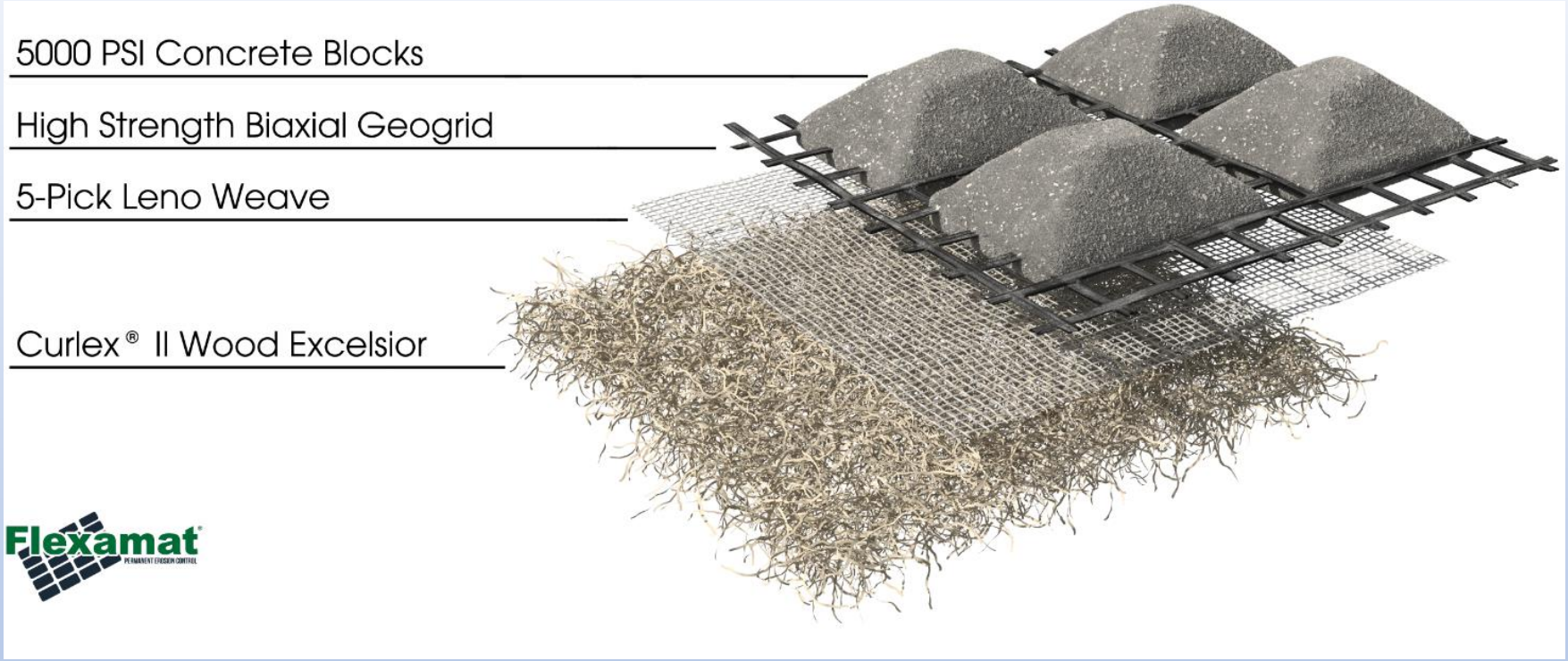



FLEXIBLE
REVETMENT
CASE STUDY

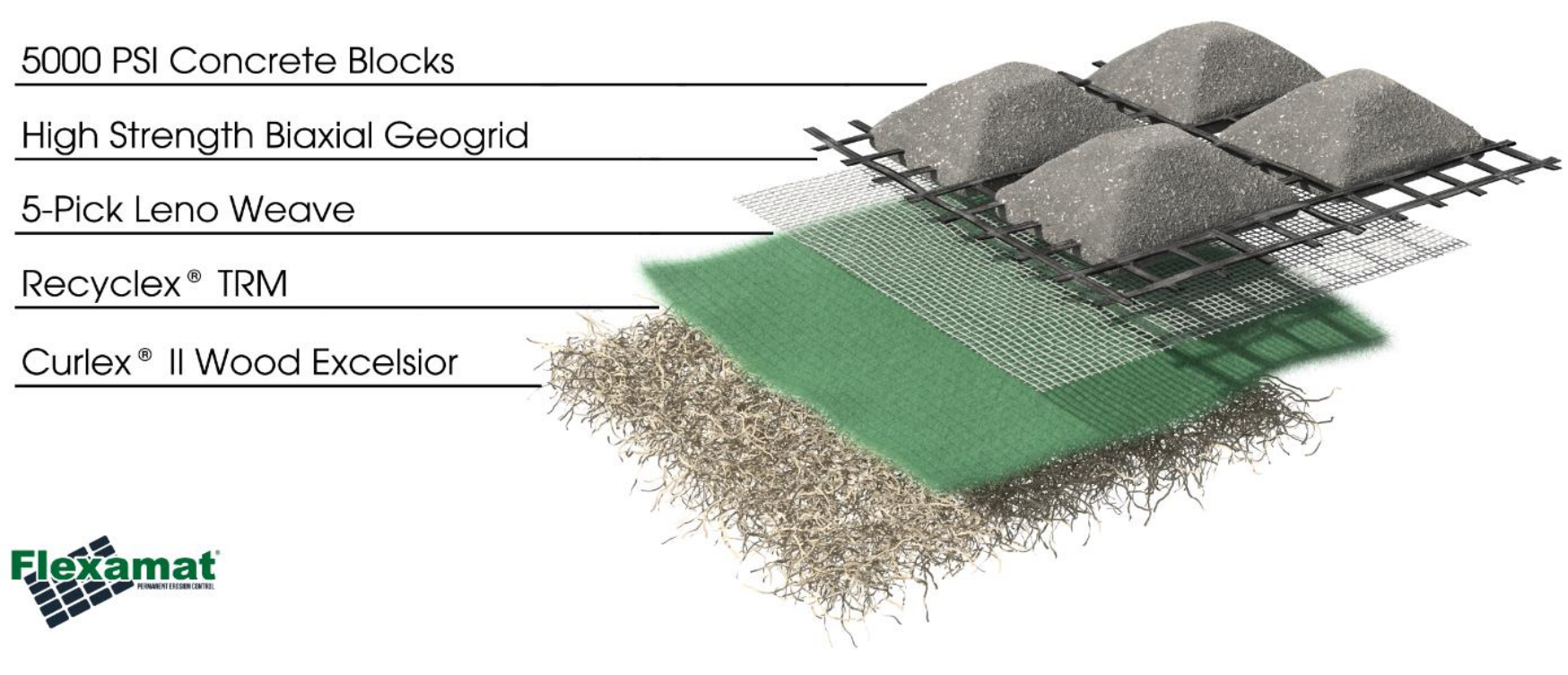
Flexamat Standard



- Cohesive soil
- Vegetates quickly
- Above waterline



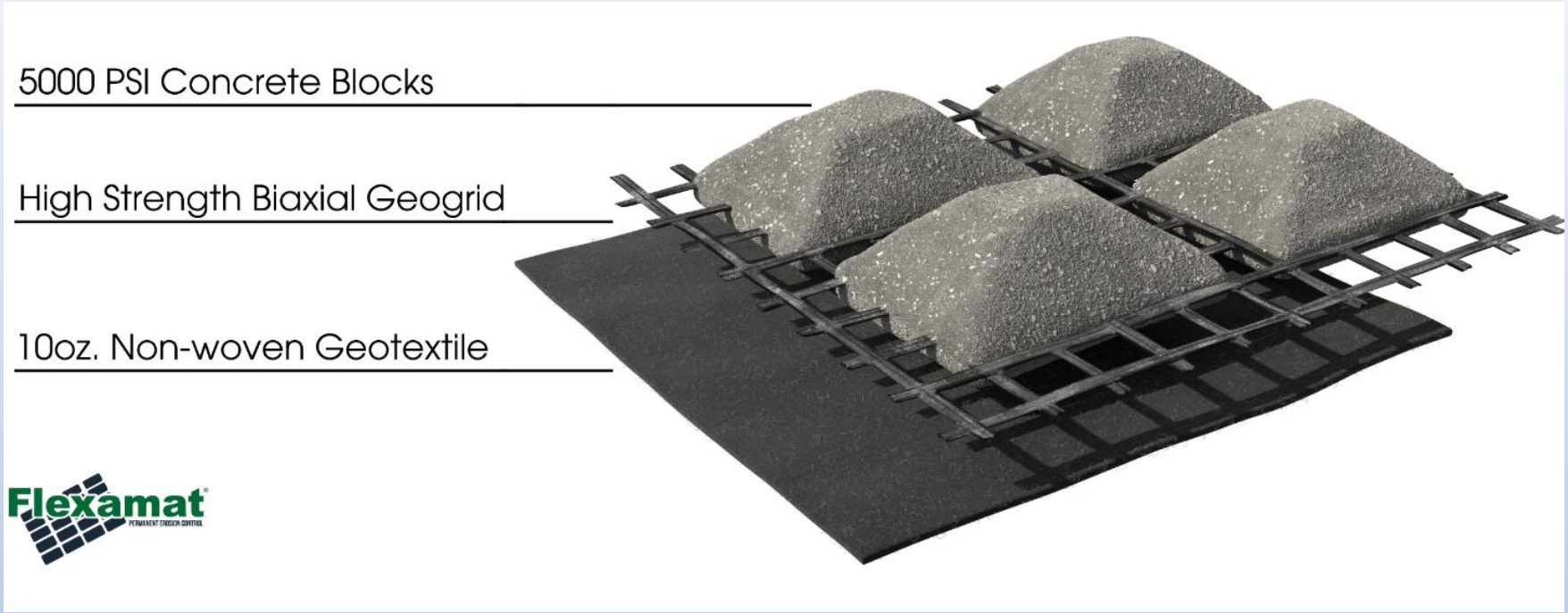
Flexamat Plus



- Cohesive and Un-cohesive soil
- Vegetates slowly
- Within the water line



Flexamat 10NW



- Cohesive and Un-cohesive soil
- Limited vegetation
- Below water line



How Much does it cost?

Area of Rip Rap is 10,000 SF
At 24” depth
Equals 20,000 CF or 740 CY

Convert yards to tons (1.5 ton/CY for void ration) x (740 CY) = 1,110 tons of stone required.
20 ton/load = **55 loads**

