

Benchmark: Chisled "□" in S.E. corner of the east headwall box culvert.
East side of Gordon Drive & ±70' north of Mau Drive. Elev. 571.51.

Existing Structure: Twin 10'x7' reinforced concrete box culvert 54' in length.
Extend to 134'-0" and add a 10'x7' cast-in-place box culvert with cast-in-place reinforced concrete headwalls and wingwalls. Road to be closed during construction.

No Salvage.

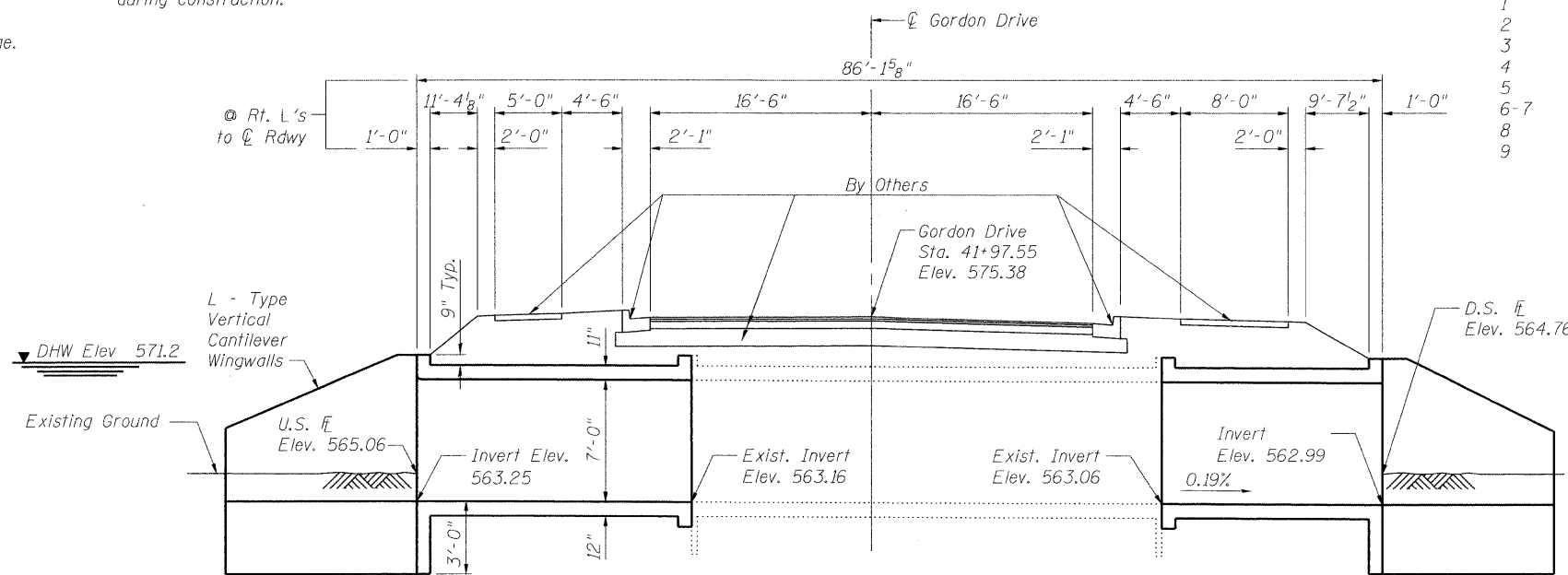
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS

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- 2 Existing Removal Plan
- 3 Top Slab Details
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- 5 Wingwall Details
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- 9 Soil Borings

