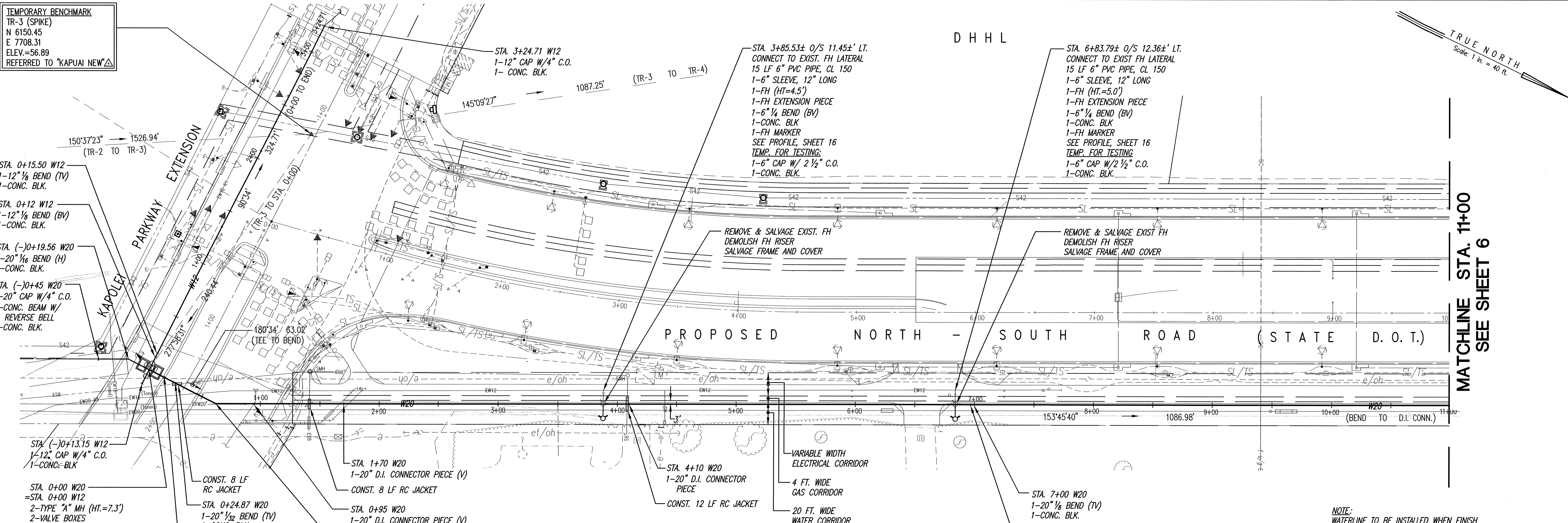
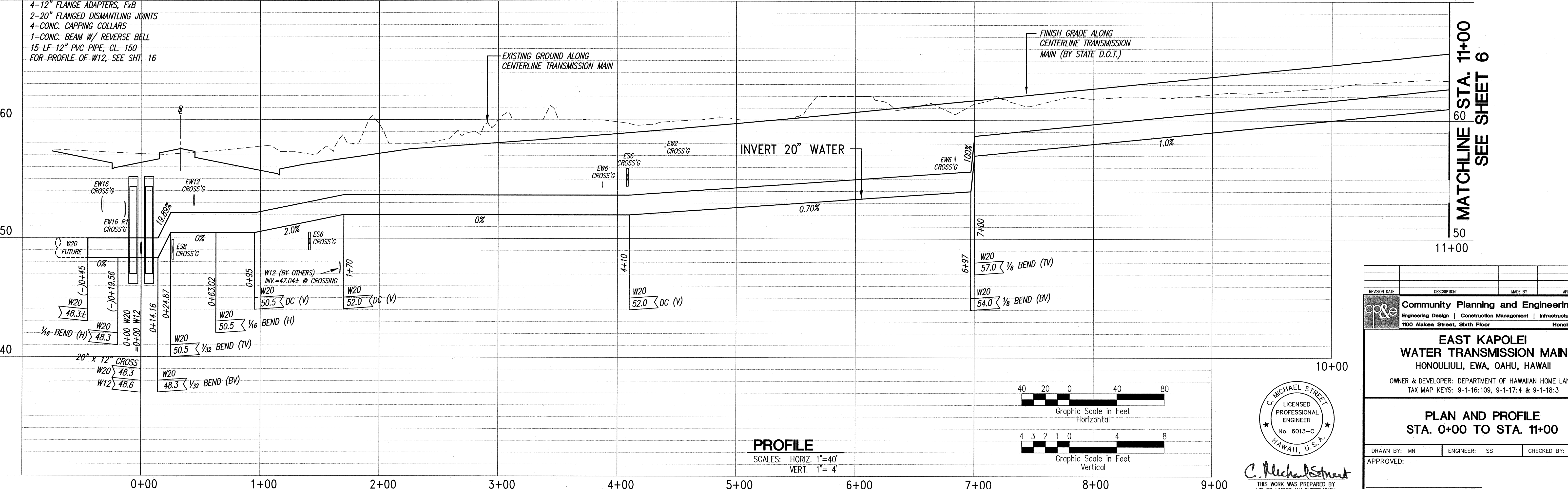


TEMPORARY BENCHMARK
TR-3 (SPIKE)
N 6150.45
E 7708.31
ELEV.=56.89
REFERRED TO "KAPUAL NEW"



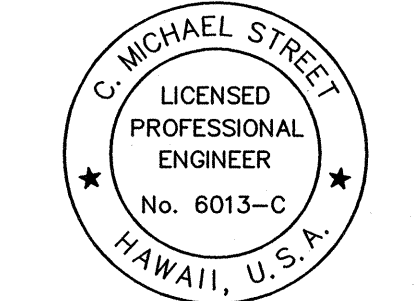
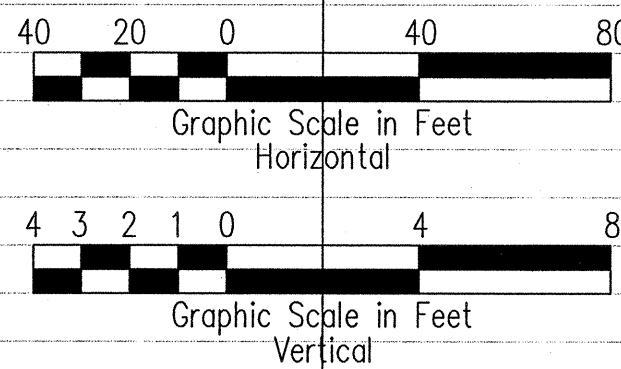
PLAN

SCALE: 1"=40'



PROFILE

SCALES: HORIZ. 1"=40'
VERT. 1"= 4'



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LICENSE EXPIRATION DATE: 04/30/08

