Conservation Plan for

Franklin County Coal Company No. 7 Abandoned Mine Reclamation Project

February 2014

Prepared by Illinois Department of Natural Resources, Office of Mines and Minerals, Abandoned Mined Lands Reclamation Division

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- Marsh Rice Rat (*Oryzomys palustris*) Trapping Report and Protection and Enhancement Plan, Franklin County Coal Company #7, Phase III, April 2013, prepared by Shawn Duncan, M.S., Midwest Reclamation Resources, Inc.
- Proposed Plans, Franklin County Coal Company No 7, Phase III Reclamation Project, Sheets 2-9, by AMLRD
- Proposed Specifications, Section 250, by AMLRD
- Draft Public Notice, by AMLRD

Conservation Plan for the State Threatened Marsh Rice Rat (Oryxomys palustris)
Franklin County Coal Company No. 7 Abandoned Mine Reclamation Project
Franklin County

1) Project Description – Description of the impact likely to result from proposed taking of the species

A) Project Location

The project site is located on the northeast side of Royalton, Illinois, in the northwest quarter and the north half of the southwest quarter of Section 28, Township 7 South, Range 1 East in Franklin County. The reclamation activities are limited to only those areas impacted by previous mining activities at the Franklin County Coal Company No. 7 mine. The abandoned mine is owned by Larry and Ruth Ann Jones. See map on sheets 2 and 3 of the proposed plans (attached).

B) Affected Species

The presence of the marsh rice rat was confirmed at the site by Midwest Reclamation Resources, Inc. of Murphysboro, Illinois in April 2013. Per the Marsh Rice Rat (*Oryzomys palustris*) Trapping Report and Protection and Enhancement Plan (attached) by Shawn Duncan, M.S. of Midwest Reclamation Resources, Inc.:

"The marsh rice rat (*Oryzomys palustris*) is a semi-aquatic rodent that lives in wet, swampy grasslands, marshes, adjacent roadside ditches, and agricultural fields (Hoffmeister 2002, Nyboer et al. 2006). The marsh rice rat is an Illinois state threatened species locally abundant throughout southern Illinois. Previous county records for the marsh rice rate include: Jackson, Perry, Williamson, Franklin, Saline and Union. Marsh rice rats are nocturnal and fee opportunistically on seeds, succulent vegetation, invertebrates, turtles, fish, bird eggs, and small mammals."

This Conservation Plan relates to this species only. The presence of potential Indiana bat habitat was also confirmed by SCI Engineering, but the proposed construction limits have been modified to remove the identified trees and no potential Indiana bat habitat will be affected.

C) Description of Activities

The proposal is to reclaim the abandoned mined land at the former Franklin County Coal Company No. 7 coal mine. The existing conditions at the site are 45 acres of poorly graded, exposed mine processing waste. The waste is a continued fire hazard. The waste is also erosive and has clogged downstream channels. Previous activities at the mine site have reduced flood storage capacity, increasing runoff flows downstream in the village of Royalton. The proposed reclamation (see attached plans) is to grade the mine waste, treat it with agricultural ground limestone and cover it with excavated earth material. Flood storage, drainage and erosion control measures will be established throughout the site. All disturbed areas will be seeded either with a permanent or wetland seeding mix. This reclamation project will address the serious public health and safety hazards by increasing flood storage on the mine site and covering the waste to prevent fire and erosion. The construction method of completing the reclamation will be with conventional earthmoving equipment, including bulldozers and trackhoes.

D) Adverse Effects
Individual rice rats could be displaced from the habitat by earth moving equipment. Mortality could result from the temporary habitat disruption.

2) Minimization and Mitigation

A) Estimated Area and Amount of Impact
Existing marsh rice rat habitat will be impacted when the 45 acres of abandoned mined land are reclaimed by this project. Per the aforementioned trapping report, marsh rice rats were trapped only on the north side of the north site (11 acres), which will not be disturbed until after construction activities are completed and vegetation established on the main site (34 acres), as noted below as a minimization effort. Based on the limited area of marsh rice rats being captured, it is estimated 11 acres of existing habitat will be impacted. Based on the limited number of marsh rice rats captured within the permit area, an estimated number of 3-10 marsh rice rats may be taken.

B) Minimization and Description of Minimization Efforts
Refer to the Marsh Rice Rat (*Oryzomys palustris*) Trapping Report and Protection and Enhancement Plan (see attached) by Midwest Reclamation Resources, Inc. The plan describes how minimization of impact to the marsh rice rat can be through short and long term habitat measures, in particular through staged construction and habitat restoration of wetlands with wetland seeding mix. The recommendations of this plan have been incorporated in the proposed plans and specifications (see attached). AMLRD will require the contractor to stage the reclamation in two sections: the main site's 34 acres will be cleared, graded, seeded and vegetation established (summer/fall 2014) before the north site's 11 acres are cleared, graded and seeded (spring 2015). Marsh rice rats on the site may be able to relocate to suitable habitat. Also, the final reclamation will create 8.3 acres of wetland on the reclaimed mine site and provide wetland seeding for an additional 4.1 acres on intermittently inundated areas.

C) Management
In addition to the staged construction maintaining habitat areas, adjacent abandoned mined lands, both previously reclaimed and not reclaimed, and agricultural fields will not be impacted during construction. Erosion control measures are included in the plans to limit off-site impacts. The contractor will be required to follow a stormwater pollution prevention plan.

D) Monitoring
AMLRD is responsible for annually monitoring the effectiveness of the measures implemented to minimize the effects of the proposed reclamation on the marsh rice rat. AMLRD will hire a consultant once each year to monitor the mitigation until acceptable by IDNR. AMLRD is the responsible party overseeing the construction to ensure that the proposed plans and specifications are followed as required. Construction management practices shall be adaptive, as allowed through the contract with change orders, to deal with any changed or unforeseen circumstances that affect the effectiveness of the stated minimization efforts.

E) Financial Statement
AMLRD has adequate funding for the construction, minimization and monitoring described in this Conservation Plan through funds appropriated by the Illinois General Assembly to the DNR from the Abandoned Mined Lands Reclamation Federal Trust Fund.

3) Alternatives

A) No Action

Completing no action at the abandoned mine site would not address the serious public health and safety hazards in Royalton: the drainage impairments that worsen flooding in the village and the exposed coal processing waste that has been on fire before and still presents that threat.

B) Proposed Reclamation Activities

The proposed reclamation project will address the serious public health and safety hazards by increasing flood storage on the mine site and covering exposed mine processing waste to prevent fires and erosion.

4) Survival of Species

As noted in the Marsh Rice Rat (*Oryzomys palustris*) Trapping Report and Protection and Enhancement Plan (see attached) by Midwest Reclamation Resources, Inc., the marsh rice rat is an Illinois state threatened species locally abundant throughout southern Illinois. The proposed reclamation includes staged construction for adequate habitat in the immediate area during construction and restoration of habitat ideal for the marsh rice rat after construction.

5) Implementing Agreement

A) Participants for the Execution of this Conservation Plan -

Janet Uglum, P.E.
Project Manager
IDNR/OMM/AMLRD Benton

J. Gregory Pinto, P.E.
Acting Division Manager
IDNR/OMM/AMLRD Springfield

B) The reclamation activities in the attached project plans and as noted in this Conservation Plan will be implemented with the project contract. Construction activities are estimated to begin June 2014 and be completed April 2015. Progress and monitoring reports will be submitted to IDNR each year.

C) AMLRD is authorized by the "Abandoned Mined Lands and Water Act," 20 ILCS 1920/1.01 et seq. to complete reclamation work on abandoned mine properties such as Franklin County Coal Company No. 7.

D) All other federal, state and local requirements have been met for this proposed reclamation and conservation plan. The Corps of Engineers has issued a Nationwide Permit No. 27 for Aquatic Habitat Restoration, Establishment and Enhancement Activities for this reclamation project.

Marsh Rice Rat (*Oryzomys palustris*)
Trapping Report
and
Protection and Enhancement Plan

Franklin County Coal Company #7, Phase III

Prepared for:
Brown & Roberts Inc.
1 Westridge Road
Harrisburg, IL 62946

Submitted: April 2013

Prepared by Shawn Duncan, M.S.
Midwest Reclamation Resources, Inc.
1023 North 14th Street
P.O. Box 1642
Murphysboro, IL 62966

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Introduction

The Abandoned Mine Lands Reclamation Division (AMLRD) of the Illinois Department of Natural Resources (IDNR), Office of Mines and Minerals has proposed a reclamation project for the Franklin County Coal Company #7 abandoned mine northeast of Royalton, Illinois (Figure 1). The project site is located in the northwest ¼ of Section 28, Township 7S, Range 1E in Franklin County, Illinois. Franklin County Coal Company #7 (FCCC #7), hereafter referred to as "project site", contains approximately 47.8 acres of open water, emergent wetland, stream, and upland habitats.

The marsh rice rat (*Oryzomys palustris*) is a semi-aquatic rodent that lives in wet, swampy grasslands, marshes, adjacent roadside ditches, and agricultural fields (Hoffmeister 2002, Nyboer et al. 2006). The marsh rice rat is an Illinois state threatened species locally abundant throughout southern Illinois. Previous county records for the marsh rice rat include: Jackson, Perry, Williamson, Franklin, Saline, and Union. Marsh rice rats are nocturnal and feed opportunistically on seeds, succulent vegetation, invertebrates, turtles, fish, bird eggs, and small mammals.

The state threatened marsh rice rat is known to occur in Franklin County and the adjoining Perry and Jackson counties. To meet the requirements of the Illinois Endangered Species Protection Act consultation process (520 ILCS 10/11(b)), IDNR has requested a survey of the project site for the presence of marsh rice rats (Oryzomys palustris). Furthermore, if the presence is confirmed, a proposed Protection and Enhancement Plan for the work has been requested.

