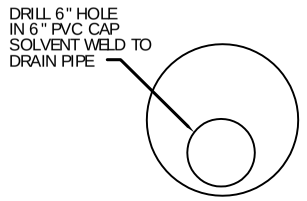
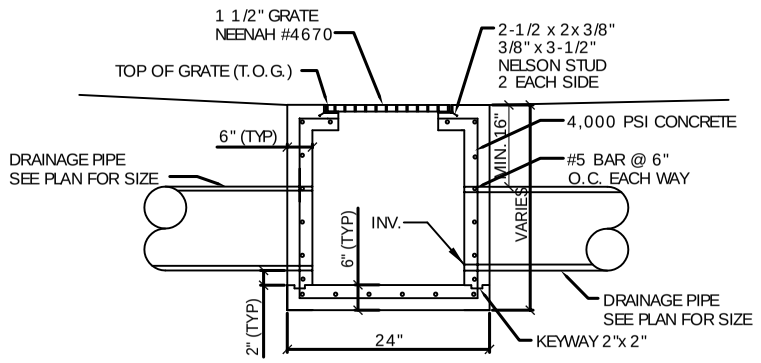
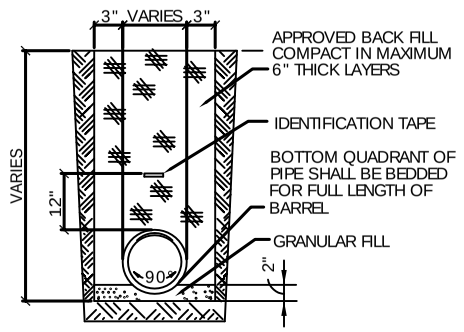


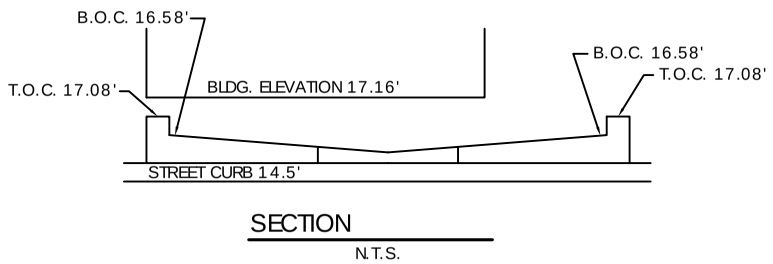
ORIFICE DETAIL
N.T.S.



