## 4.16 CONSTRUCTION ACCESS

*Construction access was mapped on USGS DRG Quadrangle maps using PLS-CADD, topography, the existing road network, and natural features (i.e. waterbodies). A suite of resource areas identified in MFSA Cir. 2 Sec. 3.7 (a) were analyzed for construction access crossings and are summarized in Table 4.16-1 below. Construction access is not proposed through the following areas: National Wilderness Areas; National Primitive Areas; National Wildlife Refuges; National Parks and Monuments; State Parks; National Recreation areas; Wild and Scenic Rivers; Roadless Areas; Specially Managed Buffer Areas; State and Federal Waterfowl Production Areas; Special Interest Areas; Critical Habitats; National Historic Landmarks; National Register Districts; Municipal watersheds; Undeveloped land or water areas with natural features of unusual scientific, educational, or recreational significance; standing water bodies; and surface supplies of potable water. Therefore impacts to these areas from construction access would not exist. Impacts from proposed construction access to areas identified in MFSA Cir. 2 Sec. 3.7 (b) are identified below in Table 4.16-2. Additional discussions pertaining to impacts can be found in the respective resource sections of the MFSA application (Vol. I-A) and the Resource Technical Reports (Vol. II).*

***Table 4.16-1 MSTI Construction Access Crossing of Resource Areas Identified in MFSA Cir. 2 Sec. 3.7 (a).***

| Route | Access Road Type | Wildlife Management Areas | Rugged Terrain > 30% Slope | Habitats of Species of Concern | National register historic districts and sites nominated to or designated by SHPO | FWP Class 1 or 2 Streams or Rivers | 303d Non-Attainment Streams | Highly Erodible Soils | VRM I | VRM II | Winter distribution of elk, deer, moose, pronghorn, mountain goat, BigHorn | Major elk summer security areas | Big Horn Sheep Habitat | Sage and sharp-tailed grouse leks and winter habitats | High waterfowl densities (prime waterfowl habitat) | Geologic units of formations with a high probability of including paleontological resources | Sites that have religious or heritage significance to Native Americans |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A1 | Existing | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | TBD |
| A1 | New | Yes | Yes | Yes | Yes | No | No | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | TBD |
| A1 | Overland | No | Yes | Yes | No | No | Yes | Yes | No | Yes | Yes | No | Yes | Yes | Yes | Yes | TBD |
| A2 | Existing | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | TBD |
| A2 | New | Yes | Yes | Yes | Yes | No | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | TBD |
| A2 | Overland | No | Yes | Yes | Yes | No | Yes | Yes | No | Yes | Yes | No | Yes | Yes | Yes | Yes | TBD |
| A3 | Existing | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | TBD |
| A3 | New | Yes | Yes | Yes | No | No | No | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | TBD |
| A3 | Overland | No | Yes | Yes | Yes | No | Yes | Yes | No | Yes | Yes | No | Yes | Yes | Yes | Yes | TBD |
| AB1 | Existing | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | No | No | Yes | Yes | Yes | TBD |
| AB1 | New | Yes | Yes | Yes | Yes | No | No | Yes | No | No | Yes | No | No | Yes | Yes | Yes | TBD |
| AB1 | Overland | No | Yes | Yes | Yes | No | Yes | Yes | No | No | Yes | No | No | Yes | Yes | Yes | TBD |
| B1 | Existing | No | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | No | No | Yes | Yes | Yes | TBD |

