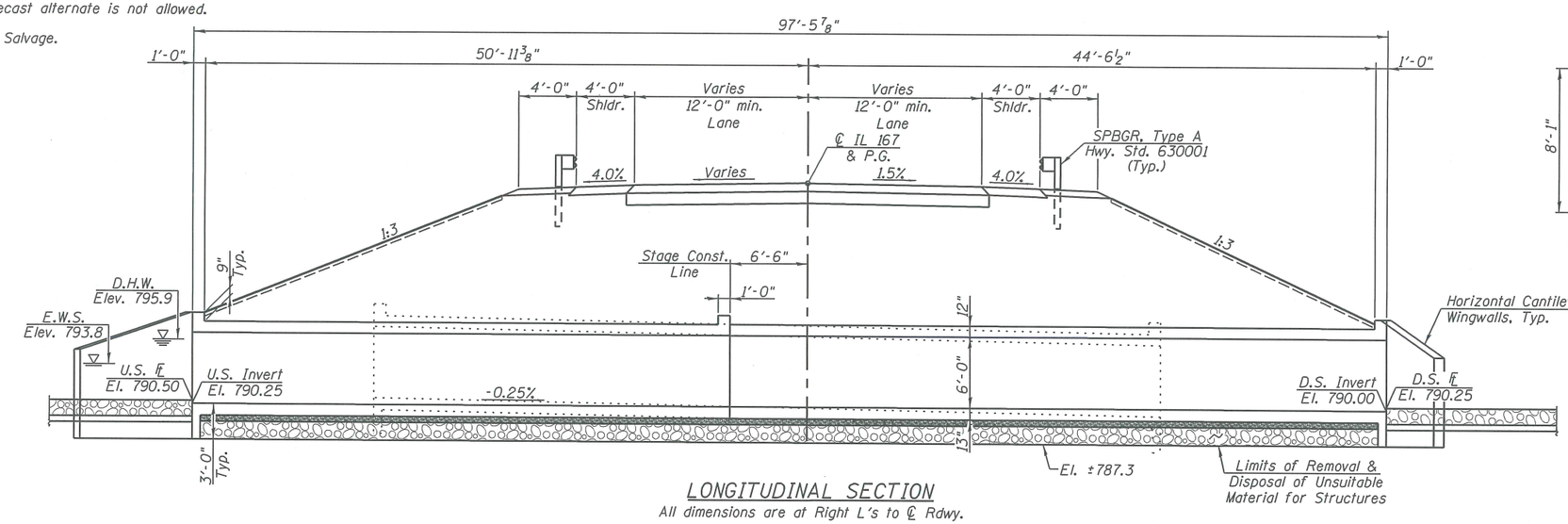
Benchmark: BM#3 - Railroad spike in power pole 2948779, northwesterly side of IL167 where the road curves from northeast to east on the north side of Wataga, IL. Station 28+04.60, 67.5' LT., Elev. = 823.29

Existing Structure: Cast in place double barrel box culvert (6'-0"H x 5'-0"W x 68'-6"L) with cast in place wingalls (SN 048-1004) built in 1928 under Section 101. Traffic to be maintained utilizing Stage Construction.

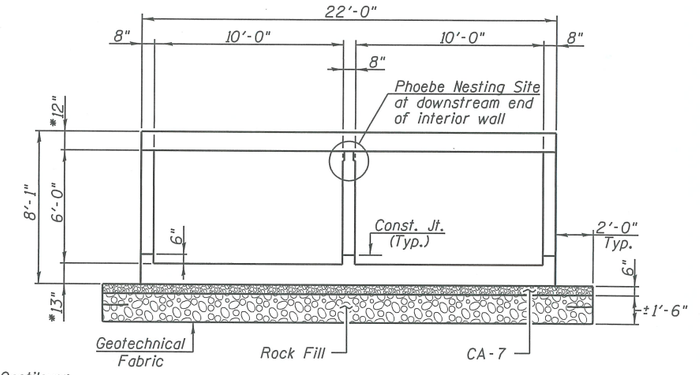
Precast alternate is not allowed.

