west virginia department of environmental protection

EARL RAY TOMBLIN, GOVERNOR
RANDY C. HUFFMAN, CABINET SECRETARY

OFFICE OF ABANDONED MINE LANDS AND RECLAMATION

CANYON REFUSE AND DUMP

DEP 16434

AT MORGANTOWN
MONONGALIA COUNTY, WEST VIRGINIA
JANUARY 2016

VICINITY MAP
1" = 1/2 MILE
MORGANTOWN NORTH QUADRANGLE
USGS 7.5 MINUTE SERIES

LOCATION MAP
1" = 1 MILE
MONONGALIA COUNTY ROAD MAP

CHADWICK K. BILLER, P.E. DATE

MATCH SHEET 4
OVERALL SITE PLAN WEST
OVERALL SITE PLAN EAST

NOTE: SITES 1, 2, & 4 SHALL BE STABILIZED USING STANDARD MULCHING PRACTICES ON SLOPES LESS THAN 2:1 OR ROLLED EROSION CONTROL PRODUCTS ON SLOPE 2:1 OR STEEPER. SITE 3 SHALL BE STABILIZED WITH HYDRAULICALLY APPLIED EROSION CONTROL PRODUCTS EXCEPT THE PROPOSED CHANNELS (WHICH THEY RECEIVE RIPRAP) AND VEGETATED ACCESS ROAD, WHERE THEY SHALL RECEIVE STANDARD STABILIZATION. (SEE DETAIL #7)

SERIES COORDINATE TABLE

LEGEND
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>APPROVED PROPERTY LINE</td>
</tr>
<tr>
<td>B</td>
<td>EXIST DRAIN &amp; WATER CHANNEL</td>
</tr>
<tr>
<td>C</td>
<td>EXIST PIPE</td>
</tr>
<tr>
<td>D</td>
<td>EXIST SKIDLINE</td>
</tr>
<tr>
<td>E</td>
<td>EXIST POWER LINE</td>
</tr>
<tr>
<td>F</td>
<td>EXIST SEWER LINE</td>
</tr>
<tr>
<td>G</td>
<td>EXIST GAS LINE</td>
</tr>
<tr>
<td>H</td>
<td>EXIST WATER LINE</td>
</tr>
<tr>
<td>J</td>
<td>EXIST UTILITY LINE</td>
</tr>
<tr>
<td>K</td>
<td>TEMP CHECK DAM</td>
</tr>
<tr>
<td>P</td>
<td>APPROX PROPERTY LIMIT</td>
</tr>
<tr>
<td>Q</td>
<td>EXIST DRAIN OR WATER CHANNEL</td>
</tr>
<tr>
<td>R</td>
<td>EXIST POWER LINE</td>
</tr>
<tr>
<td>S</td>
<td>EXIST SEWER LINE</td>
</tr>
<tr>
<td>T</td>
<td>EXIST UTILITY LINE</td>
</tr>
<tr>
<td>U</td>
<td>EXIST UTILITY POLE</td>
</tr>
<tr>
<td>V</td>
<td>BORE HOLE</td>
</tr>
<tr>
<td>W</td>
<td>GPS SITE</td>
</tr>
<tr>
<td>X</td>
<td>REFUSE LIMITS</td>
</tr>
<tr>
<td>Y</td>
<td>CONTROL POINT</td>
</tr>
<tr>
<td>Z</td>
<td>LIMITS OF DISTURBANCE</td>
</tr>
<tr>
<td>0</td>
<td>LIMITS OF CONSTRUCTION</td>
</tr>
<tr>
<td>1</td>
<td>LIMITS OF STABILIZATION</td>
</tr>
<tr>
<td>2</td>
<td>EXIST FENCE LINE</td>
</tr>
<tr>
<td>3</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>4</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>5</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>6</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>7</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>8</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>9</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>10</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>11</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>12</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>13</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>14</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>15</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>16</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>17</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>18</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>19</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>20</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>21</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>22</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>23</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>24</td>
<td>EXIST CULVERT</td>
</tr>
<tr>
<td>25</td>
<td>EXIST CULVERT</td>
</tr>
</tbody>
</table>

CFS (24)
24" COMPOST FILTER SOCK
NOTE: SITES 1, 2, & 4 SHALL BE STABILIZED USING STANDARD MULCHING PRACTICES ON SLOPES LESS THAN 2:1 OR ROLLED EROSION CONTROL PRODUCT ON SLOPE 2:1 OR STEEPER. SITE 3 SHALL BE STABILIZED WITH HYDRAULICALLY APPLIED EROSION CONTROL PRODUCTS EXCEPT THE PROPOSED CHANNELS (WHICH THEY RECEIVE RIPRAP) AND VEGETATED ACCESS ROAD, WHERE THEY SHALL RECEIVE STANDARD STABILIZATION.
NOTES:

1. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.