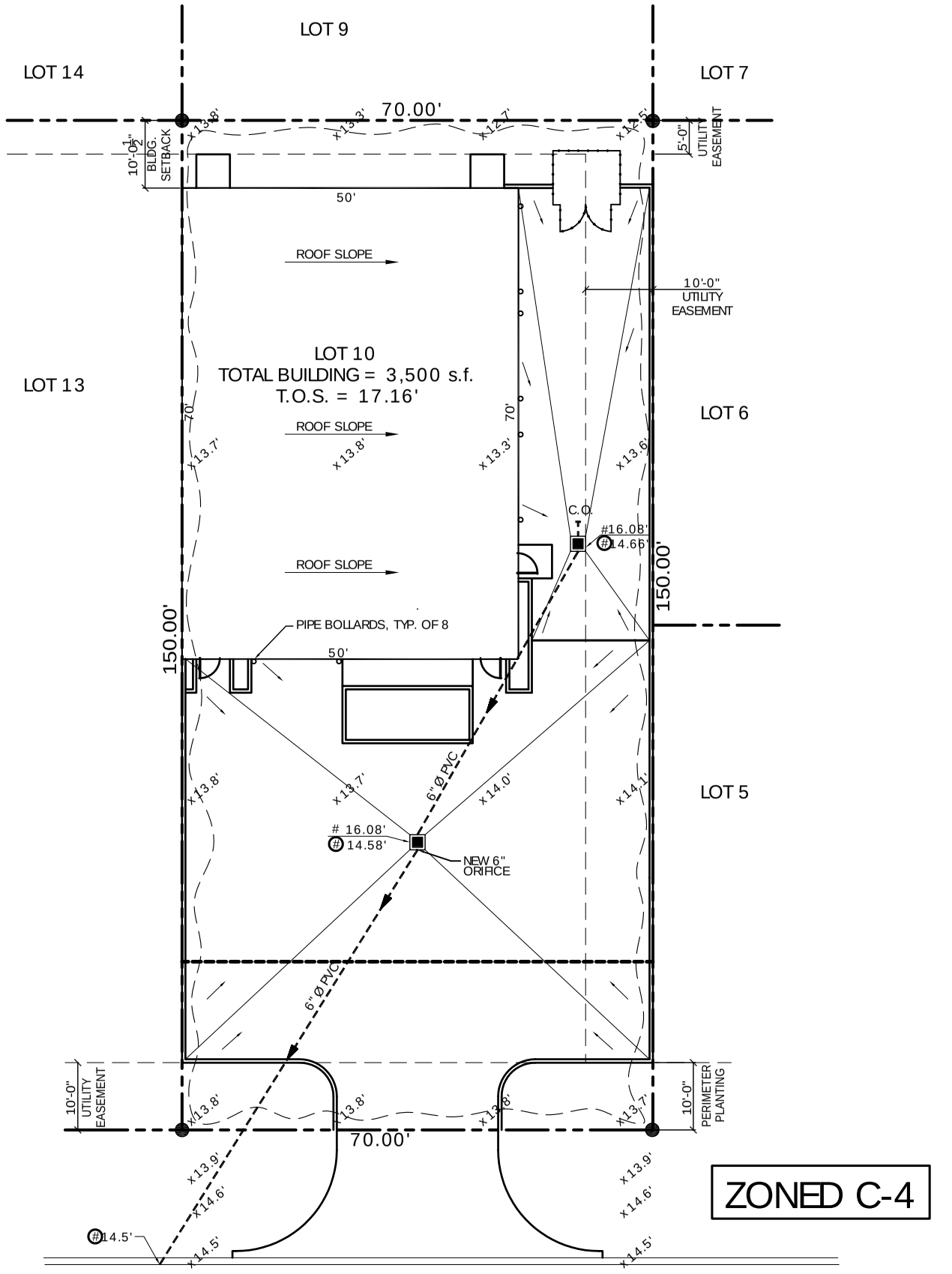
TYPICAL DROP INLET
N.T.S.



DRAIN PIPE BEDDING
N.T.S.



SECTION
N.T.S.



TAOS STREET

DRAINAGE PLAN
SCALE: 1"= 10'-0"

ZONED C-4

LEGEND:

- PROPERTY LINE
- SERVITUDE / EASEMENT
- BUILDING SETBACK
- NEW BUILDING
- NEW DRAIN LINE
- NEW DROP INLET wITEMP. SILT FENCING
- CONTROL JOINT
- SLOPE LINES
- # - T.O. GRATE ELEVATION
- (#) - INVERT ELEVATION
- 00.00 - NEW ELEVATIONS
- x00.00' - EXISTING ELEVATIONS
- TEMPORARY SILT FENCING
- NEW 6" CURB, SEE DETAIL THIS SHEET

PROJECT: 1789 | **ROSS GUASTELLA**

DRAINAGE RUN OFF CALCULATIONS -- RATIONAL METHOD

PRIOR DEVELOPMENT
10 Year Frequency

Q_1 = CIA

Watertight Surfaces			0	sqft =	0.000 Acres
	c(1) =	0.9			
Gravel Surface			0	sqft =	0.000 Acres
	c(2) =	0.21			
Green Space			10,500	sqft =	0.241 Acres
	c(3) =	0.35			
Summary			10500	sqft =	0.241 Acres
	c =	0.35			

Duration (D) = Time of concentration (TC)
TC = .7039(L^.3917)(c^-1.1309)(S^-.1985)
where
L = 150 Runoff length ft Elev diff = 1
c = 0.35 Runoff coef
S = 0.6667 Percent Slope
therefore TC = D = 17.81 minutes or
and from Rainfall Intensity Table I = 4.50 in/hr

