SEQUENCE OF EARTHMOVING OPERATIONS

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE WILL BE COMPLETED IN COMPLIANCE WITH CHAPTER 102 REGULATIONS BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED TO ONLY THOSE AREAS DESCRIBED IN EACH STAGE.

AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LAND OWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND A REPRESENTATIVE FROM THE LUZERNE CONSERVATION DISTRICT TO A PRE-CONSTRUCTION MEETING. ALSO, AT LEAST 3 WORKING DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM, INC. AT 1-800-242-1776 FOR BURIED UTILITY LOCATIONS.

BEFORE IMPLEMENTING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE LUZERNE CONSERVATION DISTRICT.

AT LEAST 7 DAYS BEFORE STARTING ANY TREE CLEARING ACTIVITIES BETWEEN APRIL 1 AND NOVEMBER 15 NOTIFY THE U. S. FISH AND WILDLIFE SERVICE (USFWS). TREE CLEARING DURING THIS PERIOD WILL BE LIMITED TO TREES WITH A DIAMETER AT BREAST HEIGHT LESS THAN 5 INCHES DUE TO POTENTIAL IMPACT TO FORAGING INDIANA BATS, OR IN ACCORDANCE WITH FINAL BAT MANAGEMENT PLAN AS APPROVED BY USFWS.

THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ. AND 287.1 ET SEQ.

BEFORE DISPOSING OF SOIL OR RECEIVING BORROW FOR THE SITE, THE OPERATOR MUST ASSURE THAT EACH SPOIL OR BORROW AREA HAS AN EROSION AND SEDIMENT CONTROL PLAN APPROVED BY THE LUZERNE CONSERVATION DISTRICT, AND WHICH IS BEING IMPLEMENTED AND MAINTAINED ACCORDING TO CHAPTER 102 REGULATIONS. THE OPERATOR SHALL ALSO NOTIFY THE LUZERNE CONSERVATION DISTRICT IN WRITING OF ALL RECEIVING SPOIL AND BORROW AREAS WHEN THEY HAVE BEEN IDENTIFIED.

EROSION CONTROL MULCH BLANKET MUST BE INSTALLED ON ALL DISTURBED AREAS WITHIN 50 FEET OF WATERS OF THE COMMON WEALTH.

UPON STABILIZATION OF CONTRIBUTORY AREAS, PERMANENT VEGETATED SWALES USED AS EROSION AND SEDIMENTATION SWALES TO CONVEY SEDIMENT LADEN RUN-OFF SHALL BE REGRADED AND IMMEDIATELY STABILIZED WITH THE PROPOSED LINING/SEEDING AS SHOWN ON THE PLANS.

SEEDING AND MULCHING OF FILL SLOPES SHALL OCCUR IN REGULAR VERTICAL INCREMENTS EVERY 15 FEET TO PROMOTE EARLY STABILIZATION OF THE FILL SLOPE.

ALL BMP CONSTRUCTION AND SITE DISTURBANCE SHALL HAVE IMMEDIATE TEMPORARY STABILIZATION, OR PERMANENT STABILIZATION INSTALLED UPON COMPLETION AS SHOWN ON THE PLANS AND AS DIRECTED.

ALL INTERIOR SLOPES OF SEDIMENT BASINS SHALL BE STABILIZED ABOVE THE SEDIMENT STORAGE ZONE WITH SLOPE MATTING AS SHOWN ON THE PLANS.

IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
THE GENERAL SEQUENCE OF EARTHMOVING ACTIVITIES FOR THE CONSTRUCTION OF THE PPL BELL BEND NUCLEAR POWER PLANT PROJECT IS AS FOLLOWS, PLEASE REFERENCE THE CONSTRUCTION SEQUENCE ALSO SET FOR AREA MAP (CS9000) AND PHASING MAPS (CS9001-CS9010):

PHASE I (CS9001)

EACH STAGE OF THE SEQUENCE MUST BE COMPLETED PRIOR TO INITIATION OF THE NEXT STAGE OF THE SEQUENCE OF EARTH MOVING OPERATIONS WITHIN THIS PHASE.

1. FIELD-MARK THE LIMITS OF DISTURBANCE, ALL WATERS OF THE COMMONWEALTH, SENSITIVE RESOURCES TO BE SAVED, AND PROPOSED INFILTRATION AREAS FOR PHASE I (AREA 10 & AREA 3).
2. INITIAL SITE ACCESS AND PARKING WILL BE AT EXISTING ROCK CONSTRUCTION ENTRANCE 1A.
3. INSTALL ROCK CONSTRUCTION ENTRANCE 1B (ALONG BEECH GROVE RD.) AND 1C (ALONG CONFERS LANE).
4. INSTALL ALL PERIMETER CONTROL: SILT FENCE AND ORANGE CONSTRUCTION FENCE AS SHOWN ON PLANS FOR PHASE I.
5. CLEAR AND GRUB AREAS OF CONSTRUCTION WITHIN THE LIMITS OF DISTURBANCE FOR PHASE I.
6. ROUGH GRADE TRANSMISSION LINE RIGHT-OF-WAY AND INSTALL RETAINING WALLS WITHIN RIGHT-OF-WAY.
7. CONSTRUCT TRANSMISSION LINE ACCESS ROADS AND LAYDOWN SPACE, INSTALLING CONVEYANCE FEATURES FROM LOWEST TO HIGHEST INVERT AS SHOWN ON THE PLANS.
8. SWALE MATTING AND ROCK FILTERS SHALL BE INSTALLED IMMEDIATELY AS GRADING IS COMPLETED.
9. PERFORM LOCAL EXCAVATIONS FOR TRANSMISSION TOWER FOUNDATIONS (AREA 10).
10. INSTALL TRANSMISSION TOWER FOUNDATIONS FOR THE RELOCATION OF THE 230KV TRANSMISSION LINES (AREA 10).
11. INSTALL NEW TRANSMISSION LINES (AREA 10) AND REMOVE EXISTING TRANSMISSION LINES CROSSING THROUGH THE POWER BLOCK AREA (AREA 3) AS SHOWN ON THE PLANS.
12. PERMANENTLY SEED ALL AREAS DISTURBED BY THE CONSTRUCTION, INCLUDING THE ACCESS ROAD AND LAYDOWN SPACE. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
13. UPON ACHIEVING FINAL STABILIZATION REMOVE ROCK FILTERS AND PERIMETER CONTROLS INCLUDING SILT FENCE (AREA 10).
14. STABILIZE THE AREAS WHERE TEMPORARY BMPS WERE LOCATED. DISPOSE OF ANY SEDIMENT AS OUTLINED IN THE MAINTENANCE NOTES (AREA 10).

PHASE II (CS9002)

EACH STAGE OF THE SEQUENCE MUST BE COMPLETED PRIOR TO INITIATION OF THE NEXT STAGE OF THE SEQUENCE OF EARTH MOVING OPERATIONS WITHIN THIS PHASE.

