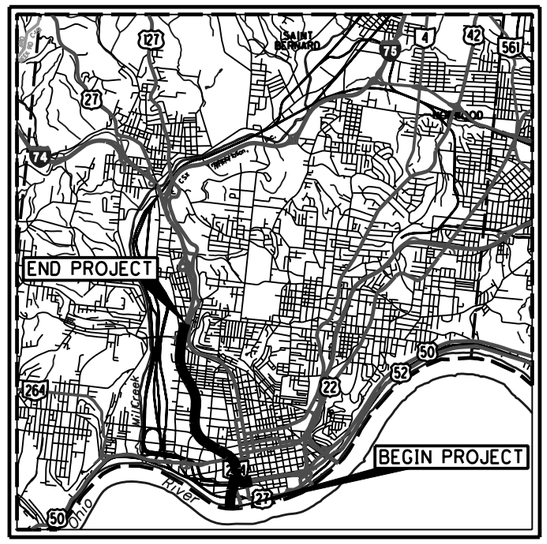
STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

HAM-71/75-0.00/0.22

CITY OF CINCINNATI
HAMILTON COUNTY
ALTERNATIVE E



LOCATION MAP

LATITUDE: ° ' " LONGITUDE: ° ' "

SCALE IN MILES

0 1 2 3 4

N

PORTION TO BE IMPROVED _____

INTERSTATE HIGHWAY _____

STATE & FEDERAL ROUTES _____

COUNTY & TOWNSHIP ROADS _____

OTHER ROADS _____

DESIGN DESIGNATION IR-71/75

CURRENT ADT (2005)	159,620
DESIGN YEAR ADT (2035)	232,910
DESIGN HOURLY VOLUME (2035)	19,230
DIRECTIONAL DISTRIBUTION	0.51
TRUCKS (24 HOUR B&C)	0.11
DESIGN SPEED	60 MPH
LEGAL SPEED	55 MPH

DESIGN FUNCTIONAL CLASSIFICATION:
URBAN INTERSTATE

NHS PROJECT _____

DESIGN EXCEPTIONS: SEE ACCOMPANYING REPORT

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL
1-800-362-2764
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE
SERVICE CALL: **1-800-925-0988**

PLAN PREPARED BY:

PB AMERICAS, INC.
312 ELM STREET, SUITE 2500
CINCINNATI, OHIO 45202

ENGINEERS SEAL:

SIGNED: _____
DATE: _____

ENGINEERS SEAL:

SIGNED: _____
DATE: _____

INDEX OF SHEETS:

TITLE	1
SCHEMATIC	ROLL PLOT
GEOMETRIC DETAILS	DVD
TYPICAL SECTIONS	2 -
PLAN	ROLL PLOT
PROFILES	ROLL PLOT
CROSS SECTIONS	
PAVEMENT MARKING PLAN	ROLL PLOT
DRAINAGE PLAN	ROLL PLOT

PAVR SUBMISSION
MAY 2011

STANDARD CONSTRUCTION DRAWINGS	SUPPLEMENTAL SPECIFICATIONS
	SPECIAL PROVISIONS

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF COMPLETE RECONSTRUCTION OF THE EXISTING IR-75 FROM THE OHIO RIVER TO APPROXIMATELY 1,500 FEET NORTH OF THE MIDPOINT OF THE WESTERN HILLS VIADUCT INTERCHANGE. ADDITIONAL WORK INCLUDES A NEW BRIDGE OVER THE OHIO RIVER AND COMPLETE RECONSTRUCTION OF THE APPROACHES TO THE NEW AND EXISTING BRIDGE, IR-71 FROM THE OHIO RIVER TO THE FORT WASHINGTON WAY TRENCH, DOWNTOWN CONNETIONS, US 50/6TH STREET, GEST STREET, LINN STREET BRIDGE, WESTERN AVENUE, WINCHELL AVENUE, FREEMAN AVENUE INTERCHANGE, EZZARD CHARLES DRIVE, AND THE WESTERN HILLS VIADUCT INTERCHANGE. OTHER BUILT FEATURES OF THE PROJECT INCLUDE OVERHEAD AND AT-GRADE ROADWAY BRIDGES, RETAINING WALLS, LIGHTING, TRAFFIC SIGNALS, STORM SEWERS AND INLETS, AND BMP STRUCTURES. THE PROJECT LENGTH IS APPROXIMATELY 2.7 MILES.

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2010 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

UNDER AUTHORITY OF SECTION 4511.21, DIVISION (H) OF THE OHIO REVISED CODE, THE REVISED PRIMA FACIE SPEED LIMITS AS INDICATED HEREIN ARE DETERMINED TO BE REASONABLE AND SAFE, AND ARE HEREBY ESTABLISHED FOR THE DURATION OF THIS PROJECT. THE PRIMA FACIE SPEED LIMIT OR LIMITS HEREBY ESTABLISHED SHALL BECOME EFFECTIVE WHEN APPROPRIATE SIGNS GIVING NOTICE THEREOF ARE ERECTED.

APPROVED _____
DATE _____ DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.

PID NO. 75119

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
CSXT RR

1



BRENT SPENCE BRIDGE REPLACEMENT STUDY

ALTERNATIVE E

SCHEMATIC PLAN


INTERSTATE 75
P.I. STA. 90+50.53
Δ = 34° 55' 25" (LT)
Dc = 3° 00' 00"
R = 1,909.86'
T = 600.78'
L = 1,164.12'
E = 92.26'
P.I. STA. 115+28.68
Δ = 34° 59' 38" (RT)
Dc = 3° 00' 00"
R = 1,909.86'
T = 602.06'
L = 1,166.46'
E = 92.65'
P.I. STA. 136+98.99
Δ = 14° 17' 25" (RT)
Dc = 1° 30' 00"
R = 3,819.72'
T = 478.83'
L = 952.69'
E = 29.90'
P.I. STA. 164+50.15
Δ = 36° 15' 36" (LT)
Dc = 2° 00' 00"
R = 2,864.79'
T = 938.02'
L = 1,813.01'
E = 149.66'
WESTERN HILLS VIADUCT TO I-75 SOUTHBOUND
P.I. STA. 22+02.42
Δ = 4° 32' 09" (LT)
Dc = 1° 15' 00"
R = 4,583.66'
T = 181.53'
L = 362.87'
E = 3.59'
WESTERN HILLS VIADUCT
P.I. STA. 20+30.46
Δ = 14° 38' 27" (RT)
Dc = 2° 00' 00"
R = 2,864.79'
T = 368.03'
L = 732.04'
E = 23.54'
P.I. STA. 33+39.25
Δ = 53° 49' 57" (LT)
Dc = 1° 00' 00"
R = 5,729.58'
T = 264.43'
L = 489.36'
E = 63.28'
P.I. STA. 42+95.00
Δ = 28° 03' 15" (RT)
Dc = 1° 00' 00"
R = 5,729.58'
T = 130.17'
L = 255.04'
E = 16.01'
P.I. STA. 45+14.28
Δ = 28° 53' 23" (LT)
Dc = 2° 24' 54" 40"
R = 2,310.00'
T = 59.25'
L = 115.97'
E = 7.51'
I-75 SOUTHBOUND TO WESTERN HILLS VIADUCT
P.I. STA. 11+21.96
Δ = 4° 52' 31" (RT)
Dc = 2° 00' 00"
R = 2,864.79'
T = 121.96'
L = 243.77'
E = 2.59'
P.I. STA. 17+41.04
Δ = 7° 48' 31" (LT)
Dc = 1° 00' 00"
R = 5,729.58'
T = 391.04'
L = 780.86'
E = 13.33'
P.I. STA. 24+50.42
Δ = 9° 33' 57" (LT)
Dc = 1° 30' 00"
R = 3,819.72'
T = 319.56'
L = 637.64'
E = 13.34'
I-75 SOUTHBOUND TO FINDLAY STREET
P.I. STA. 11+21.96
Δ = 4° 52' 31" (RT)
Dc = 2° 00' 00"
R = 2,864.79'
T = 121.96'
L = 243.77'
E = 2.59'
P.I. STA. 24+46.43
Δ = 23° 05' 57" (LT)
Dc = 2° 00' 00"
R = 2,864.79'
T = 585.43'
L = 1,154.96'
E = 59.21'
P.I. STA. 33+34.43
Δ = 3° 01' 49" (RT)
Dc = 1° 00' 00"
R = 5,729.58'
T = 151.54'
L = 303.01'
E = 2.00'
P.I. STA. 45+57.38
Δ = 29° 59' 33" (LT)
Dc = 2° 45' 00"
R = 2,083.48'
T = 558.12'
L = 1,090.64'
E = 75.46'
P.I. STA. 57+68.66
Δ = 3° 54' 43" (LT)
Dc = 2° 30' 00"
R = 2,291.83'
T = 78.27'
L = 156.47'
E = 1.34'
BANK STREET TO I-75 NORTHBOUND
P.I. STA. 11+20.38
Δ = 8° 26' 41" (RT)
Dc = 3° 31' 11"
R = 1,627.9'
T = 120.38'
L = 239.93'
E = 4.43'
P.I. STA. 21+47.63
Δ = 4° 37' 34" (RT)
Dc = 2° 00' 00"
R = 2,864.79'
T = 115.72'
L = 231.31'
E = 2.34'
P.I. STA. 30+94.31
Δ = 12° 21' 14" (RT)
Dc = 1° 15' 00"
R = 3,735.86'
T = 404.33'
L = 805.52'
E = 21.82'
I-75 NORTHBOUND TO WESTERN HILLS VIADUCT
P.I. STA. 13+71.11
Δ = 30° 47' 06" (RT)
Dc = 4° 15' 00"
R = 1,348.00'
T = 371.11'
L = 724.28'
E = 50.15'
P.I. STA. 25+11.77
Δ = 9° 10' 46" (LT)
Dc = 1° 30' 00"
R = 3,819.72'
T = 306.65'
L = 612.00'
E = 12.29'
CENTRAL PARKWAY
P.I. STA. 10+19.51
Δ = 4° 56' 15" (RT)
Dc = 12° 39' 41"
R = 452.52'
T = 19.51'
L = 39.00'
E = 0.42'
P.I. STA. 17+07.65
Δ = 36° 11' 02" (RT)
Dc = 4° 47' 03"
R = 1,197.61'
T = 391.26'
L = 756.33'
E = 62.29'
P.I. STA. 25+32.17
Δ = 7° 30' 25" (LT)
Dc = 5° 08' 41"
R = 1,113.66'
T = 73.06'
L = 145.91'
E = 2.39'
WESTERN HILLS VIADUCT TO CENTRAL PARKWAY CONNECTOR
P.I. STA. 13+78.72
Δ = 78° 33' 51" (LT)
Dc = 17° 31' 18"
R = 327.00'
T = 267.49'
L = 448.38'
E = 95.46'
WESTERN HILLS VIADUCT TO I-75 NORTHBOUND
P.I. STA. 11+65.50
Δ = 63° 46' 41" (LT)
Dc = 21° 32' 23"
R = 266.00'
T = 165.50'
L = 296.09'
E = 47.28'
P.I. STA. 23+53.26
Δ = 4° 32' 38" (RT)
Dc = 1° 00' 00"
R = 5,729.58'
T = 227.3'
L = 454.39'
E = 4.51'
P.I. STA. 35+46.91
Δ = 11° 43' 28" (LT)
Dc = 1° 56' 44"
R = 2,945.12'
T = 302.39'
L = 602.66'
E = 15.48'
SCALE
0
200
400
BRENT SPENCE BRIDGE
REPLACEMENT STUDY
ALTERNATIVE E
SCHEMATIC PLAN

INTERSTATE 75

- P.I. STA. 25+28.27: Δ = 6° 25' 38" (RT); Dc = 1° 10' 30"; R = 4,876.24'; T = 273.78'; L = 546.99'; E = 7.68'
- P.I. STA. 32+49.97: Ls = 440.00'; θs = 6° 17' 51"; LT = 293.52'; ST = 146.84'; x = 439.47'; y = 16.11'; k = 219.91'; p = 4.03'
- P.I. STA. 34+06.70: Δ = 13° 06' 10" (LT); Dc = 2° 51' 45"; R = 2,001.60'; Ls = 440.00'; θs = 6° 17' 51"; LT = 293.52'; ST = 146.84'; x = 439.47'; y = 16.11'; k = 219.91'; p = 4.03'; Δc = 0° 30' 28" (LT); Lc = 17.74'; Ts = 450.25'; Es = 17.21'
- P.I. STA. 35+61.03: Ls = 440.00'; θs = 6° 17' 51"; LT = 293.52'; ST = 146.84'; x = 439.47'; y = 16.11'; k = 219.91'; p = 4.03'
- P.I. STA. 41+90.33: Ls = 440.00'; θs = 8° 28' 12"; LT = 293.67'; ST = 146.97'; x = 439.04'; y = 21.65'; k = 219.84'; p = 5.42'
- P.I. STA. 49+16.69: Δ = 56° 21' 35" (LT); Dc = 3° 51' 00"; R = 1,488.20'; Ls = 440.00'; θs = 8° 28' 12"; LT = 293.67'; ST = 146.97'; x = 439.04'; y = 21.65'; k = 219.84'; p = 5.42'; Δc = 39° 25' 11" (LT); Lc = 1,023.89'; Ts = 1,020.04'; Es = 206.26'
- P.I. STA. 55+07.52: Ls = 440.00'; θs = 8° 28' 12"; LT = 293.67'; ST = 146.97'; x = 439.04'; y = 21.65'; k = 219.84'; p = 5.42'
- P.I. STA. 69+34.28: Ls = 944.00'; θs = 17° 42' 00"; LT = 632.51'; ST = 317.56'; x = 935.03'; y = 96.55'; k = 470.50'; p = 24.22'
- P.I. STA. 77+57.82: Δ = 64° 49' 44" (RT); Dc = 3° 45' 00"; R = 1,527.89'; Ls = 944.00'; θs = 17° 42' 00"; LT = 632.51'; ST = 317.56'; x = 935.03'; y = 96.55'; k = 470.50'; p = 24.22'; Δc = 29° 25' 44" (RT); Lc = 784.77'; Ts = 1,456.05'; Es = 310.68'
- P.I. STA. 83+48.09: Ls = 944.00'; θs = 17° 42' 00"; LT = 632.51'; ST = 317.56'; x = 935.03'; y = 96.55'; k = 470.50'; p = 24.22'

I 75 NORTHBOUND TO US 50

- P.I. STA. 1+53.78: Δ = 2° 14' 56" (RT); Dc = 0° 43' 53"; R = 7,834.94'; T = 153.78'; L = 307.52'; E = 1.51'
- P.I. STA. 5+38.56: Δ = 8° 18' 55" (RT); Dc = 1° 48' 10"; R = 3,178.39'; T = 231.04'; L = 461.28'; E = 8.39'
- P.I. STA. 11+97.36: Δ = 13° 04' 33" (LT); Dc = 3° 57' 25"; R = 1,447.99'; T = 165.95'; L = 330.45'; E = 9.48'
- P.I. STA. 18+34.52: Δ = 10° 57' 44" (LT); Dc = 2° 16' 52"; R = 2,511.75'; T = 241.02'; L = 480.57'; E = 11.54'

I 75 SOUTHBOUND TO FWW EASTBOUND

- P.I. STA. 13+85.94: Δ = 39° 31' 15" (RT); Dc = 2° 46' 21"; R = 2,066.56'; T = 742.40'; L = 1,425.45'; E = 129.30'
- P.I. STA. 27+61.38: Ls = 178.00'; θs = 6° 04' 45"; LT = 118.74'; ST = 59.40'; x = 177.80'; y = 6.29'; k = 88.97'; p = 1.57'
- P.I. STA. 32+78.72: Δ = 66° 17' 38" (LT); Dc = 6° 49' 50"; R = 838.83'; θ; Δc = 60° 12' 53" (LT); Lc = 881.57'; Es = 163.97'
- P.I. STA. 39+85.37: Δ = 13° 41' 11" (LT); Dc = 2° 25' 42"; R = 2,359.57'; T = 283.16'; L = 563.63'; E = 16.93'

I 75 SOUTHBOUND TO FREEMAN AVENUE

- P.I. STA. 1+47.28: Δ = 37° 25' 00" (LT); Dc = 13° 10' 28"; R = 434.90'; T = 147.28'; L = 284.01'; E = 24.26'
- P.I. STA. 5+09.56: Ls = 160.00'; θs = 4° 33' 22"; LT = 106.70'; ST = 53.37'; x = 159.90'; y = 4.24'; k = 79.98'; p = 1.06'
- P.I. STA. 6+40.53: Δ = 17° 47' 51" (RT); Dc = 5° 41' 42"; R = 1,006.05'; θ; Δc = 8° 41' 08" (RT); Lc = 152.51'; Es = 13.33'
- P.I. STA. 7+68.73: Ls = 159.99'; θs = 4° 33' 21"; LT = 106.70'; ST = 53.36'; x = 159.89'; y = 4.24'; k = 79.98'; p = 1.06'
- P.I. STA. 10+99.26: Δ = 2° 27' 05" (RT); Dc = 1° 56' 37"; R = 2,947.71'; T = 63.07'; L = 126.12'; E = 0.67'
- P.I. STA. 17+23.45: Δ = 2° 48' 17" (LT); Dc = 2° 00' 00"; R = 2,864.87'; T = 70.14'; L = 140.24'; E = 0.86'

INTERSTATE 71 NORTHBOUND

- P.I. STA. 23+41.76: Δ = 4° 30' 36" (RT); Dc = 1° 20' 28"; R = 4,272.64'; T = 168.24'; L = 336.31'; E = 3.31'
- P.I. STA. 27+37.60: Ls = 200.00'; θs = 11° 12' 27"; LT = 133.60'; ST = 66.91'; x = 199.24'; y = 13.00'; k = 99.87'; p = 3.26'
- P.I. STA. 32+08.90: Δ = 88° 56' 14" (RT); Dc = 11° 12' 27"; R = 511.23'; Ls = 200.00'; θs = 11° 12' 27"; LT = 133.60'; ST = 66.91'; x = 199.24'; y = 13.00'; k = 99.87'; p = 3.26'; Δc = 66° 31' 19" (RT); Lc = 593.55'; Ts = 604.90'; Es = 209.71'
- P.I. STA. 34+64.46: Ls = 200.00'; θs = 11° 12' 27"; LT = 133.60'; ST = 66.91'; x = 199.24'; y = 13.00'; k = 99.87'; p = 3.26'
- P.I. STA. 38+10.97: Ls = 140.00'; θs = 3° 44' 54"; LT = 93.35'; ST = 46.69'; x = 139.94'; y = 3.05'; k = 69.99'; p = 0.76'
- P.I. STA. 39+55.78: Δ = 17° 51' 06" (LT); Dc = 5° 21' 17"; R = 1,070.00'; Ls = 140.00'; θs = 3° 44' 54"; LT = 93.35'; ST = 46.69'; x = 139.94'; y = 3.05'; k = 69.99'; p = 0.76'; Δc = 10° 21' 18" (LT); Lc = 193.38'; Ts = 238.16'; Es = 13.89'
- P.I. STA. 40+97.68: Ls = 140.00'; θs = 3° 44' 54"; LT = 93.35'; ST = 46.69'; x = 139.94'; y = 3.05'; k = 69.99'; p = 0.76'
- P.I. STA. 45+12.01: Δ = 0° 54' 36" (RT); Dc = 0° 45' 10"; R = 7,612.00'; T = 60.45'; L = 120.90'; E = 0.24'

INTERSTATE 71 SOUTHBOUND

- P.I. STA. 3+96.80: Δ = 23° 07' 33" (RT); Dc = 7° 48' 53"; R = 733.18'; T = 150.01'; L = 295.93'; E = 15.19'
- P.I. STA. 6+62.17: Δ = 30° 21' 42" (RT); Dc = 13° 00' 54"; R = 440.23'; T = 119.45'; L = 233.28'; E = 15.92'
- P.I. STA. 10+95.47: Ls = 250.00'; θs = 14° 02' 35"; LT = 167.19'; ST = 83.81'; x = 248.50'; y = 20.34'; k = 124.75'; p = 5.10'
- P.I. STA. 20+03.08: Δ = 123° 04' 09" (LT); Dc = 11° 14' 04"; R = 510.00'; Ls = 250.00'; θs = 14° 02' 35"; LT = 167.19'; ST = 83.81'; x = 248.50'; y = 20.34'; k = 124.75'; p = 5.10'; Δc = 94° 58' 59" (LT); Lc = 845.46'; Ts = 1,074.81'; Es = 570.71'
- P.I. STA. 21+07.55: Ls = 250.00'; θs = 14° 02' 35"; LT = 167.19'; ST = 83.81'; x = 248.50'; y = 20.34'; k = 124.75'; p = 5.10'
- P.I. STA. 28+97.46: Δ = 6° 25' 38" (LT); Dc = 0° 47' 17"; R = 7,271.22'; T = 408.25'; L = 815.64'; E = 11.45'

THIRD STREET TO I 71 SOUTHBOUND

- P.I. STA. 0+52.76: Δ = 12° 21' 43" (RT); Dc = 11° 45' 38"; R = 487.19'; T = 52.76'; L = 105.11'; E = 2.85'
- P.I. STA. 4+80.77: Ls = 147.00'; θs = 8° 29' 46"; LT = 98.11'; ST = 49.10'; x = 146.68'; y = 7.25'; k = 73.45'; p = 1.82'
- P.I. STA. 7+03.59: Δ = 52° 53' 56" (RT); Dc = 11° 33' 34"; R = 495.66'; Ls = 147.00'; θs = 8° 29' 46"; LT = 98.11'; ST = 49.10'; x = 146.68'; y = 7.25'; k = 73.45'; p = 1.82'; Δc = 35° 54' 23" (RT); Lc = 310.62'; Ts = 320.93'; Es = 59.97'
- P.I. STA. 8+89.38: Ls = 147.00'; θs = 8° 29' 46"; LT = 98.11'; ST = 49.10'; x = 146.68'; y = 7.25'; k = 73.45'; p = 1.82'
- P.I. STA. 11+89.12: Δ = 22° 04' 06" (LT); Dc = 6° 03' 52"; R = 944.78'; T = 184.23'; L = 363.90'; E = 17.79'
- P.I. STA. 18+75.16: Δ = 86° 57' 28" (LT); Dc = 10° 43' 46"; R = 534.00'; T = 506.37'; L = 810.45'; E = 201.91'

C-D NORTHBOUND

- P.I. STA. 25+48.50: Δ = 9° 14' 00" (RT); Dc = 2° 15' 38"; R = 2,534.49'; T = 204.66'; L = 408.44'; E = 8.25'
- P.I. STA. 30+30.05: Δ = 11° 14' 44" (RT); Dc = 2° 01' 51"; R = 2,821.42'; T = 277.77'; L = 553.76'; E = 13.64'
- P.I. STA. 37+68.49: Δ = 33° 25' 46" (LT); Dc = 20° 22' 36"; R = 281.18'; T = 84.44'; L = 164.06'; E = 12.40'
- P.I. STA. 46+09.75: Ls = 160.00'; θs = 6° 09' 47"; LT = 106.73'; ST = 53.39'; x = 159.81'; y = 5.73'; k = 79.97'; p = 1.43'
- P.I. STA. 48+97.50: Δ = 45° 46' 00" (LT); Dc = 7° 42' 14"; R = 743.72'; θ; Δc = 33° 26' 28" (LT); Lc = 434.08'; Es = 65.09'
- P.I. STA. 51+50.48: Ls = 159.98'; θs = 6° 09' 45"; LT = 106.72'; ST = 53.39'; x = 159.80'; y = 5.73'; k = 79.96'; p = 1.43'
- P.I. STA. 56+78.54: Δ = 8° 00' 57" (LT); Dc = 2° 27' 28"; R = 2,331.14'; T = 163.33'; L = 326.13'; E = 5.71'
- P.I. STA. 62+44.60: Δ = 2° 03' 18" (RT); Dc = 0° 43' 02"; R = 7,988.00'; T = 143.26'; L = 286.49'; E = 1.28'

C-D NORTHBOUND TO SECOND STREET

- P.I. STA. 9+55.66: Δ = 2° 43' 45" (RT); Dc = 2° 25' 55"; R = 2,356.05'; T = 56.12'; L = 112.23'; E = 0.67'
- P.I. STA. 12+75.97: Δ = 20° 19' 08" (RT); Dc = 3° 53' 10"; R = 1,474.40'; T = 264.21'; L = 522.87'; E = 23.49'
- P.I. STA. 18+02.58: Δ = 56° 33' 59" (RT); Dc = 11° 30' 19"; R = 498.00'; T = 267.96'; L = 491.66'; E = 67.51'
- P.I. STA. 20+73.04: Ls = 140.00'; θs = 8° 03' 11"; LT = 93.42'; ST = 46.75'; x = 139.71'; y = 6.55'; k = 69.95'; p = 1.64'
- P.I. STA. 23+70.30: Ls = 140.00'; θs = 5° 11' 45"; LT = 93.37'; ST = 46.70'; x = 139.88'; y = 4.23'; k = 69.98'; p = 1.06'
- P.I. STA. 24+51.04: Δ = 15° 20' 43" (LT); Dc = 7° 25' 22"; R = 771.89'; θ; Δc = 4° 57' 14" (LT); Lc = 66.74'; Es = 8.04'
- P.I. STA. 25+30.36: Ls = 140.00'; θs = 5° 11' 44"; LT = 93.37'; ST = 46.70'; x = 139.87'; y = 4.23'; k = 69.98'; p = 1.06'

C-D NORTHBOUND TO NINTH STREET

- P.I. STA. 1+18.78: Ls = 178.00'; θs = 7° 48' 33"; LT = 118.78'; ST = 59.44'; x = 177.67'; y = 8.08'; k = 88.94'; p = 2.02'
- P.I. STA. 3+65.41: Δ = 45° 46' 00" (LT); Dc = 8° 46' 27"; R = 653.00'; Ls = 178.00'; θs = 7° 48' 33"; LT = 118.78'; ST = 59.44'; x = 177.67'; y = 8.08'; k = 88.94'; p = 2.02'; Δc = 30° 08' 55" (LT); Lc = 343.60'; Ts = 365.41'; Es = 57.98'
- P.I. STA. 5+81.04: Ls = 178.00'; θs = 7° 48' 33"; LT = 118.78'; ST = 59.44'; x = 177.67'; y = 8.08'; k = 88.94'; p = 2.02'
- P.I. STA. 11+08.11: Ls = 178.00'; θs = 7° 41' 00"; LT = 118.78'; ST = 59.44'; x = 177.68'; y = 7.95'; k = 88.95'; p = 1.99'
- P.I. STA. 13+42.60: Δ = 43° 18' 48" (LT); Dc = 8° 37' 59"; R = 663.68'; Ls = 178.00'; θs = 7° 41' 00"; LT = 118.78'; ST = 59.44'; x = 177.68'; y = 7.95'; k = 88.95'; p = 1.99'; Δc = 27° 56' 48" (LT); Lc = 323.72'; Ts = 353.27'; Es = 52.54'
- P.I. STA. 15+50.49: Ls = 178.00'; θs = 7° 41' 00"; LT = 118.78'; ST = 59.44'; x = 177.68'; y = 7.95'; k = 88.95'; p = 1.99'
- P.I. STA. 19+90.15: Δ = 13° 45' 07" (RT); Dc = 2° 18' 43"; R = 2,478.23'; T = 298.85'; L = 594.82'; E = 17.95'

C-D SOUTHBOUND

- P.I. STA. 5+19.91: Δ = 4° 33' 10" (LT); Dc = 0° 58' 25"; R = 5,884.88'; T = 233.93'; L = 467.62'; E = 4.65'
- P.I. STA. 11+04.61: Ls = 160.00'; θs = 7° 03' 46"; LT = 106.75'; ST = 53.41'; x = 159.76'; y = 6.57'; k = 79.96'; p = 1.64'
- P.I. STA. 12+75.07: Δ = 33° 43' 50" (RT); Dc = 8° 49' 42"; R = 649.00'; Ls = 160.00'; θs = 7° 03' 46"; LT = 106.75'; ST = 53.41'; x = 159.76'; y = 6.57'; k = 79.96'; p = 1.64'; Δc = 19° 36' 19" (RT); Lc = 222.07'; Ts = 277.21'; Es = 30.88'
- P.I. STA. 14+33.35: Ls = 160.00'; θs = 7° 03' 46"; LT = 106.75'; ST = 53.41'; x = 159.76'; y = 6.57'; k = 79.96'; p = 1.64'
- P.I. STA. 19+83.15: Ls = 270.00'; θs = 14° 02' 45"; LT = 180.57'; ST = 90.52'; x = 268.38'; y = 21.97'; k = 134.73'; p = 5.50'
- P.I. STA. 21+72.07: Δ = 45° 46' 00" (RT); Dc = 10° 24' 16"; R = 550.69'; Ls = 270.00'; θs = 14° 02' 45"; LT = 180.57'; ST = 90.52'; x = 268.38'; y = 21.97'; k = 134.73'; p = 5.50'; Δc = 17° 40' 30" (RT); Lc = 169.88'; Ts = 369.49'; Es = 53.02'
- P.I. STA. 23+32.98: Ls = 270.00'; θs = 14° 02' 45"; LT = 180.57'; ST = 90.52'; x = 268.38'; y = 21.97'; k = 134.73'; p = 5.50'
- P.I. STA. 31+79.41: Ls = 60.00'; θs = 6° 06' 47"; LT = 40.02'; ST = 20.02'; x = 59.93'; y = 2.13'; k = 29.99'; p = 0.53'
- P.I. STA. 32+03.77: Δ = 13° 55' 29" (LT); Dc = 20° 22' 36"; R = 281.18'; Ls = 60.00'; θs = 6° 06' 47"; LT = 40.02'; ST = 20.02'; x = 59.93'; y = 2.13'; k = 29.99'; p = 0.53'; Δc = 1° 41' 55" (LT); Lc = 8.34'; Ts = 64.39'; Es = 2.63'
- P.I. STA. 32+27.74: Ls = 60.00'; θs = 6° 06' 47"; LT = 40.02'; ST = 20.02'; x = 59.93'; y = 2.13'; k = 29.99'; p = 0.53'
- P.I. STA. 33+69.30: Ls = 60.00'; θs = 5° 11' 09"; LT = 40.02'; ST = 20.02'; x = 59.95'; y = 1.81'; k = 29.99'; p = 0.45'
- P.I. STA. 35+36.65: Δ = 56° 14' 27" (RT); Dc = 17° 17' 09"; R = 331.46'; Ls = 60.00'; θs = 5° 11' 09"; LT = 40.02'; ST = 20.02'; x = 59.95'; y = 1.81'; k = 29.99'; p = 0.45'; Δc = 45° 52' 10" (RT); Lc = 265.36'; Ts = 207.37'; Es = 44.88'
- P.I. STA. 36+74.66: Ls = 60.00'; θs = 5° 11' 09"; LT = 40.02'; ST = 20.02'; x = 59.95'; y = 1.81'; k = 29.99'; p = 0.45'
- P.I. STA. 39+67.11: Ls = 160.00'; θs = 4° 27' 35"; LT = 106.70'; ST = 53.36'; x = 159.90'; y = 4.15'; k = 79.98'; p = 1.04'
- P.I. STA. 40+62.97: Δ = 13° 35' 20" (LT); Dc = 5° 34' 29"; R = 1,027.76'; Ls = 160.00'; θs = 4° 27' 35"; LT = 106.70'; ST = 53.36'; x = 159.90'; y = 4.15'; k = 79.98'; p = 1.04'; Δc = 4° 40' 09" (LT); Lc = 83.76'; Ts = 202.56'; Es = 8.31'
- P.I. STA. 41+57.53: Ls = 160.00'; θs = 4° 27' 35"; LT = 106.70'; ST = 53.36'; x = 159.90'; y = 4.15'; k = 79.98'; p = 1.04'
- P.I. STA. 45+85.24: Δ = 15° 45' 24" (LT); Dc = 2° 28' 57"; R = 2,308.00'; Δc = 13° 46' 14" (LT); Lc = 554.71'; Es = 22.23'
- P.I. STA. 48+72.22: Ls = 160.00'; θs = 1° 59' 10"; LT = 106.67'; ST = 53.34'; x = 159.98'; y = 1.85'; k = 80.00'; p = 0.46'

C-D SOUTHBOUND TO SECOND STREET

- P.I. STA. 3+02.58: Ls = 120.00'; θs = 9° 34' 33"; LT = 80.12'; ST = 40.11'; x = 119.67'; y = 6.67'; k = 59.94'; p = 1.67'
- P.I. STA. 5+90.83: Δ = 81° 04' 15" (LT); Dc = 15° 57' 35"; R = 359.00'; Ls = 120.00'; θs = 9° 34' 33"; LT = 80.12'; ST = 40.11'; x = 119.67'; y = 6.67'; k = 59.94'; p = 1.67'; Δc = 61° 55' 08" (LT); Lc = 387.97'; Ts = 368.37'; Es = 115.56'
- P.I. STA. 7+70.53: Ls = 120.00'; θs = 9° 34' 33"; LT = 80.12'; ST = 40.11'; x = 119.67'; y = 6.67'; k = 59.94'; p = 1.67'
- P.I. STA. 10+10.65: Δ = 11° 29' 58" (LT); Dc = 3° 36' 03"; R = 1,591.22'; T = 160.22'; L = 319.36'; E = 8.05'
- P.I. STA. 15+91.93: Δ = 2° 28' 31" (RT); Dc = 0° 35' 07"; R = 9,789.16'; T = 211.48'; L = 422.89'; E = 2.28'

C-D SOUTHBOUND TO SEVENTH STREET

- P.I. STA. 5+36.29: Ls = 310.00'; θs = 7° 25' 40"; LT = 206.85'; ST = 103.50'; x = 309.48'; y = 13.38'; k = 154.91'; p = 3.35'
- P.I. STA. 8+04.47: Δ = 29° 53' 51" (LT); Dc = 4° 47' 31"; R = 1,195.64'; Ls = 310.00'; θs = 7° 25' 40"; LT = 206.85'; ST = 103.50'; x = 309.48'; y = 13.38'; k = 154.91'; p = 3.35'; Δc = 15° 02' 31" (LT); Lc = 313.89'; Ts = 475.03'; Es = 45.35'
- P.I. STA. 10+56.83: Ls = 310.00'; θs = 7° 25' 40"; LT = 206.85'; ST = 103.50'; x = 309.48'; y = 13.38'; k = 154.91'; p = 3.35'
- P.I. STA. 17+84.68: Δ = 35° 07' 20" (LT); Dc = 3° 32' 25"; R = 1,618.42'; Δc = 29° 27' 28" (LT); Lc = 832.09'; Es = 80.50'
- P.I. STA. 22+06.76: Ls = 320.00'; θs = 5° 39' 52"; LT = 213.44'; ST = 106.77'; x = 319.69'; y = 10.54'; k = 159.95'; p = 2.64'
- P.I. STA. 29+62.86: Δ = 8° 51' 53" (RT); Dc = 2° 28' 43"; R = 2,311.61'; T = 179.18'; L = 357.65'; E = 6.93'
- P.I. STA. 34+81.33: Ls = 200.00'; θs = 7° 22' 39"; LT = 133.45'; ST = 66.77'; x = 199.67'; y = 8.57'; k = 99.94'; p = 2.14'
- P.I. STA. 37+95.63: Δ = 48° 07' 51" (LT); Dc = 7° 22' 39"; R = 776.63'; Ls = 200.00'; θs = 7° 22' 39"; LT = 133.45'; ST = 66.77'; x = 199.67'; y = 8.57'; k = 99.94'; p = 2.14'; Δc = 33° 22' 34" (LT); Lc = 452.40'; Ts = 447.75'; Es = 76.28'
- P.I. STA. 40+67.06: Ls = 200.00'; θs = 7° 22' 39"; LT = 133.45'; ST = 66.77'; x = 199.67'; y = 8.57'; k = 99.94'; p = 2.14'

FWW WESTBOUND TO US 50

- P.I. STA. 6+87.13: Δ = 13° 35' 19" (RT); Dc = 2° 53' 36"; R = 1,980.32'; T = 235.94'; L = 469.66'; E = 14.01'
- P.I. STA. 14+70.32: Δ = 76° 51' 48" (RT); Dc = 8° 18' 14"; R = 689.98'; Δc = 69° 28' 23" (RT); Lc = 836.63'; Es = 192.05'
- P.I. STA. 18+16.91: Ls = 178.00'; θs = 7° 23' 26"; LT = 118.77'; ST = 59.43'; x = 177.70'; y = 7.64'; k = 88.95'; p = 1.91'

FWW WESTBOUND TO I 75 NORTHBOUND

- P.I. STA. 6+87.13: Δ = 13° 35' 19" (RT); Dc = 2° 52' 10"; R = 1,996.80'; T = 237.90'; L = 473.57'; E = 14.12'
- P.I. STA. 13+69.55: Δ = 69° 00' 58" (RT); Dc = 8° 49' 02"; R = 649.83'; T = 446.75'; L = 782.75'; E = 138.75'
- P.I. STA. 17+65.00: Ls = 178.00'; θs = 7° 50' 50"; LT = 118.78'; ST = 59.44'; x = 177.67'; y = 8.12'; k = 88.94'; p = 2.03'
- P.I. STA. 24+98.11: Ls = 178.00'; θs = 6° 39' 34"; LT = 118.75'; ST = 59.41'; x = 177.76'; y = 6.89'; k = 88.96'; p = 1.72'
- P.I. STA. 27+45.47: Δ = 39° 42' 43" (LT); Dc = 7° 28' 57"; R = 765.74'; Ls = 178.00'; θs = 6° 39' 34"; LT = 118.75'; ST = 59.41'; x = 177.76'; y = 6.89'; k = 88.96'; p = 1.72'; Δc = 26° 23' 36" (LT); Lc = 352.74'; Ts = 366.11'; Es = 50.23'
- P.I. STA. 29+69.51: Ls = 178.00'; θs = 6° 39' 34"; LT = 118.75'; ST = 59.41'; x = 177.76'; y = 6.89'; k = 88.96'; p = 1.72'
- P.I. STA. 36+07.66: Δ = 10° 22' 22" (LT); Dc = 2° 41' 26"; R = 2,129.49'; T = 193.29'; L = 385.52'; E = 8.75'

US 50 EASTBOUND TO I 75 SOUTHBOUND

- P.I. STA. 6+14.36: Δ = 80° 40' 26" (RT); Dc = 9° 30' 06"; R = 603.00'; T = 512.05'; L = 849.04'; E = 188.08'
- P.I. STA. 10+38.84: Δ = 16° 30' 40" (RT); Dc = 9° 30' 06"; R = 603.00'; T = 87.49'; L = 173.77'; E = 6.31'

C-D NORTHBOUND TO WINCHELL AVENUE

- P.I. STA. 0+74.00: Δ = 3° 35' 57" (LT); Dc = 2° 25' 58"; R = 2,355.14'; T = 74.00'; L = 147.95'; E = 1.16'
- P.I. STA. 6+44.31: Δ = 2° 39' 38" (LT); Dc = 3° 58' 04"; R = 1,444.00'; T = 33.53'; L = 67.05'; E = 0.39'

US 50 TO FWW EASTBOUND

- P.I. STA. 9+64.30: Ls = 178.00'; θs = 6° 43' 52"; LT = 118.75'; ST = 59.41'; x = 177.75'; y = 6.96'; k = 88.96'; p = 1.74'
- P.I. STA. 15+35.19: Δ = 76° 51' 30" (LT); Dc = 7° 33' 47"; R = 757.59'; θ; Δc = 70° 07' 38" (LT); Lc = 927.25'; Es = 210.60'
- P.I. STA. 22+33.97: Δ = 13° 41' 10" (LT); Dc = 2° 25' 41"; R = 2,359.67'; T = 283.17'; L = 563.64'; E = 16.93'

SIXTH STREET TO WINCHELL AVENUE

- P.I. STA. 2+97.50: Δ = 30° 20' 21" (RT); Dc = 5° 13' 18"; R = 1,097.27'; T = 297.50'; L = 581.02'; E = 39.61'
- P.I. STA. 13+57.26: Δ = 12° 49' 49" (LT); Dc = 3° 16' 37"; R = 1,748.41'; T = 196.58'; L = 391.52'; E = 11.02'
- P.I. STA. 17+29.83: Δ = 6° 34' 12" (RT); Dc = 3° 27' 32"; R = 1,656.50'; T = 95.08'; L = 189.94'; E = 2.73'
- P.I. STA. 26+37.28: Δ = 6° 09' 43" (RT); Dc = 1° 23' 36"; R = 4,112.34'; T = 221.35'; L = 442.26'; E = 5.95'
- P.I. STA. 33+42.47: Δ = 42° 57' 02" (RT); Dc = 4° 49' 59"; R = 1,185.48'; T = 466.38'; L = 888.67'; E = 88.44'
- P.I. STA. 42+87.02: Δ = 17° 47' 52" (RT); Dc = 3° 39' 03"; R = 1,569.33'; T = 245.72'; L = 487.48'; E = 19.12'

NINTH STREET

- P.I. STA. 11+07.96: Δ = 15° 40' 23" (RT); Dc = 2° 19' 24"; R = 2,466.23'; T = 339.43'; L = 674.63'; E = 23.25'

NINTH STREET TO WINCHELL AVENUE

- P.I. STA. 3+73.40: Δ = 31° 14' 50" (RT); Dc = 6° 07' 22"; R = 935.77'; T = 261.69'; L = 510.34'; E = 35.90'
- P.I. STA. 10+86.69: Δ = 4° 57' 47" (RT); Dc = 2° 08' 58"; R = 2,665.76'; T = 115.53'; L = 230.91'; E = 2.50'

GEST STREET

- P.I. STA. 6+63.13: Δ = 53° 21' 07" (LT); Dc = 11° 04' 02"; R = 517.71'; T = 260.11'; L = 482.08'; E = 61.67'
- P.I. STA. 15+44.86: Δ = 9° 54' 02" (RT); Dc = 2° 52' 53"; R = 1,988.56'; T = 172.24'; L = 343.61'; E = 7.45'
- P.I. STA. 20+58.73: Δ = 0° 31' 27" (RT); Dc = 0° 04' 36"; R = 74,860.23'; T = 342.49'; L = 684.98'; E = 0.78'

FREEMAN AVENUE TO I 75 NORTHBOUND

- P.I. STA. 2+91.57: Ls = 140.00'; θs = 11° 40' 16"; LT = 93.54'; ST = 46.85'; x = 139.42'; y = 9.48'; k = 69.90'; p = 2.37'
- P.I. STA. 4+35.82: Δ = 51° 45' 51" (LT); Dc = 16° 40' 22"; R = 343.65'; Ls = 140.00'; θs = 11° 40' 16"; LT = 93.54'; ST = 46.85'; x = 139.42'; y = 9.48'; k = 69.90'; p = 2.37'; Δc = 28° 25' 20" (LT); Lc = 170.47'; Ts = 237.79'; Es = 40.95'
- P.I. STA. 5+55.36: Ls = 140.00'; θs = 11° 40' 16"; LT = 93.54'; ST = 46.85'; x = 139.42'; y = 9.48'; k = 69.90'; p = 2.37'
- P.I. STA. 9+08.44: Δ = 11° 13' 40" (RT); Dc = 2° 39' 23"; R = 2,156.94'; T = 212.02'; L = 422.67'; E = 10.39'
- P.I. STA. 14+40.67: Δ = 4° 51' 46" (RT); Dc = 1° 49' 41"; R = 3,134.21'; T = 133.08'; L = 266.01'; E = 2.82'

WESTERN AVENUE

- P.I. STA. 4+28.96: Δ = 0° 56' 18" (LT); Dc = 0° 06' 34"; R = 52,385.76'; T = 428.96'; L = 857.91'; E = 1.76'

WESTERN AVENUE TO C-D SOUTHBOUND

- P.I. STA. 5+96.18: Ls = 155.00'; θs = 12° 08' 00"; LT = 103.58'; ST = 51.89'; x = 154.31'; y = 10.91'; k = 77.38'; p = 2.73'
- P.I. STA. 6+90.85: Δ = 36° 17' 53" (LT); Dc = 15° 39' 21"; R = 365.97'; Ls = 155.00'; θs = 12° 08' 00"; LT = 103.58'; ST = 51.89'; x = 154.31'; y = 10.91'; k = 77.38'; p = 2.73'; Δc = 12° 01' 54" (LT); Lc = 76.85'; Ts = 198.24'; Es = 22.03'
- P.I. STA. 7+76.34: Ls = 155.00'; θs = 12° 08' 00"; LT = 103.58'; ST = 51.89'; x = 154.31'; y = 10.91'; k = 77.38'; p = 2.73'
- P.I. STA. 14+18.51: Δ = 14° 37' 54" (LT); Dc = 2° 43' 05"; R = 2,107.92'; T = 270.62'; L = 538.30'; E = 17.30'

US 50 WESTBOUND

- P.I. STA. 2+19.37: Δ = 11° 58' 32" (RT); Dc = 2° 44' 22"; R = 2,091.48'; T = 219.37'; L = 437.14'; E = 11.47'
- P.I. STA. 11+13.14: Δ = 2° 58' 58" (LT); Dc = 0° 38' 39"; R = 8,892.81'; T = 231.53'; L = 462.96'; E = 3.01'

US 50 EASTBOUND

- P.I. STA. 9+85.41: Δ = 13° 18' 48" (RT); Dc = 3° 27' 53"; R = 1,653.67'; T = 193.00'; L = 384.25'; E = 11.22'
- P.I. STA. 18+58.83: Δ = 6° 53' 12" (LT); Dc = 3° 01' 57"; R = 1,889.30'; T = 113.68'; L = 227.09'; E = 3.42'

US 50 WB TO GEST STREET

- P.I. STA. 8+04.32: Δ = 13° 12' 52" (RT); Dc = 4° 57' 49"; R = 1,154.33'; T = 133.71'; L = 266.23'; E = 7.72'

LINN STREET

- P.I. STA. 9+36.46: Δ = 17° 01' 17" (LT); Dc = 5° 30' 00"; R = 1,041.74'; T = 155.89'; L = 309.48'; E = 11.60'

BRENT SPENCE BRIDGE REPLACEMENT STUDY

ALTERNATIVE E

CURVE DATA



BRENT SPENCE BRIDGE REPLACEMENT STUDY

ALTERNATIVE E

GEOMETRIC DETAILS:

I-75 MAINLINE, I-75 NB TO US 50, FREEMAN AVENUE TO I-75 NB, NINTH STREET, NINTH STREET TO WINCHELL AVENUE, LINN STREET


INTERSTATE 71 NB
US 50 EB TO I 75 SB
US 50 WB
FIFTH STREET
FOURTH STREET
SIXTH STREET TO WINCHELL AVENUE
GEST STREET
I 75 SB TO FREEMAN AVENUE
POT STA. 0+00.00
POT STA. 4+55.62
POT STA. 0+00.00
POT STA. 0+00.00
POT STA. 0+00.00


INTERSTATE 71 SOUTHBOUND
P.I. STA. 3+96.80
Δ = 23° 07' 33" (RT)
Dc = 7° 48' 53"
R = 733.18'
T = 150.01'
L = 295.93'
E = 15.19'
P.I. STA. 6+62.17
Δ = 30° 21' 42" (RT)
Dc = 13° 00' 54"
R = 440.23'
T = 119.45'
L = 233.28'
E = 15.92'
P.I. STA. 10+95.47
Lв = 250.00'
θв = 14° 02' 35"
LT = 167.19'
ST = 83.81'
x = 248.50'
y = 20.34'
k = 124.75'
p = 5.10'
P.I. STA. 20+03.08
Δ = 123° 04' 09" (LT)
Dc = 17° 14' 04"
R = 510.00'
Ls = 250.00'
θв = 14° 02' 35"
LT = 167.19'
ST = 83.81'
x = 248.50'
y = 20.34'
k = 124.75'
p = 5.10'
Δ.c = 94° 58' 59" (LT)
Lc = 845.46'
Ts = 1,074.81'
Es = 570.71'
P.I. STA. 21+07.55
Lв = 250.00'
θв = 14° 02' 35"
LT = 167.19'
ST = 83.81'
x = 248.50'
y = 20.34'
k = 124.75'
p = 5.10'
P.I. STA. 28+97.46
Δ = 6° 25' 38" (LT)
Dc = 0° 47' 17"
R = 7,271.22'
T = 408.25'
L = 815.64'
E = 11.45'
INTERSTATE 71 SB
THIRD STREET TO I 71 SB
US 50 TO GEST ST
C-D NB TO NINTH STREET
P.I. STA. 0+52.76
Δ = 12° 21' 43" (RT)
Dc = 11° 45' 38"
R = 487.19'
T = 52.78'
L = 105.11'
E = 2.85'
P.I. STA. 4+80.77
Lв = 147.00'
θв = 81° 29' 46"
LT = 98.11'
ST = 49.10'
x = 146.68'
y = 7.25'
k = 73.45'
p = 1.82'
P.I. STA. 7+03.59
Δ = 52° 53' 56" (RT)
Dc = 11° 33' 34"
R = 495.66'
Ls = 147.00'
θв = 8° 29' 46"
LT = 98.11'
ST = 49.10'
x = 146.68'
y = 7.25'
k = 73.45'
p = 1.82'
Δ.c = 35° 54' 23" (RT)
Lc = 310.62'
Ts = 320.93'
Es = 59.39'
P.I. STA. 8+89.38
Lв = 147.00'
θв = 8° 29' 46"
LT = 98.11'
ST = 49.10'
x = 146.68'
y = 7.25'
k = 73.45'
p = 1.82'
P.I. STA. 11+89.12
Δ = 22° 04' 06" (LT)
Dc = 6° 03' 52"
R = 944.78'
T = 184.23'
L = 363.90'
E = 11.79'
P.I. STA. 18+75.16
Δ = 86° 57' 28" (LT)
Dc = 10° 43' 46"
R = 534.00'
T = 506.37'
L = 810.45'
E = 201.91'
C-D NORTHBOUND TO NINTH STREET
P.I. STA. 1+18.78
Ls = 178.00'
θв = 7° 48' 33"
LT = 118.78'
ST = 59.44'
x = 177.67'
y = 8.08'
k = 88.94'
p = 2.02'
P.I. STA. 3+65.41
Δ = 45° 46' 00" (LT)
Dc = 8° 46' 27"
R = 653.00'
Ls = 178.00'
θв = 7° 48' 33"
LT = 118.78'
ST = 59.44'
x = 177.67'
y = 8.08'
k = 88.94'
p = 2.02'
Δ.c = 30° 08' 55" (LT)
Lc = 343.60'
Ts = 365.41'
Es = 57.98'
P.I. STA. 5+81.04
Ls = 178.00'
θв = 7° 48' 33"
LT = 118.78'
ST = 59.44'
x = 177.67'
y = 8.08'
k = 88.94'
p = 2.02'
P.I. STA. 11+08.11
Ls = 178.00'
θв = 7° 41' 00"
LT = 118.78'
ST = 59.44'
x = 177.68'
y = 7.95'
k = 88.95'
p = 1.99'
P.I. STA. 13+42.60
Δ = 43° 18' 48" (LT)
Dc = 8° 37' 59"
R = 663.68'
Ls = 178.00'
θв = 7° 41' 00"
LT = 118.78'
ST = 59.44'
x = 177.68'
y = 7.95'
k = 88.95'
p = 1.99'
Δ.c = 27° 56' 48" (LT)
Lc = 323.72'
Ts = 353.27'
Es = 52.54'
P.I. STA. 15+50.49
Ls = 178.00'
θв = 7° 41' 00"
LT = 118.78'
ST = 59.44'
x = 177.68'
y = 7.95'
k = 88.95'
p = 1.99'
P.I. STA. 19+90.15
Δ = 13° 45' 07" (RT)
Dc = 7° 18' 43"
R = 2,478.23'
T = 298.85'
L = 594.82'
E = 17.35'
SCALE
0
200
400
BRENT SPENCE BRIDGE
REPLACEMENT STUDY
ALTERNATIVE E
GEOMETRIC DETAILS:
I-71 SB, THIRD STREET TO I-71 SB,
C-D NB TO NINTH STREET, US 50 TO GEST STREET



C-D NORTHBOUND

P.I. STA. 25+48.50	P.I. STA. 30+30.05	P.I. STA. 37+68.49	P.I. STA. 46+09.75	P.I. STA. 48+97.50	P.I. STA. 51+50.48	P.I. STA. 56+78.54	P.I. STA. 62+44.60
Δ = 9° 14' 00" (RT)	Δ = 11° 44' 44" (RT)	Δ = 33° 25' 46" (L.T)	Ls = 160.00'	Δ = 45° 46' 00" (LT)	Ls = 159.98'	Δ = 8° 00' 57" (L.T)	Δ = 2° 03' 18" (RT)
Dc = 2° 51' 58"	Dc = 2° 01' 57"	Dc = 20° 22' 36"	θ s = 6° 09' 47"	Dc = 1° 42' 14"	θ s = 6° 09' 45"	Dc = 2° 27' 28"	Dc = 0° 43' 32"
R = 2,534.49'	R = 2,831.42'	R = 281.18'	LT = 106.73'	R = 743.72'	LT = 106.72'	R = 2,331.14'	R = 7,988.00'
T = 204.66'	T = 277.77'	T = 84.44'	ST = 53.39'	θ	ST = 53.39'	T = 163.33'	T = 143.26'
L = 408.44'	L = 553.76'	L = 164.06'	x = 159.81'	Δc = 33° 26' 28" (L.T)	x = 159.80'	L = 326.13'	L = 286.49'
E = 8.25'	E = 13.64'	E = 12.40'	y = 5.73'	Lc = 434.08'	y = 5.73'	E = 5.71'	E = 1.28'
			k = 79.97'	Es = 65.09'	k = 79.96'		
			p = 1.43'		p = 1.43'		

C-D NORTHBOUND TO SECOND STREET

P.I. STA. 9+55.66	P.I. STA. 12+75.97	P.I. STA. 18+02.58	P.I. STA. 20+73.04	P.I. STA. 23+70.30	P.I. STA. 24+51.04	P.I. STA. 25+30.36
Δ = 2° 43' 45" (RT)	Δ = 20° 11' 08" (RT)	Δ = 56° 33' 59" (RT)	Ls = 139.99'	Ls = 140.00'	Δ = 15° 20' 43" (L.T)	Ls = 139.99'
Dc = 2° 25' 55"	Dc = 3° 53' 10"	Dc = 11° 30' 19"	θ s = 8° 03' 11"	θ s = 5° 11' 45"	Dc = 7° 25' 22"	θ s = 5° 11' 44"
R = 2,356.05'	R = 1,474.40'	R = 498.00'	LT = 93.43'	LT = 93.37'	R = 771.89'	LT = 93.37'
T = 56.12'	T = 264.21'	T = 267.96'	ST = 46.75'	ST = 46.70'	θ	ST = 46.70'
L = 112.23'	L = 522.87'	L = 490.66'	x = 139.71'	x = 139.88'	Δc = 4° 57' 14" (L.T)	x = 139.87'
E = 0.67'	E = 23.49'	E = 67.51'	y = 6.55'	y = 4.23'	Lc = 66.74'	y = 4.23'
			k = 69.98'	k = 69.98'	Es = 8.04'	k = 69.98'
			p = 1.64'	p = 1.06'		p = 1.06'

US 50 EASTBOUND

P.I. STA. 9+85.41	P.I. STA. 18+58.83
Δ = 12° 18' 48" (RT)	Δ = 6° 53' 12" (L.T)
Dc = 3° 27' 53"	Dc = 3° 01' 57"
R = 1,653.67'	R = 1,889.30'
T = 193.00'	T = 113.68'
L = 364.25'	L = 227.09'
E = 11.22'	E = 3.42'

C-D NORTHBOUND TO WINCHELL AVENUE

P.I. STA. 0+74.00	P.I. STA. 6+44.31
Δ = 3° 35' 57" (L.T)	Δ = 2° 39' 38" (L.T)
Dc = 2° 25' 56"	Dc = 3° 58' 04"
R = 2,355.14'	R = 1,444.00'
T = 74.00'	T = 33.53'
L = 147.99'	L = 67.05'
E = 1.16'	E = 0.39'

WESTERN AVENUE

P.I. STA. 4+28.96
Δ = 0° 56' 18" (L.T)
Dc = 0° 06' 34"
R = 52,385.76'
T = 428.96'
L = 857.91'
E = 1.76'

BRENT SPENCE BRIDGE REPLACEMENT STUDY

ALTERNATIVE E

GEOMETRIC DETAILS:

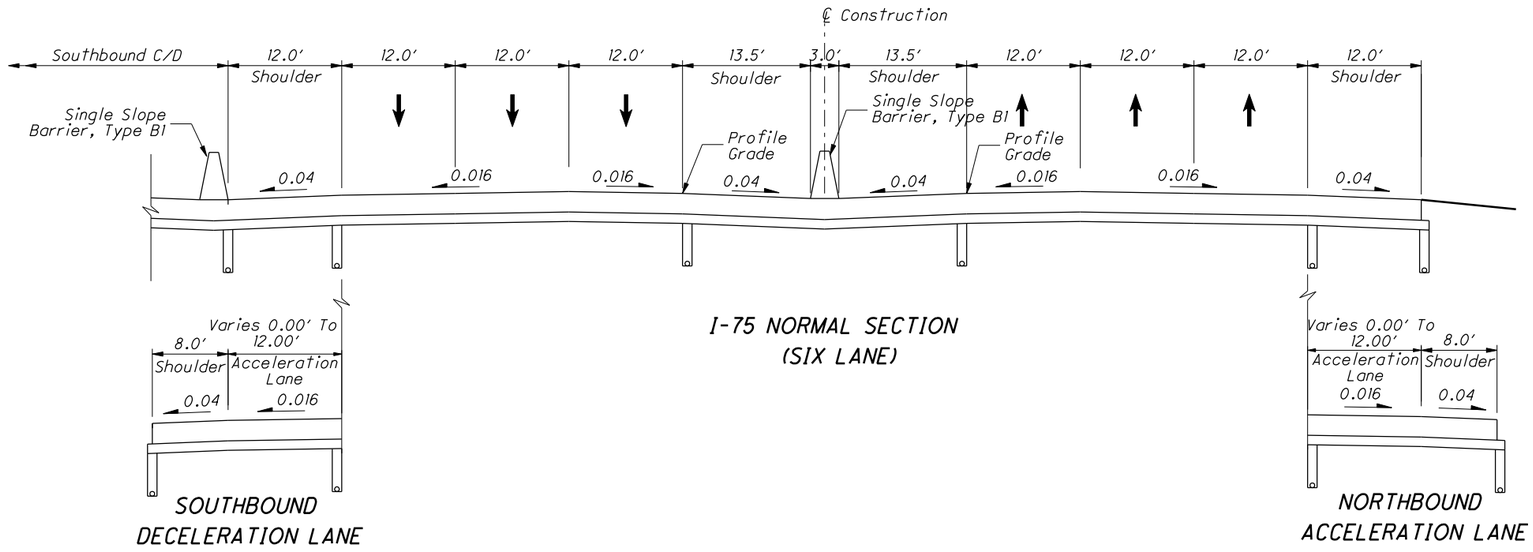
C-D NB, C-D NB TO SECOND STREET, US 50 EB, WESTERN AVENUE, C-D NB TO WINCHELL AVENUE

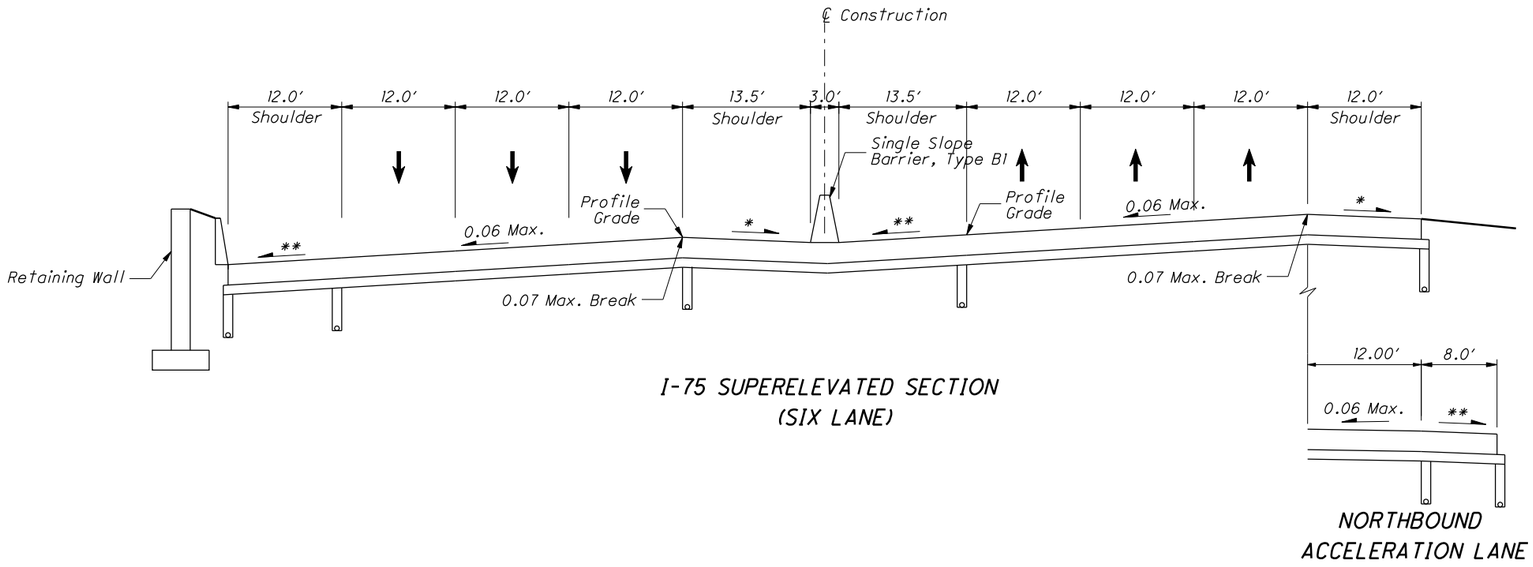

US 50 TO FWW EASTBOUND
P.I. STA. 9+64.30
Ls = 178.00'
θs = 6° 43' 52"
LT = 118.75'
ST = 59.41'
x = 177.75'
y = 6.96'
k = 88.96'
p = 1.74'
P.I. STA. 15+35.18
Δ = 76° 51' 30" (LT)
Dc = 7° 53' 47"
R = 757.59'
θ
Δ c = 70° 07' 38" (LT)
Lc = 927.25'
Es = 210.60'
P.I. STA. 22+53.97
Δ = 13° 41' 10" (LT)
Dc = 2° 25' 41"
R = 2,359.67'
T = 285.17'
L = 563.64'
E = 16.93'
FWW WESTBOUND TO US 50
P.I. STA. 6+87.13
Δ = 13° 35' 19" (RT)
Dc = 2° 53' 36"
R = 1,980.32'
T = 235.94'
L = 469.66'
E = 14.07'
P.I. STA. 14+70.32
Δ = 76° 51' 48" (RT)
Dc = 8° 18' 34"
R = 689.98'
Δ c = 63° 28' 23" (RT)
Lc = 836.63'
Es = 192.05'
P.I. STA. 18+16.31
Ls = 178.00'
θs = 7° 23' 26"
LT = 118.77'
ST = 59.43'
x = 177.75'
y = 7.64'
k = 88.95'
p = 1.91'
C-D SOUTHBOUND TO SEVENTH STREET
P.I. STA. 5+36.29
Ls = 310.00'
θs = 7° 25' 40"
LT = 206.85'
ST = 103.50'
x = 309.48'
y = 13.38'
k = 154.91'
p = 3.35'
P.I. STA. 8+04.47
Δ = 29° 53' 51" (LT)
Dc = 4° 47' 31"
R = 1,195.64'
Ls = 310.00'
θs = 7° 25' 40"
LT = 206.85'
ST = 103.50'
x = 309.48'
y = 13.38'
k = 154.91'
p = 3.35'
Δ c = 15° 02' 31" (LT)
Lc = 313.89'
Es = 45.35'
P.I. STA. 10+56.83
Ls = 310.00'
θs = 7° 25' 40"
LT = 206.85'
ST = 103.50'
x = 309.48'
y = 13.38'
k = 154.91'
p = 3.35'
P.I. STA. 17+84.68
Δ = 35° 07' 20" (LT)
Dc = 3° 32' 25"
R = 1,618.42'
Δ c = 29° 27' 28" (LT)
Lc = 832.09'
Es = 80.50'
P.I. STA. 22+06.76
Ls = 320.00'
θs = 5° 35' 52"
LT = 213.44'
ST = 106.77'
x = 319.69'
y = 10.54'
k = 159.95'
p = 2.64'
P.I. STA. 29+62.86
Δ = 8° 51' 53" (RT)
Dc = 2° 28' 43"
R = 2,315.61'
T = 179.18'
L = 357.65'
E = 6.93'
P.I. STA. 34+81.53
Ls = 200.00'
θs = 7° 22' 39"
LT = 133.45'
ST = 66.77'
x = 199.67'
y = 8.57'
k = 99.94'
p = 2.14'
P.I. STA. 37+95.63
Δ = 68° 07' 51" (LT)
Dc = 7° 22' 39"
R = 776.63'
Ls = 200.00'
θs = 7° 22' 39"
LT = 133.45'
ST = 66.77'
x = 199.67'
y = 8.57'
k = 99.94'
p = 2.14'
Δ c = 53° 22' 34" (LT)
Lc = 452.40'
Ts = 447.75'
Es = 76.28'
P.I. STA. 40+67.06
Ls = 200.00'
θs = 7° 22' 39"
LT = 133.45'
ST = 66.77'
x = 199.67'
y = 8.57'
k = 99.94'
p = 2.14'
C-D SB TO SEVENTH STREET
US 50 TO FWW EB
FWW WB TO US 50
SCALE
0
200
400
BRENT SPENCE BRIDGE
REPLACEMENT STUDY
ALTERNATIVE E
GEOMETRIC DETAILS:
FWW WB TO US 50, US 50 TO FWW EB,
C-D SB TO SEVENTH STREET


