Appendix C
Proposed Barrier Locations
<table>
<thead>
<tr>
<th>Drainage</th>
<th>Estimated Debris Volume Loss from 2013 Events (yd³)</th>
<th>50% Debris Volume Loss (yd³)</th>
<th>Location</th>
<th>Distance from Road (ft)</th>
<th>Distance to Upstream Barrier (ft)</th>
<th>Height (ft)</th>
<th>Bottom width (ft)</th>
<th>Top width (ft)</th>
<th>Barrier Capacity (yd³)</th>
<th>Estimated System Retention Capacity (yd³)</th>
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Appendix D
Barrier Cost Estimate
## Barrier Cost Estimate Details

<table>
<thead>
<tr>
<th>Drainage</th>
<th>Estimated System Retention Capacity (yd³)</th>
<th>Barrier Style</th>
<th>Barrier Quantity in Drainage</th>
<th>Barrier Materials Unit Cost</th>
<th>System Materials Cost</th>
<th>Estimated System Installation Cost</th>
<th>System Cost with 30% Contingency</th>
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</thead>
<tbody>
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<td>VX160-H6¹</td>
<td>3</td>
<td>$26,400</td>
<td>$79,200</td>
<td>$316,800</td>
<td>$514,800</td>
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<td>$79,200</td>
<td>$316,800</td>
<td>$514,800</td>
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</tbody>
</table>

¹ Installation costs were estimated to be 4 times the material cost
² Installation cost was estimated to be 4.5 times the materials cost due to the need for larger equipment and foundation posts.
³ Costs based on 2017 dollars
Appendix E
Flood Inundation Maps
Town of Jamestown
Flood Extents Map
James and Little James Creeks
1 of 3

Flood Extents
- FEMA Regulatory Floodplain
- 10-YR (912cfs)
- 25-YR (1,502cfs)
- 50-YR (2,095cfs)
- 100-YR (2,777cfs)

Flows listed are below confluence
**CHANNEL CAPACITY APPROXIMATELY 1200 CFS (< 25-YR)**

**CHANNEL CAPACITY APPROXIMATELY 850 CFS (< 10-YR)**

**Flood Extents**
- FEMA Regulatory Floodplain
- 10-YR (912cfs)
- 25-YR (1,502cfs)
- 50-YR (2,095cfs)
- 100-YR (2,777cfs)

Flows listed are below confluence
Porphyry Gulch
Hill Gulch
Buffalo Gulch
Gillespie Gulch
James Canyon Dr.
Town of Jamestown
Flood Extents Map
James and Little James Creeks
Flood Extents
10-YR (912cfs)
25-YR (1,502cfs)
50-YR (2,095cfs)
100-YR (2,777cfs)
Flows listed are below confluence
Town of Jamestown
Channel Stability Map
James and Little James Creeks
2 of 3

Potential Channel Stability Problem Areas
- 10-YR
- 25-YR
- 50-YR