No Salvage.



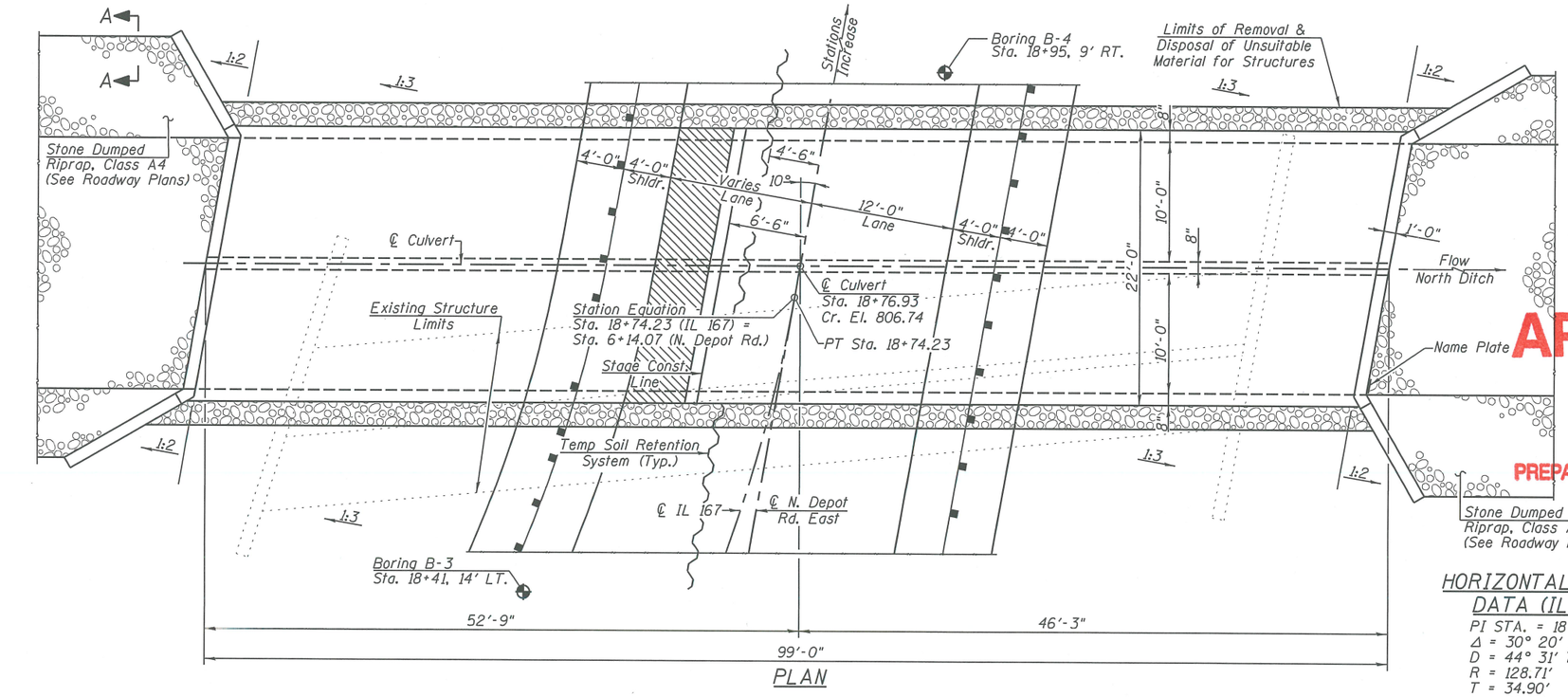
LONGITUDINAL SECTION

All dimensions are at Right L's to ℄ Rdwy.