2. ALL EXISTING ACCESS ROADS SHALL BE LEFT IN A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION.

3. ACCESS ROAD REHABILITATION: FOR PONDING AREAS OR FLAT AREAS WITH RILLS - PLACE 2" STONE IN THE PONDING AREAS/RILLS TO A DEPTH OF 6" BELOW THE ADJOINING GRADES. THEN COVER WITH #57 STONE TO 6" (DEPTH) OF #57 STONE. OVERLAY #57 STONE WITH 4" (DEPTH) OF CLASS 1 AGGREGATE. FOR STEEP AREAS WITH DEEP RILLS - PLACE #57 STONE IN RILLS TO MEET THE ADJOINING GRADES. THEN COVER WITH 4" DEPTH OF #57 STONE. OVERLAY #57 STONE WITH 4" (DEPTH) OF CLASS 1 AGGREGATE. (SEE DETAIL #4)

4. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITY LINES INCURRED DURING CONSTRUCTION.
NOTES:

1. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.

2. ALL EXISTING ACCESS ROADS SHALL BE LEFT IN A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION.

3. ACCESS ROAD REHABILITATION: FOR PONDING AREAS OR FLAT AREAS WITH RILLS - PLACE 2" STONE IN THE PONDING AREAS/RILLS TO A DEPTH OF 6" BELOW THE ADJOINING GRADES. THEN CHOOSE 2" STONE WITH A DEPTH OF 6" OR 8" DEPENDENT ON GRADE ALONGSIDE OF THE ADJOINING GRADES. FOR OTHER AREAS WITH DEEPER RILLS, PLACE #57 STONE TO MEET THE ADJOINING GRADES. PLACE #57 STONE IN RILLS TO MEET THE ADJOINING GRADES. OVERLAY #57'S WITH 4" (DEPTH) OF CLASS 1 AGGREGATE. FOR STEEP AREAS WITH DEEP RILLS - PLACE #57 STONE IN RILLS TO MEET THE ADJOINING GRADES. THEN OVERLAY #57'S WITH 4" (DEPTH) OF CLASS 1 AGGREGATE. (SEE DETAIL #4)

4. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITY LINES INCURRED DURING CONSTRUCTION.

5. THE REMOVAL OF THE ABANDONED STRUCTURE IS INCIDENTAL TO THE SITE PREPARATION PAY ITEM, INCLUDING ANY ASSOCIATED GRADING TO SMOOTH SITE AND PROMOTE POSITIVE DRAINING.

6. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.

7. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.

8. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.

9. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.

10. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.

11. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.

12. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.

13. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.

14. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.

15. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.

16. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.

17. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.
SECTION 2

1. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS. REGRADE AREA AROUND TRASH LIMITS TO PROMOTE POSITIVE DRAINAGE, THIS WORK SHALL BE INCIDENTAL TO THE SITE PREPARATION PAY ITEM.

2. ALL EXISTING ACCESS ROADS SHALL BE LEFT IN A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION.

3. ACCESS ROAD REHABILITATION: FOR PONDING AREAS OR FLAT AREAS WITH RILLS - PLACE 2" STONE IN THE PONDING AREAS/RILLS TO A DEPTH OF 6" BELOW THE ADJOINING GRADES. THEN CHOKE 2" STONE WITH 6" (DEPTH) OF #57 STONE. OVERLAY #57'S WITH 4" (DEPTH) OF CLASS 1 AGGREGATE. FOR STEEP AREAS WITH DEEP RILLS - PLACE #57 STONE IN RILLS TO MEET THE ADJOINING GRADES. THEN OVERLAY #57'S WITH 4" (DEPTH) OF CLASS 1 AGGREGATE. FOR TYPICAL CASING, THE TEMP CHECK DAM SHALL BE TO THE ADJOINING GRADES PLOWED AND THEN TOPPED WITH 4" (DEPTH) OF CLASS 1 AGGREGATE. (SEE DETAIL #4)

4. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITY LINES INCURRED DURING CONSTRUCTION.

