CAUTION !!!
UNDERGROUND UTILITIES

EXISTING UTILITIES AND UNDERGROUND FACILITIES INDICATED ON THESE PLANS HAVE BEEN LOCATED FROM REFERENCE INFORMATION SUPPLIED BY VARIOUS OWNERS OF THE FACILITIES. THE ENGINEER DOES NOT ACCEPT THE RESPONSIBILITY FOR THE UTILITY LOCATIONS SHOWN, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY BOTH HORIZONTALLY AND VERTICALLY THE LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION, TO TAKE NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL FACILITIES ENCOUNTERED, AND TO NOTIFY THE ENGINEER PROMPTLY OF ALL CONFLICTS OF THE WORK WITH EXISTING FACILITIES. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGE BY THE CONTRACTOR TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE. CONTACT ALL POSSIBLE UTILITY AND UNDERGROUND FACILITY OWNERS.

NOTES:
1. ALL CONSTRUCTION WITHIN LAKE RAY HUBBARD PROJECT PROPERTY LIMITS SHALL CONFORM TO ALL CITY OF DALLAS STANDARDS AND SPECIFICATIONS.
2. NOTIFY DWU CONSTRUCTION INSPECTION AT (214) 948-4562 48 HRS PRIOR TO CONSTRUCTION.

REFER TO CITY OF DALLAS STANDARD DETAILS FOR HEADWALLS, RIPRAP & REVEGETATION

• BENCH MARKS •
1. BOX CUT IN TOP OF CURB AT CURB LAYDOWN FOR HANDICAP RAMP AT NORTHEAST CORNER OF INTERSECTION NORTH LAKESHORE DRIVE & BAY HILL DRIVE. ELEV. 523.40
2. BOX CUT IN WEST END CURB INLET TOP AT NORTHEAST CORNER OF INTERSECTION OF BAY HILL DRIVE AND SUNSET HILL DRIVE. ELEV. 449.74

CURVE 454	
A	13°28'05"
D	28°38'52"
R	200.00
T	23.61
L	47.01
E	1.39

CURVE 452	
A	61°24'53"
D	76°23'40"
R	75.00
T	44.54
L	80.39
E	12.23

CURVE 450	
A	60°14'47"
D	45°50'12"
R	125.00
T	72.53
L	131.44
E	19.52

CURVE 453	
A	38°29'30"
D	38°11'50"
R	150.00
T	52.37
L	100.77
E	8.88

STA 0+30.00 LINE "A"
CONST. TYPE "B" HEADWALL

LAKE RAY HUBBARD
CITY OF DALLAS
JURISDICTION

STA 0+18.87 LAT. "A-2"
= 0.69'LT. ST. STA 1+08.41
= STA 0+00 LAT. A-3

STA 0+34.82 LAT. "A-3"
= 20.94'LT. ST. STA 0+80.08
INSIDE FACE INLET #4
TOP = 448.38
℄ = 444.38

STA 2+45.11 LINE "A"
= 8.5'LT. ST. STA 1+25.59
= STA 0+00 LAT. A-1
CONST. 4' SQ. S.D.M.H.

STA 4+30.11 LINE "A"
= 8.5'LT. ST. STA 3+10.59
= STA 0+00 LAT. "A-1"
CONST. 4' SQ. S.D.M.H.

STA 0+40.56 LAT. "A-1"
= 14.5'RT. ST. STA 3+44.00
INSIDE FACE INLET #2
TOP = 455.29
℄ = 451.29

STA 0+55.57 LAT. "A-2"
= 14.5'RT. ST. STA 0+75.00
INSIDE FACE INLET #3
TOP = 448.38
℄ = 444.38

STA 6+03.45 PC454 LINE "A"
= ℄ ALLEY STA 2+78.45

STA 6+50.46 PT454 LINE "A"
= 5.5'LT. ALLEY STA 2+31.87
INSIDE FACE INLET #1
℄ IN = 454.78
℄ = 450.75

245.11' S 14°59'52"E
S 15°33'57"E 173.34'
N 75°00'08"E 456.09'
S 14°59'52"E 185.00'
N 15°33'57"W 315.61'

BAY DRIVE
EMERALD
SUNSET HILL DRIVE
BLOCK "D"
BLOCK "R"

24" R.C.P. LINE "A"
36" R.C.P. LINE "A"
21" R.C.P. LINE "A-2"
18" R.C.P. LINE "A-3"

Q = 16.27 cfs
Q = 10.72 cfs
Q = 9.21 cfs

SCALE
0 40 80 120 160

STORM DRAIN SYSTEM "A"

STA 1+31.44 LINE "F"
INSIDE FACE INLET #13
PT450
TOP = 495.25

STA 1+37.93 LINE "F"
INSIDE FACE INLET #13
PC453

Q=8.04 cfs

DRAINAGE ES'MT.
18" RCP LINE "F"
15' DRAINAGE ES'MT.

