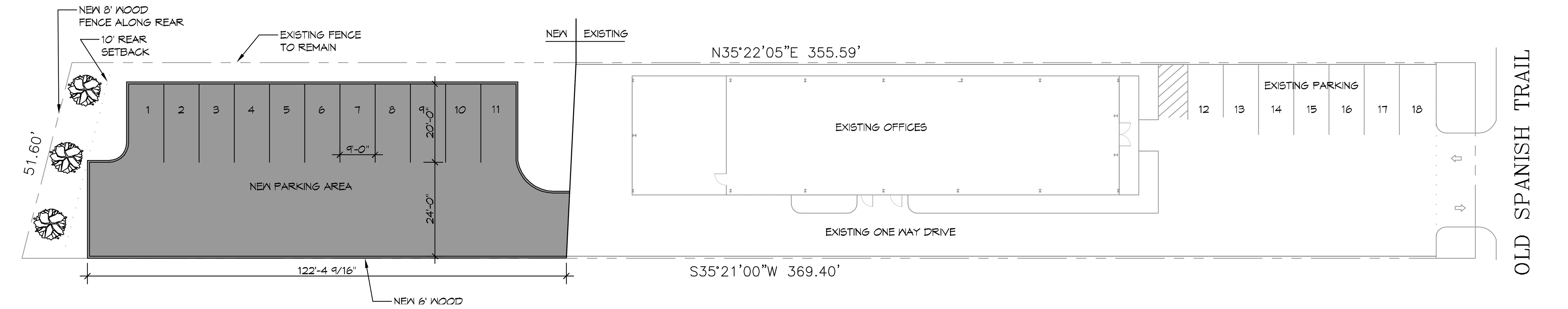
PARKING REQUIREMENTS

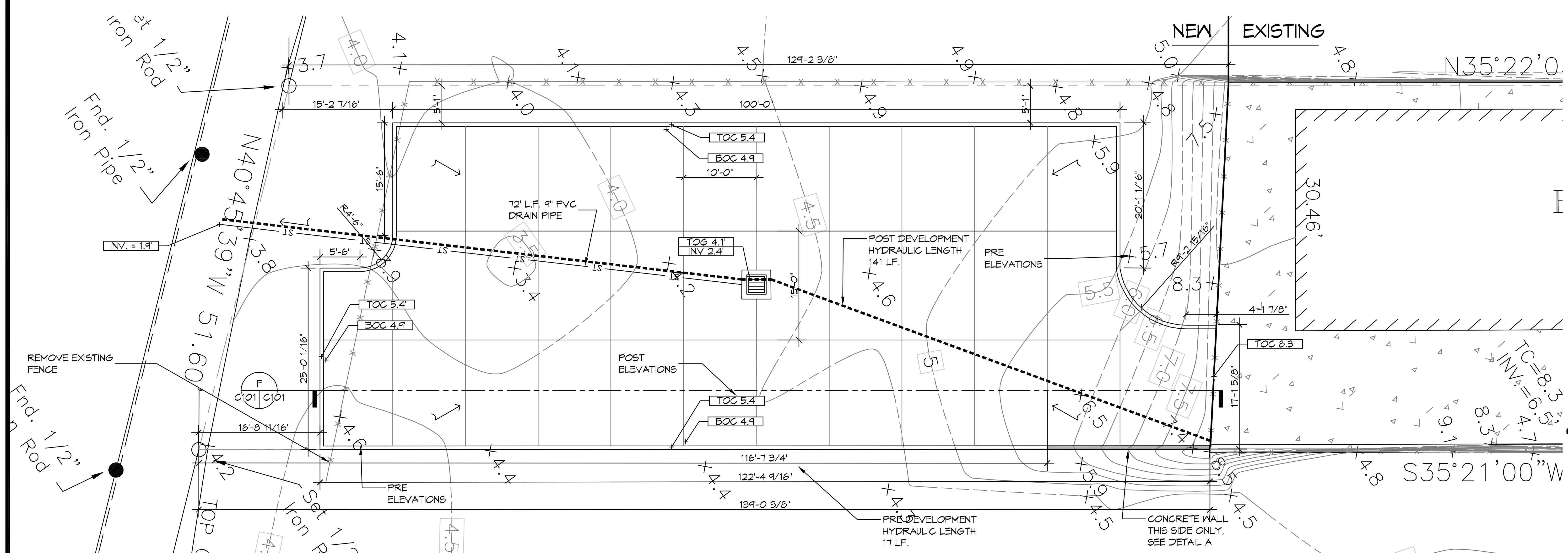
BUSINESS AND PROFESSIONAL OFFICES
OFFICE SPACES = 6 SPACES
TRAINING CENTER & MEETING ROOM = 11 SPACES
WAREHOUSE = 1 SPACE
18 PARKING SPACES REQUIRED AND PROVIDED

