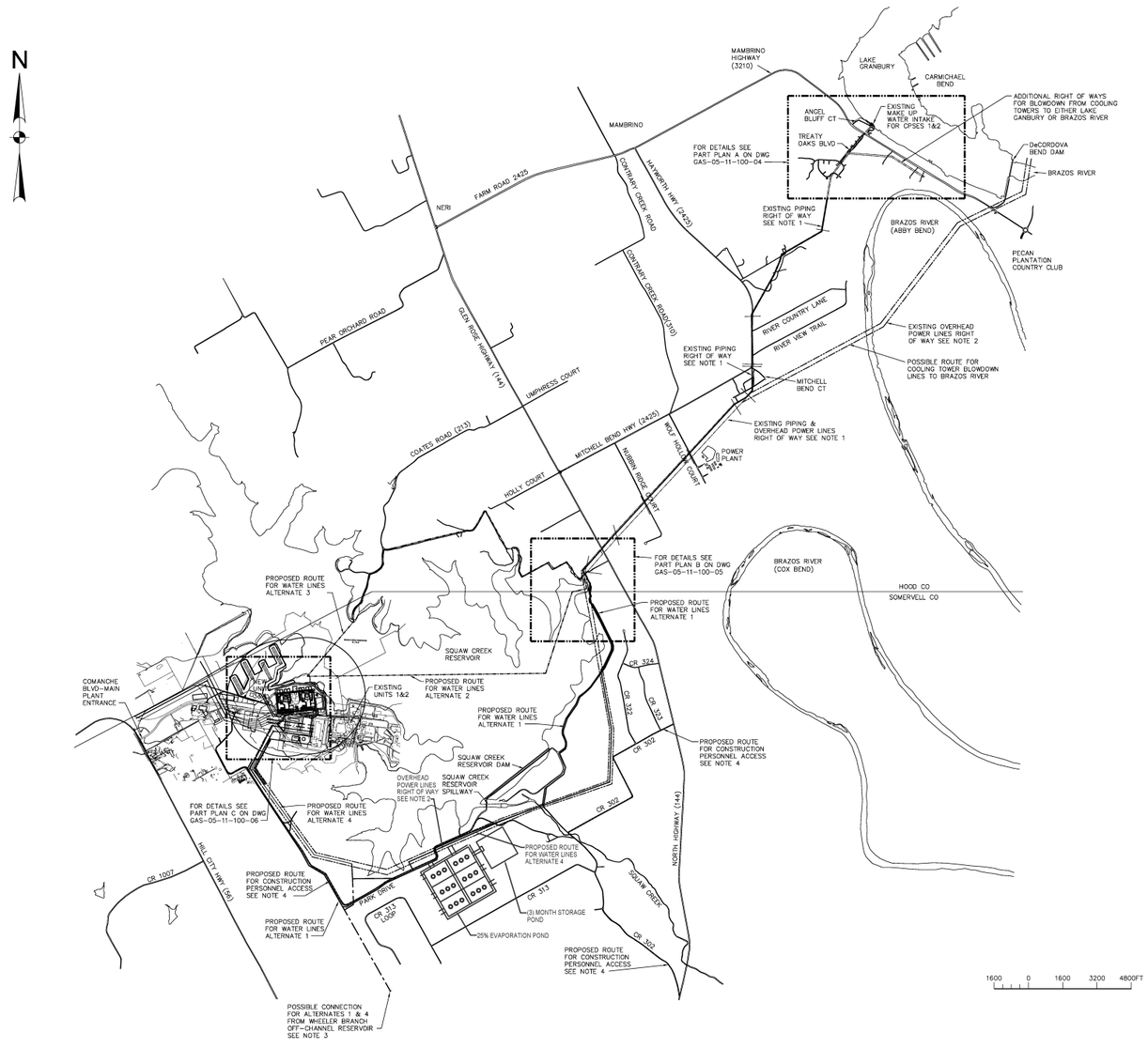


PIPE DISTANCES

MAKE UP WATER AND BLOWDOWN PIPING TO/FROM CPSES UN 3&4 COOLING TOWERS-

-UNIT 3 MAKE UP LINE = 63200 FT
-UNIT 3 BLOWDOWN LINE= 66600 FT*

-UNIT 4 MAKE UP LINE = 63975 FT
-UNIT 4 BLOWDOWN LINE= 67375 FT*

* WILL BE ADJUSTED WHEN FINAL LOCATION OF BLOWDOWN PIPE INTO LAKE GRANBURY IS DETERMINED

NOTES

1. INFORMATION PROVIDED BY HALFF ASSOCIATES.
2. ROADS, LAKES AND WATERWAYS OUTLINES TRACED FROM SATELLITE IMAGES FOUND ON WEBSITE WWW.TNRIS.STATE.TX.US3.
3. FROM HDR-00044119-05 4B.13 OFF CHANNEL RESERVOIRS, 2006 BRAZOS G REGIONAL WATER PLAN JANUARY 2006.
4. CR 302 AND PARK DRIVE SHOULD BE UPGRADED TO ACCOMODATE CONSTRUCTION ACCESS. REFERENCE ALSO DWG GAS-05-11-100-001.

ROUTES FOR WATER LINES

EACH ROUTE WILL CONTAIN AT LEAST THESE LINES;
2-42" MAKE UP WATER LINES
2-36" COOLING TOWERS BLOWDOWN LINES

ALTERNATE 1
(GOOD CHOICE FOR EASIER CONSTR, MOST SECURE)