1. FIELD-MARK THE LIMITS OF DISTURBANCE, ALL WATERS OF THE COMMONWEALTH, SENSITIVE RESOURCES TO BE SAVED, AND PROPOSED INFILTRATION AREAS FOR PHASE II (AREA 1 & 2).
2. INSTALL ROCK CONSTRUCTION ENTRANCES 2A, 2B, (AREA 1) 2C, 2D (AREA 2) AND ASSOCIATED CONSTRUCTION LAYDOWN AREAS AS SHOWN ON PLANS. CONSTRUCTION LAYDOWN AREAS SHALL INCLUDE CONSTRUCTION PARKING.
3. INSTALL ALL PERIMETER CONTROLS: SUPER SILT FENCE, SILT FENCE AND ORANGE CONSTRUCTION FENCE AS SHOWN ON PLANS (AREA 1 & 2).
4. CLEAR AND GRUB AREAS OF CONSTRUCTION WITHIN THE LIMITS OF DISTURBANCE FOR PHASE II.
5. INSTALL SEDIMENT BASINS 3, 8, 9 AND 21 WITH ALL RELATED APPURTENANCES, INCLUDING BUT NOT LIMITED TO E&S SWALES, SLOPE MATTING AND SILT FENCE ON ALL CUT/FILL SLOPES. STABILIZE INTERIOR AND EXTERIOR SLOPES OF BASIN EMBANKMENTS IMMEDIATELY UPON COMPLETION OF BASIN CONSTRUCTION. SWALE CONSTRUCTION SHALL PROGRESS FROM THE DISCHARGE POINT UPSLOPE AND SHALL BE IMMEDIATELY STABILIZED AS CONSTRUCTED.
6. STRIP ORGANIC MATERIAL FROM THE AREAS OF CONSTRUCTION WITHIN THE LIMITS OF PHASE II (AREA 1 & 2) AND HAUL TO THE TOP SOIL STOCKPILE IN AREA 1.
7. BEGIN CONSTRUCTION OF BRIDGE 4 (STA 905+50) (AREA 1). THE GENERAL SEQUENCE OF EARTHMOVING ACTIVITIES FOR THE CONSTRUCTION OF BRIDGE #4 IS AS FOLLOWS:
   A. FIELD-MARK THE LIMITS OF DISTURBANCE.
   B. INSTALL ROCK CONSTRUCTION ENTRANCE AS SHOWN ON PLANS.
   C. INSTALL ALL PERIMETER CONTROL: SILT FENCE AND ORANGE CONSTRUCTION FENCE.
   D. CLEAR AND GRUB AREAS OF CONSTRUCTION WITHIN THE LIMITS OF DISTURBANCE.
   E. INSTALL TEMPORARY WETLAND CROSSING MATTING.
   F. CONSTRUCT CRANE PAD.
      i. AREAS WHERE TEMPORARY CRANE PADS DISTURB EXISTING WETLANDS SHALL BE RESTORED AFTER BRIDGE INSTALLATION AS FOLLOWS:
         1. EXCAVATE ROCK BASE AND REMOVE GEOTEXTILE SEPARATION FABRIC.
         2. DE-COMPACT WETLAND SOIL USING A FOUR-FOOT RIPPING HOOK MOUNTED ON A TRACK HOE. THE CRANE PAD SHALL BE REMOVED IN SECTIONS TO ALLOW EQUIPMENT TO WORK FROM THE PAD SURFACE AND REACH INTO THE DISTURBED WETLAND AREA TO AVOID ADDITIONAL TRAFFIC IN THE DISTURBED OR ADJACENT WETLANDS.
         3. VERIFY THAT AT LEAST 8-INCHES OF SUITABLE TOPSOIL IS PRESENT IN THE DISTURBED WETLAND AREA. IF SUFFICIENT TOPSOIL IS NOT PRESENT, UNSUITABLE SOIL SHALL BE REMOVED AND REPLACED WITH TOPSOIL AMENDED WITH LEAF COMPOST OR OTHER SUITABLE ORGANIC MATERIAL AT A RATIO OF 2 PARTS TOPSOIL TO 1-PART COMPOST. FINAL GRADE SHALL BE CONSISTENT WITH THE FINAL GRADE OF THE SURROUNDING WETLAND.
         4. SEED THE DISTURBED AREA WITH THE FLOODPLAIN SEED MIXTURE, AS FOR THE RIVER MITIGATION AREA (LSI PLANS DATED 10-29-10) AT A RATE OF 20 LBS/ACRE.
   G. PERFORM LOCAL EXCAVATIONS FOR ABUTMENT 2. DEWATER EXCAVATION SITE WITH PUMPED WATER FILTER BAGS. MULTIPLE BAGS MAY BE NEEDED FOR EACH EXCAVATION SITE DUE TO HIGH WATER TABLE AND WETLAND FLOW.
   H. IMMEDIATELY GRADE DISTURBED AREA SURROUNDING ABUTMENT 2 AND INSTALL EROSION CONTROL MATTING ON ALL SLOPES GREATER THAN 3:1.
   I. PERMANENTLY SEED ALL AREAS DISTURBED BY THE CONSTRUCTION. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENT.
   J. CONTINUE INSTALLING PIERS AND DEWATERING EXCAVATION SITE WITH PIER 4, WORKING WEST TO ABUTMENT 1. REPLACE WETLAND CROSSING MATTING AS NEEDED.
   K. AFTER ABUTMENT #1 IS STABLE AND SEEDED, REMOVE WETLAND CROSSING MATTING AND RESTORE WETLANDS WITH THE FOLLOWING PROCESS:
      i. DE-COMPACT WETLAND SOIL USING A FOUR-FOOT RIPPING HOOK MOUNTED ON A TRACK HOE.
      ii. VERIFY THAT AT LEAST 8-INCHES OF SUITABLE TOPSOIL IS PRESENT IN THE DISTURBED WETLAND AREA.
      iii. SEED THE DISTURBED AREA WITH THE FLOODPLAIN SEED MIXTURE, AS SPECIFIED FOR THE RIVER MITIGATION AREA AT A RATE OF 20 LBS/ACRE.
   L. REMOVE PERIMETER CONTROLS INCLUDING SILT FENCE AND WETLAND BARRIER.
   M. STABILIZE THE AREAS WHERE TEMPORARY BMPS WERE LOCATED. DISPOSE OF ANY SEDIMENT AS OUTLINED IN THE MAINTENANCE NOTES.
8. CLOSE CONFERS LANE AT LOCATIONS SHOWN ON THE PLANS.
9. BEGIN ROUGH GRADING IN AREA WEST OF NORTH MARKET STREET (AREA 1) MOVING CUT MATERIAL TO SUPP ROAD AREA NORTH OF US11 (AREA 2). BEGIN ROUGH GRADING OF SUPP ROAD PROGRESSING INWARD (STA 0+00 TO STA 41+12.85).
10. AS ROUGH GRADING OF SUPP ROAD IS ACHIEVED, INSTALL GEOTEXTILE FABRIC FOLLOWED BY INSTALLATION OF AGGREGATE SUB BASE AS SHOWN ON THE PLANS.
11. INSTALL PLANT UTILITY SERVICE LINES FROM SOUTH ABUTMENT FOR BRIDGE 6, ALONG MAIN ACCESS ROAD TO THE INTERSECTION OF MAIN ACCESS ROAD AND SUPP ROAD (AREA 2). INSTALL TEMPORARY PIPE CLOSURES AT TERMINATION POINTS. TRENCH EXCAVATION SHALL BE PLACED UPHILL OF THE TRENCH AND IMMEDIATELY STABILIZED ONCE BACKFILLED.
12. ENSURE PERIMETER CONTROLS AND INTERIOR CONTROLS ARE INSTALLED AND FUNCTIONING PROPERLY PRIOR TO CONTINUING ROUGH GRADING OF MAIN ACCESS ROAD (STA 151+00 TO STA 175+00). AS ROUGH GRADING OF ACCESS ROAD IS ACHIEVED, INSTALL GEOTEXTILE FABRIC FOLLOWED BY INSTALLATION OF AGGREGATE SUB BASE AS SHOWN ON THE PLANS.