REVISION DATE	DESCRIPTION	MADE BY	APPROVED

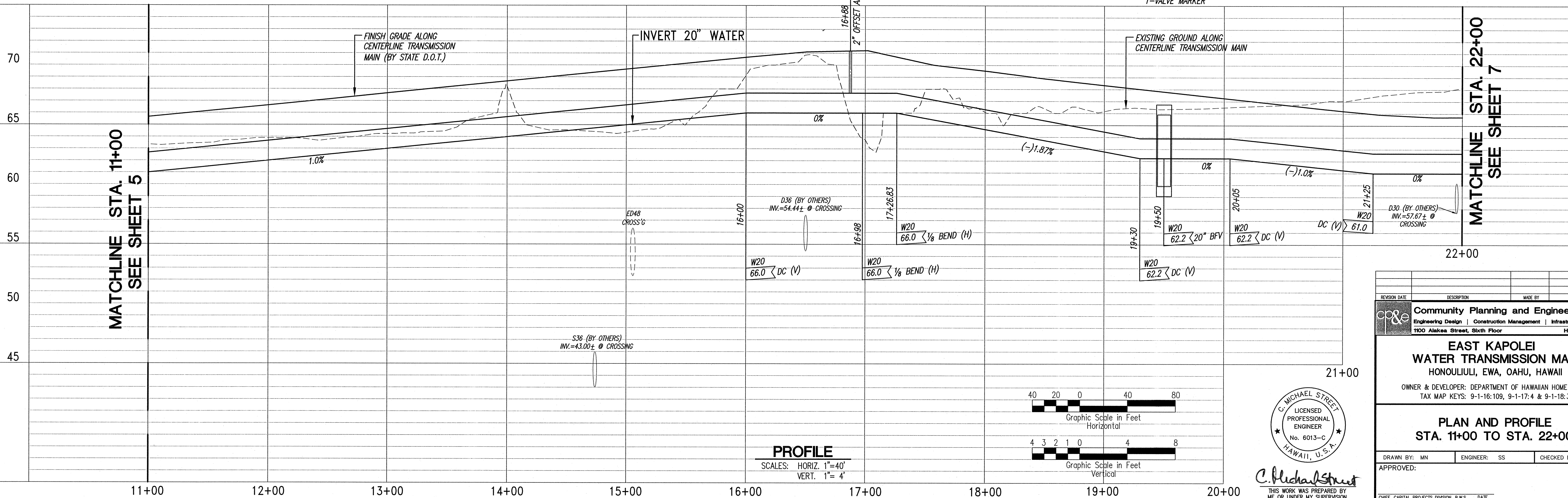
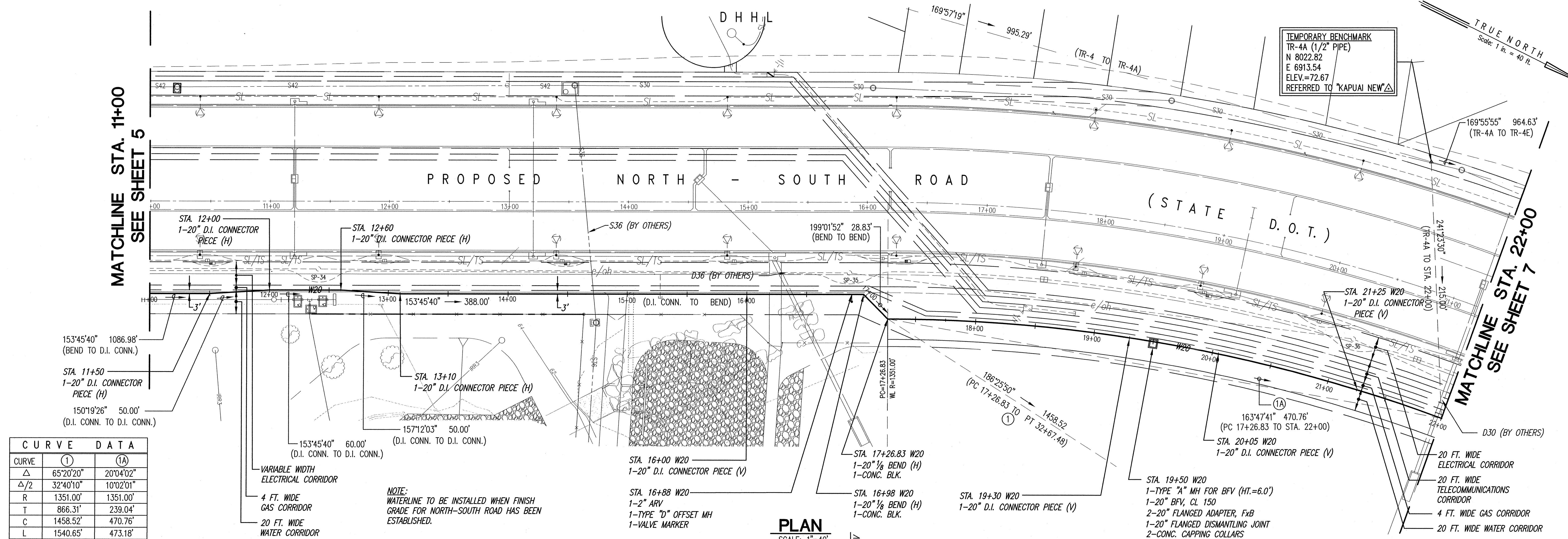
Community Planning and Engineering, Inc.
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1100 Alakea Street, Sixth Floor Honolulu, Hawaii

