

**INDEX OF SHEETS**  
 1. General Plan and Elevation  
 2.-3. Culvert Details

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Concrete Box Culverts	Cu. Yd.	28.6
Reinforcement Bars	Lb.	5360
Name Plates	Each	1
Granular Culvert Backfill	Cu. Yd.	62
Steel Plate Beam Guardrail, Attached to Structures	Foot	15

**WATERWAY INFORMATION**

Drainage Area = 0.5 Sq. Mi. Ex. Low Grade Elev. 628.31 Sta. 132+90  
 Pr. Low Grade Elev. 628.48 Sta. 132+90

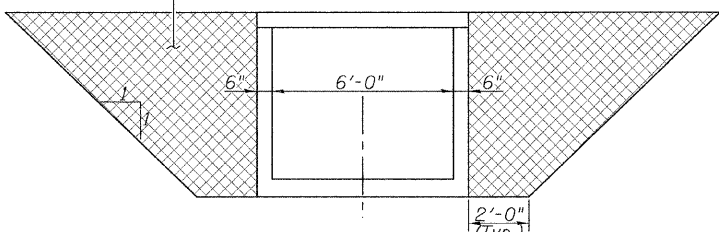
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural H.W.E.	Head - ft.		Headwater EL.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	169	22.8	25.5	625.66	2.24	0.76	627.90	626.42
	25	278	29.4/5.9	39.4	626.63	3.00	0.87	629.63	627.50
	50	385	36.7/37.2	50.4/0.8	627.34	2.97	1.20	630.31	628.54
Base	100	528	36.7/79.6	65.8/30.1	628.09	2.87	1.87	630.96	629.96

**PROFILE GRADE**  
 (Along Center Roadway)

STA. 135+67.51  
 BUILT 20\_\_ BY  
 McDONOUGH COUNTY  
 ARGYLE LAKE STATE PARK  
 PARK ROADS  
 STR. NO. 055-2507  
 LOADING HS20-44

**NAME PLATE**  
 (Std. 515001)

Granular Culvert Backfill within the limits of the proposed roadway and shoulders (26' total length). Outside limits of shoulders, the culvert shall be backfilled in accordance with Section 502 of the Standard Specifications.



**SECTION THRU BARREL**

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications for Highway Bridges.

