

US EPA ARCHIVE DOCUMENT

Engineered Water Quality Soils

- Median Planters
 - 33% existing soil, 33% sand, **33% Compost**
- Rainwater Garden
 - 90% sand (3149), **10% compost** (3890)
 - 80% sand, **20% compost**
 - 70% sand, **30% compost**
 - 50% sand, **50% compost**
 - 33% existing soil, 33% sand, **33% Compost**
- Living Slopes, Ditches, rooting media
 - 50% topsoil borrow, **50% compost**

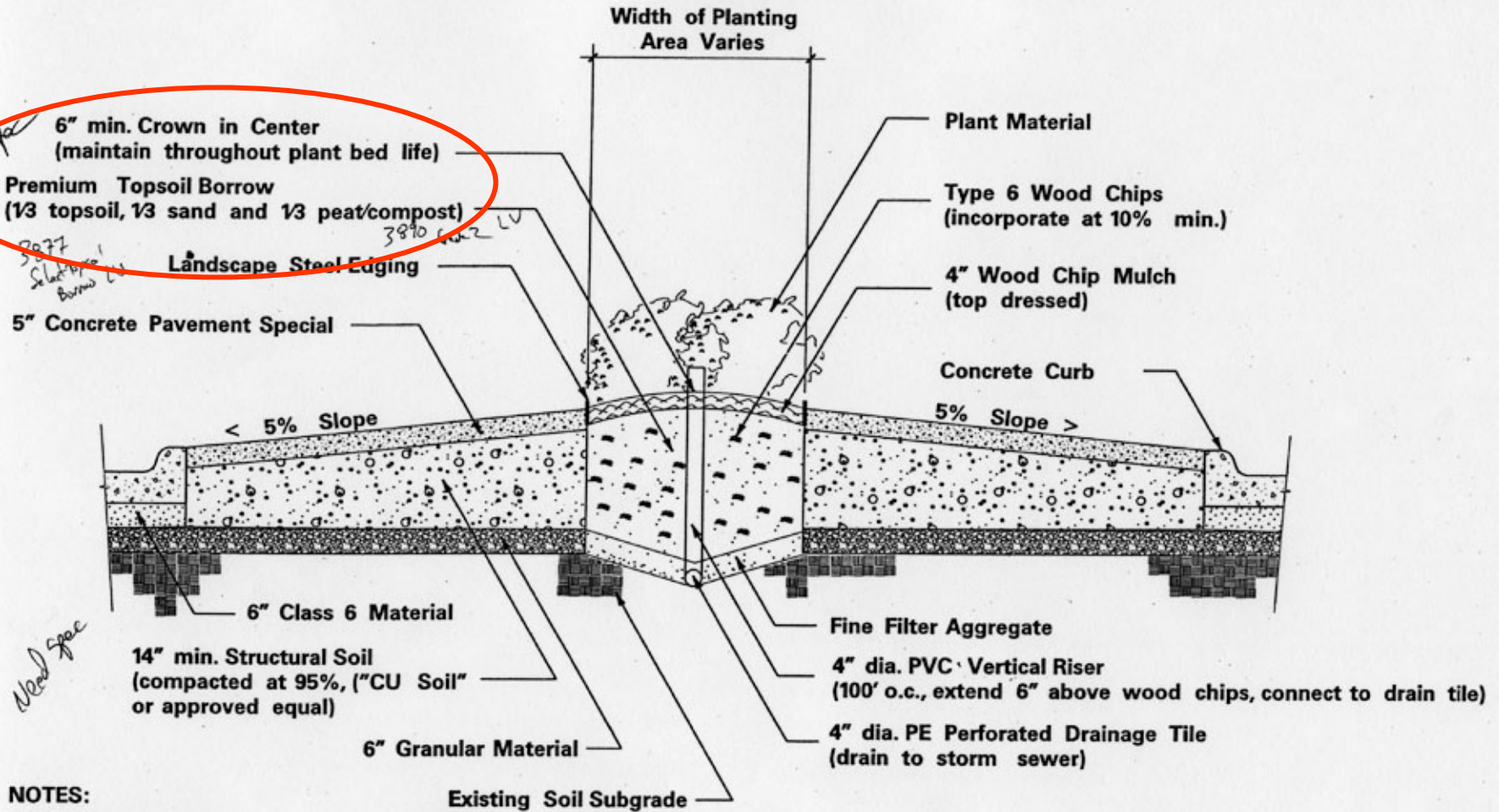


1/3 sand:1/3compost:1/3original
topsoil