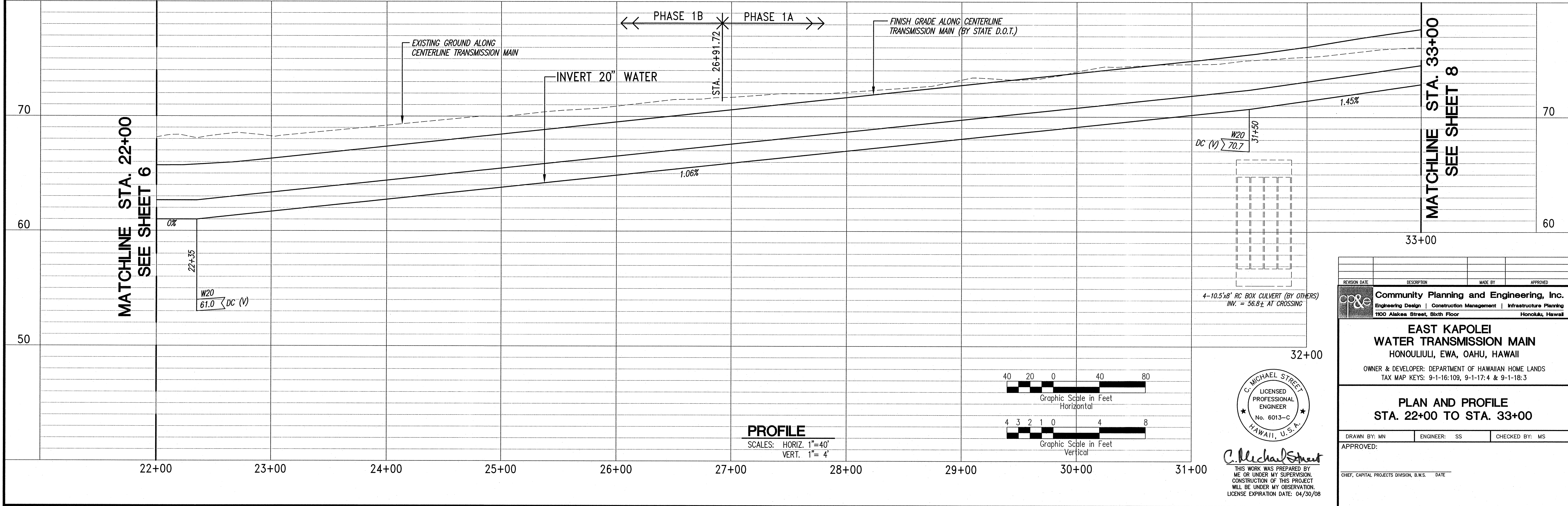
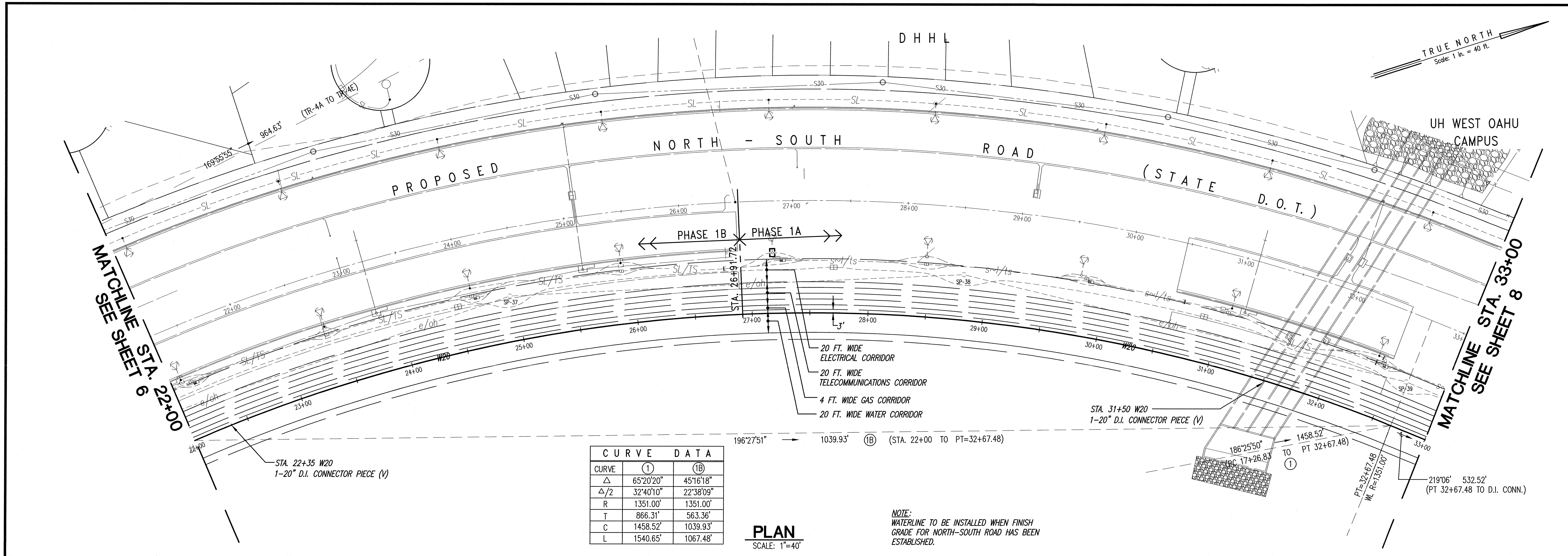
**EAST KAPOLEI
WATER TRANSMISSION MAIN**
HONOLULU, EWA, OAHU, HAWAII
OWNER & DEVELOPER: DEPARTMENT OF HAWAIIAN HOME LANDS
TAX MAP KEYS: 9-1-16:109, 9-1-17:4 & 9-1-18:3

**PLAN AND PROFILE
STA. 0+00 TO STA. 11+00**

DRAWN BY: MN ENGINEER: SS CHECKED BY: MS
APPROVED:

CHEF, CAPITAL PROJECTS DIVISION, B.W.S. DATE





REVISION DATE	DESCRIPTION	MADE BY	APPROVED

Community Planning and Engineering, Inc.
Engineering Design | Construction Management | Infrastructure Planning
1100 Alakea Street, Sixth Floor Honolulu, Hawaii

**EAST KAPOLEI
WATER TRANSMISSION MAIN
HONOLULU, EWA, OAHU, HAWAII**

OWNER & DEVELOPER: DEPARTMENT OF HAWAIIAN HOME LANDS
TAX MAP KEYS: 9-1-16:109, 9-1-17:4 & 9-1-18:3

**PLAN AND PROFILE
STA. 22+00 TO STA. 33+00**

DRAWN BY: MN ENGINEER: SS CHECKED BY: MS

APPROVED:

CHEF, CAPITAL PROJECTS DIVISION, B.W.S. DATE

MATCHLINE STA. 33+00
SEE SHEET 7

MATCHLINE STA. 44+00
SEE SHEET 9

UH WEST OAHU CAMPUS

PROPOSED NORTH - SOUTH ROAD

(STATE D. O. T.)

TRUE NORTH
Scale: 1 in. = 40 ft.

- ① STA. 38+62.24 W20
=STA. 0+00 W20
2-TYPE "A" MH (HT.=6.0')
1-20" TEE
2-20" BGGV, CL. 150, FE
2-20" FLANGED DISMANTLING JOINT
4-20" FLANGE ADAPTER, Fx B
4-CONC. CAPPING COLLAR
2-VALVE MARKER
7 LF 20" PVC PIPE, CL. 150
1-CONC. BLK.

NOTE:
WATERLINE TO BE INSTALLED WHEN FINISH
GRADE FOR NORTH-SOUTH ROAD HAS BEEN
ESTABLISHED.

STA. 33+50 W20
1-20" D.I. CONNECTOR PIECE (V)

20 FT. WIDE
ELECTRICAL CORRIDOR
20 FT. WIDE
TELECOMMUNICATIONS CORRIDOR
4 FT. WIDE GAS CORRIDOR
20 FT. WIDE WATER CORRIDOR

STA. 37+40 W20
1-20" D.I. CONNECTOR PIECE (V)
STA. 38+00 W20
1-20" D.I. CONNECTOR PIECE (H)
221'35"37" 28.24'
(D.I. CONN. TO D.I. CONN.)
STA. 38+28.24 W20
1-20" D.I. CONNECTOR
PIECE (H)
219'06" 56.00'
(D.I. CONN. TO BEND)

STA. 0+18 W20
1-20" CAP W/ 4" C.O.
1-CONC. BEAM
W/ REVERSE BELL
1-CONC. BLK.
309'06" 18.00'
(0+00 TO END)

STA. 38+84.24 W20
1-20" 1/2 BEND (H)
1-CONC. BLK.
264'06" 13.29'
(BEND TO BEND)
STA. 38+97.53 W20
1-20" 1/2 BEND (H)
1-CONC. BLK.

