurately reflect the archaeological landscape of the Project area and provide proposals addressing treatment of cultural and archaeological resources, and (2) ultimately make a threshold determination that the Project is a proposed major action that will have probable significant adverse impacts on the quality of the environment, necessitating a determination of significance. Please note that the Yakama Nation is still evaluating the potential impacts of Applicant's proposed project on 45YA109, and therefore reserves the right to supplement these initial comments with additional information at a later date.

Thank you for your consideration of these comments. Please direct your response to Mr. Joe Sexton, Attorney for the Yakama Nation, at (509) 910-8842 or joe@galandabroadman.com.

Respectfully,


JODE L. GOUDY, CHAIRMAN
YAKAMA NATION TRIBAL COUNCIL


GERALD LEWIS, CHAIRMAN
CULTURAL COMMITTEE
YAKAMA NATION TRIBAL COUNCIL

cc: Allyson Brooks, Washington State Dept. of Archaeology and Historic Preservation

EXHIBIT B



Confederated Tribes and Bands of the Yakama Nation
Established by the Treaty of June 9, 1855

Post Office Box 151
Toppenish Washington 98948

Tommy Carroll
Planning Section Manager
128 N. 2nd Street
Fourth Floor Courthouse
Yakima, WA 98901

August 2, 2016

RE: CUP2015-00037/SEO2015-00016 Rowley Quarry Expansion Threshold Determination -- MDNS

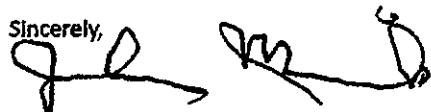
Dear Mr. Carroll,

Thank you for providing our office notification of the MDNS issued for the Rowley Quarry Expansion. We are highly concerned with the County's decision to issue this determination, given that the County is aware of Yakama Nation's opposition, and the need for an extensive archeological permitting process with the Washington State Department of Archaeology and Historic Preservation (DAHP). Our office finds the MDNS insufficient and premature, demonstrating neglect in the execution of Yakima County's duties. Our specific comments are as follows:

- We are highly disappointed that the County has not considered our request for a full EIS. The wholesale destruction of an archeological site, burial ground, and Traditional Cultural Property should be treated with greater concern. By issuing an MDNS, the County has demonstrated a lack of understanding and respect for Yakama Nation burial grounds, traditional places, and the laws that govern such sites.
- The MDNS is insufficient in that it fails to define any mitigation—it simply states that various permits will be required. Legally required permits are not mitigation. It is insufficient to say that an MDNS is based upon mitigation that has not yet been agreed to and accepted. The MDNS would have been slightly more appropriate after terms of various permits had been negotiated.
- Yakama Nation does not feel that scientific documentation is an appropriate or sufficient means of mitigation for the destruction of ancestral burial grounds. Yakima County must find another manner to address this issue. We are aware that DAHP has advised the County that an archeological permit cannot be denied. We disagree with their interpretation and urge the county to look beyond this narrow view.
- The County is aware that Yakama Nation CRP considers YA109 a burial site according to the state law (RCW 27.44, RCW 68.60). The MDNS should address how the County proposes to legally excavate a cemetery/burial sites under these laws. To state that a permit will be obtained is insufficient as 68.60 does not allow for permitted removal.
- The County is aware that Yakama Nation considers YA109 a Traditional Cultural Property. By what means does the county propose to address damages to such a site?

Yakama Nation CRP has submitted additional documentation of site YA109 to the Washington State Department of Archeological and Historic Preservation. We will be asking the various regulatory agencies to consider the site in light of the data we have provided and will continue to provide as this process moves forward.

Sincerely,



Johnson Meninick

Yakama Nation Cultural Resources Program Manager

509-865-5121 x4737

CC: Yakama Nation Tribal Council Cultural Committee
Ethan Jones, Yakama Nation Office of Legal Counsel
Joe Sexton, Galanda Broadman, PLLC
Lance Wallwage, Department of Archaeology and Historic Preservation
David Powell, Yakama Nation



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

Public Services ()

FEB 16 2017

February 15, 2017

Mr. Byron Gumz
Senior Project Planner
Yakima County
128 N 2nd St., 4th Floor Courthouse
Yakima, WA98901

Vern _____ Gary _____ Don _____ Lynn _____
Dave _____ Lisa _____ Carmen _____

In future correspondence please refer to:

Project Tracking Code: 081015-11-YA

Property: SEP2015-00016/CUP2015-00037 Expansion of Surface Mine at East Rowley Quarry,
CULTURAL RESOURCE SURVEY FOR THE PROPOSED ROWLEY QUARRY PROJECT AREA
YAKIMA COUNTY, WASHINGTON

Re: Archaeology-Request Withdrawal of MDNS and Determination of Significance

Dear Mr. Gumz:

Thank you for contacting the Washington State Department of Archaeology and Historic Preservation (DAHP). The above referenced project has been reviewed on behalf of the State Historic Preservation Officer (SHPO). **We do not concur with the MDNS for this project as we believe it is not sufficient, has not fully identified areas of cultural value and importance and therefore does not contain mitigation measures for those areas.**

We have also reviewed a draft cultural resources report prepared for the project by Archaeological Investigation Northwest (AINW). We have the following comments regarding the MDNS:

- In our opinion an MDNS is *not appropriate* for this project and we believe that a Determination of Significance (DS) must be issued. Further study and analysis of alternatives in the form of an Environmental Impact Statement (EIS) is necessary. The EIS must contain additional information regarding the cultural and traditional importance of the area as well as the effects of blasting. Please develop sufficient mitigation measures and evaluate individual resources for significance.
- The Selah-Moxee Irrigation District is concerned with the effects of ground vibrations on an irrigation tunnel that is within approximately 1,000 to 1,750 feet from the site. DAHP has also expressed concerns regarding the effect of ground vibrations on archaeological resource such as talus features and slopes which are much closer to the project area than the tunnel. There is no analysis of effects or mitigation for such effects for such archaeological and cultural resources in the MDNS. DAHP's database identifies pit features on talus slopes as burials. The MDNS propose a 75-foot buffer to protect these talus features if there is "evidence of human remains." The talus slopes are at their angle of repose which is the steepest angle of descent for which material can be piled without slumping. Additional blasting or work even with a 75 -foot buffer will have an adverse effect on archaeological resources and human burials.



- The project area is within the established boundary of archaeological site 45YA109, which contains numerous precontact and historic-period archaeological objects and features. Additional archaeological resources were identified during the most recent archaeological survey but were evaluated for significance individually and not as a part of the larger site. In DAHP's opinion it is not possible to evaluate significance outside of the larger context of 45YA109, which is not fully documented or understood at this time. Archaeological site 45YA106 is likely a Traditional Cultural Property (TCP) as well as a Cultural Landscape (CL) and would be eligible for listing in the National Register of Historic Places (NRHP).
- DAHP cannot determine significance of individual resources within 45 YA109 based on the recommendations of AINW and cannot concur with the mitigation measures:
 1. We do not have sufficient information on the effects of ground vibrations from blasting on archaeological and cultural resources;
 2. The individual resources were not evaluated within the larger context of 45YA109 and it is not known how they related to other resources and features within 45YA109 but outside of the current expansion area;
 3. The significance of the project area as a TCP and/or CL has not been addressed.
 4. Any analysis of the significance of archaeological materials and features within 45 YA109 must consider their relationships to other materials and contribution to the entire site or appropriate mitigation for damages cannot be developed.

General Comments for Cultural Resources Report:

- The report appears to be incomplete. Please record the newly identified resources as updates to archaeological site 45YA109. Alphabetical designations can be added to the site number to differentiate eg. 45YA109a, 45YA109b.
- Please update the report and replace temporary site numbers. Please add a DAHP coversheet as required by DAHP.

Thank you for the opportunity to review. If you have any questions, please contact me.

Sincerely,



Gretchen Kaehler
Assistant State Archaeologist, Local Governments
(360) 586-3088
gretchen.kaehler@dahp.wa.gov

cc. Johnson Meninick, Cultural Resources, Yakama Nation
Kate Valdez, THPO, Yakama Nation
James Essig, Resource Manager, Granite Construction Company
Dr. Allyson Brooks, SHPO, DAHP
Sandra Adix, AAG, Washington State Attorney General
Tommy Carroll, Director, Yakima County Planning
Jessica Lally, Archaeologist, Yakama Nation
Lance Wollwage, Assistant State Archaeologist, DAHP
John Fagan, Principal, AINW

HALVERSON | NORTHWEST LAW GROUP

Public Services

February 16, 2017

FEB 16 2017 *88*

Byron Gumz
Senior Project Planner (Environmental)
Yakima County Planning Division
128 N. 2nd Street
4th Floor, Courthouse
Yakima, WA 98901

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**Also State Bar of CA Member
+Of Counsel

Re: CUP 2015-00037/SEP2015-00016/Rowley Quarry Expansion Project

Dear Mr. Gumz:

Our office represents the Selah-Moxee Irrigation District ("SMID") and, as you know, has submitted comments and documentations in the past with regard to the above-referenced Conditional Use Permit application and the proposed MDNS threshold determination for the expanded blasting operations proposed by Granite Northwest, Inc. We appreciate this opportunity to comment further.

It is the position of SMID that Mitigation Measure C1 to address the District's concerns over the impacts that blasting operations could have on the 10,000 foot long, 85-year old SMID tunnel are inadequate. Whether it is found in the MDNS mitigation measures or the Conditional Use Permit, and preferably both, the mitigation measures need to do more than merely refer to the proponent's Blast Vibration Monitoring Plan that still contains the deficiencies pointed out by SMID and its experts on previous occasions. We renew the District's concerns over the inadequacy of the 2016 Blast Vibration Monitoring Plan through the Declarations of the District's experts from CH2M, Mr. Dick Haapala and Mr. Kenneth Greene, and also from the District's Manager, Nathan Draper. Those Declarations are attached to this letter.

Mitigation Measure C1 indicates that the last version of the proponents Blast Monitoring Plan shall be implemented within the "mine expansion area". That means the proponent is apparently going to reposition and install monitors somewhere (it is not clear where) in undisturbed, solid rock locations. The Plan contains no defined location for placement, gives no indication how the test data will be used, with whom it will be shared, and what is to happen if testing thresholds are exceeded (or SMID's tunnel collapses). Since the BVM Plan does not address these issue, the MDNS threshold determination and CUP permit must.

Bear in mind, that SMID has never taken the position that blasting should be prohibited. But blasting during the irrigation season 1,000 feet closer to an 85-year old, 10,000 foot

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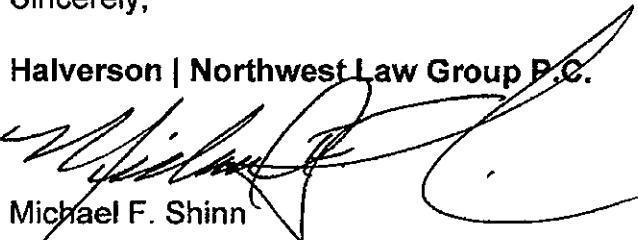
Attachment: DD

long tunnel carrying irrigation water has the potential for catastrophic results to the 2,500+ farmers who customarily receive irrigation water between mid-March and the end of October. Blasting should be confined to times of the year when the tunnel can be inspected and repaired, if necessary, to minimize the chances of a catastrophic event cutting farmers off from their irrigation water deliveries. Balancing the risks to 2,500+ farmers against the commercial interests of Granite Northwest should favor the farmers whose activities are not ultra-hazardous. Blasting should occur 'outside' this normal irrigation season. Mitigation Measure C1 should therefore require, because the Blast Vibration Monitoring Plan does not, a calendared limitation on the times when blasting may and may not occur.

The Blast Vibration Monitoring Plan does not even include a protocol for giving notice to neighboring property owners. It should. Clearly, SMID should be given the opportunity of getting people and equipment out of harm's way and in the past our client attests that they've sometimes learned of blasting by the sounds of the blast itself. In our August 17, 2016 comment submittal letter, at pages 4 and 5, the District, through consultation with its engineering experts, suggested 10 mitigation measures that should be made part of the MDNS and Conditional Use Permit. We respectfully request that the final MDNS incorporate them all.

Sincerely,

Halverson | Northwest Law Group P.C.


Michael F. Shinn

MFS/jlf
Enclosures

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7 In re the Matter of:

8 Rowley Quarry Expansion Threshold
9 Determination – Mitigated Determination
10 of Non-Significant (MDNS)

File No.:
CUP2015-00037/SEP2015-
00016

13 **DECLARATION OF KENNETH GREEN, P.E.**
14

15 I, Kenneth Green, declare as follows:

16 1. I am over the age of eighteen years and competent to testify to matters
17 set forth herein. I am a licensed Professional Engineer employed with CH2M. My
18 emphasis and expertise is in geotechnical engineering. And in that capacity, I routinely
19 consult on the effects of both naturally occurring and artificial seismic forces on
20 structures.

21 2. In 2015, Selah-Moxee Irrigation District (“SMID” or the “District”) retained
22 CH2M to provide consulting services and advice concerning District irrigation water
23 delivery infrastructure, including, specifically, the SMID canal and tunnel through the
24 Yakima Ridge in the vicinity of Selah Gap. In particular, we were asked to provide
25 analysis and recommendations concerning the potential effects of blasting operations
26 conducted by Granite Northwest, Inc. (“Granite”) at its East Selah Quarry site, which
27 is located adjacent to SMID’s Yakima Ridge Tunnel.

28 3. As more fully described in Richard Haapala’s separately filed
29 Declaration on behalf of the District, CH2M prepared a report entitled *Selah Moxee*
30 *Irrigation District Yakima Ridge Tunnel – Condition Assessment and Improvements*,
31 together with an executive summary entitled *Yakima Ridge Tunnel Technical Report*
32 (together, the “2015 CH2M Reports”), which were submitted by SMID in connection

1 with Granite's pending Conditional Use Permit application to Yakima County, CUP
2 2015-00037/SEP 2015-00016, which would expand the size and scope of mining
3 operations at the East Selah Quarry (the "Application"). And in particular, the 2015
4 CH2M Reports addressed the scope and potential severity of blasting-related risks to
5 SMID infrastructure and operations that, in our view, had not been adequately
6 addressed by Granite's consultant, GeoDesign, Inc. ("GeoDesign") under their
7 January 19, 2015, Blast Vibration Monitoring Plan in support of the Application (the
8 "2015 BVM Plan"). I have reviewed the 2015 BVM Plan, as well as GeoDesign's
9 subsequently issued 2016 BVM Plan, as described in Mr. Haapala's Declaration.

10
11 4. I agree with Mr. Haapala's analysis and conclusions that, even under
12 the 2016 BVM Plan, GeoDesign has still failed to accurately assess and properly
13 mitigate against blast-related risks to the Tunnel and canal.

14
15 5. Most recently I have reviewed both SMID Manager Nathan Draper's
16 February 14, 2017, *Tunnel Inspection and Maintenance Report*, appended to his
17 concurrently filed Declaration, as well as the February 13, 2017, *SMID Tunnel*
18 *Inspection Technical Memorandum* prepared by my CH2M colleague, Mr. Haapala,
19 and appended to his separate Declaration. Together, those reports provide
20 indisputable evidence of the relative fragility of the Tunnel and its susceptibility to
21 damage from seismic forces. They also confirm SMID's role in active monitoring and
22 repair of expected, recurring damage to an 85+ year-old structure. That structure,
23 however, is designed and operated to tolerate naturally occurring seismic stresses –
24 not artificially induced blasting effects. And on that basis, I urge Yakima County to
25 require Granite and its consultants to incorporate the below described requirements
26 (*in addition* to Mr. Haapala's recommended requirements as set forth in his
27 Declaration) in a revised BVM Plan as a precondition on expanded blasting
28 operations. Compliance with these requirements should, in my view, be a precondition
29 on the approval of any expansion of blasting operations under the Application.

30
31 6. An accurate and agreed seismic "baseline" must be established in order
32 to distinguish between damage to the Tunnel that naturally occurs and damage that
33 is caused, on a more-likely-than-not basis, by Quarry blasting events. We repeat here
34 our concerns raised in the 2015 CH2M Reports, which have not changed in light of

1 the subsequently issued 2016 BVM Plan. The seismic monitoring data presented in
2 the 2015 BVM Plan (which were obtained on only six occasions between 2012 and
3 2014) were flawed, insofar as the monitoring devices were not properly installed in
4 undisturbed, solid rock. (And the proposal to reposition and reinstall new monitors –
5 produced by another manufacturer – under the 2016 BVM Plan leaves little doubt that
6 even GeoDesign acknowledges the unreliability of previously gathered blasting data.)
7 Nevertheless, the 2016 BVM Plan continues to rely on the same unreliable data from
8 2012-2014 to support the conclusion that expected future rockfall events in the Tunnel
9 will be “from causes not associated with the proposed blasting.” 2016 BVM Plan, @
10 p.5. Unless or until there are adequate and independently verifiable blasting data
11 available, there is no scientifically supportable basis for differentiating between
12 naturally occurring and blast-related seismic damage to the Tunnel.
13

14 7. A revised BVM Plan must, as a condition on any Application approval,
15 provide for the free exchange and sharing of blast data and damage assessments
16 among stakeholders, including both the District and Yakima County. Without timely
17 access to such data, it will be impossible for the County in its regulatory capacity to
18 verify that blasting-related environmental risks are, in fact, being properly mitigated as
19 provided in the BVM Plan. Similarly, SMID personnel and consultants should be
20 allowed to observe the siting and installation of seismic monitoring equipment prior to
21 all blasting. And the District, at its option, should be allowed to place its own seismic
22 monitoring equipment at the same locations selected by Granite or its blasting
23 contractor(s), or at such other locations as SMID may elect to corroborate and assess
24 the reliability of Granite’s data.
25

26 8. A revised BVM Plan must provide a proposed schedule for blasting
27 operations to appropriately mitigate risks of the most catastrophic, blast-related
28 Tunnel failures. As a matter of common sense, blasting related damage to the Tunnel
29 and canal will be far easier (and less costly) to repair outside of SMID’s irrigation
30 season. Considering the Tunnel carries 85 percent of all Yakima River water diverted
31 by SMID and delivered to its 2,500+ irrigation customers, we recommend that blasting
32 under the Application be confined to the period November 1st though March 15th. In
33 truly exigent circumstances, where Granite believes that in-season blasting must be
34

1 conducted as an operational necessity, Granite and the District could presumably
2 consult in good faith to determine whether and in what manner limited blasting could
3 be safely undertaken.

4

5 I declare the foregoing to be true and correct under penalty of perjury of the
6 laws of the State of Washington.

7

8 SIGNED AT Bellevue, Washington, this 16th day of FEBRUARY
9
10 2017.

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KENNETH GREEN, P.E.

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7 In re the Matter of:

8 Rowley Quarry Expansion Threshold
9 Determination – Mitigated Determination
10 of Non-Significant (MDNS)

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13 File No.:
14 CUP2015-00037/SEP2015-
15 00016

16
17 **DECLARATION OF NATHAN DRAPER**
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22

23 I, Nathan Draper, declare as follows:

24 1. I am over the age of eighteen years and competent to testify to matters
25 set forth herein. I am the Manager of Selah-Moxee Irrigation District ("SMID" or the
26 "District") and have served in that capacity for four and one-half years. I am chiefly
27 responsible for the inspection, maintenance and repair of all SMID infrastructure,
28 including the nearly 10,000-foot Yakima Ridge Tunnel through which the District's
29 main canal runs.

30 2. As more fully described in my February 14, 2017, *Tunnel Inspection*
31 and *Maintenance Report*, a true and correct copy of which is attached as Exhibit "A"
32 hereto, I directed a preliminary, year-end assessment of the Tunnel on December
33 21, 2016, as well as comprehensive rockfall remediation project. The preliminary
34 inspection confirmed substantial rockfall accumulations not present during the 2015
35 year-end inspection. (Details of the District's prior year inspection and remediation
efforts are included in my *Tunnel Inspection and Maintenance Report* dated
February 23, 2016, which is already on file with the County Planning Division).
Specifically, the December 21, 2016, inspection identified five (5) new rockfall
locations comprising 13.51 cubic yards of mostly basalt rock. And as was the case in
prior years, most of the new debris was located within a short distance from the

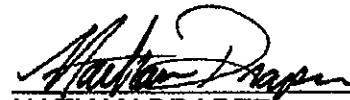
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1 Selah end of the Tunnel, where proposed, expanded blasting activity under the
2 Application would occur.

3 3. On the basis of our year-end inspection, between January 30 and
4 February 3, 2017, our crews removed a total of 26.74 cubic yards of rockfall and
5 debris.

6
7 I declare the foregoing to be true and correct under penalty of perjury of the
8 laws of the State of Washington.

9
10 11 SIGNED AT Moxee, Washington, this 16 day of February,
12 2017.

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14 NATHAN DRAPER

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HALVERSON | NORTHWEST P.C.
405 East Lincoln Ave. | P.O. Box 22550
Yakima, WA 98907
509.248.6030

Exhibit A

Selah-Moxee Irrigation District

Yakima Ridge Tunnel

2017 Tunnel Inspection and Maintenance Report

February 14, 2017

Introduction

The Selah-Moxee Irrigation District operates and maintains over 42 miles of canals and ditches to provide irrigation water to over 7,400 acres of land in the East Selah, Terrace Heights, and Moxee areas. The district diverts and conveys water from the Yakima River beginning on March 15 and ends irrigation deliveries around October 15 of every year. In addition to the many miles of canals and ditches, the canal system also contains a tunnel that is 9,600 feet in length that begins in East Selah and extends through the Yakima Ridge south to Terrace Heights.

The Yakima Ridge Tunnel is a vital component of the Selah-Moxee Irrigation District's canal system. The tunnel is located in the upper portions of the canal system, and therefore must transmit 85% of the water diverted from the river. The tunnel was constructed between the years of 1928-30 to replace a flume through the Selah Gap that was considered a hazard to the district and to the state highway below. During construction of the state highway blasting techniques were used in removing a portion of the hillside to make room for the highway, which had "loosened" the flume's foundation, causing the canal to leak¹. The Selah-Moxee Irrigation District funded the tunnel project through the sales of bonds for \$200,000.00² (\$2.75 million in today's dollars³) to eliminate the hazard. The tunnel has since been used to supply irrigation water to the Terrace Heights and Moxee areas. In recent years, the District and its Board have become increasingly concerned about the potential effects of blasting activities near the tunnel. And there is ample basis for that concern, as described in our prior year (2016) Tunnel Inspection and Maintenance Report. To cite only one example from that Report, a blast event on September 3, 2015, changed the canal water surface elevation from 2.53 feet prior to the blast to 2.55 feet within two hours following the blast. However, the flow rate of the canal remained constant during this time period, suggesting that a restriction had recently developed downstream of the tunnel entrance that caused the water surface elevation to rise. Quite likely such restriction was new rockfall in the tunnel that occurred roughly contemporaneously with the September 3rd blasting event.

Tunnel damage or failure will impede the District's ability to supply reliable irrigation water to its customers, with direct loss of crops and property damage estimated to exceed \$75 million.

¹ *A Historical Study of The Selah and Moxee Irrigation District*; by Alfred Moss, 1966

² *Id.*

³ www.saving.org Inflation Calculator

Figure 1: 04-20-16 Blasting Event



Tunnel Inspection

The Selah-Moxee Irrigation District began its annual tunnel inspection on December 21, 2016. The purpose of the inspection was to assess the overall condition of the tunnel and identify newly fallen rock and determine a mode of action to ensure the tunnel is operational for the 2017 irrigation season. Figure 2 identifies new rockfall locations relative to measured stations in the tunnel along with the type of material found that has fallen and the estimated quantities of fallen rock material in cubic yards. The District located a total of 5 new rock falls within the tunnel consisting mostly of basalt rock with a total quantity of 13.51 cubic yards.

Figure 2: New Rock Fall locations and amounts.

Inspection			Cubic Yards
Date	Location	Findings	
12/21/2016	8+80	Rock Fall (Basalt)	2.5
12/21/2016	13+00	Rock Fall (Basalt)	3.75
12/21/2016	19+50	Rock Fall (Basalt)	2.06
12/21/2016	89+70	Rock Fall (Basalt)	3.2
12/21/2016	90+60	Rock Fall (Basalt with sediment)	2
		Total	13.51

Figure 3 identifies the rock fall locations in relation to the overall length of the tunnel. As depicted in Figure 3, three rockfall events occurred within the first 2,000 feet from the tunnel entrance portal in East Selah. While two rock falls occurred in the proximity of station 90+00, which is located near the exit portal in Terrace Heights.

Figure 3

2016 Yakima Ridge Tunnel Diagram

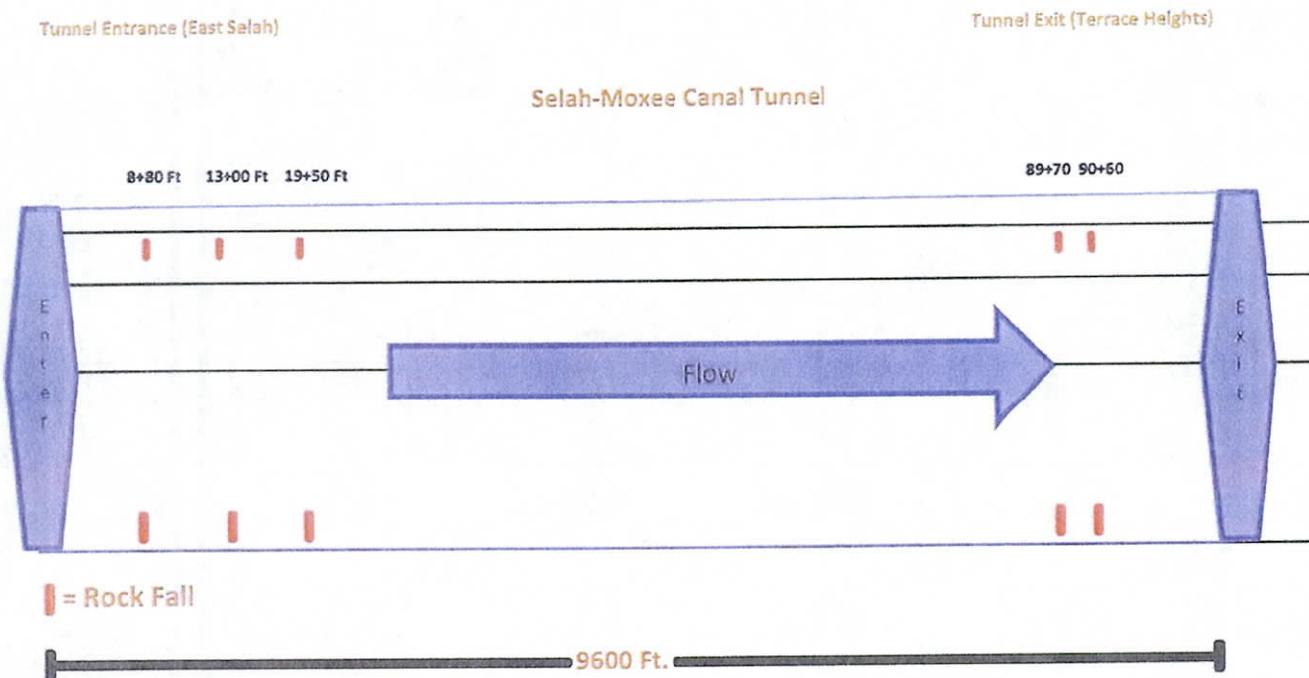
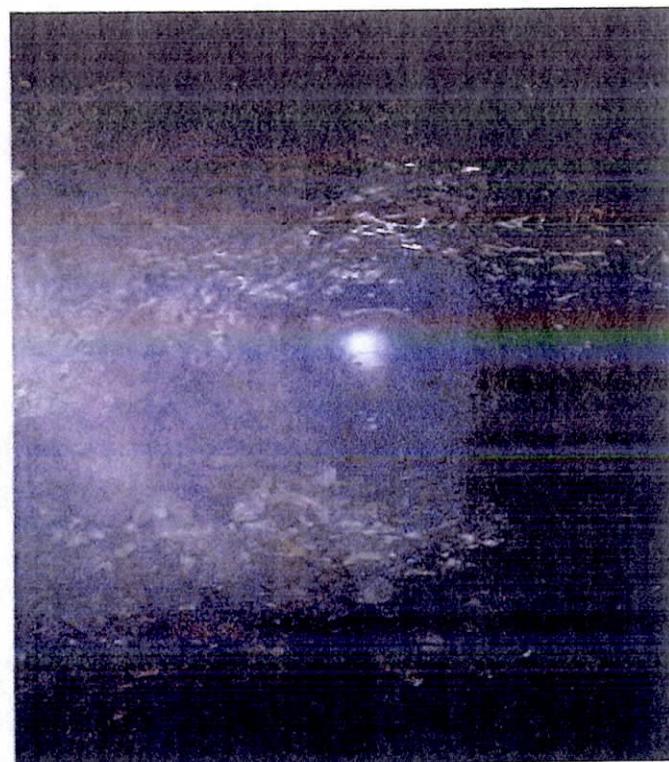


Figure 4: Photo of Station 8+80 rock fall identified in the 12-21-16 tunnel inspection



Tunnel Maintenance

As part of the tunnel maintenance program the district determined that the removal of fallen rock was necessary in order to increase flow capacity and return the water surface elevation to normal operational heights during the irrigation season. To accomplish this task, the District rented a utility vehicle with adequate size to operate in the tunnel and with sufficient capabilities to transport rock. The vehicle was loaded by hand from all the stations identified in Figure 6, below, and then the rock was transported out of the tunnel and stock piled either near the tunnel entrance in East Selah or the tunnel exit in Terrace Heights.

Figure 5: Crew unloading the utility vehicle full of rock that was removed from the Yakima Ridge Tunnel.



Figure 6

Tunnel Maintenance			Cubic Yards New Fallen Rock	Cubic Yards Existing Rock	Total Cubic Yards	Utility Vehicle Loads
Date	Location	Work Performed				
1/30/2017	91+50	Rock Removal	0	0.3	0.3	0.3
1/30/2017	91+15	Rock Removal	0	0.75	0.75	0.7
1/30/2017	90+60	Rock and sediment removal	2	0	2	2
1/30/2017	89+70	Rock Removal	3.2	0	3.2	3
		Equipment Failures, water depth 0-14" Deep at station 71+00 to 78+80				
1/31/2017	N/A					
2/1/2017	8+80	Rock Removal	2.5	4.75	7.25	7
2/2/2017	13+00	Rock Removal	3.75	2.43	6.18	6
2/3/2017	19+50	Rock Removal	2.06	0	2.06	2
2/3/2017	58+50	Rock Removal	0	1.2	1.2	1
2/3/2017	48+70	Rock Removal	0	0.6	0.6	1
2/3/2017	39+40	Rock Removal	0	1.2	1.2	1
2/3/2017	31+00	Rock Removal	0	0.75	0.75	1
2/3/2017	1+40	Rock Removal	0	1.25	1.25	1
		Total	13.51	13.23	26.74	26

As noted in Figure 6, a total of 13.51 cubic yards of newly fallen rock was removed from the tunnel, together with 13.23 cubic yards of rock on the sides of the tunnel floor that had accumulated from prior rockfall events. The total amount of rock removed from the tunnel between January 30 and February 3, 2017, was 26.74 cubic yards. The average load size was 1.03 cubic yards, which was an increase from last year's average.

Figure 7 is a photo after the work was completed in the area of tunnel station 8+80. The District can expect sufficient capacity in the tunnel under the existing conditions for the 2017 irrigation season. However, if tunnel conditions change – including any enhanced rockfall caused by blasting – the tunnel capacity will be diminished, potentially resulting in property and crop damage of SMID customers. While the District has made significant progress in the removal of previously fallen rock additional efforts are needed to remove those rocks remaining on the tunnel floor. Based upon recent history of the tunnel the District can also expect to find new rock falls in the coming years, which will require continued annual inspections and monitoring that identify new rock falls and must anticipate removal of these new rock falls during the non-irrigation season.

Figure 7: Station 8+80 after rock removal was completed.



Summary

The Yakima Ridge Tunnel is a vital component of the Selah-Moxee Irrigation District system and must maintain operational integrity to meet the demands of the district's customers. The District is faced with external challenges from blasting activities by its neighbors to keep the tunnel functional, which requires additional time and effort on the District's behalf. Over the years, the District has been forced to shoulder the entire financial burden of inspecting and remediating seismic-related damage to the tunnel.

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7 In re the Matter of:

8 Rowley Quarry Expansion Threshold
9 Determination – Mitigated Determination
10 of Non-Significant (MDNS)

File No.:
CUP2015-00037/SEP2015-
00016

12

13 **DECLARATION OF RICHARD V. HAAPALA**

14

15 I, Richard V. Haapala, declare as follows:

16 1. I am over the age of eighteen years and competent to testify to matters
17 set forth herein. I am a licensed Professional Engineer employed with CH2M. I have
18 more than 30 years' experience as an agricultural engineer, with emphasis on
19 irrigation infrastructure.

20 2. In 2015, Selah-Moxee Irrigation District ("SMID" or the "District") retained
21 CH2M to provide consulting services and advice concerning District irrigation water
22 delivery infrastructure, including, specifically, the SMID canal and tunnel through the
23 Yakima Ridge in the vicinity of Selah Gap. In particular, we were asked to provide
24 analysis and recommendations concerning the potential effects of blasting operations
25 conducted by Granite Northwest, Inc. ("Granite") at its East Selah Quarry site, which
26 is located adjacent to SMID's Yakima Ridge Tunnel. At that time and to-date, Quarry
27 blasting has not been allowed at any location closer than 2,700 feet from the Tunnel
28 or its entrance.