Methods

To meet IDNR requirements, Midwest Reclamation Resources Inc. conducted live trap surveys for marsh rice rats. Trapping was conducted by Shawn Duncan, M.S. Zoology, the staff biologist for Midwest Reclamation Resources Inc. Sherman live traps (13 x 13 x 38 cm; H. B. Sherman Live Traps, Inc., Tallahassee, FL) were baited with a commercial bird seed mix (millet, milo, sunflower, cracked corn). Traps were set along runs and trails within hydric and mesic herbaceous and wooded cover types. Trapping was conducted over three nights between 26-29 March 2013. Each night a total of 44 traps were set (Figure 1). Traps were checked in the morning and closed during the day and reopened in the late afternoon. All captured animals were

identified to species, and immediately released. Estimated trap nights were calculated using the following assumptions: 1) Open traps were counted as 1 trap night each, 2) Closed but empty traps were counted as 0.5 trap night each, 3) Traps containing non-target species were counted as 0.5 trap night each, and 4) Traps containing rice rats were counted as 1 trap night each. Trapping was conducted with the authorization of a Scientific Collecting Permit and an Endangered and Threatened Species Possession Permit for marsh rice rats.

Results

Three marsh rice rats were captured during the 3 nights of trapping. Based on the total number of traps that were found open (54), closed (41), occupied by a non-target species (34), or occupied by a marsh rice rat (3), there were an estimated 94.5 trap-nights. All three rice rats were captured in the northern portion of the project site (Figure 1). No rice rats were captured around the large open water lake in the southern portion of the project site. Additionally, 30 deer mice/white-footed mice (*Peromyscus spp.*), 5 southern short-tailed shrew (*Blarina carolinensis*), and 1 prairie vole (*Microtus ochrogaster*) were captured.

Summary

Based on the results of live trapping, marsh rice rats are present within the project site. Rice rats were captured in the northern portion of the project site in a large stand of common reed (*Phragmites australis*) near shallow water. No rice rats were captured near or around the large pond in the southern portion of the project site although habitat similar to the northern portion of project site was present. A Protection and Enhancement Plan is recommended.

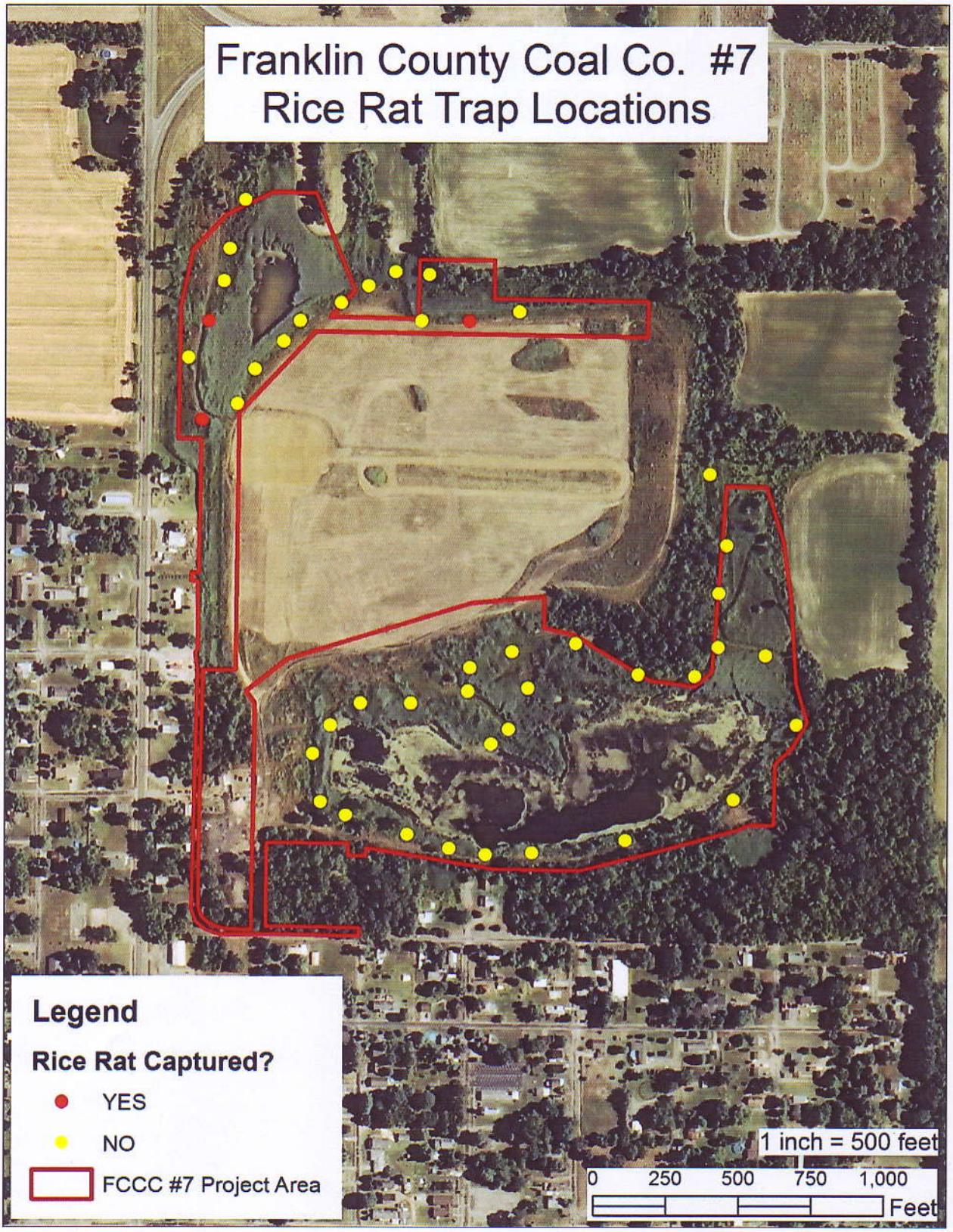


Figure 1. Project site and locations of marsh rice rat traps.

Protection and Enhancement Plan

A Protection and Enhancement plan has been prepared for the marsh rice rat within the Franklin County Coal Co. #7 Phase III project area.

Objective 1 – Avoidance and Minimization

Avoidance and minimization of impact to Marsh Rice Rats

The proposed activities for the permit area include grading and covering of coal refuse to reduce offsite erosion and the chance of coal refuse igniting. Additionally, all *Phragmites* within the project area will be cleared and removed to reduce the potential for fire. The 3 rice rats were captured along the fringes of shallow water wetlands dominated by *Phragmites*. Because of the widespread abundance of *Phragmites* and exposed coal refuse within the project area there are few areas that will not be disturbed by clearing operations. However, through the use of short term and long term habitat measures the impact to marsh rice rats can be reduced.

Objective 2 – Short Term Habitat Measures

The second objective of the PEP is to minimize the potential take of rice rats by providing short-term habitat measures.

Staged wetland removal

Staged clearing and grading within the project area is recommended to provide areas of refuge for marsh rice rats. Incremental clearing and grading will leave portions of the project area unaffected while work progresses in other areas. Leaving portions of the project area unaffected may minimize the impact to the local rice rat population. Additional benefit can be gained by completing project activities and habitat restoration in a portion of the project area prior to disturbance of the previously unaffected refuge areas. This may allow for some marsh rice rat habitat to occur within the project area during all stages of the project.

Objective 3 – Long Term Habitat Measures

The third objective of the PEP is to provide long-term habitat measures for the rice rat in the post-mine reclamation plan.

Habitat Restoration

Following project completion, there will be 2.1 acres of shallow water habitat (0'-2' deep) and 5.5 acres of deep water habitat (0'-22' deep). These open water habitats and their adjacent terrestrial habitats will provide areas in which marsh rice rats can inhabit. It is recommended to establish hydrophytic/wetland vegetation in the shallow edges of the open water habitats and in the adjacent areas to provide habitat for rice rats and to prevent the reinvasion of *Phragmites*. Suggested wetland species are identified in Table 1. In addition to open water habitats there will be several vegetated drainage channels within the completed project area. Vegetated drainage channels provide suitable habitat for rice rats especially when adjacent to wetland and grassland habitats.

Literature Cited

Hoffmeister, D. F. 2002. Mammals of Illinois. University of Illinois Press, Urbana and Chicago, IL, USA.

Nyboer, R.W., J.R. Herkert, and J.E. Ebinger, editors. 2006. Endangered and Threatened Species of Illinois: Status and Distribution, Volume 2 - Animals. Illinois Endangered Species Protection Board, Springfield, Illinois. 181 pp.

Table 1. Potential wetland plant species to be used in seed mix for revegetation.

Scientific Name	Common Name	Wetland Indicator
Acorus calamus	Sweet Flag	OBL
Alisma subcordatum	Water plantain	OBL
Asclepias incarnata	Swamp Milkweed	OBL
Aster puniceus	Bristly Aster	OBL
Bidens frondosa	Devil's beggarticks	FACW
Carex comosa	Bristly Sedge	OBL
Carex cristatella	Crested Oval Sedge	FACW
Carex frankii	Bristly Cattail Sedge	OBL
Carex vulpinoidea	Brown Fox Sedge	OBL
Cephalanthus occidentalis	Button Bush	OBL
Echinochloa crusgalli	Barnyard Grass	FACW
Eleocharis palustris	Great Spike Rush	OBL
Elymus virginicus	Virginia Wild Rye	FACW
Eupatorium perfoliatum	Common Boneset	FACW
Glyceria striata	Fowl Manna Grass	OBL
Helenium autumnale	Sneezeweed	FACW
Hibiscus laevis	Halberdleafed Rosemallow	OBL
Iris virginica	Blue Flag	OBL
Juncus effusus	Common Rush	OBL
Juncus sp.	Rush Species	OBL/FACW
Leersia oryzoides	Rice Cut Grass	OBL
Lobelia siphilitica	Great Blue Lobelia	FACW
Lycopus americanus	Common Water Horehound	OBL
Mimulus ringens	Monkey Flower	OBL
Penthorum sedoides	Ditch Stonecrop	OBL
Polygonum spp.	Smartweed (Various Mix)	OBL
Pontederia cordata	Pickerelweed	OBL
Rudbeckia laciniata	Cutleaf Coneflower	FACW
Sagittaria latifolia	Common Arrowhead	OBL
Scirpus acutus(Schoenoplectus a.)	Hard Stem Bulrush	OBL
Scirpus atrovirens	Dark Green Rush	OBL
Scirpus cyperinus	Wool Grass	OBL
Scirpus fluviatilis(Schoenoplectus f.)	River Bulrush	OBL
Scirpus validus (Schoenoplectus tabernaemontani)	Softstem Bulrush	OBL
Senna hebecarpa	Wild Senna	FACW
Sparganium eurycarpum	Broadfruit bur-reed	OBL
Spartina pectinata	Prairie Cordgrass	FACW
Thalictrum dasycarpum	Purple Meadow Rue	FACW
Verbena hastata	Blue Vervain, Swamp verbena	FACW
Vernonia spp.	Ironweed (Various Mix)	FAC

Photo Log

Photo 1. Captured marsh rice rat.

