

**DRAINAGE CALCULATIONS**

**AREAS**

TOTAL ACRES	12.66
BUILDINGS	3.19
PAVED	2.56
LANDSCAPE	5.85
<b>PRE DEVELOPMENT</b>	
C-9, Tc=33.9 min	1.58, 33 Cfs
C-12, Tc=66 x 5.33 x 2=13.50 CFS	
<b>TOTAL PRE DEV. RAIN DR=13.33 CFS</b>	

**POST DEVELOPMENT**  
 RUNOFF Q LIMITED TO .90X13.33= 12.0 CFS  
 BLUES & PAVED SURFACES=4.01 ACRES  
 C FOR CONCRETE & ROOF= .90  
 Tc = 14.33 1=6.66 n/m<sup>2</sup>  
 Q= 4.01 x .9 x 6.66 = 24.0 CFS  
 C= .80 n/m<sup>2</sup> 5.85 ACRES Tc=36 min 1=5.59 n/m<sup>2</sup>  
 Q= 5.85 x .2 x 5.55 = 6.49 CFS  
**TOTAL Q=30.49 CFS**

RETENTION REQ. FOR 1-HR RAIN  
 30.49-12.0 = 18.49 CFS

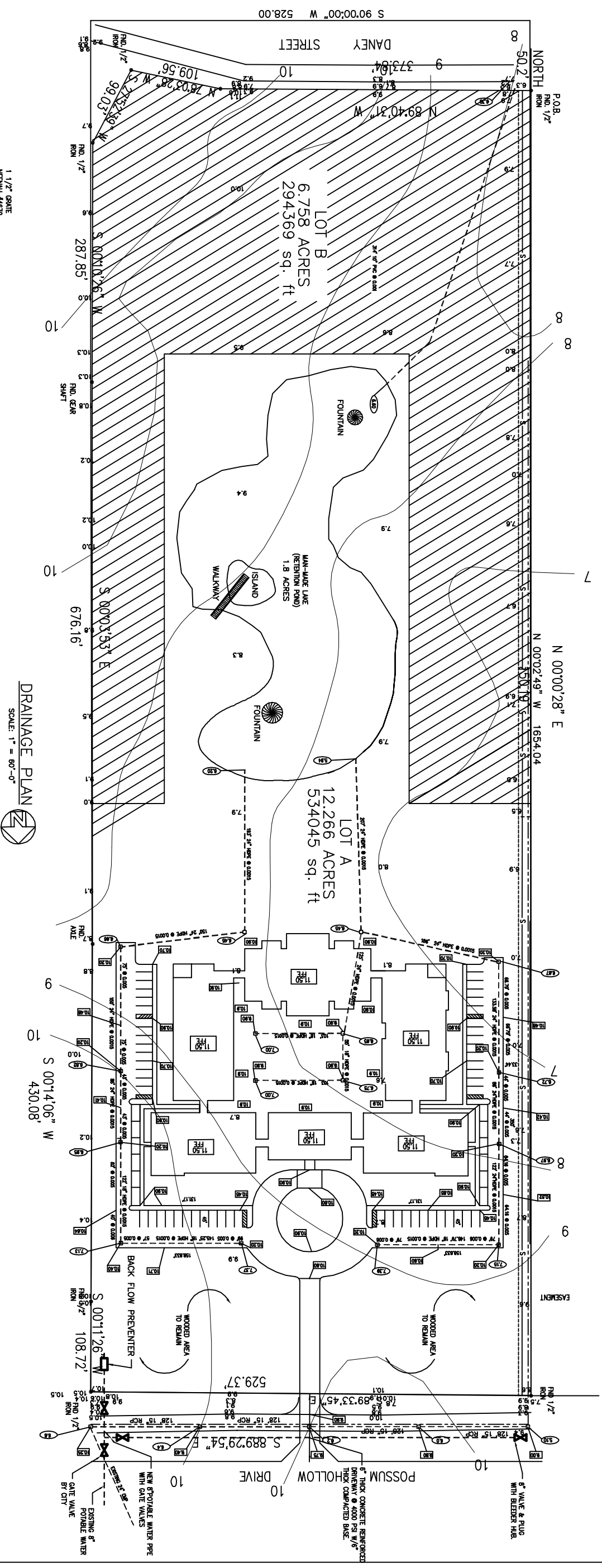
USE HOLDING POND FOR RETENTION  
 DEPTH OF WATER W/ 1 HR RAIN  
 18.49 FT<sup>3</sup>/SEC X 3600 SEC/HR X 1hr = 70662 ft<sup>3</sup>  
 POND= 2.50 ACRES = 108900 SQ FT.  
 WITH 108900 SF AREA, DEPTH = 70662 / 108900  
 = 6.48 FT DEEP = 9.74 IN

POUD WILL SUPPORT 1 HR RAIN (7.44")

**SIZE DISCHARGE FOR 12 CFS**

$Q = CA \sqrt{R} \sqrt{S}$   
 $A = Q / (C \sqrt{R} \sqrt{S})$   
 $A = 12 / (.785 \sqrt{.0005}) = 9.4'$

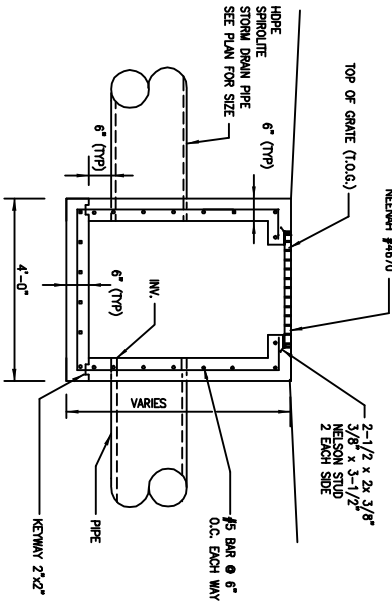
USE 10" DUCTILE



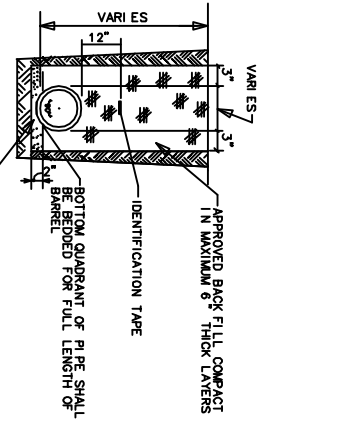
**DRAINAGE PLAN**  
 SCALE: 1" = 80'-0"

**NOTES:**  
 ALL CONSTRUCTION SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.

**LEGEND**  
 INVERT  
 TOP OF GRATE  
 DROP INLET



**TYPICAL DROP INLET**  
 N.T.S.



**TYPICAL PIPE TRENCH DETAIL**  
 N.T.S.

REVISED ON 11/09/01  
 REVISED ON 02/18/02

<p>“CAMELLIA GARDENS”</p> <p><b>DAMMON ENGINEERING, INC.</b></p> <p>ARCHITECTS - ENGINEERS</p> <p>819 ROBERT ROAD              SLIDELL LA. 70458</p>	<p>MARK DEVELOPMENT, LLC.</p> <p>CAMELLIA GARDENS              POSSUM HOLLOW ROAD              SLIDELL, LA</p>	<p>SCALE: AS NOTED</p> <p>FILE: --</p> <p>JOB No.: --</p> <p>DATE: 07/28/00</p> <p>SHEET</p> <p style="font-size: 2em; font-weight: bold;">C-2</p> <p>OF --</p>
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