

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-03-00	2004	20	66

Sub-Total Earthwork Quantities "Kapaa"

Excavation = 307.1 C.Y.
Embankment = 340.0 C.Y.

New Finish Grade (Typical) FG=10.81 EG=10.50 R/W (Typ.)

C = 7.6 SF
F = 16.6 SF

"KAPAA" STA. 2+90.70

Exc = 18.1 CY
Emb = 48.2 CY

"A" FG=10.80 EG=10.37

C = 16.4 SF
F = 47.4 SF

"KAPAA" STA. 2+50

Exc = 22.2 CY
Emb = 64.1 CY

Fill to Top Bank Slope Varies

FG=10.76 EG=10.81

C = 7.6 SF
F = 21.8 SF

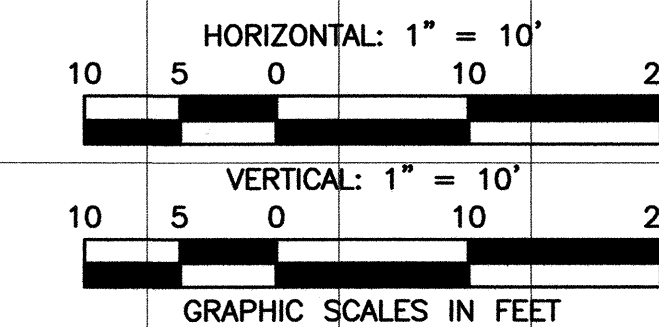
"KAPAA" STA. 2+00



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CROSS SECTIONS
"KAPAA"
KUHIO HIGHWAY IMPROVEMENTS
Extension Of Temporary Kapaa Bypass Road
Project No. 56A-03-00
Scale: 1"=10'
Date: Mar 2004
SHEET No. 1 OF 6 SHEETS

20



Exc = 9.6 CY
Emb = 65.0 CY

Fill to Top Bank Slope Varies

FG=11.28 EG=11.00

C = 2.8 SF
F = 48.4 SF

"KAPAA" STA. 1+50

FG=11.29 EG=11.07

C = 32.0 SF
F = 19.0 SF

"KAPAA" STA. 0+00

Baseline (Typical)

Exc = 50.6 CY
Emb = 52.6 CY

FG=11.63 EG=11.39

C = 22.6 SF
F = 37.8 SF

"KAPAA" STA. (-)0+50

Exc = 38.6 CY
Emb = 49.1 CY

FG=11.88 EG=12.01

C = 19.1 SF
F = 15.2 SF

"KAPAA" STA. (-)1+00

Exc = 36.3 CY
Emb = 21.6 CY

FG=12.13 EG=12.09

C = 20.1 SF
F = 8.1 SF

"KAPAA" STA. (-)1+50

Exc = 42.8 CY
Emb = 17.1 CY

FG=12.38 EG=12.39

Exist. Ground (Typical)

C = 26.1 SF
F = 10.4 SF

"KAPAA" STA. (-)2+00

Exc = 52.0 CY
Emb = 17.1 CY

New Finish Grade (Typical)

FG=12.64 EG=12.48

C = 30.1 SF
F = 8.1 SF

"KAPAA" STA. (-)2+50

Exc = 36.8 CY
Emb = 5.1 CY

R/W (Typ.)

