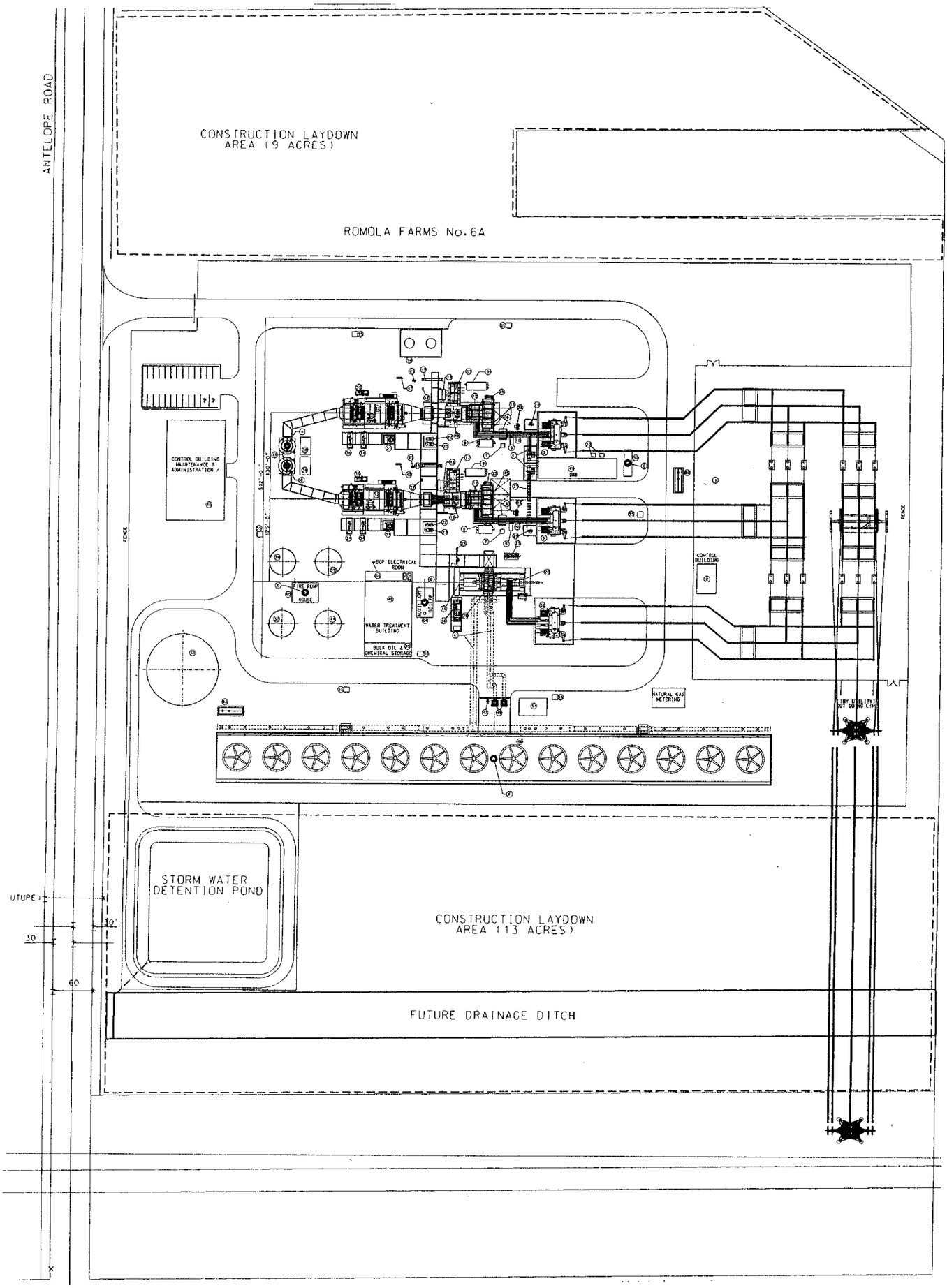

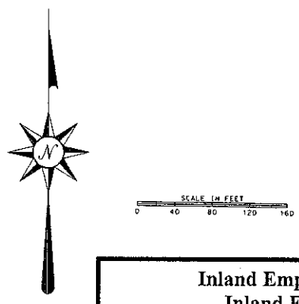

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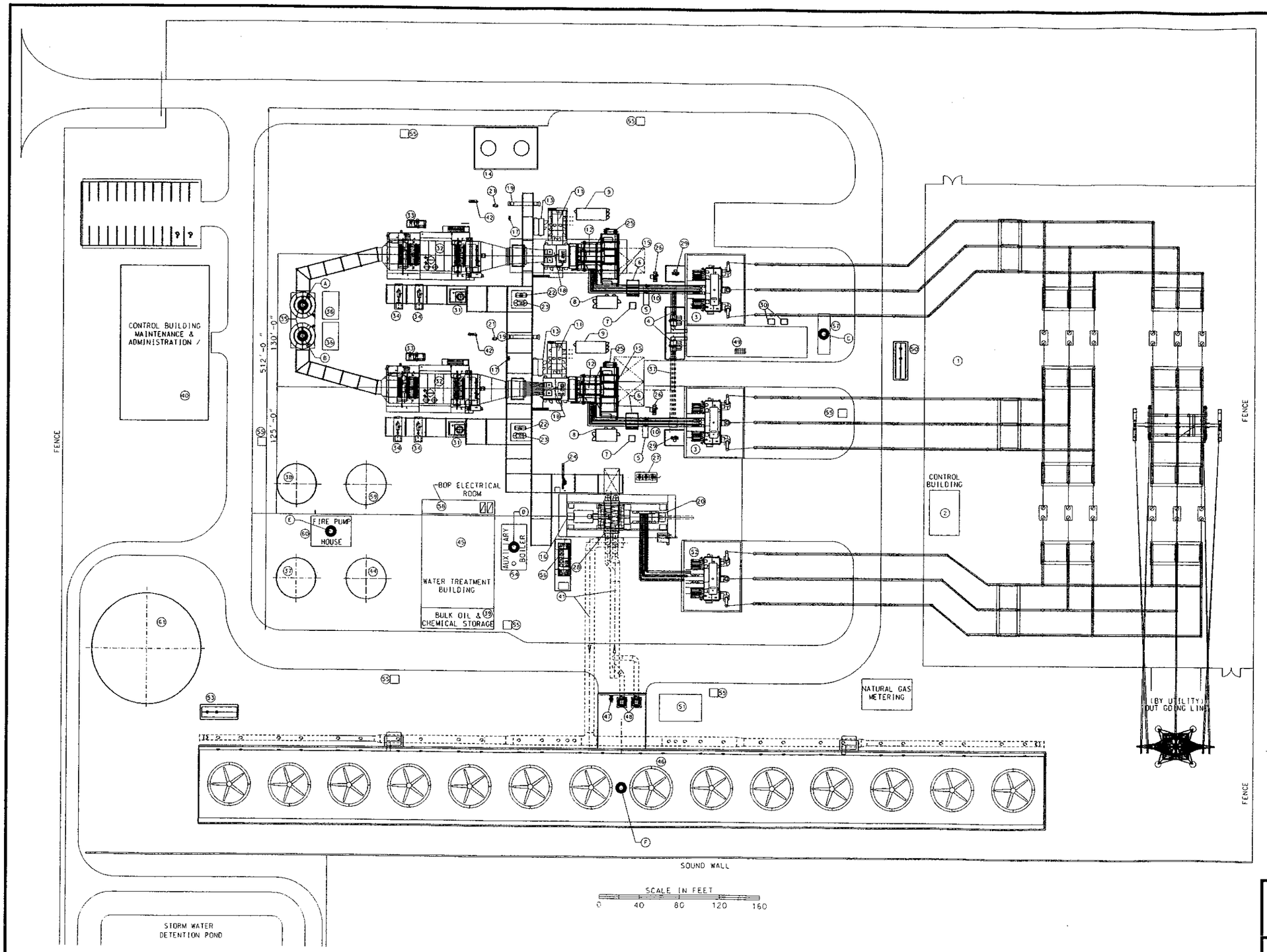
Figure 3.3-1

Site Plan



LEGEND

1. ELECTRICAL SUBSTATION AREA
2. SWITCHYARD CONTROL BUILDING
3. CT MAIN POWER TRANSFORMER
4. UNIT AUX. TRANSFORMER
5. GROUND DETECTION DISTRIBUTION TRANSFORMER
6. GENERATOR CIRCUT BREAKER
7. DC LINK REACTOR (UNDER BREAKER)
8. LCI/GEC CONTROL HOUSE
9. PACKAGED ELECTRICAL & ELECTRONIC CONTROL CENTER (PEECC)
10. ISOLATED PHASE BUS DUCT
11. ACCESSORY MODULE
12. CT GENERATOR
13. WATER INJECTION SKID
14. AMMONIA STORAGE TANK (AQUEOUS)
15. COMBUSTION TURBINE AIR INLET FILTER
16. HYDRAULIC CONTROL UNIT
17. GAS SCRUBBER
18. COMBUSTION TURBINE (CT)
19. FUEL GAS HEATER
20. ST GENERATOR
21. FUEL GAS CONDITIONING DRAINS TANK
22. DRAINS TANK
23. FALSE START DRAINS TANK
24. GLAND STEAM CONDENSOR
25. CO2 SKID
26. EXCITATION TRANSFORMER
27. CONDENSATE PUMPS
28. CONDENSER
29. CT ISOLATION TRANSFORMER
30. 4kV/480V TRANSFORMER
31. HRSG BLOWDOWN TANK
32. HEAT RECOVERY STEAM GENERATOR (HRSG)
33. AMMONIA INJECTION SKID
34. BOILER FEED PUMPS
35. HRSG STACK
36. CEMS/MCC BUILDING
37. NON-RECLAIMABLE WASTEWATER TANK
38. FIREWATER TANK
39. OVERHANG FOR BULK OIL & CHEMICAL STORAGE
40. ADMIN. & MAINT. BLDG. & CONTROL ROOM
41. CIRCULATING WATER PIPING
42. DUCT BURNER SKID
43.
44. DEMINERALIZED WATER STORAGE TANK
45. WATER TREATMENT BUILDING
46. COOLING TOWER
47. AUXILIARY COOLING WATER PUMPS
48. CIRCULATING WATER PUMPS
49. MEDIUM VOLTAGE SWITCHGEAR BUILDING
50. OIL/WATER SEPARATOR
51. COOLING TOWER POWERHOUSE & CHEMICAL TREATMENT/MCC
52. STG MAIN POWER TRANSFORMER
53. STORM WATER/OIL WATER SEPERATOR
54. AUXILIARY BOILER
55. HYDRANT
56. LUBE OIL EQUIPMENT
57. STANDBY GENERATOR
58. BOP ELECTRICAL ROOM
59. CONDENSATE SURGE TANK
60. FIRE PUMP HOUSE
61. RECYCLED WATER TANK

UTM COORDINATES		
POINT	NORTH	EAST
A	N3733212.0130	E484186.1268
B	N3733202.8690	E484186.1269
C	N3733194.1951	E484341.7574
D	N3733140.2174	E484250.6960
E	N3733144.4412	E484195.1951
F	N3733068.6856	E484283.5228