Photo 2. Habitat around northern pond.

Photo 3. Open Water Habitat in the southern portion of project area.

Photo 4. Sherman trap used for trapping.

Qualifications

Shawn Duncan, M.S. – Zoology

Shawn Duncan is the staff Wildlife Biologist for Midwest Reclamation Resources, Inc. He received a Bachelor's of Science from Purdue University in Wildlife Science in 2005. Additionally, he received a Master's of Science from Southern Illinois University Carbondale in Zoology in 2011. He has ten years of experience conducting vegetation and animal surveys and is qualified to conduct surveys and make habitat determinations for Endangered and Threatened Species within Illinois. Additionally, he has been trained and certified in conducting wetland delineations and other aspects of the Clean Water Act through the Richard Chinn Environmental Training program.

Summary of Quantities

Item No.	#	Item	Section	Quantity Main	Quantity North	Quantity Total	Unit	Rates/Remarks
NRM20110	1	Special Clearing	201	0.6	0.4	1	L SUM	
NRM20210	2	Earth Excavation	202	99,183	25,560	124,743	CU YD	COMPACTION IN ACCORDANCE WITH SECTION 205 OF SPECIAL PROVISIONS
NRM20220	3	Mine Refuse Excavation	202	79,372	28,021	107,393	CU YD	
NRM25040	4	Nitrogen Fertilizer Nutrient	250	5,900	2,000	7,900	POUND	100 LB / ACRE TWICE
NRM25050	5	Phosphorus Fertilizer Nutrient	250	3,540	1,200	4,740	POUND	120 LB / ACRE
NRM25060	6	Potassium Fertilizer Nutrient	250	8,850	3,000	11,850	POUND	300 LB / ACRE
NRM25070	7	Agricultural Ground Limestone	250	147.5	50.0	197.5	TON	5 TON / ACRE
NRM250xx	8	Seeding – Permanent	250	25.0	6.2	31.2	ACRE	
NRM250xx	9	Seeding – Wetland	250	4.5	3.8	8.3	ACRE	
25100115	10	Mulch, Method 2, Procedure 1	IDOT 251	29.5	10.0	39.5	ACRE	2 TON / ACRE
NRM25510	11	Mine Refuse Treatment – Limestone	255	294.0	100.0	394.0	TON	10 TON / ACRE
NRM25810	12	Mowing	258	23.3	7.9	31.2	ACRE	
NRM28040	13	Perimeter Erosion Barrier	280	–	530	530	FOOT	
NRM280xx	14	Inlet and Pipe Protection	280	3	–	3	EACH	
28100205	15	Stone Riprap, Class A3	IDOT 281	836.2	35.0	871.2	TON	
NRM28610	16	Special Excelsior Blanket	286	2,003	409	2,412	SQ YD	8' WIDE
40200800	17	Aggregate Surface Course, Type B	IDOT 402	326.6	–	326.6	TON	CA–1 AND CA–6
542C0217	18	Pipe Culverts, Class C, Type 1 12"	IDOT 542	50	–	50	FOOT	CORRUGATED
542C0223	19	Pipe Culverts, Class C, Type 1 18"	IDOT 542	135	–	135	FOOT	POLYETHYLENE (PE) PIPE
542C0229	20	Pipe Culverts, Class C, Type 1 24"	IDOT 542	120	–	60	FOOT	WITH A SMOOTH INTERIOR
NRM61410	21	Dewatering Impoundments	614	0.9	0.1	1	L SUM	
NRM67110	22	Mobilization (Max. 6% of Bid)	671	0.8	0.2	1	L SUM	

GENERAL NOTES

Unless otherwise noted on the plans, all disturbed areas within the construction limits will be amended with agricultural ground limestone, fertilizer nutrients, seeded and mulched at the required rates specified in the plans.

The contractor is responsible for visiting the site and familiarizing himself with the existing conditions and the proposed reclamation work prior to submitting a bid.

The contractor shall provide and pay for all field engineering services to execute the project as specified in the Field Engineering section of the Special Provisions.

The contractor is responsible for locating and protecting all existing utility lines pertaining to the work.

Unless noted on the plans, all onsite access roads may be used for construction and must be maintained during construction and restored to original or better condition at the completion of work by the contractor. Access roads to the site as designated in the plans are to be maintained to the satisfaction of the engineer.

The construction limits will be staked by the contractor prior to construction. The contractor is responsible for the repair and/or restitution at his own expense for all damages done to any area outside the construction limits.

Application rates specified in the plans are shown in the Summary of Quantities–Rates/Remarks column.

CONSTRUCTION NOTES

BURIAL/REMOVAL OF MATERIAL–Concrete and masonry debris designated for burial by the engineer shall be buried at least two foot below proposed final grade. Onsite organic debris and trash shall be disposed of in an engineer approved offsite landfill in accordance with Sections 201 and 501 of the Special Provisions.

TREE REMOVAL–Trees cleared from the site shall be disposed of onsite per Section 201 of the Special Provisions. No clearing of trees outside the construction limits may occur.

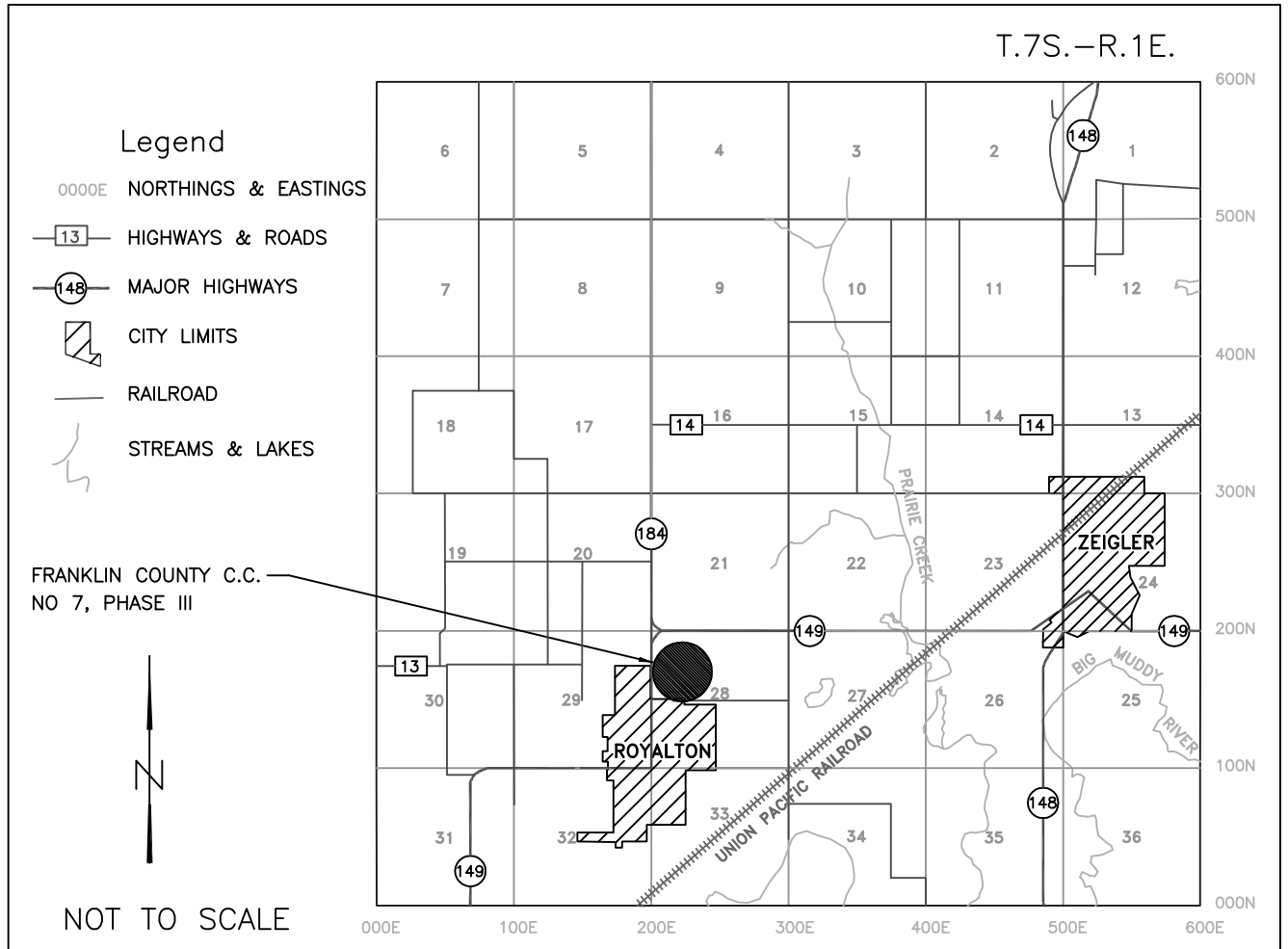
ACID WATER TREATMENT–Acid mine drainage treatment shall be in accordance with Section 614 of the Special Provisions.

EROSION CONTROL–The contractor shall schedule his operations and take such precautions that may be necessary to prevent or minimize erosion. Failure to comply with this requirement shall cause the contractor to be fully responsible for repairing any eroded areas and cleaning up areas or drainage structures that have become silted in or damaged.

AGRICULTURAL GROUND LIMESTONE–Immediately prior to seed bed preparation, fertilizer nutrients and agricultural ground limestone shall be uniformly spread at the rates specified in the plans.

