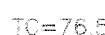
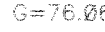


LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
EXISTING PLAN VIEW		EXISTING PLAN VIEW	
	3/4" IR		TC=76.59
	G=76.06		TOP OF CURB ELEV.
	SURVEY MONUMENT		GUTTER LINE ELEV.
	GPS MONUMENT		HOUSTON LIGHTING & POWER CO. CONDUIT & MANHOLE
	TRANSIT LINE (BASE LINE)		POWER POLE W/ OVERHEAD LINES
	EXISTING RIGHT-OF WAY LINE		POWER POLE W/ OVERHEAD LINES
	PROPERTY LINE		POWER POLE DOWN GUY
	THEORETICAL PROPERTY LINE		SWBT CONTROLLER BOX
	LOT LINE		SOUTHWESTERN BELL MANHOLE & CONDUIT
	DRAINAGE EASEMENT		TELEPHONE BOX
	DIMENSION LINE		STREET LIGHT (NON-CANTILEVERED)
	EDGE CONCRETE PAVING		STREET LIGHT (CANTILEVERED)
	CURB LINE		YARD LIGHT
	EDGE OF ASPHALT		ELECTRICAL JUNCTION BOX OR TRAFFIC LIGHT POLE
	EDGE OF SHELL OR GRAVEL		PIPELINE MARKERS &/ OR VENTS
	RAILROAD		SMALL SIGN
	SIDEWALK		SIGN POST
	GUARD RAIL		MAILBOX
	GUARD FENCE		FENCE LINE (CHAIN LINK OR OTHER)
	CONCRETE BARRIER		FENCE LINE (BARBED WIRE)
	R.R. XING POLE		FLAGPOLE
	GUARD POST		SOIL BORING
	RIPRAP		MONITORING WELL
	TREE		UTILITY LOCATION TEST HOLE
	HEDGE		PIEZOMETER LOCATION
	BUILDING		
	SLAB		
	PORCH		
	STEPS		
	POST		
	RETAINING WALL		
	STREAM		
	SPOT ELEVATION		
	WATER LINE		
	WATER VALVE		
	FIRE HYDRANT		
	REDUCERS		
	ROUND CONNECTIONS		
	WATER METER		
	ENTEN INTERMEDIATE PRESSURE GAS LINE		
	GAS VALVE		
	GAS METER		
	GAS LINE MARKER		
	24" (& SMALLER) SAN SWR		
	30" (& LARGER) SAN SWR		
	24" (& SMALLER) STM SWR		
	30" (& LARGER) STM SWR		
	SANITARY SEWER LINE MANHOLE & CLEANOUT		
	STORM SEWER LINE		
	STORM SEWER LINE & MANHOLE		
	CURB INLET		
	CULVERT		
	GRATE INLET		
	DITCHES, LEFT AND RIGHT		

SYMBOL	DESCRIPTION
	EXTENSOMETER LOCATION
	POINT OF INTERSECTION (P.I.)
	POINT OF CURVE (P.C.)
	OR POINT OF TANGENCY (P.T.)
	WATER LINE
	WATER LINE (BORED & JACKED)
	WATER LINE (STEEL SECTION)
	REDUCERS
	SANITARY SEWER LINE
	SANITARY SEWER LINE CASING & AUGERING
	SANITARY SEWER MANHOLE
	SANITARY SEWER TO BE ABANDONED & FILLED
	STORM SEWER LINE
	STORM SEWER MANHOLE
	EDGE OF PAVEMENT
	CONCRETE WALK
	MATCH LINE

SYMBOL	DESCRIPTION
	WATER LINE (4" & LARGER)
	WATER LINE (BORED & JACKED)
	WATER LINE (STEEL SECTIONS)
	SANITARY SEWER LINE (24" AND SMALLER)
	SANITARY SEWER LINE (36" AND LARGER)
	STORM SEWER LINE (24" AND SMALLER)
	STORM SEWER LINE (36" AND LARGER)
	18" JOINT OF DIP OR PRESSURE PIPE FOR SANITARY SEWER
	SANITARY SEWER LINE CASING & AUGERING
	SANITARY SEWER MANHOLE
	SANITARY SEWER TUNNEL CONSTRUCTION
	STORM SEWER MANHOLE
	STORM SEWER INLET
 -- DESIGNATION -- SHEET NO. WHERE CUT IS MADE	SECTION SYMBOL USED WHEN SECTION CUT