5. THE GROUTED, RIPRAP LOW WATER CROSSING FOR THE VEGETATIVE ACCESS ROAD SHALL BE PER PAY ITEMS 7.6 AND 7.7 RESPECTIVELY. (SEE DETAIL #10)

6. P4-6 DRY SEAL’S EXCAVATION/GRADING SHALL BE PAID FOR UNDER THE UNCLASSIFIED EXCAVATION PAY ITEM.

7. REMOVE EXISTING CABLE GATE AND REPLACE WITH A 16' FARM GATE PER DETAIL #28.

8. RE-GRADE EXISTING CLOGGED CHANNEL TO PROMOTE POSITIVE DRAINAGE TO PROPOSED LOW WATER CROSSING WITH A MINIMUM CHANNEL SLOPE OF 2%.
PROPOSED SEEP COLLECTOR AND 8" CONVEYANCE PIPE. ACTUAL LENGTH AND LOCATION TO BE DETERMINED IN THE FIELD AND APPROVED BY THE WVDEP (SEE DETAIL #21)

BASELINE #2
RE-ALIGN EXISTING VEGETATED ACCESS ROAD AS SHOWN

BASELINE #4

PROPOSED REALIGNED ACCESS ROAD

BASELINE #3

EXISTING VEGETATED ACCESS ROAD SEE NOTE 1

PROPOSED LOW WATER CROSSING SEE NOTE 4

NOTES:
1. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.
2. ALL EXISTING ACCESS ROADS SHALL BE LEFT IN A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION. CONTRACTOR TO KEEP REFUSE LIMITS AND EXISTING VEGETATION AND EXISTING WATER COURSES IN GOOD CONDITION DURING CONSTRUCTION. THE APKING GROUND AS WELL AS TRASH/DEBRIS ARE UNDER THE LIMITS OF CONSTRUCTION AND SHALL NOT BE DISPOSED OF OR DISPOSED OF IN A MANNER THAT IS DISAPPROVED BY THE WVDEP. ALL EXISTING ACCESS ROADS SHALL BE LEFT IN A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION.
3. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITY LINES INCURRED DURING CONSTRUCTION. THE ABANDONED GAS WELL IS OUTSIDE OF THE LIMITS OF CONSTRUCTION AND SHALL NOT BE AFFECTED BY CONSTRUCTION ACTIVITIES.
4. THE GROUTED, RIPRAP LOW WATER CROSSING FOR THE REALIGNED ACCESS ROAD SHALL BE PAD PER PAY ITEMS 7.6 AND 7.7 RESPECTIVELY. (SEE DETAIL #10)
5. ALL EXPOSED REFUSE SHALL BE UNDERCUT 1' AT THE TOE OF SLOPE AND COVERED WITH A 12" SOIL CAP PER TYPICAL DETAIL, UNLESS OTHERWISE DIRECTED BY THE WVSDE. (SEE DETAIL #7)
6. ALL PORTALS TO HAVE WET SEALS WHICH HAVE WATER, SHALL BE Dewatered AND THE WATER TREATED WITH SODA ASH BRIQUETTES PRIOR TO THE INSTALLATION OF THE MINE SEAL. (SEE DETAIL #23/24)
NOTES:

1. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.

2. ALL EXISTING ACCESS ROADS SHALL BE LEFT IN A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION.

3. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITY LINES INCURRED DURING CONSTRUCTION.

4. ALL EXPOSED REFUSE SHALL BE UNDERCUT 1' AT THE TOE OF SLOPE AND COVERED WITH A 12" SOIL CAP PER TYPICAL DETAIL, UNLESS OTHERWISE DIRECTED BY THE WVDEP. (SEE DETAIL #7)


5. ALL PORTALS TO HAVE WET SEALS WHICH HAVE IMPOUNDED WATER, SHALL BE DEWATERED AND THE WATER TREATED WITH SODA ASH BRIQUETTES PRIOR TO THE INSTALLATION OF THE MINE SEAL.