29 3. CH2M geotechnical engineer Ken Green and I jointly prepared a report
30 entitled *Selah Moxee Irrigation District Yakima Ridge Tunnel – Condition Assessment*
31 and *Improvements*, together with an executive summary entitled *Yakima Ridge Tunnel*
32 *Technical Report* (together, the "2015 CH2M Reports"), which were submitted by the

1 District and its legal counsel, Halverson Northwest, in connection with Granite's
2 pending Conditional Use Permit application to Yakima County, CUP 2015-00037/SEP
3 2015-00016, which would expand the size and scope of mining operations at the East
4 Selah Quarry (the "Application"). Under the Application, the overall Quarry operational
5 "footprint" would nearly quadruple and, of particular concern to SMID, active mining
6 operations – including blasting – would be allowed much closer to the Yakima Ridge
7 Tunnel than under existing permit approvals – as close as 1,000 feet from the Tunnel
8 east of the Selah Gap.

9
10 4. The 2015 CH2M Reports addressed specifically the scope and potential
11 severity of blasting-related risks to SMID infrastructure and operations in response to
12 a January 19, 2015, Blast Vibration Monitoring Plan that had been submitted by
13 Granite's consultant, GeoDesign, Inc. ("GeoDesign") in support of the Application (the
14 "2015 BVM Plan"). As we noted in the CH2M Reports, the 2015 BVM Plan was
15 incomplete and inadequate – not only because it misstated the relevant history and
16 available evidence concerning blasting related risks to the Tunnel, but also because
17 it recommended insufficient blasting and monitoring protocols for the protection of the
18 Tunnel and the District's vital irrigation water delivery responsibilities.

19
20 5. Subsequently, GeoDesign submitted a July 18, 2016, Revised Blast
21 Vibration Monitoring Plan in support of the Application (the "2016 BVM Plan"), which I
22 have reviewed. Presumably, the 2016 BVM Plan was intended to address
23 shortcomings in the analyses and recommendations under the 2015 BVM Plan.
24 Unfortunately, the 2016 BVM Plan contains few (if any) improvements for the
25 gathering, assessment and sharing of accurate blasting data with key stakeholders,
26 including SMID and Yakima County in its regulatory capacity.

27
28 6. In my professional opinion, the 2016 BVM Plan must be corrected to
29 acknowledge and incorporate all statistical and anecdotal evidence obtained by SMID
30 and its consultants concerning Tunnel damage, including but not limited to the
31 following:

32
33 6.1. Contrary to repeated assertions under *both* the 2015 and 2016
34 BVM Plans, the District *does*, indeed, carry on periodic Tunnel assessments, including
35 removal of accumulated rockfall and debris. SMID has – for more than ten years –

1 conducted an annual inspection of the entire Tunnel. And SMID has a particularly
2 good record of Tunnel damage and remediation efforts during the past several years.

3 6.2 SMID's *Tunnel Inspection and Maintenance Report* dated
4 February 23, 2016, was compiled by District Manager Nathan Draper and is already
5 on file with the County Planning Division. As more fully described therein, inspection
6 crews identified a total of six (6) *new* areas of concentrated rockfall within the tunnel,
7 comprising approximately 23 cubic yards of mostly basalt rock, which had not been
8 present at the time of the 2015 inspection. (Granite conducted two separate Quarry
9 blasting events during that intervening period.) In February 2016, crews removed 18.5
10 cubic yards of the observed new rockfall – virtually all of which was located within
11 2,000 feet of the SMID tunnel entrance, i.e., closest to proposed, expanded Quarry
12 blasting under the Application.

14 6.3 I have also reviewed Mr. Draper's February 14, 2017, *Tunnel*
15 *Inspection and Maintenance Report*, which is appended to his concurrently filed
16 Declaration. As more fully described therein, SMID's 2016 year-end inspection
17 confirmed substantial rockfall accumulations not present during the prior year
18 inspection, which, again, were concentrated within a relatively short distance from the
19 Selah end of the Tunnel (i.e., closest to proposed, expanded blasting under the
20 Application). And under SMID's subsequent Tunnel maintenance project, crews
21 removed nearly 27 cubic yards of rockfall and debris.

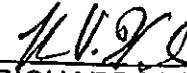
23 6.4 Most recently, on February 9, 2017, I accompanied Mr. Draper
24 on a detailed inspection of the entire Tunnel, observations and conclusions from which
25 I documented in an *SMID Tunnel Inspection Technical Memorandum* dated February
26 13, 2017, a true and correct copy of which is appended as Exhibit "A" hereto. As more
27 fully described in the *Technical Memorandum*, most of the significant rockfall events
28 have occurred in the upstream half of the tunnel. Areas that have active rockfall
29 typically have significant visible cracks between the blocks of rocks. Of particular
30 interest was a large piece of rock (about three feet long) located relatively close to the
31 upstream entrance to the Tunnel, which has separated from the rest of the rock near
32 the midpoint of the Tunnel wall and could, in my opinion, fall at any time. If such a
33 rock of such size were to fall during the District irrigation season, it could cause a

1 substantial hydraulic restriction within the Tunnel. And we observed numerous other
2 loose rocks at other locations, all of which have the potential to fall and to interfere
3 with canal flows to one degree or another

4 7. In my professional opinion, inclusion of the above-described evidence
5 concerning Tunnel damage under a revised BVM Plan will help immeasurably to
6 assess the very real and substantial risks posed by expanded Quarry blasting
7 operations to SMID infrastructure and operations. And in connection therewith, I also
8 recommend that Yakima County adopt all suggested improvements to blasting
9 protocols, including monitoring, advanced by my colleague, Mr. Green, under his
10 separately filed Declaration, as a precondition on approval of any expansion of
11 blasting operations under the Application.

12
13
14 I declare the foregoing to be true and correct under penalty of perjury of the
15 laws of the State of Washington.

16
17
18 SIGNED AT Yakima, Washington, this 16 day of February,
19 2017.

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23 _____
24 RICHARD V. HAAPALA, P.E.

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Exhibit A

SMID Tunnel Inspection

PREPARED FOR: Nathan Draper
REPAVED BY: Dick Haapala
DATE: February 13, 2017
PROJECT NUMBER: 334186.A1.01

At the request of the Selah Moxee Irrigation District, I accompanied the District staff on an inspection of the interior of the SMID tunnel near East Selah. Those present for the inspection were Nathan Draper, Rod Ensign, and Dick Haapala.

Using a John Deere Gator, we entered the tunnel at about 1:45 pm on 2/9/2017 and exited the downstream end (south) at about 3 pm. The canal was not flowing any water and the standing water in the tunnel was not frozen. A significant portion of the downstream end of the tunnel had water that was from zero to 12" deep. The Gator was able to negotiate the water and fallen rock.

The rock removal work done by the District in past years has made the tunnel passable for small wheeled vehicles such as the Gator. During previous inspections, prior to the rock removal, the fallen rock would have prevented travel by a wheeled vehicle.

The natural weathering of the interior of the tunnel makes it relatively easy to locate areas of recent rock falls due to the differences in coloration.

Most of the significant rock falls have occurred in the upstream half of the tunnel. Areas that have active rock falls typically have significant visible cracks between the blocks of rocks. At a point about 800 feet from the upstream end, a large (about 3 feet long) piece of rock near the midpoint of the right side wall has separated from the rest of the rock and appears to be in danger of falling. It is sizeable enough that it may create a hydraulic restriction. Removal by manual prying was discussed.

Loose rock was observed to have the potential of falling soon from some areas but the pieces are not large. All of these rock fall locations are in areas that have increased ceiling heights. The high ceilings may have been created by over break during the original construction or are a result of less stable rock that continues to fall. At least three of these locations are considered to be candidates for some reinforcing. The construction of reinforced concrete arch liners to protect areas in the past has been successful and could be implemented in these areas that are located from 800 feet to 3,000 feet from the tunnel entrance. Alternatively, the addition of rock bolts, steel mesh, and shotcrete could help stabilize these areas.

There is only one location near the downstream end of the tunnel that has a significant rock fall area. The rock in this area consists of quite small angular chunks and is very localized.

Various sections of the tunnel have the reinforced concrete liners that for the most part appear to be in good condition. However, two of the most upstream sections have a visible void between the concrete and the rock above. Two of the lined sections have holes in the tops that could have been caused by rocks falling from above. The integrity of these sections could be improved by filling the voids with pumped concrete.

Some sections between the lined sections have water standing quite deep. This makes it very difficult to access and perform maintenance work. It may be desirable to fill these low areas with smaller sized rock collected from maintenance activities.

Although there is very little groundwater seeping into the tunnel, there is one section very near the downstream end that has a steady presence of dripping water. There were no observed streams of flowing water.

HALVERSON | NORTHWEST

Public Services () LAW GROUP

VIA HAND DELIVERY

FEB 23 2017

February 23, 2017

Vern Gary Don Lynn
Dave Lisa Carmen

FEB 28 2017

Vern Gary Don Lynn
Dave Lisa Carmen

Mr. Tommy Carroll, Section Manager

Yakima County Public Services – Long Range & Environmental
128 N. 2nd Street
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Linda A. Sellers
Michael F. Shinn
Juliana Van Wingerden
Stephen R. Wintree+
*Also OR Bar Member
**Also State Bar of CA Member
+Of Counsel

Re: CUP 2015-00037/SEP2015-00016/Rowley Quarry Expansion Project

Dear Mr. Carroll:

On behalf of Selah-Moxee Irrigation District (“SMID”), thanks very much for following up with us regarding our additional comments, declarations and supporting materials submitted last week in connection with the above-referenced Conditional Use Permit application.

Consistent with our conversation this morning, I am forwarding with this letter copies of the following reports compiled by SMID and its consultant, CH2M, regarding blasting-related damage and risks to SMID’s Selah Ridge Tunnel and irrigation canal under the County’s currently-issued draft MDNS:

- February 23, 2016, *Tunnel Inspection and Maintenance Report*, SMID Manager Nathan Draper
- February 14, 2017, *Tunnel Inspection and Maintenance Report*, SMID Manager Nathan Draper
- September 16, 2015, *Yakima Ridge Tunnel Technical Report / Selah Moxee Irrigation District Yakima Ridge Tunnel – Condition Assessment and Improvements*, CH2M
- February 13, 2017, *Technical Memorandum, SMID Tunnel Inspection*, CH2M

Our records reflect that all of the above materials have been timely submitted under prior draft MDNS comment schedules, but we are happy to again provide these reports in a single submission for your convenience. We ask that the Planning Department review these reports together with our recently submitted Declarations of Messrs. Draper, Haapala and Green, as well as Halverson Northwest’s August 2016 and February 2017

halversonNW.com

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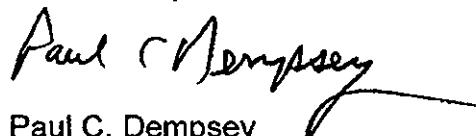
Attachment: EE

comment letters, as our collective comment and opinion regarding the pending Permit application.

As always, we stand ready to answer any additional questions you may have in connection with these submissions, which we trust will be helpful to more fully assess and mitigate blasting-related environmental risks under the proposed MDNS. Feel free to contact me or Mike Shinn here at HNW if we can be of help.

Very truly yours,

Halverson | Northwest Law Group P.C.


Paul C. Dempsey

Enclosures

cc: (without enclosures)

Mr. Nathan Draper, SMID
Michael F. Shinn, Esq.
Lawrence E. Martin, Esq.

SMID Tunnel Inspection

PREPARED FOR: Nathan Draper
REPAVED BY: Dick Haapala
DATE: February 13, 2017
PROJECT NUMBER: 334186.A1.01

At the request of the Selah Moxee Irrigation District, I accompanied the District staff on an inspection of the interior of the SMID tunnel near East Selah. Those present for the inspection were Nathan Draper, Rod Ensign, and Dick Haapala.

Using a John Deere Gator, we entered the tunnel at about 1:45 pm on 2/9/2017 and exited the downstream end (south) at about 3 pm. The canal was not flowing any water and the standing water in the tunnel was not frozen. A significant portion of the downstream end of the tunnel had water that was from zero to 12" deep. The Gator was able to negotiate the water and fallen rock.

The rock removal work done by the District in past years has made the tunnel passable for small wheeled vehicles such as the Gator. During previous inspections, prior to the rock removal, the fallen rock would have prevented travel by a wheeled vehicle.

The natural weathering of the interior of the tunnel makes it relatively easy to locate areas of recent rock falls due to the differences in coloration.

Most of the significant rock falls have occurred in the upstream half of the tunnel. Areas that have active rock falls typically have significant visible cracks between the blocks of rocks. At a point about 800 feet from the upstream end, a large (about 3 feet long) piece of rock near the midpoint of the right side wall has separated from the rest of the rock and appears to be in danger of falling. It is sizeable enough that it may create a hydraulic restriction. Removal by manual prying was discussed.

Loose rock was observed to have the potential of falling soon from some areas but the pieces are not large. All of these rock fall locations are in areas that have increased ceiling heights. The high ceilings may have been created by over break during the original construction or are a result of less stable rock that continues to fall. At least three of these locations are considered to be candidates for some reinforcing. The construction of reinforced concrete arch liners to protect areas in the past has been successful and could be implemented in these areas that are located from 800 feet to 3,000 feet from the tunnel entrance. Alternatively, the addition of rock bolts, steel mesh, and shotcrete could help stabilize these areas.

There is only one location near the downstream end of the tunnel that has a significant rock fall area. The rock in this area consists of quite small angular chunks and is very localized.

Various sections of the tunnel have the reinforced concrete liners that for the most part appear to be in good condition. However, two of the most upstream sections have a visible void between the concrete and the rock above. Two of the lined sections have holes in the tops that could have been caused by rocks falling from above. The integrity of these sections could be improved by filling the voids with pumped concrete.

Some sections between the lined sections have water standing quite deep. This makes it very difficult to access and perform maintenance work. It may be desirable to fill these low areas with smaller sized rock collected from maintenance activities.

Although there is very little groundwater seeping into the tunnel, there is one section very near the downstream end that has a steady presence of dripping water. There were no observed streams of flowing water.

Yakima Ridge Tunnel

PREPARED FOR: Selah-Moxee Irrigation District
 PREPARED BY: Richard V. Haapala/CH2M
 DATE: September 16, 2015
 PROJECT NUMBER: 334186
 REVIEWED BY: Ed Thomas, P.E./CH2M
 Ken Green, P.E./CH2M



The Yakima Ridge Tunnel is a vital component of the Selah-Moxee Irrigation District's (District) canal system that provides irrigation water to 7,400 acres of high value farmland, residential properties that include the City of Moxee, three cemeteries, and a golf course. The original tunnel construction was completed in 1930 and some relatively minor reinforcement was done in 1961. Even though there have been several tunnel inspections conducted over the subsequent years, no significant repair or reinforcement work has been found to be needed. The most recent inspection was done in November, 2014.

Approximately 85% of the land in the District is served by water that passes through the tunnel. That land does not have an alternative source of water. Therefore, a failure or blockage of the tunnel would cause a significant amount of damage to adjacent or downstream lands. Such a failure could cause the upstream portions of the canal to overtop and fail. Farmland, roads, residences, and businesses in the area would be adversely affected by the resulting flooding. With no supply of irrigation water, the downstream crops would suffer with even a short period of interrupted service. Any tunnel failure that blocks or impedes the flow of water will require a complete shutdown of water to the entire District to perform the repairs. The repairs could take days or months to complete. Damage to the current crops would be significant, but there would also be long term impacts to permanent and future crops. These impacts would directly affect other related industries (transportation, processors, end users, etc.), and the adverse effects on the local economy would be even greater. The direct losses from failure of the current crops such as hops, orchards, and other crops has been estimated to be in excess of \$75 million. Costs to replant and re-establish markets have not been estimated. Neither have the multiplier effects to the economy been calculated. Since hops represent a large portion of the crops within the District and they are marketed globally, the economic impacts would be far reaching.

Blasting operations have been used in the adjacent Rowley rock quarry to mine rock for production of aggregate for construction purposes since approximately 2001 under a Yakima County conditional use permit. The current operator, Granite Northwest, indicates that the existing quarry has limited quantities of suitable rock material remaining and has applied to Yakima County for an expansion of the mined area. The proposed expansion would bring the active mining area to within 1,100 feet of the SMID tunnel. The current mining operations are about twice that distance from the tunnel. Allowing future blasting closer to the tunnel will definitely increase the potential for an increased level of damage to the tunnel.

Granite Northwest has hired Geo Design, Inc. to give an opinion of the condition of the tunnel. A report of Geo Design's findings dated January 19, 2015 was presented to Granite. The Geo Design report

YAKIMA RIDGE TUNNEL

contains some unsubstantiated information and lacks details of several important issues, including the following:

Page 1 of the report states "SMID has not conducted any mitigation of the tunnel....." The District has actually done periodic inspections which have included some relatively minor moving of some of the fallen rock out of the flow path to improve the hydraulic conditions. Small rockfalls in unlined tunnels are quite common and are caused by naturally occurring vibrations and weathering, but could be aggravated by blasting activities.

Page 2 of the report states "SMID has not removed any of the rockfall from the tunnel...". As stated above, this statement is not correct.

Page 4 of the report states "...it would take vibration intensities significantly higher than 2 in/sec to cause rockfall...". Inspections by CH2M HILL have identified several areas within the tunnel that have a "Potential Failure Mechanism" and rock could easily fall with very low levels of vibration. Since the seismometers used have not been permanently installed and in direct contact with the rock, it is not known what the vibration levels actually are, especially when blasting would be done closer to the tunnel. Any small vibration whether natural or blast induced could cause rockfalls.

Page 4 of the report describes the vibration monitoring done by Granite. However, there is no discussion how the locations of the monitoring points were determined. It is known by direct observations by CH2M HILL that at least one of the vibration sensors was temporarily buried in soil near the tunnel entrance. It was not in contact with undisturbed rock. Higher and more consistent levels of vibration could likely have been recorded if the sensors were in direct contact with the rock. To provide accurate and consistent vibration data, the seismometer sensors need to be strategically and permanently installed in direct contact with undisturbed rock. The use of portable vibration monitoring equipment does not provide the consistency required.

Page 5 of the report states "Rockfalls may continue...but from causes not associated with the proposed blasting." CH2M HILL agrees that a certain amount of rockfall will occur due to naturally occurring vibrations and weathering. However, any vibration caused by blasting will induce more rockfalls than will naturally occur. The failure could be catastrophic. Geo Design has no basis to state that the rockfalls are "not associated" with the blasting and in fact rock fall conditions would most likely be aggravated by an increase in either the frequency or the magnitude of the blasting vibrations.

Page 6 of the report describes the type of vibration monitors to be used. However, there is no description of how many or where they are to be installed or the methods that will be used to attach them to solid rock. The data collected from the vibration monitors needs to be provided to the District shortly after (within two weeks) each blast is conducted.

Conclusions

While some blast induced vibrations have been measured, it appears that the level of intensity of those blasts may not have been accurately recorded by the portable vibration monitoring equipment. Even though the risk of a catastrophic tunnel failure is low, it does exist. Both Geo Design and CH2M HILL have identified areas of potential failure. Since a catastrophic failure could occur, no blasting should be allowed unless it is done under very strict requirements and is approved by the County and the District to substantially guarantee no damage will occur to the tunnel.

Inspections of the tunnel by CH2M HILL includes photographs of loose rock slabs that could fall with the slightest vibration. Any blasting induced vibrations would make the falling of rock slabs more likely. When one slab falls, it reduces the support of adjacent slabs. The likelihood of subsequent rockfalls increases. Rock debris on the tunnel floor demonstrate that some rock has already fallen. None of those rockfalls appear to be seriously impeding the flow of water at this time. Any rock that is within the flowing water will cause some interference.

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Blasting at this site should only be approved under very limited circumstances, if at all. At a minimum, the following would be required:

- Any blasting plan will need to be reviewed by the County and SMID to prevent damage to the tunnel.
- A mitigation plan must be developed to provide for any loss of water and economic losses in case of canal blockage or failure.
- All blasting shall have limits on frequency, duration, intensity, and timing.
- At least one month prior notice of blasting must occur with blasting plans that include sizes and types of charges and frequencies of blasting.
- The County or other regulatory agency must provide oversight and have authority to stop or limit blasting when circumstances pose unacceptable risks.
- Install permanent seismometers near the tunnel in specific locations to most accurately measure vibration to the tunnel.
- Install audio instrumentation within the tunnel to detect rockfalls.
- Accept responsibility for damage to the tunnel caused by blasting by providing blasting insurance to protect the District and landowners.
- Contingency plans need to be developed to repair damage and restore irrigation service if damage should occur.
- Make provisions to modify blasting procedures if higher risks are identified.
- Blast during the non-irrigation season.
- Inspect the tunnel and remove fallen rock annually.

Alternatives to be Considered:

Rather than exposing the District's water users to risks associated with a tunnel failure several alternatives could be considered.

- Provide an alternative source of water from a location downstream of the tunnel. This could be from a river pump station or from the Roza Irrigation District canal. Limited water supplies, costs, and legal issues may make this alternative difficult to implement.
- Make improvements to the tunnel by installing a heavy steel liner throughout its two mile length at an estimated cost of approximately \$6 million.

Follow Up Activities:

The responsibility to perform the work described and liability for losses need to be discussed with Granite Northwest. To-date, no plans to mitigate risks have been proposed or developed between Granite Northwest and the District.

Selah Moxee Irrigation District Yakima Ridge Tunnel - Condition Assessment and Improvements

PREPARED FOR: Nathan Draper/SMID

PREPARED BY: Robert Martin/MKE

Ken Green/SEA

Dick Haapala/TCA

Ed Thomas/TCA

DATE: January 19, 2015

Introduction

The Selah Moxee Irrigation District Yakima Ridge Tunnel (SMID Tunnel) is part of a 30-mile long gravity fed irrigation canal system that delivers water to irrigation customers located in Yakima County, WA. The canal and SMID Tunnel are part of a critical water supply system that delivers water to approximately 7,000 acres of productive farmland. The canal is capable of delivering up to 100 cfs on a continuous basis and draws water from a diversion point in the Yakima River located approximately 15 miles upstream of the SMID Tunnel entrance. The SMID Tunnel and canal conveyance facilities are owned, operated, and maintained by the SMID.

This Condition Assessment and Improvement Report (CAIR) documents activities from the inspection and evaluation of the SMID Tunnel, completed November 2014. Walk-through assessments of the tunnel are typically performed on an annual basis by SMID and have occasionally been conducted by outside consultants to obtain a cursory review of tunnel conditions. This assessment, although not considered detailed, collected a significant amount of data, provided tunnel stationing, dimensioning of the tunnel, and notation of rockfall and less stable areas within the tunnel. It also provided an opportunity to perform a preliminary assessment of more detailed tunnel conditions to better document the overall condition of the tunnel, to look for potential areas requiring work, and to allow a prioritization of work to be done to improve the long term condition of the tunnel.

The results and recommendations of the condition assessment were used to further evaluate the proposed expansion of an existing rock quarry located on land adjacent to the SMID Tunnel. The rock quarry uses drill and blast techniques to mine rock from the hillside and SMID has concerns about the possible impact blasting will have on the SMID Tunnel stability. A summary of recommendations associated with the proposed quarry expansion are also identified in this CAIR.

Background

The SMID Tunnel is located east of the Selah Gap, in the Yakima Ridge Anticline. The Selah Gap is created by a northwest-southeast oriented break or cut in the natural ridge line which separates broad valley bottom areas north and south of the ridge line. The town of Selah, Washington is located just north of the gap and the town of Yakima, Washington is located immediately to the south. Selah Gap was created when the Yakima River downcut through the Yakima Ridge Anticline, as it was uplifted perpendicular to the path of the river. Further erosion of the Selah Gap occurred approximately 10 to 20 thousand years ago as a result of intense scour from Lake Missoula floods, which resulted in severe scour and geomorphic landscape changes, scouring and flooding most of Central Washington state during this period. Selah Gap is about 2 miles long as measured along the present river line and is currently occupied by the Yakima River within this resulting downcut river channel.

The SMID Tunnel was constructed from 1928 to 1930 to allow conveyance of water from the Selah side of the ridge (north side) to farmland located on the Yakima side of the ridge (south side). The SMID Tunnel is oriented in a north-south alignment, is located about 9,000 feet east of the Selah Gap, and is about 9,600 feet in total length. See Appendix C for original construction and repair drawings.

Bedrock Geology

The SMID Tunnel is located in the Columbia Plateau which is formed by the Columbia River Basalt group (CRB). The CRB consists of numerous individual basalt flows that range from a few feet to more than 300 feet in thickness. The flows are typically jointed with blocky to columnar joints, so that most flows have colonnades and some have entablatures. Most are black or gray on fresh surface, and weather from gray to some shade of red or brown. Flow bottoms are commonly rubbly or pillow, whereas flow tops are often vesicular, scoriaceous, and rubbly.

The basalt flows at the site, based on mapping by Bentley et al (1983) and Bentley et al (1993), in order from oldest to youngest include the:

- Grande Ronde Basalt: Numerous flows of fine-grained basalt with normal and reverse magnetic polarity.
- Wanapum Basalt: Several flows of gray-black, fine to medium grained basalt divided into numerous members based on age, chemistry, and magnetic polarity
- Saddle Mountains Basalt: Flows of blue-black, fine-grained basalt.

Sedimentary beds were deposited between some of the basalt flows. The Vantage Member overlies the Grande Ronde Basalt and consists of white to tan, weakly- to moderately-indurated volcaniclastic clay, silt, and coarse sand. The Selah Member overlies the Pomona Member of the Saddle Mountains Basalt and consists of white to light reddish brown, weakly- to moderately-indurated volcanic clay, silt, sand, and gravel. These interbeds are typically weaker and weather more easily than the basalt flows.

Structural Geology

The project area is within the Yakima Fold Belt subprovince, which is characterized by long, narrow anticlines and broad synclines that extend generally eastward from the Cascade Range (Myers and Price, 1979; Newcomb, 1970). Many of the folds contain a great degree of asymmetry, where the shorter limb is more steeply dipping, thrust faulted, and majorly deformed within. Shattered basalt is common in the rupture and thrust fault zones. Most faults within the region are thrust faults associated with the anticlinal fold axes, and likely developed synchronously with folding.

The structural geology is an important component that impacts tunnel stability. The tunnel was driven through a geologic structure called the Yakima Ridge Anticline. The northern flank of this structure is underlain by a sequence of north-dipping basalt flows including the Gingko, Sand Hollow, Kelley Hollow, Sentinel Gap, Roza, Priest Rapids, and Pomona Members. The Priest Rapid and Pomona Members are separated by the Selah Member of the Ellensburg Formation. The surface dips gently to the north, with dip angles between 5 and 8 degrees. However, on the northern flank immediately west of the tunnel alignment, dip angles between 26 and 53 degrees are mapped in exposures of the Priest Rapids member, which indicates that the subsurface geology within the structure is likely complex and folded.

The ridge of the anticline is cut by a south-dipping thrust fault. The southern flank of the anticline is formed by a similar sequence of basalt flows as the north flank, but are more steeply south-dipping. The dip angles ranges from 12 degrees near the top of the ridge to as much as 75 degrees to the south. The Vantage Member of the Ellensburg Formation is exposed near Selah Gap, just west of the Tunnel alignment, and is likely exposed in the tunnel alignment.

Because the tunnel alignment cuts through the faulted anticline and the series of basalt flows and sedimentary interbeds, the bedding dips in basalt flows are variable, and tops and bottoms of basalt flows which are likely to be highly fractured and contain cinders or soil-like interbeds are exposed. Also, weak,

poorly-indurated sedimentary interbeds such as the Vantage Member will be exposed along portions of the alignment. These geologic conditions are anticipated to create highly variable tunneling conditions which will necessitate tunnel support and stabilization measures, plus a monitoring program to evaluate stability.

Tunnel Description

The SMID Tunnel is constructed through basaltic rock with sporadic sedimentary beds consisting of sands and clays. The tunnel cross-section is horseshoe-shaped, with an arched roof and vertical sidewalls. The invert of the tunnel has a bottom width of approximately 9.5 feet, and a height, from invert to crown, of approximately 7.5 feet.

The tunnel is largely unsupported and unlined through most of its length. Portions of the tunnel are supported with either cast in place concrete or pneumatically applied shotcrete liner. There are a few sections of tunnel where concrete columns were placed to support slabbing rock as shown in Figure 1.

FIGURE 1

Station 8+18 and 8+24; Concrete Column Supports



On the upstream end, the tunnel has a cast in place (CIP) portal that connects to a lined channel. The downstream portal is unlined and exits into an unlined channel.

Tunnel Maintenance

The SMID Tunnel conveys irrigation water from mid-March to mid-October. Tunnel maintenance is possible during the non-irrigation months but has generally been limited in recent years to an annual walk through

the tunnel to identify noticeable repair locations. No significant repairs have been performed within the tunnel since 1961 when some concrete lining was installed.

Adjacent Property – Granite Construction Rock Quarry

An existing rock quarry located just west of the northern end of the SMID Tunnel has been in operation since the 1980's. The quarry conducts blasting several times per year and seismic data has been collected during each event since approximately 2000.

The quarry intends to expand their operation eastward toward the SMID Tunnel. The proposed expansion of the quarry and primarily the associated blasting is a concern for SMID. It was unclear what affect the blasting could have on the stability of the tunnel. Collapse of the tunnel or a significant rock fall would restrict water flow to approximately 85 percent of the SMID customers. Significant economic loss from permanent crop damage would result because an alternative water source is not available to supplement the SMID in the event that water cannot flow through the tunnel. Costs associated with flooding damage repair would be incurred in the event of canal overtopping at the tunnel inlet portal and damage to surrounding properties. In addition, de-stabilization of the tunnel as a result of blasting increases safety concerns for regular tunnel maintenance or repairs.

Tunnel Condition Assessment

The most common type of failure in tunnels excavated in jointed rock masses such as the SMID Tunnel, is wedges falling either from the crown or sliding out of the sidewalls of the opening. These wedges are formed by the intersection of structural features, such as bedding planes and joints, which separate the rock mass into discrete but interlocked pieces. When a free face is created by excavating an opening, the restraint from the surrounding rock is removed. Unless steps are taken to support these wedges, the stability of the opening may deteriorate. If a wedge is allowed to fall or slide it will cause a reduction in the restraint and the interlocking of the rock mass and this, in turn, may allow other wedges to fall.

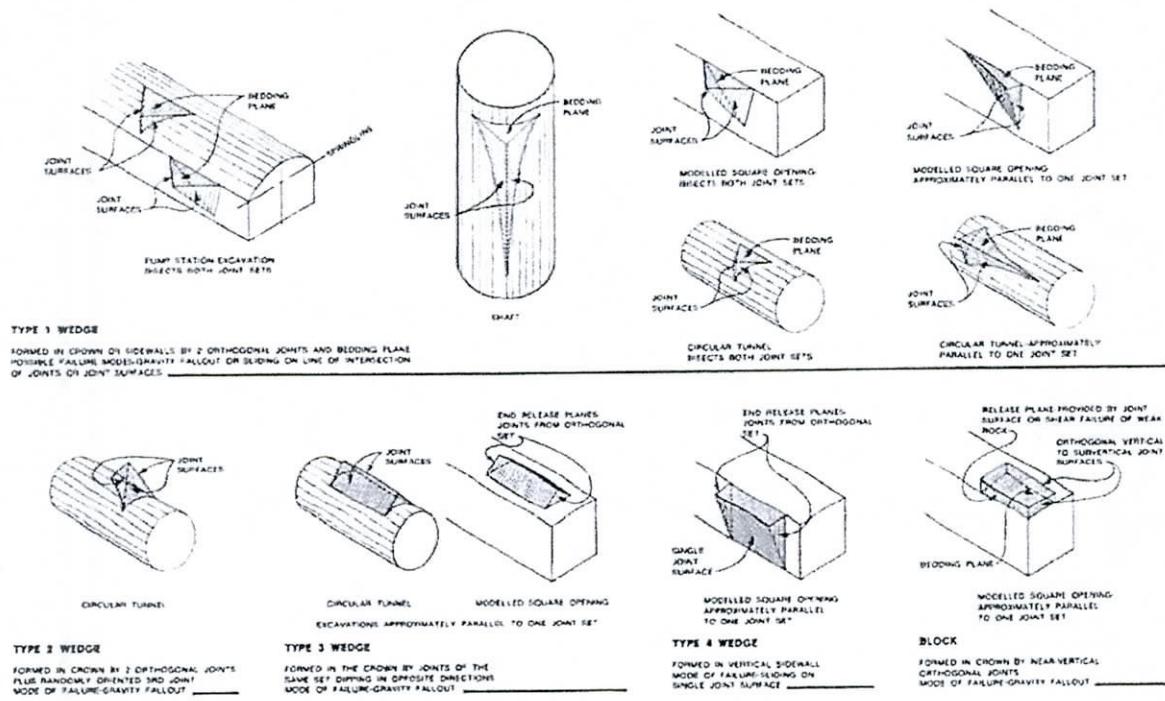
A condition assessment of an unlined tunnel allows for the evaluation of the rock mass and provides a means to assess current and future stability. Instability in the rock mass can lead to reduced flow capacity or blockage of the tunnel due to wedges falling. Some factors that contribute to structural instability include but are not limited to the following: freeze-thaw, defects built-into the final support at the time of construction, changes in ground loading or internal loading, changes in operations, reduction in effective thickness of structural elements, changes in groundwater chemistry, outwash of fines in discontinuities, erosion of the invert, and seismic loading.