13. INSTALL RAIL BED (STA 536+00 TO STA 555+00).
14. BEGIN CONSTRUCTION OF BRIDGE 2, 5 & 6 THE GENERAL SEQUENCE OF EARTHMOVING ACTIVITIES FOR THE CONSTRUCTION OF BRIDGES #2, 5 AND 6 ARE AS FOLLOWS:
   A. FIELD-MARK THE LIMITS OF DISTURBANCE.
   B. INSTALL ROCK CONSTRUCTION ENTRANCE AS SHOWN ON PLANS.
   C. INSTALL ALL PERIMETER CONTROL: SILT FENCE AND ORANGE CONSTRUCTION FENCE.
   D. CLEAR AND GRUB AREAS OF CONSTRUCTION WITHIN THE LIMITS OF DISTURBANCE.
   E. INSTALL TEMPORARY WETLAND CROSSING MATTING.
   F. CONSTRUCT CRANE PAD.
      i. AREAS WHERE TEMPORARY CRANE PADS DISTURB EXISTING WETLANDS SHALL BE RESTORED AFTER BRIDGE INSTALLATION AS FOLLOWS:
         1. EXCAVATE ROCK BASE AND REMOVE GEOTEXTILE SEPARATION FABRIC.
         2. DE-COMPACT WETLAND SOIL USING A FOUR-FOOT RIPPING HOOK MOUNTED ON TRACK HOE. THE CRANE PAD SHALL BE REMOVED IN SECTIONS TO ALLOW EQUIPMENT TO WORK FROM THE PAD SURFACE AND REACH INTO THE DISTURBED WETLAND AREA TO AVOID ADDITIONAL TRAFFIC IN THE DISTURBED OR ADJACENT WETLANDS.
         3. VERIFY THAT AT LEAST 8-INCHES OF SUITABLE TOPSOIL IS PRESENT IN IN THE DISTURBED WETLAND AREA. IF SUFFICIENT TOPSOIL IS NOT PRESENT, UNSUITABLE SOIL SHALL BE REMOVED AND REPLACED WITH TOPSOIL AMENDED WITH LEAF COMPOST OR OTHER SUITABLE ORGANIC MATERIAL AT A RATIO OF 2 PARTS TOPSOIL TO 1-PART COMPOST. FINAL GRADE SHALL BE CONSISTENT WITH THE FINAL GRADE OF THE SURROUNDING WETLAND.
         4. SEED THE DISTURBED AREA WITH THE FLOODPLAIN SEED MIXTURE, AS FOR THE RIVER MITIGATION AREA (LSI PLANS DATED 10-29-10) AT A RATE OF 20 LBS/ACRE.
   G. PERFORM LOCAL EXCAVATIONS FOR ABUTMENT 2. DEWATER EXCAVATION SITE WITH PUMPED WATER FILTER BAGS. MULTIPLE BAGS MAY BE NEEDED FOR EACH EXCAVATION SITE DUE TO HIGH WATER TABLE AND WETLAND FLOW.
   H. IMMEDIATELY GRADE DISTURBED AREA SURROUNDING ABUTMENT 2 AND INSTALL EROSION CONTROL MATTING ON ALL SLOPES GREATER THAN 3:1.
   I. PERMANENTLY SEED ALL AREAS DISTURBED BY THE CONSTRUCTION. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENT.
   J. CONTINUE INSTALLING PIERS AND DEWATERING EXCAVATION SITE WITH THE NEXT PIER, WORKING NORTH TO ABUTMENT 1. REPLACE WETLAND CROSSING MATTING AS NEEDED.
   K. AFTER ABUTMENT #1 IS STABLE AND SEEDED, REMOVE WETLAND CROSSING MATTING AND RESTORE WETLANDS WITH THE FOLLOWING PROCESS:
      i. DE-COMPACT WETLAND SOIL USING A FOUR-FOOT RIPPING HOOK MOUNTED ON A TRACK HOE.
      ii. VERIFY THAT AT LEAST 8-INCHES OF SUITABLE TOPSOIL IS PRESENT IN THE DISTURBED WETLAND AREA.
      iii. SEED THE DISTURBED AREA WITH THE FLOODPLAIN SEED MIXTURE, AS SPECIFIED FOR THE RIVER MITIGATION AREA AT A RATE OF 20 LBS/ACRE.
   L. REMOVE PERIMETER CONTROLS INCLUDING SILT FENCE AND WETLAND BARRIER.
   M. STABILIZE THE AREAS WHERE TEMPORARY BMPS WERE LOCATED. DISPOSE OF ANY SEDIMENT AS OUTLINED IN THE MAINTENANCE NOTES.
15. ENSURE PERIMETER CONTROLS AND INTERIOR CONTROLS ARE INSTALLED AND FUNCTIONING PROPERLY PRIOR TO CONTINUING ROUGH GRADING OF ACCESS ROAD A (STA 339+00 TO STA 335+19.70). AS ROUGH GRADING IS ACHIEVED, INSTALL GEOTEXTILE FABRIC FOLLOWED BY INSTALLATION OF AGGREGATE SUB BASE AS SHOWN ON THE PLANS.
16. BEGIN CONSTRUCTION OF BRIDGE 1 (STA 339+00). THE GENERAL SEQUENCE OF EARTHMOVING ACTIVITIES FOR THE CONSTRUCTION OF BRIDGE 1 IS AS FOLLOWS:
   A. FIELD-MARK THE LIMITS OF DISTURBANCE, ALL WATERS OF THE COMMONWEALTH, SENSITIVE RESOURCES TO BE SAVED, AND PROPOSED INFILTRATION AREAS.
   B. INSTALL ROCK CONSTRUCTION ENTRANCE AS SHOWN ON PLANS.
   C. INSTALL ALL PERIMETER CONTROL: SILT FENCE AND ORANGE CONSTRUCTION FENCE.
   D. CLEAR AND GRUB AREAS OF CONSTRUCTION WITHIN THE LIMITS OF DISTURBANCE.
   E. INSTALL TEMPORARY WETLAND CROSSING MATTING. IF FLOWING WATER IS ENCOUNTERED, TEMPORARY SANDBAG COFFERDAMS SHOULD BE INSTALLED SO THAT CONSTRUCTION CAN COMMENCE IN DRY CONDITIONS.
   F. CONSTRUCT CRANE PAD.
      i. AREAS WHERE TEMPORARY CRANE PADS DISTURB EXISTING WETLANDS SHALL BE RESTORED AFTER BRIDGE INSTALLATION AS FOLLOWS:
         1. EXCAVATE ROCK BASE AND REMOVE GEOTEXTILE SEPARATION FABRIC.
         2. DE-COMPACT WETLAND SOIL USING A FOUR-FOOT RIPPING HOOK MOUNTED ON A TRACK HOE. THE CRANE PAD SHALL BE REMOVED IN SECTIONS TO ALLOW EQUIPMENT TO WORK FROM THE PAD SURFACE AND REACH INTO THE DISTURBED WETLAND AREA TO AVOID ADDITIONAL TRAFFIC IN THE DISTURBED OR ADJACENT WETLANDS.
         3. VERIFY THAT AT LEAST 8-INCHES OF SUITABLE TOPSOIL IS PRESENT IN THE DISTURBED WETLAND AREA. IF SUFFICIENT TOPSOIL IS NOT PRESENT, UNSUITABLE SOIL SHALL BE REMOVED AND REPLACED WITH TOPSOIL AMENDED WITH LEAF COMPOST OR OTHER SUITABLE ORGANIC MATERIAL AT A RATIO OF 2 PARTS TOPSOIL TO 1-PART COMPOST. FINAL GRADE SHALL BE CONSISTENT WITH THE FINAL GRADE OF THE SURROUNDING WETLAND.