C-D SOUTHBOUND
P.I. STA. 5+19.91
Δ = 4° 33' 10" (LT)
Dc = 0° 58' 25"
R = 5,884.88'
T = 233.93'
L = 467.62'
E = 4.65'
P.I. STA. 11+04.61
Ls = 160.00'
θs = 1° 03' 46"
LT = 106.75'
ST = 53.41'
x = 159.76'
y = 6.57'
k = 79.96'
p = 1.64'
P.I. STA. 12+75.07
Δ = 33° 43' 50" (RT)
Dc = 8° 49' 42"
R = 649.00'
Ls = 160.00'
θs = 7° 03' 46"
LT = 106.75'
ST = 53.41'
x = 159.76'
y = 6.57'
k = 79.96'
p = 1.64'
Δc = 19° 36' 19" (RT)
Lc = 222.07'
Ts = 277.2'
Es = 30.88'
P.I. STA. 14+33.35
Ls = 160.00'
θs = 7° 03' 46"
LT = 106.75'
ST = 53.41'
x = 159.76'
y = 6.57'
k = 79.96'
p = 1.64'
P.I. STA. 19+83.15
Ls = 270.00'
θs = 14° 02' 45"
LT = 180.57'
ST = 90.52'
x = 268.38'
y = 21.97'
k = 134.73'
p = 5.50'
P.I. STA. 21+72.07
Δ = 45° 46' 00" (RT)
Dc = 10° 24' 16"
R = 550.69'
Ls = 270.00'
θs = 14° 02' 45"
LT = 180.57'
ST = 90.52'
x = 268.38'
y = 21.97'
k = 134.73'
p = 5.50'
Δc = 17° 40' 30" (RT)
Lc = 169.88'
Ts = 369.49'
Es = 53.02'
P.I. STA. 23+32.98
Ls = 270.00'
θs = 14° 02' 45"
LT = 180.57'
ST = 90.52'
x = 268.38'
y = 21.97'
k = 134.73'
p = 5.50'
P.I. STA. 32+03.77
Δ = 13° 55' 29" (LT)
Dc = 20° 22' 36"
R = 281.18'
Ls = 60.00'
θs = 6° 06' 47"
LT = 40.02'
ST = 20.02'
x = 59.93'
y = 2.13'
k = 29.99'
p = 0.53'
Δc = 1° 47' 55" (LT)
Lc = 8.34'
Ts = 64.39'
Es = 2.83'
P.I. STA. 33+74.41
Ls = 60.00'
θs = 6° 06' 47"
LT = 40.02'
ST = 20.02'
x = 59.93'
y = 2.13'
k = 29.99'
p = 0.53'
P.I. STA. 33+27.74
Ls = 60.00'
θs = 6° 06' 47"
LT = 40.02'
ST = 20.02'
x = 59.93'
y = 2.13'
k = 29.99'
p = 0.53'
P.I. STA. 33+69.30
Ls = 60.00'
θs = 5° 11' 09"
LT = 40.02'
ST = 20.02'
x = 59.95'
y = 1.81'
k = 29.99'
p = 0.45'
P.I. STA. 35+36.65
Δ = 56° 14' 21" (RT)
Dc = 17° 17' 09"
R = 331.46'
Ls = 60.00'
θs = 5° 11' 09"
LT = 40.02'
ST = 20.02'
x = 59.95'
y = 1.81'
k = 29.99'
p = 0.45'
Δc = 45° 52' 10" (RT)
Lc = 265.36'
Ts = 207.37'
Es = 44.88'
P.I. STA. 36+74.66
Ls = 60.00'
θs = 5° 11' 09"
LT = 40.02'
ST = 20.02'
x = 59.95'
y = 1.81'
k = 29.99'
p = 0.45'
P.I. STA. 39+67.11
Ls = 160.00'
θs = 4° 27' 35"
LT = 106.70'
ST = 53.36'
x = 159.90'
y = 4.15'
k = 79.98'
p = 1.04'
P.I. STA. 40+62.97
Δ = 13° 35' 20" (LT)
Dc = 5° 34' 29"
R = 1,027.76'
Ls = 160.00'
θs = 4° 27' 35"
LT = 106.70'
ST = 53.36'
x = 159.90'
y = 4.15'
k = 79.98'
p = 1.04'
Δc = 4° 40' 09" (LT)
Lc = 83.76'
Ts = 202.56'
Es = 8.71'
P.I. STA. 41+57.53
Ls = 160.00'
θs = 4° 27' 35"
LT = 106.70'
ST = 53.36'
x = 159.90'
y = 4.15'
k = 79.98'
p = 1.04'
P.I. STA. 45+85.24
Δ = 15° 45' 24" (LT)
Dc = 2° 28' 57"
R = 2,308.00'
Δc = 13° 46' 14" (LT)
Lc = 554.71'
Es = 22.23'
P.I. STA. 48+72.22
Ls = 160.00'
θs = 1° 59' 10"
LT = 106.67'
ST = 53.34'
x = 159.98'
y = 1.85'
k = 80.00'
p = 0.46'
C-D SOUTHBOUND TO SECOND STREET
P.I. STA. 3+02.58
Ls = 120.00'
θs = 9° 34' 33"
LT = 80.12'
ST = 40.11'
x = 119.63'
y = 6.67'
k = 59.94'
p = 1.67'
P.I. STA. 5+90.83
Δ = 89° 04' 15" (LT)
Dc = 15° 57' 35"
R = 359.00'
Ls = 120.00'
θs = 9° 34' 33"
LT = 80.12'
ST = 40.11'
x = 119.67'
y = 6.67'
k = 59.94'
p = 1.67'
Δc = 61° 55' 08" (LT)
Lc = 387.97'
Ts = 368.37'
Es = 115.56'
P.I. STA. 7+70.53
Ls = 120.00'
θs = 9° 34' 33"
LT = 80.12'
ST = 40.11'
x = 119.67'
y = 6.67'
k = 59.94'
p = 1.67'
P.I. STA. 10+10.65
Δ = 11° 29' 58" (LT)
Dc = 3° 36' 03"
R = 1,591.22'
T = 160.22'
L = 319.36'
E = 8.05'
P.I. STA. 15+91.93
Δ = 2° 28' 31" (RT)
Dc = 0° 35' 07"
R = 9,789.91'
T = 211.48'
L = 422.89'
E = 2.28'
WESTERN AVENUE TO C-D SOUTHBOUND
P.I. STA. 5+96.18
Ls = 155.00'
θs = 12° 08' 00"
LT = 103.58'
ST = 51.89'
x = 154.31'
y = 10.91'
k = 77.38'
p = 2.73'
P.I. STA. 6+90.85
Δ = 36° 17' 53" (LT)
Dc = 15° 39' 27"
R = 365.97'
Ls = 155.00'
θs = 12° 08' 00"
LT = 103.58'
ST = 51.89'
x = 154.31'
y = 10.91'
k = 77.38'
p = 2.73'
Δc = 12° 01' 54" (LT)
Lc = 76.85'
Ts = 198.24'
Es = 22.03'
P.I. STA. 7+76.34
Ls = 155.00'
θs = 12° 08' 00"
LT = 103.58'
ST = 51.89'
x = 154.31'
y = 10.91'
k = 77.38'
p = 2.73'
P.I. STA. 14+18.51
Δ = 14° 37' 54" (LT)
Dc = 2° 43' 05"
R = 2,107.92'
T = 270.62'
L = 538.30'
E = 17.30'
WESTERN AVENUE TO C-D SB
C-D SB
C-D SB TO SECOND STREET
SCALE
0
200
400
BRENT SPENCE BRIDGE
REPLACEMENT STUDY
ALTERNATIVE E
GEOMETRIC DETAILS:
C-D SB, C-D SB TO SECOND STREET,
WESTERN AVENUE TO C-D SB


I 75 SOUTHBOUND TO FWW EASTBOUND
P.I. STA. 17+85.94
Δ = 39° 31' 15" (RT)
Dc = 2° 45' 21"
R = 2,066.56'
T = 742.40'
L = 1,425.45'
E = 129.30'
P.I. STA. 27+61.38
Ls = 178.00'
θs = 6° 04' 45"
LT = 118.74'
ST = 59.40'
x = 177.80'
y = 6.29'
k = 88.97'
p = 1.57'
P.I. STA. 32+79.72
Δ = 66° 17' 58" (LT)
Dc = 6° 49' 50"
R = 838.83'
θ
Δc = 60° 12' 53" (LT)
Lc = 881.57'
Ec = 163.37'
P.I. STA. 39+85.37
Δ = 17° 41' 11" (LT)
Dc = 2° 25' 42"
R = 2,359.57'
T = 283.16'
L = 563.63'
E = 16.93'
FWW WB TO I 75 NB
I 75 SB TO FWW EB
FWW WESTBOUND TO I 75 NORTHBOUND
P.I. STA. 4+87.13
Δ = 13° 35' 19" (RT)
Dc = 2° 52' 10"
R = 1,996.80'
T = 237.90'
L = 473.53'
E = 14.12'
P.I. STA. 13+69.55
Δ = 69° 00' 58" (RT)
Dc = 8° 49' 02"
R = 649.83'
T = 446.75'
L = 782.75'
E = 158.75'
P.I. STA. 17+65.00
Ls = 178.00'
θs = 7° 50' 50"
LT = 118.78'
ST = 59.44'
x = 177.67'
y = 8.32'
k = 88.94'
p = 2.03'
P.I. STA. 24+98.31
Ls = 178.00'
θs = 6° 39' 34"
LT = 118.75'
ST = 59.41'
x = 177.76'
y = 6.89'
k = 88.96'
p = 1.72'
P.I. STA. 27+45.47
Δ = 39° 42' 43" (LT)
Dc = 7° 28' 57"
R = 765.74'
Ls = 178.00'
θs = 6° 39' 34"
LT = 118.75'
ST = 59.41'
x = 177.76'
y = 6.89'
k = 88.96'
p = 1.72'
Δc = 26° 23' 36" (LT)
Lc = 352.74'
Ts = 366.11'
Es = 50.23'
P.I. STA. 29+69.51
Ls = 178.00'
θs = 6° 39' 34"
LT = 118.75'
ST = 59.41'
x = 177.76'
y = 6.89'
k = 88.96'
p = 1.72'
P.I. STA. 36+07.66
Δ = 10° 22' 22" (LT)
Dc = 2° 47' 26"
R = 2,279.45'
T = 193.29'
L = 385.52'
E = 8.75'
SCALE
0 200 400
BRENT SPENCE BRIDGE
REPLACEMENT STUDY
ALTERNATIVE E
GEOMETRIC DETAILS:
I-75 SB TO FWW EB, FWW WB TO I 75 NB

* Varies 0.04 to 0.01.
** 0.04 or Rate of Super if Greater.





CALCULATED | CHECKED

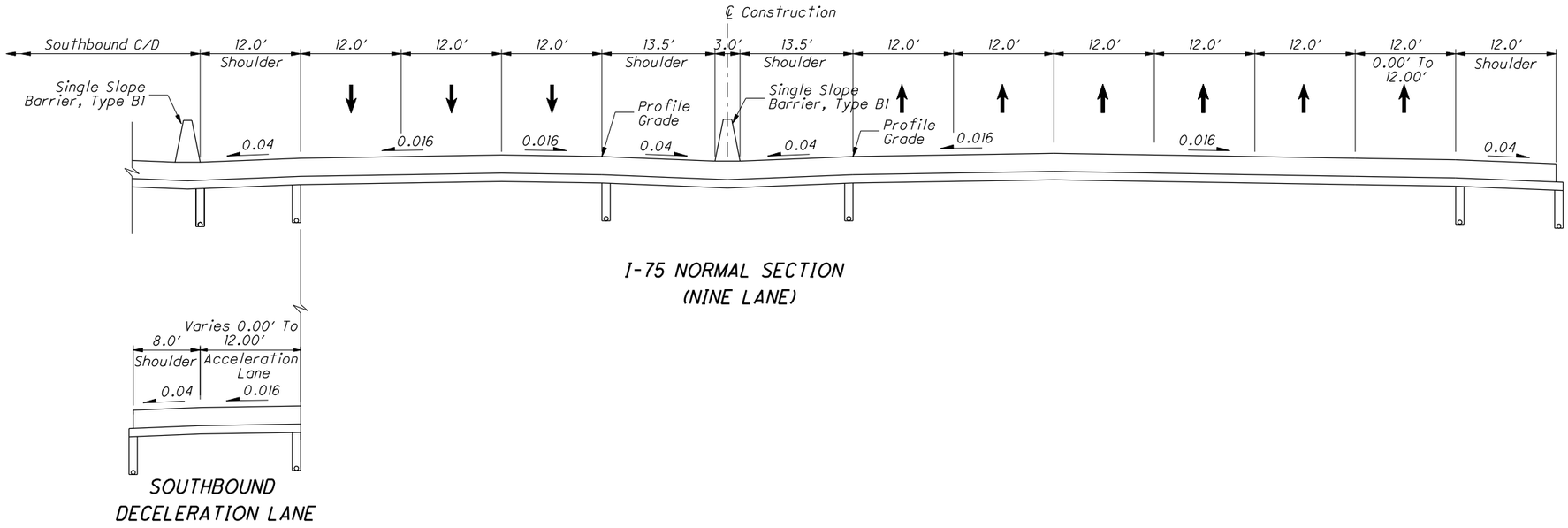
TYPICAL SECTIONS - IR-75 (ALTERNATE E)

HAM-71/75-0.00-0.22

2

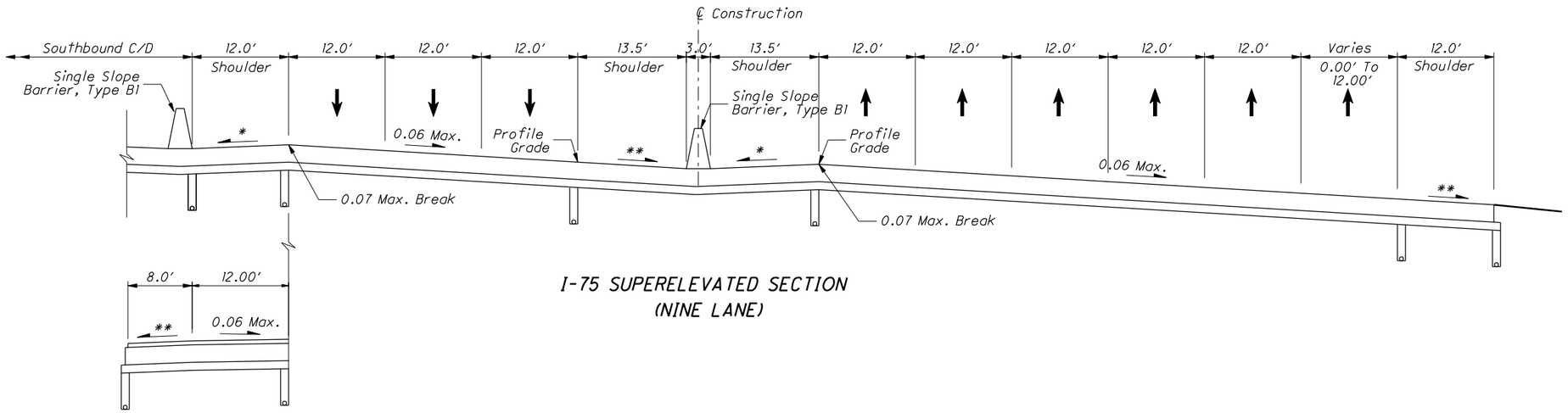
I:\projects\75119\roadway\sheets\75119GY001_Alt_E.dgn 7/20/2010 12:12:26 PM ludwigj

* Varies 0.04 to 0.01.
** 0.04 or Rate of Super if Greater.



I-75 NORMAL SECTION
(NINE LANE)

SOUTHBOUND
DECELERATION LANE



I-75 SUPERELEVATED SECTION
(NINE LANE)

SOUTHBOUND
DECELERATION LANE

CALCULATED | CHECKED

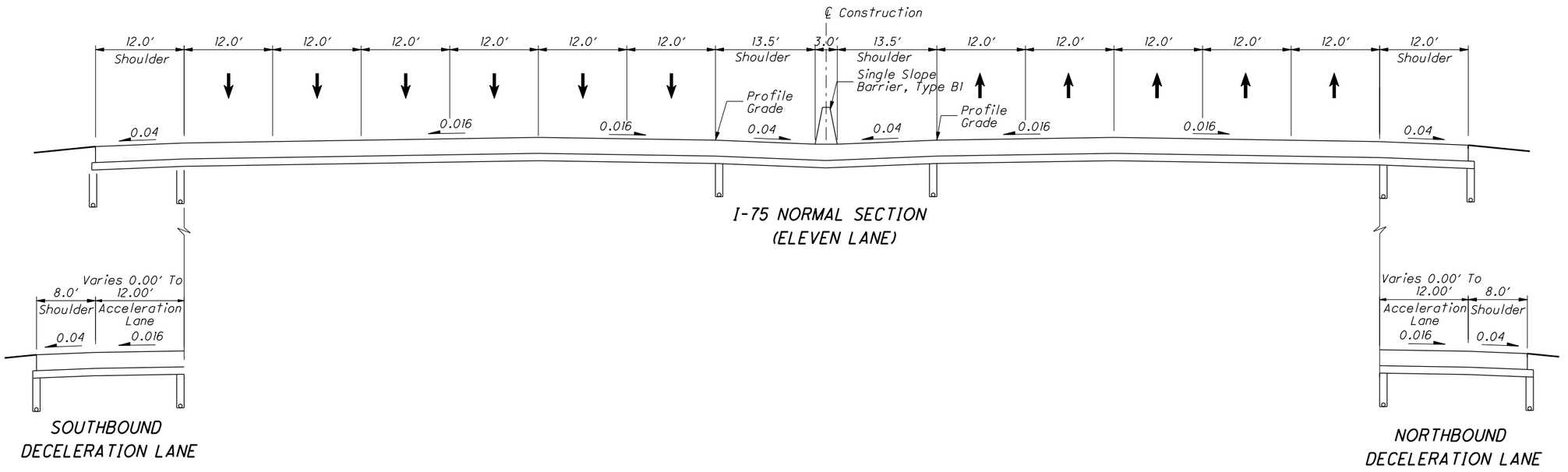
TYPICAL SECTIONS - IR-75 (ALTERNATE E)

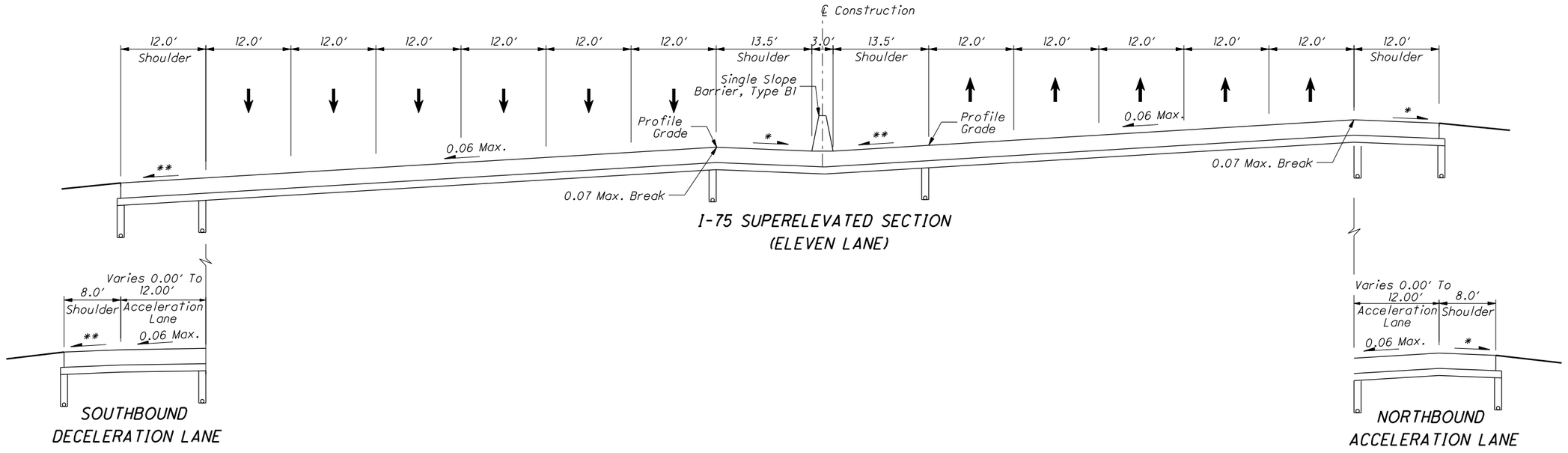
HAM-71/75-0.00-0.22

3

I:\projects\75119\roadway\sheets\75119GY001_Alt_E.dgn 7/20/2010 12:12:30 PM ludwigj

* Varies 0.04 to 0.01.
** 0.04 or Rate of Super if Greater.





CALCULATED | CHECKED

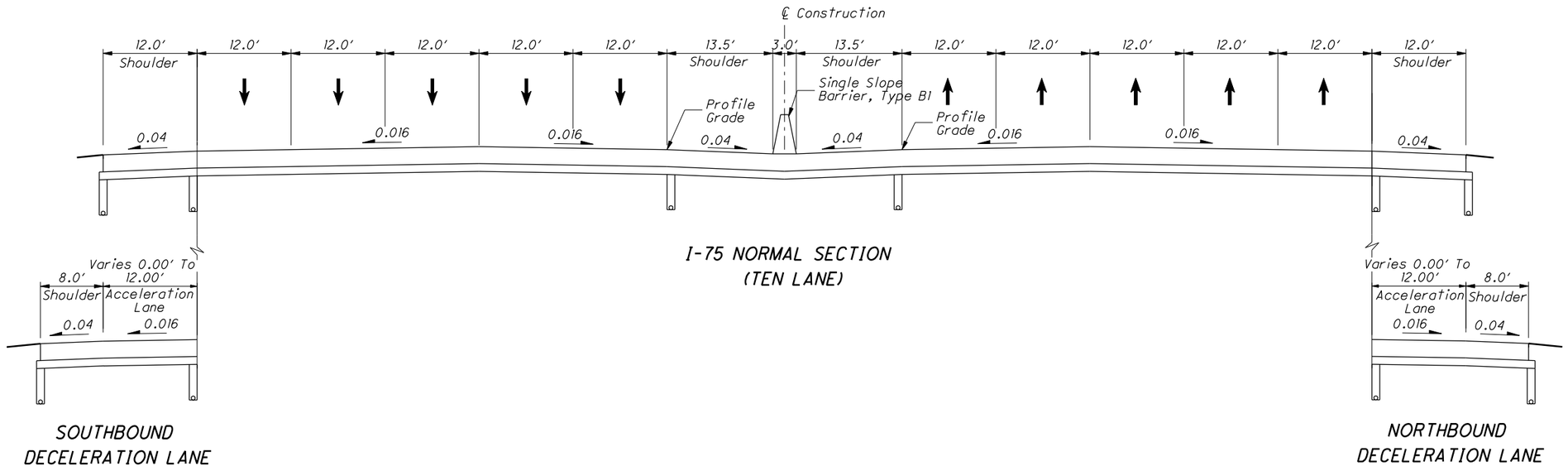
TYPICAL SECTIONS - IR-75 (ALTERNATE E)

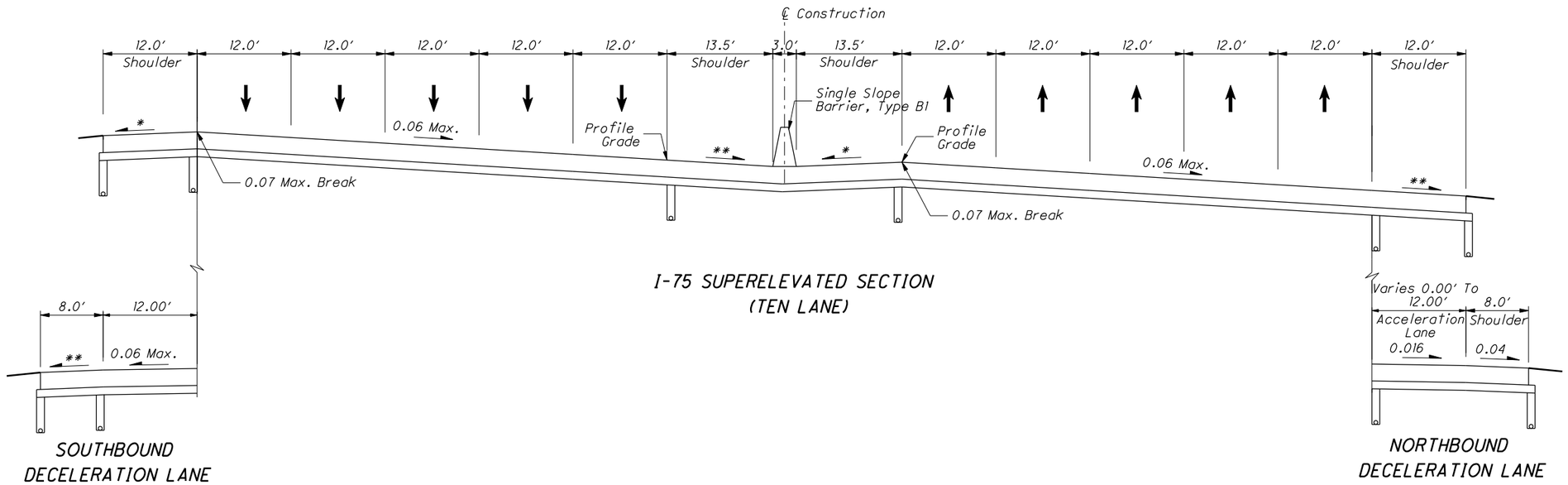
HAM-71/75-0.00-0.22

4

I:\projects\75119\roadway\sheets\75119GY001_Alt_E.dgn 7/20/2010 12:12:35 PM ludwigj

* Varies 0.04 to 0.01.
** 0.04 or Rate of Super if Greater.





CALCULATED | CHECKED

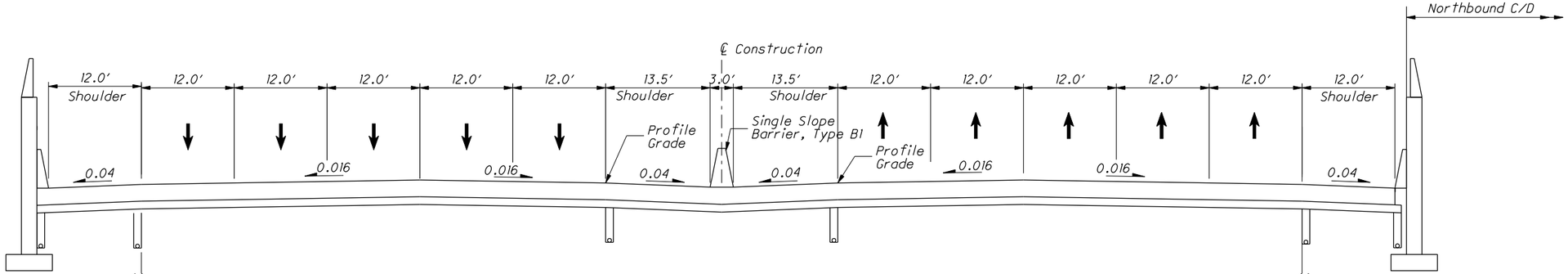
TYPICAL SECTIONS - IR-75 (ALTERNATE E)

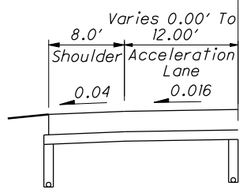
HAM-71/75-0.00-0.22

5

I:\projects\75119\roadway\sheets\75119GY001_Alt_E.dgn 7/20/2010 12:12:40 PM ludwigj

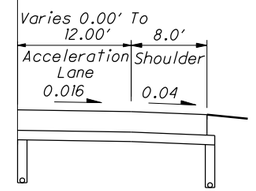
* Varies 0.04 to 0.01.
** 0.04 or Rate of Super if Greater.





SOUTHBOUND
DECELERATION LANE

I-75 NORMAL SECTION
(TEN LANE)



NORTHBOUND
DECELERATION LANE

CALCULATED
CHECKED

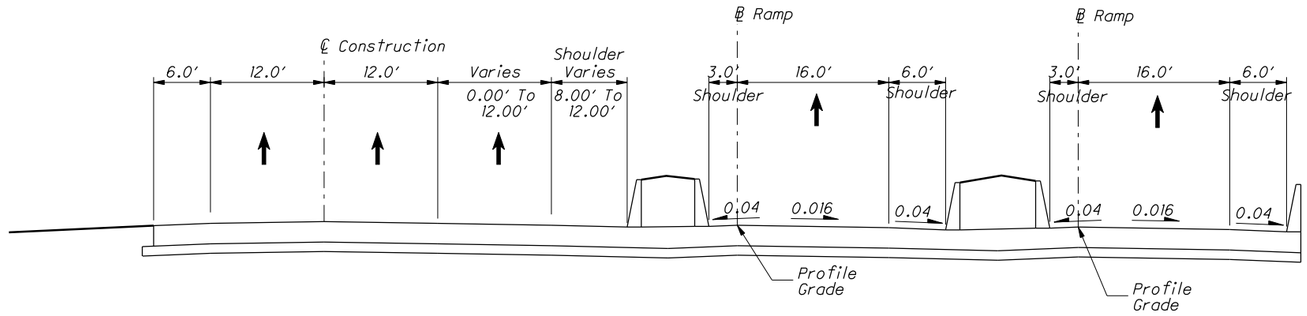
TYPICAL SECTIONS - IR-75 (ALTERNATE E)

HAM-71/75-0.00-0.22

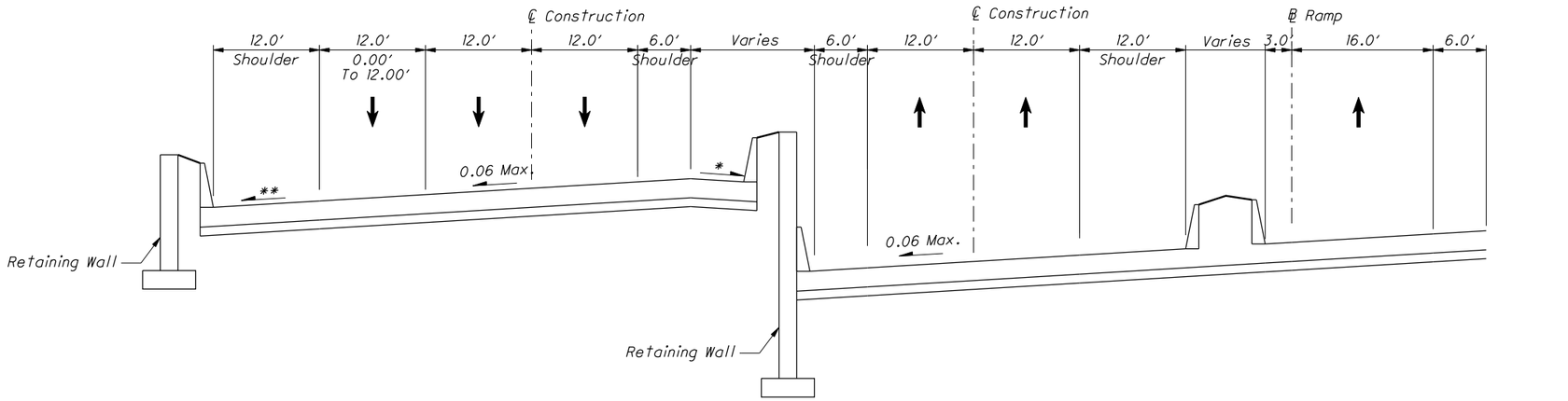
6

I:\projects\75119\roadway\sheets\75119GY001_Alt_E.dgn 7/20/2010 12:12:44 PM ludwigj

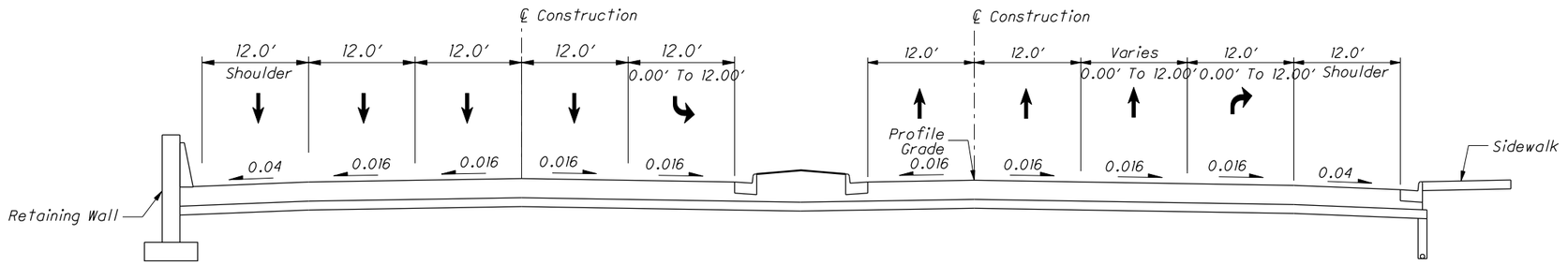
* Varies 0.04 to 0.01.
** 0.04 or Rate of Super if Greater.



COLLECTOR / DISTRIBUTOR SOUTHBOUND
SUPERELEVATED SECTION



COLLECTOR / DISTRIBUTOR SOUTHBOUND
SUPERELEVATED SECTION



COLLECTOR / DISTRIBUTOR
NORMAL SECTION

CALCULATED | CHECKED

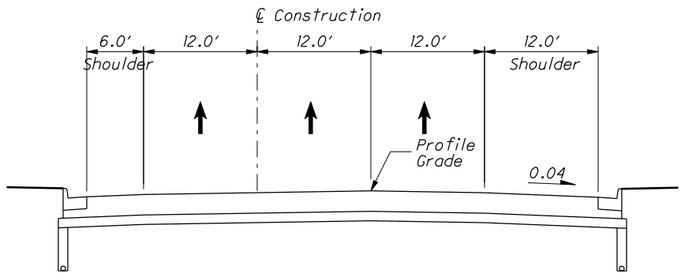
TYPICAL SECTIONS - IR-75 (ALTERNATE E)

HAM-71/75-0.00-0.22

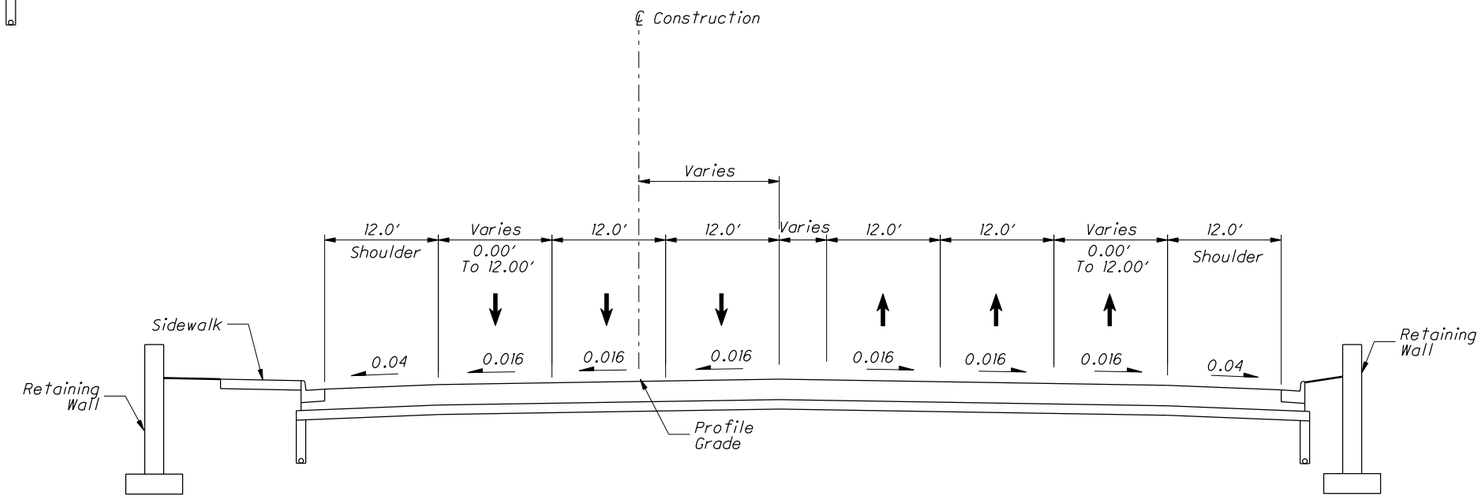
7

I:\projects\75119\roadway\sheets\75119GY001_Alt_E.dgn 7/20/2010 12:12:47 PM ludwigj

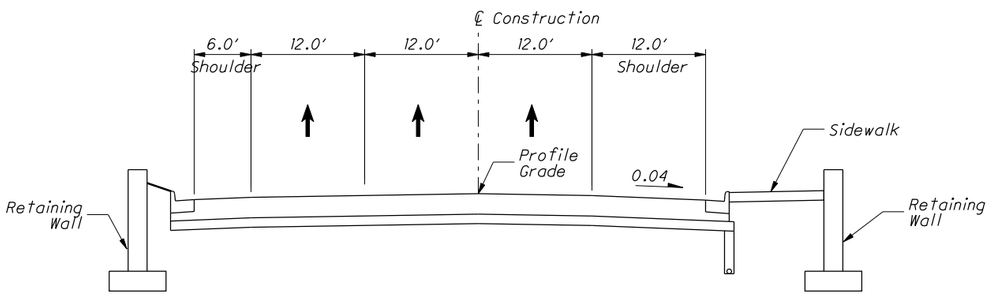
* Varies 0.04 to 0.01.
** 0.04 or Rate of Super if Greater.



FIFTH STREET
NORMAL SECTION



US 50
NORMAL SECTION



FOURTH STREET
NORMAL SECTION

CALCULATED
CHECKED

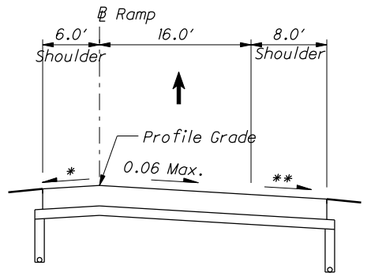
TYPICAL SECTIONS - IR-75 (ALTERNATE E)

HAM-71/75-0.00-0.22

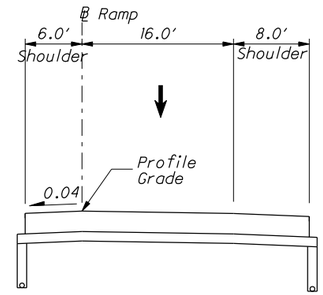
8

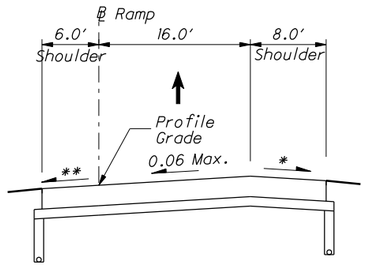
I:\projects\75119\roadway\sheets\75119GY001_Alt_E.dgn 7/20/2010 12:12:52 PM ludwigj

* Varies 0.04 to 0.01.
** 0.04 or Rate of Super if Greater.

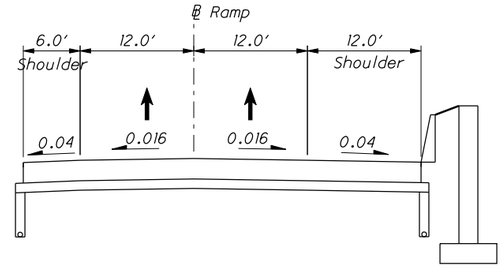


I 75 SOUTHBOUND TO FWW EASTBOUND
SUPERELEVATED SECTION

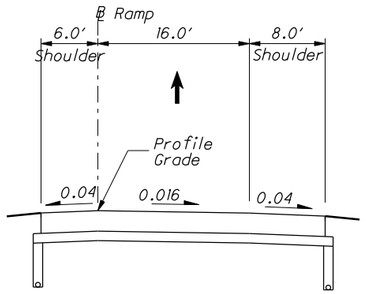




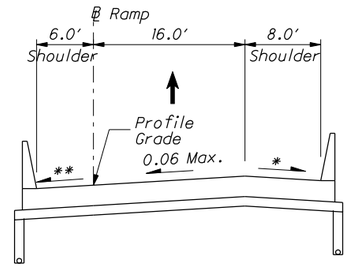
I 75 SOUTHBOUND TO FWW EASTBOUND
SUPERELEVATED SECTION



US50 TO FWW EASTBOUND
NORMAL SECTION



I 75 SOUTHBOUND TO FWW EASTBOUND
NORMAL SECTION



US50 TO FWW EASTBOUND
SUPERELEVATED SECTION

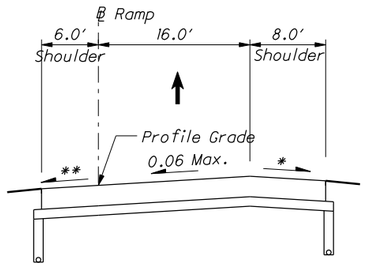
CALCULATED | CHECKED

TYPICAL SECTIONS - IR-75 (ALTERNATE E)

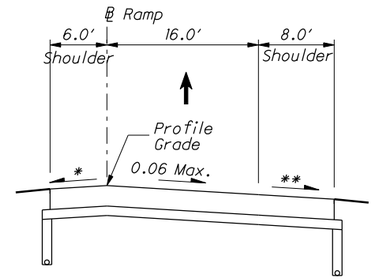
HAM-71/75-0.00-0.22

I:\projects\75119\roadway\sheets\75119GY001_Alt_E.dgn 7/20/2010 12:12:55 PM ludwigj

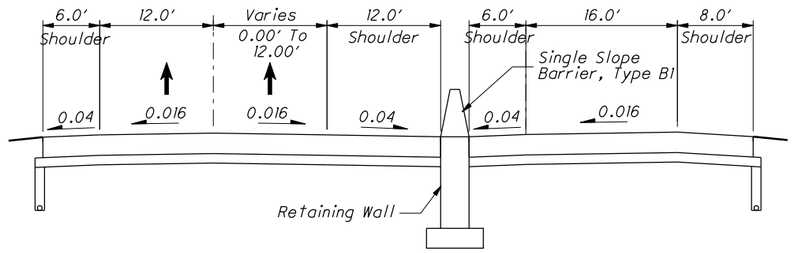
* Varies 0.04 to 0.01.
** 0.04 or Rate of Super if Greater.



FWW WESTBOUND TO I-75 NORTHBOUND
SUPERELEVATED SECTION

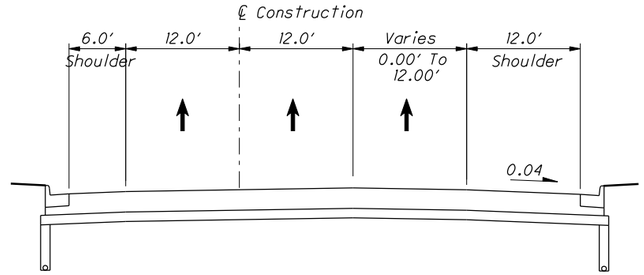


US50 EASTBOUND TO I-75 SOUTHBOUND
SUPERELEVATED SECTION

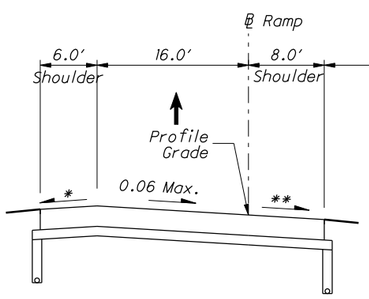


FWW WESTBOUND TO US 50
NORMAL SECTION

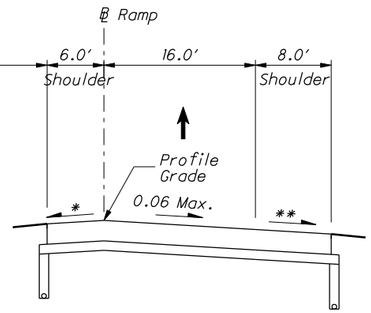
FWW WESTBOUND TO I-75 NORTHBOUND
SUPERELEVATED SECTION



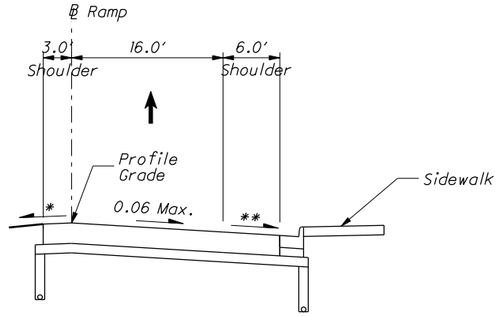
SEVENTH STREET
NORMAL SECTION



FWW WESTBOUND TO US 50
SUPERELEVATED SECTION



FWW WESTBOUND TO I-75 NORTHBOUND
SUPERELEVATED SECTION



SIXTH STREET TO WINCHELL
SUPERELEVATED SECTION

CALCULATED | CHECKED

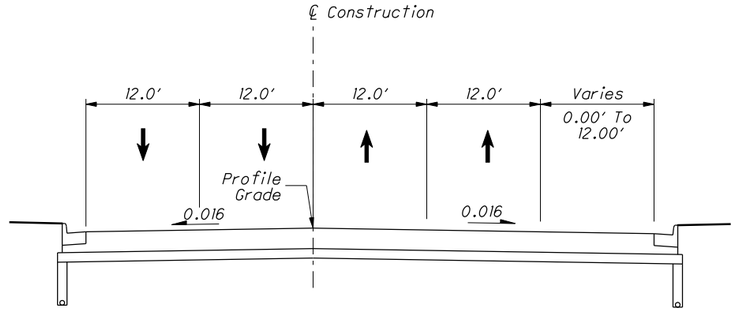
TYPICAL SECTIONS - IR-75 (ALTERNATE E)

HAM-71/75-0.00-0.22

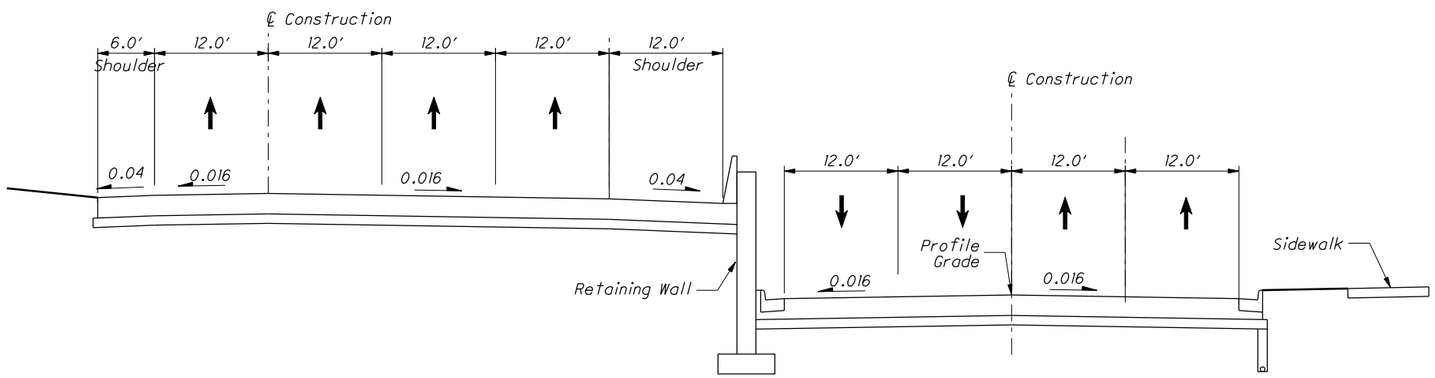
10

I:\projects\75119\roadway\sheets\75119GY001_Alt_E.dgn 7/20/2010 12:12:58 PM ludwigj

* Varies 0.04 to 0.01.
** 0.04 or Rate of Super if Greater.



GEST STREET
NORMAL SECTION



COLLECTOR / DISTRIBUTOR
NORMAL SECTION

GEST STREET
NORMAL SECTION

CALCULATED | CHECKED

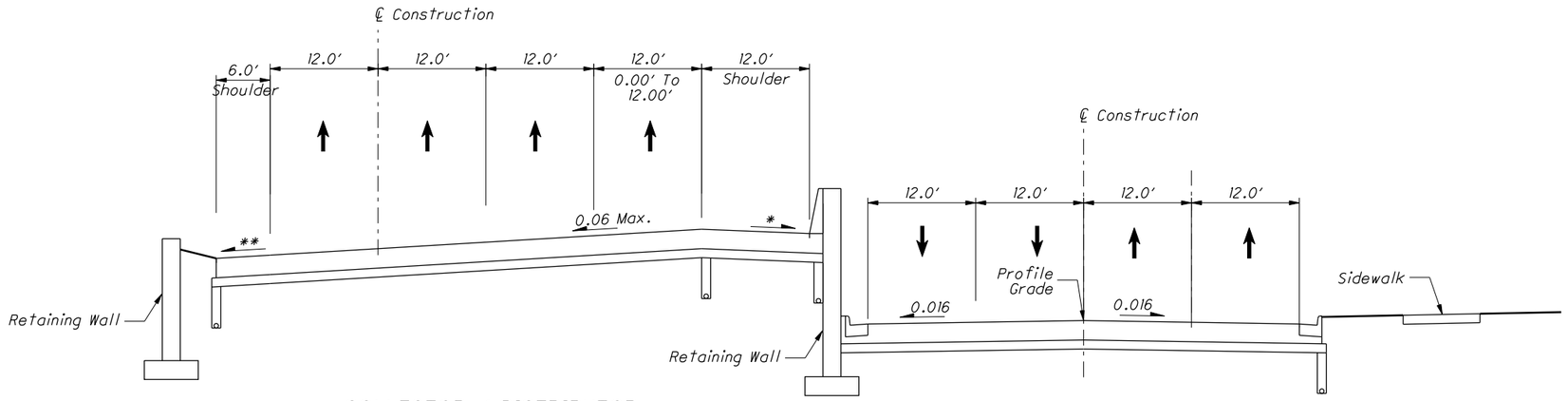
TYPICAL SECTIONS - IR-75 (ALTERNATE E)

HAM-71/75-0.00-0.22

11

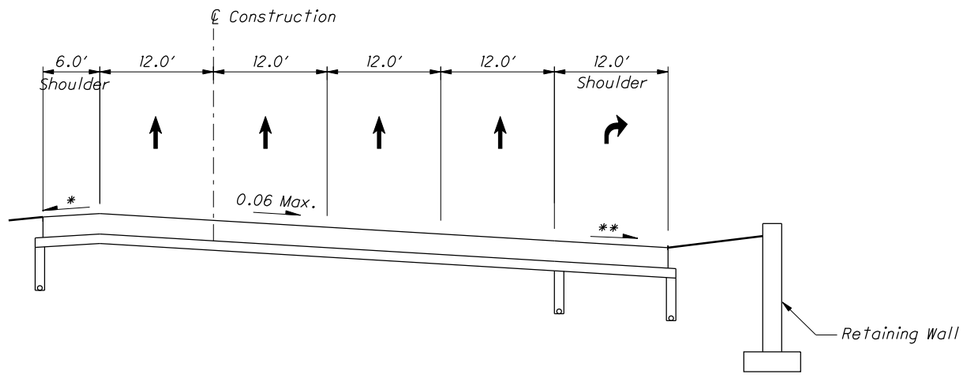
I:\projects\75119\roadway\sheets\75119GY001_Alt_E.dgn 7/20/2010 12:13:03 PM ludwigj

* Varies 0.04 to 0.01.
** 0.04 or Rate of Super if Greater.



COLLECTOR / DISTRIBUTOR
SUPERELEVATED SECTION

GEST STREET
NORMAL SECTION



COLLECTOR / DISTRIBUTOR
SUPERELEVATED SECTION

CALCULATED | CHECKED

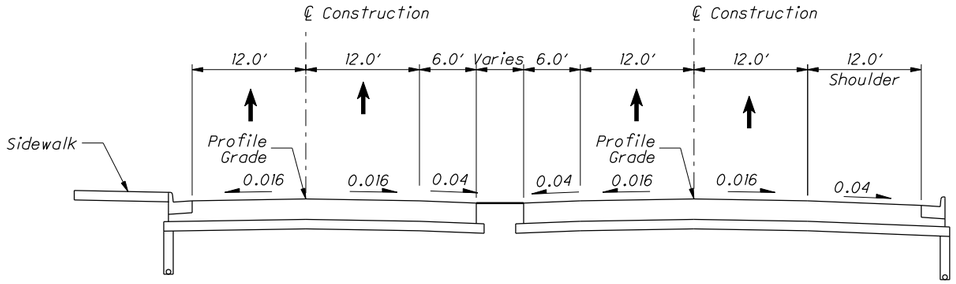
TYPICAL SECTIONS - IR-75 (ALTERNATE E)

HAM-71/75-0.00-0.22

12

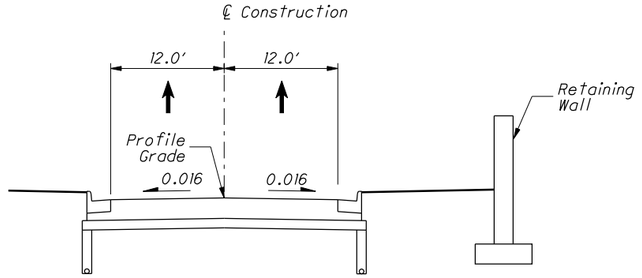
I:\projects\75119\roadway\sheets\75119GY001_Alt_E.dgn 7/20/2010 12:13:05 PM ludwigj

* Varies 0.04 to 0.01.
** 0.04 or Rate of Super if Greater.

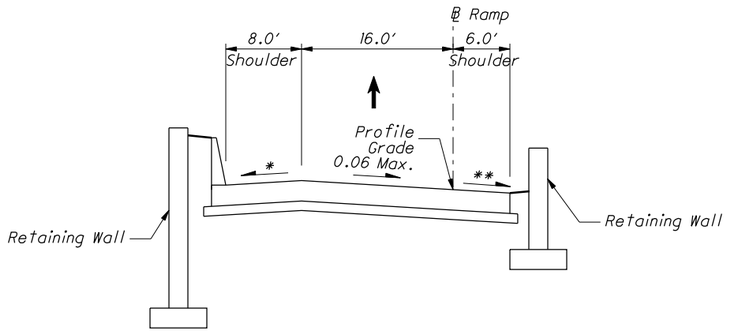


SEVENTH STREET
NORMAL SECTION

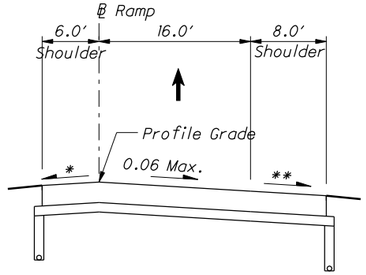
EIGHTH STREET
NORMAL SECTION



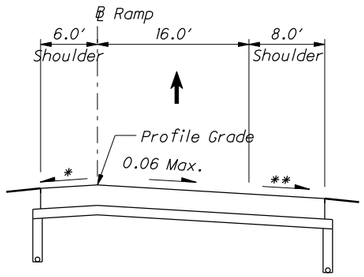
WINCHELL AVE.
NORMAL SECTION



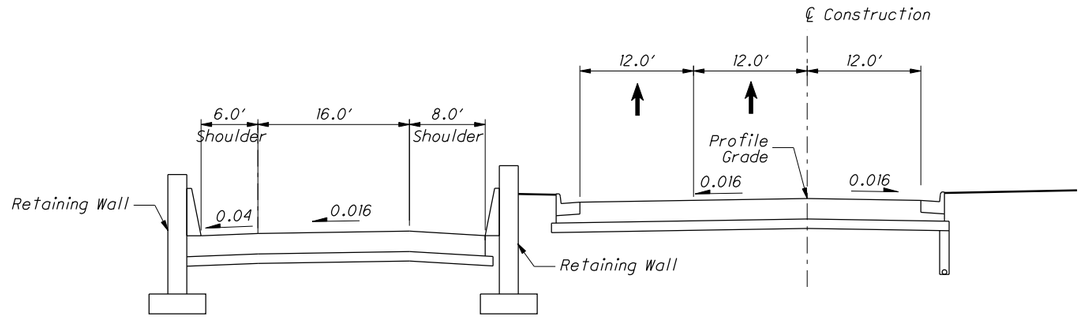
I-75 SOUTHBOUND TO FREEMAN AVE.
SUPERELEVATED SECTION



NINTH STREET TO WINCHELL AVE
SUPERELEVATED SECTION



SEVENTH STREET TO GEST STREET
SUPERELEVATED SECTION



FREEMAN AVENUE TO I 75 NB
NORMAL SECTION

WINCHELL AVE.
NORMAL SECTION

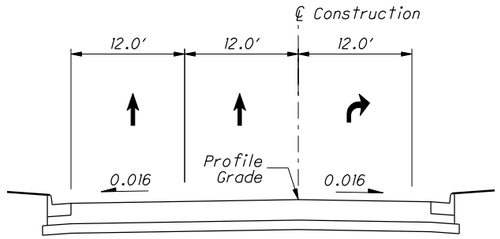
CALCULATED | CHECKED

TYPICAL SECTIONS - IR-75 (ALTERNATE E)

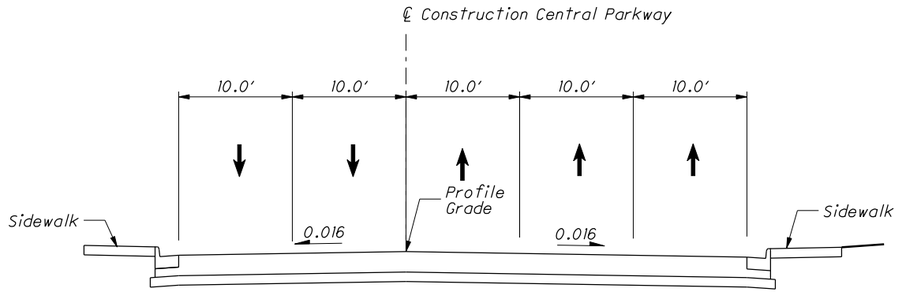
HAM-71/75-0.00-0.22

I:\projects\75119\roadway\sheets\75119GY001_Alt_E.dgn 7/20/2010 12:13:08 PM ludwigj

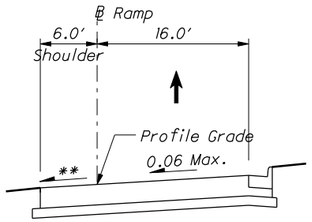
* Varies 0.04 to 0.01.
** 0.04 or Rate of Super if Greater.



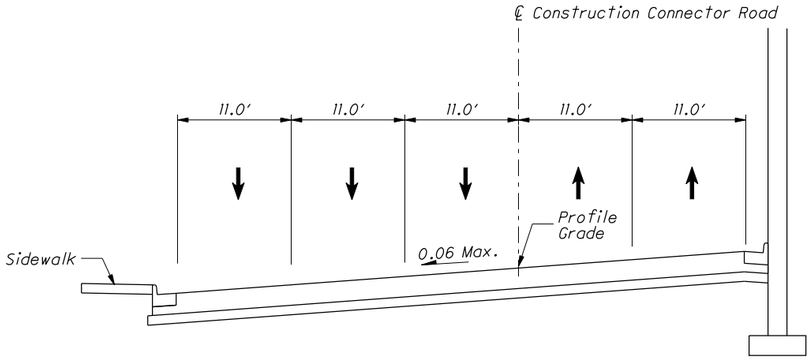
WINCHELL AVE.
NORMAL SECTION



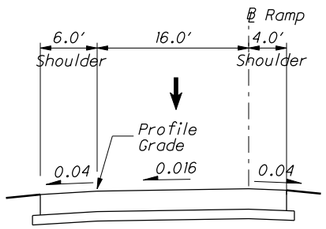
CENTRAL PARKWAY
NORMAL SECTION



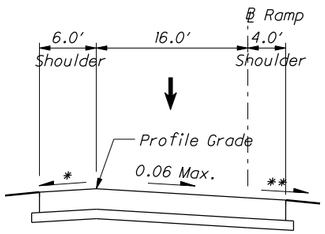
FREEMAN AVENUE TO WINCHELL AVE
SUPERELEVATED SECTION



CONNECTOR ROAD
SUPERELEVATED SECTION



NINTH STREET TO WINCHELL AVE
NORMAL SECTION



NINTH STREET TO WINCHELL AVE
SUPERELEVATED SECTION

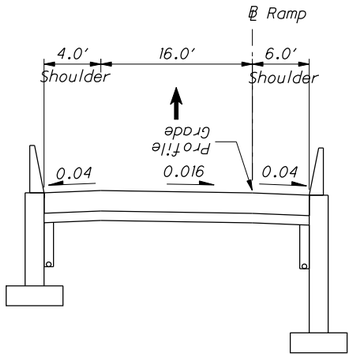
I:\projects\75119\roadway\sheets\75119GY001_Alt_E.dgn 7/20/2010 12:13:12 PM ludwigj

CALCULATED | CHECKED

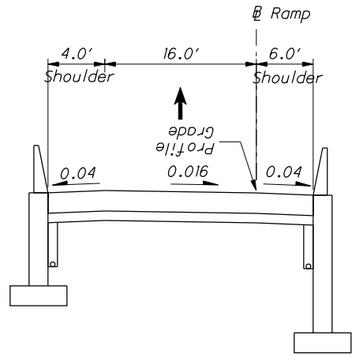
TYPICAL SECTIONS - IR-75 (ALTERNATE E)

HAM-71/75-0.00-0.22

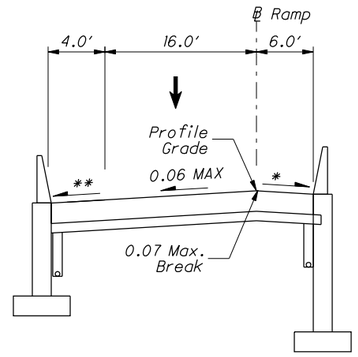
* Varies 0.04 to 0.01.
** 0.04 or Rate of Super if Greater.