During the condition assessment of the SMID Tunnel, determination of average dip and dip direction of significant discontinuity sets, and the identification of wedges that could potentially slide or fall from the crown or sidewalls were observed but not mapped. Examples of wedge formation created by intersecting discontinuities are presented in Figure 2.

Process and Procedure

The first step in preparation for the condition assessment was to create a process for logging geologic features encountered in the tunnel during the inspection. The team decided to use peripheral geologic mapping to log exposed geologic features. The method allowed for the logging of all geologic discontinuities regardless of their position on the tunnel walls. Peripheral geologic mapping uses a form depicting a plan view of the tunnel developed by “unrolling the circumference” of the tunnel and showing the entire wall surface. A log of the conditions encountered in the tunnel was then recorded on the plan view as the inspection progressed.

FIGURE 2
Wedge Formation Created By Intersecting Discontinuities



After optimizing the plan, the inspection commenced with a three man stationing team that was responsible for establishing stationing along the tunnel length at 50-foot intervals. The stationing helped a two-man condition assessment team accurately locate defects along the tunnel alignment without long measurements, and more precisely located geologic discontinuities. When plotting features, the condition assessment team measured horizontal distance along center line of each wall, vertical distance above invert, and then plotted the points at the proper tunnel station. The geologic log recorded on the condition assessment form depicts the relative positions of observations, as shown in Appendix A. In addition, photos were taken of significant features encountered during assessment as shown in Appendix B.

Observations and Assessments

The condition assessment team anticipated that sections of the tunnel would be lined and other sections would be unlined, based on observations made from previous entries completed by others. In the lined sections of the tunnel, observations were made regarding the condition of the CIP concrete liner and if chemical or mechanical deterioration was taking place. Observations were also made pertaining to infiltration, liner type, and properties.

In the unlined sections of the tunnel, primary focus was placed on the major geologic features and tunnel debris. The geologic features that have the greatest effect on the physical and engineering properties of the rock mass were logged first, such as faults, joints, shear zones, bedding planes, seams, and their properties. Additional features logged included fractures, stressed zones, fallouts, infiltration, liner type, and debris in invert.

Lined Tunnel Zones

The SMID Tunnel is approximately 8 percent lined with either shotcrete or CIP concrete. During the inspection, a total of 14 lined locations were identified, two of which were shotcrete lined. The lined zones were complete toe to crown/crown to toe coverage. Shotcrete thickness was estimated to be less than 3 inches in most locations.

Reinforced CIP concrete was used in the remaining 12 lined locations covering the crown and sidewalls and some instances the invert. In most instances, drain holes were installed in the liner to relieve hydraulic pressure during construction, and allow drainage. During the inspection, a few of the drain holes were producing flows of less than 0.5 gallon per minute (gpm). In instances where flow was observed, iron staining was also evident. Table 1 summarizes the lining encountered in the tunnel during the assessment. Typical lined tunnel sections are presented in Figure 3.

TABLE 1
Tunnel Concrete Liner Summary

Item	Station		Lining Type	Shape	Length (ft)
	Start	End			
1	0+00	0+68	CIP	Horseshoe	68
2	4+60	7+17	Shotcrete	Horseshoe	257
3	57+41	57+63	CIP	Horseshoe	22
4	71+62	73+01	Shotcrete	Horseshoe	139
5	73+82	74+02	CIP	Horseshoe	20
6	77+52	77+96	CIP	Horseshoe	44
7	78+10	78+30	CIP	Horseshoe	20
8	82+80	82+95	CIP	Horseshoe	15
9	88+08	88+28	CIP	Horseshoe	20
10	88+69	88+89	CIP	Horseshoe	20
11	90+06	90+21	CIP	Horseshoe	15
12	91+15	91+31	CIP	Horseshoe	16
13	91+52	92+57	CIP	Horseshoe	105
14	92+91	93+35	CIP	Horseshoe	44

Unlined Tunnel Zones

The SMID Tunnel is more than 92 percent unlined. Inspection of the unlined sections of the tunnel primarily focused on major geologic features. Geologic features were observed but only zones where jointing in the rock posed a risk to stability or locations where extensive raveling was encountered, were documented and included in Appendix A. Figure 4 shows typical unlined tunnel sections encountered during the condition assessment.

The discontinuities observed during the assessment consisted mainly of joints and fractures. In rock mechanics and engineering geology, the orientation of a plane is generally defined by dip angle (inclination), dip direction (facing), or strike (running), as illustrated in Figure 5. The orientation and dip of the major joint set largely controls the possibility of unstable conditions or excessive deformations developing in the tunnel. The mutual orientation of discontinuities determines the shape of the individual blocks and beds encountered in the tunnel. The orientation or dip direction of the major joint set encountered during the SMID Tunnel assessment was generally parallel to each other and perpendicular to the tunnel alignment which is favorable for the stability of the tunnel. Stability is achieved when intersecting joints are not as frequent and when the wedge is much larger than the tunnel diameter (Hoek, 1997).

FIGURE 3

Station 74+02 and 71+62, Typical Cast-in-Place Concrete and Shotcrete Lined Tunnel Zones.

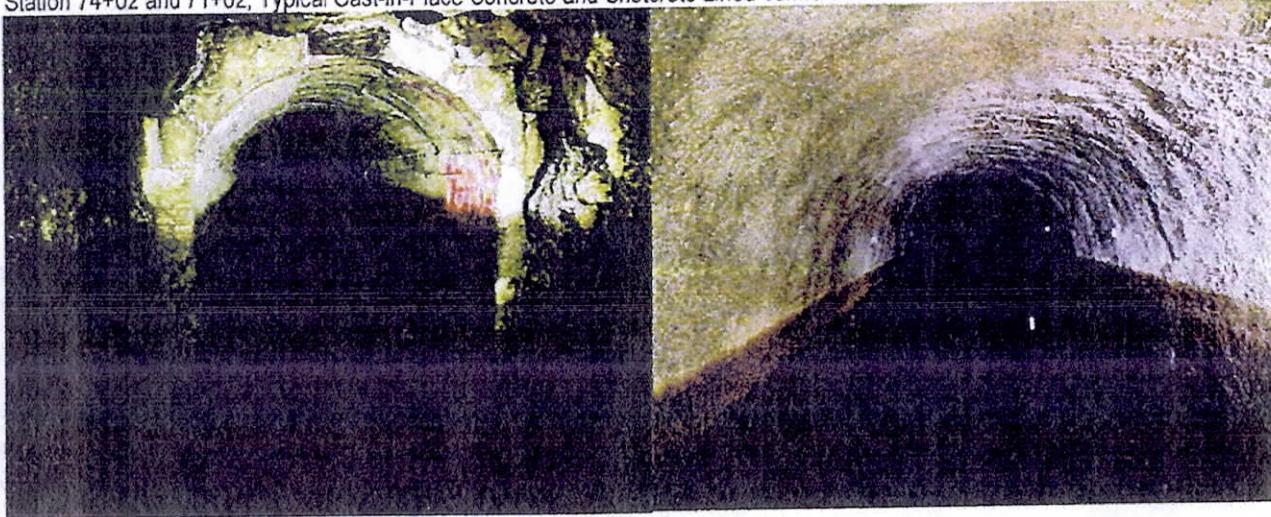
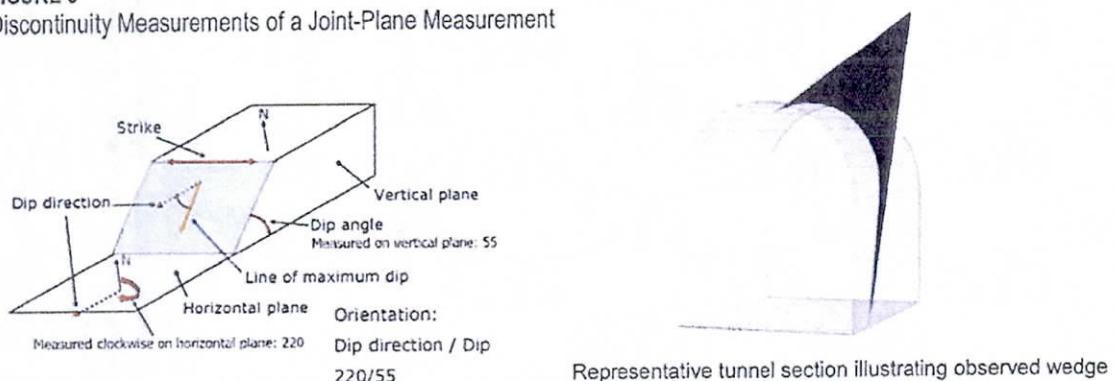


FIGURE 4

Station 2+25, Typical Unlined Tunnel Section



FIGURE 5
Discontinuity Measurements of a Joint-Plane Measurement



The condition assessment team encountered zones where the rock was highly fractured and raveling, and also locations where intersecting discontinuities could form unstable wedges or slabs. An unstable slab or "slabbing" is formed when a low angle joint intersects a steeply dipping joint near the excavated surface as shown in Figure 6. Stability is diminished when the following conditions are encountered:

- Two steeply dipping discontinuities intersect in close proximity to the excavated face
- Low angle discontinuity intersecting a steeply dipping discontinuity
- Intersecting discontinuities forming a wedge with flowing water along a plane

If any of these conditions is encountered, gravity acting on the wedge causes the joint to dilate and the frictional forces holding the rock in place is diminished, causing the slab or wedge to fail.

FIGURE 6
Station 75+00, Observed Slabbing in Tunnel



Rock Support

When unstable wedges, slabs, or raveling conditions are encountered, rock support is required. Typical rock support includes the use of shotcrete or rock bolts in a spot or pattern configuration, which can be used in conjunction with steel straps, wire mesh, or shotcrete. The type of rock support used in a tunnel is based on support requirement needs.

Rock bolts and dowels have been used for many years for the support of underground excavations. A wide variety of bolt and dowel types have been developed to meet different needs encountered during the excavation of rock. Rock bolts generally consist of plain steel rods with a mechanical or chemical anchor at one end and a face plate and nut at the other. They are always tensioned after installation. For short term applications the bolts are generally left ungrouted. For more permanent applications or in rock in which corrosive groundwater is present, the space between the bolt and the rock can be filled with cement or resin grout.

Dowels or anchor bars generally consist of deformed steel bars that are grouted into the rock. Tensioning is not possible and the load in the dowels is generated by movements in the rock mass. In order to be effective, dowels have to be installed before significant movement in the rock mass has taken place.

Tunnel Rehabilitation Priority

Three tunnel rehabilitation action levels have been defined for the SMID Tunnel to establish a timeline for maintenance and remedial measure by the SMID. Level 1 is repair work required to extend the life of the tunnel and should be completed within one year of the last inspection. Level 2 is maintenance and monitoring that is required to extend the life of the tunnel, and should be completed within five years of the last inspection. Level 3 is monitoring, the minimum amount of effort that should be expended to ensure that conditions observed in 2014 have not worsened, and should be completed within every ten years of the last inspection. If funding is not available for Levels 1 or 2, Level 3 may be completed in the interim as long as the consequences of a failure are considered. The definition of each action level is listed in Table 2. Action levels identified during the investigation are summarized in Table 3.

TABLE 2
Condition Assessment Action Levels

Action Level	Description
1	A repair program that will require supporting defined portions of rock blocks and wedges, supporting raveling zones, removing debris, mucking, and repairing or replacing portions of the existing liner.
2	A maintenance program that promotes required maintenance on a proactive basis rather than a reactive basis. A minimum maintenance program for sections of the tunnel will consist of periodic monitoring of defined wedges at an interval of not more than 5 years, along with implementation of recommended support as required.
3	An inspection program conducted at a minimum of every 10 years to evaluate conditions in the tunnel, focusing on defined focus zones indicated in this report and fallout that may have occurred.

TABLE 3
SMID Tunnel Action Level Summary

Item	Station		Location	Potential Failure Mechanism	Preventative Measure ^{a,b}	Action Level
	Start	End				
1	1+40	3+60	Crown and Sidewalls	Raveling	Pattern Bolts and Shotcrete	2
2	1+40	3+60	Invert	Debris in Invert	Muck	1
3	7+40	9+20	Crown and Sidewalls	Slabbing	Pattern Bolts and Shotcrete	1
4	11+30	13+40	Crown and Sidewalls	Slabbing	Pattern Bolts and Shotcrete	2
5	35+30	37+20	Crown	Raveling	Shotcrete	3
6	44+00	44+02	Sidewall	Wedge	Spot bolts	3
7	74+73	74+73	Crown	Void	Pattern Bolts and Shotcrete	2
8	75+00	76+50	Crown	Slabbing	Pattern Bolts	3
9	77+50	78+00	Crown	Void	Pattern Bolts and Shotcrete	2
10	88+00	88+30	Crown	Void	Pattern Bolts and Shotcrete	2
11	90+00	90+20	Crown	Void	Pattern Bolts and Shotcrete	2
12	90+60	91+20	Crown	Raveling	Shotcrete	3
13	92+00	92+60	Crown	Void	Pattern Bolts and Shotcrete	2
14	95+80	96+20	Crown and Sidewalls	Raveling	Shotcrete	3

^a Steel straps may be required in instances where spot or pattern rock bolting is recommended. Careful consideration should be given to the type and quantity of support required prior to mobilizing to the site.

^b Assume 4-foot by 4-foot bolt spacing for zones where pattern bolts are recommended.

Recommendations – Immediate and Long Term

In general, the SMID Tunnel appears to be stable. The team encountered three (3) zones where there is a potential for wedge/slab instability, at stations 7+40, 11+30, and 75+00. Horizontal and sub-vertical joints formed wedges and slabs that have the potential to be unstable given their orientation. Rock mass instability was not observed at the time of inspection at any other location, but the potential exists for future instability in several locations along the tunnel alignment. The following section includes recommendations for the repair, maintenance, and future inspection of the SMID Tunnel.

Action Level 1 – Tunnel Repairs

Action Level 1 zones are based on the functionality of the tunnel, existing blockage in the tunnel, and the tunnel's ability to convey water. When determining Action Level 1 zones, consideration was also given to observed discontinuities, which were evaluated based on aperture of the discontinuity, staining, water transmission along discontinuity, and projection of the discontinuity to determine intersection and potential size of each wedge. Action Level 1 zones are summarized in Table 4.

TABLE 4
SMID Tunnel Action Level 1 Summary

Item	Station		Location	Potential Failure Mechanism	Preventative Measure ^{a,b}	Action Level
	Start	End				
1	1+40	3+60	Invert	Debris in Invert	Muck	1
2	7+40	9+20	Crown and Sidewalls	Slabbing	Pattern Bolts and Shotcrete	1

^a Steel straps may be required in instances where spot or pattern rock bolting is recommended. Careful consideration should be given to the type and quantity of support required prior to mobilizing to the site.

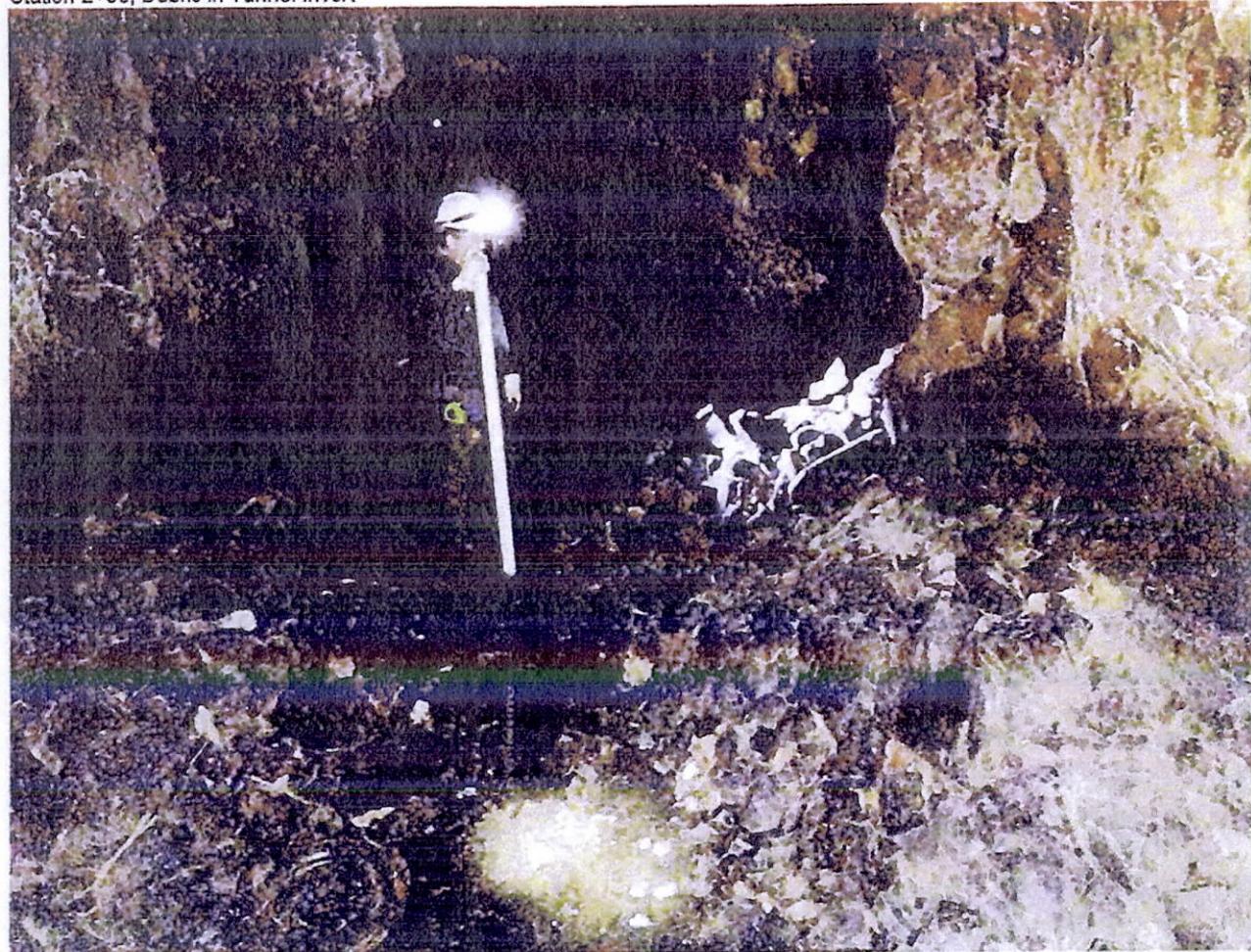
^b Assume 4-foot by 4-foot bolt spacing for zones where pattern bolts are recommended.

Debris Removal and Further Assessment for Preventative Support

Long-term functionality of the tunnel may be affected if debris is not cleared from the tunnel between stations 1+40 and 3+60, as shown in Figure 7. The tunnel perimeter between 7+40 and 9+20 should be thoroughly scaled and reevaluated for stability. Rock support consisting of resin rock bolts, approximately 12 feet in length, should be considered at the locations identified in Table 4 to stabilize the rock face.

FIGURE 7

Station 2+50, Debris in Tunnel Invert



Action Level 2 – Maintenance and Monitoring

Action Level 2 zones were defined based on the potential for rock instability that could impact flow or the SMID's ability to access portions of the tunnel in the future. When determining Action Level 2 zones, consideration was given to observed discontinuities and were evaluated based on aperture of the discontinuity, staining, water transmission along discontinuity, and projection of the discontinuity to determine intersection and potential size of each wedge. Blocks or wedges that were determined to be less than 50 percent of the tunnel width were included in Action Level 2 zones. Action Level 2 zones are summarized in Table 5.

TABLE 5
SMID Tunnel Action Level 2 Summary

Item	Station		Location	Potential Failure Mechanism	Preventative Measure ^{a, b}	Action Level
	Start	End				
1	1+40	3+60	Crown and Sidewalls	Raveling	Pattern Bolts and Shotcrete	2
2	11+30	13+40	Crown and Sidewalls	Slabbing	Pattern Bolts and Shotcrete	2
3	74+73	74+73	Crown	Void	Pattern Bolts and Shotcrete	2
4	77+50	78+00	Crown	Void	Pattern Bolts and Shotcrete	2
5	88+00	88+30	Crown	Void	Pattern Bolts and Shotcrete	2
6	90+00	90+20	Crown	Void	Pattern Bolts and Shotcrete	2
7	92+00	92+60	Crown	Void	Pattern Bolts and Shotcrete	2

^a Steel straps may be required in instances where spot or pattern rock bolting is recommended. Careful consideration should be given to the type and quantity of support required prior to mobilizing to the site.

^b Assume a 4-foot by 4-foot bolt spacing for zones where pattern bolts are recommended.

Periodic Tunnel Monitoring

Locations labeled as Action Level 2 identified in Table 5 do not require immediate support but will require periodic monitoring to ensure long-term stability of the tunnel. Figure 6 shows a typical example of a slabbing condition in the tunnel crown that should be monitored. In most cases, rock failure in the identified areas will not impact flow in the tunnel but will cause accessibility issues when traversing the tunnel for inspection and maintenance activities.

Voids Above Tunnel Liner

Voids up to 10 feet high were observed above the liner at stations 74+73, 77+50, 88+00, 90+00, and 92+00. The rock above the liner, in some cases, appeared to be unstable and had fallen but did not compromise the liner. In most cases, tunnel liners are not designed for impact loading that can occur when a block falls from a height of 10 feet. In all cases, water was observed dripping from the rock face where the voids were identified suggesting that the rock may become mobile in the future if not supported. The voids above the tunnel liner should either be filled or appropriate rock support installed to prevent collapse of the tunnel in the future.

Action Level 3 – Long Term Monitoring

Action Level 3 zones are all areas not defined by Action Levels 1 or 2. Periodic inspection of the entire tunnel is recommended to ensure long-term functionality of the tunnel system. Inspection intervals are recommended on a 10-year cycle; however, more frequent inspection and observation should be considered as opportunities arise.

After each inspection, proper documentation, rating, and action level establishment should be made with revision to this report via supplements. If time and budget are limited for tunnel repairs, focus should be placed on the Action Level 1 items until funding and time are available.

Inspections between stations 7+40 and 9+20 and at locations were voids above the liner have been identified should be conducted annually. It should be noted that tunnel entry for inspection and maintenance should only be made when accompanied by personnel who have experience in hard rock tunneling and can readily identify geologic hazards within the tunnel. Action Level 3 zones are summarized in Table 6.

TABLE 6
SMID Tunnel Action Level 3 Summary

Item	Station		Location	Potential Failure Mechanism	Preventative Measure ^{a,b}	Action Level
	Start	End				
1	35+30	37+20	Crown	Raveling	Shotcrete	3
2	44+00	44+02	Sidewall	Wedge	Spot bolts	3
3	75+00	76+50	Crown	Slabbing	Pattern Bolts	3
4	90+60	91+20	Crown	Raveling	Shotcrete	3
5	95+80	96+20	Crown and Sidewalls	Raveling	Shotcrete	3

^aSteel straps may be required in instances where spot or pattern rock bolting is recommended. Careful consideration should be given to the type and quantity of support required prior to mobilizing to the site.

^bAssume a 4-foot by 4-foot bolt spacing for zones where pattern bolts are recommended.

Recommendations – Quarry Expansion

As discussed previously, this CAIR for the SMID Tunnel indicates that the tunnel appears to be relatively stable at this time, and the risk of a catastrophic failure of the tunnel as a result of future blasting at existing and expanded quarry is minimal. However, locations were identified within the tunnel that have potential instability and pose a certain amount of risk. Blasting associated with the proposed rock quarry expansion will take place in closer proximity to the tunnel than ever before. The new blasting proximity could increase the potential for producing rock falls within the SMID Tunnel at locations identified for stabilization in this CAIR.

Recommendations associated with blasting at the proposed quarry expansion are as follows:

- Granite Northwest should provide detailed blasting plans to SMID for review at least one week prior to blast.
- Granite Northwest should properly install permanent seismometers that yield more accurate results than the temporary seismometers that have been used during previous blasts at existing quarry. Per previous discussions with Granite Northwest, the permanent seismometers should be able to identify a vibration threshold value of 0.5 inches instead of the previously used threshold of 5 inches.
- Granite Northwest should obtain appropriate blasting insurance of a value agreed to by SMID.
- Blasting associated with the quarry expansion should happen during the non-irrigation season if possible.
- Water level staff gages at the inlet and outlet of the portal should be installed to identify immediate changes in water level after a blast that would likely be the result of a rock fall within the tunnel partially impeding (or blocking) flow.

- Annual inspections of the SMID Tunnel are recommended to observe any changes in tunnel stability or new rock falls. Annual inspections should take place immediately after irrigation season in mid-October to maximize the amount of time available to perform any necessary stabilization or debris removal.

References

Bentley, R.D., Campbell, N.P., and Powell, J.E., 1993, Geologic maps of part of the Yakima fold belt, northeastern Yakima County, Washington: Washington Division of Geology and Earth Resources, Open File Report 93-3, scale 1:31,680.

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Myers, C. W, and Price, S. M., Geologic Studies of the Columbia Plateau: A Status Report. Prepared for U. S. Department of Energy.

Newcomb, R.C., 1970. Tectonic structure of the main part of the basalt of the Columbia River group, Washington, Oregon, and Idaho. U. S. Geological Survey IMAP: 587.

Appendix A
Condition Assessment Form Logs



CH2MHILL

Tunnel Condition Assessment Form

Project Name

Selah Mixed Tunnel

Client

SMID

Date and Time

11-5-14

Inspector

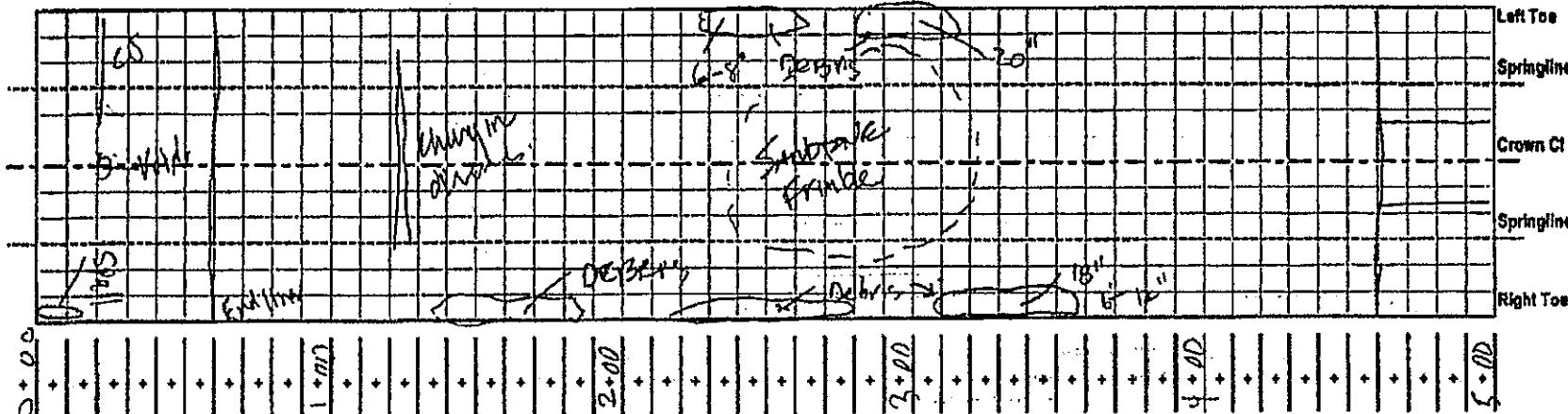
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Inspector

KLG

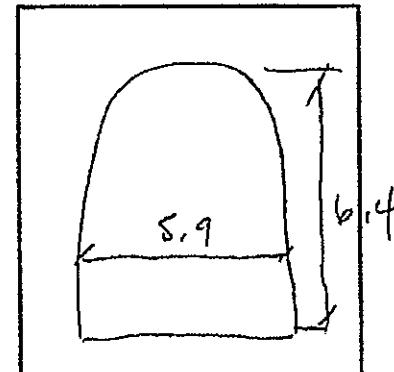
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1 of 20



Notes:

Item	Description
1	Welded plate across entrance 57(+) x 5.9'
2	Partial has metal plate across entrance 57(+) x 5.9'
3	Concrete spalling 10'(+) x 2'
4	Concrete lining short
5	Concrete lining short
6	Crown joint w/ void in crown
7	Wavy line 38'''
8	Photo
9	Lining change
10	Concrete 11-12'' 11-10''
11	Debris
12	Water mark 3.5'''
13	Debris
14	Water mark 3.4'''
15	Debris
16	Water mark 3.5'''
17	Debris
18	Water mark 3.5'''
19	Photo



Tunnel Cross Section

Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scale:

Horizontal (1 Block) = 1

Vertical (1 Block) = 1

19 4+60 7.5(H) x 9.5(W) Water mark 3.6'
 1.1. 4+60 Liner change 8.77(m x 5.81-W) Total width 8.2 11'(L) (4'-0" tall side wall)



Tunnel Condition Assessment Form

Project Name

Selah Muxee Tunnel

Client

SMID

Date and Time

11-5-14

Inspector

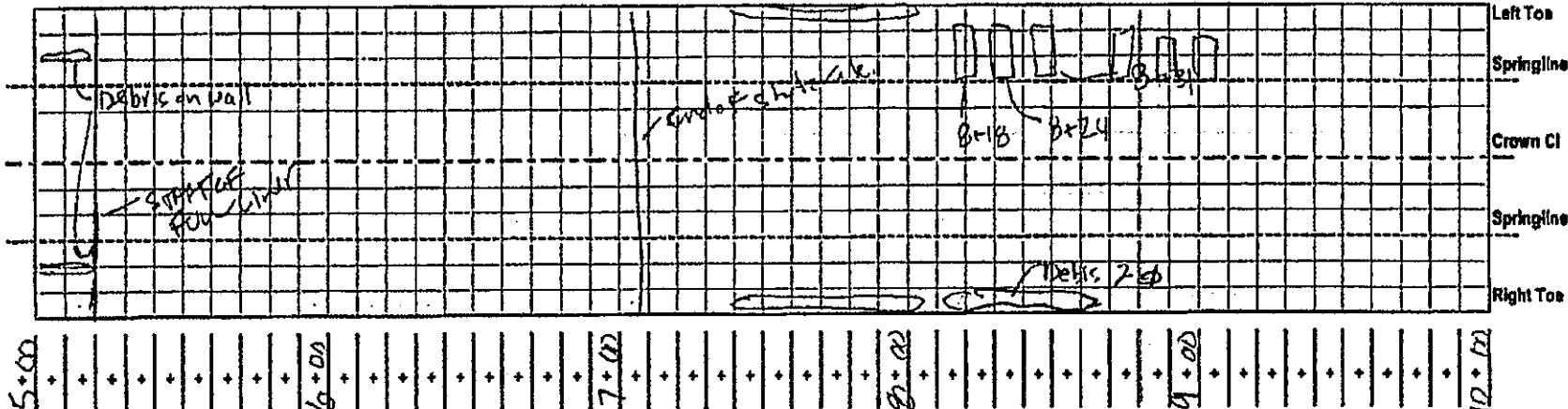
RWM

Inspector

KG

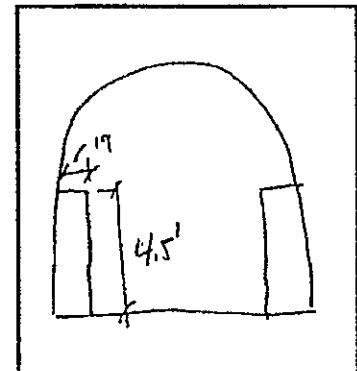
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2 of 20



Notes:

Item	Description
1	TUNNEL DIMENSION 7.3 x 5.9 (W) 8.5 (H) (m) Water 3.6
2	Debris on top of invert 3" full length
3	5+17 (short change, 7.3 (H) x 5.9 (W) 1.7 (W) (H) Water 3.6'
4	5+17 6.5 (H) x 10.0 (W) Water 3.6' Height 4.0' (4-8")
5	5+17 Water Behind liner
6	5+17 Back is weather and is soil, 1.1K
7	6+00 10.5 (H) x 5.95 (W) Water 3.6'
8	6+35 Lined (laminated) Sheet liner
9	6+35 6.3 (H) x 8.94 (W) Water 3.3
10	6+35 5.9 (H) x 5.24 1 Water 3.1'
11	6+35 Slight rise in invert.
12	6+35 POWERED invert start
13	6+40 6.0 (H) x 5.25 Water 3.3
14	7+08 End of sheet liner (5.5) x 5.3 Water 3.2
15	7+17 End of full liner (6.3 x 10.0) Water 3.5
16	7+17 7.3 x 7.5 (W) Water 3.3
17	7+40 to 8+0 Debris in invert
18	7+80 start of slabby rock possible bottom rag



Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scale:

Horizontal (1 Block) = 1
 Vertical (1 Block) = 1

NOTES:

20 8+18 13.1 (w) x 8.6 (h) water 4.4

21 8+18 12.3 (h) x 8.9 (w) water 4.4

22 8+18 2.5 \pm debris

23 8+24 9.5 (h) x 7.5 (w) water 4.0

24 8+31 8.2 (h) x 8.5 (w) water 4.3

25 8+71 12.5 (h) x 9.2 (w) 7.4 width from pillar (Pillar)

26 8+71 About 3' 6" of debris 8" and sandstone

27 8+76 11.2 (h) x 7.7 (w) water 4.1 (Pillar)

28 8+86 7.5 (h) x 7.9 (w) (Pillar)

29 8+86 Debris piled up 3.5' 2.5 \pm .