90/10 sand/compost



Median Planting Details



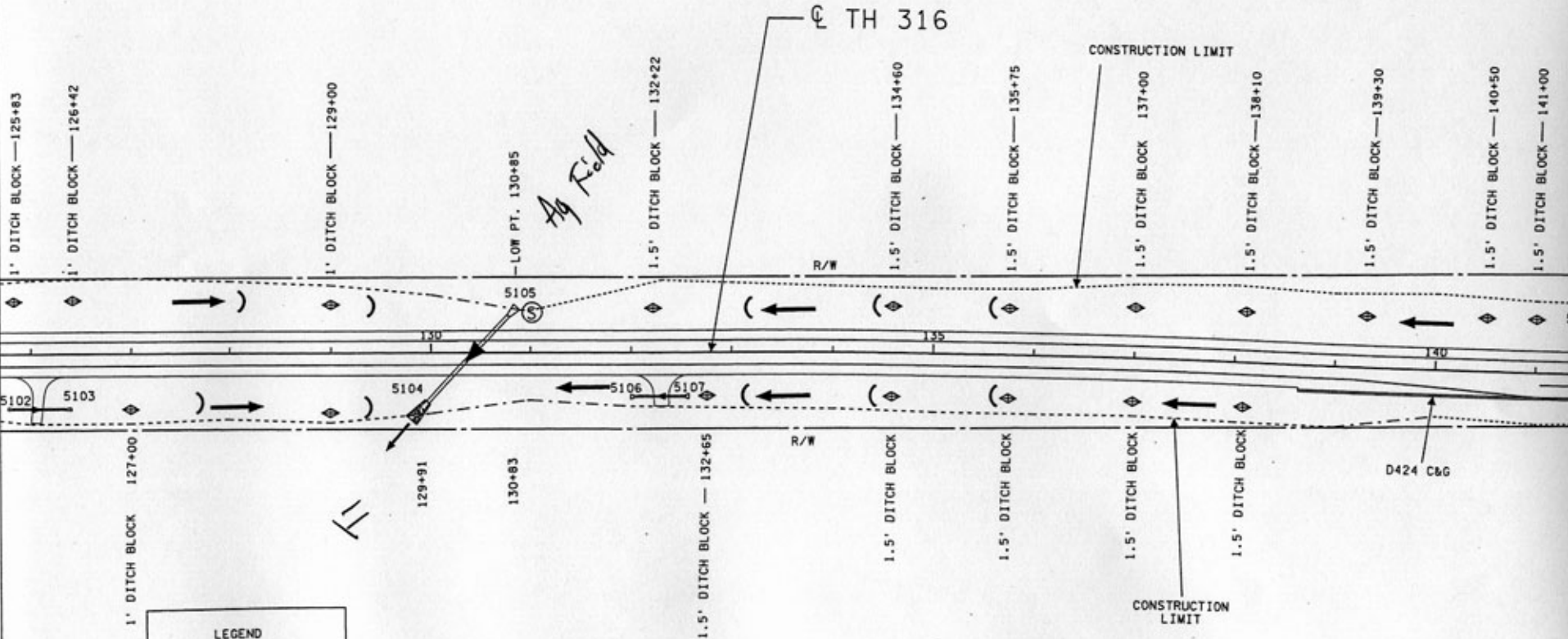
NOTES:

1. Irrigation system (tied to City water mains with meter pits) could be substituted for quick couplers per agreement with the City of Golden Valley.
2. Snow plowing should direct all snow away from median.





Vertical Drainage Ditches/Bioswales



LEGEND

- SURFACE FLOW DIRECTION
- ⊙ SOD APRON INLET OR OUTLET
- ▨ RIPRAP
- ◇ DITCH BLOCK
- ◻ APRON
- (TEMPORARY BIOROLL

SCALE 100'