FG=12.53 EG=12.53

C = 37.2 SF
F = 1.3 SF

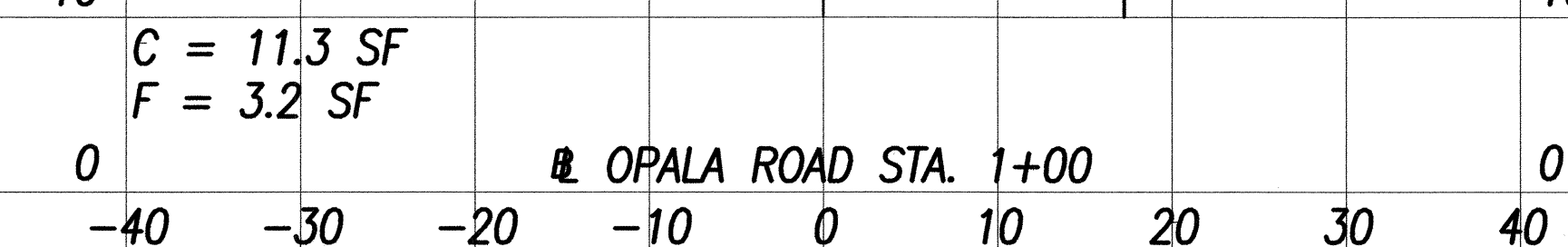
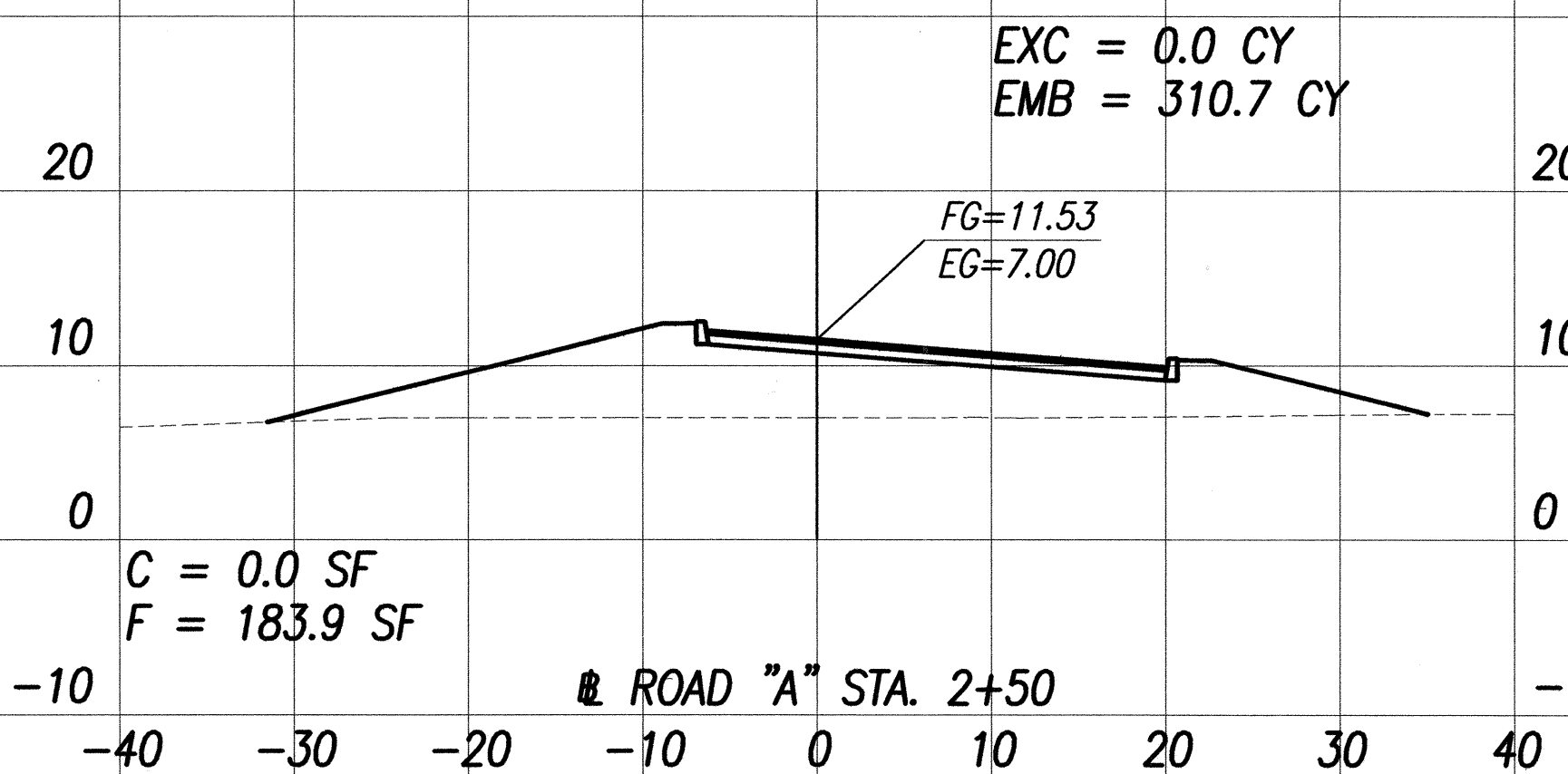
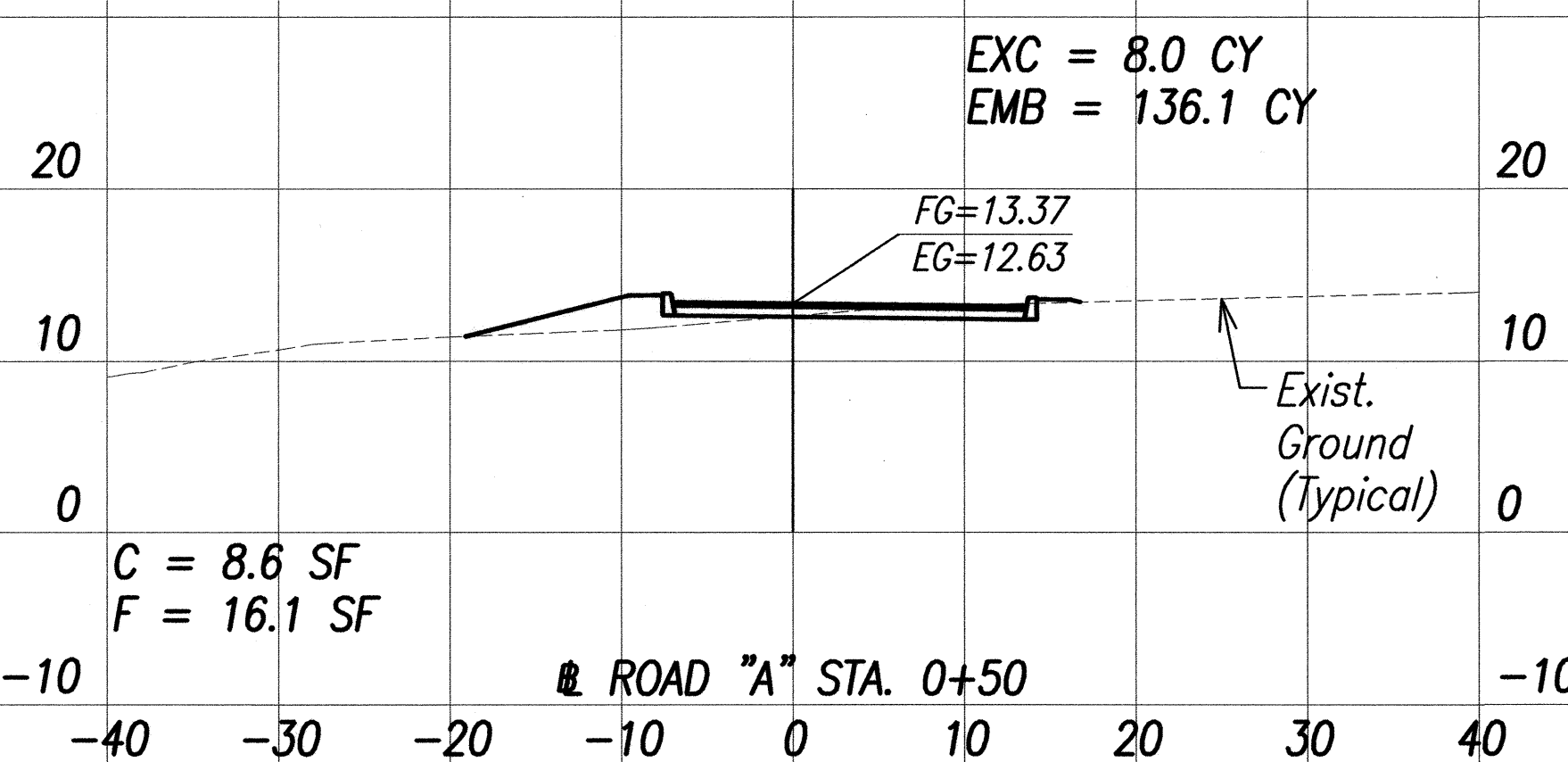
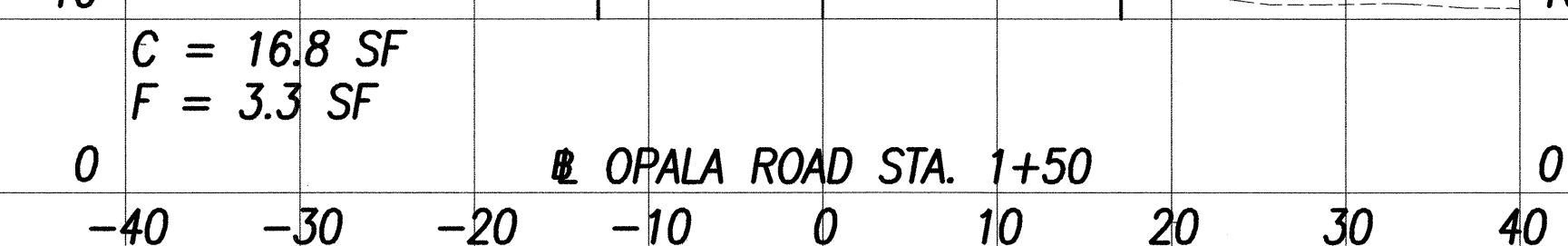
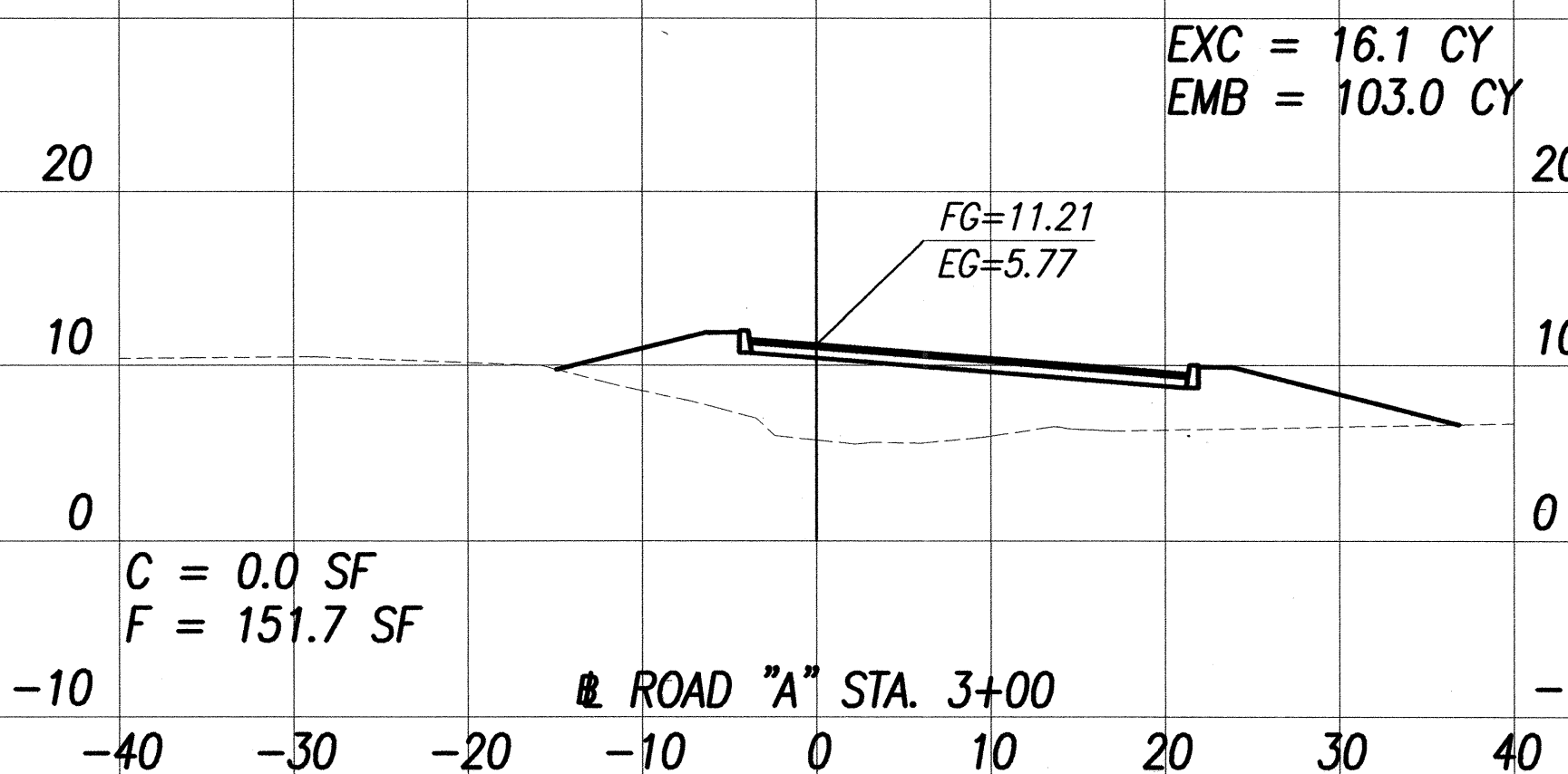
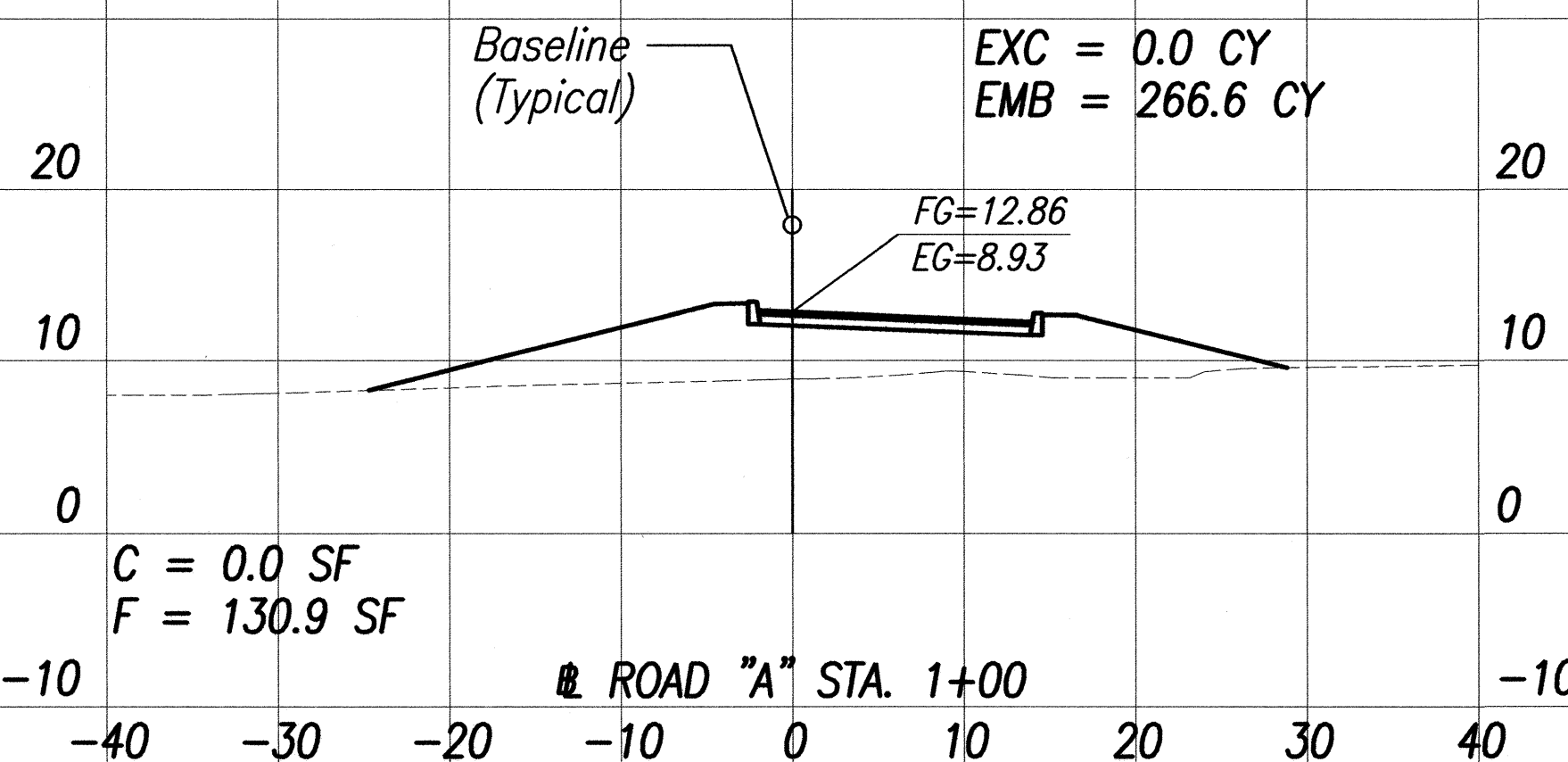
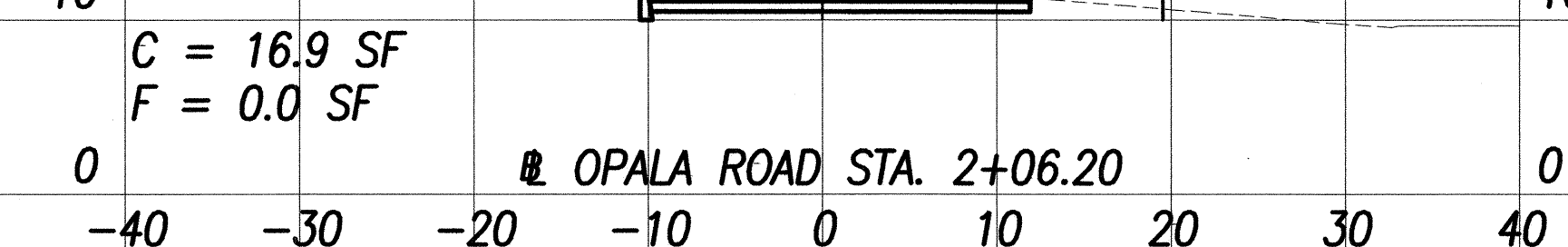
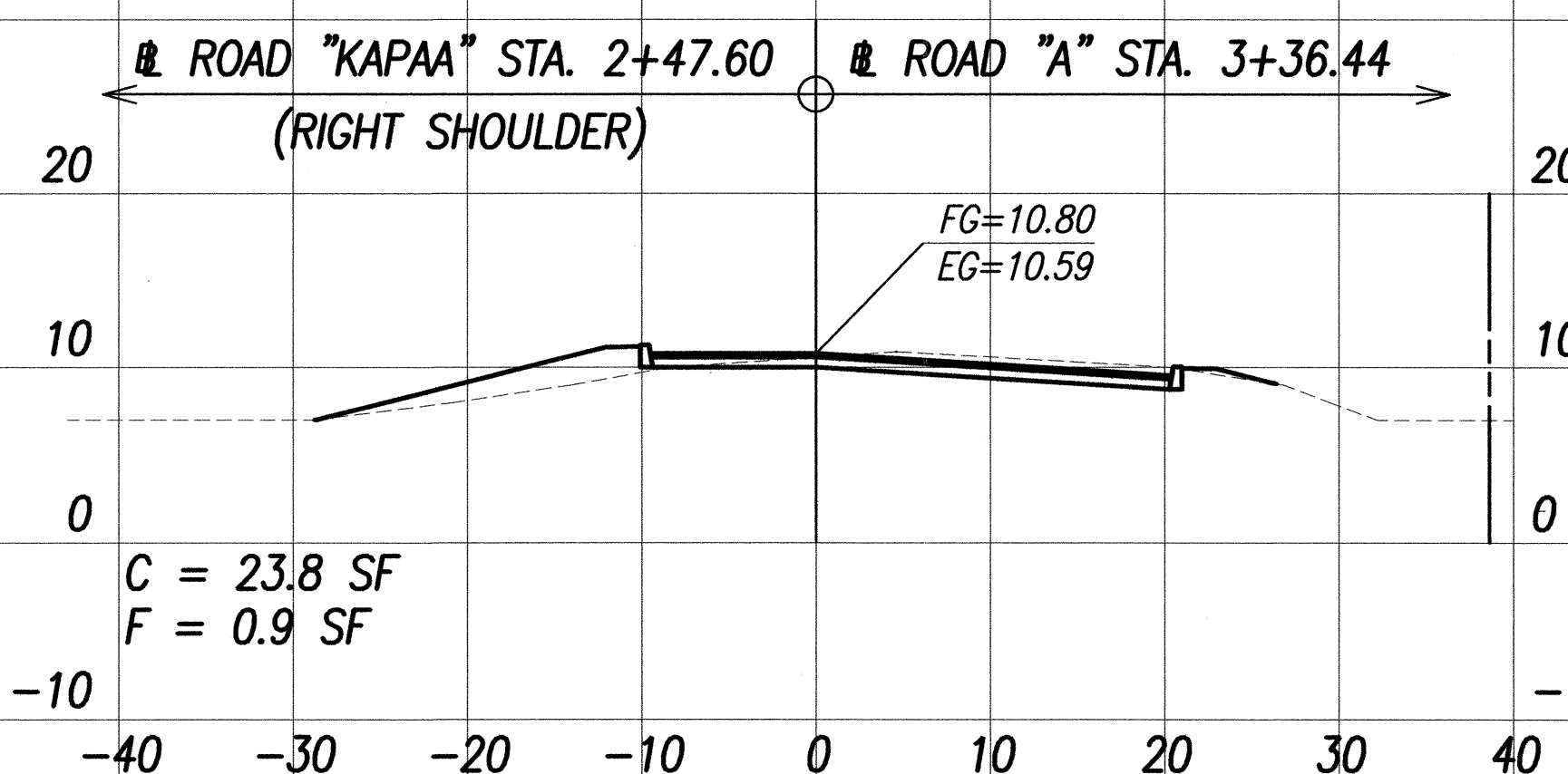
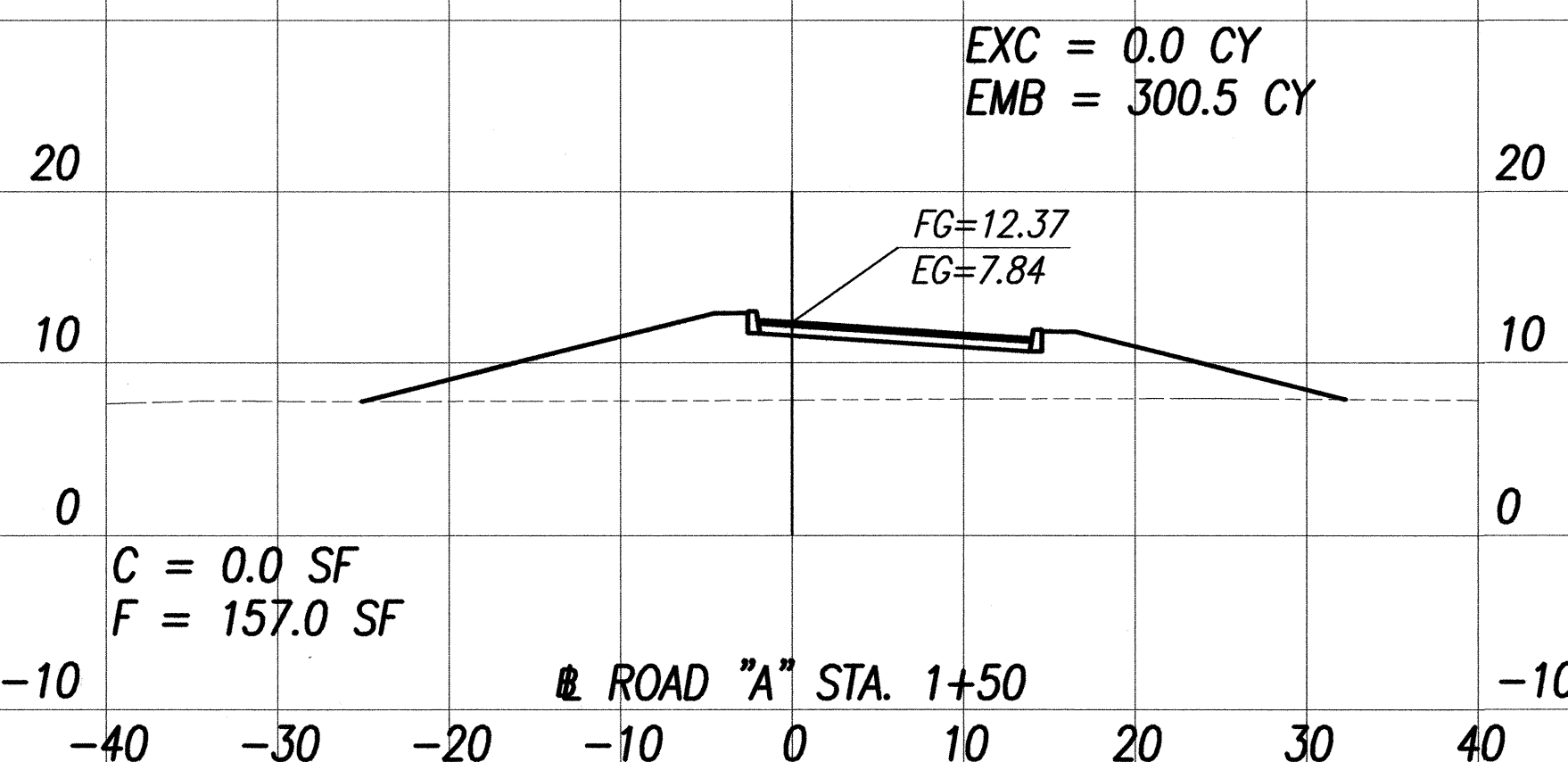