MULCHING–Within 24 hours from the time seeding has been performed, the seeded area shall be given a covering of mulch at the rates specified in the plans. The mulch is to be anchored into the soil in accordance with the requirements for method 2, procedure 1 of Article 251.03 of the Standard Specifications. If Excelsior or Special Excelsior Blanket is to be used, the blanket shall be placed the same day that the areas are seeded.

MINE REFUSE TREATMENT (on projects with mine refuse)–After mine refuse has been graded to the subgrade shown in the plans, agricultural ground limestone shall be uniformly spread at the rate specified in the plans. A 3 inch layer of soil shall then be spread over the mine refuse treatment area and blended to a depth of 6 inches with an industrial offset disk approved by the engineer. Treated areas shall then be covered with soil as directed in the plans.



Location Map

Schedule of Seeding, Fertilizer Nutrients, Mulch and Mowing

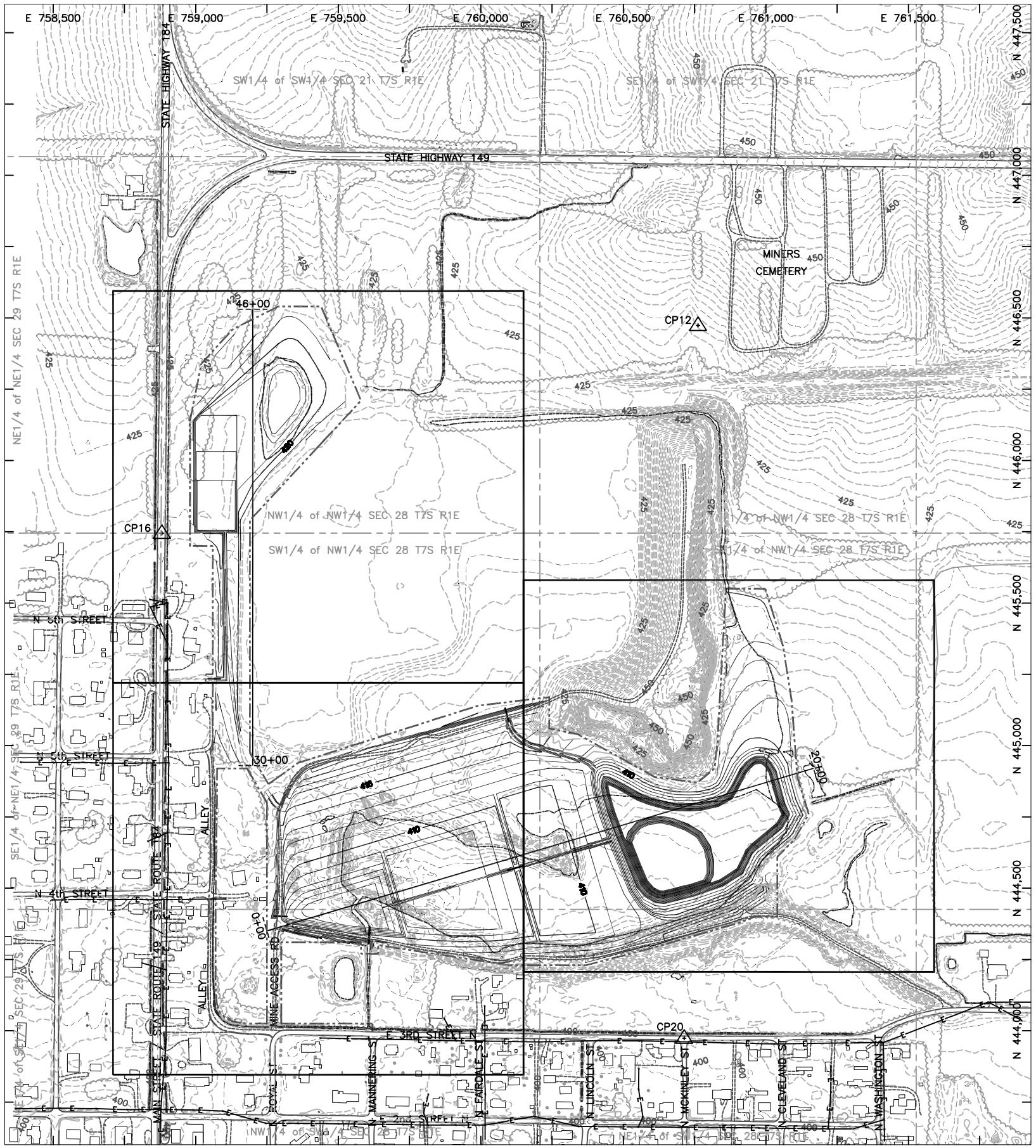
ITEM (unit)	INITIAL APPLICATION MAIN SITE FALL 2014 AUG 20 – SEPT 30	SECOND APPLICATION MAIN SITE SPRING 2015 JAN 1 – MARCH 15	INITIAL APPLICATION NORTH SITE SPRING 2015 JAN 1 – MARCH 15	SECOND APPLICATION NORTH SITE FALL 2015 AUG 20 – SEPT 30	MOWING TO BE COMPLETED BY JUNE, 30, 2015 OR AS DIRECTED	TOTAL QUANTITY
SEEDING–Permanent (acres)	25.0		6.2		BY ENGINEER	31.2
SEEDING–Wetland (acres)	4.5		3.8			8.3
AGRICULTURAL GROUND LIMESTONE (tons)	147.5		50.0			197.5
NITROGEN FERTILIZER NUTRIENT (pounds)	2,950	2,950	1,000	1,000		7,900
PHOSPHOROUS FERTILIZER NUTRIENT (pounds)	3,540		1,200			4,740
POTASSIUM FERTILIZER NUTRIENT (pounds)	8,850		3,000			11,850
MULCH, METHOD 2 PROCEDURE 2 (acres)	29.5		10.0			39.5
MOWING (acres)					31.2	31.2

State of Illinois
Department of Natural Resources

Franklin County C.C. No 7
Phase III Reclamation Project
AML-GFrE-xxxx
Franklin County

Date: 1/15/2014
Drawn By: JLU
Checked By:

Summary of Quantities/
General Notes/Location Map
Sheet
2 of 22



Notes

1. THE NORTH SITE INCLUDES ALL AREAS SHOWN ON EXISTING CONDITIONS SHEET 6/PROPOSED CONDITIONS SHEET 9 AS WELL AS THE AREA BETWEEN SECTIONS 30+00 AND 33+00 ON EXISTING CONDITIONS SHEET 4/PROPOSED CONDITIONS SHEET 7. ALL REMAINING AREAS ARE THE MAIN SITE.

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP 12	446,473.75	760,761.87	433.10	MAGNETIC NAIL SET IN PAVEMENT
CP 16	445,744.66	758,881.17	420.46	MAGNETIC NAIL SET IN PAVEMENT
CP 20	443,973.75	760,713.60	401.87	MAGNETIC NAIL SET IN PAVEMENT

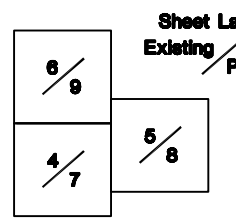
BASELINE INFORMATION		
STA	NORTHING	EASTING
0+00	444,350	759,250
20+00	444,920	761,167
30+00	444,930	759,200
46+00	446,530	759,200

- 425 — EXISTING CONTOUR
- 410 — PROPOSED CONTOUR
- PROPOSED CONSTRUCTION LIMITS
- BASELINE FOR CROSS SECTIONS
- TREE LINE
- SECTION LINE
- E — OVERHEAD ELECTRIC LINE
- EDGE OF WATER
- EXISTING ROAD, UNPAVED
- CONTROL POINT
- EXISTING STRUCTURE

Legend

Franklin County C.C. No 7
Phase III

Sheet Layout
Existing / Proposed



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SCALE IN FEET

State of Illinois
Department of Natural Resources

Franklin County C.C. No 7
Phase III Reclamation Project
AML-GFrE-xxxx
Franklin County

Drawn By : JLU
Checked By :
Date : 1/15/2014

Site Information

Sheet 3 of 22

Notes

1. THE NORTH SITE INCLUDES THE AREA BETWEEN SECTIONS 30+00 AND 33+00 ON THIS EXISTING CONDITIONS SHEET 4/PROPOSED CONDITIONS SHEET 7, AS WELL AS ALL AREAS SHOWN ON EXISTING CONDITIONS SHEET 6/ PROPOSED CONDITIONS SHEET 9.

2. CLEARING OF THE NORTH SITE MAY NOT COMMENCE UNTIL 4 MONTHS AFTER ALL SEEDING ACTIVITIES ARE COMPLETED AT THE MAIN SITE.

EXISTING CONDITIONS SHEET 4/PROPOSED CONDITIONS SHEET 7

EXISTING CONDITIONS SHEET 6/ PROPOSED CONDITIONS SHEET 9

EXISTING IMPOUNDMENT TO BE DEWATERED SEE SHEET 5

EXISTING 36" CONCRETE CULVERT TO BE REMOVED IN ACCORDANCE WITH SECTION 201 OF THE SPECIAL PROVISIONS (INCIDENTAL TO SPECIAL CLEARING)

CONSTRUCTION LIMITS ADJACENT TO ALLEY ARE FROM THE WEST EDGE OF THE ALLEY TO 20 FEET EAST OF THE ALLEY.

