Webbs Ferry Boat Launch - Vault Toilet Replacement – Allegheny National Forest

PART 1 – GENERAL

1. SCOPE OF WORK
   1.1. Work includes the removal of existing vault toilet, construction, and onsite placement of ADA accessible prefabricated precast concrete vault toilet building, and all associated demolition, preparation, and finish site work including construction of paved pathways and aprons.

2. WORK HOURS
   2.1. Work shall be conducted between 7:00 am and 5:00 pm on normal workdays, unless approved in writing by CO for unusual circumstances.

   2.2. No work will be scheduled on Saturdays, Sundays, or Federal Holidays.

   2.3. Construction Schedules shall be submitted as directed in FAR 52.236-15.
      2.3.1. Ensure Construction Schedule meets the requirements within Timing and Other Considerations section of the Demolition and Site Preparation specification.
      2.3.2. Provide COR with regular schedule updates, as needed, to communicate timing of key actions impacting use and or closure for public safety at any site. This includes, but is not limited to, closure and opening of toilet facilities, use of cranes, delivery of equipment on large trucks, etc.

   2.4. Give written notice to the CO whenever it is desired to perform outside of designated hours, on a weekend, or on a Federal Holiday. If approved, such work may be subject to requirements furnished in writing by the CO and no extra compensation will be allowed.

3. SUBMITTALS
   3.1. Coordinate preparation and processing of submittals with performance of construction activities and with the schedule.

   3.2. Allow 15 calendar days each for submittal review, corrections following the initial review and re-submittal review before activities scheduled after the submittal approval.

   3.3. Submittal Transmittal: Transmit each set of submittals from the Contractor to the Government by use of a Transmittal Cover Sheet (example available upon request). Cover Sheet format to be approved by COR prior to start of use and shall include:
      3.3.1. Project name and Forest Service contract number.
      3.3.2. Date.

3.3.3. Name, address and telephone number of firm or entity that prepared the submittal.
3.3.4. Names of subcontractor, manufacturer, supplier, etc. as applicable.
3.3.5. Category and description of submittal.
3.3.6. Section of Specifications or Drawing sheet number the Submittal represents.
3.3.7. Certification by Contractor stating that submittal complies with the Contract, or statement of deviations from the requirements of the Contract.
3.3.8. Signature of transmitter shall indicate they have verified the accuracy, compatibility, and conformance with contract requirements for all included items.
3.3.9. Space to record Contractor's review and approval markings, and for Government response.

3.4. Submit items for review as noted here and as indicated in individual specification sections. Unless otherwise requested by COR, submit PDF electronic file for each item required. This includes but is not limited to Construction Schedule, Shop Drawings, Product Data, Certificates of Compliance, Permits and Approvals, Test Reports, Operation and Maintenance (O/M) Manuals, and Warranties.

3.5. Products subject to shop drawing, product data, or sample review shall not be used in the work until submittals have been reviewed and transmittals have been approved in writing by the COR.
3.5.1. Contractor shall be responsible for confirming and correlating all quantities and dimensions, selecting fabrication processes and means and methods of construction, coordinating its work with that of all other trades, and performing all work in a safe and satisfactory manner.
3.5.2. Submittals will only be reviewed for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Corrections or comments made on submittals shall not relieve Contractor from compliance with requirements of Drawings and Specifications and shall not be considered an order for extra work.
3.5.3. Incomplete submittals will be returned to the Contractor with no further review. Delays due to incomplete or rejected submittals will not be excused and no monetary compensation or time compensation shall be provided to the Contractor.
3.5.4. Where manufacturer's standard literature includes multiple products or options, identify the specific products and options as required for this project. Specific written notice shall be given of each variation that shop drawings and product data may have from requirements of the Contract Documents.
3.5.5. When the Contractor desires to submit for approval a product for an "approved equal," the Contractor must provide documentation of the original specified product and the Contractor proposed product in a side-by-side comparison, such as a table, which clearly demonstrates the Contractor proposed product meets or exceeds the originally specified product.