PLAN
SCALE: 1"=40'

STA. 39+06.54 W20
=STA. 0+00 W20
1-TYPE "A" MH (HT.=6.0')
1-20" TEE
1-20" BGGV, CL. 150, FE
1-20" FLANGED DISMANTLING JOINT
2-20" FLANGE ADAPTER, Fx B
2-CONC. CAPPING COLLAR
1-VALVE MARKER
219'06" 56.40'
(BEND TO D.I. CONN.)
174'06" 13.29'
(BEND TO BEND)
219'06" 18.00'
(BEND TO BEND)

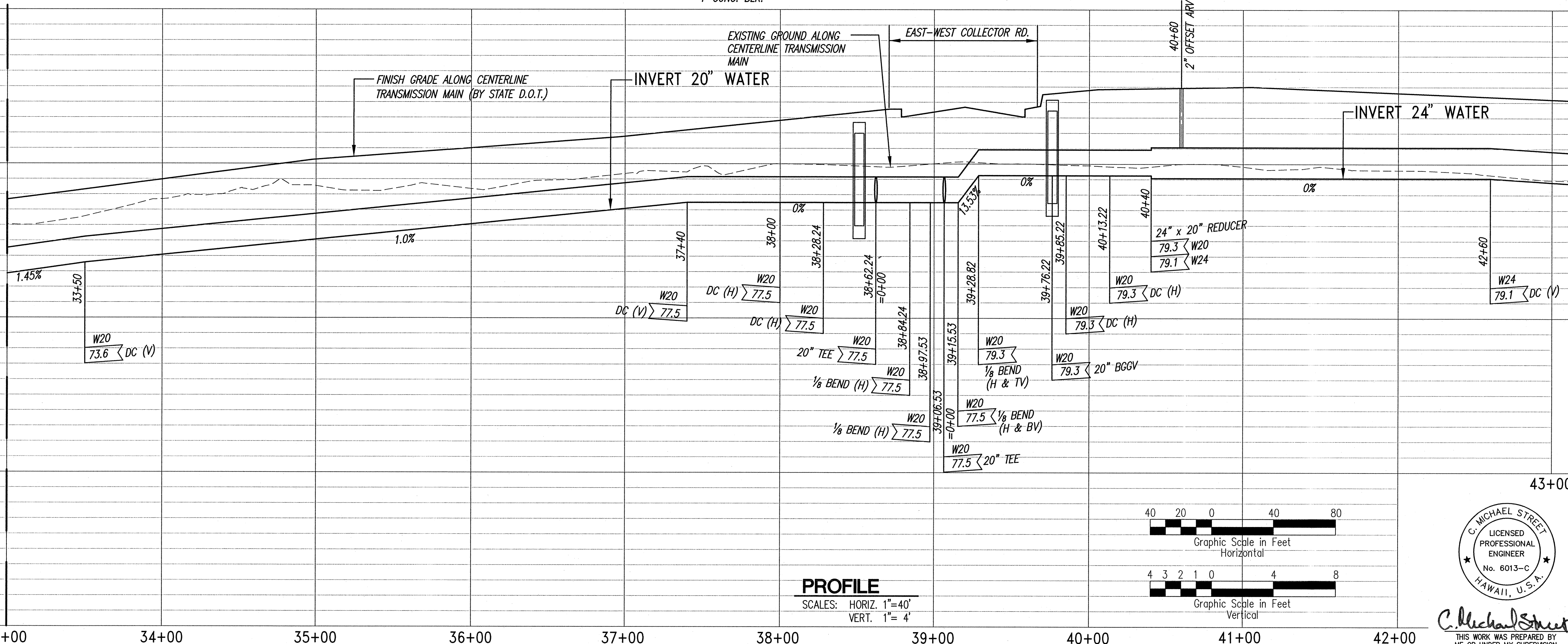
STA. 40+13.22 W20
1-20" D.I. CONNECTOR PIECE (H)
STA. 39+85.22 W20
1-20" D.I. CONNECTOR PIECE (H)
STA. 39+76.22 W20
1-TYPE "A" MH (HT.=6.0')
1-20" BGGV, CL. 150, FE
1-20" FLANGED DISMANTLING JOINT
2-20" FLANGE ADAPTER, Fx B
2-CONC. CAPPING COLLAR
1-VALVE MARKER
219'06" 56.40'
(BEND TO D.I. CONN.)
174'06" 13.29'
(BEND TO BEND)
219'06" 18.00'
(BEND TO BEND)

STA. 42+60 W24
1-24" D.I. CONNECTOR PIECE (V)

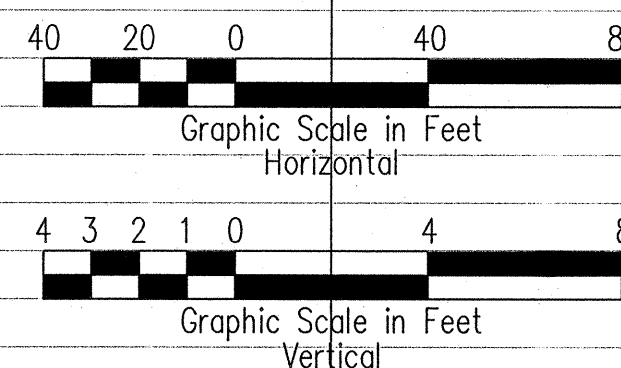
CURVE DATA		
CURVE	②	②A
Δ	25'06"00"	4'58"25"
Δ/2	12'33"00"	2'29"12.5"
R	1649.00'	1649.00'
T	367.09'	71.62'
C	716.63'	143.10'
L	722.39'	143.15'

MATCHLINE STA. 33+00
SEE SHEET 7

MATCHLINE STA. 44+00
SEE SHEET 9



PROFILE
SCALES: HORIZ. 1"=40'
VERT. 1"= 4'



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CONSTRUCTION OF THIS PROJECT
WILL BE UNDER MY OBSERVATION.
LICENSE EXPIRATION DATE: 04/30/08

REVISION DATE	DESCRIPTION	MADE BY	APPROVED

Community Planning and Engineering, Inc.
Engineering Design | Construction Management | Infrastructure Planning
1100 Alakea Street, Sixth Floor Honolulu, Hawaii

**EAST KAPOLEI
WATER TRANSMISSION MAIN**
HONOLULU, EWA, OAHU, HAWAII
OWNER & DEVELOPER: DEPARTMENT OF HAWAIIAN HOME LANDS
TAX MAP KEYS: 9-1-16:109, 9-1-17:4 & 9-1-18:3

**PLAN AND PROFILE
STA. 33+00 TO STA. 44+00**

DRAWN BY: MN ENGINEER: SS CHECKED BY: MS
APPROVED:

CHIEF, CAPITAL PROJECTS DIVISION, B.W.S. DATE

MATCHLINE STA. 44+00
SEE SHEET 8

TRUE NORTH
Scale: 1 in. = 40 ft.

UH WEST OAHU CAMPUS

PROPOSED NORTH - SOUTH ROAD (STATE D.O.T.)