N 5th STREET

N 4th STREET

ALLEY

MINE ACCESS RD

MAIN STREET / STATE ROUTE 149 / STATE ROUTE 184

E 3RD STREET N

N ROYAL ST

N MANNERING ST

N FAIRDALE ST

SE1/4 of NE1/4 SEC 29 T7S R1E

SW1/4 of NW1/4 SEC 28 T7S R1E

NE1/4 of SE1/4 SEC 29 T7S R1E

NW1/4 of SW1/4 SEC 28 T7S R1E

N 445,220 E 759,035

N 445,220 E 759,060

N 444,990 E 759,060

N 444,975 E 759,190

N 444,940 E 759,360

N 444,885 E 759,255

N 444,920 E 759,075

N 444,800 E 759,250

N 445,140 E 759,990

N 444,310 E 759,300

N 444,310 E 759,580

N 444,300 E 759,640

N 444,270 E 759,580

N 444,270 E 759,640

N 444,230 E 760,100

N 444,025 E 759,250

N 444,025 E 759,300

N 444,025 E 759,620

32+00

31+00

30+00

0+00

1+00

2+00

3+00

4+00

5+00

6+00

7+00

8+00

R0 R1 R2 R3 R4 R5 R20 R21 R22 R23 R24 R25 R26 R27 R28 R29

N 445,000

N 444,750

N 444,500

N 444,250

N 444,000

E 759,000

E 759,250

E 759,500

E 759,750

E 760,000

425 EXISTING CONTOUR
PROPOSED CONSTRUCTION LIMITS
BASELINE FOR CROSS SECTIONS
TREE LINE
SECTION LINE
E OVERHEAD ELECTRIC LINE
EDGE OF WATER
EXISTING ROAD, UNPAVED
BORING LOCATION
CONTROL POINT
EXISTING STRUCTURE

Legend

Franklin County C.C. No 7
Phase III

Sheet Layout

6
4
5

0 60 120
SCALE IN FEET

State of Illinois
Department of Natural Resources

Franklin County C.C. No 7
Phase III Reclamation Project
AML-GFrE-xxxx
Franklin County

Drawn By : JLU
Checked By :
Date : 1/15/2014

Existing Conditions - Main Site

Sheet 4 of 22

Notes

1. THE EXISTING IMPOUNDMENT AT THE MAIN SITE HAS FLUCTUATING WATER SURFACE ELEVATION AND VOLUME. THE GIVEN VOLUME IS WITH WATER SURFACE ELEVATION = 409.5, AS WAS SURVEYED ON FEBRUARY 1, 2010.

2. PER SECTION 614 OF THE SPECIAL PROVISIONS, THE DEWATERING IMPOUNDMENT OPERATIONS SHALL BE PERFORMED AT A CONTROLLED RATE WHICH WILL PREVENT DOWNSTREAM FLOODING, EROSION OF THE EXISTING STREAM CHANNELS, TRANSPORTATION OF SEDIMENT OUTSIDE THE CONSTRUCTION LIMITS AND DAMAGE TO AQUATIC LIFE AND ITS HABITAT. IN ADDITION, AT NO TIME SHALL THE PUMPING RATE FROM THE MAIN IMPOUNDMENT EXCEED 10 CUBIC FEET PER SECOND (4,500 GALLON PER MINUTE).

3. ALSO PER SECTION 614 OF THE SPECIAL PROVISIONS, THE DEWATERING IMPOUNDMENTS ITEM SHALL BE COMPLETED IN ORDER TO EXECUTE ALL EXCAVATION, FILL AND SEEDING ACTIVITIES PROPOSED. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR MULTIPLE PUMPING OPERATIONS.

4. THE EXISTING AGRICULTURAL FIELD SHALL NOT BE DISTURBED.

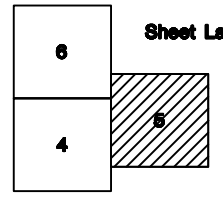
EXISTING IMPOUNDMENT TO BE DEWATERED
VOLUME = 13.5 MILLION GALLONS
ACIDITY = 0 mg/L
SEE NOTE AT RIGHT

Legend

- EXISTING CONTOUR
- PROPOSED CONSTRUCTION LIMITS
- BASELINE FOR CROSS SECTIONS
- TREE LINE
- SECTION LINE
- OVERHEAD ELECTRIC LINE
- EDGE OF WATER
- EXISTING ROAD, UNPAVED
- BORING LOCATION
- CONTROL POINT
- EXISTING STRUCTURE

Franklin County C.C. No 7
Phase III

Sheet Layout



0 60 120
SCALE IN FEET

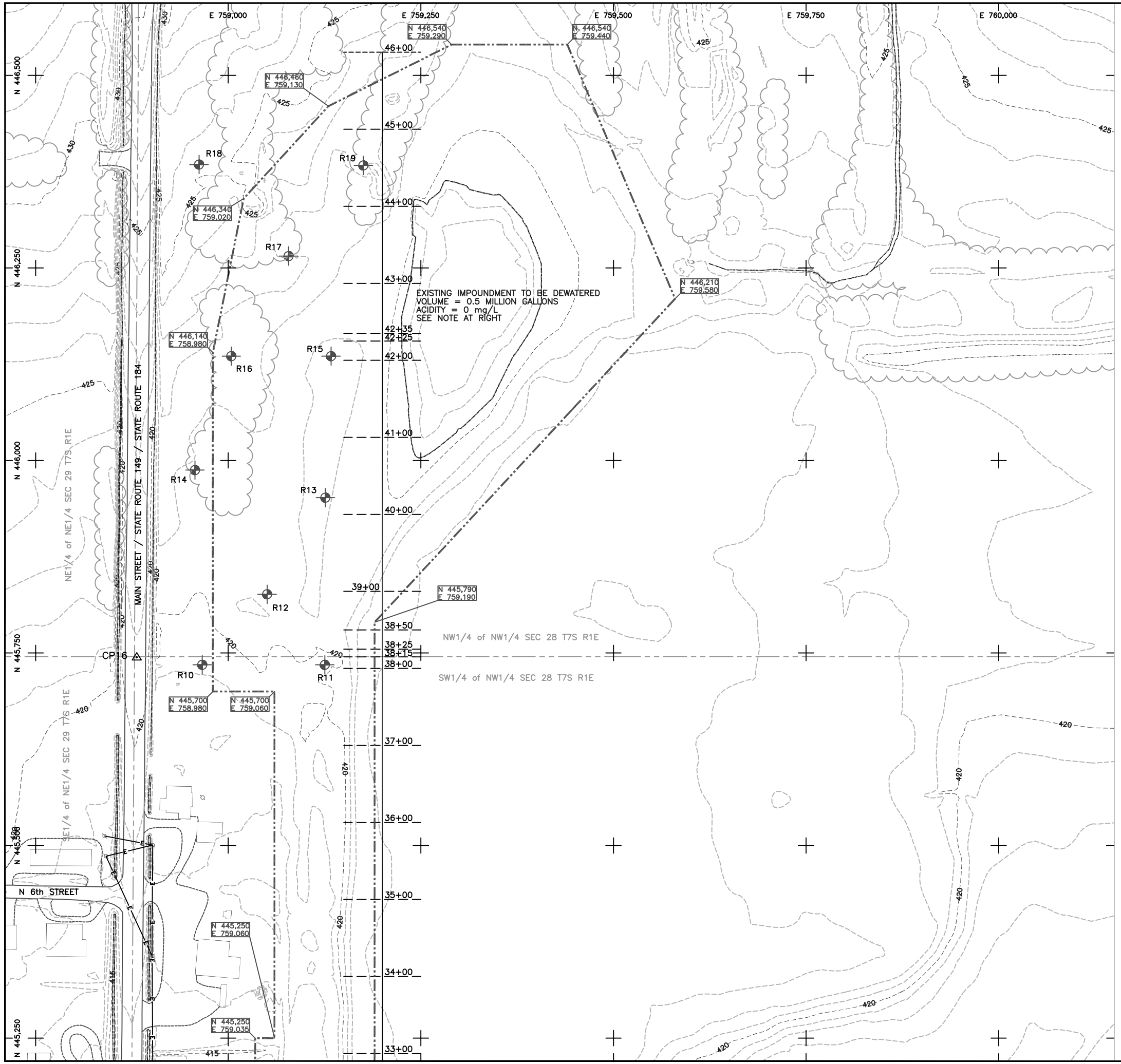
State of Illinois
Department of Natural Resources

Franklin County C.C. No 7
Phase III Reclamation Project
AML-GFrE-xxxx
Franklin County

Date : 1/15/2014
Drawn By : JLU
Checked By :

Existing Conditions - Main Site

Sheet 5 of 22



Notes

1. THE NORTH SITE INCLUDES ALL AREAS SHOWN ON THIS EXISTING CONDITIONS SHEET 6/PROPOSED CONDITIONS SHEET 9 AS WELL AS THE AREA BETWEEN SECTIONS 30+00 AND 33+00 ON EXISTING CONDITIONS SHEET 4/PROPOSED CONDITIONS SHEET 7.

2. THE EXISTING IMPOUNDMENT AT THE NORTH SITE HAS FLUCTUATING WATER SURFACE ELEVATION AND VOLUME. THE GIVEN VOLUME IS WITH WATER SURFACE ELEVATION = 419.4, AS WAS SURVEYED ON FEBRUARY 1, 2010.

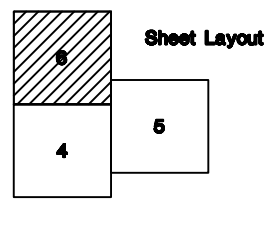
3. PER SECTION 614 OF THE SPECIAL PROVISIONS, THE DEWATERING IMPOUNDMENT OPERATIONS SHALL BE PERFORMED AT A CONTROLLED RATE WHICH WILL PREVENT DOWNSTREAM FLOODING, EROSION OF THE EXISTING STREAM CHANNELS, TRANSPORTATION OF SEDIMENT OUTSIDE THE CONSTRUCTION LIMITS AND DAMAGE TO AQUATIC LIFE AND ITS HABITAT. IN ADDITION, AT NO TIME SHALL THE PUMPING RATE FROM THE NORTH IMPOUNDMENT EXCEED 5 CUBIC FEET PER SECOND (2,250 GALLON PER MINUTE).