FOLLOWS ROADS AROUND WEST & SOUTH OF SQUAW CREEK RESERVOIR

ALTERNATE 2
(MOST DIFFICULT TO CONSTR. AND SECURE)
RUNS ACROSS OR THROUGH SQUAW CREEK RESERVOIR

ALTERNATE 3
(DIFFICULT TO CONSTR. AND SECURE ACROSS SCR)
FOLLOWS ROADS AROUND NORTH & EAST OF SQUAW CREEK RESERVOIR & THEN GOES THROUGH SQUAW CREEK RES.

ALTERNATE 4
(BEST CHOICE, EASE OF CONSTR, MOST SECURE)
FOLLOWS ROADS AND POWER LINE RIGHT OF WAYS AROUND WEST & SOUTH OF SQUAW CREEK RESERVOIR

OPEN ITEMS

- NEED INFO FOR RIGHT OF WAYS TO SECURE FINAL ROUTE LOCATION OF BLOWDOWN LINES AT LAKE GRANBURY (NEW LAND PURCHASED?)
- WITH REGARD TO EXISTING RIGHT OF WAYS, WILL THERE BE ENOUGH SPACE FOR EXISTING PIPING, EXISTING OVERHEAD POWER LINE TOWERS FOUNDATIONS AND NEW MAKEUP AND BLOWDOWN LINES OR WILL THEY NEED TO BE EXPANDED (MORE LAND PURCHASED)

PRELIMINARY

Figure 3.4-3 Intake and Discharge Locations (Sheet 1 of 3)

