

LYNNVILLE HIGHWALL

| | |
|----------|------------------------|
| SITE NO. | CONTRACT NO. |
| 1832 | DEL2315208026/E008-301 |

WARRICK COUNTY



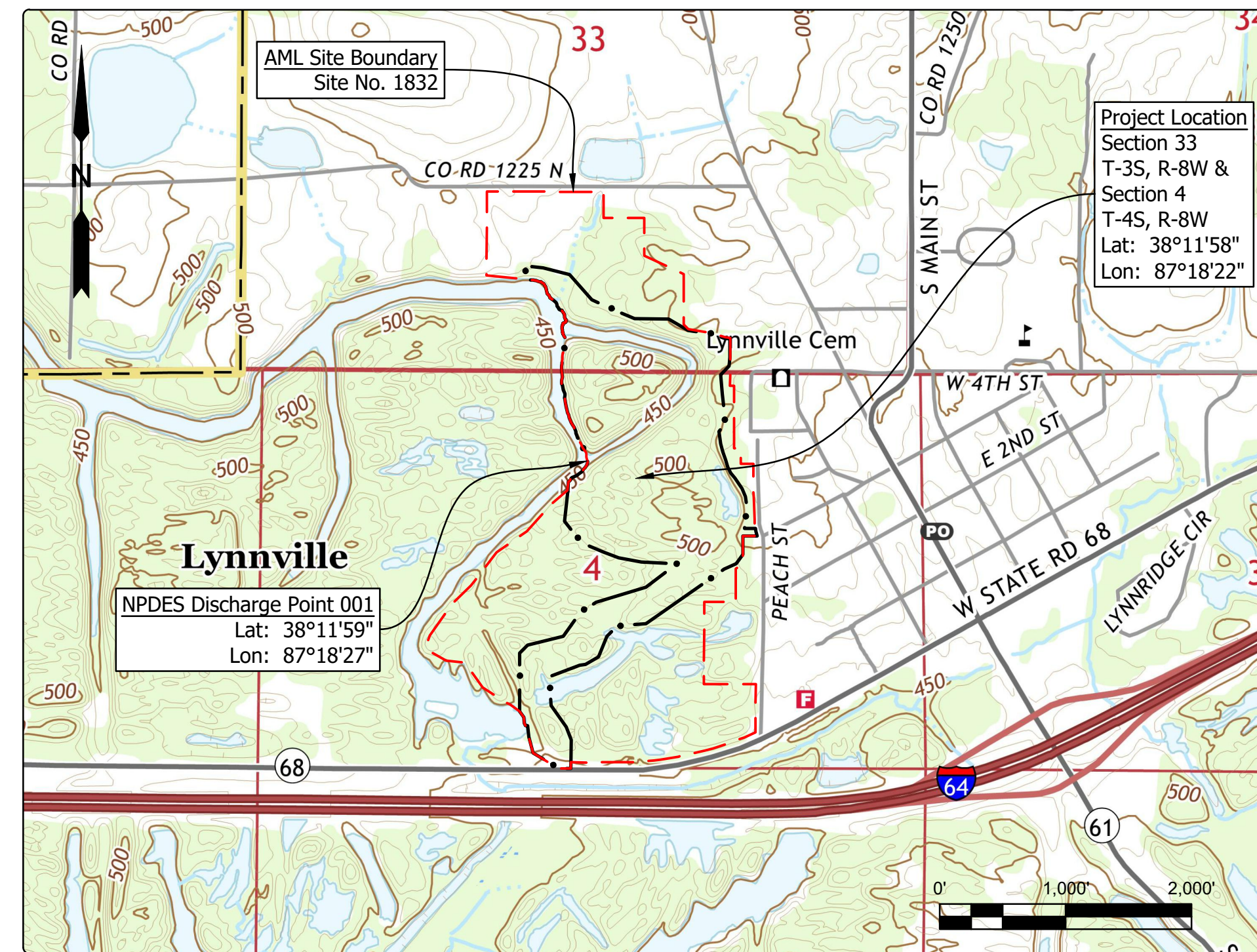
STATE OF INDIANA
INDIANA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF RECLAMATION



ABANDONED COAL MINE
RESTORATION

LYNNVILLE HIGHWALL
SITE 1832
CONTRACT DEL2315208026/E008-301
WARRICK COUNTY

Clear and grub, backfill highwall, improve drainage,
improve wetlands, and revegetate all disturbed areas.



Project Location Map
Lynnville US TOPO (USGS, 2019)

GENERAL NOTES

- 2022 AML Standard Specifications to be used with these plans.
- Plans developed from topographic mapping survey flown in Fall of 2017 by Williams Aerial & Mapping, Inc. in NAD 83, Indiana State Plane West, Feet.
- An NPDES discharge permit is required for this project. Additional NPDES discharge points can be added to facilitate construction sequencing.
- Loose fill shall be placed for the top 4 ft in the fill areas of the tree compatible mix. Loose fill shall consist of a single 4 ft lift and one pass of a low ground pressure dozer unless otherwise approved by the Engineer.
- Access road and recreational vehicle parking pads shall be constructed as shown. The landowner shall be required to fully develop the campground before considering it operational.

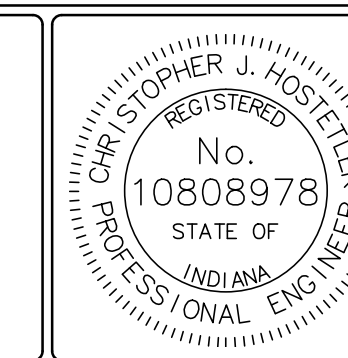
INDEX

| SHEET NO. | SHEET TITLE |
|-----------|------------------------------|
| 1 | Title, Index, & Location Map |
| 2 | Site Map |
| 3-6 | Site Plans |
| 7-8 | Sections |
| 9 | Revegetation Plan |
| 10 | Details |

UTILITIES

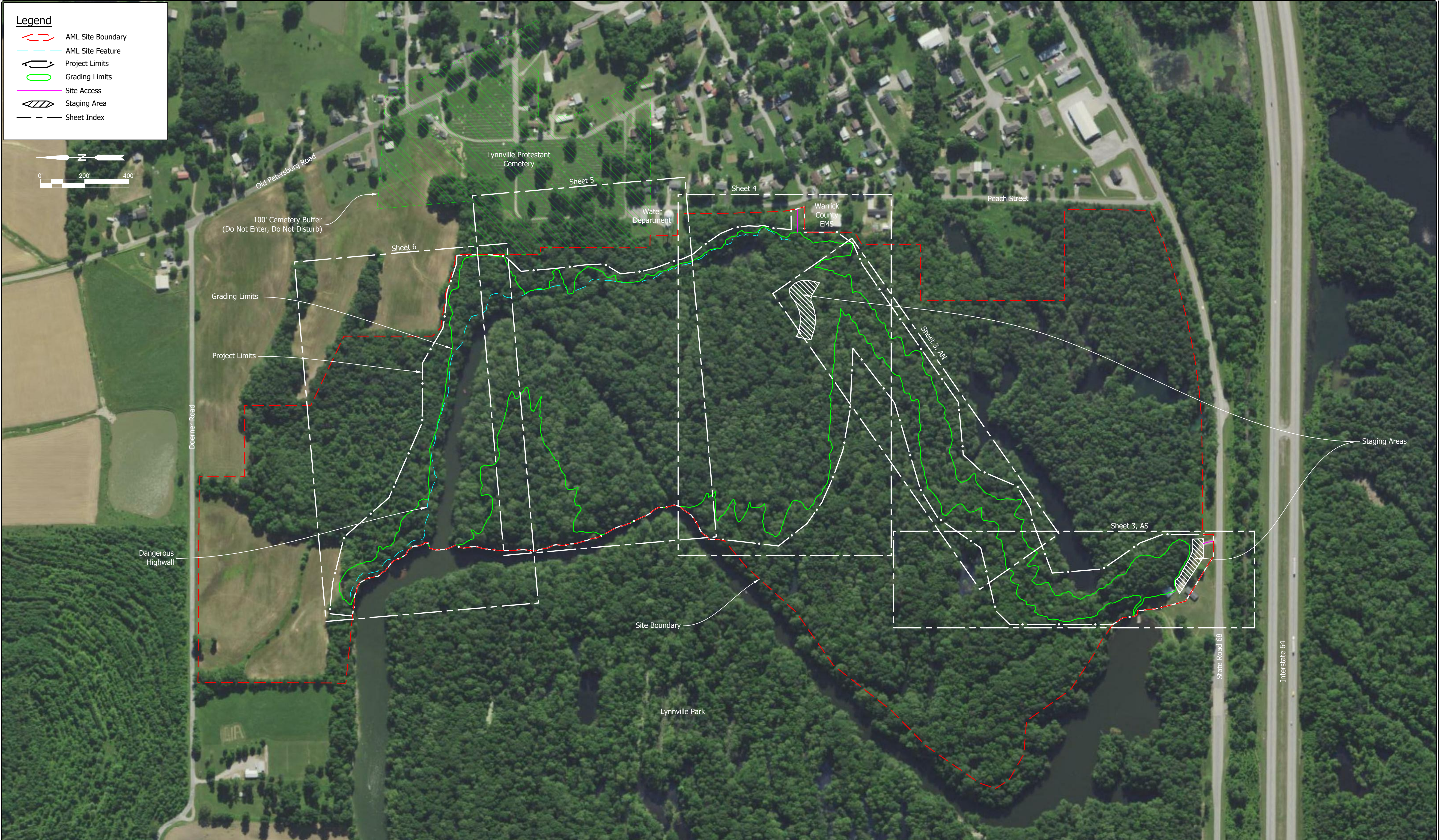
The facilities of the following utilities exist near the project site but are not expected to be affected by the proposed construction. If questions arise, the utility may be contacted using the information below.

