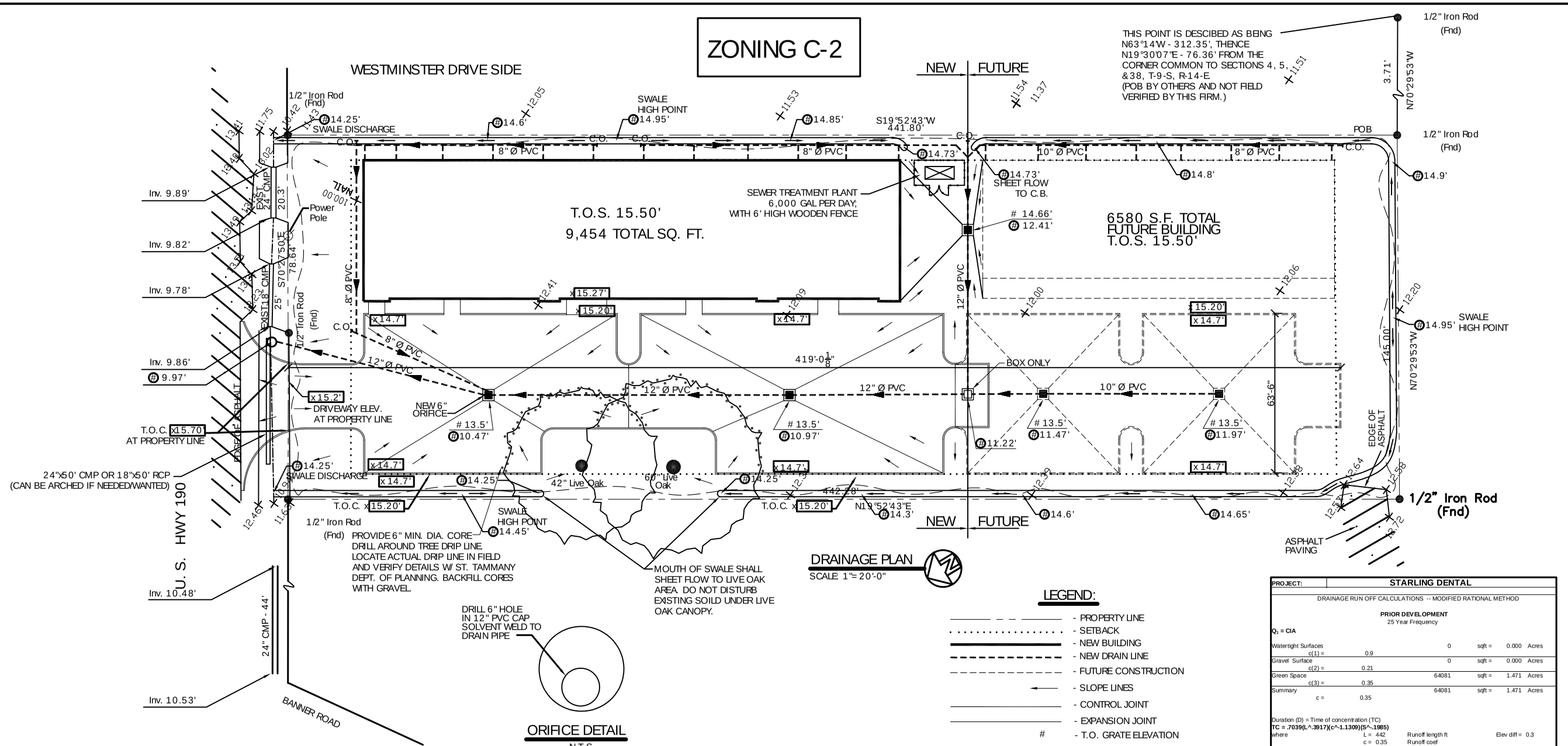
ZONING C-2

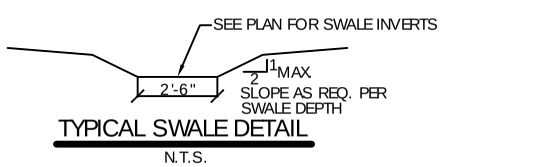


DRAINAGE PLAN

SCALE: 1"= 20'-0"

LEGEND:

- PROPERTY LINE
- SETBACK
- NEW BUILDING
- NEW DRAIN LINE
- FUTURE CONSTRUCTION
- SLOPE LINES
- CONTROL JOINT
- EXPANSION JOINT
- # - T.O. GRATE ELEVATION
- Ø - INVERT ELEVATION
- 00.00' - NEW ELEVATIONS
- X 00.00' - EXISTING ELEVATIONS
- TEMPORARY SILT FENCING
- NEW 6" CURB, SEE DETAIL THIS SHEET
- NEW DROP INLET w/TEMP. SILT FENCING



TYPICAL SWALE DETAIL

N.T.S.

