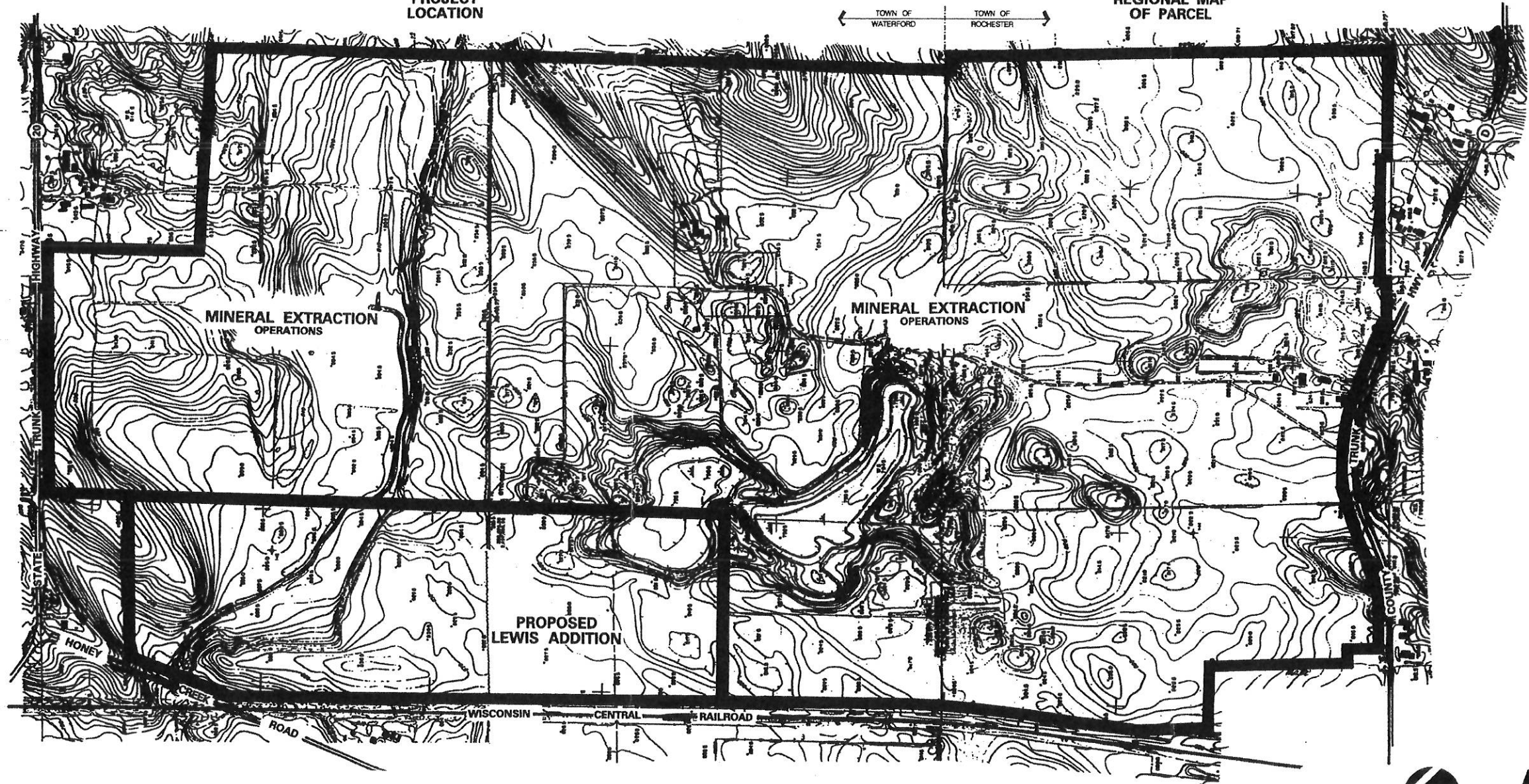
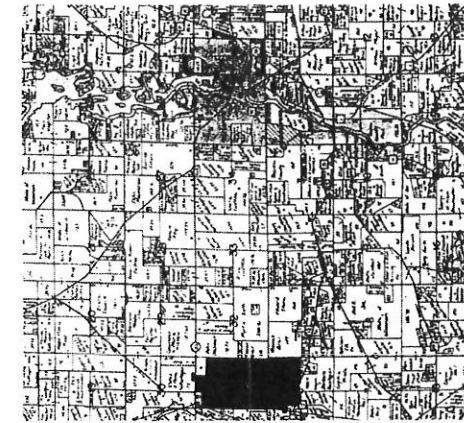