MATCHLINE STA. 55+00
SEE SHEET 10

CURVE DATA				
CURVE	②	②B	③	③A
Δ	25°06'00"	20°07'34"	24°46'36"	00°30'30"
Δ/2	12°33'00"	10°03'47"	12°23'18"	00°15'15"
R	1649.00'	1649.00'	4149.00'	4149.00'
T	367.08'	292.64'	911.34'	18.41'
C	716.63'	576.27'	1780.22'	36.82'
L	722.39'	579.24'	1794.17'	36.82'

STA. 44+59.92 W24
1-24" D.I. CONNECTOR PIECE (V)

STA. 45+40.02 W24
1-24" D.I. CONNECTOR PIECE (V)

STA. 48+40 W24
1-24" D.I. CONNECTOR PIECE (V)

STA. 49+60 W24
1-24" BFV, CL. 150
2-24" FLANGE ADAPTER, Fx8
1-24" FLANGED DISMANTLING JOINT
1-TYPE "A" MH FOR BFV (HT.=6.0')
2-CONC. CAPPING COLLARS
1-VALVE MARKER

STA. 50+40 W24
1-24" D.I. CONNECTOR PIECE (V)

STA. 49+80 W24
1-24" D.I. CONNECTOR PIECE (V)

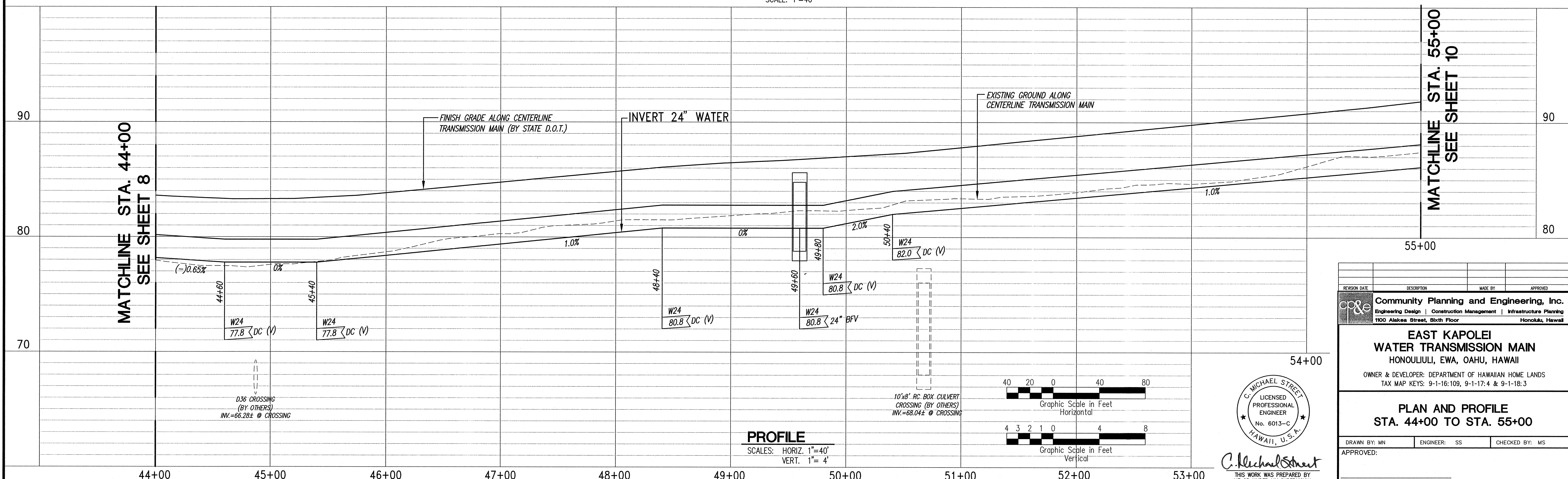
20 FT. WIDE ELECTRICAL CORRIDOR
20 FT. WIDE TELECOMMUNICATIONS CORRIDOR
4 FT. WIDE GAS CORRIDOR
20 FT. WIDE WATER CORRIDOR

NOTE:
WATERLINE TO BE INSTALLED WHEN FINISH
GRADE FOR NORTH-SOUTH ROAD HAS BEEN
ESTABLISHED.

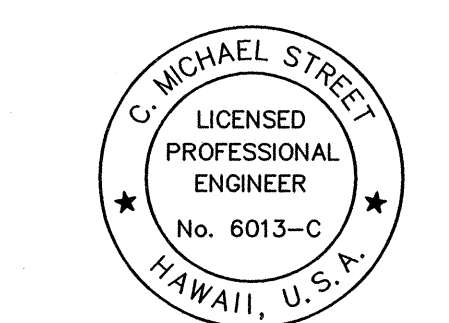
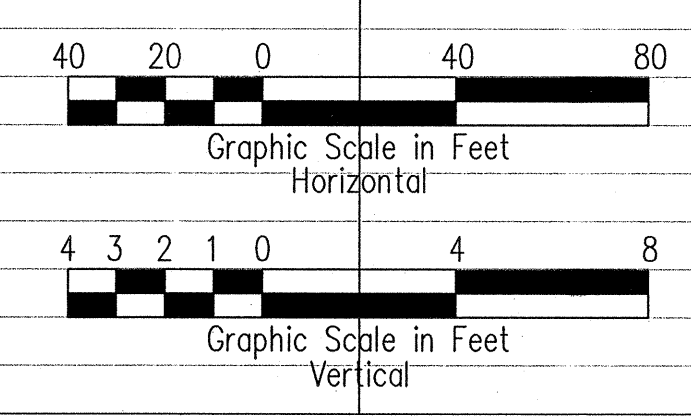
PLAN
SCALE: 1"=40'

MATCHLINE STA. 44+00
SEE SHEET 8

MATCHLINE STA. 55+00
SEE SHEET 10



PROFILE
SCALES: HORIZ. 1"=40'
VERT. 1"= 4'



C. Michael Street
THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.
CONSTRUCTION OF THIS PROJECT
WILL BE UNDER MY OBSERVATION.
LICENSE EXPIRATION DATE: 04/30/08

REVISION DATE	DESCRIPTION	MADE BY	APPROVED

Community Planning and Engineering, Inc.
Engineering Design | Construction Management | Infrastructure Planning
1100 Alakea Street, 8th Floor Honolulu, Hawaii

**EAST KAPOLEI
WATER TRANSMISSION MAIN**
HONOLULU, EWA, OAHU, HAWAII
OWNER & DEVELOPER: DEPARTMENT OF HAWAIIAN HOME LANDS
TAX MAP KEYS: 9-1-16:109, 9-1-17:4 & 9-1-18:3

**PLAN AND PROFILE
STA. 44+00 TO STA. 55+00**

DRAWN BY: MN ENGINEER: SS CHECKED BY: MS

APPROVED: CHIEF, CAPITAL PROJECTS DIVISION, B.W.S. DATE

MATCHLINE STA. 55+00
SEE SHEET 9

PROPOSED NORTH - SOUTH ROAD (STATE D.O.T.)

