

Good afternoon, Danielle.

For your review, please see the attached Voluntary Mitigation Measures proposed for Union Pacific Railroad's PIRATE Project. If you have any additional questions or concerns, please do not hesitate to reach out. Thank you.

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April 12, 2023

VIA EMAIL

Ms. Danielle Gosselin
Director, Office of Environmental Analysis
Surface Transportation Board
395 E Street, SW
Washington, DC 20423

Re: STB Docket No. FD 36501 – Union Pacific Railroad – Construction and
Operation Exemption - PIRATE Project – Voluntary Mitigation Measures

Dear Ms. Gosselin:

Please find enclosed the proposed voluntary mitigation measures for Union Pacific Railroad's PIRATE Project. Union Pacific Railroad submits these voluntary mitigation measures for consideration in the Draft Environmental Assessment that is currently being prepared by the Surface Transportation Board's Office of Environmental Analysis.

If there are any questions regarding the proposed voluntary mitigation measures, please do not hesitate to contact me.

Sincerely,

/s/

Tanya Spratt

Encl.

cc: Adam Assenza
Maggie Buckley
Kevin Rice



Introduction

This report presents the Union Pacific Railroad's (Applicant) draft Voluntary Mitigation Measures (VMs) for the proposed PIRATE Project. These VMs were developed based on the Applicant's understanding of the environmental and built environmental conditions within the rail corridor and are based on feedback received during the environmental review process to date. As appropriate, these VMs may be carried out either by the Applicant or the Applicant's construction contractor(s).

Voluntary Mitigation Measures

The following sections provide the Applicant's VMs. They are presented by resource category.

CONSTRUCTION AND RAIL OPERATIONS SAFETY

VM 1. The Applicant will follow all applicable federal Occupational Safety and Health Administration, Federal Railroad Administration (FRA), and operational safety regulations to minimize the potential for accidents and incidents during construction and operation of the rail line.

GRADE CROSSING SAFETY

VM 2. The Applicant will consult with appropriate federal, state, and local transportation agencies to determine the final design of the at-grade crossing warning devices. Warning devices on public roadways will be subject to review and approval, depending on location, by the Arizona Corporation Commission (ACC), City of Mesa, and Town of Queen Creek. The Applicant will follow standard safety designs for each at-grade crossing for proposed warning devices and signs. These designs will follow the Federal Highway Administration's *Manual on Uniform Traffic Control Devices for Streets and Highways* (MUTCD) and the American Railway Engineering and Maintenance-of-Way Association (AREMA) guidelines for railroad warning devices. They will also comply with applicable ACC, City of Mesa, and Town of Queen Creek requirements.

VM 3. For construction of road crossings, when reasonably practical, the Applicant and Applicant's contractor(s) will consult with local transportation officials regarding construction phasing and temporary traffic control. The Applicant's contractor(s) will be responsible for local agency coordination of construction schedules, detours, and temporary traffic control, as well as obtainment of necessary temporary traffic control permits from the City of Mesa and Town of Queen Creek. As appropriate, the Applicant's contractor(s) will maintain egress or routing of traffic to allow for passage of emergency and other vehicles.



VM 4. The Applicant will consult with the Flood Control District of Maricopa County (FCDMC) to determine the final details and reasonable signage for private at-grade crossings along access roads.

VM 5. The Applicant and Applicant's contractor(s) will consult with appropriate adjacent landowners for coordination of construction schedules and temporary access during construction.

VM 6. The Applicant will consult with the ACC and City of Mesa regarding roadway safety and user expectations, which includes items such as pavement markings, signing, delineators, and active warning devices for vehicles, pedestrians, and bicyclists at proposed at-grade crossings.

HAZARDOUS MATERIALS HANDLING AND SPILLS DURING CONSTRUCTION

VM 7. Prior to initiating any project-related construction activities, the Applicant's contractor(s) will prepare a Hazardous Waste Management Plan (HWMP) detailing the manner in which hazardous wastes will be managed and describing the types and volumes of hazardous wastes anticipated to be managed. The HWMP will address both onsite and offsite hazardous waste management and include the following: description of the methods to be used to ensure accurate piece counts or weights of shipments, waste minimization methods, facilities to be used for treatment, storage, and disposal (TSD), onsite areas designated where hazardous wastes are to be handled, identify whether transfer facilities are to be used, and if so, how the wastes will be tracked to ultimate disposal. Additionally, the Applicant's contractor(s) will document hazardous waste inspections on a weekly basis.

VM 8. In accordance with the Applicant contractor's HWMP and Emergency Management Plan (EMP), and in the event of a spill over the applicable reportable quantity, the Applicant's contractor(s) will comply with its spill prevention, control, and countermeasures plan and applicable federal, state, and local regulations pertaining to spill containment, appropriate clean-up, and notifications.