g	AND
A3	AND
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
ACI	AMERICAN CONCRETE INSTITUTE
ABANDL	ABANDONED
ACP	ASPHALT CONCRETE PAVEMENT
ADJ	ADJUSTMENT
ANS	AMERICAN NATIONAL STANDARDS INSTITUTE
APTS	APARTMENTS
ASR	ASPHALT STABILIZED BASE
ASPH	ASPHALT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATTY	ATTORNEY
AWWA	AMERICAN WATER WORKS ASSOCIATION
AVE	AVENUE
B	BORING
B/C	BACK OF CURB
BL	BASE LINE
REG	BEGINNING
BKF	BACKFILL
BLDG	BUILDING
BLVD	BOULEVARD
BND	BOUND
BOTT	BOTTOM
BR	BRICK
C	CUT, CONDUIT
C TO C C-C	CENTER TO CENTER
OR C C	CENTER TO CENTER
CA	CONTROL AIR
CEM	CEMENT
CD	CLEAN OUT
CI	CAST IRON
CIP	CAST IRON PIPE
CTY	CITY OF HOUSTON
CL OR CL	CENTERLINE
CLEAR OR CLR	CLEARANCE
CM	CLAUDE & MILLER INC.
CMP	CORRUGATED METAL PIPE
CONTR	CONTROL
CS	COMPANY
COP	CITY OF HOUSTON
CONC	CONCRETE
COND	CONDUIT
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
C-R ST	CONCRETE REINFORCING STEEL
	INSTITUTE
CSE	CEMENT STABILIZED BASE
CS	CEMENT STABILIZED SAND
CTB	CONCRETE TRAFFIC BARRIER
D	DEGREE OF CURVE (ARC) DEFINITION
DER	DEFORMED
DER	DEPTH
DET	DETAIL
	DIAMETER
DIA OR D	DUCTILE IRON PIPE
DIP	DISTANCE
DIST	DISTANCE
DOTY	DIRECTOR OF TRAFFIC & TRANSPORTATION
DR	DRAIN LINE
DR	DRIVE
DS	DRILLED SHAFT
D/W	DROVEWAY
DWG	DRAWING
E	EAST
EA	EACH
EDB	ELECTRIC DUCT BANK
EFF	EFFLUENT
ELECT	ELECTRIC
ELEV	ELEVATION
ELEV OR EL	ELEVATION
EMB	EMBANKMENT
EMB	EDGE OF PAVEMENT
ESA	ENVIRONMENTAL BORING
EWEP	EACH WAY EACH FACE
EXC	EXCAVATION
EXIST	EXISTING
EXP	EXPANSION
F	FRIDAY
FB	FIELD BOOK
AT OR F-F	FACE TO FACE
FR	FIRE HYDRANT
F/L	FLOW LINE
FM	FORCE MAIN
FT	FEET
FTG	FOOTING
FWY	FREEWAY
GAL	GALLON
GPS	GLOBAL POSITIONING SYSTEM
H-C-D	HARRIS COUNTY FLOOD CONTROL DISTRICT
H-C-M-P	HARRIS COUNTY MAP RECORDS
H-M-A-C	HOT MIX ASPHALT CONCRETE
H	HIGH PRESSURE (GAS LINE) HORSE POWER
H-L-P OR H-LP	HOUSTON LIGHTING & POWER CO.
HORIZ	HORIZONTAL
H-W	HIGHWAY
I	TOTAL INTERSECTION ANGLE
ID	INSIDE DIAMETER
INV OR B	INVERT ELEVATION
I	IRON PIPE OR
I	INTERMEDIATE PRESSURE
IR	IRON ROD
IR	INSIDE RADIUS
J	JOINT
JBS	JOINTS
LA	LANE
LS	LINE SUM
LS OR L	LENGTH OF CIRCULAR CURVE
L	LINEAL FEET
LVS	LEAKING REGISTERED STORAGE TANK
L	LEFT OR LIGHT

ABBREVIATIONS

M	MONDAY
MAX	MAXIMUM
M.C.C.	MOTOR CONTROL CENTER
MFG	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MON	MONUMENT
MP	MILE POST
MRC	MONOLITHIC REINFORCED
	CONCRETE SEWER
MTD	MULTI TILE DUCT
MTL	MATERIAL
MW	MONITORING WELL
N	NORTH
NA	NOT APPLICABLE
NFV	NOT FIELD VERIFIED
NG	NATURAL GROUND
N.T.S.	NOT TO SCALE
NIC	NOT IN CONTRACT
NO OR #	NUMBER
NW	NORTH WEST
OD	OUTSIDE DIAMETER
O/E	OVERHEAD ELECTRIC
OH	OVERHEAD
OSHA	OCCUPATIONAL SAFETY AND HEALTH