- | | |
|--|--|
| <u>Electric:</u> | <u>Telecom:</u> |
| Duke Energy 390 N Maint St. Martinsville, IN 46151 Phone: (765) 349-4012 | Frontier 8001 West Jefferson Blvd. Fort Wayne, IN 46804 Phone: (260) 461-3324 |
| <u>Natural Gas:</u> | <u>Water/Sanitary:</u> |
| Centerpoint Energy (South) 1800 W 26th St. Muncie, IN 47302 Phone: (765) 287-2119 | Town of Lynnville 207 Main St. Lynnville, IN 47619 Phone: (812) 922-5111 |

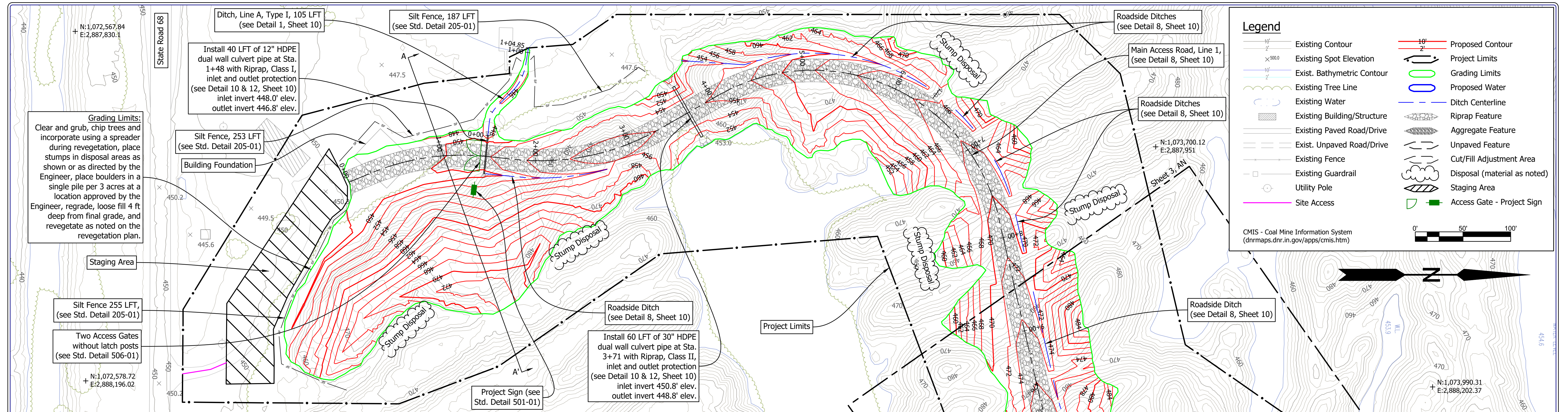


PLANS PREPARED BY: INDIANA DEPARTMENT OF NATURAL RESOURCES (812) 665-2207 DIVISION OF RECLAMATION PHONE NUMBER
CERTIFIED BY: *Christopher J. Hostetler* 10/18/2022 DATE
APPROVED FOR LETTING: *Kristi Turpin* 10/18/2022 DATE
DIVISION OF RECLAMATION

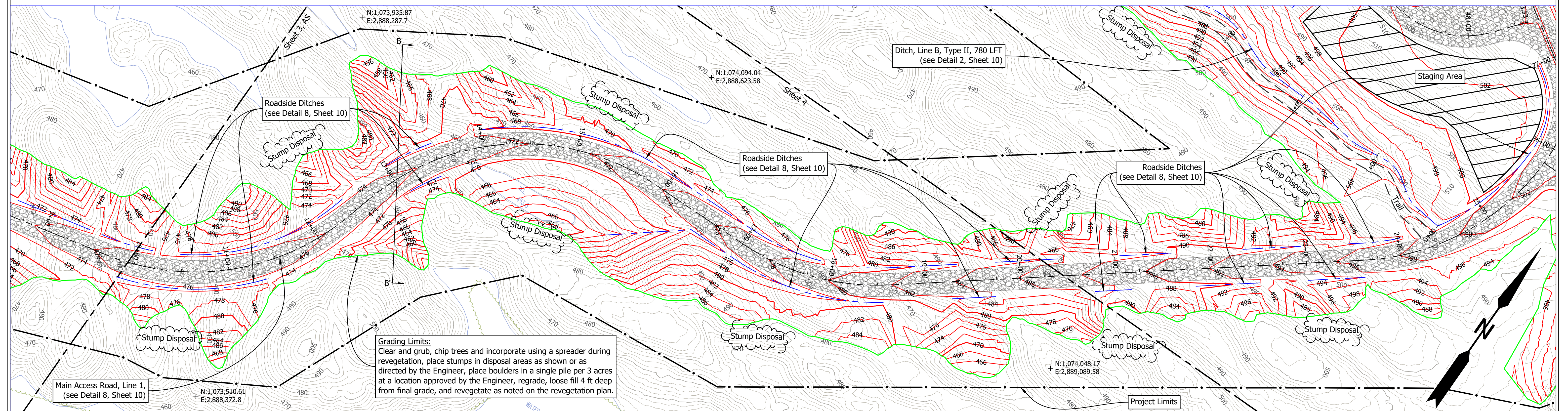
| | |
|---------------------|------------------|
| SCALE AS NOTED | SHEET 1 OF 10 |
| PROJECT E008-301 | SITE 1832 |




| | | | | | |
|--|--|------------------------|--|--------------------------------------|---------------------|
| | RECOMMENDED FOR APPROVAL: <i>Christopher J. Hostetler</i> 10/18/2022 DATE | DATE MADE 7/19/2021 | Site Map STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES DIVISION OF RECLAMATION | SCALE 1" = 200' | SHEET 2 OF 10 |
| | DESIGNED BY C.J.H. | DRAWN BY C.J.H. | | DATE REVISED 7/13/2022 3:54:42 PM | PROJECT E008-301 |

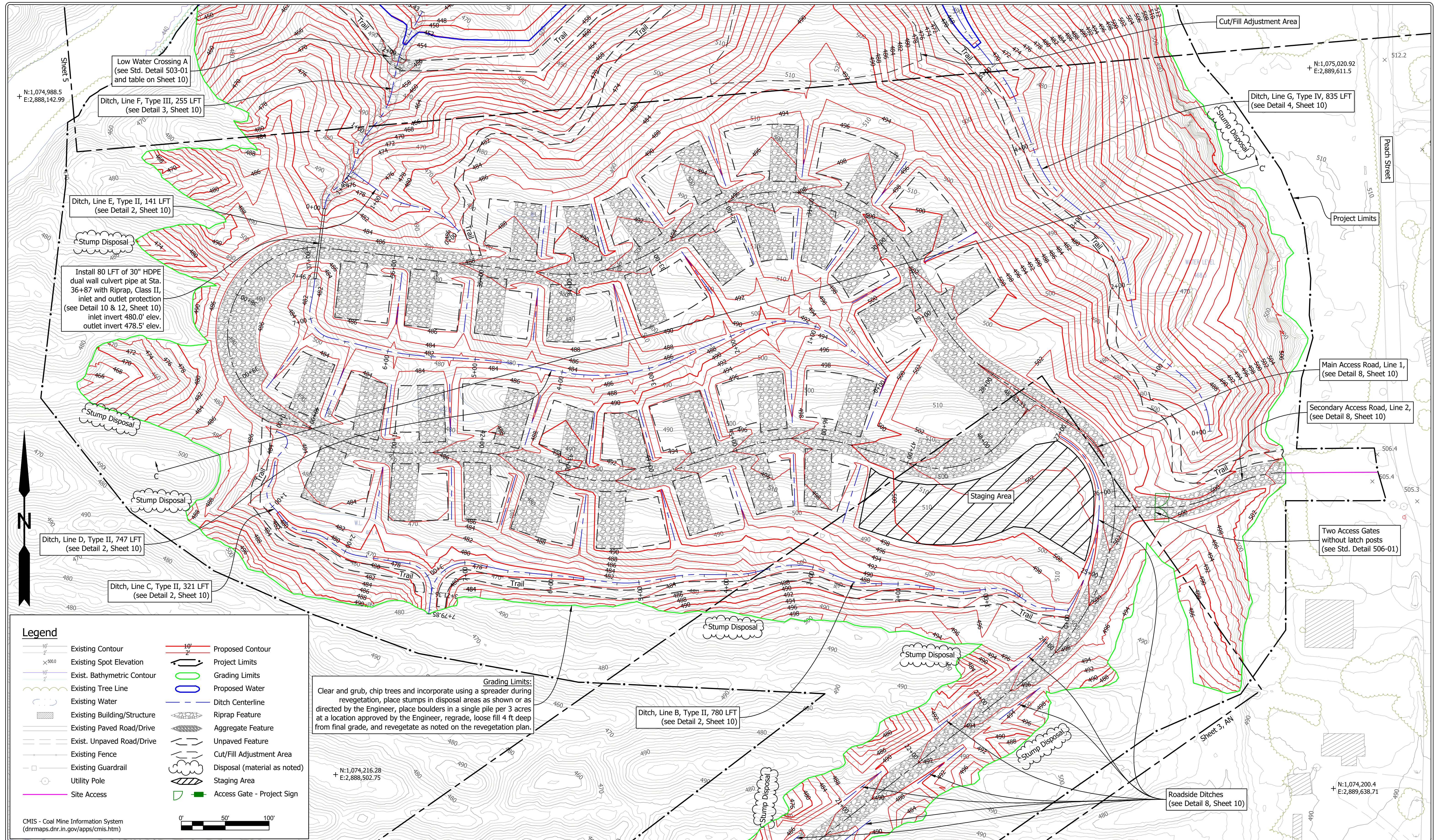


AS Site Access - South
1" = 50'



AN Site Access - North
1" = 50'

| | | | | | |
|---|--|------------------------|--|--------------------------------------|---------------------|
|  | RECOMMENDED FOR APPROVAL: <i>Christopher J. Horvath</i> 10/18/2022 DATE | DATE MADE 7/19/2021 | Site Plan - Access | SCALE 1" = 50' | SHEET 3 OF 10 |
| | DESIGNED BY C.J.H. | DRAWN BY C.J.H. | | DATE REVISED 7/13/2022 3:54:42 PM | PROJECT E008-301 |
| | | | STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES DIVISION OF RECLAMATION | | |

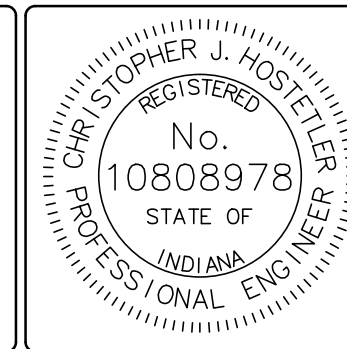
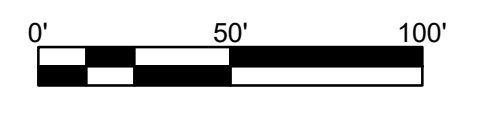


Legend

- Existing Contour
- Existing Spot Elevation
- Exist. Bathymetric Contour
- Existing Tree Line
- Existing Water
- Existing Building/Structure
- Existing Paved Road/Drive
- Exist. Unpaved Road/Drive
- Existing Fence
- Existing Guardrail
- Utility Pole
- Site Access
- Proposed Contour
- Project Limits
- Grading Limits
- Proposed Water
- Ditch Centerline
- Riprap Feature
- Aggregate Feature
- Unpaved Feature
- Cut/Fill Adjustment Area
- Disposal (material as noted)
- Staging Area
- Access Gate - Project Sign

Grading Limits:
 Clear and grub, chip trees and incorporate using a spreader during revegetation, place stumps in disposal areas as shown or as directed by the Engineer, place boulders in a single pile per 3 acres at a location approved by the Engineer, regrade, loose fill 4 ft deep from final grade, and revegetate as noted on the revegetation plan.

CMIS - Coal Mine Information System
 (dnrmaps.dnr.in.gov/apps/cmisis.htm)



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 DATE

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 C.J.H.