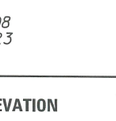
SECTION THRU BARREL

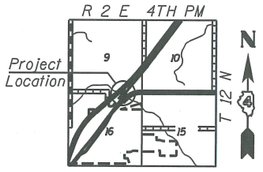
* Slab thickness may be refined in the final design



PLAN

▨ - Indicates Limits of Geotextile Retaining Wall





LOCATION SKETCH

HIGHWAY CLASSIFICATION

F.A.S. 379 - IL Rte. 167
Functional Class: Major Collector (Non-Urban); Class II Truck Route
ADT: 1,500 (2015); 1830 (2035)
ADTT: 200 (2015); 244 (2035)
DHV: 183 (2035)
Design Speed: 55 m.p.h.
Posted Speed: 55 m.p.h.
Two-way Traffic Directional Distribution 50:50

LOADING HL 93

Allow 50#/sq. ft. for future wearing surface

DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition.

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

APPROVED

MAR 06 2019

AS A BASIS FOR PREPARATION OF DETAILED PLANS

HORIZONTAL CURVE DATA (IL 167)

PI STA. = 18+40.97
Δ = 30° 20' 20" (LT)
D = 44° 31' 7.3"
R = 128.71'
T = 34.90'
L = 68.15'
E = 4.65'
P.C. STA. = 18+06.08
P.T. STA. = 18+74.23

GENERAL PLAN & ELEVATION
IL ROUTE 167
OVER NORTH DITCH
F.A.S. ROUTE 379 - SECTION (6,101)CR
KNOX COUNTY
STA. 18+76.93
STRUCTURE NO. 048-2504

Veenstra & Kimm, Inc.
Springfield, IL. Phone: (217)544-8033

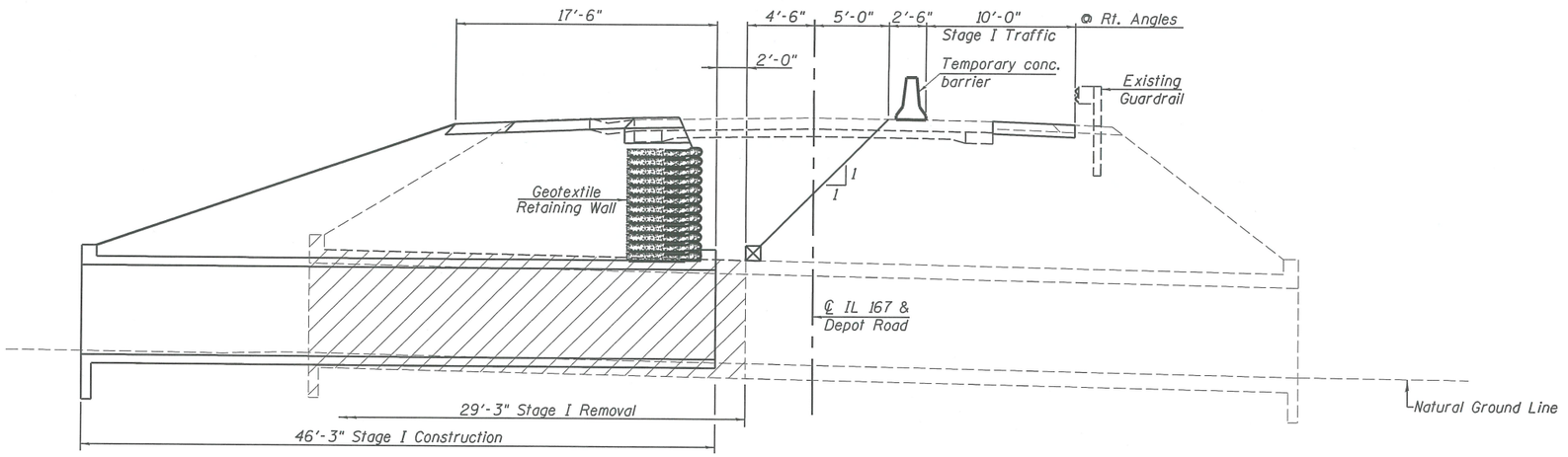
USER NAME = ___	DESIGNED - KES	REVISED - ___	
	CHECKED - MAH	REVISED - ___	
PLOT SCALE = ___	DRAWN - JRP	REVISED - ___	
PLOT DATE = 2/18/2019	CHECKED - MAH	REVISED - ___	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