LEGEND

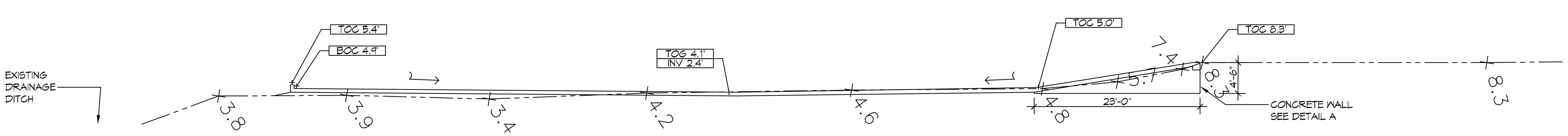
- CREPE MYRTLE OR EQUAL
ALL CLASS "A" TREES, AT THE TIME OF PLANTING, SHALL HAVE A MINIMUM CALIPER OF AT LEAST ONE INCH (1") INCHES, MEASURED SIX (6") INCHES ABOVE THE ROOT BALL, AND A MINIMUM HEIGHT OF SIX FEET INSTALLED AND A MATURE HEIGHT OF TWENTY FEET AS PER THE CITY OF SLIDELL ZONING ORDNANCE.



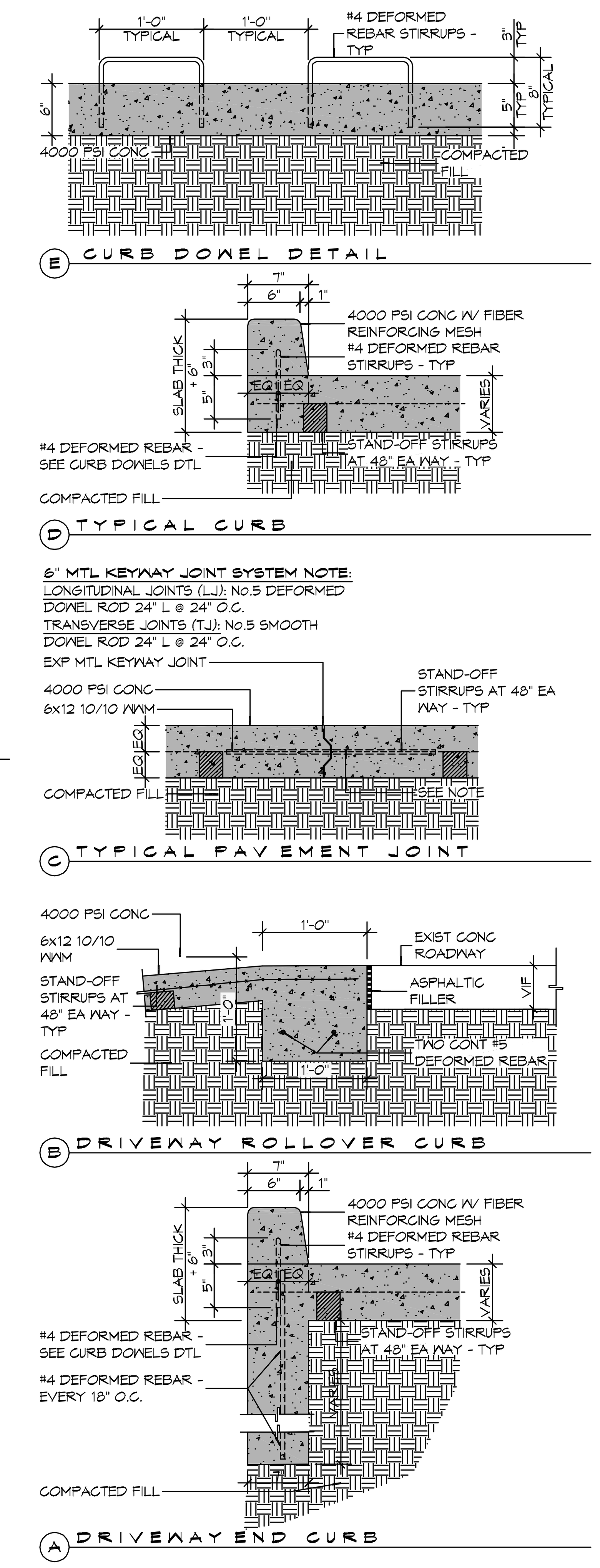
1 PARKING SITE PLAN
SCALE: 1" = 20'-0"