6. LOCATIONS OF VEGETATED AND RIPRAP SLOPE DRAINS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED AND APPROVED BY THE WVDEP INSPECTOR. SLOPE DRAINS SHALL BE CONSTRUCTED PER THE VEGETATED CHANNEL DETAIL #20 AND THE RIPRAP CHANNEL DETAIL #14.

7. THE GROUTED, RIPRAP LOW WATER CROSSING FOR THE REALIGNED ACCESS ROAD SHALL BE PAD PER PAY ITEMS 7.6 AND 7.7 RESPECTIVELY. (SEE DETAIL #10)
1. The contractor is required to dispose of all existing trash/debris within the limits of construction per specifications.

2. All existing access roads shall be left in a condition equal to or better than the existing condition.

3. The removal of the abandoned structures is incidental to the site preparation as site clearing, any associated grading to smooth site and promote positive draining.

4. All portals in the mine seal which have impounded water, shall be dewatered and the water treated with soda ash bricks prior to the installation of the seal.

5. The existing low water crossing for the realigned access road shall be for fill per pay item 7.7 and shall be removed in its entirety. (See detail #10)

6. The grouted, riprap low water crossing for the realigned access road shall be pad per pay items 7.6 and 7.7 respectively. (See detail #10)

7. Locations of vegetated and riprap slope drains are approximate and shall be field verified and approved by the WVDEP inspector. Slope drains shall be constructed per the vegetated channel detail #20 and the riprap channel detail #14.

8. Contract time is 18 months.

9. The project may be modified by the Sponsor.

10. The contractor is required to provide all necessary materials, labor, and equipment for the work described in this Contract. The contractor is responsible for all costs associated with the work.

11. The contractor is required to complete the work in a timely manner and to the satisfaction of the Sponsor.

12. The contractor is required to comply with all applicable laws, regulations, and codes.

13. The contractor is required to provide all necessary insurance for the work described in this Contract.

14. The contractor is required to complete the work in accordance with the plans and specifications provided by the Sponsor.