@$1000/load = $55,000

Large excavator, small excavator, skid steer (2 operators) daily $3800

Equipment cost per week (5 days) - $19,000
3 weeks = $57,000

Flexamat cost $5.00 SF

10,000 SF = $50,000

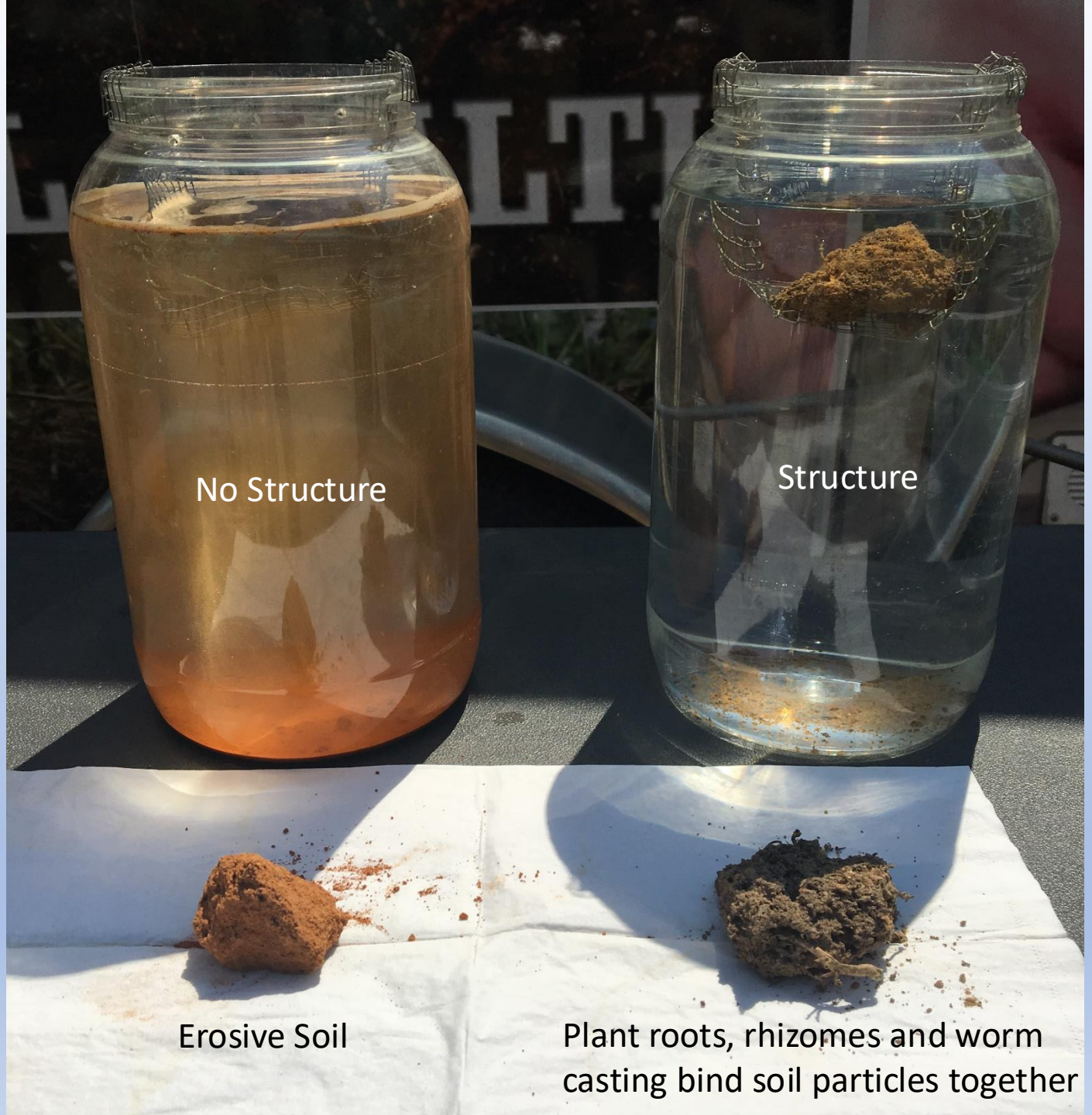
The cost savings is the installation time.

The performance difference is strength.

The real reason we need erosion control products






No Structure
Structure
Erosive Soil
Plant roots, rhizomes and worm casting bind soil particles together

Tips on build structure into your soil:

- Amend soil with nutrients.
- Use compost or topsoil.
- Use aggregate.
- Install hydraulic mulch & erosion control blankets over the soil.
- Install composite turf reinforcement mats into the subgrade.
- Use sod grass.

Without the appropriate Lime and Fertilizer



With the appropriate Lime and Fertilizer





Compost






BAY
STREET
The Cheesecake
Factory



Aggregate










SIX MONTHS AFTER
TELEVISION



Hydraulic mulch and blankets










IGHLANDER
OTBALL






CAT







Sod


VOLVO





- Environmental Quality Incentives Program (EQIP) administered by the USDA Natural Resources Conservation Service (NRCS) to implement voluntary conservation practices on working lands.

Phillip Restore Project

Before Proceeding with Construction,
Call the Alabama Line Location Center
ALABAMA ONE-CALL
Dial 811 or 1-800-292-8525

THE NATURAL RESOURCES CONSERVATION SERVICE (NRCS) MAKES NO REPRESENTATION AS TO THE EXISTENCE OR NONEXISTENCE OF ANY UTILITIES AT THE CONSTRUCTION SITE. IT IS THE RESPONSIBILITY OF THE LANDOWNERS, OPERATORS AND CONTRACTORS TO ASSURE THEMSELVES THAT NO HAZARD EXISTS OR DAMAGE WILL OCCUR TO UTILITIES.

ALL EXCAVATION AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS.

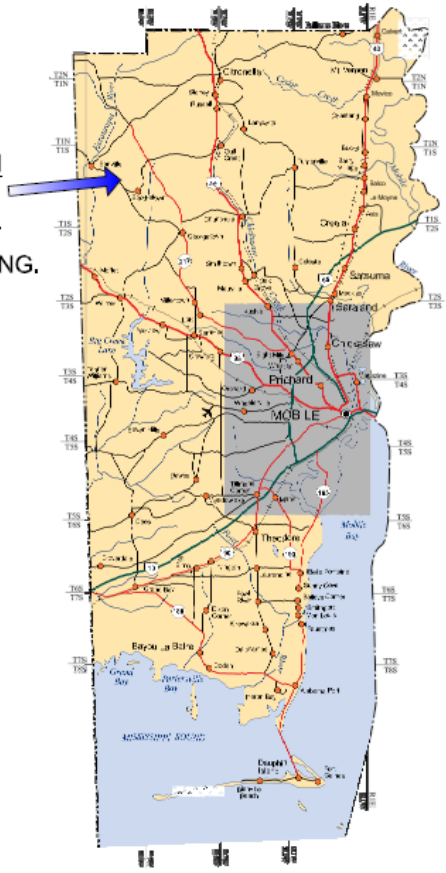


VICINITY MAP
(Not to scale)

SITE LOCATION

30° 58' 24" N LAT.

-88° 22' 57" W LONG.