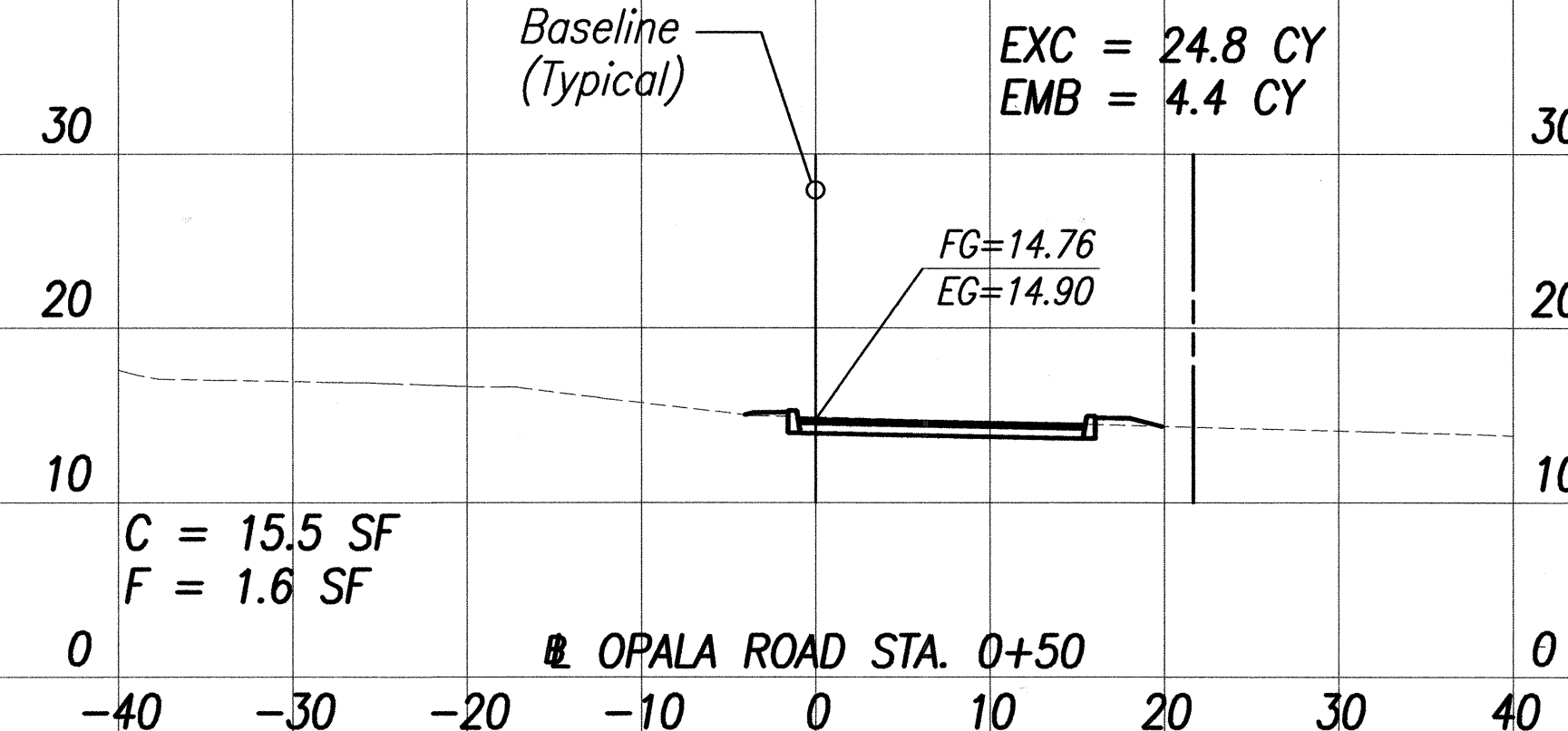
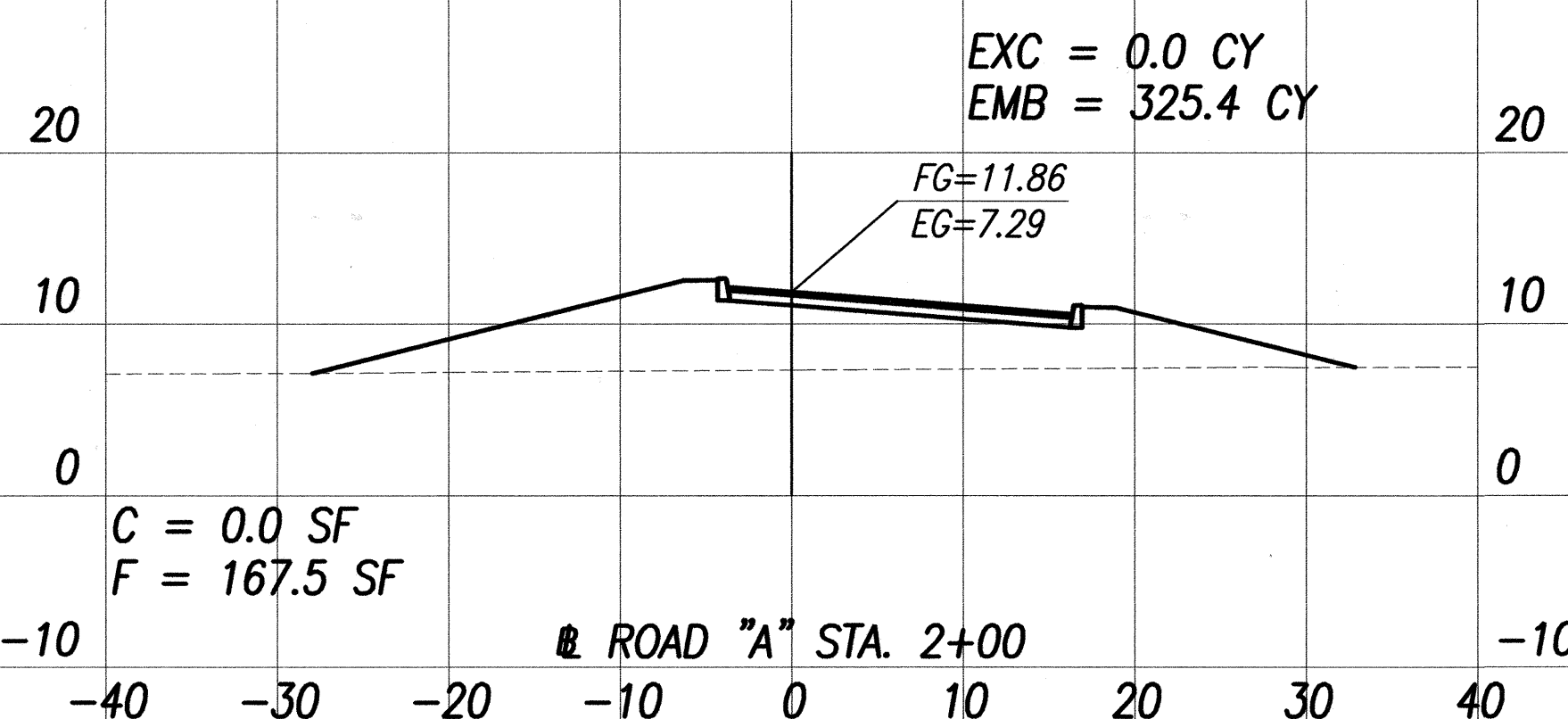
"KAPAA" STA. (-)2+79.55

ORIGINAL PLAN
SURVEY PLOTTED BY
DRAWN BY
NOTE BOOK
DESIGNED BY
CHECKED BY
QUANTITIES BY
No.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-03-00	2004	21	66

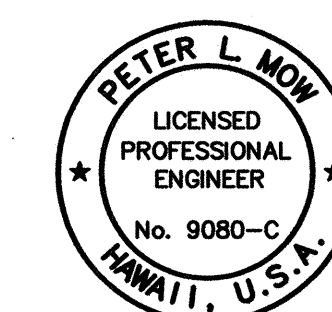
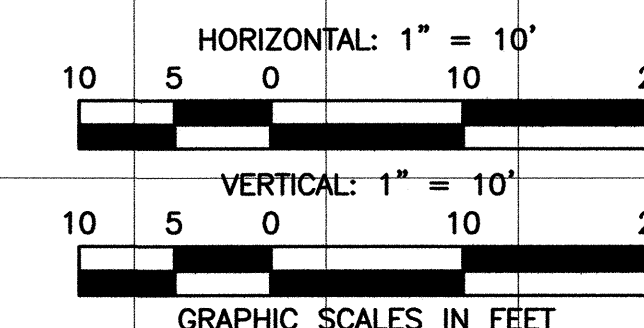
Sub-Total Earthwork Quantities Opala

Excavation = 85.9 C.Y.
Embankment = 13.9 C.Y.