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 7/19/2021

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Site Plan - South

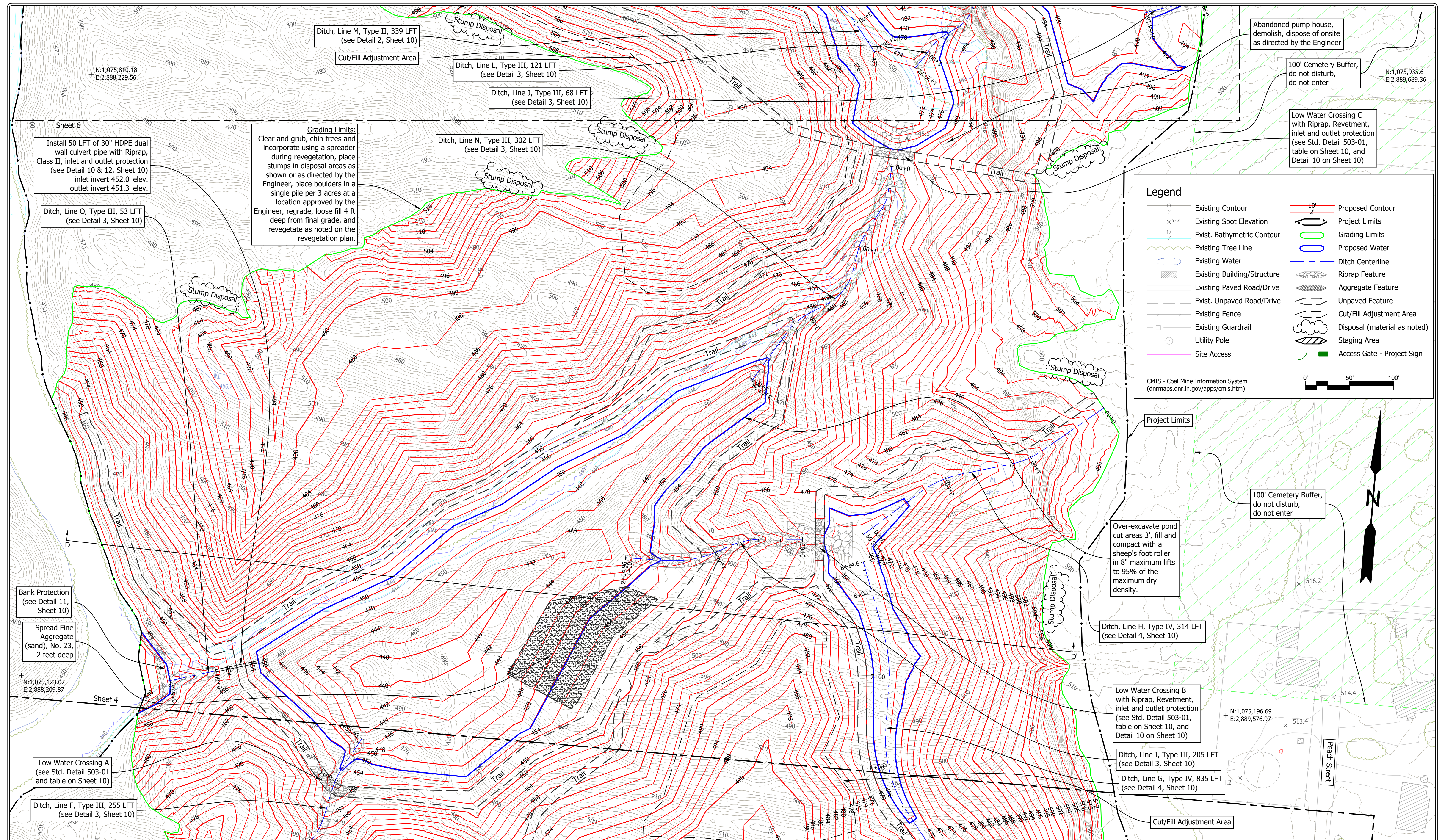
STATE OF INDIANA
 DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF RECLAMATION

SCALE
 1" = 50'

PROJECT
 E008-301

SHEET
 4 OF 10

SITE
 1832



Install 50 LFT of 30" HDPE dual wall culvert pipe with Riprap, Class II, inlet and outlet protection (see Detail 10 & 12, Sheet 10) inlet invert 452.0' elev. outlet invert 451.3' elev.

Grading Limits:
Clear and grub, chip trees and incorporate using a spreader during revegetation, place stumps in disposal areas as shown or as directed by the Engineer, place boulders in a single pile per 3 acres at a location approved by the Engineer, regrade, loose fill 4 ft deep from final grade, and revegetate as noted on the revegetation plan.

Ditch, Line M, Type II, 339 LFT (see Detail 2, Sheet 10)

Cut/Fill Adjustment Area

Ditch, Line L, Type III, 121 LFT (see Detail 3, Sheet 10)

Ditch, Line J, Type III, 68 LFT (see Detail 3, Sheet 10)

Ditch, Line N, Type III, 302 LFT (see Detail 3, Sheet 10)

Ditch, Line O, Type III, 53 LFT (see Detail 3, Sheet 10)

Bank Protection (see Detail 11, Sheet 10)

Spread Fine Aggregate (sand), No. 23, 2 feet deep

Low Water Crossing A (see Std. Detail 503-01 and table on Sheet 10)

Ditch, Line F, Type III, 255 LFT (see Detail 3, Sheet 10)

Abandoned pump house, demolish, dispose of onsite as directed by the Engineer

100' Cemetery Buffer, do not disturb, do not enter

Low Water Crossing C with Riprap, Revetment, inlet and outlet protection (see Std. Detail 503-01, table on Sheet 10, and Detail 10 on Sheet 10)

Legend

| | | | |
|--|-----------------------------|--|------------------------------|
| | Existing Contour | | Proposed Contour |
| | Existing Spot Elevation | | Project Limits |
| | Exist. Bathymetric Contour | | Grading Limits |
| | Existing Tree Line | | Proposed Water |
| | Existing Water | | Ditch Centerline |
| | Existing Building/Structure | | Riprap Feature |
| | Existing Paved Road/Drive | | Aggregate Feature |
| | Exist. Unpaved Road/Drive | | Unpaved Feature |
| | Existing Fence | | Cut/Fill Adjustment Area |
| | Existing Guardrail | | Disposal (material as noted) |
| | Utility Pole | | Staging Area |
| | Site Access | | Access Gate - Project Sign |

CMIS - Coal Mine Information System (dnrmmaps.dnr.in.gov/apps/cmisis.htm)

0' 50' 100'

Project Limits

100' Cemetery Buffer, do not disturb, do not enter

Over-excavate pond cut areas 3', fill and compact with a sheep's foot roller in 8" maximum lifts to 95% of the maximum dry density.

Ditch, Line H, Type IV, 314 LFT (see Detail 4, Sheet 10)

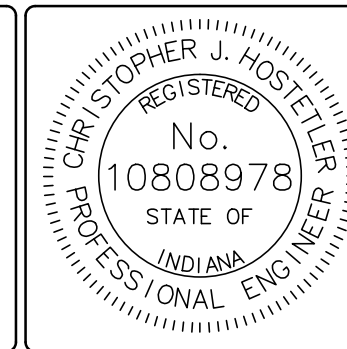
Low Water Crossing B with Riprap, Revetment, inlet and outlet protection (see Std. Detail 503-01, table on Sheet 10, and Detail 10 on Sheet 10)

Ditch, Line I, Type III, 205 LFT (see Detail 3, Sheet 10)

Ditch, Line G, Type IV, 835 LFT (see Detail 4, Sheet 10)

Cut/Fill Adjustment Area

Peach Street



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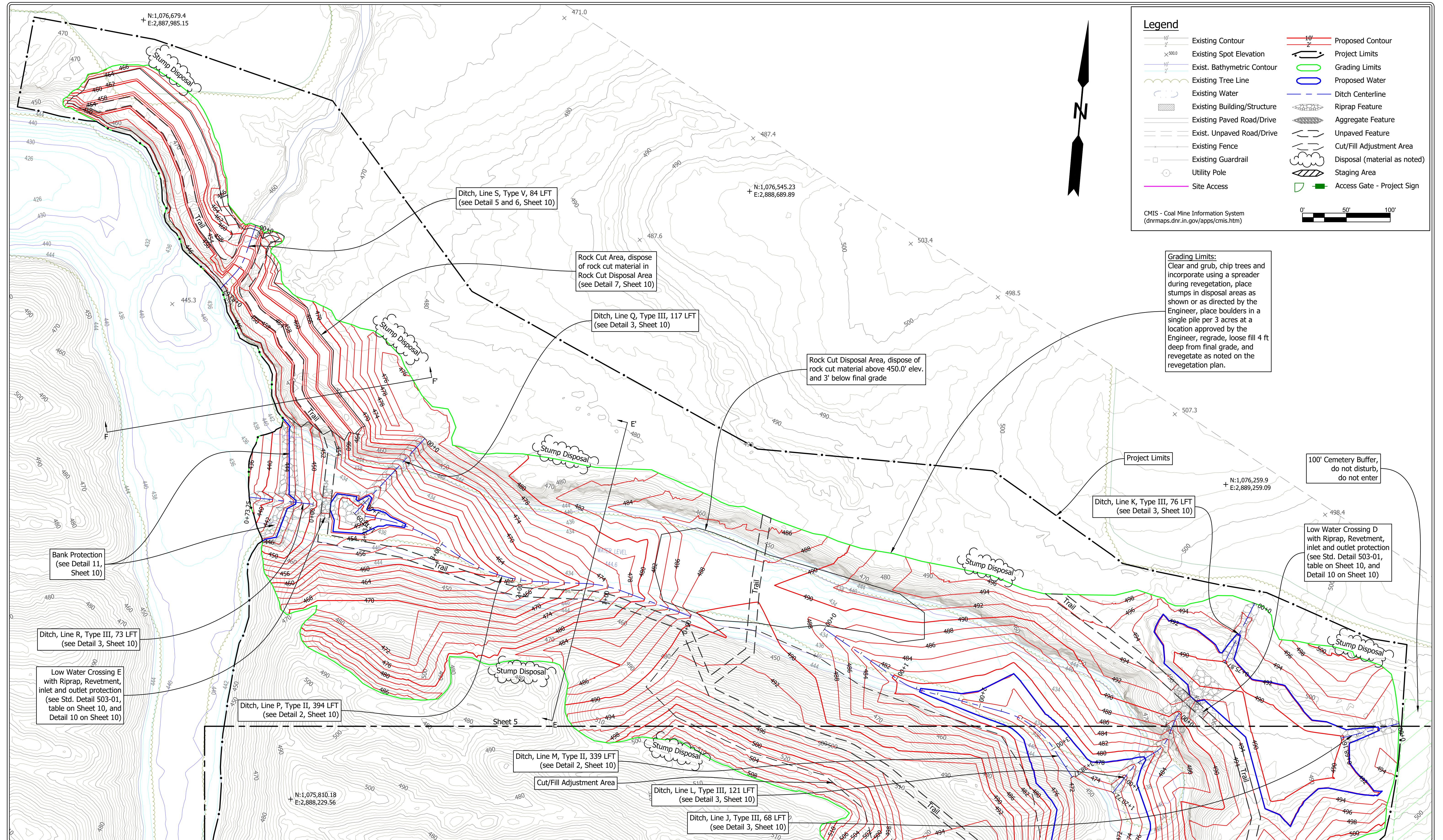
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Site Plan - Central
STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF RECLAMATION

SCALE 1" = 50'
PROJECT E008-301

SHEET 5 OF 10
SITE 1832



Legend

| | | | |
|--|-----------------------------|--|------------------------------|
| | Existing Contour | | Proposed Contour |
| | Existing Spot Elevation | | Project Limits |
| | Exist. Bathymetric Contour | | Grading Limits |
| | Existing Tree Line | | Proposed Water |
| | Existing Water | | Ditch Centerline |
| | Existing Building/Structure | | Riprap Feature |
| | Existing Paved Road/Drive | | Aggregate Feature |
| | Exist. Unpaved Road/Drive | | Unpaved Feature |
| | Existing Fence | | Cut/Fill Adjustment Area |
| | Existing Guardrail | | Disposal (material as noted) |
| | Utility Pole | | Staging Area |
| | Site Access | | Access Gate - Project Sign |

CMIS - Coal Mine Information System
(dnrmaps.dnr.in.gov/apps/cmisis.htm)

0' 50' 100'

Grading Limits:
Clear and grub, chip trees and incorporate using a spreader during revegetation, place stumps in disposal areas as shown or as directed by the Engineer, place boulders in a single pile per 3 acres at a location approved by the Engineer, regrade, loose fill 4 ft deep from final grade, and revegetate as noted on the revegetation plan.