LOCATION MAP
(Not to scale)

INDEX OF DRAWINGS

1. COVER SHEET AND LOCATION MAP
2. EXISTING PLAN VIEW
3. PROPOSED PLAN VIEW
4. CONSTRUCTION NOTES
5. FLUME NO. 1 PROFILE AND DETAILS
6. FLUME NO. 1 CROSS SECTIONS
7. GULLY NO. G2 DETAILS
8. GULLY NO G3A DETAILS
9. GULLY NO, G4 DETAILS
10. GULLY NO, G5 DETAILS
11. STREAM CROSSING AND CONSTRUCTION DETAILS
12. BANK STABILIZATION AND FLUME NO. 2 DETAILS
13. INLET AND FENCING DETAILS

CONSTRUCTION DRAWINGS APPROVED

VERNON ABNEY, STATE CONSERVATION ENGINEER

DATE

04/21/20

NAME OF CONTRACTOR
CONTRACT NO.
DATE OF CONTRACT
PROJECT AGREEMENT NO.
DATE CONSTRUCTION STARTED
DATE CONSTRUCTION COMPLETED
NAME OF GOVT. REPRESENTATIVE
NAME OF GOVT. INSPECTOR

Date 12/19 12/19 4/20
Designed M. NELSON
Drawn ALABAMA NRCS
Checked
Approved V. ABNEY

COVER SHEET AND LOCATION MAP
PHILLIPS RESTORE PROJECT
MOBILE COUNTY, ALABAMA

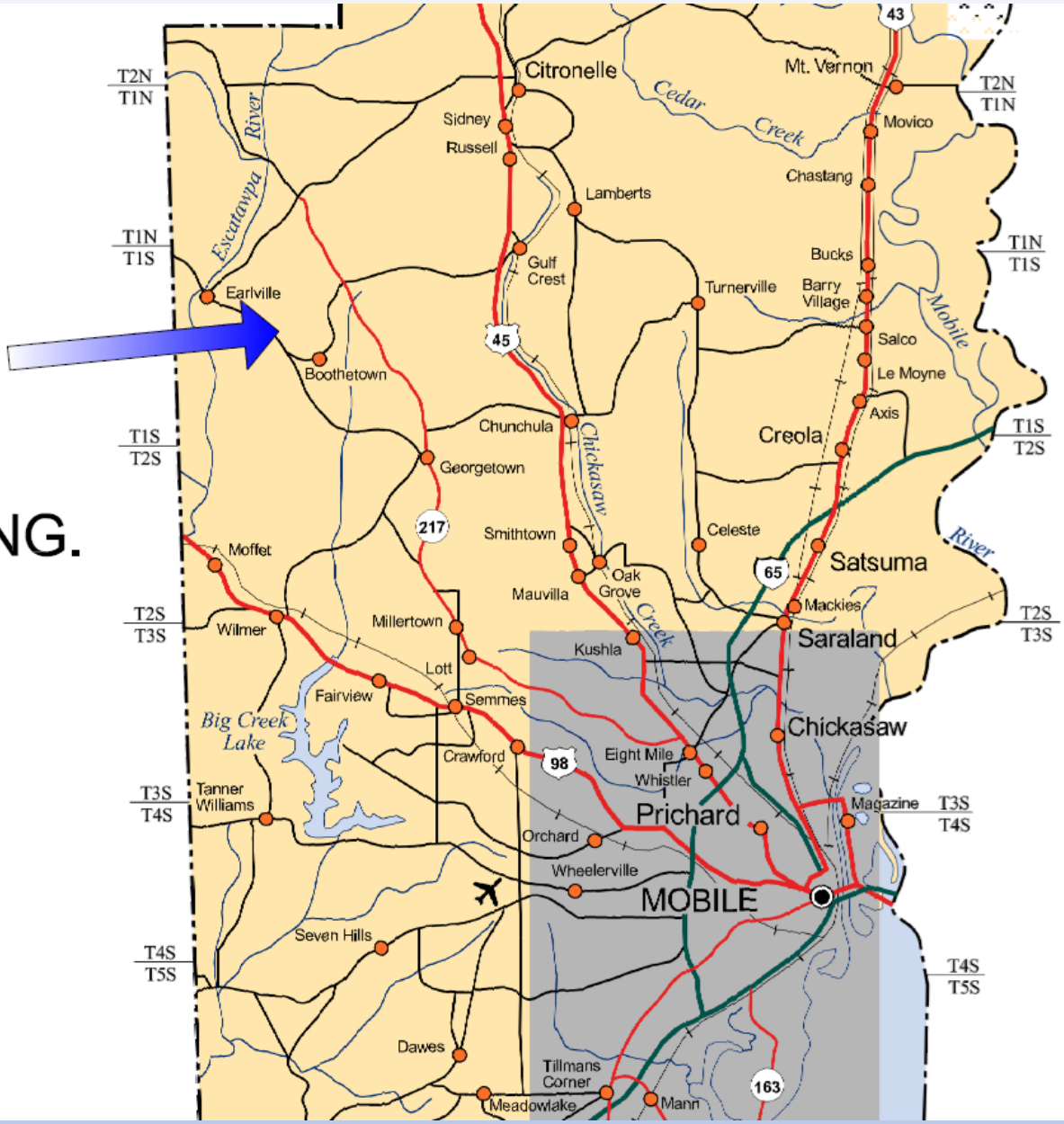
United States Department of Agriculture
Natural Resources Conservation Service
Alabama