         4. SEED THE DISTURBED AREA WITH THE FLOODPLAIN SEED MIXTURE, AS FOR THE RIVER MITIGATION AREA (LSI PLANS DATED 10-29-10) AT A RATE OF 20 LBS/ACRE.
   G. PERFORM LOCAL EXCAVATIONS FOR ABUTMENT 2. DEWATER EXCAVATION SITE WITH PUMPED WATER FILTER BAGS. MULTIPLE BAGS MAY BE NEEDED FOR EACH EXCAVATION SITE DUE TO HIGH WATER TABLE AND WETLAND FLOW.
   H. IMMEDIATELY GRADE DISTURBED AREA SURROUNDING ABUTMENT 2 AND INSTALL EROSION CONTROL MATTING ON ALL SLOPES GREATER THAN 3:1.
   I. PERMANENTLY SEED ALL AREAS DISTURBED BY THE CONSTRUCTION. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENT.
   J. CONTINUE INSTALLING PIERS AND DEWATERING EXCAVATION SITE STARTING WITH PIER 4, WORKING WEST TO ABUTMENT 1. REPLACE WETLAND CROSSING MATTING AS NEEDED.
   K. AFTER ABUTMENT #1 IS STABLE AND SEEDED, REMOVE WETLAND CROSSING MATTING AND RESTORE WETLANDS WITH THE FOLLOWING PROCESS:
      i. DE-COMPACT WETLAND SOIL USING A FOUR-FOOT RIPPING HOOK MOUNTED ON A TRACK HOE.
      ii. VERIFY THAT AT LEAST 8-INCHES OF SUITABLE TOPSOIL IS PRESENT IN THE DISTURBED WETLAND AREA.
      iii. SEED THE DISTURBED AREA WITH THE FLOODPLAIN SEED MIXTURE, AS SPECIFIED FOR THE RIVER MITIGATION AREA AT A RATE OF 20 LBS/ACRE.
   L. REMOVE PERIMETER CONTROLS INCLUDING SILT FENCE AND WETLAND BARRIER.
   M. STABILIZE THE AREAS WHERE TEMPORARY BMPS WERE LOCATED. DISPOSE OF ANY SEDIMENT AS OUTLINED IN THE MAINTENANCE NOTES.
17. INSTALL PERIMETER CONTROLS AND INTERIOR CONTROLS IN THE AREA OF THE SHOPS AND WAREHOUSES LOCATED BETWEEN ACCESS ROAD A AND MAIN ACCESS ROAD.
18. INSTALL STORMWATER BASIN 3.1 MAKING SURE TO INSTALL SILT FENCE ON THE UPSLOPE SIDE OF THE EXCAVATION PIT TO ELIMINATE SEDIMENT LADEN WATER FROM ENTERING THE EXCAVATION PIT.
19. INSTALL FOUNDATIONS FOR STRUCTURES LOCATED WITHIN THE LIMITS OF DISTURBANCE FOR THE ACCESS ROAD AREA AS SHOWN ON THE PLANS.
20. AS ROUGH GRADING PROGRESSES, INSTALL PERIMETER CONTROLS ON CUT/FILL SLOPES AS SHOWN ON THE PLANS AND INSTALL STORM DRAIN SYSTEM PIPING AND CONNECT TO INFILTRATION BASIN 3.1. INSTALL FILTER BAGS AT ALL CATCH BASIN INLETS.
21. INSTALL WATER, SANITARY SEWER AND ELECTRICAL SERVICES TO STRUCTURES LOCATED IN AREA 2. TERMINATE SEWER LINE AT THE SANITARY SEWER LIFT STATION (AREA 2). INSTALL TEMPORARY PIPE CLOSURES.
22. ENSURE PERIMETER CONTROLS AND INTERIOR CONTROLS ARE INSTALLED AND FUNCTIONING PROPERLY IN AREA 2 ALONG SUPP RD.
23. ENSURE SEDIMENT BASIN 3 IS REMAINS CORRECTLY INSTALLED WILL ALL RELATED APPURTENANCES.
24. ENSURE PERIMETER CONTROLS AND INTERIOR CONTROLS ARE INSTALLED AND FUNCTIONING PROPERLY PRIOR TO CONTINUING ROUGH GRADING ALONG WEST SIDE OF SUPP ROAD (STA 13+27 TO STA 41+00) ESTABLISHING AREA FOR FUTURE TOP-SOIL STOCKPILE AREA.
25. AS SUFFICIENT STABILIZATION OCCURS REMOVE SEDIMENT BASINS 8 & 9.
26. FINALIZE PROPOSED DEVELOPMENT WHERE SEDIMENT BASINS 8 & 9 WERE REMOVED UNDER PERIMETER CONTROLS AS SHOWN ON THE PLANS.
27. ONCE ROUGH GRADING IS COMPLETE IN AREA 1, BEGIN INSTALLATION OF INFILTRATION BASIN 8, FOLLOWED BY INSTALLATION OF INFILTRATION BASIN 9 MAKING SURE TO INSTALL SILT FENCE ON THE UPSLOPE SIDE OF THE EXCAVATION PIT TO ELIMINATE SEDIMENT LADEN WATER FROM ENTERING THE EXCAVATION PIT.
28. INSTALL FOUNDATION FOR SANITARY SEWER LIFT STATION IN THE AREA EAST OF NORTH MARKET STREET AS SHOWN ON THE PLANS (AREA 1).
29. INSTALL FOUNDATIONS FOR STRUCTURES LOCATED IN THE AREA WEST OF NORTH MARKET STREET AS SHOWN ON THE PLANS (AREA 1).
30. INSTALL STORM DRAIN SYSTEM PIPING AND CONNECT TO INFILTRATION BASINS 8 & 9 (AREA 1). INSTALL FILTER BAGS AT ALL CATCH BASIN INLETS.
31. INSTALL WATER, SANITARY SEWER, AND ELECTRICAL SERVICES TO STRUCTURES LOCATED IN THE AREA WEST OF NORTH MARKET STREET.
32. CONTINUE INSTALLATION OF WATER AND SANITARY SEWER LINES UNDER NORTH MARKET STREET AND TERMINATE AT THE SANITARY SEWER LIFT STATION (AREA 1). INSTALL TEMPORARY PIPE CLOSURES.
33. FINAL GRADE ENTRANCE ROAD AND PARKING AREAS WEST OF NORTH MARKET STREET AND INSTALL SUB-BASE PAVEMENT AS SHOWN ON THE PLANS.
34. STABILIZE CONSTRUCTION PARKING AND LAY-DOWN AREAS, INSTALL GEOTEXTILE FABRIC AND AGGREGATE SUB BASE (AREA 1 & 2).
35. PERMANENTLY SEED PERIMETER GRADED SLOPES, SWALES AND DRAINAGE TRENCHES AND CLEAN ALL WATER CONVEYANCE FACILITIES IN AREA WEST OF NORTH MARKET STREET AND NORTHWEST QUADRANT OF ACCESS ROAD AREA (AREA 1 & 2). AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
36. REMOVE PERIMETER CONTROLS FROM THE AREA WEST OF NORTH MARKET STREET (AREA 1) AS SHOWN ON PLANS THAT INCLUDE: SUPER SILT FENCE AND SILT FENCE AND INLET FILTER BAGS AS SHOWN ON PLANS.
37. STABILIZE THE AREAS WHERE TEMPORARY BMPS WERE LOCATED WEST OF NORTH MARKET STREET (AREA 1). DISPOSE OF ANY SEDIMENT AS OUTLINED IN THE MAINTENANCE NOTES.