CONTROL/ELECTRICAL COMPONENTS KEY

- REMOTE I/O MODULES
- CONTROL PROCESSOR & I/O MODULES
- 480V MOTOR CONTROL CENTER
- 480V UNIT SUBSTATION
- 5kV SWITCHGEAR

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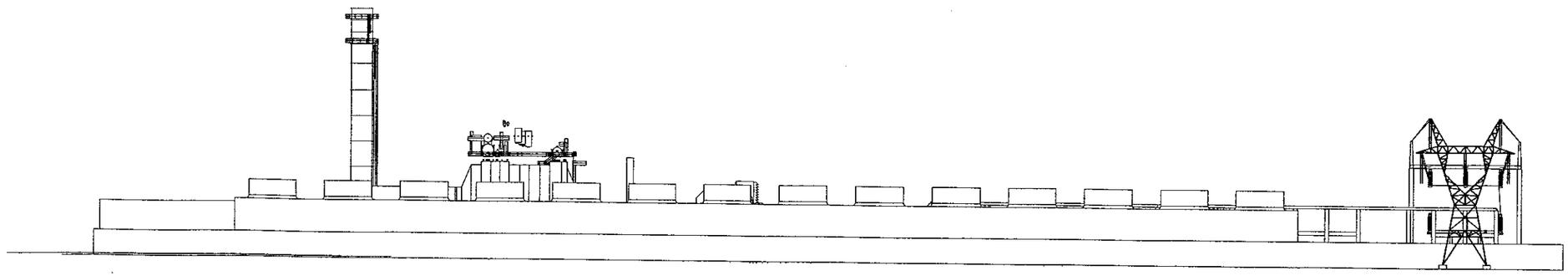
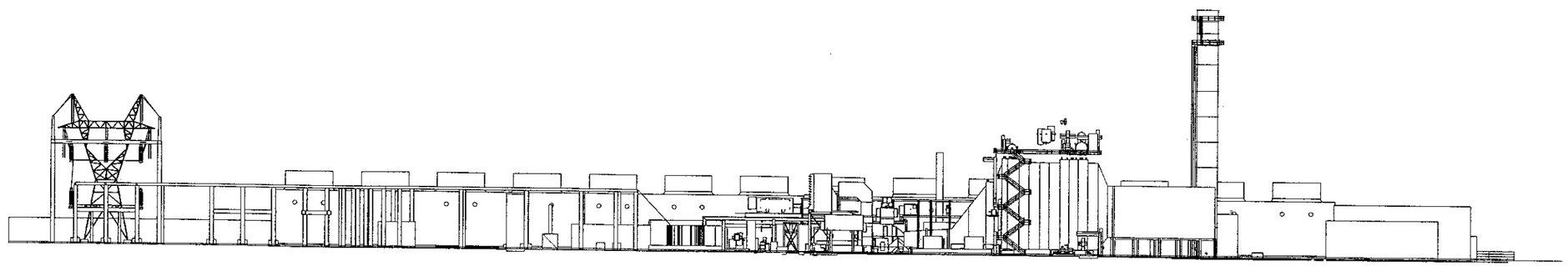
Figure 3.3-2

General Arrangement



VIEW LOOKING NORTH



VIEW LOOKING SOUTH

HORIZONTAL AND VERTICAL SCALE

0 50' 100' 200' 300'

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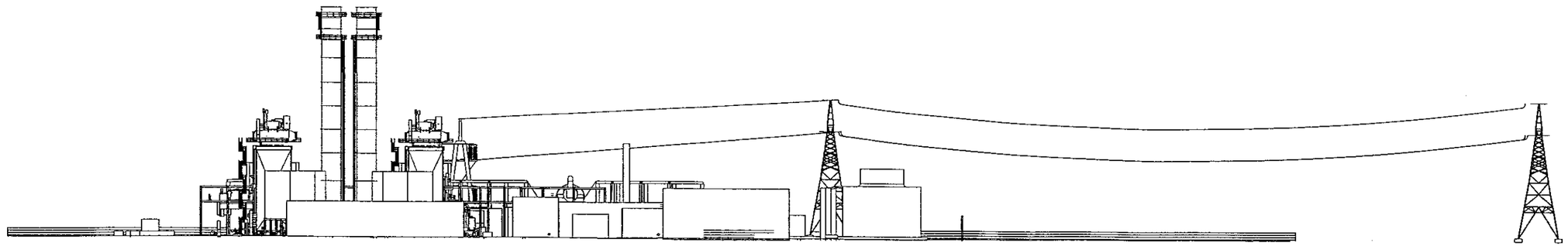
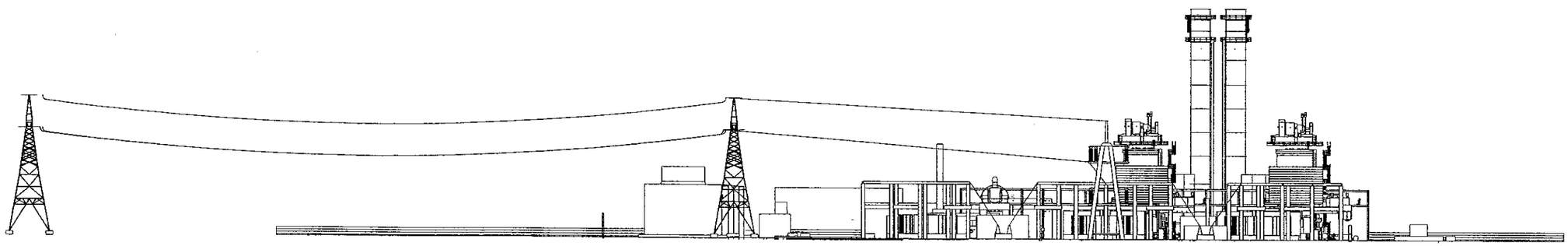
Figure 3.4-1

Elevations- Views Towards North and South



VIEW LOOKING EAST



VIEW LOOKING WEST

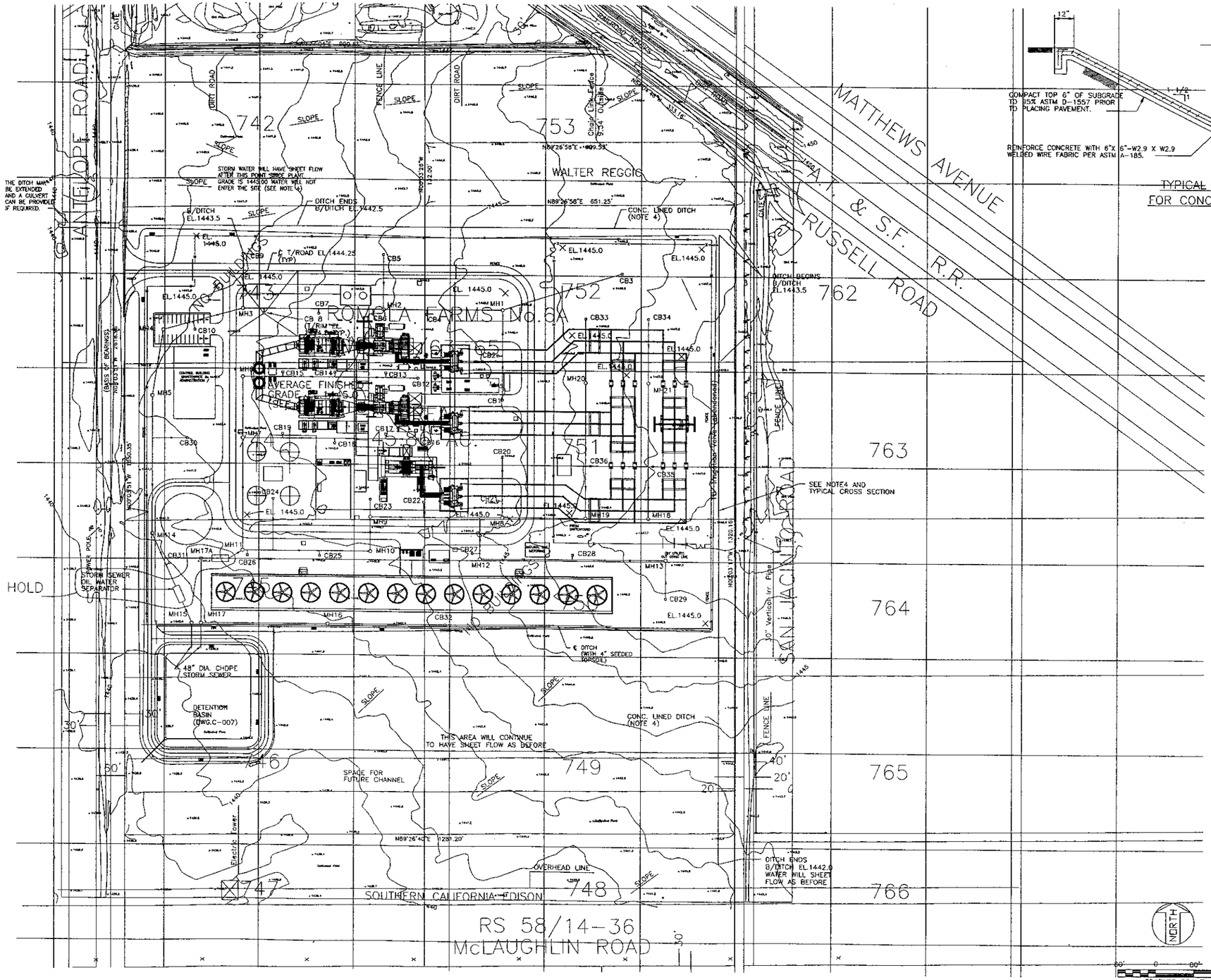
HORIZONTAL AND VERTICAL SCALE

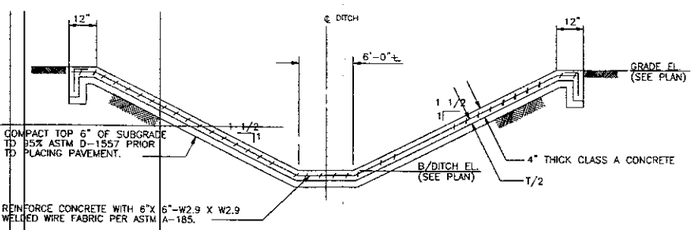
0 50' 100' 200' 300'

Inland Empire Energy Center, LLC
Inland Empire Energy Center

Figure 3.4-2

Elevations- Views Towards East and West





~~TYPICAL~~ CROSS SECTION FOR CONCRETE PAVED DITCH

N.T.S.