2 DRAINAGE & PAVING PLAN
SCALE: 1" = 10'-0"



F SECTION
SCALE: 1"= 10'-0"



4 PAVING DETAILS
SCALE: 1" = 1'-0"

GENERAL PAVING NOTES

1. ALL NEW CONCRETE SHALL SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS AND A MINIMUM THICKNESS OF 6". CONCRETE MIX SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF ASTM C-150 TYPE 1.
2. CONCRETE PAVING THICKNESS SHALL VARY AS FOLLOWS:
   a. APRONS & LOADING AREAS = 8" THICKNESS (INDICATED WITH CROSS HATCH WHERE OCCURS)
   b. DRIVE LANES & PARKING AREAS = 6" THICKNESS (STANDARD UNO)
3. ALL REINFORCING STEEL SHALL MEET ASTM-A615 (GRADE 60).
4. ALL REINFORCING STEEL SHALL BE SECURELY SUPPORTED TO PREVENT BOTH VERTICAL AND HORIZONTAL MOVEMENT DURING CONCRETE PLACEMENT. ALL CONTROL AND EXPANSION JOINTS SHALL BE LOCATED AND INSTALLED AS SHOWN ON THE PAVING PLAN AND IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
5. ALL SUB GRADE FILL SHALL BE SELECT GRANULAR MATERIAL COMPACTED TO 95% STANDARD PROCTOR DENSITY IN A MAXIMUM OF 6" LIFTS.
6. ANY WORK WITHIN THE ROADWAY OR ADJACENT TO THE ROADWAY CAUSING AN INTERFERENCE TO VEHICULAR TRAFFIC MUST CONFORM TO THE REQUIREMENTS SET FORTH BY THE UNIFORM MANUAL OF TRAFFIC CONTROL DEVICES OF THE STATE OF LOUISIANA. THE CONTRACTOR MUST FURNISH ALL NECESSARY TRAFFIC SIGNS AND/OR BARRICADES AND MAINTAIN THEM DURING CONSTRUCTION ACTIVITY.

PAVING LEGEND

TOC XXX.X' — TOP OF CONCRETE ELEVATION
TOG XXX.X' — TOP OF GRATE ELEVATION
INV XXX.XX' — INVERT OF PIPE ELEVATION
LJ — LONGITUDINAL JOINTS (LJ) = NO. 5 DEFORMED DOWEL RODS 24" LONG @ 24" O. C.
TJ — TRANSVERSE JOINTS (TJ) = NO. 5 SMOOTH DOWEL RODS 24" LONG @ 24" O. C.
NEW CATCH BASIN
*000.00 EXISTING TOPO