MATCHLINE STA. 66+00
SEE SHEET 11

CURVE DATA		
CURVE	(3)	(3B)
Δ	24°46'36"	15°11'26"
Δ/2	12°23'18"	07°35'43"
R	4149.00'	4149.00'
T	911.34'	553.24'
C	1780.22'	1096.78'
L	1794.17'	1100.00'

NOTE:
WATERLINE TO BE INSTALLED WHEN FINISH
GRADE FOR NORTH-SOUTH ROAD HAS BEEN
ESTABLISHED.

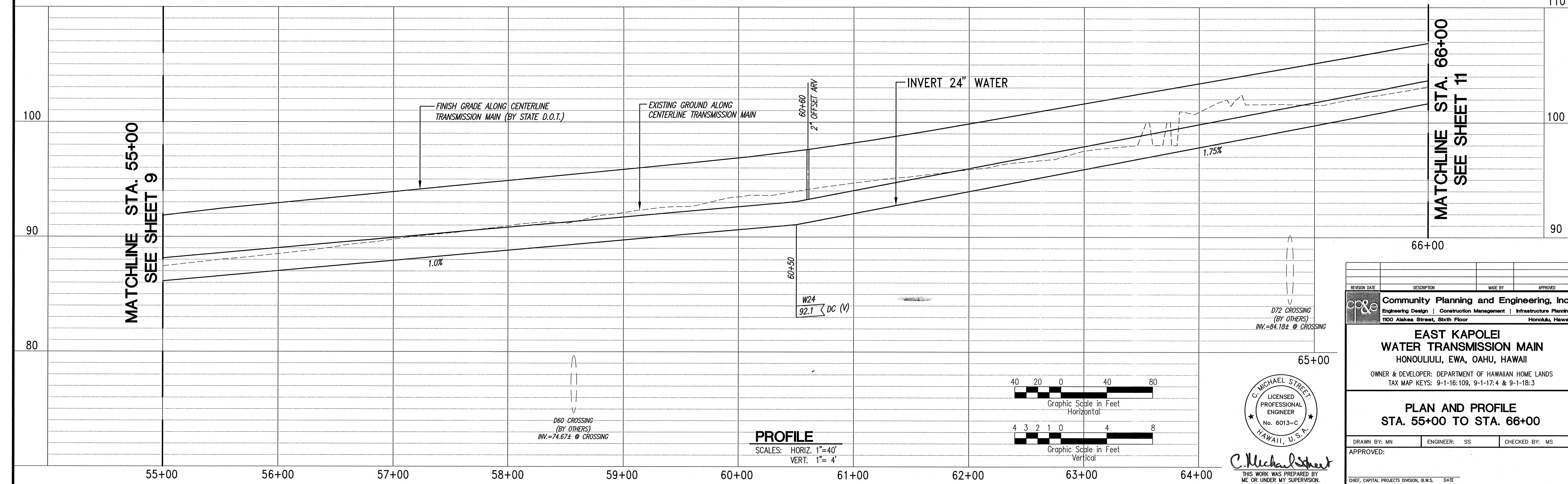
STA. 60+50 W24
1-24" D.I. CONNECTOR PIECE (V)

STA. 60+60 W24
1-2" ARV
1-TYPE "D" OFFSET MH
1-VALVE MARKER

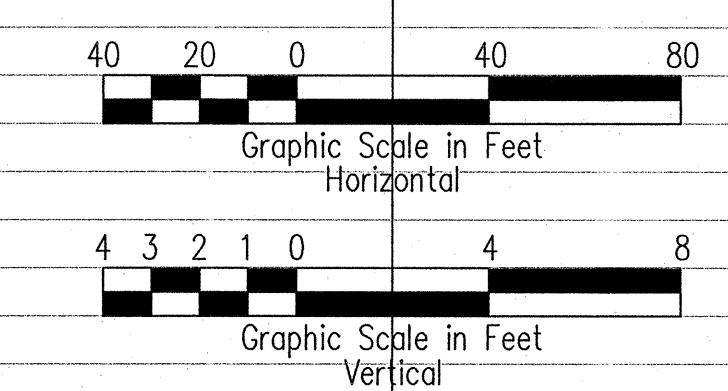
TO 62+00 PT 72+57.35

- 20 FT. WIDE ELECTRICAL CORRIDOR
- 20 FT. WIDE TELECOMMUNICATIONS CORRIDOR
- 4 FT. WIDE GAS CORRIDOR
- 20 FT. WIDE WATER CORRIDOR

PLAN
SCALE: 1"=40'



PROFILE
SCALES: HORIZ. 1"=40'
VERT. 1"= 4'



C. MICHAEL STREET
LICENSED PROFESSIONAL ENGINEER
No. 6013-C
HAWAII, U.S.A.

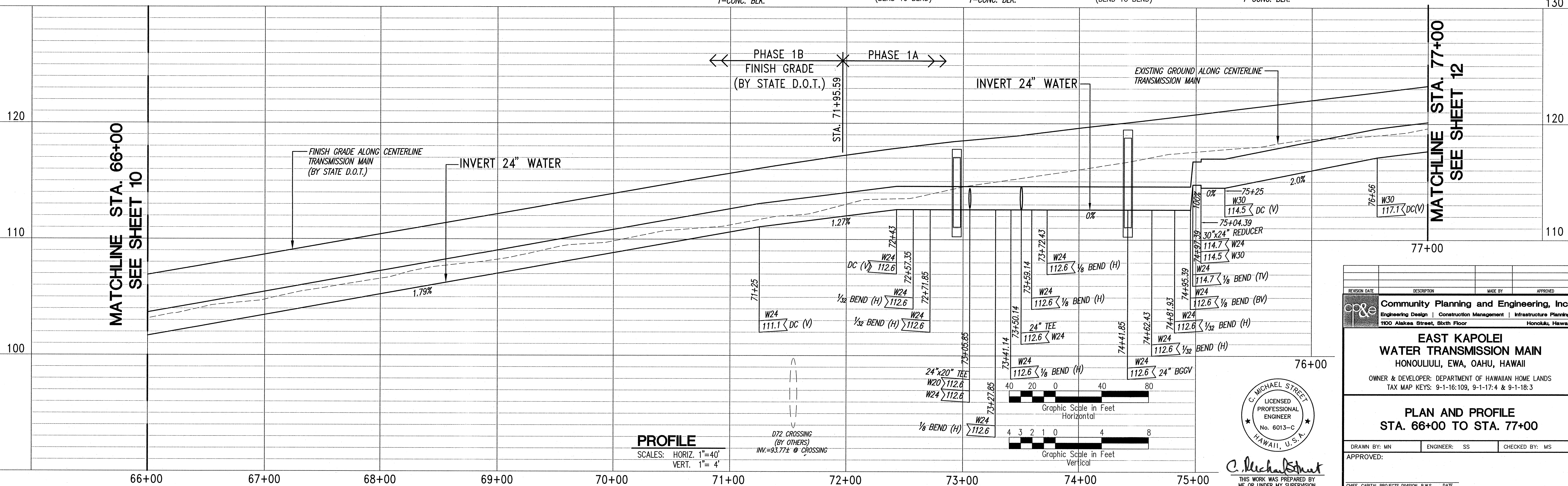
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LICENSE EXPIRATION DATE: 04/30/08