4. PAY ITEMS
   4.1. Each pay item listed below includes site specific requirements; work under each pay item also includes all requirements of the contract including Drawings and Part 2 Specifications.

<u>Pay Item #1</u> – Webbs Ferry Boat Launch
(41.99597° LATTITUDE, -78.96358° LONGITUDE)

Remove 1 double-user vault toilet building from site. Install 1 CXT Gunnison (or equivalent) single vault toilet within the footprint of the removed structure.

Remove degraded paved pathway between vault toilet building and parking. Install an accessible paved pathway connecting the new vault toilet entrance to the existing parking area.

PART 2 - SPECIFICATIONS

1. DEMOLITION AND SITE PREPARATION
   1.1. Submittals
      1.1.1. None

   1.2. Timing and Other Considerations
      1.2.1. If a new toilet building will be installed in the same location as an existing toilet building AND is the only toilet serving the site:
         1.2.1.1. Closure may not exceed 96 hours.
         1.2.1.2. Closure may not extend over a weekend.
         1.2.1.3. Timing must align with approved construction schedule.
      1.2.2. For all sites with multiple vault toilets, section 1.4.1 does not apply:
         1.2.2.1. Existing vault toilet buildings to be removed and not replaced in the same footprint will remain in service until the new vault toilet is installed and ready for use AND/OR
         1.2.2.2. A minimum of one unisex restroom remain open for use at all times during construction when the recreation area is open for use.
      1.2.3. The contractor shall maintain a site that is safe for public users and employees at all times during construction.
         1.2.3.1. This includes but is not limited to the installation and maintenance of barricades and/or fencing and other protective measures around equipment operations, excavations, and other construction hazards in accordance with 29 CFR Part 1926 and other relevant industry standards.
         1.2.3.2. The contractor's responsibility in this regard begins at the time of construction mobilization and extends until completion and acceptance of the work.

1.3. Removal of Existing Vault Toilet

1.3.1. Existing above-ground structure, concrete slab, and building base shall be removed from government property and become the contractor's property. If not retained, contractor to dispose of legally off Government property.

1.3.2. Prior to removal of all existing vault toilets, pump and dispose of vault contents by a licensed sewage hauler and disposal service. Dispose of contents legally off Government property.

1.3.3. Maintain erosion control measures to protect the project site and prevent sediment pollution of adjacent water courses and properties as needed.

1.3.4. Removal of existing vaults which **will be** within the footprint of a new building shall include the following:

1.3.4.1. The vaults shall be handled in such a way that no contents of the vault are spilled or dumped onsite.

1.3.4.2. Vaults shall become property of contractor and be removed from the site. If not retained, contractor to dispose of legally off Government property.

1.3.4.3. Over-excavation resulting from the removal of the existing vault shall be backfilled with material conforming to section 2.2.11.2 and compacted with either the bucket of an excavator or a jumping-jack style compactor.

1.4. Clearing and grubbing

1.4.1. Clearing and grubbing shall result in minimal disturbance to the site while still allowing work to be accomplished

1.4.2. Tree removal shall be as noted in each bid item. Any tree removal not noted in the bid items must be approved by the COR prior to cutting.

1.4.2.1. All timber from tree removal shall be cut into 8' lengths and neatly placed onsite as directed by the COR.

1.4.3. Brush produced from clearing and tree removal shall be disposed of on site as per direction of the COR.

1.4.4. All stumps from clearing and tree removal shall be excavated from the site and disposed of on site as per direction of the CO and considered incidental (having no separate pay item).

1.4.5. Protect all trees which are **not** to be cut from damage during work.

2. VAULT TOILET

2.1. Submittals

2.1.1. Vault Toilet Structures

2.1.1.1. Include all applicable shop drawings, product data, O/M manuals, warranties, or other documents.

2.1.1.2. List the sites at which each structure submitted shall be used. Any variation in a specific structure shall be clearly described and included in the submittal.