15. The contractor is required to provide all necessary permits for the work described in this Contract.

16. The contractor is required to provide all necessary transportation for the work described in this Contract.

17. The contractor is required to provide all necessary equipment for the work described in this Contract.

18. The contractor is required to provide all necessary skilled labor for the work described in this Contract.

19. The contractor is required to provide all necessary unskilled labor for the work described in this Contract.

20. The contractor is required to provide all necessary material for the work described in this Contract.

21. The contractor is required to provide all necessary tools and equipment for the work described in this Contract.

22. The contractor is required to provide all necessary safety equipment for the work described in this Contract.

23. The contractor is required to provide all necessary safety training for the work described in this Contract.

24. The contractor is required to provide all necessary materials for the work described in this Contract.

25. The contractor is required to provide all necessary tools and equipment for the work described in this Contract.

26. The contractor is required to provide all necessary safety equipment for the work described in this Contract.

27. The contractor is required to provide all necessary safety training for the work described in this Contract.

28. The contractor is required to provide all necessary materials for the work described in this Contract.

29. The contractor is required to provide all necessary tools and equipment for the work described in this Contract.

30. The contractor is required to provide all necessary safety equipment for the work described in this Contract.

31. The contractor is required to provide all necessary safety training for the work described in this Contract.

32. The contractor is required to provide all necessary materials for the work described in this Contract.

33. The contractor is required to provide all necessary tools and equipment for the work described in this Contract.

34. The contractor is required to provide all necessary safety equipment for the work described in this Contract.

35. The contractor is required to provide all necessary safety training for the work described in this Contract.

36. The contractor is required to provide all necessary materials for the work described in this Contract.

37. The contractor is required to provide all necessary tools and equipment for the work described in this Contract.

38. The contractor is required to provide all necessary safety equipment for the work described in this Contract.

39. The contractor is required to provide all necessary safety training for the work described in this Contract.

40. The contractor is required to provide all necessary materials for the work described in this Contract.

41. The contractor is required to provide all necessary tools and equipment for the work described in this Contract.

42. The contractor is required to provide all necessary safety equipment for the work described in this Contract.

43. The contractor is required to provide all necessary safety training for the work described in this Contract.

44. The contractor is required to provide all necessary materials for the work described in this Contract.

45. The contractor is required to provide all necessary tools and equipment for the work described in this Contract.

46. The contractor is required to provide all necessary safety equipment for the work described in this Contract.

47. The contractor is required to provide all necessary safety training for the work described in this Contract.

48. The contractor is required to provide all necessary materials for the work described in this Contract.

49. The contractor is required to provide all necessary tools and equipment for the work described in this Contract.

50. The contractor is required to provide all necessary safety equipment for the work described in this Contract.

51. The contractor is required to provide all necessary safety training for the work described in this Contract.

52. The contractor is required to provide all necessary materials for the work described in this Contract.

53. The contractor is required to provide all necessary tools and equipment for the work described in this Contract.

54. The contractor is required to provide all necessary safety equipment for the work described in this Contract.

55. The contractor is required to provide all necessary safety training for the work described in this Contract.

56. The contractor is required to provide all necessary materials for the work described in this Contract.

57. The contractor is required to provide all necessary tools and equipment for the work described in this Contract.

58. The contractor is required to provide all necessary safety equipment for the work described in this Contract.

59. The contractor is required to provide all necessary safety training for the work described in this Contract.
NOTES:
1. CONTRACTOR TO DISPOSE OF ALL EXISTING TRASH/DEBRIS WITHIN THE LIMITS OF CONSTRUCTION PER SPECIFICATIONS.
2. ALL EXISTING ACCESS ROADS SHALL BE LEFT IN A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION.
3. THE PROPOSED UNDERDRAIN FROM PORTAL #20 TO TIE INTO CHANNEL #6 SHALL BE A COMBINATION VEGETATED TRAPEZOIDAL CHANNEL WITH UNDERDRAIN. THE UNDERDRAIN TRENCHING, STONE, AND FABRIC SHALL BE PAID FOR UNDER PAY ITEM 10.3 AND THE TRAPEZOIDAL VEGETATED CHANNEL SHALL BE PAID FOR UNDER PAY ITEM 7.3.(SEE DETAIL #19 & 22)
4. ALL PORTALS TO HAVE WET SEALS WHICH HAVE IMPOUNDED WATER, SHALL BE DEWATERED AND THE WATER TREATED WITH SODA ASH BRIQUETTES PRIOR TO THE INSTALLATION OF THE MINE SEAL.
5. THE GROUTED RIPRAP LOW WATER CROSSING FOR THE VEGETATIVE ACCESS ROAD SHALL BE PER PAY ITEMS 7.4 AND 7.5, RESPECTIVELY. (SEE DETAIL #10)
6. LOCATIONS OF VEGETATED AND RIPRAP SLOPE DRAINS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED AND APPROVED BY THE WVDEP INSPECTOR. SLOPE DRAINS SHALL BE CONSTRUCTED PER THE VEGETATED CHANNEL DETAIL #20 AND THE RIPRAP CHANNEL DETAIL #14.

SCALE: 1"=30'
NOTES:
1. ALL EXISTING ACCESS ROADS SHALL BE LEFT IN A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION, SEE NOTE 4.
2. LIMITS OF CONSTRUCTION EXCLUDED IN BORROW AREA.
3. REMOVE EXISTING CABLE GATE AND REPLACE WITH A 16' FARM GATE PER DETAIL 28.
4. REMOVE AND REPLACE EXISTING GATE WITH A 16' FARM GATE.
5. THE LOCATION OF THE EXISTING GATE IS APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY PLACEMENT OF THE NEW FARM GATE WITH THE WVDEP.

LEGEND
- APPROX. PROPERTY LINE
- EXIST. SUBDIVISION ROADS
- TEMP. STONE CONSTRUCTION
- TEMP. VEGETATED ACCESS ROAD
- REFUSE LIMITS
- TRASH LIMITS
- CONTROL POINT
- TAX MAP AND PARCEL NO.
- EXIST. CABLE GATE
- EXIST. FENCE LINE
- EXIST. OVERHEAD UTILITY LINE
- EXIST. UTILITY POLE
- EXIST. MANHOLE
- EXIST. SEWER LINE
- EXIST. GAS LINE
- EXIST. WATER LINE
NOTE:
1. TO THE DEPTH OF FILL, PORTAL #17'S MINE SEAL AND THE FIRST 20' OF EACH CONVEYANCE PIPE (40 LINEAR FEET TOTAL) SHALL BE A-200. THE REMAINING 74' OF EACH CONVEYANCE PIPE (148 LINEAR FEET TOTAL) SHALL BE SDR 35.
2. EXTEND UNDER DRAIN PIPE AND STONE INTO OPEN/COLLAPSED PORTAL AS FAR AS PRACTICABLE AND AS DIRECTED BY THE WVDEP INSPECTOR.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE MATERIAL SHALL BE PLACED ABOVE THE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12" OF BAKETABLE SOILS AND SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