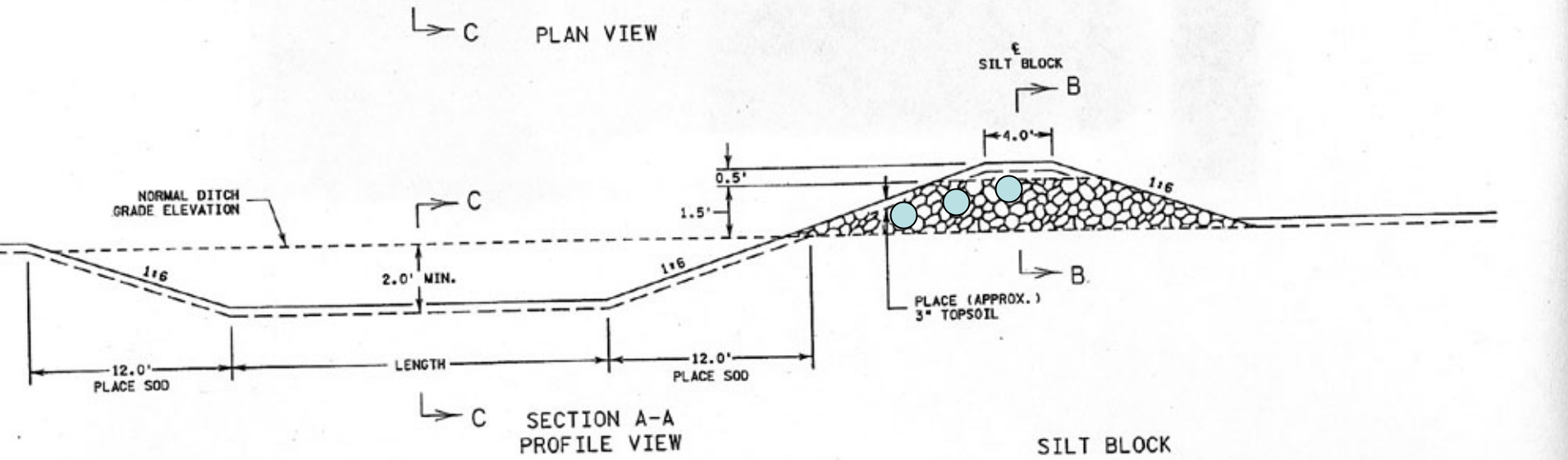
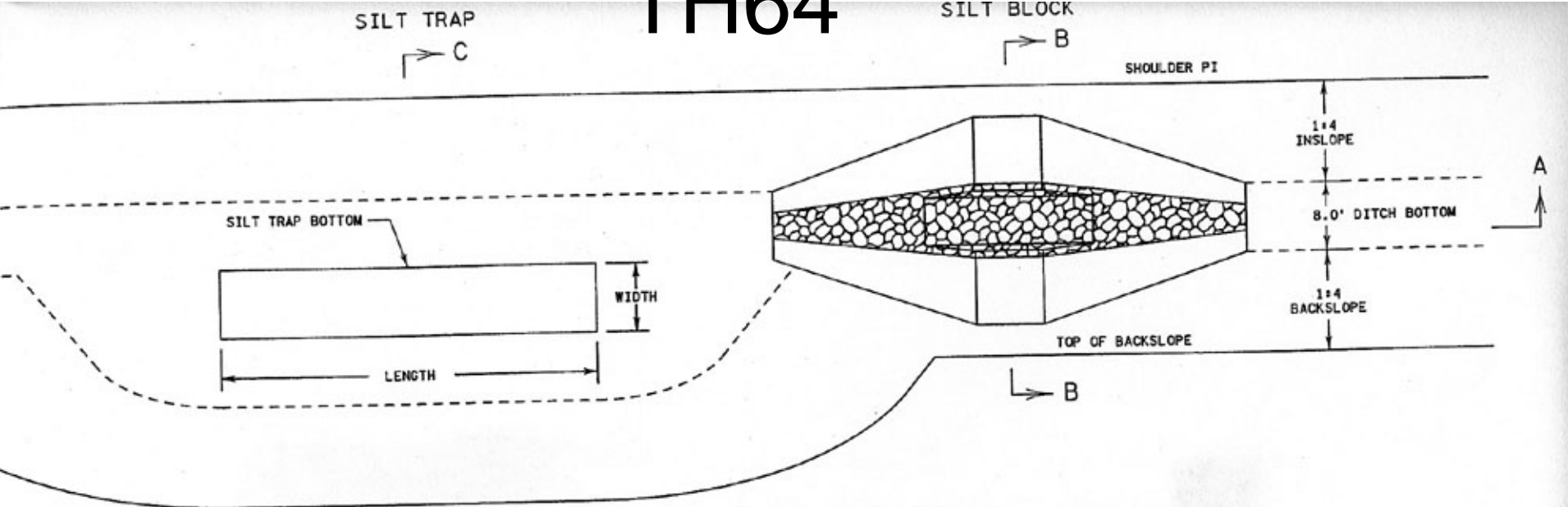
DRAINAGE PLAN