2.1.2. Base Course Material

2.1.2.1. Product data and test reports

2.1.3. Backfill Material

2.1.3.1. Product data and test reports

2.2. Materials

2.2.1. Manufacturer

2.2.1.1. Manufacturer shall be CXT or pre-approved equal. The salient characteristics used to determine an "or equal" are listed in Section 2.1.

2.2.2. Vault:

2.2.2.1. There shall be one vault for each toilet riser.

2.2.2.2. All interior vault surfaces shall be sealed to prevent leaking and absorption of odors into the material used to construct the vault. If the building floor slab is the top of the vault, then the underneath side of the floor slab (top interior of the vault) shall be sealed to prevent odor absorption. Sealer shall consist of a deep penetrating, high alkali resistant, low volatility product.

2.2.2.3. The vault shall have a black interior to help prevent the visitor from seeing the waste when looking down the toilet riser unless otherwise approved by COR in writing. Do not use bituminous materials for coating the vault because that material is food for bacteria.

2.2.2.4. The vault shall have a minimum bottom slope of 1 inch per foot from under the toilet riser out to the outside cleanout area so that the waste can be more thoroughly removed.

2.2.2.5. The vault shall have a 24-inch diameter (minimum equivalent area) lightweight manhole cover installed to the rear or side of the building. The manhole cover must be sealed to prevent air and water from entering the vault. The manhole cover shall be lockable with a padlock and raised, with the surrounding concrete sloped away with a minimum slope of 1/2 inch per foot.

2.2.2.6. The size of the vault shall be minimum 1,000 gallons for each toilet riser in the structure.

2.2.2.7. The depth of the vault shall be no deeper than 5 ft.

2.2.3. Building Interior Floor Surface:

2.2.3.1. The floor shall be sloped a minimum of 1/8 inch per foot and a maximum of 1/4 inch per ft. from the back to the front door so that water will not "pocket" and cleaning will be easier.

2.2.3.2. The floor shall be completely sealed to prevent any staining or odor absorption.

2.2.3.3. The floor shall have a non-slip surface only in the walkway area.

2.2.3.4. The wall to floor surfaces shall have a large radius coving (4 to 6 inches) and all 90° corners shall be rounded.

2.2.3.5. The floor shall evenly join the outside concrete so that there is no lip at the doorway to hinder people with disabilities from entering.

2.2.4. Interior Building Walls and Ceiling:

2.2.4.1. The walls shall be nonporous.

2.2.4.2. The walls shall be light in color to assist in reflecting available light unless otherwise approved by COR in writing

2.2.4.3. The walls shall be difficult to write on and/or designed to be easily cleaned.

2.2.4.4. The walls shall be free from ledges, angles, and shelves to minimize dirt accumulation and ease cleaning.

2.2.5. Building Structural Requirements

2.2.5.1. The building supplied shall have the following structural design loads:

2.2.5.1.1. Floor bearing capacity shall be a minimum of 40 psf.

2.2.5.1.2. Roof live load shall be a minimum 60 psf for snow loading.

2.2.5.1.3. Vault buildings will withstand the effects of 100 miles per hour wind exposure class C winds.

2.2.5.2. OR building shall have structural design loads greater than or equal to those salient to CXT Gunnison as specified in Section 4.0 of the CXT product specifications (https://lbfoster.com/infrastructure/precast-concrete-buildings/vault-restrooms/gunnison)

2.2.6. Toilet Riser:

2.2.6.1. The riser shall have no cracks and crevices on the outside for potentially odorous materials to collect in.

2.2.6.2. The riser shall have a heavy-duty open front seat and cover assembly that does not seal the air out.

2.2.6.3. The riser shall be easy to clean and impervious to oxidizing cleaning agents.

2.2.6.4. The riser shall be vandal resistant.

2.2.7. Toilet Paper Dispenser:

2.2.7.1. A three-roll lock-bar toilet paper dispenser shall be provided and installed for each vault stall.

2.2.8. Air Vent for the Building:

2.2.8.1. The vent in the building, necessary to supply replacement air for the air drawn out of the vault, shall be near 120 sq. inches of free area for each vault and riser unit.