VM 9. The Applicant will require its construction contractor(s) to implement measures to protect workers' health and safety and the environment in the event that undocumented hazardous materials are encountered during construction. The Applicant will document all activities associated with hazardous material spill sites and hazardous waste sites and will notify the appropriate state and local agencies according to applicable regulations. The goal of the measures is to ensure the proper handling and disposal of contaminated materials including contaminated soil, groundwater, and stormwater, if such materials are encountered. The Applicant will use disposal methods that comply with applicable solid and hazardous water regulations.

VM 10. The Applicant's contractor(s) will responsibly handle and store gasoline, diesel fuel, oil, lubricants, and other petroleum products to reduce the risk of spills



contaminating soils or surface waters. If a petroleum spill occurs in the project area as a result of rail construction, operation, or maintenance and exceeds specific quantities or enters a water body, the Applicant's contractor(s) will be responsible for promptly cleaning up the spill and notifying responsible agencies in accordance with federal and state regulations.

HAZARDOUS MATERIALS TRANSPORT AND EMERGENCY RESPONSE

VM 11. The Applicant will prepare a hazardous materials emergency response plan to address potential derailments or spills. This plan will address the requirements of the Pipeline and Hazardous Materials Safety Administration (PHMSA) and FRA requirements for comprehensive oil spill response plans. The Applicant will distribute the plan to federal, state, and local emergency response agencies. This plan shall include a roster of agencies and people to be contacted for specific types of emergencies during rail construction, operation and maintenance activities, procedures to be followed by particular rail employees, emergency routes for vehicles, and the location of emergency equipment.

VM 12. The Applicant will work with the local agencies to facilitate the development of cooperative agreements with other emergency service providers to share services areas and emergency call response.

VM 13. In the event of a reportable hazardous materials release, the Applicant will notify appropriate federal, and state environmental agencies as required under federal and state law.

VM 14. The Applicant will comply with applicable FRA, PHMSA, and Transportation Security Administration regulations for the safe and secure transportation of hazardous materials.

TOPOGRAPHY, GEOLOGY, AND SOILS

VM 15. The Applicant's contractors(s) will limit ground disturbance to only the areas necessary for project-related construction activities.

VM 16. During project-related earth-moving activities, the Applicant's contractors(s) will remove topsoil and excess earthen material for safe and legal disposal to an offsite location.

VM 17. The Applicant's contractor(s) will stockpile excavated soil in areas away from environmentally or culturally sensitive areas and will use appropriate erosion control measures to prevent or contain erosion.

VM 18. The Applicant's contractor(s) will submit a Notice of Intent (NOI) to request permit coverage under Arizona Pollutant Discharge Elimination System



(AZPDES) Construction Activity General Permit (CGP) AZG2020-001 CGP for construction stormwater management.

VM 19. The Applicant's contractor(s) will submit an application for coverage under the National Pollutant Discharge Elimination System stormwater construction permits pursuant to Section 402 of the Clean Water Act for construction stormwater management.

VM 20. The Applicant's contractor(s) will develop a stormwater pollution prevention plan (SWPPP), which will include construction best management practices (BMPs) to control erosion and reduce the amount of sediment and pollutants entering surface waters, groundwater, and waters of the U.S. The Applicant will require its construction contractor(s) to follow all water quality control conditions identified in all permits, including the Section 404 permit from the U.S. Army Corps of Engineers (USACE) and the Section 401 Water Quality Certification from the Arizona Department of Environmental Quality.

VM 21. The Applicant's contractor(s) will perform finish grading and surface disturbed areas with appropriate BMPs, where practical and in consultation with the City of Mesa and Town of Queen Creek, when construction is completed.

AIR QUALITY

VM 22. In accordance with Maricopa County dust control permitting requirements, the Applicant's contractor(s) will implement appropriate dust control measures to reduce fugitive-dust emissions created during project-related construction activities. The Applicant will require its construction contractor(s) to regularly operate water trucks on haul roads to reduce dust generation.

VM 23. The Applicant will work with its contractor(s) to make sure that construction equipment is properly maintained, and that mufflers and other required pollution-control devices are in working condition in order to limit construction-related air pollutant emissions.

WATER RESOURCES/WETLANDS

VM 24. The Applicant will obtain a permit from USACE under Section 404 of the Clean Water Act before initiating project-related construction activities in wetlands and other jurisdictional waters of the United States. The Applicant will comply with all conditions of the Section 404 permit.

VM 25. The Applicant will obtain a Section 401 Water Quality Certification from the Arizona Department of Environmental Quality. The Applicant will incorporate the conditions of the Section 401 Water Quality Certification into its construction contract specifications and will monitor the project for compliance.



VM 26. The Applicant will minimize impacts to wetlands to the extent practicable in the final design. After all practicable steps have been taken to minimize impacts to wetlands, the Applicant agrees to prepare a mitigation plan for any remaining wetland impacts in consultation with USACE, where applicable.

STREAMS AND PERENNIAL WASHES

VM 27. The Applicant's contractor(s) will construct stream crossings during low-flow periods, when practical.