TH64



Compost Logs



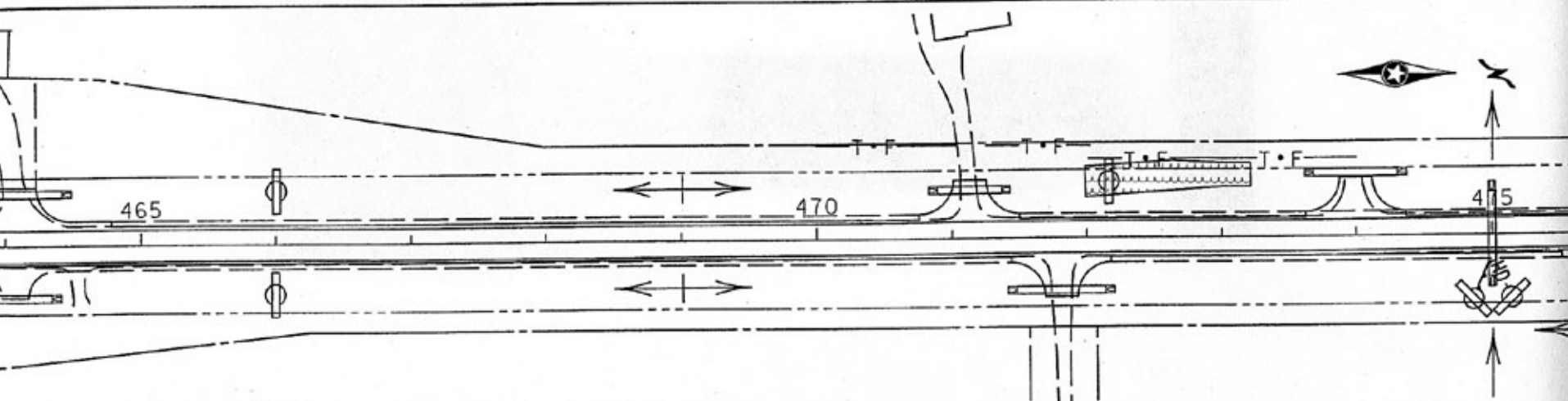
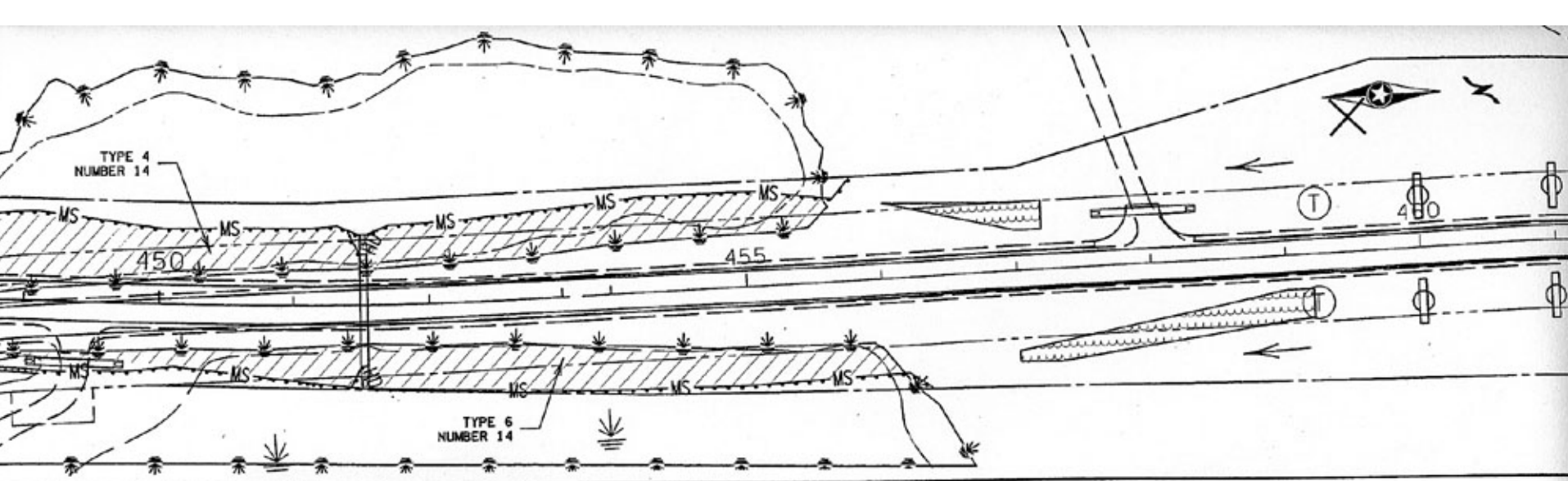
S-xxx (2573) Compost Log

This work shall consist of furnishing, installing, maintaining and dispersing (if needed) a water permeable compost log to contain soil erosion and sediment by removing soil particles from water moving off site into adjacent waterways or storm water drainage systems in accordance with the applicable Mn/DOT Standard Specifications and the following:




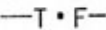


S-xxx.1 MATERIALS

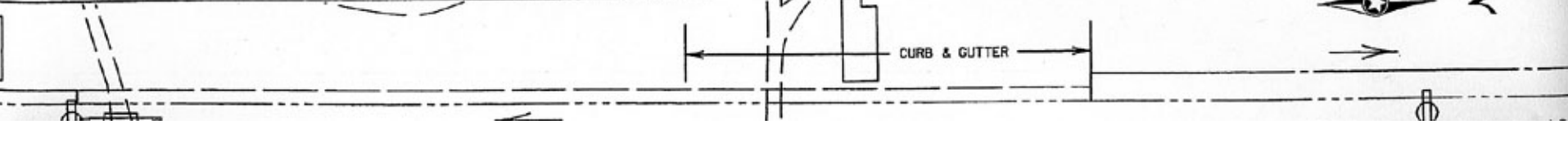
Compost logs shall consist of a weed free compost as per Mn/DOT 3890 Grade 2 derived from a well-decomposed source of leaf, grass and wood feedstock. The compost shall be produced using an aerobic composting process meeting CFR 503 regulations, including time and temperature data indicating effective weed seed, pathogen and insect larvae kill. A sample shall be submitted to the engineer for approval prior to being used and must comply with all local, state and federal regulations, along with a certificate of compliance. Test results using the US Composting Council Seal of Testing Assurance Program is acceptable. The compost shall be free of any refuse, contaminants or other materials toxic to plant growth. Non-composted products will not be accepted. The particle size used to pneumatically fill the logs shall pass a 51 mm (**2 inch**) sieve with a minimum of 70% greater than the 10 mm (**3/8 inch**) sieve, in accordance with TMECC 02.02-B, "Sample Sieving for Aggregate Size Classification. The geotextile log shall consist of 10 mm (**3/8 inch**) knitted tube material and contain the compost material while not limiting water infiltration.. The geotextile shall be made to photo degrade in-situ and shall be approximately 8 inches in diameter once formed, and continuous linear lengths up to 55 meters (**180 feet**). The geotextile log tube may be purchased from the following company:

Filtrexx International, LLC, 35481 Grafton Eastern, Grafton, OH 44044
440-926-8041, 440-926-4021 (fax)



