

APPENDIX N-1 MINERAL RESOURCES

This appendix contains supporting documentation for the assessment of mineral resources for the Supplement to the Final Environmental Impact Statement.

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N.1 BACKGROUND

In preparation of the June 2014 Final EIS, supporting documentation was developed for the assessment of impacts to mineral resources and is provided in **Appendix N, Mineral Resources**. The volume of material required for the construction of the June 2014 Final EIS Alternatives B and D were estimated in order to determine the ability, as shown below in **Table N-1**.

**Table N-1
PRELIMINARY MATERIAL ESTIMATE – ALTERNATIVES B AND D
Gross Field Airport**

Location or Purpose	Material	Volume
Runway and taxiway surface	Asphaltic concrete	1,800 tons
Base	Class 2 aggregate	2,900 cubic yards
Subbase	Class 3 aggregate	5,800 cubic yards
Import fill: net finished, compacted in place for runway and taxiway	Unspecified	45,000 cubic yards
Import fill: overfill to account for settlement and consolidation	Unspecified	11,250 to 22,500 cubic yards
Import fill for levees	Unspecified	50,000 cubic yards

The estimate provided in this table was developed for a runway extension of 1,100 feet long and 75 feet wide, along with a parallel extension of the taxiway and levees.

Source: Preliminary Design Report (Cortright & Seibold, 2002)

As discussed in Appendix N, *Mineral Resources*, the sources of aggregate, asphalt, and concrete are of limited volume within Marin County. Asphaltic concrete and the Class 2 and 3 aggregate materials could be acquired from a local Marin County supplier such as Dutra Materials and Lunny Grading & Paving. Import fill sources would need to be arranged for at the time of the project. Sources could include the local mineral locations identified above or local active construction projects looking to dispose of excess fill. Between the local Marin County sources and the availability of materials from outside of the County, materials are anticipated to be available for the construction of Alternative B or D.

N.2 MINERAL RESOURCE ESTIMATE - ALTERNATIVE E

The volume of material required for the construction of Alternative E is anticipated to be less than that estimated for Alternatives B and D because Alternative E proposes a shorter runway extension, as shown below in **Table N-2**.

**Table N-2
PRELIMINARY MATERIAL ESTIMATE – ALTERNATIVE E
Gross Field Airport**

Location or Purpose	Material	Volume
Runway and taxiway surface	Asphaltic concrete	700 tons
Base	Class 2 aggregate	1,100 cubic yards
Subbase	Class 3 aggregate	2,200 cubic yards
Import fill: net finished, compacted in place for runway and taxiway	Unspecified	16,700 cubic yards
Import fill: overfill to account for settlement and consolidation	Unspecified	4,200 to 8,400 cubic yards
Import fill for levees	Unspecified	37,700 cubic yards

The estimate provided in this table was developed for a runway extension of 300 feet long and 75 feet wide, along with a northern shift of 106 feet and a parallel extension of the taxiway and levees.
Source: Landrum & Brown analysis, 2018.

Because Alternative E would require less material than that required for Alternatives B and D, the conclusions regarding the availability of materials for construction of Alternative B and D also apply to Alternative E. Therefore, asphaltic concrete and the Class 2 and 3 aggregate materials could be acquired from a local Marin County supplier such as Dutra Materials and Lunny Grading & Paving. Import fill sources would need to be arranged for at the time of the project. Sources could include the local mineral locations identified above or local active construction projects looking to dispose of excess fill. Between the local Marin County sources and the availability of materials from outside of the County, materials are anticipated to be available for the construction of Alternative E.