LEGEND

- CONCRETE LINED DITCHES
- 1445 — EXISTING CONTOURS
- SWS — STORM SEWER PIPE
- × — FINISHED GRADE OR T/PAVING ELEVATION
- MH1 — MANHOLE
- CB1 — CATCH BASIN
- CULVERT

NOTES:

1. FOR DETAILS OF DETENTION BASIN, SEE DWG. C-007.
2. ALL MANHOLES, CATCH BASINS, CHANNEL SECTIONS, AND EROSION CONTROL MEASURES SHALL BE PER RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT'S DESIGN STANDARD DRAWINGS AND CALIFORNIA DEPT OF TRANSPORTATION STANDARD SPECIFICATIONS.
3. BASED ON THE CURRENT DEFINED FLOODPLAIN MODEL, NONE OF THE SUBJECT PROPERTY IS WITHIN THE FEMA 100-YEAR FLOODPLAIN.
4. THE DITCHES ON THE NORTHERN AND EASTERN BOUNDARY ARE CONCRETE LINED AS PER STANDARD DWG. CH326 AND DESIGNED TO INTERCEPT THE OFFSITE WATERSHED FLOW OF APPROXIMATELY 407 CFS BASED ON A 100 YEAR RUNOFF FOR A 1-HOUR STORM EVENT.
5. PLANT FINISHED GRADE ELEVATION =1445.00 FT. TOP OF FOUNDATIONS/TOP OF FLOOR =1445.50 FT.
6. PLANT ONSITE DRAINAGE SYSTEM IS DESIGNED FOR A 2 YEAR, 24-HOUR RAINFALL DURATION BASIS. THE ONSITE UNDEVEPOLED CONDITION RUNOFF IS CALCULATED AS 0.5 CFS. THE ONSITE DEVELOPED CONDITION RUNOFF HAS BEEN CALCULATED AS 3.3 CFS. TO REGULATE THE FLOW TO 0.5 CFS (UNDEVELOPED CONDITION FLOW(). A DETENTION BASIN OF 4.3 ACRE-FEET HAS BEEN PROVIDED.
7. ALL AREAS WITHIN THE PLANT SHALL BE GRADED TOWARDS THE NEAREST CATCH BASIN/DITCH AT 0.5% FROM HIGH POINT OF FINISHED SURFACE (EL.1445).

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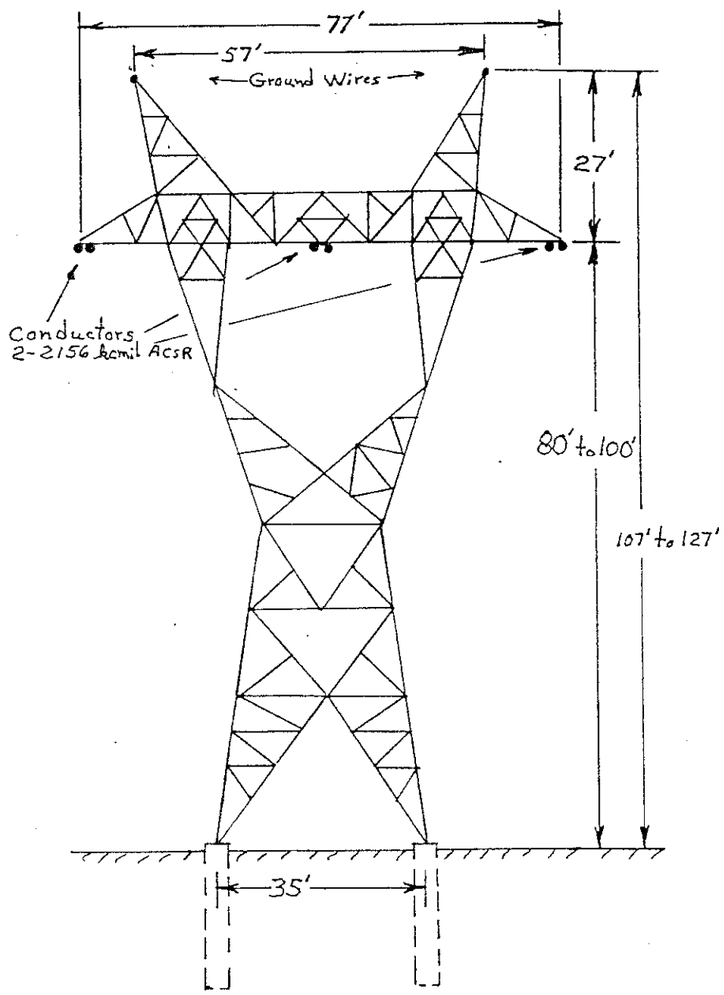
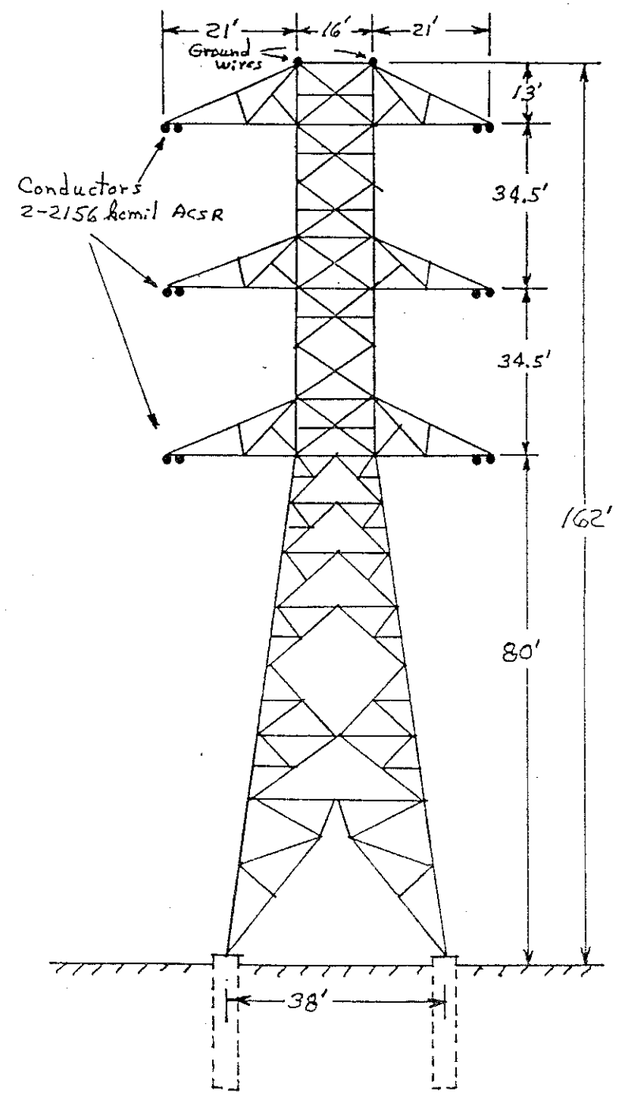
Figure 3.5-2

Grading and Drainage Plan

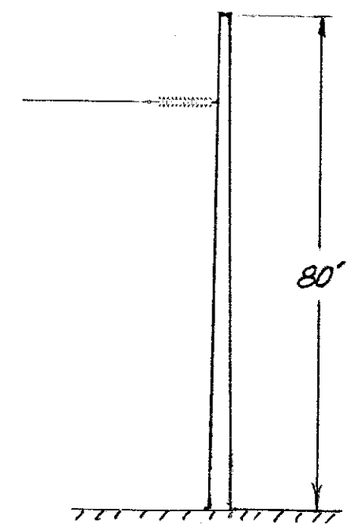
500 kV Single Circuit Tower



500 kV Double Circuit Tower



Single Tubular Angle Towers (Deadend)