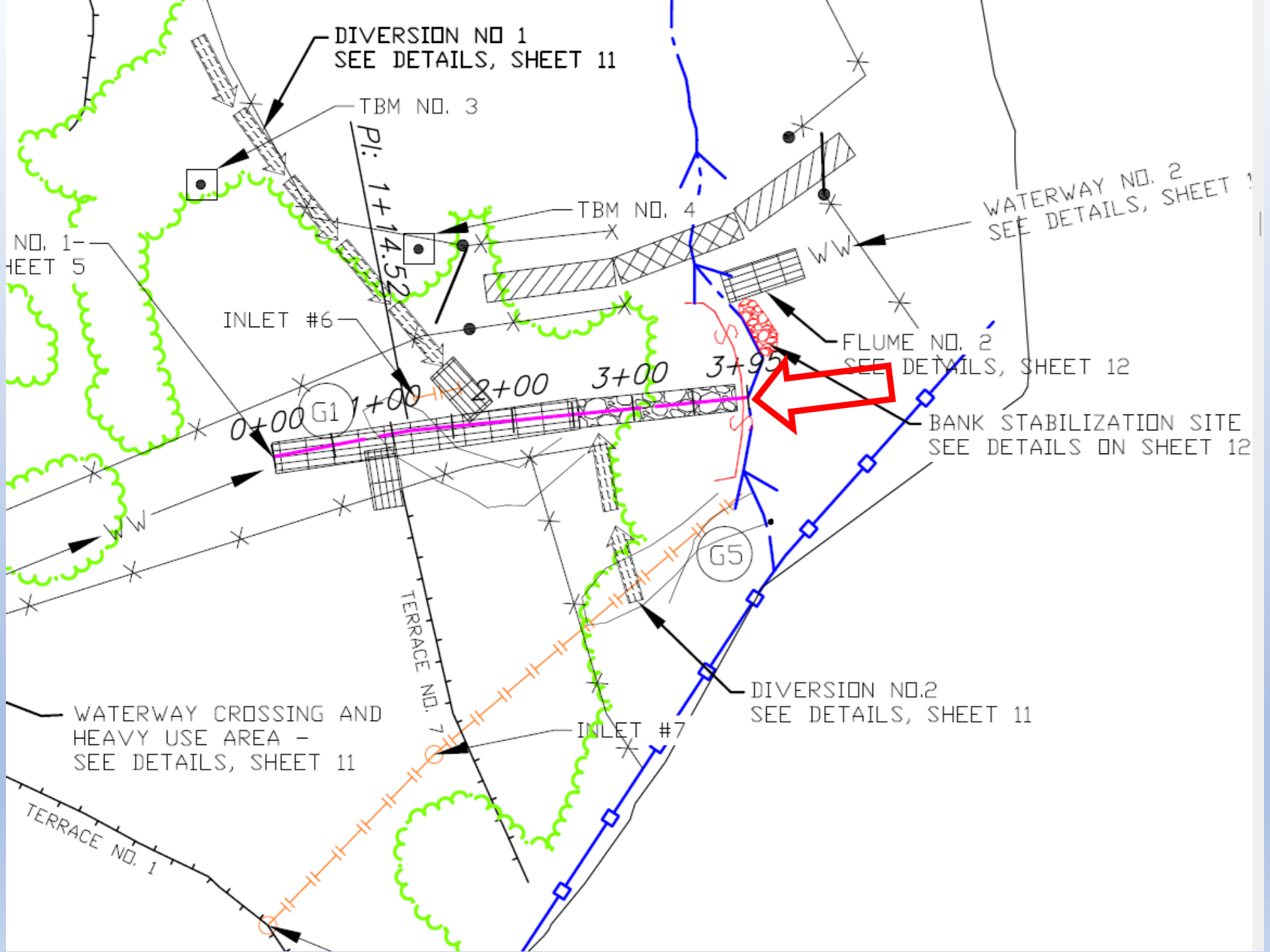
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Drawing No.
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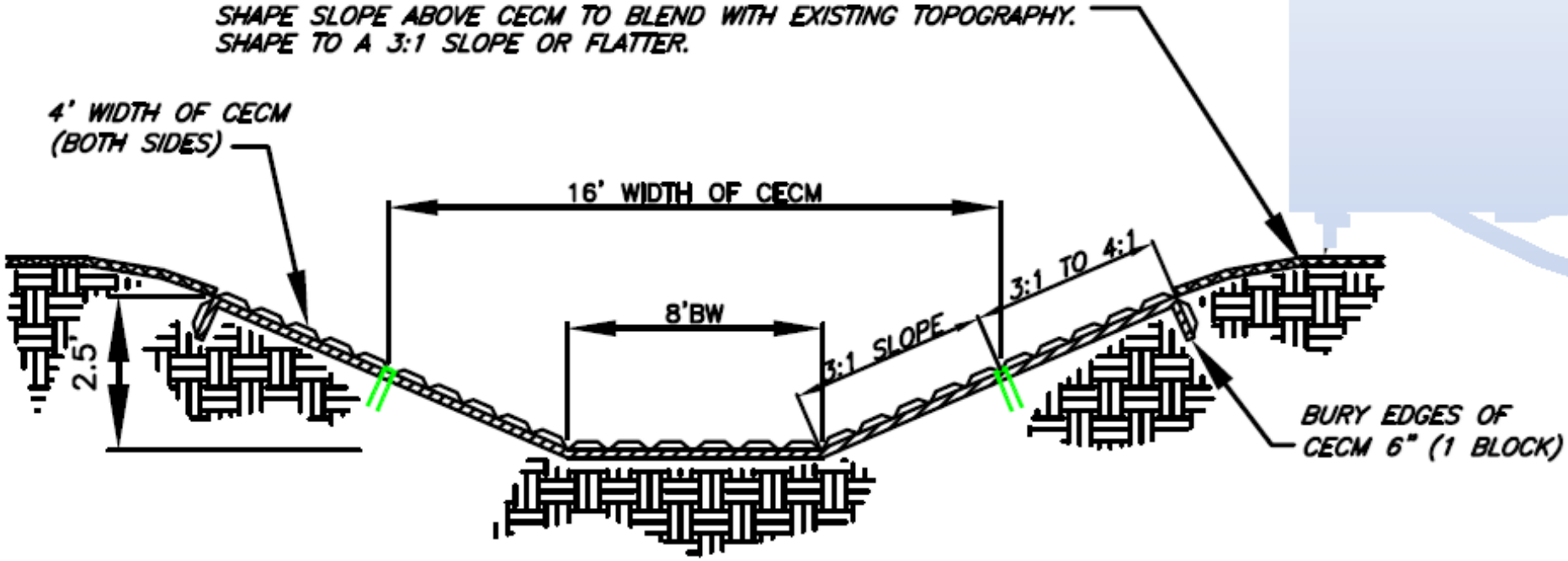
SITE LOCATION

30° 58' 24" N LAT.