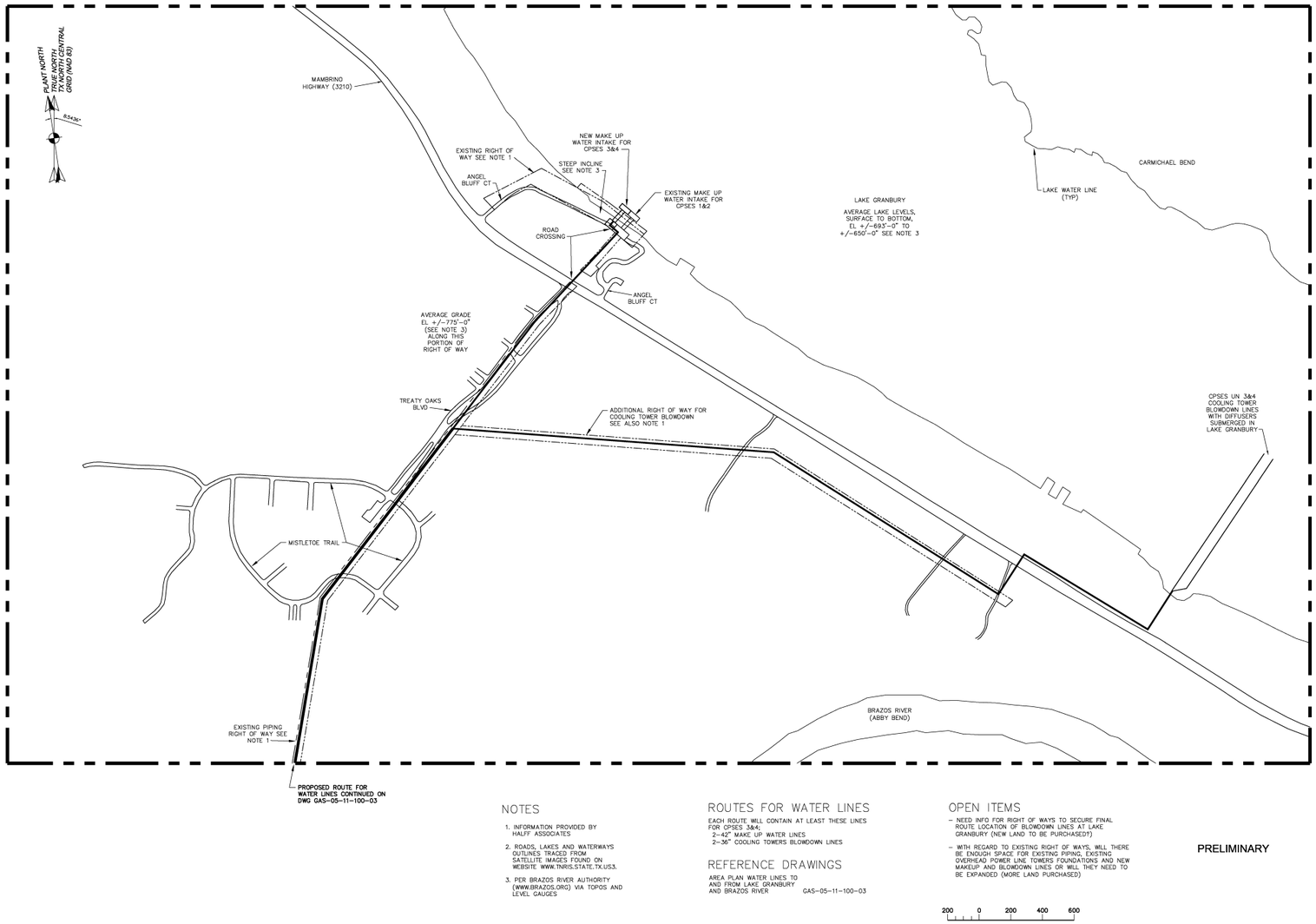