2.2.8.2. There shall be only one vent opening in each room which contains a toilet riser in the building. The opening shall be placed only on one side of the building (ideally, the side that the prevailing wind blows against). The "side" can be either side, the front, or the back of the building.

2.2.8.3. The vent shall be located "head-high" on the building if there is a constant prevailing wind hitting that side. For shifting winds, the vent shall be placed as low to the ground as possible and on the side that the wind is most predominant during the use period. If there is an up-canyon wind in the morning and a down-canyon wind during the afternoon, then the vent shall be placed on an adjacent wall surface as low to the ground as possible so that wind has the least effect of aspirating air out of the building.

2.2.8.4. The vent shall be constructed of a heavy-duty material, such as expanded metal, in order to prevent vandalism.

2.2.8.5. There shall be no screen in the vent opening unless the size is 1/4-inch mesh (in the least dimension).

2.2.9. Air Vent for the Vault:

2.2.9.1. The vault vent area shall be equivalent to a minimum of 12 inches in diameter. Each vault shall have its own vent.

2.2.9.2. The top of the vent pipe shall be a minimum height of 3 ft. above the highest point of the roof.

2.2.9.3. The 12-inch diameter pipe above the roof shall be painted a dark color to take advantage of potential convection resulting from the sun's energy as the sun heats the pipe.

2.2.9.4. The top of the 12-inch pipe shall remain uncovered and unscreened. If a top is absolutely necessary, it should be a flat plate placed 12 inches above the top of the pipe and supported by three thin metal rods so as not to interfere with the aspiration effects of the wind flowing over the open top pipe.

2.2.10. Appearance:

2.2.10.1. Appearance shall be consistent with the CXT models identified for each pay item. Appearances that differ from the identified CXT model may be submitted as alternate options. The Contracting Officer (CO) will determine whether the proposed alternates meet the desired appearance for use in a National Forest campground.

2.2.10.2. Vault toilet building appearance shall conform to the following unless otherwise noted in specific Pay items or approved by CO:

2.2.10.2.1. Exterior finish shall be “board and bat” upper texture and “horizontal lap siding” lower texture

2.2.10.2.2. Roof finish shall be a cedar shake texture

2.2.10.2.3. Exterior finish color shall be “Coca Milk” or equivalent

2.2.10.2.4. Interior finish shall be smooth

2.2.10.3. Contractor is responsible for all touch-up painting

2.2.10.4. All vault buildings shall have signage conforming to the following:

2.2.10.4.1. All vault toilets shall have handicap-accessible signage.

2.2.10.4.2. Single vault building shall have unisex signage. Double vault buildings shall have "Men" signage to one vault and "Women" signage to the other vault.

2.2.10.4.3. All signage shall be weather-resistant and shall be clearly and neatly posted.

2.2.10.4.4. Signage from existing vaults structures may be used with specific COR approval where signage is in good condition and matches other site signage aesthetics.

2.2.11. Installation Materials

2.2.11.1. Bedding course shall be well graded, crushed, gravel with 100% passing the 1" sieve and less than 10% passing the #200 sieve.

2.2.11.2. Backfill shall be well graded, compactable material free of excess moisture, muck, frozen lumps, roots, sod, or other deleterious material, with maximum particle size of 3 inches, and soil classification meeting AASHTO M 145 A-1, A-2-4, A-2-5, or A-3. Native material may be used as backfill where it meets these characteristics.

2.3. Installation

2.3.1. Installation of new vaults and buildings shall be in accordance with all manufacturer directions and specifications.