Sub-Total Earthwork Quantities Road "A"

Excavation = 24.1 C.Y.
Embankment = 1,442.3 C.Y.



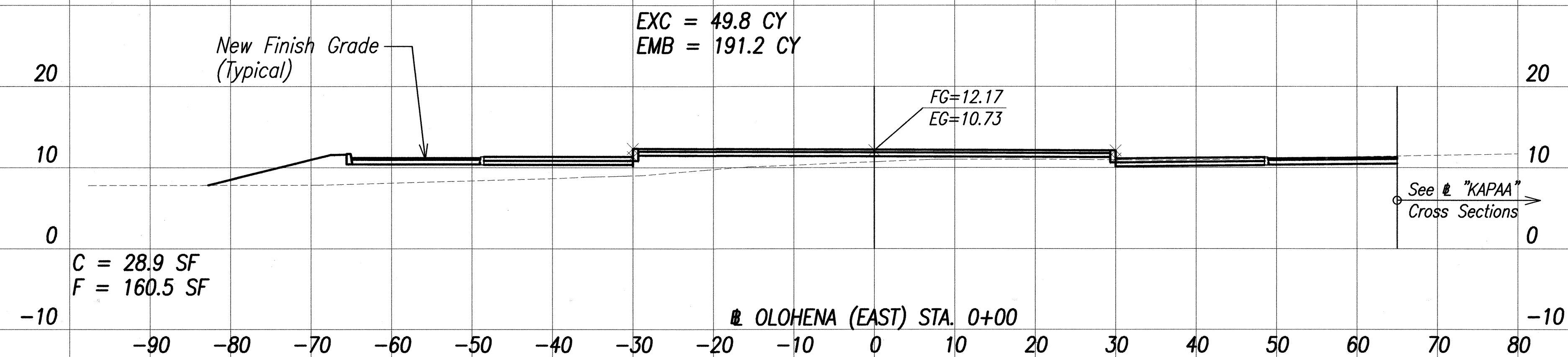
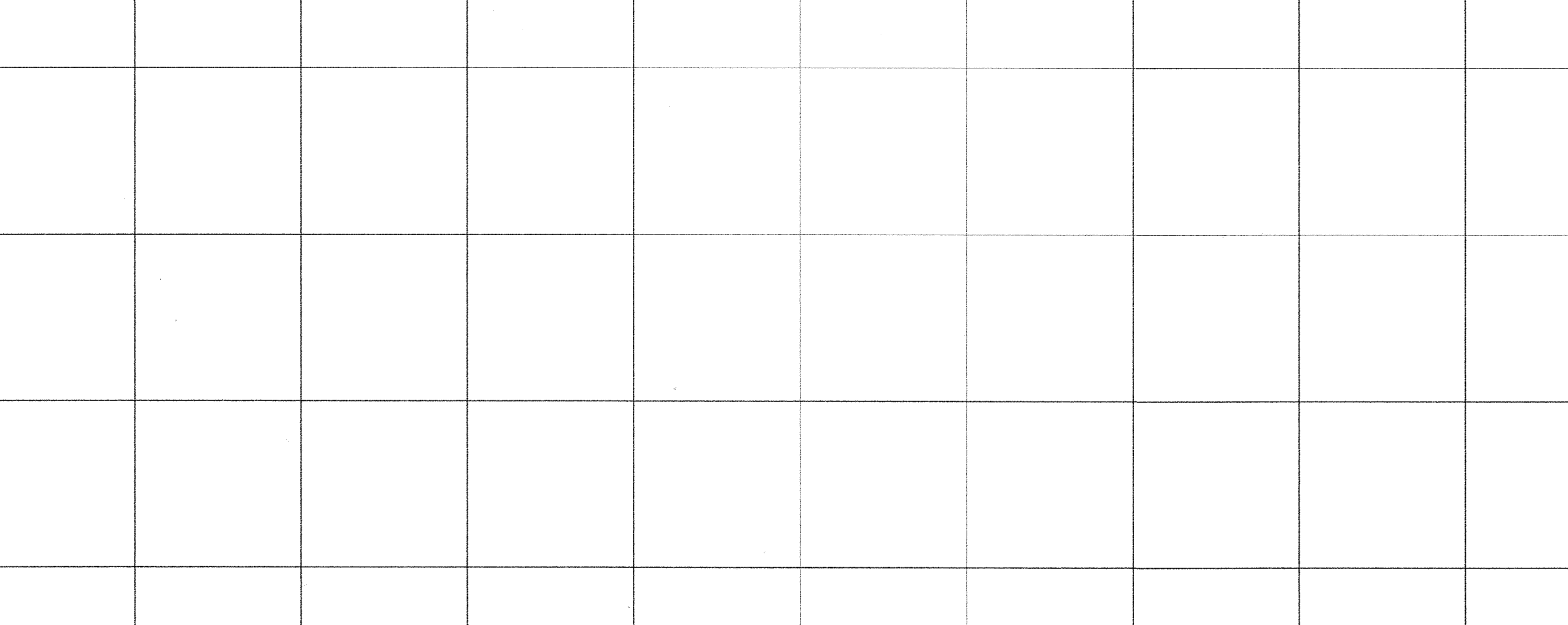
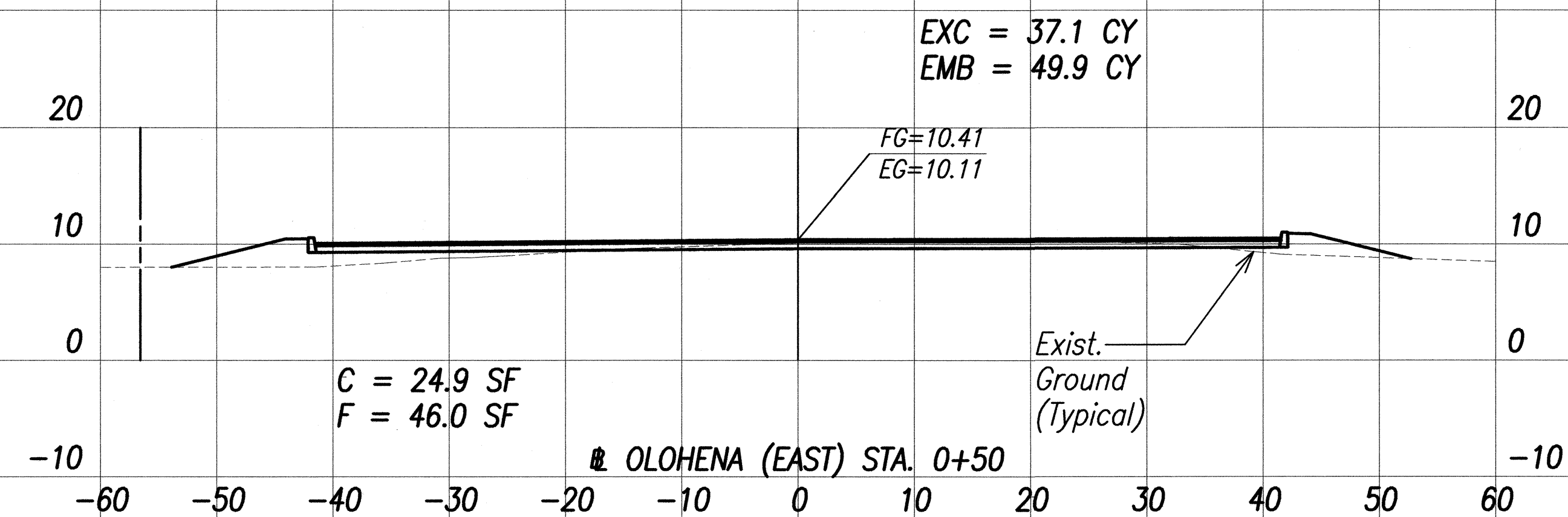
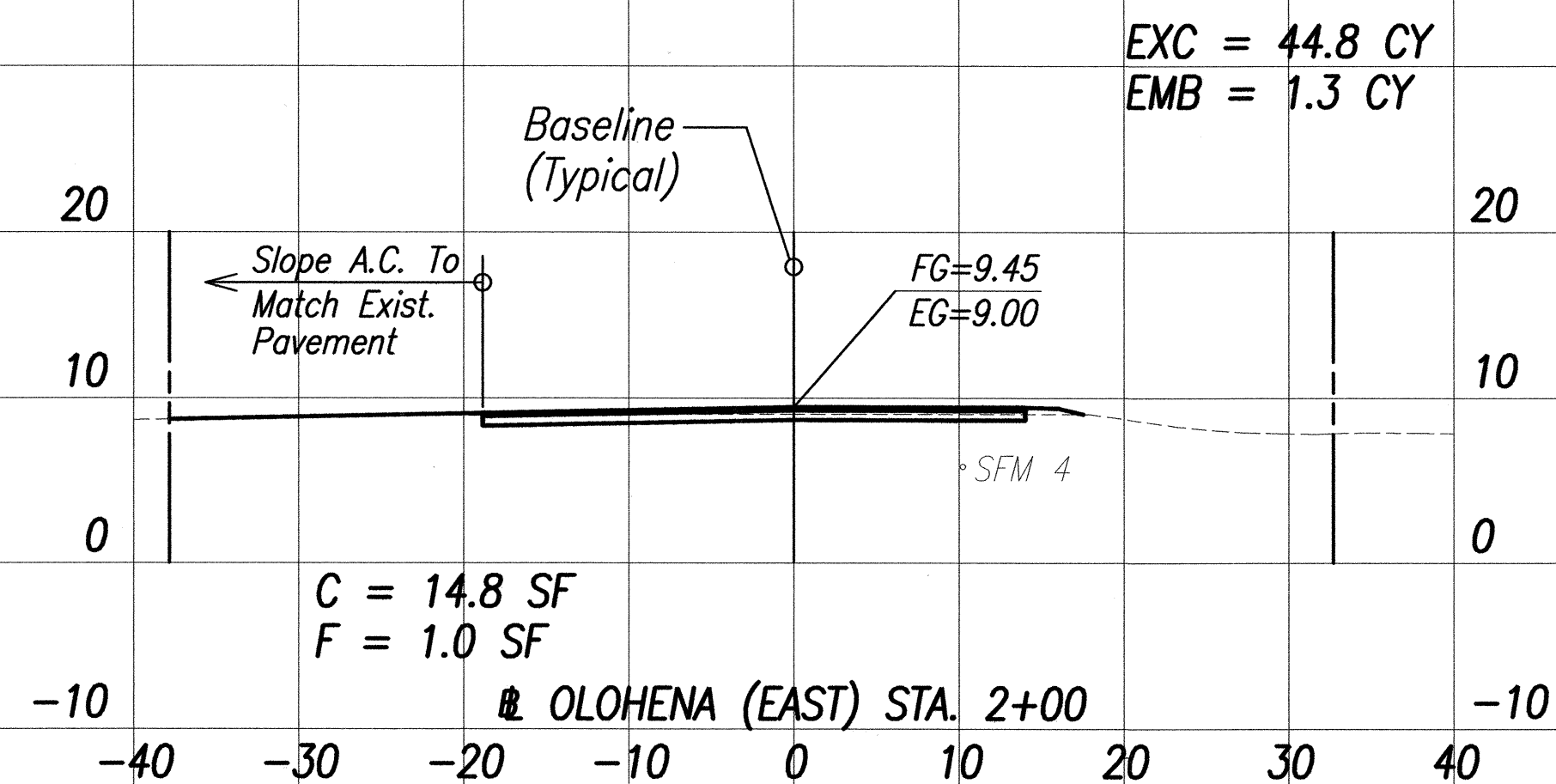
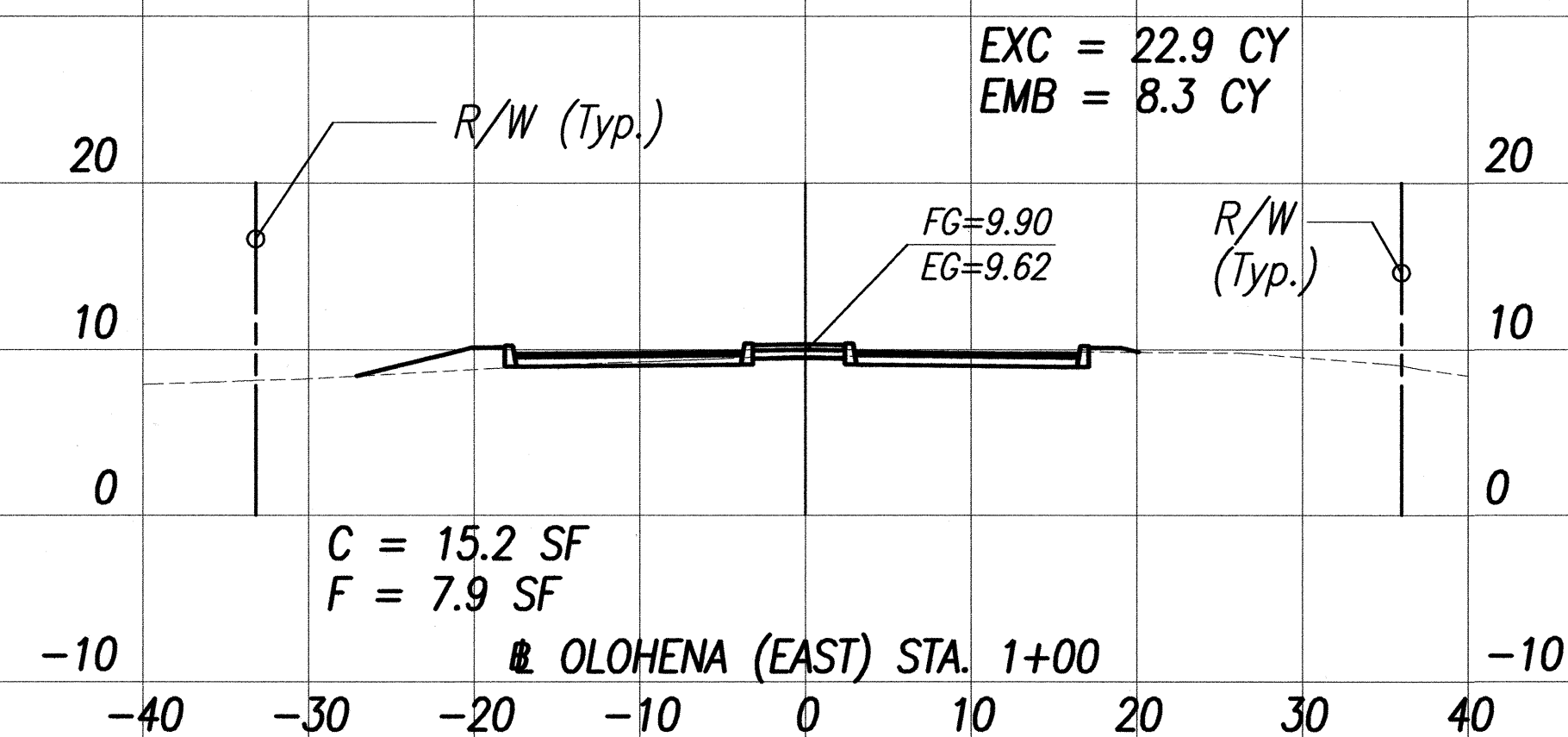
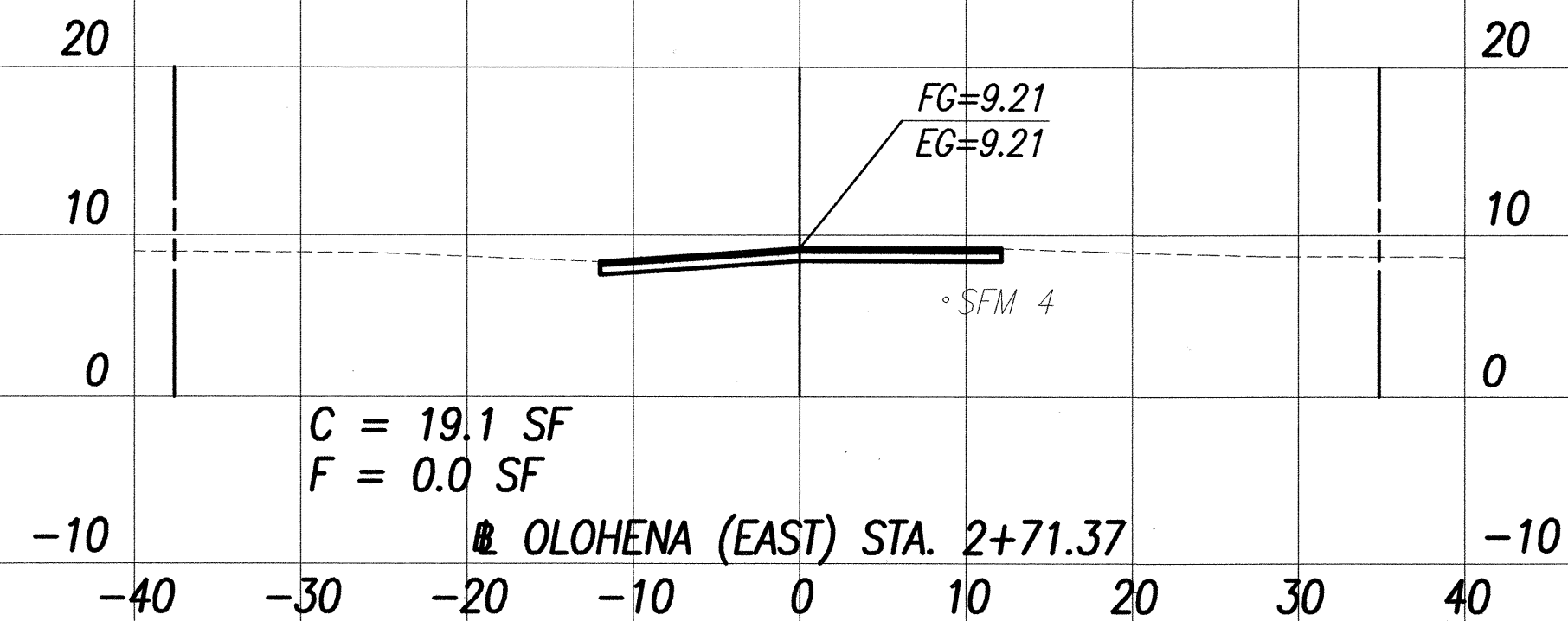
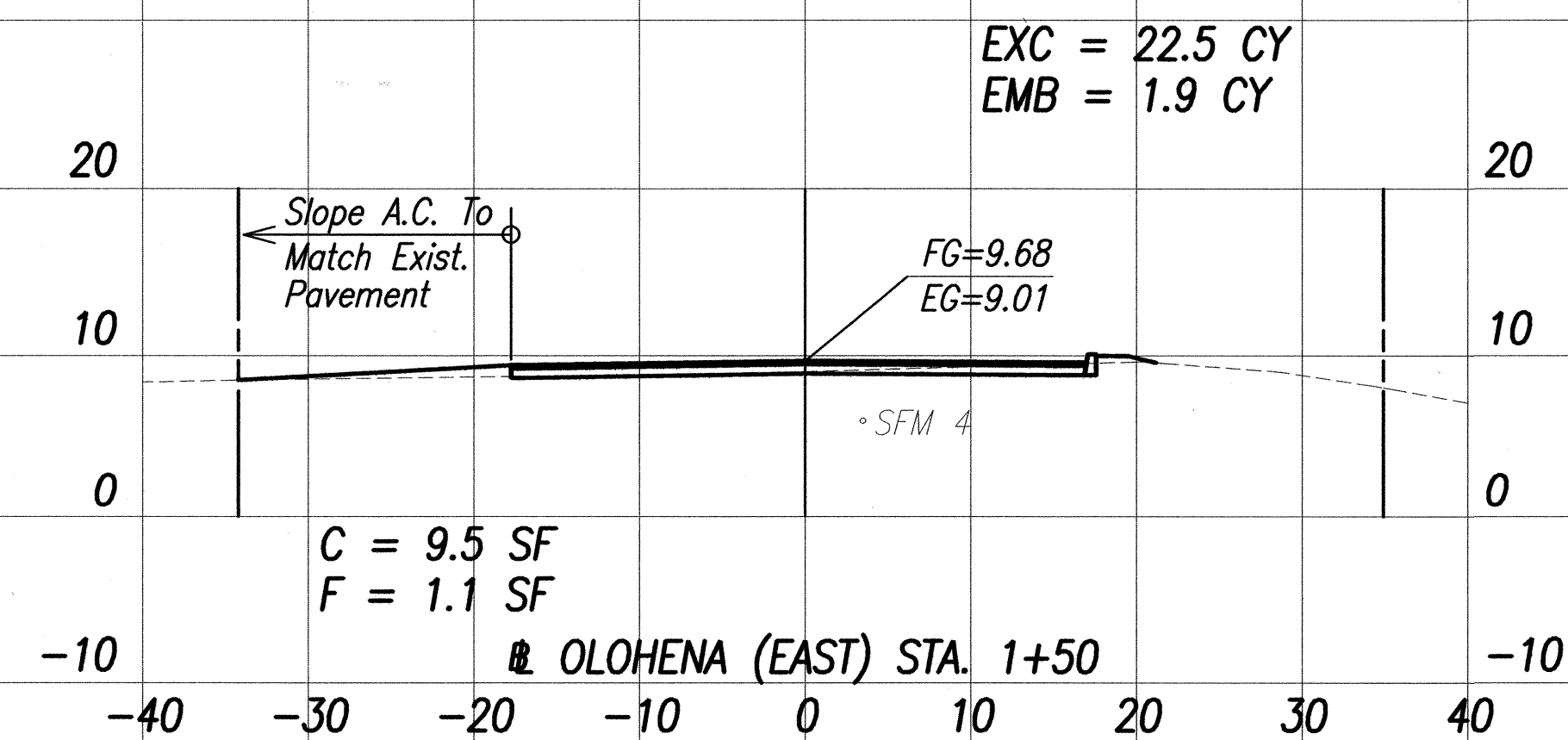
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CROSS SECTIONS
ROAD "A" and OPALA
KUHIO HIGHWAY IMPROVEMENTS
Extension Of Temporary Kapaa Bypass Road
Project No. 56A-03-00
Scale: 1"=10' Date: Mar 2004
SHEET No. 2 OF 6 SHEETS