Not to Scale

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Figure 3.6-2

Typical Transmission Line Structures

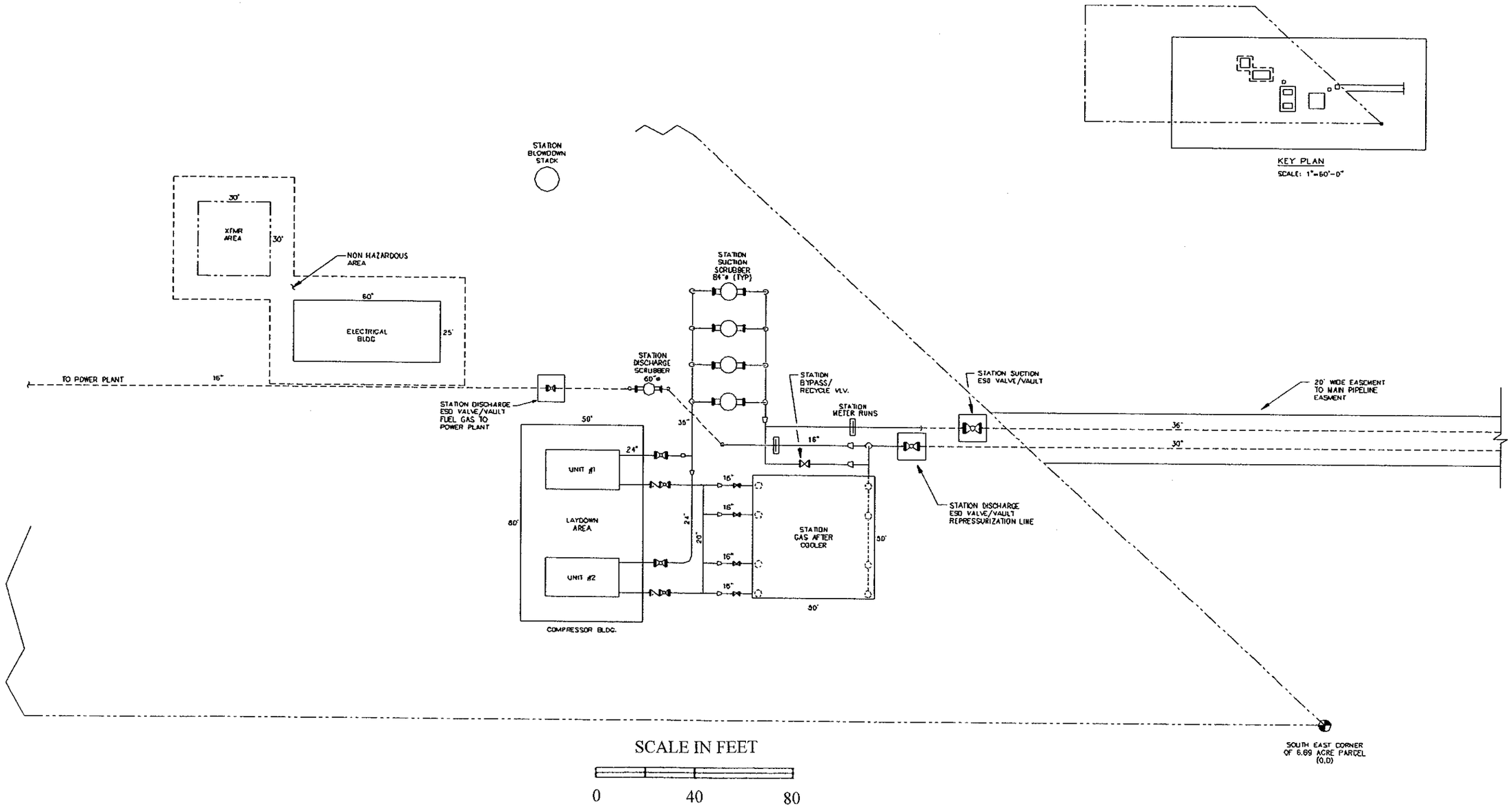

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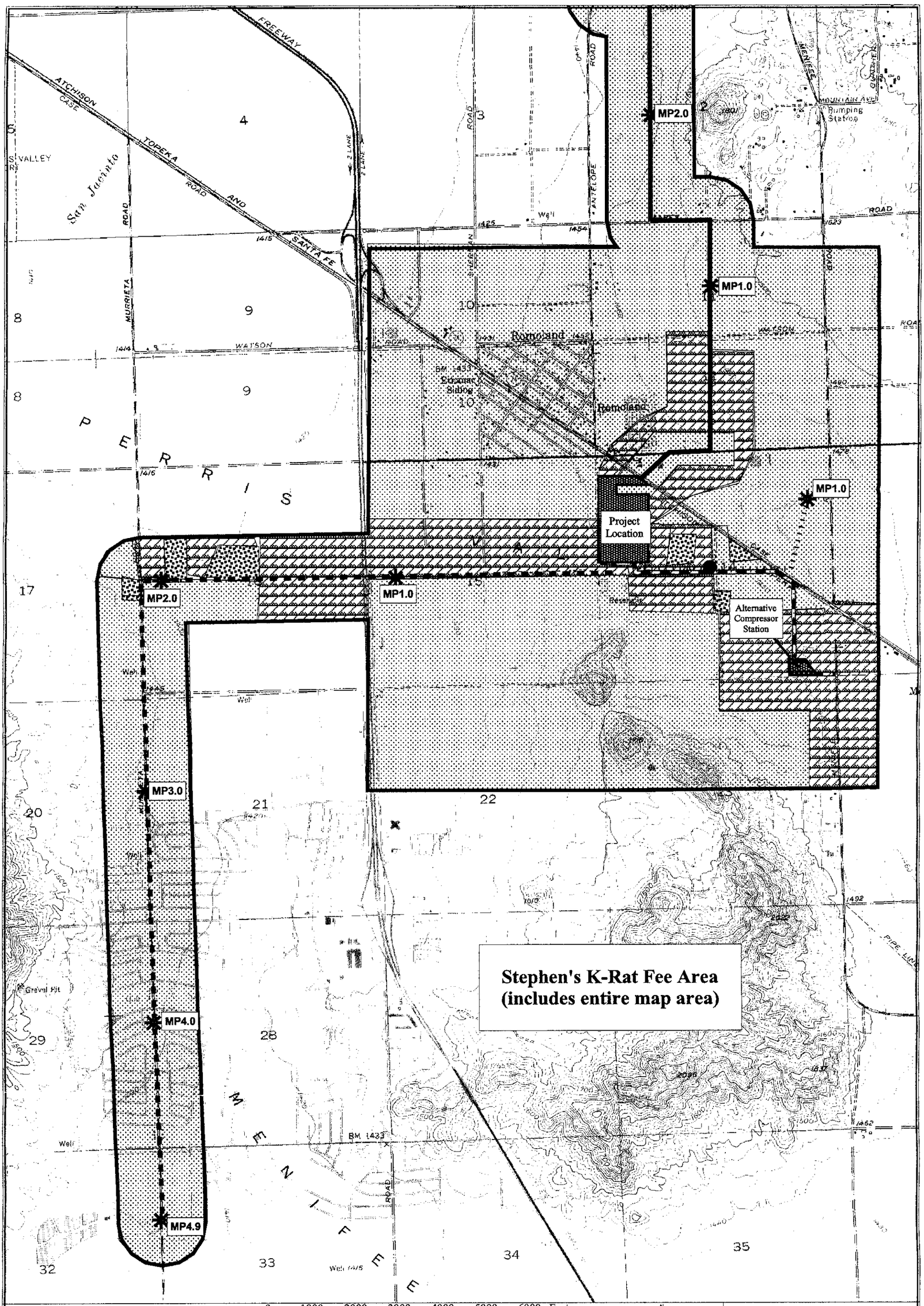
Figure 3.10-1

Compressor Station Plot Plan



LEGEND

0 1000 2000 3000 4000 5000 6000 Feet

- Urban/Exotic/Residential
- Riparian/Permanent Wetland
- Seasonal Wetland
- Alkali Playa
- Annual Grassland
- Agriculture
- Coastal Sage Scrub
- Water Crossing
- Natural Gas Pipeline (Alt. A)
- Natural Gas Pipeline (Alt. B)
- Transmission Line
- Water Pipeline

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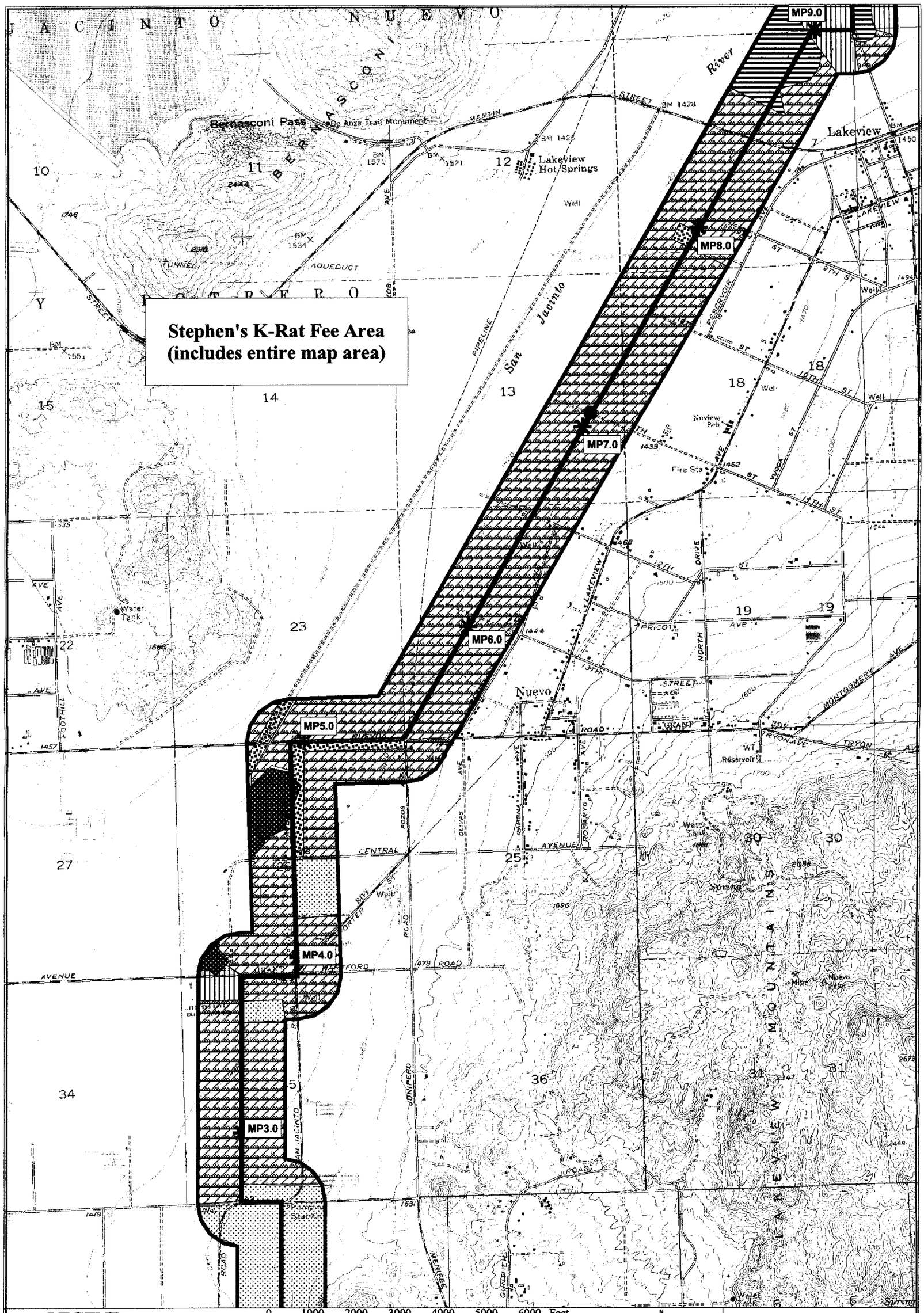
Figure 5.3-2A
Natural Communities



LEGEND

- Urban/Exotic/Residential
- Riparian/Permanent Wetland
- Seasonal Wetland
- Alkali Playa
- Annual Grassland
- Agriculture
- Coastal Sage Scrub
- Water Crossing
- Natural Gas Pipeline (Alt. A)
- Natural Gas Pipeline (Alt. B)
- Transmission Line
- Water Pipeline

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Figure 5.3-2B
Natural Communities

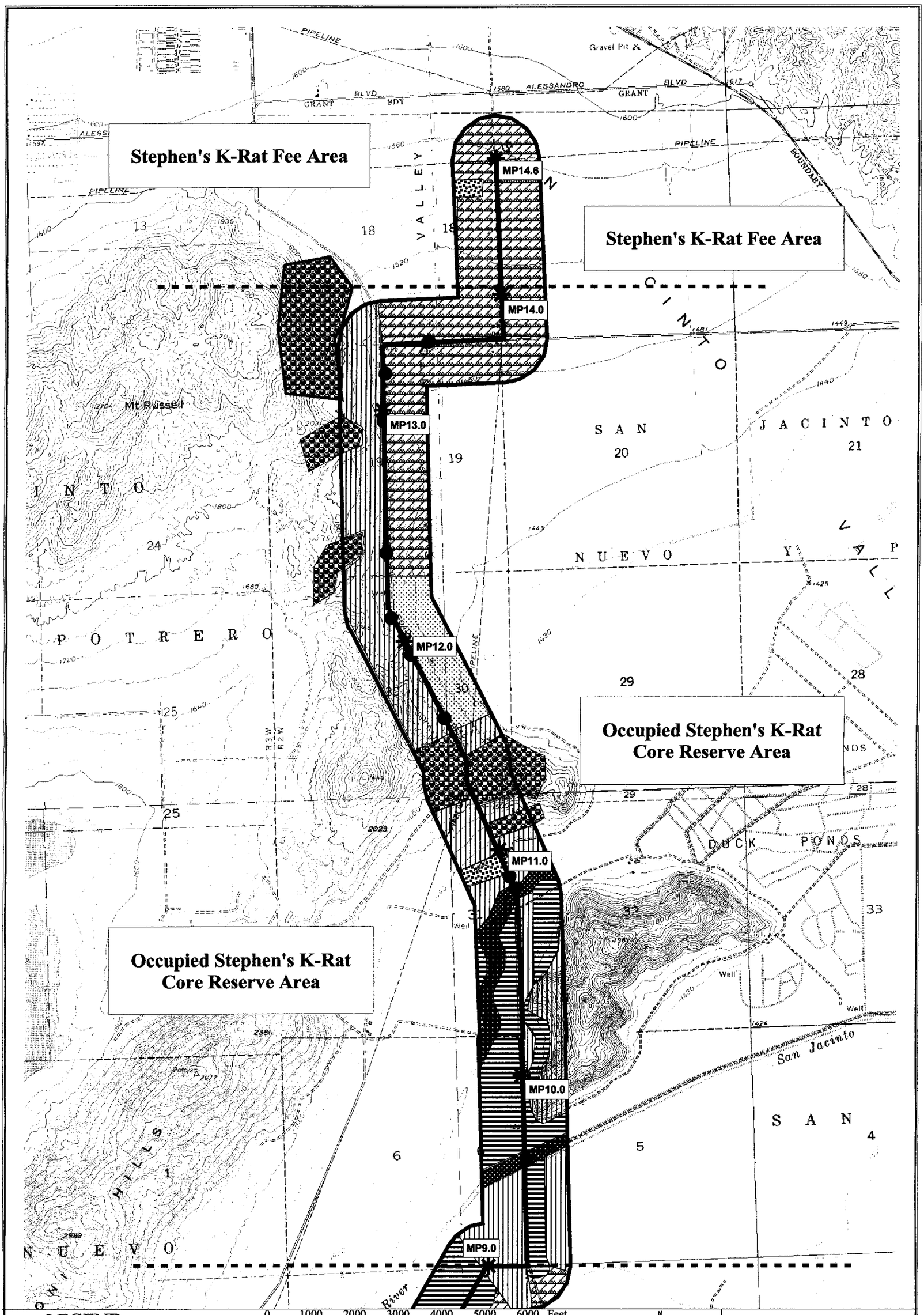

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Figure 5.3-2C
Natural Communities