4. THE EXISTING AGRICULTURAL FIELD SHALL NOT BE DISTURBED.

- 425 — EXISTING CONTOUR
- PROPOSED CONSTRUCTION LIMITS
- BASELINE FOR CROSS SECTIONS
- TREE LINE
- SECTION LINE
- E — OVERHEAD ELECTRIC LINE
- EDGE OF WATER
- EXISTING ROAD, UNPAVED
- BORING LOCATION
- CONTROL POINT
- EXISTING STRUCTURE

Legend

Franklin County C.C. No 7
Phase III



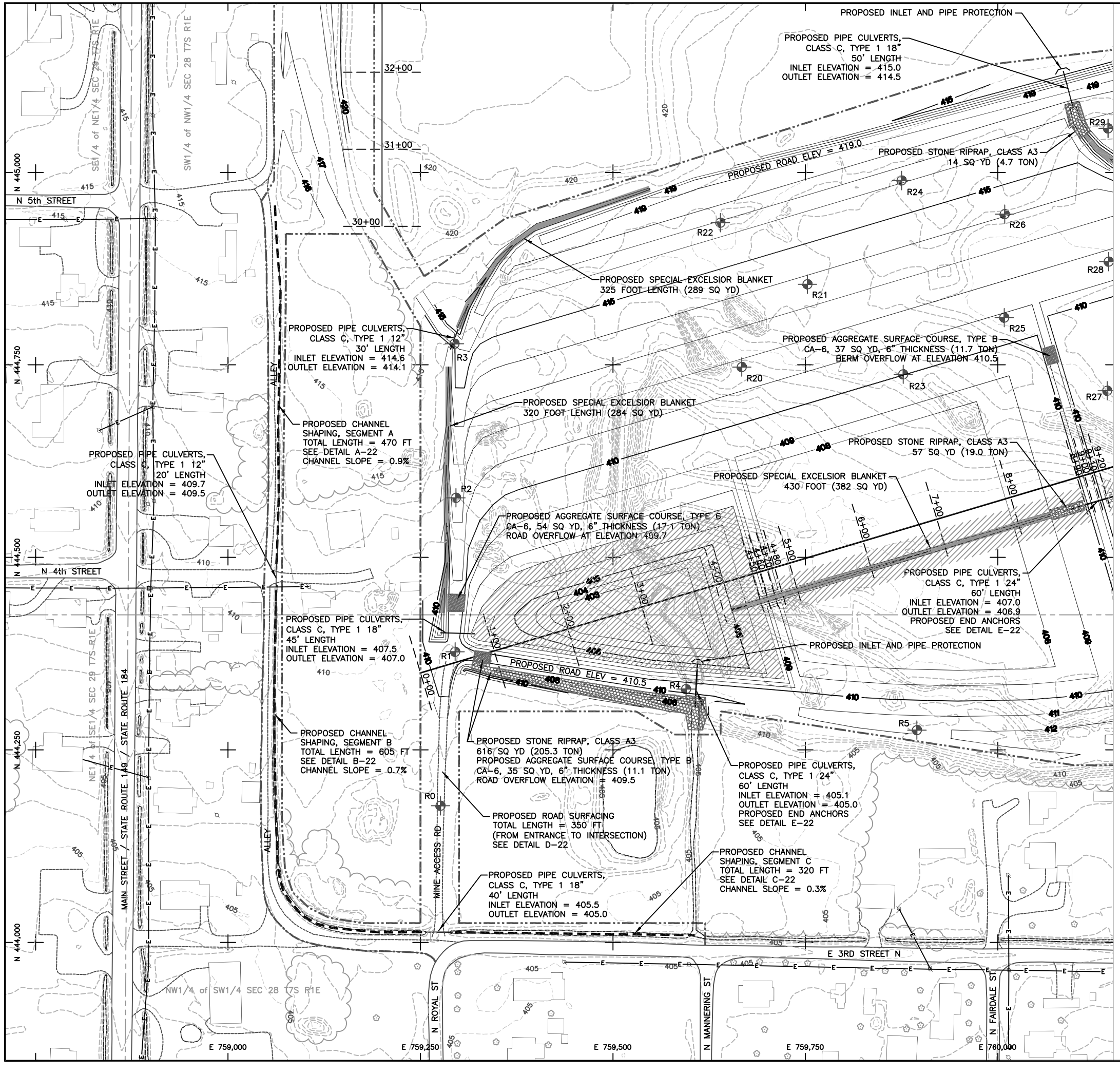
State of Illinois
Department of Natural Resources

Franklin County C.C. No 7
Phase III Reclamation Project
AML-GFrE-xxxx
Franklin County

Drawn By : JLU
Checked By :
Date : 1/15/2014

Existing Conditions - North Site

Sheet 6 of 22



Notes

1. ALL AREAS OF GRADED MINE REFUSE ABOVE ELEVATION 400.0 SHALL RECEIVE MINE REFUSE TREATMENT – LIMESTONE IN ACCORDANCE WITH SECTION 255 OF THE SPECIAL PROVISIONS PRIOR TO THE EARTH FILL COVER. THE LIMESTONE APPLICATION RATE SHALL BE 10 TON/ACRE.
MAIN SITE = 294.0 TON
NORTH SITE = 100.0 TON

2. SEEDING – WETLAND TO BE COMPLETED ON THIS SHEET INCLUDES THE AREA BELOW ELEVATION 407.0 AT THE DOWNSTREAM PROPOSED IMPOUNDMENT AS WELL AS THE PROPOSED CHANNEL AND THE AREA 20' ON BOTH SIDES (HATCHED AREAS).
SHEET 7
SEEDING – WETLAND = 1.7 ACRE

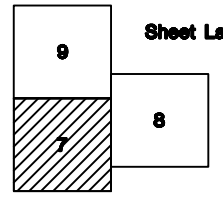
3. MOWING SHALL BE COMPLETED AT ALL SEEDED AREAS ABOVE NORMAL POOL ELEVATIONS.
MAIN SITE = 23.3 ACRE
NORTH SITE = 7.9 ACRE

- 425 EXISTING CONTOUR
- 410 PROPOSED CONTOUR
- PROPOSED CONSTRUCTION LIMITS
- BASELINE FOR CROSS SECTIONS
- TREE LINE
- SECTION LINE
- E OVERHEAD ELECTRIC LINE
- EDGE OF WATER
- PROPOSED RIPRAP
- PROPOSED SEEDING – WETLAND
- PROPOSED SPECIAL EXCELSIOR BLANKET (8 FT WIDTH)
- PROPOSED PERIMETER EROSION BARRIER
- EXISTING ROAD, UNPAVED
- CONTROL POINT
- EXISTING STRUCTURE

Legend

Franklin County C.C. No 7
Phase III

Sheet Layout



0 60 120
SCALE IN FEET

State of Illinois
Department of Natural Resources

Franklin County C.C. No 7
Phase III Reclamation Project
AML-GFrE-xxxx
Franklin County

Date : 1/15/2014
Drawn By : JLU
Checked By :

Proposed Conditions - Main Site

Sheet 7 of 22

PROPOSED SPECIAL EXCELSIOR BLANKET
600 FOOT LENGTH (533 SQ YD)

PROPOSED AGGREGATE SURFACE COURSE, TYPE B
CA-6, 36 SQ YD, 6" THICKNESS (11.4 TON)
ROAD OVERFLOW AT ELEVATION 418.5

PROPOSED SPECIAL EXCELSIOR BLANKET
330 FOOT LENGTH (293 SQ YD)

PROPOSED STONE RIPRAP, CLASS A3
117 SQ YD (39.0 TON)
OVERFLOW ELEVATION = 408.5

PROPOSED SPECIAL EXCELSIOR BLANKET
250 FOOT LENGTH (222 SQ YD)

PROPOSED INLET AND PIPE PROTECTION

PROPOSED AGGREGATE SURFACE COURSE, TYPE B
CA-6, 44 SQ YD, 6" THICKNESS (13.9 TON)
ROAD OVERFLOW AT ELEVATION 413.5

MINE RD

SW1/4 of NW1/4 SEC 28 T7S R1E
SE1/4 of NW1/4 SEC 28 T7S R1E
NE1/4 of SW1/4 SEC 28 T7S R1E
SW1/4 of NE1/4 SEC 28 T7S R1E
NW1/4 of SE1/4 SEC 28 T7S R1E

R30 R31 R32 R33 R34 R35 R36 R37 R38 R39 R40 R41 R42 R43 R44 R45 R46 R47 R48 R49 R6 R7 R8 R9

E 760,250 E 760,500 E 760,750 E 761,000 E 761,250 E 761,500
N 445,500 N 445,250 N 445,000 N 444,750 N 444,500 N 444,250

Notes

1. SEEDING – WETLAND TO BE COMPLETED ON THIS SHEET INCLUDES THE AREA BETWEEN ELEVATIONS 403.5 AND 410.5 AT THE UPSTREAM PROPOSED IMPOUNDMENT AS WELL AS THE PROPOSED CHANNEL AND THE AREA 20' ON BOTH SIDES (HATCHED AREAS).
SHEET 8
SEEDING – WETLAND = 2.8 ACRE

2. SEEDING – PERMANENT IS REQUIRED FOR ALL OTHER DISTURBED AREAS, EXCEPT SEEDING IS NOT REQUIRED FOR ELEVATIONS BELOW 403.5 WITHIN THE UPSTREAM PROPOSED IMPOUNDMENT.
MAIN SITE
SEEDING – PERMANENT = 25.0 ACRE

Legend

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED CONSTRUCTION LIMITS
- BASELINE FOR CROSS SECTIONS
- TREE LINE
- SECTION LINE
- OVERHEAD ELECTRIC LINE
- EDGE OF WATER
- PROPOSED RIPRAP
- PROPOSED SEEDING – WETLAND
- PROPOSED SPECIAL EXCELSIOR BLANKET (8 FT WIDTH)
- PROPOSED PERIMETER EROSION BARRIER
- EXISTING ROAD, UNPAVED
- CONTROL POINT
- EXISTING STRUCTURE