30 9+00 7.3 (h) x 8.6 water 4.1

31 9+20 small debris

32 9+40-45 Debris left sidewalk 6'-11" \pm

33 9+85 to 10+20 Debris on right side wall 3'-0" up to 2' \pm



Tunnel Condition Assessment Form

Project Name

Selah Mtn Tunnel

Client

SMID

Date and Time

11-5-14

Inspector

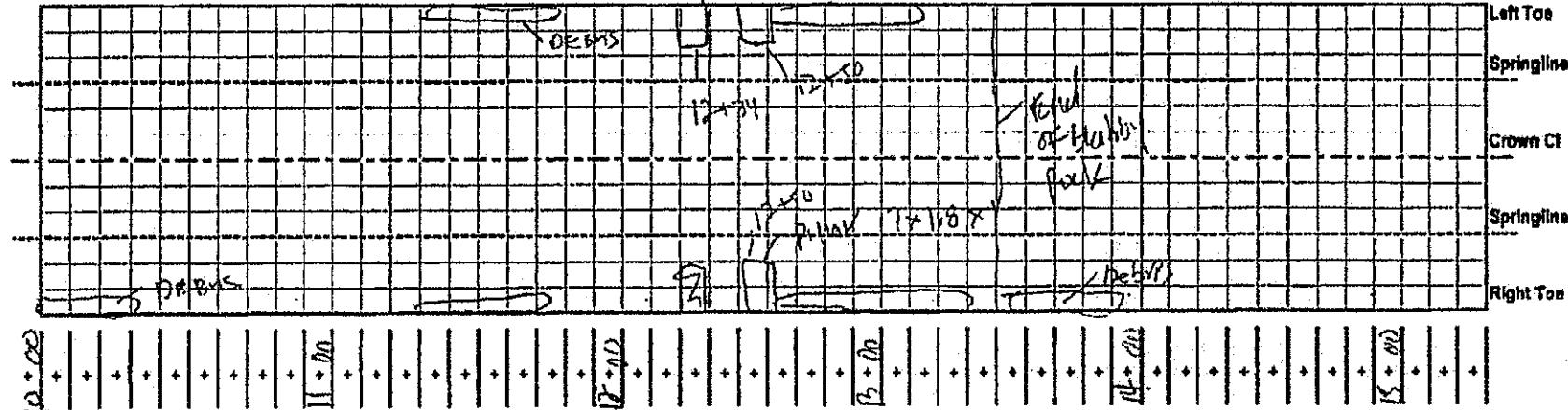
RJM

Inspector

KG

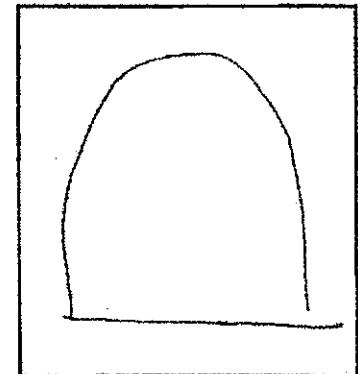
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3 of 20



Notes:

Item	Description
1	10+00
2	10+20
3	10+30
4	10+40
5	10+50
6	10+60
7	10+70
8	10+80
9	10+90
10	10+100
11	10+110
12	10+120
13	10+130
14	10+140
15	10+150
16	10+160



Tunnel Cross Section

Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scales:

Horizontal (1 Block) = 1
 Vertical (1 Block) = 1



CH2MHILL

Project Name

Selah Moxee Tunnel

Client

SMW

Date and Time

11-5-14

Tunnel Condition Assessment Form

Inspector

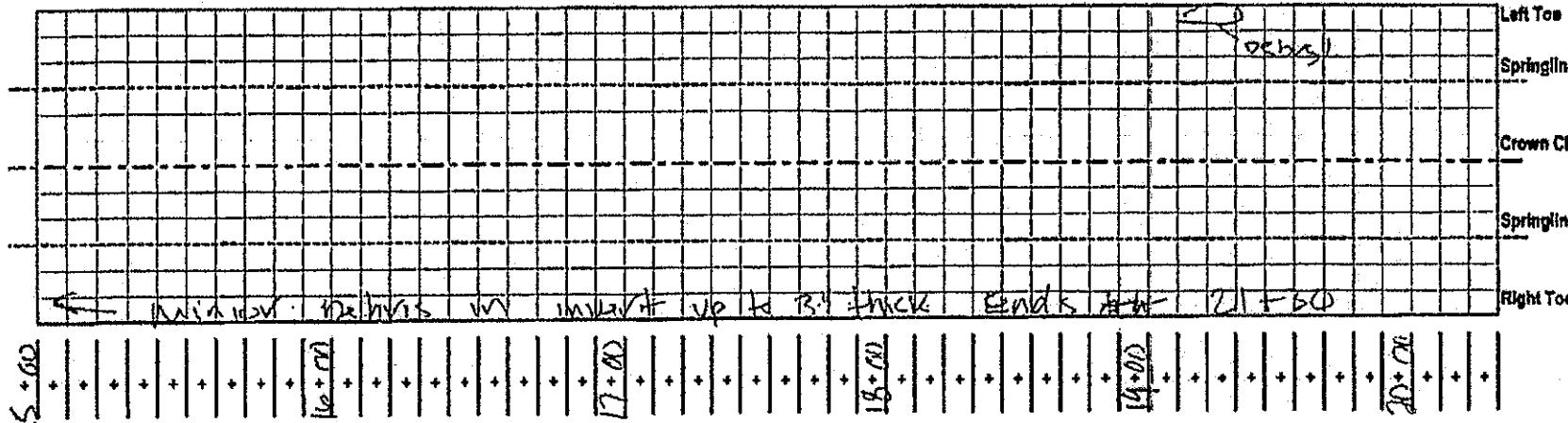
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Inspector

KGT

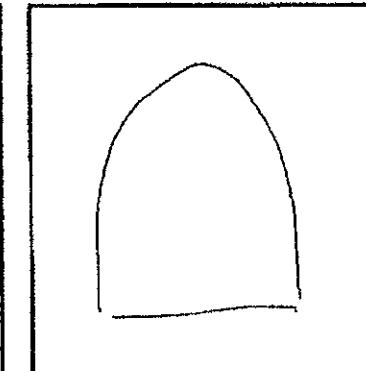
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4 of 20



Notes:

Item	Description
16+00	8.4(+) x 7.7(w) a/altv 3.1
17+00	Photo of good time
17+00	Acquisition in good area 0 of about 3" of sand and gravel
18+00	8.4(+) x 7.8 (w) altv 3.1
19+20 to 19+35	Debris left sidewall 2" 10" d
20+00	8.1(+) x 8.9 (w) altv 3.5



Tunnel Cross Section

Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scales:

Horizontal (1 Block) = 1
 Vertical (1 Block) = 1



Tunnel Condition Assessment Form

Project Name

Selah Maxee Tunnel

Client

SWID

Date and Time

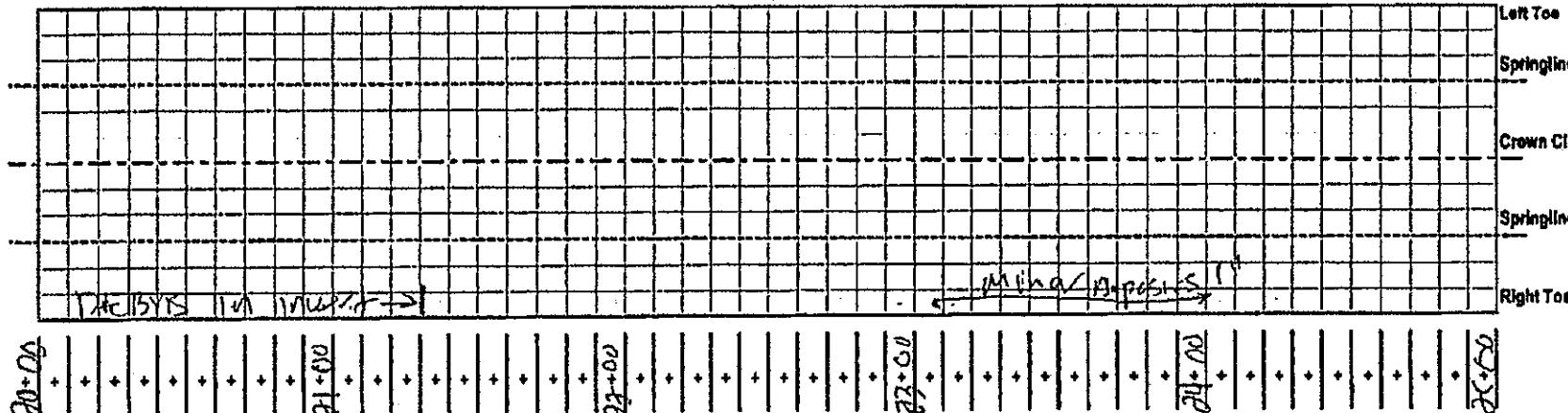
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Inspector

Inspector

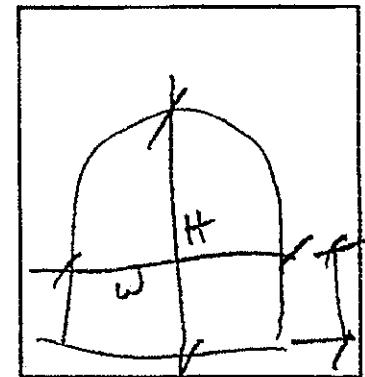
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RWH

KC
5 of 20

Notes:

Item	Description		
1	21+30	Find	0.1' 3' Dolomites in Tnkt
2	22+30	8.0 (H) X	water 4.2
3	24+00	7.8 (H) X	water 3.8



Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scale:

Horizontal (1 Block) = 1
 Vertical (1 Block) = 1



CH2MHILL

Tunnel Condition Assessment Form

Project Name

Client

Date and Time

Selah Moxee Tunnel

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Inspector

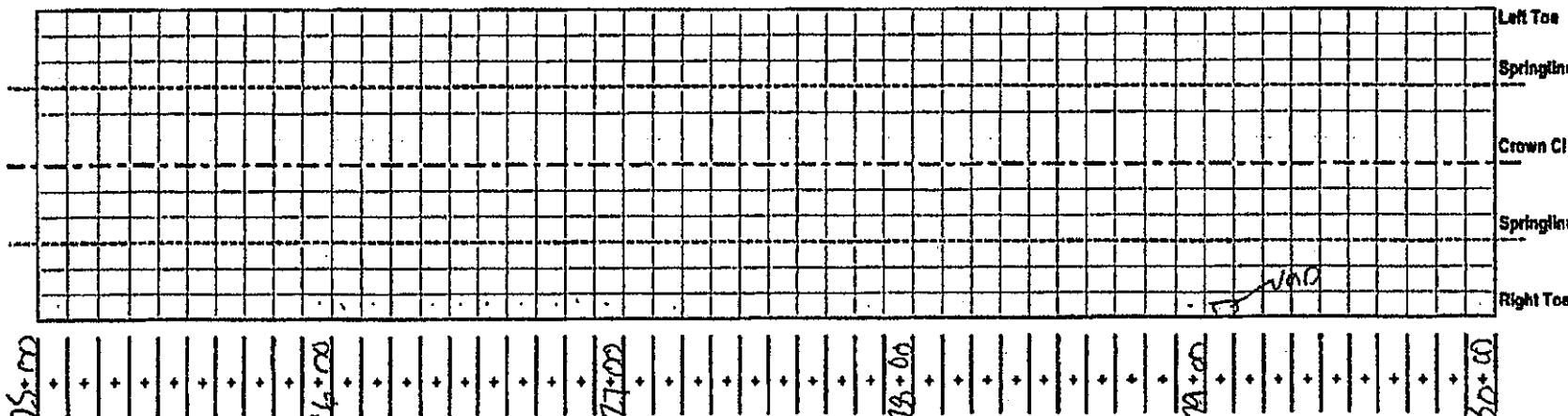
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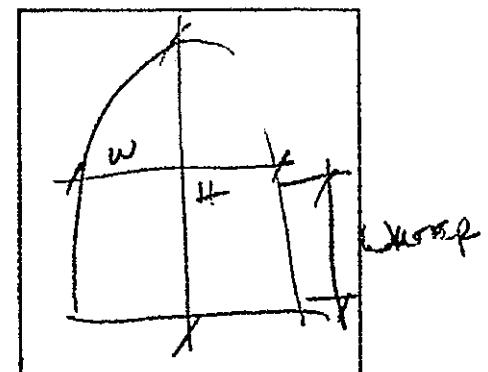
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6 of 10



Notes:

Item	Description	
1	26+OD 8.4 (H) X 9.9 (W)	WATER 4.0
2	28 HXW 8.7 (H) X 9.4 (W)	WATER 4.1
3	29+OD 10.0 2.8 (D) X 3.0 (W) 1.0" (H)	
4	30+OD 8.0 (H) X 9.5 (W) 1.0"	WATER 4.1



Tunnel Cross Section

Observation Checklist

- (1) **Geology (Rock Type)**
- (2) **Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)**
- (3) **Groundwater (Infiltration, location, rate)**
- (4) **Sedimentation (Composition, Depth, Location)**

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Seal

Horizontal (1 Block) = _____

Vertical (1 Block) = 1



CH2MHILL

Project Name

Selby Miner Tunnel

Client

SIAMID

Date and Time

11-5-14

Inspector

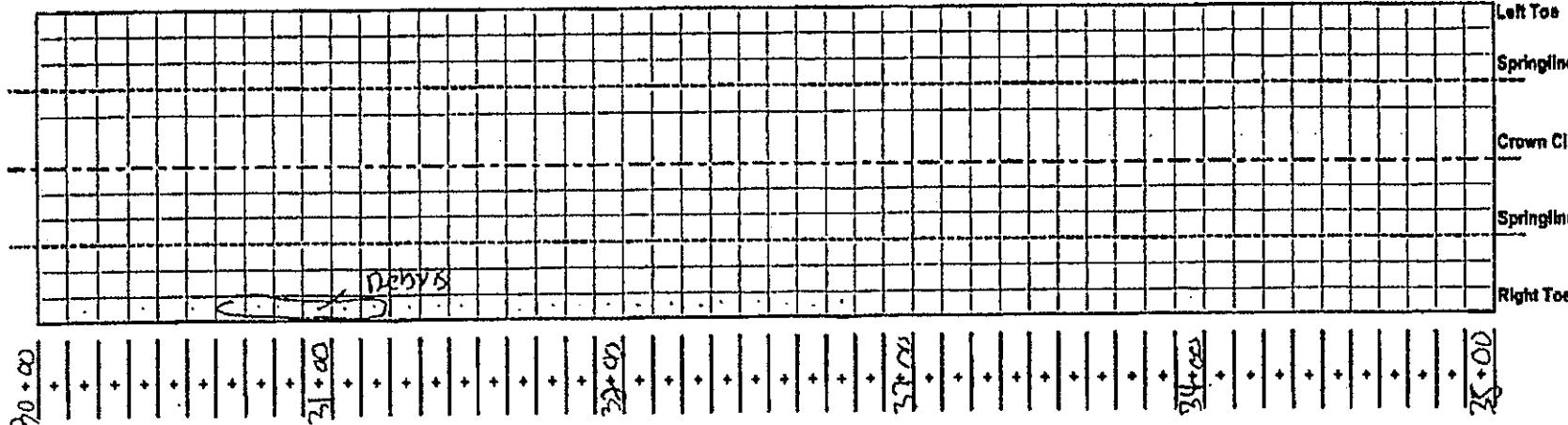
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Inspector

KG

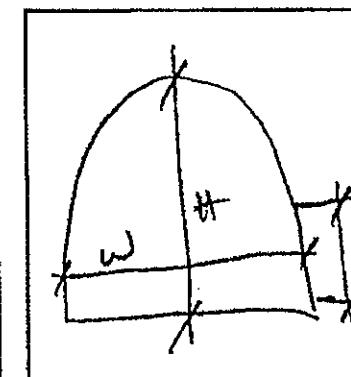
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Notes:

Item	Description
1	30 + 0 Start 0.8 m in new find 31 + 2.1 up to 6" water 4.0 center 4.0
2	32 + 0.0 7.4 (L) x 0.2 (W)
3	34 + 0.0 8.4 (L) x 9.2 (W)
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Tunnel Cross Section

Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

(5) Lined or Unlined (Indicate Rock Support)

(6) Lining (Composition and Condition)

(7) Rock Support (Type and Spacing)

Scale:

Horizontal (1 Block) = 1Vertical (1 Block) = 1



CH2MHILL

Tunnel Condition Assessment Form

Project Name

Client

Date and Time

Se-Jah Moxee (Anne)

SWARD

U.S.-14

Inspector

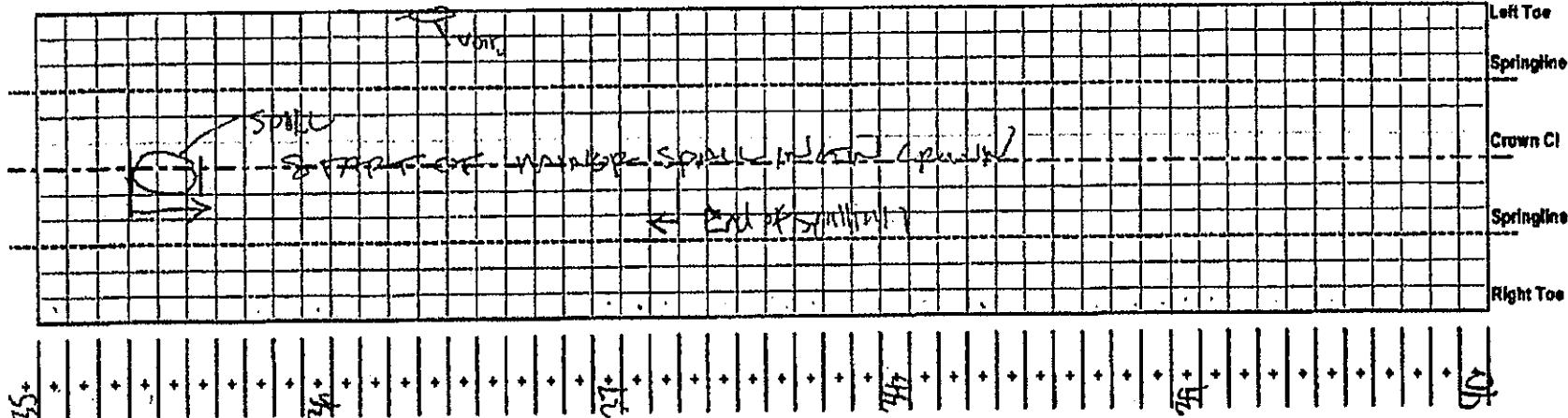
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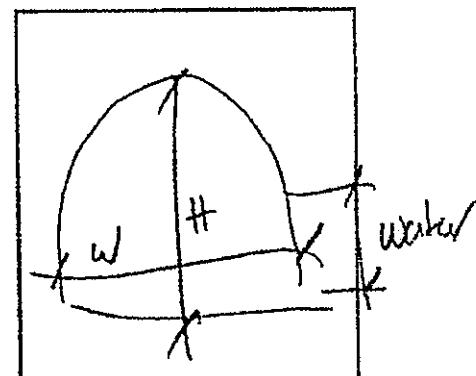
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Notes:

Item	Description
1	SPILL from 11 o'clock to 2 o'clock Debris in invert
2	25±50 picuure of spill
3	3(1+2) 7.8(4) x 9.9 water 4.0
4	36±72 to 31±40 void in sidewall 36" Deep
5	37±40 End of manuv Spalling in crown
6	38±72 7.2(4) x 7.7(4) water 4.0
7	410±20 8.2(4) x 9.9(4) water 4.3



Tunnel Cross Section

Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scalene

Horizontal (1 Block) = _____

Vertical (1 Block) =



CH2MHILL

Project Name

Selah Moxee Tunnel

Client

SMID

Date and Time

11-5-14

Tunnel Condition Assessment Form

Inspector

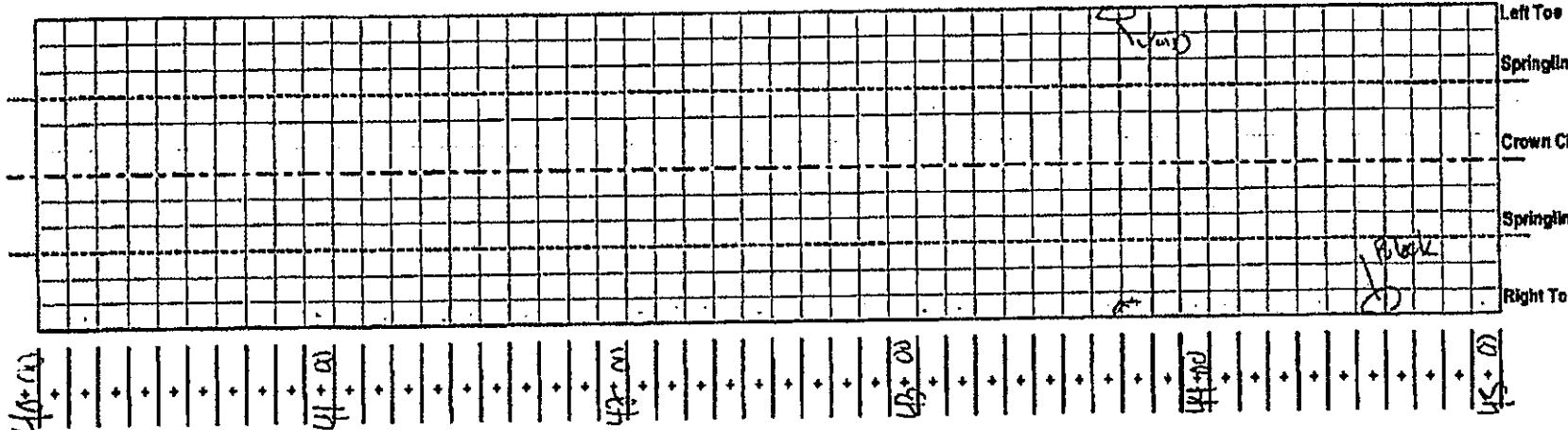
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Inspector

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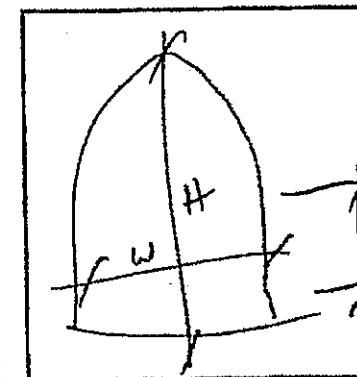
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Notes:

Item	Description
1	40' (top) 81, 81 (H) x 81, 1 (W)
2	42' + 75' to 43' + 50' void from 7' block to 9' block 2.5' deep
3	43' + 75' void 81, 1 (H) x 81, 2 (W)
4	44' + 60' block 2.5' x 2.1' x 1' Right sidewall



Tunnel Cross Section

Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

(5) Lined or Unlined (Indicate Rock Support)

(6) Lining (Composition and Condition)

(7) Rock Support (Type and Spacing)

Scale:

Horizontal (1 Block) = Vertical (1 Block) =



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Tunnel Condition Assessment Form

Project Name

Selah Moxee Tunnel

Client

SMID

Date and Time

11-5-14

Inspector

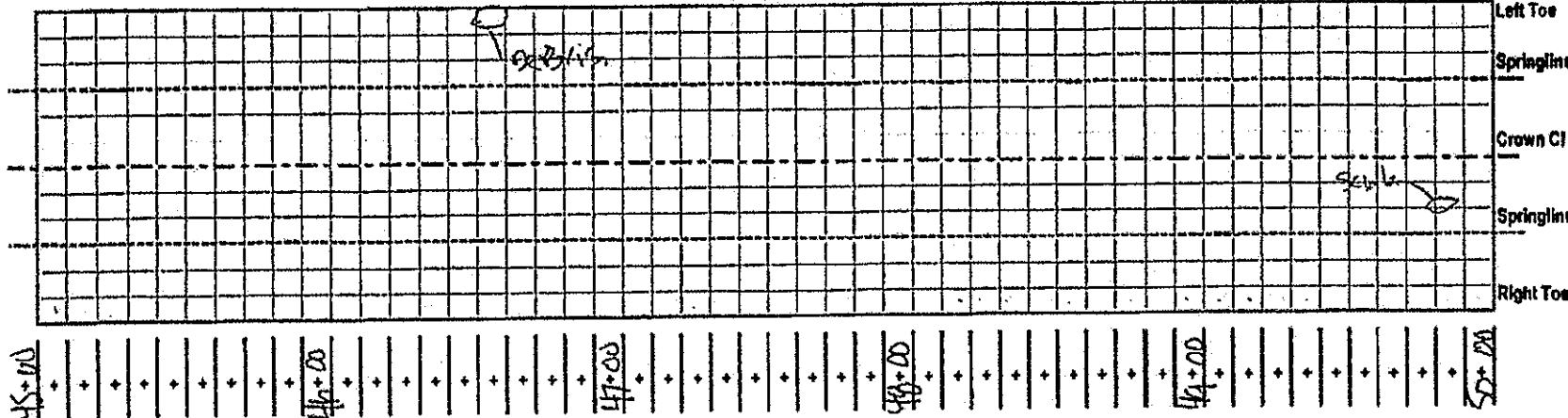
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Inspector

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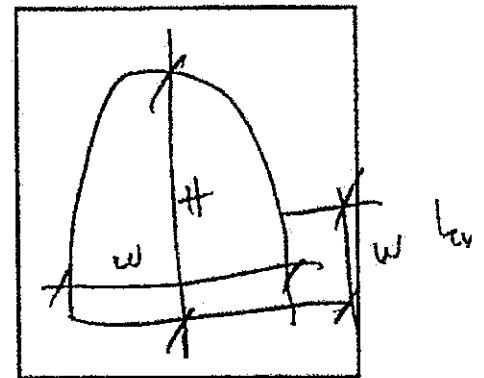
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Notes:

Item	Description
1	46+00 8.3 (+) x 0.0 (w)
2	47+55 - 57 minor debris side wall
3	47+60 (n.s. visible) less than 1 gpm. from block
4	48+00 8.4 (+) x 8.3 (w)
5	49+90 minor scaling bench
6	50+00 7.7 (4) x 10.0 (w) water 4/3



Tunnel Cross Section

Note: air flow 1 foot per second estimated by [redacted].

Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scale:

Horizontal (1 Block) = 1
 Vertical (1 Block) = 1



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Tunnel Condition Assessment Form

Project Name

Sebah Maxel Tunnel

Client

2009-1

Date and Time

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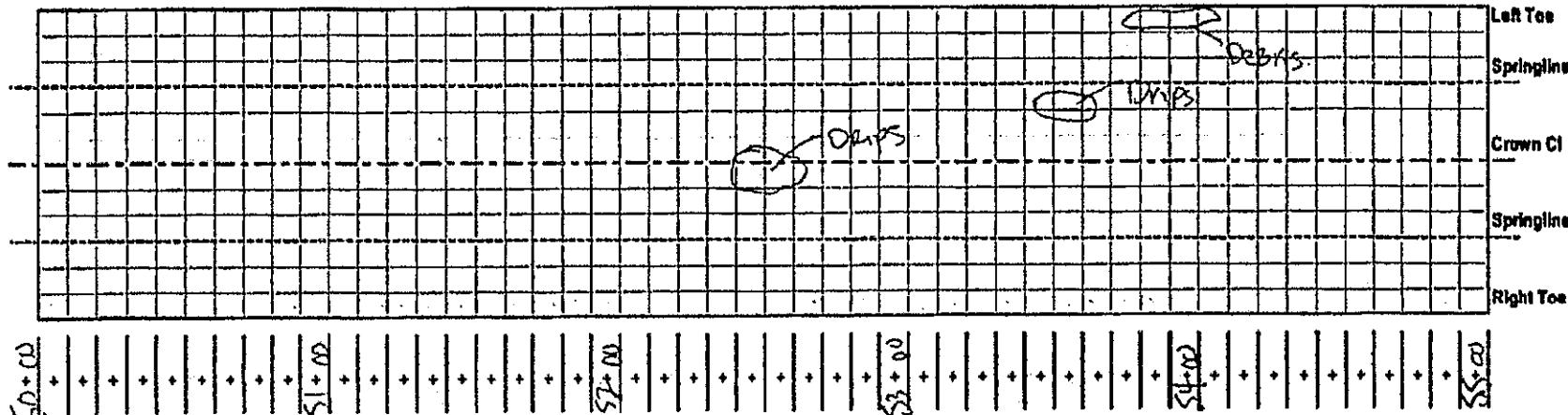
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Inspector

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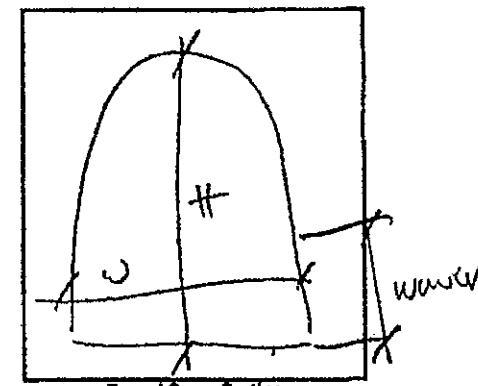
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Notes

Item	Description
1	S7+00 8.8 (H) x 9.6 (W) 11' lateritic
2	S7+55 MINER INFILTRATION IN CROWN 10' H/S
3	S3+05 to S2+55 MINER INFILTRATION THRU 10' OAKLE
4	S1+05 8.5 (H) x 9.2 (W) Upto 2 1/2' Cutface 3.7'
5	S3+00 to S4+10 DEBRIS Upto 2 1/2' most 3"



Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scalability

Horizontal (1 Block) =

Vertical (1 Block) =



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Tunnel Condition Assessment Form

Project Name

Selah Moxo Tunnel

Client

SWID

Date and Time

1-5-14

Inspector

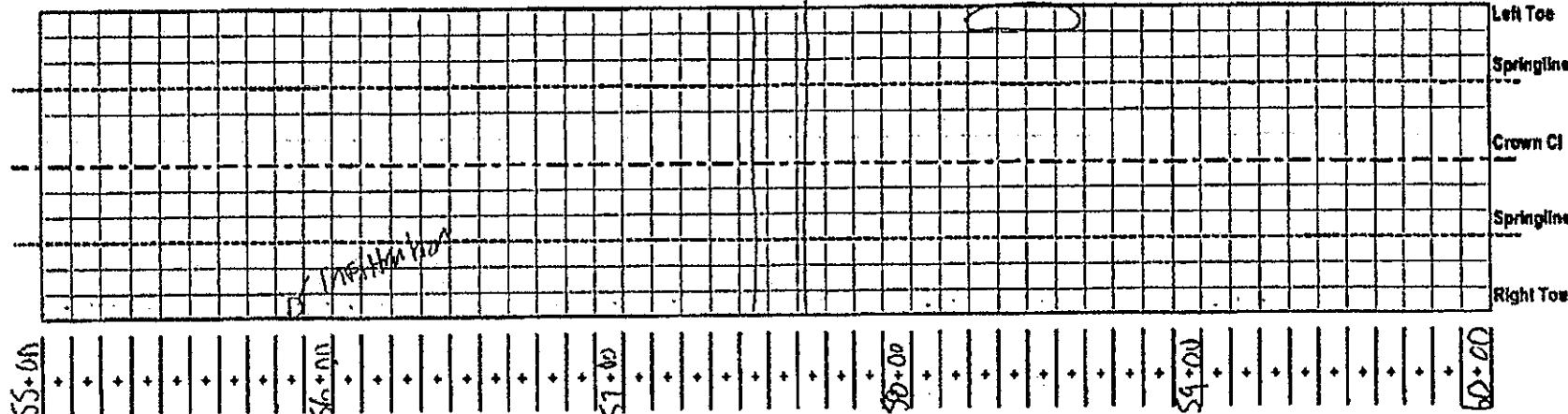
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Inspector

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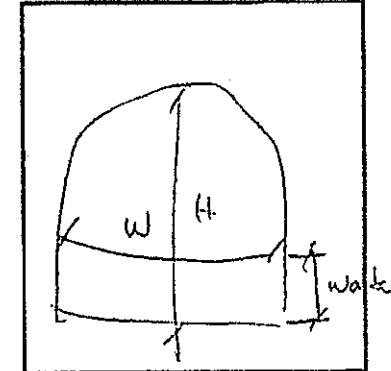
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Notes:

Item	Description
1	at station 55+00 infiltration Drips at 3 o'clock.
2	Station 55+00 Shallow 9.0 (H) x 9.0 (W) Water 3.8
3	57+41 Start of new (shallow) 9.0 (H) x 9.0 (W) Water 3.7
4	57+41 5.86 (H) x 7.60 (W) Water 2.9
5	57+41 Start of new w/ visual incl. length 13'-6" Water 2.9
6	57+54 End of shallow and start of cast in place concrete
7	57+54 Start of cast in place concrete
8	57+63 End of cast in place concrete
9	57+63 5.86 (H) x 7.60 (W) Water 2.8
10	57+63 7.60 (H) x 7.60 Water 3.7
11	57+63 Curvate (11'L) x (18'YT) x (4'R)
12	57+63 Water, mud up stream up to 1.5 deep.
13	57+64 End of concrete lining
14	58+00 9.0 (H) x 9.0 (W) Water 3.7
15	58+25 to 58+55 Drips up to 6' Ø 1.5 Deep Water 3.9
16	58+55 8.2 (H) x 8.1 (W)



Tunnel Cross Section

Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scale:

Horizontal (1 Block) = _____

Vertical (1 Block) = _____



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Tunnel Condition Assessment Form