RECLAMATION PLAN SUBMITTAL FOR
COMPLIANCE WITH AUTOMATIC
RECLAMATION PERMIT RECEIVED
PURSUANT TO CH. NR 135.18 AND 135.19
WISCONSIN ADMINISTRATIVE CODE

SUBMITTED JULY 2002

DETAILS OF THE
METHODS & SEQUENCING
FOR
MINERAL EXTRACTION
&
SITE RECLAMATION PLAN

TOWN OF WATERFORD WISCONSIN
TOWN OF ROCHESTER WISCONSIN



**GRAEF
ANHALT
SCHLOEMER**
and Associates Inc.



REVISED: 5 NOV 97



PAYNE & DOLAN
N3 W23650 BADINGER ROAD
WAUKESHA, WISCONSIN 53187
414-524-1700

INDEX OF EXHIBITS

- A PLAT OF EXISTING SITE
- B PARCEL SEQUENCING PLAN
- C SITE RECLAMATION PLAN

250 SCALE 0 250 500 750 1000

PLAT OF EXISTING SITE

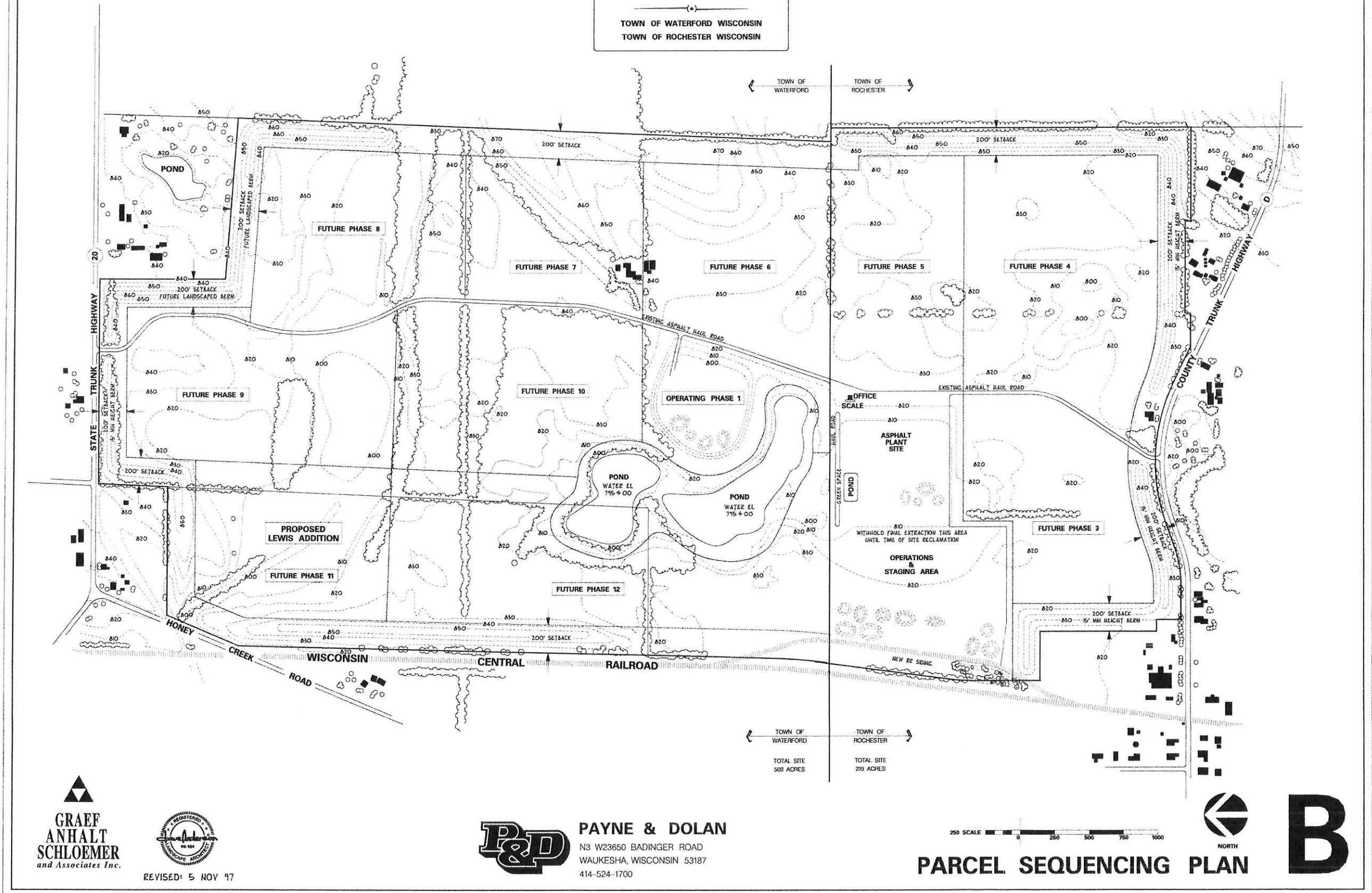
APPROXIMATE DATE OF MAP: 1985



A

DETAILS OF THE
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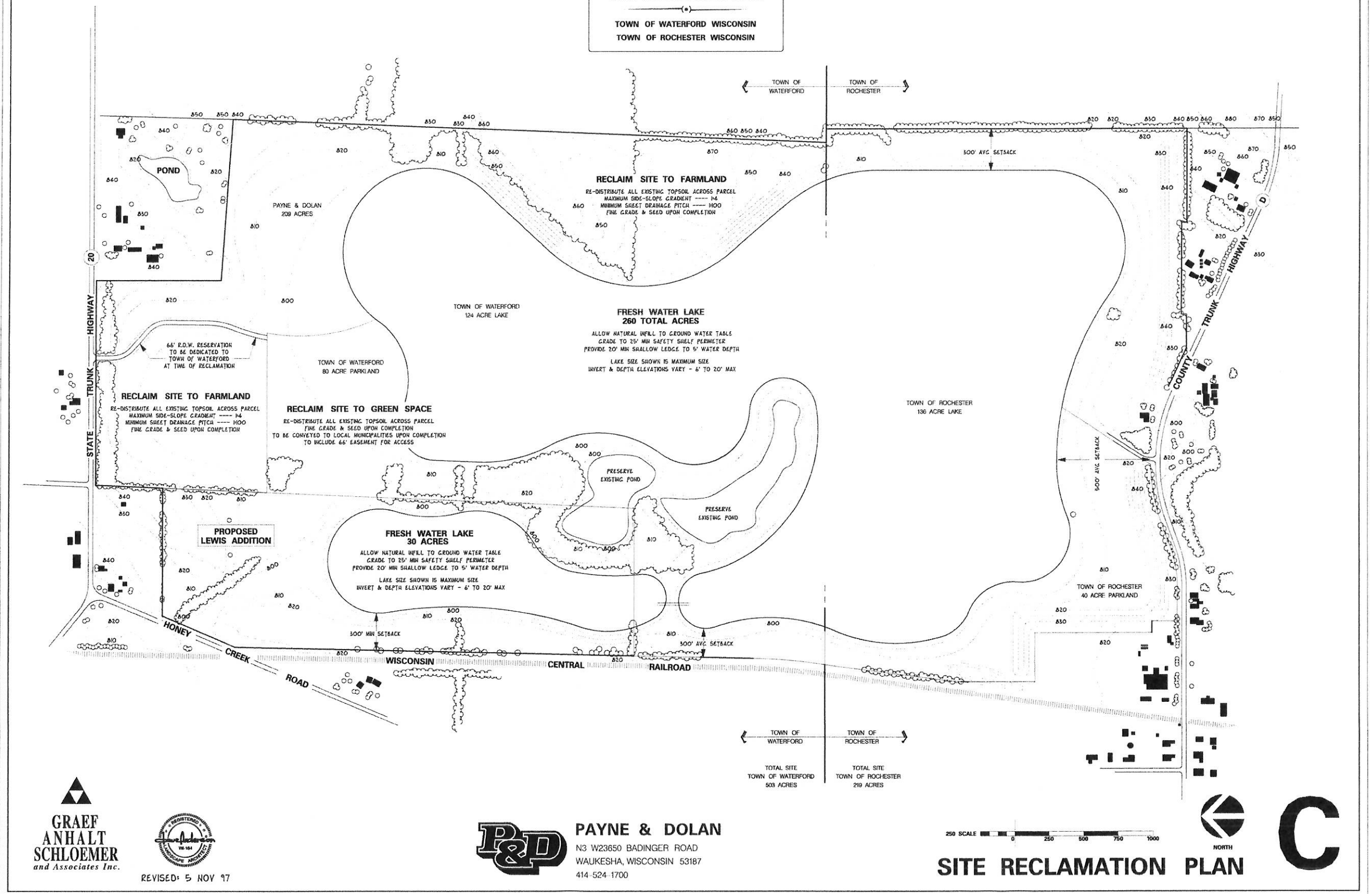
PARCEL SEQUENCING PLAN