| Route | Access Road Type | Wildlife Management Areas | Rugged Terrain > 30% Slope | Habitats of Species of Concern | National register historic districts and sites nominated to or designated by SHPO | FWP Class 1 or 2 Streams or Rivers | 303d Non-Attainment Streams | Highly Erodible Soils | VRM I | VRM II | Winter distribution of elk, deer, moose, pronghorn, mountain goat, BigHorn | Major elk summer security areas | Big Horn Sheep Habitat | Sage and sharp-tailed grouse leks and winter habitats | High waterfowl densities (prime waterfowl habitat) | Geologic units of formations with a high probability of including paleontological resources | Sites that have religious or heritage significance to Native Americans |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *B1* | *New* | *No* | *Yes* | *Yes* | *Yes* | *No* | *No* | *Yes* | *No* | *No* | *Yes* | *No* | *Yes* | *Yes* | *Yes* | *Yes* | *TBD* |
| *B1* | *Overland* | *No* | *No* | *Yes* | *Yes* | *No* | *No* | *Yes* | *No* | *No* | *Yes* | *No* | *No* | *Yes* | *Yes* | *Yes* | *TBD* |
| *B2* | *Existing* | *No* | *Yes* | *Yes* | *Yes* | *No* | *Yes* | *Yes* | *Yes* | *No* | *Yes* | *No* | *Yes* | *Yes* | *Yes* | *Yes* | *TBD* |
| *B2* | *New* | *No* | *Yes* | *Yes* | *No* | *No* | *No* | *Yes* | *No* | *No* | *Yes* | *No* | *No* | *Yes* | *No* | *Yes* | *TBD* |
| *B2* | *Overland* | *No* | *Yes* | *Yes* | *No* | *No* | *No* | *Yes* | *No* | *No* | *Yes* | *No* | *No* | *Yes* | *Yes* | *Yes* | *TBD* |
| *B3* | *Existing* | *No* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *No* | *No* | *Yes* | *No* | *No* | *Yes* | *Yes* | *Yes* | *TBD* |
| *B3* | *New* | *No* | *Yes* | *Yes* | *Yes* | *No* | *No* | *Yes* | *No* | *No* | *Yes* | *No* | *Yes* | *Yes* | *Yes* | *Yes* | *TBD* |
| *B3* | *Overland* | *No* | *No* | *Yes* | *Yes* | *No* | *No* | *Yes* | *No* | *No* | *Yes* | *No* | *No* | *Yes* | *Yes* | *Yes* | *TBD* |

***Table 4.16-2 MSTI Construction Access Crossing Potential Impacts to Resource Areas Identified in MFSA Cir. 2 Sec. 3.7 (b).***

<table>
<tr><th></th><th>Existing Access Roads</th><th>New Access Roads</th><th>Overland Access Roads</th></tr>
<tr><td>Wildlife Management Areas</td><td>Increased construction traffic/human presence would temporarily disturb biological resources through increased noise and dust. Timing limitation would reduce these impacts.</td><td colspan="2">Construction traffic/human presence would temporarily disturb biological resources through increased noise and dust. New road and overland travel would create disturbance that would potentially reduce habitat quantity and quality. Timing limitations and avoidance where feasible would reduce these impacts.</td></tr>
<tr><td>Rugged Terrain > 30% Slope</td><td>Minimal impacts would occur from using the existing road network for construction access.</td><td colspan="2">New construction access and overland travel would potentially increase soil erosion and contribute to soil production loss.</td></tr>
<tr><td>Habitats of Species of Concern</td><td>Increased construction traffic/human presence would temporarily disturb biological resources through increased noise and dust. Timing limitation would reduce these impacts.</td><td colspan="2">Construction traffic/human presence would temporarily disturb biological resources through increased noise and dust. New road and overland travel would create disturbance that would potentially reduce habitat quantity and quality. Timing limitations and avoidance where feasible would reduce these impacts.</td></tr>
<tr><td>National register historic districts and sites nominated to or designated by SHPO</td><td colspan="3">Minimal impacts to known sites would occur due to the use of existing roads, consultation with tribes, preconstruction survey, and site avoidance.</td></tr>
<tr><td>FWP Class 1 or 2 Streams or Rivers</td><td rowspan="2">Minimal impacts would occur from using existing roads for construction access. Existing water crossing structures would be used.</td><td rowspan="2">Minimal impacts would occur; streams and rivers would be spanned. Water quality impacts would be managed through the permitting process (SWPPP).</td><td rowspan="2">Minimal impacts would occur from using overland travel for construction access</td></tr>
<tr><td>303d Non-Attainment Streams</td></tr>
<tr><td>Highly Erodible Soils</td><td>Minimal impacts would occur from using the existing road network for</td><td colspan="2">New construction access and overland travel would potentially increase soil erosion and contribute to soil production loss.</td></tr>
</table>