PROJECT:	Old Spanish Trail				
STORMWATER RUN-OFF CALCULATIONS					
Formulas used:					
[1] RATIONAL METHOD: Q=Aci					
where:	Q= Peak discharge of watershed in cubic feet per second (cfs) due to maximum storm assumed.				
	A= Area of watershed in acres.				
	c= Coefficient of run-off [2].				
	i= Intensity of rainfall in inches per hour based on concentration time. [3]				
[4] TC= $\frac{\left(L^{0.8}\left(\frac{1000}{c}-9\right)^{0.7}\right)}{(1140(s^{0.5}))}$					
where:	TC= Time of concentration= time required for rain falling at most remote point to reach discharge point.				
	c= Site run-off coefficient based on conditions shown.				
	s= Percent slope of overland flow.				
PRIOR DEVELOPMENT					
25 Year Frequency					
Q_1 = Aci					
Watertight Surfaces		10,613	sqft =	0.244	Acres
c(1) =	0.9				
Gravel Surface			sqft =	0.000	Acres
c(2) =	0.25				
Green Space		7,525	sqft =	0.173	Acres
c(3) =	0.15				
Summary		18,138	sqft =	0.416	Acres
c =	0.59				
Duration (D) = Time of concentration (TC)					
where	L = 117	run-off length ft		Elev diff =	1
	c = 0.59	run-off coef			
	S = 0.8547	percent slope			
therefore	TC = D = 6.65	minutes			
Expected rainfall intensity	i = 8.53	in/hr			
Q_1 =	2.091 cfs		10% reduction	1.882	cfs
POST DEVELOPMENT					
25 Year Frequency					
Q_2 = Aci					
Watertight Surfaces		15,456	sqft =	0.355	Acres
c(1) =	0.9				
Gravel Surface		0	sqft =	0.000	Acres
c(2) =	0.25				
Green Space		2,682	sqft =	0.062	Acres
c(3) =	0.15				
Summary		18,138	sqft =	0.416	Acres
c =	0.79				
Duration (D) = Time of concentration (TC)					
where	L = 141	run-off length ft		Elev diff =	2
	c = 0.79	run-off coef			
	S = 1.4184	percent slope			
therefore	TC = D = 8.09	minutes			
Expected rainfall intensity	i = 8.29	in/hr			
Q_2 =	2.724 cfs				
DETENTION REQUIREMENTS					
Detention required	Q_2-Q_1	0.84 cfs			
ONE HOUR DETENTION		3029.8 cuft			
DETENTION DIMENSIONS		WIDTH	44 feet		
		LENGTH	122 feet		
		DEPTH	0.56 feet		
DISCHARGE END AREA REQUIREMENTS					
25 Year Frequency					
[5] A= $\frac{Q}{(c\sqrt{(2gh)})}$					
where:	A= Discharge Area required				
	g= Acceleration of gravity				
	c= Discharge coefficient				
	h= Hydraulic head				
	Q= Flow volume from run-off				
Pipe Servicing Site Drainage					
Q =	1.882	cfs	h =	0.50	feet
c =	0.62	coefficient	A =	0.535	sqft
g =	32.16	ft/sec/sec			
REQUIRED CONDUIT =		9.91	inch inside diameter		

References:
1. Chen, W.F. The Civil Engineering Handbook. 1995. Eq.# 31.1, pg. 1036
2. Seelye, Elwyn E. Data Book for Civil Engineers. Vol.1 1960. Tbl. B, pg. 18-02
3. Seelye, Elwyn E. Data Book for Civil Engineers. Vol.1 1960. Fig.B, pg. 18-01
4. Chen, W.F. The Civil Engineering Handbook. 1995. Tbl. 31.2 Regan Equation (n=0.013)
5. Chen, W.F. The Civil Engineering Handbook. 1995. Eq.# 28.32, pg. 969

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REVISIONS

#	DESCRIPTION	DATE

SEAL:

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RAY MASKER
McDONALD'S OFFICE
683 OLD SPANISH TRAIL
SLIDELL, LA. 70458

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DATE: 07-21-2020
DRAWN BY: CKD
CHECKED BY: CKD

SHEET TITLE:
SITE PLAN

DRAWING NUMBER:
C101

SHEET No: 3 of 1

FILE NAME: J:\-- Offices\Ray Masker Mc Donalds Old Spanish Trail\Current Drawings\C101 -- Site Drainage Plan.dwg PLOT DATE & TIME: Monday, July 27, 2020 2:37:51 PM