B

DETAILS OF THE
METHODS & SEQUENCING
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MINERAL EXTRACTION
&
SITE RECLAMATION PLAN

TOWN OF WATERFORD WISCONSIN
TOWN OF ROCHESTER WISCONSIN



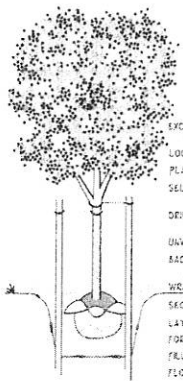
DETAILS OF THE
METHODS & SEQUENCING
FOR
MINERAL EXTRACTION
&
SITE RECLAMATION PLAN

TOWN OF WATERFORD WISCONSIN
TOWN OF ROCHESTER WISCONSIN

CALL BEFORE YOU DIG

STATE LAW REQUIRES YOU TO NOTIFY
OWNERS AND OPERATORS OF UNDERGROUND
FACILITIES AT LEAST 3 FULL WORKING
DAYS BEFORE YOU DIG

1-800-242-8511



2 TREE PLANTING DETAIL

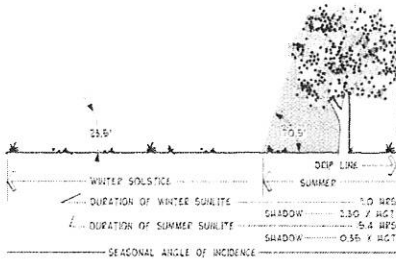
BARE ROOT STOCK MAY BE PLANTED IN 1/4 TO TOPSOIL PIT

EXCAVATE PLANTING PIT TWICE THE DIAMETER
OF SOIL & 6" GREATER IN DEPTH
LOOSEN SUBSOIL W/ PICK TO ENSURE POROSITY
PLACE 6" PEAT MOSS IN PLANTING PIT & TAMP
SELECT BEST VIEWING ANGLE, SET STOCK
BY BALL & PLACE IN PLANTING PIT
UNWRAP TOP HALF OF BALL
BACKFILL W/ MIXTURE 1/3 PEAT MOSS-2/3 TOP-
SOIL & TAMP
WRAP TRUNK W/ PAPER TAPE TO FIRST BRANCH
SECURE TO STAKE W/ RUBBER HOSE CUT WIRE
LAY-IN POROUS FABRIC WEED BARRIER
FORM 3" GAUZE TO ENCIRCLE STOCK
FILL W/ 3" SHREDDED WOOD STOCK MULCH
FLOOD IMMEDIATELY & WATER FREQUENTLY
THRU-OUT INITIAL 60 DAY ACCEPTANCE PERIOD