| | Existing Access Roads | New Access Roads | Overland Access Roads |
|---|---|---|---|
| | *construction access.* | | |
| **Visual Resources** | *Minimal impacts to visual resources would result from utilizing existing roads for construction access.* | *-Construction access roads would not be compatible with visual resource management plans and would be avoided where feasible. - New roads may be compatible with visual resource management plans (VRM Class II) in areas where the overall visual contrast level, or degree of physical alteration of the landscape, would be characterized as weak. These areas generally occur where spur roads would be short, removal of vegetation would be minimal, and the proposed transmission line would parallel a similar existing line.* | *Overland access may be compatible with VRM Class II in areas where the overall visual contrast level, or degree of physical alteration of the landscape, would be characterized as weak. These areas generally occur where contrasts would be created by crushed vegetation from overland access, removal of vegetation would be minimal, and the proposed transmission line would parallel a similar existing line.* |
| **Winter distribution of elk, deer, moose, pronghorn, mountain goat, BigHorn** | *Increased construction traffic/human presence would temporarily disturb biological resources through increased noise and dust. Timing limitation would reduce these impacts.* | *Construction traffic/human presence would temporarily disturb biological resources through increased noise and dust. New road and overland travel would create disturbance that would potentially reduce habitat quantity and quality. Timing limitations and avoidance where feasible would reduce these impacts.* | |
| **Major elk summer security areas** | | | |
| **Big Horn Sheep Habitat** | | | |
| **High waterfowl densities (prime waterfowl habitat)** | | *Construction traffic/human presence would temporarily disturb biological resources through increased noise and dust. New road and overland travel would create disturbance that would potentially reduce habitat quantity and quality. Timing limitations and avoidance where feasible would reduce these impacts.* | |
| **Geologic units of formations with a high probability of including paleontological resources** | *Minimal impacts would occur from using the existing road network for construction access.* | *New construction access and overland travel would potentially increase ground disturbance and impact unknown paleo-sites. Known sites and newly discovered sites would be avoided where feasible.* | *Minimal impacts would occur from using overland travel for construction access.* |
| **Sites that have religious or heritage significance to Native Americans** | *Minimal impacts to known sites would occur due to the use of existing roads, consultation with tribes, preconstruction survey, and site avoidance.* | | |

*Mileage estimates from construction access to earth resource impacts are summarized below in Tables 4.16-3-4.16-5. Maps of construction access are provided in the construction access map book (sheets 1-40). Impacts to earth resources are summarized in the MFSA application (Sections 4.4, 4.5, 4.6, and 4.13) and in the Earth Resource Technical Reports in Vol. II of the application.*

***Table 4.16-3 Mileage of Construction Access, Crossing Wind and Water Soil Erodibility Classifications.***

| Route | Access Road Type | Soil Erodibility Classification | | | | | |
|---|---|---|---|---|---|---|---|
| | | WATER | | | | | |
| | | Least Susceptible | Least Susceptible | Moderately Susceptible | Moderately Susceptible | Most Susceptible | Most Susceptible |
| | | WIND | | | | | |
| | | Least Susceptible | Moderately Susceptible | Least Susceptible | Moderately Susceptible | Least Susceptible | Moderately Susceptible |
| A1 | Existing | 7.2 | 20.3 | 9.1 | 47.1 | 30.4 | 26.6 |
| A1 | New | 8.8 | 2.9 | 5.0 | 23.5 | 4.1 | 2.7 |
| A1 | Overland | 6.1 | 2.7 | 7.2 | 11.9 | 3.9 | 9.3 |
| A2 | Existing | 32.4 | 41.7 | 30.3 | 74.1 | 28.7 | 13.8 |
| A2 | New | 15.0 | 12.5 | 9.9 | 24.3 | 4.7 | 3.7 |
| A2 | Overland | 5.5 | 1.2 | 8.7 | 5.8 | 1.7 | 1.1 |
| A3 | Existing | 9.4 | 23.2 | 4.6 | 71.8 | 44.4 | 57.7 |
| A3 | New | 7.0 | 2.7 | 1.1 | 21.2 | 5.0 | 8.6 |
| A3 | Overland | 5.5 | 2.7 | 2.9 | 13.3 | 8.3 | 10.4 |
| AB1 | Existing | 1.5 | 33.6 | 96.6 | 69.3 | 42.7 | 54.3 |
| AB1 | New | 1.8 | 4.4 | 69.2 | 51.5 | 6.5 | 6.7 |
| AB1 | Overland | 4.2 | 2.4 | 14.5 | 22.0 | 8.0 | 23.3 |
| B1 | Existing | 0 | 1.4 | 63.5 | 7.7 | 10.4 | 26.5 |
| B1 | New | 0 | 0 | 49.2 | 12.7 | 2.4 | 11.0 |
| B1 | Overland | | 0.3 | 5.8 | 14.3 | 2.6 | 4.7 |
| B2 | Existing | 1.2 | 3.0 | 81.3 | 3.8 | 7.7 | 15.2 |
| B2 | New | 0 | 0 | 1.9 | 0 | 0 | 0 |
| B2 | Overland | 0 | 0 | 8.7 | 0.5 | 1.4 | 0.3 |
| B3 | Existing | 0 | 1.4 | 53.0 | 2.2 | 2.3 | 25.7 |
| B3 | New | 0 | 0 | 40.5 | 1.0 | 2.4 | 12.9 |
| B3 | Overland | 0.6 | 0.3 | 7.1 | 5.1 | 5.9 | 22.6 |