LEGEND

EXISTING GROUND
PROPOSED GRADE
PROPOSED LIMIT OF DISTURBANCE
CFS-24
PROPOSED 24" COMPOST FILTER SOCK
LOD

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

LEGEND

EXISTING GROUND
PROPOSED GRADE
PROPOSED LIMIT OF DISTURBANCE
CFS-24
PROPOSED 24" COMPOST FILTER SOCK
LOD
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE ’BOTTOM’ LAYERS OF THE BACKFILL. REFUSE MATERIAL SHOULD BE PLACED ABOVE TOP OF COAL. WHENEVER POSSIBLE, THE TOP 12” OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE ’BOTTOM’ LAYERS OF THE BACKFILL. REFUSE MATERIAL SHOULD BE PLACED ABOVE TOP OF COAL. WHENEVER POSSIBLE, THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE ’BOTTOM’ LAYERS OF THE BACKFILL. REFUSE MATERIAL SHOULD BE PLACED ABOVE TOP OF COAL. WHENEVER POSSIBLE, THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE ’BOTTOM’ LAYERS OF THE Backfill. REFUSE MATERIAL SHOULD BE PLACED ABOVE TOP OF COAL. WHENEVER POSSIBLE, THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE ’BOTTOM’ LAYERS OF THE BACKFILL. REFUSE MATERIAL SHOULD BE PLACED ABOVE TOP OF COAL. WHENEVER POSSIBLE, THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE ’BOTTOM’ LAYERS OF THE BACKFILL. REFUSE MATERIAL SHOULD BE PLACED ABOVE TOP OF COAL. WHENEVER POSSIBLE, THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE ’BOTTOM’ LAYERS OF THE BACKFILL. REFUSE MATERIAL SHOULD BE PLACED ABOVE TOP OF COAL. WHENEVER POSSIBLE, THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE ’BOTTOM’ LAYERS OF THE BACKFILL. REFUSE MATERIAL SHOULD BE PLACED ABOVE TOP OF COAL. WHENEVER POSSIBLE, THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE ’BOTTOM’ LAYERS OF THE BACKFILL. REFUSE MATERIAL SHOULD BE PLACED ABOVE TOP OF COAL. WHENEVER POSSIBLE, THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHEREVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

LEGEND
- EXISTING GROUND
- PROPOSED GRADE
- LOD
- PROPOSED 24" COMPOST FILTER SOCK
- PROPOSED LIMIT OF DISTURBANCE

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHEREVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL, WHENEVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

LEGEND

EXISTING GROUND
PROPOSED GRADE
PROPOSED VEGETATED CHANNEL
PROPOSED 24" COMPOST FILTER
PROPOSED LIMIT OF DISTURBANCE

REALIGNED ACCESS ROAD

CHANNEL #2
EL 1131.33
EL 1137.48
EL 1119.54
EL 1122.12
EL 1142.11
EL 1140.92
EL 1176.34

REALIGNED ACCESS ROAD

CHANNEL #2
EL 1119.12
EL 1123.07
EL 1143.19
EL 1139.79
EL 1171.98

REALIGNED ACCESS ROAD

CHANNEL #2
EL 1113.15
EL 1114.94
EL 1120.00
EL 1132.00
EL 1133.47
EL 1160.27
REALIGNED ACCESS ROAD

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL, WHENEVER POSSIBLE. THE TOP LAYER OF THE BACKFILL IS A MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

LEGEND
- EXISTING GROUND
- PROPOSED GRADE
- PROPOSED VEGETATED CHANNEL
- PROPOSED 24" COMPOST FILTER SOCK
- PROPOSED LIMIT OF DISTURBANCE