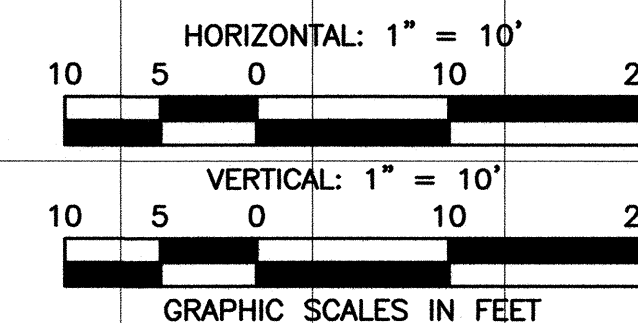
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-03-00	2004	22	66

Sub-Total Earthwork Quantities Olohena (East)

Excavation = 177.2 C.Y.
Embankment = 252.7 C.Y.



See "KAPAA" Cross Sections



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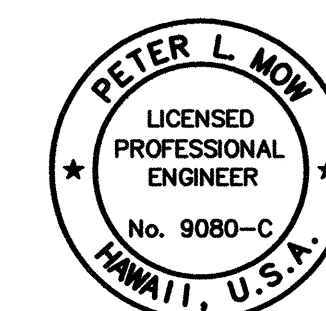
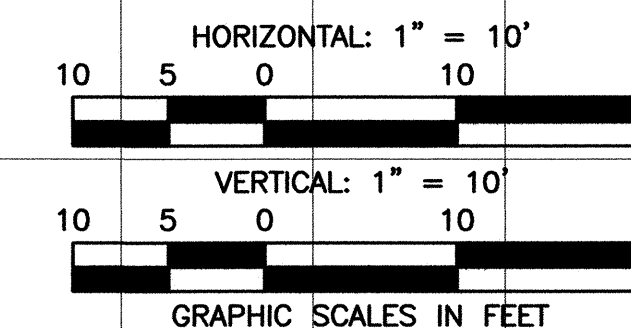
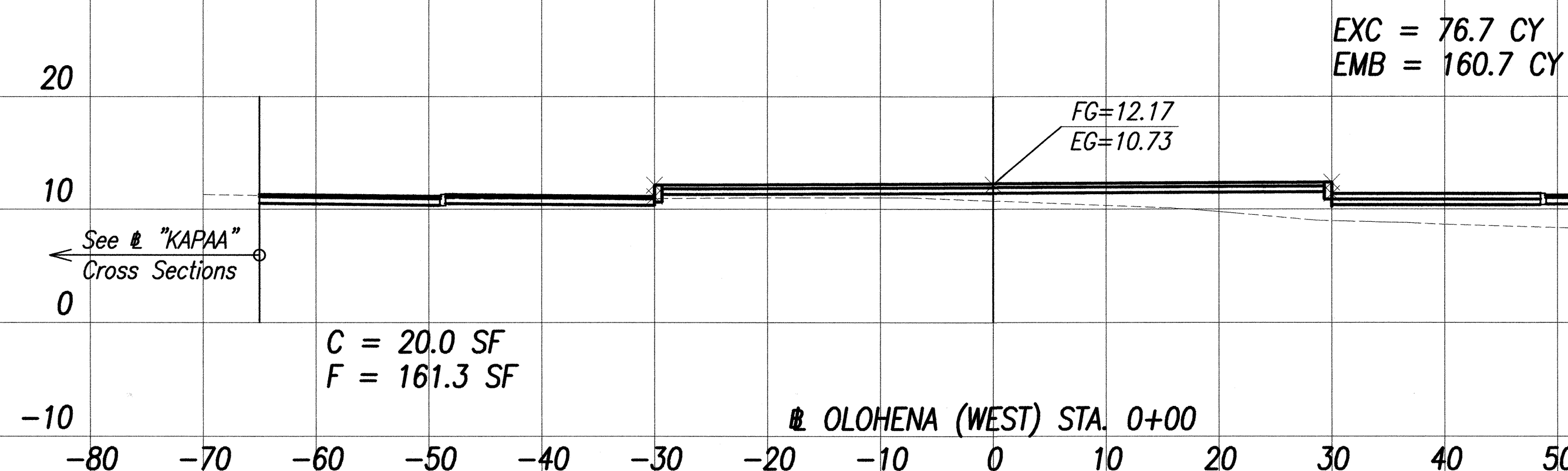
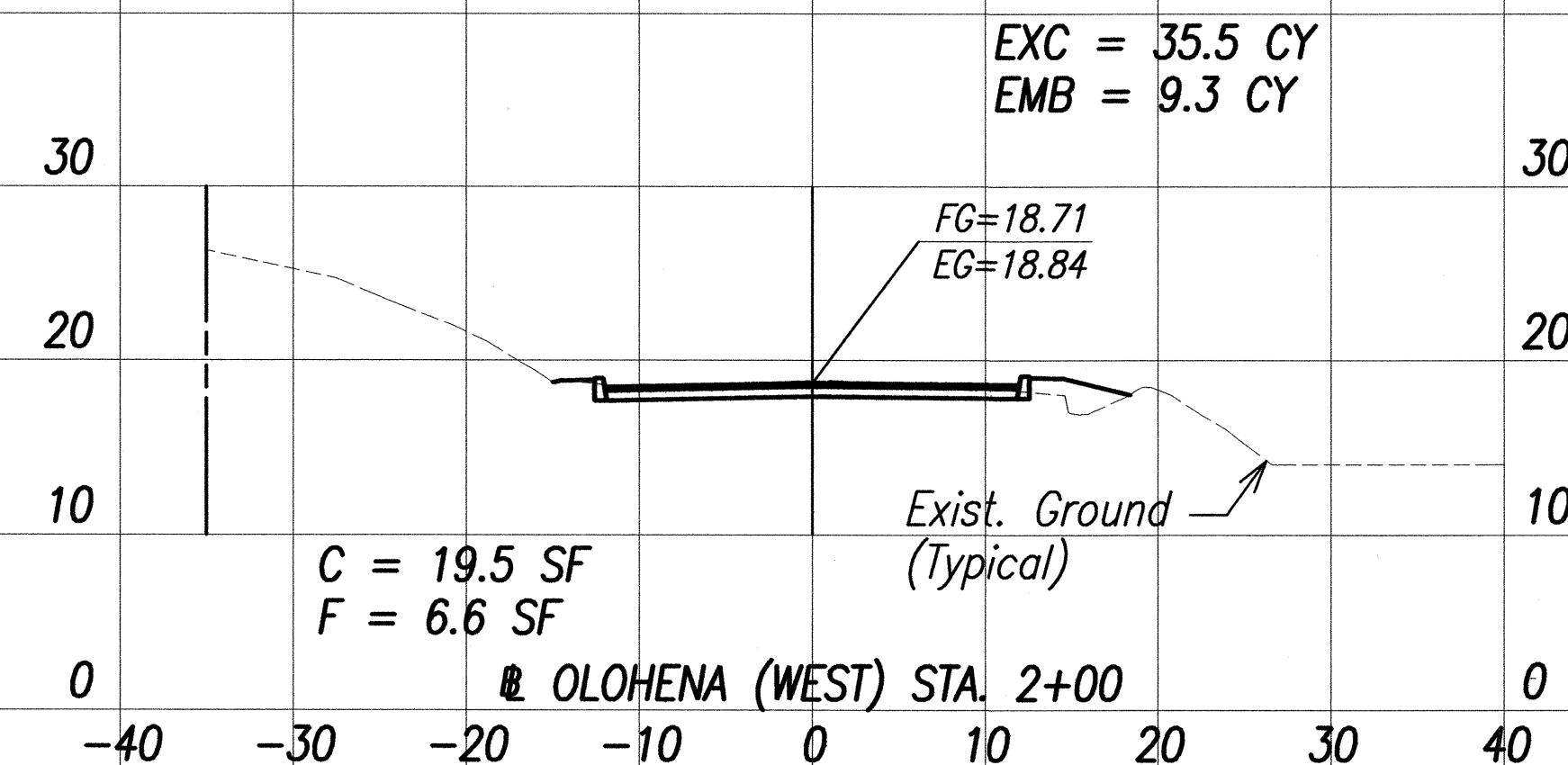
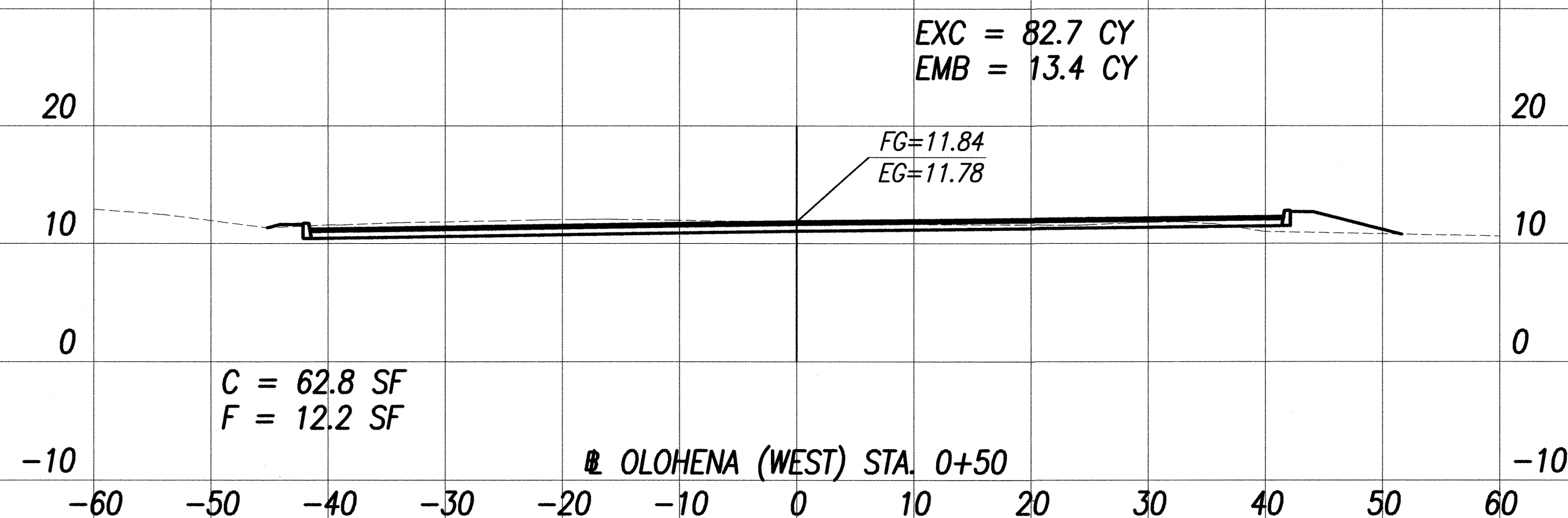
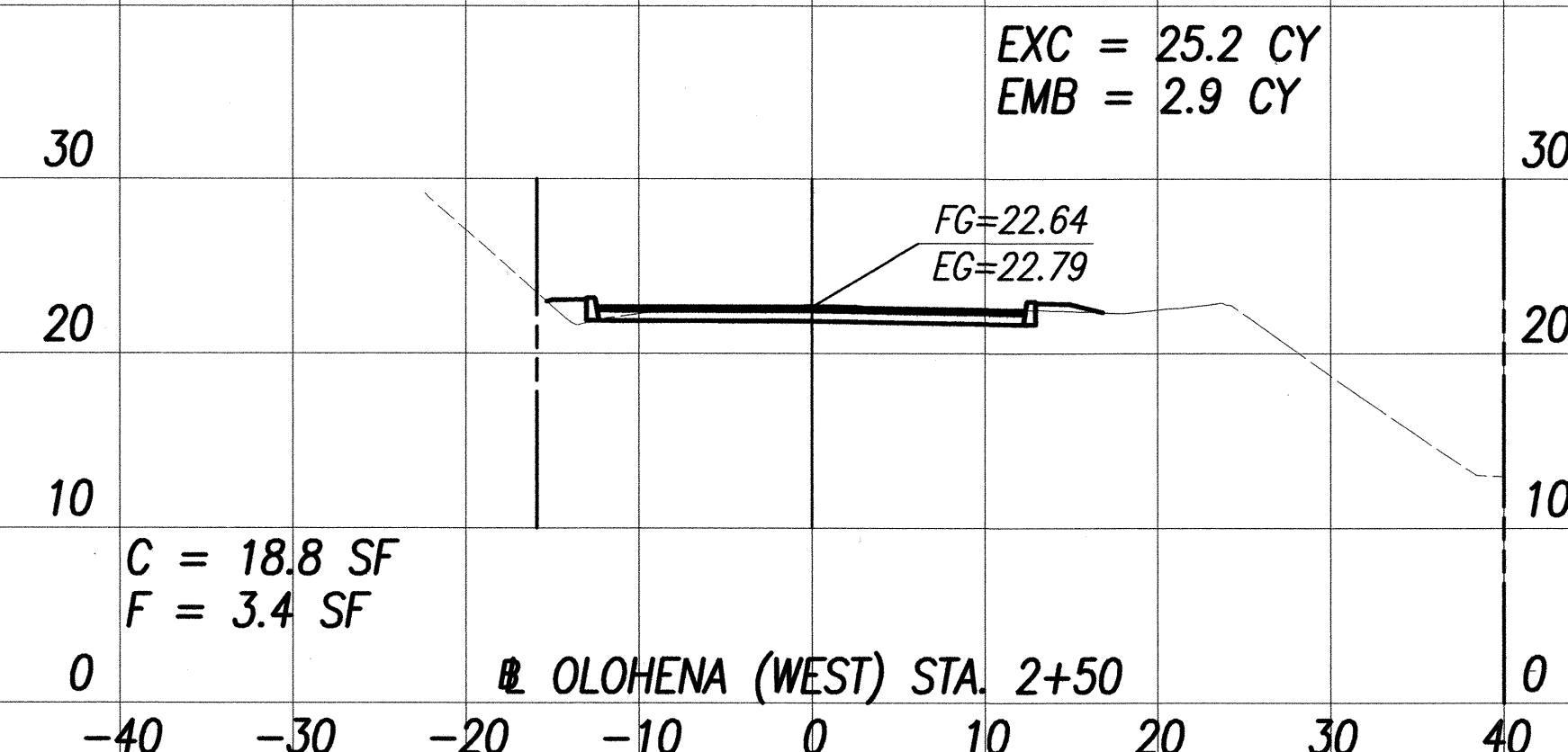
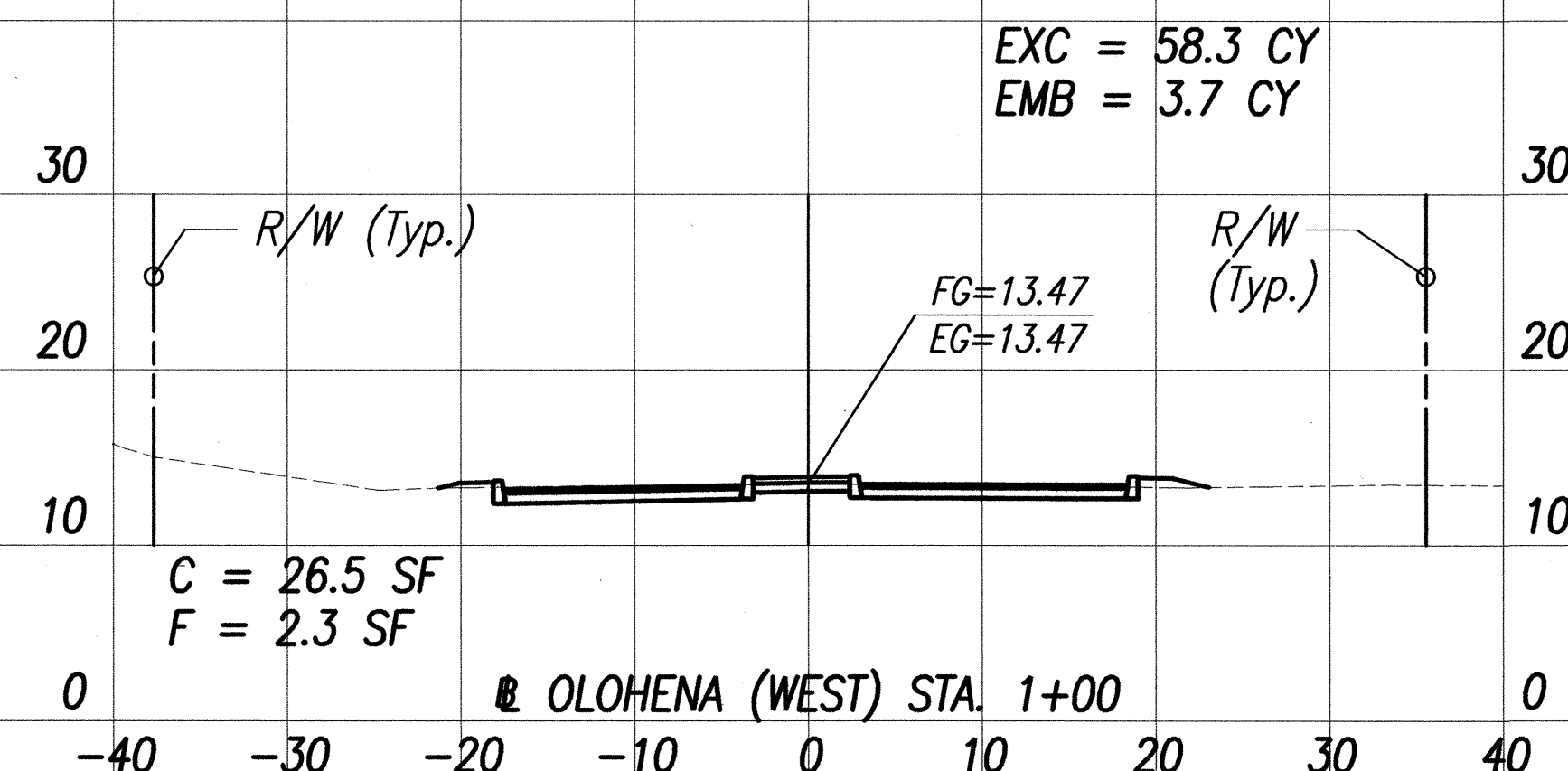
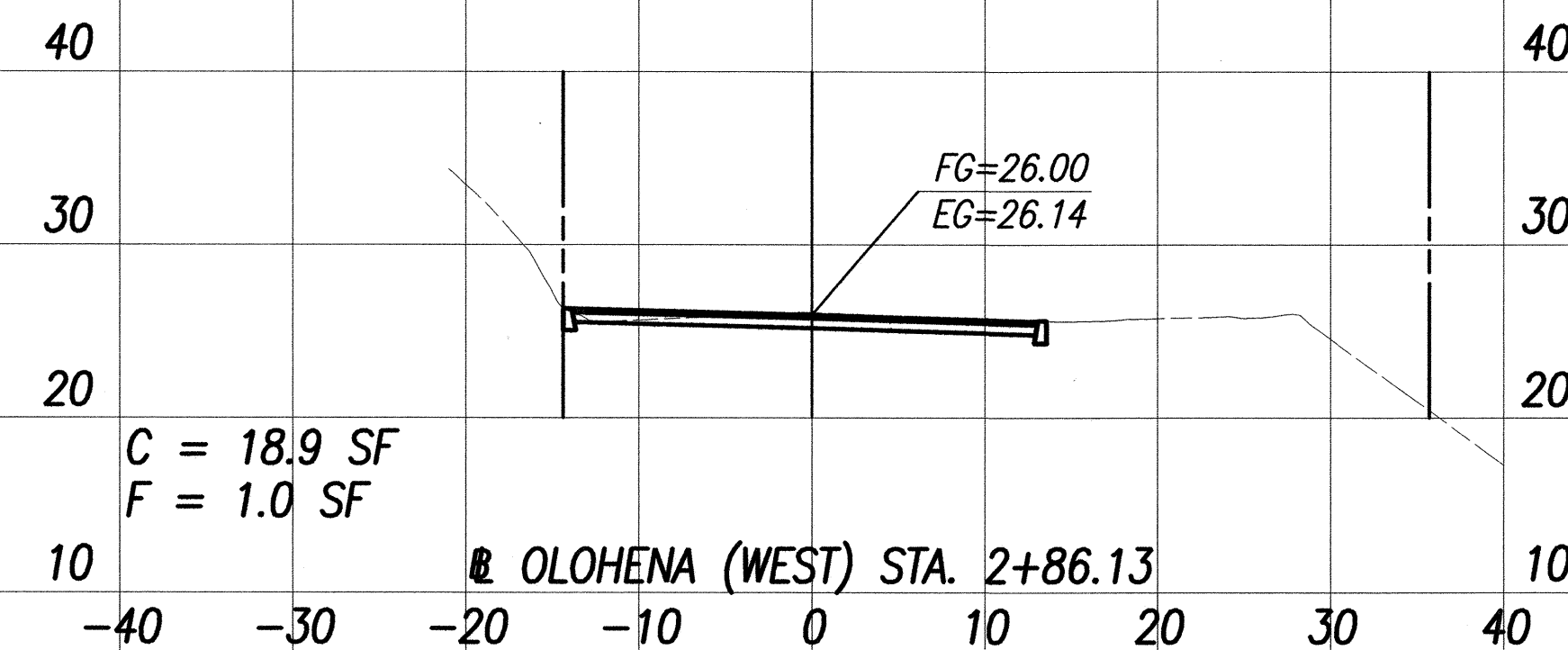
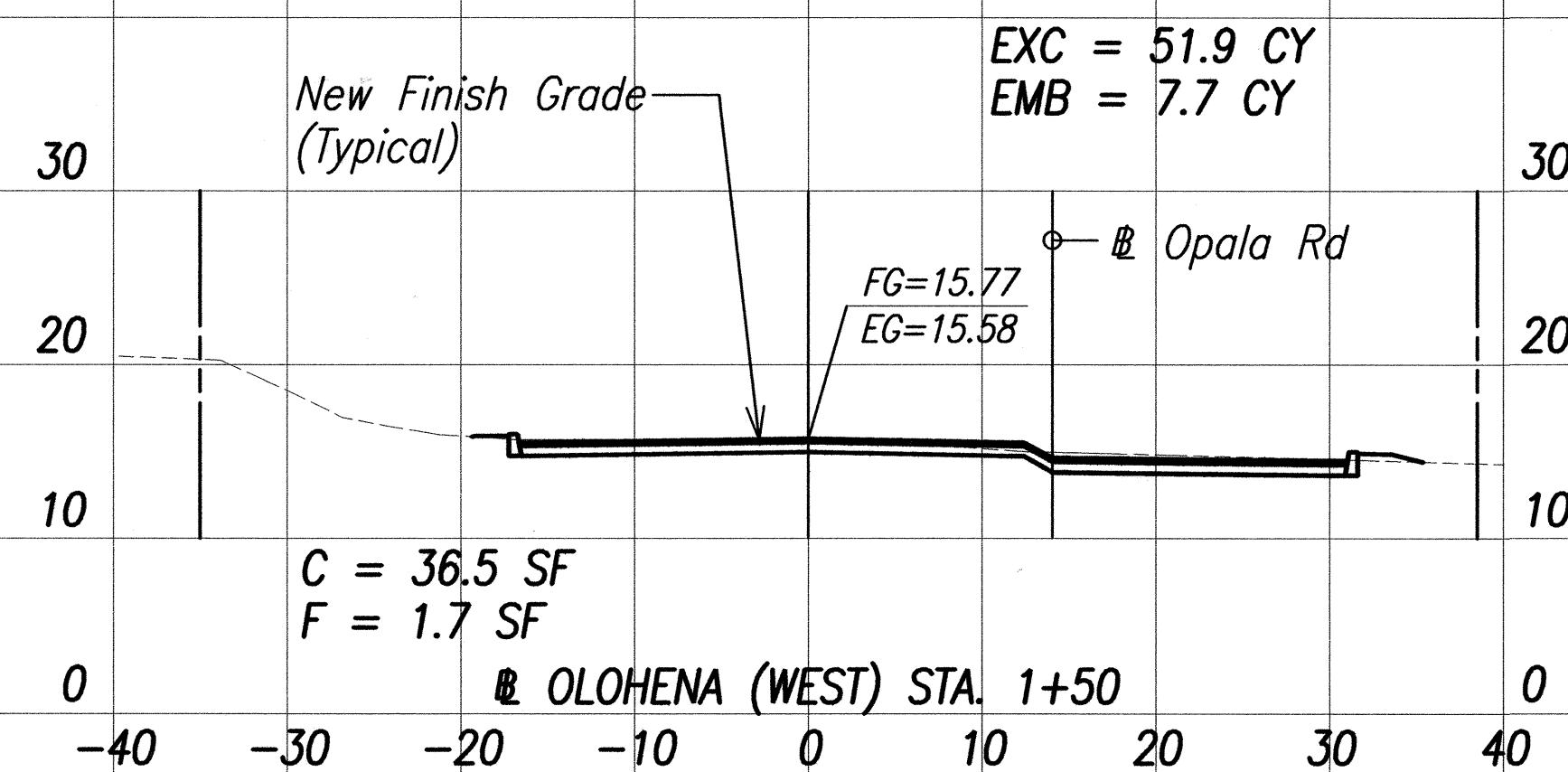
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CROSS SECTIONS
OLOHENA (EAST)
KUHIO HIGHWAY IMPROVEMENTS
Extension Of Temporary Kapaa Bypass Road
Project No. 56A-03-00
Scale: 1"=10' Date: Mar 2004
SHEET No. 3 OF 6 SHEETS