100' Cemetery Buffer, do not disturb, do not enter

Low Water Crossing D with Riprap, Revetment, inlet and outlet protection (see Std. Detail 503-01, table on Sheet 10, and Detail 10 on Sheet 10)

Ditch, Line K, Type III, 76 LFT (see Detail 3, Sheet 10)

Rock Cut Disposal Area, dispose of rock cut material above 450.0' elev. and 3' below final grade

Ditch, Line Q, Type III, 117 LFT (see Detail 3, Sheet 10)

Rock Cut Area, dispose of rock cut material in Rock Cut Disposal Area (see Detail 7, Sheet 10)

Ditch, Line S, Type V, 84 LFT (see Detail 5 and 6, Sheet 10)

Bank Protection (see Detail 11, Sheet 10)

Ditch, Line R, Type III, 73 LFT (see Detail 3, Sheet 10)

Low Water Crossing E with Riprap, Revetment, inlet and outlet protection (see Std. Detail 503-01, table on Sheet 10, and Detail 10 on Sheet 10)

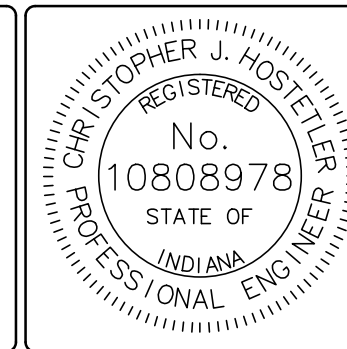
Ditch, Line P, Type II, 394 LFT (see Detail 2, Sheet 10)

Ditch, Line M, Type II, 339 LFT (see Detail 2, Sheet 10)

Cut/Fill Adjustment Area

Ditch, Line L, Type III, 121 LFT (see Detail 3, Sheet 10)

Ditch, Line J, Type III, 68 LFT (see Detail 3, Sheet 10)



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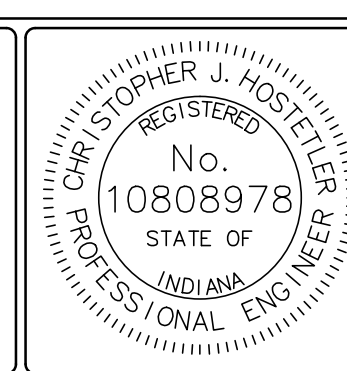
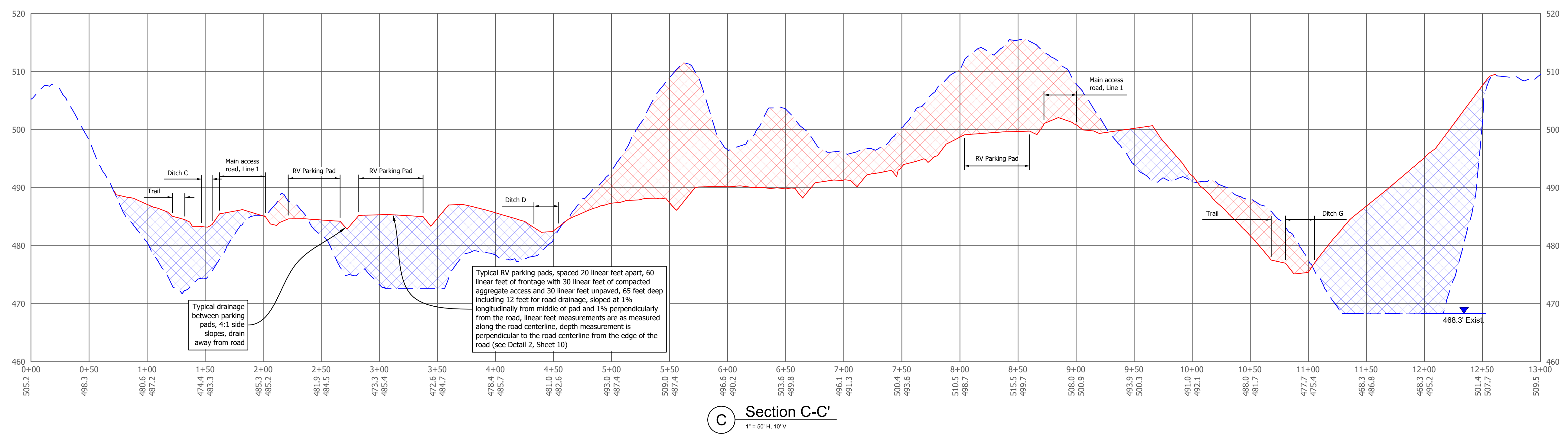
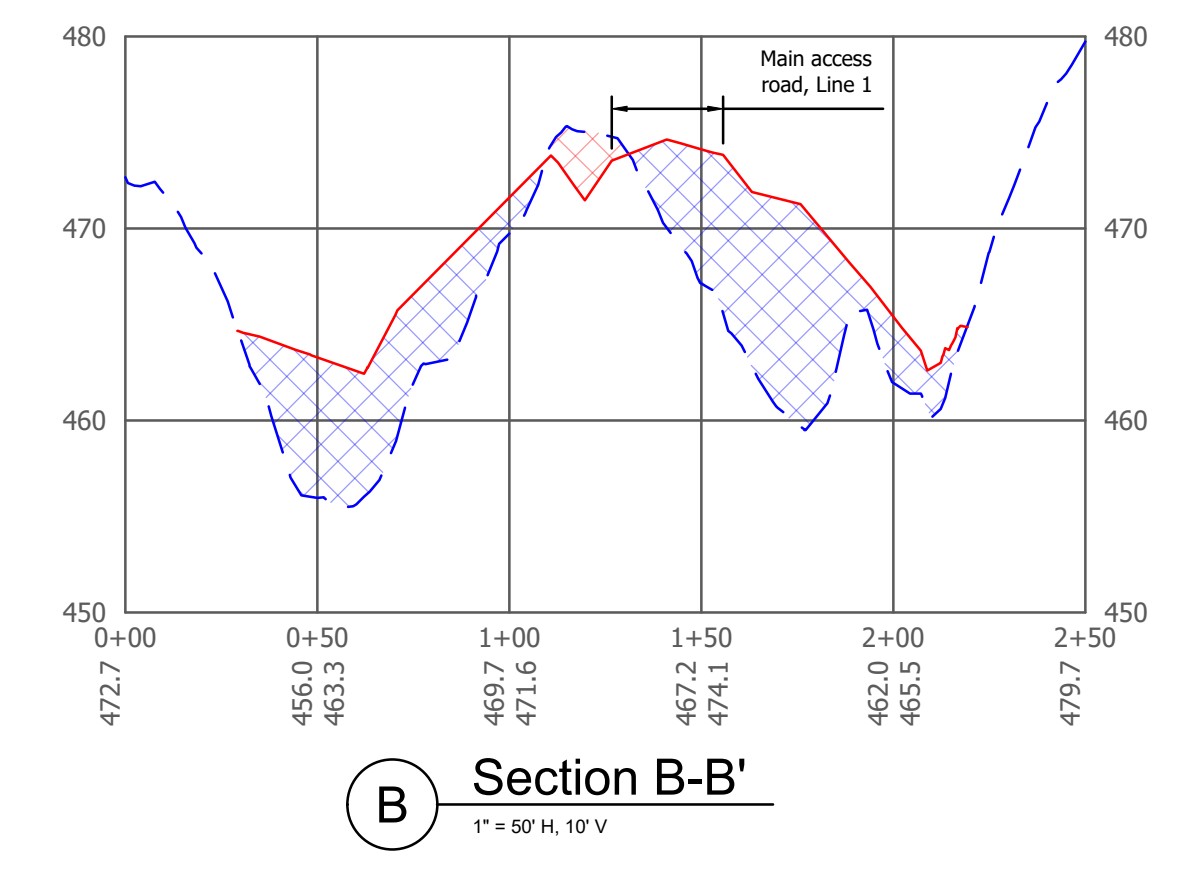
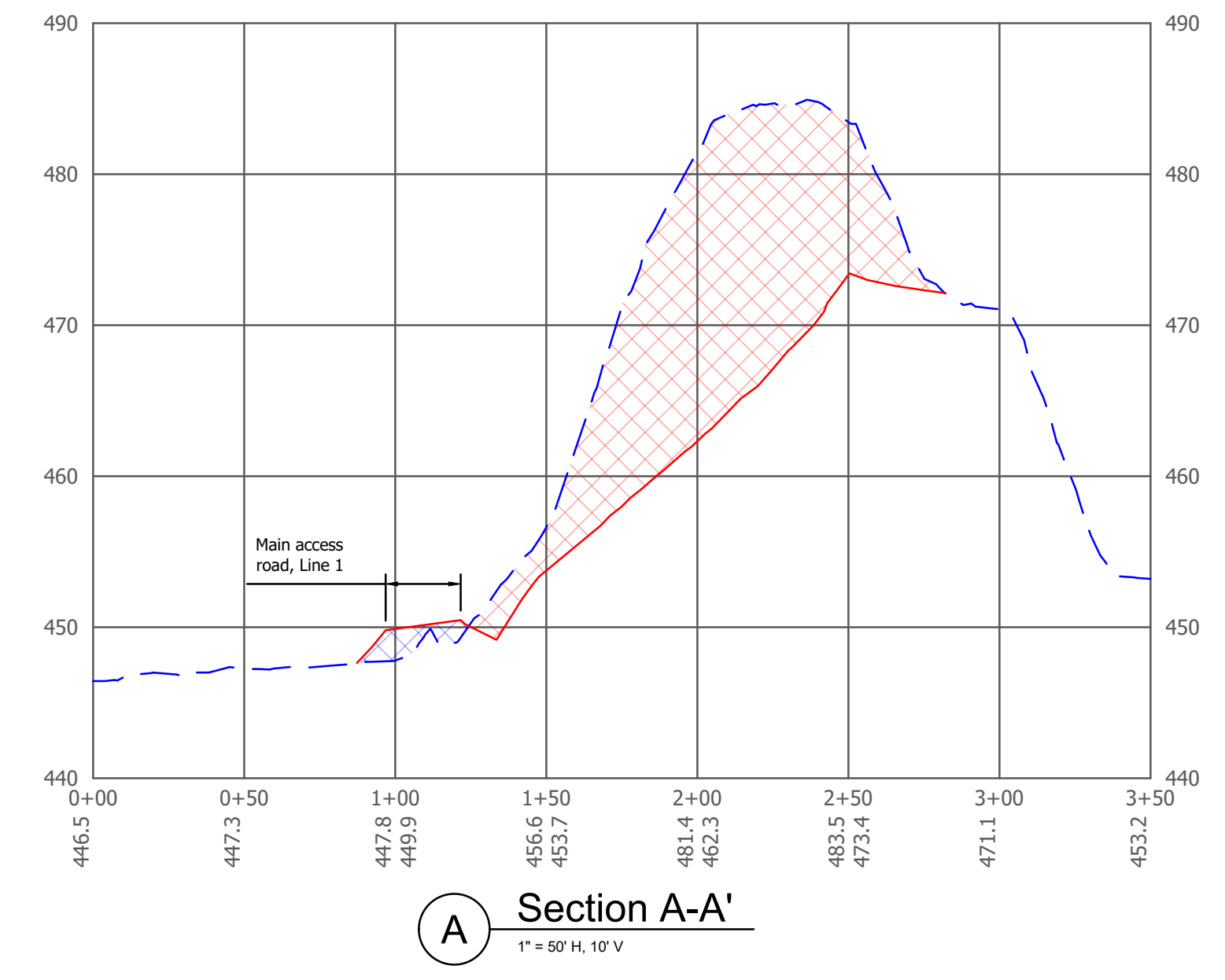
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Site Plan - North
STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF RECLAMATION