PHASE III (CS9003)

EACH STAGE OF THE SEQUENCE MUST BE COMPLETED PRIOR TO INITIATION OF THE NEXT STAGE OF THE SEQUENCE OF EARTH MOVING OPERATIONS WITHIN THIS PHASE.

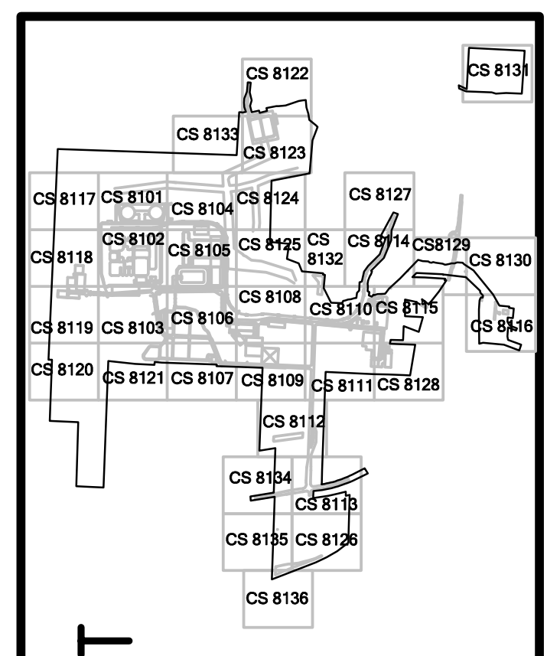
1. PERIMETER BMPS FOR PHASE II, INCLUDING BUT NOT LIMITED TO SILT FENCES AND ORANGE CONSTRUCTION FENCE, REMAIN IN-PLACE IN THE AREA ALONG SUPP ROAD.
2. FIELD-MARK THE LIMITS OF DISTURBANCE, ALL WATERS OF THE COMMONWEALTH, SENSITIVE RESOURCES TO BE SAVED, AND PROPOSED INFILTRATION AREAS FOR PHASE III (AREA 3 & 4).
3. INSTALL PERIMETER CONTROLS FOR PHASE III: SUPER SILT FENCE AND SILT FENCE AS SHOWN ON PLANS (AREA 3 & 5).
4. INSTALL SEDIMENT BASIN 10 AND 10A WITH ALL RELATED APPURTENANCES, INCLUDING BUT NOT LIMITED TO SLOPE MATTING AND SILT FENCE ON ALL CUT/FILL SLOPES. STABILIZE INTERIOR AND EXTERIOR SLOPES OF BASIN EMBANKMENTS IMMEDIATELY UPON COMPLETION OF BASIN CONSTRUCTION.
5. CLEAR AND GRUB THE POWER BLOCK AREA WITHIN THE LIMITS OF DISTURBANCE (AREA 3). RELOCATE EXISTING UTILITIES IN THE AREAS OF CONSTRUCTION (AREA 3). REMOVE ABANDONED TRANSMISSION TOWERS AND ASSOCIATED FOUNDATIONS.
6. BEGIN ROUGH GRADING OF ACCESS ROAD V EAST OF BRIDGE 4.
7. INSTALL PERIMETER CONTROLS AROUND THE TOP-SOIL STOCK PILE AREA WEST OF NORTH MARKET STREET (AREA 1) AS SHOW ON PLANS.
8. STRIP ORGANIC MATERIAL FROM THE POWER BLOCK AREA WITHIN THE LIMITS OF DISTURBANCE (AREA 3) AND HAUL TO THE DESIGNATED TOP-SOIL STOCK PILE AREA WEST OF NORTH MARKET STREET (AREA 1).
9. BEGIN CONSTRUCTION OF BRIDGE 3 (AREA 3&4). THE GENERAL SEQUENCE OF EARTHMOVING ACTIVITIES FOR THE CONSTRUCTION OF BRIDGE 3 IS AS FOLLOWS.
   A. FIELD-MARK THE LIMITS OF DISTURBANCE, ALL WATERS OF THE COMMONWEALTH, SENSITIVE RESOURCES TO BE SAVED, AND PROPOSED INFILTRATION AREAS.
   B. INSTALL ROCK CONSTRUCTION ENTRANCE AS SHOWN ON PLANS.
   C. INSTALL ALL PERIMETER CONTROL: SILT FENCE AND ORANGE CONSTRUCTION FENCE.
   D. INSTALL SANDBAG COFFERDAM TO EXTEND PAST THE 100 YEAR STORM FLOODPLAIN ELEVATION. INSTALL 2 36" CMP AS SHOWN ON PLANS. PIPES SHOULD BE DEPRESSED 6" FROM STREAM BED BOTTOM.
   E. CLEAR AND GRUB AREAS OF CONSTRUCTION WITHIN THE LIMITS OF DISTURBANCE.
   F. INSTALL TEMPORARY WETLAND CROSSING MATTING.
   G. CONSTRUCT CRANE PAD.
      i. AREAS WHERE TEMPORARY CRANE PADS DISTURB EXISTING WETLANDS SHALL BE RESTORED AFTER BRIDGE INSTALLATION AS FOLLOWS:
         1. EXCAVATE ROCK BASE AND REMOVE GEOTEXTILE SEPARATION FABRIC.
         2. DE-COMPACT WETLAND SOIL USING A FOUR-FOOT RIPPING HOOK MOUNTED ON A TRACK HOE. THE CRANE PAD SHALL BE REMOVED IN SECTIONS TO ALLOW EQUIPMENT TO WORK FROM THE PAD SURFACE AND REACH INTO THE DISTURBED WETLAND AREA TO AVOID ADDITIONAL TRAFFIC IN THE DISTURBED OR ADJACENT WETLANDS.
         3. VERIFY THAT AT LEAST 8-INCHES OF SUITABLE TOPSOIL IS PRESENT IN THE DISTURBED WETLAND AREA. IF SUFFICIENT TOPSOIL IS NOT PRESENT, UNSUITABLE SOIL SHALL BE REMOVED AND REPLACED WITH TOPSOIL AMENDED WITH LEAF COMPOST OR OTHER SUITABLE ORGANIC MATERIAL AT A RATIO OF 2 PARTS TOPSOIL TO 1-PART COMPOST. FINAL GRADE SHALL BE CONSISTENT WITH THE FINAL GRADE OF THE SURROUNDING WETLAND.
         4. SEED THE DISTURBED AREA WITH THE FLOODPLAIN SEED MIXTURE, AS FOR THE RIVER MITIGATION AREA (LSI PLANS DATED 10-29-10) AT A RATE OF 20 LBS/ACRE.
   H. PERFORM LOCAL EXCAVATIONS FOR ABUTMENT 2. DEWATER EXCAVATION SITE WITH PUMPED WATER FILTER BAGS. MULTIPLE BAGS MAY BE NEEDED FOR EACH EXCAVATION SITE DUE TO HIGH WATER TABLE AND WETLAND FLOW.
   I. IMMEDIATELY GRADE DISTURBED AREA SURROUNDING ABUTMENT 2 AND INSTALL EROSION CONTROL ALL SLOPES GREATER THAN 3:1.
   J. PERMANENTLY SEED ALL AREAS DISTURBED BY THE CONSTRUCTION. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENT.
   K. CONTINUE INSTALLING PIERS AND DEWATERING EXCAVATION SITE STARTING WITH PIER 2, WORKING NORTH TO ABUTMENT 1. REPLACE WETLAND CROSSING MATTING AS NEEDED.
   L. AFTER ABUTMENT #1 IS STABLE AND SEEDED, REMOVE WETLAND CROSSING MATTING AND RESTORE WETLANDS WITH THE FOLLOWING PROCESS:
      i. DE-COMPACT WETLAND SOIL USING A FOUR-FOOT RIPPING HOOK MOUNTED ON A TRACK HOE.
      ii. VERIFY THAT AT LEAST 8-INCHES OF SUITABLE TOPSOIL IS PRESENT IN THE DISTURBED WETLAND AREA.
      iii. SEED THE DISTURBED AREA WITH THE FLOODPLAIN SEED MIXTURE, AS SPECIFIED FOR THE RIVER MITIGATION AREA AT A RATE OF 20 LBS/ACRE.
   M. REMOVE PERIMETER CONTROLS INCLUDING SILT FENCE AND WETLAND BARRIER.
   B. STABILIZE THE AREAS WHERE TEMPORARY BMPS WERE LOCATED. DISPOSE OF ANY SEDIMENT AS OUTLINED IN THE MAINTENANCE NOTES.
10. BEGIN CONSTRUCTION OF BRIDGE 7 (AREA 3&4). THE GENERAL SEQUENCE OF EARTHMOVING ACTIVITIES FOR BRIDGE 7 IS AS FOLLOWS:
   A. FIELD-MARK THE LIMITS OF DISTURBANCE, ALL WATERS OF THE COMMONWEALTH, SENSITIVE RESOURCES TO BE SAVED, AND PROPOSED INFILTRATION AREA.
   B. INSTALL ROCK CONSTRUCTION ENTRANCE AS SHOWN ON PLANS.
   C. INSTALL ALL PERIMETER CONTROLS: SILT FENCE AND ORANGE CONSTRUCTION FENCE.
   D. CLEAR AND GRUB AREAS OF CONSTRUCTION WITHIN THE LIMITS OF DISTURBANCE.
   E. INSTALL TEMPORARY WETLAND CROSSING MATTING.
   F. CONSTRUCT CRANE PAD.
      i. AREAS WHERE TEMPORARY CRANE PADS DISTURB EXISTING WETLANDS SHALL BE RESTORED AFTER BRIDGE INSTALLATION AS FOLLOWS:
         1. EXCAVATE ROCK BASE AND REMOVE GEOTEXTILE SEPARATION FABRIC.
         2. DE-COMPACT WETLAND SOIL USING A FOUR-FOOT RIPPING HOOK MOUNTED ON A TRACK HOE. THE CRANE PAD SHALL BE REMOVED IN SECTIONS TO ALLOW EQUIPMENT TO WORK FROM THE PAD SURFACE AND REACH INTO THE DISTURBED WETLAND AREA TO AVOID ADDITIONAL TRAFFIC IN THE DISTURBED OR ADJACENT WETLANDS.
         3. VERIFY THAT AT LEAST 8-INCHES OF SUITABLE TOPSOIL IS PRESENT IN IN THE DISTURBED WETLAND AREA. IF SUFFICIENT TOPSOIL IS NOT PRESENT, UNSUITABLE SOIL SHALL BE REMOVED AND REPLACED WITH TOPSOIL AMENDED WITH LEAF COMPOST OR OTHER SUITABLE ORGANIC MATERIAL AT A RATIO OF 2 PARTS TOPSOIL TO 1-PART COMPOST. FINAL GRADE SHALL BE CONSISTENT WITH THE FINAL GRADE OF THE SURROUNDING WETLAND.
         4. SEED THE DISTURBED AREA WITH THE FLOODPLAIN SEED MIXTURE, AS FOR THE RIVER MITIGATION AREA (LSI PLANS DATED 10-29-10) AT A RATE OF 20 LBS/ACRE.
   G. PERFORM LOCAL EXCAVATIONS FOR ABUTMENT 2. DEWATER EXCAVATION SITE WITH PUMPED WATER FILTER BAGS. MULTIPLE BAGS MAY BE NEEDED FOR EACH EXCAVATION SITE DUE TO HIGH WATER TABLE AND WETLAND FLOW.
   H. IMMEDIATELY GRADE DISTURBED AREA SURROUNDING ABUTMENT 2 AND INSTALL EROSION CONTROL MATTING ON ALL SLOPES GREATER THAN 3:1.
   I. PERMANENTLY SEED ALL AREAS DISTURBED BY THE CONSTRUCTION. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENT.
   J. CONTINUE INSTALLING PIERS AND DEWATERING EXCAVATION SITE STARTING WITH PIER 2, WORKING NORTH TO ABUTMENT 1. REPLACE WETLAND CROSSING MATTING AS NEEDED.
   K. AFTER ABUTMENT #1 IS STABLE AND SEEDED, REMOVE WETLAND CROSSING MATTING AND RESTORE WETLANDS WITH THE FOLLOWING PROCESS:
      i. DE-COMPACT WETLAND SOIL USING A FOUR-FOOT RIPPING HOOK MOUNTED ON A TRACK HOE.
      ii. VERIFY THAT AT LEAST 8-INCHES OF SUITABLE TOPSOIL IS PRESENT IN THE DISTURBED WETLAND AREA.
      iii. SEED THE DISTURBED AREA WITH THE FLOODPLAIN SEED MIXTURE, AS SPECIFIED FOR THE RIVER MITIGATION AREA AT A RATE OF 20 LBS/ACRE.
   L. REMOVE PERIMETER CONTROLS INCLUDING SILT FENCE AND WETLAND BARRIER.
   M. STABILIZE THE AREAS WHERE TEMPORARY BMPS WERE LOCATED. DISPOSE OF ANY SEDIMENT AS OUTLINED IN THE MAINTENANCE NOTES.
11. INSTALL PERIMETER CONTROLS FOR AREA 4: SUPER SILT FENCE AND SILT FENCE AS SHOWN ON PLANS.
12. INSTALL SEDIMENT BASINS 1 AND 1A WITH ALL RELATED APPURTENANCES, INCLUDING BUT NOT LIMITED TO SLOPE MATTING AND SILT FENCE, ON ALL CUT/FILL SLOPES. STABILIZE INTERIOR AND EXTERIOR SLOPES OF BASIN EMBANKMENTS IMMEDIATELY UPON COMPLETION OF BASIN CONSTRUCTION.
13. CLEAR AND GRUB THE PARKING LOT AREA WITHIN THE LIMITS OF DISTURBANCE (AREA 4).
14. BEGIN ROUGH GRADING OF ACCESS ROAD B SOUTH OF BRIDGE 3 TO GAIN ACCESS TO AREA 4.
15. BEGIN ROUGH GRADING IN POWER BLOCK AREA (AREA 3) MOVING CUT MATERIAL TO SUPP ROAD, FILLING REMAINING LOW SPOTS FROM PHASE II. EXCESS CUT MATERIAL FROM THE POWER BLOCK AREA MAY BE HAULED TO AREA 4 TO BEGIN FILLING THE PARKING LOT AREA, OR AREA 2 SOUTH OF US11.
16. AS ROUGH GRADING PROGRESSES, COMPLETE CONSTRUCTION OF WALL NO. 1A AND NO. 1B AS SHOWN ON THE PLANS.
17. ONCE ROUGH GRADING IS ACHIEVED IN REMAINING AREA 2 AREAS NORTH OF US11, FINAL GRADE ACCESS ROADS AND INSTALL SUB-BASE PAVEMENT AS SHOWN ON PLANS.
18. STABILIZE CONSTRUCTION LAY-DOWN AREAS ALONG SUPP ROAD AND MAIN ACCESS ROAD, INSTALL GEOTEXTILE FABRIC AND AGGREGATE SUB BASE (AREA 2) AND PERIMETER CONTROLS ON ALL CUT/FILL SLOPES AS SHOWN ON THE PLANS.
19. PERMANENTLY SEED PERIMETER GRADED SLOPES, SWALES AND DRAINAGE TRENCHES AND CLEAN ALL WATER CONVEYANCE FACILITIES IN THE ACCESS ROAD AREA (AREA 2). AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
20. ENSURE ALL PERIMETER AND INTERIOR CONTROLS FOR AREA 3 IN THE AREA OF INFILTRATION BASIN 12 ARE INSTALLED AND FUNCTIONING PROPERTY.
21. INSTALL SEDIMENT BASIN 12 WITH ALL RELATED APPURTENANCES, INCLUDING BUT NOT LIMITED TO SLOPE MATTING AND SILT FENCE ON ALL CUT/FILL SLOPES. STABILIZE INTERIOR AND EXTERIOR SLOPES OF BASIN EMBANKMENTS IMMEDIATELY UPON COMPLETION OF BASIN CONSTRUCTION.
22. BEGIN ROUGH GRADING OF MAIN ACCESS ROAD NORTH OF BRIDGES 2, 5 & 6 TO STA. 118+00. INSTALLING E&S SWALES FROM THE DISCHARGE POINT WORKING UPSLOPE AND AS SHOWN ON THE PLANS. E&S SWALES SHALL BE IMMEDIATELY STABILIZED WITH LININGS AS SHOWN ON THE PLANS.