22

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-03-00	2004	23	66

Sub-Total Earthwork Quantities Olohena (West)

Excavation = 330.3 C.Y.
Embankment = 197.7 C.Y.



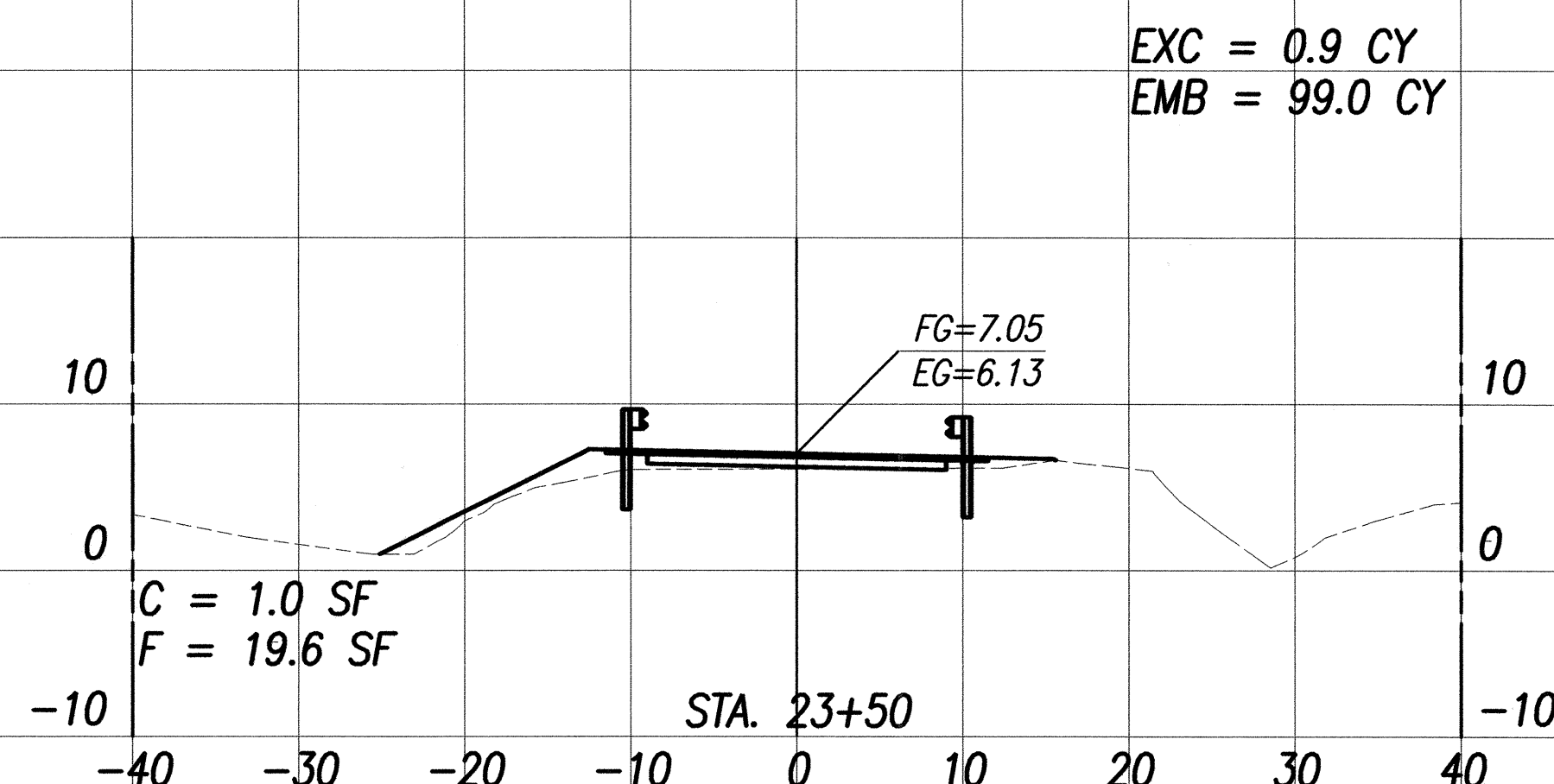
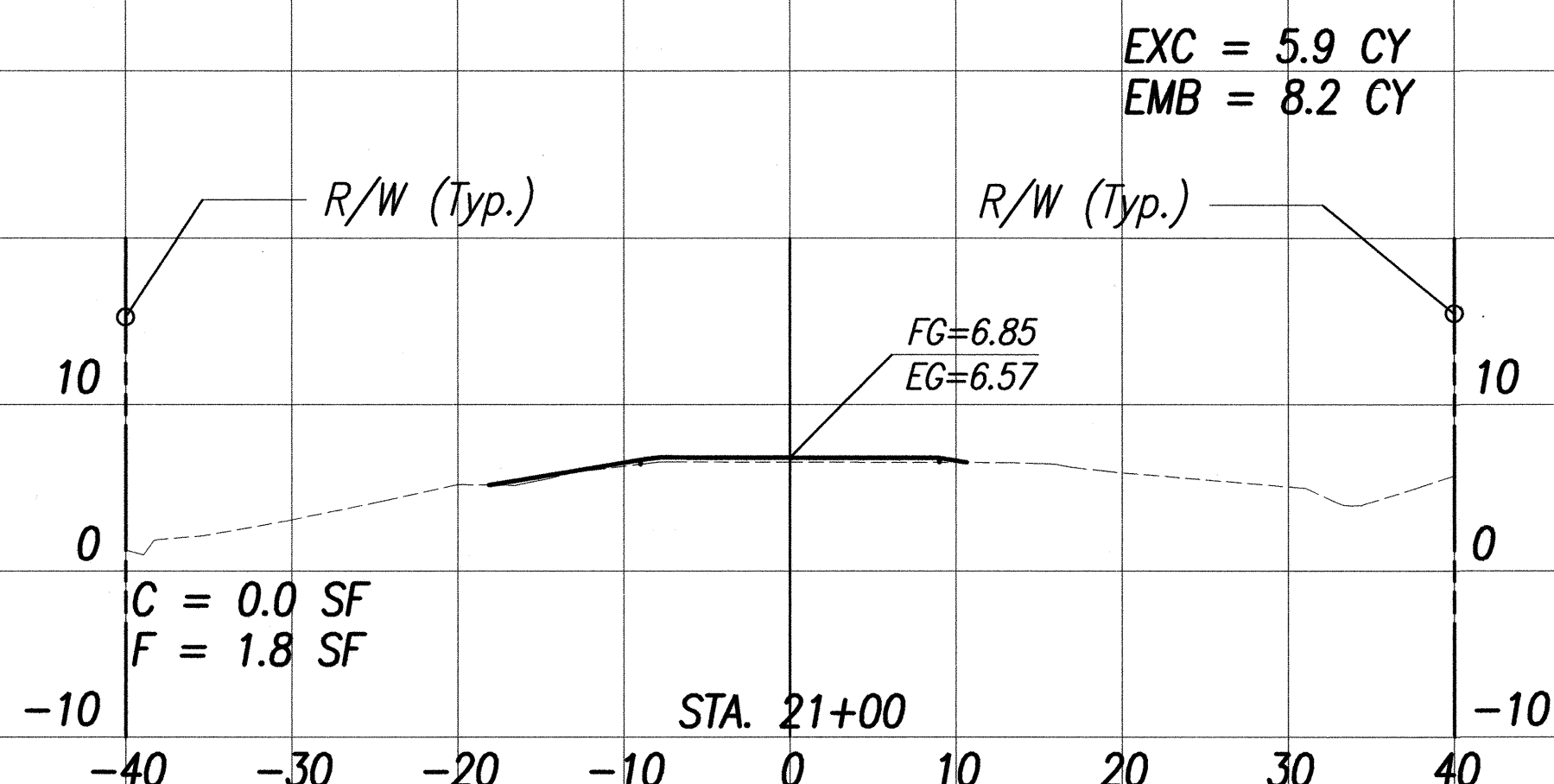
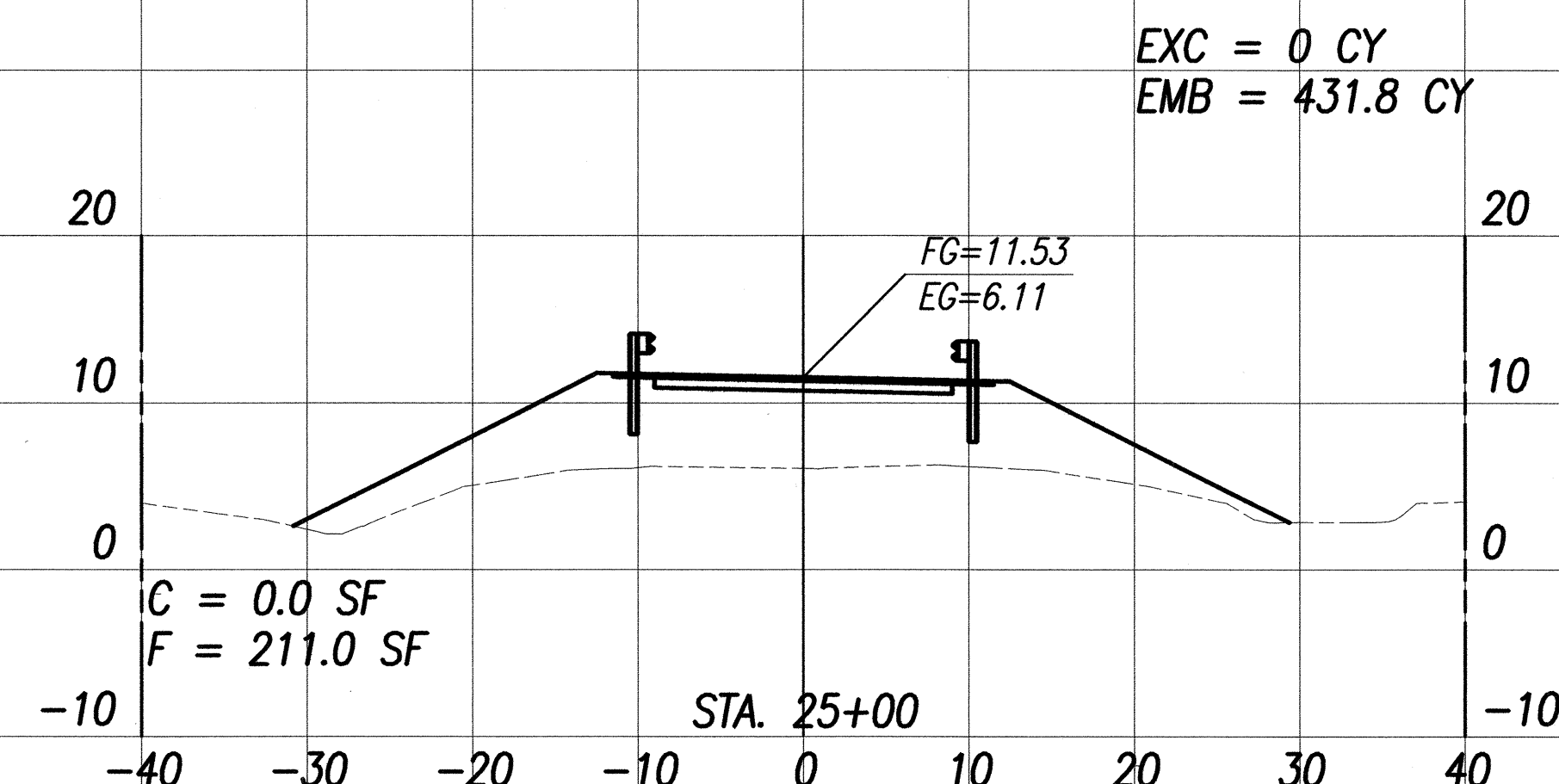
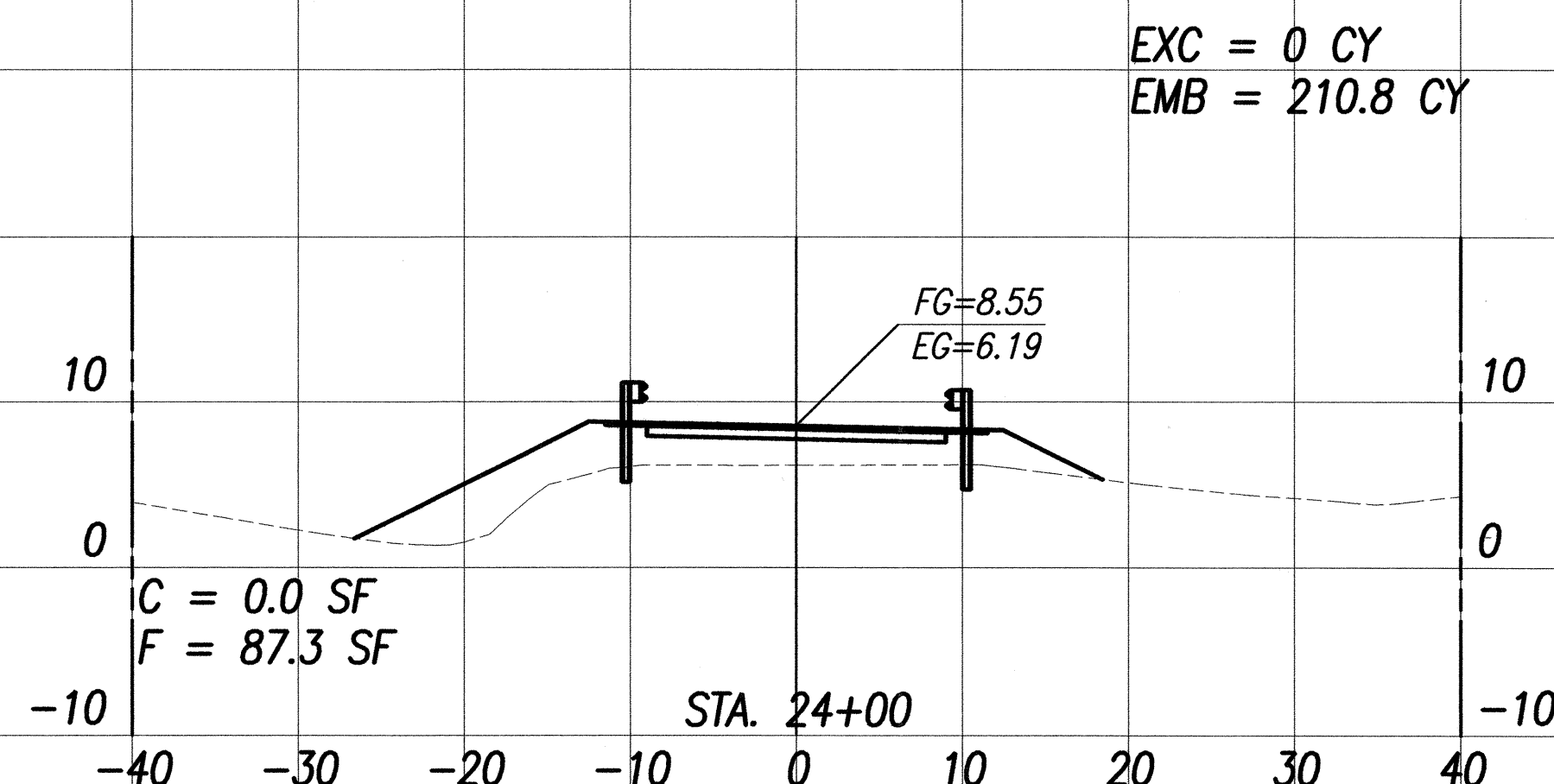
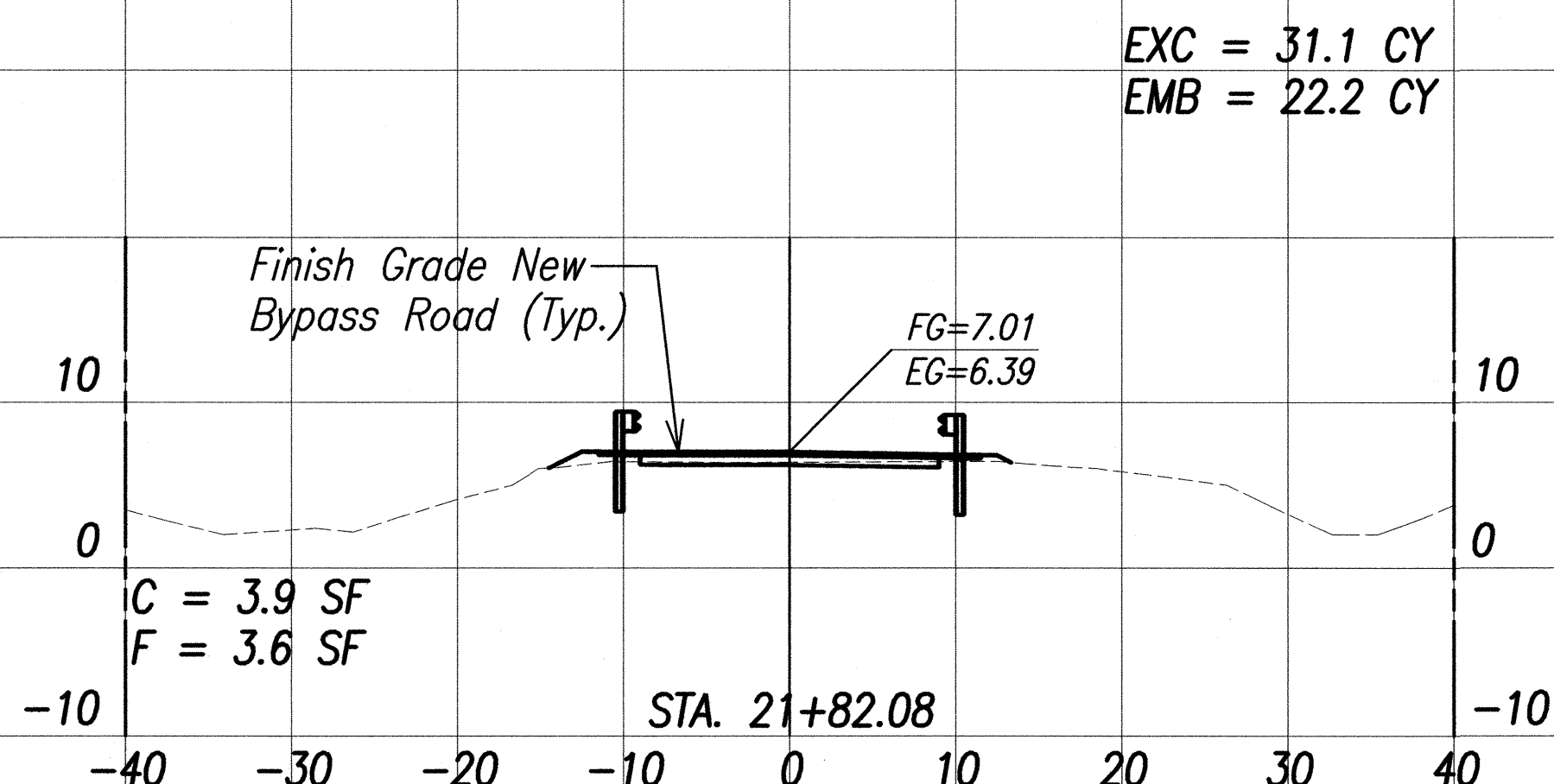
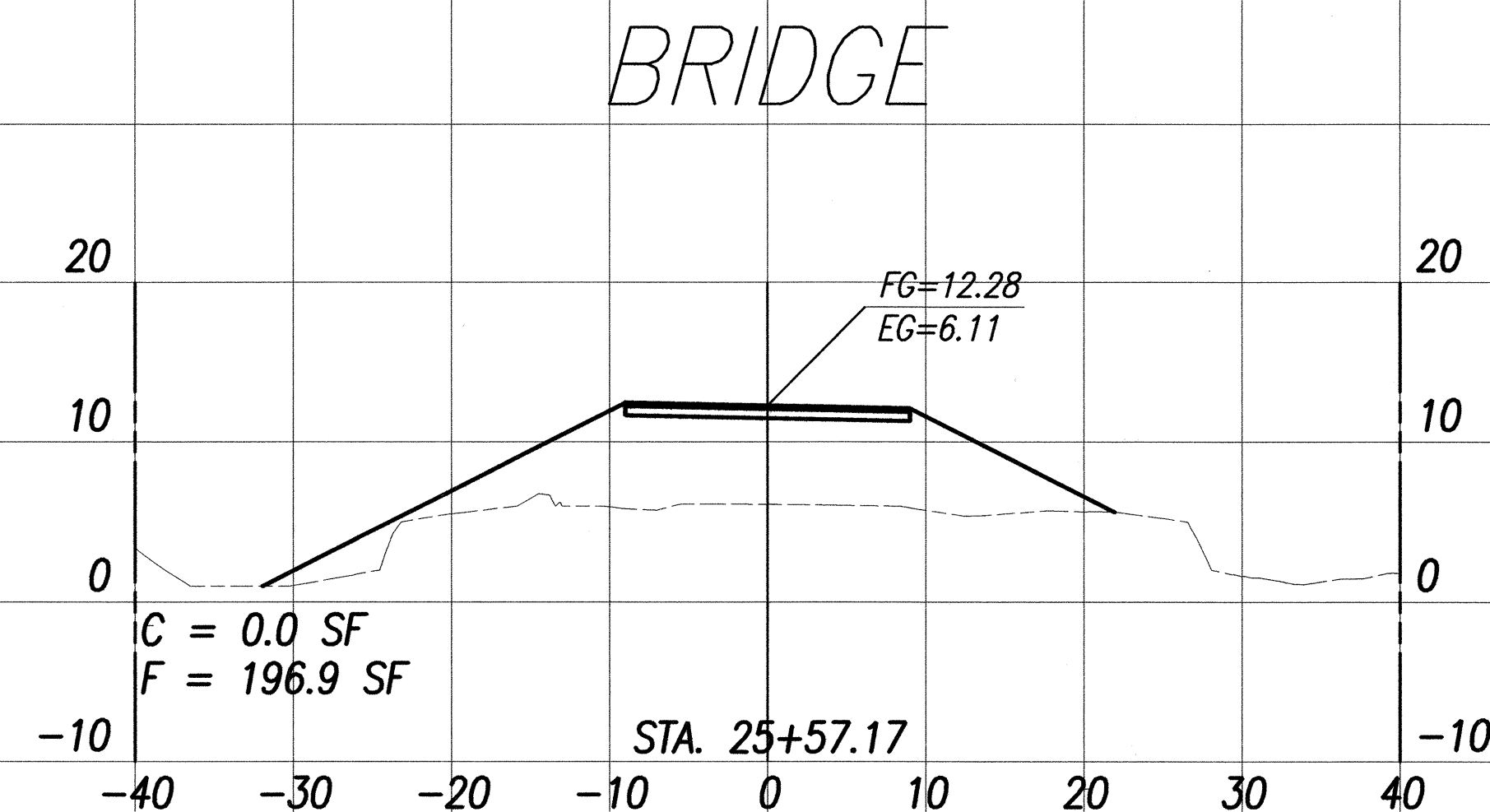
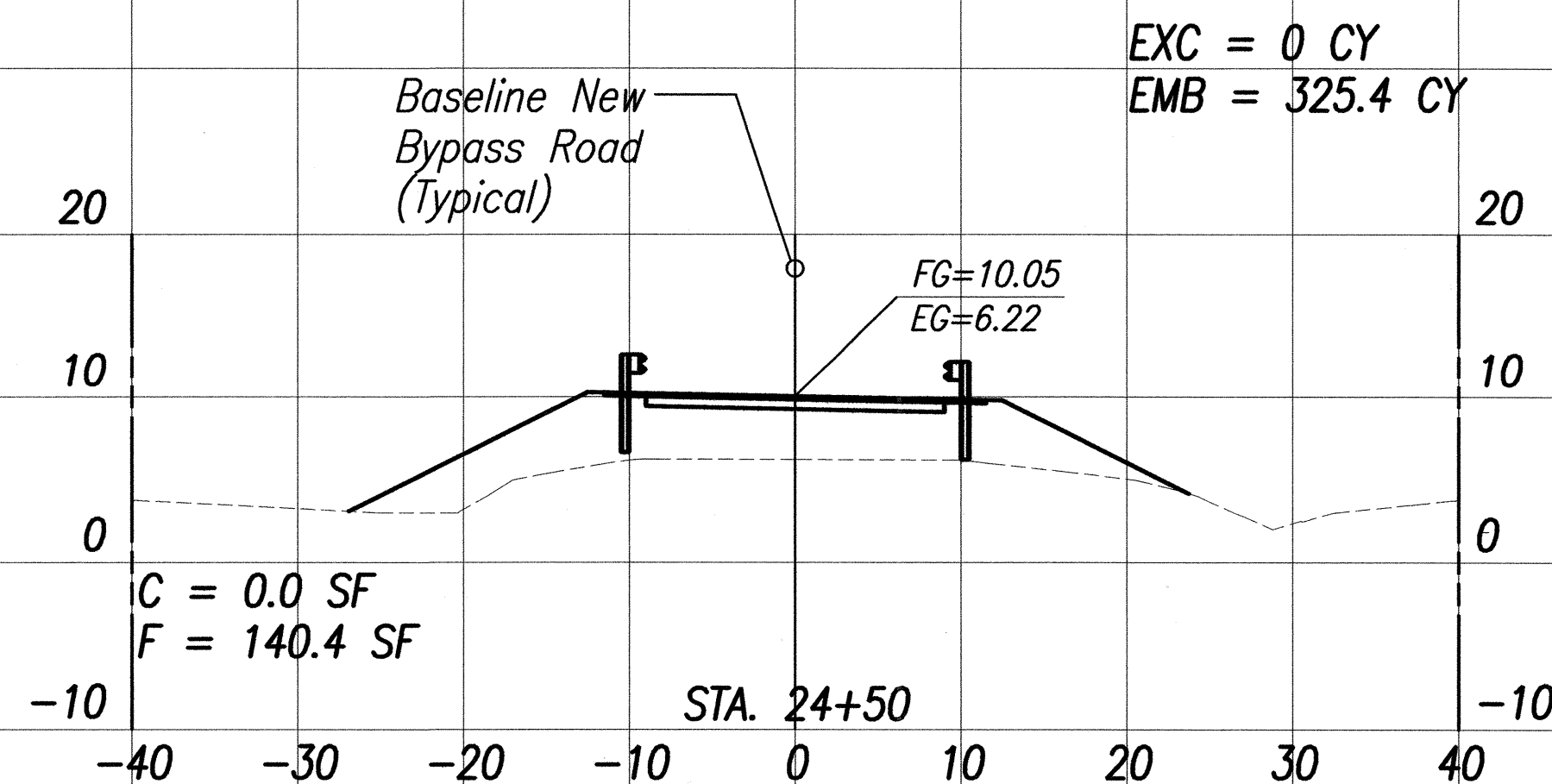
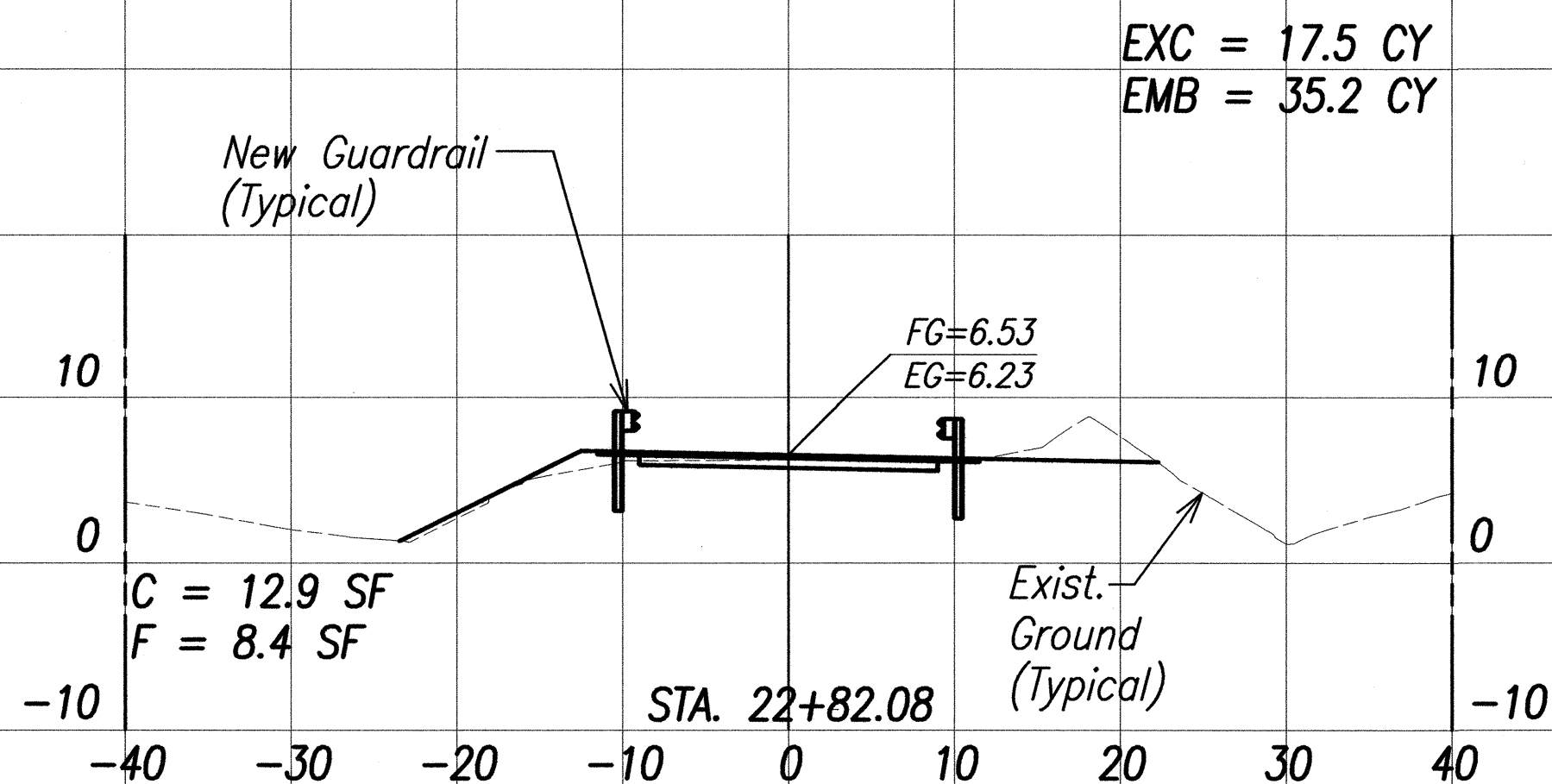
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**CROSS SECTIONS
OLOHENA (WEST)**
KUHIO HIGHWAY IMPROVEMENTS
Extension Of Temporary Kapaa Bypass Road
Project No. 56A-03-00
Scale: 1"=10' Date: Mar 2004
SHEET No. 4 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-03-00	2004	24	66