2.3.2. Contractor is responsible for removal of the existing vault and clearing and grubbing per Section 1: Demolition and Site Preparation.

2.3.3. Vault toilet floor shall be installed at an elevation that provides positive drainage away from the building and sidewalk while providing an ABA compliant route to the entrance, the contractor shall provide excavation and fill as required by site to meet these requirements. Finished topsoil shall be graded to be 1"-2" below that finished floor elevation where it meets the building. Compact bottom of excavation with vibratory or plate compactor prior to placement of aggregate bedding. Make 3 passes minimum with compacting equipment.

2.3.4. Place a minimum 1.0-foot compacted depth of aggregate bedding material. Bedding shall occupy a plan area 2 feet wider and 2 feet longer than the vault to be placed. Place in 6-inch lifts and compact with a vibratory compactor. Use a sand leveling course as needed to ensure a level placement of vault per CXT installation instructions.

2.3.5. Placement of the new vault shall be as shown on the drawings over the footprint of vault demolished.

2.3.6. Backfill and compact the excavation surrounding the placed vault and, if present, the vacant footprint of the second removed vault.

2.3.7. Finished grading, topsoil, seeding, and cleanup requirement shall be in accordance with Section 3: Site Cleanup and Restoration.

Section 910—Trailways

Section 911 - Trail and Prism

Description

911.00.01 This work consists of constructing trails, restoration of existing trails or obliteration of abandoned trails. The earthwork and associated trail tread and prism work may be covered by one or more of the following subsections:

911.10.	Excavation and Embankment
911.20.	Borrow
911.30.	Existing Trail Restoration
911.40.	Slide Maintenance
911.50.	Slough and Berm Removal
911.60.	Obliteration of Abandoned Trails
911.70.	Retainers

Measurement

911.00.02 Measure the section 911 items listed in the bid schedule according to subsection 906.

Payment

911.00.03 The accepted quantities will be paid at the contract price per unit of measurement for the section 911 pay items listed in the bid schedule. Payment will be full compensation for the work prescribed in this section. See Subsection 906.04.

911.10 - Excavation and Embankment

Description

911.10.01 This work consists of the excavation and placement of excavated material, regardless of its nature, from within the trailway or from other sources, except for material included under other pay items SHOWN IN THE SCHEDULE OF ITEMS.

Includes excavation, embankment, and backfill construction required to shape and finish the trailbed, ditches, backslopes, fill slopes, drainage dips, trail passing sections, and turnouts. Also includes excavation and embankment work required to construct culverts, trail bridges, shallow stream fords and gully crossings, talus and rubble rock sections, and climbing turns.

Materials

911.10.02 Materials. Use materials meeting the requirements of the following sections:

Rock, Grid Pavement Units, and Aggregate	991
Geosynthetics	994
Material for Timber Structures	995

Construction

911.10.03 Use and Disposal of Excavated Material. Conserve and use all suitable material for specified work. Conserve excess excavated rock suitable for specified project work and use in place of materials from designated sources.

Remove all duff and debris from within trailway limits and uniformly spread outside the clearing limits, not more than 4 inches in depth (unless otherwise SHOWN ON THE PLANS). Do not obstruct drainage or create piles, berms, or windrows of debris.

Place excess and unsuitable excavation beyond the downslope edge of the trailbed Do not obstruct drainage and spread to a depth not exceeding 4 inches. This includes any material removed in the grubbing operation and deposited in the same area.

Place rocks over 4 inches in greatest dimension not used in construction beyond the hinge point on the downslope side. Place rocks so that the tops are at least 6 inches lower than the trailbed surface. Ensure that no blockage of drainage or creation of a windrow effect occurs.

911.10.04 Trailway Excavation and Embankment. Minor deviations of ± 12 inches in vertical alignment and 36 inches in horizontal alignment with smooth transitions of at least 30 feet on each side of the deviation are acceptable unless otherwise SHOWN ON THE PLANS.