23. ONCE ROUGH GRADING IS COMPLETE IN AREA 3 EAST OF THE TEAR DROP WETLAND, BEGIN INSTALLATION OF INFILTRATION BASIN 12 MAKING SURE TO INSTALL SILT FENCE ON THE UPSLOPE SIDE OF THE EXCAVATION PIT TO ELIMINATE SEDIMENT LADEN WATER FROM ENTERING THE EXCAVATION PIT.
24. ESTABLISH ROUGH GRADE IN THE AREA OF INFILTRATION BASIN 12 AND INSTALL STORM DRAIN SYSTEM PIPING CONNECTING TO INFILTRATION BASIN 12 IN THE POWER BLOCK AREA (AREA 3). STABILIZE CONSTRUCTION LAY-DOWN AREA, INSTALL GEOTEXTILE FABRIC AND AGGREGATE SUB BASE. INSTALL FILTER BAGS AT ALL CATCH BASIN INLETS. STABILIZE SIDE SLOPES ALONG BEACH GROVE ROAD AND ADJACENT WETLAND AREAS BY SEEDING.
25. AS SUFFICIENT STABILIZATION OCCURS IN AREA 3 EAST OF THE TEAR DROP WETLAND REMOVE SEDIMENT BASIN 12.
26. FINALIZE PROPOSED DEVELOPMENT WHERE SEDIMENT BASIN 12 WAS REMOVED UNDER PERIMETER CONTROLS AS SHOWN ON THE PLANS.
27. INSTALL TEAR DROP CULVERT ADJACENT TO EXISTING PVC PIPE.
28. REMOVE EXISTING PVC PIPE AND BEGIN ROUGH GRADE OF ACCESS ROAD W ALONG WITH CONSTRUCTION OF WALL NO. 3A AND WALL NO. 3B.
29. CONTINUE ROUGH GRADING IN POWER BLOCK AREA FILLING LOW AREAS BEHIND RETAINING WALLS 1A AND 3B (AREA 3).
30. AS SUFFICIENT STABILIZATION OCCURS IN AREA 3 WEST OF THE TEAR DROP WETLAND REMOVE SEDIMENT BASINS 10 & 10A.
31. FINALIZE PROPOSED DEVELOPMENT WHERE SEDIMENT BASIN 10 AND 10A WERE REMOVED UNDER PERIMETER CONTROLS AS SHOWN ON THE PLANS.
32. ONCE ROUGH GRADING IS COMPLETE IN AREA 3 WEST OF THE TEAR DROP WETLAND, BEGIN INSTALLATION OF INFILTRATION BASINS 10.1 AND 10.4 MAKING SURE TO INSTALL SILT FENCE ON THE UPSLOPE SIDE OF THE EXCAVATION PIT TO ELIMINATE SEDIMENT LADEN WATER FROM ENTERING THE EXCAVATION PIT.
33. CONTINUE ROUGH GRADING IN POWER BLOCK AREA FILLING LOW AREAS BEHIND RETAINING WALLS 1B AND 3A (AREA 3). EXCESS CUT MATERIAL MAY BE USED TO FILL LOW SPOTS IN THE BATCH PLANT AREA (AREA 5) OR HAULED TO THE PERMANENT SPOILS AREA.
34. AS ROUGH GRADING OF ACCESS ROAD V PROGRESSES IN THE POWER BLOCK AREA (STA 910+00 TO 921+24.44), INSTALL STORM DRAIN SYSTEM PIPING AND CONNECT TO INFILTRATION BASIN 10.4. INSTALL FILTER BAGS AT ALL CATCH BASIN INLETS.
35. INSTALL WATER AND SEWER SERVICE LINES BETWEEN EAST ABUTMENT FOR BRIDGE 4 AND NORTH ABUTMENT FOR BRIDGE 7 (AREA 3). INSTALL TEMPORARY PIPE CLOSURES.
36. INSTALL REMAINING WATER AND SEWER SERVICE LINES BETWEEN EAST AND WEST ABUTMENTS FOR BRIDGE 4 AND CONNECT TO PREVIOUSLY INSTALLED PIPING.
37. FINAL GRADE ACCESS ROADS W AND V IN SOUTHERN POWER BLOCK AREA BETWEEN BRIDGE 3 AND BRIDGE 5 (STA 910+00 TO 921+00 & 800+00 TO 817+00) AND INSTALL SUB-BASE PAVEMENT AS SHOWN ON PLANS (AREA 3).
38. PERMANENTLY SEED PERIMETER GRADED SLOPES, SWALES AND DRAINAGE TRENCHES AND CLEAN ALL WATER CONVEYANCE FACILITIES IN THE AREA IN THE AREA EAST OF NORTH MARKET STREET (AREA 1) AND THE AREA BETWEEN BRIDGE 3 AND BRIDGE 4 (AREA 3). AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
39. WHEN SUPERSTRUCTURE FOR BRIDGE 6 IS COMPLETE, INSTALL PLANT UTILITY SERVICE LINES ACROSS BRIDGE 6 FROM TEMPORARY TERMINATION POINT AT SOUTH ABUTMENT TO POWER BLOCK AREA (AREA 3). INSTALL TEMPORARY PIPE CLOSURES.
40. WHILE ROUGH GRADING OCCURS IN THE POWER BLOCK AREA, AREA 5 CONSTRUCTION MAY BEGIN.
41. FIELD-MARK THE LIMITS OF DISTURBANCE, ALL WATERS OF THE COMMONWEALTH, SENSITIVE RESOURCES TO BE SAVED, AND PROPOSED INFILTRATION AREAS FOR AREA 5.
42. INSTALL ROCK CONSTRUCTION ENTRANCE 3A FOR RAIL CONSTRUCTION (AREA 5) AS SHOWN ON THE PLANS.
43. INSTALL ALL PERIMETER AND INTERIOR CONTROLS AS SHOWN ON THE PLANS. AS INSTALLATION OCCURS MODIFY THE EXISTING PERIMETER CONTROLS BETWEEN AREAS 2 AND 5 TO ENCOMPASS BOTH AREAS.
44. INSTALL SEDIMENT BASINS 6 AND 18 WITH ALL RELATED APPURTENANCES, INCLUDING BUT NOT LIMITED TO SLOPE MATTING AND SILT FENCE ON ALL CUT/FILL SLOPES. STABILIZE INTERIOR AND EXTERIOR SLOPES OF BASIN EMBANKMENTS IMMEDIATELY UPON COMPLETION OF BASIN CONSTRUCTION.
45. BEGIN TO CLEAR AND GRUB BATCH PLANT AREA WITHIN THE LIMITS OF DISTURBANCE. RELOCATE EXISTING UTILITIES IN THE AREAS OF CONSTRUCTION (AREA 5).
46. INSTALL PERIMETER CONTROLS AROUND TOP-SOIL STOCK PILE AREA WEST OF ACCESS ROAD (AREA 2) AS SHOW ON PLANS.
47. STRIP ORGANIC MATERIAL FROM THE BATCH PLANT AREA WITHIN THE LIMITS OF DISTURBANCE (AREA 5) AND HAUL TO THE TOP-SOIL STOCK PILE AREA WEST OF SUPP ROAD.
48. INSTALL PLANT UTILITY SERVICE LINES FROM TEMPORARY TERMINATION POINTS ALONG NORTH ACCESS ROAD TO THE NORTHEAST LIMIT OF DISTURBANCE FOR THE BATCH PLANT AREA (AREA 5). INSTALL TEMPORARY PIPE CLOSURES.