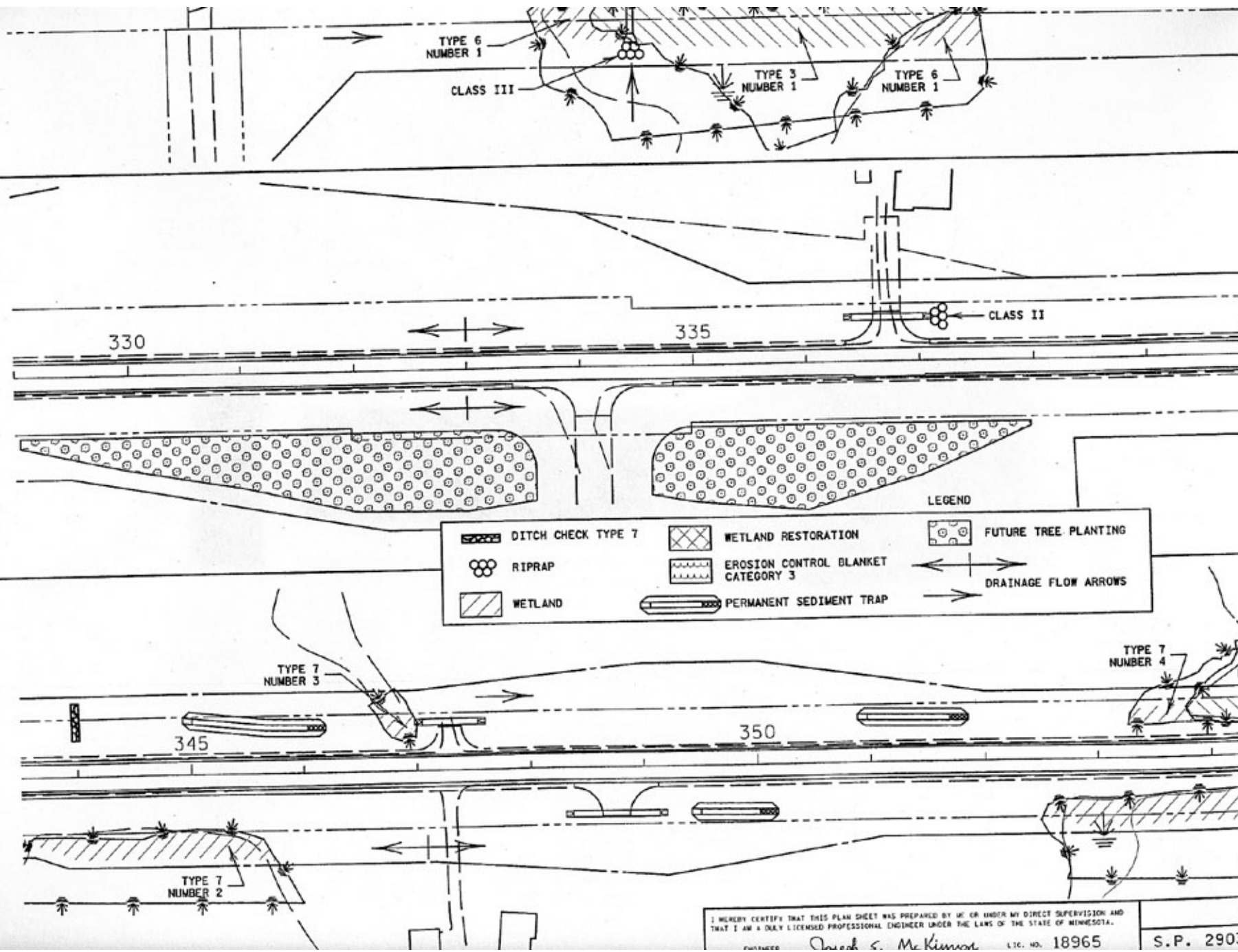
LEGEND

CHECK TYPE 3		EROSION CONTROL BLANKET CATEGORY 3		FLOTATION SILT CURTAIN
TRAP		SILT FENCE TYPE MACHINE SLICED		TEMPORARY FENCING FOR TREE PROTECTION
		SILT FENCE TYPE HEAVY DUTY		DRAINAGE FLOW ARROWS



PLOTTED AND/OR REVISED

PROJECT 2 - BEMIDJI, MN
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LEGEND

DITCH CHECK TYPE 7	WETLAND RESTORATION	FUTURE TREE PLANTING
RIPRAP	EROSION CONTROL BLANKET CATEGORY 3	DRAINAGE FLOW ARROWS
WETLAND	PERMANENT SEDIMENT TRAP	