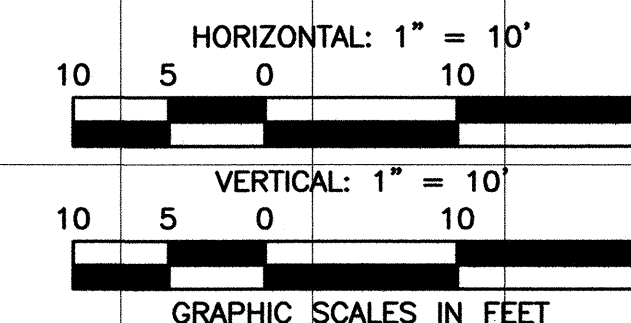
Notes:

Sta. 21+00 To Sta. 21+82.08 = Transition Slope
Sta. 21+82.08 To Sta. 25+57.17 = 2H:1V Slope



KAPAA BYPASS ROAD EXTENSION – BRIDGE APPROACHES

at "KAPAA" STA. 21+00 TO STA. 25+57.17



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

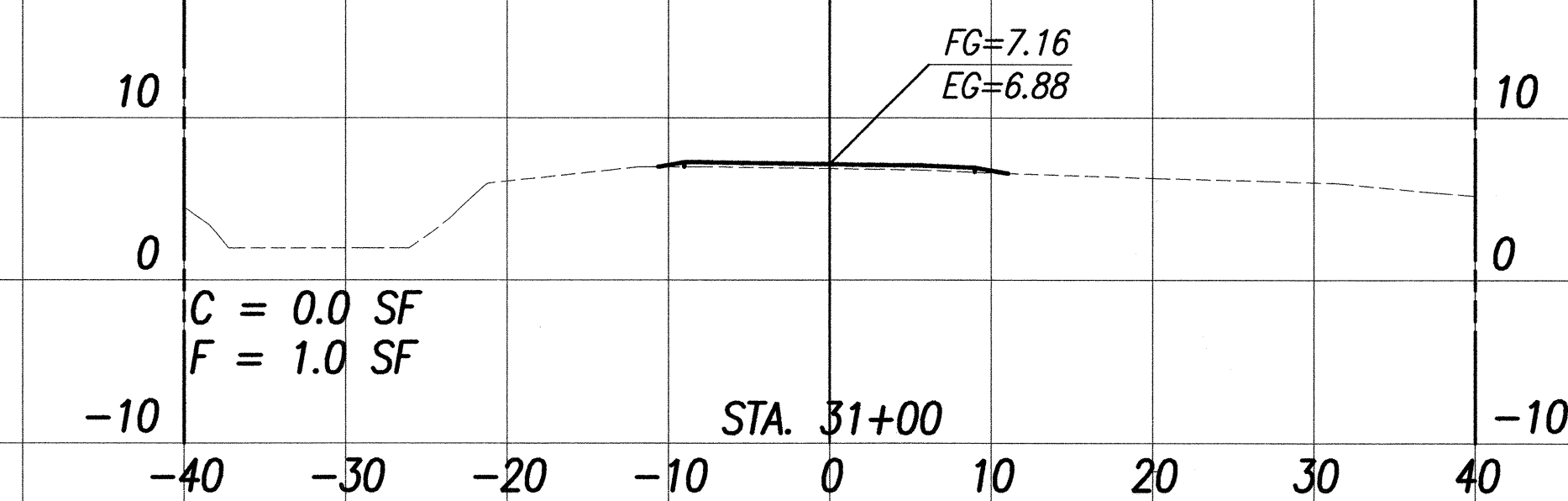
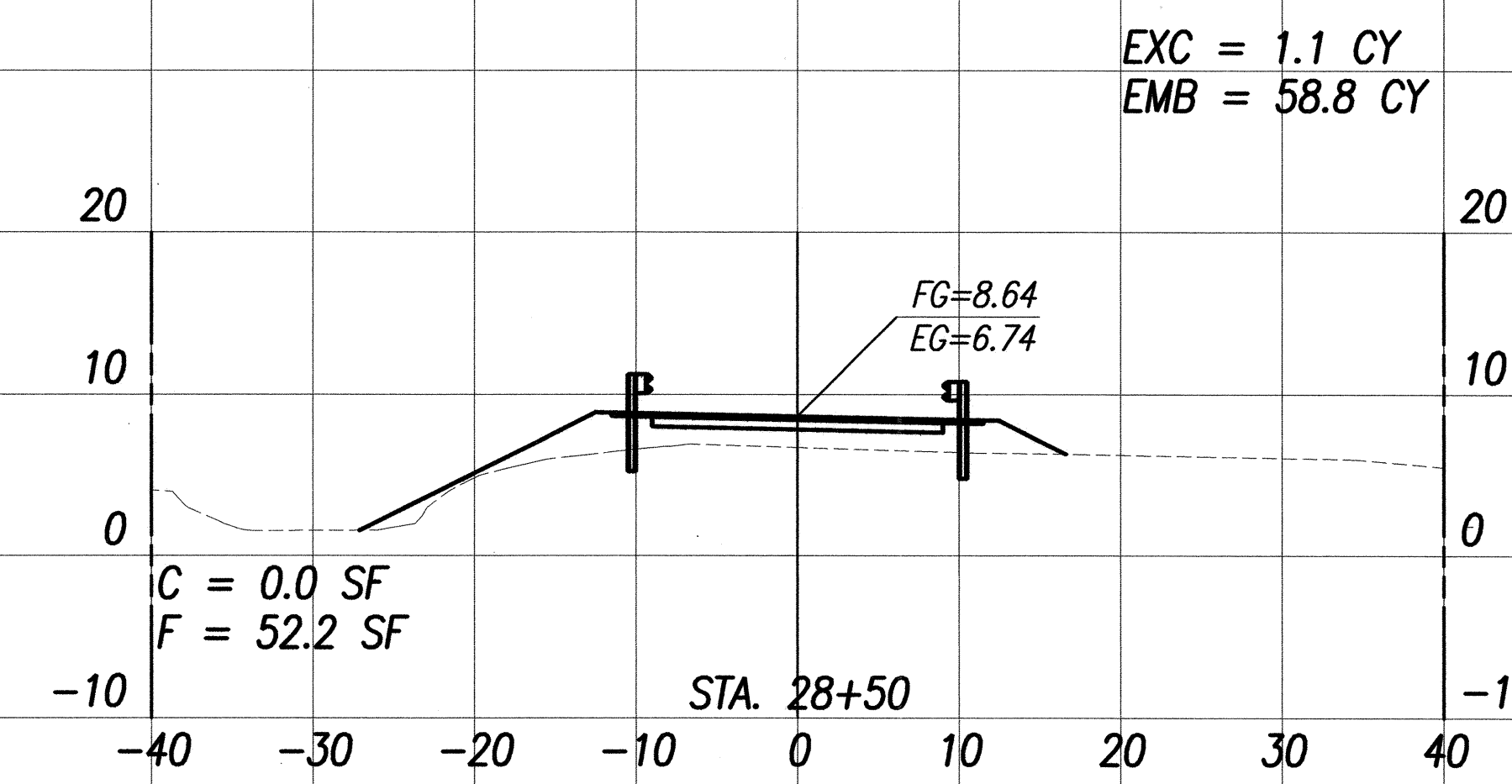
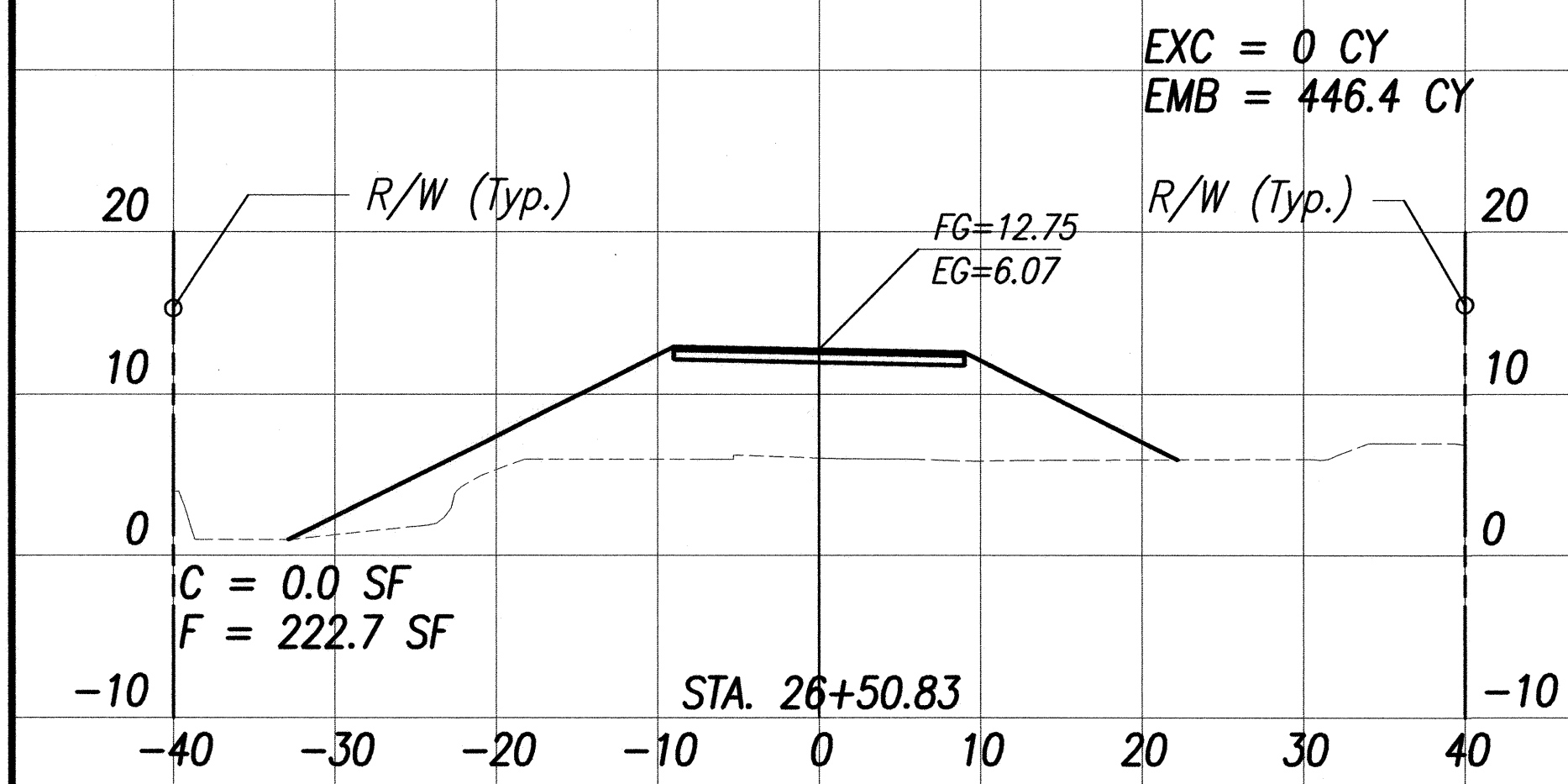
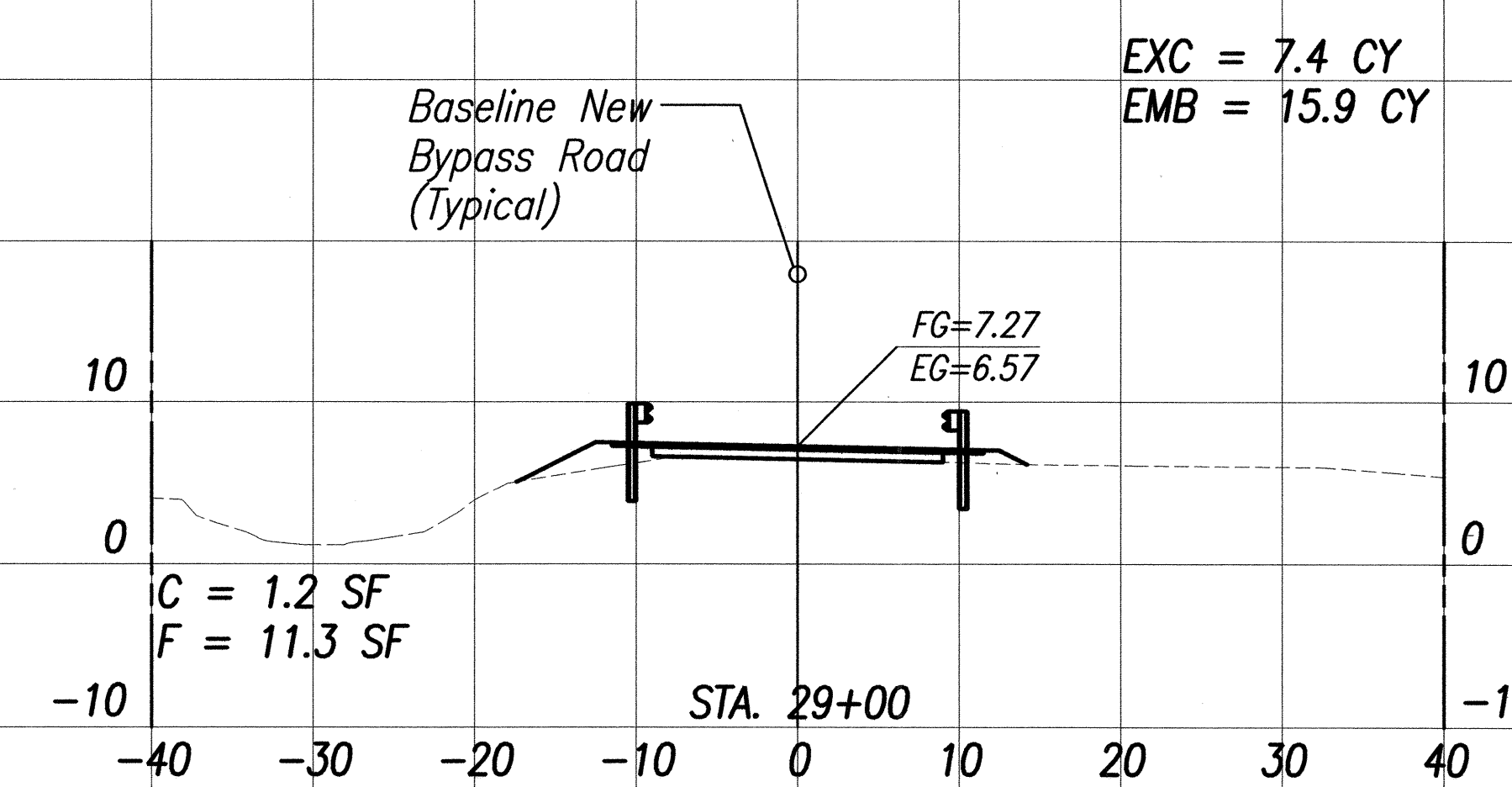
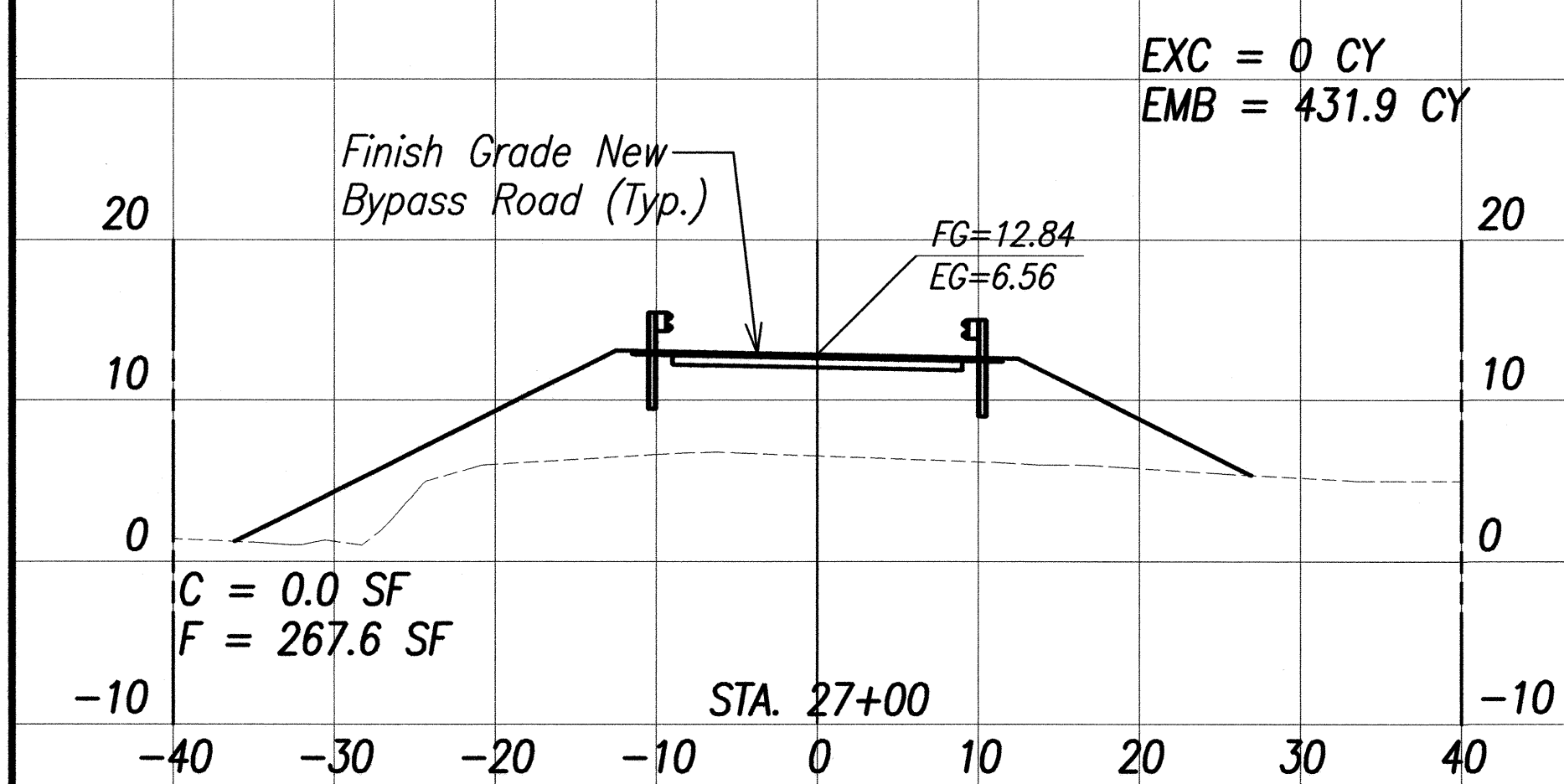
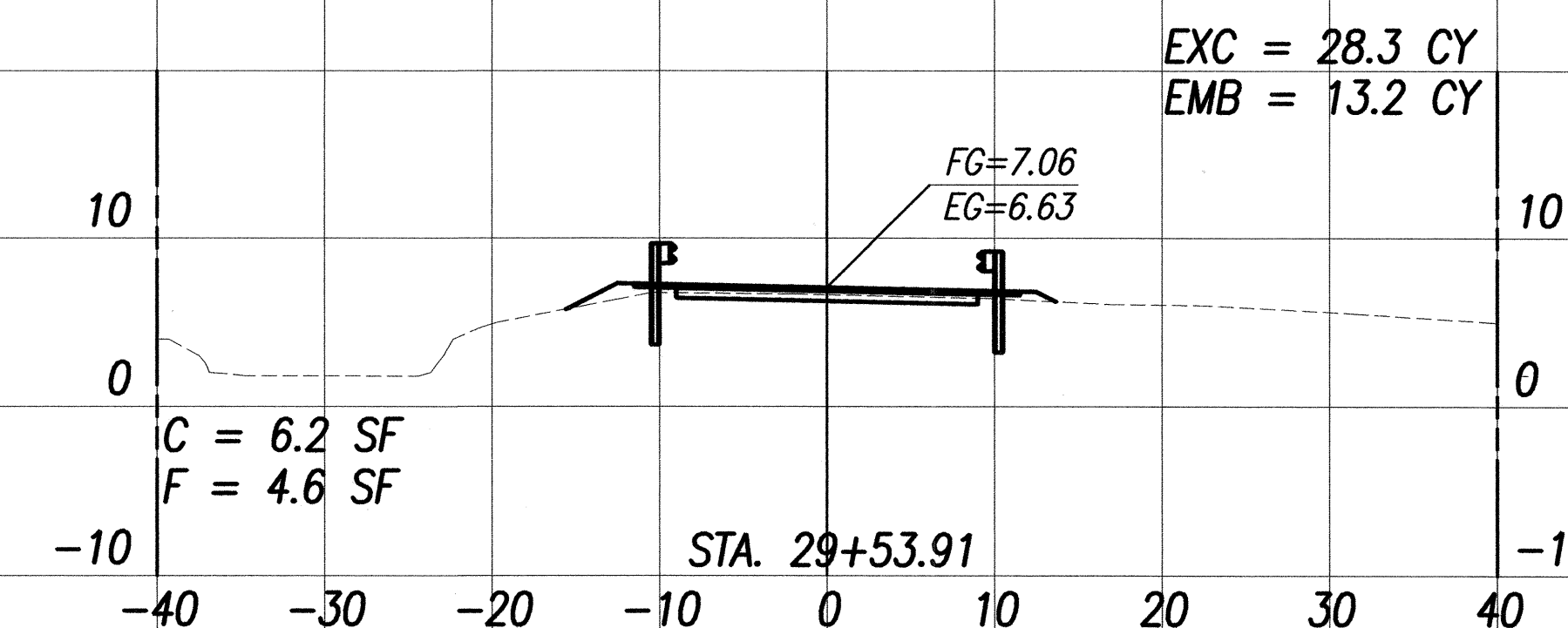
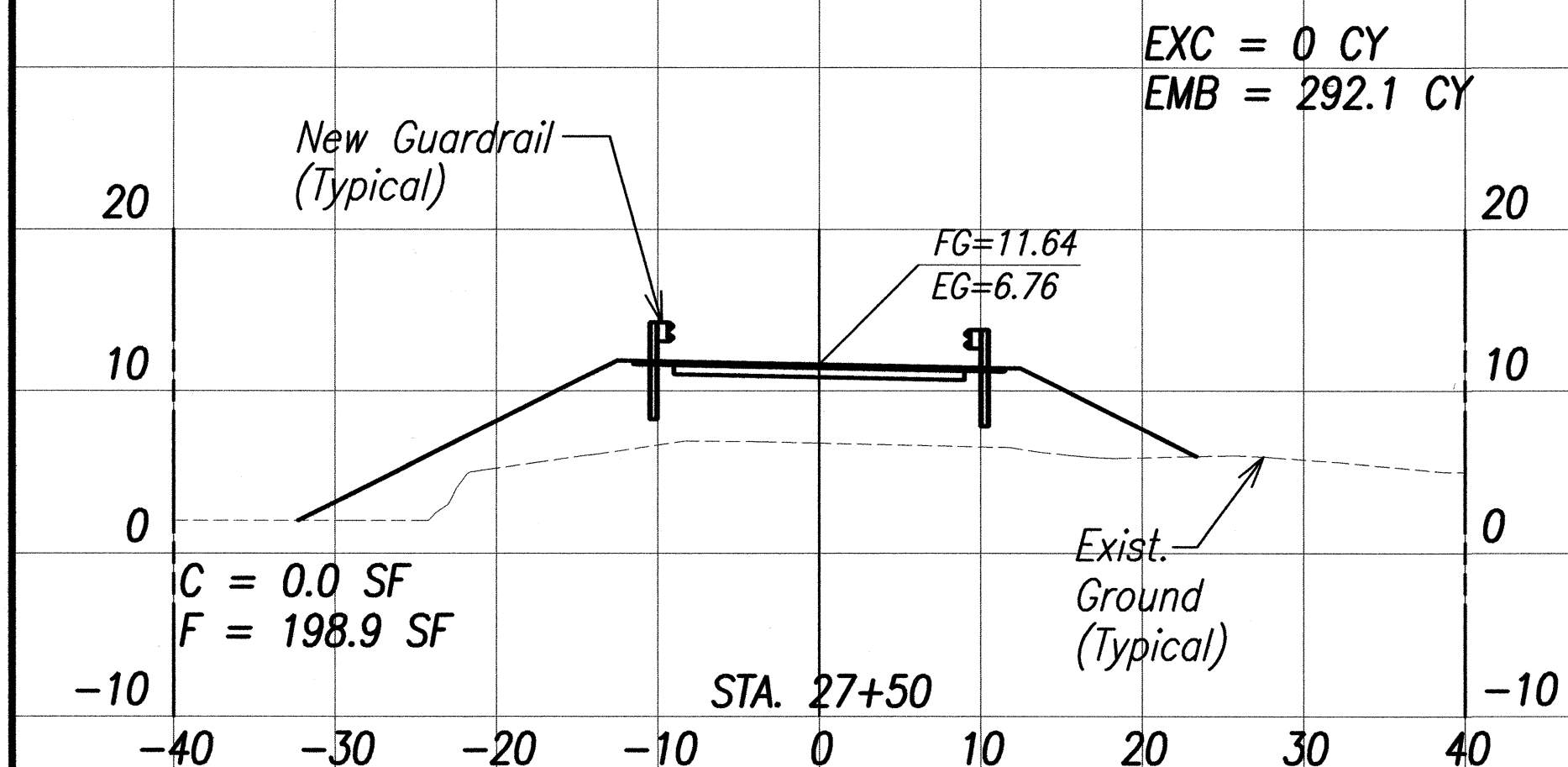
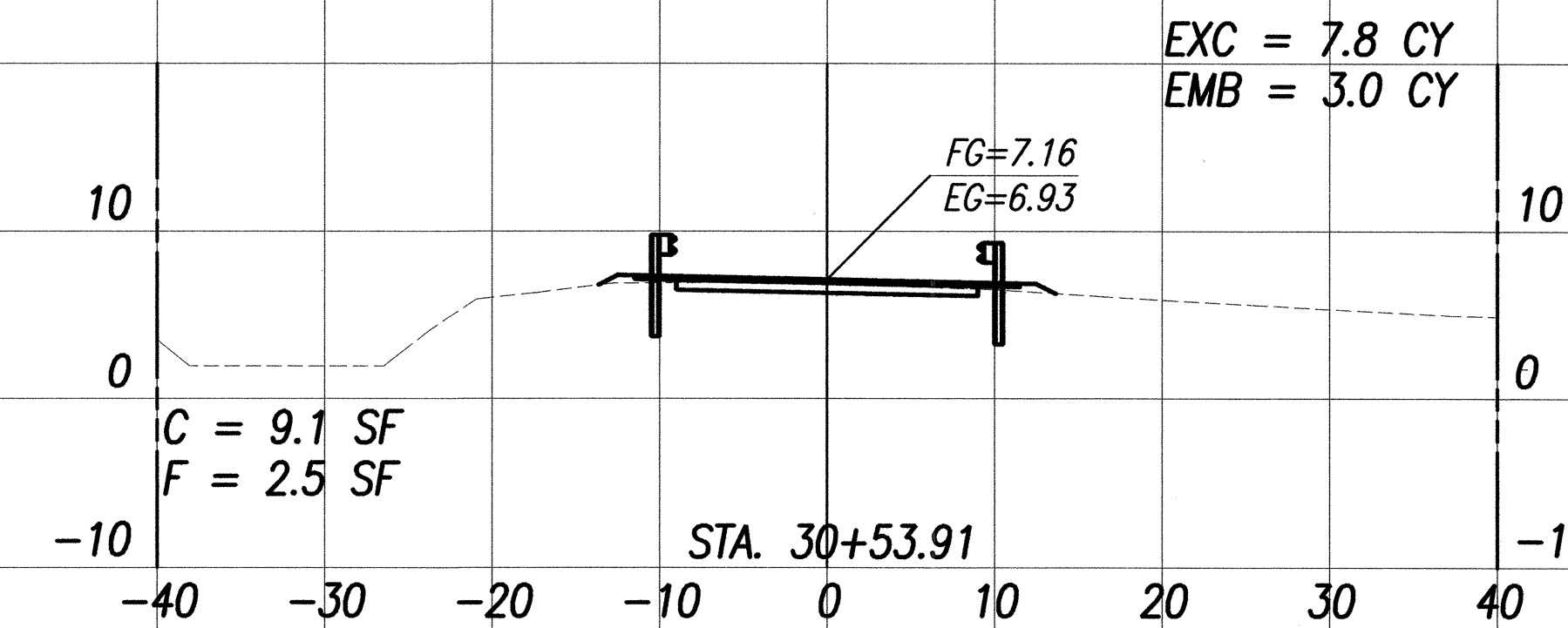
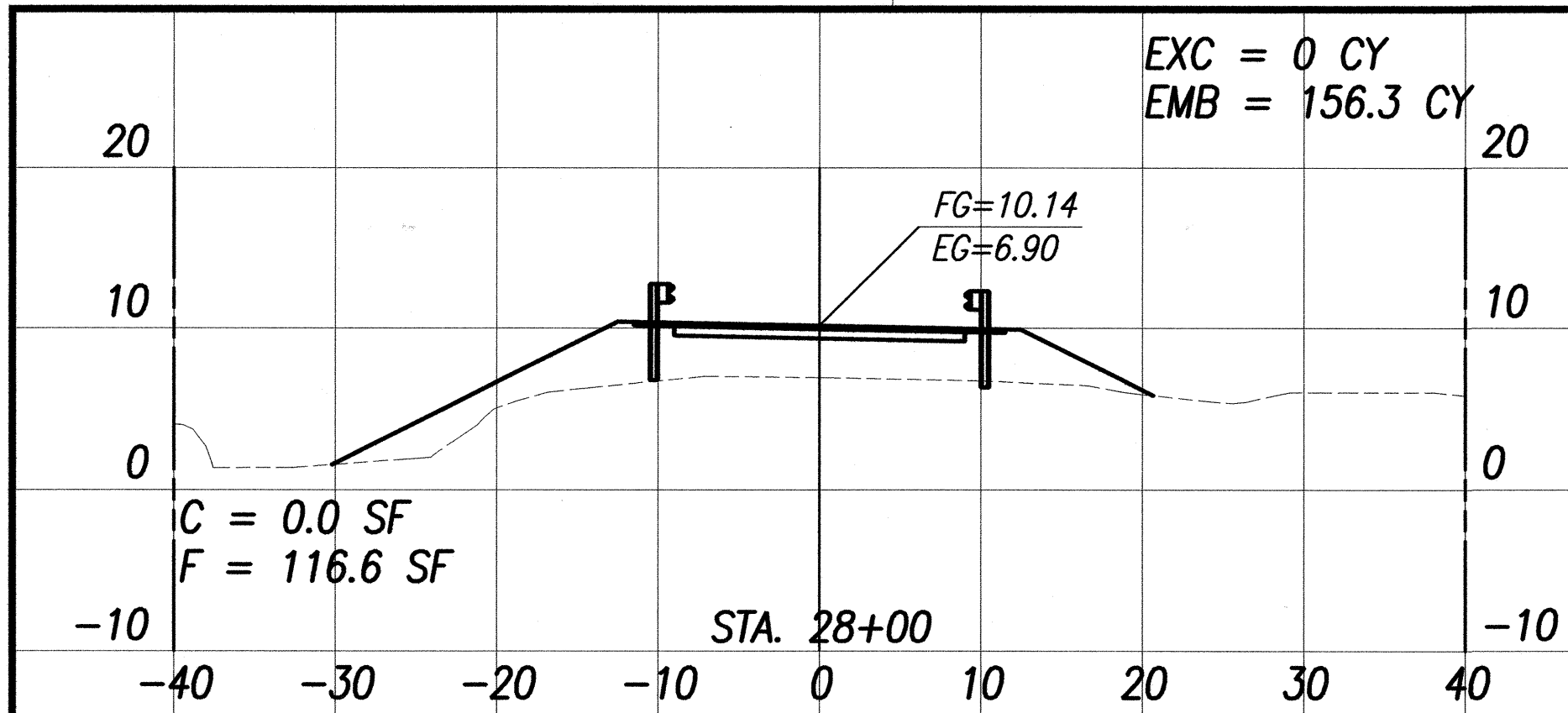
CROSS SECTIONS

KUHIO HIGHWAY IMPROVEMENTS
Extension Of Temporary Kapaa Bypass Road
Project No. 56A-03-00

Scale: 1"=10' Date: Mar 2004

SHEET No. 5 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-03-00	2004	25	66