-88° 22' 57" W LONG.




DIVERSION NO 1
SEE DETAILS, SHEET 11
TBM NO. 3
TBM NO. 4
WATERWAY NO. 2
SEE DETAILS, SHEET 1
NO. 1-
HEET 5
INLET #6
FLUME NO. 2
SEE DETAILS, SHEET 12
0+00
G1
1+00
2+00
3+00
3+95
BANK STABILIZATION SITE
SEE DETAILS ON SHEET 12
G5
TERRACE NO. 7
DIVERSION NO.2
SEE DETAILS, SHEET 11
WATERWAY CROSSING AND
HEAVY USE AREA -
SEE DETAILS, SHEET 11
INLET #7
TERRACE NO. 1



CECM FLUME – TYPICAL CROSS–SECTION

(NOT TO SCALE)







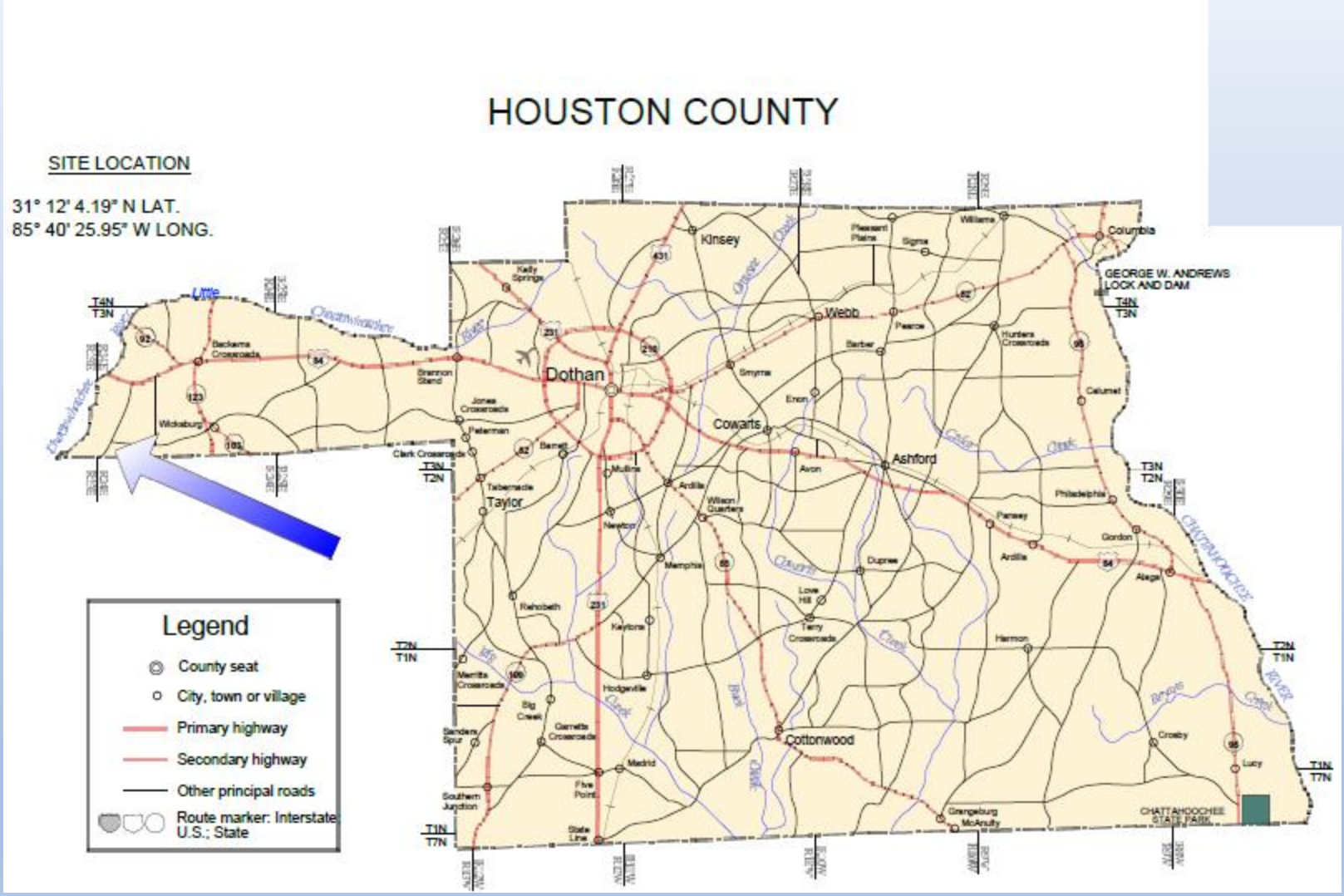


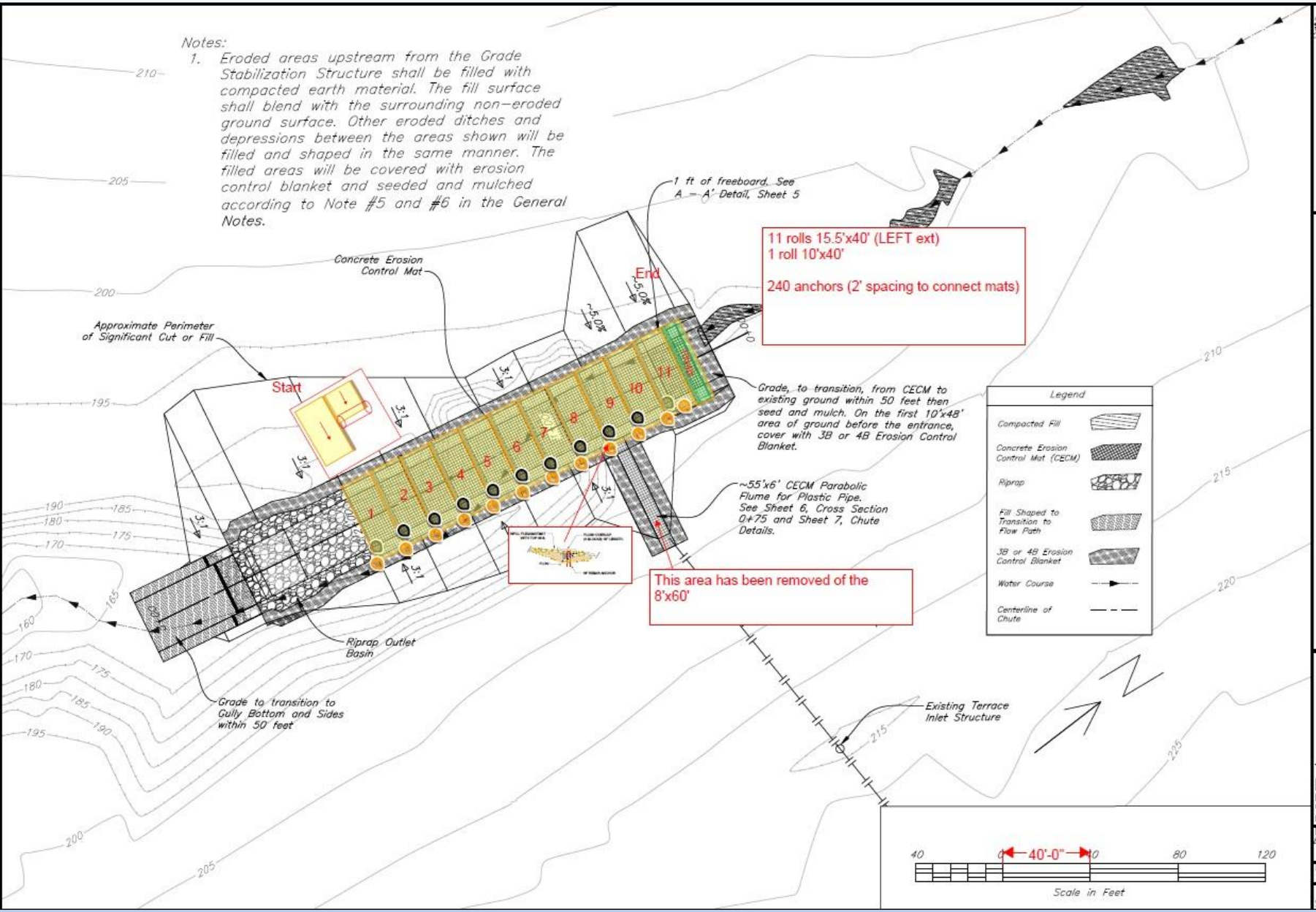





SANY
SANY

Bonner Gully





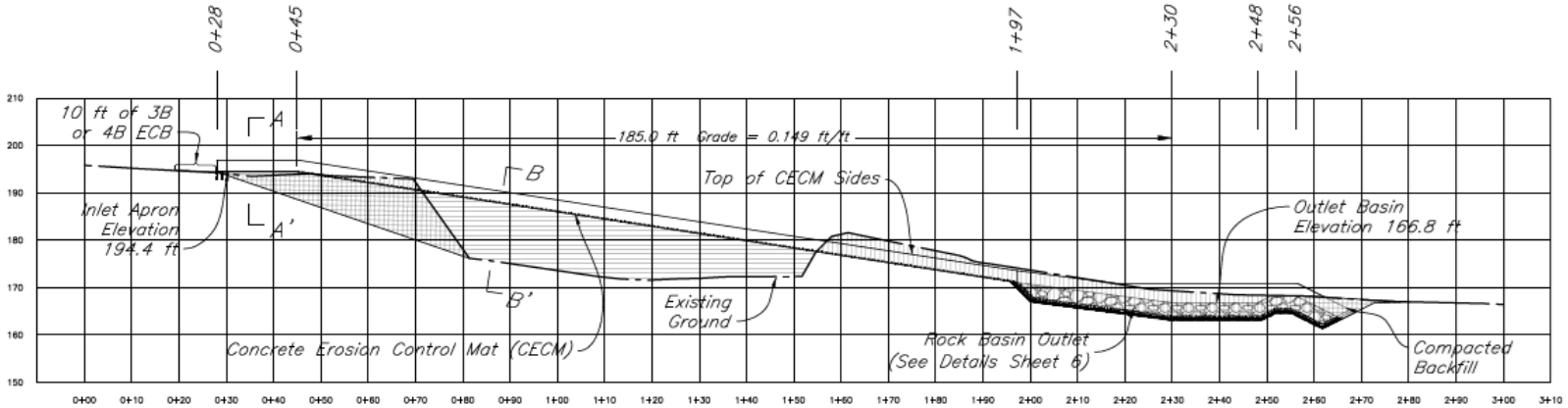
Designed CA 5/25
Drawn CA 5/25
Checked MN and BS 6/25
Approved Vernon Abney 6/25

BONNER GRADE STABILIZATION STRUCTURE

PLAN VIEW

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USDA
Natural Resources Conservation Service