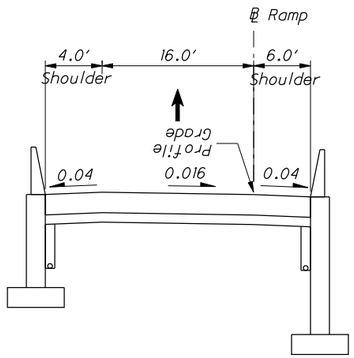
SOUTHBOUND I-75 TO
WESTERN HILLS VIADUCT
NORMAL SECTION



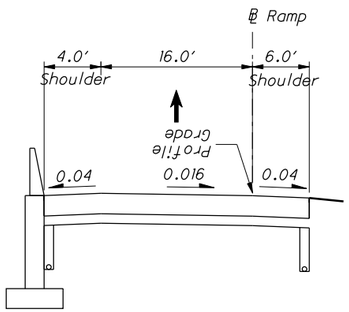
SOUTHBOUND I-75 TO
FINDLAY ST
NORMAL SECTION



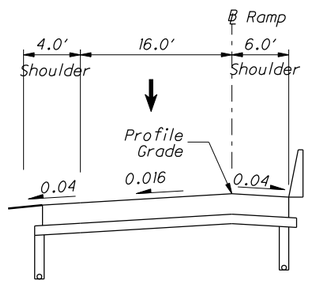
SOUTHBOUND I-75 TO
FINDLAY ST
SUPERELEVATED SECTION



NORTHBOUND I-75 TO
WESTERN HILLS VIADUCT
NORMAL SECTION



WESTERN HILLS
VIADUCT TO I-75 NORTHBOUND
NORMAL SECTION



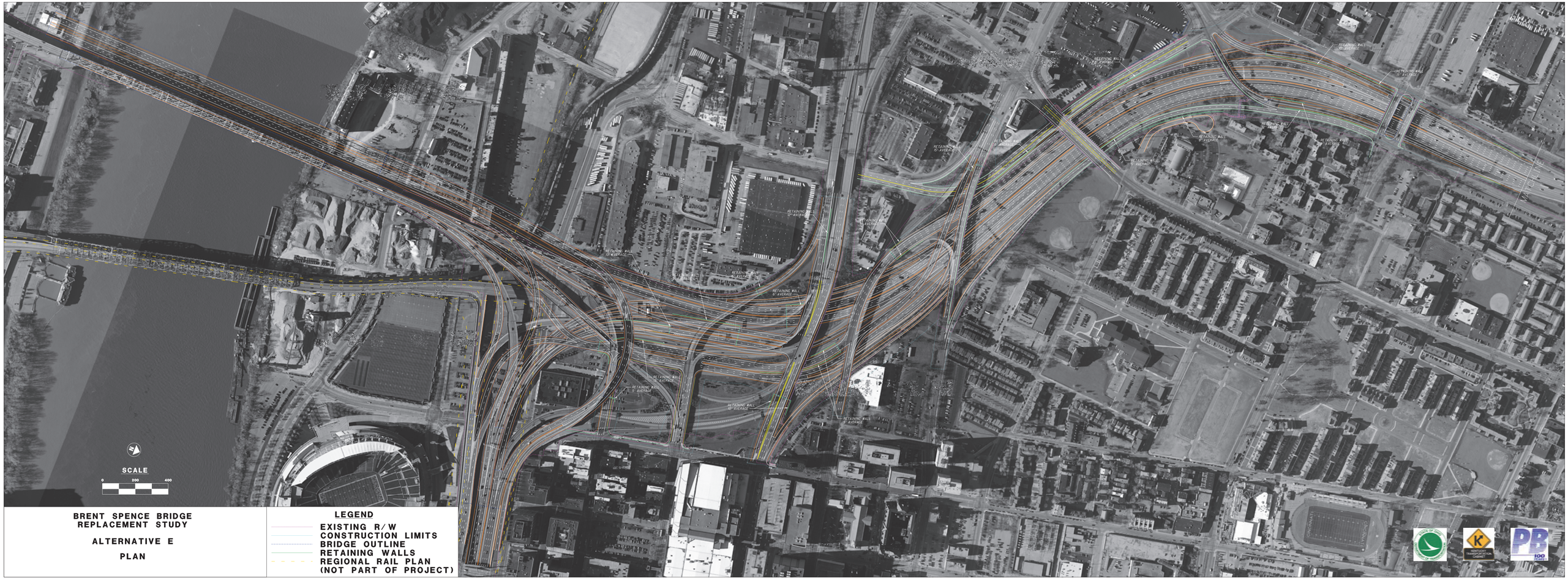
BANK ST RAMP
TO I-75 NORTHBOUND
NORMAL SECTION

CALCULATED | CHECKED

TYPICAL SECTIONS - IR-75 (ALTERNATE E)

HAM-71/75-0.00-0.22

I:\projects\75119\roadway\sheets\75119GY001_Alt_E.dgn 7/20/2010 12:13:16 PM ludwigj



BRENT SPENCE BRIDGE REPLACEMENT STUDY

ALTERNATIVE E

PLAN



BRENT SPENCE BRIDGE
REPLACEMENT STUDY

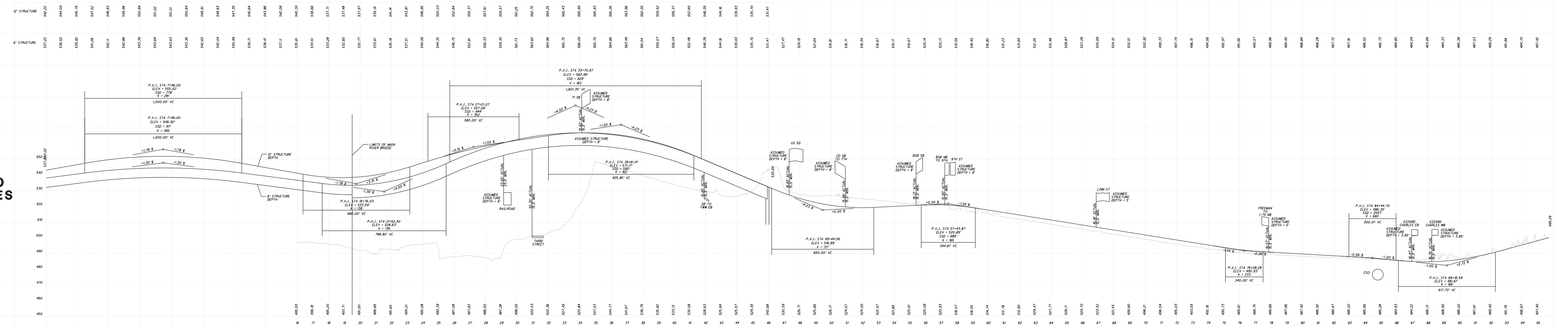
ALTERNATIVE E

PLAN

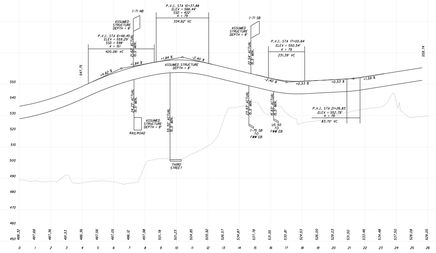
LEGEND

EXISTING R/W
CONSTRUCTION LIMITS
BRIDGE OUTLINE
RETAINING WALLS

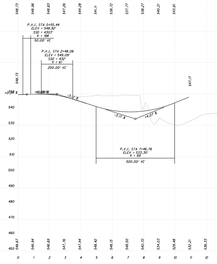
I-75 MAINLINE OHIO RIVER TO EZZARD CHARLES



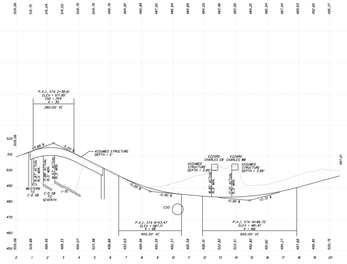
I-75 MAINLINE NORTHBOUND TO US 50



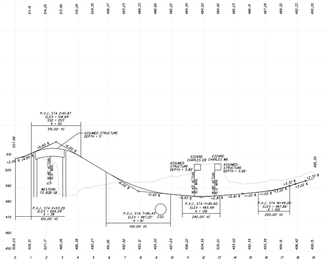
US 50 TO I-75 MAINLINE SOUTHBOUND



FREEMAN AVE TO I-75 MAINLINE NORTHBOUND



I-75 MAINLINE SOUTHBOUND TO FREEMAN AVE



BRENT SPENCE BRIDGE REPLACEMENT STUDY

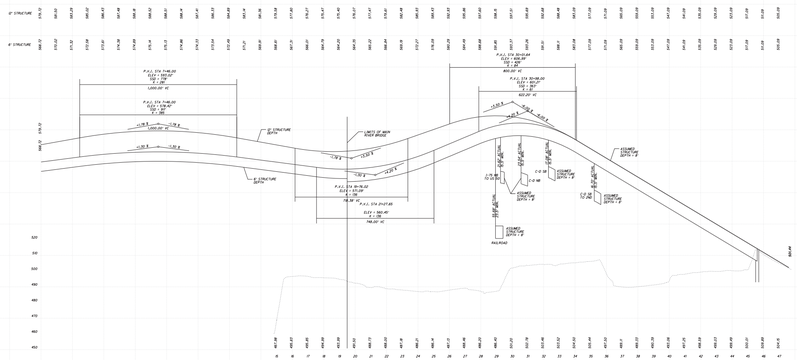
ALTERNATIVE E

PROFILES

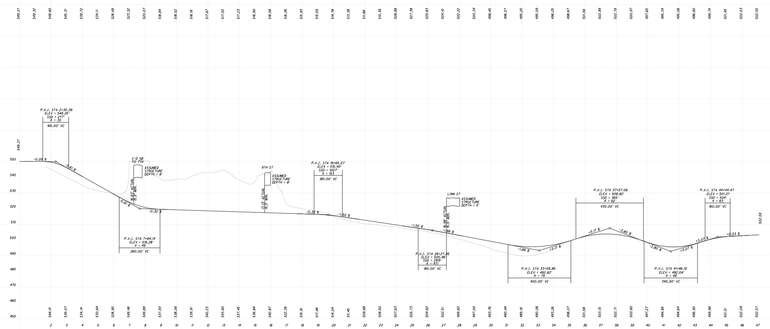
SCALE

0 200 400 600

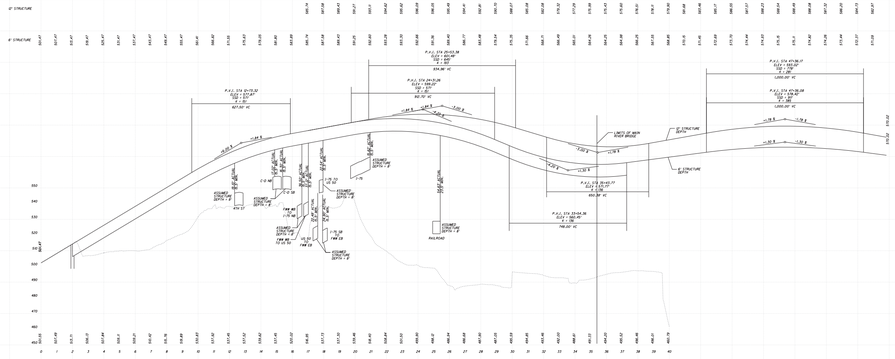
I-71 NORTHBOUND



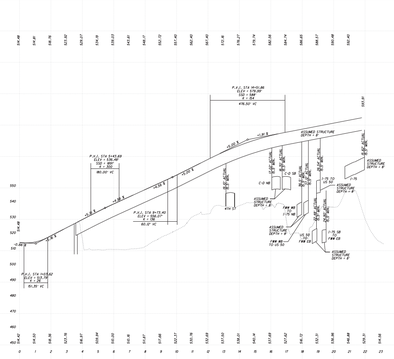
SIXTH STREET TO WINCHELL AVENUE



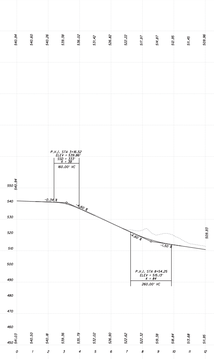
I-71 SOUTHBOUND



THIRD STREET TO I-71 SOUTHBOUND



NINTH STREET TO WINCHELL AVENUE



BRENT SPENCE BRIDGE REPLACEMENT STUDY

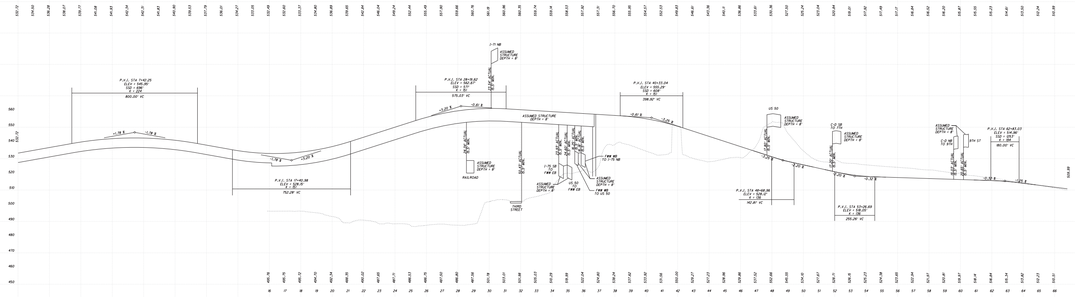
ALTERNATIVE E

PROFILES

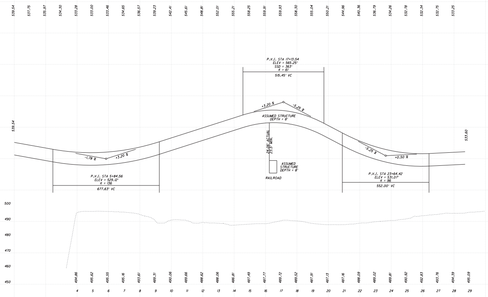
SCALE

0 200 400 600

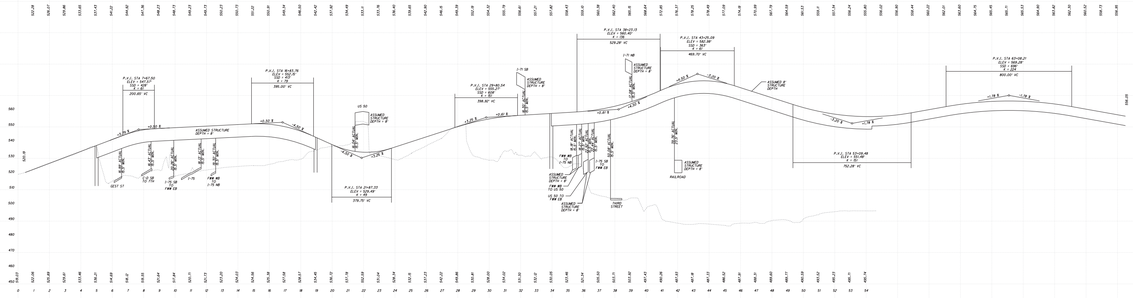
COLLECTOR-DISTRIBUTOR NORTHBOUND



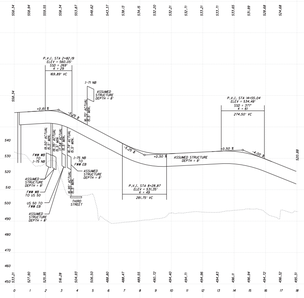
C-D NORTHBOUND TO SECOND STREET



COLLECTOR-DISTRIBUTOR SOUTHBOUND



C-D SOUTHBOUND TO SECOND STREET



BRENT SPENCE BRIDGE REPLACEMENT STUDY

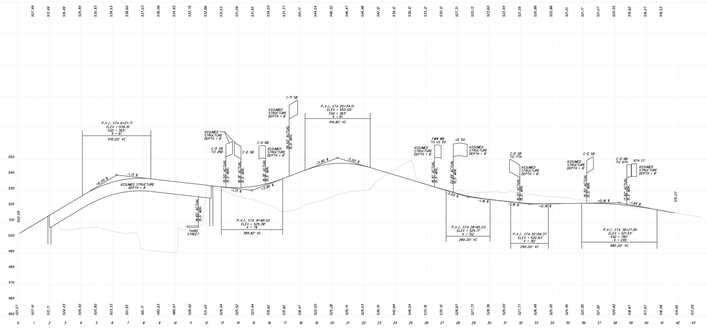
ALTERNATIVE E

PROFILES

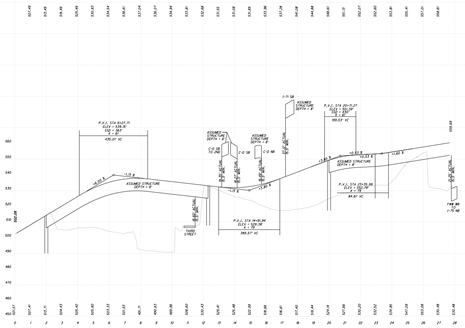
SCALE

0 200 400 600

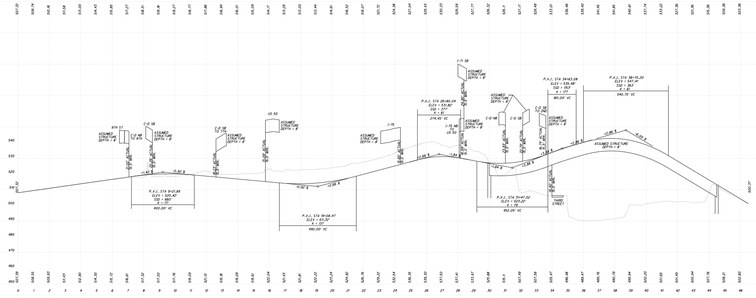
FWW WB TO
I-75 NORTHBOUND



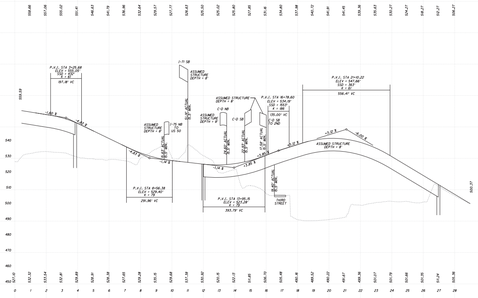
FWW WB TO
US 50



I-75 SOUTHBOUND
TO FWW EB



US 50
TO FWW EB



BRENT SPENCE BRIDGE
REPLACEMENT STUDY

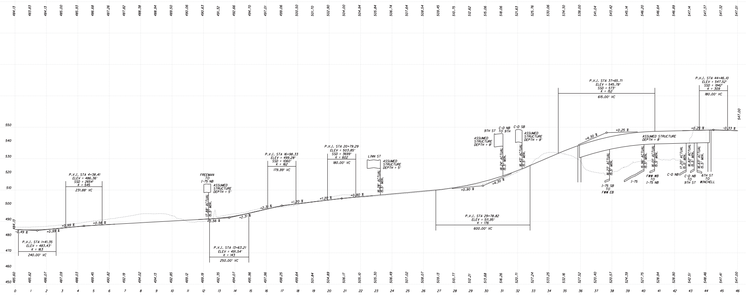
ALTERNATIVE E

PROFILES

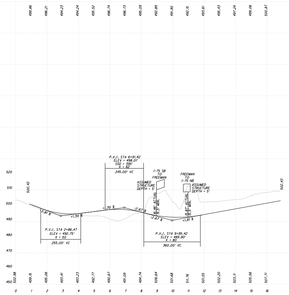
SCALE

0 200 400 600

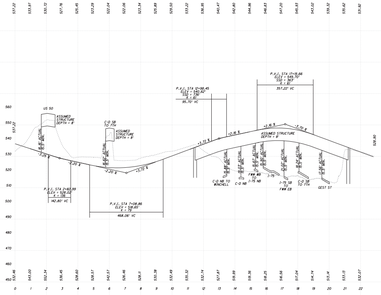
COLLECTOR-DISTRIBUTOR SB TO SEVENTH ST



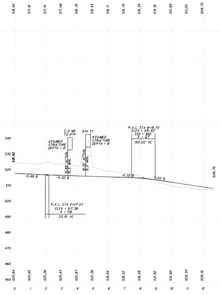
WESTERN AVE TO COLLECTOR-DISTRIBUTOR SB



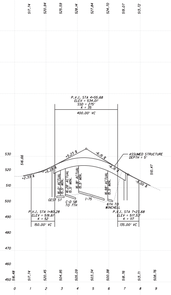
COLLECTOR-DISTRIBUTOR NB TO NINTH ST



COLLECTOR-DISTRIBUTOR NB TO WINCHELL AVE



LINN STREET



BRENT SPENCE BRIDGE REPLACEMENT STUDY

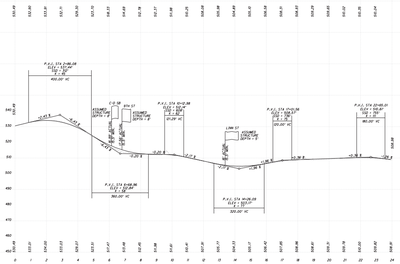
ALTERNATIVE E

PROFILES

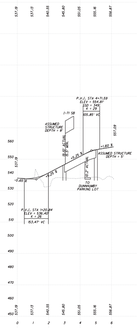
SCALE

0 300 400 600

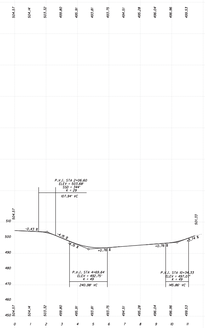
GEST STREET



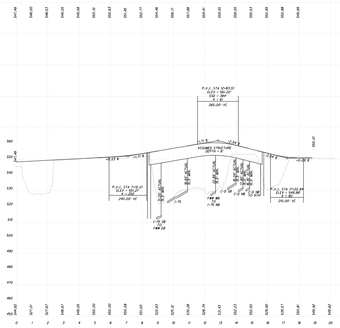
FOURTH STREET



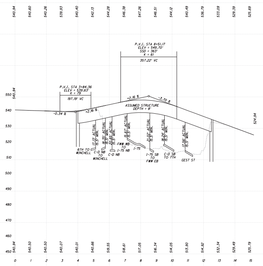
WESTERN AVE



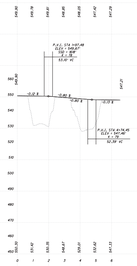
US 50 EB



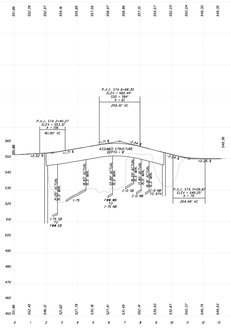
NINTH STREET



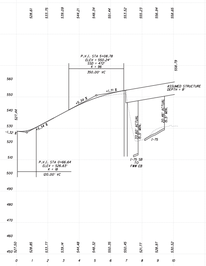
FIFTH STREET



US 50 WB



US 50 TO GEST STREET



BRENT SPENCE BRIDGE REPLACEMENT STUDY

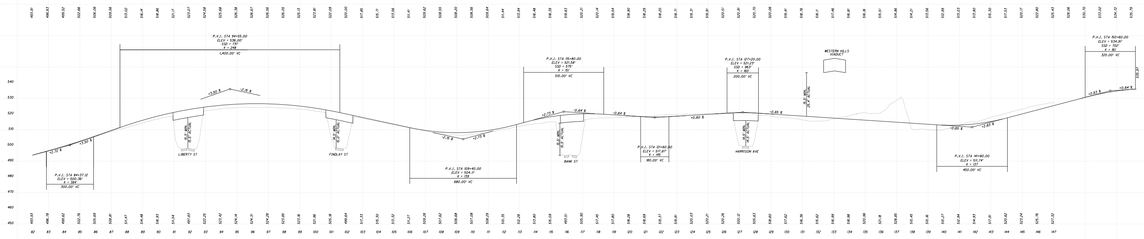
ALTERNATIVE E

PROFILES

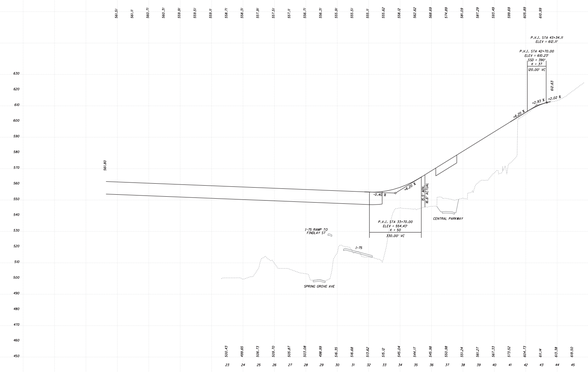
SCALE

0 200 400 600

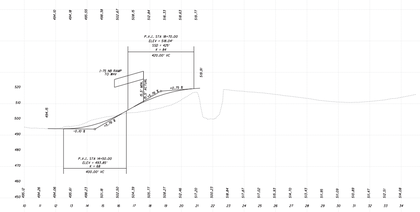
INTERSTATE 75



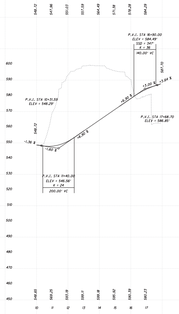
WESTERN HILLS VIADUCT



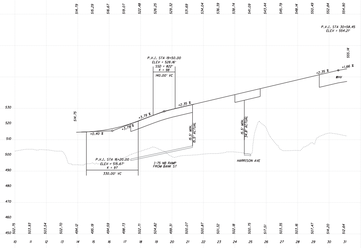
BANK STREET TO I-75 NORTHBOUND



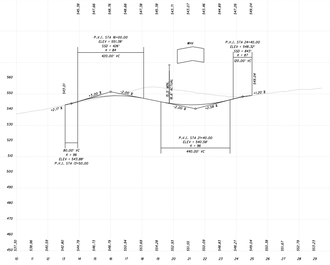
WESTERN HILLS VIADUCT TO CENTRAL PARKWAY CONNECTOR



I-75 NORTHBOUND TO WESTERN HILLS VIADUCT



CENTRAL PARKWAY



BRENT SPENCE BRIDGE REPLACEMENT STUDY

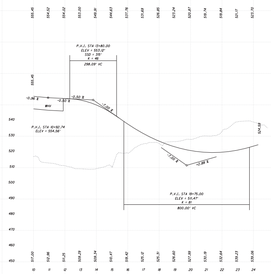
ALTERNATIVE E

PROFILES

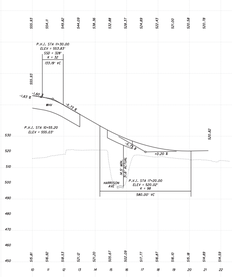
SCALE

0 200 400 600

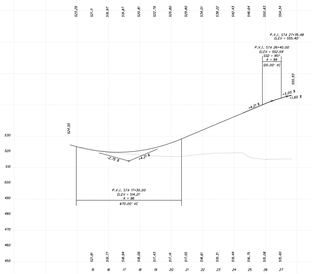
WESTERN HILLS VIADUCT
TO I-75 NORTHBOUND



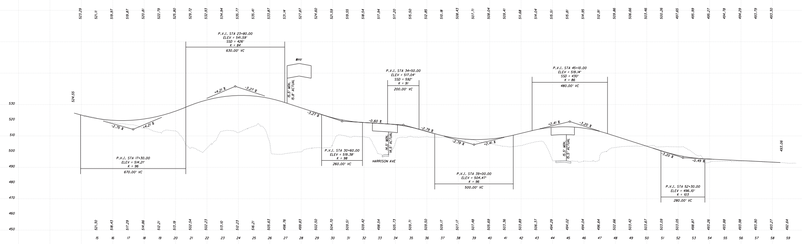
WESTERN HILLS VIADUCT
TO I-75 SOUTHBOUND



I-75 SOUTHBOUND TO
WESTERN HILLS VIADUCT



I-75 SOUTHBOUND TO
FINDLAY STREET



BRENT SPENCE BRIDGE
REPLACEMENT STUDY

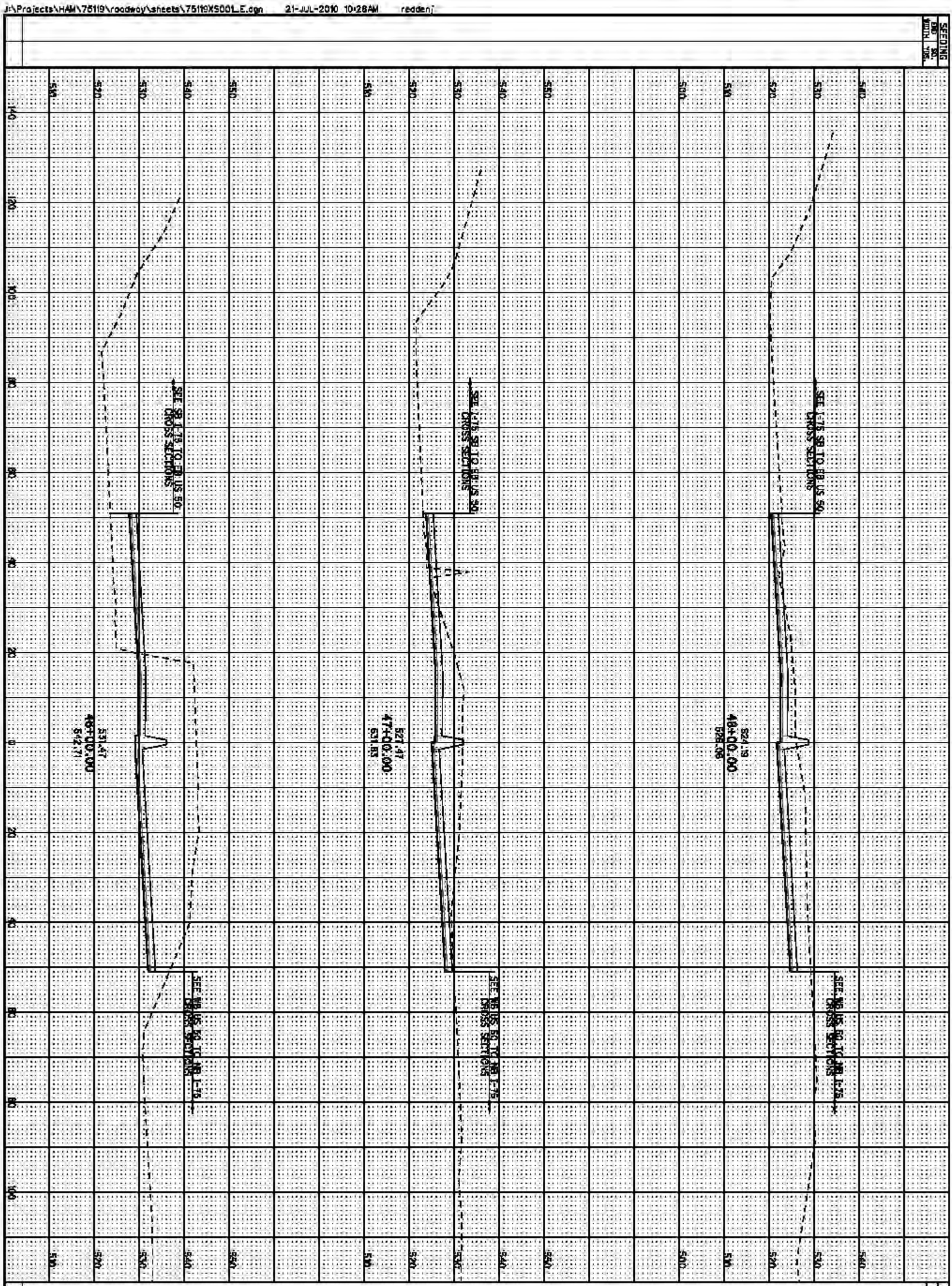
ALTERNATIVE E

PROFILES

SCALE

0 200 400 600

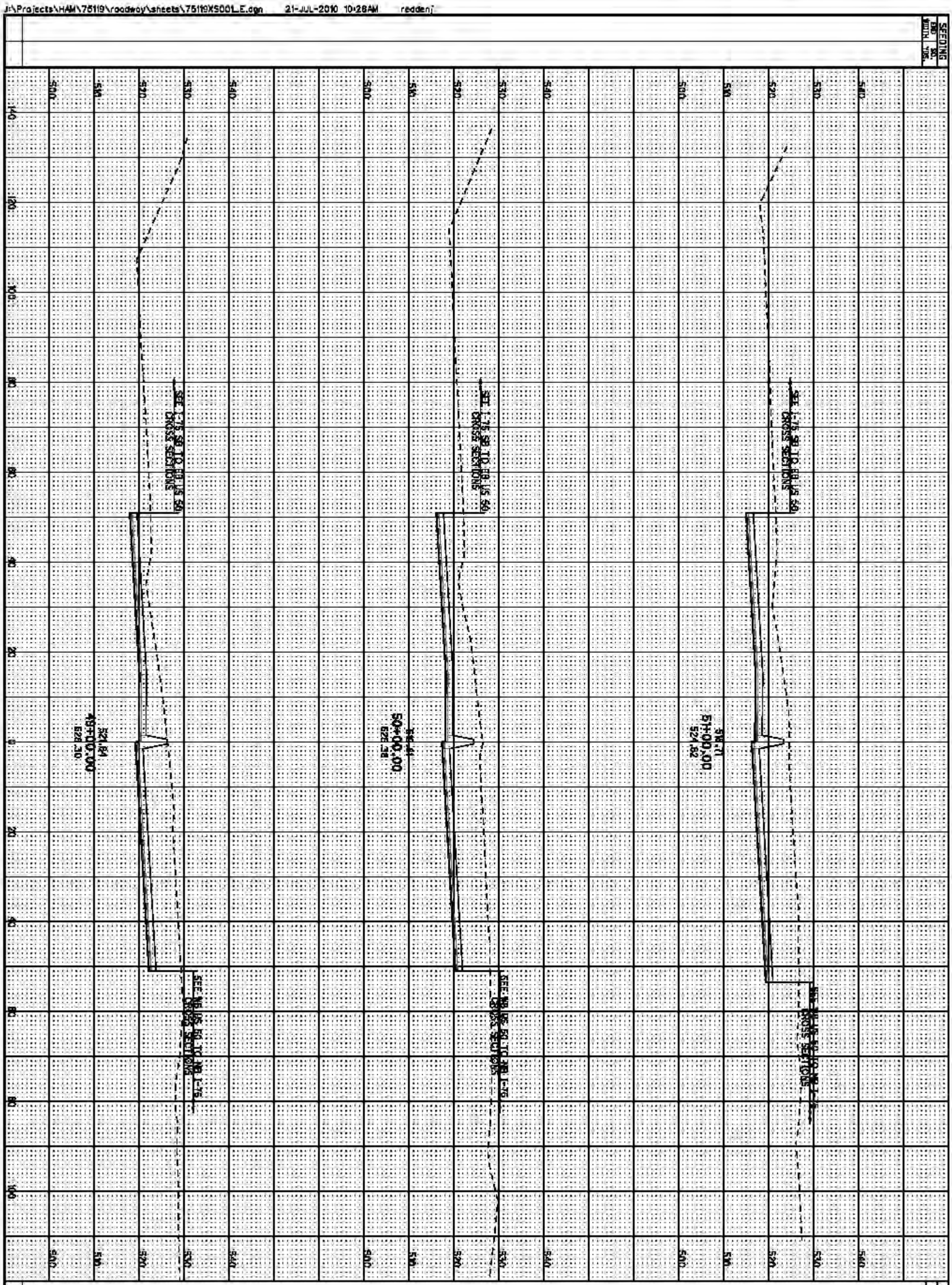
J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:28AM redden



16	HAM-71/75-0.00/0.22	**CROSS SECTIONS - I-75** **STA. 46+00.00 TO STA. 48+00.00**

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:28AM reddenj



17	HAM-71/75-0.00/0.22	CROSS SECTIONS - I-75 STA. 49+00.00 TO STA. 51+00.00

CALCULATED
CHECKED

SEEDING
END WIDTH | SQ. YDS.

END AREA
CUT | FILL

VOLUME
CUT | FILL

CALCULATED | DESIGN

SEE I-75 SB TO EB US 50 CROSS SECTIONS

516.11
54+00.00
522.16

E WB US 50/I-71 TO NB I-75
SEE 6TH ST. TO WINCHELL CROSS SECTIONS

521.17
36+01.06
523.04

SEE I-75 SB TO EB US 50 CROSS SECTIONS

518.87
53+00.00
523.12

E WB US 50/I-71 TO NB I-75
SEE 6TH ST. TO WINCHELL CROSS SECTIONS

521.01
34+97.01
524.35

SEE I-75 SB TO EB US 50 CROSS SECTIONS

518.34
52+00.00
524.06

E WB US 50/I-71 TO NB I-75
SEE 6TH ST. TO WINCHELL CROSS SECTIONS

520.XX
33+92.46
528.XX

540 530 520 510 500

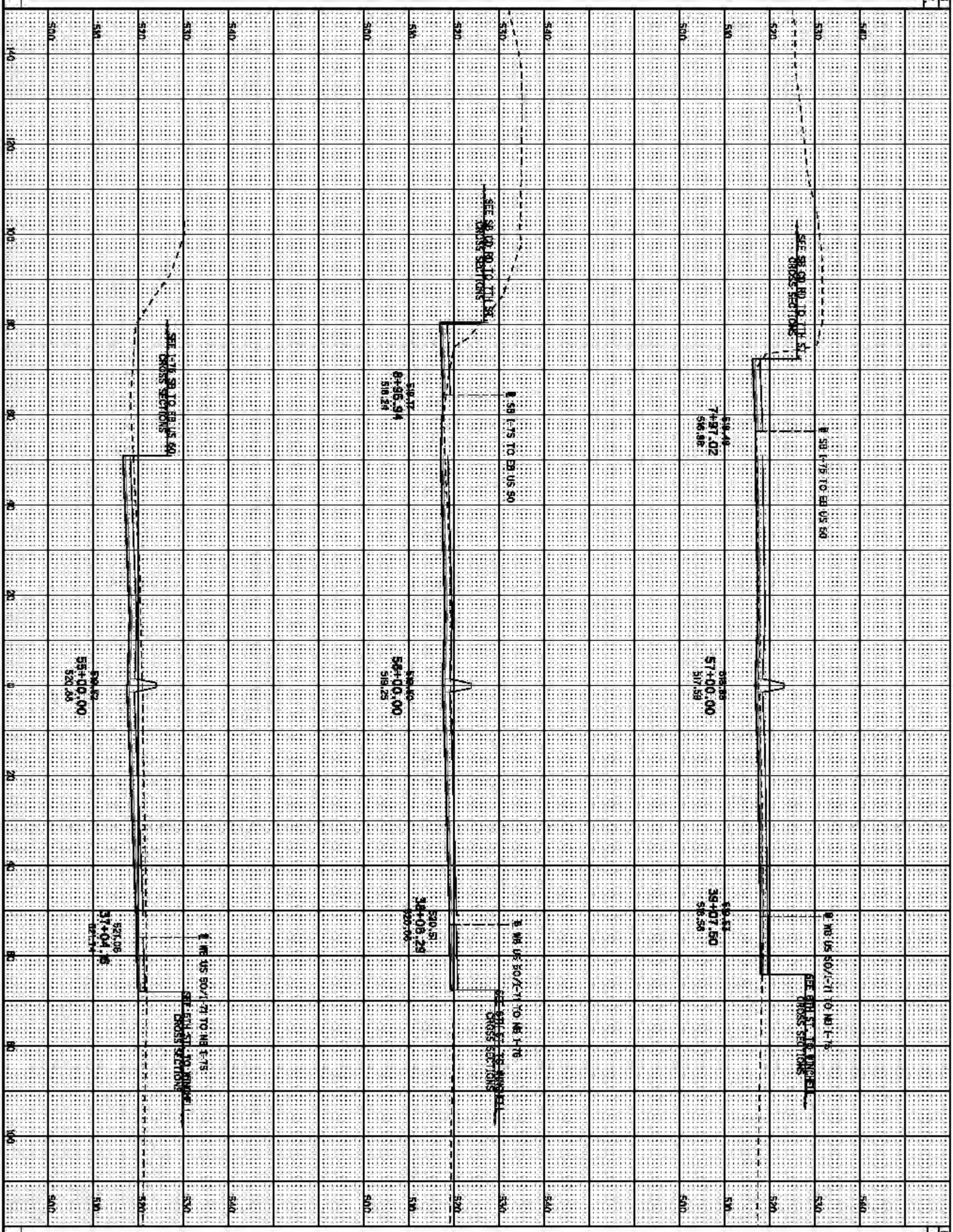
140 120 100 80 60 40 20 0 20 40 60 80 100

CROSS SECTIONS - I-75
STA. 52+00.00 TO STA. 54+00.00

HAM-71/75-0.00/0.22

J:\Projects\HAM\75119\roadway\sheets\75119XS001LE.dgn 21-JUL-2010 10:28AM redeni

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:28AM reddenj



END AREA		VOLUME	
CUT	FILL	CUT	FILL

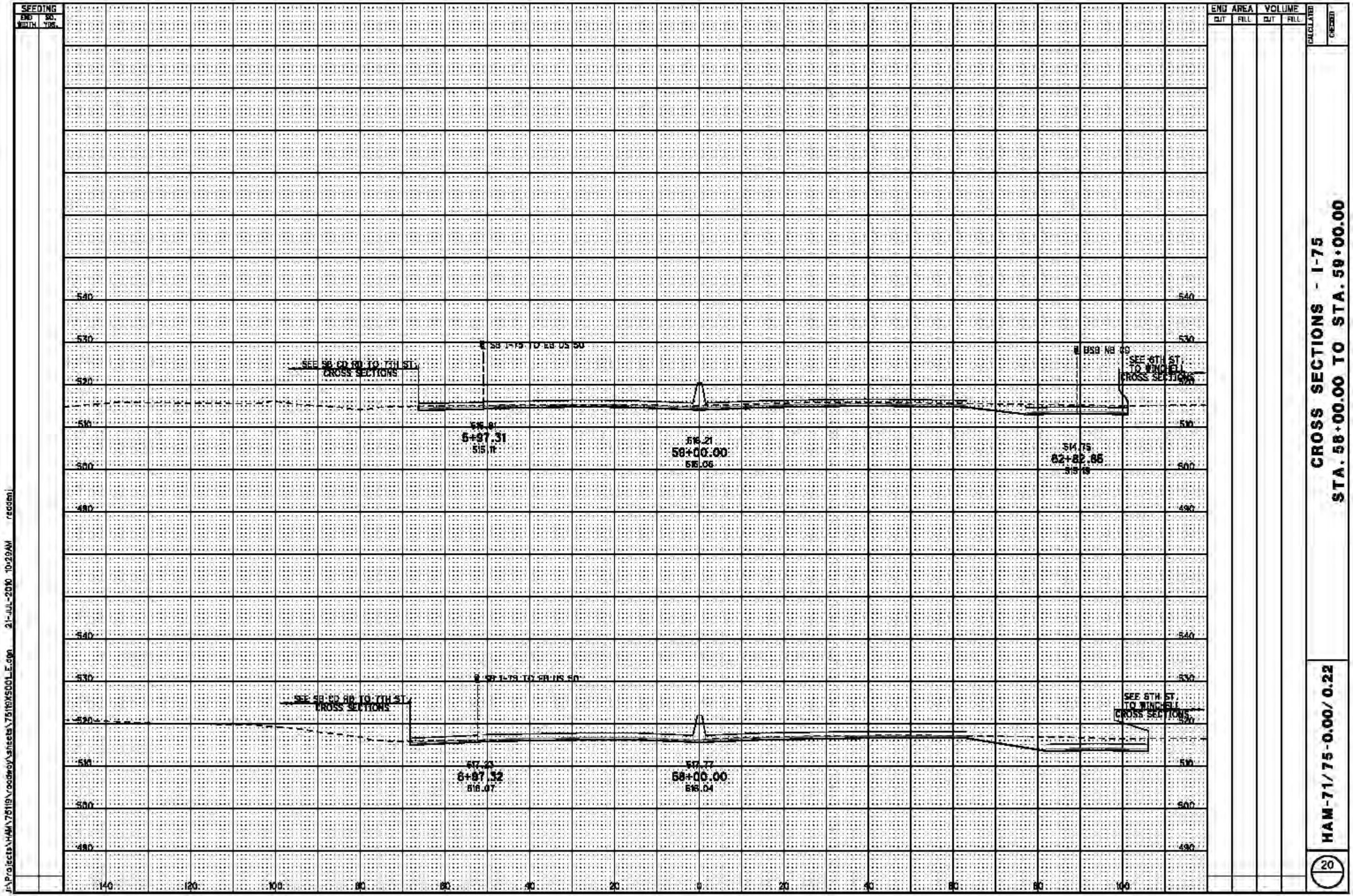
18

HAM-71/75-0.00/0.22

CROSS SECTIONS - I-75
STA. 55+00.00 TO STA. 57+00.00

CALCULATED

CHECKED

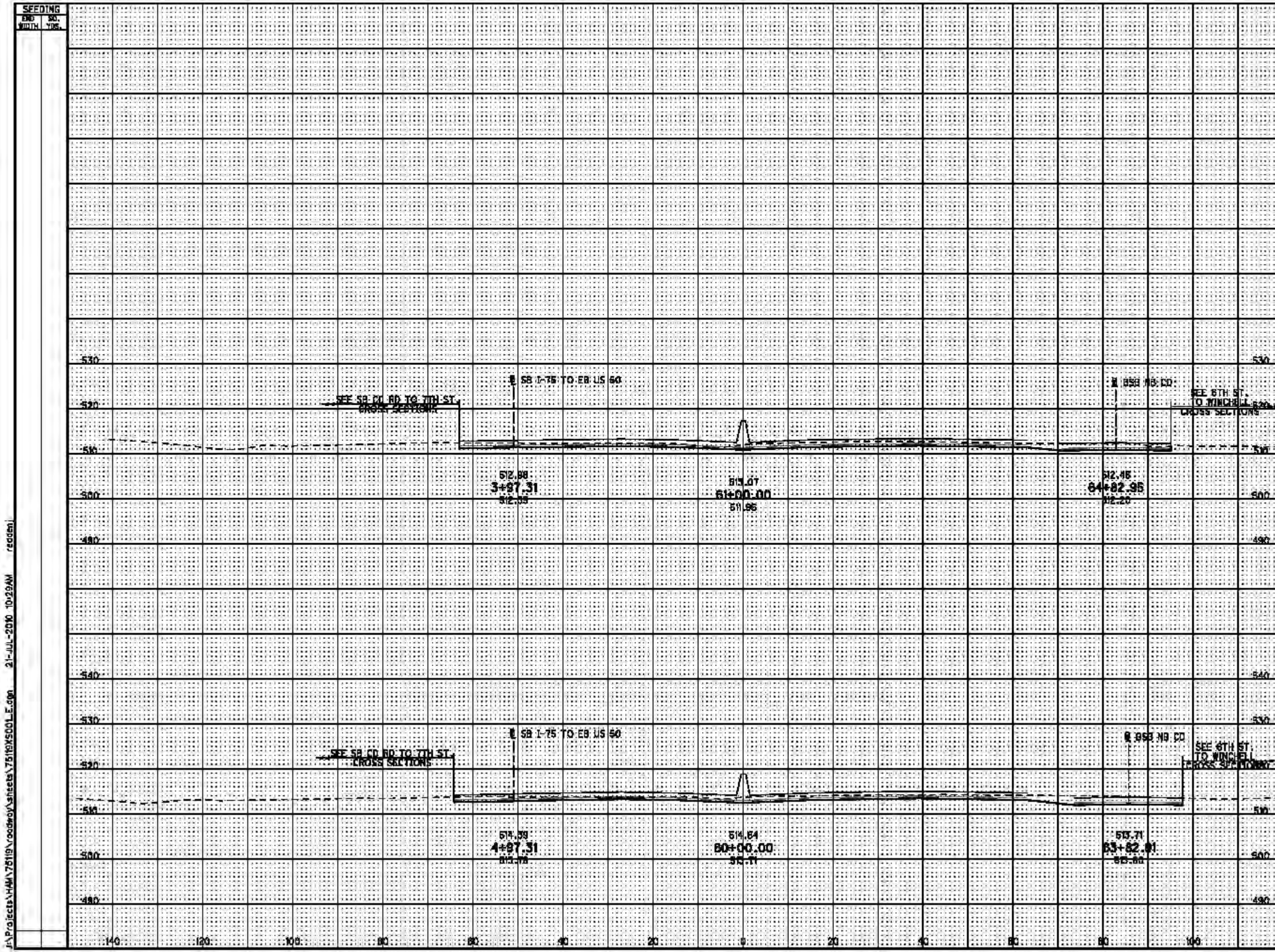


CROSS SECTIONS - I-75
STA. 58+00.00 TO STA. 59+00.00

HAM-71/75-0.00/0.22

20

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:29AM redenj

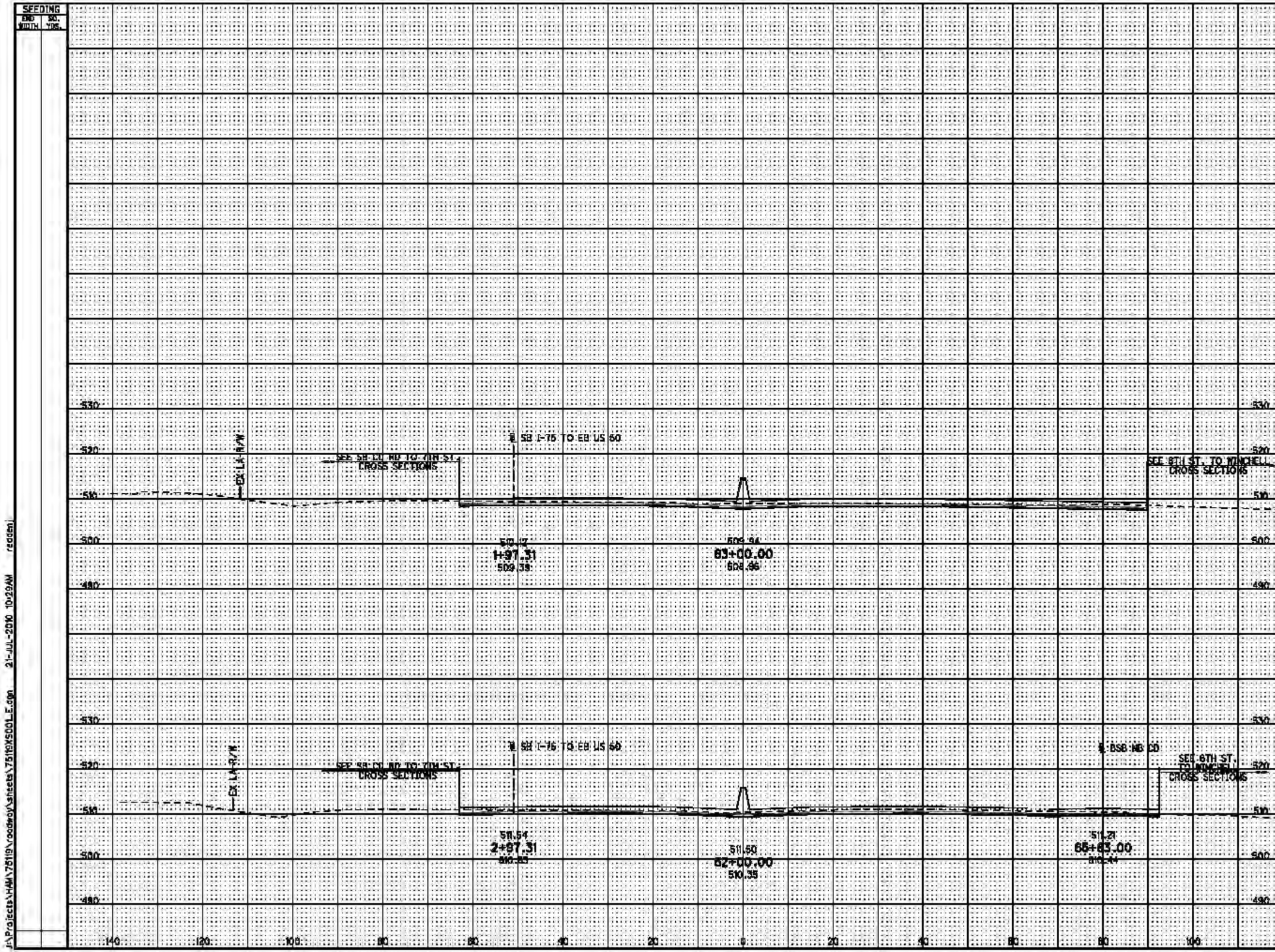


CROSS SECTIONS - I-75
STA. 60+00.00 TO STA. 61+00.00

HAM-71/75-0.00/0.22

21

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:29AM redden



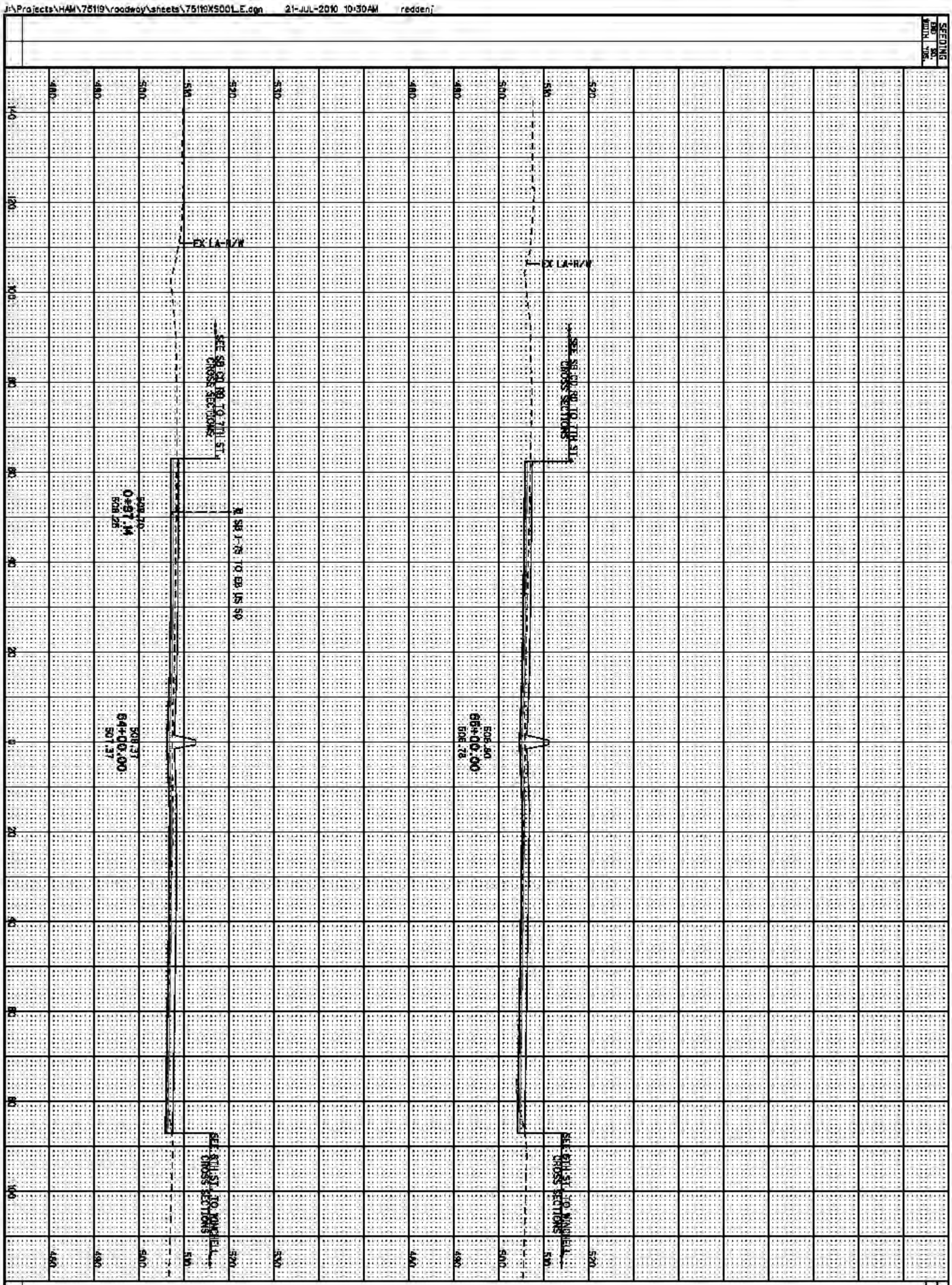
CROSS SECTIONS - I-75
STA. 62+00.00 TO STA. 63+00.00

HAM-71/75-0.00/0.22

22

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:29AM redden

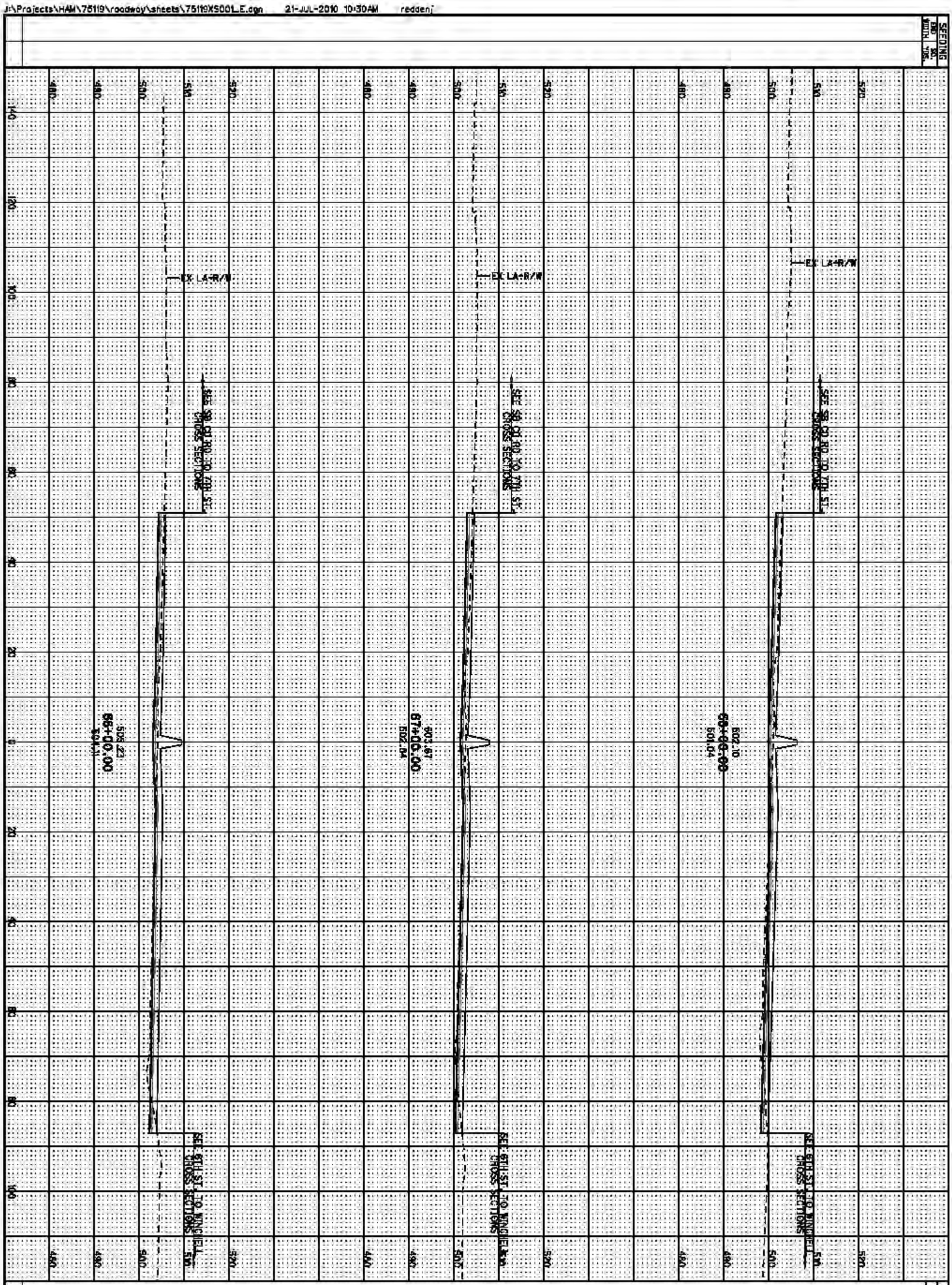
J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:30AM redden



HAM-71/75-0.00/0.22

CROSS SECTIONS - I-75
STA. 64+00.00 TO STA. 65+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:30AM redden

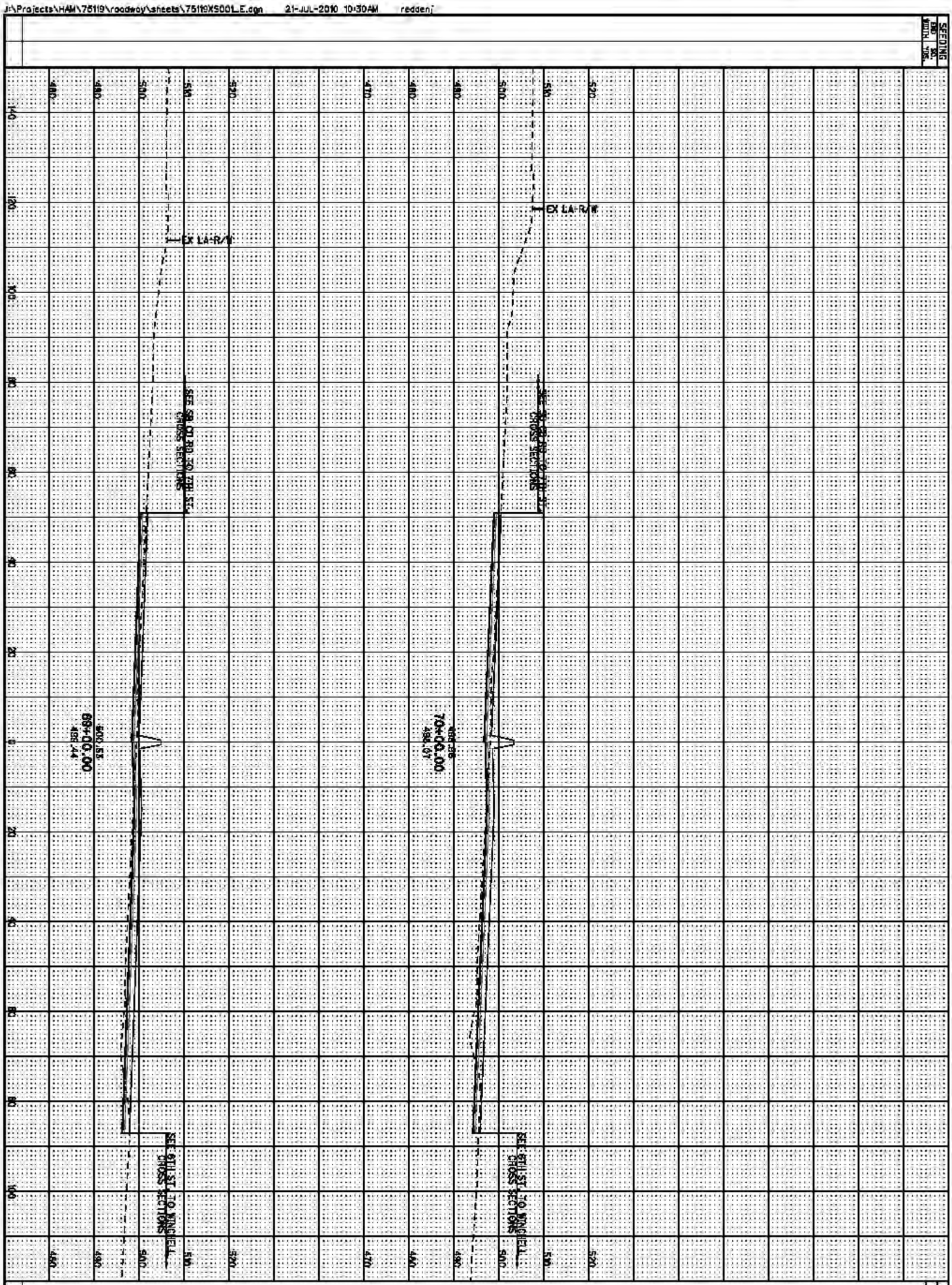


HAM-71/75-0.00/0.22

CROSS SECTIONS - I-75
STA. 66+00.00 TO STA. 68+00.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:30AM reddenj