49. BEGIN ROUGH GRADING OF MAIN ACCESS ROAD (STA. 175+00 TO 2900+00) INSTALLING E&S SWALES FROM DISCHARGE POINT WORKING UPSLOPE. SWALES SHALL BE IMMEDIATELY STABILIZED WITH LINING AS SHOWN ON THE PLANS.
50. GRADE AND STABILIZED CONSTRUCTION LAYDOWN AREAS ADJACENT TO MAIN ACCESS ROAD IN AREA 5. STABILIZATION OF THIS AREA SHALL INCLUDE BUT WILL NOT BE LIMITED TO INSTALLING GEOTEXTILE FABRIC AND AGGREGATE SUBBASE MATERIAL AND PERIMETER CONTROLS AT THE BASE OF ALL CUT/FILL SLOPES.
51. AS ROUGH GRADING OF MAIN ACCESS ROAD IS ACHIEVED IN BATCH PLANT AREA (STA 175+00 TO STA 2900+00) (AREA 5), INSTALL GEOTEXTILE FABRIC FOLLOWED BY INSTALLATION OF AGGREGATE SUB BASE AS SHOWN ON THE PLANS.
52. ENSURE ALL PERIMETER AND INTERIOR CONTROLS ARE INSTALL AND FUNCTIONING PROPERLY IN AREA 5 IN THE AREA OF THE RAIL ROAD CULVERT.
53. INSTALL SANDBAG COFFER DAM, PUMP AND HOSE IN TRIBUTARY 3 TO LAKE TOOK-A WHILE AS SHOWN ON THE PLANS AND DETAILS.
54. CONSTRUCT 48" RAIL ROAD CULVERT AS SHOWN ON THE PLANS.
55. REMOVE SAND BAG COFFER DAM, PUMP AND HOSE; STABILIZE THE AREAS WHERE BMPS WERE LOCATED. DISPOSE OF ANY SEDIMENT AS OUTLINED IN THE MAINTENANCE NOTES.
56. INSTALL RAIL BED (STA 500+00 TO STA 536+00) AND STABILIZE SLOPES AS SHOWN ON THE PLANS WITH SLOPE MATTING/VEGETATION. PERIMETER CONTROLS SHALL BE PLACED ON ALL CUT/FILL SLOPES AS WELL.
57. INSTALL FOUNDATIONS FOR STRUCTURES LOCATED IN THE BATCH PLANT AREA AS SHOWN ON THE PLANS (AREA 5).
58. INSTALL REMAINING CONVEYANCE SYSTEM FOR BASIN 18. INSTALL FILTER BAGS AT ALL CATCH BASIN INLETS.
59. INSTALL WATER, SANITARY SEWER, AND ELECTRICAL SERVICES TO STRUCTURES LOCATED IN THE BATCH PLANT AREA.
60. FINAL GRADE ACCESS ROADS IN BATCH PLANT AREA (STA 175+00 TO STA 2900+00) AND INSTALL SUB-BASE PAVEMENT AS SHOWN ON PLANS (AREA 5).
61. STABILIZE CONSTRUCTION LAY-DOWN AREAS IN THE BATCH PLANT AREA; INSTALL GEOTEXTILE FABRIC AND AGGREGATE SUB BASE (AREA 5).
62. AS STABILIZATION OCCURS IN THE BATCH PLANT AREA (AREA 5), CONVERT SEDIMENT BASIN 18 TO INFILTRATION BASIN 18 AS SHOWN ON THE PLANS. CONVERSION PROCESS SHALL INCLUDE BUT WILL NOT BE LIMITED TO ADJUSTING FINAL GRADE OF BASIN BED TO NO LESS THAN TWO FEET BELOW SEDIMENT BASIN BED. PROPER CARE SHALL BE TAKEN TO REDUCE ANY UNNECESSARY COMPACTION OF THE INFILTRATION BED. STABILIZE INTERIOR AND EXTERIOR SLOPES OF BASIN EMBANKMENTS IMMEDIATELY UPON COMPLETION OF BASIN CONSTRUCTION.
63. AS SUFFICIENT STABILIZATION OCCURS IN AREA 5 SOUTH OF THE BATCH PLANT, REMOVE SEDIMENT BASIN 6 AND BEGIN INSTALLATION OF INFILTRATION BASIN 6 MAKING SURE TO INSTALL SILT FENCE ON THE UPSLOPE SIDE OF THE EXCAVATION PIT TO ELIMINATE SEDIMENT LADEN WATER FROM ENTERING THE EXCAVATION PIT.
64. FINALIZE PROPOSED DEVELOPMENT WHERE SEDIMENT BASIN 6 WAS REMOVED UNDER PERIMETER CONTROLS AS SHOWN ON THE PLANS.
65. PERMANENTLY SEED GRADED SLOPES, SWALES AND DRAINAGE TRENCHES AND CLEAN ALL WATER CONVEYANCE FACILITIES IN THE BATCH PLANT AREA (AREA 5). AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
66. REMOVE ALL PERIMETER CONTROLS FROM THE AREA EAST OF NORTH MARKET STREET (AREA 1), THE ACCESS ROAD AREA (AREA 2) AND THE BATCH PLANT AREA (AREA 5) THAT INCLUDE: SUPER SILT FENCE, SILT FENCE, AND INLET FILTER BAGS AS SHOWN ON PLANS.
67. STABILIZE THE AREAS WHERE TEMPORARY BMPS WERE LOCATED IN THE AREA EAST OF NORTH MARKET STREET (AREA 1), THE ACCESS ROAD AREA (AREA 2) AND THE BATCH PLANT AREA (AREA 5). DISPOSE OF ANY SEDIMENT AS OUTLINED IN THE MAINTENANCE NOTES.
68. AS GRADING IS FINALIZED IN AREA 2, SOUTH OF US 11 ALL SLOPES SHALL BE STABILIZED WITH SLOPE MATTING, VEGETATION AND PERIMETER CONTROLS ON ALL CUT/FILL SLOPES. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
69. CONVERT SEDIMENT BASIN 21 TO INFILTRATION BASIN 21 AS SHOWN ON THE PLANS. CONVERSION PROCESS SHALL INCLUDE BUT WILL NOT BE LIMITED TO ADJUSTING FINAL GRADE OF BASIN BED TO NO LESS THAN TWO FEET BELOW SEDIMENT BASIN BED. PROPER CARE SHALL BE TAKEN TO REDUCE ANY UNNECESSARY COMPACTION OF THE INFILTRATION BED. STABILIZE INTERIOR AND EXTERIOR SLOPES OF BASIN EMBANKMENTS IMMEDIATELY UPON COMPLETION OF BASIN CONSTRUCTION.

Pennoni

Engineers • Surveyors • Planners • Landscape Architects

DATE	NO.	REVISIONS	BY
9/15/11	1	EXCESS EARTHWORK REDUCTION AND LCD COMMENTS	DFC
11/12/10	0	INITIAL SUBMISSION	DFC

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK



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BELL BEND NUCLEAR POWER PLANT

SALEM TOWNSHIP, PENNSYLVANIA

EROSION AND SEDIMENTATION CONTROL SEQUENCE

PPL BELL BEND, LLC

38 BOMBOY LANE, SUITE 2
BERWICK, PA 18603

Pennoni Associates Inc.

JOB NO. PPLS0902
SHEET 3 OF 75
SCALE N.T.S.
DRAWN BY LGB
DATE 9/15/2011
APPROVED JFM
DRAWING NO. CS8003