3 EVERGREEN PLANTING DETAIL

BARE ROOT STOCK MAY BE PLANTED IN 1/4 TO TOPSOIL PIT



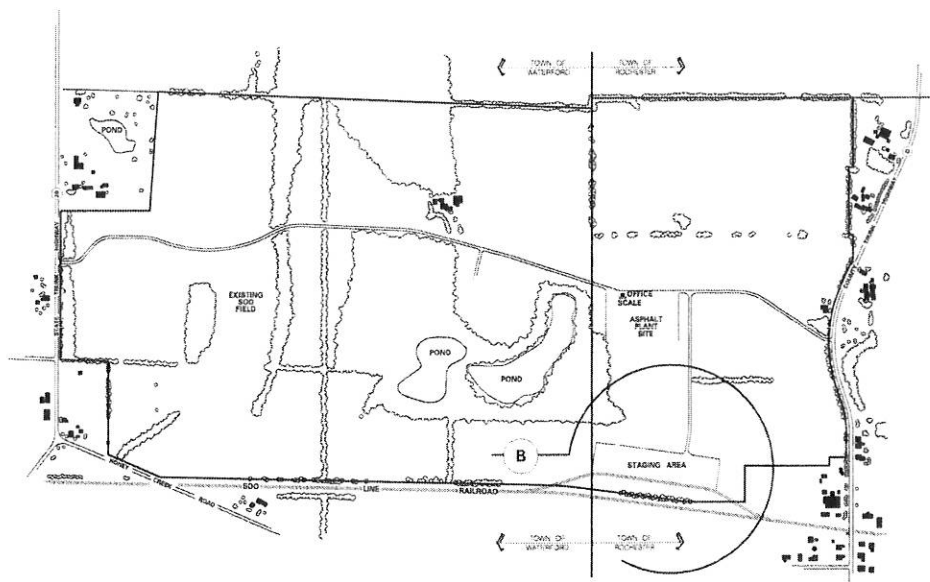
GEOGRAPHICAL LOCATION OF SITE: 43.30 NORTH LATITUDE
88.40 WEST LONGITUDE
DURATION OF ANNUAL GROWING SEASON: 176 DAYS
AVERAGE WARMEST DAY: 80 JULY °F
AVERAGE COOLEST DAY: 3 JAN °F
ANNUAL PRECIPITATION: 750 MM
AVERAGE SUNSHINE PER DAY: 5.6H
OVERALL AVERAGE TEMPERATURE: 45 °F