Franklin County C.C. No 7
Phase III

Sheet Layout

9 | 8
7

0 60 120
SCALE IN FEET

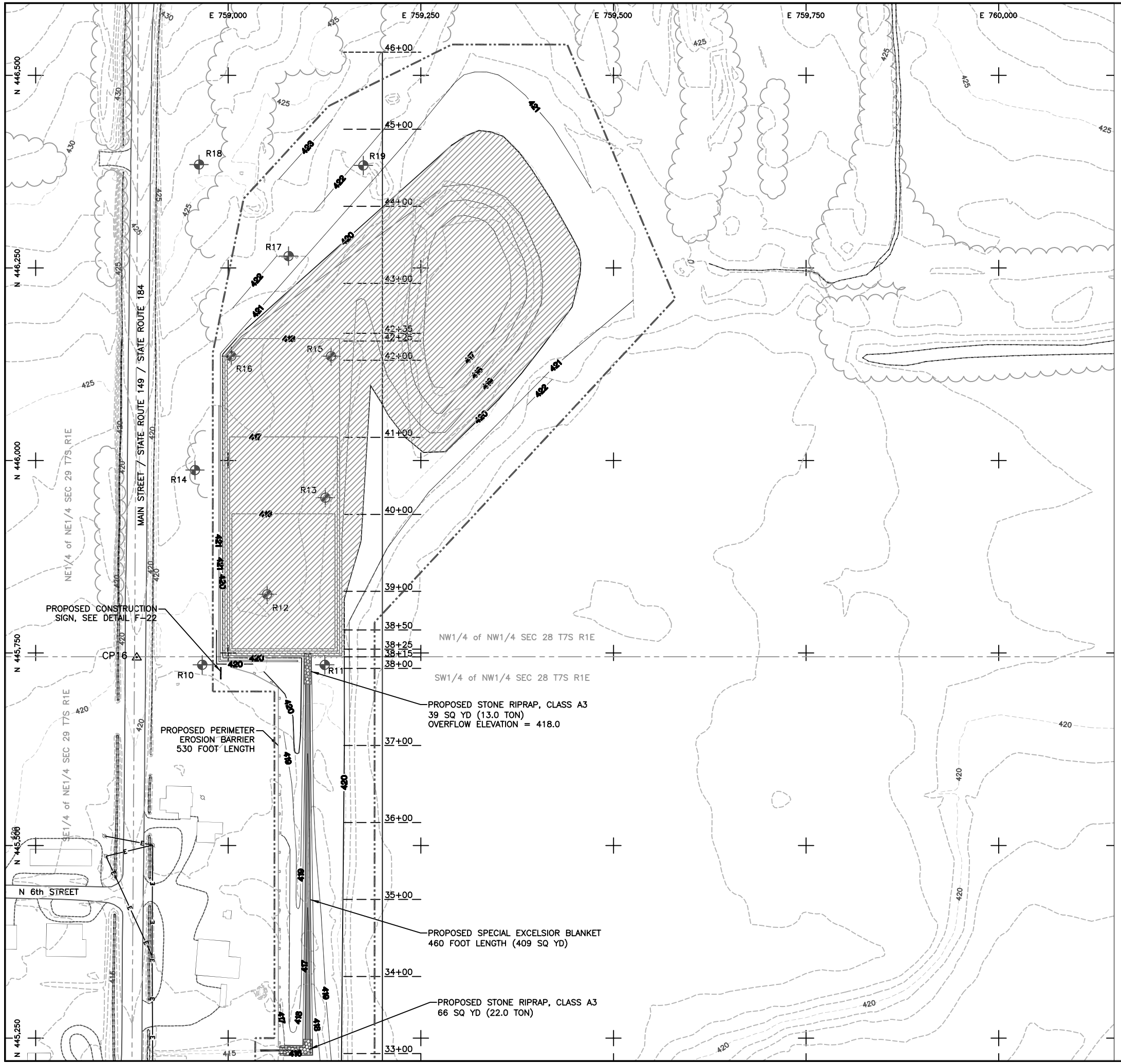
State of Illinois
Department of Natural Resources

Franklin County C.C. No 7
Phase III Reclamation Project
AML-GFrE-xxxx
Franklin County

Date : 1/15/2014
Drawn By : JLU
Checked By :

Proposed Conditions - Main Site

Sheet 8 of 22



Notes

1. SEEDING – WETLAND TO BE COMPLETED ON THIS SHEET INCLUDES THE AREA BELOW ELEVATION 420.0 AT THE EXISTING AND PROPOSED IMPOUNDMENTS (HATCHED AREAS).
SHEET 9
SEEDING – WETLAND = 3.8 ACRE

2. SEEDING – PERMANENT IS REQUIRED FOR ALL OTHER DISTURBED AREAS.
NORTH SITE
SEEDING – PERMANENT = 6.2 ACRE

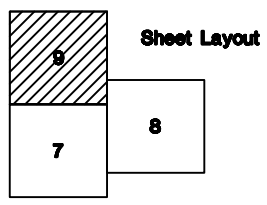
3. EXCESS EARTH MATERIAL (3,400 CU YD) TO BE STOCKPILED AS DIRECTED BY THE ENGINEER FOR FUTURE EROSION REPAIRS.

Legend

- 425 EXISTING CONTOUR
- 410 PROPOSED CONTOUR
- PROPOSED CONSTRUCTION LIMITS
- BASELINE FOR CROSS SECTIONS
- TREE LINE
- SECTION LINE
- E OVERHEAD ELECTRIC LINE
- EDGE OF WATER
- PROPOSED RIPRAP
- PROPOSED SEEDING – WETLAND
- PROPOSED SPECIAL EXCELSIOR BLANKET (8 FT WIDTH)
- PROPOSED PERIMETER EROSION BARRIER
- EXISTING ROAD, UNPAVED
- CONTROL POINT
- EXISTING STRUCTURE

Franklin County C.C. No 7
Phase III

Sheet Layout



State of Illinois
Department of Natural Resources

Franklin County C.C. No 7
Phase III Reclamation Project
AML-GFrE-xxxx
Franklin County

Date : 1/15/2014
Drawn By : JLU
Checked By :

Proposed Conditions - North Site

Sheet 9 of 22

SECTION 250: SEEDING - (revise the following articles as indicated)

Article 250.02 Materials - (revise Article 1081.04 of the Standard Specifications as indicated)

(a) Sampling and Testing. Each lot of seed, or seed mixture, except Prairie Forbs, furnished shall be tested by a State Department of Agriculture (including other states), or by land grant college or university agricultural sections, or by a Registered Seed Technologist. The seed sample shall be sent directly from the dealer to the place of testing. The cost of this testing shall be included in the unit bid price.

All seeds shall comply with the requirements of the U.S. Department of Agriculture Consumer and Marketing Service, Rules and Regulations under the Federal Seed Act of August 9, 1939, issued March 1940, reprinted with amendments April 1968, or any current revisions.

Acceptance of seeds furnished under this Specification will be based on receipt and approval of a certification covering tests from each lot of seed. Certification shall consist of test reports showing the required test results of lots corresponding to the shipment and signed by the responsible personnel of a State seed laboratory or college or university seed testing section or a Registered Seed Technologist. A Registered Seed Technologist shall verify his/her signature with his/her Society of Commercial Technologists' seal.

The sample must be tested within 30 days of scheduled seeding. Test reports shall provide or include the following information at a minimum:

(1) Name of Seed Dealer	(2) Kind and Variety of Seed
(3) Date of Test	(4) Lab Number
(5) Weight Examined by Grams	(6) Lot Number
(7) Pure Seed Crop by Name	(8) Purity Percentage Analysis
(9) Germination Percentage Analysis	(10) Hard Seed Percentage Analysis
(11) Other Crop Names and Percentages	(12) Common Weed Names & Percentages
(13) Percentage of Total Inert Matter	(14) Noxious Weeds and Percentages (if any)

A ten percent (10%) tolerance will be allowed for each specified pure live seed species in the total seed mixture. If test results indicate insufficient pure live seed of any species, additional pure live seed of the same species shall be added prior to seeding, to correct deficiencies to within the ten percent tolerance allowable.

If test results indicate the presence of an Illinois noxious weed, or the seed mixture is found unacceptable by reason of any other defect that in the judgment of the Engineer cannot be corrected, the Contractor shall obtain a new supply of the specified seed mixture. Any areas seeded with an unacceptable seed mixture shall be destroyed, by preparing a new seed bed and reseeding. No additional compensation will be allowed for correcting deficiencies to within the allowable tolerance, for obtaining a new seed supply if required, or for reseeding.

Seeds may be sampled at destination on a random basis and tested for comparison with certification and compliance with the Specifications. If deviations are found, the results will be reviewed to determine whether the material is acceptable for use. Major

deviations may result in a requirement that each lot of material from the source in question be sampled, tested and approved by the State Department of Agriculture before further use.

Article 250.03 Equipment - (revise as indicated)

(e) Spinning Disk Seeders. (change Article 1101.08 (e) of the Standard Specifications to)

When spinning disk seeders are used, the individual seeds comprising the seeding mixture need not be sown separately. A spike-toothed or tine-toothed harrow, approved by the Engineer, must be either be pulled behind the spinning disk seeder by the same equipment in one operation, or pulled by other equipment over all seeded areas on the same day.

(i) Harrows - Spike Toothed and Tine Toothed.

Spike and tine toothed harrows shall be commercially manufactured harrows designed for light tillage necessary to cover grass and legume seed after these seeds have been broadcast with spinning disk seeders, truck mounted air flow fertilizer/seeder spreaders, and aerial seeders.

(j) No-Till Seeder.

These seeders shall be commercially manufactured no-till (zero-till) seeders specifically designed for no-till placement of grass and legume seed and shall be approved by the Engineer prior to use.

Article 250.04 Fertilizer and Agricultural Ground Limestone - (change to)

(a) Prior to the application of fertilizer nutrients and agricultural ground limestone on the soil and/or coal refuse, the Contractor shall notify the Engineer so that the Engineer can sample soil and/or coal refuse, retest and, if necessary, revise the rates for fertilizer and limestone specified on the plans to accommodate actual field conditions.

(b) Immediately prior to seed bed preparation and seeding, fertilizer nutrients and agricultural ground limestone shall be uniformly spread at the specified rates over the areas designated. Specified rates of agricultural ground limestone and fertilizer nutrients are listed on the plans under Summary of Quantities or Schedule of Seeding, Fertilizer Nutrients, Mulch and Mowing. NOTE: Fertilizer quantities and application rates may be based on two or more applications. Potassium may be required to be applied in split applications.