Project Name

Client

Date and Time

Selah Morse Tunnel

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Inspector

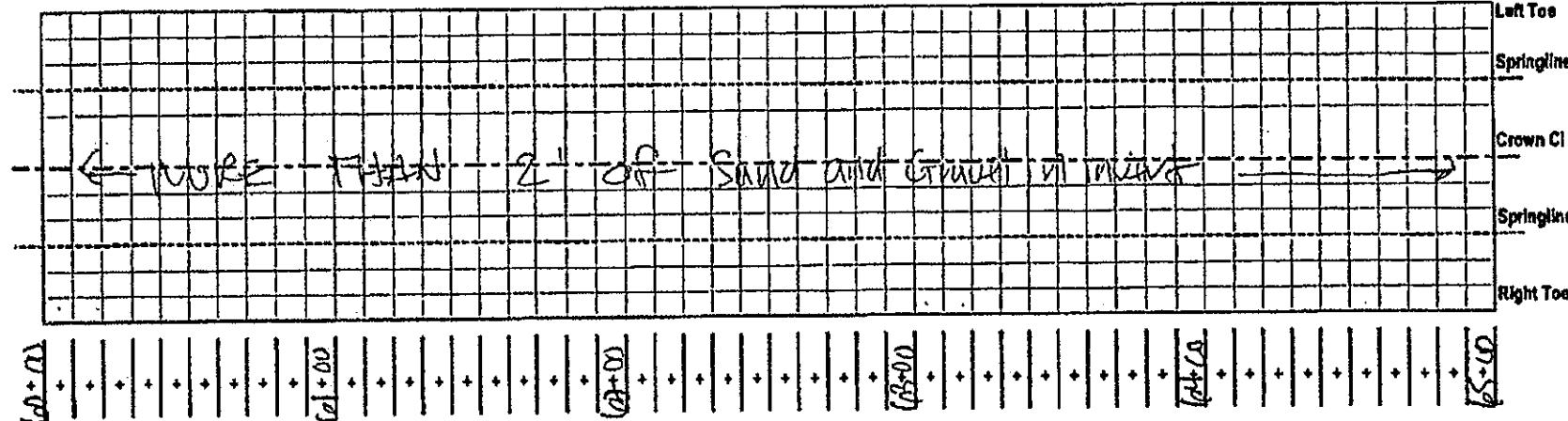
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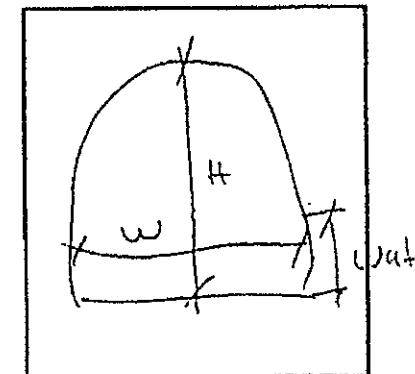
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13 of 70



Notes:

Item	Description
1	60700 64-7
2	8.3(H) V 8.4(W) 8.3(H) V 9.5(W)



Tunnel Cross Section

Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scales

Horizontal (1 Block) =

Vertical (1 Block) = 1



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Tunnel Condition Assessment Form

Project Name

Selah Moxee Tunnel

Client

SMID

Date and Time

11-5-14

Inspector

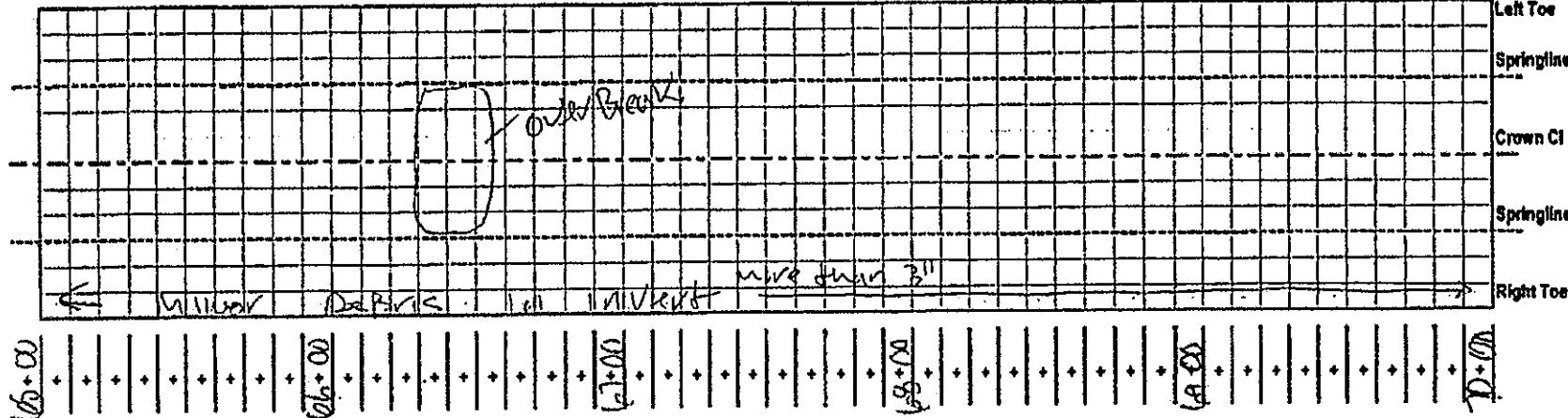
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Inspector

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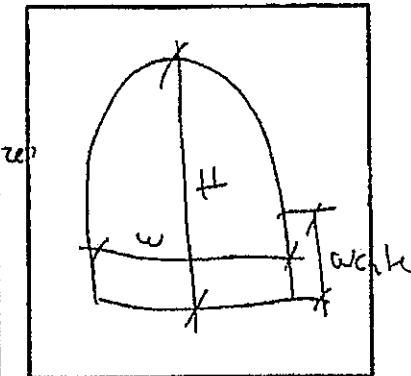
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Notes:

Item	Description
1	Left TGS 8.2 (H) x 8.4 (W) water 5.7
2	Left TGS to 50 overbank 10.6 (H) x 8.3 (W) water 4.4
3	Left TGS 8.7 (H) x 8.7 (W) water 4.5
4	Debris in tunnel more than 3' water 10.4
5	Left TGS to 55 debris in sidewall up to 10.4 water 4.1



Tunnel Cross Section

Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scale:

Horizontal (1 Block) = 1Vertical (1 Block) = 1



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Tunnel Condition Assessment Form

Appendix A

Project Name

Selah Moxee Tunnel

Client

SWID

Date and Time

11-5-14

Inspector

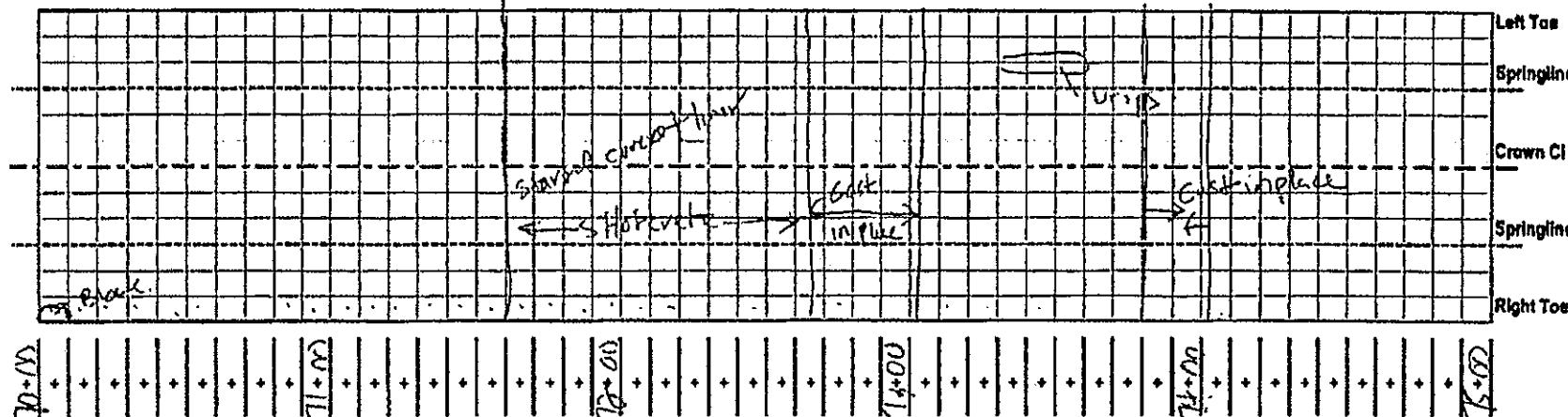
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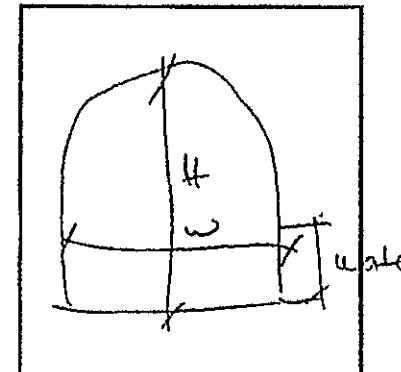
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Notes:

Item	Description
1	70+00 Block side wall 11" d
2	71+02 Start of concrete liner cast in place paired invert
3	71+07 7.6cp(H) x 9.8(w) water (4.5)
4	71+02 6.4(H) x 6.0(w) water (4.1)
5	71+02 Start of lining 4.3' 15" at concrete.
6	Drains in sidewall 2" dia extend 15" in.
7	Active Drill
8	Structures in crown and the back to cast in place
9	Drains in cast in place liner.
10	End of cast in place liner
11	73+01 6.05(H) x 6.11(w) water 4.0
12	73+06 7.9(H) x 8.2(w) Curve 12, 14, 13. water 4.6
13	73+20 to 72+52. Drip left side wall in Octok.
14	73+82 Start cast in place liner
15	72+87 7.2(H) x 7.7(w) water 4.4
16	72+02 6.42(H) x 5.8(w) water 3.9
17	73+82 Lining 4.6' 17' (9') (6') concrete lining.
18	74+02 End of cast in place liner w/ invert



Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scale:

Horizontal (1 Block) = 1Vertical (1 Block) = 1

19 74+02 6.4(H) x 6.0(w)

water 3.9

A-16

21. 74+07 8.0(H) x 8.7(W) Water 4.5 Appendix A

22. 74+02 concrete 20" (L), top (15), 17" (R)

23. 74+00 Infiltration Drips. 10 o'clock and around
Liner at 74+02 End

24. 74+20 to 74+30 Infiltration crown Drips.

25. 74+73 Cast in place liner w/ void about up to 10'
w/ rock fall. Rock support rear

26. 74+73 7.7(H) x 6.9 Water 4.2

27. 74+73 Appears to be about 3" of crown

28. 74+73 6.35(H) x 6.0(W) Water 3.8

29. 74+84 6.4(H) x 6.0(W) Water 3.8

30. 74+80 7.9(H) x 9.6(W) Water 4.2





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Tunnel Condition Assessment Form

Appendix A

Project Name

Selah Mtn Tunnel

Client

SMID

Date and Time

11-5-14

Inspector

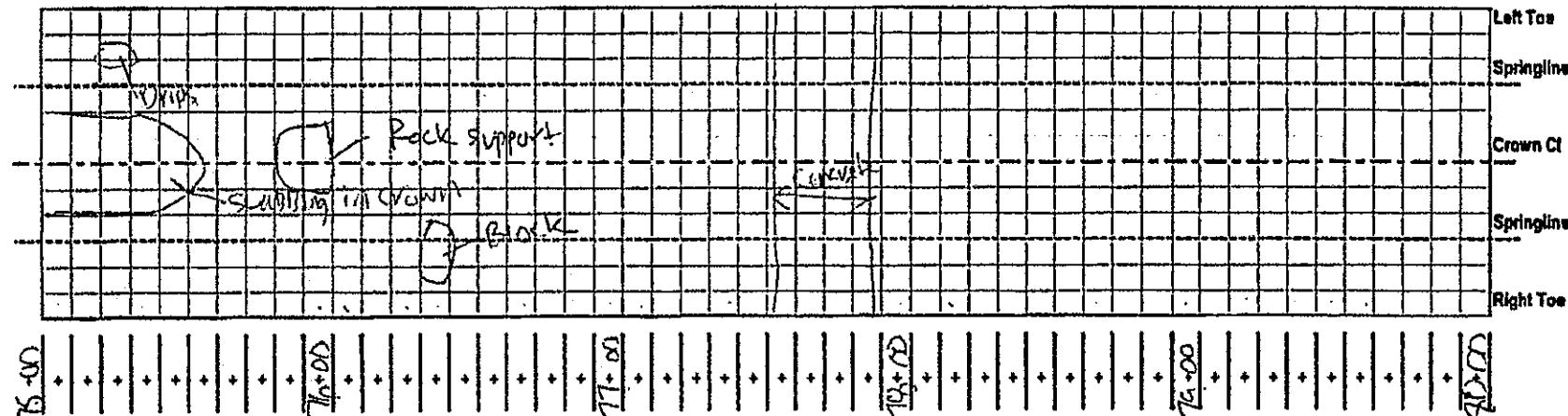
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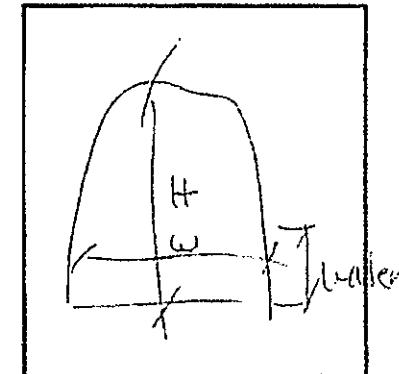
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1 of 20



Notes:

Item	Description
1	75+20 Infiltration Drains left sidewall 10 arched
2	75+00 to 75+20 Slabbing in crown
3	75+11 to Infiltration left and right sidewall
4	75+20 1.7 ft x 11.9 ft water 4.4
5	75+90 to 76+10 Flat roof potential for slabbing rock swap possible.
6	(bottom) 11.9 ft right side wall concrete rock contact 8' x 6' w/ water at front infiltration (infiltration)
7	77+00 to 77+50 Slabbing for/ may require support
8	77+00 start of concrete liner 11
9	77+7 7.7 (H) x 7.4 (W) water 4.2
10	77+72 6.3 (H) x 5.9 (W) water 3.7
11	77+72 church 45 ft (13) (15) (7)
12	77+72 void behind liner at least 5"
13	77+72 void in liner 18 ft x 3.12" to rock line. / is 3" thick
14	77+96 end of concrete liner
15	77+96 infiltration along length of 1.10' (1.00')



Tunnel Cross Section

Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scale:

Horizontal (1 Block) = 1

Vertical (1 Block) = 1

6 77+96

6.2 (H) x 6.03 (W)

min in line minimum 2 m

water 7.6

				Appendix A
18	78+00	8.5(H) x 8.3(W)	water	4.6
19	77+96	Distance from liner to Rock 31"(T), 10"(L), 24"(R)		
20	78+10	Start of concrete liner		
21	78+10	8.0(H) x 8.1(W)	water	4.4
22	78+10	6.1(H) x 3.6(W) 6.0(W)	water	3.6
23	77+96 to 78+10	Infiltration crown Drips		
24	78+30	6.2(H) x 6.0(W)	water	3.7
25	78+25	Infiltration Drps.		
26	78+30	Haunch 4.5' (14" L), 14"(R), 11(R)		
27	78+30	7.9(H) x 7.8(W)	water	4.5



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Tunnel Condition Assessment Form

Appendix A

Project Name

Selah Moxee Tunnel

Client

SMID

Date and Time

11-5-14

Inspector

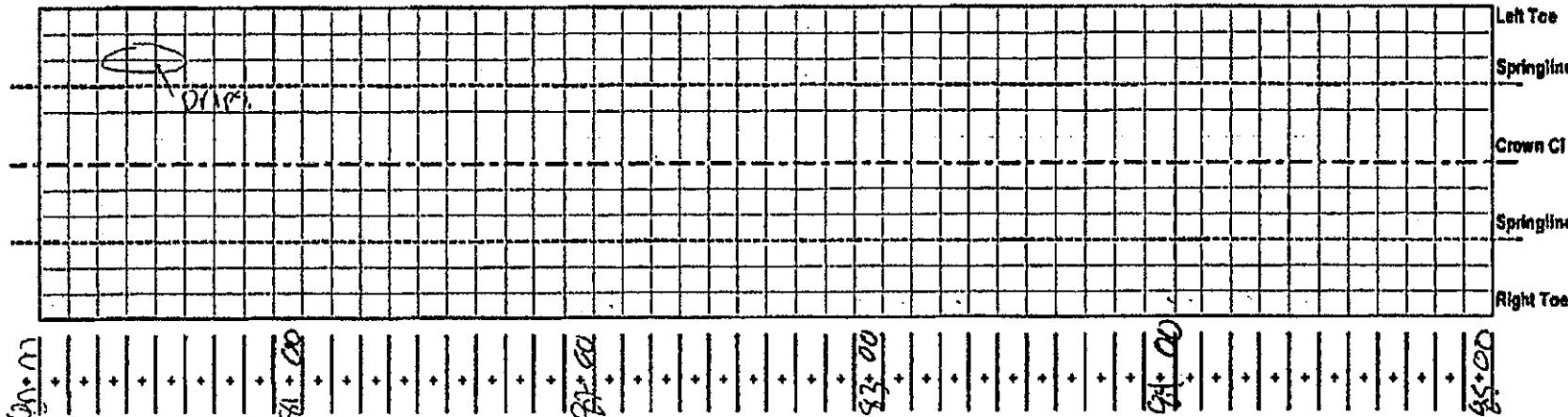
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Inspector

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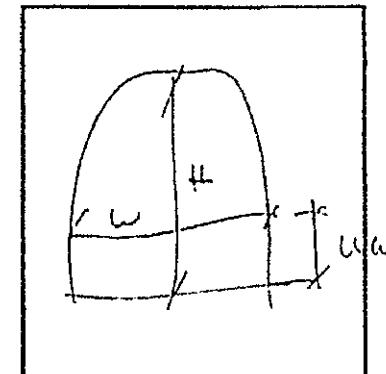
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Notes:

Item	Description		
1	80+00	8.6 (H) x 4 (W)	water 4.6
2	80+40	to 80+60	DRIVE 10 ft Side wall 10' arched
3	80+80	81+00	CAVITY / CAVY River
4	81+00	10.2 (H) x 10.4 (W)	water 4.3
5	82+00	0.2 (H) x 7.4 (W)	water 4.3
6	82+00	Shirt RC concrete liner	
7	82+00	7.7 (H) x 8.7 (W)	water 4.0
8	82+90	CONCRETE 8" (H) 4" (T) 5" (R)	16. inch w/c
9	82+90	10.4 (H) x 10.7 (W)	water 3.5
10	82+90	10.2 (H) x 10.7 (W)	water 3.5
11	82+95	19.1 (H) : 4" (T) 11" (R)	
12	82+95	7 (H) x 7.7 (W)	water 4.1
13	83+70	to 83+20	DRIVE 10 ft and 10 ft Wall 4" (H) 10' thick
14	84+00	7.8 (H) x 9.7 (W)	water 4.2



Tunnel Cross Section

Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Fissures, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scale:

Horizontal (1 Block) = 1

Vertical (1 Block) = 1



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Tunnel Condition Assessment Form

Project Name

Selgh Muxee Tunnel

Client

SMID

Date and Time

11-5-14

Inspector

RWM

Inspector

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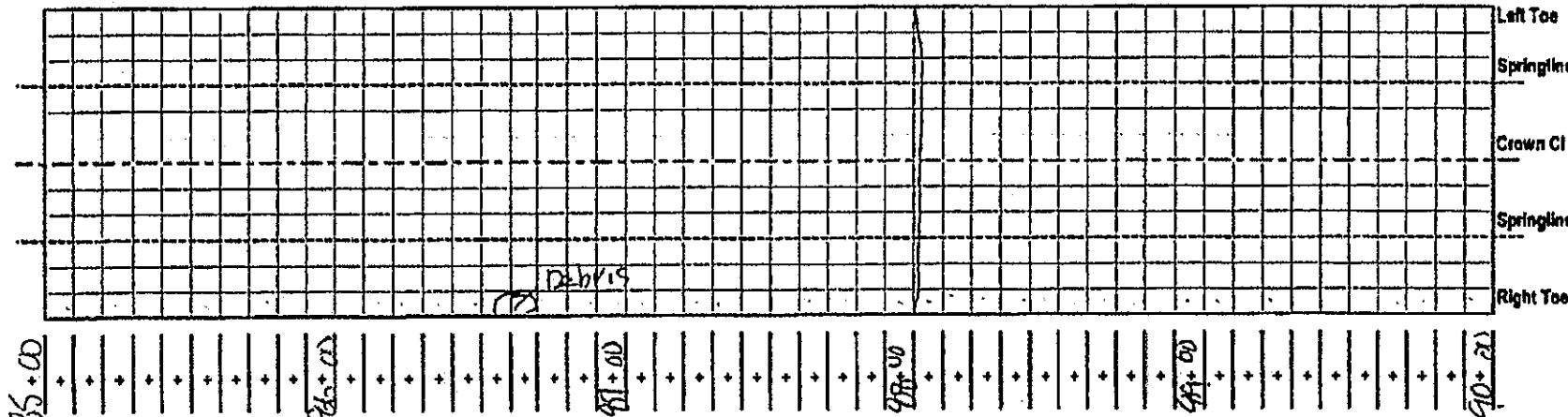
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17

24

79



85+00

85+00

85+00

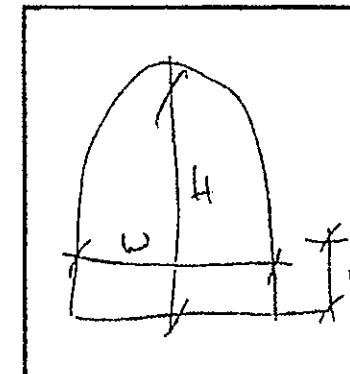
85+00

85+00

85+00

Notes:

Item	Description
1	86+722 1.4(H) x 7.7(W) water 4.8
2	86+722 + 1.2 Debris right side, up to 1' H
3	86+722 Debris cut (right cut) 1.12' H
4	86+722 1.9(H) x 9.3(W) water 4.4
5	86+722 1.9(H) x 6.0(W) water 3.7
6	86+722 Haunch 4.5 11'(L), 12'(T), 6'(R)
7	86+722 End of liner
8	86+722 VOID OVER liner 4' H water greater than 3'
9	86+722 1.4(H) x 9.3(W) water 3.8
10	86+722 8'(L) 10'(T) 5'(R) water 4.1
11	86+722 1.9(H) x 9.3(W) water 3.8
12	86+722 (wall 88+60) 5.2(H) x 7.4(W) water 3.8
13	86+722 1.1(H) x 10.0(W) water 7.2
14	86+722 End of liner
15	86+722 7(L) 10(T), 11(R) Haunch 4.4
16	86+722 1.2(H) x 10.0(W) water 3.7
17	86+722 8'(L) x 7.2(W) water 4.5
18	86+722 7(L), 14(T), 14(R)



Tunnel Cross Section

Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scale:

1

Horizontal (1 Block) = _____

Vertical (1 Block) = _____

19 Wall station 88+88 ours 88+86

22 89 ft 89+30 to 89+40 Infiltration Right side wall 3 o'clock
Drips,

23 89+65 to 89+85 Debris left and right sidewall
2'-0" thick up to 12" ϕ

23 89+70 11.8 (H) x 10.0 (w) water 3.8



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Tunnel Condition Assessment Form

Project Name

Selah Motor Tunnel

Client

SMID

Date and Time

11-5-14

Inspector

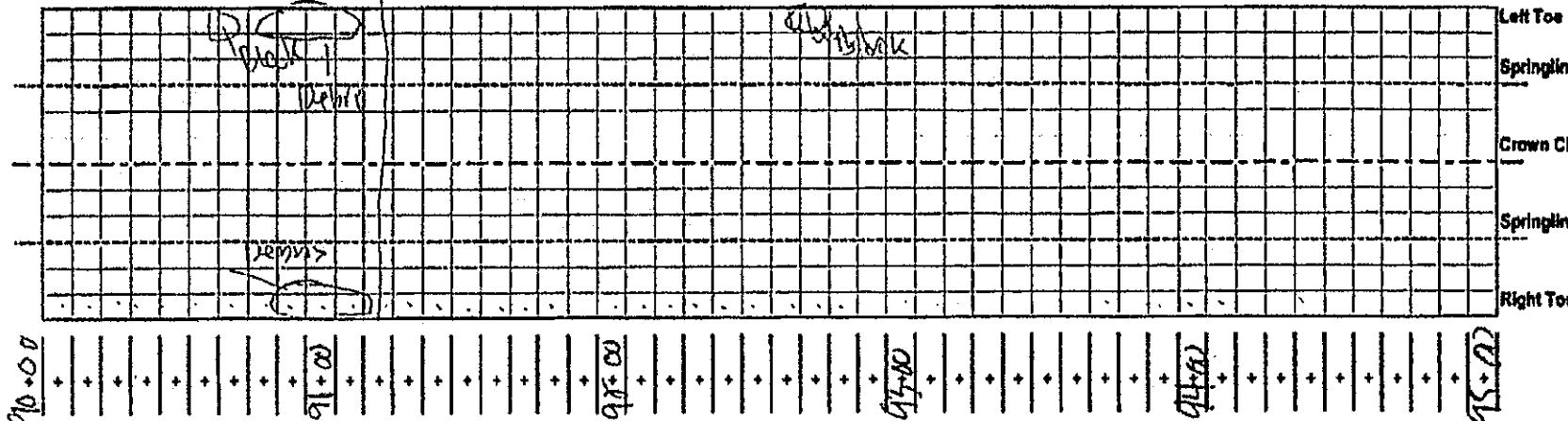
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Inspector

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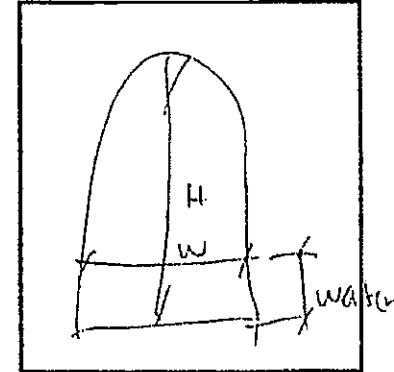
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Notes:

Item	Description
1	90+06
2	90+06
3	90+06
4	90+20(2)
5	90+21
6	90+22
7	90+23
8	90+23
9	90+23
10	91+07 To 91+12
11	91+13
12	91+15
13	91+15
14	91+15
15	91+31
16	91+31
17	91+31
18	91+31



Tunnel Cross Section

Observation Checklist

- (1) Geology (Rock Type)
- (2) Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)
- (3) Groundwater (Infiltration, location, rate)
- (4) Sedimentation (Composition, Depth, Location)

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scale:

Horizontal (1 Block) = 1Vertical (1 Block) = 1

9. 91+52

Start of Concrete Liner

20.	91+31	to 91+52	Debris Left and Right sidewalls up to 12" ϕ 2' thickness	
21	91+52		8.3(H) x 9.6(W)	water 3.4
22	91+52		6.1(H) x 6.0(W)	water 3.1
23	91+52		aunch 4.5, 17(L) 10(T) 7(R)	
24	91+52	to 92+00	Few Rocks 5" ϕ in invert.	
25	92+57		5.9(H) x 6.0(W)	water 2.7
26	92+57		End of concrete cast in place liner.	
27	92+60		7.5(H) x 9.1(W)	
28	92+57		11(L), 17(T), 15(R)	water 3.6
29	92+57		VOID Behind liner on right sidewall	
30	92+91	(wall 92+51)	Start of liner	57
31	92+57	+ 92+91	Debris in invert up to 8" ϕ	30
32	92+91		8.3(H) x 7.9(W)	4 91 water 3.8



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Tunnel Condition Assessment Form

Project Name

Y Selah Moyses Triple

Client

2001

Date and Time

1-5-4

Inspector

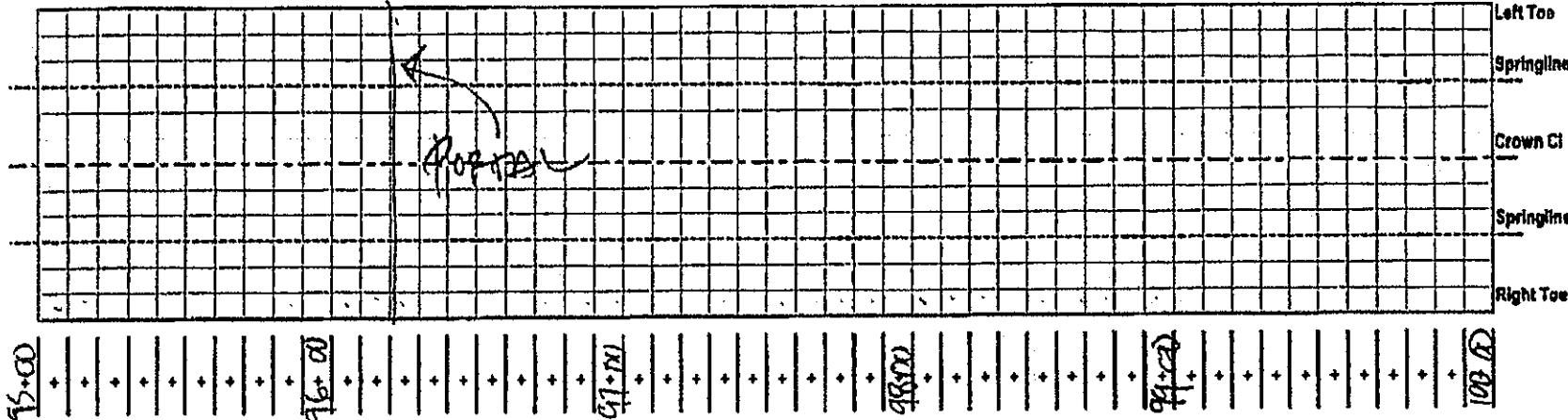
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Inspector

165

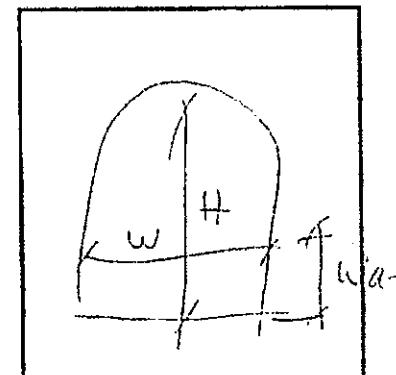
Sheet

20 of 20



Notes:

Item	Description
1	96+70 to 45+30 110 hours in interval. 5' 0"
2	110+110 to 96+70 Points 100 1100 ft up to 2' -0"
3	96+70 to 96+70 0.5' (1') x 2' (1')
4	96+70 to 96+70 Knobline 1100 ft interval
5	96+70 End of tunnel 7.1 (1') x 4.5 (1')
6	96+70 1100 ft interval



Tunnel Cross Section

Observation Checklist

- (1) **Geology (Rock Type)**
- (2) **Discontinuities (Joints, Shears, Faults, Foliation, Orientation, location, Description)**
- (3) **Groundwater (Infiltration, location, rate)**
- (4) **Sedimentation (Composition, Depth, Location)**

- (5) Lined or Unlined (Indicate Rock Support)
- (6) Lining (Composition and Condition)
- (7) Rock Support (Type and Spacing)

Scale:

Horizontal (1 Block) = _____

33	92+91	6.7 (H) x 6.0 (W)	water 3.3
34	92+91	Haunch 4'-9", 7(L), 14(T), 7(R)	
35	93+35	End of concrete thru	
36	93+35	6.5 (H) x 6.0 (W)	water 3.4
37	93+35	13(L), 8(T), 6(R)	
38	93+35	Minor void Behind liner	
39	93+37	7.9 (H) x 8.3 (W)	water 3.5
40	93+37 to 93+80	Minor Debris invert	3" ϕ
41	94+00	7.8 (H) x 8.3 (W)	water 3.8