PRO-CFS(24)
PRO-LOD

REALIGNED ACCESS ROAD

2:1 MAX

CHANNEL #2
EL 1130.85

CHANNEL #2
EL 1129.59

CHANNEL #2
EL 1125.08

CHANNEL #3
EL 1128.46

EL 1131.60

EL 1131.54

EL 1159.47

EL 1116.42

EL 1118.00

EL 1133.04

EL 1132.87

EL 1158.38

EL 1121.11

EL 1130.64

EL 1130.47

EL 1160.63
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCK-piled TO BE USED FOR THE SOIL CAP.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH TIPPLE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHEREVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

LEGEND

- Existing Ground
- Proposed Grade
- COMPOST FILTER
- PROPOSED 24" SOCK
- Proposed Limit of Disturbance

NOTE:

THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH TIPPLE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHEREVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE OR NON-REFUSE MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL. WHENEVER POSSIBLE, THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

LEGEND
- EXISTING GRADE
- PROPOSED GRADE
- PROPOSED CHANNEL
- PROPOSED 24" COMPOST FILTER SOCK
- PROPOSED LIMIT OF DISTURBANCE

ACCESS ROAD
EL 1130.90
EL 1127.98
EL 1120.01
EL 1134.23
EL 1134.96
EL 1159.71
EL 1114.52
EL 1119.50
EL 1133.86
EL 1136.29
EL 1162.70
EL 1112.51
EL 1119.50
EL 1133.81
EL 1136.02
EL 1163.81

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL. WHENEVER POSSIBLE, THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE OR NON-REFUSE MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

LEGEND

EXISTING GROUND
PROPOSED GRADE
CFS-24
PROPOSED 24"
COMPOST FILTER
SOCK
PROPOSED LIMIT OF DISTURBANCE

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE OR NON-REFUSE MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

LEGEND

EXISTING GROUND
PROPOSED GRADE
CFS-24
PROPOSED 24"
COMPOST FILTER
SOCK
PROPOSED LIMIT OF DISTURBANCE

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE OR NON-REFUSE MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED BEHIND THE PROPOSED LIMIT OF DISTURBANCE. ANY REFUSE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS, AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH
REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED
IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD
BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP
LAYER OF BACKFILL SHALL BE ANY SUITABLE MATERIAL
THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE
SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR
NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED
FOR THE SOIL CAP.

NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH
REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED
IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD
BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP
LAYER OF BACKFILL SHALL BE ANY SUITABLE MATERIAL
THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE
SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR
NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED
FOR THE SOIL CAP.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL. WHENEVER POSSIBLE, THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

NOTE:

THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL. WHENEVER POSSIBLE, THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE “BOTTOM” LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12″ OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

LEGEND

EXISTING GROUND

PROPOSED GRADE

CFS-24

PROPOSED 24" COMPOST FILTER

SOCK

PROPOSED LIMIT OF DISTURBANCE

NOTE:loh
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

LEGEND

EXISTING GROUND

PROPOSED GRADE

PROPOSED 24" COMPOST FILTER SOCK

PROPOSED LIMIT OF DISTURBANCE

REALIGNED ACCESS ROAD

HOR. FT.

VERT. FT.

DEP 101-023-0145

CANYON REFUSE & BUMP RECLAMATION PLANS

WEST VIRGINIA DEP

ABANDONED MINE LANDS & RECLAMATION

35
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL. WHENEVER POSSIBLE, THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD NOT BE PLACED IN CHANNELS. A MINIMUM OF 2' OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCK-PILED TO BE USED FOR THE SOIL CAP.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL WHENEVER POSSIBLE. THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL THAT CAN SUPPORT VEGETATION, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

LEGEND

EXISTING GROUND
PROPOSED GRADE
PROPOSED 24" COMPOST FILTER SOCK
PROPOSED LIMIT OF DISTURBANCE

CHANNEL #6 WITH UNDERDRAIN

EL 1151.60
EL 1146.71
EL 1142.00
EL 1165.09
EL 1160.07
EL 1148.44
EL 1143.66
EL 1179.91
EL 1144.28
EL 1173.01
EL 1146.86
EL 1175.70
EL 1153.20
EL 1168.08
EL 1145.21
EL 1139.31
EL 1140.92
EL 1137.64
EL 1138.56

CHANNEL #6

38 ft. HOR.
20 ft. VERT.
NOTE: THE MATERIAL TO BE EXCAVATED MAY BE MIXED WITH REFUSE. ANY REFUSE MATERIAL FOUND SHALL BE COMPACTED IN THE "BOTTOM" LAYERS OF THE BACKFILL. REFUSE SHOULD BE PLACED ABOVE TOP OF COAL. WHENEVER POSSIBLE, THE TOP 12" OF BACKFILL (SOIL CAP) SHALL BE ANY SUITABLE MATERIAL, AS DEFINED IN THE SPECIFICATIONS. AS EXCAVATION PROGRESSES, SUITABLE (OR NON-REFUSE) MATERIAL SHALL BE STOCKPILED TO BE USED FOR THE SOIL CAP.

