ROADSIDE SWALE
APPROXIMATE 3’ SWALE
LANDSCAPE FABRIC BELOW
NO EDGING
NATIVE GRASS
1” TO 1.5” RIVER ROCK
LANDSCAPE FABRIC BELOW
MOSS ROCK BOULDER
GROUPING
THUNDERCHILD CRABAPPLE
OR COLORADO SPRUCE
APPROXIMATE 2’ BERM

FULL SIZED SHEET IS 18”X24”
LANDSCAPE SPECIFICATIONS

MATERIALS:

3. Rock Areas:
   1.1. Drainage Swale, use 2-8 inch river cobble (fill with smaller rock as necessary).
   1.2. In areas, as described on plan, use 1 - 2 inch rock river. Underlay with landscape fabric. Rock shall be placed at approximate 2-3 inch depth. Set level with top of sidewalk and/or curb.

5.3. SPECIMEN Boulders (PROVIDED BY LCC) shall be harvested moss rock by the owner setting from 0.5 to 2.0 inch. See detail for proper setting Sheet 3 of 4. To be placed by Contractor.

6.2. Landscape Fabric - Linemaker Polypropylene or equivalent. Secure with commercial fastening staples. Use Linemaker staples or equivalent.

8.1. Water Supply: 3' rock stake and tie with self nylon tree strap. (Remove staking after one (1) year) (See Detail, Sheet 3 of 4)

DRAINAGE:

1. Utilizes: Locate underground utilities and perform a manner to avoid damage. Hand excavate as required. Maintains staking until removal is approved. Adjustments to time locations based on these separations shall be done in the field. Utility separation shall be as follows:

   1. 10 feet between trees and water and/or sewer lines.
   2. 4 feet between trees and gas lines.
   3. 10 feet between trees and fire hydrants.

2. Excavation: During excavation, when conditions detrimental to plant growth are encountered, such as refillable fill, adverse drainage conditions or other obstructions, notify the Owner's Representative.

3. During landscape work, store materials and equipment where directed. Keep planters clean and work area in an orderly condition.

4. Protect landscape work and materials from damage due to landscape operations, operations by other trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged landscape work as directed.

5. Upon completion of work, clean adjacent streets and site paving from debris and dirt accumulations.

6. Mulch acceptance: All plant material shall be guaranteed by the contractor for one full year from final acceptance. During the acceptance and warranty period the contractor shall provide general maintenance of all items installed by said contractor, including weeding and to replace any plant material that is not in good condition and producing new growth.

7. To remove all stakes at end of warranty period.

8. Contractor shall keep on file for Owner's Representative's inspection, all receipts for soil amendments.

CLEAN-UP AND GRUB:

1. Remove and dispose of all existing plant material in landscape area as shown on plan. Remove or grind and dispose of all existing tree and shrub roots and stump.

GRADING AND SOIL PREPARATION:

1. Add existing topsoil (available on site) to fill depressions and create form as shown on plan. Use topsoil approximately 75-80 ton.

2. Straight grade bottom of socket to maintain positive drainage from east culvert invert to west culvert invert.

3. Compact to a firm, but not hard density (80% of Standard Proctor Density at +/- 5% maximum moisture).

4. Grade shall be set to allow for proper drainage away from all structures and shall remain smooth, flowing landforms, free of vegetation, surface debris, bumps or depressions.

5. Entire site area shall be graded to final grade prior to installation of any plant material.

6. For rock areas, trim finish grade elevations adjacent to paved areas or back of curb to 2-3 inch below finished grade. (See detail Sheet 2 of 3)

DRAINAGE SYSTEM:

1. Use 2-8 inch river cobble and fill open areas with 1-2 inch river rock. Place cobble on landscape fabric. See Detail, Sheet 7 of 4.

SPECIMEN Boulders PROVIDED BY LCC:

1. Boulders shall be harvested moss rock type, available on site, in a range of sizes from 3-2 ton each and arranged according to the plan to the extent possible. Boulders shall be set by Contractor. Set boulders according to detail, Sheet 3 of 4.

PLANTING:

1. Final grade shall be set prior to any planting.

2. All plant quantities listed on plant schedule are for reference only. Plants shall be provided based on plan quantities.

3. All plants shall conform to the requirements of the ASLA Standards for Nursery Stock. All plants shall be true to species and sizes specified.

4. The plants supplied under these specifications shall consist of plants coming from propagating houses, beds, frames or nurseries. “Collective stock” will not be accepted unless specified or as an approved substitute.

5. Provide trees and shrubs grown in Wyoming or northern Colorado nursery fields for a major portion of plant life.

6. Plants that are not well rooted, are not rooted or have root rot shall be rejected. All plants shall have a well-formed network of whitish roots binding the soil together. If there is a deep mat of black or brown stems through little soil; or root systems and with soil that easily falls away; reject the plant.

7. All B&B’d (balled and burlapped) plants shall conform to or exceed the minimum requirements as specified in the requirements of the American Standards for Nursery Stock. No balled and burlapped plant shall be accepted if the ball is broken or the trunk loose below the burlap. Not less than 10% of plant ball diameter.

8. Schedule and coordinate delivery and planting with other landscape work in such a manner that the plants will not be in a site building area more than one day prior to planting unless special arrangements are made to cover from wind and other obstructions.