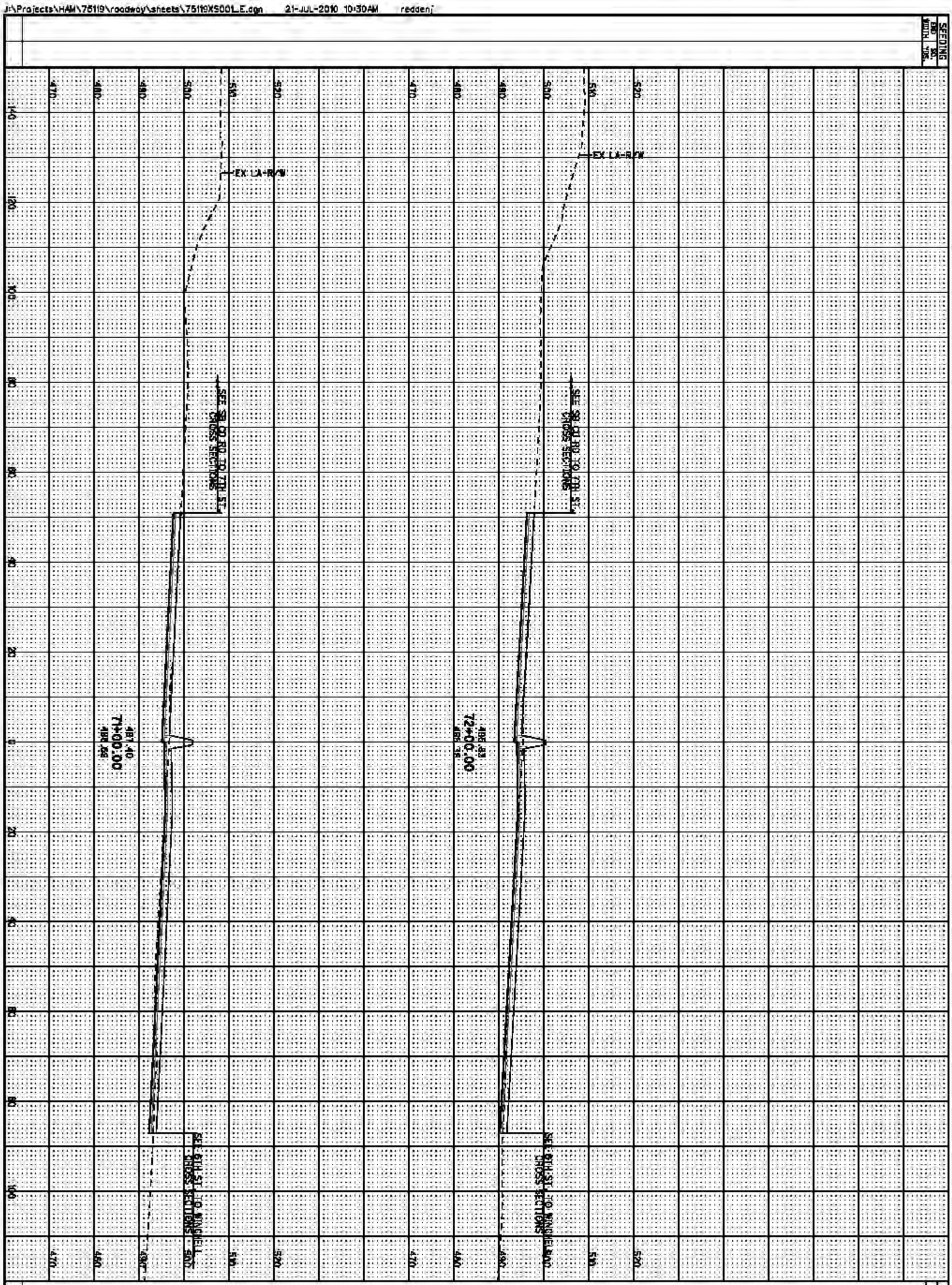


25

HAM-71/75-0.00/0.22

CROSS SECTIONS - I-75
STA. 69+00.00 TO STA. 70+00.00

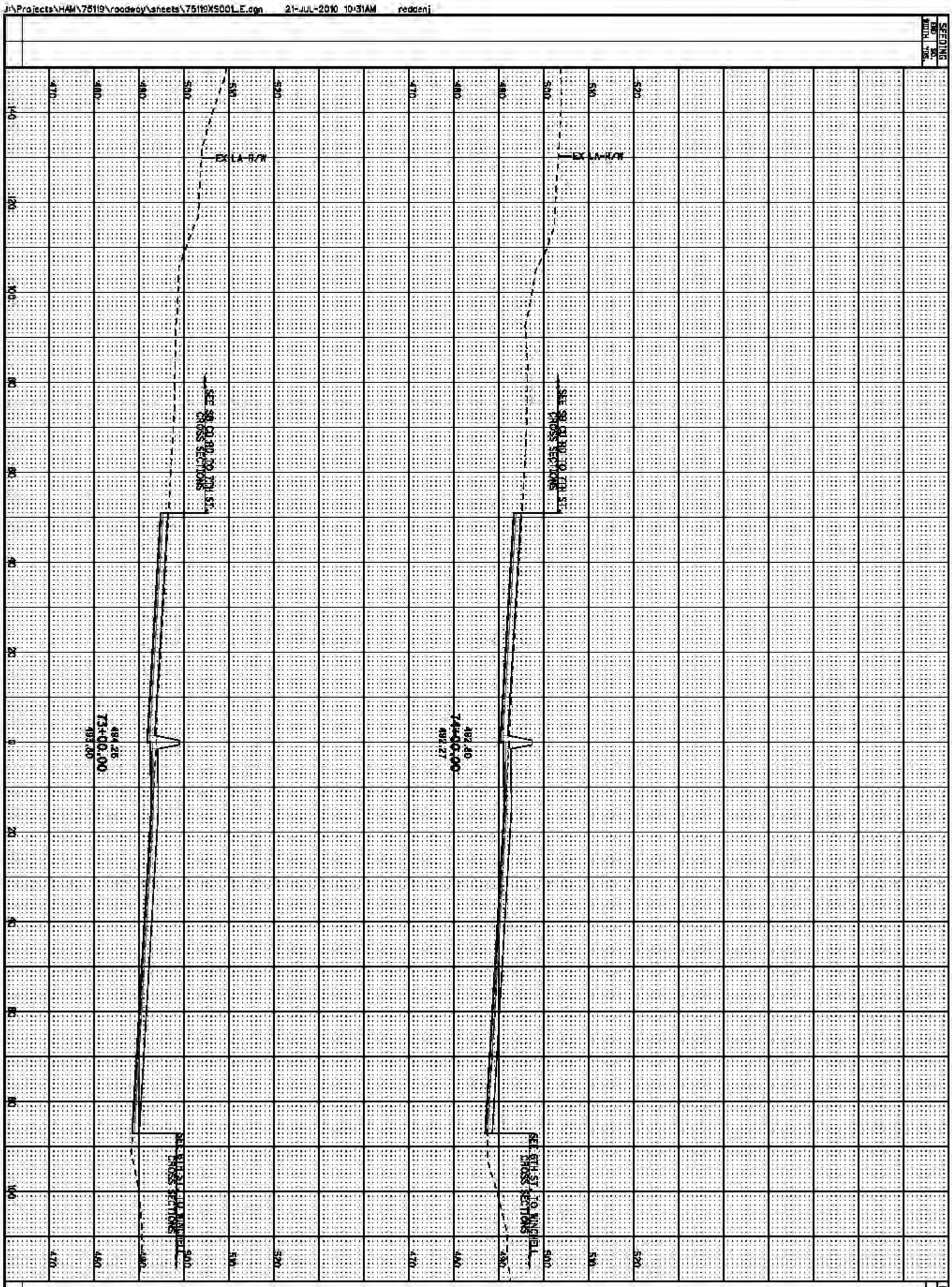
J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:30AM redden



26	HAM-71/75-0.00/0.22	CROSS SECTIONS - I-75 STA. 71+00.00 TO STA. 72+00.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:31AM reddenj

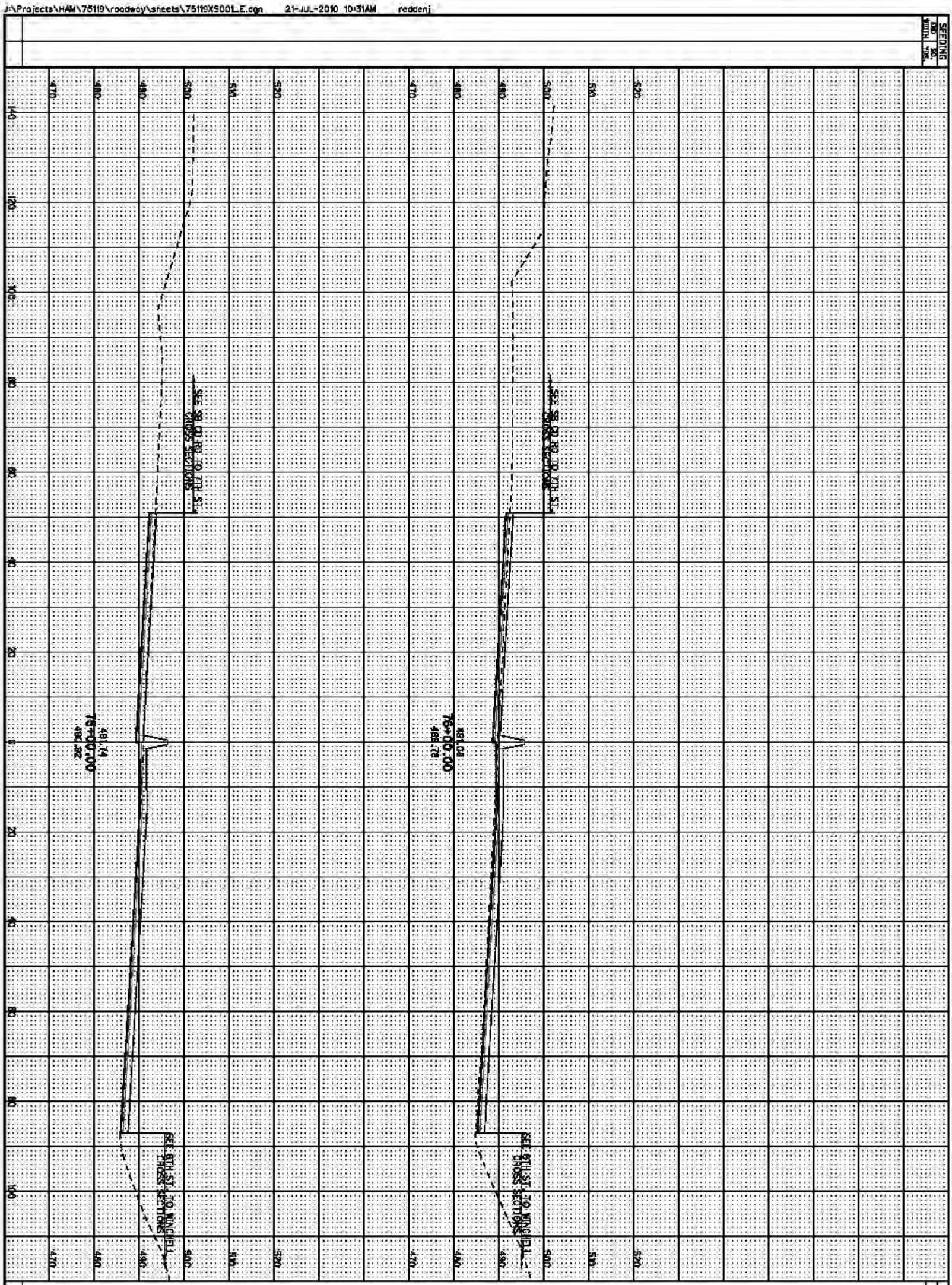


27

HAM-71/75-0.00/0.22

CROSS SECTIONS - I-75
STA. 73+00.00 TO STA. 74+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:31AM reddenj



28	HAM-71/75-0.00/0.22	CROSS SECTIONS - I-75 STA. 75+00.00 TO STA. 76+00.00

CALCULATED
CHECKED

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED

CHECKED

SEE SB CD RD TO 7TH ST. CROSS SECTIONS

SEE 6TH ST. TO WINCHELL CROSS SECTIONS

78+00.00

SEE SB CD RD TO 7TH ST. CROSS SECTIONS

SEE 6TH ST. TO WINCHELL CROSS SECTIONS

77+00.00

CROSS SECTIONS - I-75

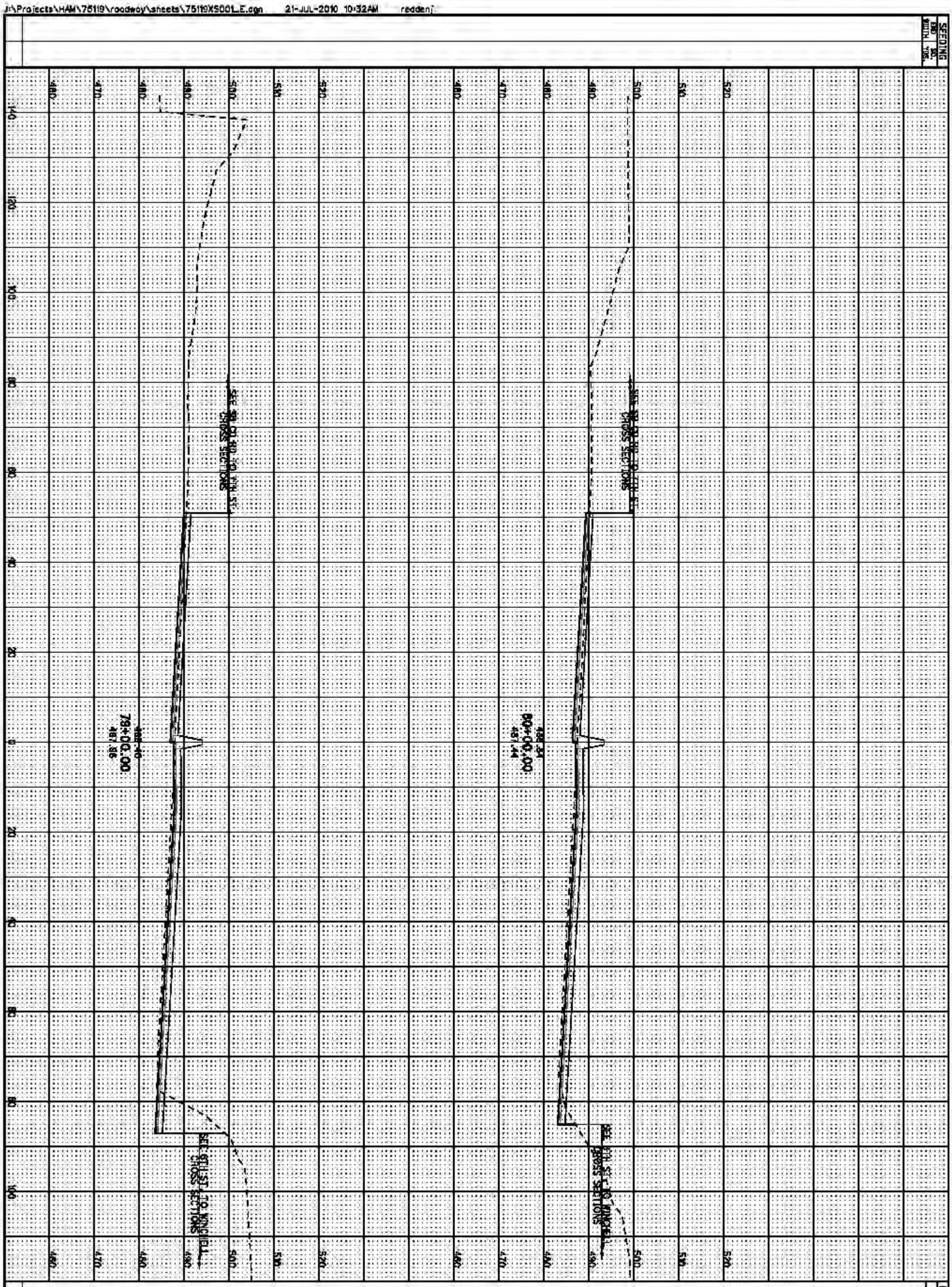
STA. 77+00.00 TO STA. 78+00.00

HAM-71/75-0.00/0.22

29

J:\Projects\HAM\75119\roadway\sheets\75119XSOOLE.dgn 21-JUL-2010 10:31AM reddenj

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:32AM redden

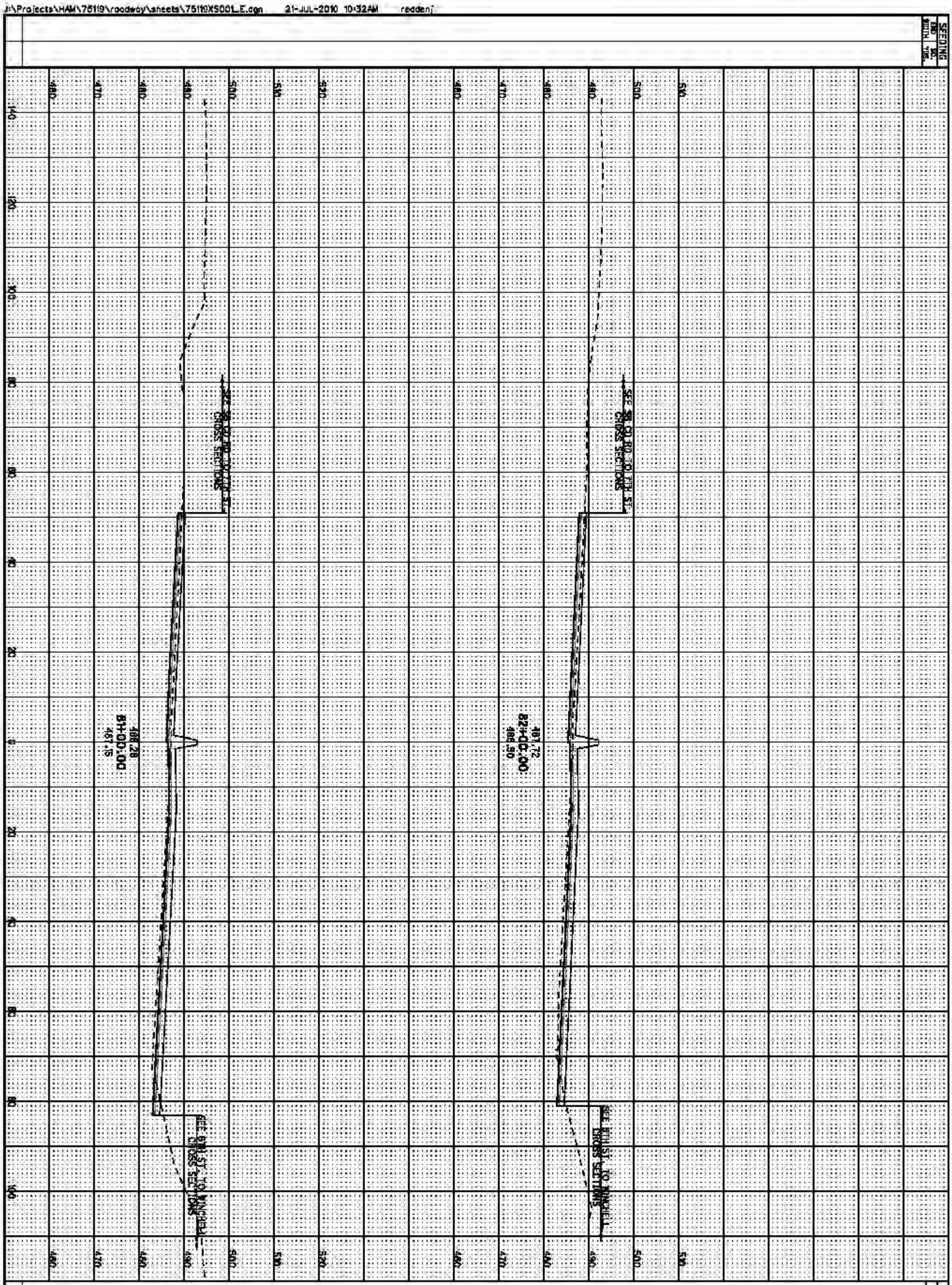


30

HAM-71/75-0.00/0.22

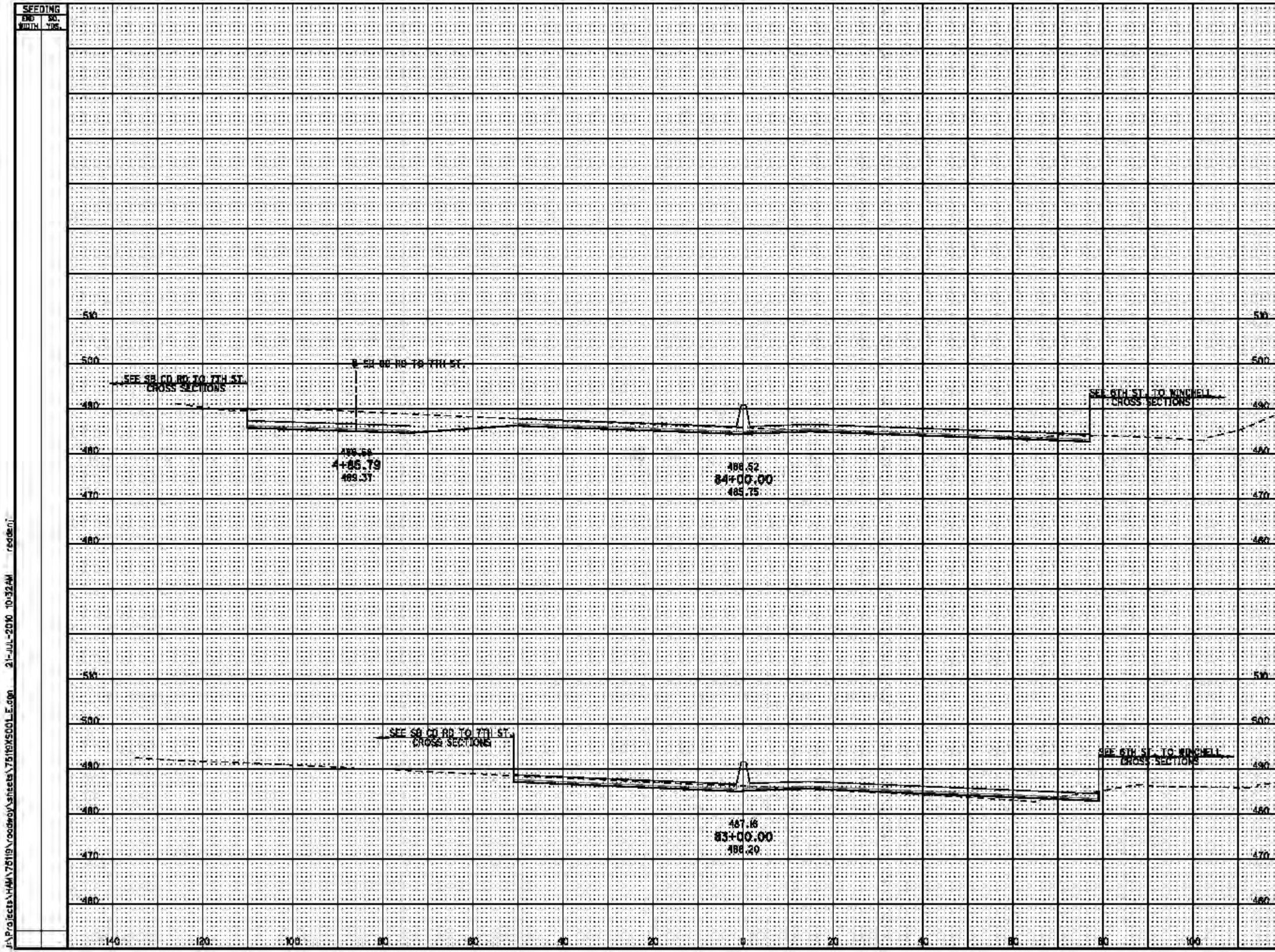
CROSS SECTIONS - I-75
STA. 79+00.00 TO STA. 80+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:32AM reddenj



31	HAM-71/75-0.00/0.22	CROSS SECTIONS - I-75 STA. 81+00.00 TO STA. 82+00.00

CALCULATED
CHECKED

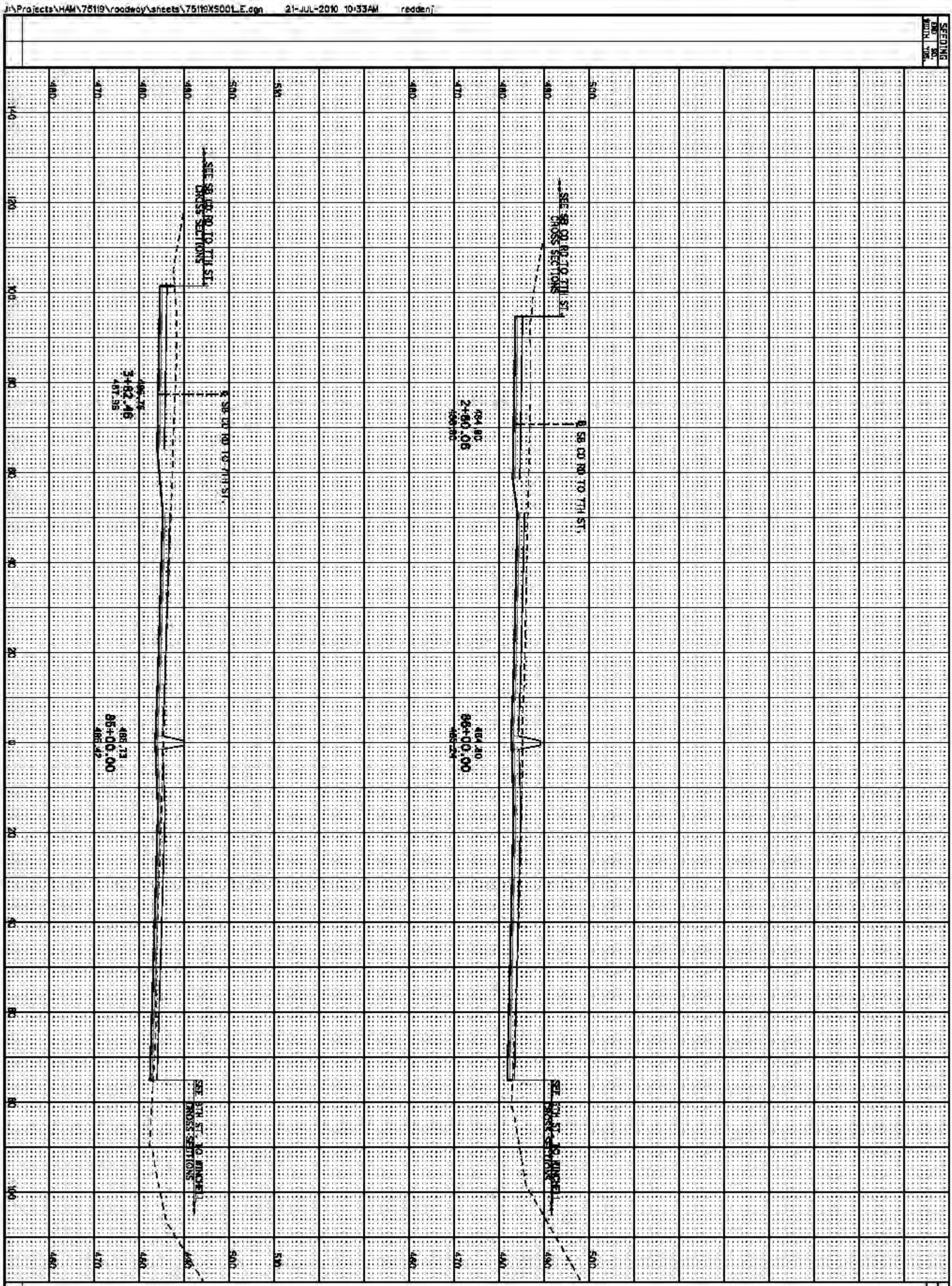


CROSS SECTIONS - I-75
STA. 83+00.00 TO STA. 84+00.00

HAM-71/75-0.00/0.22

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:32AM redenj

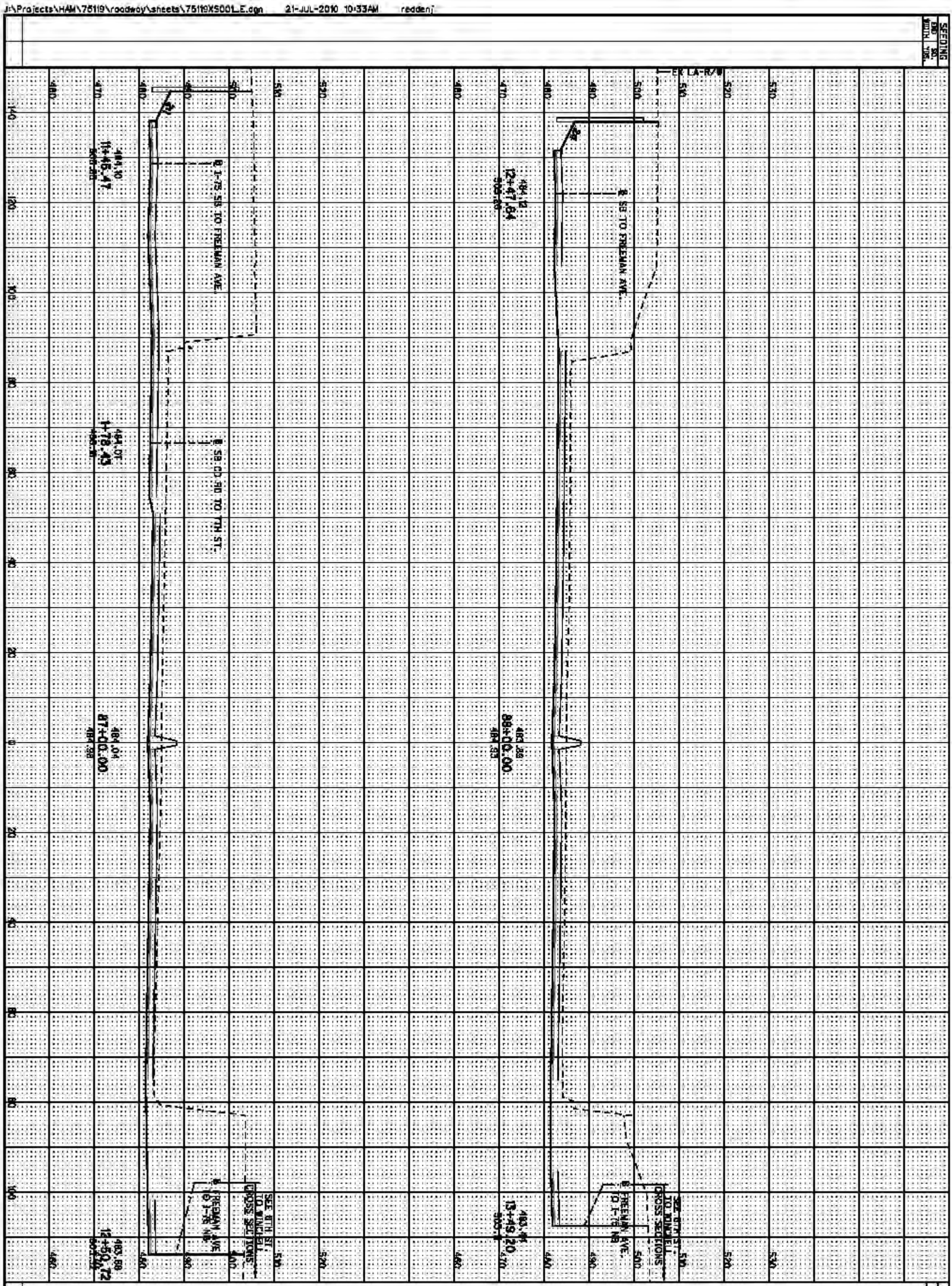
J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:33AM reddenj



33	HAM-71/75-0.00/0.22	CROSS SECTIONS - I-75 STA. 85+00.00 TO STA. 86+00.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:33AM reddenj

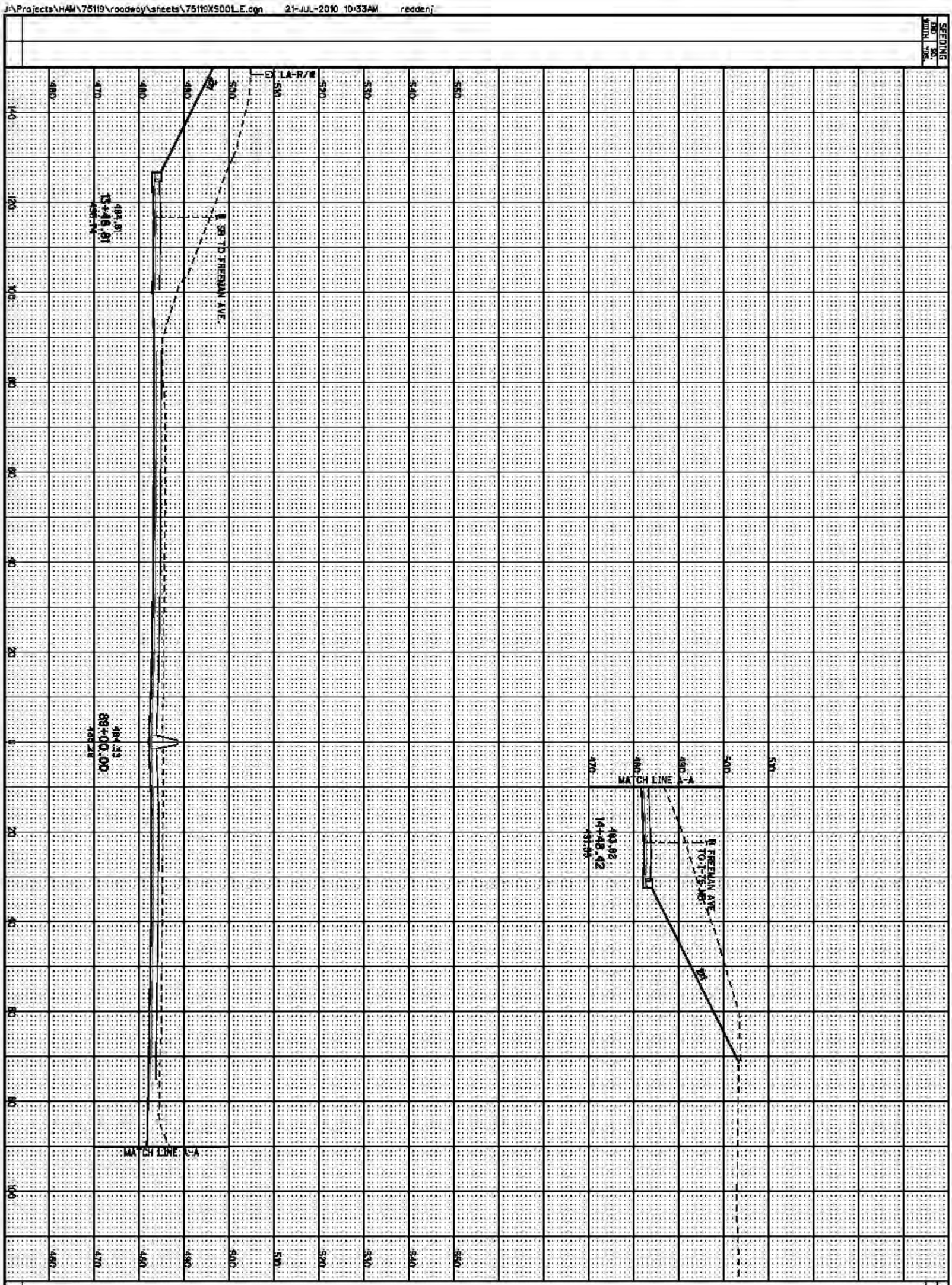


34 | HAM-71/75-0.00/0.22

CROSS SECTIONS - I-75
STA. 87+00.00 TO STA. 88+00.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:33AM reddenj

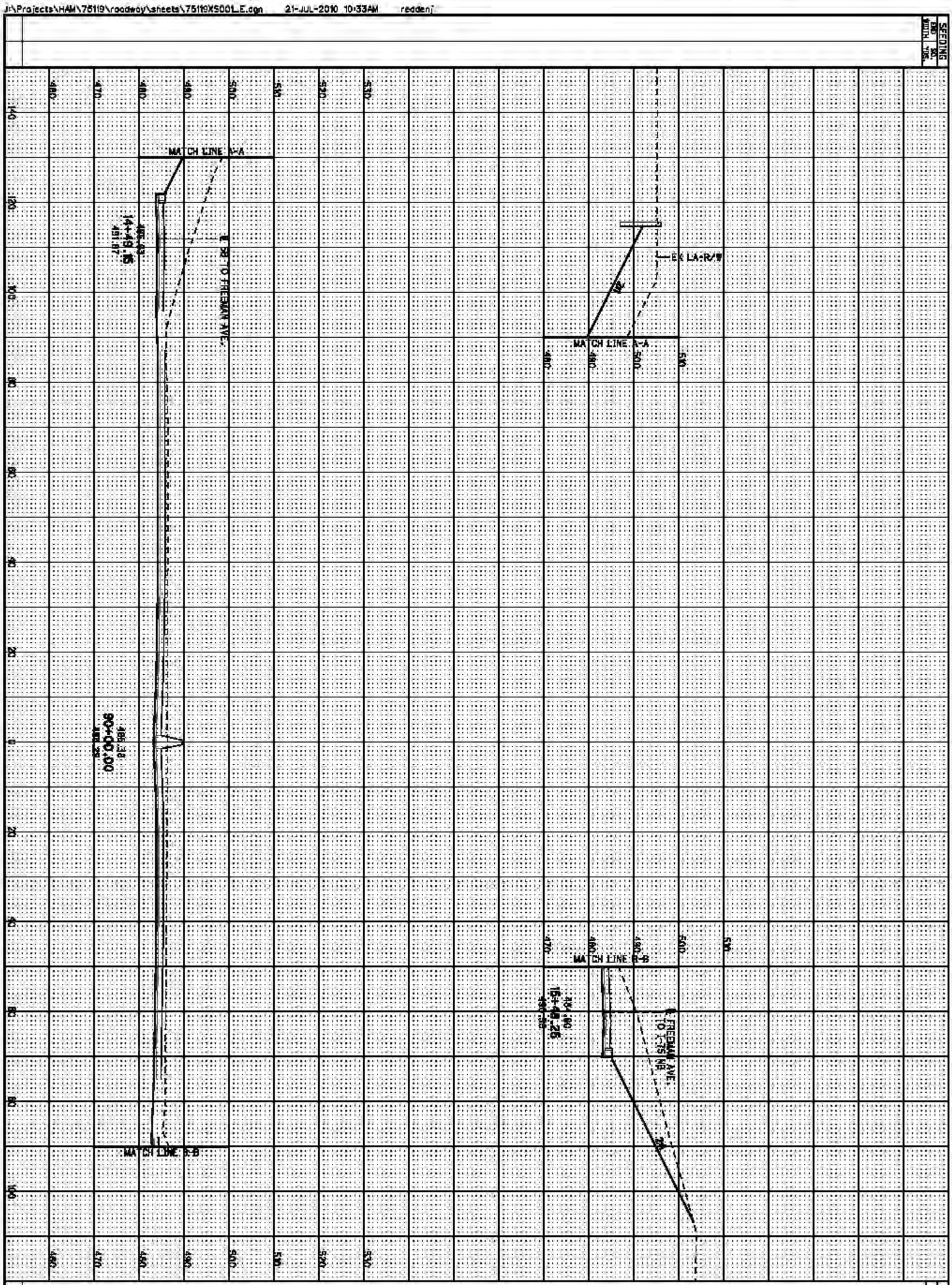


35 | HAM-71/75-0.00/0.22

CROSS SECTIONS - I-75
STA. 89+00.00

CALCULATED
CHECKED

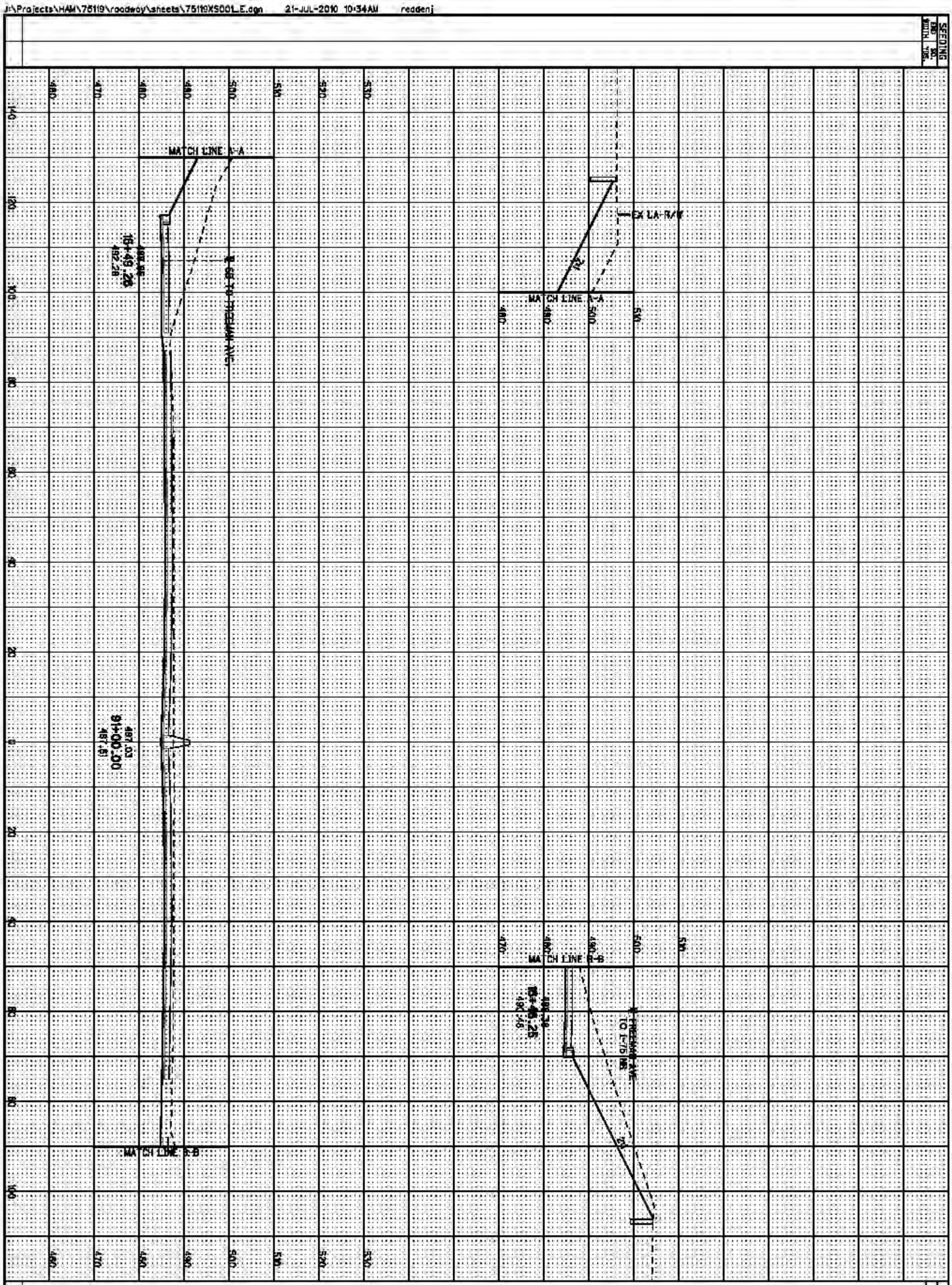
J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:33AM reddenj



HAM-71/75-0.00/0.22

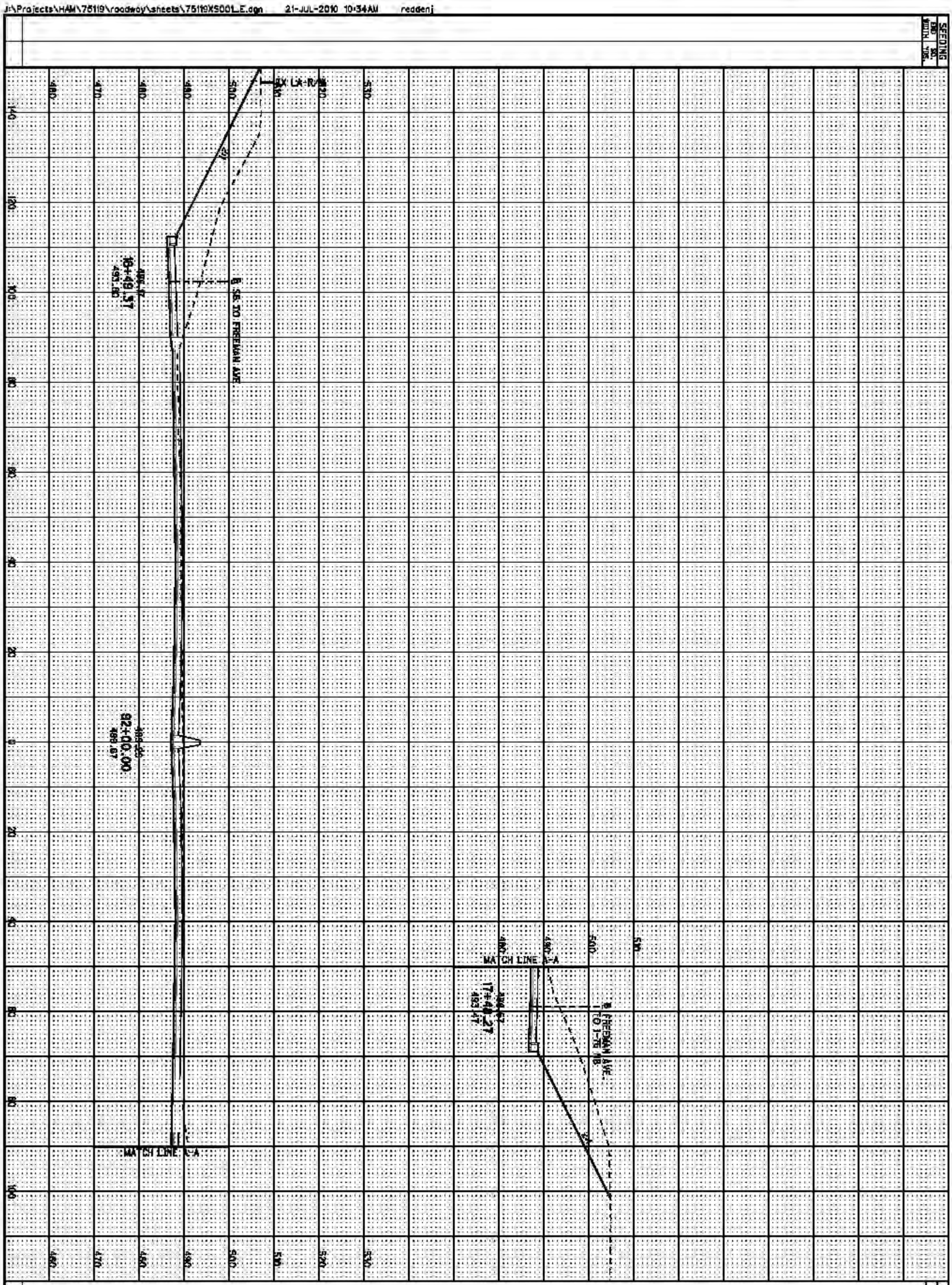
CROSS SECTIONS - I-75
STA. 80+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:34AM reddenj



37	HAM-71/75-0.00/0.22	CROSS SECTIONS - I-75 STA. 91+00.00	CALCULATED CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:34AM reddenj



38	HAM-71/75-0.00/0.22	CROSS SECTIONS - I-75 STA. 92+00.00

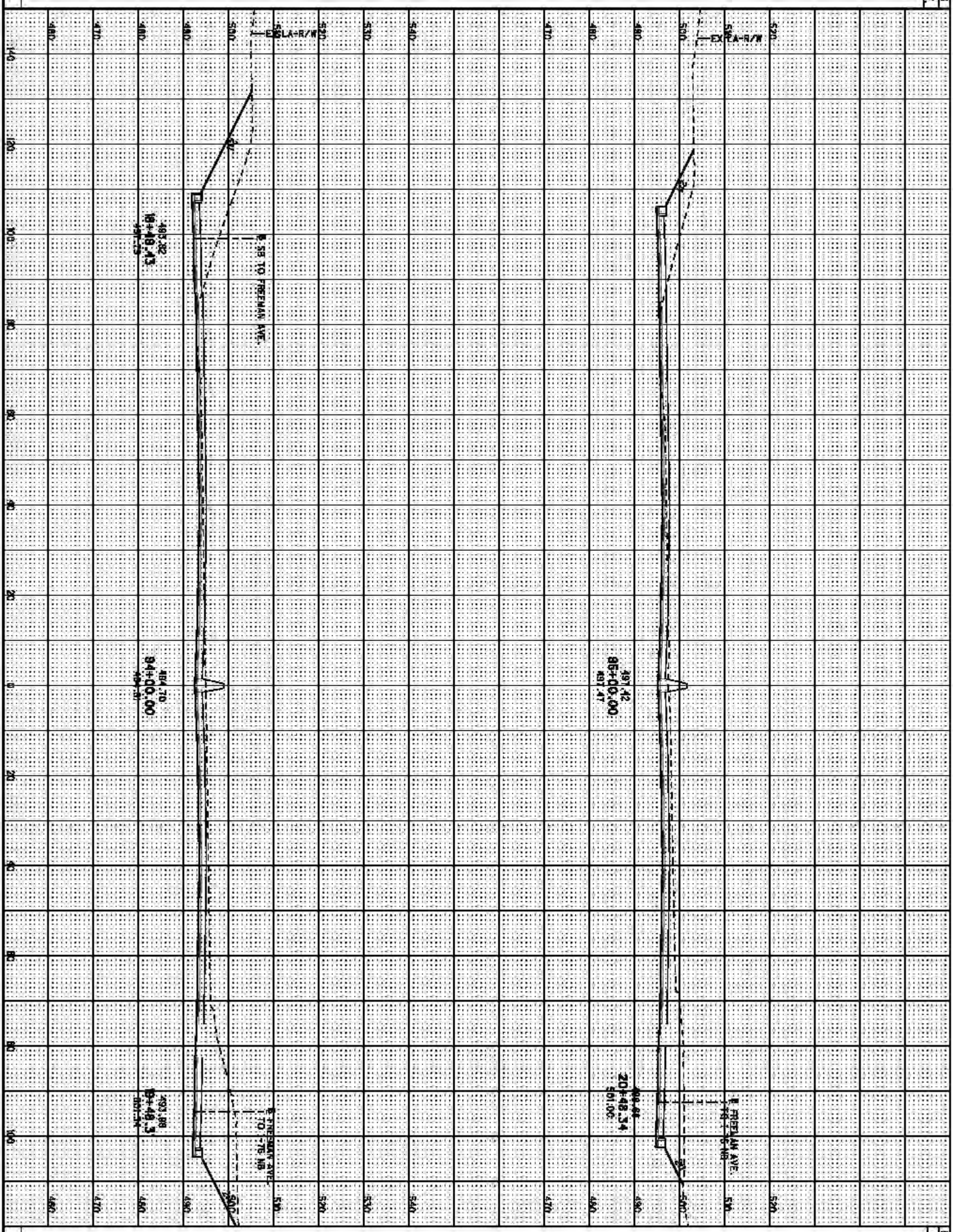
J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:34AM reddenj



39	HAM-71/75-0.00/0.22	**CROSS SECTIONS - I-75** **STA. 83+00.00**

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS001_E.dgn 21-JUL-2010 10:35AM reddenj



SEEDING	
END	SQ.
WIDTH	YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

40

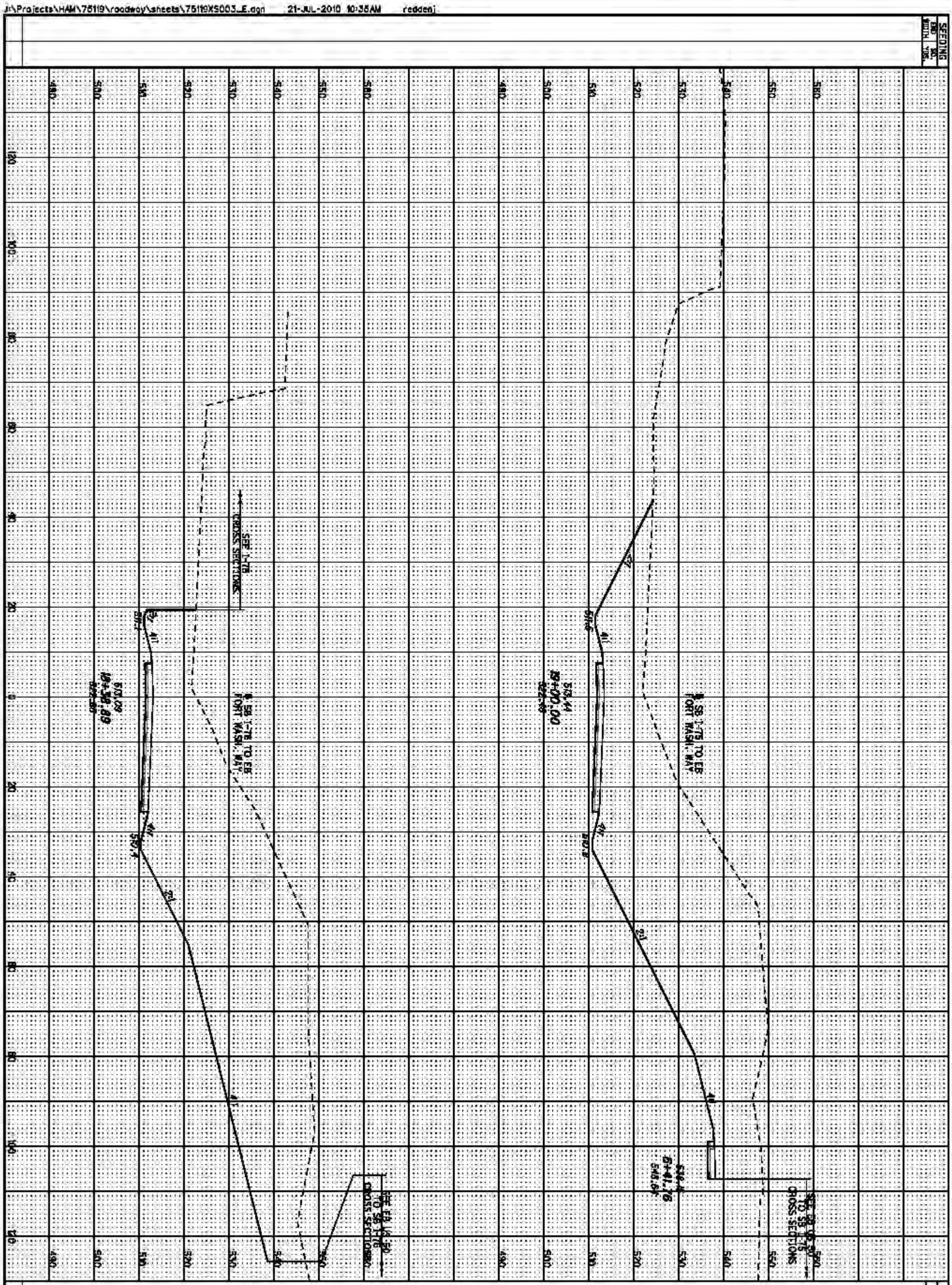
HAM-71/75-0.00/0.22

CROSS SECTIONS - I-75
STA. 94+00.00 TO STA. 95+00.00

CALCULATED

CHECKED

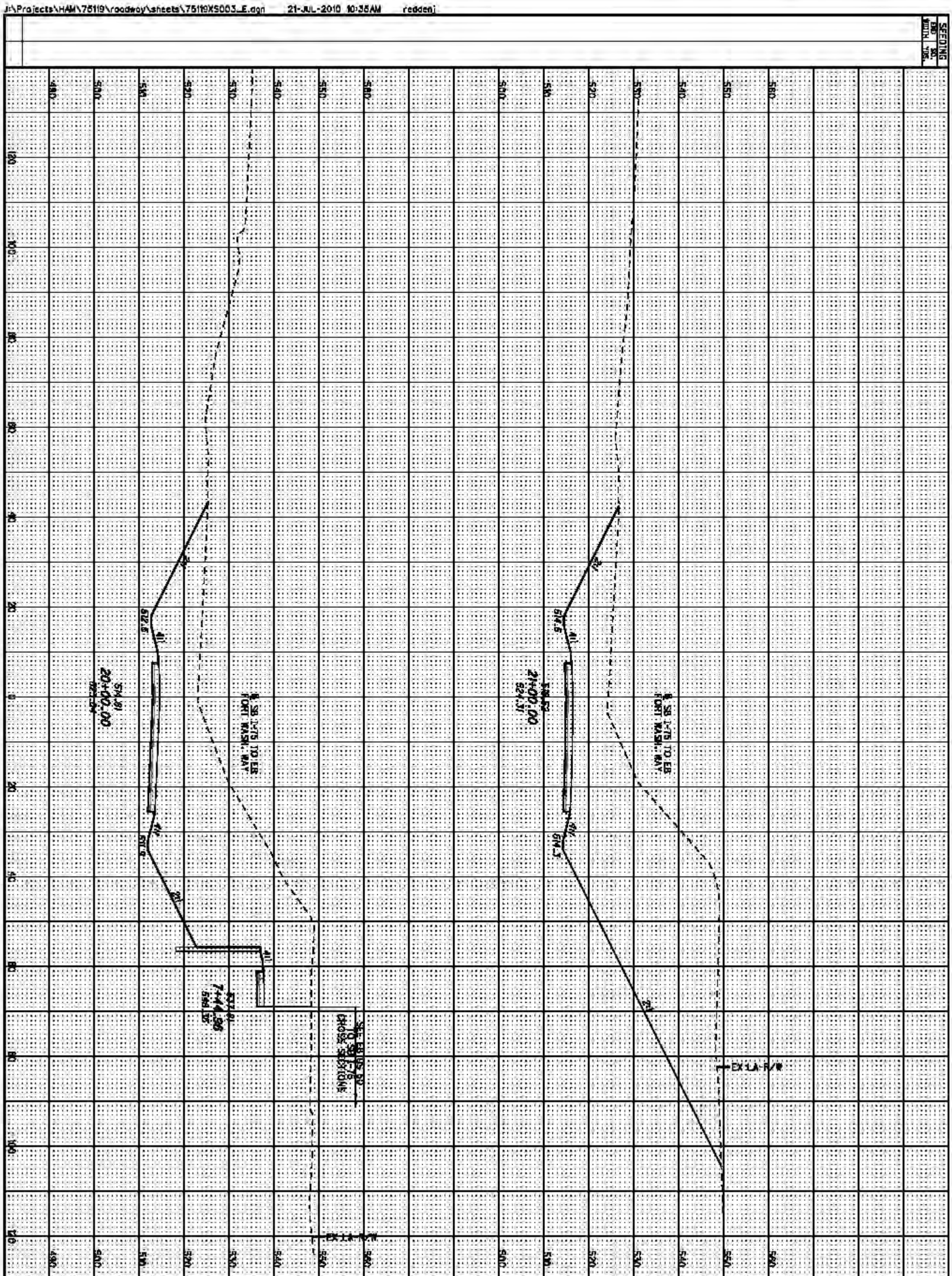
J:\Projects\HAM\75119\roadway\sheets\75119XS003_E.dgn 21-JUL-2010 10:35AM reddenj



41	HAM-71/75-0.00/0.22	CROSS SECTIONS - I-75 SB TO EB FORT WASH. WAY STA. 18+38.89 TO STA. 19+00.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS003_E.dgn 21-JUL-2010 10:35AM reddenj



42

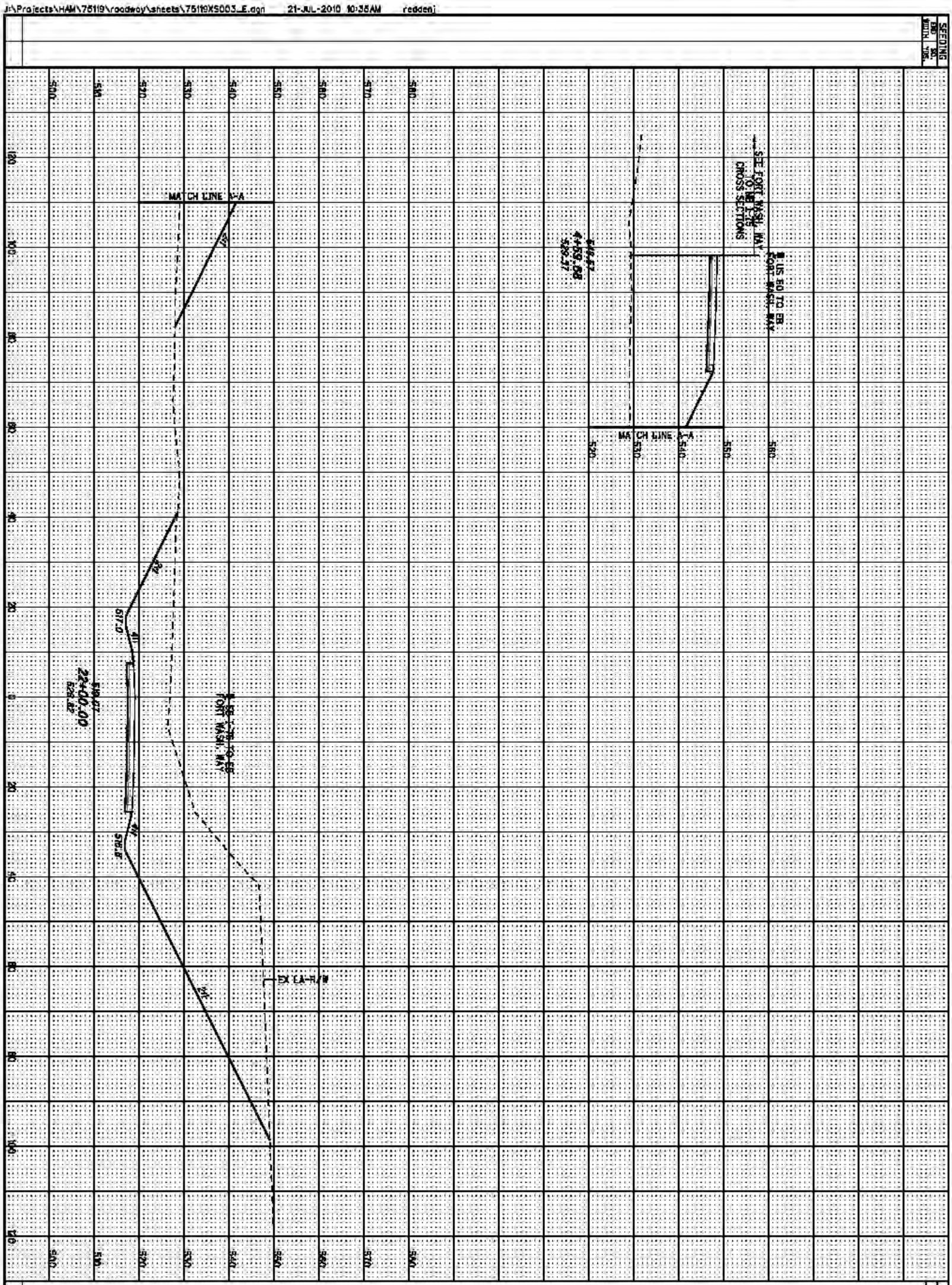
HAM-71/75-0.00/0.22

CROSS SECTIONS - I-75 SB TO EB FORT WASH. WAY
STA. 20+00.00 TO STA. 21+00.00

CALCULATED

CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS003_E.dgn 21-JUL-2010 10:35AM reddenj