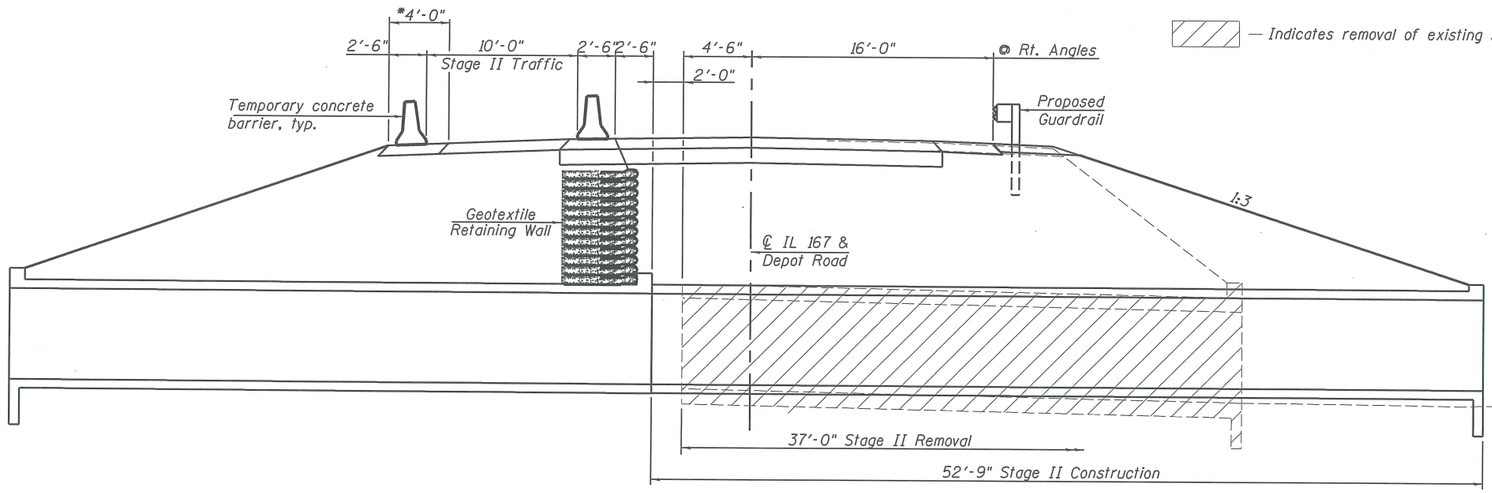
GENERAL PLAN & ELEVATION

SHEET NO. 1 OF 2 SHEETS

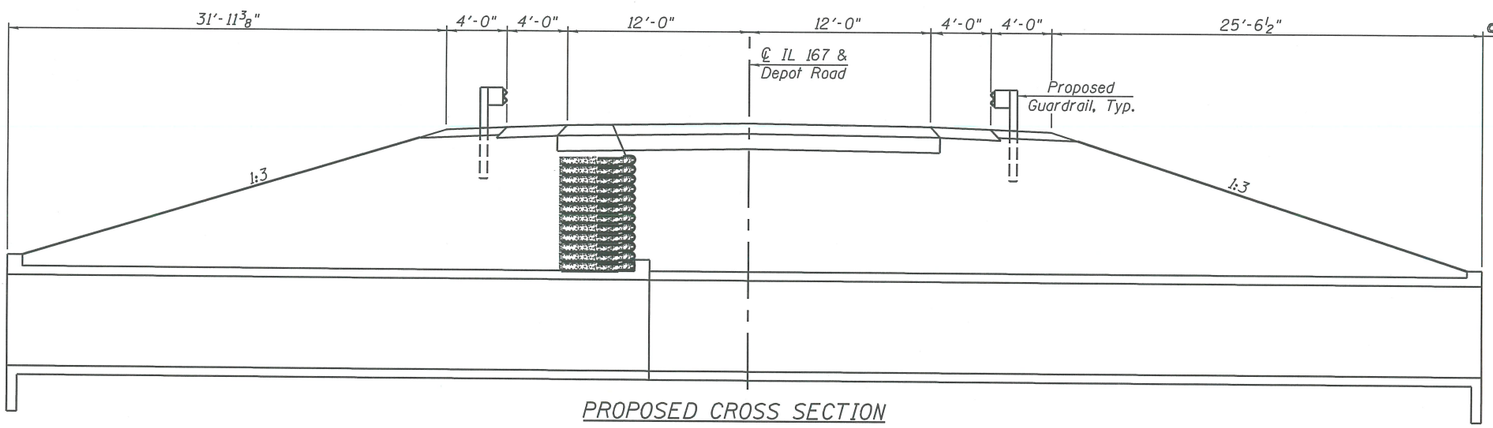
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	(6,101)CR	KNOX	___	___
		CONTRACT NO. 68C65		
	ILLINOIS	FED. AID PROJECT		



STAGE I CONSTRUCTION AND STAGE I TRAFFIC



STAGE II CONSTRUCTION AND STAGE II TRAFFIC



PROPOSED CROSS SECTION

— Indicates removal of existing structure

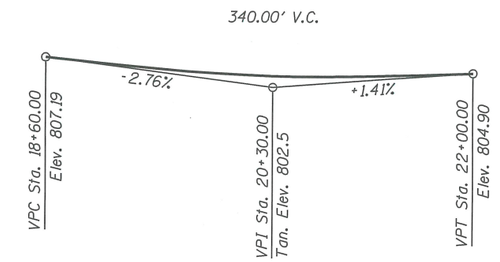
WATERWAY INFORMATION

Drainage Area = 1.27 Sq. Mi.

Existing Overtopping Elevation 803.5 @ Sta. 20+37
Proposed Overtopping Elevation 803.5 @ Sta. 20.37

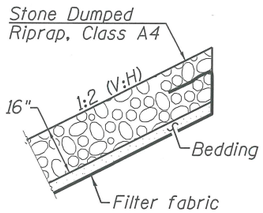
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	471	50	100	795.5	0.9	0.0	796.4	794.7
Design	50	766	54	108	795.9	3.2	0.0	799.1	795.5
Base	100	904	56	112	796.1	3.8	0.1	799.9	796.2
OVT(E)	200	1020	58	N/A	796.3	4.7	N/A	801.0	N/A