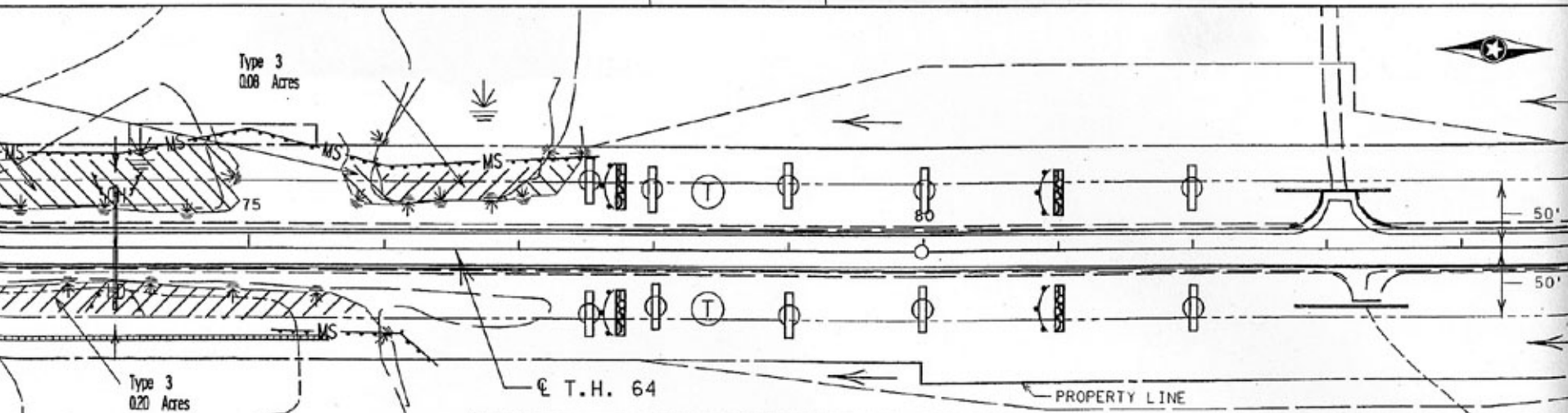
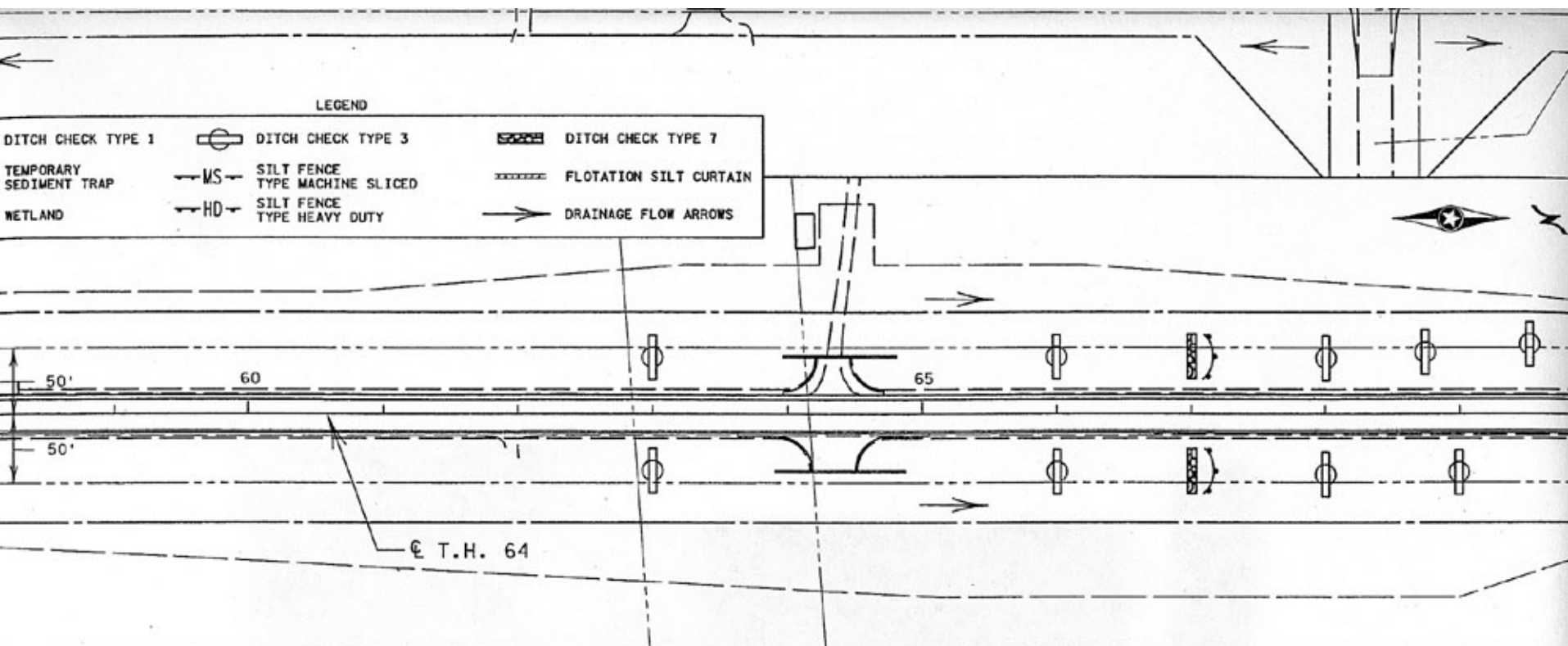
I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ENGINEER *Joseph S. McKinnon* LIC. NO. 18965

S.P. 2903

LEGEND

DITCH CHECK TYPE 1		DITCH CHECK TYPE 3		DITCH CHECK TYPE 7	
TEMPORARY SEDIMENT TRAP		SILT FENCE TYPE MACHINE SLICED		FLOTATION SILT CURTAIN	
WETLAND		SILT FENCE TYPE HEAVY DUTY		DRAINAGE FLOW ARROWS	



I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 ENGINEER Craig A. Johnson LIC. NO. 16500