1 CLIMATOLOGICAL DATA OF SITE

WATERFORD/ROCHESTER, WISCONSIN

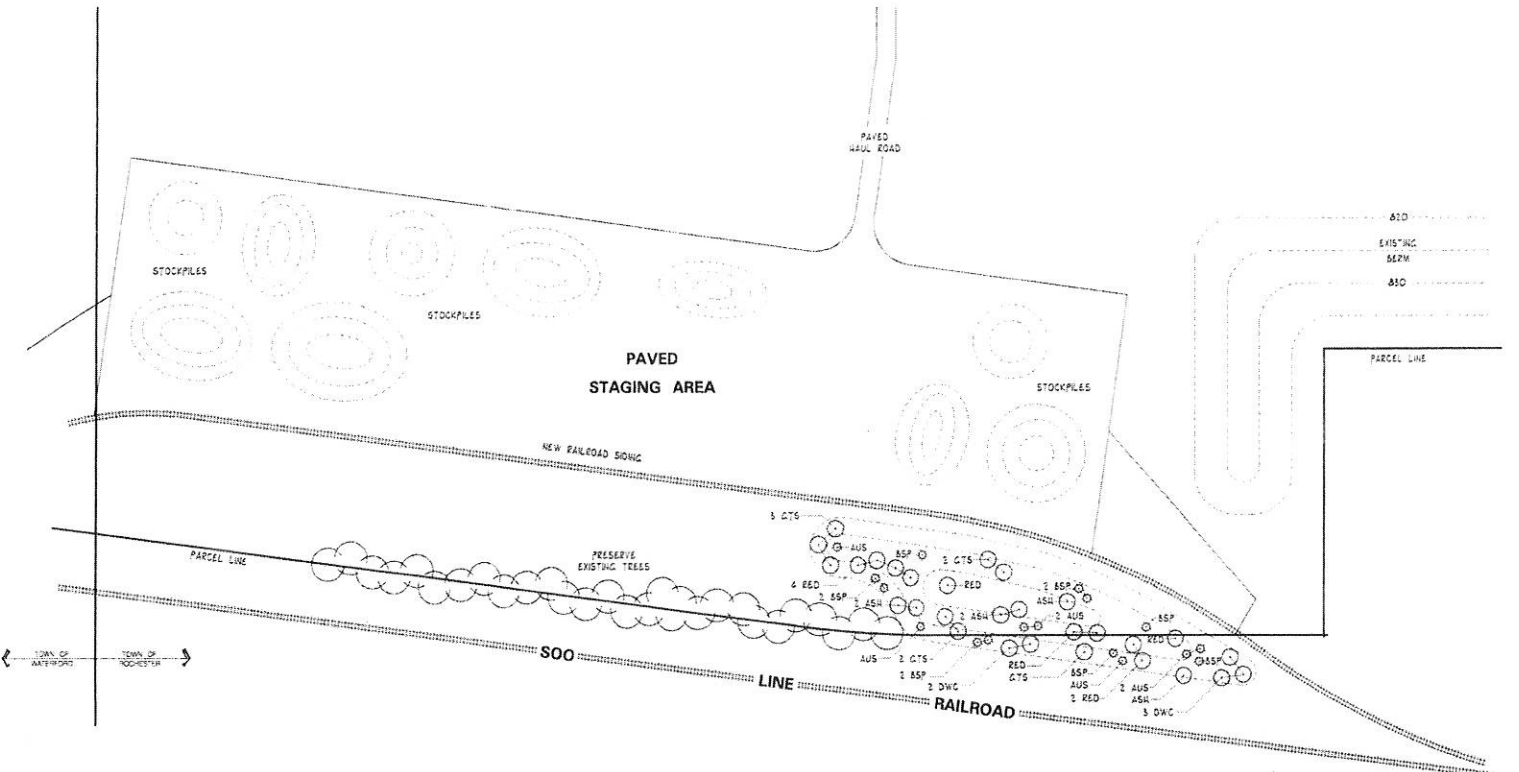
PLANT MATERIAL SCHEDULE

QUANTITY	SYMBOL	SCIENTIFIC NAME	COMMON NAME	MIN. SIZE	SYMBOL
8	●	GLIEDERIA TRIACANTHOS BIERMANI (PATENT 164)	SKYLINE LOCUST	2" CAL	GTS
6	●	FRAXINUS PENNSYLVANICA LANCEOLATA	GREEN ASH	2" CAL	ASH
10	●	ACER RUBRUM 'AUTUMN BLAZE'	AUTUMN BLAZE RED MAPLE	2" CAL	RED
5	●	MALUS WYMAN	DON WYMAN CRAB	2" CAL	DWC
1	●	PRUNUS NIGRA	AUSTRIAN PINE	5' HGT	AUS
10	●	PICEA PUGANS (GLAUCOUS MODICUM)	BLUE SPRUCE	5' HGT	SSP