OVT(P)	>500		N/A	120		N/A		N/A	
Max. Calc.	500	1240	60	120	796.5	5.4	1.4	801.9	797.9

10 Year Outlet Velocity from Existing Structure = 9.4 fps
10 Year Outlet Velocity from Proposed Structure = 4.8 fps

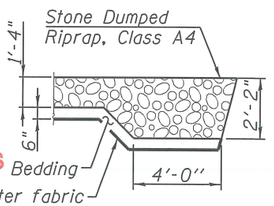


PROFILE GRADE

(Along ℄ IL 167)



SECTION A-A



RIPRAP FLANK DETAIL

(Downstream End Only)

APPROVED
MAR 06 2019
AS A BASIS FOR
PREPARATION OF DETAILED PLANS

* Temporary widening for Stage II Traffic to be removed during Stage III Construction

GENERAL PLAN & ELEVATION
IL ROUTE 167
OVER NORTH DITCH
F.A.S. ROUTE 379 - SECTION (6,101)CR
KNOX COUNTY
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PLOT DATE = 2/18/2019	CHECKED - ___	REVISED - ___	

GENERAL PLAN & ELEVATION
SHEET NO. 2 OF 2 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
379	(6,101)CR	KNOX	___	___
		CONTRACT NO. 68695		
	ILLINOIS FED. AID PROJECT			