I:\2330 CALPINE-MENIFEE\DWG\FIG5.3A.DWG
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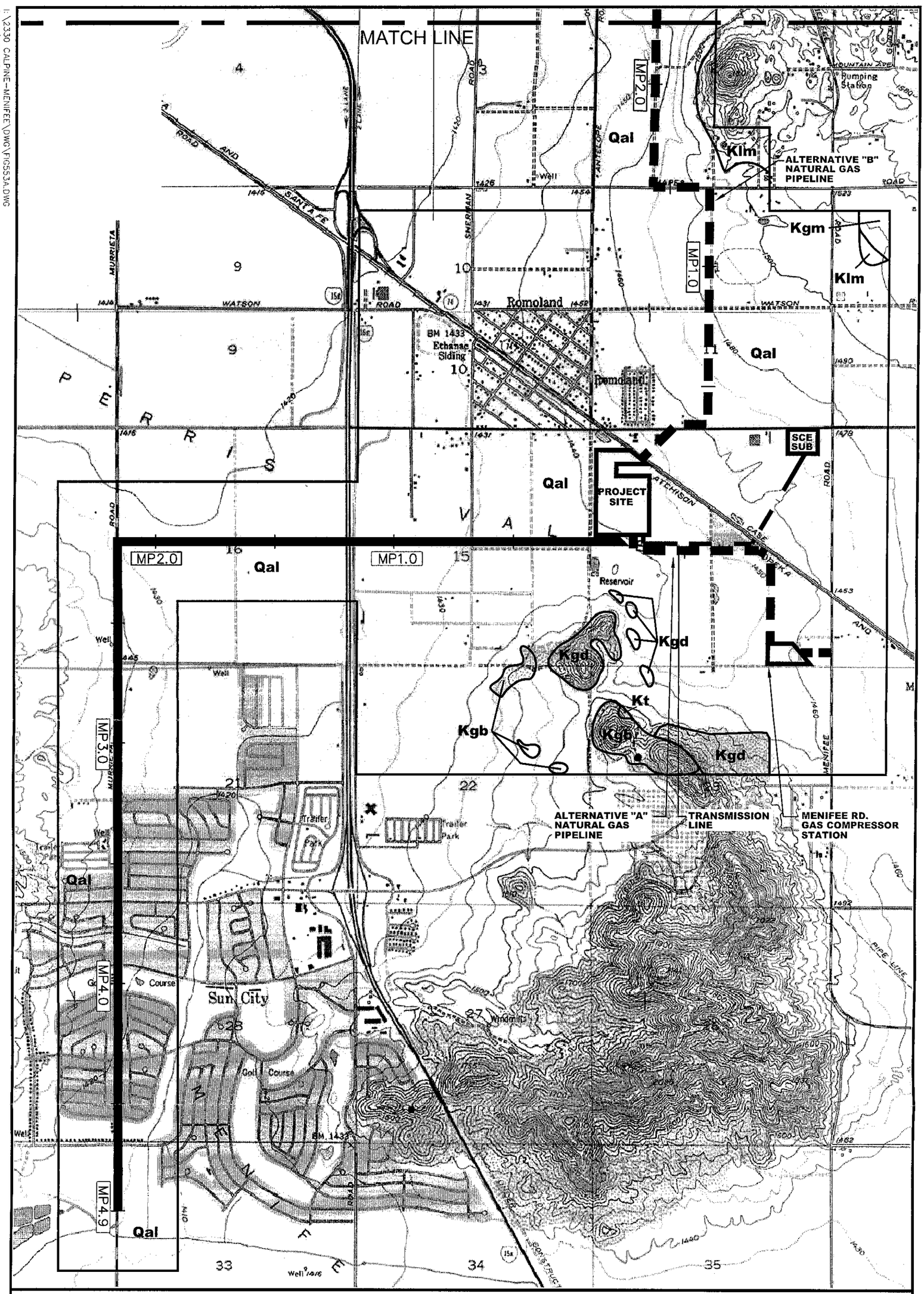

LEGEND

- NATURAL GAS PIPELINES
- TRANSMISSION LINE
- WASTE WATER PIPELINE
- Kgb — GEOLOGICAL AREA TYPE

QUATERNARY

Qal SANDY ALLUVIAL DEPOSITS

CRETACEOUS

Kgd	GRANODIORITE AND TONOLITE
Kt	TONOLITE AND GRANADIONITE
Kgb	GABBRO
Kgm	FOLIATED QUARTZ DIORITE
Klm	QUARTZ DIORITE

0 1000 2000 4000
APPROXIMATE GRAPHIC SCALE IN FEET

Base map from USGS 7.5 Romoland, Perris, Sunnymead, Lakeview and El Casco - Quads (Scale 1:24,000).

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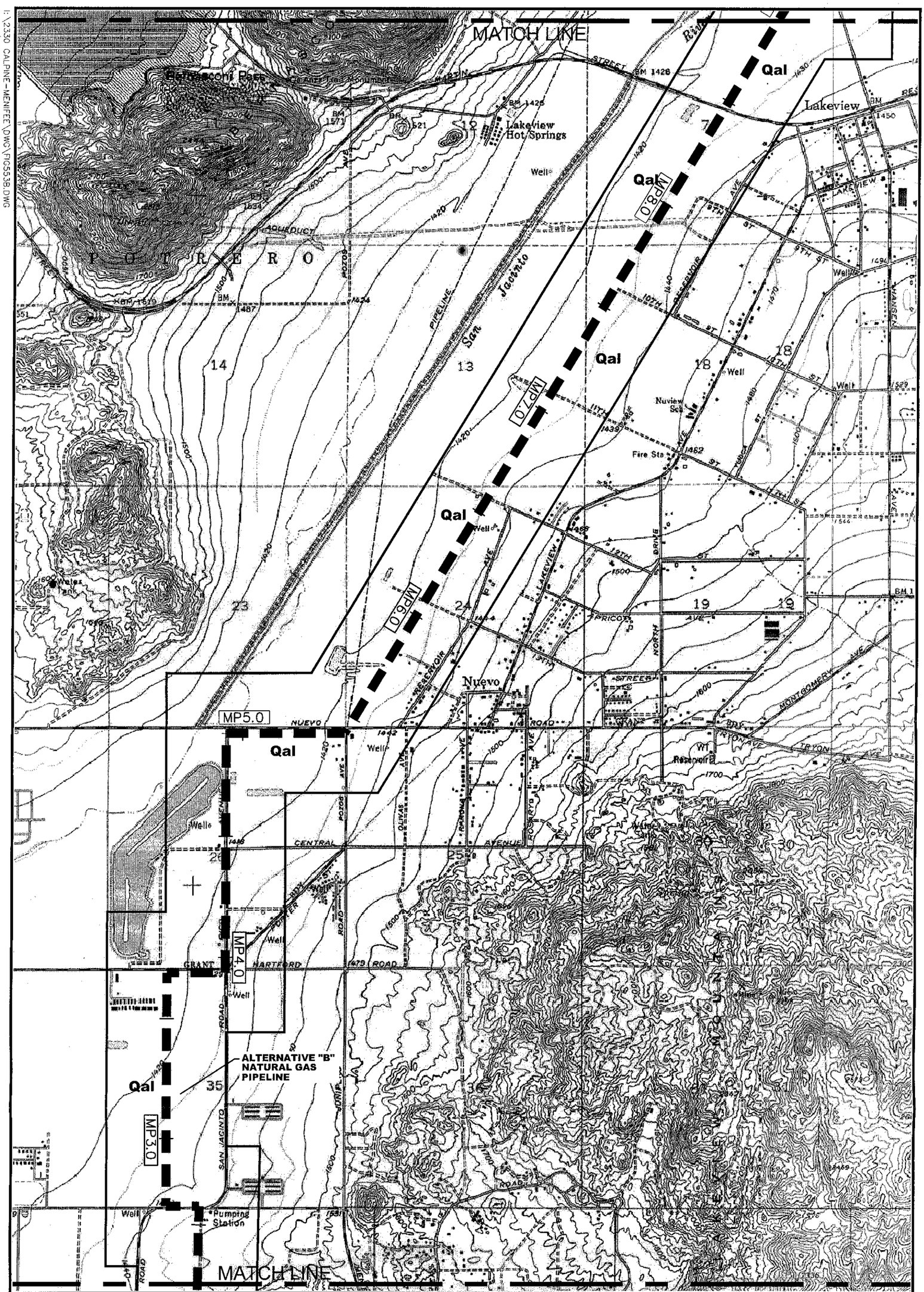
Figure 5.5-3A
Geological Area Types

SOURCE: DIBBLEE 1967, USGS OFR. 90-701, URS 2000, USGS MS19.



LEGEND

NATURAL GAS PIPELINE

Kgb GEOLOGICAL AREA TYPE

QUATERNARY

Qal SANDY ALLUVIAL DEPOSITS

Base map from USGS 7.5 Romoland, Perris, Sunnymead, Lakeview and El Casco - Quads (Scale 1:24,000).

0 1000 2000 4000

APPROXIMATE GRAPHIC SCALE IN FEET

Inland Empire Energy Center
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Figure 5.5-3B
Geological Area Types

SOURCE: DIBBLEE 1967, USGS OFR. 90-701, URS 2000, USGS MS19.