LEGEND

EXISTING GROUND
PROPOSED GRADE
PROPOSED RIPRAP
PROPOSED 24"
COMPOST FILTER
SOCK
PROPOSED LIMIT OF DISTURBANCE

NOTE: BASELINE 4B CROSS SECTIONS ARE ONLY FROM THE RIGHT OF CENTER LINE, REFER TO BASELINE 4C (CHANNEL 7) FOR THE CROSS SECTIONAL AREA TO THE LEFT OF CENTERLINE.

NOTE: BASELINE 4B CROSS SECTIONS ARE ONLY FROM THE RIGHT OF CENTER LINE, REFER TO BASELINE 4C (CHANNEL 7) FOR THE CROSS SECTIONAL AREA TO THE LEFT OF CENTERLINE.

PROPOSED LIMIT OF DISTURBANCE

NOTE: BASELINE 4B CROSS SECTIONS ARE ONLY FROM THE RIGHT OF CENTER LINE, REFER TO BASELINE 4C (CHANNEL 7) FOR THE CROSS SECTIONAL AREA TO THE LEFT OF CENTERLINE.

NOTE: BASELINE 4B CROSS SECTIONS ARE ONLY FROM THE RIGHT OF CENTER LINE, REFER TO BASELINE 4C (CHANNEL 7) FOR THE CROSS SECTIONAL AREA TO THE LEFT OF CENTERLINE.

NOTE: BASELINE 4B CROSS SECTIONS ARE ONLY FROM THE RIGHT OF CENTER LINE, REFER TO BASELINE 4C (CHANNEL 7) FOR THE CROSS SECTIONAL AREA TO THE LEFT OF CENTERLINE.
TYPICAL WET MINE SEAL PIPE DETAILS

NOTES:
1. The two (2) comply steel pipe sections of mine seal outlet pipes shall be included in the unit price bid for the mine seal services including the purchase of mine seal pipes and in the installation.
2. The mine seal consist of 2" inch pipe and shall be included in the unit price bid for mine seal construction. A minimum of two (2) pipes are required for each seal.
3. The entrance and exit cap located inside the mine exit end of the pipe are made of 2" inch pipe and are furnished with the mine seal pipe.
4. The pipe seal shall be in contact with the coal face or a distance of at least 70 feet from the sealed area.
5. The pipe seal is made of steel pipe and fitted with a rubber gasket to prevent the entry of water or gases.
6. The seal shall be designed to prevent the entry of water or gases into the sealed area.

CLAY SEAL DETAILS, TYP.

WET MINE SEAL OUTLET PIPES
CROSS SECTION, TYP.

WET MINE SEAL RISER PIPES AND STUBS
CROSS SECTION, TYP.

RISER CAP DETAIL, TYP.

WET MINE SEAL OUTLET PIPES
LONGITUDINAL VIEW, TYP.

WET MINE SEAL RISER PIPES
ELEVATION VIEW, TYP.
TYPICAL TYPE A MANHOLE DETAIL
NOT TO SCALE

TYPE "A" MANHOLE BASE

NOTES:
1. UNITS SHOWN ARE PRE-CAST.
2. MINIMUM HEIGHT OF TOP OF PIPE IS 2" LESS THAN THE DIAMETER OF PIPE.
3. FURNISH AND SIZING OF MATERIALS MAY BE USED IN ANY COMBINATION TO PRODUCE MANHOLE OR SEWER DEPTH.
4. MANHOLE TOPS SHALL CONSIST OF WROUGHT OR SEIZED "O"-RINGS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
5. THE MANHOLE DECKING SHALL BE REINFORCED IN ACCORDANCE WITH THE SPECIFICATIONS.