**DESIGN STRESSES**

**FIELD UNITS**

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

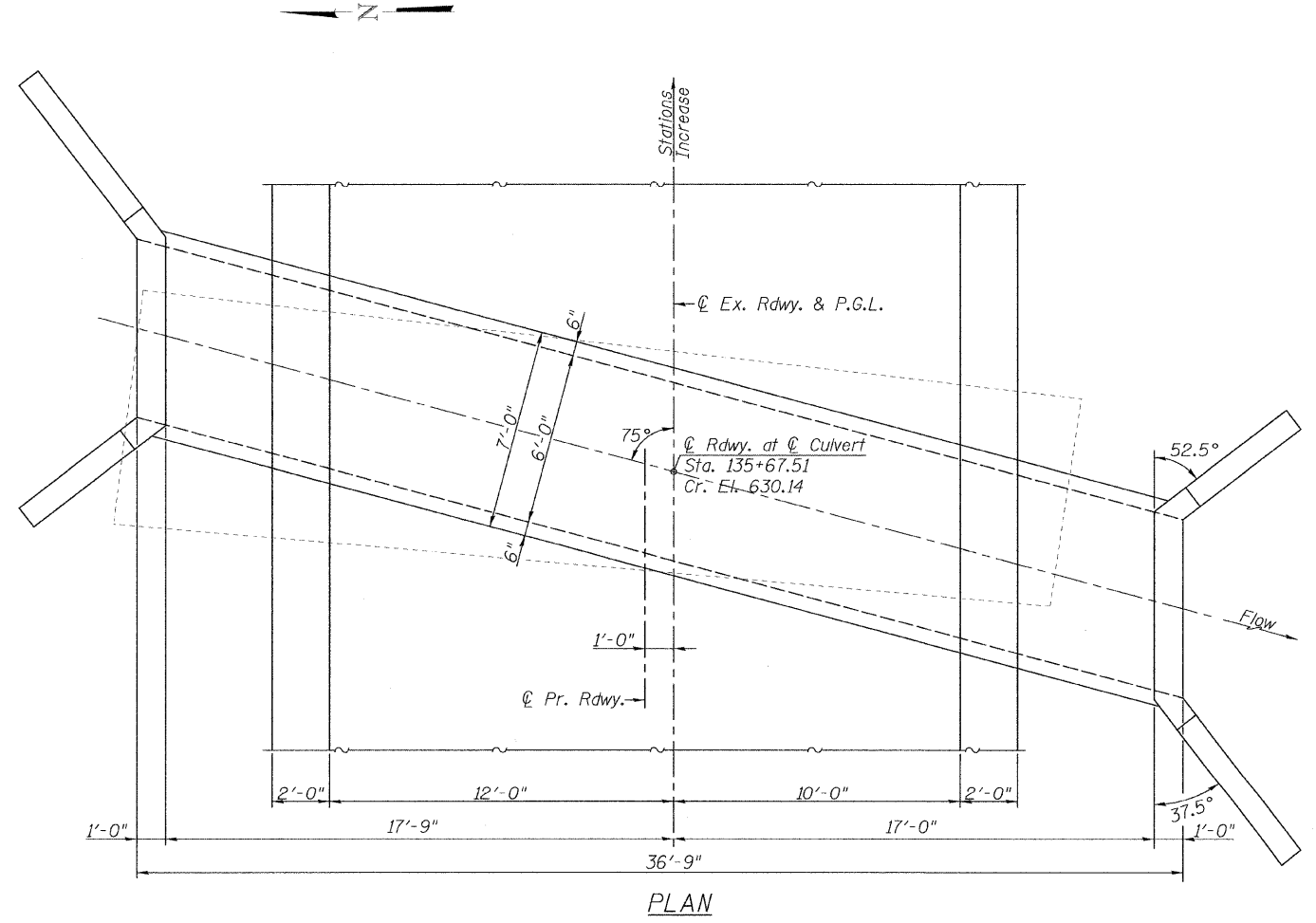
**LOADING HS20-44**

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

**GENERAL NOTES**

1. Reinforcement bar shall conform to the requirements of ASTM A 706 Gr. 60. See Special Provisions.
2. See Roadway Plans for layout of riprap and riprap quantities
3. All construction joints shall be bonded.
4. Exposed edges shall have a 3/4" chamfer.
5. At least 8 ft. of barrel shall be poured monolithically with the wingwalls.
6. Precast alternative is not allowed.

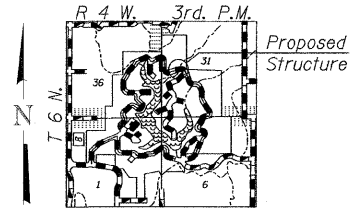
**GENERAL PLAN & ELEVATION**  
 ARGYLE LAKE STATE PARK  
 OVER TRIBUTARY TO ARGYLE LAKE  
 McDONOUGH COUNTY  
 STA. 135+67.51  
 STRUCTURE NO.055-2507



**PLAN**



Mark A. Henderson 12-8-2010  
 Expiration 11/30/2012



**LOCATION SKETCH**

<b>Allen Henderson &amp; Associates, Inc.</b> Civil and Structural Engineers Springfield, IL. 62703 Phone: (217)544-8033 IL Design Firm No. 184-001907	SHEET NO. 1	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3 SHEETS	*	ARGYLE LAKE STATE PARK	McDONOUGH	162	101
		*	PARK ROADS	CONTRACT NO. 46158		
		FED. ROAD DIST. NO.	ILLINOIS JOB NO. C-30-005-11			