STA 2+38.71 LINE "F"
=0.63'LT. ALLEY STA 4+40.65
PRC

STA 3+19.10 LINE "F"
= 5.5'LT. ALLEY STA 3+38.72
INSIDE FACE INLET #12
℄ IN = 498.42

Q = 5.59 cfs

INSTALL 6' TO 12' DIA. HARD LIMESTONE ROCK RUBBLE AT S.D. OUTLET AND AT EXIST. GULLY LOCATION. REFER TO GRADING PLAN FOR ADDITIONAL INFORMATION.

STA 0+00.00 LINE "F"
CONST. TYPE "B" HEADWALL
PC450

129°26'32"
S 39°08'38"E 98.60'
N 30°19'57"E 302.23'
N 27°00'00"E 425.88'

HILLCREST CIRCLE
BLOCK "P"
WOODHAVEN CIRCLE

STORM DRAIN LINE "F"

VERTICAL SCALE: 1"=6'

NOTE: ALL STORM DRAIN PIPE SHALL BE CLASS III UNLESS OTHERWISE NOTED.

STA 0+30.00 LINE "A"
TYPE "B" HEADWALL
℄= 439.25

STA 0+40.00 P.V.I.
℄ = 439.35

STA 0+60.00 P.V.I.
℄ = 440.71

20 L.F. 36" R.C.P. @ +6.78%

10 L.F. 36" R.C.P. @ +1.00%

183 L.F. 36" RCP @ +1.00%

181 L.F. 24" RCP @ +2.80%

218 L.F. 24" RCP @ +0.91%

2:1 SLOPE MAXIMUM

SEE HEADWALL DETAIL ON SHEET No.5

℄ = 438.25

℄ CREEK

Q100 HG = 444.96

HG = 446.28
kj = 0.50
hj = 0.05
HG = 446.23

RIM = 448.43

Q100 = 51.3 cfs
fs = 0.59%
V = 7.3 fps
V²/2g = 0.83'

STA 2+45.11 LINE "A"
℄ STA. STORM DRAIN MANHOLE
= STA 2+47.74
℄ 24" IN = 443.56
℄ 36" OUT = 442.56
℄ 24" LAT. = 443.76

HG = 452.08
kj = 0.50
hj = 1.34
HG = 450.74

RIM = 453.74

Q100 = 31.4 cfs
fs = 1.98%
V = 10.0 fps
V²/2g = 1.55'

STA 4+30.11 LINE "A"
℄ 48" SQ. STORM DRAIN MANHOLE
= STA 0+00 LAT. A-1
℄ 24" = 448.74
℄ 18" LAT. = 448.99

HG = 453.75
kj = 1.25
hj = 0.52
HG = 453.23

NATURAL GROUND

℄ IN = 454.78

PROPOSED GRADE

Q100 = 16.3 cfs
fs = 0.52%
V = 5.2 fps
V²/2g = 0.42'

STA 6+50.46 LINE "A"
INSIDE FACE COMBINATION INLET
℄= 450.75

6" TO 12" DIA. HARD LIMESTONE ROCK RUBBLE GULLY REPAIR @ MAX. 2:1 SLOPE

INSTALL 6'x6' AREA MIN. 12" DIAMETER HARD LIMESTONE ROCK RUBBLE AT OUTLET TO DISSIPATE OUTLET VELOCITY.

CONTRACTOR SHALL CONFIRM OUTLET HEADWALL LOCATION WITH ENGINEER IN FIELD PRIOR TO CONSTRUCTION

HG = 492.34
kj = 0.50
hj = 0.84
HG = 491.50

NATURAL GROUND

TOP = 495.25

181 L.F. 18" RCP @+2.16%

131 L.F. 18" RCP @ +14.96%

Q100 = 13.6 cfs
fs = 1.68%
V = 7.7 fps
V²/2g = 0.92'

Q100 = 5.6 cfs
fs = 0.28%
V = 3.2 fps
V²/2g = 0.16'

HG = 495.61
kj = 1.25
hj = 0.19
HG = 495.42

℄ IN = 496.1

STA 0+00.00 LINE "F"
TYPE "B" HEADWALL
℄= 471.00

STA 1+31.44 LINE "F"
INSIDE FACE CB. INLET
℄= 490.00

STA 1+37.93 LINE "F"
INSIDE FACE CB. INLET
℄= 490.00

STA 3+19.10 LINE "F"
INSIDE FACE GRATE INLET
℄ = 493.91

6"S.S.

RECORD PLANS
2-13-96

PREPARED BY:
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HILLCREST SHORES PHASE II
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

STORM DRAIN PLAN AND PROFILE SYSTEMS "A" & "F"

STATE OF TEXAS
ULYS LANE III
40864
REGISTERED PROFESSIONAL ENGINEER
4-4-95

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