43

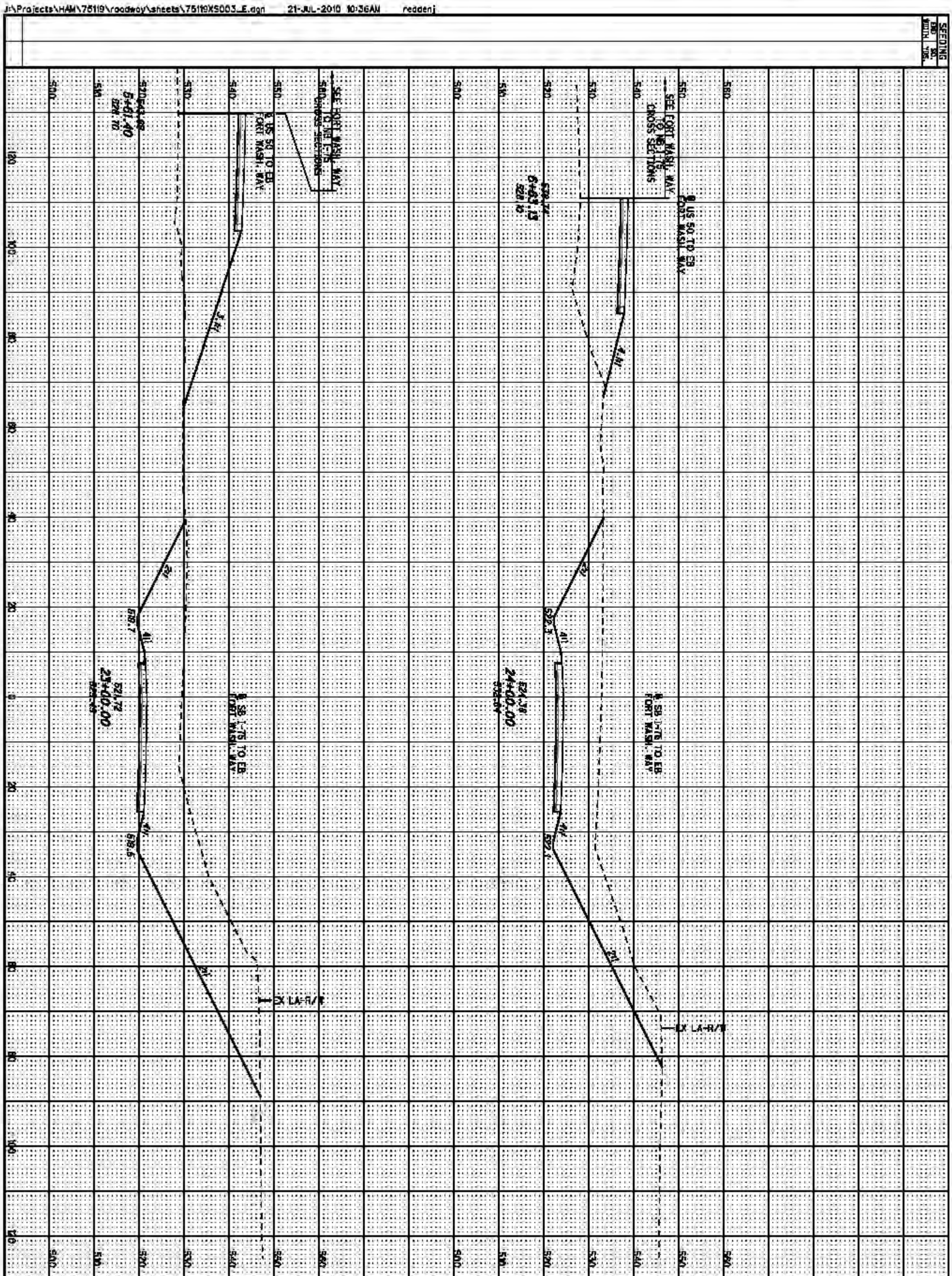
HAM-71/75-0.00/0.22

CROSS SECTIONS - I-75 SB TO EB FORT WASH. WAY
STA. 22+00.00

CALCULATED

CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS003_E.dgn 21-JUL-2010 10:36AM reddenj

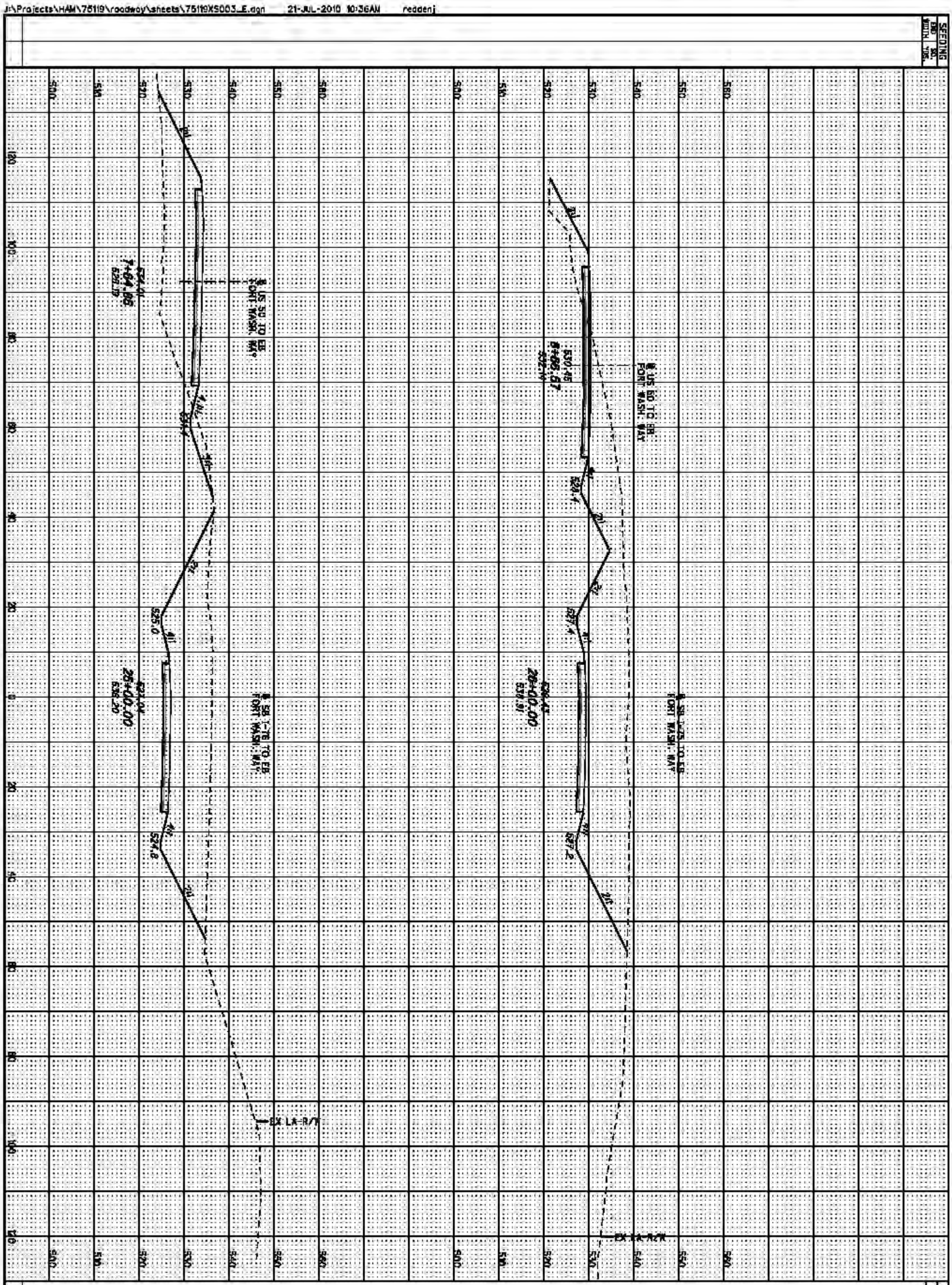


44

HAM-71/75-0.00/0.22

CROSS SECTIONS - I-75 SB TO EB FORT WASH. WAY
STA. 23+00.00 TO STA. 24+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS003_E.dgn 21-JUL-2010 10:36AM reddenj

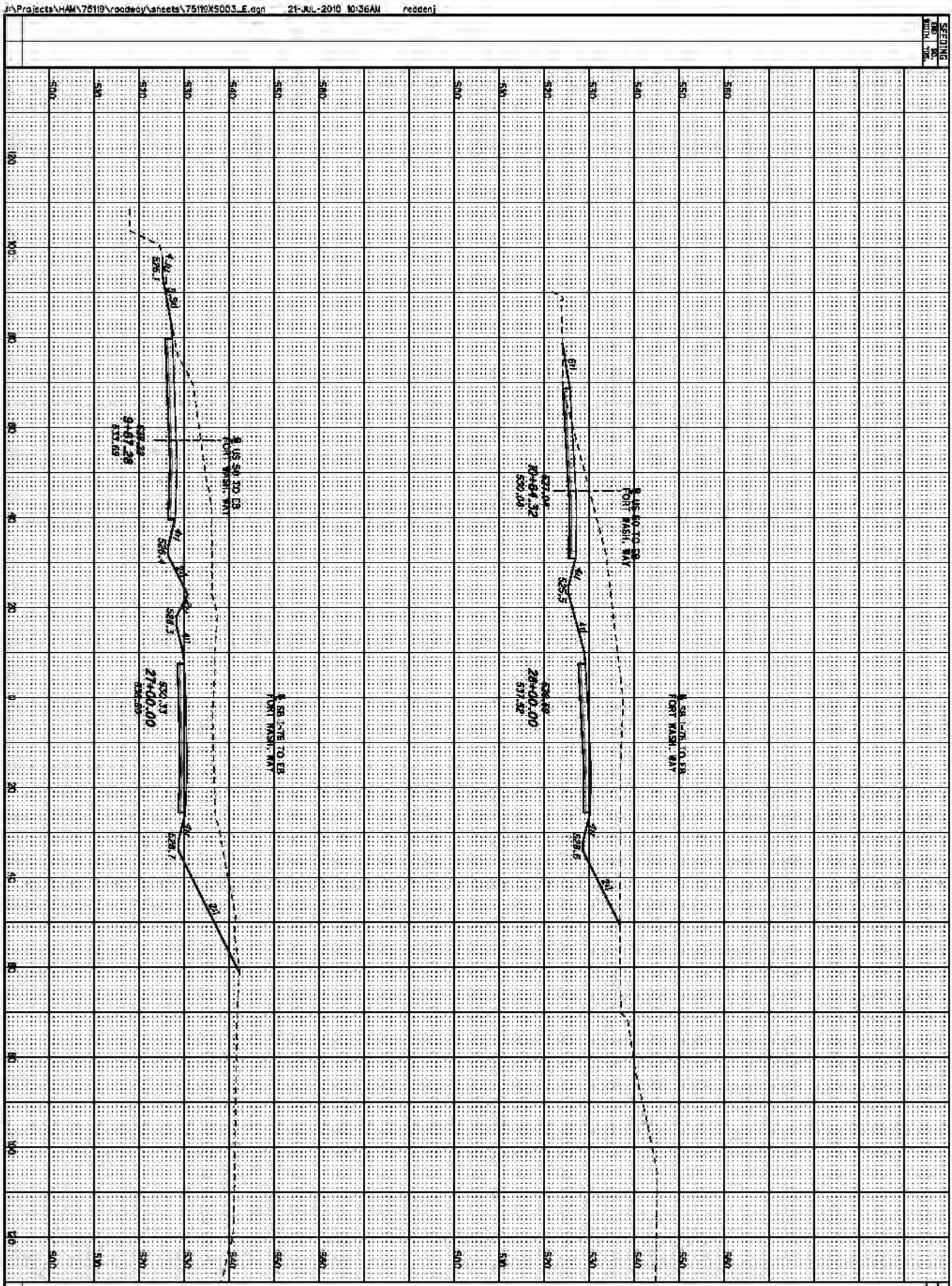


45

HAM-71/75-0.00/0.22

CROSS SECTIONS - I-75 SB TO EB FORT WASH. WAY
STA. 25+00.00 TO STA. 26+00.00

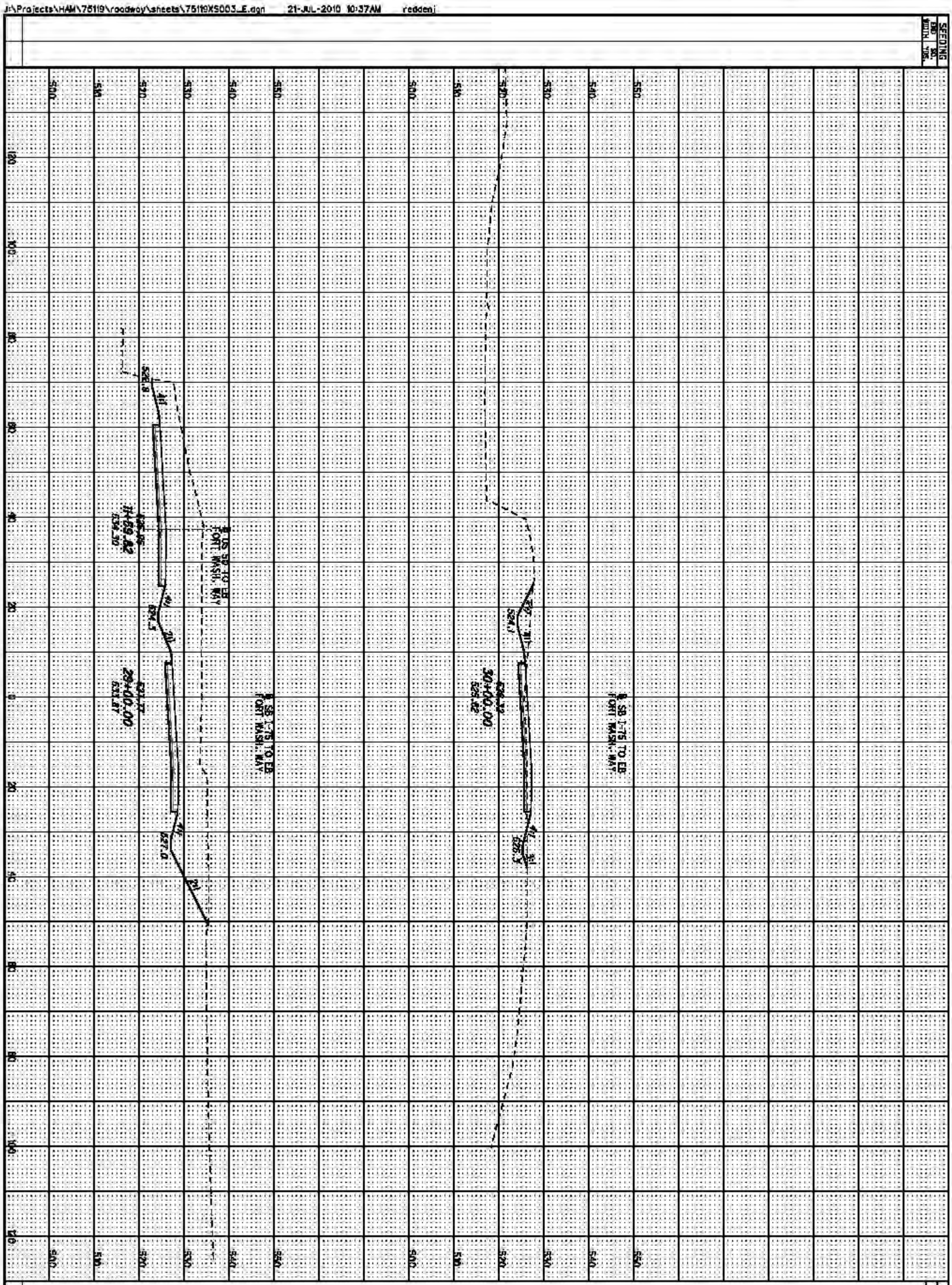
J:\Projects\HAM\75119\roadway\sheets\75119XS003_E.dgn 21-JUL-2010 10:36AM reddenj



46	HAM-71/75-0.00/0.22	CROSS SECTIONS - I-75 SB TO EB FORT WASH. WAY STA. 27+00.00 TO STA. 28+00.00

CALCULATED
CHECKED

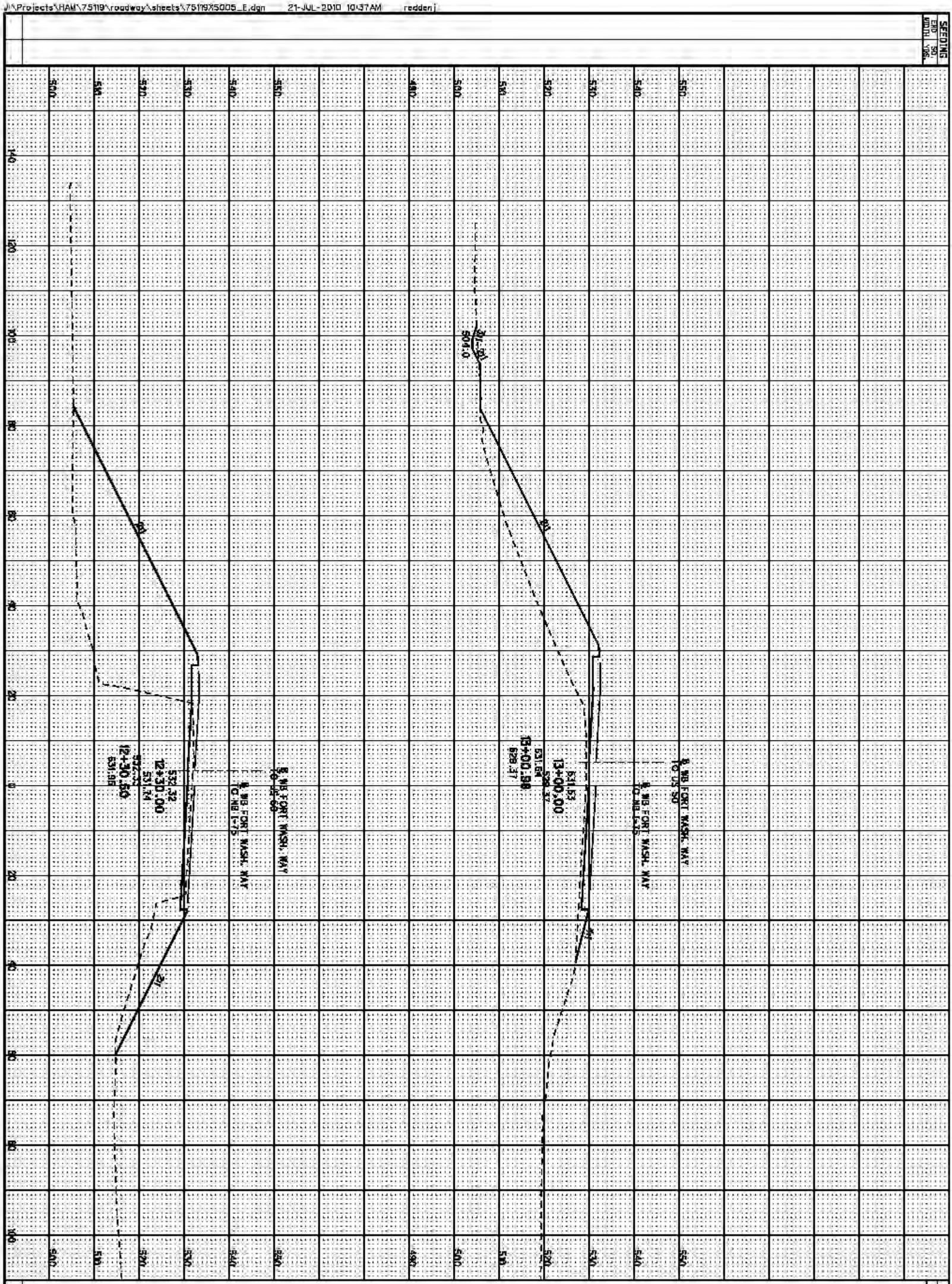
J:\Projects\HAM\75119\roadway\sheets\75119XS003_E.dgn 21-JUL-2010 10:37AM reddenj



HAM-71/75-0.00/0.22

CROSS SECTIONS - I-75 SB TO EB FORT WASH. WAY
STA. 29+00.00 TO STA. 30+00.00

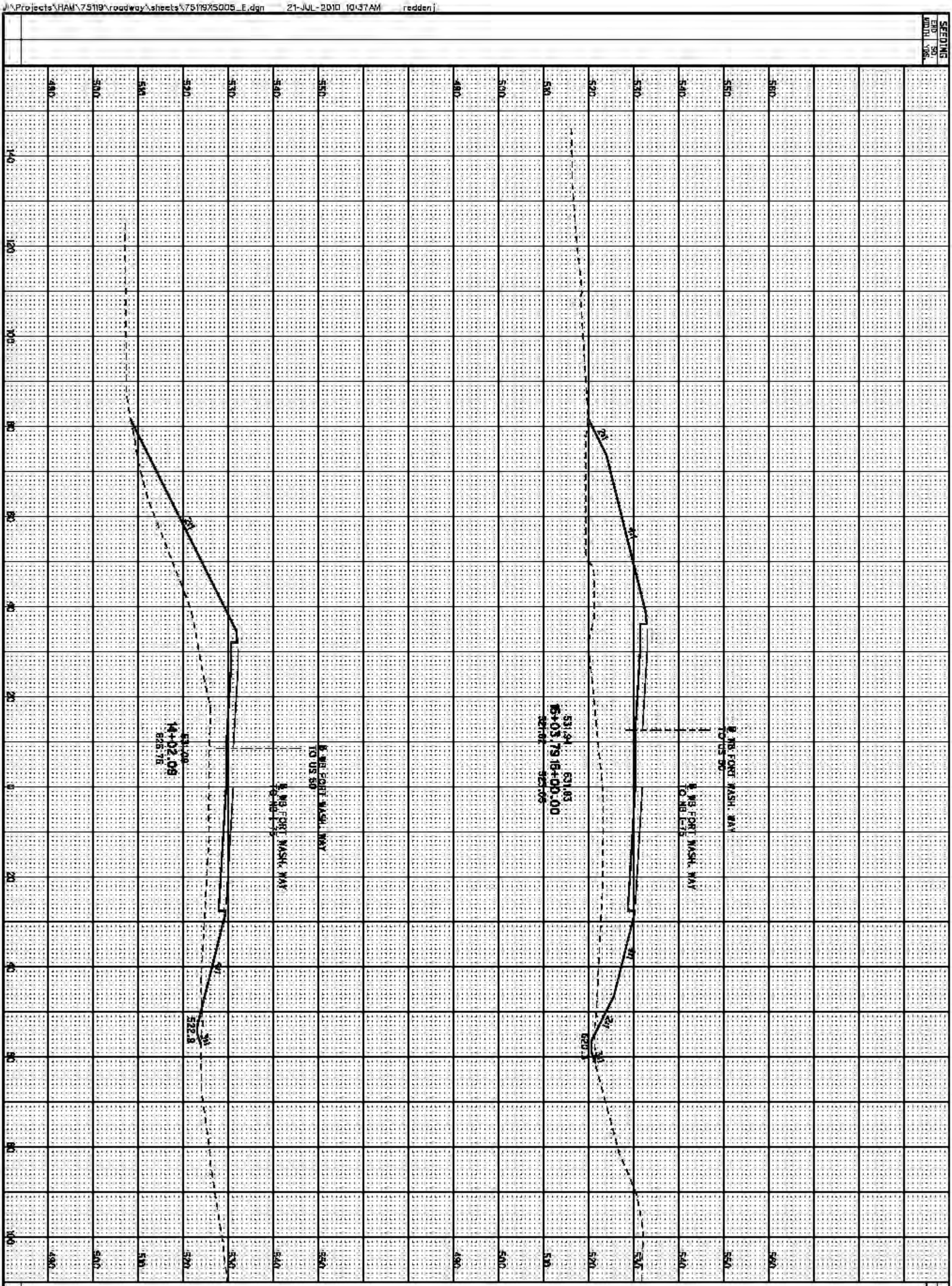
J:\Projects\HAM\75119\roadway\sheets\75119X5005_E.dgn 21-JUL-2010 10:37AM reddenj



48	HAM-71/75-0.00/0.22	CROSS SECTIONS - WB FORT WASH. WAY TO NB I-75 STA. 12+30.00 TO STA. 13+00.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119X5005_E.dgn 21-JUL-2010 10:37AM reddenj



49	HAM-71/75-0.00/0.22	CROSS SECTIONS - WB FORT WASH. WAY TO NB I-75 STA. 14+00.00 TO STA. 15+00.00	CALCULATED CHECKED

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED

CHECKED

CROSS SECTIONS - WB FORT WASH. WAY TO NB I-75

STA. 16+00.00 TO STA. 17+00.00

HAM-71/75-0.00/0.22

50

J:\Projects\HAM\75119\roadway\sheets\75119X5005_E.dgn 21-JUL-2010 10:37:AM redderj

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME		
CUT	FILL	CUT	FILL	CALCULATED
				CHECKED

B WB FORT WASH. WAY TO US 50

SEE SB I-75 TO EB FORT WASH. WAY CROSS SECTIONS

B WB FORT WASH. WAY TO NB I-75

SEE SB CD TO I-75 SB CROSS SECTIONS

544.54
19+00.00
52.81

546.39
19+13.26
519.78

B WB FORT WASH. WAY TO US 50

SEE SB I-75 TO EB FORT WASH. WAY CROSS SECTIONS

B WB FORT WASH. WAY TO NB I-75

SEE SB CD TO I-75 SB CROSS SECTIONS

541.55
18+12.40
517.26

541.17
19+00.00
516.91

580 550 540 530 520 510 500 490

140 120 100 80 60 40 20 0 20 40 60 80 100

J:\Projects\HAM\75119\roadway\sheets\75119X5005_E.dgn 21-JUL-2010 10:38AM reddenj

CROSS SECTIONS - WB FORT WASH. WAY TO NB I-75
STA. 18+00.00 TO STA. 19+00.00

HAM-71/75-0.00/0.22

51

SEEDING

END WIDTH	SQ. YDS.

END AREA		VOLUME		
CUT	FILL	CUT	FILL	CALCULATED
				CHECKED

SEE SB I-75 TO EB FORT WASH. WAY CROSS SECTIONS

B WB FORT WASH. WAY TO NB I-75

SEE SB CD TO I-75 SB CROSS SECTIONS

537.32
6+92.48
527.49

546.47
21+00.00
527.66

537.32
7+92.48
526.79

549.32
20+00.00
526.02

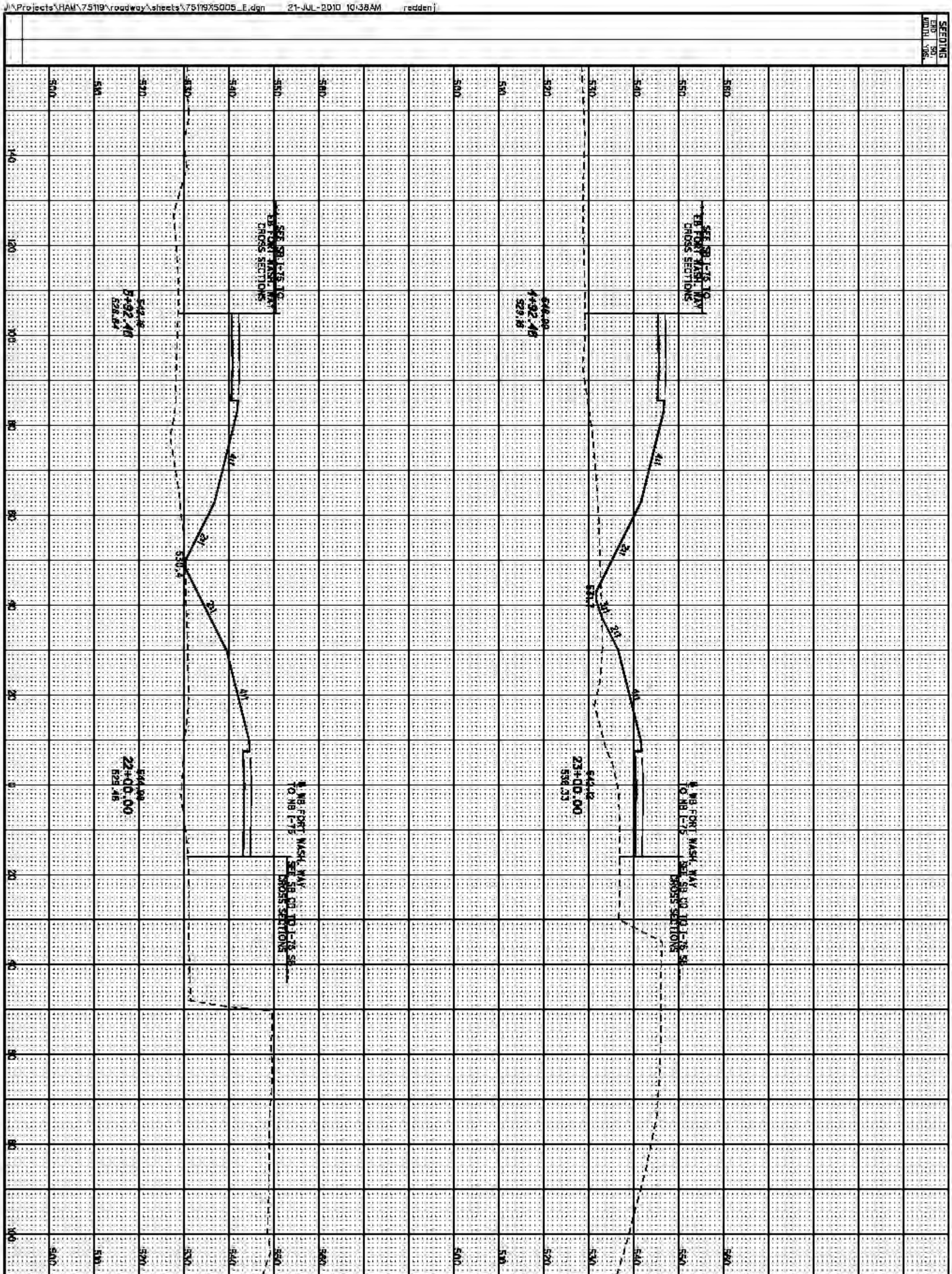
CROSS SECTIONS - WB FORT WASH. WAY TO NB I-75
STA. 20+00.00 TO STA. 21+00.00

HAM-71/75-0.00/0.22

52

J:\Projects\HAM\75119\roadway\sheets\75119X5005_E.dgn 21-JUL-2010 10:38AM redden

J:\Projects\HAM\75119\roadway\sheets\75119X5005_E.dgn 21-JUL-2010 10:38AM reddenj

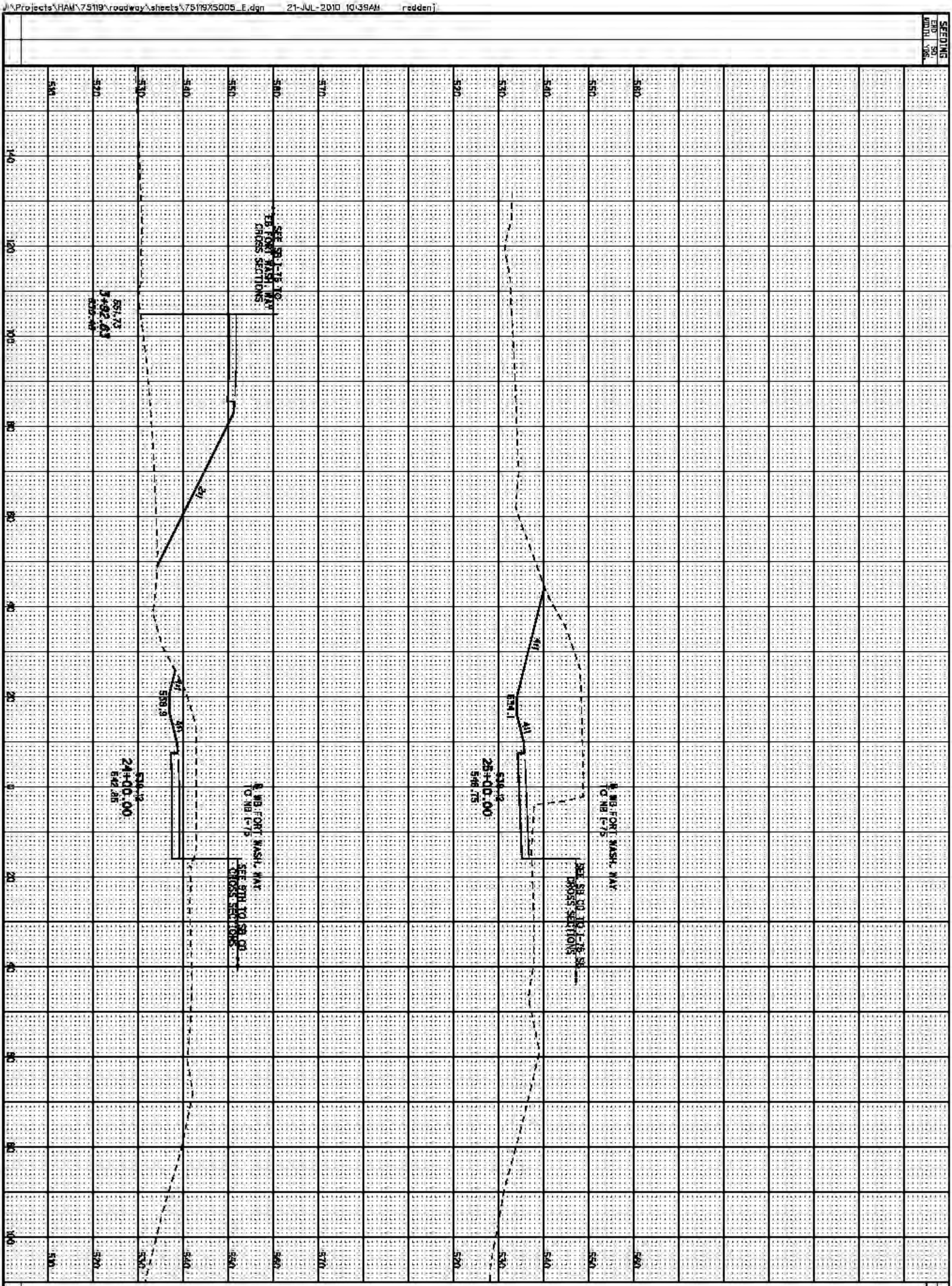


53

HAM-71/75-0.00/0.22

CROSS SECTIONS - WB FORT WASH. WAY TO NB I-75
STA. 22+00.00 TO STA. 23+00.00

J:\Projects\HAM\75119\roadway\sheets\75119X5005_E.dgn 21-JUL-2010 10:39AM redden1



54

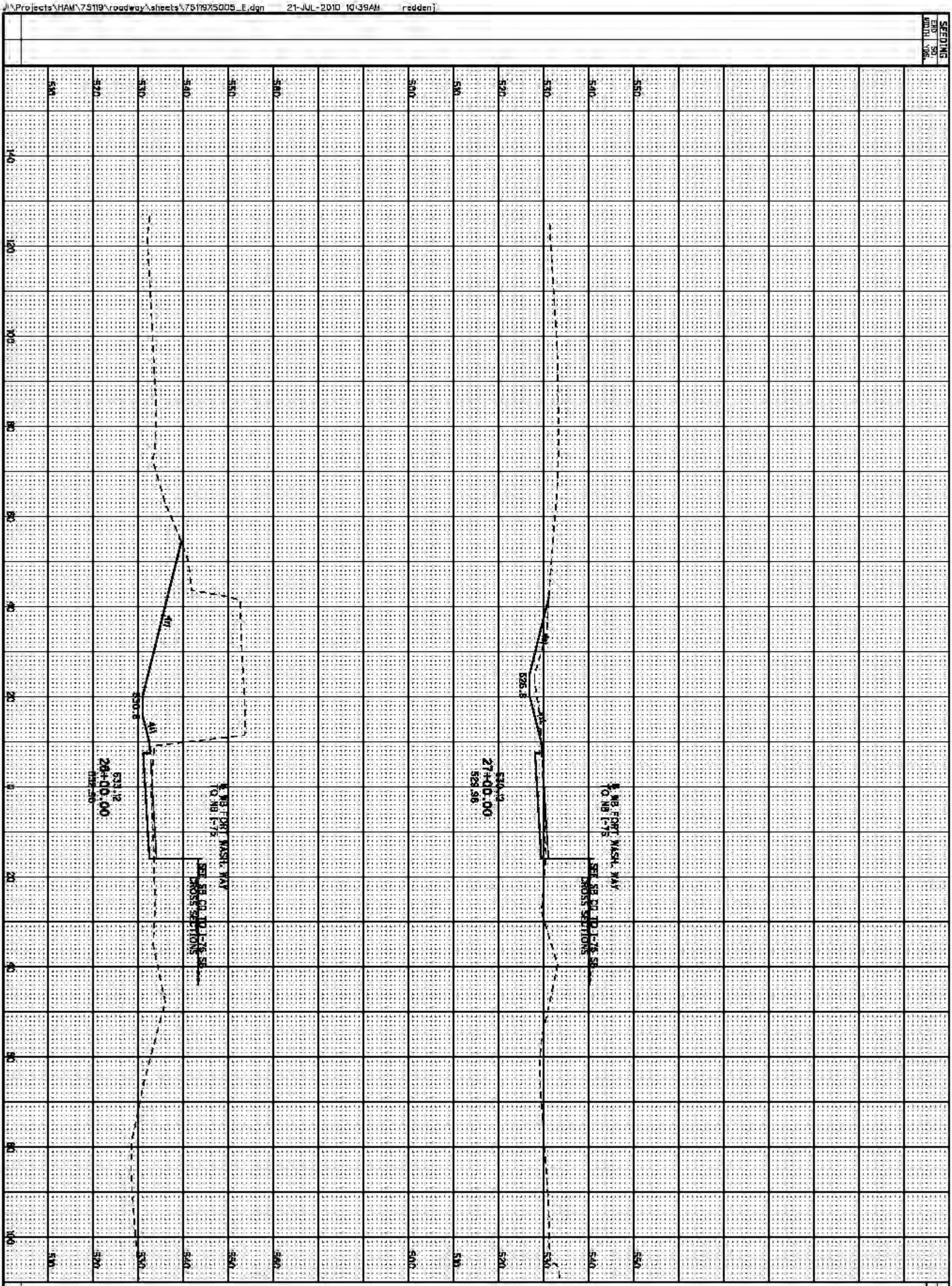
HAM-71/75-0.00/0.22

CROSS SECTIONS - WB FORT WASH. WAY TO NB I-75
STA. 24+00.00 TO STA. 25+00.00

CALCULATED

CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119X5005_E.dgn 21-JUL-2010 10:39AM reddenj



55

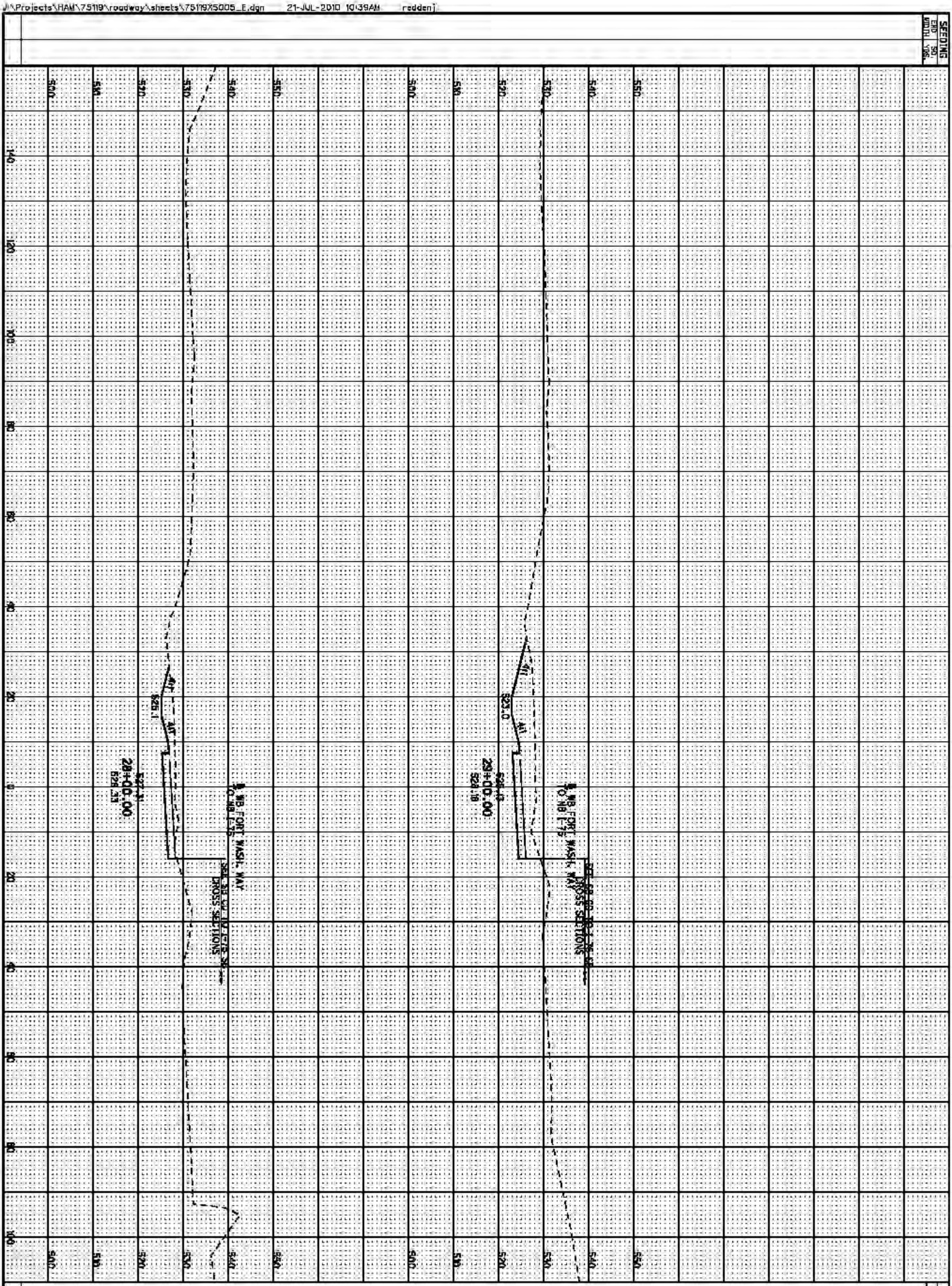
HAM-71/75-0.00/0.22

CROSS SECTIONS - WB FORT WASH. WAY TO NB I-75
STA. 26+00.00 TO STA. 27+00.00

CALCULATED

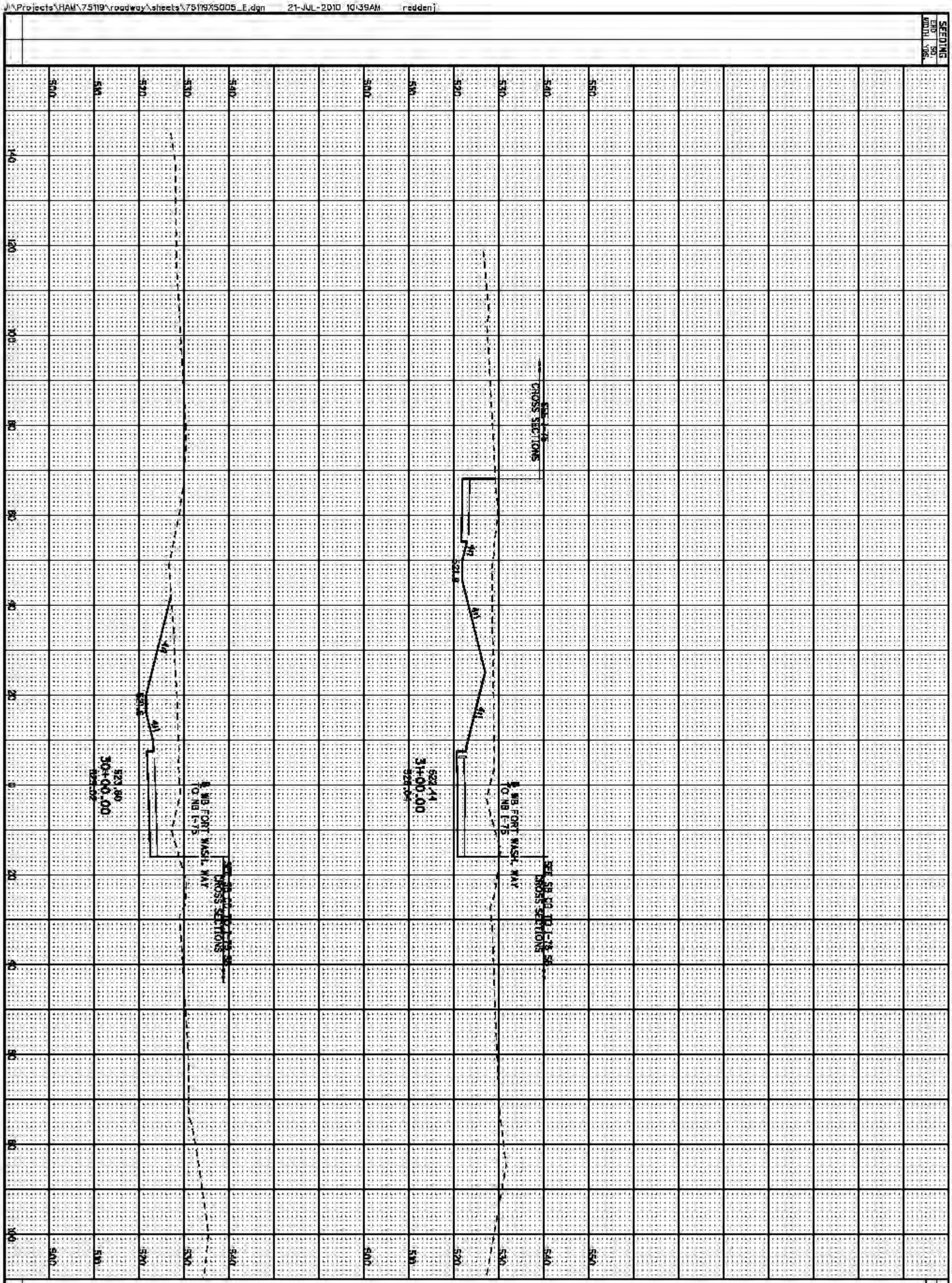
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119X5005_E.dgn 21-JUL-2010 10:39AM reddenj



56	HAM-71/75-0.00/0.22	CROSS SECTIONS - WB FORT WASH. WAY TO NB I-75 STA. 28+00.00 TO STA. 29+00.00	CALCULATED CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119X5005_E.dgn 21-JUL-2010 10:39AM reddenj

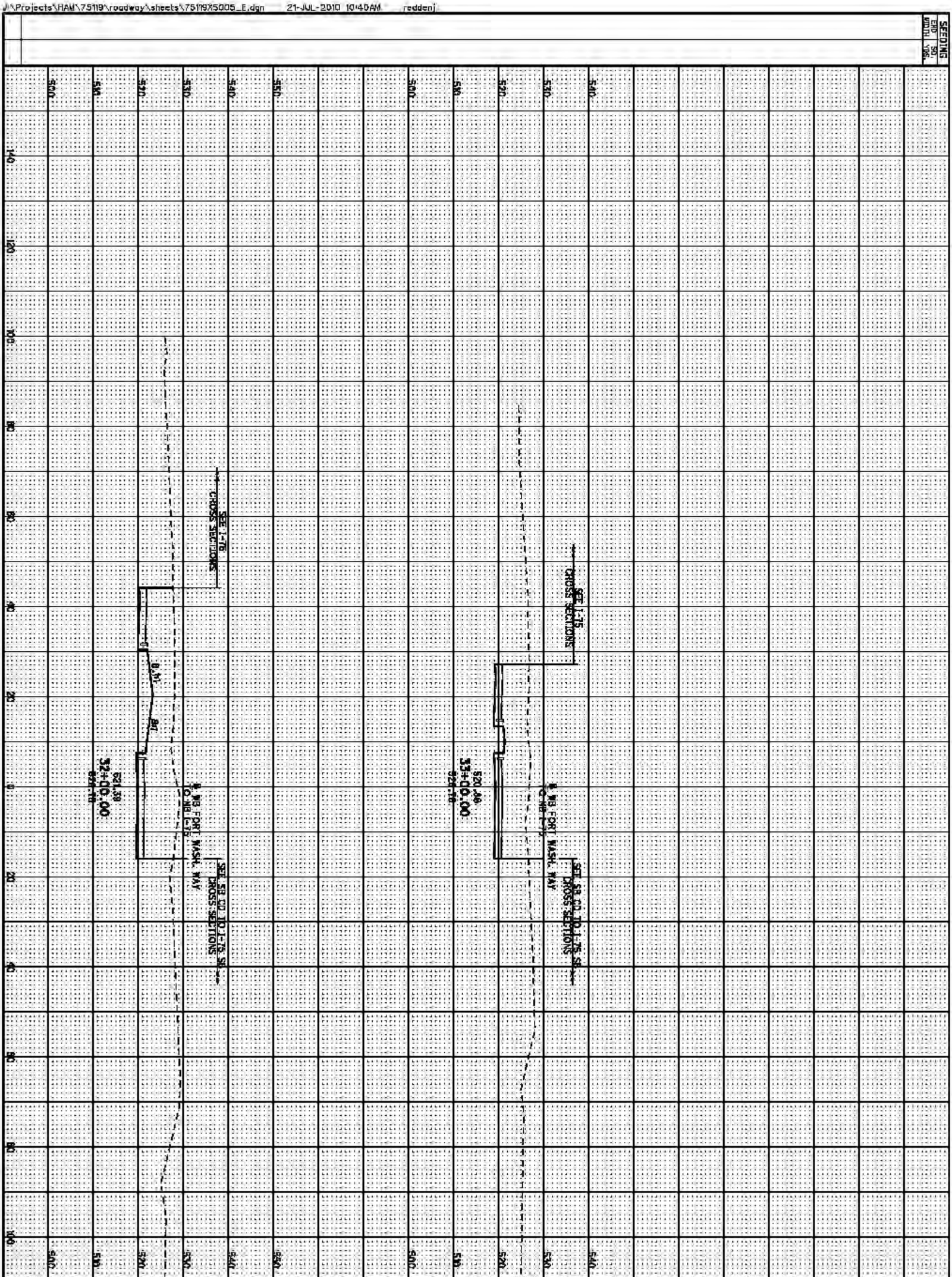


57

HAM-71/75-0.00/0.22

CROSS SECTIONS - WB FORT WASH. WAY TO NB I-75
STA. 30+00.00 TO STA. 31+00.00

J:\Projects\HAM\75119\roadway\sheets\75119X5005_E.dgn 21-JUL-2010 10:40AM reddenj



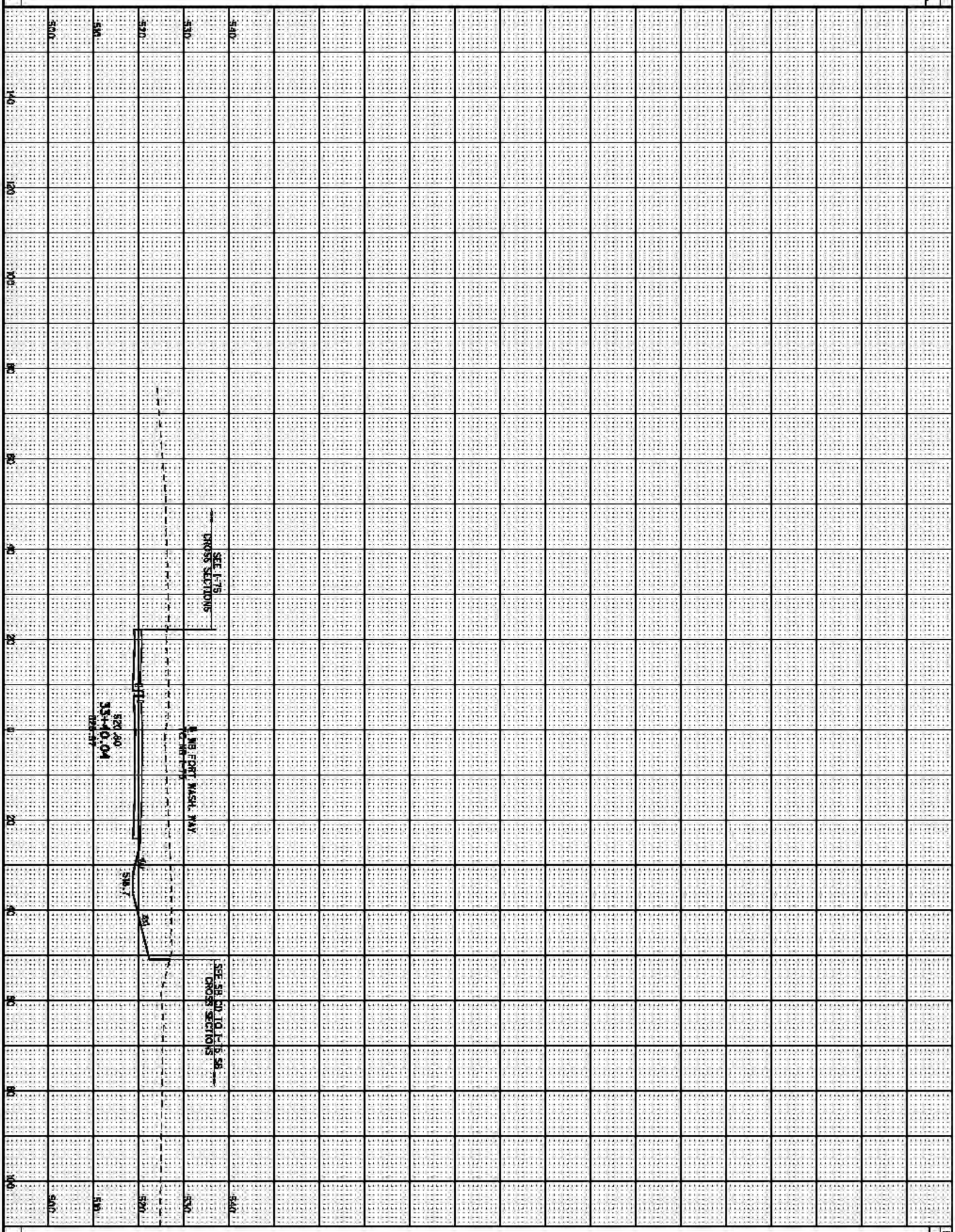
58

HAM-71/75-0.00/0.22

CROSS SECTIONS - WB FORT WASH. WAY TO NB I-75
STA. 32+00.00 TO STA. 33+00.00

J:\Projects\HAM\75119\roadway\sheets\75119X5005_E.dgn 21-JUL-2010 10:40AM reddenj

SEEDING
END SQ.
WIDTH YDS.