Construct embankments with suitable compacted material. Compact all disturbed soil within the trailbed area.

Remove any rock within or above the backslopes that is unstable. Use or dispose of rock in accordance with Subsection 912.03.

Leave the finished slope in a uniform and roughened condition.

Make necessary adjustments of horizontal or vertical alignment, within the tolerances specified in this subsection, to produce the designed trailway section and balance earthwork. Such adjustments shall not be considered as changes.

911.10.05 Trailbed Finish. Fill holes with suitable material, compact, and cut high points to provide a uniform trailbed finish.

Section 913 – Surfacing

Description

913.00.01 This work consists of furnishing, hauling, watering, placing, and compacting surfacing and other associated work. Trail surfacing may be covered by one or more of the following subsections:

913.10. Aggregate Surfacing and Base Course

Materials

913.00.02 Materials. Use materials meeting the requirements of the following sections:

Rock, Grid Pavement Units, and Aggregate 991

Construction

913.00.02 Preparation of Subgrade. Prepare and finish trailbed as required under section 911. Obtain written approval of the CO before placing aggregate.

Measurement

913.00.04 Measure the section 913 items listed in the bid schedule according to subsection 906.

Payment

913.00.05 The accepted quantities will be paid at the contract price per unit of measurement for the section 913 pay items listed in the bid schedule. Payment will be full compensation for the work prescribed in this section. See Subsection 906.04.

913.10 - Aggregate Surfacing and Base Course

Description

913.10.01 This work consists of furnishing, hauling, watering, placing, and compacting aggregate surfacing or base course; furnishing and installing retainers; and geosynthetics.

Materials

913.10.02 Materials. Produce aggregate by pit run, screening, or crushing. Obtain materials from sources SHOWN ON THE PLANS or other sources approved by the CO in writing.

913.10.03 Handling Materials. Stockpile, remove, transport, and spread aggregates in a manner that will preserve specified gradation and avoid contamination. Do not intermingle stockpiles of aggregate having different gradations.

913.10.04 Sampling Aggregate. Submit test results and a Certificate of Compliance verifying that aggregate gradation meets contract requirements.

Sample the material before incorporation into the work as follows:

(b) for onsite-produced materials at crushing or screening plants, after additions of any necessary blending material.
(b) for commercially produced aggregates, at the producer's plant or stockpile.

The sampling will not be considered a final acceptance and will not preclude later sampling and testing after final processing of the material. Such sampling does not relieve the contractor of responsibility of providing quality control measures to ensure compliance with contract requirements.

Construction

913.10.05 Preparation of Subgrade. Prepare and finish trailbed as required

under section 912. Obtain written approval of the CO before placing aggregate.

913.10.06 Spreading and Compacting. Use aggregate that is uniformly mixed at optimum moisture content and spread and compact in layers to the final thickness and width SHOWN ON THE PLANS. The maximum thickness of any one layer shall be 3 inches. Obtain compaction by one of the following methods as SHOWN IN THE SCHEDULE OF ITEMS:

(c) by hand, using non-mechanized compaction tools over the full area of each layer until visual displacement ceases;
(c) by mechanical vibratory compactors over the full area of each layer until visual displacement ceases, but not fewer than three complete passes;
(c) by using a roller or mechanical hand tamper until the density is at least 90 percent of the maximum density, as determined by AASHTO T 99, Method C or D.

Immediately following final spreading, smoothing, and compacting, correct any irregularities or depressions that develop by adding or removing material until the surface is smooth, uniform, and compacted.

913.10.07 Acceptance, Testing, Sampling, and Tolerances. Do not vary the total compacted thickness of the aggregate by more or less than ¾ inch from the specified thickness or place it consistently below or above the specified depth. Do not vary the aggregate width by more than ± 3 inches from the specified width or place it consistently narrower or wider than the specified width.

