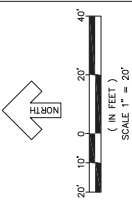


PARKING SUMMARY:
BUILDING USE: MEDICAL OFFICE/CLINIC
SQUARE FOOTAGE: 12,500
PARKING REQUIRED:
Minimum (1,400 gsf) - 32
Maximum (1,100 gsf) - 125
PARKING PROVIDED:
84 Total
80 - Standard
4 - ADA



LEGEND

- NEW BUILDING
- NEW CONCRETE SIDEWALK/FLATWORK, SEE DETAIL 5/C511
- NEW CONCRETE PAVEMENT, SEE DETAIL 2/C510
- NEW LIGHT DUTY ASPHALT PAVEMENT, SEE DETAIL 1/C510
- NEW HEAVY DUTY ASPHALT PAVEMENT, SEE DETAIL 1/C510
- NEW ASPHALT PAVEMENT PATCH FOR UTILITY WORK, SEE DETAIL 1/C523
- NEW SIDEWALK DRAIN, SEE SHEET C512

KEYNOTES

- 1 NEW CONCRETE CURB, SEE DETAIL 4/C510
- 2 NEW CONCRETE FLUSH CURB, SEE DETAIL 5/C510
- 3 NEW CONCRETE SAWTOOTH CURB, SEE DETAIL 9/C510
- 4 NEW ADA/TAS RAMP, SEE ENLARGEMENTS
- 5 NEW CONCRETE SIDEWALK/FLATWORK, SEE DETAIL 5/C511
- 6 NEW CONCRETE PAVEMENT, SEE DETAIL 2/C510
- 7 NEW LIGHT DUTY ASPHALT PAVEMENT, SEE DETAIL 1/C510
- 8 NEW HEAVY DUTY ASPHALT PAVEMENT, SEE DETAIL 1/C510
- 9 NEW PARKING STRIPE, SEE DETAIL 3/C512
- 10 NEW ADA PARKING, SEE DETAIL 1/C513
- 11 NEW SIDEWALK DRAIN, SEE DETAIL 4/C512
- 12 NEW SIDEWALK DRAIN, SEE DETAIL 1/C515
- 13 NOT USED
- 14 NEW DUMPSTER PAD W/ ENCLOSURE, REF. ARCHITECTURAL & STRUCTURAL
- 15 NEW UTILITY FLATWORK, SEE SHEET C523
- 16 NEW UTILITY FLATWORK, SEE SHEET C523
- 17 NEW SEWER CLEANOUT, SEE SHEET C521
- 18 NEW WATER METER BOX, SEE SHEET C520
- 19 NEW WATER SHUT-OFF VALVE, SEE SHEET C520
- 20 NEW ASPHALT PAVEMENT PATCH FOR UTILITY WORK, SEE DETAIL 1/C523
- 21 NEW STOP SIGN, SEE DETAIL 2/C514
- 22 NEW CONCRETE DRIVEWAY, SEE DETAIL 1/C514
- 23 NEW CONCRETE TRANSFORMER PAD, REF. ELECTRICAL
- 24 NEW CONCRETE TAP BOX PAD, REF. ELECTRICAL
- 25 NEW ROCK RIP RAP APRON, SEE DETAIL 3/C523
- 26 NEW CONCRETE STORM DRAIN HEADWALL, SEE DETAIL 2/C512
- 27 NEW SIDEWALK DRAIN DISCHARGE APRON, SEE DETAIL 5/C512
- 28 NEW SIDEWALK DRAIN INLET APRON
- 29 NEW SIDEWALK DRAIN DISCHARGE APRON
- 30 NEW FIRE LANE SIGN, SEE SHEET C140
- 31 NEW EXTENDED SIDEWALK DRAIN CONCRETE FLUME
- 32 NEW BIKE RACK, REF. ARCHITECTURAL
- 33 NEW DECORATIVE BOLLARD, REF. ARCHITECTURAL
- 34 NEW STORM DRAIN CLEANOUT
- 35 NEW STORM DRAIN BOX

INTELLIGENT ENGINEERING
10000 N. MICHIGAN AVE. SUITE 100
DALLAS, TEXAS 75243
TEL: 214.635.1000
WWW.INTELLIGENTENGINEERING.COM

C130
SHEET NO.
11/11/2016
TOTAL SHEET 10 OF 10

GMP #1 - SITE / CIVIL
SHEET TITLE
SHEET NO.

ROBERT L. M. HILLIARD CLINIC
601 RUNNELS AVENUE
SAN ANTONIO, TEXAS 78208

KAT TEXAS
304 N. New Braunfels
San Antonio, Texas 78202
F: 210.202.2195
www.katdex.com





HYDRAULIC LENGTH & T_c CALCULATIONS

- SEGMENT 1: OVERLAND FLOW
65-LF AT 0.65% GRASS
 $T_c=10.7$ MIN
- SEGMENT 2: OVERLAND FLOW
83-LF AT 0.85% PAVED
 $T_c=5.0$ MIN
- SEGMENT 3: SHALLOW CONCENTRATED FLOW
354-LF AT 0.5% PAVED
 $T_c=4.2$ MIN
- SEGMENT 4: CHANNEL FLOW
263-LF AT 6 FT/SEC; GRASS
 $T_c=0.7$ MIN
- SEGMENT 5: CHANNEL FLOW
49-LF AT 6 FT/SEC; PAVED
 $T_c=0.1$ MIN
- SEGMENT 6: CHANNEL FLOW
595-LF AT 6 FT/SEC; GRASS
 $T_c=1.7$ MIN
- SEGMENT 7: CHANNEL FLOW
241-LF AT 6 FT/SEC; GRASS
 $T_c=0.7$ MIN
- SEGMENT 8: CHANNEL FLOW
1115-LF AT 6 FT/SEC; GRASS
 $T_c=3.1$ MIN
- COMBINED TOTAL $T_c=26.2$ MIN

ULTIMATE DEVELOPED CONDITIONS

NOTE: BASED ON ZONING ONLY

INCREASED IMPERVIOUS COVER

1.25-AC

2000-ft DOWNSTREAM										
DA	AREA (AC)	Perv (AC)	Imperv (AC)	C	T_c (MIN)	I_s	I_{25}	I_{100}	Q_{25}	Q_{100}
Existing	56.05	37.10	18.95	0.55	26	4.098	5.390	6.756	167.02	209.35
Proposed	56.05	35.85	20.20	0.57	26	4.098	5.390	6.756	171.07	214.42
Ultimate	56.05	15.14	40.91	0.79	26	4.098	5.390	6.756	238.04	298.37

INTELLIGENT
ENGINEERING
SERVICES

ENGINEERING COMMUNITIES FROM THE GROUND UP
1901 BELMONT PLACE, SUITE 200
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210.349.9988
es@icf.com
TDCI PERM F-42

PROJECT

Robert L.M. Hilliard Clinic

CLIENT

KAI Texas

REV.

DATE

12.20.2016

SHEET