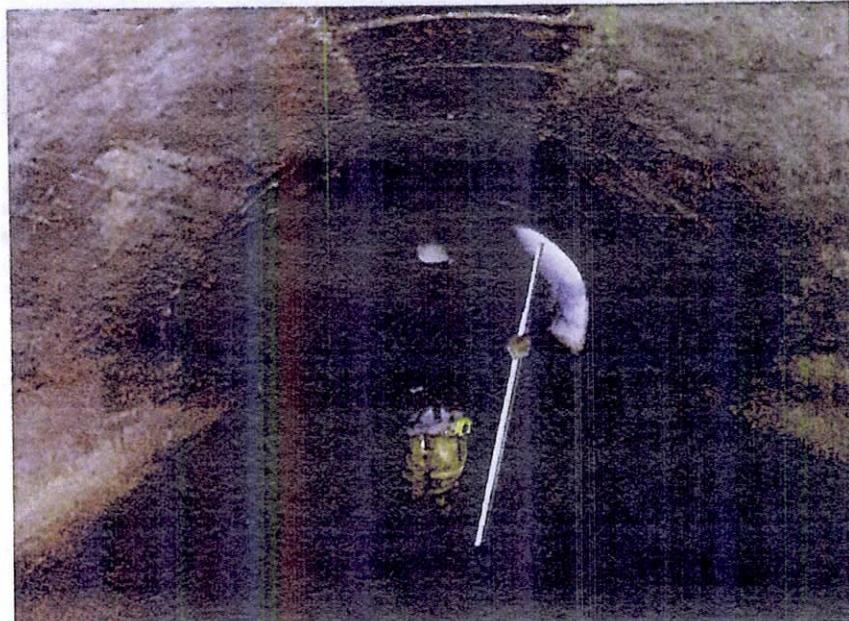
Appendix B Photos



Station 0+00, Tunnel Upstream Portal



Station 1+50, Debris in Invert



Station 0+50, Tunnel Liner



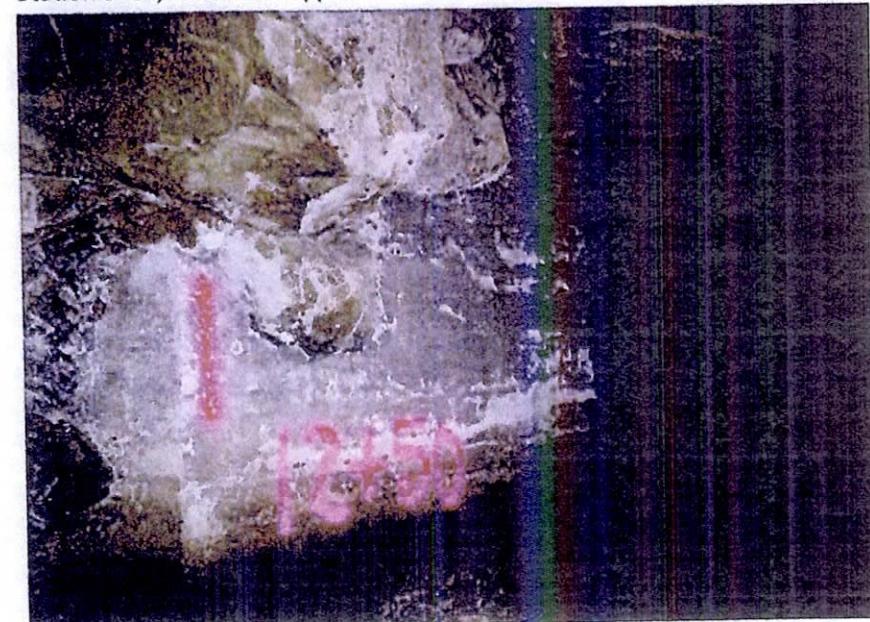
Station 8+18, Rock Block in Invert



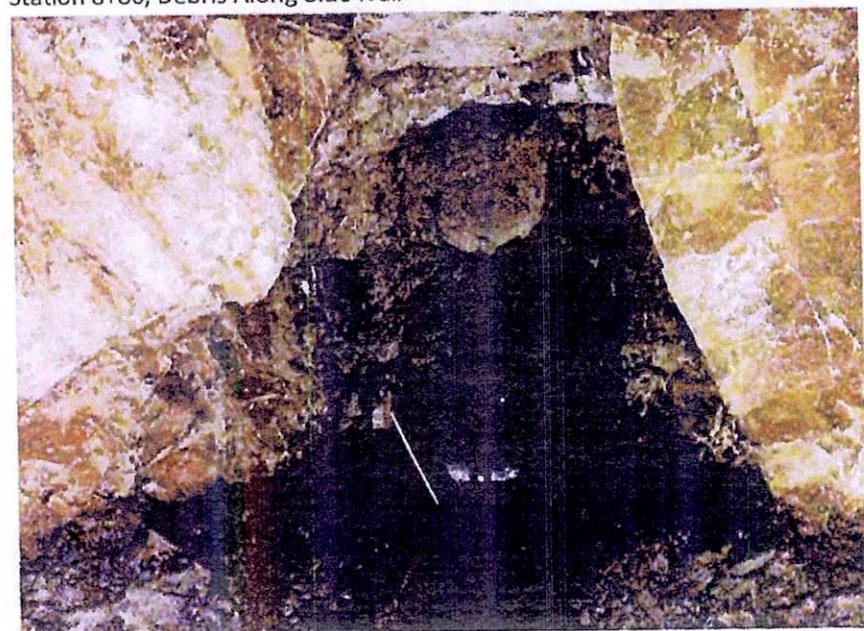
Station 8+24, Concrete Support Columns



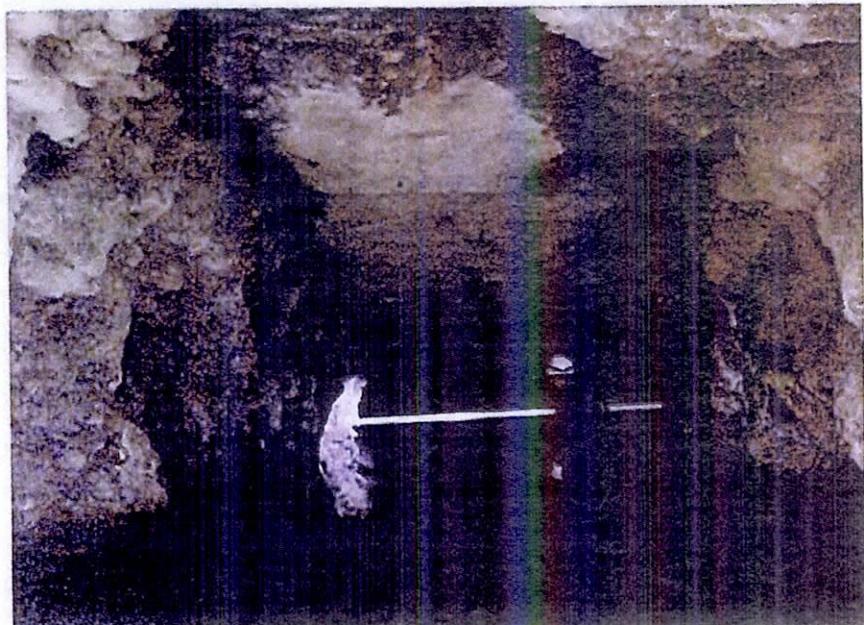
Station 8+86, Debris Along Side Wall



Station 12+50, Concrete Support Column



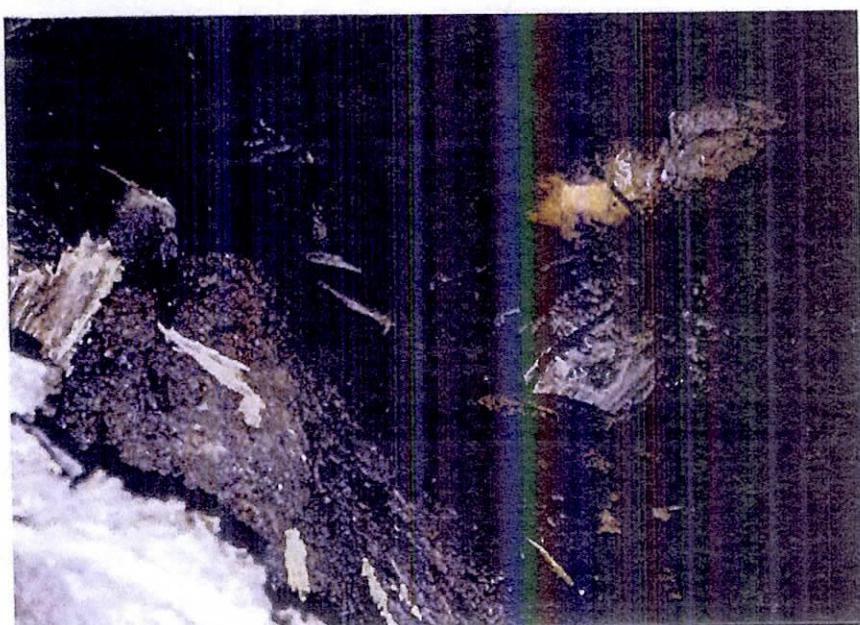
Station 13+40, End of Overbreak



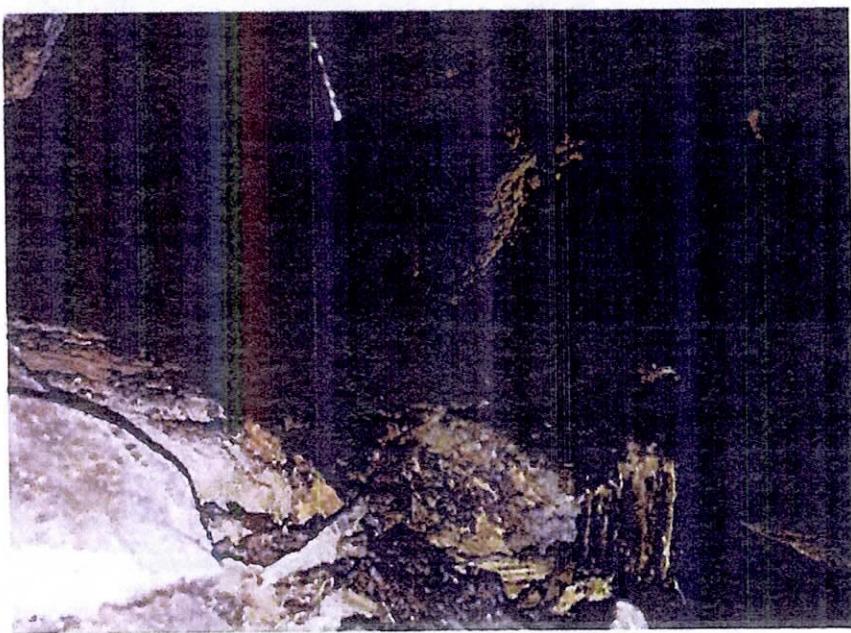
Station 70+00, Overbreak



Station 74+30, Blocks Resting on Tunnel Liner



Station 74+73, Debris on Tunnel Liner-1



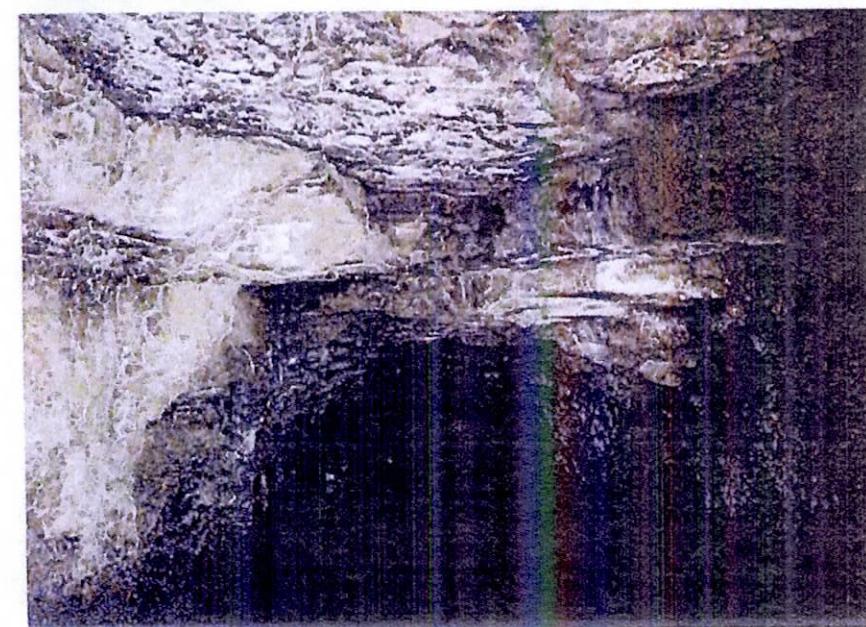
Station 74+73, Debris on Tunnel Liner-2



Station 74+73, End View of Tunnel Liner



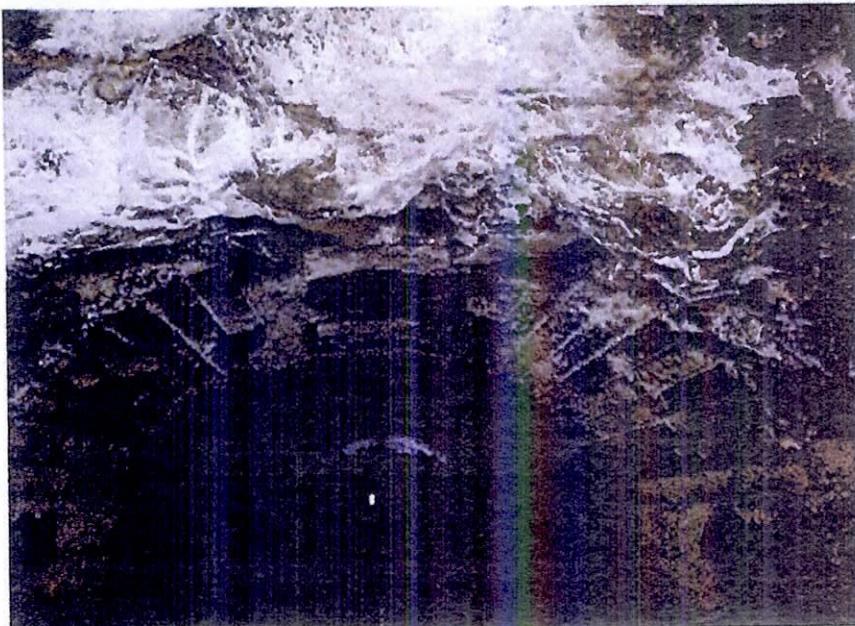
Station 74+73, Void Above Tunnel Liner



Station 75+00, Slabby Rock



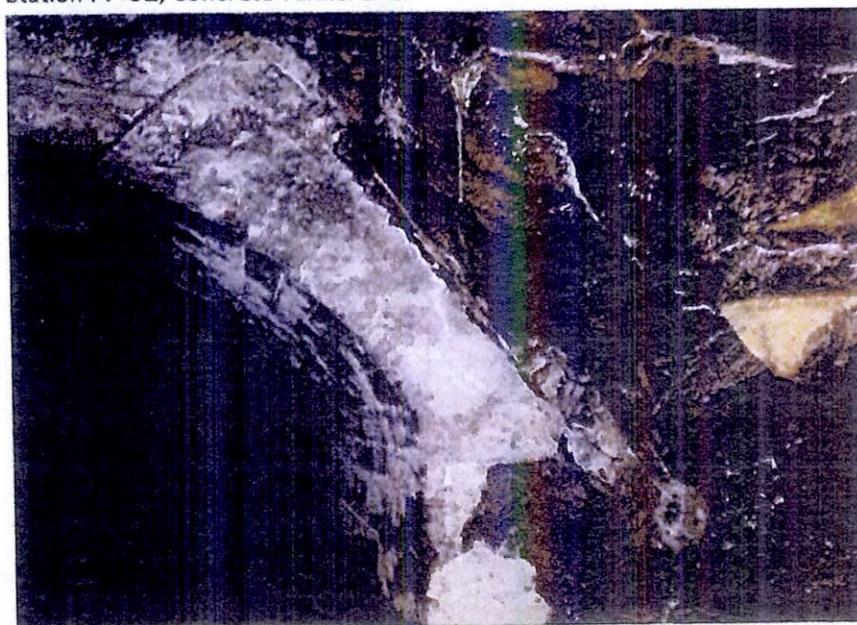
Station 77+00, Peaking in Tunnel



Station 77+52, Concrete Tunnel Liner



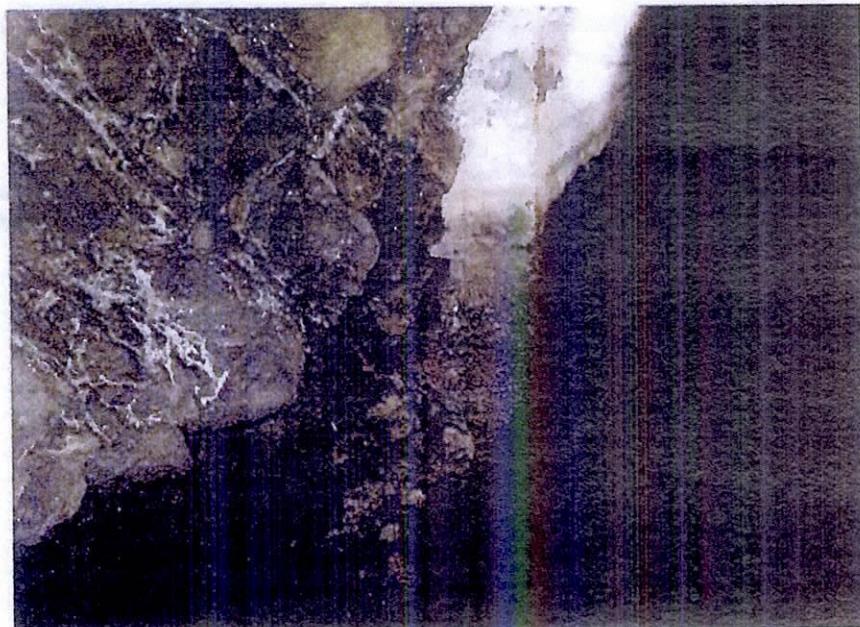
Station 82+80, Concrete Tunnel Liner



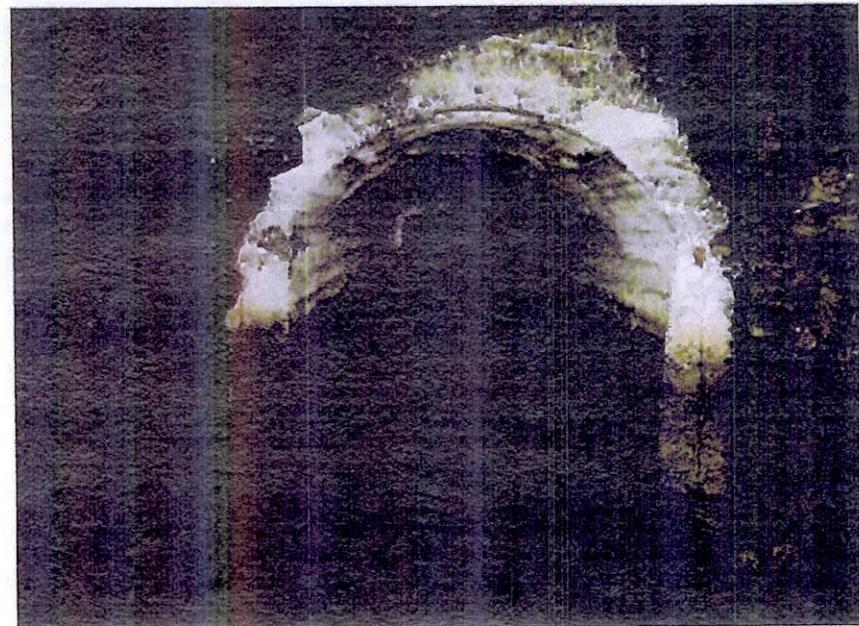
Station 82+80, Void Behind Tunnel Liner



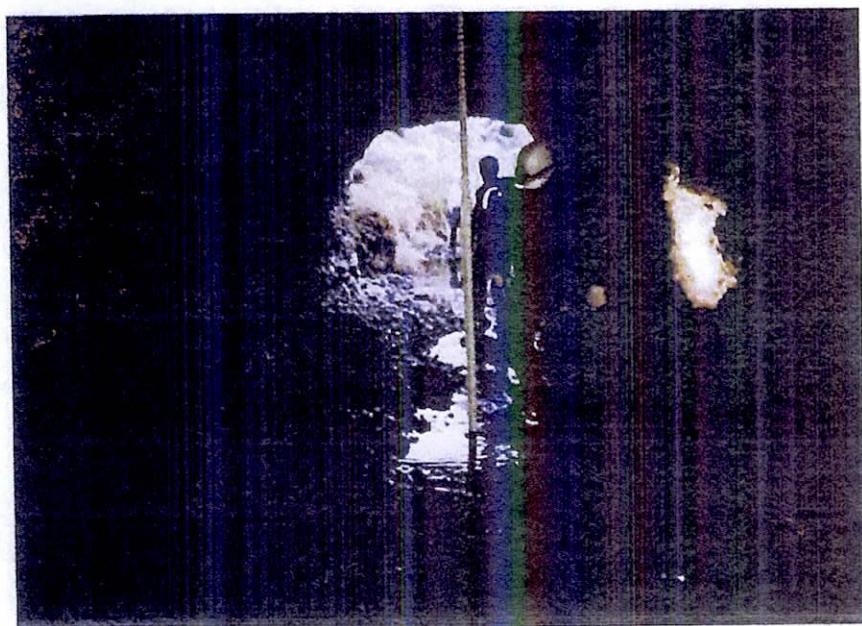
Station 82+95, Concrete Tunnel Liner



Station 82+95, Void Behind Tunnel Liner



Station 88+89, Concrete Tunnel Liner

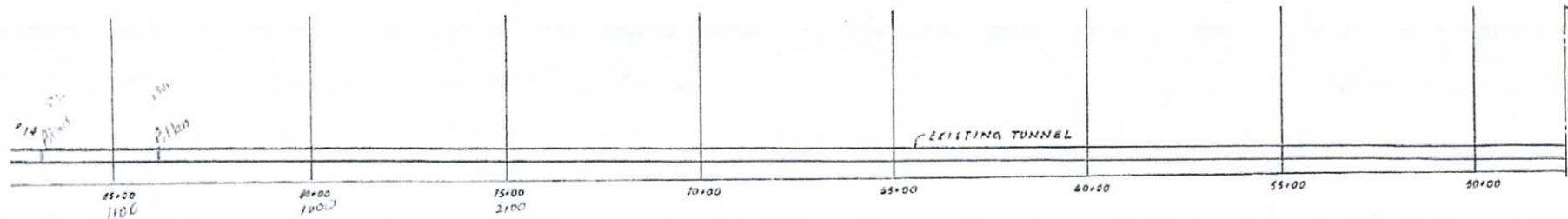


Station 96+00, Near Downstream Tunnel Portal



Station 96+20, Downstream Tunnel Portal

Appendix C
Tunnel Construction and Repair Drawings



STRUCTURE

CONCRETE:
DESIGN
MINIM.
CONT.
TEST
TESTI.
REINFORCE:
REFO
FO
EL.
IE.
IRON
SUPP.
OR A.
LAR.

CONCRETE
UNL.
COVE
CONC
WALE
TAN

DESIGN CR.
V2/13
NO. 2

PNEUMATIC
A DESI
Y-GR
GUN
SUR
FINI
APPL
TO &
THE
CON
BFR

NOTE: VERIFY ALL DIMENSIONS SHOWN.
APPROX. TOTAL LENGTH OF TUNNEL 9600'.
STATIONING & ELEVATION SHOWN ARE
APPROXIMATE.

PROFILE OF TUNNEL

HORIZ. SCALE: 1" = 200'. VERT SCALE 1" = 40'.

ONYX STEEL

10N ST.

1

WALTER LIN

— 2 —

25

This technical diagram illustrates the cross-section of a bridge pier during construction. The pier is a large, curved structure. On the left, a vertical line indicates a '2' OR SPLICE. The top right corner is labeled '#906'. The right side of the pier is labeled 'EXIST CONC. LINING' and '3½" GUNITE'. The bottom left corner is labeled '17" HORIZ' and '6" VERT'. A horizontal line near the base is labeled '17½" CLEAR'. A dashed line within the pier's curve is labeled 'REMOVE EXIST. RAILS & G CHANNEL'. The diagram shows the transition from the existing concrete lining to the new gunite overlay.

ASSUMED EXISTING OVERBREAK LINE

PACKING SEE UNIT PRICE SCHEDULE

STEEL SET

1/2" CLEAR 8'-0"

INSIDE FACE OF STEEL SETS

1/2" CLEAR 8'-0"

1/2" CLEAR 5'-0" 1/2"

1/2" CLEAR 5'-0" 1/2"

NOTE : EXTERIOR TUNNEL CONTOUR MAY VARY TO SUIT EXIST. TUNNEL CONDITION.

INC.

UNITS

1:3

1:0

7:0

1:0

5' 0" 1/2"

1/2" CLEAR 5'-0" 1/2"

JOHN H. PEIERSON, PE. INGENIER

NOTE :
EXTERIOR TUNNEL CONTOUR
MAY VARY TO SUIT EXIST.
TUNNEL CONDITION.

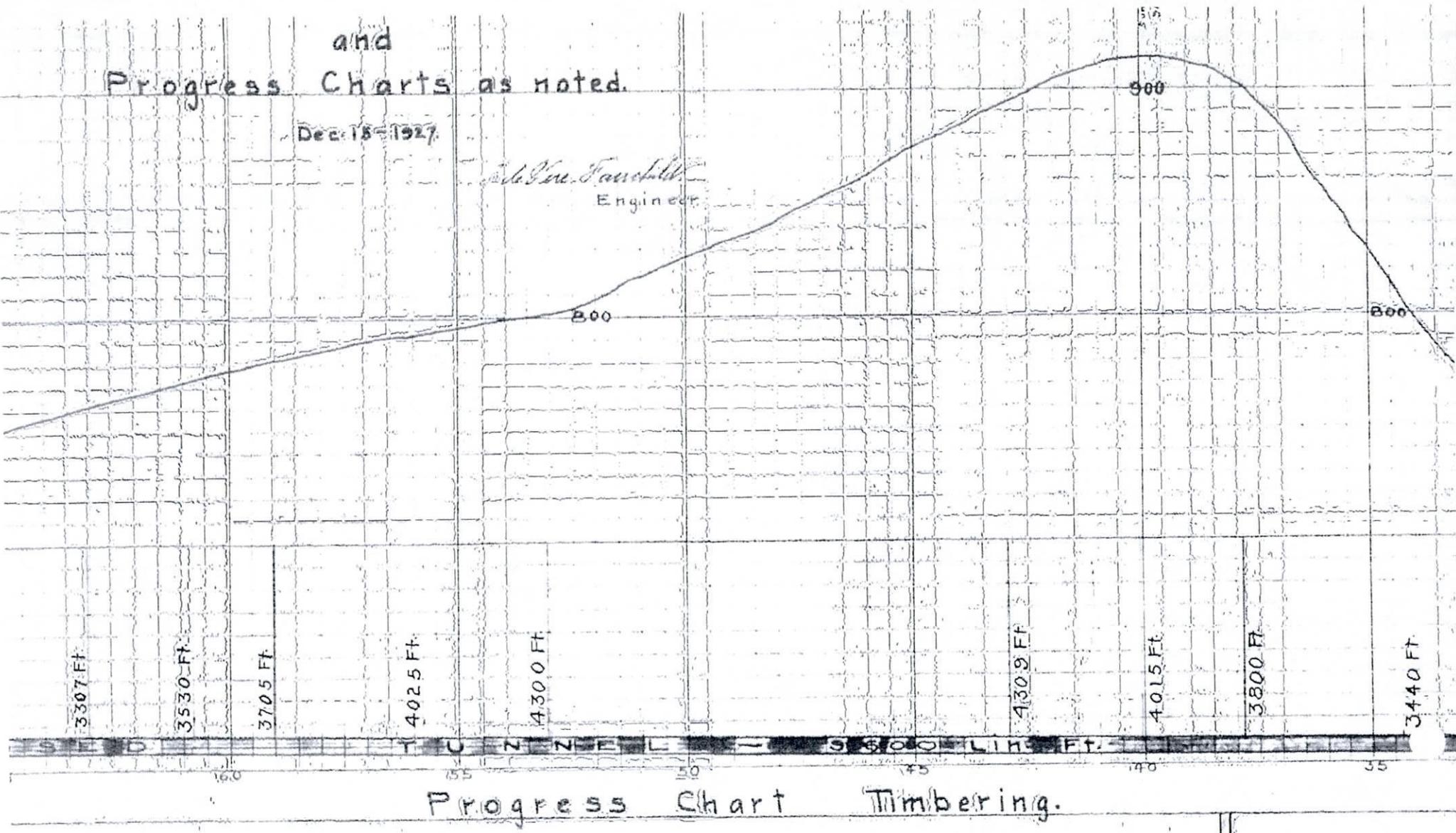
EDWARD H. PETE
ATCA BALTIMORE

and
Progress Charts as noted.

Dec. 15-1927.

John F. Fauchille

Engineer



Progress Chart Tunnel Excavation.



Selah-Moxee Irrigation District

Yakima Ridge Tunnel

2016 Tunnel Inspection and Maintenance Report

February 23, 2016

Introduction

The Selah-Moxee Irrigation District operates and maintains over 42 miles of canals and ditches to provide irrigation water to over 7,400 acres of land in the East Selah, Terrace Heights, and Moxee areas. The district diverts and conveys water from the Yakima River beginning on March 15 and ends irrigation deliveries around October 15 of every year. In addition to the many miles of canals and ditches, the canal system also contains a tunnel that is 9,600 feet in length that begins in East Selah and extends through the Yakima Ridge south to Terrace Heights.

The Yakima Ridge Tunnel is a vital component of the Selah-Moxee Irrigation District's canal system. The tunnel is located in the upper portions of the canal system, and therefore must transmit 85% of the water diverted from the river. The tunnel was constructed between the years of 1928-30 to replace a flume through the Selah Gap that was considered a hazard to the district and to the state highway below. During construction of the state highway blasting techniques were used in removing a portion of the hillside to make room for the highway, which had "loosened" the flume's foundation, causing the canal to leak¹. The Selah-Moxee Irrigation District funded the tunnel project through the sales of bonds for \$200,000.00² (\$2.73 million today³) to eliminate the hazard. The tunnel has since been used to supply irrigation water to the Terrace Heights and Moxee areas. However, over the past several years blasting activities near the tunnel has caused concern for the district, believing that blasting may damage or cause complete failure of the tunnel. Tunnel damage or failure will impede the district's ability to supply reliable irrigation water to its customers. This would result in a direct loss of crop and property damage in excess of \$75 million.

Current Blasting Operations

Blasting operations have continued in the adjacent property of the Rowley rock quarry located west of the Yakima Ridge Tunnel for some time. The quarry is currently operated by Granite Northwest to mine rock for the production of aggregate for construction purposes. Figure 1, identifies the blasting activities that have taken place and recorded by SMID personnel throughout the year of 2015. The chart depicts blast times, the depth of the water in the canal prior to and after each blast event, and canal flow in

¹ A Historical Study of The Selah and Moxee Irrigation District; by Alfred Moss, 1966

² A Historical Study of The Selah and Moxee Irrigation District; by Alfred Moss, 1966

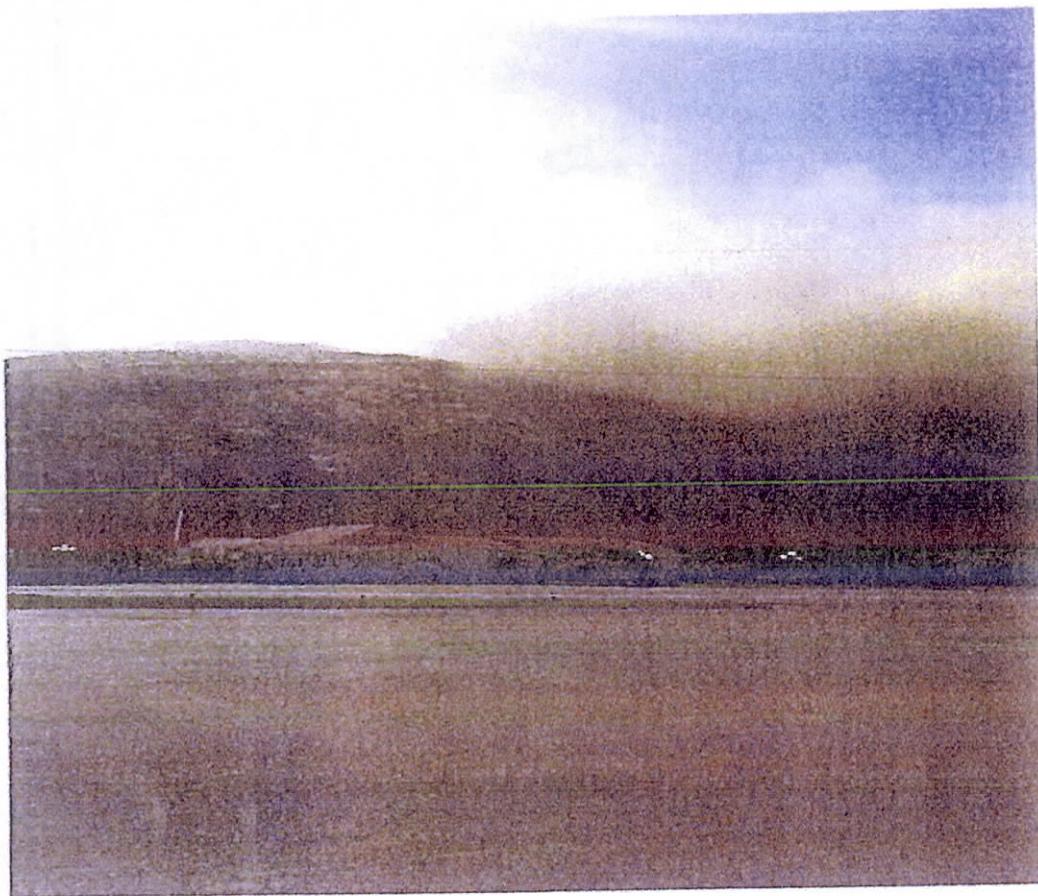
³ www.saving.org Inflation Calculator

cubic feet per second (cfs) during that time. Notes were also taken to identify changes in seismic equipment placement by the blasting crew and water surface elevation in the canal. According to Figure 1, it appears that the blast event on 9/3/15 changed the water surface elevation from 2.53 feet prior to the blast, to 2.55 feet sometime after the blast. The flow rate of the canal remained constant during this time period. This would suggest that a restriction had recently developed downstream of the tunnel entrance that would cause the water surface elevation in the canal to rise. This type of activity would be indicative of a rock fall within the tunnel. Also of note is that readings from subsequent blasts differ significantly from the blast held on 5/4/15. The May 4 blast indicates a water depth in the canal of 2.58 feet and a flow rate of 68.3 cfs, while on 9/21/15 the water depth had increased to 2.67 feet while the flow rate reduced to 58 cfs. Under normal operating conditions the depth of water in the canal would decrease as the flow in the canal decreased. Therefore the data would suggest that a restriction within the tunnel had occurred resulting in the increase in water depth within the canal.