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Sheet 4 of 9

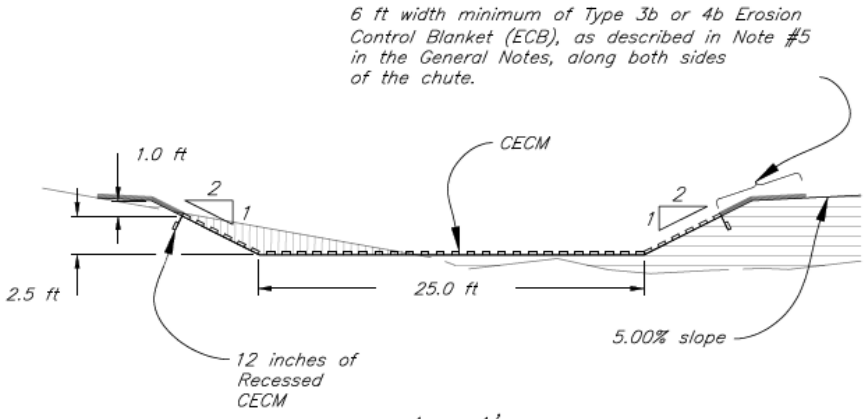


Centerline of Grade Stabilization Structure

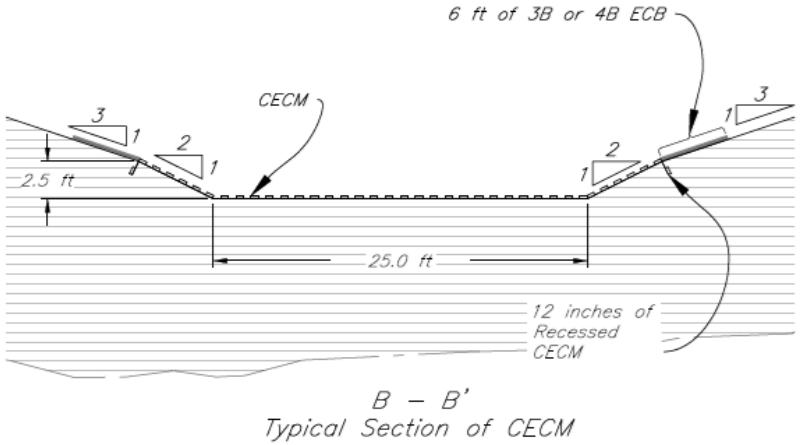
Legend

Compacted Fill | Cut | Cut and Compacted Fill





A – A'
Typical Section of CECM
between Stations 0+28 and 0+45
(not to scale)



B – B'
Typical Section of CECM
between Stations 0+45 and 1+97
(not to scale)

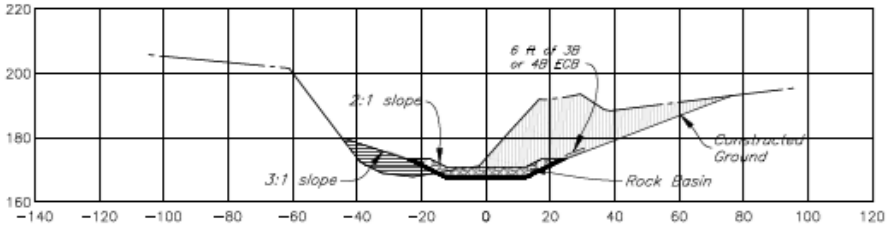
Date 5/25 5/25 6/25 6/25
Designed CA
Drawn CA
Checked MN and BS
Approved Vernon Abney

BONNER
GRADE STABILIZATION STRUCTURE
PROFILE AND DETAILS

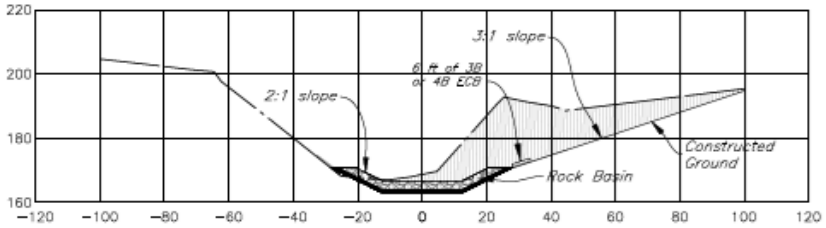
United States Department of Agriculture
Natural Resources Conservation Service

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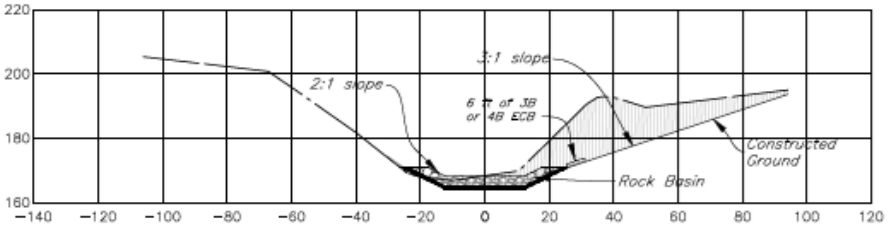
2+00



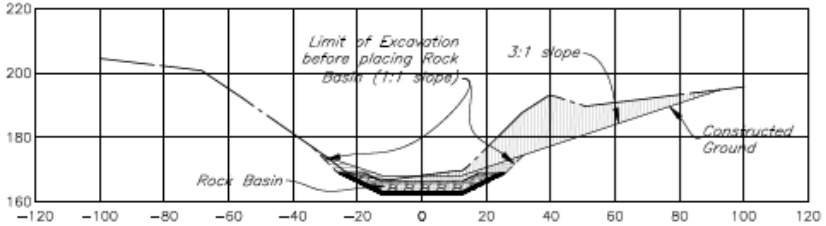
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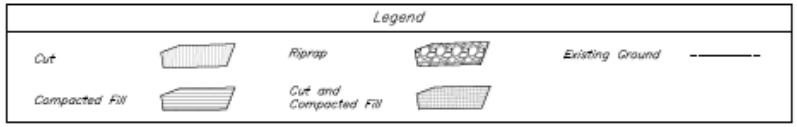


2+56



2+60







Note: Stationing corresponds to centerline of chute stations.

USDA United States Department of Agriculture

Bonner Grade Statbilization Structure

Designed CA 5/25
Drawn CA 5/25
Checked MN and BS 6/25
Date

File Name Bonner GSS.dwg
Drawing Name






KOMATSU








CAT
330F


CAT
CAT
330F










THE END!

Sign in Sheet for more information