***Table 4.16-4 Mileage of Construction Access, Crossing Mass Movement Potential Areas.***

| *Route** | *Access Road Type* | *Miles with Mass Movement Potential* |
|---|---|---|
| A2 | Existing | 0.4 |
| A2 | Overland | 0.1 |
| AB1 | Existing | 0.7 |
| B1 | Existing | 0.7 |
| B2 | Existing | 3.3 |
| B2 | New | 0.6 |
| B2 | Overland | 0.1 |
| B3 | Existing | 0.7 |

**Note: Routes not listed do not contain any mileage of mass movement potential*

***Table 4.16-5 Mileage of Construction Access, Crossing Reclamation Potential Areas.***

| *Route* | *Access Road Type* | *Reclamation Potential* | | | | |
|---|---|---|---|---|---|---|
| | | *Miles Least Resilient* | *Miles Less Resilient* | *Miles Moderately Resilient* | *Miles Somewhat Resilient* | *Miles Most Resilient* |
| A1 | Existing | 25.4 | 0.0 | 46.1 | 7.2 | 62.0 |
| A1 | New | 14.0 | 0.0 | 16.1 | 8.4 | 8.5 |
| A1 | Overland | 5.9 | 0.0 | 15.0 | 4.0 | 16.2 |
| A2 | Existing | 32.0 | 31.5 | 90.5 | 5.7 | 61.2 |
| A2 | New | 11.4 | 14.0 | 23.8 | 7.0 | 13.8 |
| A2 | Overland | 2.3 | 0.0 | 14.4 | 1.9 | 5.3 |
| A3 | Existing | 30.9 | 0.7 | 56.8 | 9.4 | 113.3 |
| A3 | New | 15.0 | 0.2 | 7.4 | 7.0 | 16.1 |
| A3 | Overland | 5.2 | 0.0 | 13.1 | 5.5 | 19.2 |
| AB1 | Existing | 38.7 | 7.1 | 146.9 | 1.5 | 103.9 |
| AB1 | New | 15.5 | 7.8 | 92.1 | 1.4 | 23.4 |
| AB1 | Overland | 5.7 | 2.1 | 29.2 | 2.1 | 35.4 |
| B1 | Existing | 1.4 | 7.1 | 84.1 | 0.0 | 16.8 |
| B1 | New | 0.0 | 7.8 | 53.5 | 0.0 | 14.0 |
| B1 | Overland | 0.3 | 2.1 | 10.3 | 0.0 | 14.8 |
| B2 | Existing | 0.0 | 7.6 | 94.6 | 0.0 | 9.9 |
| B2 | New | 0.0 | 0.3 | 1.6 | 0.0 | 0.0 |
| B2 | Overland | 0.0 | 0.5 | 8.9 | 0.0 | 1.4 |
| B3 | Existing | 1.4 | 2.5 | 75.4 | 0.0 | 5.2 |
| B3 | New | 0.0 | 4.5 | 49.9 | 0.0 | 2.4 |
| B3 | Overland | 0.3 | 1.4 | 30.3 | 0.0 | 9.7 |