Figure 1
Blasting Activity 2015

Date	Time	Blast	Depth of Water (ft) in Canal Prior to Blast	Depth of Water (ft) in Canal After Blast	Canal Q (cfs)	Notes
		Blast	Canal After Blast	Canal Q (cfs)		
3/19/2015	N/A	1.92	1.92	29.3		
3/27/2015	12:50 PM	2.08	2.08	38.6		
4/14/2015	N/A	2.24	2.24	42.8		
5/4/2015	11:20 AM	2.58	2.58	68.3		
9/3/2015	5:48 PM	2.53	2.55	55.8	Blast Equipment placed at a different Location. Rock fall near fruit stand, no blast horn. Increase in canal h after 2 hours.	
9/15/2015	11:10 AM	2.65	2.67	58	Notice sent on same day. Seismic Equipment placed on south side of canal walkway on soil.	
9/21/2015	1:38 PM	2.67	2.67	58		

Figure 2 Blast Event at the rock quarry in East Selah 9-15-15



Tunnel Inspection

The Selah-Moxee Irrigation District began its annual tunnel inspection on January 26, 2016. The purpose of the inspection was to assess the overall condition of the tunnel and identify newly fallen rock and determine a mode of action to ensure the tunnel is operational for the 2016 irrigation season. Figure 3 identifies new rock fall locations relative to measured stations in the tunnel along with the type of material found that has fallen and the estimated quantities of fallen rock material in cubic yards. The district located a total of 6 new rock falls within the tunnel consisting mostly of basalt rock with a total quantity of 23 cubic yards.

Figure 3

Inspection			Cubic Yards
Date	Location	Findings	
1/26/2016	2+50	Rock Fall (Basalt with Sediment)	1.25
1/26/2016	8+80	Rock Fall (Basalt)	8.5
1/26/2016	13+00	Rock Fall (Basalt)	6
1/26/2016	19+50	Rock Fall (Basalt)	3
1/26/2016	35+00	Rock Fall (Basalt)	1.75
1/26/2016	58+00	Rock Fall (Basalt with Sediment)	2.5
		Total	23

Figure 4 also identifies the rock fall locations in relation to the overall length of the tunnel. According to Figure 4 the majority of the rock falls have occurred within the first 2,000 feet from the tunnel entrance portal in East Selah. Also of note is that no rock falls were observed beyond the 5,800 ft. location leading to the tunnel exit portal near Terrace Heights.

Figure 4

2016 Yakima Ridge Tunnel Diagram

Tunnel Entrance (East Selah)

Tunnel Exit (Terrace Heights)

Selah-Moxee Canal Tunnel

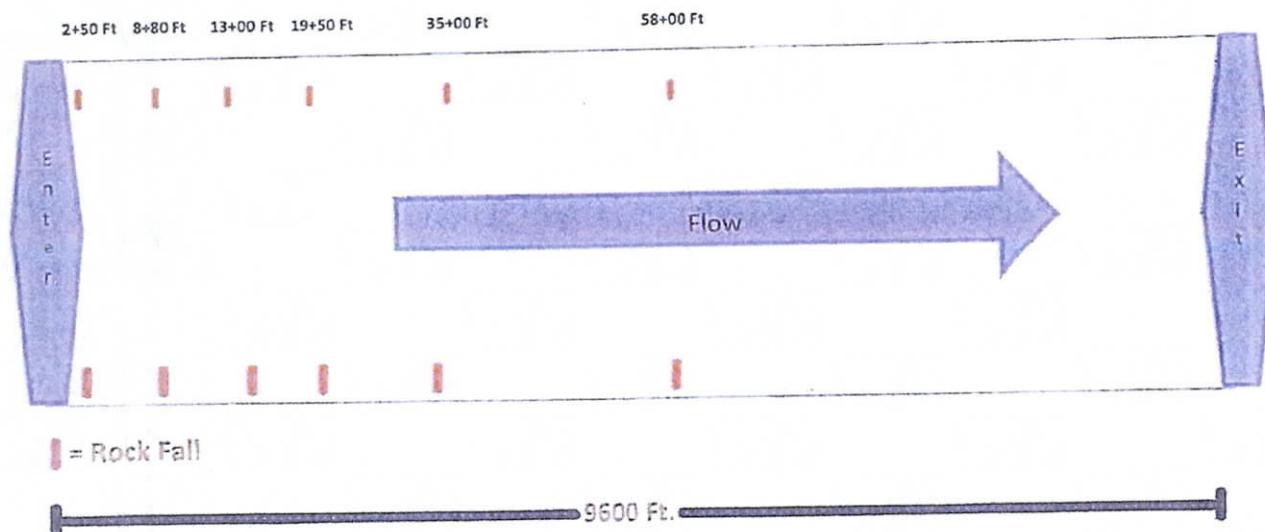
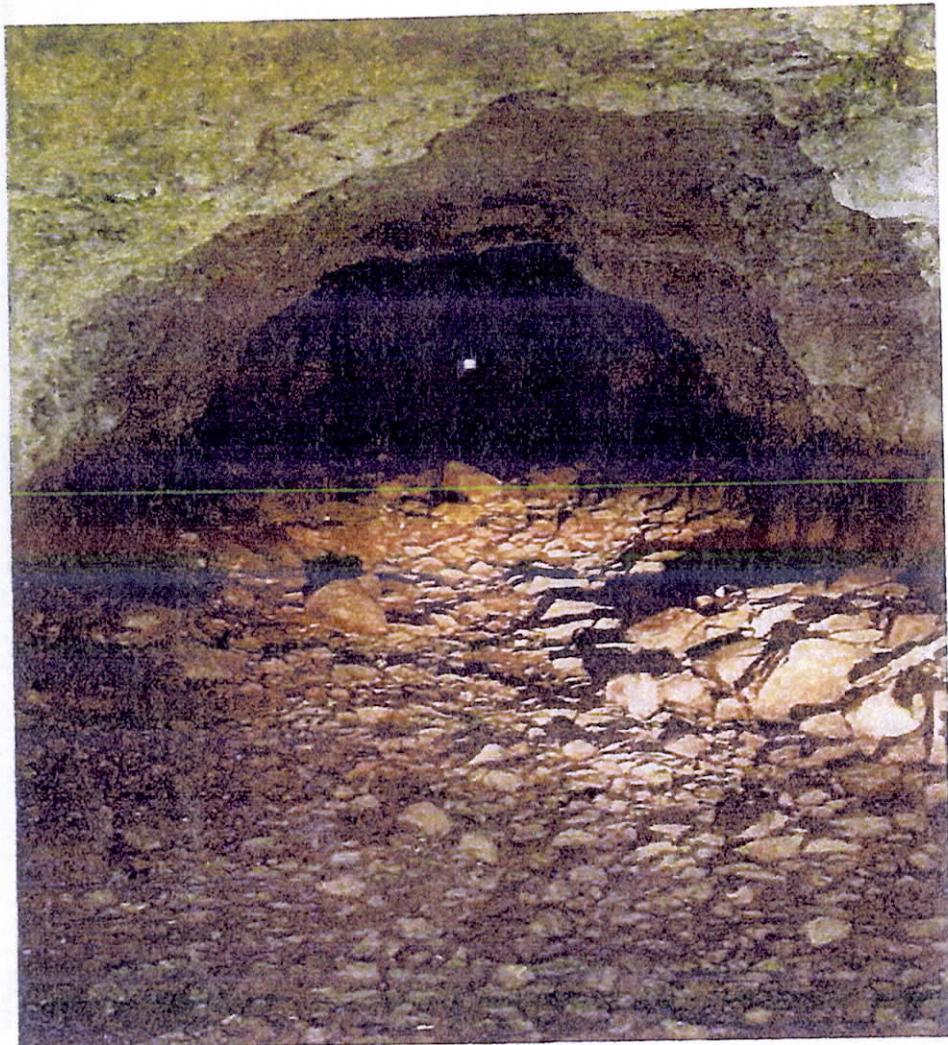


Figure 5 Station 13+00 rock fall



Tunnel Maintenance

As part of the tunnel maintenance program the district determined that the removal of fallen rock was necessary in order to increase flow capacity and return the water surface elevation to normal operational heights during the irrigation season. To accomplish this task, the district rented a utility vehicle with adequate size to operate in the tunnel and sufficient capabilities to transport rock. The vehicle was loaded by hand from the three stations identified in Figure 6, and then the rock was transported out of the tunnel and stock piled near the tunnel entrance in East Selah.

Figure 6: Utility Vehicle removing a load of rock from the Yakima Ridge Tunnel



Figure 7

Date	Location	Work Performed	Cubic Yards	Loads
1/26/2016	All	Relocate fallen rock for equipment passage		N/A
1/26/2016	2+50	Rock and sediment removal	1.25	2
1/27/2016	8+80	Rock Removal	5.25	7
1/28/2016	8+80	Rock Removal	8.25	11
1/29/2016	13+00	Rock Removal	3.75	5
2/1/2016		Water from storm events entering tunnel and mechanical issues with rental equipment	0	0
		Total	18.5	25

According to Figure 7, 3.75 cubic yards of rock was removed from station 13+00. Figure 8 is a photo after the work was completed in that area. The district removed a total of 18.5 cubic yards of rock from the tunnel. While this is significant progress to restoring the tunnel to full capacity, addition work remains in order to complete this task.

Figure 8 Station 13+00 after rock removal was completed.



Summary

The Yakima Ridge Tunnel is a vital component of the Selah-Moxee Irrigation District system and must maintain operational integrity to meet the demands of the district's customers. The district is faced with external challenges from blasting activities by its neighbors to keep the tunnel functional. There appears to be evidence that blasting activities may have unintended effects on the tunnel. Therefore, the district must have an active role in limiting the negative impacts to the tunnel, and a proactive approach to ensure the overall integrity of the tunnel for years to come.

Selah-Moxee Irrigation District

Yakima Ridge Tunnel

2017 Tunnel Inspection and Maintenance Report

February 14, 2017

Introduction

The Selah-Moxee Irrigation District operates and maintains over 42 miles of canals and ditches to provide irrigation water to over 7,400 acres of land in the East Selah, Terrace Heights, and Moxee areas. The district diverts and conveys water from the Yakima River beginning on March 15 and ends irrigation deliveries around October 15 of every year. In addition to the many miles of canals and ditches, the canal system also contains a tunnel that is 9,600 feet in length that begins in East Selah and extends through the Yakima Ridge south to Terrace Heights.

The Yakima Ridge Tunnel is a vital component of the Selah-Moxee Irrigation District's canal system. The tunnel is located in the upper portions of the canal system, and therefore must transmit 85% of the water diverted from the river. The tunnel was constructed between the years of 1928-30 to replace a flume through the Selah Gap that was considered a hazard to the district and to the state highway below. During construction of the state highway blasting techniques were used in removing a portion of the hillside to make room for the highway, which had "loosened" the flume's foundation, causing the canal to leak¹. The Selah-Moxee Irrigation District funded the tunnel project through the sales of bonds for \$200,000.00² (\$2.75 million in today's dollars³) to eliminate the hazard. The tunnel has since been used to supply irrigation water to the Terrace Heights and Moxee areas. In recent years, the District and its Board have become increasingly concerned about the potential effects of blasting activities near the tunnel. And there is ample basis for that concern, as described in our prior year (2016) Tunnel Inspection and Maintenance Report. To cite only one example from that Report, a blast event on September 3, 2015, changed the canal water surface elevation from 2.53 feet prior to the blast to 2.55 feet within two hours following the blast. However, the flow rate of the canal remained constant during this time period, suggesting that a restriction had recently developed downstream of the tunnel entrance that caused the water surface elevation to rise. Quite likely such restriction was new rockfall in the tunnel that occurred roughly contemporaneously with the September 3rd blasting event.

Tunnel damage or failure will impede the District's ability to supply reliable irrigation water to its customers, with direct loss of crops and property damage estimated to exceed \$75 million.

¹ *A Historical Study of The Selah and Moxee Irrigation District*; by Alfred Moss, 1966

² *Id.*

³ www.saving.org Inflation Calculator

Figure 1: 04-20-16 Blasting Event



Tunnel Inspection

The Selah-Moxee Irrigation District began its annual tunnel inspection on December 21, 2016. The purpose of the inspection was to assess the overall condition of the tunnel and identify newly fallen rock and determine a mode of action to ensure the tunnel is operational for the 2017 irrigation season. Figure 2 identifies new rockfall locations relative to measured stations in the tunnel along with the type of material found that has fallen and the estimated quantities of fallen rock material in cubic yards. The District located a total of 5 new rock falls within the tunnel consisting mostly of basalt rock with a total quantity of 13.51 cubic yards.

Figure 2: New Rock Fall locations and amounts.

Inspection			
Date	Location	Findings	Cubic Yards
12/21/2016	8+80	Rock Fall (Basalt)	2.5
12/21/2016	13+00	Rock Fall (Basalt)	3.75
12/21/2016	19+50	Rock Fall (Basalt)	2.06
12/21/2016	89+70	Rock Fall (Basalt)	3.2
12/21/2016	90+60	Rock Fall (Basalt with sediment)	2
		Total	13.51

Figure 3 identifies the rock fall locations in relation to the overall length of the tunnel. As depicted in Figure 3, three rockfall events occurred within the first 2,000 feet from the tunnel entrance portal in East Selah. While two rock falls occurred in the proximity of station 90+00, which is located near the exit portal in Terrace Heights.

Figure 3

2016 Yakima Ridge Tunnel Diagram

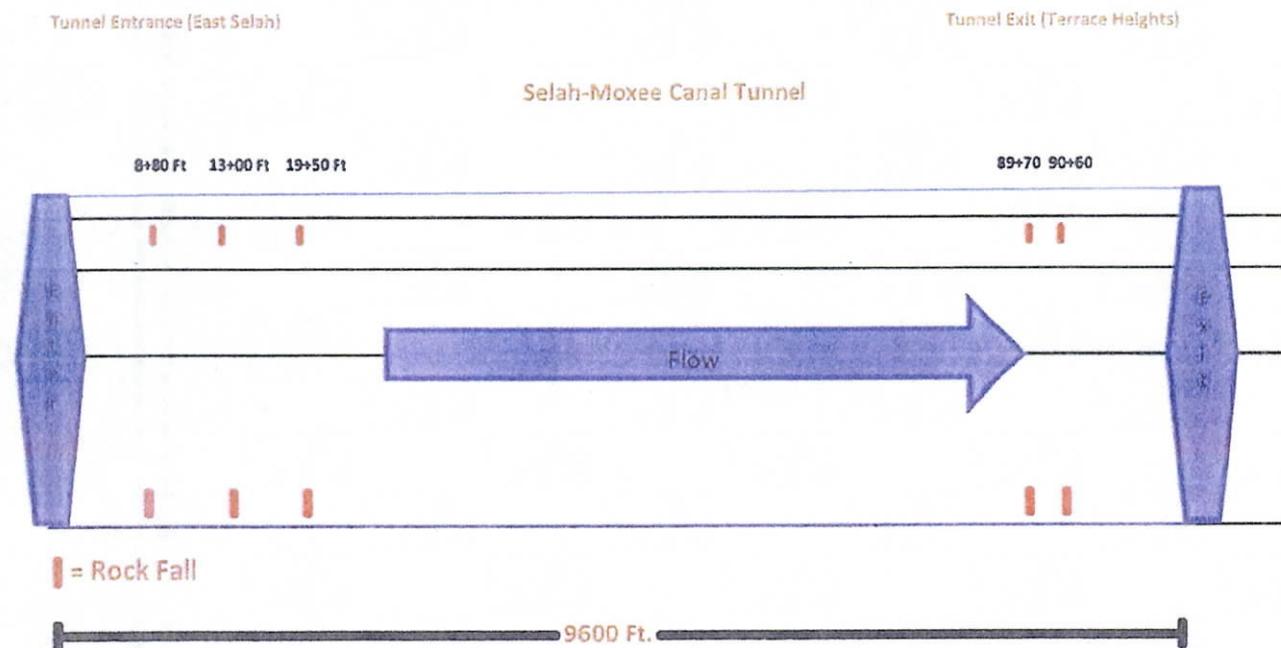
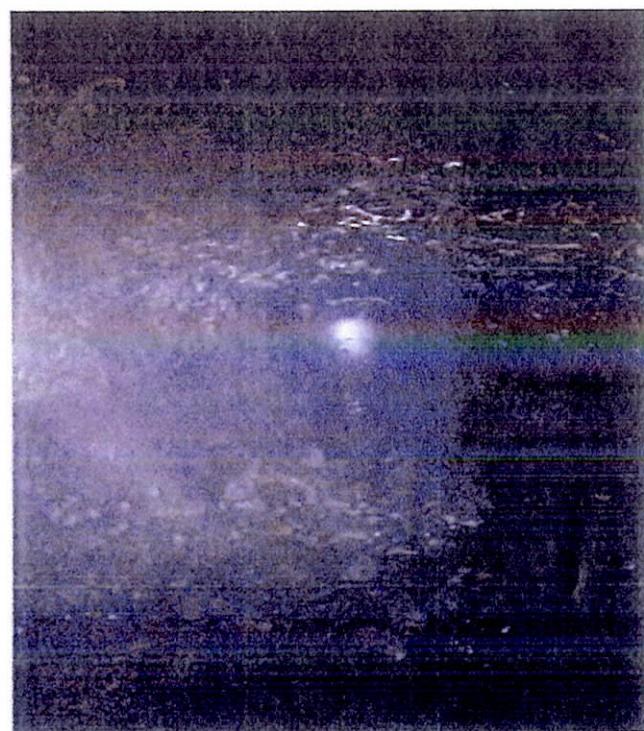


Figure 4: Photo of Station 8+80 rock fall identified in the 12-21-16 tunnel inspection



Tunnel Maintenance

As part of the tunnel maintenance program the district determined that the removal of fallen rock was necessary in order to increase flow capacity and return the water surface elevation to normal operational heights during the irrigation season. To accomplish this task, the District rented a utility vehicle with adequate size to operate in the tunnel and with sufficient capabilities to transport rock. The vehicle was loaded by hand from all the stations identified in Figure 6, below, and then the rock was transported out of the tunnel and stock piled either near the tunnel entrance in East Selah or the tunnel exit in Terrace Heights.

Figure 5: Crew unloading the utility vehicle full of rock that was removed from the Yakima Ridge Tunnel.



Figure 6

Tunnel Maintenance			Cubic Yards	Cubic Yards	Total Cubic Yards	Utility Vehicle Loads
Date	Location	Work Performed	New Fallen Rock	Existing Rock		
1/30/2017	91+50	Rock Removal	0	0.3	0.3	0.3
1/30/2017	91+15	Rock Removal	0	0.75	0.75	0.7
1/30/2017	90+60	Rock and sediment removal	2	0	2	2
1/30/2017	89+70	Rock Removal	3.2	0	3.2	3
1/31/2017	N/A	Equipment Failures, water depth 0-14" Deep at station 71+00 to 78+80				
2/1/2017	8+80	Rock Removal	2.5	4.75	7.25	7
2/2/2017	13+00	Rock Removal	3.75	2.43	6.18	6
2/3/2017	19+50	Rock Removal	2.06	0	2.06	2
2/3/2017	58+50	Rock Removal	0	1.2	1.2	1
2/3/2017	48+70	Rock Removal	0	0.6	0.6	1
2/3/2017	39+40	Rock Removal	0	1.2	1.2	1
2/3/2017	31+00	Rock Removal	0	0.75	0.75	1
2/3/2017	1+40	Rock Removal	0	1.25	1.25	1
		Total	13.51	13.23	26.74	26

As noted in Figure 6, a total of 13.51 cubic yards of newly fallen rock was removed from the tunnel, together with 13.23 cubic yards of rock on the sides of the tunnel floor that had accumulated from prior rockfall events. The total amount of rock removed from the tunnel between January 30 and February 3, 2017, was 26.74 cubic yards. The average load size was 1.03 cubic yards, which was an increase from last year's average.

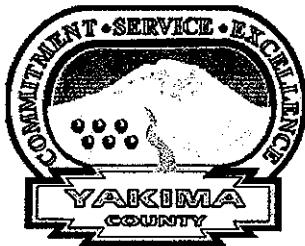
Figure 7 is a photo after the work was completed in the area of tunnel station 8+80. The District can expect sufficient capacity in the tunnel under the existing conditions for the 2017 irrigation season. However, if tunnel conditions change – including any enhanced rockfall caused by blasting – the tunnel capacity will be diminished, potentially resulting in property and crop damage of SMID customers. While the District has made significant progress in the removal of previously fallen rock additional efforts are needed to remove those rocks remaining on the tunnel floor. Based upon recent history of the tunnel the District can also expect to find new rock falls in the coming years, which will require continued annual inspections and monitoring that identify new rock falls and must anticipate removal of these new rock falls during the non-irrigation season.

Figure 7: Station 8+80 after rock removal was completed.



Summary

The Yakima Ridge Tunnel is a vital component of the Selah-Moxee Irrigation District system and must maintain operational integrity to meet the demands of the district's customers. The District is faced with external challenges from blasting activities by its neighbors to keep the tunnel functional, which requires additional time and effort on the District's behalf. Over the years, the District has been forced to shoulder the entire financial burden of inspecting and remediating seismic-related damage to the tunnel.



Compliance, Extension, Expiration and Reinstatement (YCC 16B.07.050)

- (1) Compliance with Conditions and Safeguards of Project Permit. It is the affirmative duty of a project permit holder and the land owner (as applicant) to comply with any conditions made a part of the terms under which the approval of a project permit was granted as authorized by Yakima County Code. The applicant shall complete all required conditions, submit documentation that all conditions were met and request County inspection or review to determine that the requirements have been fulfilled within the timeframe specified in the decision and any authorized extensions. When the conditions of the project permit have been met within the timeframe specified by the decision and any subsequent extension authorized by the applicable code, the applicant shall provide a letter certifying that the conditions were met to the Administrative Official to document compliance.
- (2) Extension of Any Approved Project Permit. A valid project permit, other than a preliminary plat, may be extended one time only for up to one additional year by action of the Administrative Official.
 - (a) Requests for extensions shall be made in writing, shall be submitted to the Planning Division prior to the expiration date and shall be accompanied by the final approved site plan showing the location and size of any development or work already completed on the project. Such extension request shall present a timeline that identifies when each of the conditions of the decision has or will be completed and shall detail unique and special circumstances that prohibited the commencement or completion, or both, of the use authorized.
 - (b) The Administrative Official shall review the request without public notice or hearing and issue the decision within fourteen days from the receipt of the completed request. The Administrative Official may:
 - (i) Approve the extension based on a work schedule provided by the applicant to assure the work will be completed according to a modified schedule, or
 - (ii) Disapprove the extension.
 - (c) The Administrative Official shall mail the decision to the applicant and shall specify the decision as final unless appealed to the Hearing Examiner under the provisions of Chapter 16B.09 of this Title. Conditions of approval listed previously in the Notice of Decision issued pursuant to 16B.07.010 through 16B.07.030 of this Chapter may be appealed only according to the procedures and time periods specified in YCC 16B.09.010 and are not subject to appeal again following any decision or determination of the Administrative Official made under this Section 16B.07.050.

Attachment: FF

(3) Failure to Complete Approved Permit Conditions within Specified Timeframe and Failure to Comply with Permit Decisions or Conditions.

- (a) Expiration. If compliance with the terms of the project permit approval has not occurred within the timeframe specified by the decision and any subsequent extension authorized by the applicable code, the project shall be considered expired by time limitation and the land use approval shall be null and void. Expiration of a project permit granted pursuant to Yakima County Code shall not be subject to appeal.
- (b) Violations. A project permit issued or processed pursuant to any applicable Title listed in YCC 16B.01.020 will be deemed in violation of this Code if it is ascertained that the application included any false information material to the project permit approval, or if it develops that the conditions and safeguards made a part of the terms under which the approval was granted are not being maintained. Such violations of project permit approval shall be subject to Chapter 16B.11 and other remedies available to Yakima County under any applicable law to enforce conditions of permit approvals, remedy land use and code violations or abate those violations including without limitation YCC Title 13.
- (c) Compliance agreement. The applicant and the County may enter into a compliance agreement to complete the required conditions subject to appropriate fees to compensate the County in preparing, recording and implementing the compliance agreement. On terms acceptable to the Administrative Official, in his or her sole discretion, the County may offer an extension of time to complete the required conditions of approval subject to appropriate fees to compensate the County in preparing, recording and implementing any such compliance agreement; provided, however, that no compliance agreement may be used in lieu of the permit process to remove or negotiate conditions of approval.

(4) Reinstatement. Where a project permit has expired, the applicant may apply to have the permit reinstated and the work authorized by the original permit can be recommenced, provided the following are met:

- (a) The applicant submits a written request not more than sixty days after the original permit or authorized extension expired.
- (b) The applicant provides a timeline for successful achievement of all conditions upon which the Administrative Official can agree.
- (c) The codes under which the original permit was issued and other laws which are enforced by Yakima County have not been amended in any manner which affects the work authorized by the original permit.
- (d) No changes have been made or will be made in the original plans and specifications for such work.
- (e) The applicant submits a reinstatement fee. The fee for a reinstated permit shall be seventy percent of the amount required for a new project permit pursuant to YCC Title 20.
- (f) Where the request for reinstatement does not comply with all of the preceding criteria in this Subsection, a new project permit application must be submitted and processed as a new project, at full permit fees.

Rowley East Quarry Expansion Narrative

JUL 20 2016

ProposalVern Gary Don Lynn
Dave Lisa Carmen

Expand the existing 61 acre Rowley East Quarry to include approximately 100 acres of adjacent land for mining and accessory use. The proposed mine boundary includes approximately 161 acres.

Table 1 below lists the parcels included in this proposal.

<i>Table 1. Parcels in Proposal</i>	Parcel			
	ID	Owner	Acres	Comment
Existing Quarry				
19130623003	(P1)	Rowley Family Trust	18.1	Currently in mine area
19130623004	(P2)	Rowley Family Trust	3.37	Currently in mine area
19130623002	(P3)	Rowley Family Trust	3.1	Currently in mine area
19130624004	(P6)	Rowley Family Trust	36.11	Currently in mine area
Proposed Expansion				
19130612404	(P5)	Granite Northwest, Inc.	27.01	Not proposed to be mined
				Stockpile area only/water source No mining or product processing
19130624003	(P4)	Rowley Family Trust	3.29	
19130613001	(P7)	Rowley Family Trust	120.85	Partially in proposed mine area

See attached parcel map.

Rowley East Quarry is a basalt quarry that has been mined since 1994. The current 61 acre site is owned by the Rowley Family Trust and the mining operations are performed under lease by Granite Construction Company. The quarry provides aggregate materials for local construction and consumers. The aggregate material is also incorporated in asphalt used to build and repair local roads, freeways, and construction projects.

Quality permitted reserves in the current mine are being diminished and this proposed expansion into adjacent undeveloped land will enable continued operations and the ability to provide aggregate resources to the surrounding areas for the foreseeable future. The proposed area has been designated under the Mineral Resource Overlay in the Yakima County Comprehensive Plan as an area of long term significance for the extraction of minerals. The proposed undeveloped mining areas to the east and south of the existing quarry contain steep slopes, are not suitable for agriculture, and do not currently provide a use.

Site and Operations Description

The existing quarry is east of Selah, WA on the south side of Interstate 82 at the East Selah Road exit. The current and proposed land lies above the 100 year floodplain of the Yakima River and consist of steep and rolling slopes with rocky outcrops. The eastern part of the existing quarry has been reclaimed as previously planned. Mining into the proposed expansion will proceed from the current central section being actively mined. The existing requirement for concurrent reclamation of the current mined area will be carried over into Phase 1 of the updated mining plan.

Attachment: G G

Rowley East Quarry Expansion Narrative

The proposed expansion will not change current operational hours, employees, or traffic to and from the site; it will only expand the minable reserves for the quarry. Typically, the mine operates 7am to 5:30pm and occasionally operates during the night. The current mine is accessed from East Selah Road and this entrance will continue to be utilized in this proposal.

No new structures are proposed for this expansion. Facilities and operations on current quarry area will support the expansion area. Current parking onsite for employees and customers will also be sufficient after mine area is expanded.

Mining Plan

Extraction and processing of the aggregate from the Rowley East Expansion site will be accomplished in four phases. Each phase will be brought to reclamation slope and vegetated concurrently. The eastern part of the quarry has been reclaimed. The current mined face in the south-central part of the operating quarry will be included into Phase 1. Mining into the expansion will be initiated from this operating area. Phases 1 through 3 will be developed with concurrent reclamation. This will leave phase 4 as a visual and acoustic buffer between operations and properties to the north (YCC 15.45.060 (3)).

Property boundary setback at least 25 feet, as according to YCC 15.45.060 (6)(c), except with the common boundary with the existing Rowley operation area. At no time will a crusher be within 500 feet of an existing residence not owned by one of the property owners (YCC 15.45.060 (6)(b)). All mining will remain above the water table. Clearing new land will only occur as needed for immediate mining in order to minimize erosion and visual impacts.

Phase 1

Phase 1 will progress south from the existing Rowley East Quarry operations, away from the interstate. When enough space in the pit floor is established, the crusher location will be relocated from the eastern part of the current stockpile area to south of the current stockpile area, closer to the operating face. Reclamation slopes of up to 1.5:1, as in the existing quarry, will be established along the permit boundary areas as mining progresses south into Phase 1. Terraced slopes will be created into the boundaries with Phase 2 and Phase 3 to ensure safe slope stability. The boundary between phases will not be mined to a vertical wall. As Phase 1 nears completion it will be concurrently reclaimed as mining enters Phase 2. This will entail a "rolling reclamation" and the reclaimed slopes in Phase 1 will be covered in stored topsoil and vegetated.

Phase 2

Phase 2 will be developed in the same manner as Phase 1. The crusher and stockpiles will be moved into the pit floor of Phase 1 provided there is adequate room. Mining will progress east into Phase 2. Reclamation slopes of up to 1.5:1, as in the existing quarry, will be established along the permit boundary areas as mining progresses east into Phase 2. Terraced slopes will be created into the boundary with Phase 3 to ensure safe slope stability. The boundary between phases will not be mined to a vertical wall. As Phase 2 nears completion it will be concurrently reclaimed as mining enters Phase 3.

Rowley East Quarry Expansion Narrative

Phase 3

Phase 3 will be developed in the same manner as Phase 1. The crusher and stockpiles may be moved into the pit floor of Phase 2 provided there is adequate room. Mining will progress north and northeast into Phase 3. Reclamation slopes of up to 1.5:1, as in the existing quarry, will be established along the permit boundary areas as mining progresses. Terraced slopes will be created into the boundary with Phase 5 to ensure safe slope stability. The boundary between phases will not be mined to a vertical wall. During Phase 3 “rolling reclamation” will occur.

Phase 4

Phase 4 will be developed in a similar manner to Phase 1. However, mining will not proceed until reclamation is initiated on all previous Phases. The crusher and stockpiles will be located in the existing Rowley East Quarry, west of Phase 4. Mining will progress east into Phase 5. As the pit floor is established, the crusher and stockpiles will be moved to the east, closer to the working face. Upon completion of Phase 5, the final reclamation slope of up to 1.5:1, as in the existing quarry, along the eastern boundary and the pit floor will be reclaimed.

Mining and Blasting Protocol

Any blasting will be completed according to rules and guidelines established in YCC 15.45.060 (7) (b, c). All blasting will occur between the hours of 9:00 am and 4:00 pm, Monday through Friday. Blasting will not occur on New Year's Day, the Fourth of July, Labor Day, Thanksgiving, or Christmas Day. The current blasting notification plan for the existing quarry will continue to be implemented to notify emergency response agencies and residences within one-half mile of the site of a blasting event. This notice will also include the Selah-Moxee Irrigation District, WSDOT regional office, Yakima County Planning Department, and the WSY, PNSN Seismology Lab. A blasting vibration monitoring plan has been developed to collect vibration data during blasting events. Vibration sensors known as geophones are placed in the vicinity of the Selah-Moxee Irrigation Tunnel. A formal blasting vibration monitoring plan has been included as part of this proposal. Parcel 1 and Parcel 11 from Table 1 above are parcels being used to place the permanent geophones (vibration sensors) as described in the blasting vibration monitoring plan.

Mining will continue in the expansion area in the same fashion as in the current quarry. This includes loosening the resource rock using a crawler tractor and controlled blasting. The loosened rock will then be pushed to the lower portion of the slope using a bladed crawler tractor, where it will be picked up with an articulated front end loader. The excavated material will then be processed in the on-site rock crusher to the size distribution of the final marketable products and then stockpiled. Water mist will be sprayed onto the conveyors via water bars or nozzles to minimize fugitive dust emissions during the processing. Water will be brought in via a water truck from an existing facility north of Interstate 82. No on-site water resources will be developed.

Crusher Placement

When processed inventory is running low, a portable crusher is mobilized to the site to crush material until the stockpile inventory is full. The current crushing location is along the northwest border of the existing quarry. The crushing will remain at the current location until mining into phase 1 of the

Rowley East Quarry Expansion Narrative

expansion creates a pit floor large enough to relocate the crusher. As the pit floor moves further south and east into the expansion, the crusher will be located in that area behind the cover of the Phase 4 along the northern border of the site. This will provide a shorter turnaround for equipment loading the crusher and contain the operation within the pit behind the cover of the northern slope.