END AREA
CUT FILL

VOLUME
CUT FILL

59

HAM-71/75-0.00/0.22

CROSS SECTIONS - WB FORT WASH. WAY TO NB I-75
STA. 33+40.04

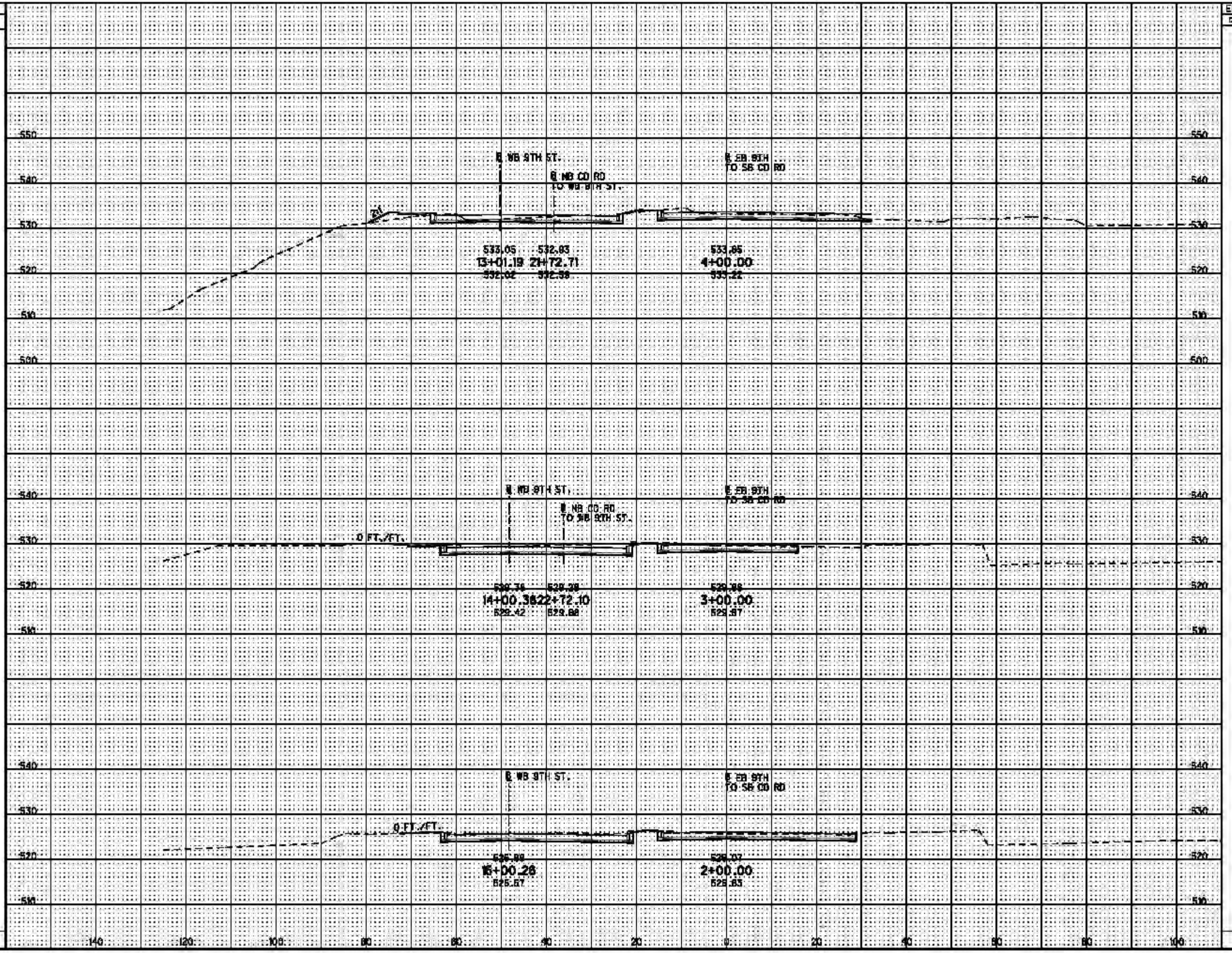
CALCULATED
CHECKED

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED

CHECKED



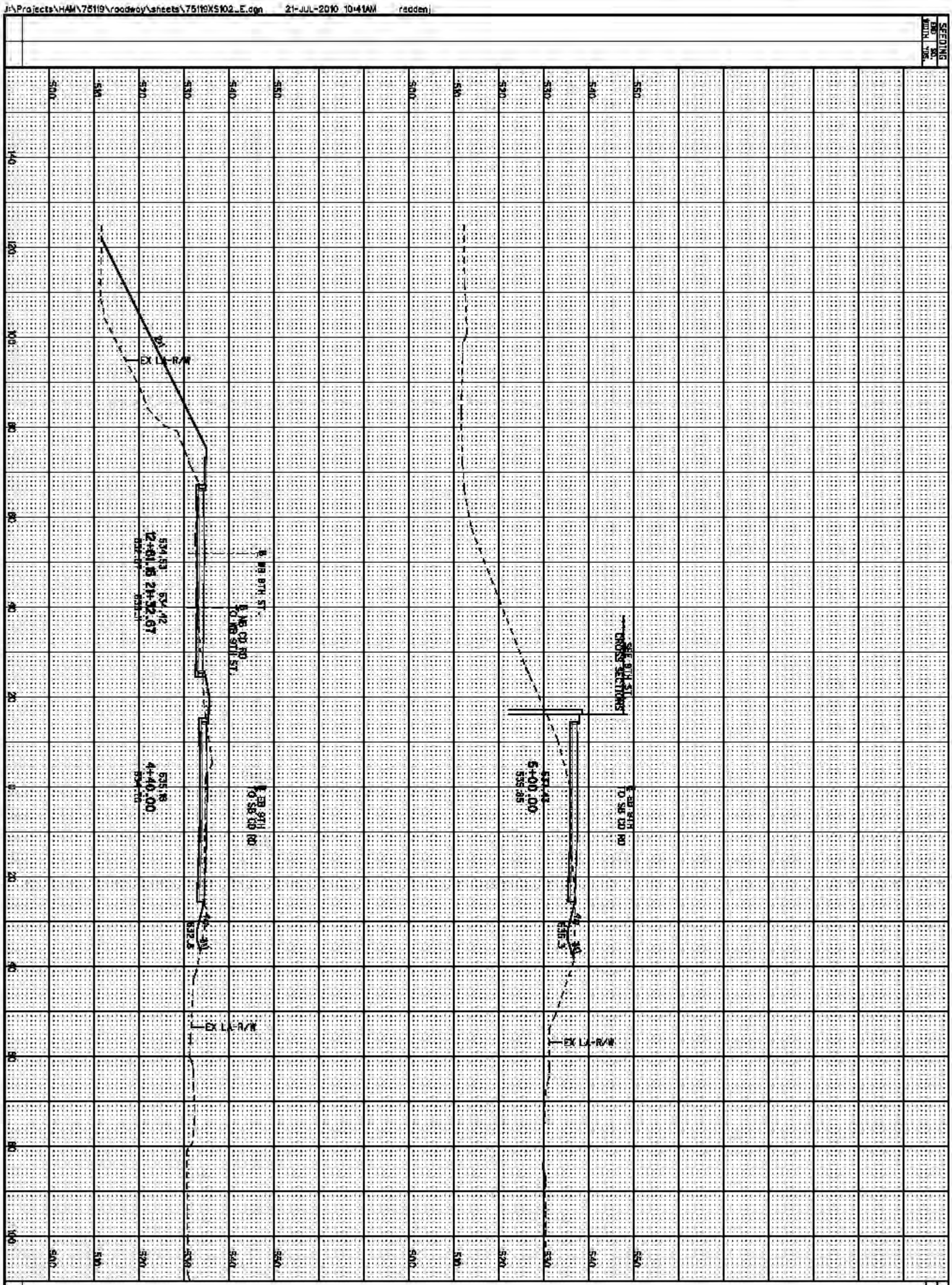
CROSS SECTIONS - SB CD RD TO I-75 SB
STA. 2+00.00 TO STA. 4+00.00

HAM-71/75-0.00/0.22

60

J:\Projects\HAM\75119\roadway\sheets\75119XS02_E.dgn 21-JUL-2010 10:40AM redeni

J:\Projects\HAM\75119\roadway\sheets\75119XS102_E.dgn 21-JUL-2010 10:41AM redden



61	HAM-71/75-0.00/0.22	CROSS SECTIONS - SB CD RD TO I-75 SB STA. 4+40.00 TO STA. 5+00.00

CALCULATED
CHECKED

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED

CHECKED

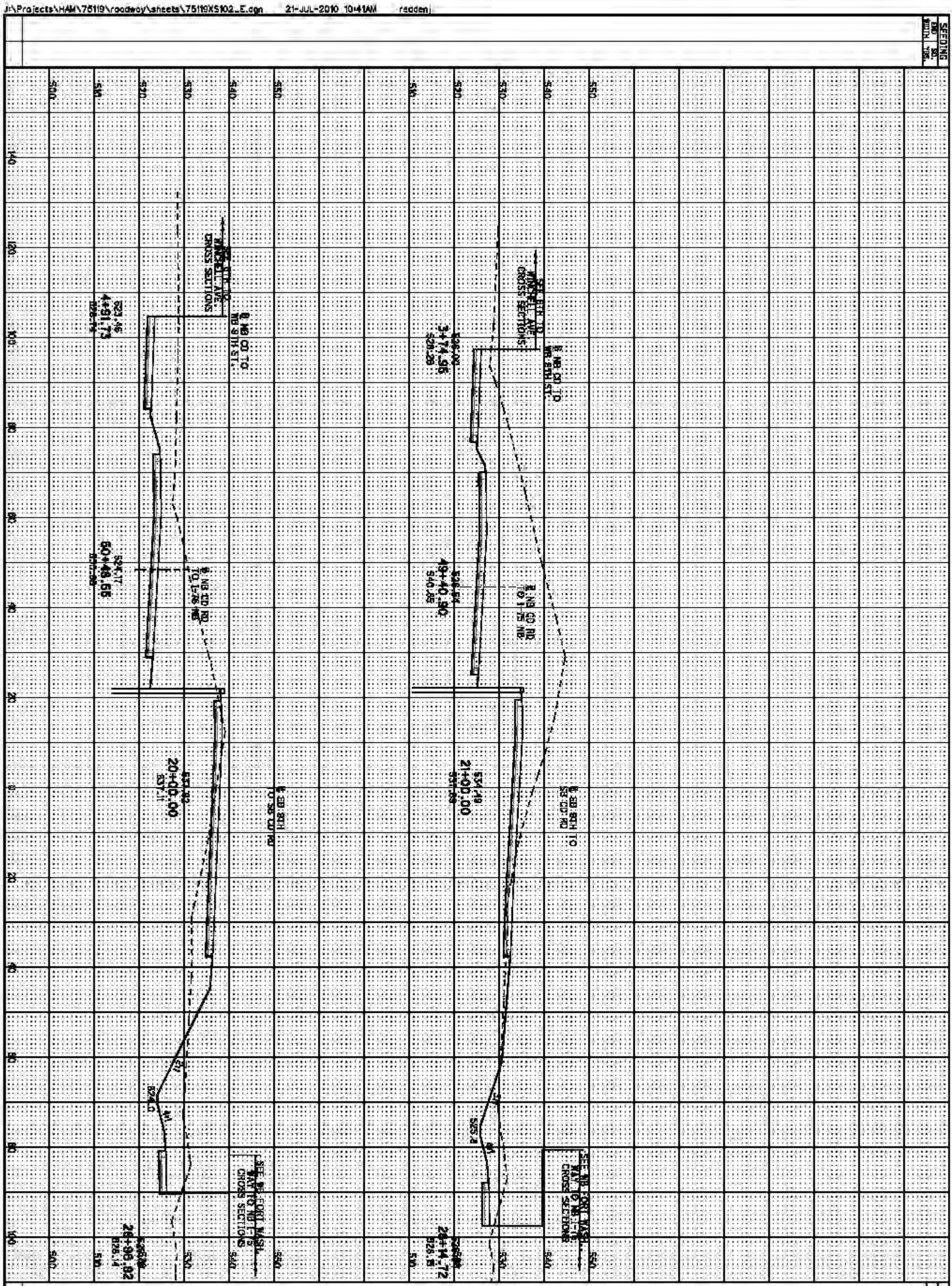
CROSS SECTIONS - SB CD RD TO I-75 SB
STA. 18+00.00 TO STA. 19+00.00

HAM-71/75-0.00/0.22

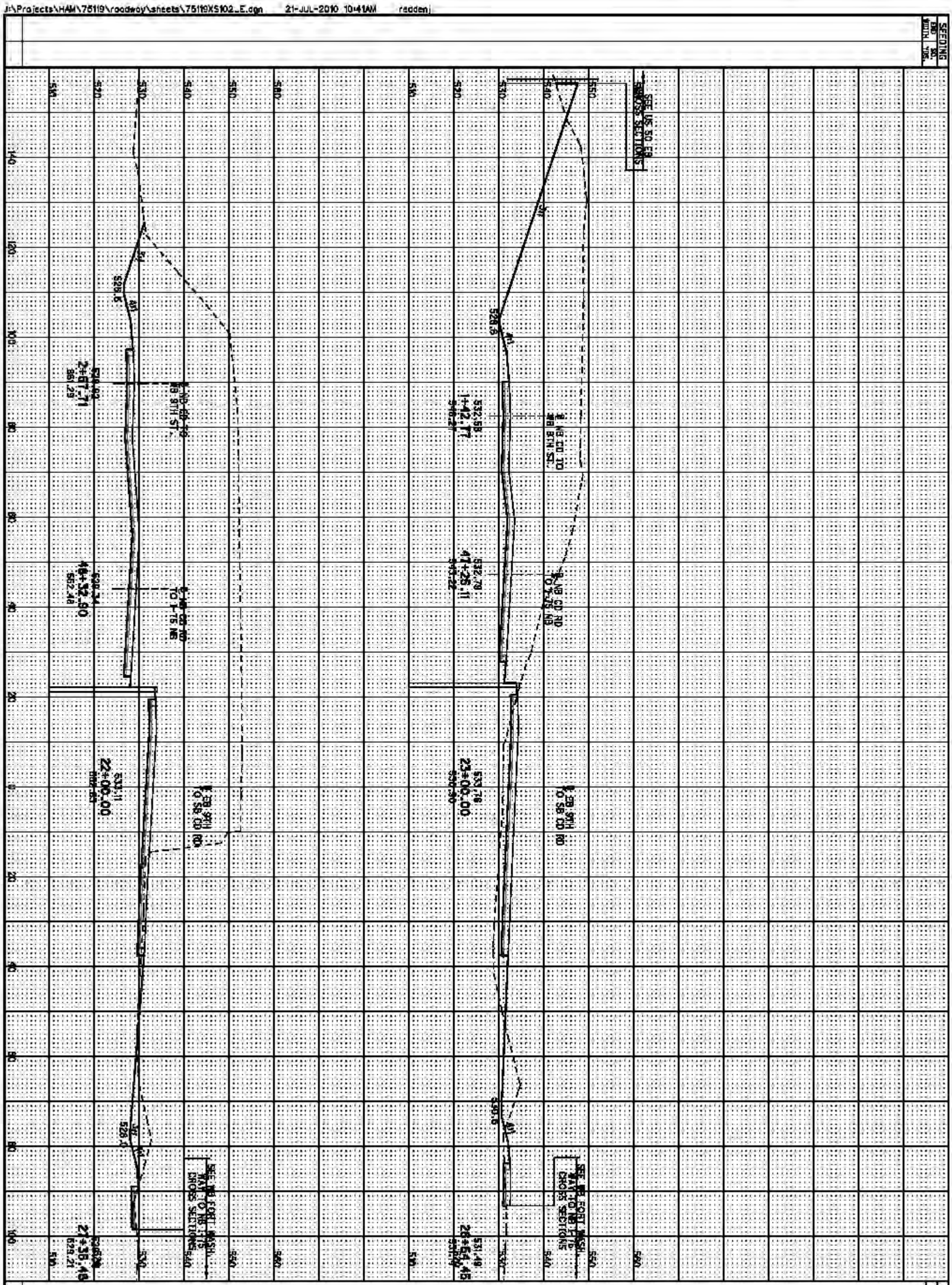
52

J:\Projects\HAM\75119\roadway\sheets\75119XS02_E.dgn 21-JUL-2010 10:41AM radden

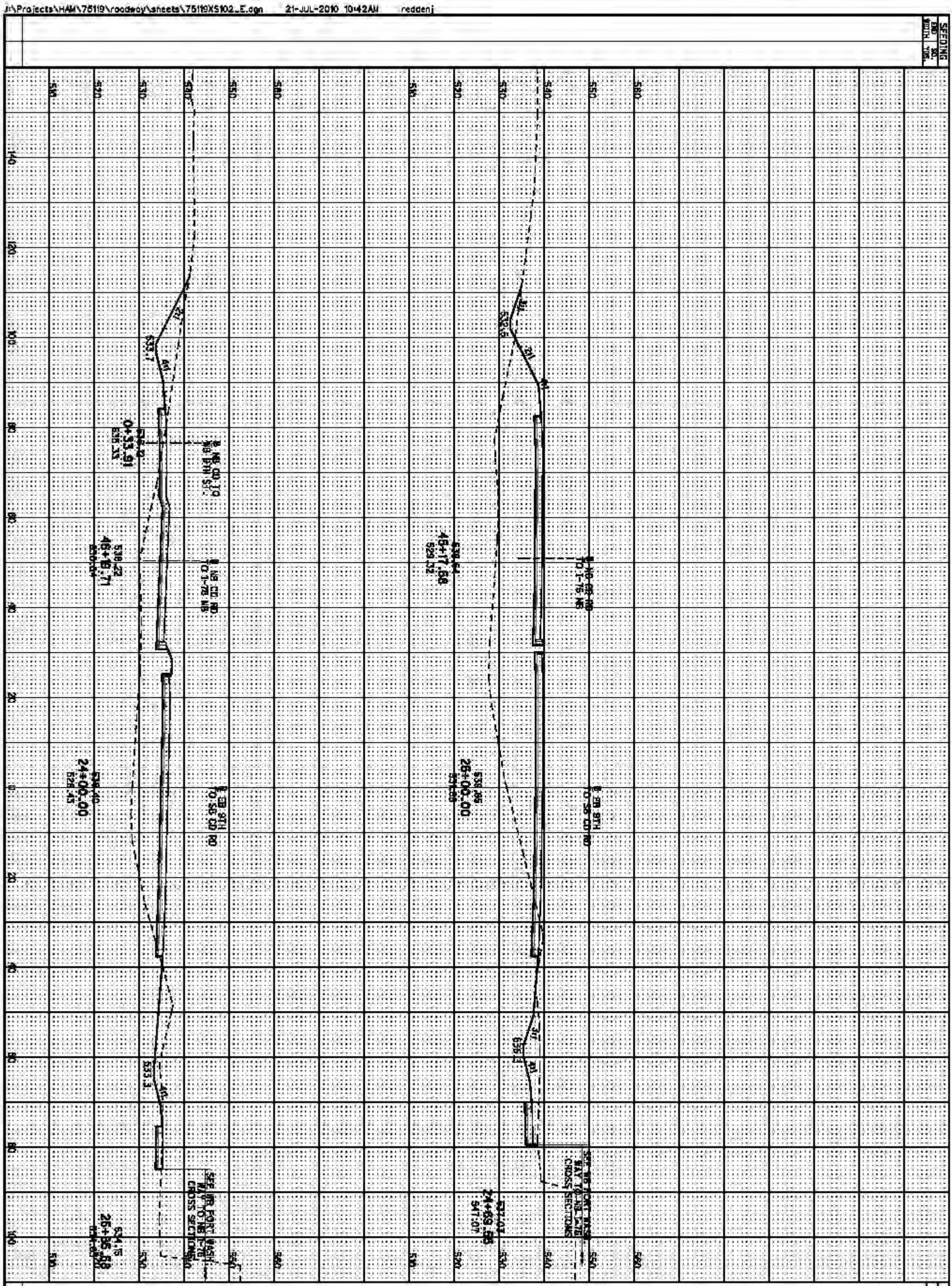
J:\Projects\HAM\75119\roadway\sheets\75119XS102_E.dgn 21-JUL-2010 10:41AM redden



J:\Projects\HAM\75119\roadway\sheets\75119XS102_E.dgn 21-JUL-2010 10:41AM redden


SEEDING
END AREA VOLUME
CUT FILL CUT FILL
SEE US 50 EB CROSS SECTIONS
SEE NB FORT WASH WAY TO NB I-75 CROSS SECTIONS
SEE NB FORT WASH WAY TO NB I-75 CROSS SECTIONS
EB 9TH ST
NB CD TO EB 9TH ST
NB CD RD TO I-75 NB
EB 9TH TO SB CD RD
EB 9TH TO SB CD RD
NB CD RD TO I-75 NB
532.58
1+42.11
532.79
1+35.11
533.78
23+00.00
533.11
22+00.00
531.49
26+54.45
528.27
27+35.19
528.27
528.27
528.27

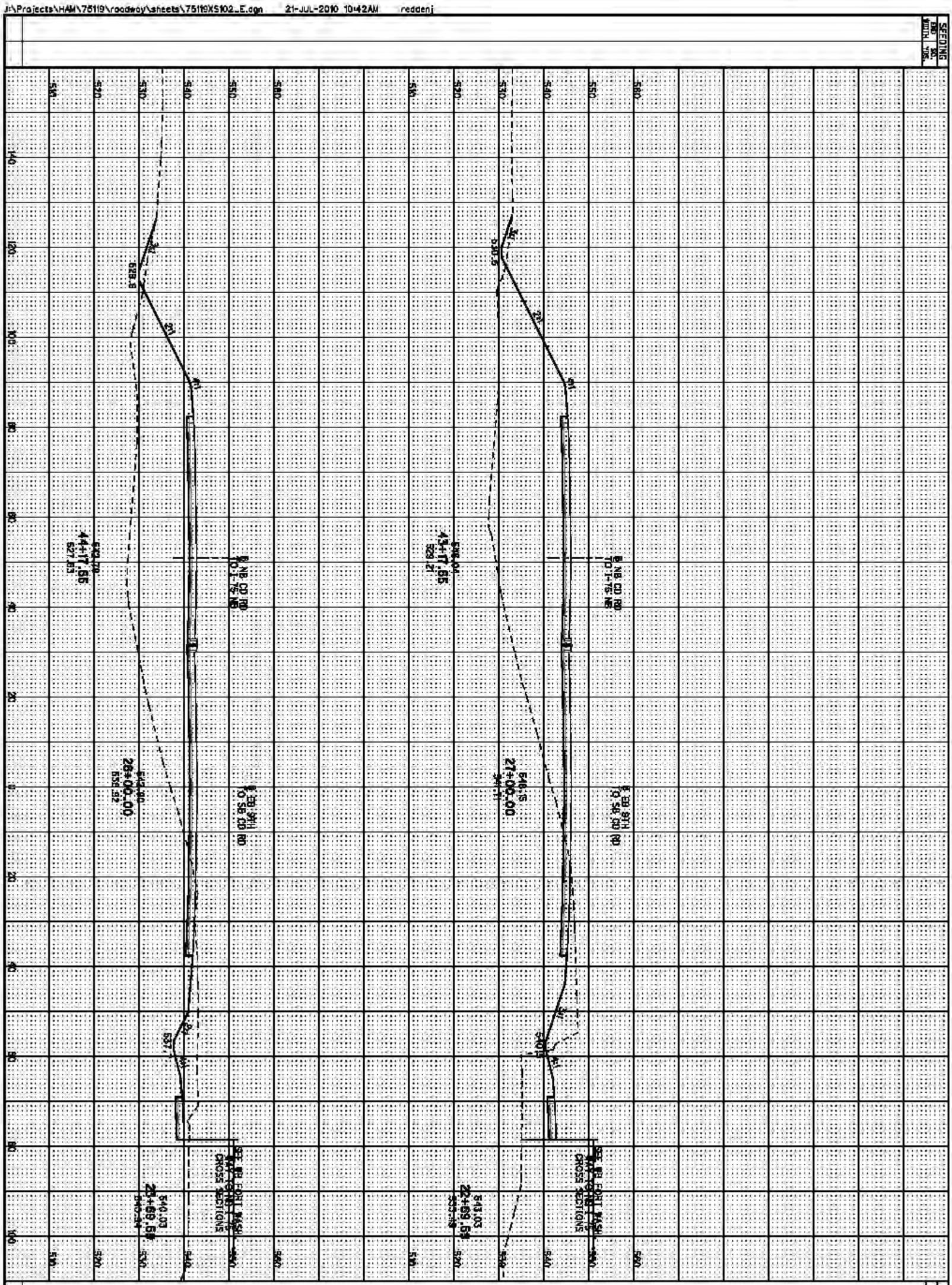
J:\Projects\HAM\75119\roadway\sheets\75119XS102_E.dgn 21-JUL-2010 10:42AM reddenj



HAM-71/75-0.00/0.22

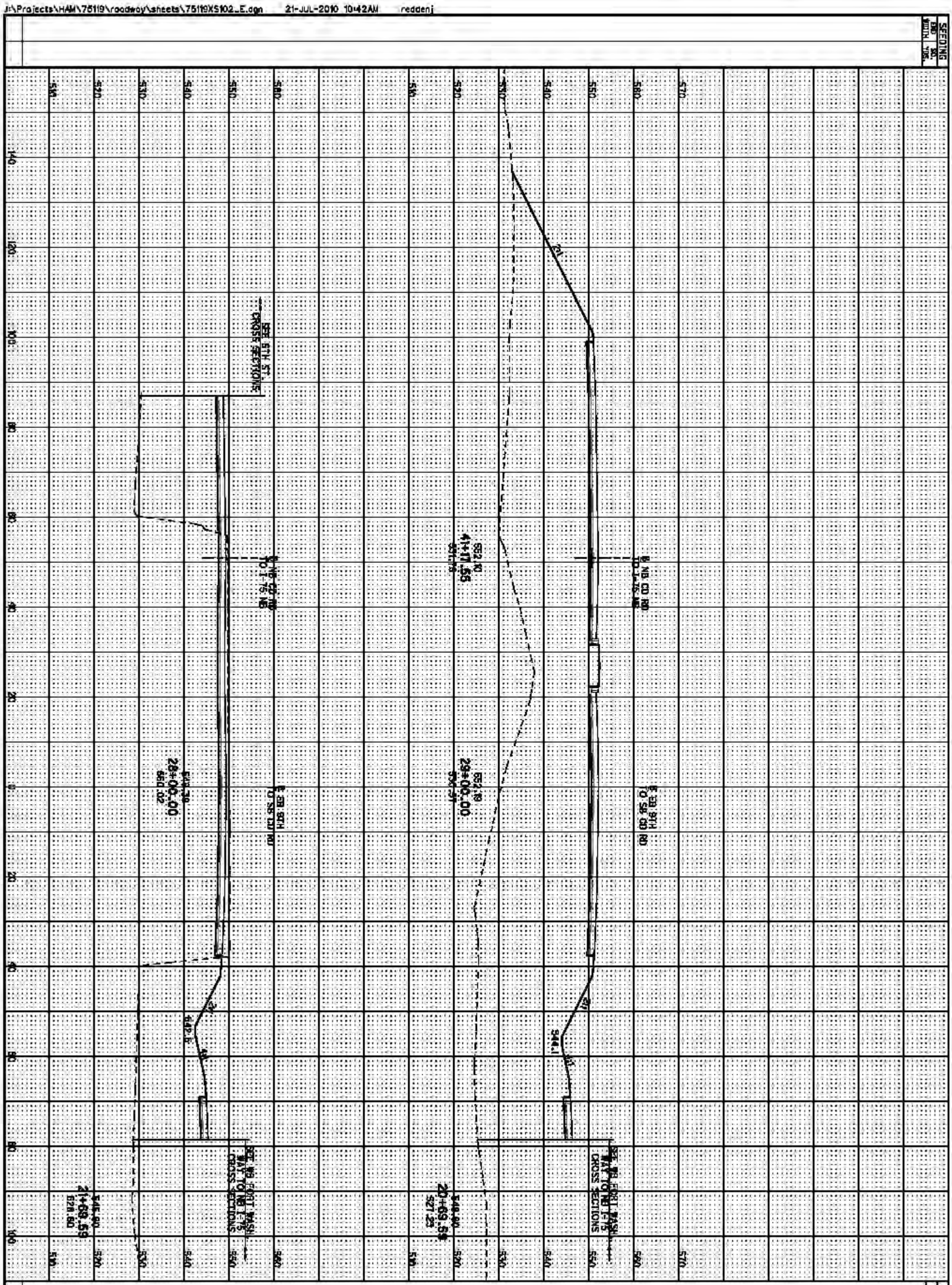
CROSS SECTIONS - SB CD RD TO I-75 SB
STA. 24+00.00 TO STA. 25+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS102_E.dgn 21-JUL-2010 10:42AM reddenj



56	HAM-71/75-0.00/0.22	CROSS SECTIONS - SB CD RD TO I-75 SB STA. 26+00.00 TO STA. 27+00.00

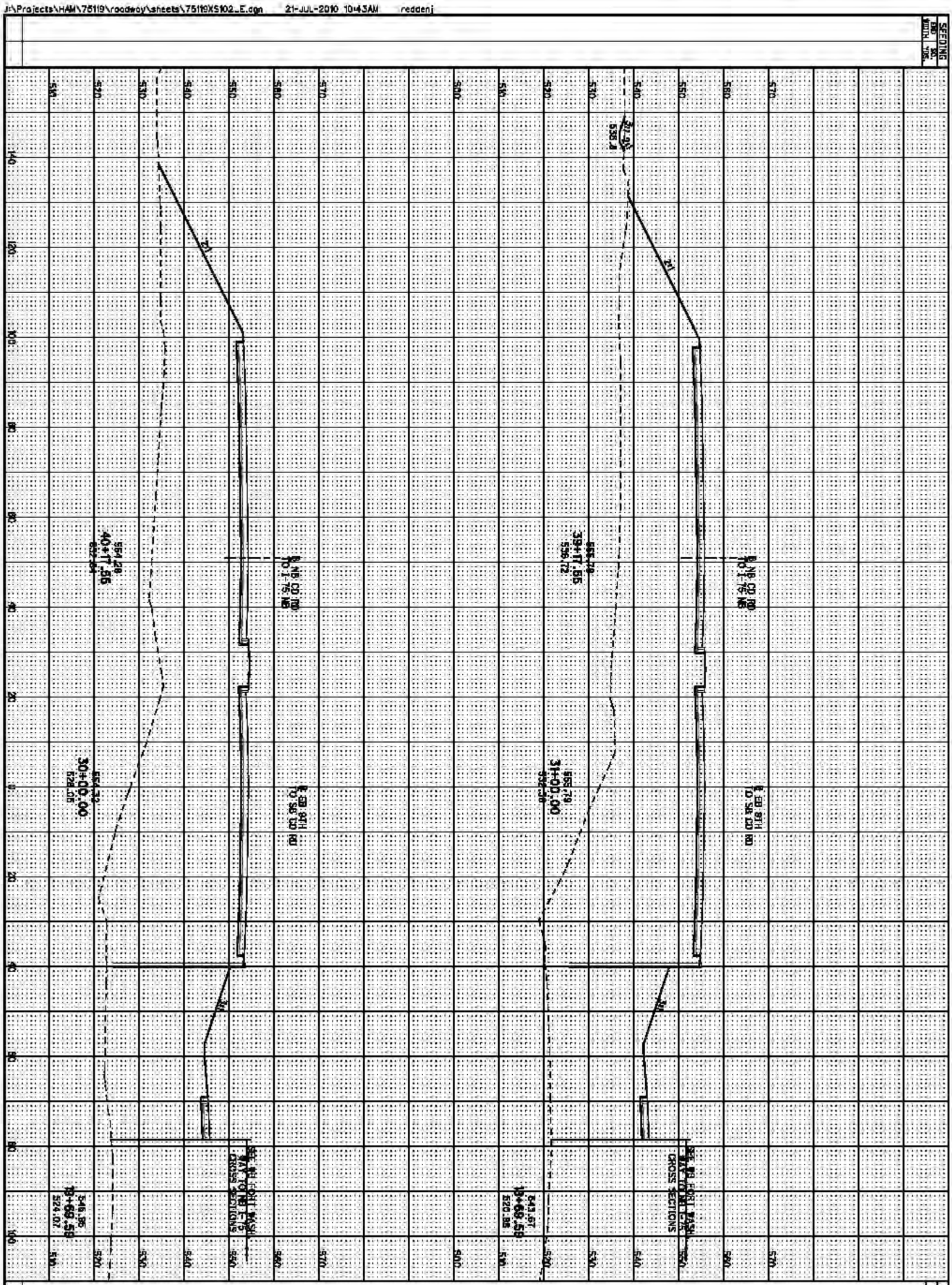
J:\Projects\HAM\75119\roadway\sheets\75119XS102_E.dgn 21-JUL-2010 10:42AM reddenj



HAM-71/75-0.00/0.22

CROSS SECTIONS - SB CD RD TO I-75 SB
STA. 28+00.00 TO STA. 29+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS102_E.dgn 21-JUL-2010 10:43AM reddenj



56	HAM-71/75-0.00/0.22	CROSS SECTIONS - SB CD RD TO I-75 SB STA. 30+00.00 TO STA. 31+00.00

SEEDING

END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED

CHECKED

SEE 4TH ST CROSS SECTIONS

℄ EB 9TH TO SB CD RD

33+00.00

SEE WB FORT WASH WAY TO NB I-75 CROSS SECTIONS

535.80
16+46.13
517.14

℄ NB CD RD TO I-75 NB

℄ EB 9TH TO SB CD RD

SEE WB FORT WASH WAY TO NB I-75 CROSS SECTIONS

555.59
38+22.80
558.93

558.61
32+00.00
551.49

539.83
17+69.34
517.69

570 560 550 540 530 520 510 500

140 120 100 80 60 40 20 0 20 40 60 80 100

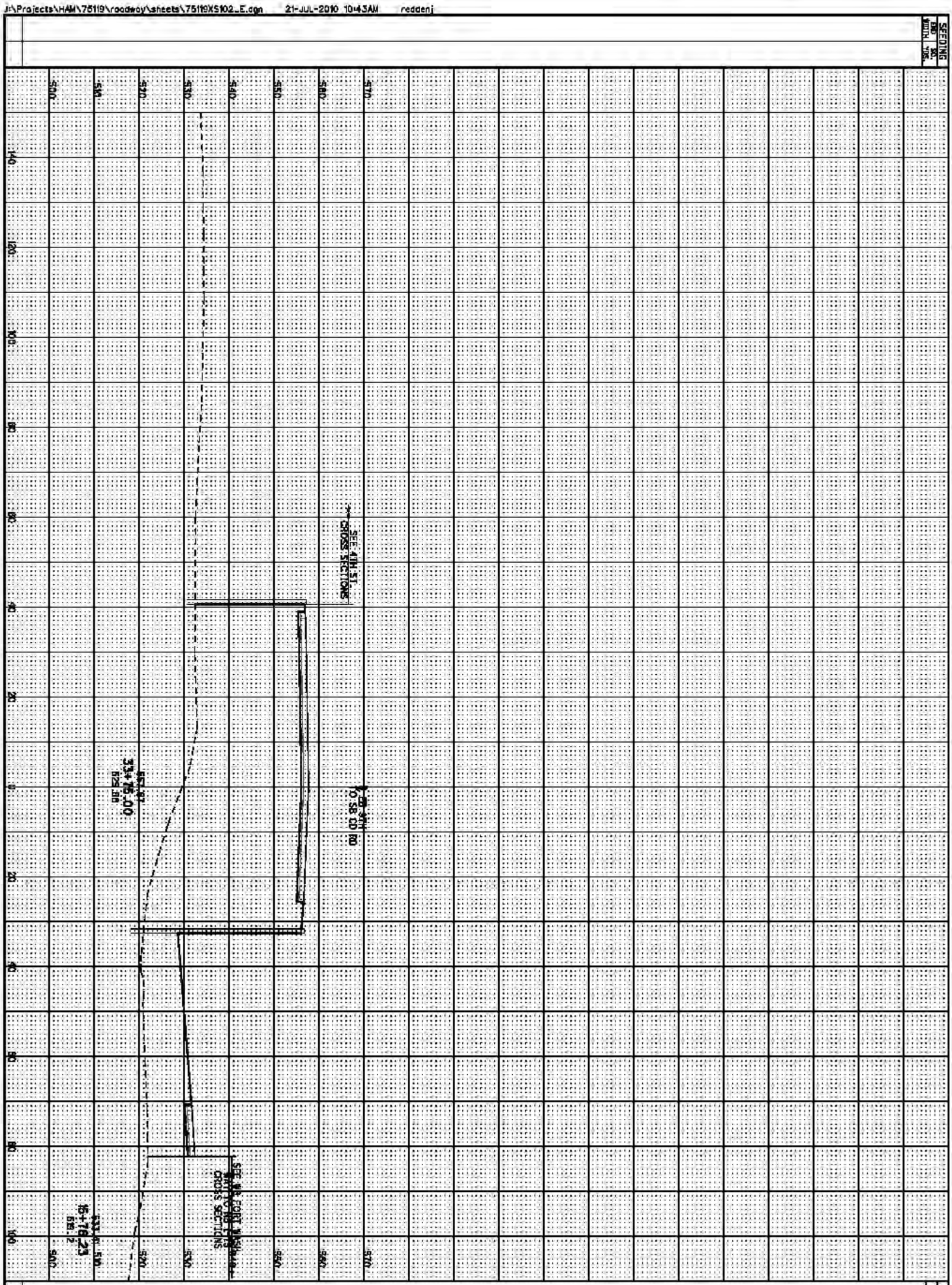
CROSS SECTIONS - SB CD RD TO I-75 SB
STA. 32+00.00 TO STA. 33+00.00

HAM-71/75-0.00/0.22

59

J:\Projects\HAM\75119\roadway\sheets\75119XS02_E.dgn 21-JUL-2010 10:43AM reddenj

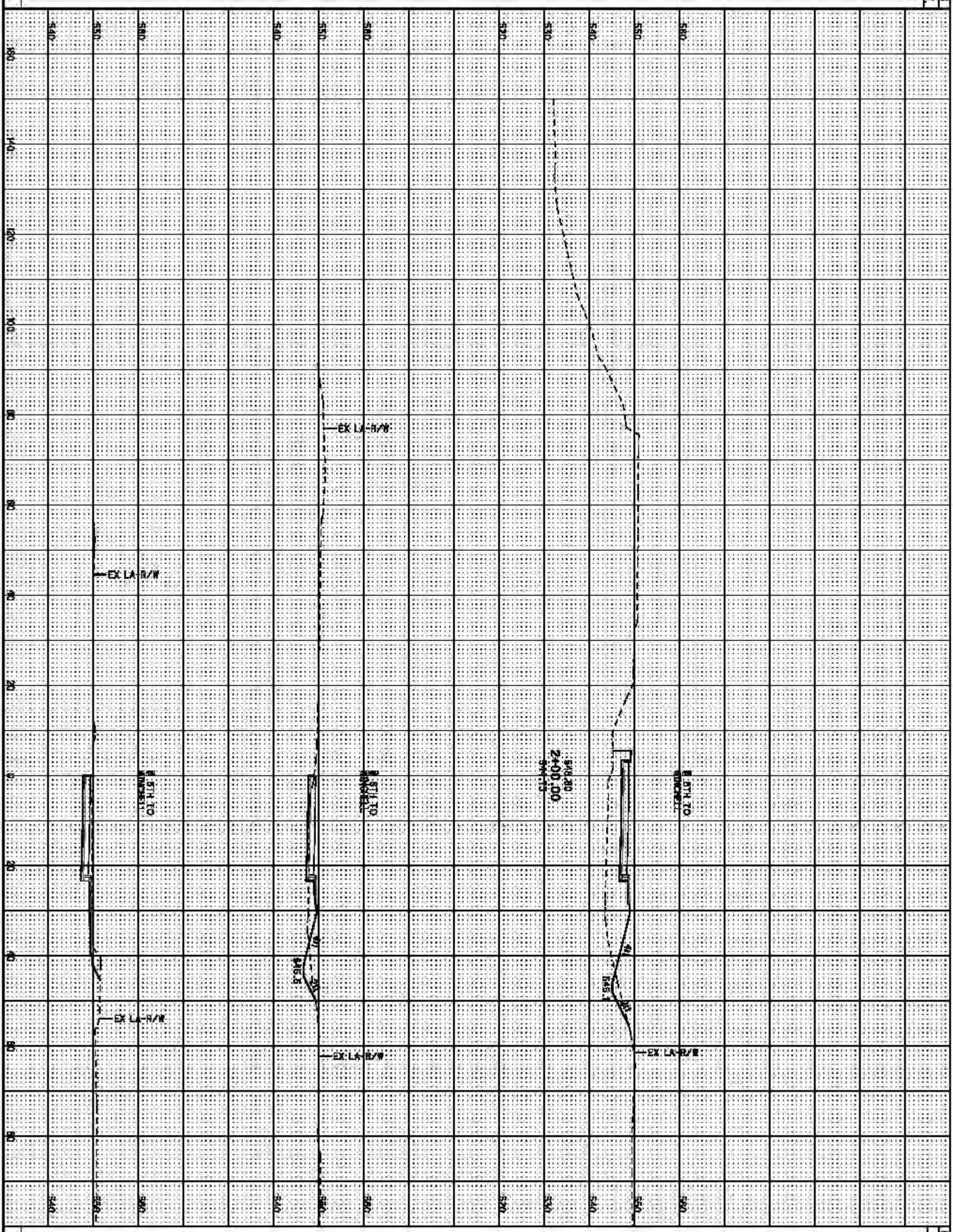
J:\Projects\HAM\75119\roadway\sheets\75119XS102_E.dgn 21-JUL-2010 10:43AM reddenj



HAM-71/75-0.00/0.22

CROSS SECTIONS - SB CD RD TO I-75 SB
STA. 33+75.00

J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:44AM redden]



SEEDING	
END	SQ.
WIDTH	YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

71

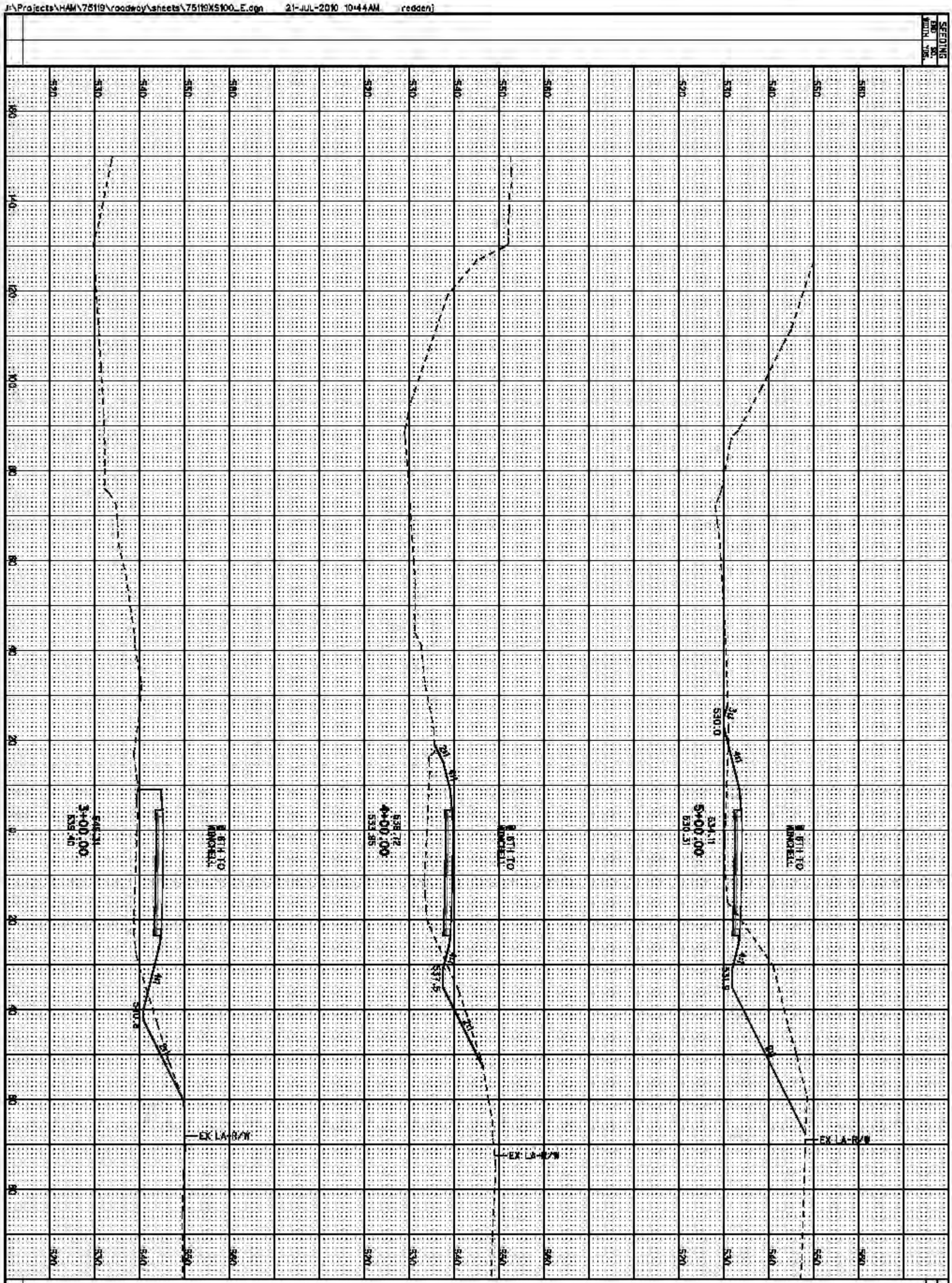
HAM-71/75-0.00/0.22

CROSS SECTIONS - 6TH TO WINCHELL
STA. 0+00.00 TO STA. 2+00.00

CALCULATED

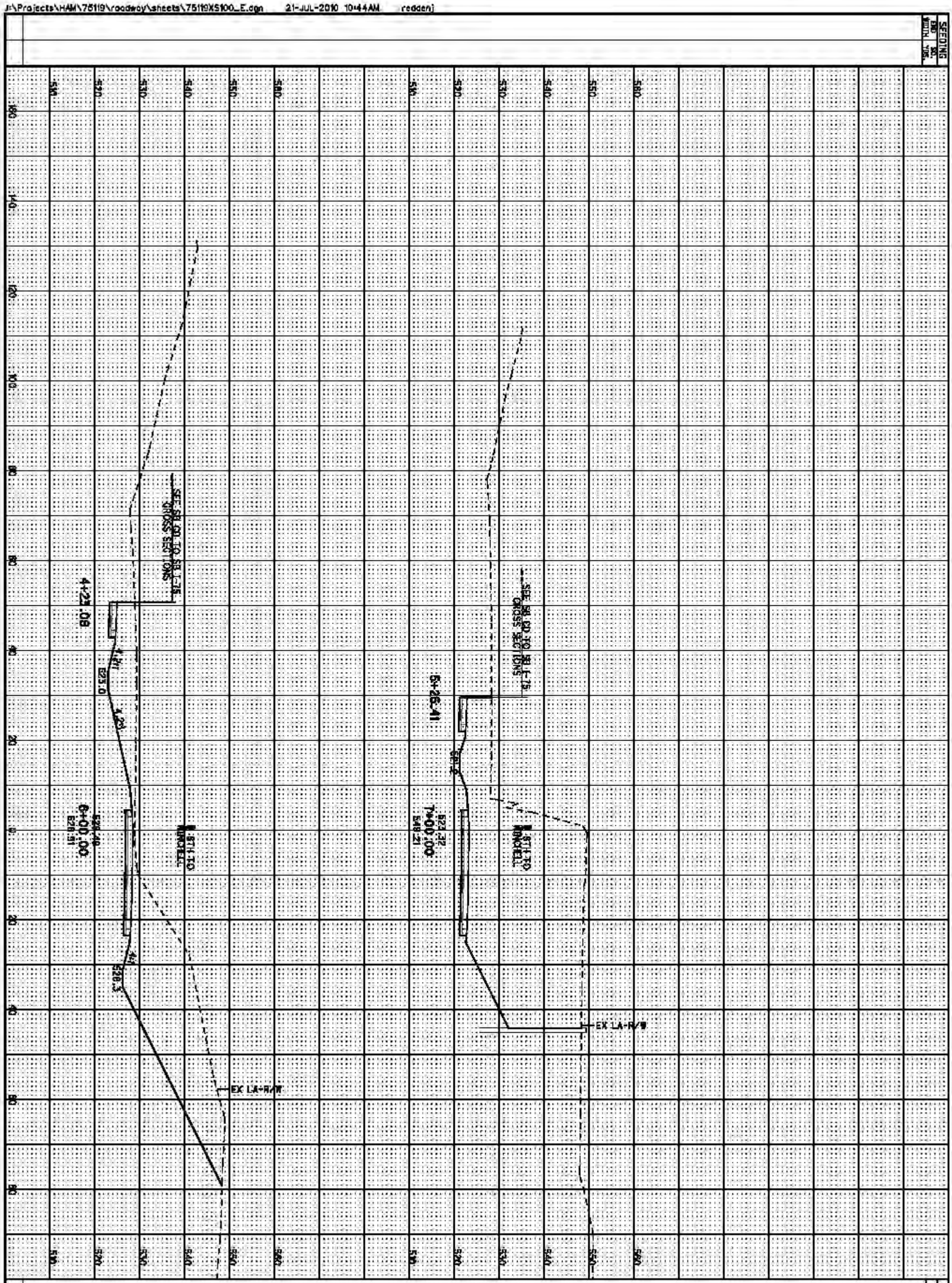
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:44 AM redden



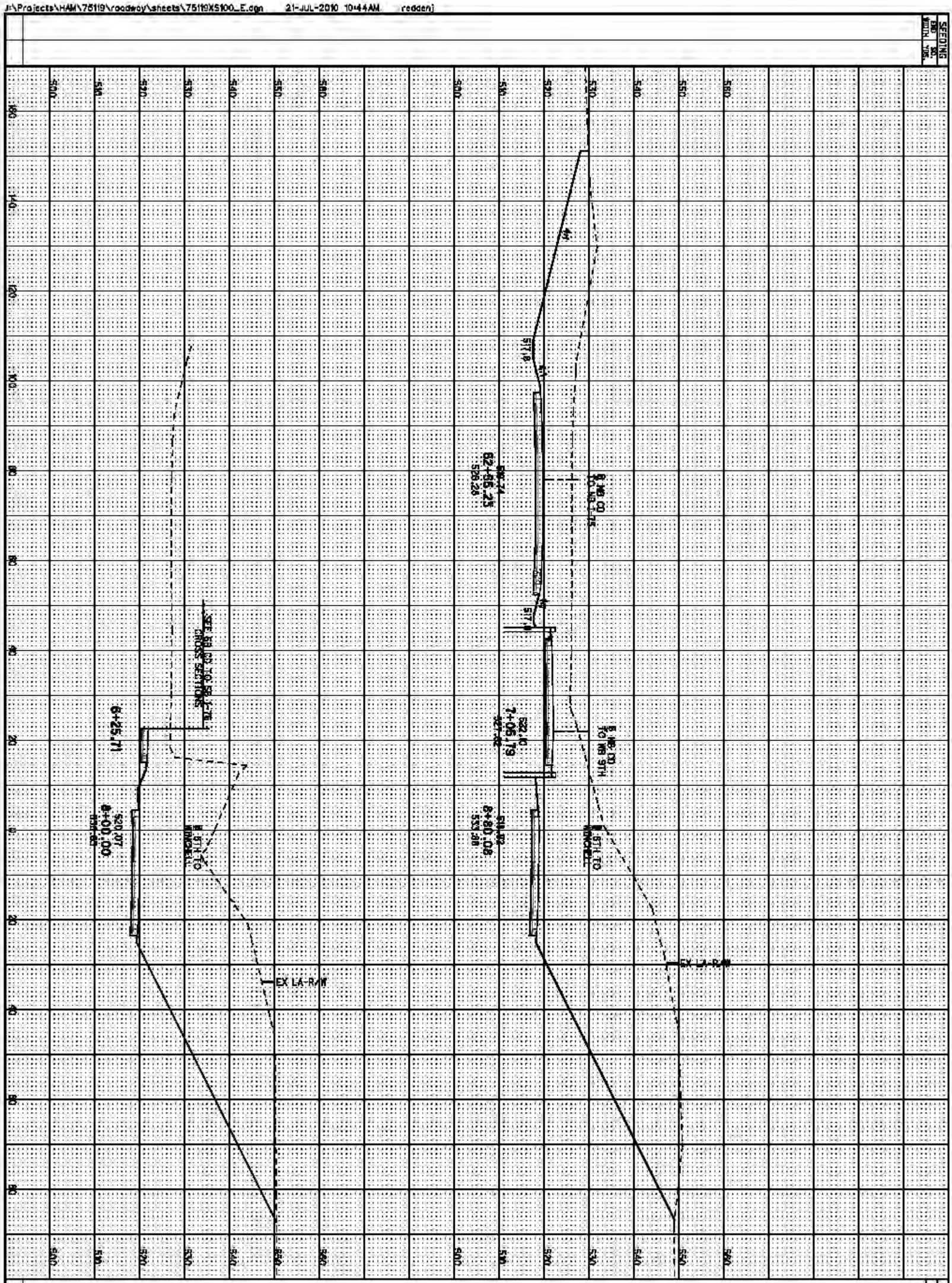
72	HAM-71/75-0.00/0.22	CROSS SECTIONS - 8TH TO WINCHELL STA. 3+00.00 TO STA. 5+00.00	CALCULATED CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:44 AM redden



73	HAM-71/75-0.00/0.22	CROSS SECTIONS - 6TH TO WINCHELL STA. 6+00.00 TO STA. 7+00.00

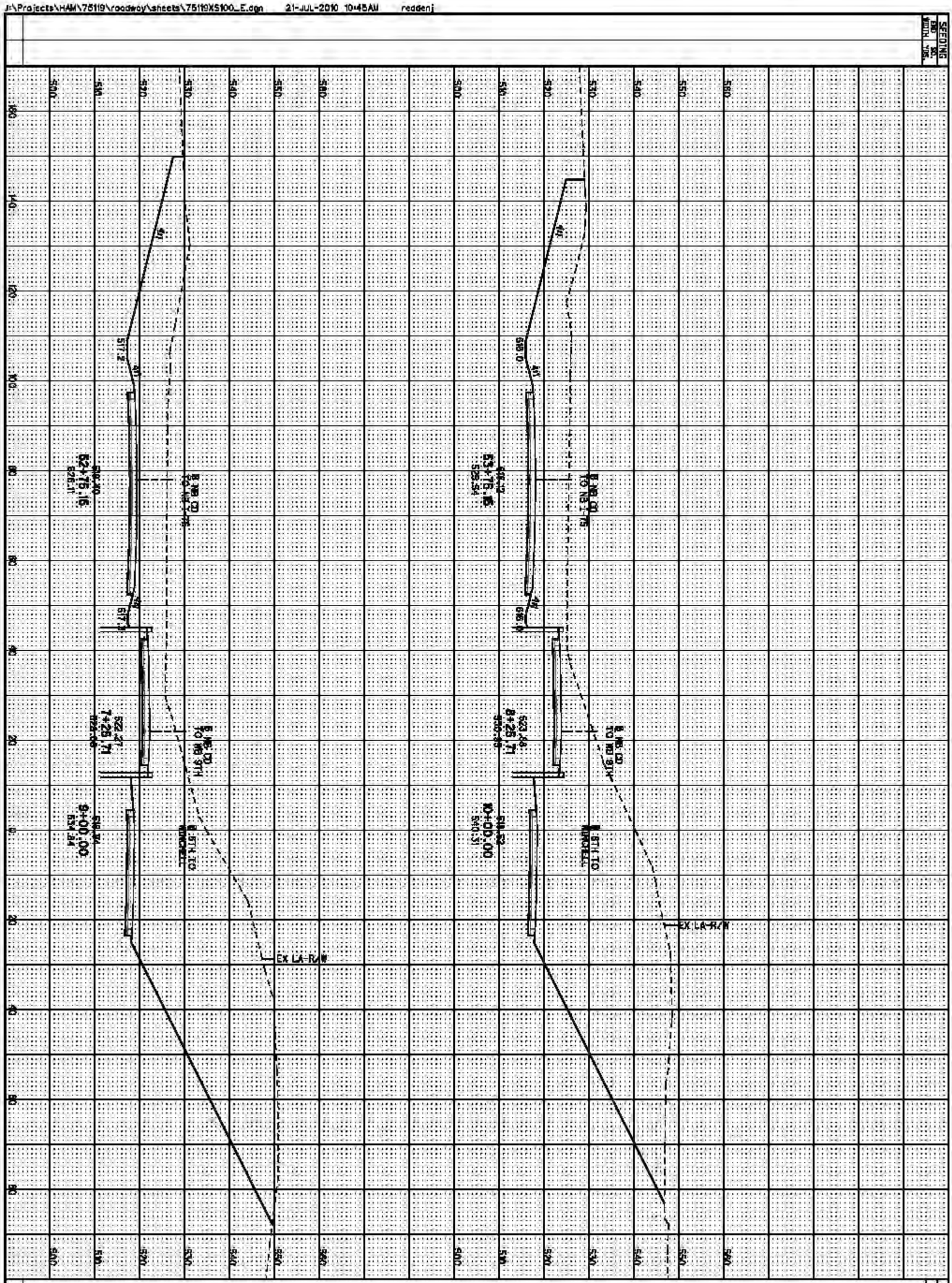
J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:44 AM redden



74	HAM-71/75-0.00/0.22	CROSS SECTIONS - 6TH TO WINCHELL STA. 8+00.00 TO STA. 8+80.08

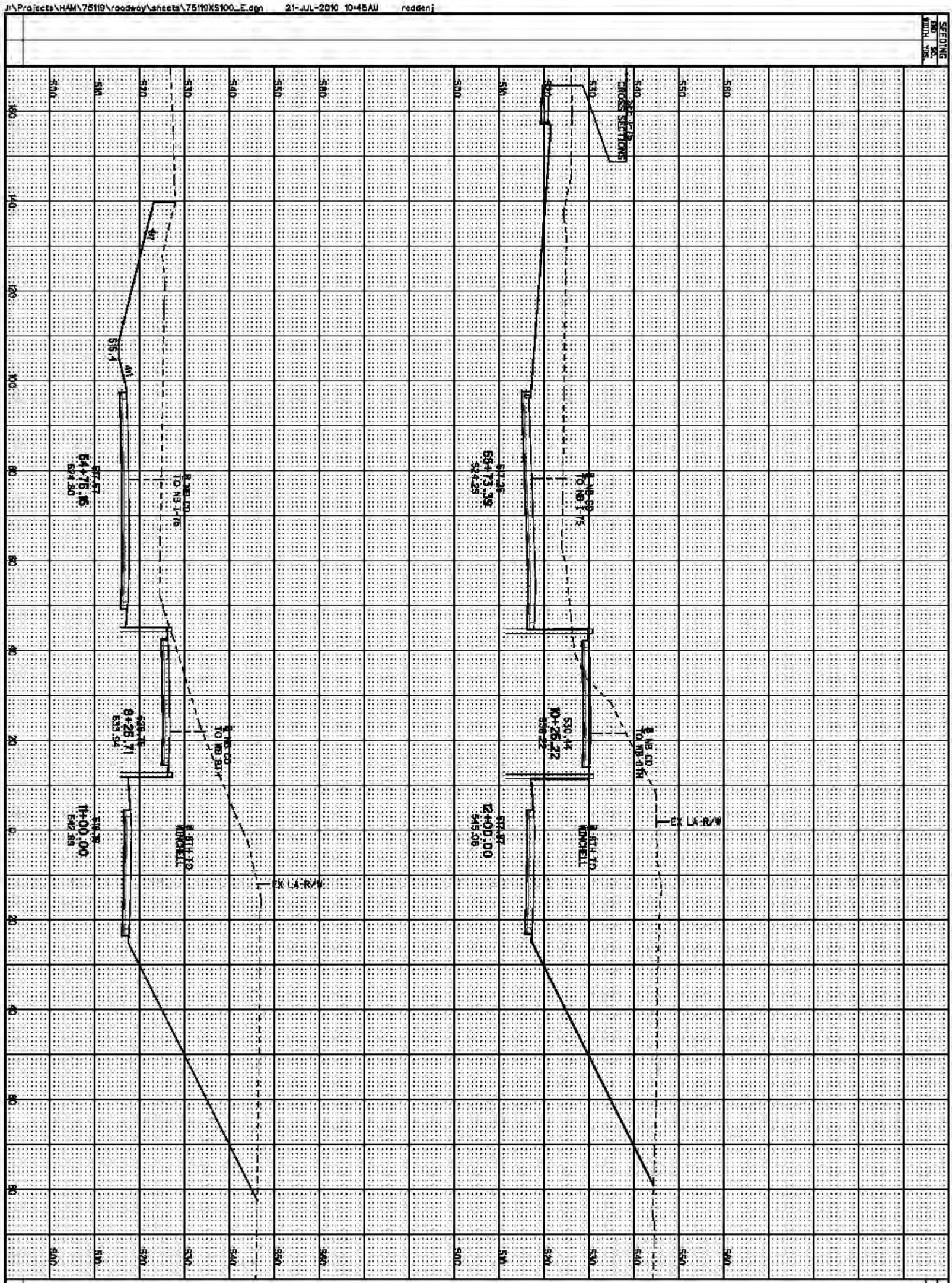
CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:45AM reddenj



75	HAM-71/75-0.00/0.22	CROSS SECTIONS - 8TH TO WINCHELL STA. 9+00.00 TO STA. 10+00.00

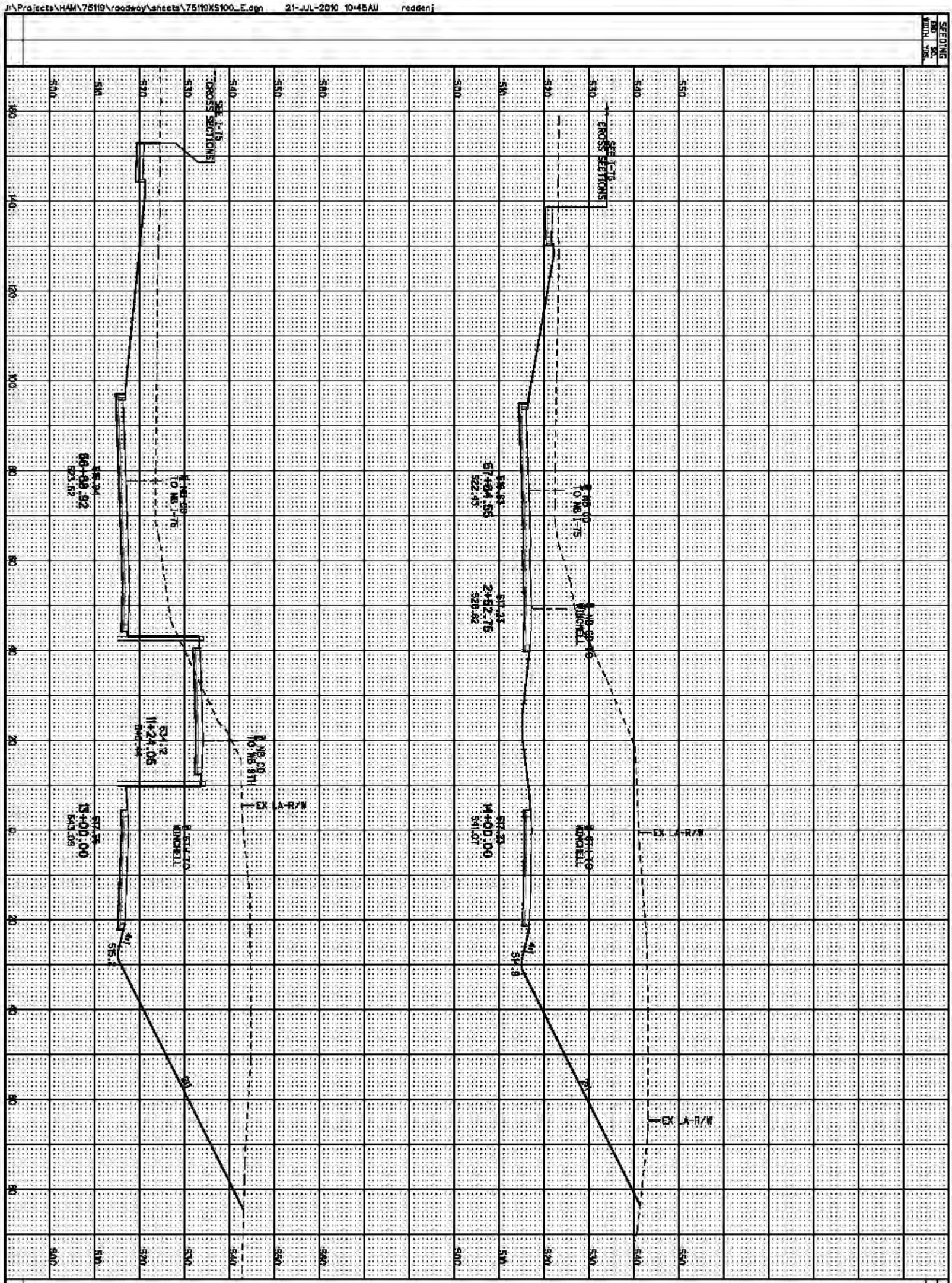
J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:45AM reddenj



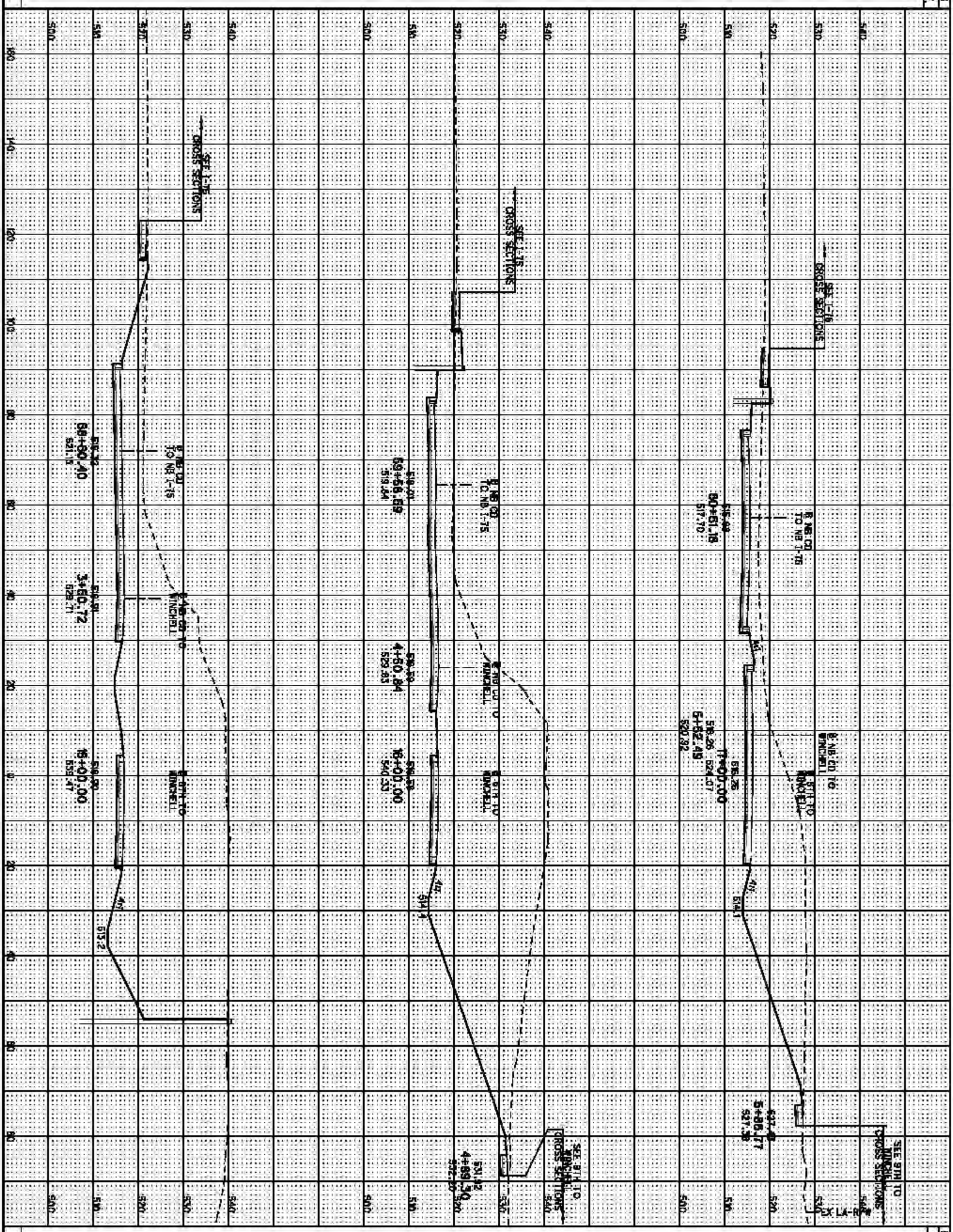
HAM-71/75-0.00/0.22

CROSS SECTIONS - 8TH TO WINCHELL
STA. 11+00.00 TO STA. 12+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:45AM reddenj


SEEDING
END AREA VOLUME
CUT FILL CUT FILL
SEE I-75 CROSS SECTIONS
EX LA-R/W
EX LA-R/W
EX LA-R/W

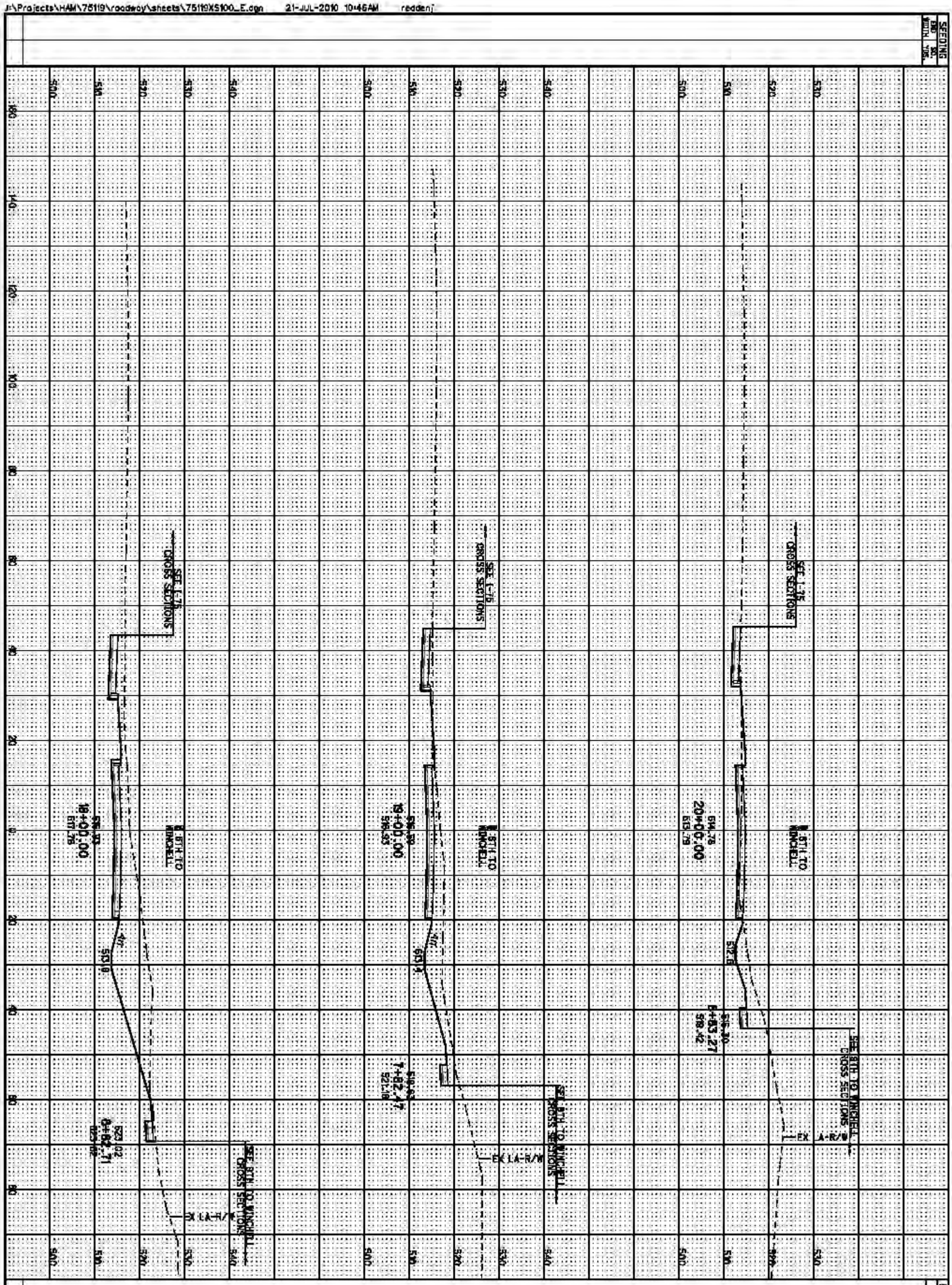
J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:46AM reddenj