WATERWAY INFORMATION

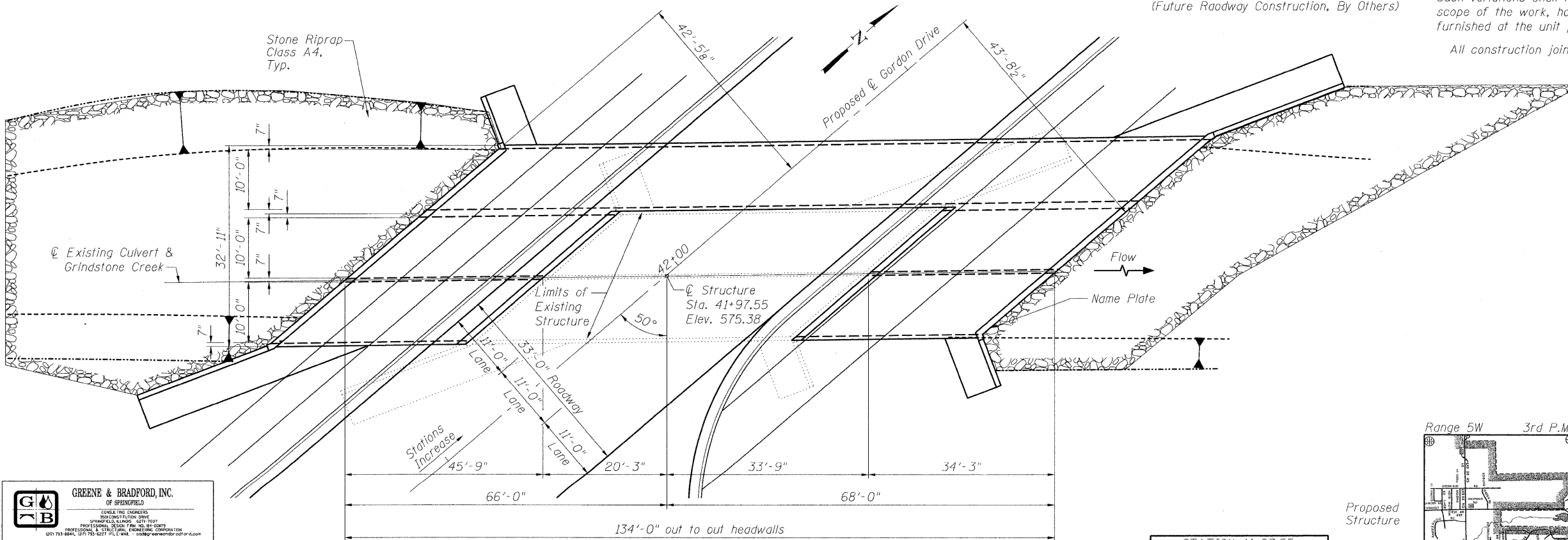
		Q C.F.S.		Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
Flood	Freq. Yr.	Exist.	Prop.	Exist.	Prop.	Exist.	Exist.	Prop.	Exist.	Prop.
Design	Box Culvert	649	649	92.7	139.6	570.0	0.5	0.0	570.5	570.0
	Over-the-Road	0	0	0.0	0.0					
	Total	649	649	92.7	139.6					
Base	Box Culvert	1073	1073	104.0	156.0	571.2	1.9	0.6	573.1	571.8
	Over-the-Road	0	0	0.0	0.0					
	Total	1073	1073	104.0	156.0					
Over-topping	Box Culvert	1266	1266	104.0	156.0	571.6	2.9	1.1	574.5	572.7
	Over-the-Road	0	0	0.0	0.0					
	Total	1266	1266	104.0	156.0					
Maximum	Box Culvert	1409.6	1443	104.0	156.0	571.9	3.8	1.7	575.7	573.6
	Over-the-Road	33.4	0	17.0	0.0					
	Total	1443	1443	121.0	156.0					
Maximum	Box Culvert	1460.2	1738	104.0	156.0	572.5	4.1	2.8	576.6	575.3
	Over-the-Road	277.8	0	116.2	0.0					
	Total	1738	1738	220.2	156.0					



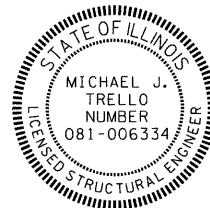
LONGITUDINAL SECTION

PROPOSED PROFILE GRADE

(Along Center Roadway)
(Future Roadway Construction, By Others)



PLAN



I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current A.A.S.H.T.O. L.R.F.D. Bridge Design Specifications.

Michael J. Trello
Signed

11/25/09
Dated

Expires: 11/30/10

STATION 41+97.55
REBUILT 20... BY
VILLAGE OF CHATHAM
F.A.U. RTE. 8153
SEC. 09-00028-01-DR
LOADING HS20
STRUCTURE NO. 084-8011

NAME PLATE
See Std. 515001

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

All construction joints shall be bonded.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu Yd	27.5
Reinforcement Bars, Epoxy Coated	Pound	58,970
Name Plates	Each	1
Expansion Bolts, 3/4"	Each	104
Concrete Box Culverts	Cu Yd	353.0

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

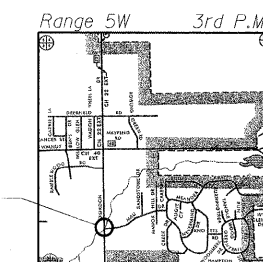
FIELD UNITS

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

LOADING HS 20-44

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

GENERAL PLAN & ELEVATION
GORDON DRIVE OVER
GRINDSTONE CREEK
F.A.U. 8153 - SEC. 09-00028-01-DR
SANGAMON COUNTY
STATION 41+97.55
STRUCTURE NO. 084-8011



LOCATION SKETCH

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9 SHEETS	8153	09-00028-01-DR	SANGAMON	32	13
CONTRACT NO. 93516					
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		ARA-5082(009)



DESIGNED NIEWINSKI
CHECKED TRELLO
DRAWN VERENSKI
CHECKED TRELLO