Reclamation

As mining progresses into new areas, topsoil will first be removed and stored onsite for reclamation purposes. Final reclamation slopes of up to 2V:1H will be established through the mining process to produce a ridge and floor structure, similar to the existing and surrounding landforms. This will maintain a side slope of up to 2V:1H and a flat surface north of the ridge. The configuration will support the native dry vegetation as is found in the local ecological community.

“Rolling reclamation” will occur as final slopes are reached and mining progresses. Topsoil will be spread on the final slopes and will be vegetated with native grasses and shrubs to match the existing and surrounding areas. If needed, additional topsoil will be brought onsite or amendments added to onsite soils in order to complete reclamation. Areas of rock outcrops and variable slopes will be used to mimic surrounding land features.

After completion of Phase 4 following the preceding phases, the crusher and stockpiles will be removed. All equipment associated with the quarry operation will be removed. Final reclamation of the entire excavation will be completed within two years of the cessation of mining.

Illumination

No new illumination is proposed in the existing mine area. Current lighting in the stockpile and scale area will continue to be utilized. When a crusher is operating in the mine, associated lights will be directed down at the ground or away from the interstate or other public roads and into the quarry area. No direct lighting or glare will be directed toward drivers on the interstate or public roads. As mining progresses into the expansion, lighting will be further concealed by the Phase 4 slope separating the pit floor from the interstate.

A. BACKGROUND

1. Name of proposed project, if applicable:

Rowley East Quarry Expansion

2. Name of applicant:

Granite Construction Company

3. Address and phone number of applicant and contact person:

80 Pond Rd.
Yakima, WA 98901
James Essig
360.410.8117

4. Date checklist prepared:

April 9, 2015; revised July 20, 2016 and January 13, 2017

5. Agency requesting checklist:

Yakima County Public Services

6. Proposed timing or schedule (including phasing, if applicable):

The proposal is a continuation of ongoing and continuous existing quarry operations. The proposal is not susceptible to "phased review" for purposes of WAC 197-11-060(5). Permitted quarry operations are currently active within in a 62 acre area adjacent to the proposed expansion area (per existing Yakima County CUP00-6 and DNR Surface Mining Reclamation Permit # 70-012774). These mineral resources are nearly exhausted. The proposed continuation of existing quarry operations will initiate in the western side of the Expansion Area and progress southeast and east through the Expansion Area. The schedule and sequencing of mining and reclamation activities will be accomplished per DNR and Yakima County requirements.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No future expansions are planned at this time.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Cultural Resources Survey of the Proposed Rowley East Quarry Expansion Location, Yakima, Washington," D. Ellis, (AINW Report 183, March 10, 2000), attached hereto as Exhibit A ("AINW 2000").

Cultural Resources Survey of the Proposed Rowley Quarry Expansion Location, Yakima, Washington," R. Adams, Ph.D., G. Thomas, M.S., and J. Fagan, Ph.D., R.P.A. (AINW Report 2182, July 30, 2008), attached hereto as Exhibit B ("AINW 2008").

An archaeological site alteration and excavation permit application, with supporting materials, has been submitted by Archaeological Investigations Northwest, Inc. to the Department of Archaeology and Historic Preservation (DAHP) on behalf of Granite Construction. A copy of this application and supporting materials is attached hereto as Exhibit C ("DAHP Permit Application")

Blast Vibration Monitoring Plan for Rowley Quarry, prepared by GeoDesign Inc., July 19, 2016 ("BVM Plan"). A copy of the BVM Plan is attached hereto as Exhibit D.

Cultural Resources Survey for the Proposed Rowley Quarry Project Area, Yakima, Washington, R. Adams, Ph.D., R.P.A., and J. Fagan, Ph.D., R.P.A. (AINW Report 3743, November 29, 2016), attached hereto as Exhibit E ("AINW 2016").

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None known.

10. List any government approvals or permits that will be needed for your proposal, if known.

DNR Surface Mining and Reclamation Permit, DOE Sand and Gravel General Permit, and DAHP Archaeological Site Alteration & Excavation Permit.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

Prior to the extension of existing mining operations into the proposed Expansion Area, Granite Construction proposes to direct its consultant Archaeological Investigations Northwest, Inc. (AINW) to conduct archaeological mitigation within that portion of the Expansion Area that is identified for additional archaeological investigations in response to Question 13.d below. These investigations are an interdependent part of Granite's proposed plan for continuation of its quarry operations and will serve as a basis for appropriately avoiding or mitigating any impacts to cultural resources within the Expansion Area. The proposed archaeological investigations are designed to address questions related to the pre-contact use of the site, such as the function of the talus features.

Upon the exhaustion of resources within the area currently permitted for mining operations, Granite will extend these operations in the western side of the Expansion Area and progress southeast and east through the Expansion Area. The schedule and sequencing of mining and reclamation activities will be accomplished per DNR and Yakima County

requirements. As mining progresses lateral benches will be developed across the mine face. These benches will maintain slope stability and provide a safe working platform for active mining operations as well as final reclamation. Topsoil will be stripped and stockpiled near the eastern and western ends of each bench. This material will be staged for final reclamation. The overall project proposes to utilize parcel 191306-13001 (120.85 ac.) and several smaller parcels to facilitate the continuation of the current active quarrying operations to the northwest.

A northeastern twenty-five acre portion of the Expansion Area is not proposed for quarrying operations. This boundary provides a buffer to eliminate any quarrying operations within the vicinity of the Selah-Moxee Irrigation Tunnel.

12. **Location of the proposal.** Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

101 East Selah Road. The proposal is located on the south side of East Selah Road; immediately south of Interstate 82 and East Selah Road Interchange, lying along the north slope of Yakima Ridge; approximately 1 mile East of the City of Selah. This expansion area is depicted in a site plan that is attached hereto as Figure 1.

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. **General description of the site (circle one):**

Flat, rolling, hilly, steep slopes, mountainous, other ...

- b. **What is the steepest slope on the site (approximate percent slope)?**

About 50%

- c. **What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.**

Silt loams and rock outcrops. Soils support sparse grasses and brush.
Not of Ag value.

- d. **Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**

No.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Grading will occur within the Expansion Area over time to expose rock for mining and reclaiming disturbed areas. All topsoil will be retained for reclamation.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Erosion could occur on exposed surfaces within the Expansion Area. Mining operations will stabilize slopes.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

< 2%

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Consistent with past practices, exposed areas will be stabilized within the Expansion Area. Surface mining will be planned and sequenced to prevent erosion of exposed soils within the Expansion Area. Topsoil will be stored and vegetated to prevent erosion within the Expansion Area.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

No change from the existing condition is proposed. Some dust from aggregate material crushing and handling and from vehicle traffic may be generated. Consistent with past practices, daily operational controls of the mine site will adequately control any fugitive dust emissions.

b. Are there any offsite sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Consistent with past practices, stockpiles and traffic areas will be sprayed with water via water truck to prevent fugitive dust emissions from the pit floor. Roadways will be graveled. Paved roads will be swept with a mechanical broom and Vac-truck as needed.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

No.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

5) Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.

No.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well? Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No change from the existing condition is proposed. There is an existing well on parcel #19130624003, which is owned by the Rowley Family Trust. This well currently supplies water for the existing sprinkler dust suppression system, and will continue to do so. Water will evaporate or discharge to ground, consistent with current practices. Established levels of

consumption and beneficial use of ground water will not change.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None.

c. Water runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

No change from the existing condition is proposed. Consistent with past practices, runoff from stormwater will remain onsite and infiltrate or evaporate. Water will be routed to pit floor.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No. Mining has not historically impacted drainage patterns outside of permitted boundary. Consistent with past practices, the extension of mining into the Expansion Area will not alter or otherwise affect drainage patterns in the vicinity of the Expansion Area.

d. Proposed measures to reduce or control surface, ground, runoff water, and drainage pattern impacts, if any:

None required. Per Sand and Gravel Permit requirements, slopes will be stabilized and water retained onsite.

4. Plants

a. Check the types of vegetation found on the site:

Deciduous tree: Alder, maple, aspen, other

Evergreen tree: Fir, cedar, pine, other

Shrubs

Grass

Pasture

- Crop or grain
- Orchards, vineyards or other permanent crops.
- Wet soil plants: Cattail, buttercup, bulrush, skunk cabbage, other
- Water plants: Water lily, eelgrass, milfoil, other
- Other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

As mining progresses, topsoil with grasses and shrubs will be removed for mining to occur. Topsoil will then be returned to area and revegetated with native grasses and shrubs.

c. List threatened and endangered species known to be on or near the site.

None known.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Consistent with past practices, exposed slopes that are finished being mined will be topsoiled and vegetated with native grass and shrubs. Upon reclamation, site will be seeded and planted to return site to natural appearance.

e. List all noxious weeds and invasive species known to be on or near the site.

None known.

5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include:

Birds: Hawk, heron, eagle, songbirds, other:

Mammals: Deer, bear, elk, beaver, other:

Fish: Bass, salmon, trout, herring, shellfish, other:

b. List any threatened and endangered species known to be on or near the site.

None known.

c. Is the site part of a migration route? If so, explain.

No.

d. Proposed measures to preserve or enhance wildlife, if any:

None required. No change from the existing condition is proposed. Minimal wildlife present onsite and there is no prior history of any significant wildlife mortality attributable to mining operations.

Mining will disturb land as needed for operations and be reclaimed as mining is completed, restoring any existing wildlife habitat.

e. List any invasive animal species known to be on or near the site.

None known.

6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

No change from the existing condition is proposed. Electricity will continue to be used for basic lighting and diesel used in equipment at established levels of consumption.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None required. Proposal does not require significant use of energy.

7. Environmental health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

Rock quarry operations typically use highly controlled blasting to cut basalt away from the hillside to facilitate mining and processing of aggregates. Controlled blasting is a common means used by mine operators to break rock out of its in situ condition and move it into a manageable area. Blasts at the Rowley Quarry are carefully controlled and strategically planned to achieve maximum efficiency and are subject to strict protocols that ensure employee and public safety. Placement of bore holes and the timing of the blast are carefully calculated and drilling and blasting is performed by experienced crews with specialized training. On average, over the last 10 years, Granite has conducted 2 blasts per year. Each such blast is of a less than one-half second duration. Blasts are conducted so as to contain any flying debris or other surface characteristics of blasting activities on site, and this will be the case with any blasting conducted in the Expansion Area. Over the course of 22 years of operation there has never been a case of personal injury or property damage attributable to blasting operations at the Rowley Quarry.

The proposed action presents no change to the existing condition other than location of the blasting (i.e., the occurrence of blasting within the Expansion Area). Noise associated with blasting during hours of operation is infrequent and of limited duration (less than one-half seconds) when it occurs. Due to the long established practice of blasting in this area, and the low density and developmental characteristics of the surrounding area, noise impacts from blasting in the Expansion Area will not be significant and will be within the established baseline of noise associated with existing operations.

Ground vibrations are also associated with blasting and this issue has been raised as a concern by the Selah-Moxee Irrigation District in connection with an irrigation tunnel that is located approximately 1,000ft.-1750ft. East of the eastern boundary of the Expansion Area. Granite has assessed this potential impact and this assessment is contained in the attached BVM Plan. The BVM Plan considered ground vibrations associated with prior blasting events (January 2012 to May 2104) and concluded that blasting within the Expansion Area may cause ground vibrations on the order of 0.5 in/sec at a distance of 1,000 feet from the blast. Ground vibrations of this magnitude are significantly below the low end of a conservative threshold (2 in/sec to 16 in/sec) used to identify ground vibrations that present a risk of "minor damage" to adjacent properties.

As noted below, a twenty-five acre portion of the northeastern Expansion Area is not proposed for quarrying operations. This area will provide a buffer to mitigate any impacts to the Selah-Moxee Irrigation Tunnel associated with ground-born vibrations that could result from blasting within the Expansion Area. No other impacts associated with blasting were identified. As with noise, due to the long established practice of blasting in this area, and the low density and developmental characteristics of the surrounding area, ground vibration impacts from blasting within the Expansion Area will not be significant and are consistent with the established baseline associated with existing operations.

- 1) **Describe any known or possible contamination at the site from present or past uses.**
None.
- 2) **Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.**

None. No transmission pipelines are located within the project area.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

No toxic or hazardous chemicals will be stored or used or produced by the project. Consistent with past practices, any regulated materials or substances that may be brought on site and stored or used in the normal course of mining operations will be stored or used in accordance with manufacturers recommendations and in accordance with the requirements of applicable law.

4) Describe special emergency services that might be required.

None.

5) Proposed measures to reduce or control environmental health hazards, if any:

Blasting is performed by a professional contractor on a small scale. A formal blasting notification with date and time is provided to the following agencies and individuals, including neighbors and emergency services.

*911, Yakima County Sheriff, City of Selah Police Department, WSDOT Regional Office, Selah/Moxee Irrigation District, Frank Rowley, Granite Construction Company, DeAtley Crushing, Yakima County Public Services, Larry Martin (Attorney-Irrigation District), BAER Testing and Consulting, Washington State Patrol and WSU/PNSN Seismology Laboratory

Granite will implement the BVM Plan and monitor blasting in the Expansion Area in accordance with the following guidelines:

- Seismographs equipped with triaxial geophones will be used to monitor ground vibrations during each blasting event.
- Monitoring during the blasts will be performed from at least three locations in order to monitor the ground vibrations and to estimate the attenuation of blast energy with distance.
- Monitoring shall be performed to measure ground vibrations in terms of PPV and frequency and compared to the maximum acceptable vibration limits of 2 in/sec.

- At the end of every calendar year, an independent review of all the blast vibration data from the preceding year will be made to determine compliance with the plan.

A twenty-five acre portion of the northeastern Expansion Area is not proposed for quarrying operations. This area will provide a buffer to mitigate any impacts to the Selah-Moxee Irrigation Tunnel associated with ground-born vibrations that could result from blasting within the Expansion Area.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Noise will not affect the project. Existing traffic noise from freeway.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

No change from the existing condition is proposed. Noise from the existing mine operations include: truck traffic, rock crushing, blasting, earth moving, and material loading.

Crushing and blasting occur on an intermittent, as-needed basis; those activities are not part of the daily operations. The proposed action will not increase the existing noise levels. The added acreage will not increase the intensity of the current noise levels in the short term. As mining progresses to the south, future operations will be setback further away from local residents and the freeway; which will reduce off-site noise levels in the long-term. Typical operating hours are 7:00 am-3:30 pm Monday-Saturday. Occasional night time operations will continue when required by specific construction projects.

The appropriate agencies are notified of scheduled blasting per the blasting plan. Noise associated with blasting during hours of operation is infrequent and of limited duration (less than 5 seconds when it occurs. Due to the long established practice of blasting in this area, and the low density and developmental characteristics of the surrounding area, noise impacts from blasting in the Expansion Area will not be significant and will be within the established baseline of noise associated with existing operations.

- 3) Proposed measures to reduce or control noise impacts, if any:

Site topography contains noise within the mine site.

8. Land and shoreline use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The site is contiguous to an existing mine. Current use of the site is undeveloped land. There are four residences along E. Selah Rd. All other properties in the area are undeveloped.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

No. Site is not used as working farmlands or working forests. Land is designated Mineral Resource Lands by Yakima County.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No. The proposal will not affect working farms or forests. No working farms or forests are adjacent to the site.

c. Describe any structures on the site.

There are four houses and a commercial building within the parcels.

d. Will any structures be demolished? If so, what?

No structures are to be demolished as part of this proposal.

e. What is the current zoning classification of the site?

R, RLDP, & MIN.

f. What is the current comprehensive plan designation of the site?

Mineral Resource Overlay.

g. If applicable, what is the current shoreline master program designation of the site?

N/A.

h. Has any part of the site been classified critical area by the city or county? If so, specify.

No.

i. Approximately how many people would reside or work in the completed project?

2-5 daily workers.

- j. Approximately how many people would the completed project displace?
None.
- k. Proposed measures to avoid or reduce displacement impacts, if any:
N/A.
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
Site has mineral resource overlay and is adjacent to same current use.
- m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:
No proposed measures.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
None.
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
None.
- c. Proposed measures to reduce or control housing impacts, if any:
Not applicable.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?
No proposed structures.
- b. What views in the immediate vicinity would be altered or obstructed?
Hillside will be mined next to existing active mine. Upon reclamation, top soil will be graded and vegetated to blend into the natural landscape.
- c. Proposed measures to reduce or control aesthetic impacts, if any:
The sequencing of mining operations and ongoing reclamation activities.

11. Light and glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?
 - No.
- c. What existing offsite sources of light or glare may affect your proposal?
 - None.
- d. Proposed measures to reduce or control light and glare impacts, if any:
 - None.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?
 - None.
- b. Would the proposed project displace any existing recreational uses? If so, describe.
 - No.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
 - The site is regulated by MSHA; no recreation opportunities exist.

13. Historic and cultural preservation

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.
 - No.
- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation. This may include human burials or old cemeteries. Is there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

Archaeological features on the north side of Yakima Ridge were originally documented by Harlan Smith in 1910. This work identified the presence of pits on the talus slopes. Talus features have been identified as potential areas of cultural importance. Archeological Investigation Northwest (AINW) have conducted three separate survey efforts and prepared reports from year 2000, 2008, and 2016. These investigations were performed to support quarry development applications and submitted to Yakima County.

These documents are attached as Exhibits A (AINW 2000), B (AINW 2008), and E (AINW 2016).

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

AINW conducted the initial survey in year 2000 to address a previous quarry expansion (AINW 2000). In 2008 AINW conducted an additional survey in anticipation of the current expansion application (AINW 2008). In 2016, AINW conducted an additional survey in support of the current expansion application. These archaeological surveys have identified areas containing talus features of particular interest.

In order to assess and mitigate the potential impacts of the proposed action, AINW will conduct additional archaeological investigations within the Expansion Area. This will include photo documenting, collecting, identifying, and returning non-significant pre-contact isolated artifacts identified during the 2016 AINW survey to the landowner and conducting archaeological excavation and sampling at three locations within the Expansion Area.

Isolated talus features identified during previous surveys will be excavated to determine past use and function. Site dimension data will be recorded and artifacts will be collected and analyzed.

Historic maps have been provided as exhibits to the DAHP permit application, which are attached at Exhibit C. GIS maps have been developed to support the current proposal.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Based upon AINW 2000, AINW 2008, and AINW 2016, the following mitigation measures are recommended:

- Prior to ground-disturbing activities, non-significant pre-contact isolates, if able to be relocated, will be photo documented, collected, identified, and returned to the landowner (15/2357-6, 15/2357-7, 00/598-2, and 07/1574-8).
- For pre-contact archaeological sites containing cultural talus features, archaeological excavation and sampling will be conducted (45YA693 and 15/2357-3). If archaeological excavations at these sites reveal evidence of human remains, the remains will be avoided by the establishment of 75-foot buffers for mining activities. If there is no

evidence of human remains, the pit features will be photo documented and any surface artifacts collected, identified, and returned to the landowner.

- For pre-contact archaeological site 07/1574-9, archaeological excavations will be conducted. Any recovered artifacts will be identified and returned to the landowner.
- Any archaeological resources that reveal evidence of human remains will be avoided by the establishment of 75-foot buffers for mining activities.
- If unanticipated archaeological or historical resources are encountered during project construction, all ground-disturbing activity in the vicinity of the find will be halted and the Washington DAHP will be promptly notified to ensure compliance with relevant state and federal laws and regulations. Should evidence of human remains be encountered, all ground-disturbing activity in the vicinity will be halted immediately and the Yakima County Coroner and the landowner(s) will be promptly notified.
- As to any archaeological resources to be avoided by the establishment of 75-foot buffers for mining activities, a reclamation buffer of 60 feet will be maintained interior to the mining buffer. Buffers may be modified by WDNR in connection with WDNR's approval of a final reclamation plan for the area or areas in question.

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area, and describe proposed access to the existing street system. Show on site plans, if any.

Site will be accessed through current mine access points on E. Selah Rd. Access to I-82 is immediately adjacent.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

No.

- c. How many additional parking spaces would the completed project or nonproject proposal have? How many would the project or proposal eliminate?

The site currently has a sufficient parking area for all workers/contractors/visitors to the site. No parking will be added or eliminated. Five employee parking spaces have been identified on the site plan.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No. There will be no change in Granite's established use of existing infrastructure.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

No change from the existing condition is proposed. There are currently up to 250 truck trips per day during the peak season. The proposal for mine expansion will not change the current average daily truck trips for quarry operations. Estimation of truck trips is based upon historical tonnages sold from the site and interplant aggregate transfers to the asphalt plant across the freeway. Haul truck trips and aggregate sales are based on market demand, fluctuations in the economy, and funding for WSDOT infrastructure projects. The proposal to extend the mine boundary will not change the current traffic loading for the site.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

h. Proposed measures to reduce or control transportation impacts, if any:

None required.

15. Public services

a. Would the project result in an increased need for public services (for example: Fire protection, police protection, public transit health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

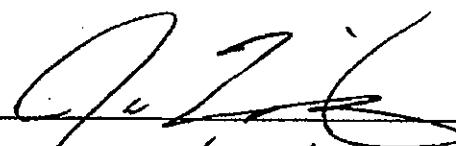
None required.

16. Utilities

- a. Circle utilities currently available at the site: Electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.
None.
- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.
Electricity may be brought in from current mining area if basic lighting is needed.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

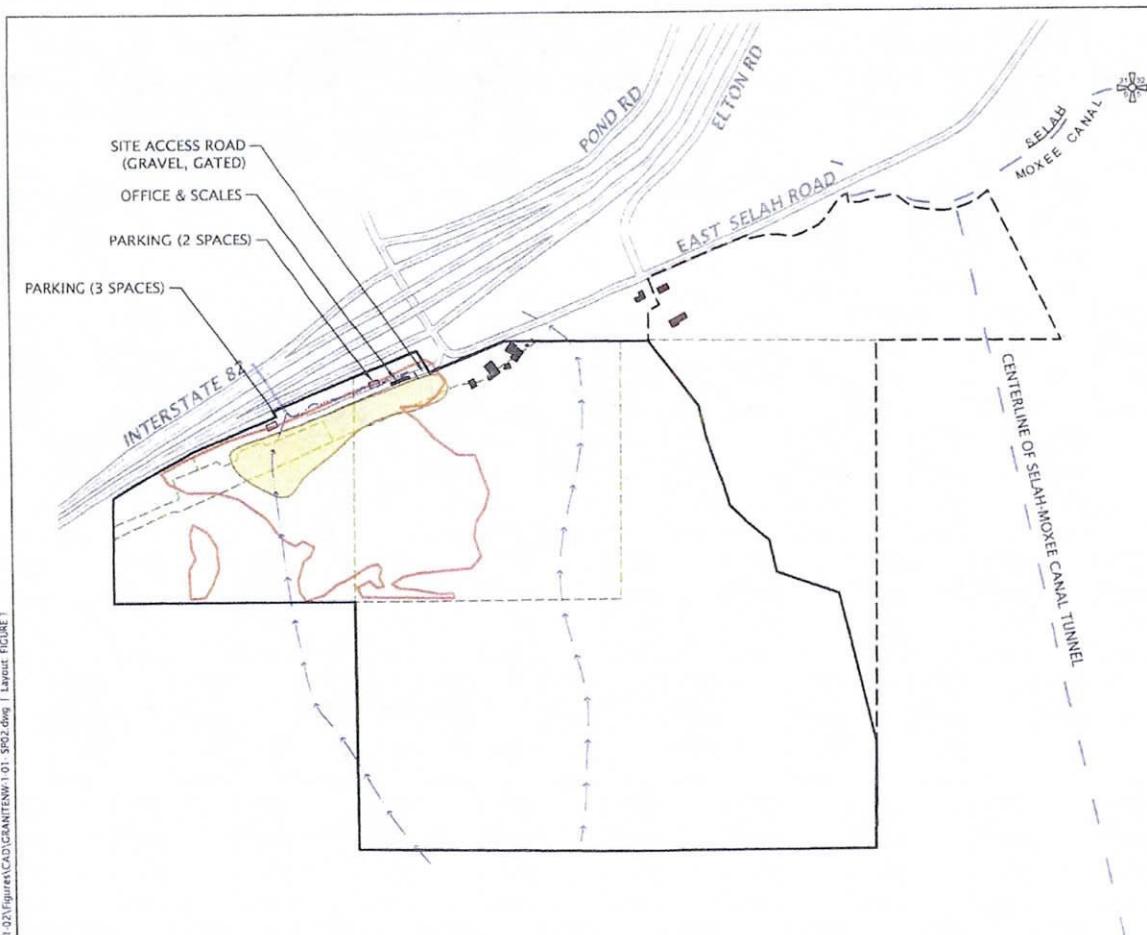
Signature: 

Date Submitted: 1/16/17

NOTES:
1. MA
2. THE
3. STR
4. EXI
5. PAR

NOTES:

1. MAP BASED ON SURVEY PROVIDED BY GRAY SURVEYING & ENGINEERING, INC. 02-06-09.
2. THE PERMIT BOUNDARY COINCIDES WITH THE PROPERTY BOUNDARY AT PORTIONS OF THE NORTH, SOUTH, WEST, AND EAST BOUNDARIES.
3. STREAM LOCATIONS AND TYPE OBTAINED FROM YAKIMA COUNTY GIS MAP AT WEB ADDRESS [HTTP://WWW.YAKIMACOUNTY.US](http://WWW.YAKIMACOUNTY.US); "FOR TYPE 3, 4 & 5 STREAMS, THESE MAPS ARE FOR INFORMATION AND ILLUSTRATIVE PURPOSES ONLY AND NOT REGULATORY IN NATURE." (YAKIMA COUNTY CRITICAL AREAS CODE 16A.04.21).
4. EXISTING DISTURBANCE BOUNDARY OBTAINED FROM WASHINGTON DEPARTMENT OF NATURAL RESOURCES INSPECTION REPORT DATED JANUARY 18, 2013.
5. PARCEL LINES OBTAINED ONLINE FROM YAKIMA COUNTY ASSESSOR.



LEGEND

Legend for the site plan:

- PROPERTY BOUNDARY (214.1 ACRES)
- PERMIT BOUNDARY (161.0 ACRES; SEE NOTE 2)
- PARCEL LINES
- EXISTING DISTURBANCE BOUNDARY (26 ACRES; SEE NOTE 4)
- STOCKPILE AREA
- OFFICE & SCALES
- BUILDINGS
- DITCH
- TYPE 5 STREAM (SEE NOTE 3)
- CULVERT
- BERM
- SELAH-MOXEE CANAL
- ROADS (PAVED)
- SECTION CORNER

Public Services

JUL 20 2016

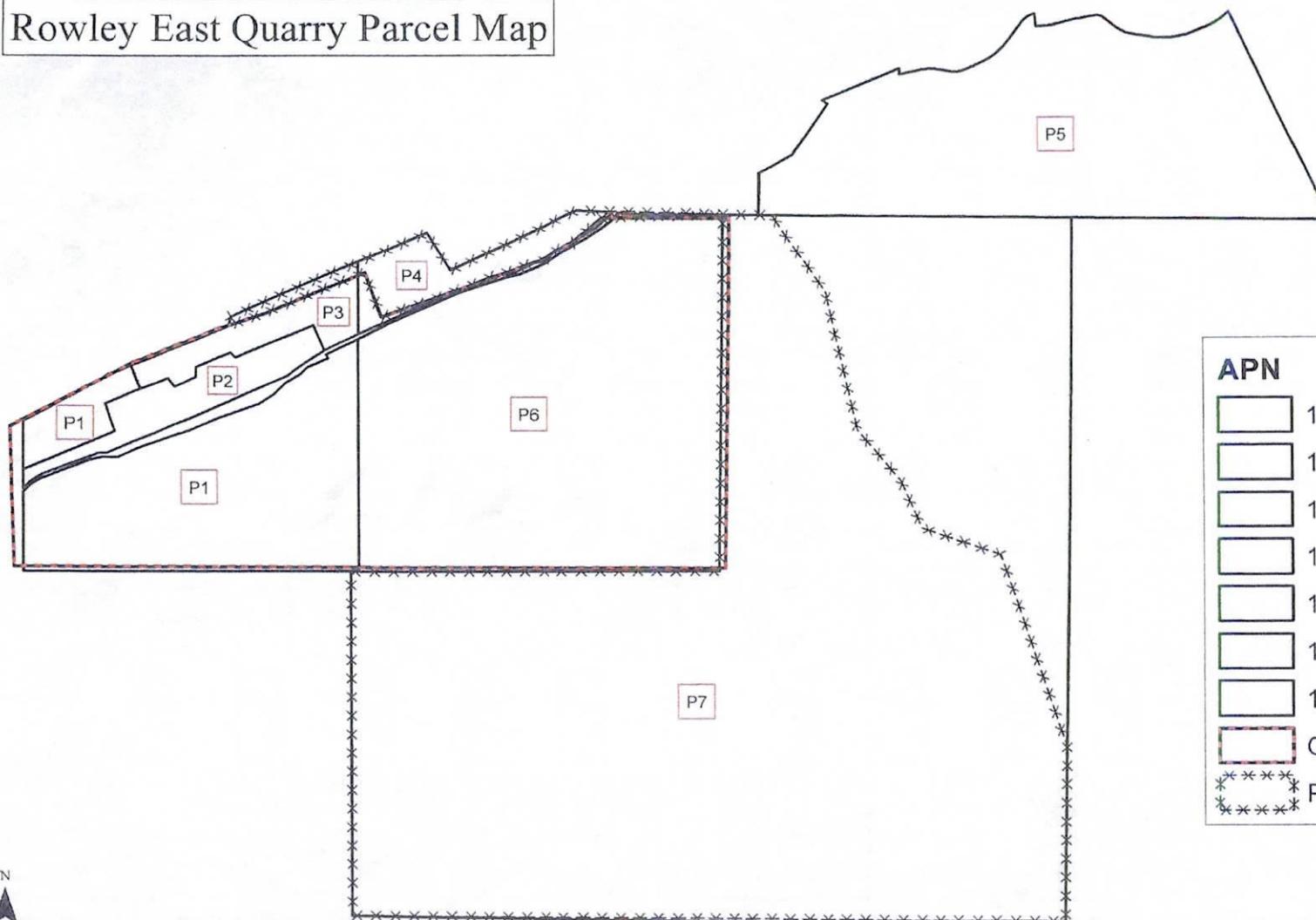
Vern Gary Don Lynn
Dave Lisa Carmen



A horizontal scale bar with tick marks at 0, 600, and 1200. Below the bar, the text '(SCALE IN FEET)' is written in parentheses.

GEO DESIGN ²		SITE PLAN ROWLEY QUARRY (DNR #70-012774)	
1157 1st Avenue, Suite 2200 Seattle, WA 98101 (206) 467-1400 FAX (206) 467-4801	CRANITE NORTHWEST, INC GRANITEW-102 111 V 2015	YAKIMA COUNTY, WA SECTION 6 Twp 13N Range 19E, W.M.	FIGURE 1

Rowley East Quarry Parcel Map



APN	ID
19130623003	P1
19130623004	P2
19130623002	P3
19130624003	P4
19130612404	P5
19130624004	P6
19130613001	P7
Current Permit Boundary	
* * * * *	Proposed Permit Boundary

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

FILE NO.: CUP15-037/SEP15-016
Notice of Decision & Final Threshold Determination (MDNS)

AFFIDAVIT OF MAILING

STATE OF WASHINGTON)
) ss.
COUNTY OF YAKIMA)

I, Patty A. LeBlanc, being first duly sworn, and as an employee of the Yakima County Public Services, Planning Division, dispatched through the United States Mails, a Notice of Decision & Final Threshold Determination (MDNS), a true and correct copy of which is enclosed here-with; that Notice of Decision & Final Threshold Determination (MDNS) was addressed to property owners, parties of record, and agencies, that said parties are individually listed on the Mailing List retained by the Planning Division and that said notice was mailed by me on the 7th day of April, 2017.

That I mailed said notices in the manner herein set forth and that all of the statements are made herein are just and true. Dated this 7th day of April, 2017.



Patty A. LeBlanc
Patty A. LeBlanc
Office Specialist

Donald Gatchalian Jason Earles
Joe Stump
Kent McHenry Jase Testerman
Michele Pescador Terry Keenhan
Dianna Woods David Haws

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13
17
30

Tom Justus
WA State Department of Health
16201 E. Indiana Ave. Ste 1500
Spokane Valley, WA 99216

Selah-Moxee Irrigation District
P.O. Box 166
Moxee, WA 98936

Selah School District #119
Attn: Shane Backlund
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Selah, WA 98942-1117

City of Selah – Planning
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Selah, WA 98942

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Spokane, WA 99216

Realty Specialist
Department of Energy
Bonneville Power Admin.
2410 E. Hawthorne Rd
Mead, WA 99021

Superintendent
Bureau of Indian Affairs
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Toppenish, WA 98948

Fire Chief
Fire District # 2
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Selah, WA 98942

Yakima County Sheriff's Office

Conf. of Governments

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Union Gap, WA 98903

WA State Dept of Health
Wastewater/Shellfish
16201 E. Indiana Ave – Ste 1500
Spokane, WA 99216

Yakima Health District

Dept. of Natural Resources
SEPA Center - David F. Dietzman
P.O. Box 47015
Olympia, WA 98504-7015

Tribal Council
Confederated Tribes & Bands
of the Yakama Nation
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Toppenish, WA 98948

Agency Mailing List

Highlighted = Emailed

CUP15-037/SEP15-016
1/23/17
4/7/17
17 LABELS

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AND
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Yakima, WA 98901

Yakama Nation
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Toppenish, WA 98948

Hop Growers of WA
PO Box 1207
Moxee, WA 98936

Parties of Record
Highlighted = Emailed

CUP15-037/SEP15-016
4/7/17
13 LABELS