VM 28. When practical and in consultation with the FCDMC and USACE where applicable, the Applicant's contractor (s) will minimize impacts to streams where impacts are unavoidable. After all practicable steps have been taken to minimize impacts to streams, the Applicant agrees to prepare a mitigation plan for any remaining stream impacts in consultation with USACE, where applicable.

VM 29. For streams and rivers within a floodplain regulated by the FCDMC, the Applicant will design the stream crossing with the goal of not impeding floodwaters and not raising water surface elevations to levels that would change the regulated floodplain boundary. If flood elevations change, the Applicant will coordinate with FEMA and/or local floodplain managers to obtain a Letter of Map Revision where construction of bridges, culverts or embankments results in an unavoidable increase greater than 1 foot to the 100-year water surface elevations.

VM 30. The Applicant will obtain a permit from FCDMC before initiating project-related construction activities in a floodplain regulated by FEMA. The Applicant will comply with all conditions of the floodplain permit.

BIOLOGICAL RESOURCES

VM 31. The Applicant will comply with any conditions and mitigation commitments contained in the EA or similar document, provided by the Arizona Game and Fish Department, and/or the USFWS, for sensitive species that could potentially be impacted by the project.

VM 32. The Applicant will require its contractor(s) to comply with the requirements of the Migratory Bird Treaty Act as applicable. The following measures will be conducted by the Applicant and/or its contractor(s):

- a. Where practical, any ground-disturbing, ground-clearing activities or vegetation treatments will be performed before migratory birds begin nesting or after all young have fledged.
- b. If activities must be scheduled to start during the migratory bird breeding season, the Applicant will not take steps to prevent migratory birds from establishing nests in the potential impact area. The Applicant or its agents will



- not haze or exclude nest access for migratory birds and other sensitive avian species.
- c. If activities must be scheduled during the migratory bird breeding season, a qualified biologist will perform a site-specific survey for nesting birds starting no more than 7 days prior to ground-disturbing activities or vegetation treatments. Birds with eggs or young will not be hazed, and nests with eggs or young will not be moved until the young are no longer dependent on the nest.
 - d. If nesting birds are found during the survey, the Applicant will establish appropriate seasonal or spatial buffers around nests. Vegetation treatments or ground-disturbing activities within the buffer areas will be postponed, where feasible, until the birds have left the nest. A qualified biologist will confirm that all young have fledged.

THE BURROWING OWL

VM 33. Within 30 days prior to construction, qualified biologists will survey for the federal- and state-protected Burrowing Owl (*Athene cunicularia*) following guidelines provided by the Arizona Game and Fish Department. Survey results will be provided to the Arizona Game and Fish Department.

VM 34. If Burrowing Owls are observed at burrows in the project area, a 100-ft buffer of no activity will be established around the burrow for the duration of the project.

VM 35. If an active Burrowing Owl burrow is in an area that requires impact, a local, qualified rehabber will be contacted to remove the owls from the project area with the appropriate state and federal permits. The burrows will be collapsed by the rehabber to prevent further nesting activities.

VEGETATION

VM 36. The Applicant will comply with any conditions and mitigation commitments contained in the EA or similar document, provided by the Arizona Game and Fish Department, and/or the USFWS, for sensitive plant species that could potentially be impacted by the project.

CULTURAL RESOURCES

VM 37. The Applicant will apply all measures identified in the Historic Properties Treatment Plan (HPTP) regarding development training materials to educate construction supervisors about the importance of protecting cultural resources and the procedures for handling undocumented discoveries.

VM 38. The Applicant and the Applicant's contractor(s) will comply with the requirements of the Memorandum of Agreement (MOA) and the HPTP developed by OEA, the Advisory Council on Historic Preservation (ACHP), Arizona State Historic



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Preservation Office, Native American tribal representatives, and other federal and state agencies in consultation with other consulting parties.

UTILITIES

VM 39. The Applicant will secure agreements with utility owners to establish responsibility for protecting or relocating existing utilities, if impacted by construction.

VM 40. The Applicant will coordinate with Arizona State Land Department (ASLD) to develop irrigation infrastructure protection or relocation plans.

COMMUNITY OUTREACH

VM 41. The Applicant will appoint a liaison to consult with communities, businesses, agencies, Tribal Governments, educational institutions, and non-profit organizations to provide general project information, progress on construction, information on rail operations and safety as needed and will seek to develop cooperative solutions to local concerns regarding construction activities.

VM 42. In accordance with temporary traffic control permitting requirements, the Applicant's contractor(s) will install temporary traffic control including pavement markings, signing, and detours throughout the project areas and applicable work zones.

NOISE AND VIBRATION

VM 43. The Applicant will comply with FRA regulations (49 Code of Federal Regulations Part 210) establishing decibel limits for train operation.

VM 44. The Applicant will work with its contractor(s) to make sure that project-related construction and maintenance vehicles are maintained in good working order with properly functioning mufflers to control noise.