A SITE PLAN

REFER TO SHEET 5 FOR SITE PLAN



B ENLARGED LANDSCAPED BERM PLAN

CONSTRUCT BERM PER BERM PLAN & CROSS-SECTIONS

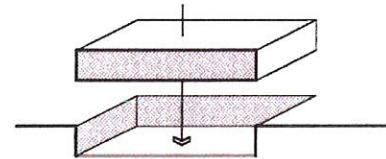


5 JUN 97



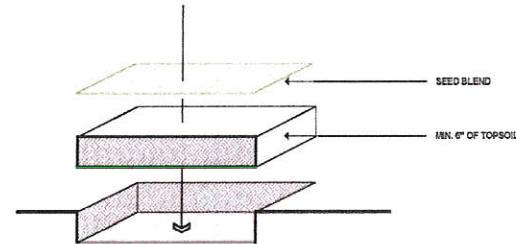
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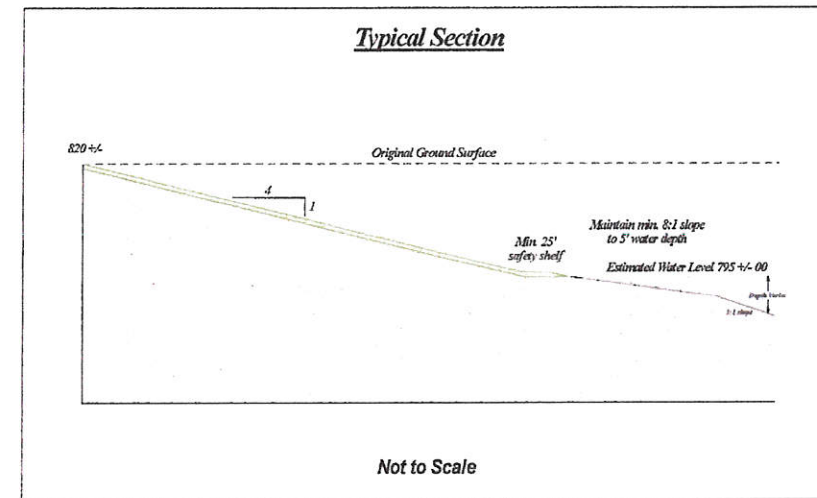
- RETAIN EXISTING TOPSOIL & SUBSOIL FOR DISTRIBUTION DURING RECLAMATION
- MINIMUM 6" OF SUBSOIL AND 6" OF TOPSOIL ON RECLAIMED SLOPES
- STORE TOPSOIL & SUBSOIL IN TEMPORARY BERMS DURING MINERAL EXTRACTION
- EXISTING TOPSOIL & SUBSOIL SHALL BE SPREAD BY GRADING CONTRACTOR
- PROJECT MANAGER SHALL APPROVE FINISHED GRADE & UNIFORM SLOPES PRIOR TO THE SOWING OF SEED

PRESERVATION OF TOPSOIL & SUBSOIL



- ENOUGH TOPSOIL WILL BE STOCKPILED ON SITE FOR RECLAMATION
- MINIMUM OF 6" OF TOPSOIL ON RECLAIMED SLOPES
- PROJECT MANAGER SHALL APPROVE FINISHED GRADE & UNIFORM SLOPES PRIOR TO THE SOWING OF SEED
- ALL SEEDING WILL BE DONE IN ACCORDANCE WITH THE STATE OF WISCONSIN DOT STANDARD SPECIFICATIONS FOR SEEDING AND MULCHING, SECTIONS 630 AND 627
- SEEDING TO BE COMPLETED WITHIN 30 DAYS OF FINAL TOPSOIL GRADING

SEED OPERATIONS



DETAILS

I. PURPOSE AND SCOPE

The purpose of this reclamation plan is to describe the activities to reclaim the site to a condition whereby future land use is feasible after the completion of mineral extraction activities. Implementation of this reclamation plan shall be completed within one (1) year after the cessation of site operations.

The proposed land use for the reclaimed site upon reclamation is returning the parcel to agricultural/farmland operations and green space. The ultimate land development and end use (beyond grading, revegetation and other requirements detailed in this plan) are subject to future land use requirements.

No end use development proposals (besides those listed above) shall be implemented prior to the submission of detailed end-use development plans pursuant to then applicable town and county ordinance requirements, and the granting of detailed zoning and land use approvals in accordance with such applicable ordinance requirements.

II. PROPOSED EARTHWORK AND RECLAMATION

The topsoil and other overburden materials covering the nonmetallic mineral deposit are removed and stockpiled separately for future reclamation. After the nonmetallic minerals are removed, the topsoil and other overburden materials will be placed over the area where the minerals were excavated, graded to conform with the surrounding land and seeded. The existing topsoil and overburden are re-distributed across the parcel and fine graded to present a uniform appearance. Reclaimed slopes will be seeded upon completion of the fine grading.

The reclamation plan has been designed to maintain pre-mine drainage patterns to the greatest extent possible and to improve upon existing conditions where possible. Payne & Dolan will perform the necessary grading to achieve the final topography and drainage patterns as outlined in the attached reclamation plan view.