Q_1 = 0.380 cfs **RUNOFF LIMIT 90%** **0.342 cfs**

POST DEVELOPMENT
10 Year Frequency

Q_2 = CIA

Watertight Surfaces			9352	sqft =	0.215 Acres
	c(1) =	0.9			
Gravel Surface			0	sqft =	0.000 Acres
	c(2) =	0.21			
Green Space			1148	sqft =	0.026
	c(3) =	0.35			
Summary			10500	sqft =	0.241 Acres
	c =	0.84			

D = Time of concentration (TC)
TC = .7039(L^.3917)(c^-1.1309)(S^-.1985)
where
L = 150 Runoff length ft Elev diff = 0.5
c = 0.84 Runoff coef
S = 0.3333 Percent Slope
therefore TC = D = 7.59 minutes or
and from Rainfall Intensity Table I = 7.60 in/hr

Q_2 = 1.539 cfs

RESULTS

DETENTION REQUIRED	Q_2-Q_1	1.197	cfs
ONE HOUR DETENTION		4308.9	cuft
DETENTION DIMENSIONS	WIDTH		70 feet
	LENGTH		132 feet
	DEPTH		**0.47 feet**

DISCHARGE END AREA CALCULATIONS

Q = cA(2gH)^1/2 where Q is allowable run off

Allowable run off	Q =	0.342	cfs
Friction loss factor	c =	0.98	coefficient
Acceleration	g =	32.2	ft/ft/sec
Height above invert	If H =	1.50	feet
End area	A =	0.04	sqft

REQUIRED CONDUIT = 2.55 inch diameter

USE 6" Orifice

NOTES:

1) DRAIN PIPE & FITTINGS WITHIN PROPERTY LINE SHALL BE POLYVINYL CHLORIDE PLASTIC PIPE, MEETING CLASS 100 C-900 PVC.
2) ELEVATIONS SHOWN ARE M.S.L.
3) FIELD VERIFY ALL ELEVATIONS AND DRAINAGE SYSTEM PLACEMENT PRIOR TO START OF WORK.
4) MUCK OUT 24" DEEP FOR FOUNDATION PAD MINIMUM, OR TO UNDISTURBED SOIL CAPABLE OF 1500 PSF BEARING.
5) DOWN SPOUTS SHALL FLOW INTO SUB-SUFRACE DRAINAGE.
6) THERE IS NO EVIDENCE OF EXISTING OFF-SITE FLOW CROSSING THE PROPERTY. NEW DRAINAGE CALCULATIONS ARE DETERMINED ACCORDINGLY.
7) NEW DRAINAGE SWALES SHALL BE CONSTRUCTED PER FIELD REQ. N/A

GUTTERS AND DOWN SPOUTS TO BE SEAMLESS ALUMINUM 24 GAUGE, COLOR TO BE SELECTED BY OWNER. GUTTERS TO BE "OGEE" IN CROSS SECTION, MINIMUM 6" WIDTH.

F.M. REV. DATE: 8-26-08

DAMMON
ENGINEERING, INC.
CHIEF ENGINEER
EMMETT
DAMMON, P.E.
CHIEF ARCHITECT
ROBERT
WILTSE
1095 FLORIDA AVENUE
SLIDELL, LA 70458
OFFICE: 985-649-5832
FAX: 985-641-5950
WEBSITE:
WWW.DAMMONENGINEERING.COM
EMAIL:
DAMMONENG@BELLSOUTH.NET
ARCHITECTURE
ENGINEERING
STUDIES
PLANNING
INVESTIGATION
EXPERT WITNESS

NEW OFFICE/ WAREHOUSE

GUASTELLA CONSTRUCTION
LOT #10 TAOS STREET
SLIDELL, LA 70458

DRAINAGE PLAN

REV:

SCALE: AS NOTED
JOB#: 1572
DATE: 6-20-08
SHEET 5

C-4

OF 17