PA	PLANT AIR
Pg	PAGE
P/L	PROPERTY LINE OR PIPE LINE
PC	POINT OF CURVATURE
PC OR POC	POINT ON CURVE
PCC	PORTLAND CEMENT CONCRETE OR POINT OF COMPOUND
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POT	PLATE
PT	POINT ON TANGENT
PP	POWER POLE
PL	PROPERTY LINE
PROP	PROPOSED
PS	PUMP STATION
PSI	POUNDS PER SQUARE INCH
PT	POINT OR POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE OR POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVM	PAVEMENT
PW	PLANT WATER OR POTABLE WATER

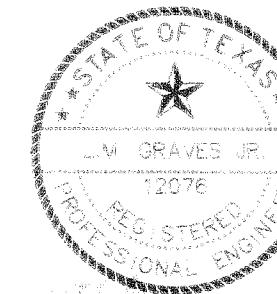
R	RADIUS OF CIRCULAR CURVE
RAS	RETURN ACTIVATED SLUDGE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RE OR REF	REFERENCE
REINF	REINFORCED, REINFORCING OR REINFORCEMENT
REM	REMOVABLE
ROW	RIGHT OF WAY
RR	RAIL ROAD
R/R	RAILROAD
RT	RIGHT

S	SLOPE, SOUTH
SAN	SANITARY
SC	SCUM LINE
SD	STORM DRAIN
SDR	STANDARD DIMENSION RATIO
SEW	SEWER
SEW	SQUARE FEET
SG	SLUDGE GRATE OR SLIDE GRATE
SH	STATE HIGHWAY
SIG	SIGNAL
SL	SLUDGE
SPC	SPACED OR SPACING
SPEC	SPECIFICATION
SQ	SQUARE
ST	SAINT OR STREET
STA	STATION ALONG BASELINE OR CENTERLINE
STA.	STABILIZED
STD	STANDARD
STL	STEEL
STM	STORM
SWBT	SOUTHWESTERN BELL TELEPHONE COMPANY
S/W	SIDEWALK
SY	SQUARE YARD

T	TANGENT
TBM	TEMPORARY BENCH MARK
TC	TOP OF CURB
TEMP	TEMPORARY
TDOT	TEXAS DEPARTMENT OF TRANSPORTATION
TC	TOP OF GRATE
THK	THICK
T.M.U.T.C.D.	TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
TOC	TOP OF
TRAF OR TRF	TRAFFIC
TRV OR TRAF	TRAVERSE
TY	TYPE
TYF	TYPICAL

USCGS	UNITED STATES COASTAL
UTIL	UTILITY
V	VERTICAL
VAP	VARIABLE
VCP	VITRIFIED CLAY PIPE
VOL	VOLUME
VP	VERTICAL PANEL

W	WEST
W/	WITH
SW	WATER STOP
W.S. LINE	WASTE SLUDGE LINE
WVF	WOVEN WIRE FABRIC
WWTP	WASTEWATER TREATMENT PLANT
XING OR X-ING	CROSSING
YELL	YELLOW

[illegible]

CLAUNCH & MILLER, INC.
Engineering Consultants

CMI PROJECT NO. 94021-A	GHWWP PROJECT NO. R-1220-13-3
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AFTON VILLAGE & SADDLEBROOK
LIFT STATIONS & FORCE MAIN
LEGENDS &
ABBREVIATIONS

4450-2

PRIVATE UTILITY LINES SHOWN

ENTEX, INC. DATE

SOUTHWESTERN BELL TELEPHONE CO. DATE
VALID FOR ONE YEAR ONLY

HOUSTON LIGHTING & POWER CO. DATE
APPROVAL ONLY FOR CROSSING UNDERGROUND
DUCT LINES UNLESS NOTED. VALID FOR ONE YEAR ONLY

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE GROUP

SECTION APPROVALS

WATER ENGINEERING	TRAFFIC AND SIGNAL ENGINEERING
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WASTEWATER ENGINEERING STREET & BRIDGE ENGINEERING

STORM SEWER ENGINEERING CONSTRUCTION

OTHER DEPARTMENTS

PLANNING AND DEVELOPMENT SPONSOR DEPARTMENT

CITY ENGINEER DATE

DIRECTOR OF PUBLIC WORKS DATE

SUBMITTED BY: BO GRAVES DESIGNED BY: TOM LANE

SCALE 1"=40' DRAWN BY: FULLER

DATE: AUGUST, 1996
SHEET NO. 4 OF 86 SHEETS
SURVEY BY: ESOP
CITY: DWG. NO.