(c) When Incorporation - Limestone and Mulch are to be used, as specified in the plans, agricultural ground limestone shall be applied in accordance with Section 256 of the Special Provisions. The fertilizer nutrients and seed mixture shall then be uniformly spread at the rates specified over the incorporated areas and tilled into the soil with the seed mixture by use of a spike toothed or tine toothed harrow as directed by the Engineer.

(d) No-till (zero-till) Seeding. No-Till (zero-till) seeding will not require seed bed preparation. Agricultural ground limestone shall be applied two weeks (14 days) prior to no-till (zero-till) seeding. Fertilizer nutrients shall be applied two weeks (14 days) after

no-till (zero-till) seeding according to the Engineer's discretion. The no-till (zero-till) areas may or may not be mowed prior to or after no-till (zero-till) seeding according to the Engineer's discretion. If the Engineer determines mowing is necessary, it will be measured and paid for according to Articles 250.09 and 250.10, respectively. At no time will the seeder be used as a mulch stabilizer in conjunction with seeding or alone.

(e) Direct Vegetation. If seed bed preparation is required on direct vegetation areas, agricultural ground limestone and fertilizer nutrients shall be applied prior to seeding and according to these specifications. If seed bed preparation is not required or if the Engineer determines it is impractical, the agricultural ground limestone and fertilizer nutrients shall be applied according to the Engineer's discretion.

Article 250.05 Seed bed Preparation - (delete last paragraph and add the following)

Seed bed preparation cannot be performed sooner than 14 days prior to seeding. Seed bed preparation will not be required when no-till seeding or Incorporation - Limestone and Mulch is specified.

Article 250.06 Seeding Methods - (delete all but paragraphs 1 and 2 and add the following)

Harrows that meet the requirements of Article 250.03 (j) of this Special Provision shall be used for light tillage to cover grass and legume seeds, fertilizer and agricultural ground limestone with soil to the satisfaction of the Engineer on the same day the that the seed is sown. A minimum of two passes will be required, one parallel to the slope and one perpendicular to the slope to assure coverage.

Rolling will not be required.

Article 250.07 Seeding Mixtures - (change to)

Article 250.07 Seeding Mixtures, Requirements and Guarantee

(a) Seeding Dates Seeding - Permanent and Seeding - Wetland.

SOUTHERN ILLINOIS (South of U.S. Rt. 50)

Spring seeding dates shall be January 1 to March 15, and fall seeding dates shall be August 20 to September 30 for the following seeding mixes.

Seeding will not be allowed when the wind speed is ten miles per hour or greater. Seed bed preparation may be allowed by the Engineer prior to seeding dates at his discretion.

(b) Seed Mixture for Seeding - Permanent.

SEED	VARIETIES	PURE LIVE SEED LBS./ACRE
Switch Grass	-	2
Orchard Grass	-	10
Redtop	-	4
Smooth Brome Grass	-	24
Medium Red Clover	e.g. Kenstar	5
Alsike Clover or Ladino Clover or other White Clovers	-	10
Alfalfa	-	10
Annual Lespedeza	e.g. Kobe	5
Winter Wheat	-	40
TOTAL		110

(c) Seed Mixture for Seeding - Wetland.

SEED	PURE LIVE SEED LBS./ACRE
Annual Ryegrass	25
Oats, Spring	25
Wetland Grasses and Forbs (see species below)	15

SPECIES	% by Weight
Acorus calamus (Sweet Flag)	1
Asclepias incarnata (Swamp Milkweed)	1
Aster puniceus (Bristly Aster)	3
Bidens frondosa (Devil's beggarticks)	2
Carex comosa (Bristly Sedge)	6
Carex cristatella (Crested Oval Sedge)	6
Carex frankii (Bristly Cattail Sedge)	6
Carex vulpinoidea (Brown Fox Sedge)	6
Eleocharis palustris (Great Spike Rush)	3
Eupatorium perfoliatum (Common Boneset)	2
Glyceria striata (Fowl Manna Grass)	12
Helenium autumnale (Sneezeweed)	1
Iris virginica (Blue Flag)	1
Juncus effuses (Common Rush)	6
Juncus tenuis (Slender Rush)	6
Leersia oryzoides (Rice Cut Grass)	10
Lobelia siphilitica (Great Blue Lobelia)	2
Polygonum pensulvanicum (Pennsylvania Smartweed)	3
Polygonum lapathifolium (Curlytop Smartweed)	3
Rudbeckia laciniata (Cutleaf Coneflower)	2
Scirpus acutus (Hard Stem Bulrush)	3
Scirpus atrovirens (Dark Green Rush)	3
Scirpus fluviatilis (River Bulrush)	3
Scirpus validus (Softstem Bulrush)	3
Sparganium eurycarpum (Broadfruit Burreed)	2
Spartina pectinata (Prairie Cordgrass)	4

Average purity and germination percentages (viable seed for legumes) are from 1948, Yearbook of Agricultural, Grass. Any other product from seed tag percentages of germination times purity, and/or viable seed, will cause the Contractor to adjust his total pounds per acre of seed to sow.

(d) Temporary Seeding. This provision is applicable in the event that the Contractor fails to perform permanent seeding within the dates specified. In that event, temporary seeding shall be required to provide a temporary vegetative cover until the next term of permanent seeding dates. Temporary seeding shall be performed by the Contractor at his own proper cost and expense, at no additional cost to the Department. Prior to temporary seeding, the Engineer

shall submit in writing to the Contractor a proposed temporary seeding mixture, specifying the seed varieties and their respective rates on a pound per acre of pure live seed basis. Vegetation resulting from the temporary seeding shall be destroyed as part of the seed bed preparation for permanent seeding during the next term of permanent seeding dates.

(e) Reseeding Guarantee. The Contractor is required to guarantee the results of the permanent seeding for one year after the date of seeding. The Engineer will periodically inspect all seeded areas during that year to determine whether or not vegetation has been successfully established. Upon the Engineer's determination that vegetation has been successfully established, the Contractor shall be released from all further obligations. If the Engineer determines that vegetation on any area is unacceptable, the Contractor shall be required to reseed that area during the next term of permanent seeding dates, at the Contractor's own proper cost and expense, and at no additional cost to the Department.

Unacceptability will be based on:

1. Seed test failure (Article 250.02).
2. Using unacceptable equipment in performing seeding.
3. Failure to perform seeding as specified; i.e., missing areas during seeding, improper seed bed preparation, etc.
4. Failure to perform mulching as specified; i.e., applying too much or too light application in some areas, using unacceptable mulch, etc.

(d) Subsequent Reseeding. Any area reseeded once by the Contractor will be inspected within six (6) months after reseeding to determine if germination has occurred. If subsequent reseedings are required of the same area(s), through no fault of the Contractor, the Contractor shall be compensated for such subsequent reseeding at unit bid prices, or as otherwise agreed upon by the Contractor and the Engineer.

Article 250.08 Selective Mowing Stakes - (delete entire article)

Article 250.09 Method of Measurement - (revise as indicated)

Substitute SEEDING – PERMANENT and SEEDING - WETLAND for the various classes of seeding. Seed testing and any temporary seeding or reseeding will not be measured for payment.

Delete all reference to mowing and refer to Section 258 of the Special Provision, if mowing is specified on the plans.

Article 250.10 Basis of Payment - (revise as indicated)

Substitute SEEDING – PERMANENT and SEEDING - WETLAND for the various classes of seeding and interseeding. The cost of seed testing and any temporary seeding or reseeding will not be paid for separately, but shall be considered incidental to the cost of SEEDING.

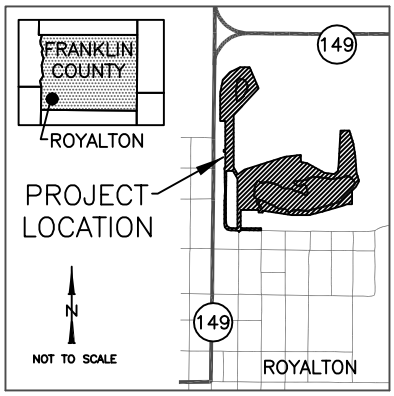
Delete all reference to mowing and refer to Section 258 of the Special Provision, if mowing is specified on the plans.

End of Revisions to SECTION 250: SEEDING

PUBLIC NOTICE

The Illinois Department of Natural Resources, Office of Mines and Minerals, Abandoned Mined Lands Reclamation Division (AMLRD) has applied to the Illinois Department of Natural Resources for the incidental take authorization related to the reclamation of the Franklin County Coal Company No. 7 abandoned coal mine on the northeast side of Royalton in Franklin County. The project could result in the incidental take of the Marsh Rice Rat (Oryzomys palustris).

The mailing address for the AMLRD office responsible for this project is: Illinois Department of Natural Resource, Office of Mines and Minerals, Abandoned Mined Lands Reclamation, 503 E Main Street, Benton, IL 62812.



It is anticipated that the abandoned coal mine reclamation may cause an incidental take of marsh rice rats. A take may result when 45 acres of abandoned mined land are reclaimed.

To offset impacts to the marsh rice rat, AMLRD will require the contractor to stage the reclamation: 34 acres in summer/fall 2014 and 11 acres in winter 2015. The reclamation will also create 8.3 acres of wetland on the reclaimed mine site and provide wetland seeding for an additional 4.1 acres on intermittently inundated areas. This will be completed in addition to grading exposed mine processing waste and covering with earth material.

A copy of the Franklin County Coal Company #7 Conservation Plan is available for inspection at the following locations:

1) IDNR Abandoned Mined Lands Reclamation Division, 503 E Main Street, Benton, IL 62812.
2) Royalton Public Library, 305 S Dean Street, Royalton, IL 62983.

Comments to this proposal should be directed to Jenny Skufca, Endangered Special Project Manager, Illinois Department of Natural Resources, One Natural Resources Way, Springfield, IL 62702, (217) 557-8243, or by e-mail to Jenny.Skufca@illinois.gov

This notice is being published in the Breeze Courier and three times in the Southern Illinoisan. The comment period closes 30 days after the final publication of this notice in the Southern Illinoisan. Final publication is scheduled for _____, 2014. The deadline for receipt of comments is _____, 2014.