SCALE 1" = 50'
PROJECT E008-301

SHEET 6 OF 10
SITE 1832

| Legend | |
|--------|----------------|
| | Existing Grade |
| | Design Grade |
| | Existing Water |
| | Proposed Water |
| | Cut |
| | Fill |



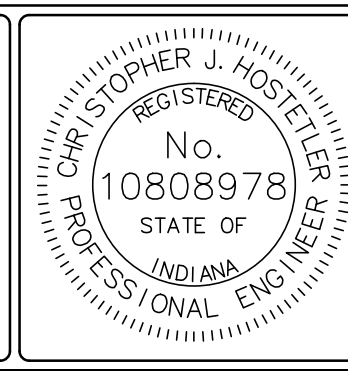
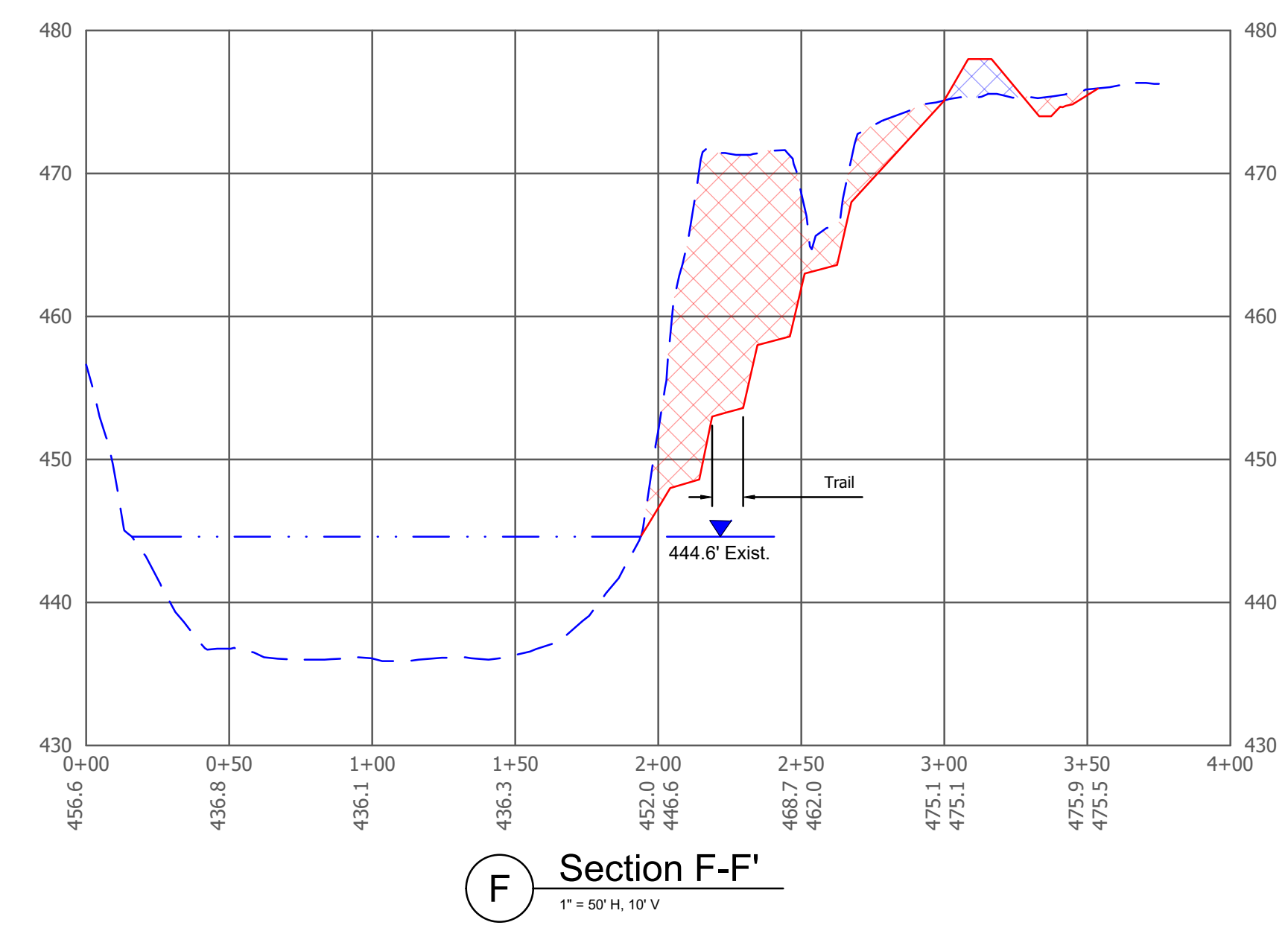
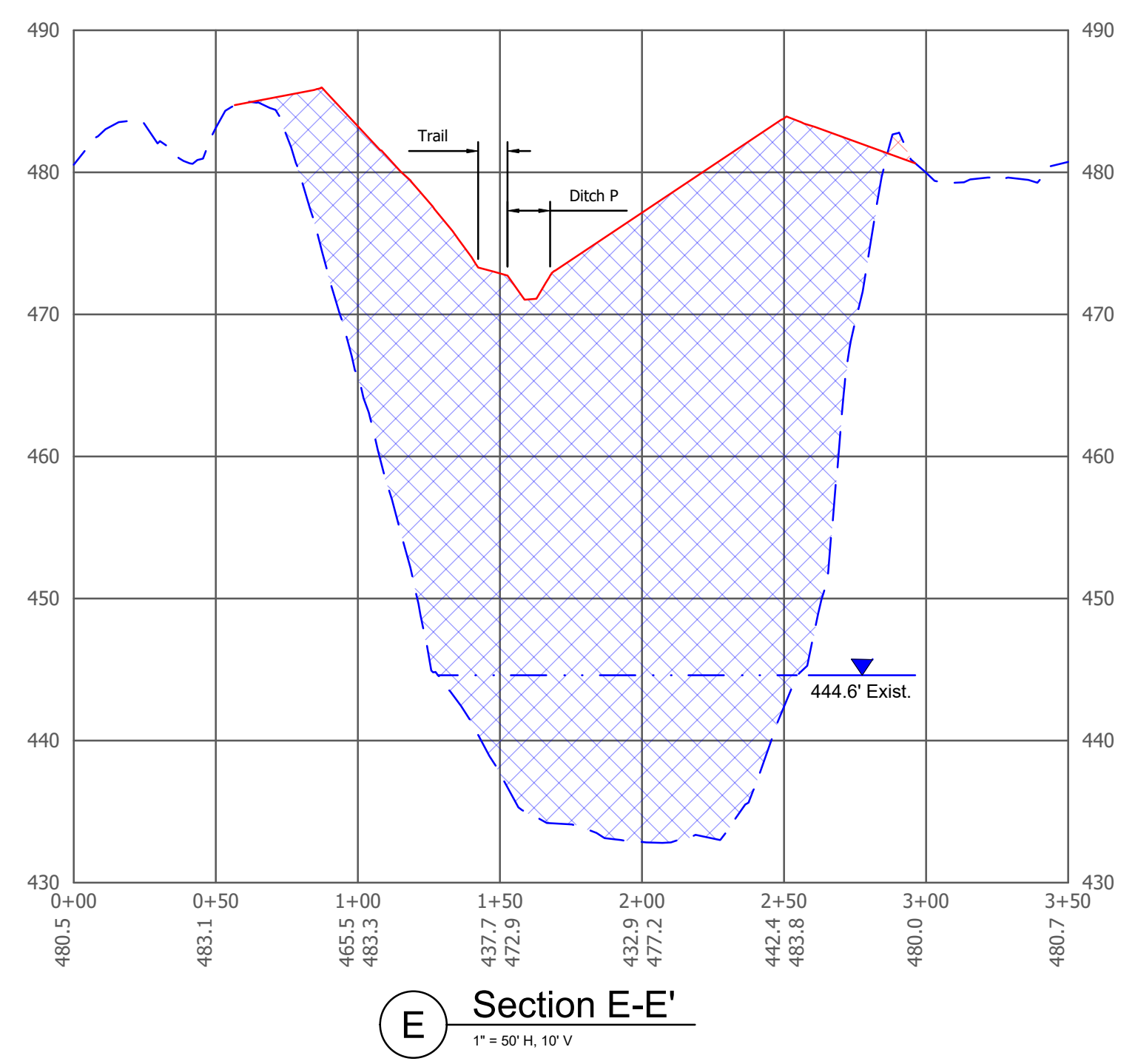
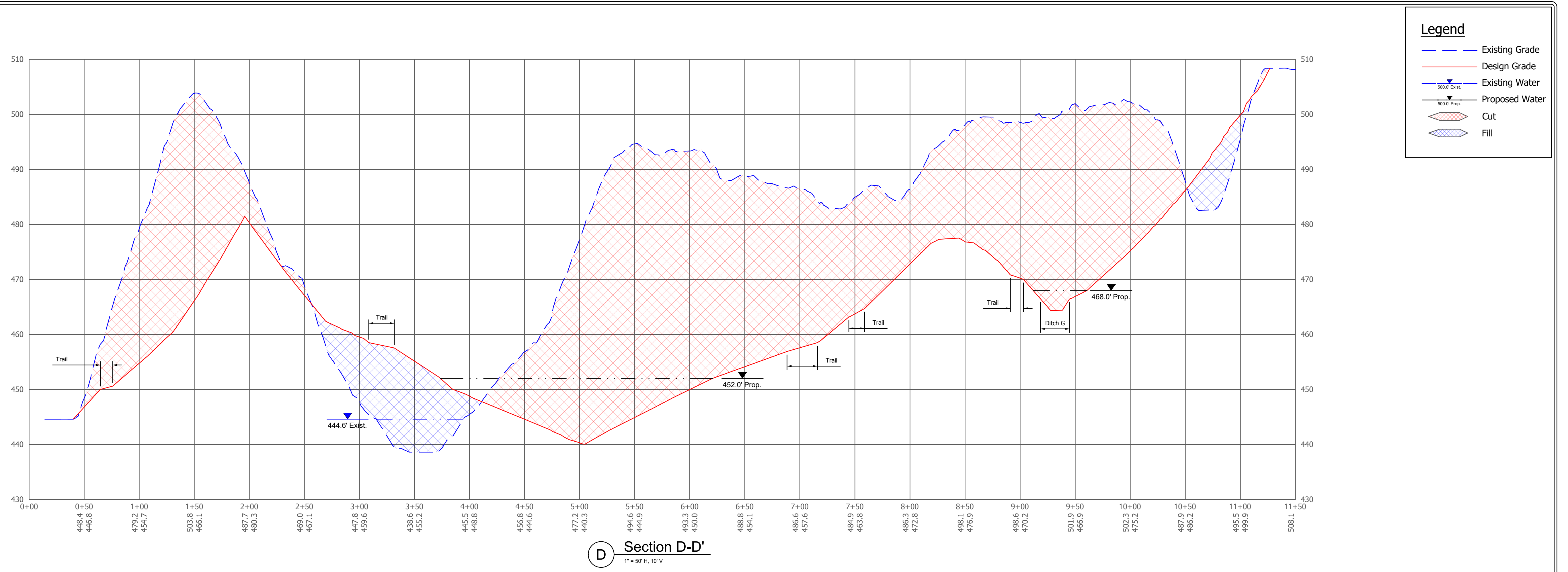
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DATE

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Sections
SCALE: As Noted
PROJECT: E008-301
SHEET: 7 OF 10
SITE: 1832
STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF RECLAMATION



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C.J.H.