990. Materials

Section 990 - Materials

990.01 General. Materials specification not found in this section will be covered by the most current version of *Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects*, U.S. Department of Transportation, Federal Highway Administration.

Section 991 - Rock, Grid Pavement Units, Aggregate and Asphalt

991.06 Crushed Aggregate for Base or Surface Course. Use crushed aggregate meeting the requirements of tables 991-1 and 991-2 and SHOWN IN THE SCHEDULE OF ITEMS.

At least 50 percent, by weight, of the aggregate retained on the No.4 sieve is to have one fractured face. Naturally fractured faces may be included in the 50-percent requirement.

The CO may approve other gradations if they are similar to those specified Grade aggregate from coarse to fine within the gradation band.

Table 991-1-Crushed and screened aggregate grading requirements for base or surface courses.

	Percent Passing (AASHTO T 11 and T 27)			
Sieve	Grading A	Grading B	Grading C	Grading D
1"				
¾"	100	100		
½"	50-90	70-100		
3/8"			100	100
No.4	30-65	45-75	60-85	70-90
No.8	25-55	30-60	35-70	45-70
No.30		15-40		20-40
No.200	6-12	6-20	5-20	5-20

Table 991-2.-Crushed Aggregate Quality Requirements

Description	AASHTO Test Method	Requirement
Percent Wear	T 96	40 Max.
Durability Index, Coarse and Fine	T 211	35 Min.
Liquid Limit	T 89	35 Max.
Plasticity Index	T 91	2-11

3. SITE CLEANUP AND RESTORATION

3.1. Submittals

3.1.1. Topsoil

3.1.1.1. Product data, test reports, and NNIS certification.

3.1.2. Seed mixtures

3.1.2.1. Product data.

3.1.3. Replacement pavement

3.1.3.1. Product data and test reports for any concrete or asphalt used for pathway or damaged pavement.

3.2. Materials

3.2.1. Topsoil:

3.2.1.1. Placed topsoil shall be free of excess moisture, muck, frozen lumps, roots, sod, or other deleterious material with a 3-inch maximum particle size.

3.2.1.2. Topsoil hauled into the site (non-native material) shall be certified Non-Native Invasive Species (NNIS) free.

3.2.1.3. Native material stockpiled during excavation may be used as topping material where the native material conforms to the characteristics described in section 4.2.1.1.

3.2.2. Grass Seeding:

3.2.2.1. Grass seed and mulch shall be contractor furnished and certified weed free.

3.2.2.2. For lawn areas use local native mix approved by CO.

3.2.2.3. For non-lawn areas use local native mix approved by CO.

3.2.2.4. Mulch shall be straw mulch unless otherwise approved by the CO.

3.3. Installation

3.3.1. Grade area directly around new structure to drain away from vault. All other disturbed ground shall be restored to natural grade.

3.3.1.1. Place 2”-3” of lightly compacted topsoil over backfill for all disturbed soils.

3.3.2. Excess material from excavation or from the contractor shall be removed from Forest Service property unless otherwise approved or requested by the CO.

3.3.3. Seed and mulch all disturbed soils.

3.3.3.1. For lawn areas apply seed at 2 pounds per 1000 square feet.

3.3.3.2. For non-lawn areas apply seed at 0.7 pounds per 1000 square feet.

3.3.3.3. Apply straw mulch uniformly to all seeded areas at a loose depth of 1 to 2 inches.

3.3.3.4. Maintain seeded areas until contract final inspection. Over-seed and/or mulch areas patchy or non-growing areas.

3.3.4. All disturbed, mulched, or seeded area shall be kept free of all invasive species and weeds (includes all plants which are not in the specified seed mix or are not both native and present onsite already).

3.3.5. Protect all existing concrete and asphalt surfaces which are not to be removed. Any damaged pavement sections shall be neatly saw cut and replaced in kind by the contractor at no expense to the Government.