END AREA		VOLUME	
CUT	FILL	CUT	FILL

78	HAM-71/75-0.00/0.22	CROSS SECTIONS - 8TH TO WINCHELL STA. 15+00.00 TO STA. 17+00.00	CALCULATED CHECKED

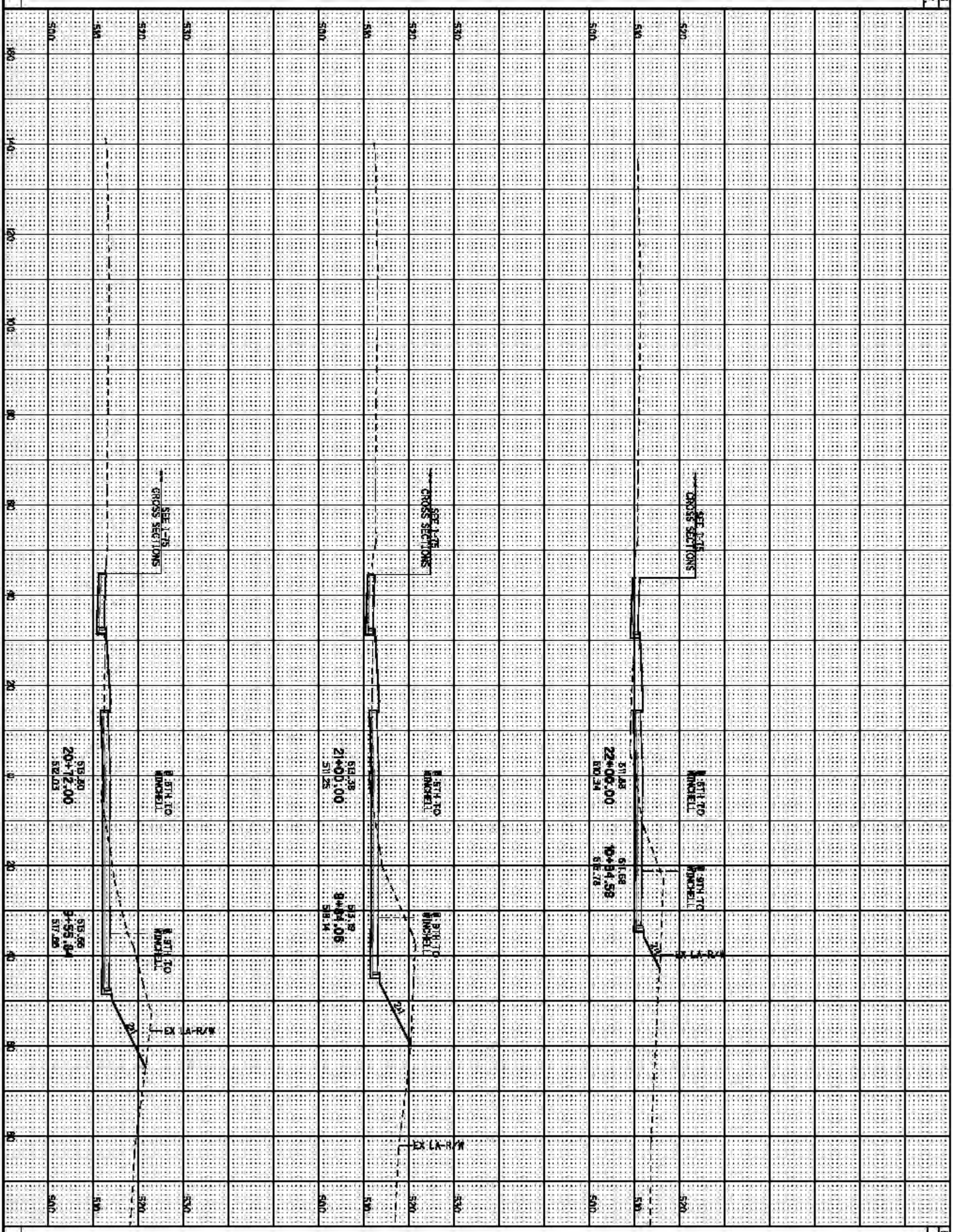
J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:46AM redden



79	HAM-71/75-0.00/0.22	CROSS SECTIONS - 8TH TO WINCHELL STA. 18+00.00 TO STA. 20+00.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:46AM reddenj



SEEDING	
END	SQ.
WIDTH	YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

80

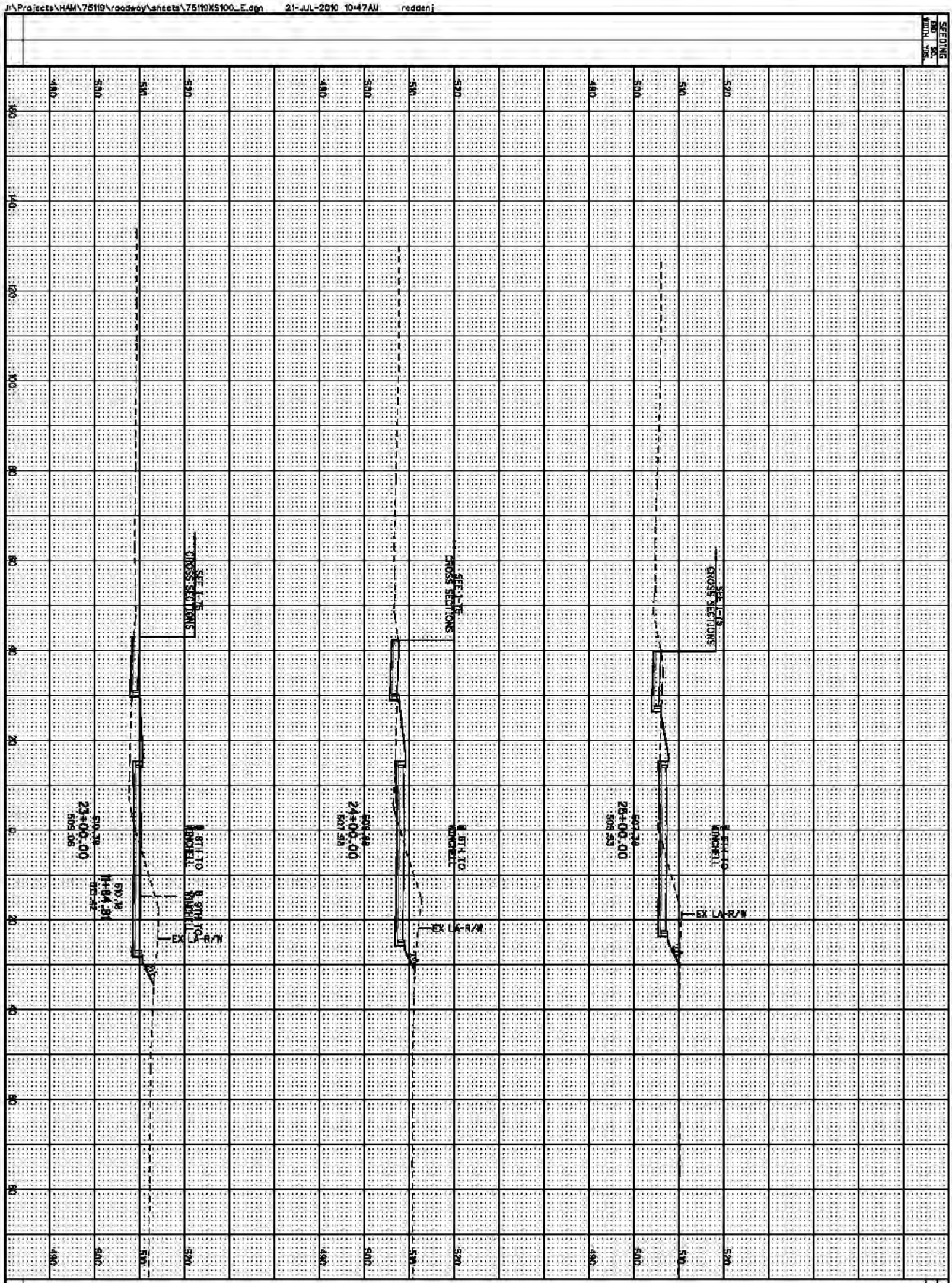
HAM-71/75-0.00/0.22

CROSS SECTIONS - 6TH TO WINCHELL
STA. 20+72.00 TO STA. 22+00.00

CALCULATED

CHECKED

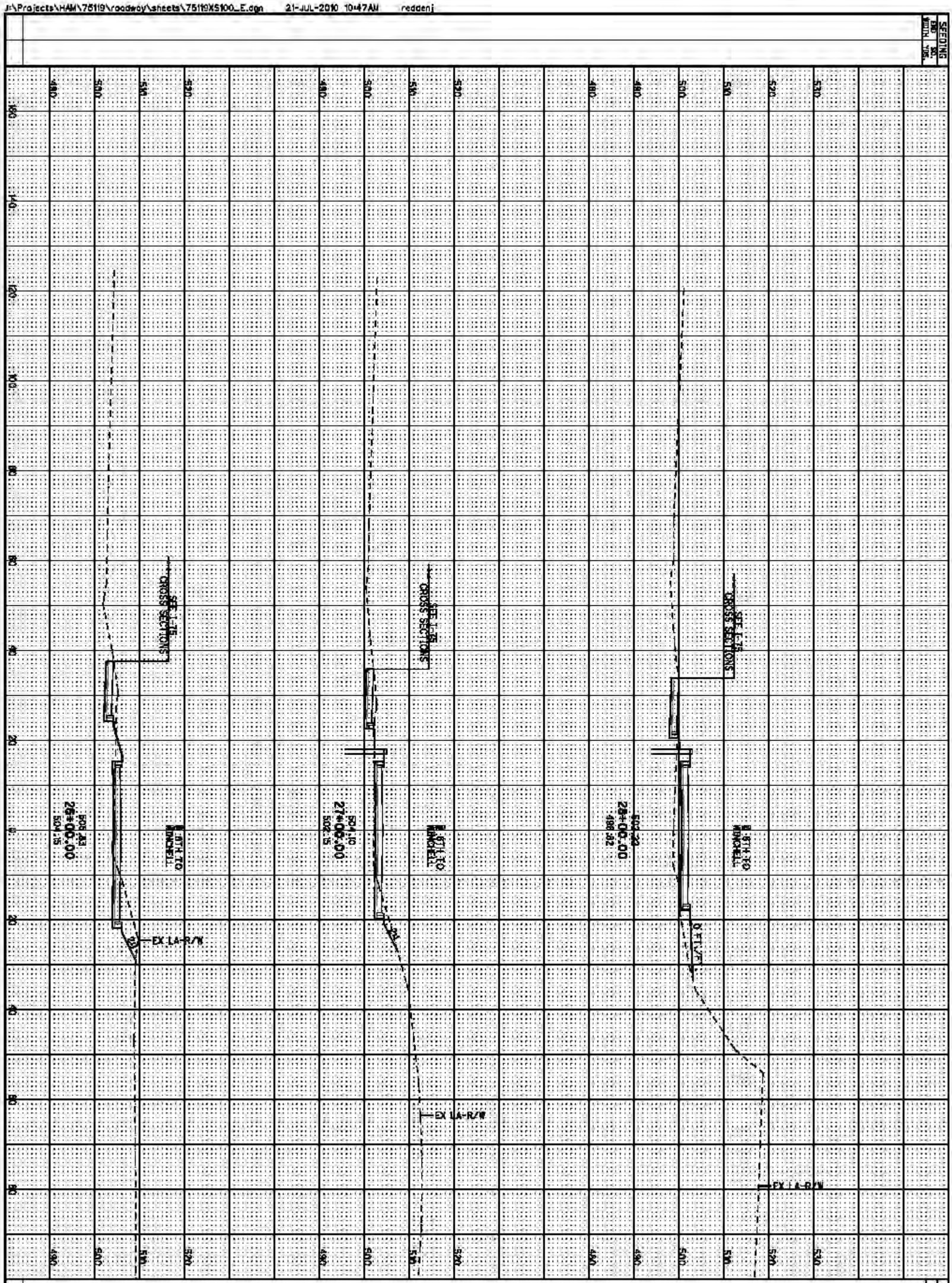
J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:47AM reddenj



81	HAM-71/75-0.00/0.22	CROSS SECTIONS - 8TH TO WINCHELL STA. 23+00.00 TO STA. 25+00.00

CALCULATED
CHECKED

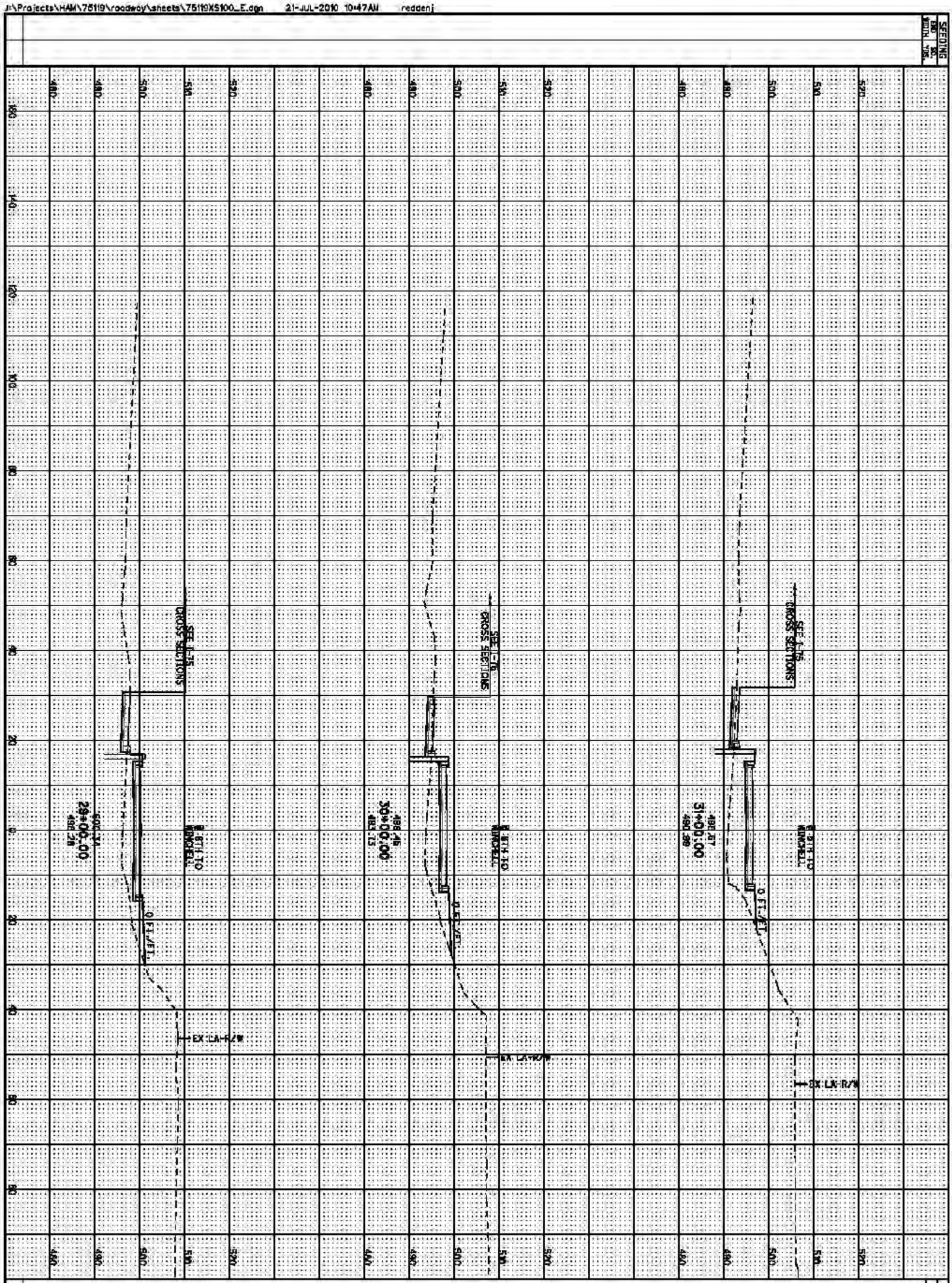
J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:47AM reddenj



29	HAM-71/75-0.00/0.22	CROSS SECTIONS - 6TH TO WINCHELL STA. 26+00.00 TO STA. 28+00.00

CALCULATED
CHECKED

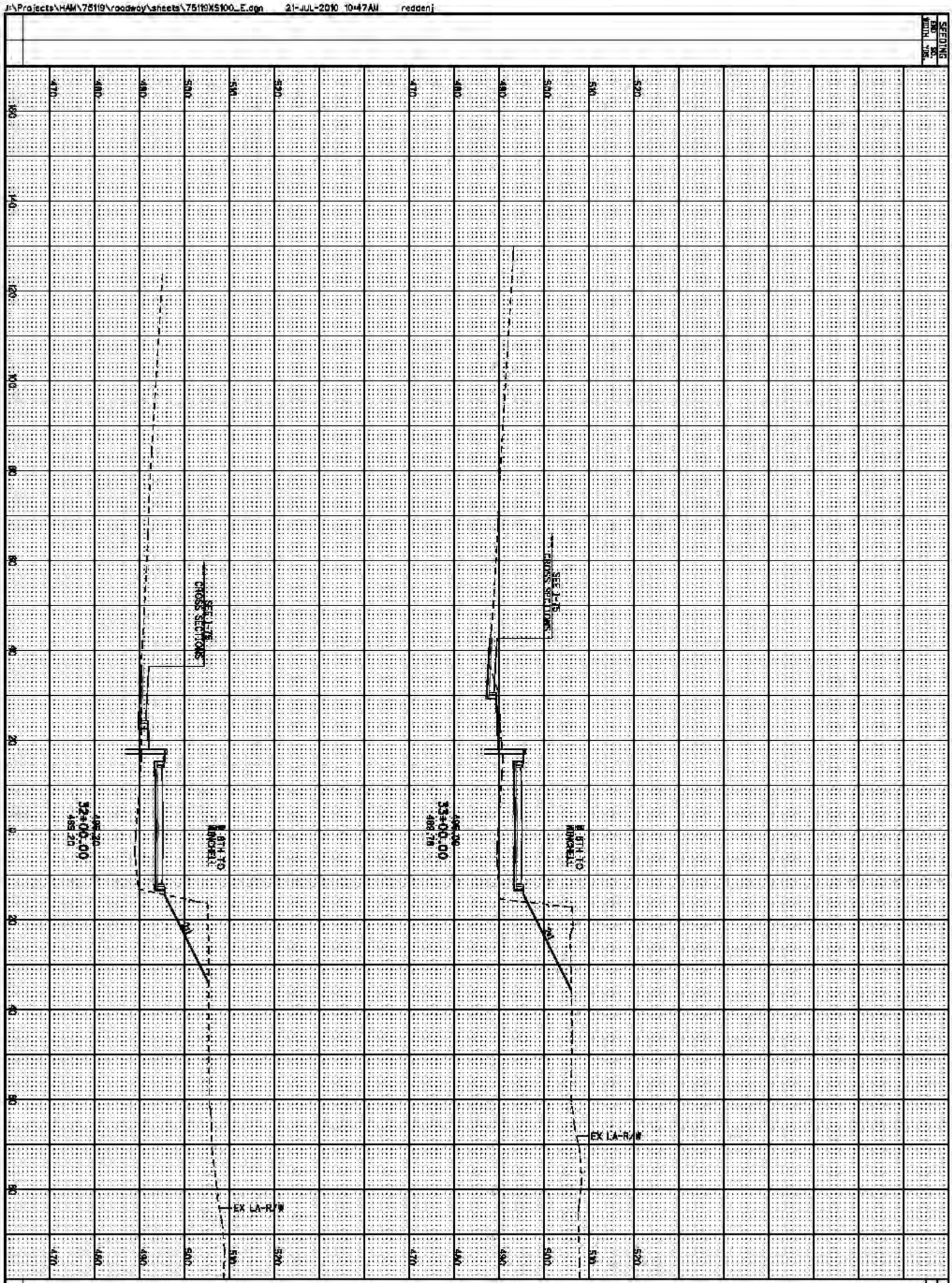
J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:47AM reddenj



63	HAM-71/75-0.00/0.22	CROSS SECTIONS - 8TH TO WINCHELL STA. 29+00.00 TO STA. 31+00.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:47AM reddenj



84

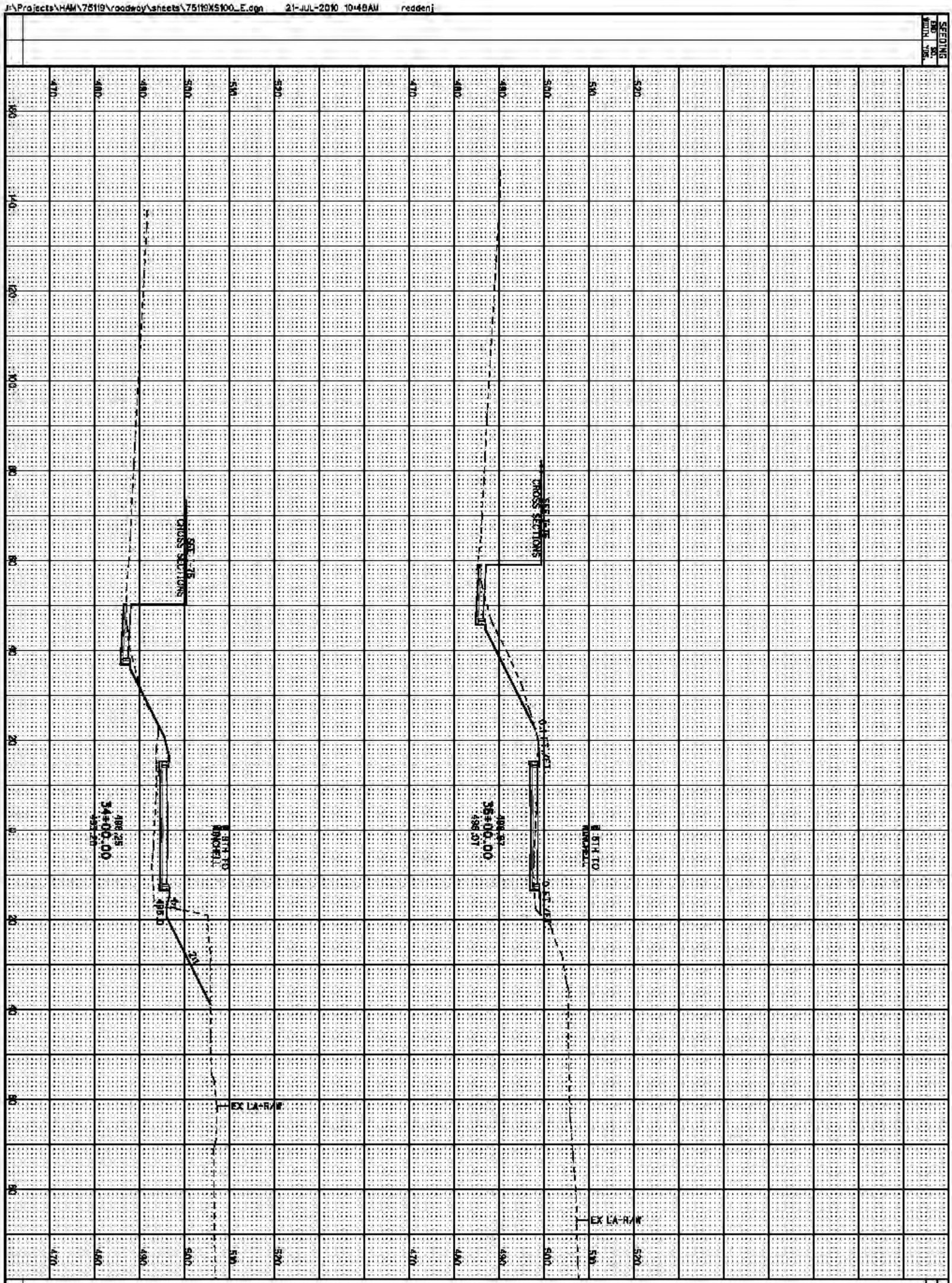
HAM-71/75-0.00/0.22

CROSS SECTIONS - 8TH TO WINCHELL
STA. 32+00.00 TO STA. 33+00.00

CALCULATED

CHECKED

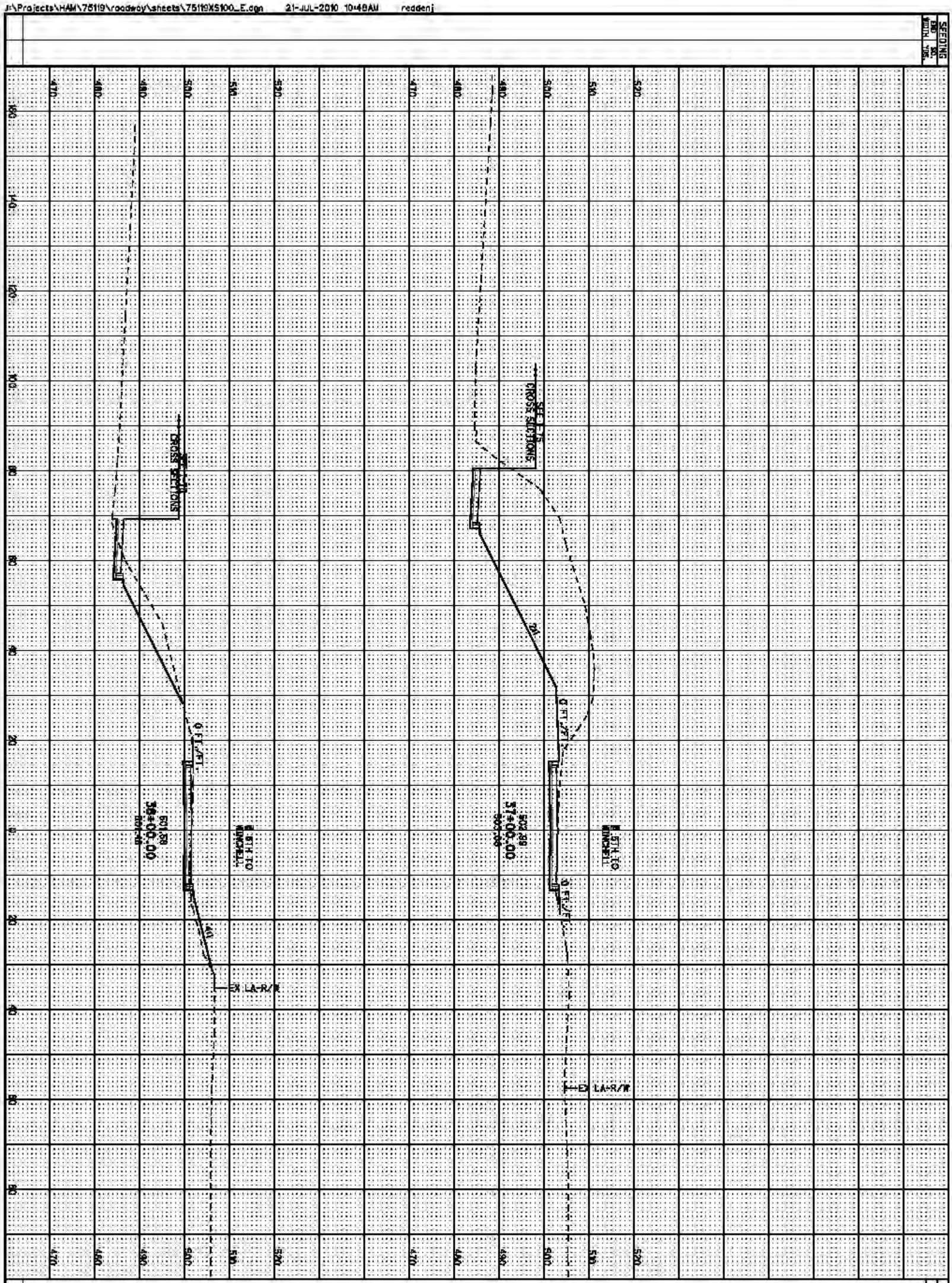
J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:48AM reddenj



65	HAM-71/75-0.00/0.22	CROSS SECTIONS - 8TH TO WINCHELL STA. 34+00.00 TO STA. 35+00.00

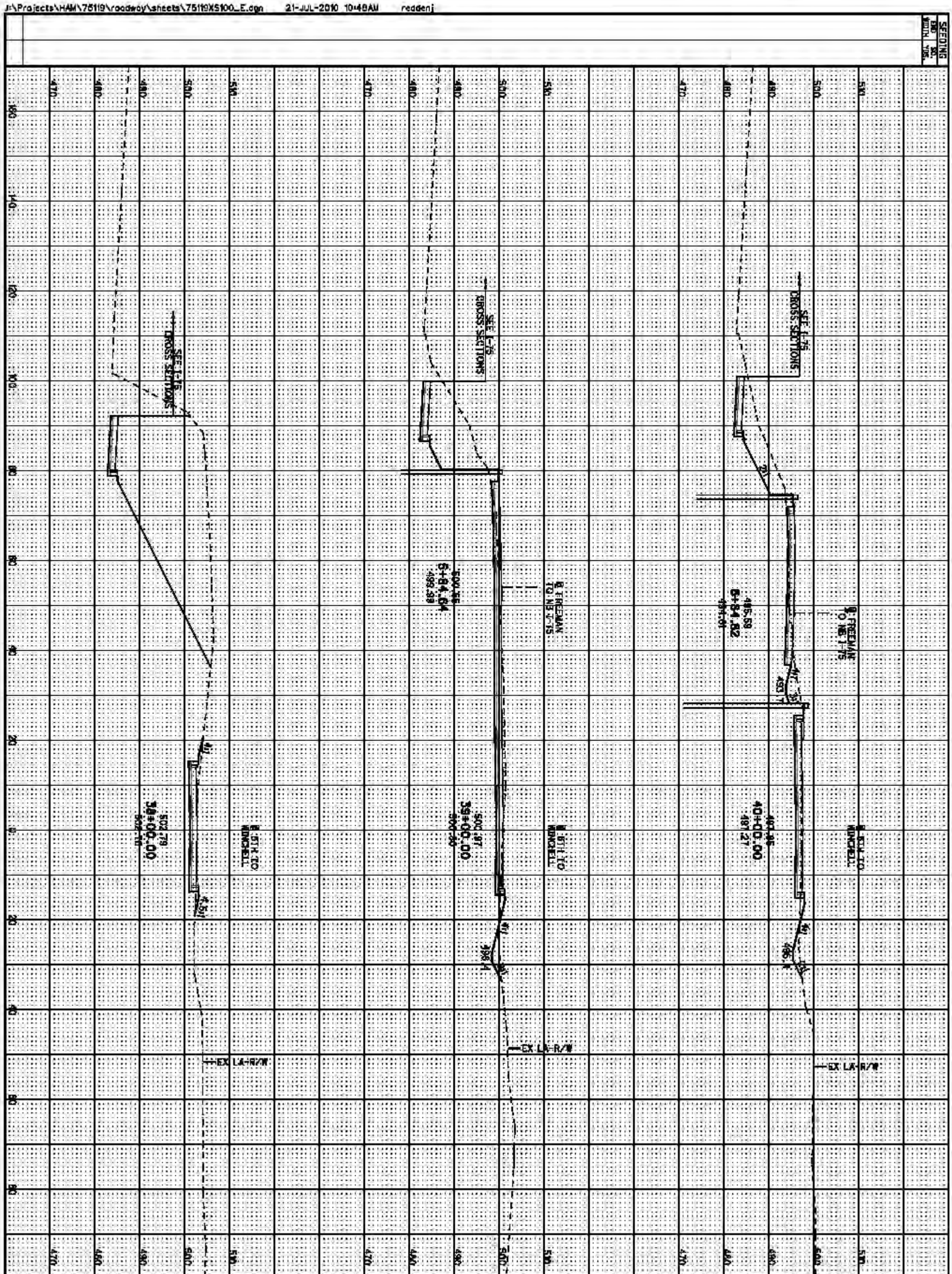
CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:48AM reddenj



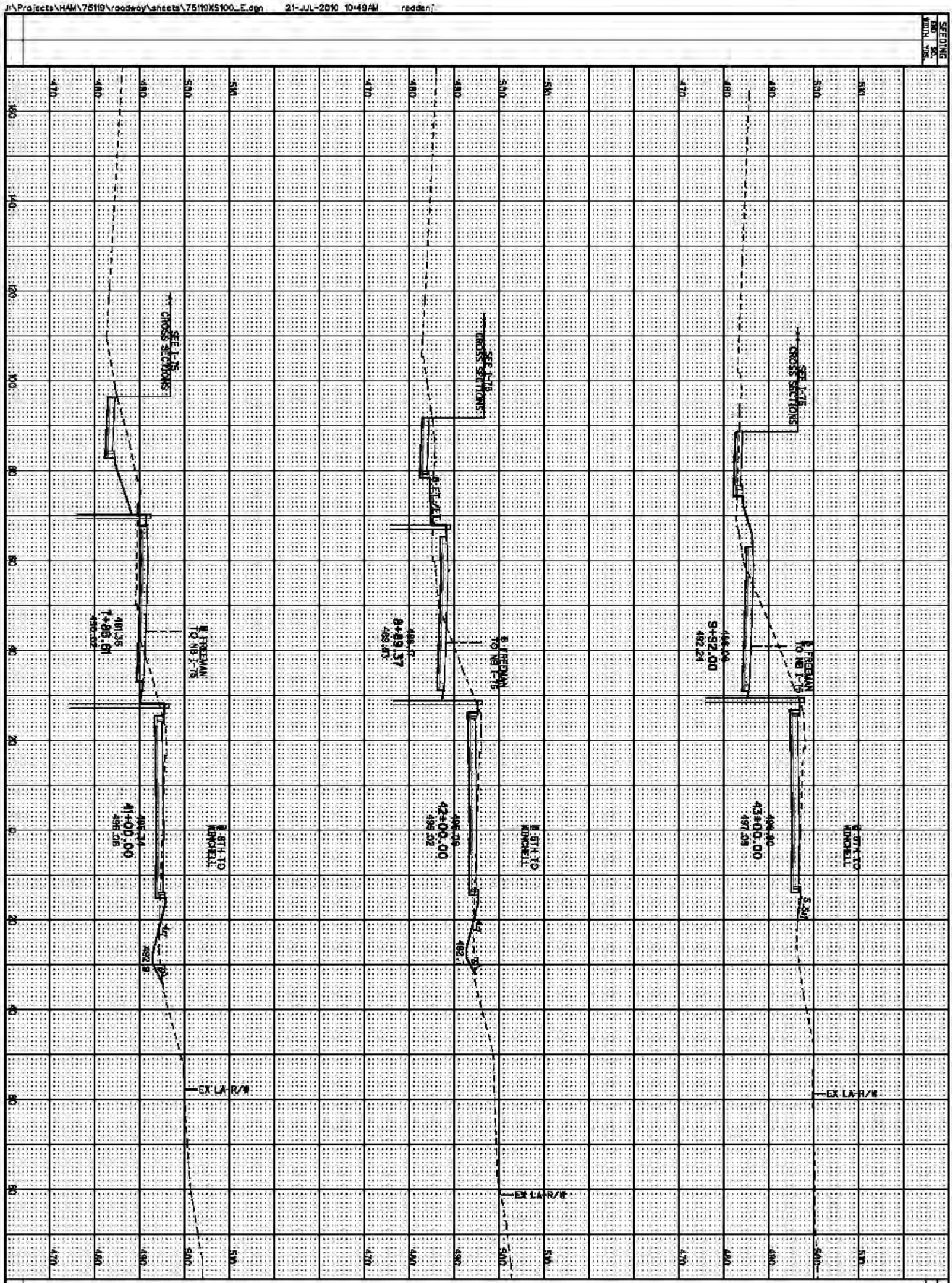
69	HAM-71/75-0.00/0.22	CROSS SECTIONS - 6TH TO WINCHELL STA. 36+00.00 TO STA. 37+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:48AM reddenj



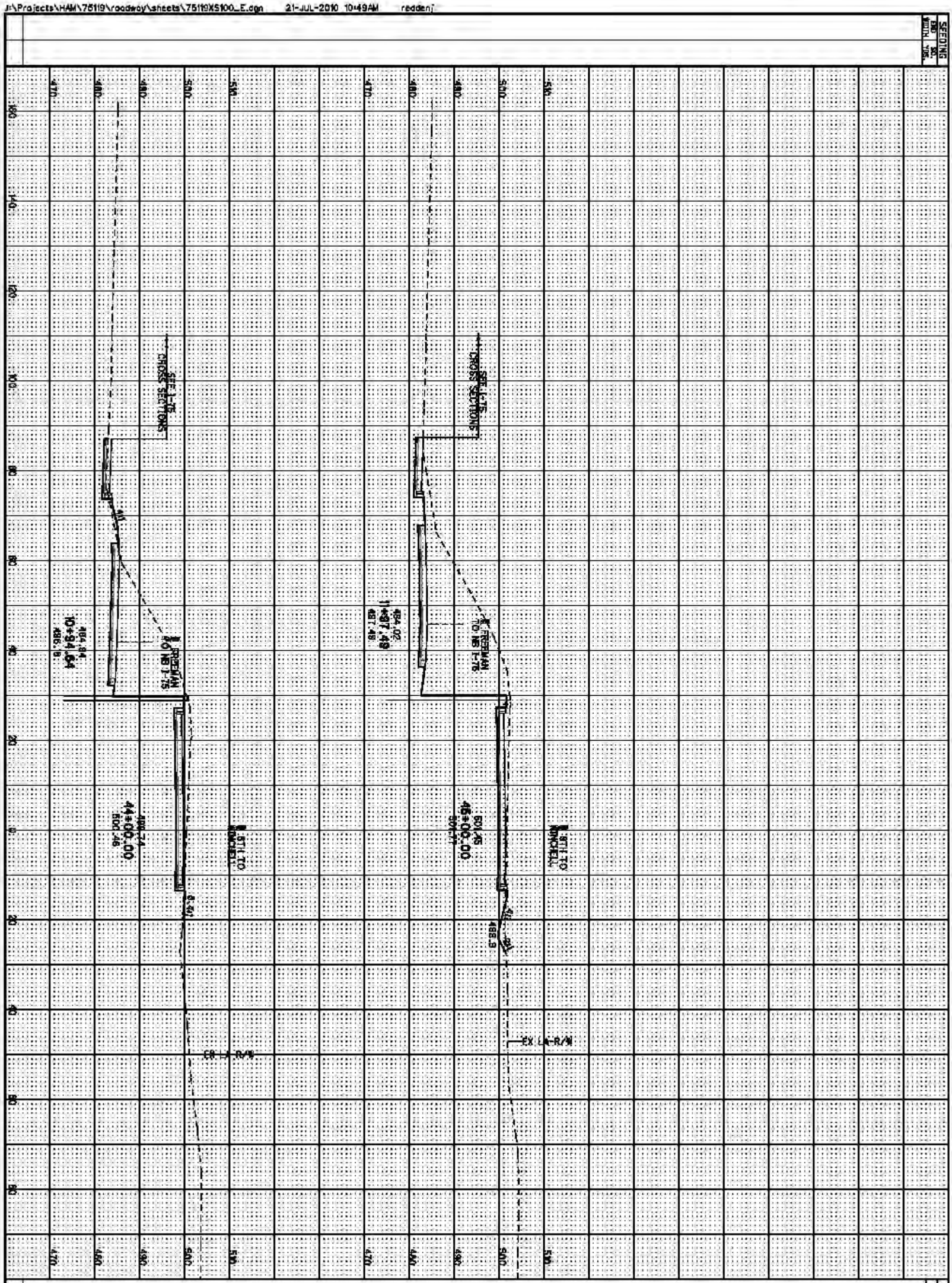
57	HAM-71/75-0.00/0.22	CROSS SECTIONS - 8TH TO WINCHELL STA. 38+00.00 TO STA. 40+00.00	CALCULATED CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:49AM redden1



69	HAM-71/75-0.00/0.22	CROSS SECTIONS - 6TH TO WINCHELL STA. 41+00.00 TO STA. 43+00.00

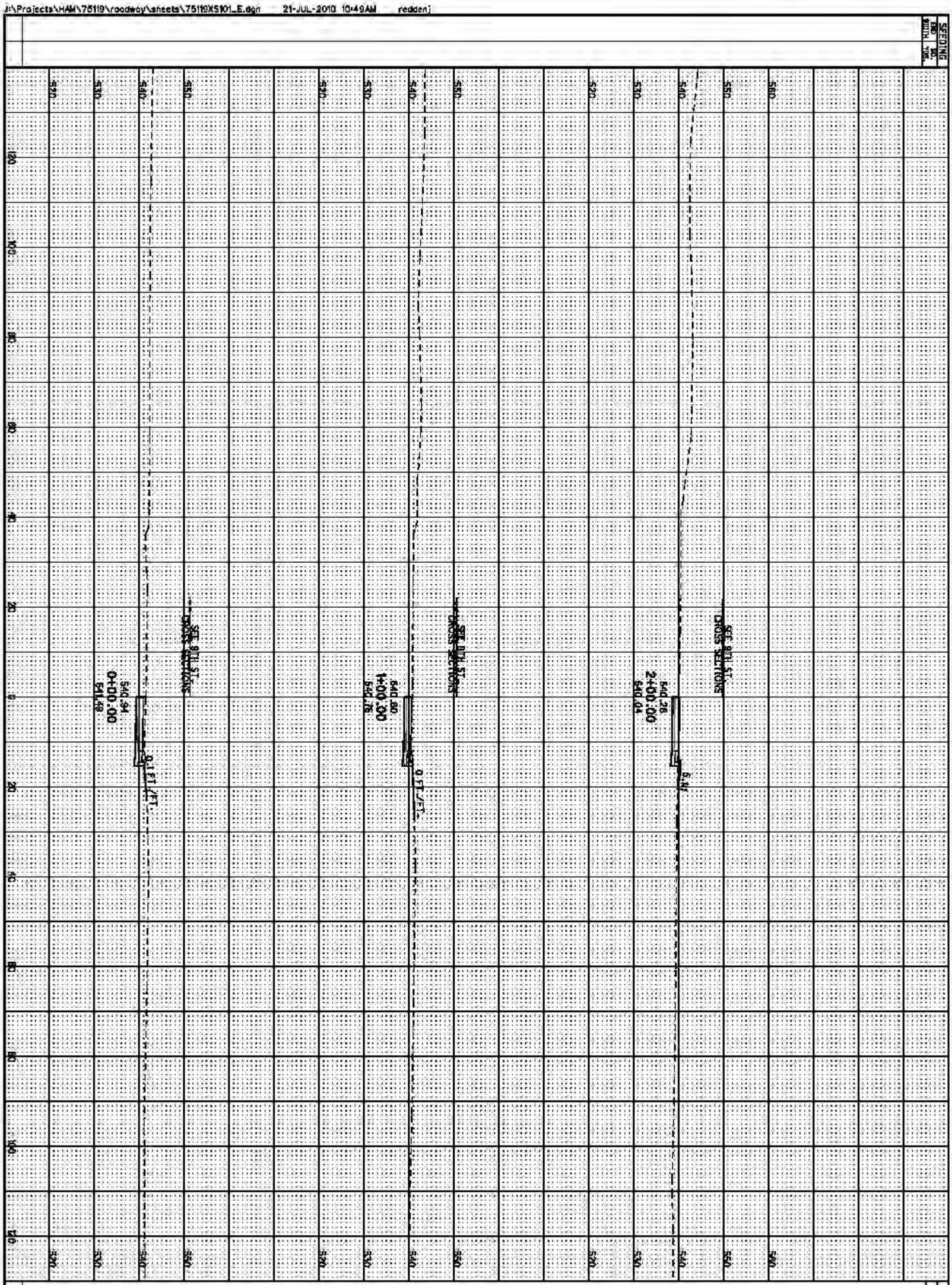
J:\Projects\HAM\75119\roadway\sheets\75119XS100_E.dgn 21-JUL-2010 10:49AM reddenj



69	HAM-71/75-0.00/0.22	CROSS SECTIONS - 8TH TO WINCHELL STA. 44+00.00 TO STA. 45+00.00

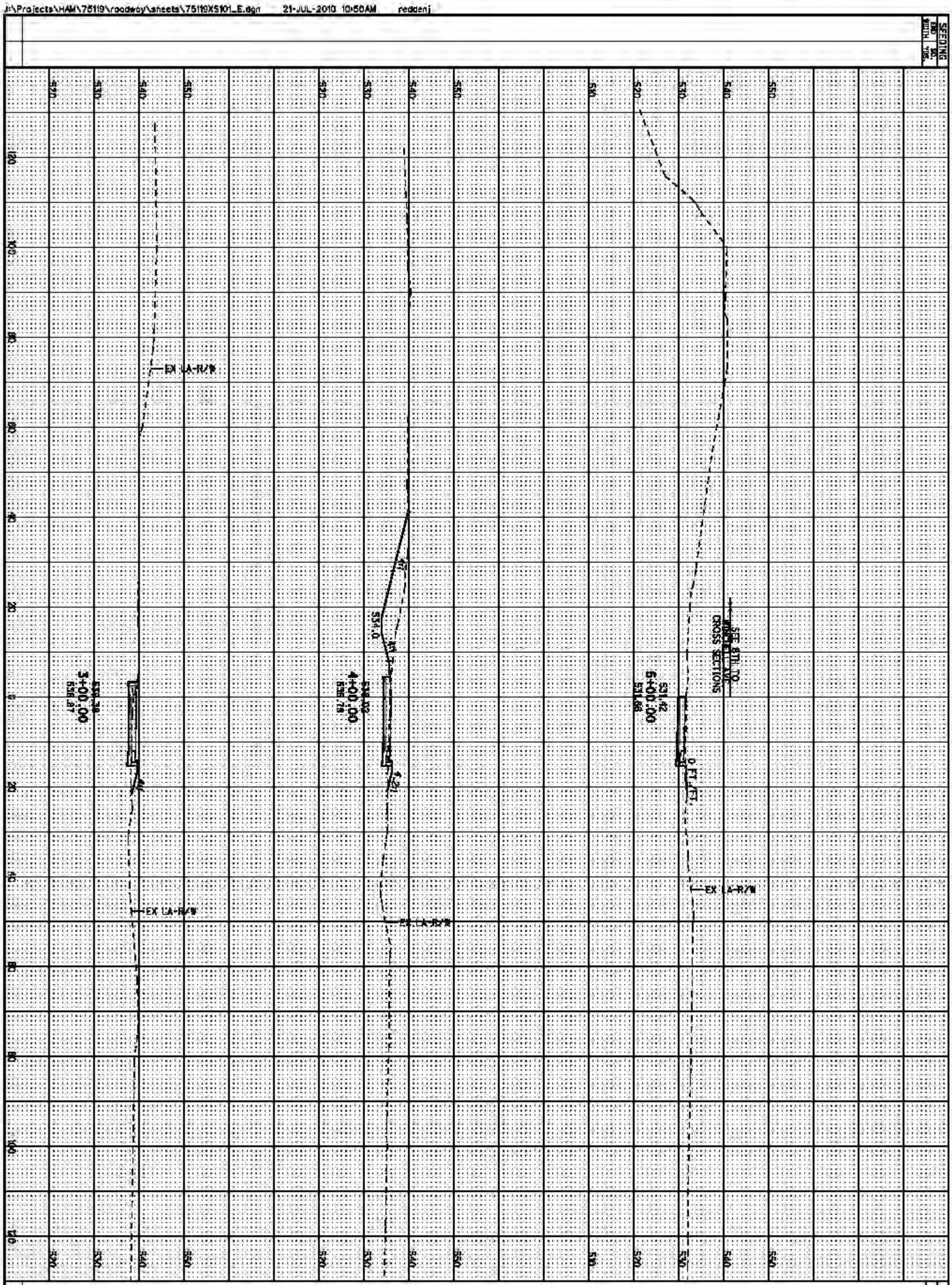
CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS101_E.dgn 21-JUL-2010 10:49AM redden



08	HAM-71/75-0.00/0.22	CROSS SECTIONS - 9TH TO WINCHELL STA. 0+00.00 TO STA. 2+00.00	CALCULATED CHECKED

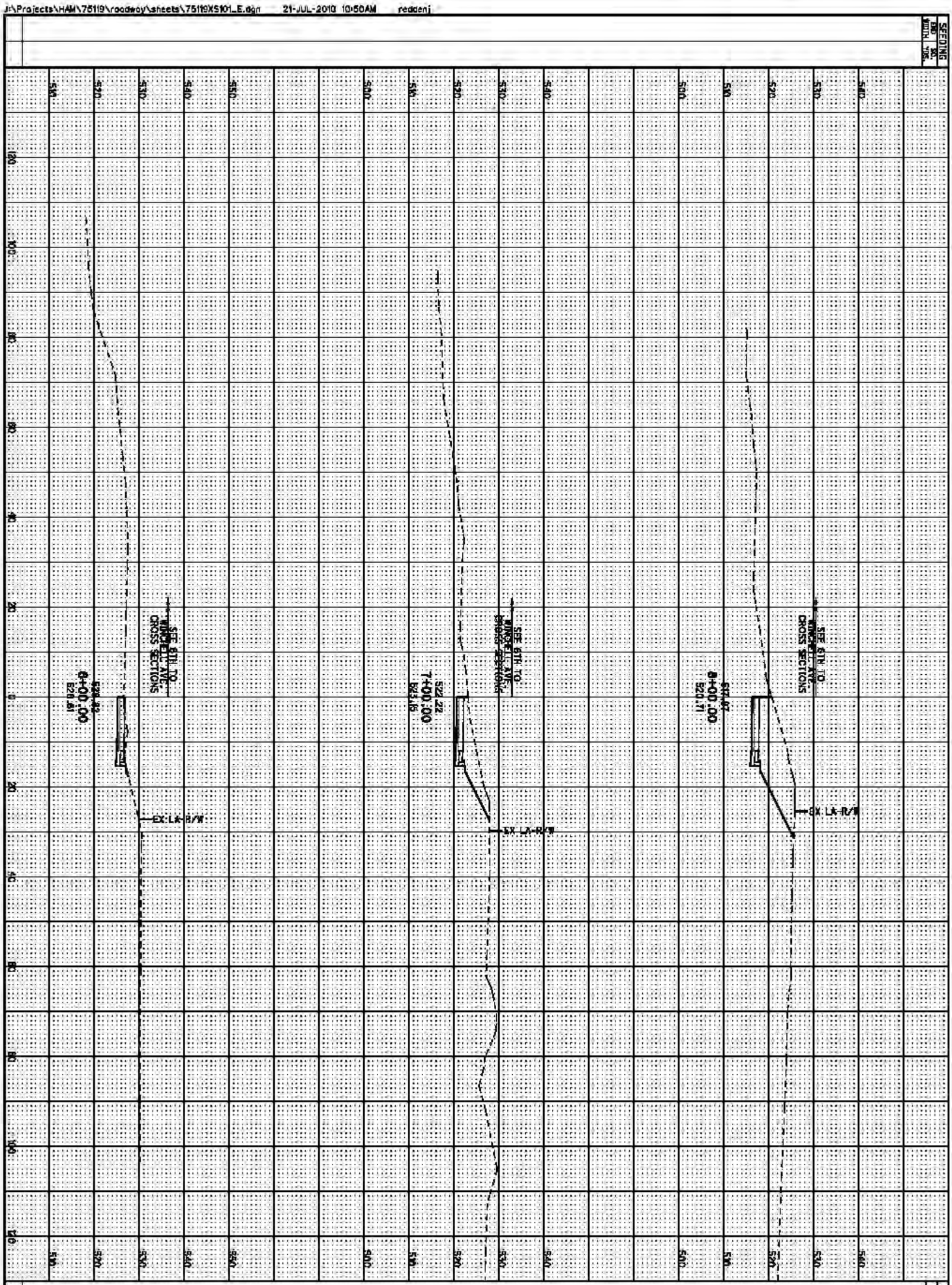
J:\Projects\HAM\75119\roadway\sheets\75119XS101_E.dgn 21-JUL-2010 10:50AM reddenj



18	HAM-71/75-0.00/0.22	CROSS SECTIONS - 9TH TO WINCHELL STA. 3+00.00 TO STA. 5+00.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS101_E.dgn 21-JUL-2010 10:50AM reddenj

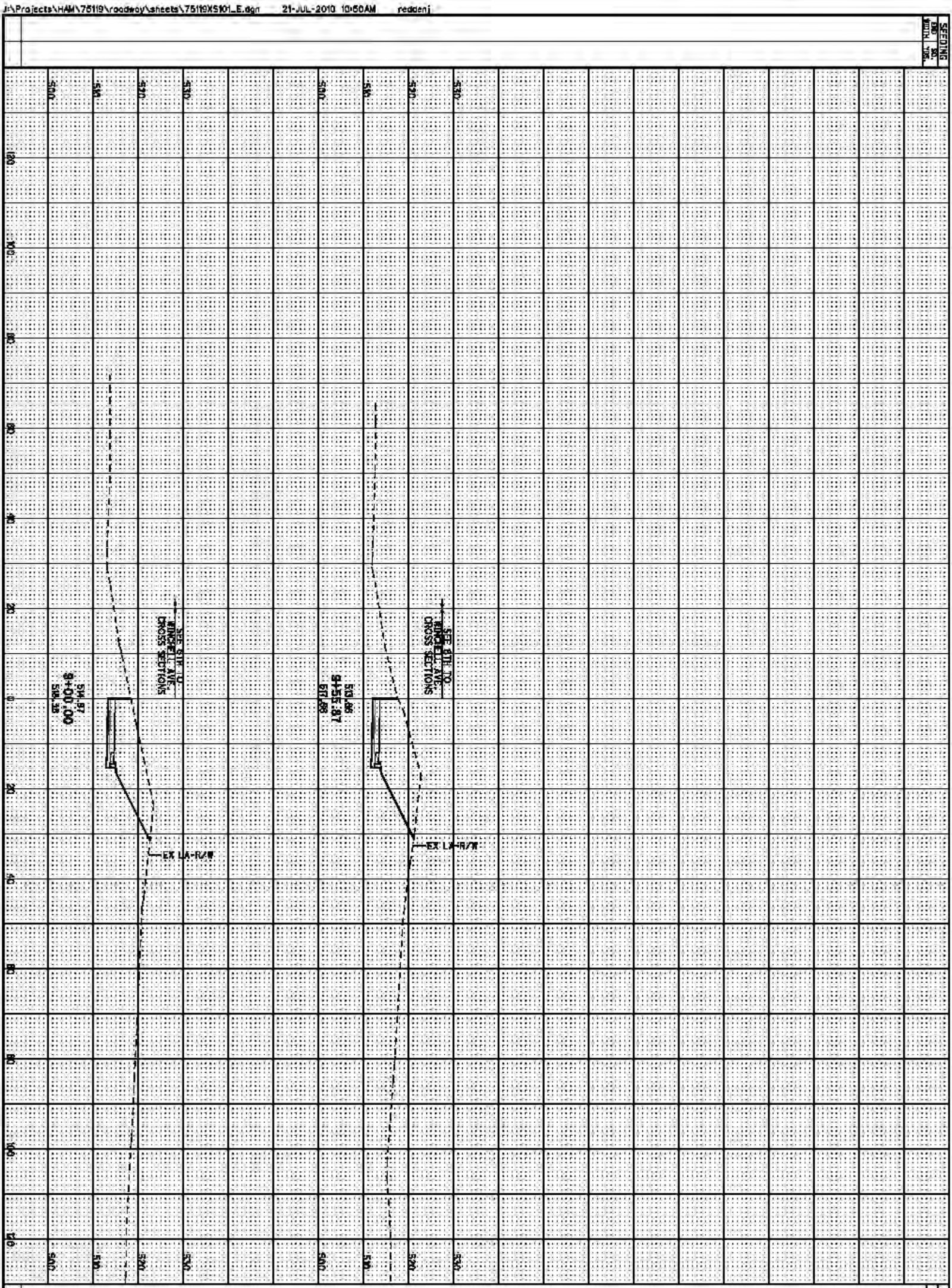


26 | HAM-71/75-0.00/0.22

CROSS SECTIONS - 9TH TO WINCHELL
STA. 6+00.00 TO STA. 8+00.00

CALCULATED
CHECKED

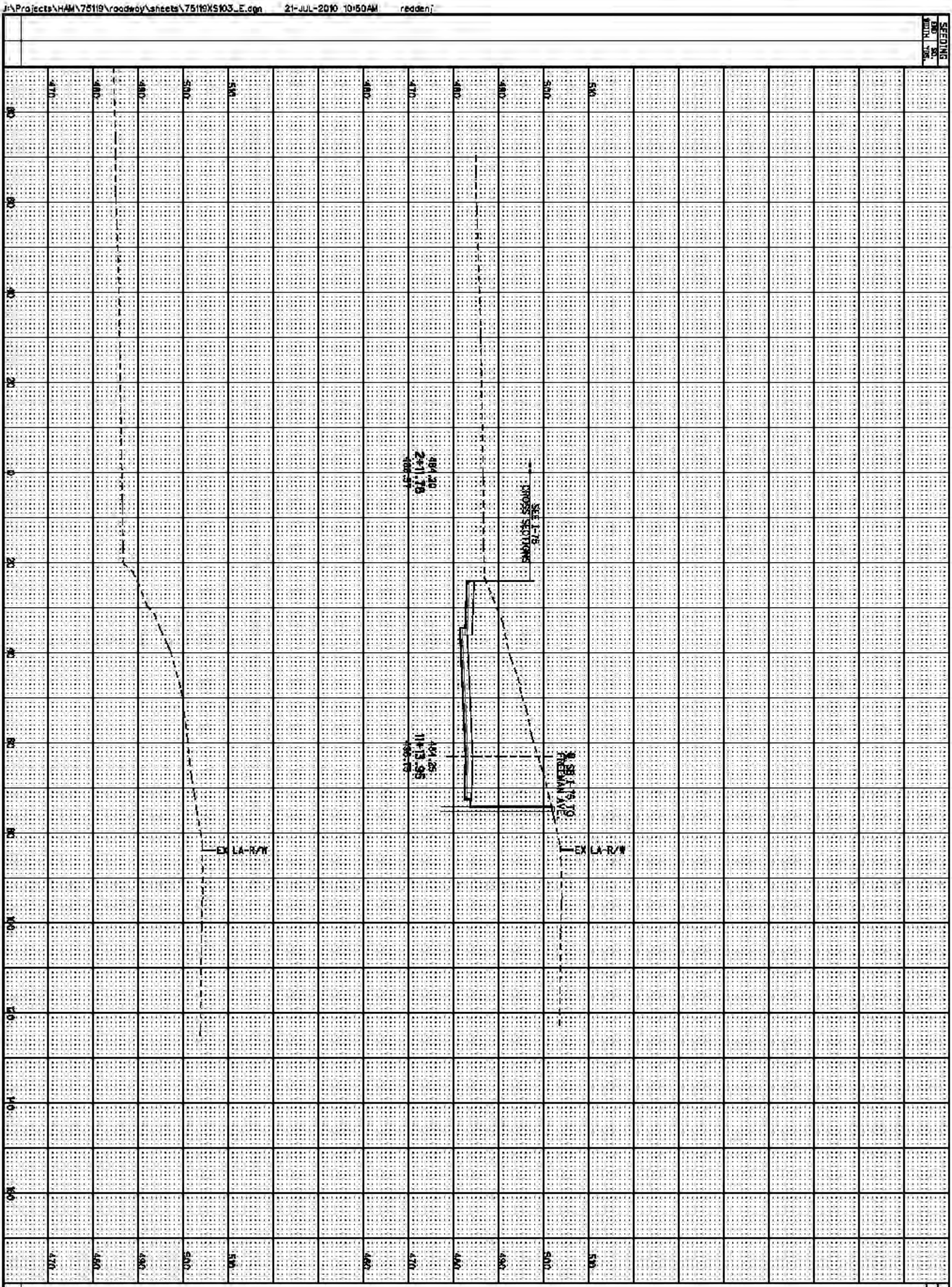
J:\Projects\HAM\75119\roadway\sheets\75119XS101_E.dgn 21-JUL-2010 10:50AM reddenj



93	HAM-71/75-0.00/0.22	CROSS SECTIONS - 9TH TO WINCHELL STA. 9+00.00 TO STA. 9+55.87

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS103_E.dgn 21-JUL-2010 10:50AM redden



94

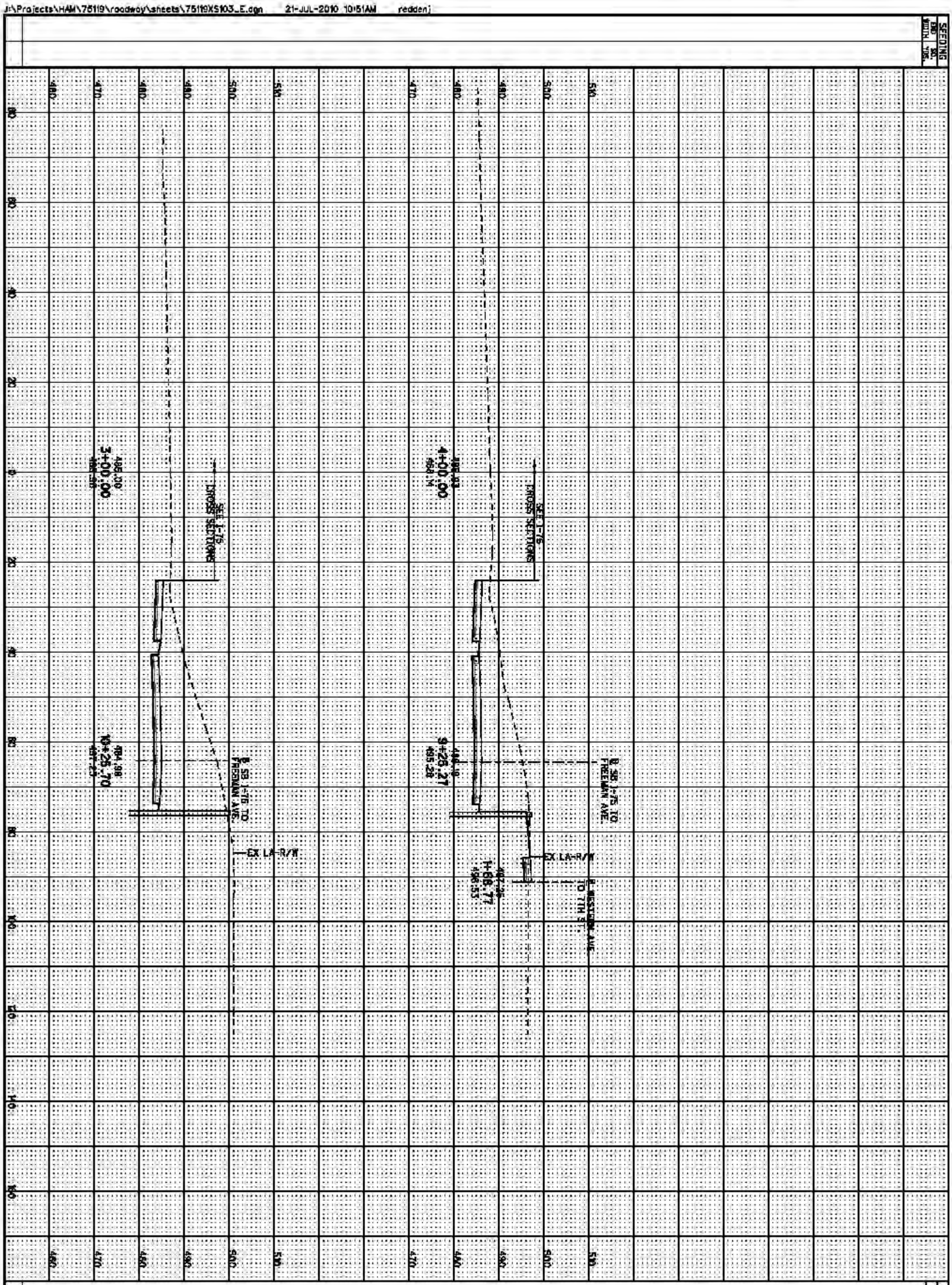
HAM-71/75-0.00/0.22

CROSS SECTIONS - SB CD RD TO 7TH
STA. 2+00.00 TO STA. 2+11.76

CALCULATED

CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS103_E.dgn 21-JUL-2010 10:51AM redden



95	HAM-71/75-0.00/0.22	CROSS SECTIONS - SB CD RD TO 7TH STA. 3+00.00 TO STA. 4+00.00

CALCULATED
CHECKED

SEEDING

END WIDTH	SQ. YDS.