NOTES:

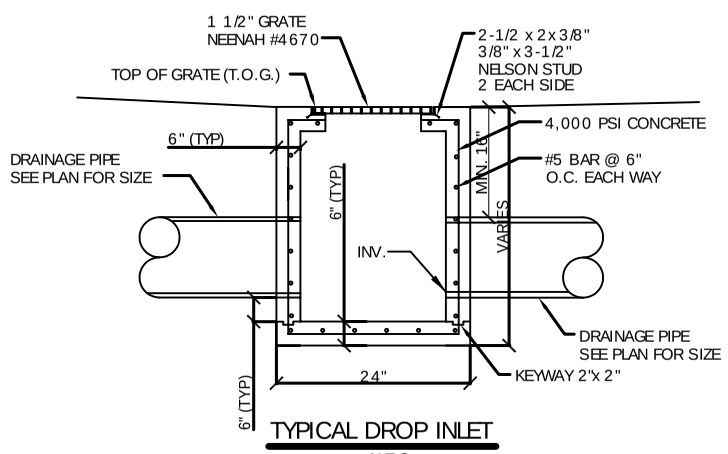
1) DRAIN PIPE & FITTINGS WITHIN PROPERTY LINE SHALL BE POLYVINYL CHLORIDE PLASTIC PIPE, MEETING CLASS 100 C-900 PVC.
2) ELEVATIONS SHOWN ARE M.S.L.
3) FIELD VERIFY ALL ELEVATIONS AND DRAINAGE SYSTEM PLACEMENT PRIOR TO START OF WORK.
4) MUCK OUT 24" DEEP FOR FOUNDATION PAD MINIMUM, OR TO UNDISTURBED SOIL CAPABLE OF 1500 PSF BEARING.
5) DOWN SPOUTS SHALL FLOW INTO SUB-SURFACE 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.

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.

ORIFICE DETAIL

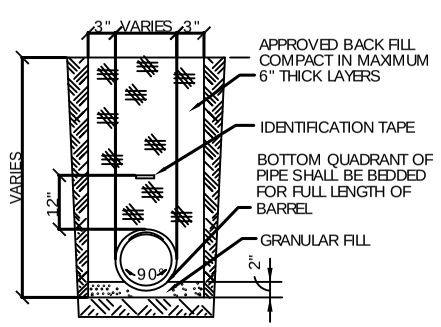
N.T.S.

NOTE:
FEATHER IN CONCRETE ELEVATIONS AT DOORWAYS TO TYPICAL ELEVATIONS, ALONG WALL AT THE BASE OF BRICK LEDGE. ALSO SEE SHEET A-1.



TYPICAL DROP INLET

N.T.S.



DRAIN PIPE BEDDING

N.T.S.

PROJECT: STARLING DENTAL

DRAINAGE RUN OFF CALCULATIONS -- MODIFIED RATIONAL METHOD

PRIOR DEVELOPMENT
25 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		64081	sqft =	1.471	Acres
c(3) =	0.35				
Summary		64081	sqft =	1.471	Acres
c =	0.35				

Duration (D) = Time of concentration (TC)
TC = .7039(L^.3917)(c^-1.1309)(S^-.1985)

where	L = 442	Runoff length ft	Elev diff =	0.3
	c = 0.35	Runoff coef		
	S = 0.0679	Percent Slope		
therefore	TC = D = 42.81	minutes or		
and from Rainfall Intensity Table	I = 4.40	in/hr		

Q_1 = 2.267 cfs 10% Reduction **2.040 cfs**

POST DEVELOPMENT
25 Year Frequency

$Q_2 = CIA$

Watertight Surfaces		38474	sqft =	0.883	Acres
c(1) =	0.9				
Gravel Surface		0	sqft =	0.000	Acres
c(2) =	0.21				
Green Space		25607	sqft =	0.588	
c(3) =	0.35				
Summary		64081	sqft =	1.471	Acres
c =	0.68				

D = Time of concentration (TC)
TC = .7039(L^.3917)(c^-1.1309)(S^-.1985)

where	L = 394	Runoff length ft	Elev diff =	0.1
	c = 0.68	Runoff coef		
	S = 0.0254	Percent Slope		
therefore	TC = D = 23.46	minutes or		
and from Rainfall Intensity Table	I = 5.88	in/hr		

Q_2 = 5.886 cfs

RESULTS

DETENTION REQUIRED	Q_2-Q_1	3.845	cfs
ONE HOUR DETENTION		13843.7	cu/ft
DETENTION DIMENSIONS	WIDTH	64	feet
	LENGTH	394	feet
	REQUIRED DEPTH	**0.55**	**feet**

DISCHARGE END AREA CALCULATIONS

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

Allowable run off	Q =	2.040	cfs
Friction loss factor	c =	0.98	coefficient
Acceleration	g =	32.2	ft/ft/sec
Height above invert	if H =	3.00	feet
End area	A =	0.15	sqft

REQUIRED CONDUIT = 5.24 inch diameter

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NEW OFFICE BUILDING

KEN STARLING
HWY 190
SLIDELL, LA

DRAINAGE PLAN

REV: 4–25–08

SCALE: AS NOTED

JOB#: 1901

DATE: 1–25–08

SHEET

C-4

OF