9. Open Hoops or Pits. No hole or pit shall remain open without safety devices to protect the Owner from liability for personal accidental injury. Barricade open excavations occurring as part of this work and post with warning lights. Operate with lights recommended by authorities having jurisdiction.

10. Plant trees and shrubs after final grades are established and prior to planting of soil or as soon as possible acceptable to Owner’s Representative. If planting of trees and shrubs occurs after seed or soil work, protect areas and promptly repair damage to soil or seed areas resulting from planting operations.

11. Plants shall be of 4-6 inch caliper or clay loam in the planting pit for all container-grown and B&B plants shall be 2-4’ shallower than the height of the root ball at root flare. Plant the root ball so the top permanent roots are on average two trees above grade. Cover any exposed roots with moist soil. In loam and sandy loam soils, where there is good water and air movement into the soil, plants may be placed in planting pits at a depth equal to but no deeper than the height of the root flare. Determine that the apparent root flare on the base of the tree trunk is indeed the actual root flare by carefully removing soil on top of the root ball to verify the top permanent roots. In all cases, the root ball shall be placed on firm, undisturbed soil in the planting pit set for planting. Width of planting pits shall be no less than 24” wider than the root ball.

12. Removal of Containers: Wire and Rope: All containers, whether metal, plastic or natural fiber, shall be removed from the soil ball prior to planting. B&B plants whose soil balls are wrapped in burlap (treated or not) shall have the burlap pulled away from the roots and rock ball and all remaining ropes cut and removed to prevent girdling. B&B trees wrapped in artificial, non-biodegradable “burlap” or plastic shall not be accepted for planting. Plants in wire baskets shall be placed in 3/4” sch 40 PVC conduit at 12-inches burial depth. Use sweep or open end fittings or sleeve with locknut at top. Ensure conduit is capable of being evenly dispersed and suspended when agitated in water.

13. Mix wood cellulose fiber mulch and water in a slurry tank according to the Manufacturers recommendations. Add cellulose fiber after required quantity of water and other approved materials have been placed in slurry tank.

14. Uniformly spray apply of straw mulch mixture over seeded areas within 24 hours of seeding. At a rate of no less than 35 lbs. per 1000 S.F.

15. Do not apply hydraulic mulch to surfaces with free water.

16. Apply mulch topdress over seeded areas at the rate indicated on drawings using approved spraying equipment.

17. Provide test areas as required for adjusting mulching equipment to assure conformance with indicated or specified application rate.

IRRIGATION:

1. Follow all recommended practices as set forth by the Manufacturer’s Specifications and the Irrigation Association.

2. Provide shallow trench with new 1/8” drip pipe, necessary fittings and end caps throughout planting area and add drip emitters to all newly planted trees, shrubs, and perennials. Space all emitters accordingly across the root zone. Typically 6 ea. 2” emitters spaced 12” apart. Install control wires in 3/4” sch 40 PVC conduit at 12-inches burial depth. Use sweep or open end fittings or sleeve with locknut at top. Install drip irrigation system. Start system at time of freezing to prevent freezing. Use sweep or open end fittings or sleeve with locknut at top. Install drip irrigation system. Start system prior to the first irrigation and continue until the irrigation system is guaranteed operational. Use drip irrigation. Install drip irrigation during plowing or from above and below through the Irrigation Association.

13. Irrigation system for newly planted trees, shrubs, turf and seeding are adequate during establishment. Irrigation should be checked every 2-5 weeks to assure the system is working properly. Adjust zone timing as necessary, especially during periods of high heat and precipitation.

16. Newly planted trees and plants require additional irrigation for 2-3 years. Particularly in the first year. Provide 15-25 gallons of water per week for trees and 1-3 gallons per week for shrubs, ornamental grasses and perennials during the first growing season, apply over the root system. Provide additional watering during dry winters.

6. Fresh grade and trim where needed to obtain finish grades of one inch below adjacent pavements. Vertically positive drainage away from all structures. Remove rock and debris larger than one inch from all areas to be seeded.

7. Seed shall be spread evenly at the rate of 2 pounds/1000 S.F., when winds are calm. Do not perform seeding if winds cause blowing of seed and/or disturb soil.

8. Spread seed by hand or mechanically with hand-held or vehicle mounted spreader. Rake, drag or roll to cover as much seed as possible with approximately 1/8 - 1/2 inch of soil to achieve good seed to soil contact. Some seed will remain visible and will not germinate. In these cases double the specified drill rate for seeding.

9. Verify that all seeding work is complete prior to application of mulch.

10. Mulch seed areas within 24 hours after seeding.

11. Hydraulic Mulch Wood cellulose fiber mulch, dyed green, containing no substance or factor which might inhibit germination or growth of grass seed. Wood fibers must be capable of being evenly dispersed and suspended when agitated in water.

12. Mix wood cellulose fiber mulch in a water to a slurry tank following manufacturer recommendations. Add cellulose fiber after required quantity of water and other approved materials have been placed in slurry tank.

13. Uniformly spray apply of straw mulch mixture over seeded areas within 24 hours of seeding. At a rate of no less than 35 lbs. per 1000 S.F.

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