Total Earthwork Quantities

Excavation = 1,024.7 C.Y.
Embankment = 4,797.0 C.Y.

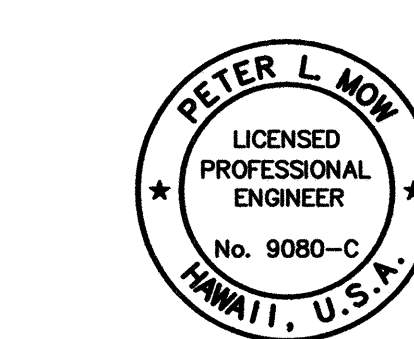
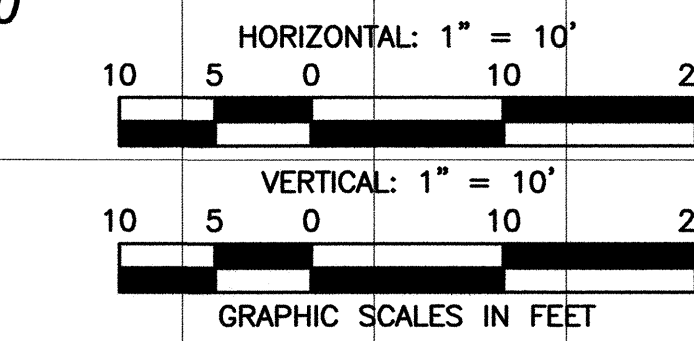
Sub-Total Earthwork Quantities Bridge Approaches

Excavation = 100.1 C.Y.
Embankment = 2,550.4 C.Y.

Note:
Sta. 26+50.83 To Sta. 30+53.91 = 2H:1V Fill Slope
Sta. 30+53.91 To Sta. 31+00 = Transition Slope

KAPAA BYPASS ROAD EXTENSION - BRIDGE APPROACHES

"KAPAA" STA. 26+50.83 TO STA. 31+00



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CROSS SECTIONS

KUHOI HIGHWAY IMPROVEMENTS
Extension Of Temporary Kapaa Bypass Road
Project No. 56A-03-00

Scale: 1"=10'

Date: Mar 2004

SHEET No. 6 OF 6 SHEETS

SURVEY PLOTTED BY _____
 DATE _____
 DRAWN BY _____
 DESIGNED BY _____
 CHECKED BY _____
 ORIGINAL PLAN _____
 NOTE BOOK _____
 QUANTITIES BY _____
 No. _____