I:\2330 CALPINE-MENIFEE\DWG\FIG5538.DWG
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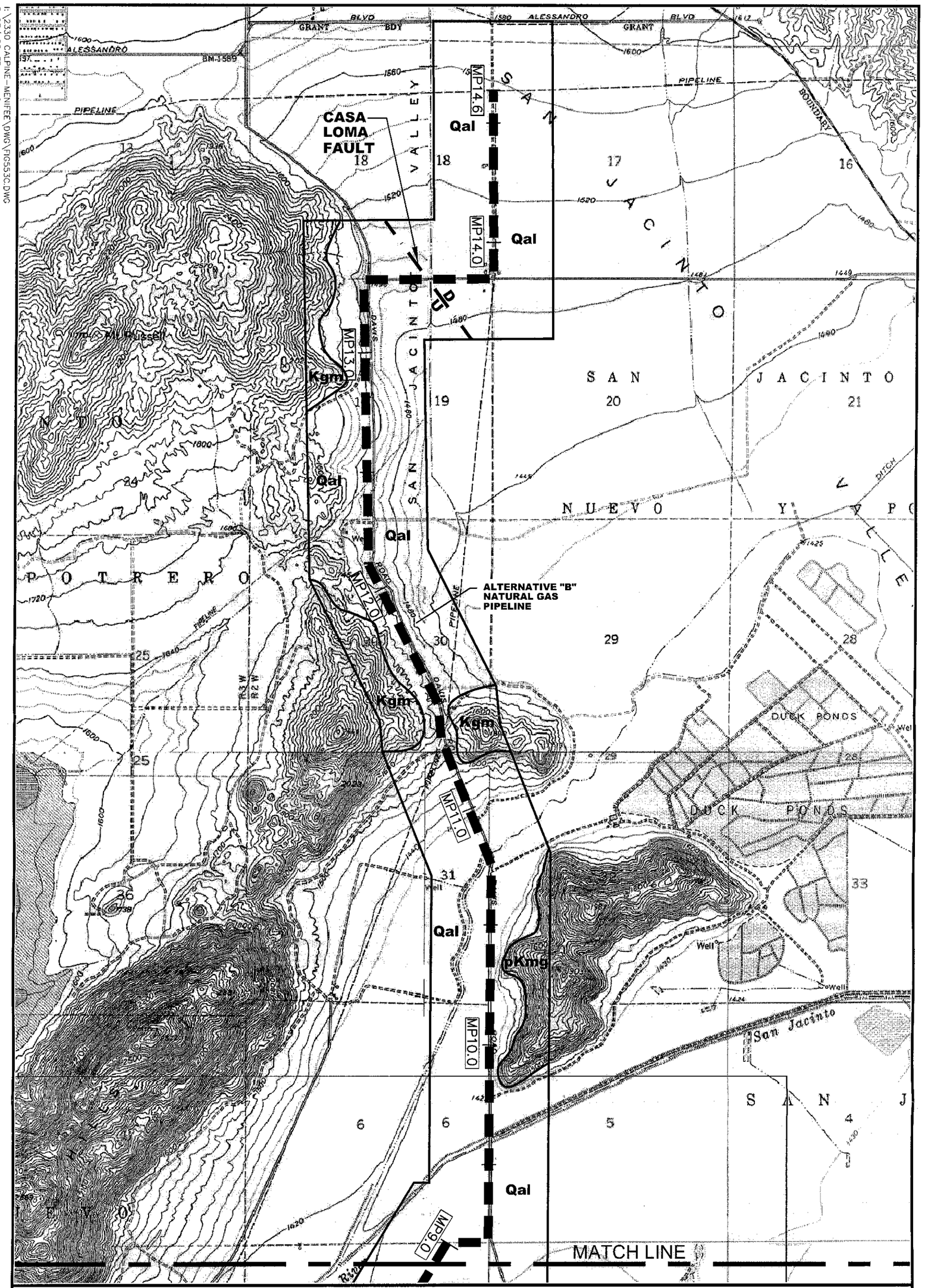

LEGEND

- NATURAL GAS PIPELINE
- Kgb — GEOLOGICAL AREA TYPE
- CONCEALED FAULT WITH INFERRED LOCATION
- U — UPTHROWN SIDE
- D — DOWNTHROWN SIDE

QUATERNARY

Qal SANDY ALLUVIAL DEPOSITS

CRETACEOUS

Kgm FOLIATED QUARTZ DIORITE

PREBATHOLITIC ROCKS

pKmg VARIOUS TYPES OF METAMORPHIC ROCKS

0 1000 2000 4000

APPROXIMATE GRAPHIC SCALE IN FEET

Base map from USGS 7.5 Romoland, Perris, Sunnymead, Lakeview and El Casco - Quads (Scale 1:24,000).

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Figure 5.5-3C
Geological Area Types

SOURCE: DIBBLEE 1967, USGS OFR. 90-701, URS 2000, USGS MS19.

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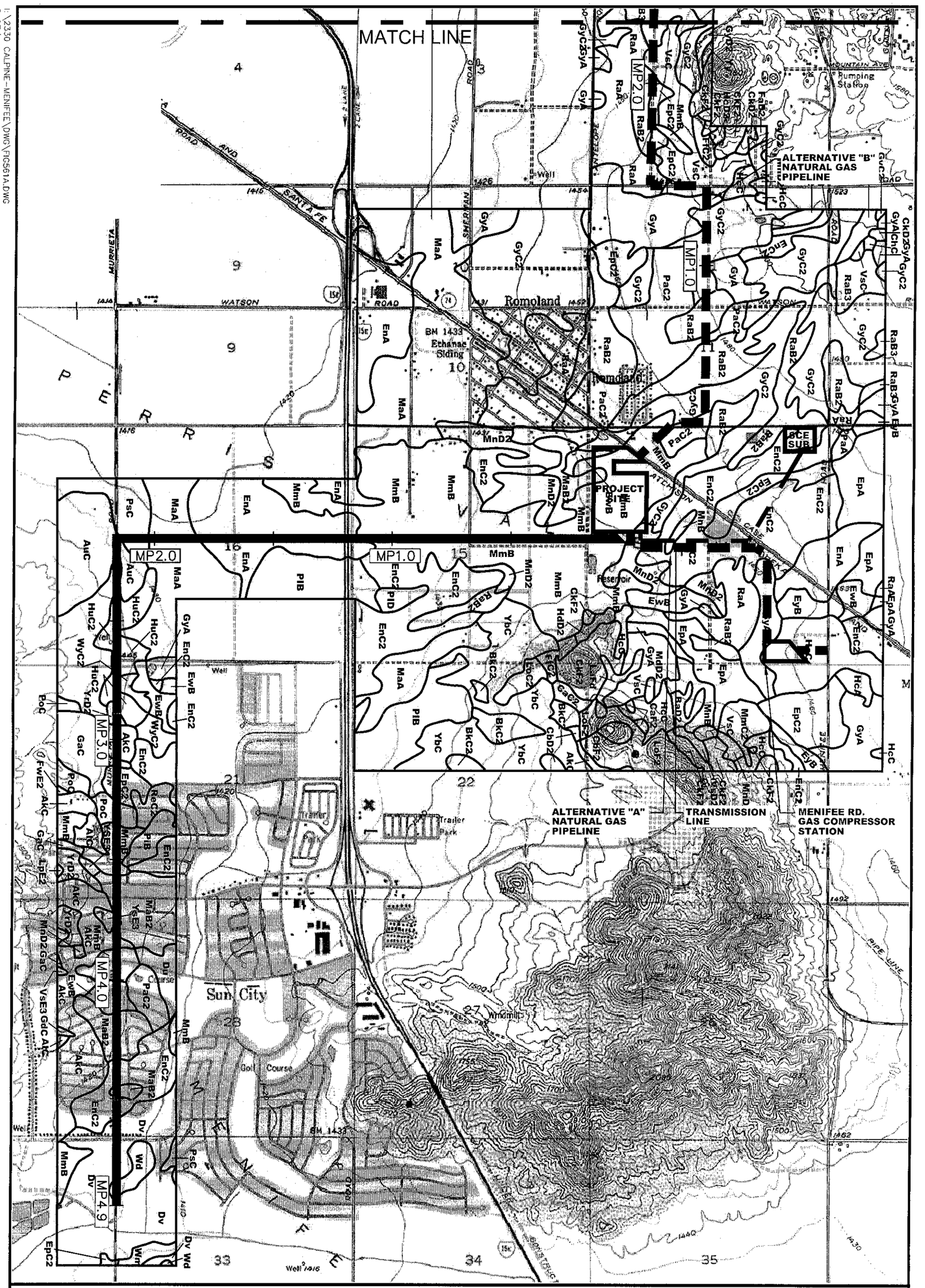

LEGEND

- NATURAL GAS PIPELINES
- TRANSMISSION LINE
- WASTE WATER PIPELINE
- EnC2 — SOIL TYPE

0 1000 2000 4000

APPROXIMATE GRAPHIC SCALE IN FEET

Base map from USGS 7.5 Romoland, Perris, Sunnymead, Lakeview and El Casco - Quads (Scale 1:24,000).

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Figure 5.6-1A
Soil Mapping Units

I:\2330 CALPINE-MENIFEE\DWG\FIG561A.DWG
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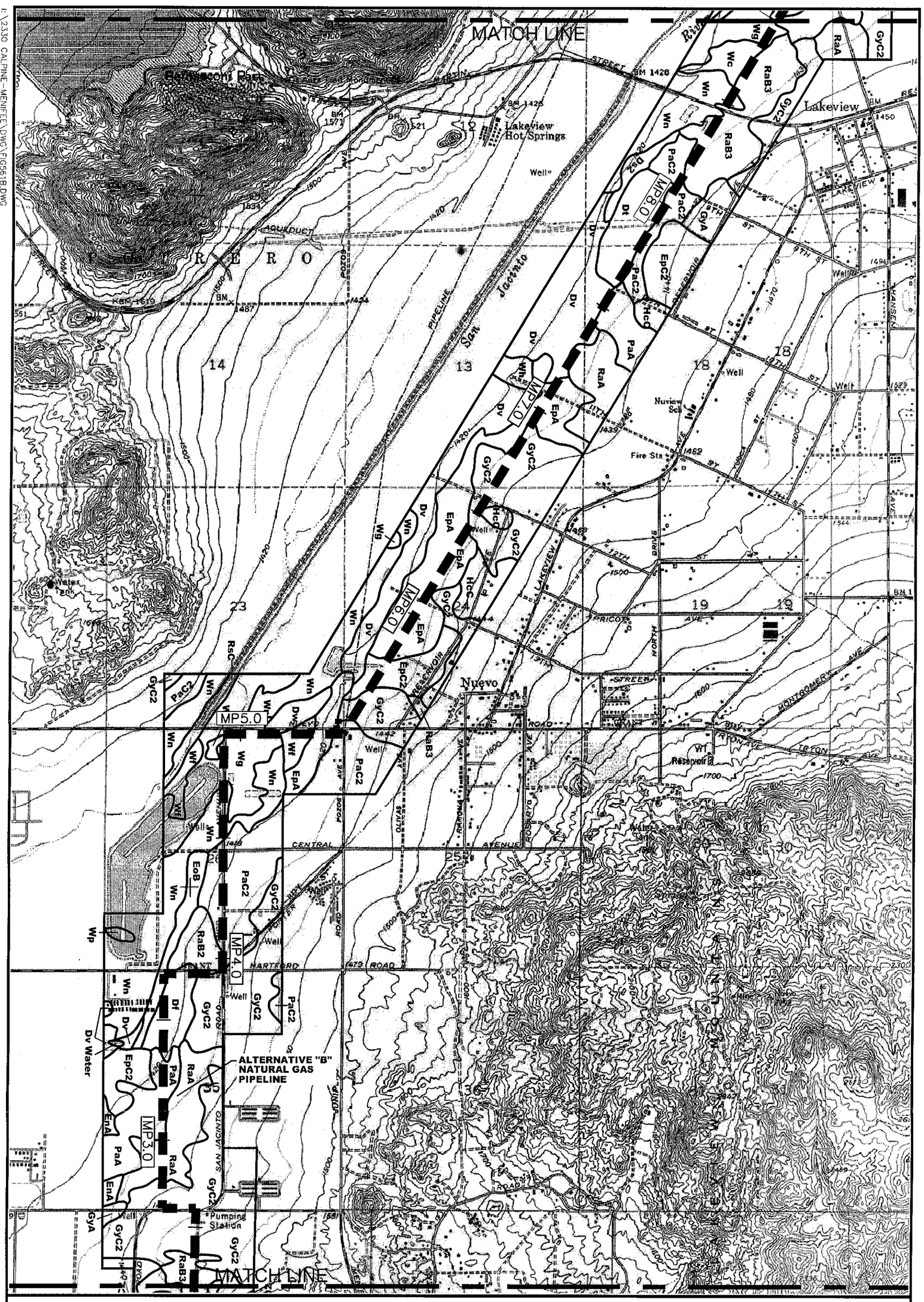

LEGEND

NATURAL GAS PIPELINE

EnC2 SOIL TYPE

Base map from USGS 7.5 Romoland, Perris, Sunnymead, Lakeview and El Casco - Quads (Scale 1:24,000).