REVISION DATE	DESCRIPTION	MADE BY	APPROVED
Community Planning and Engineering, Inc. Engineering Design Construction Management Infrastructure Planning 1100 Alakea Street, Sixth Floor Honolulu, Hawaii			
EAST KAPOLEI WATER TRANSMISSION MAIN HONOLULU, EWA, OAHU, HAWAII OWNER & DEVELOPER: DEPARTMENT OF HAWAIIAN HOME LANDS TAX MAP KEYS: 9-1-16:109, 9-1-17:4 & 9-1-18:3			
PLAN AND PROFILE STA. 55+00 TO STA. 66+00			
DRAWN BY: MN	ENGINEER: SS	CHECKED BY: MS	
APPROVED:			
CHIEF, CAPITAL PROJECTS DIVISION, B.W.S. DATE			

① STA. 73+05.85 W24
=0+00 W20
2-TYPE "A" MH (HT.=6.0')
1-24"x20" TEE
1-24" BGGV, CL. 150, FE
1-20" BGGV, CL. 150, FE
1-24" FLANGED DISMANTELING JOINT
1-20" FLANGED DISMANTELING JOINT
2-24" FLANGE ADAPTER, Fx B
2-20" FLANGE ADAPTER, Fx B
4-CONC. CAPPING COLLAR
2-VALVE MARKER
7 LF 20" PVC PIPE, CL. 150
1-CONC. BLK

② STA. 73+50.14 W24
=0+00 W24
1-TYPE "A" MH (HT.=6.0')
1-24" TEE
1-24" BGGV, CL. 150, FE
1-24" FLANGED DISMANTELING JOINT
2-24" FLANGE ADAPTER, Fx B
2-CONC. CAPPING COLLAR
1-CONC. BLK.
FOR PROFILE OF W24,
SEE SHT. 16

CURVE DATA				
CURVE	③	③C	④	④A
Δ	24°46'36"	9°04'40"	18°47'40"	3°00'41"
Δ/2	12°23'18"	4°32'20"	9°23'50"	1°30'20.5"
R	4149.00'	4149.00'	4149.00'	4149.00'
T	911.34'	329.36'	686.55'	109.06'
C	1780.22'	656.66'	1354.88'	218.04'
L	1794.17'	657.35'	1360.97'	218.07'



UH WEST OAHU CAMPUS

TRUE NORTH
Scale: 1 in. = 40 ft.

MATCHLINE STA. 77+00
SEE SHEET 11

MATCHLINE STA. 88+00
SEE SHEET 13

CURVE DATA		
CURVE	(4)	(4B)
Δ	18°47'40"	15°11'26"
Δ/2	9°23'50"	7°35'43"
R	4149.00'	4149.00'
T	686.55'	553.24'
C	1354.88'	1096.78'
L	1360.97'	1100.00'

STA 78+00 W30
1-30" D.I. CONNECTOR PIECE (V)

NOTE:
WATERLINE TO BE INSTALLED WHEN FINISH
GRADE FOR NORTH-SOUTH ROAD HAS BEEN
ESTABLISHED.

PLAN
SCALE: 1"=40'

20 FT. WIDE
ELECTRICAL CORRIDOR
20 FT. WIDE
TELECOMMUNICATIONS
CORRIDOR
4 FT. WIDE GAS CORRIDOR
20 FT. WIDE WATER CORRIDOR

STA. 86+29.48 W30
1-30" D.I. CONNECTOR PIECE (V)

MATCHLINE STA. 77+00
SEE SHEET 11

MATCHLINE STA. 88+00
SEE SHEET 13

INVERT 30" WATER

FINISH GRADE ALONG
CENTERLINE TRANSMISSION
MAIN (BY STATE D.O.T.)

EXISTING GROUND ALONG CENTERLINE
TRANSMISSION MAIN

1.23%

1.0%

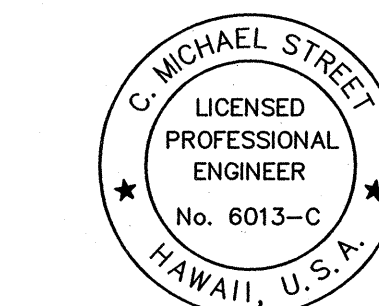
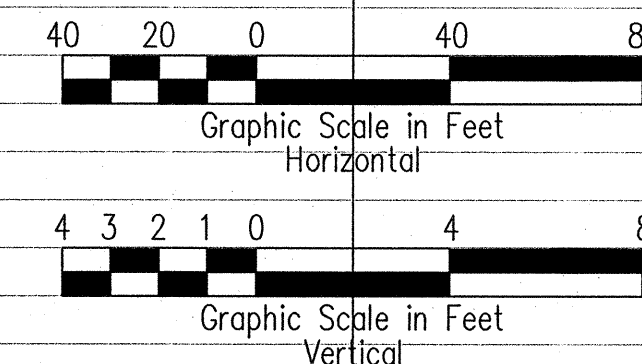
0.83%

W30
118.9' DC (V)

W30
127.2' DC (V)

PROFILE

SCALES: HORIZ. 1"=40'
VERT. 1"= 4'



C. Michael Street
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LICENSE EXPIRATION DATE: 04/30/08

REVISION DATE	DESCRIPTION	MADE BY	APPROVED
Community Planning and Engineering, Inc. Engineering Design Construction Management Infrastructure Planning 1100 Alakea Street, Sixth Floor Honolulu, Hawaii			

**EAST KAPOLEI
WATER TRANSMISSION MAIN**
HONOLULU, EWA, OAHU, HAWAII

OWNER & DEVELOPER: DEPARTMENT OF HAWAIIAN HOME LANDS
TAX MAP KEYS: 9-1-16:109, 9-1-17:4 & 9-1-18:3

**PLAN AND PROFILE
STA. 77+00 TO STA. 88+00**

DRAWN BY: MN ENGINEER: SS CHECKED BY: MS

APPROVED:

CHIEF, CAPITAL PROJECTS DIVISION, B.W.S. DATE

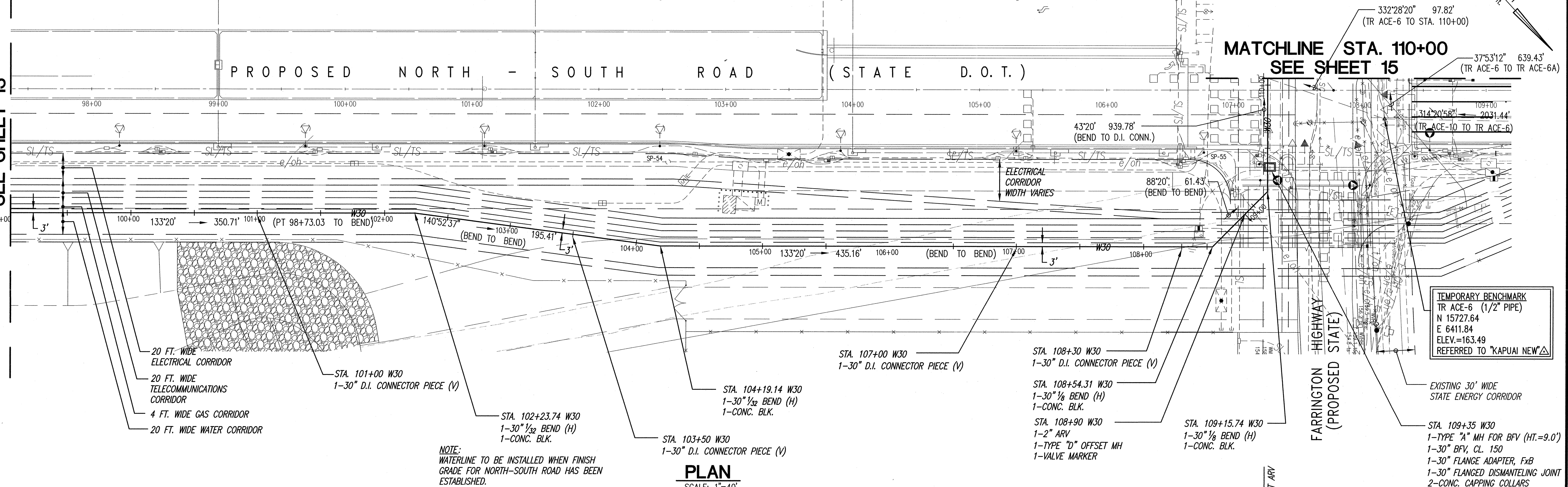
MATCHLINE STA. 99+00
SEE SHEET 13

MATCHLINE STA. 99+00
SEE SHEET 13

UH WEST OAHU CAMPUS

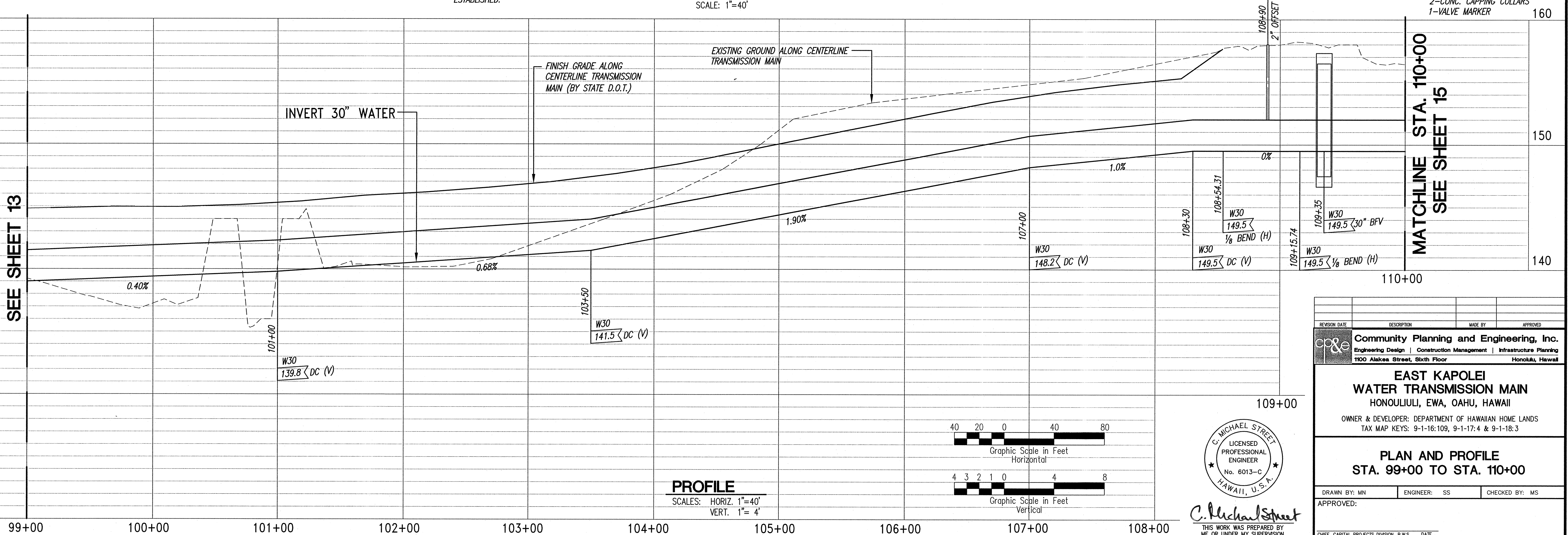
PROPOSED NORTH - SOUTH ROAD (STATE D.O.T.)

MATCHLINE STA. 110+00
SEE SHEET 15



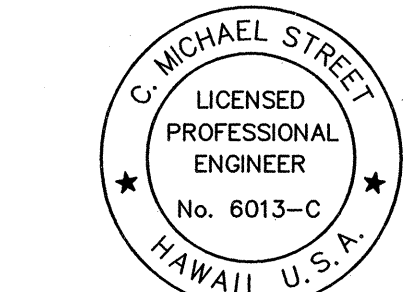
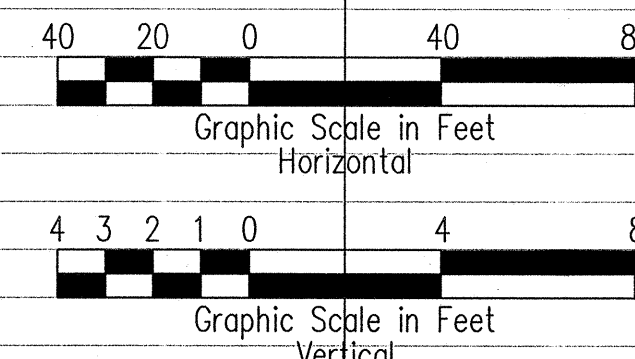
NOTE:
WATERLINE TO BE INSTALLED WHEN FINISH
GRADE FOR NORTH-SOUTH ROAD HAS BEEN
ESTABLISHED.

PLAN
SCALE: 1"=40'



PROFILE

SCALES: HORIZ. 1"=40'
VERT. 1"= 4'



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LICENSE EXPIRATION DATE: 04/30/08

REVISION DATE	DESCRIPTION	MADE BY	APPROVED
Community Planning and Engineering, Inc. Engineering Design Construction Management Infrastructure Planning 1100 Alakea Street, Sixth Floor Honolulu, Hawaii			
EAST KAPOLEI WATER TRANSMISSION MAIN HONOLULU, EWA, OAHU, HAWAII OWNER & DEVELOPER: DEPARTMENT OF HAWAIIAN HOME LANDS TAX MAP KEYS: 9-1-16:109, 9-1-17:4 & 9-1-18:3			
PLAN AND PROFILE STA. 99+00 TO STA. 110+00			
DRAWN BY: MN	ENGINEER: SS	CHECKED BY: MS	APPROVED:
CHIEF, CAPITAL PROJECTS DIVISION, B.W.S. DATE			