III. REVEGETATION PLAN

After the overburden materials have been placed over reclaimed slopes, the stockpiled topsoil will be spread over the reclaimed slopes, fine graded, seeded and mulched. Seeding activities will be carried out in accordance with accepted seeding specifications provided in the reclamation plan.

Prepared soil will be seeded at any time during the growing season when soil conditions are suitable but no longer than 30 days after the final grading of reclaimed slopes. Seeding activities should not be carried out immediately following rain, when the ground is too dry, or during windy periods.

All seeding and mulching will be done in accordance with the State of Wisconsin Department of Transportation Standard Specifications for Seeding and Mulching, Sections 630 and 627.

IV. EROSION CONTROL AND POST OPERATIONAL MAINTENANCE

Erosion control measures will be implemented as necessary to minimize off-site erosion until such time as permanent placement and shaping of overburden and topsoil and seeding is possible. Best Management Practices (BMPs) such as check dams, straw bales, silt fence, surface water diversions, energy dissipators, mulch or artificial surface cover, cover crop of vegetation, buffer areas, or other appropriate measures will be taken as necessary. All erosion and sediment control practices will be periodically checked for stability and operation on a regular basis.

Follow-up inspections of all reclaimed or otherwise stabilized surfaces along with all erosion and sediment control practices will be conducted on a monthly basis to ensure their stability until such time as the vegetation required to support the post-mining land use has been successfully established and the financial assurance has been released.

Seeded areas will be reseeded and fertilized as necessary to establish and maintain a dense self-sustaining vegetative cover over reclaimed slopes. Erosion and sediment control measures will be repaired or replaced as necessary. Other preventative measures not mentioned in this reclamation plan will be taken as necessary to minimize off-site erosion.

V. COSTS OF RECLAMATION

Reclamation is an on-going process during the nonmetallic mineral extraction process, with a majority of the reclamation being completed during active mineral extraction. Final reclamation will consist of reclaiming the processing and stockpiling area upon completion of the mineral extraction activities.

The estimated reclamation costs shall approximate the actual costs of reclamation including but not limited to grading and shaping overburden over previously mined areas as shown on the reclamation plan, distribution and placement of topsoil, necessary erosion control measures, seeding, mulching, inspections and maintenance.

The estimated reclamation costs for this site are \$93,750.

VI. ASSESSING SUCCESSFUL RECLAMATION

Payne & Dolan will assess successful reclamation with the approved reclamation plan using the following methods:

1. The available overburden and topsoil have been graded to the contours as shown on the reclamation plan, and have been fine graded, seeded and mulched.
2. Adequate vegetation has been established to stabilize reclaimed surfaces. Adequate revegetation will be determined by utilizing the guidelines outlined in the Wisconsin Technical Note-AGRONOMY-WM-1, Guidelines for Herbaceous Stand Evaluation, dated May 15, 1991 or by percent cover will be determined as total cover (expressed as a percentage) as measured by the canopy (vertical projection of plant parts) and will be recorded by species. Revegetation will be measured over the entire revegetated site at no less than 10 randomly placed square foot quadrants for each 10 acre area.

VII. CERTIFICATION OF RECLAMATION PLAN

I hereby certify, as a duly authorized representative or agent, that the reclamation at this nonmetallic mining site will be carried out in accordance with the approved reclamation plan submitted by Payne & Dolan, Inc. I also certify that the information contained herein is true and accurate and complies with the local and statewide nonmetallic mining reclamation standards established in NR 135, Wisconsin Administrative Code.

Signature of representative or agent
Clint G. Weninger, PG
Payne & Dolan, Inc.

Date signed
7/17/02



NOTES:
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HEREIN ARE CONFIDENTIAL
AND SHOULD NOT BE USED OUTSIDE OF
THE PROJECT WITHOUT
PERMISSION.

PROJECT:

DATE	REVISION

DATE	July 11, 2002
DRAWN BY	CSW
CHECKED BY	
PROJECT #	81000-002-01
SCALE	As shown