0 1000 2000 4000

APPROXIMATE GRAPHIC SCALE IN FEET

Inland Empire Energy Center
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Figure 5.6-1B
Soil Mapping Units

I:\2330 CALPINE-MENIFEE\DWG\FIG561B.DWG
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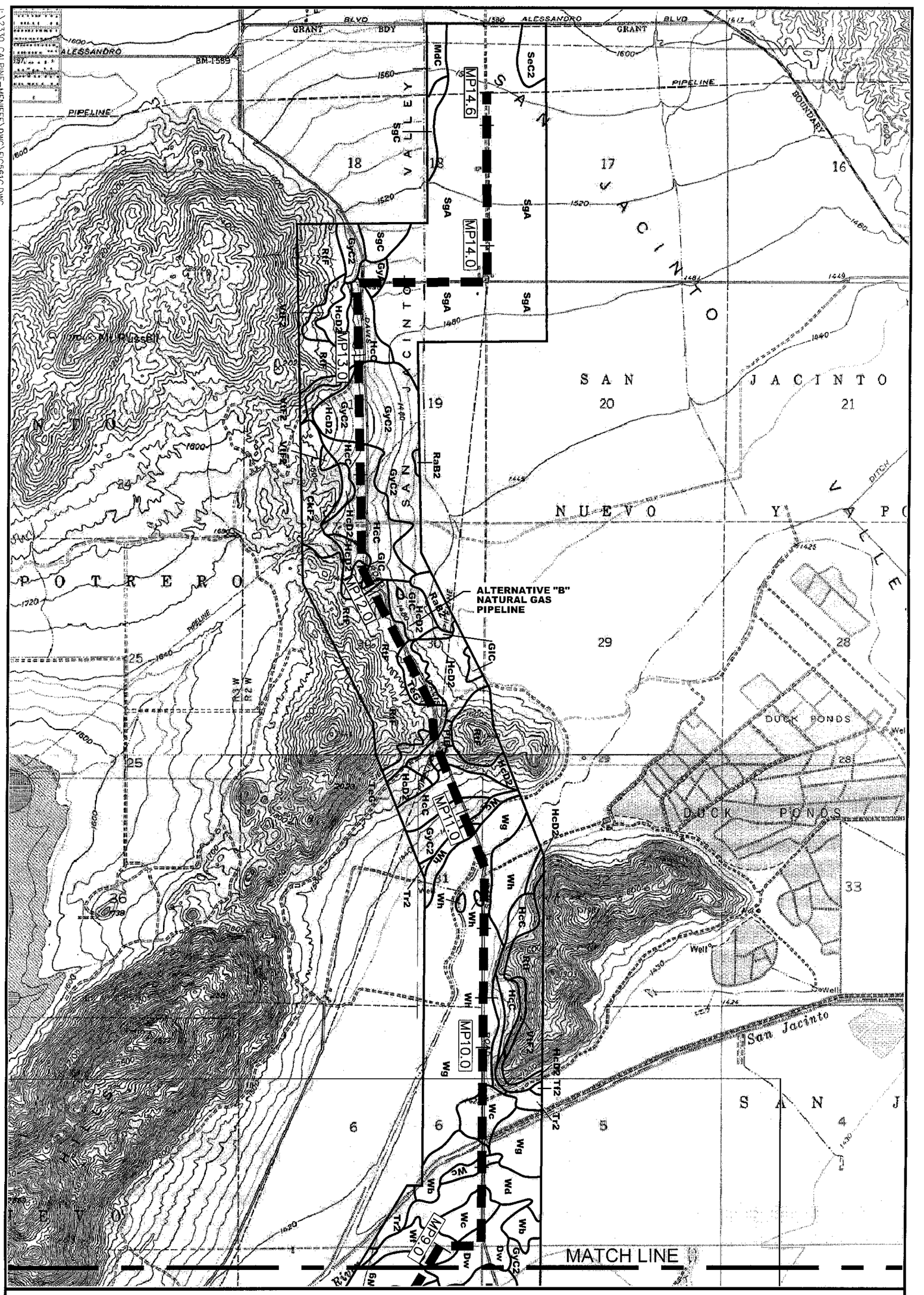
I:\2330 CALPINE-MENIFEE\DWG\FIG561C.DWG
PLOT/UPDATE: AUG 06 2001 14:52:06



LEGEND

NATURAL GAS PIPELINE

EnC2 SOIL TYPE

Base map from USGS 7.5 Romoland, Perris, Sunnymead, Lakeview and El Casco - Quads (Scale 1:24,000).

0 1000 2000 4000

APPROXIMATE GRAPHIC SCALE IN FEET

Inland Empire Energy Center
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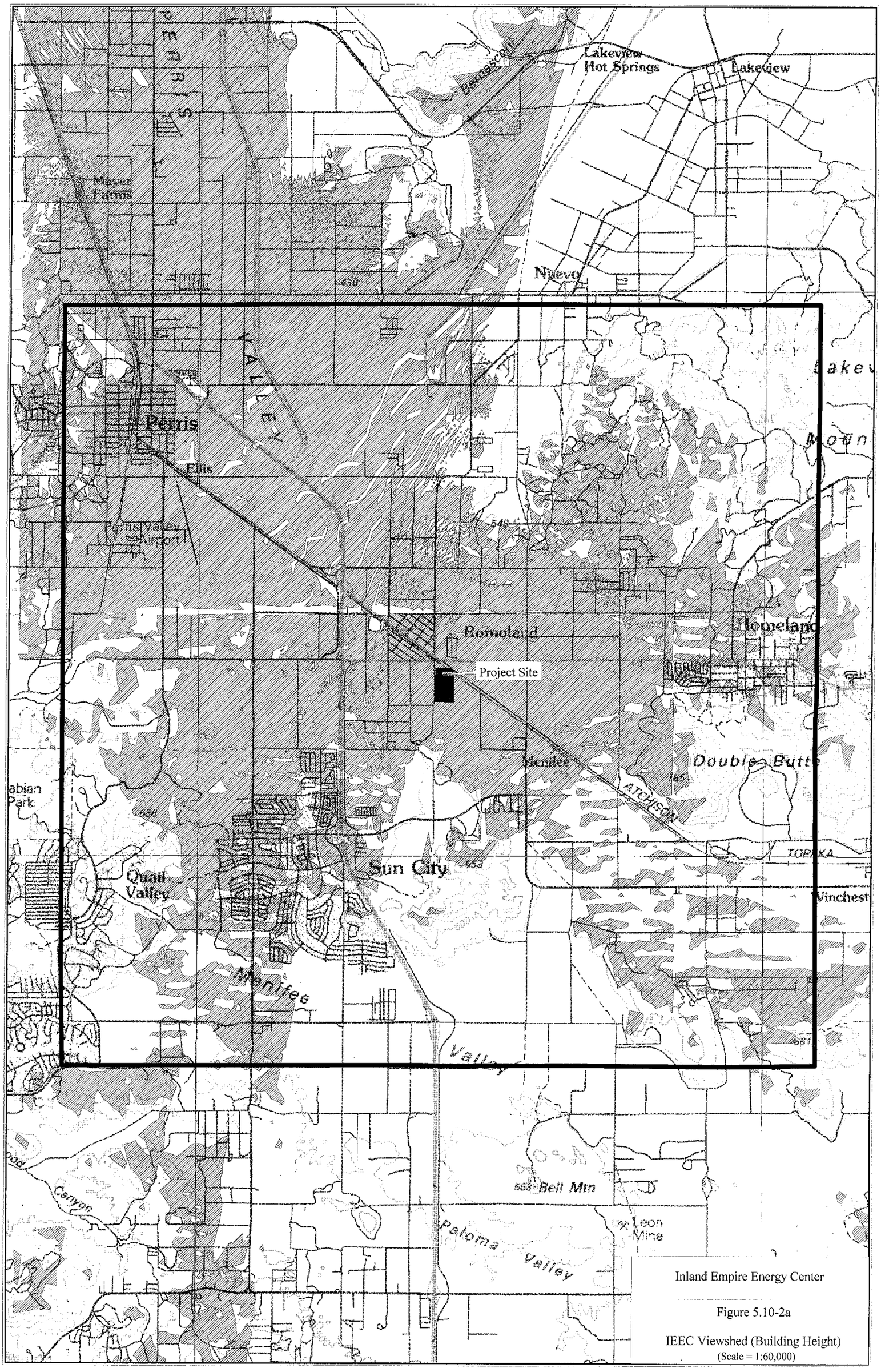
Figure 5.6-1C
Soil Mapping Units



Inland Empire Energy Center

Figure 5.10-2a

IEEC Viewshed (Building Height)

(Scale = 1:60,000)