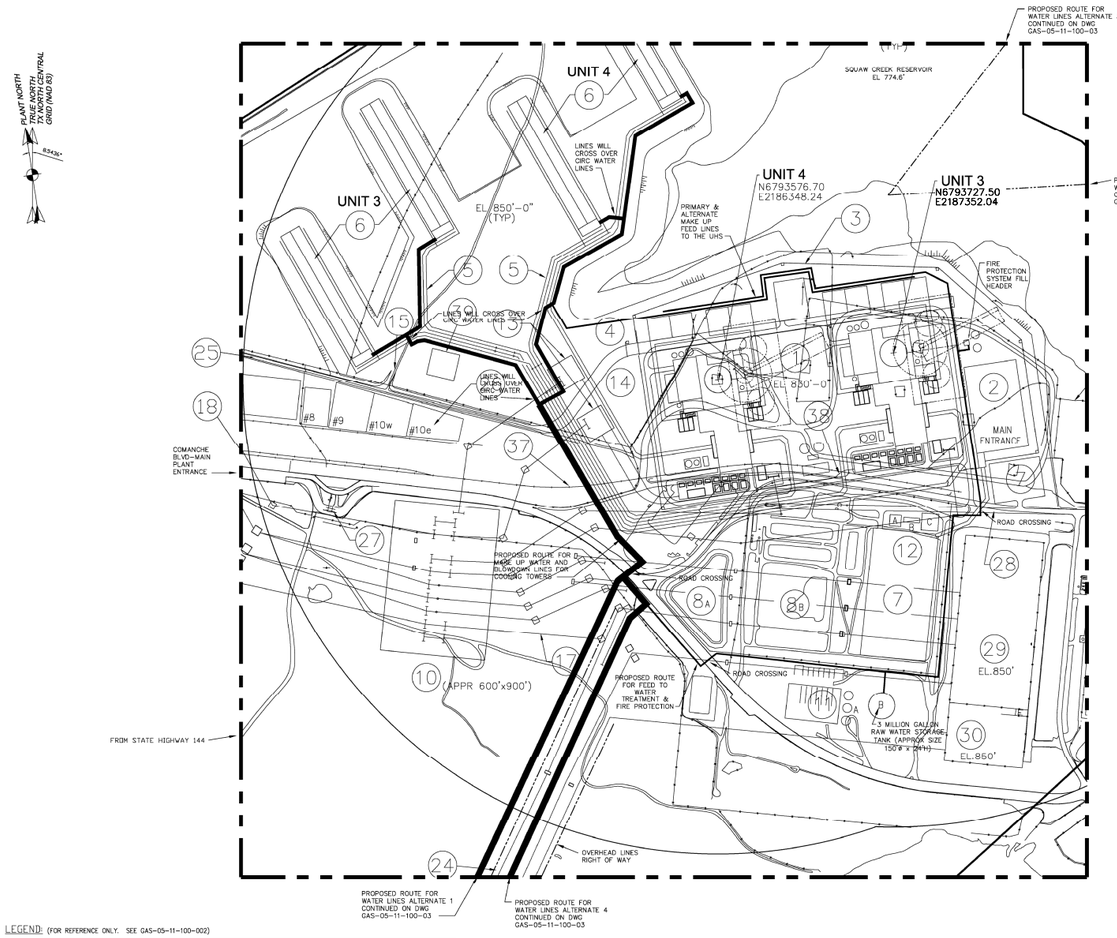