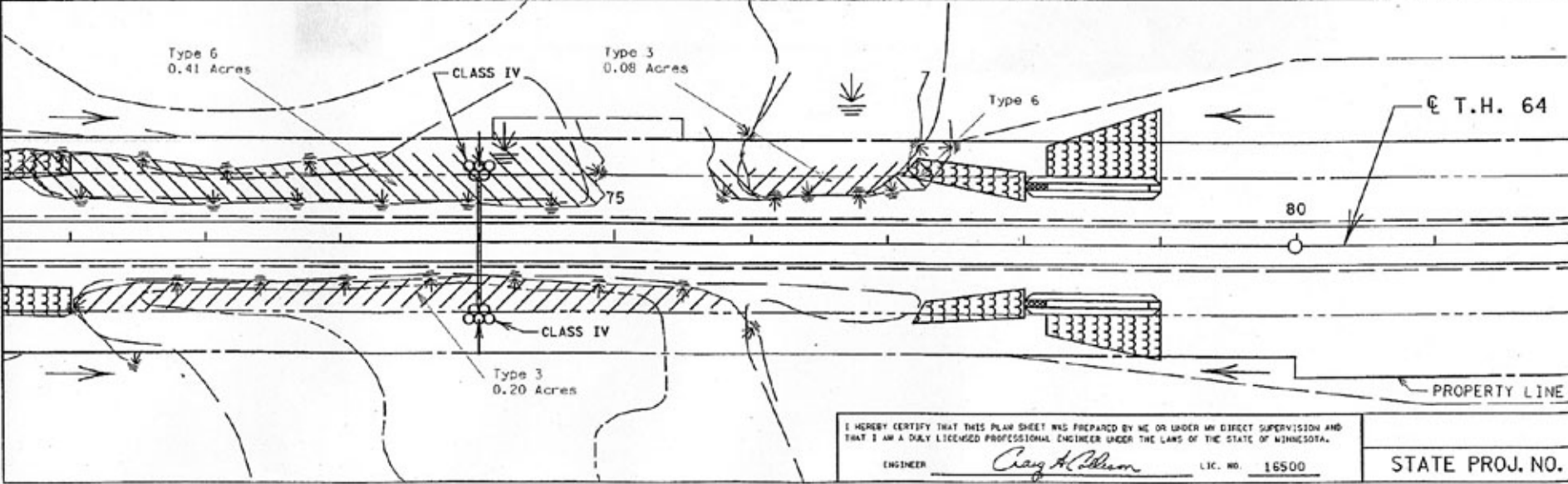
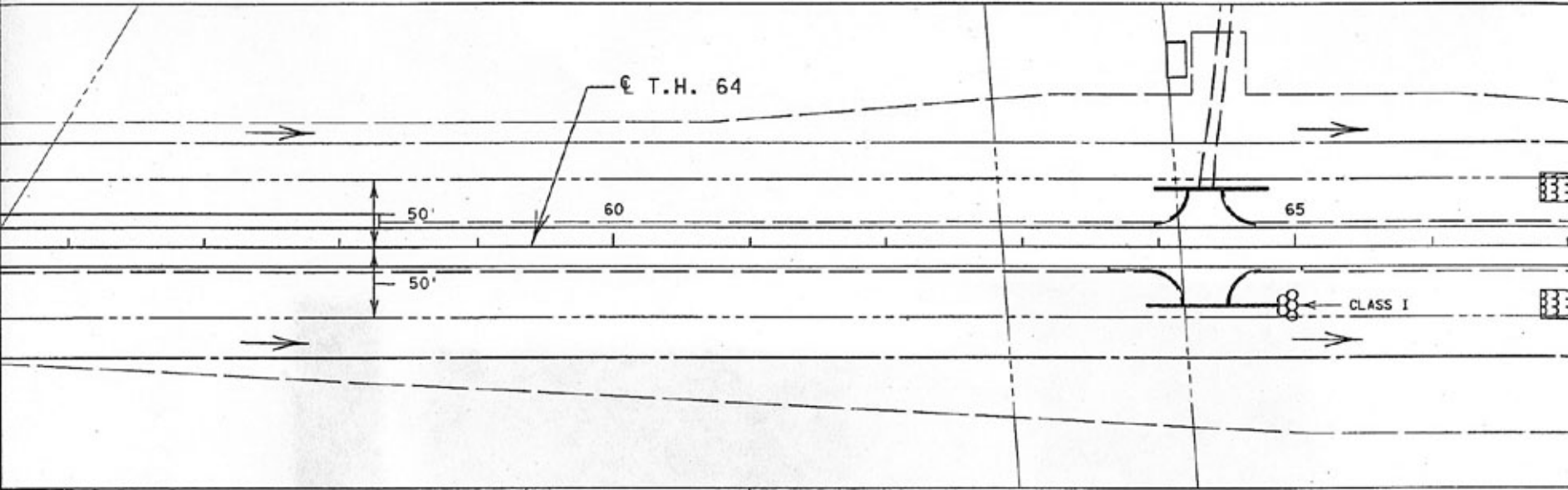
TEMPORARY EROSION CONTROL
 STATE PROJ. NO. 2903-10 (TH 64) SHEET NO. 4

PLOTTED

PATH & FILENAME: S:\Projects\064\2303\00\Plan\24230310_dwg.dgn

	RIPRAP		EROSION CONTROL BLANKET CATEGORY 3
	WETLAND		DRAINAGE FLOW ARROWS
			PERMANENT SEDIMENT TRAP

SEE TEMPORARY EROSION CONTROL ARROWS FOR STATIC EROSION CONTROL



I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ENGINEER Craig A. Johnson LIC. NO. 16500

STATE PROJ. NO.







Landscape Compost

- 2 to 6 inches surface applied, incorporated into 12 inch original soil depth, minimum 6 ft diameter for trees, whole bed for shrubs
- Spading Machine required for incorporation