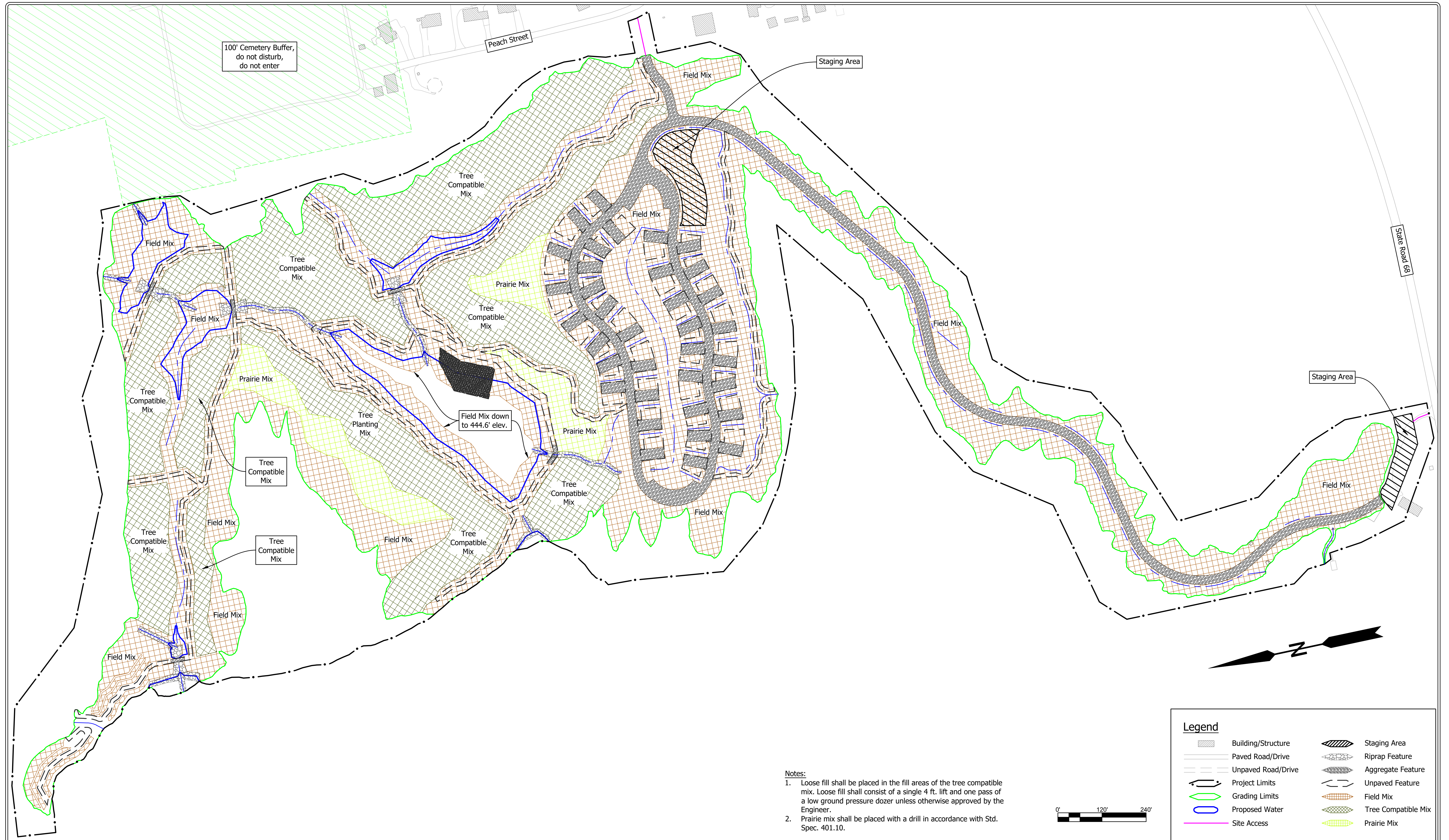
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Sections
STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF RECLAMATION

SCALE
As Noted
PROJECT
E008-301

SHEET
8 OF 10
SITE
1832



100' Cemetery Buffer,
do not disturb,
do not enter

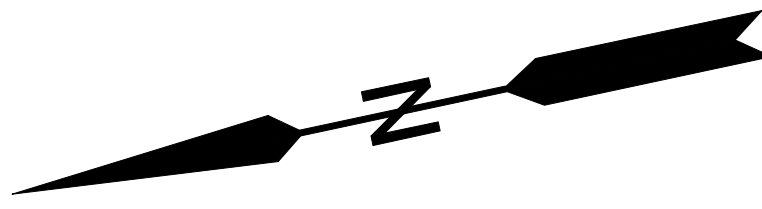
Peach Street

Staging Area

State Road 68

Field Mix down
to 444.6' elev.

Staging Area

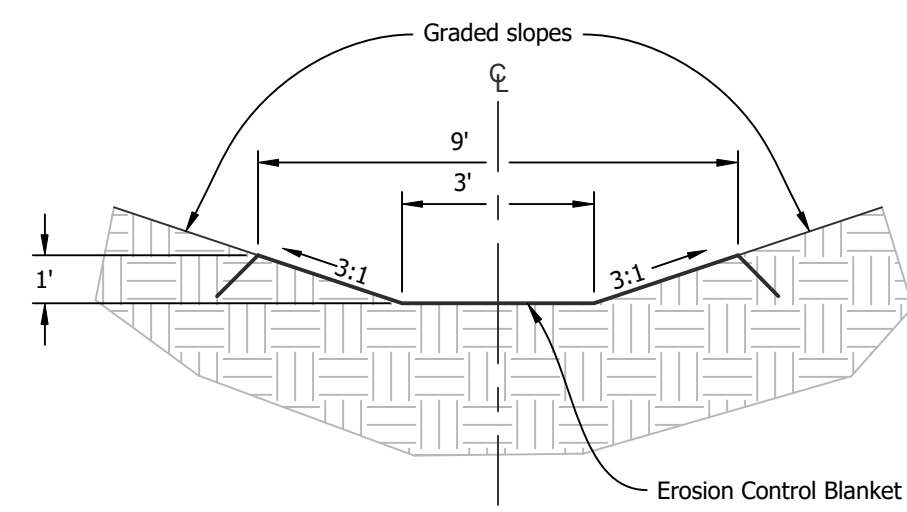


- Notes:**
- Loose fill shall be placed in the fill areas of the tree compatible mix. Loose fill shall consist of a single 4 ft. lift and one pass of a low ground pressure dozer unless otherwise approved by the Engineer.
 - Prairie mix shall be placed with a drill in accordance with Std. Spec. 401.10.

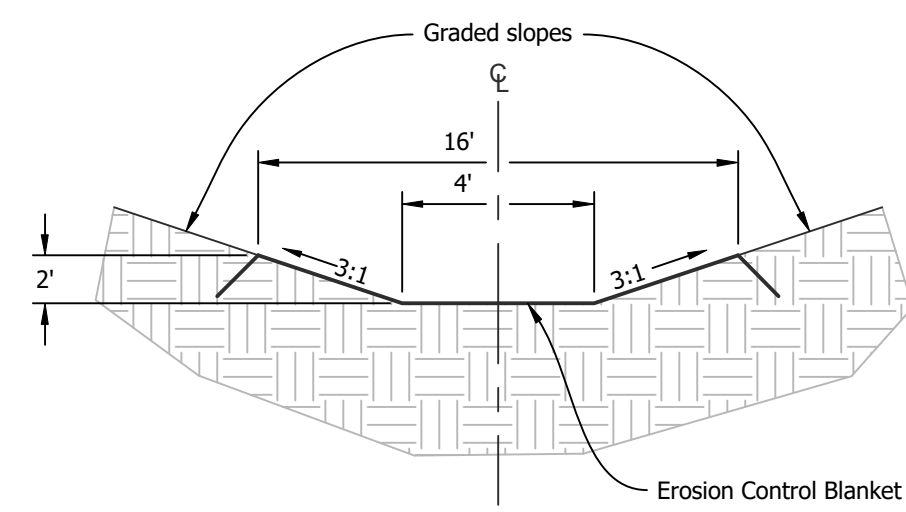


| Legend | |
|--------|---------------------|
| | Building/Structure |
| | Paved Road/Drive |
| | Unpaved Road/Drive |
| | Project Limits |
| | Grading Limits |
| | Proposed Water |
| | Site Access |
| | Staging Area |
| | Riprap Feature |
| | Aggregate Feature |
| | Unpaved Feature |
| | Field Mix |
| | Tree Compatible Mix |
| | Prairie Mix |

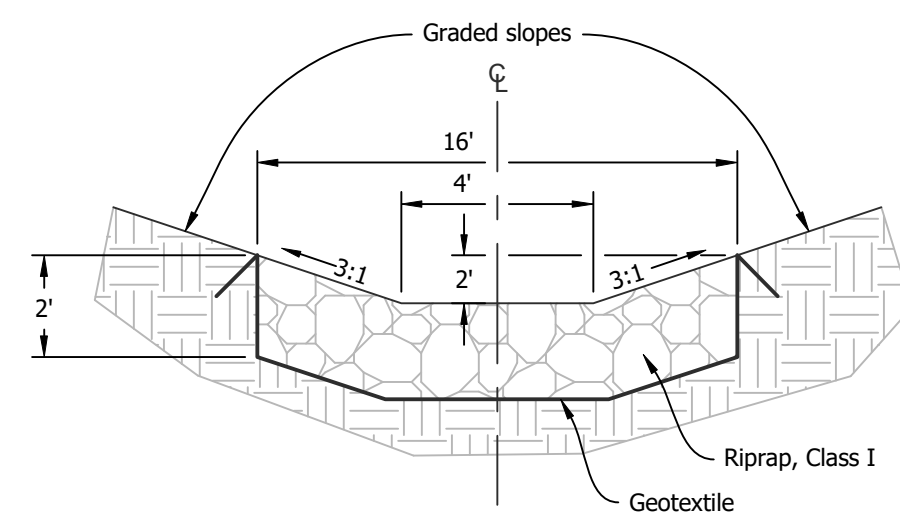
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|--|--|------------------------|---|--------------------------------------|---------------------|
| | RECOMMENDED FOR APPROVAL: <i>Christopher J. Hostetler</i> 10/18/2022 DATE | DATE MADE 7/19/2021 | Revegetation Plan STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES DIVISION OF RECLAMATION | SCALE 1" = 120' | SHEET 9 OF 10 |
| | DESIGNED BY C.J.H. | DRAWN BY C.J.H. | | DATE REVISED 7/13/2022 3:54:42 PM | PROJECT E008-301 |