Figure 3.4-3 Intake and Discharge Locations (Sheet 2 of 3)



PIPE DISTANCES

SEE DWG GAS-05-11-100-03 FOR MAKE UP WATER AND BLOWDOWN PIPE DISTANCES.

PIPE ON THIS DRAWING:-

-FIRE PROTECTION SYSTEM FILL -	2550 FT
-FEED TO UHS - PRIMARY -	2300 FT
-FEED TO UHS - ALTERNATE -	2500 FT
-FEED TO NEW WATER TREATMENT FAC. -	1700 FT

NOTES

1. INFORMATION PROVIDED BY HALFF ASSOCIATES
2. ROADS, LAKES AND WATERWAYS OUTLINES TRACED FROM SATELLITE IMAGES FOUND ON WEBSITE WWW.TNRIS.STATE.TX.US.

REFERENCE DRAWINGS

AREA PLAN WATER LINES TO AND FROM LAKE GRANBURY AND BRAZOS RIVER GAS-05-11-100-03

ROUTES FOR WATER LINES

EACH ROUTE WILL CONTAIN AT LEAST THESE LINES;
2-42" MAKE UP WATER LINES
2-36" COOLING TOWERS BLOWDOWN LINES

ALTERNATE 1
(GOOD CHOICE FOR EASIER CONSTR, MOST SECURE)
FOLLOWS ROADS AROUND WEST & SOUTH OF SQUAW CREEK RESERVOIR

ALTERNATE 2
(MOST DIFFICULT TO CONSTR. AND SECURE)
RUNS ACROSS OR THROUGH SQUAW CREEK RESERVOIR

ALTERNATE 3
(DIFFICULT TO CONSTR. AND SECURE ACROSS SOR)
FOLLOWS ROADS AROUND NORTH & EAST OF SQUAW CREEK RESERVOIR & THEN GOES THROUGH SQUAW CREEK RES.

ALTERNATE 4
(BEST CHOICE, EASE OF CONSTR, MOST SECURE)
FOLLOWS ROADS AND POWER LINE RIGHT OF WAYS AROUND WEST & SOUTH OF SQUAW CREEK RESERVOIR

OPEN ITEMS

PRELIMINARY

200 0 200 400 600

LEGEND: (FOR REFERENCE ONLY. SEE GAS-05-11-100-002)

ITEM NO	DESCRIPTION	ITEM NO	DESCRIPTION
1	NEW UNITS 3 & 4	19	MODIFIED BLDG FOR MAINTENANCE TRAINING FACILITY
2	NEW UNITS OPS OFFICES, SECURITY, ACCESS	20	MODIFIED BLDG FOR OPS TRAINING/EOF/SIMULATOR FACILITY
3	NEW UNITS PLANT PERIMETER BOUNDARY	21	MODIFIED BLDG FOR ADMIN FACILITY
4	LARGE VEHICLE ACCESS GATE W/SALLY PORT	22	COMANCHE BLVD-EXISTING PLANTS ACCESS ROAD
5	NEW UNITS BURIED CIRC WATER PIPES	23	EXISTING PLANT RAIL SPUR
6	NEW UNITS COOLING TOWERS	24	EXISTING HIGH VOLTAGE OVERHEAD POWER LINES
7	NEW UNITS PARKING FACILITIES	25	REROUTED EXISTING ROAD
8	(A) NEW UNITS EFFLUENT HOLDUP & EVAPORATION POND (B) EXISTING EFFLUENT HOLDUP & EVAPORATION POND	26	EXISTING LANDFILLS 8, 9, 10w & 10e (TO REMAIN)
9	NEW SANITARY WASTE TREATMENT FACILITY	27	MAIN SITE ENTRANCE
10	NEW UNITS 345KV SWITCHING STATION	28	RELOCATED ROAD - 8th AVENUE
11	NEW WATER TREATMENT FACILITY UN 1 - 4 WITH (A)DEMIN WATER STORAGE TANKS AND (B)RAW WATER STORAGE TANK	29	EXISTING 345KV SWITCHING STATION
12	RELOCATED WATER TREATMENT EQUIPMENT INCLUDING A)SURGE BASIN; B)API SEPARATOR; C)LAB.	30	EXISTING 138KV SWITCHING STATION
13	TRANSITION STATION	31	EXISTING UNITS 1&2 CIRC WATER INTAKE STRUCTURE
14	HEAVY HAUL ROAD	32	EXISTING FENCE
15	COOLING TOWER & GAS FARM ACCESS POINT	33	EXISTING UNITS 1 & 2
16	NEW WAREHOUSE / INVESTMENT RECOVERY STORAGE	34	SAFE SHUTDOWN IMPOUNDMENT DAM
17	NEW ONCOR 345KV TRANSMISSION LINE	35	SAFE SHUTDOWN IMPOUNDMENT
18	NEW ONCOR 345KV TRANSMISSION LINE	36	SQUAW CREEK RESERVOIR
		37	EXISTING RAIL SPUR NEW TERMINUS POINT
		38	345KV UNDERGROUND CABLES
		39	NEW UNITS GAS FARM

Figure 3.4-3 Intake and Discharge Locations (Sheet 3 of 3)