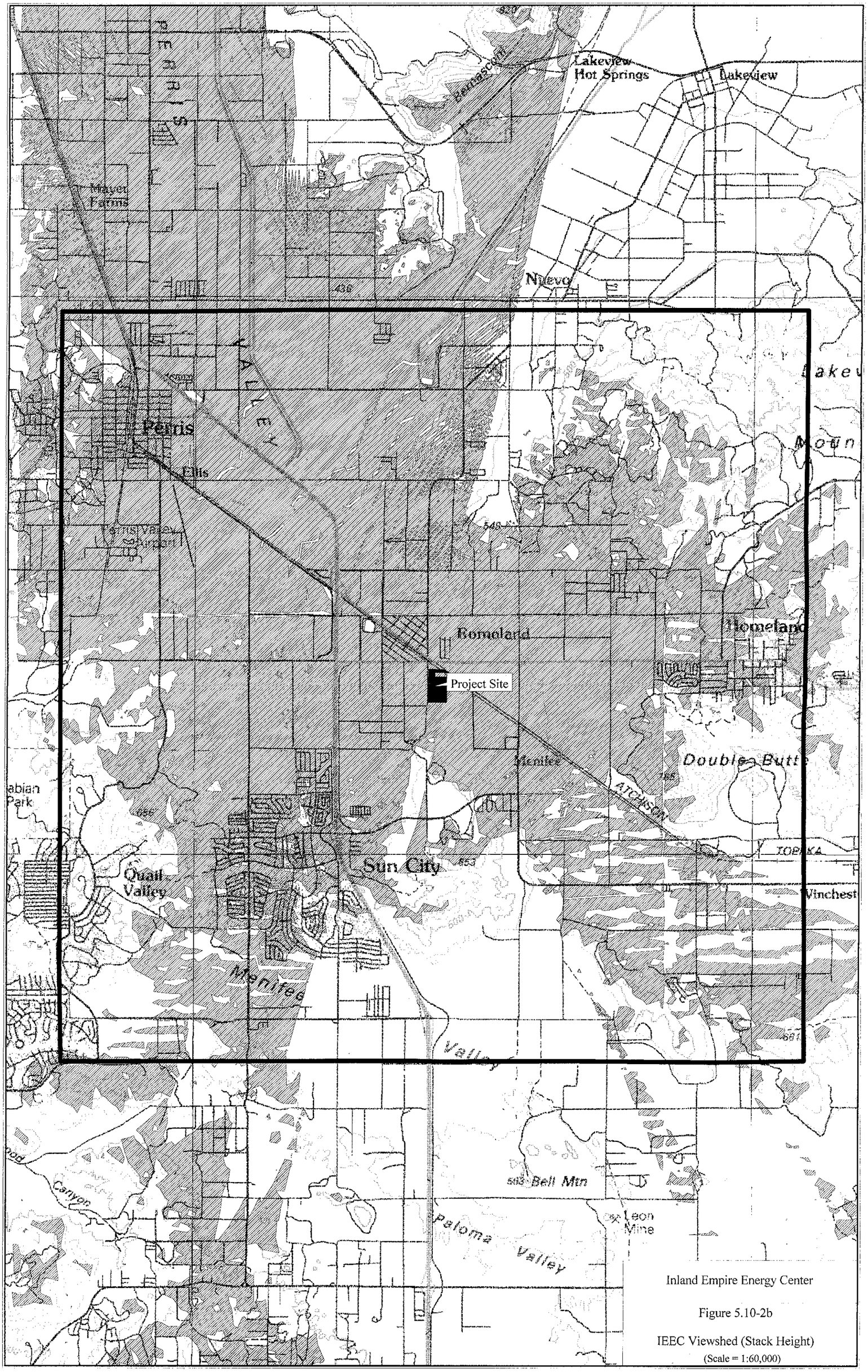


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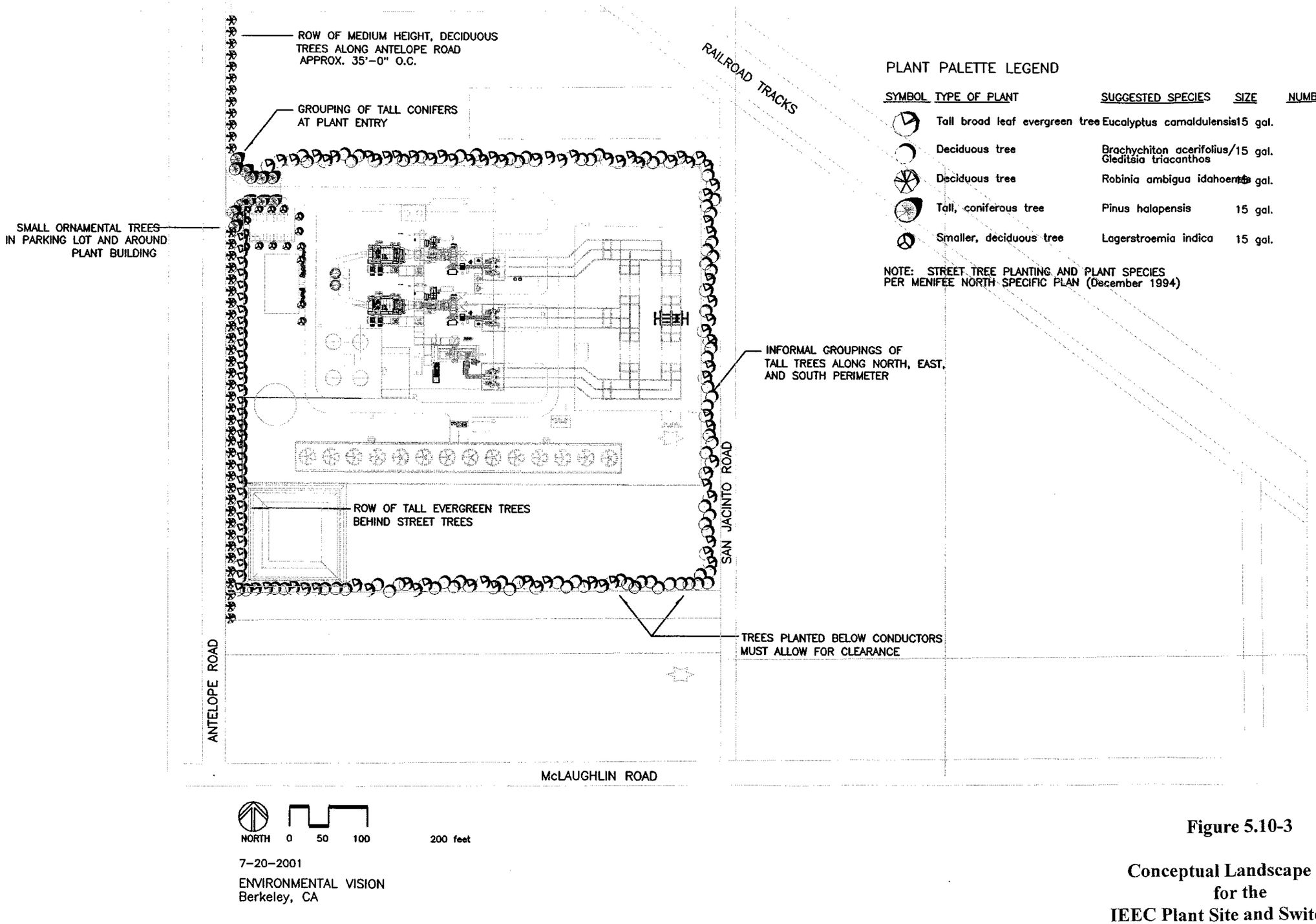
Figure 5.10-2b

IEEC Viewshed (Stack Height)

(Scale = 1:60,000)



PLANT PALETTE LEGEND

SYMBOL	TYPE OF PLANT	SUGGESTED SPECIES	SIZE	NUMBER SHOWN
	Tall broad leaf evergreen tree	Eucalyptus camaldulensis	15 gal.	102
	Deciduous tree	Brachychiton acerifolius/ Gleditsia triacanthos	15 gal.	72
	Deciduous tree	Robinia ambigua idahoensis	15 gal.	44
	Tall, coniferous tree	Pinus halapensis	15 gal.	13
	Smaller, deciduous tree	Lagerstroemia indica	15 gal.	16

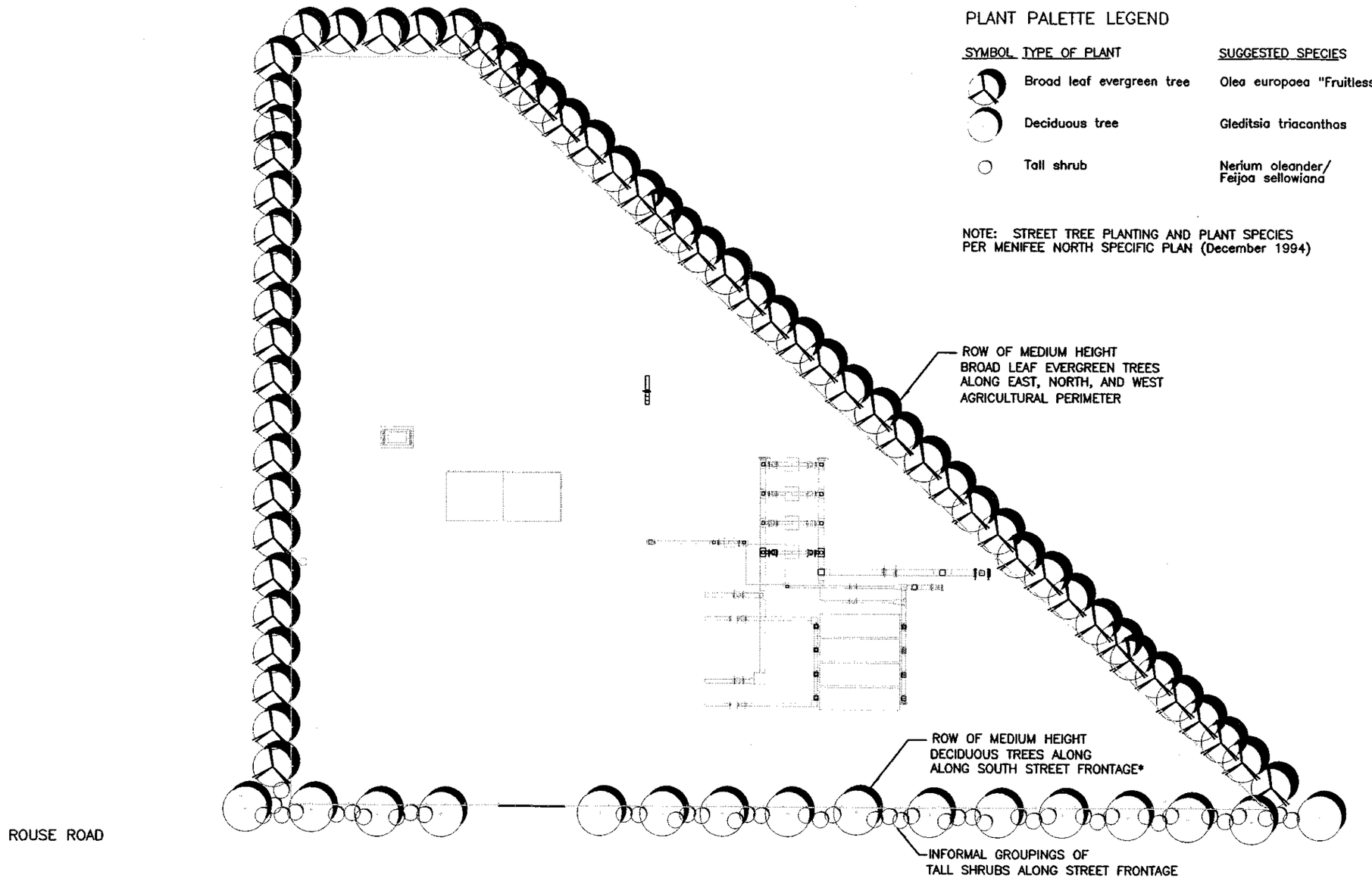
NOTE: STREET TREE PLANTING AND PLANT SPECIES PER MENIFEE NORTH SPECIFIC PLAN (December 1994)

7-20-2001

ENVIRONMENTAL VISION
Berkeley, CA

Figure 5.10-3

Conceptual Landscape Plan for the IEEC Plant Site and Switchyard



PLANT PALETTE LEGEND

SYMBOL	TYPE OF PLANT	SUGGESTED SPECIES	SIZE	NUMBER SHOWN
	Broad leaf evergreen tree	Olea europaea "Fruitless"	15 gal.	60
	Deciduous tree	Gleditsia triacanthos	15 gal.	16
	Tall shrub	Nerium oleander/ Feijoa sellowiana	15 gal.	45

NOTE: STREET TREE PLANTING AND PLANT SPECIES PER MENIFEE NORTH SPECIFIC PLAN (December 1994)

NORTH 0 10 50 100 feet

7-20-2001

ENVIRONMENTAL VISION
Berkeley, CA

Figure 5.10-4

Conceptual Landscape Plan for the Compressor Station