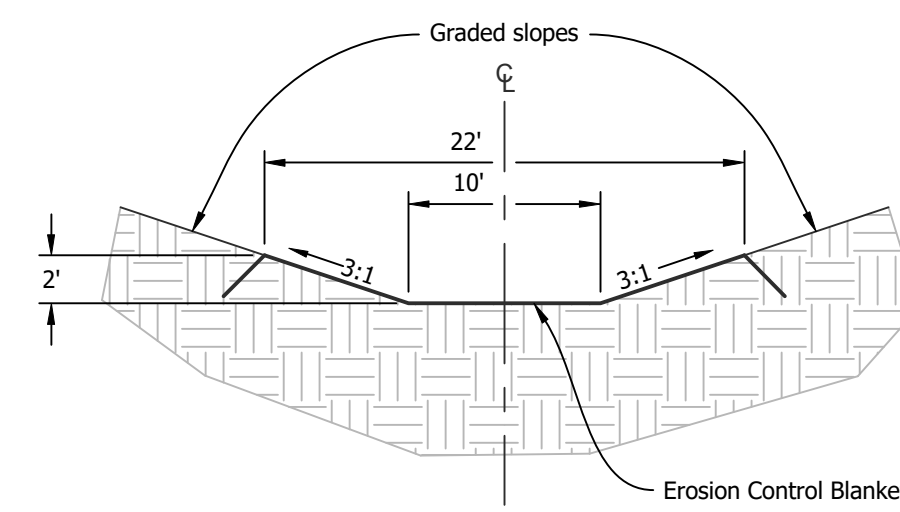
1 Ditch Line A, Type I
Not to Scale



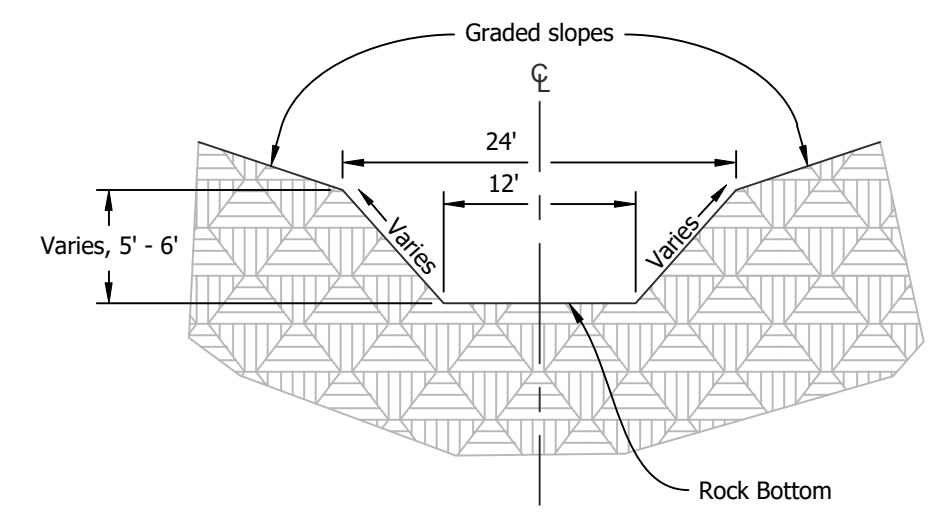
2 Ditch Lines B - E, M, and P, Type II
Not to Scale



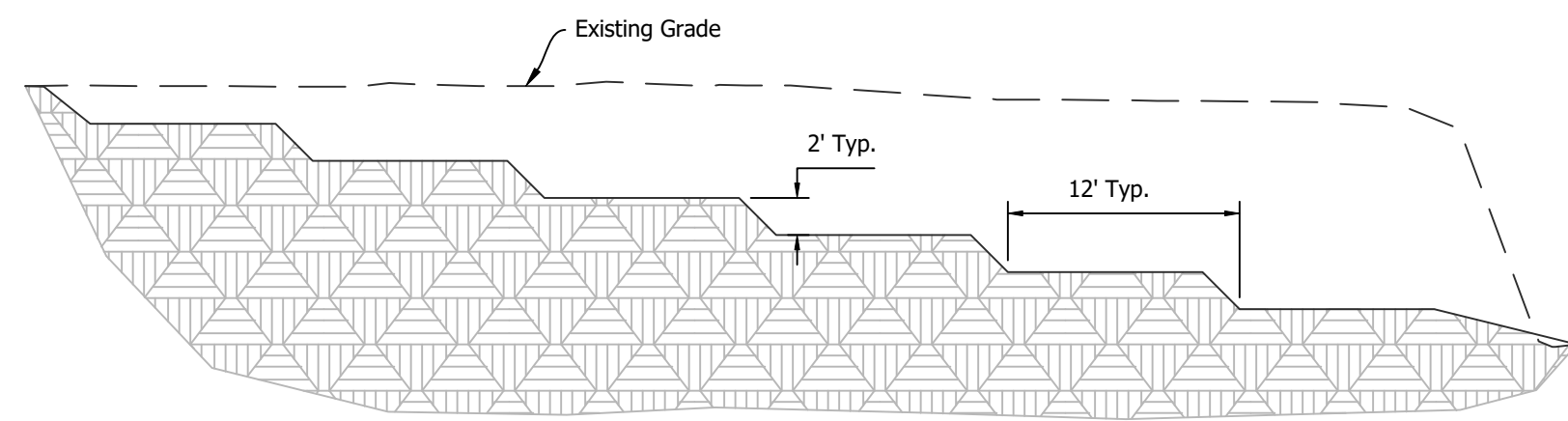
3 Ditch Lines F, I - L, N, O, Q, and R, Type III
Not to Scale



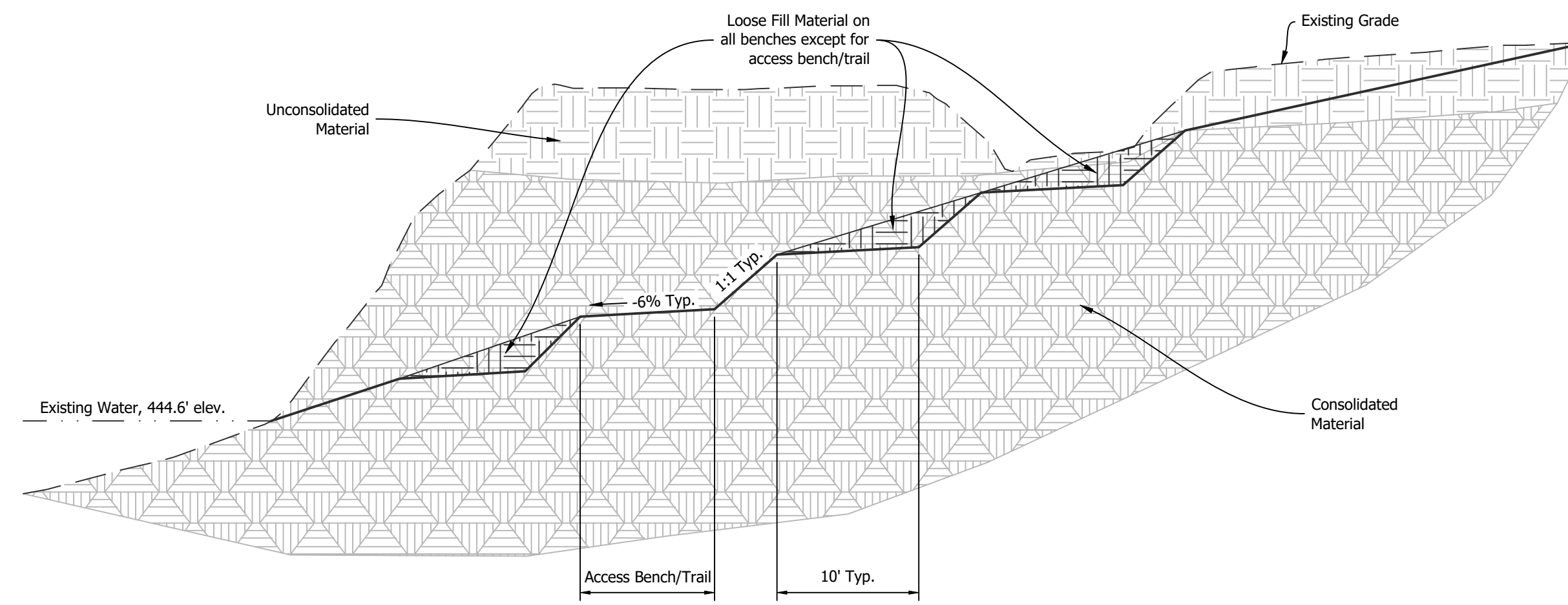
4 Ditch Lines G and H, Type IV
Not to Scale



5 Ditch Line S, Type V
Not to Scale

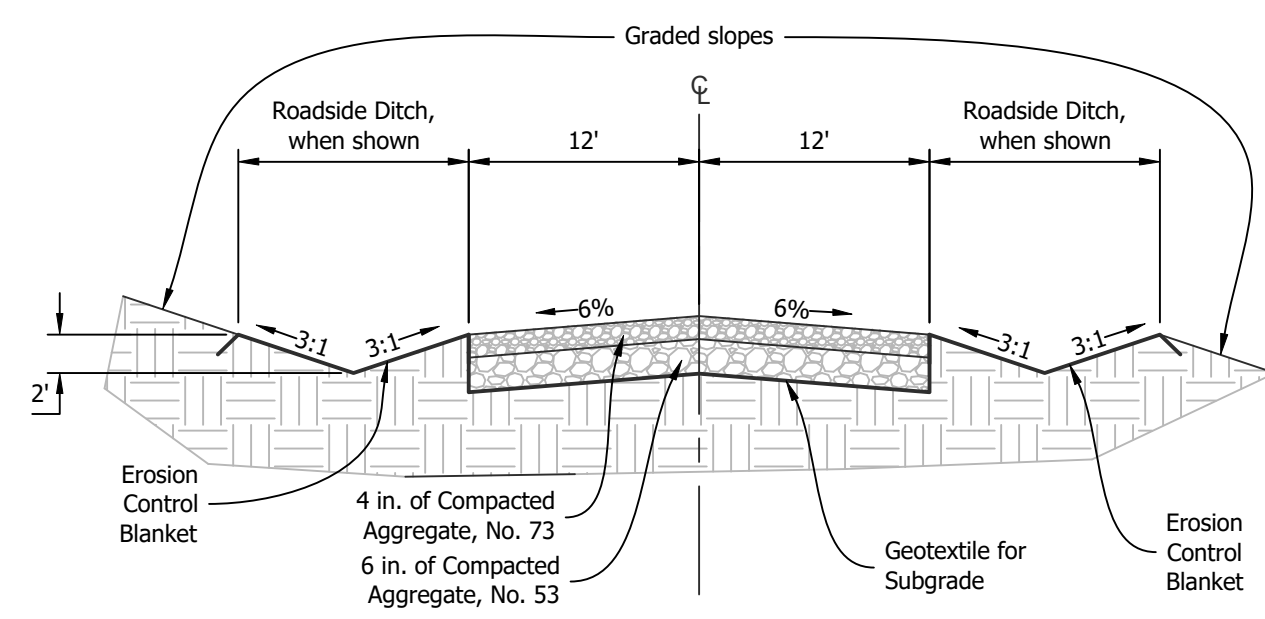


6 Ditch Line S, Profile
Not to Scale

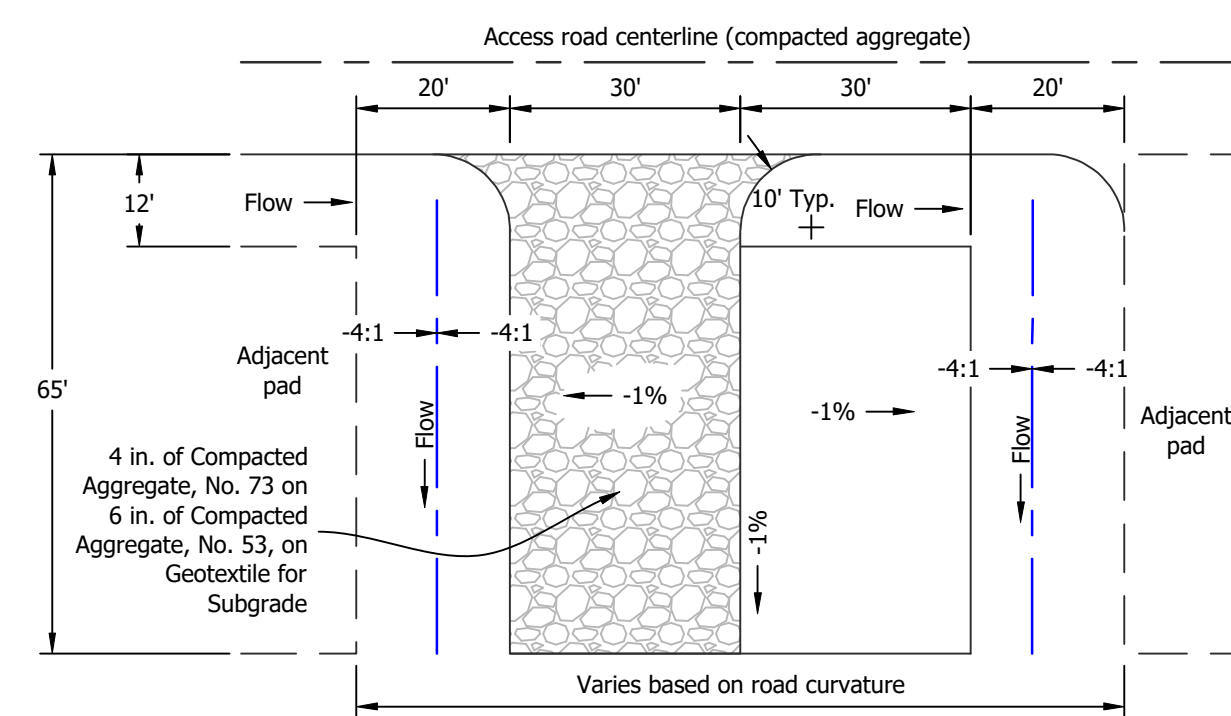


7 Benching Plan, Rock Cut Area
Not to Scale

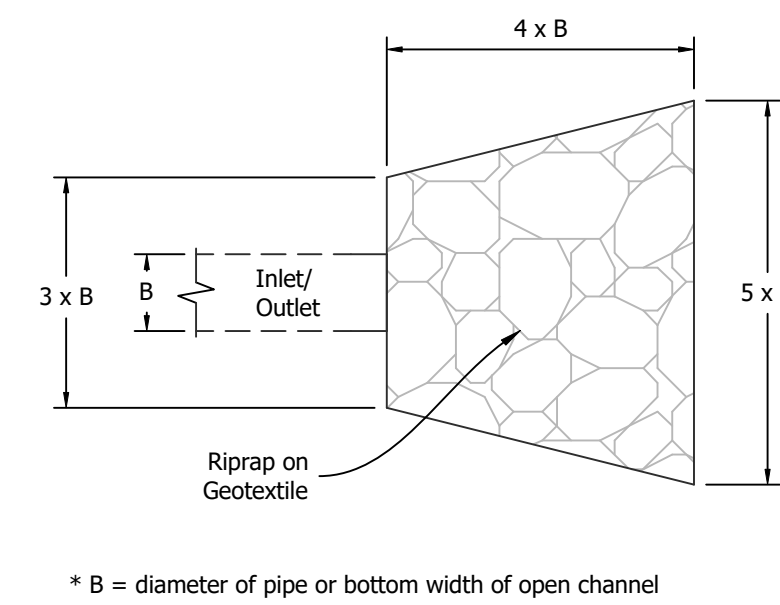
| Low Water Crossing Information | | | | | |
|--------------------------------|--------------|-------------------|-------------------|-------------------------|----------------|
| ID | Width, W_1 | Base Width, W_2 | Side Slope, S_s | Transverse Slope, S_t | Upstream Elev. |
| A | 12' | 12' | Varies | -10% | 454.8' |
| B | 10' | 8' | 10:1 | -2% | 468.0' |
| C | 10' | 8' | 10:1 | -2% | 478.0' |
| D | 10' | 8' | 10:1 | -2% | 492.0' |
| E | 10' | 8' | 10:1 | 0% | 451.5' |



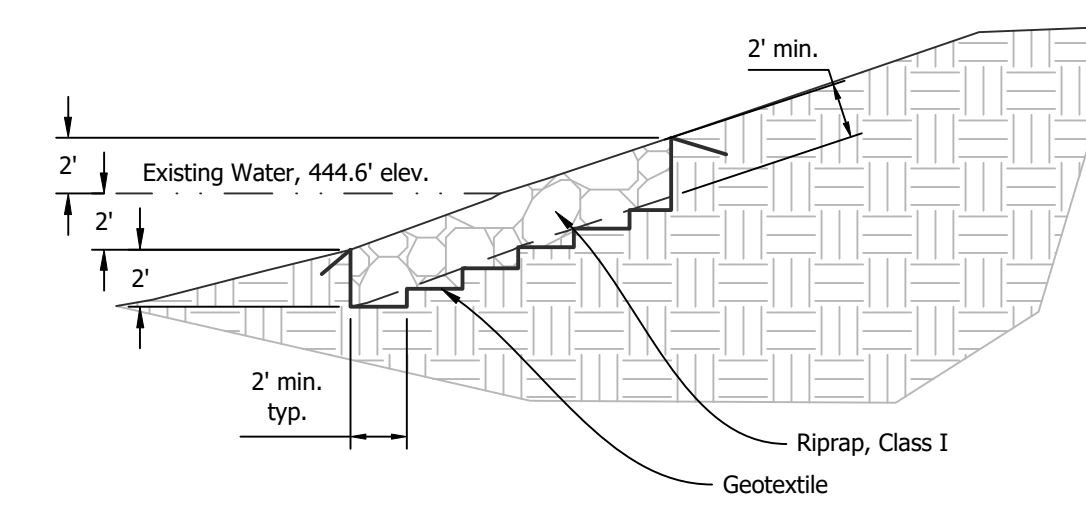
8 Access Road, Lines 1 and 2, Typical Section
Not to Scale



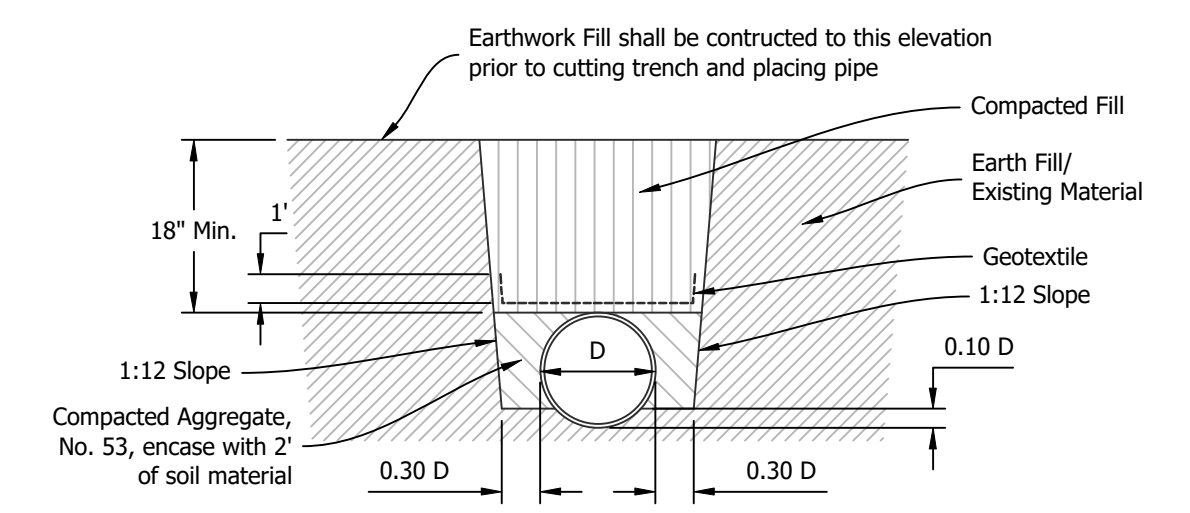
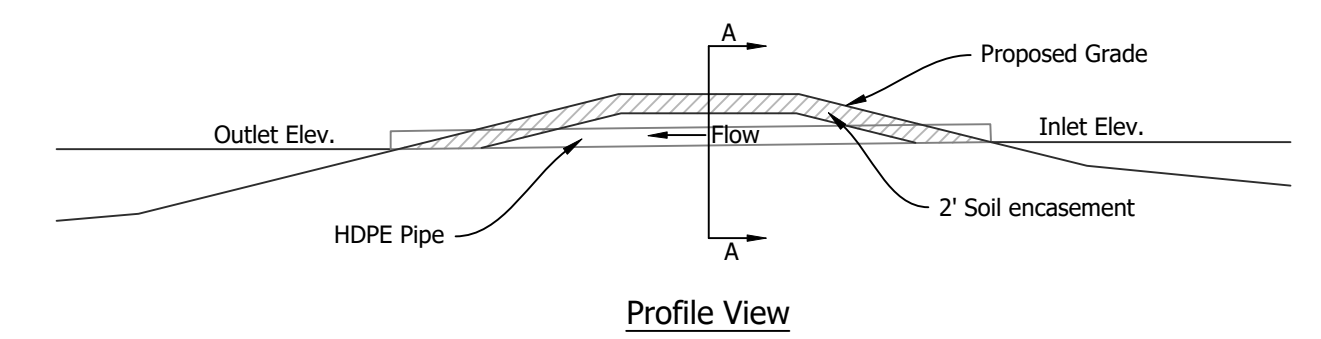
9 Typical RV Parking Pad
Not to Scale



10 Inlet/Outlet Protection
Not to Scale

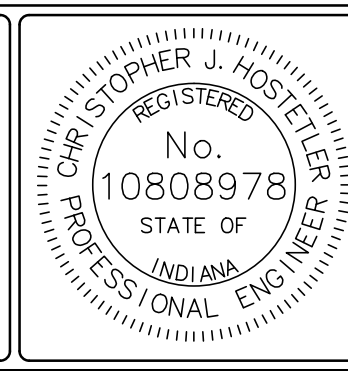


11 Bank Protection
Not to Scale



Cross Section A-A

12 Pipe Installation
Not to Scale



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C.J.H.

DATE MADE
7/19/2021
DATE REVISED
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Details
STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF RECLAMATION

SCALE
As Noted
PROJECT
E008-301

SHEET
10 OF 10
SITE
1832