END AREA

CUT	FILL

VOLUME

CUT	FILL

CALCULATED

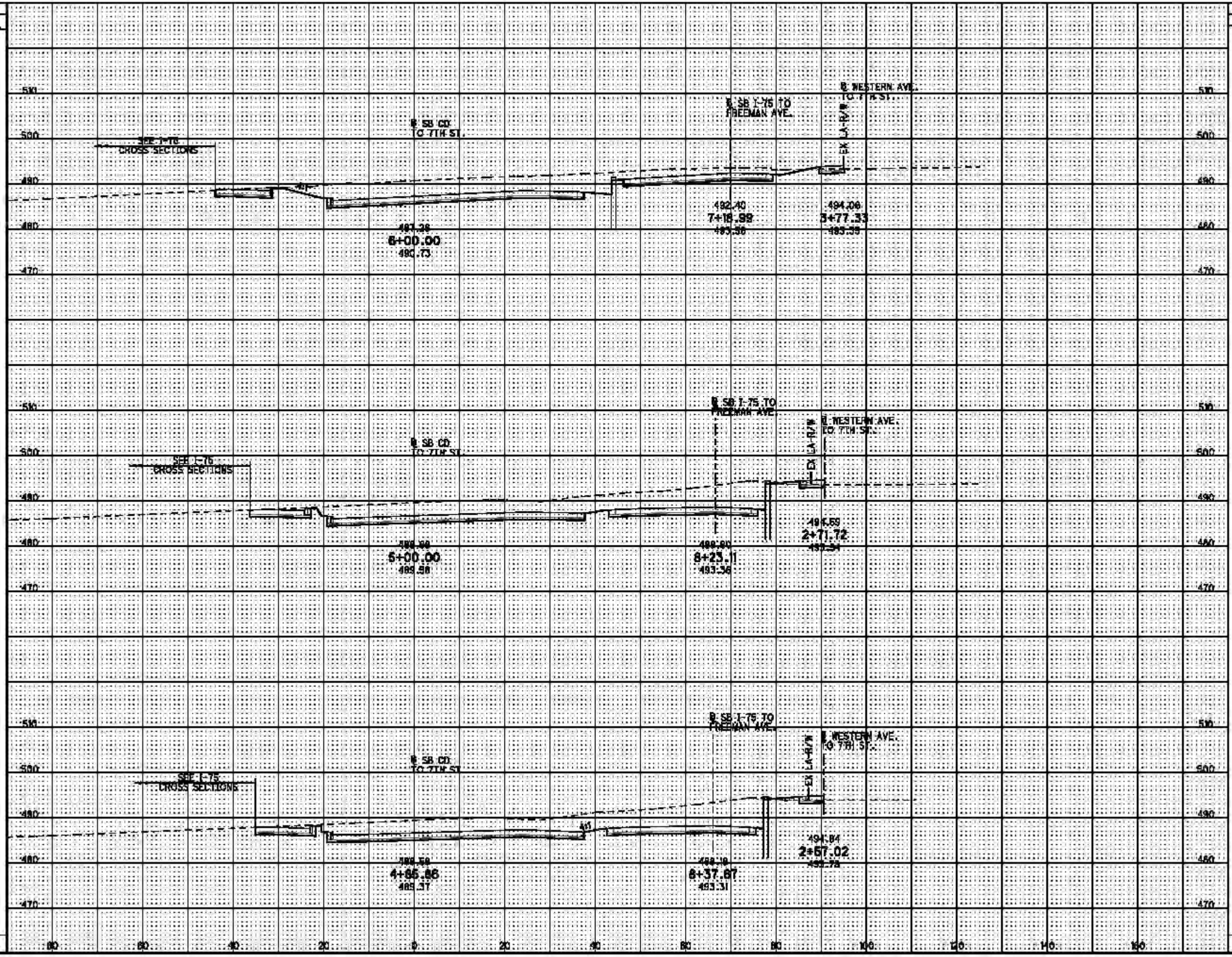
CHECKED

CROSS SECTIONS - SB CD RD TO 7TH
STA. 4+85.86 TO STA. 8+00.00

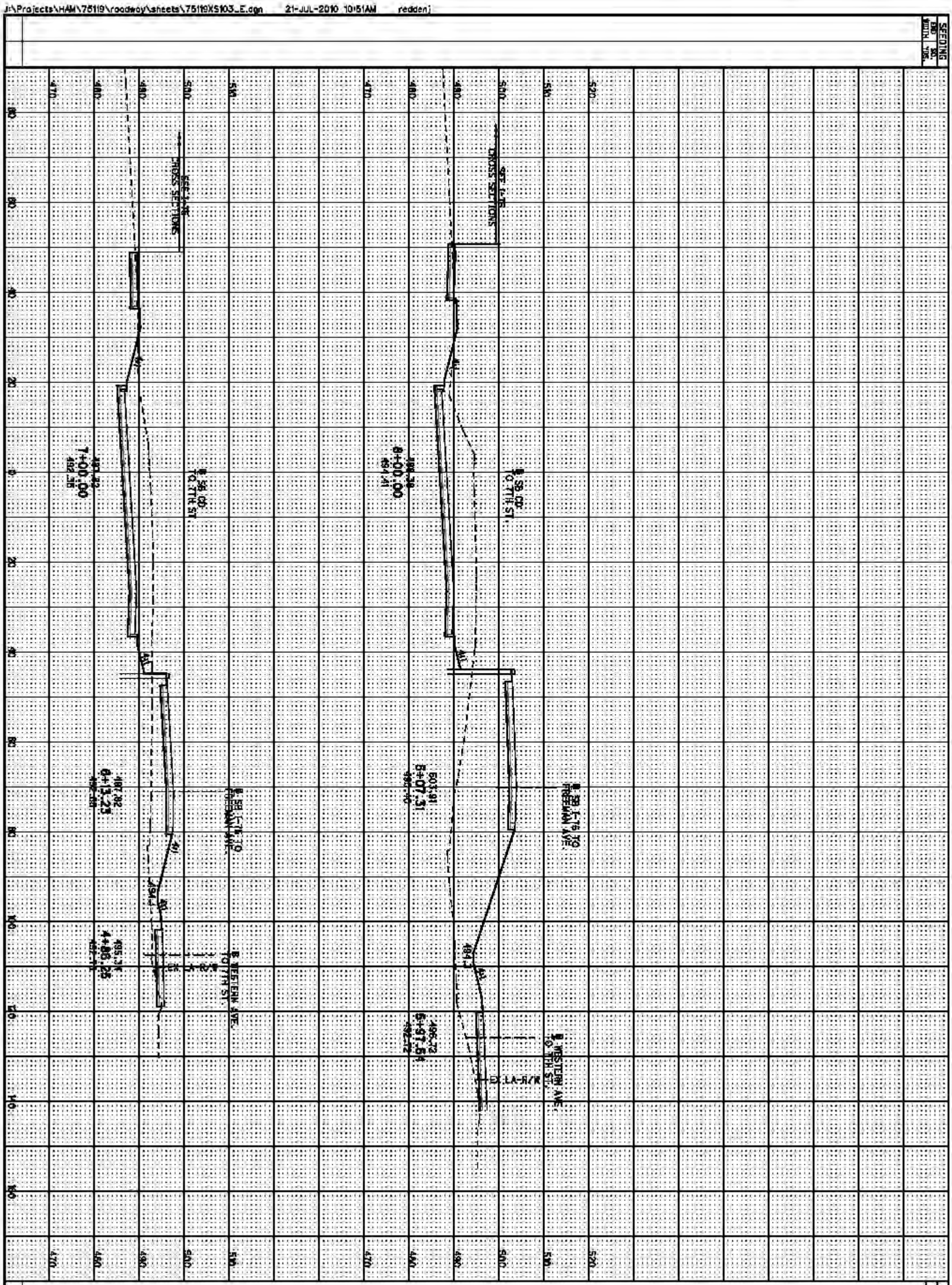
HAM-71/75-0.00/0.22

96

J:\Projects\HAM\75119\roadway\sheets\75119XS03_E.dgn 21-JUL-2010 10:51AM redden



J:\Projects\HAM\75119\roadway\sheets\75119XS103_E.dgn 21-JUL-2010 10:51AM redden



97	HAM-71/75-0.00/0.22	CROSS SECTIONS - SB CD RD TO 7TH STA. 7+00.00 TO STA. 8+00.00

CALCULATED
CHECKED

SEEDING

END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED

CHECKED

CROSS SECTIONS - SB CD RD TO 7TH
STA. 9+00.00 TO STA. 10+00.00

HAM-71/75-0.00/0.22

98

J:\Projects\HAM\75119\roadway\sheets\75119XS03_E.dgn 21-JUL-2010 10:52AM redeni

SEE I-75 CROSS SECTIONS

@ SB CD TO 7TH ST.

@ WESTERN AVE. TO 7TH ST.

EX LA-HOW

4.5%

4.5%

0 FT./FT.

489.50
10+00.00
493.61

494.58
9+20.11
493.39

@ SB I-75 TO FREEMAN AVE.

@ SB CD TO 7TH ST.

@ WESTERN AVE. TO 7TH ST.

SEE I-75 CROSS SECTIONS

2%

2%

494.5

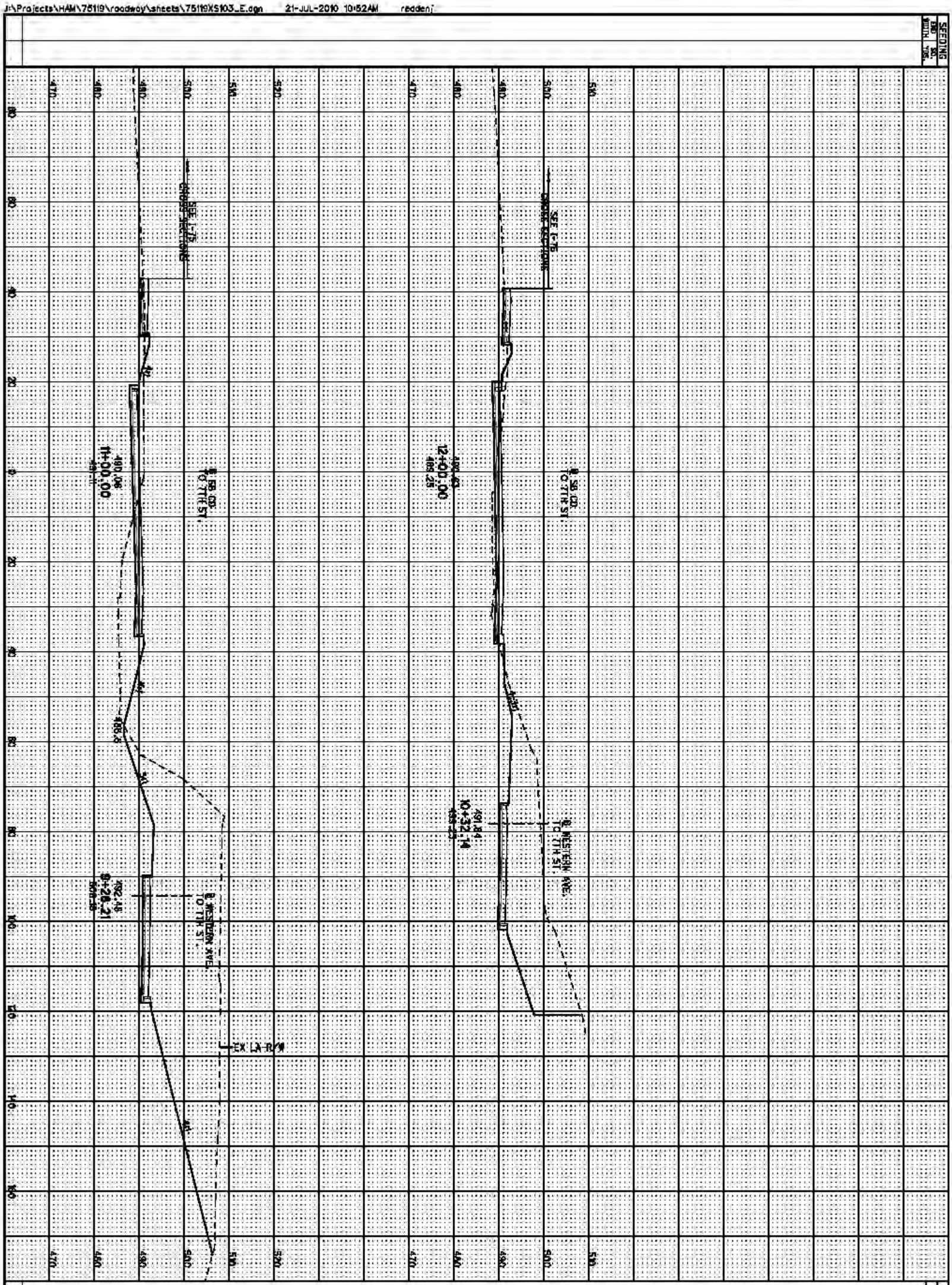
496.0

488.64
9+00.00
486.61

490.21
9+01.44
485.82

488.65
7+06.78
484.82

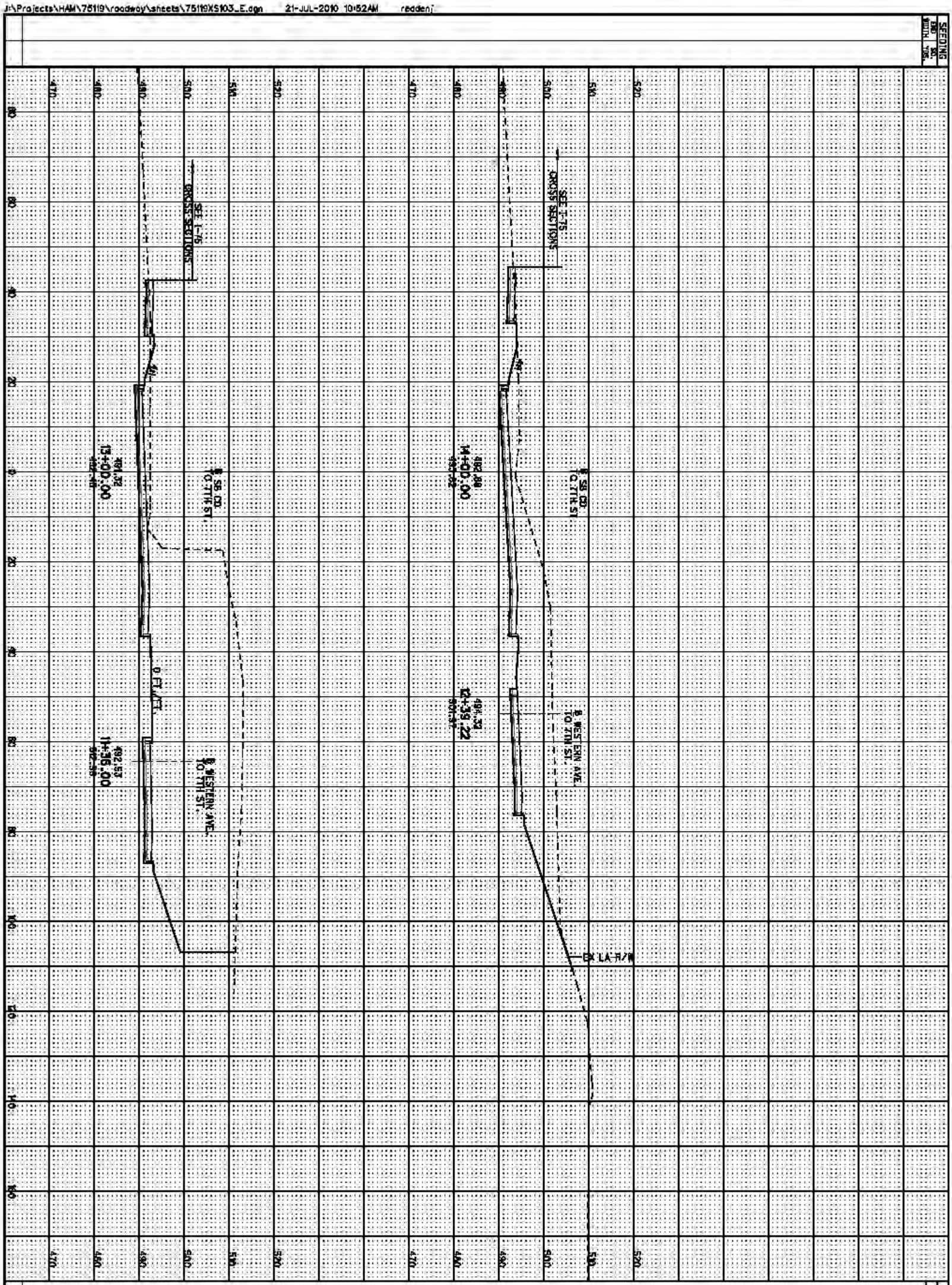
J:\Projects\HAM\75119\roadway\sheets\75119XS103_E.dgn 21-JUL-2010 10:52AM reddenj



66	HAM-71/75-0.00/0.22	CROSS SECTIONS - SB CD RD TO 7TH STA. 11+00.00 TO STA. 12+00.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS103_E.dgn 21-JUL-2010 10:52AM redden



END AREA VOLUME
CUT FILL CUT FILL

100

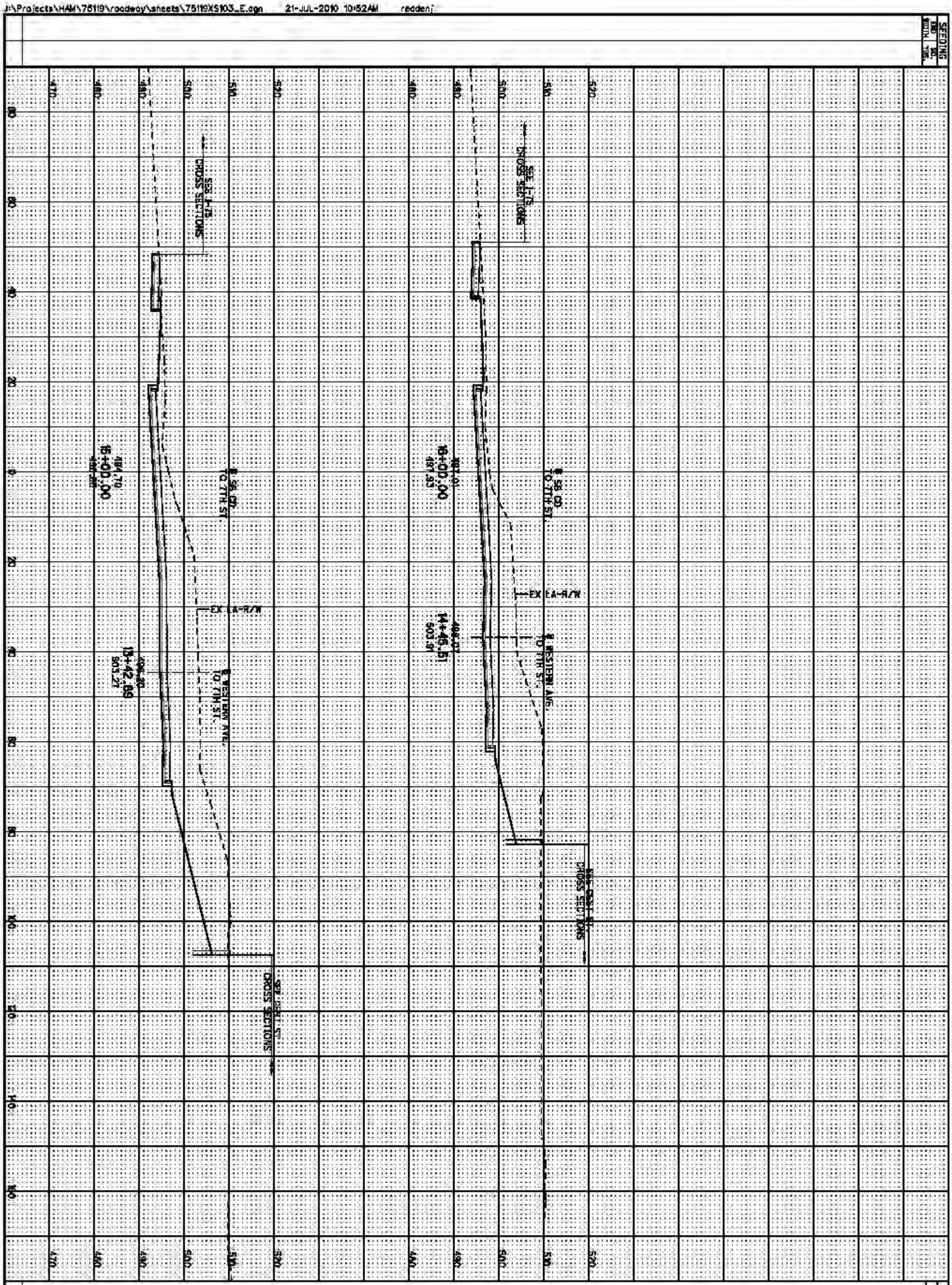
HAM-71/75-0.00/0.22

CROSS SECTIONS - SB CD RD TO 7TH
STA. 13+00.00 TO STA. 14+00.00

CALCULATED

CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS103_E.dgn 21-JUL-2010 10:52AM redden

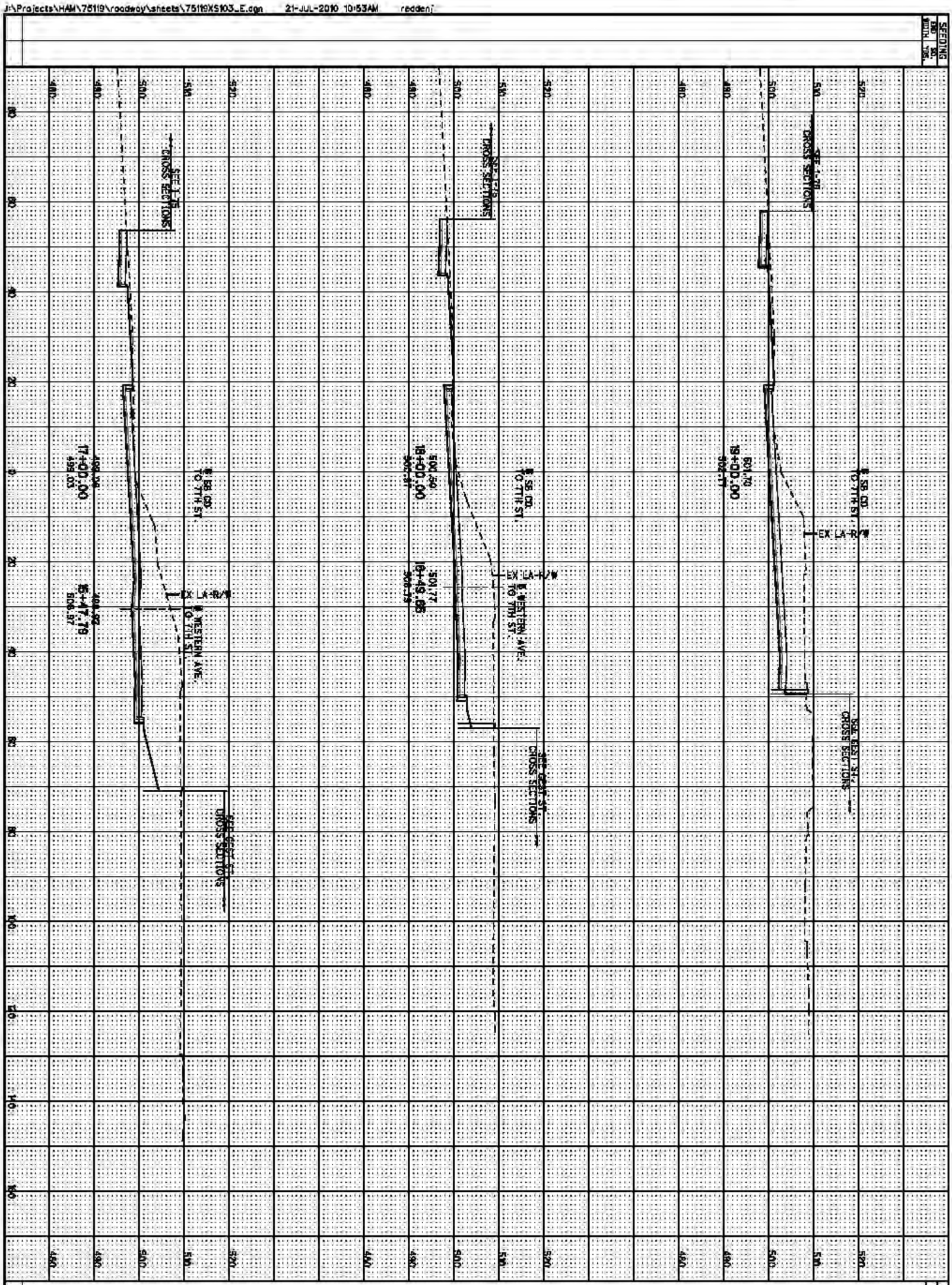


101

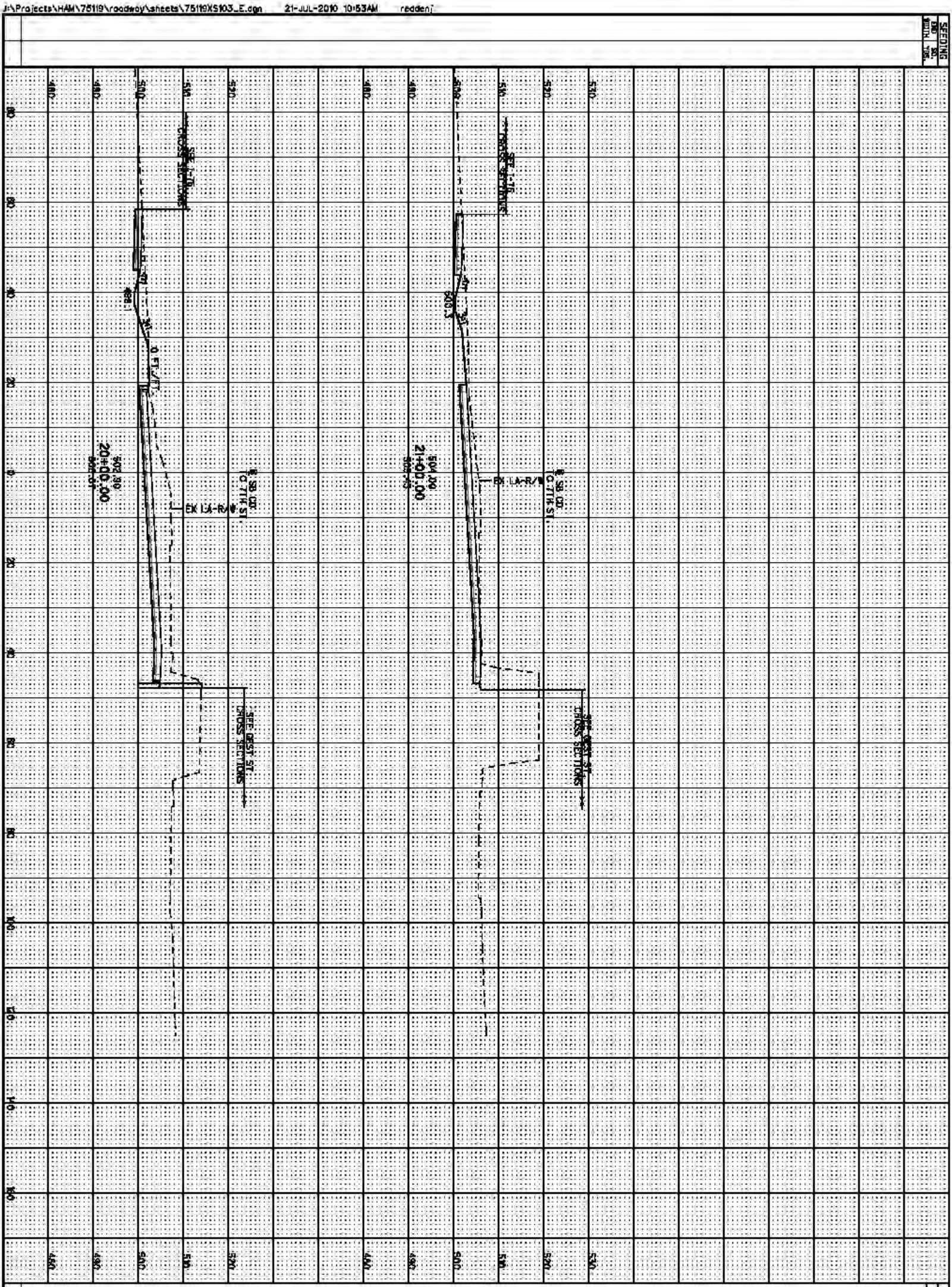
HAM-71/75-0.00/0.22

CROSS SECTIONS - SB CD RD TO 7TH
STA. 15+00.00 TO STA. 16+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS103_E.dgn 21-JUL-2010 10:53AM redden

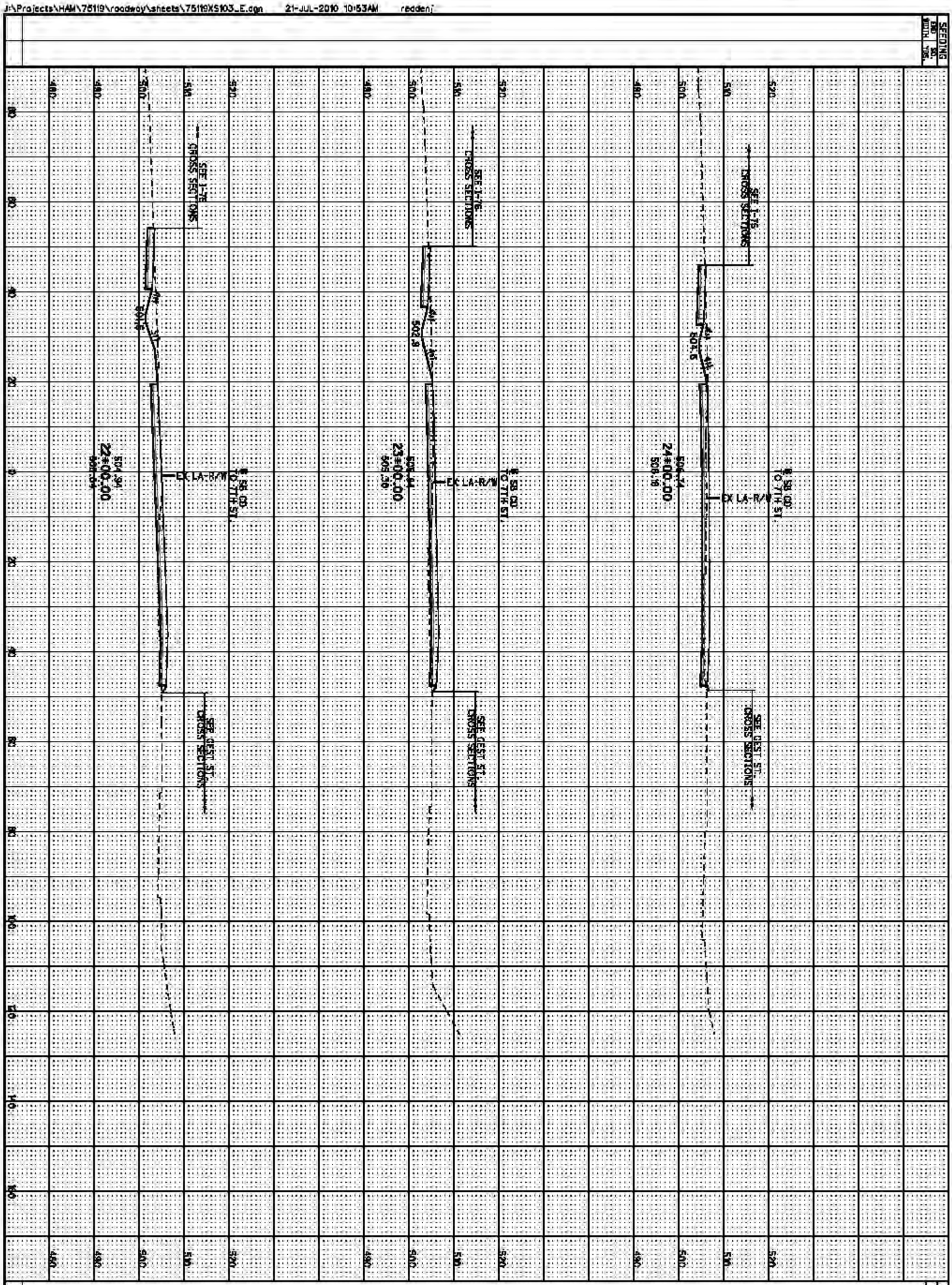

SEEDING
END AREA VOLUME
CUT FILL CUT FILL
SEE 1-75 CROSS SECTIONS
SEE CROSS SECTIONS
SEE CROSS SECTIONS
SEE

J:\Projects\HAM\75119\roadway\sheets\75119XS103_E.dgn 21-JUL-2010 10:53AM redden



103	HAM-71/75-0.00/0.22	CROSS SECTIONS - SB CD RD TO 7TH STA. 20+00.00 TO STA. 21+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS103_E.dgn 21-JUL-2010 10:53AM redden



104

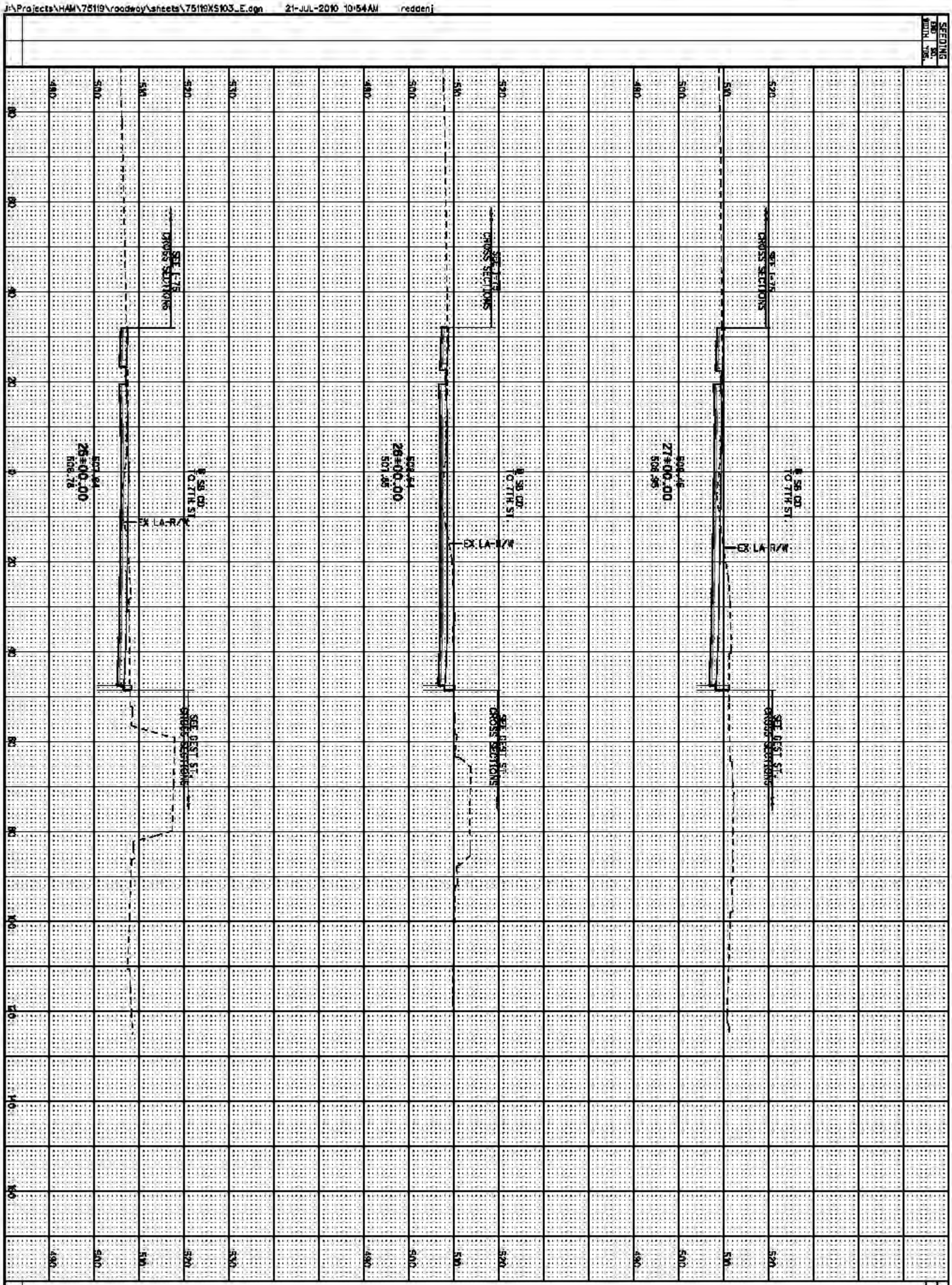
HAM-71/75-0.00/0.22

CROSS SECTIONS - SB CD RD TO 7TH
STA. 22+00.00 TO STA. 24+00.00

CALCULATED

CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS103_E.dgn 21-JUL-2010 10:54AM reddenj

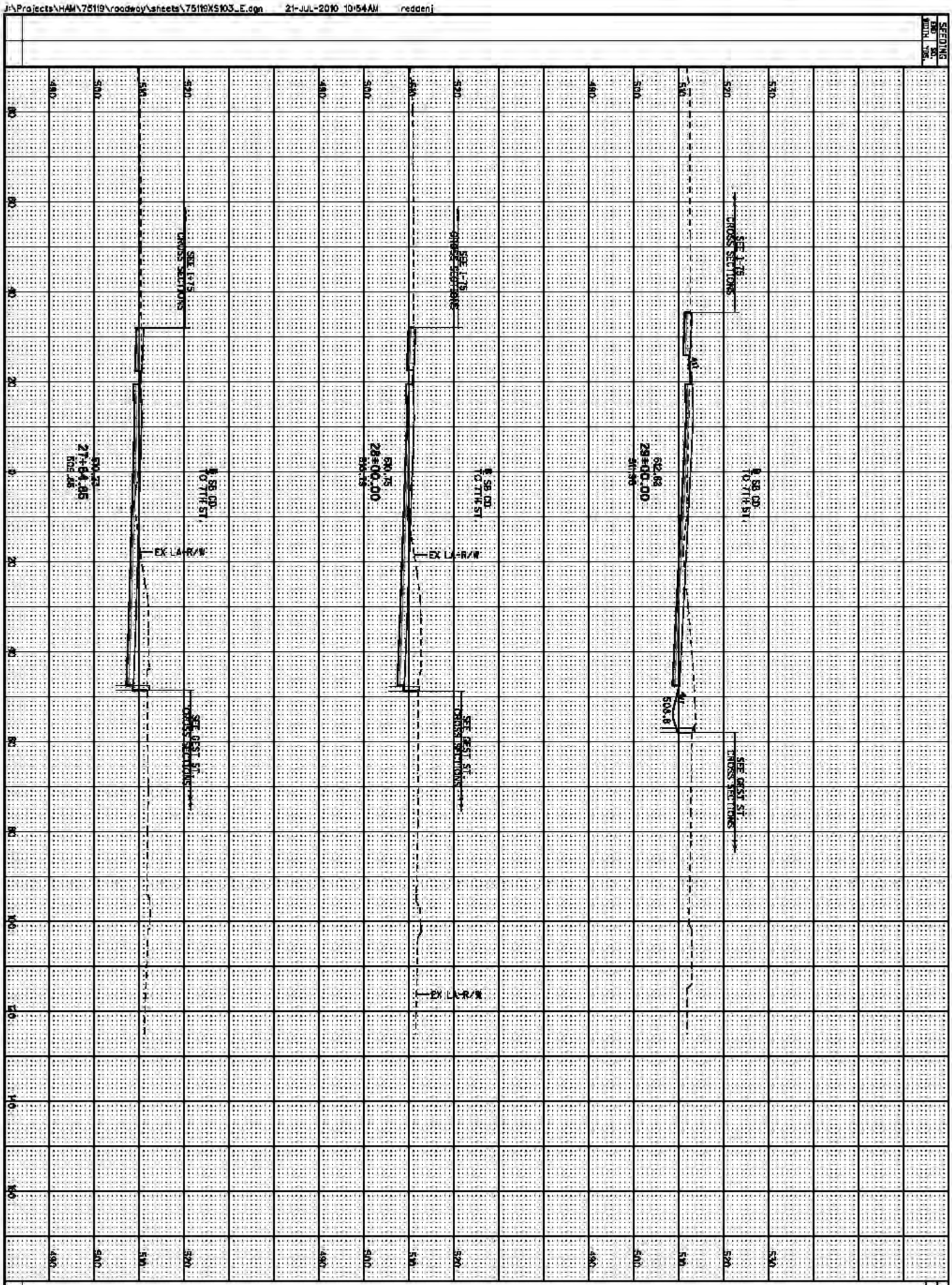


105

HAM-71/75-0.00/0.22

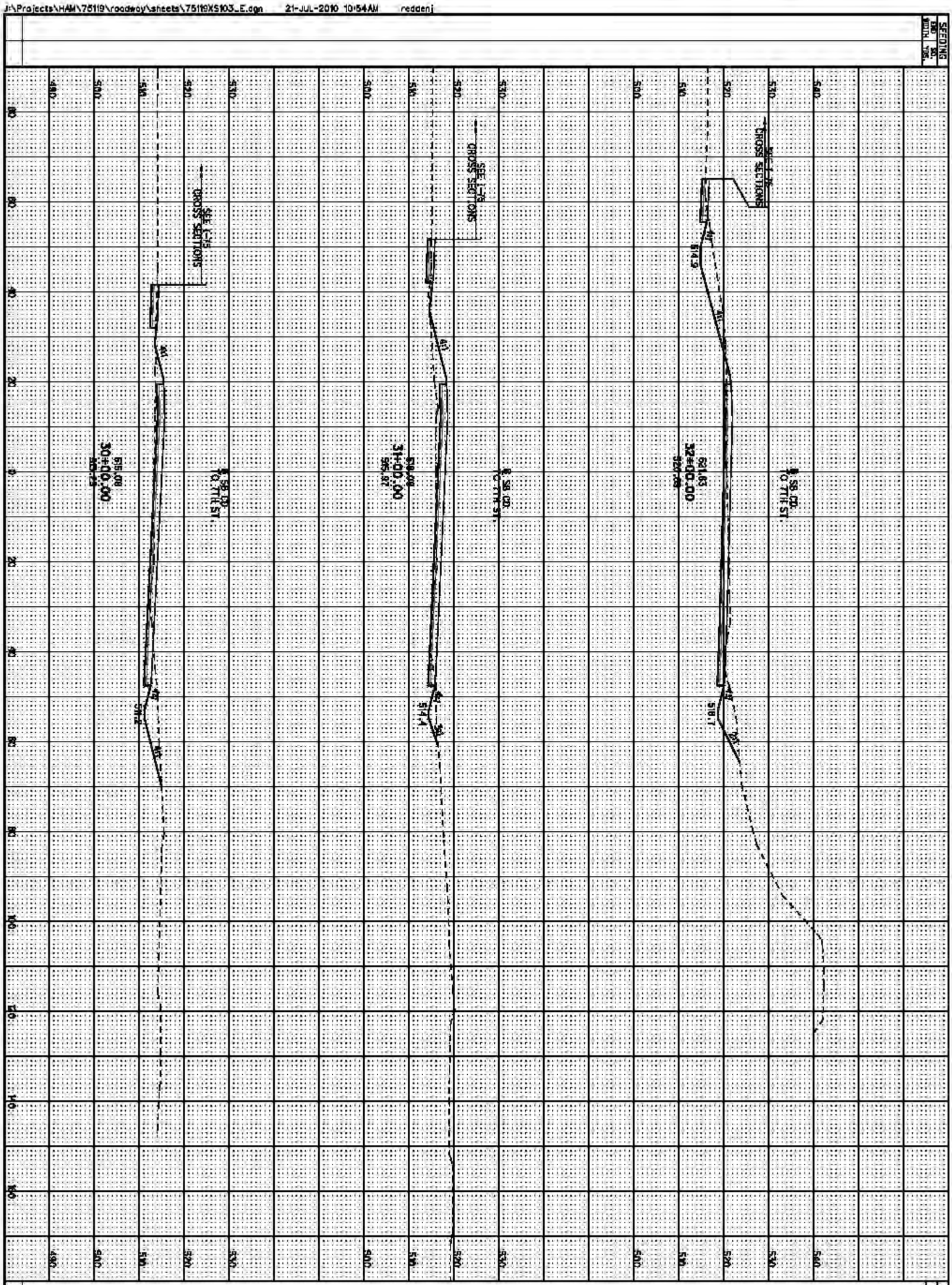
CROSS SECTIONS - SB CD RD TO 7TH
STA. 25+00.00 TO STA. 27+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS103_E.dgn 21-JUL-2010 10:54AM reddenj



106 | HAM-71/75-0.00/0.22 | CROSS SECTIONS - SB CD RD TO 7TH STA. 27+64.85 TO STA. 29+00.00 | CALCULATED | CHECKED

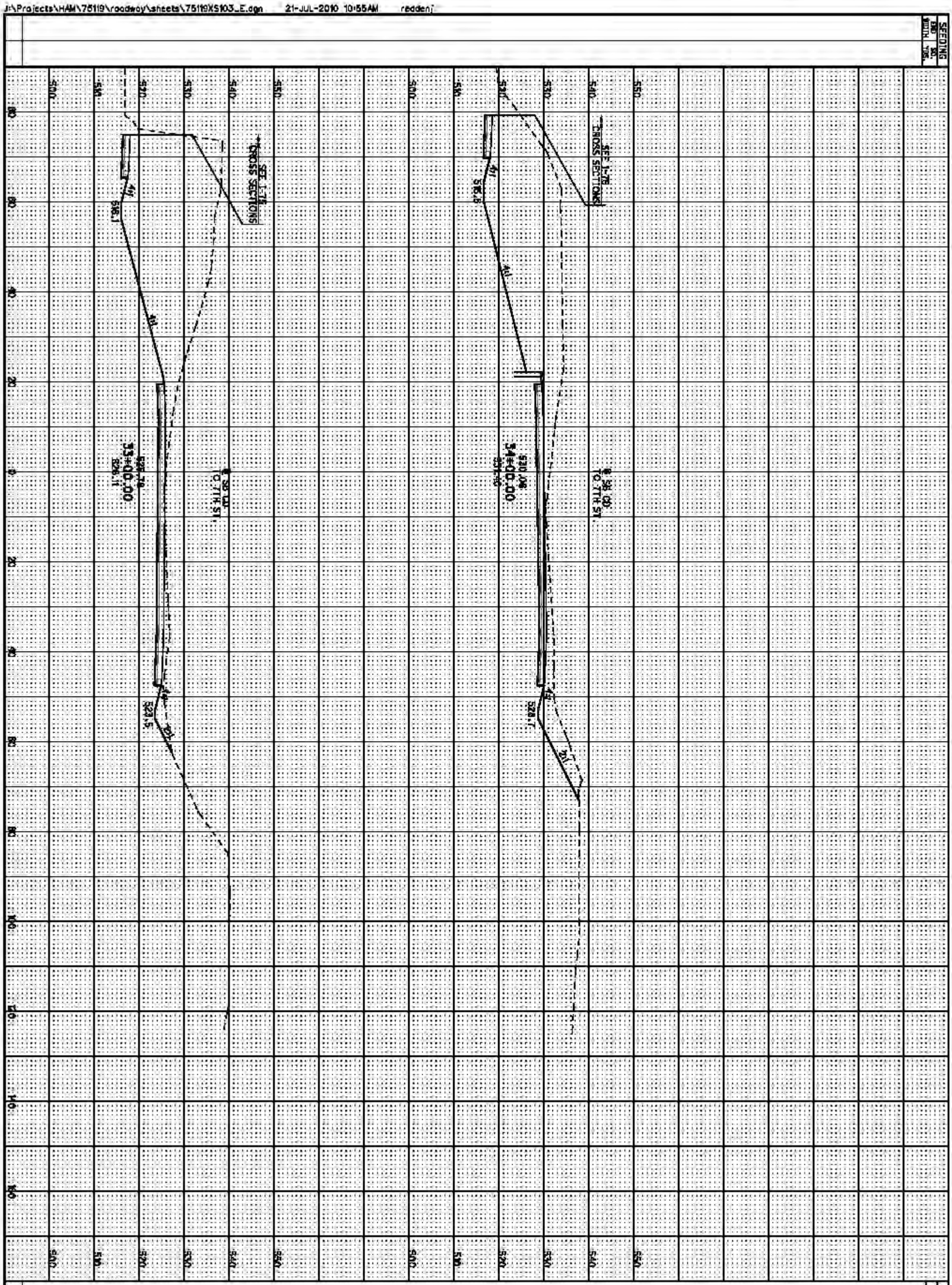
J:\Projects\HAM\75119\roadway\sheets\75119XS103_E.dgn 21-JUL-2010 10:54AM reddenj



HAM-71/75-0.00/0.22

CROSS SECTIONS - SB CD RD TO 7TH
STA. 30+00.00 TO STA. 32+00.00

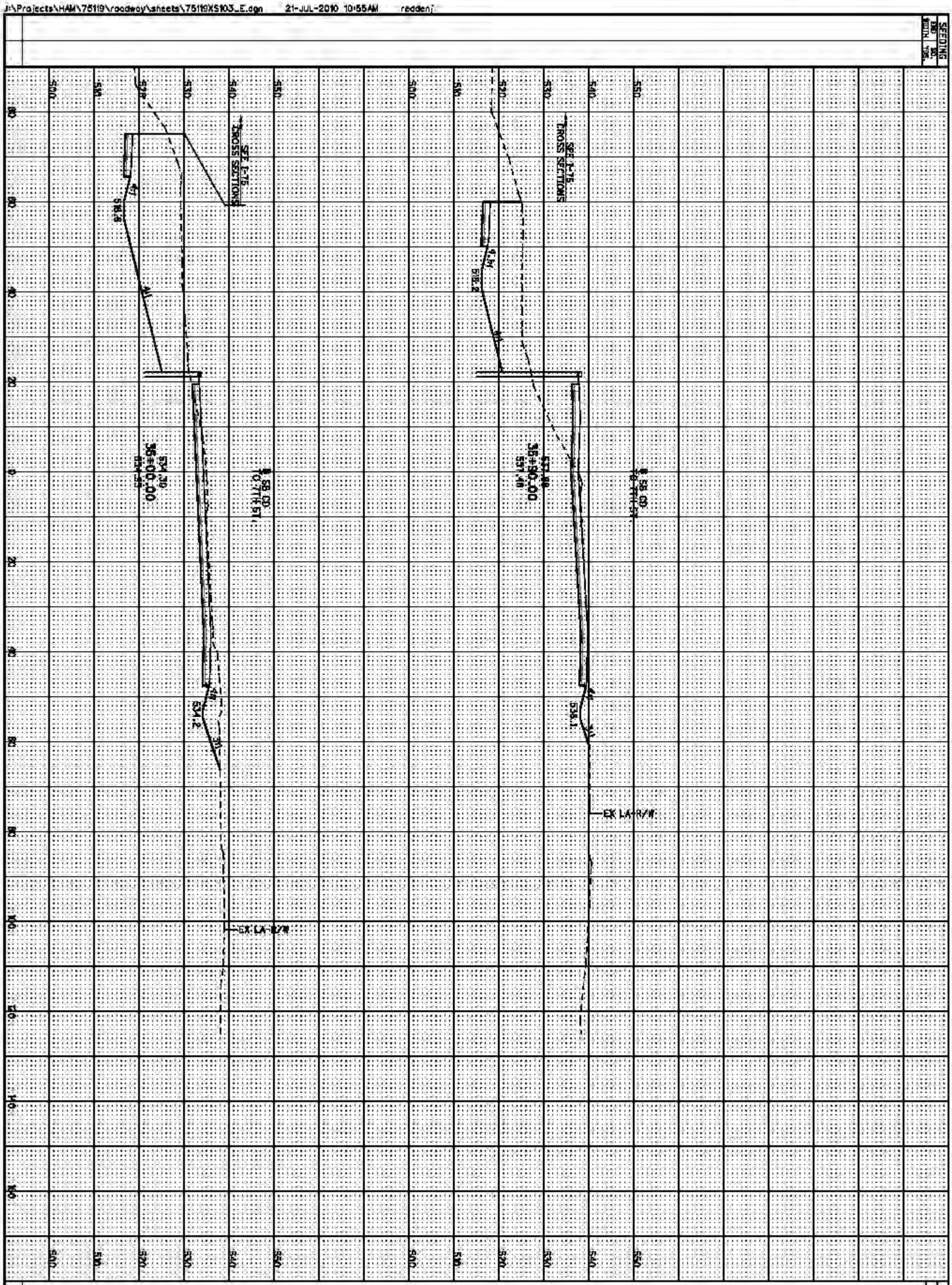
J:\Projects\HAM\75119\roadway\sheets\75119XS103_E.dgn 21-JUL-2010 10:55AM redden



108	HAM-71/75-0.00/0.22	CROSS SECTIONS - SB CD RD TO 7TH STA. 33+00.00 TO STA. 34+00.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS103_E.dgn 21-JUL-2010 10:55AM redden



108

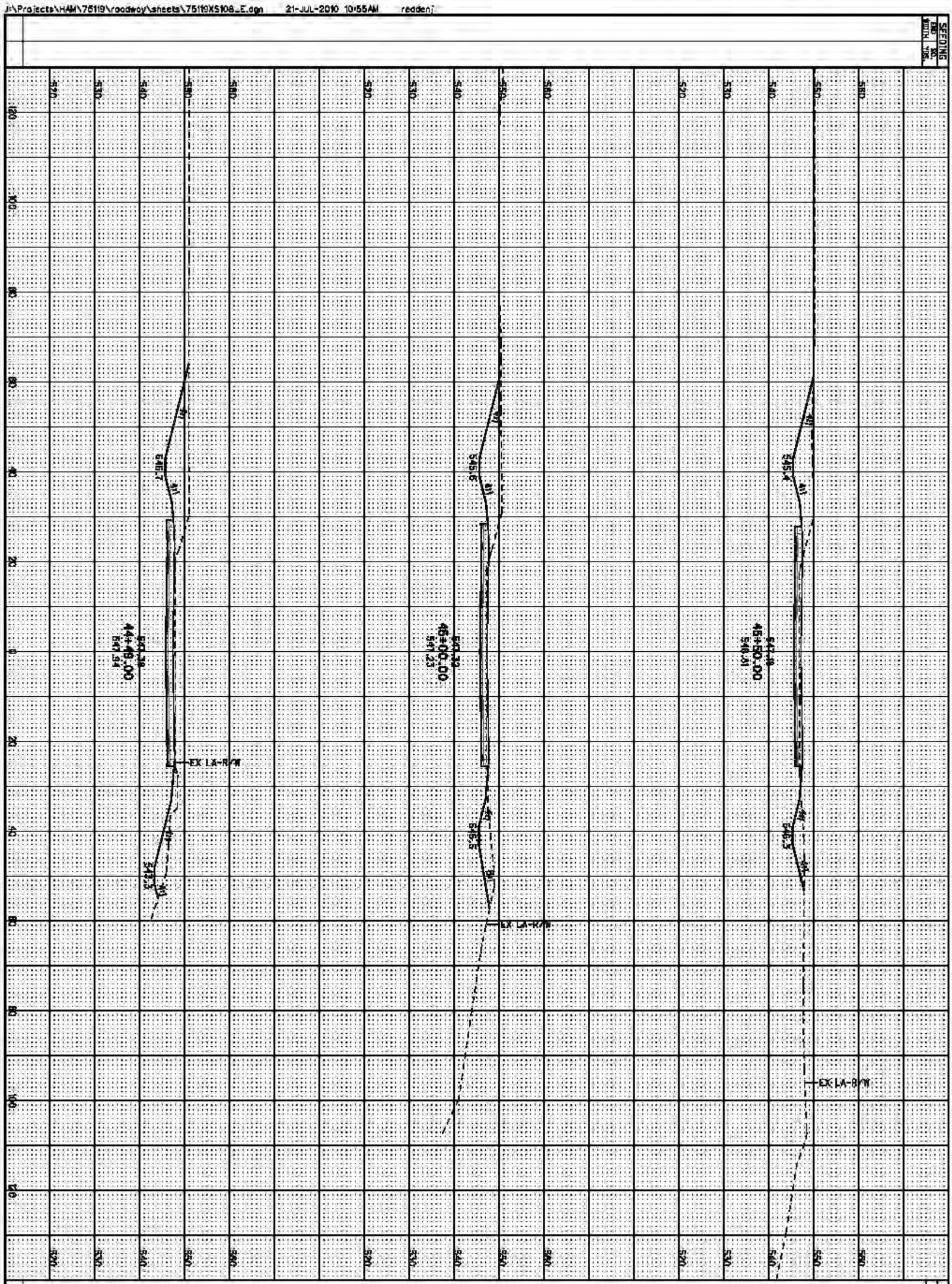
HAM-71/75-0.00/0.22

CROSS SECTIONS - SB CD RD TO 7TH
STA. 35+00.00 TO STA. 35+90.00

CALCULATED

CHECKED

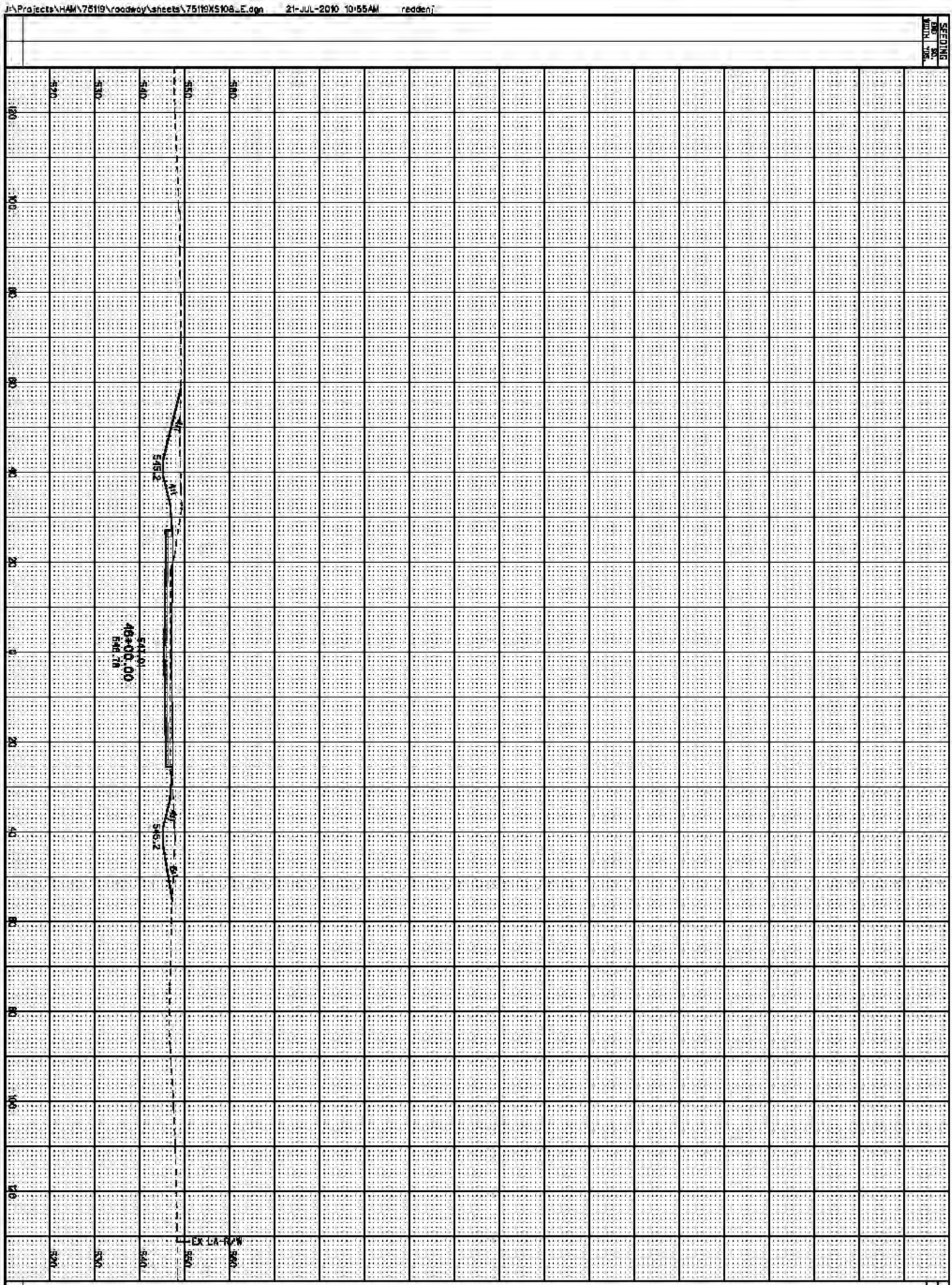
J:\Projects\HAM\75119\roadway\sheets\75119XS108_E.dgn 21-JUL-2010 10:55AM redden



110	HAM-71/75-0.00/0.22	CROSS SECTIONS - 7TH ST STA. 44+49.00 TO STA. 45+50.00

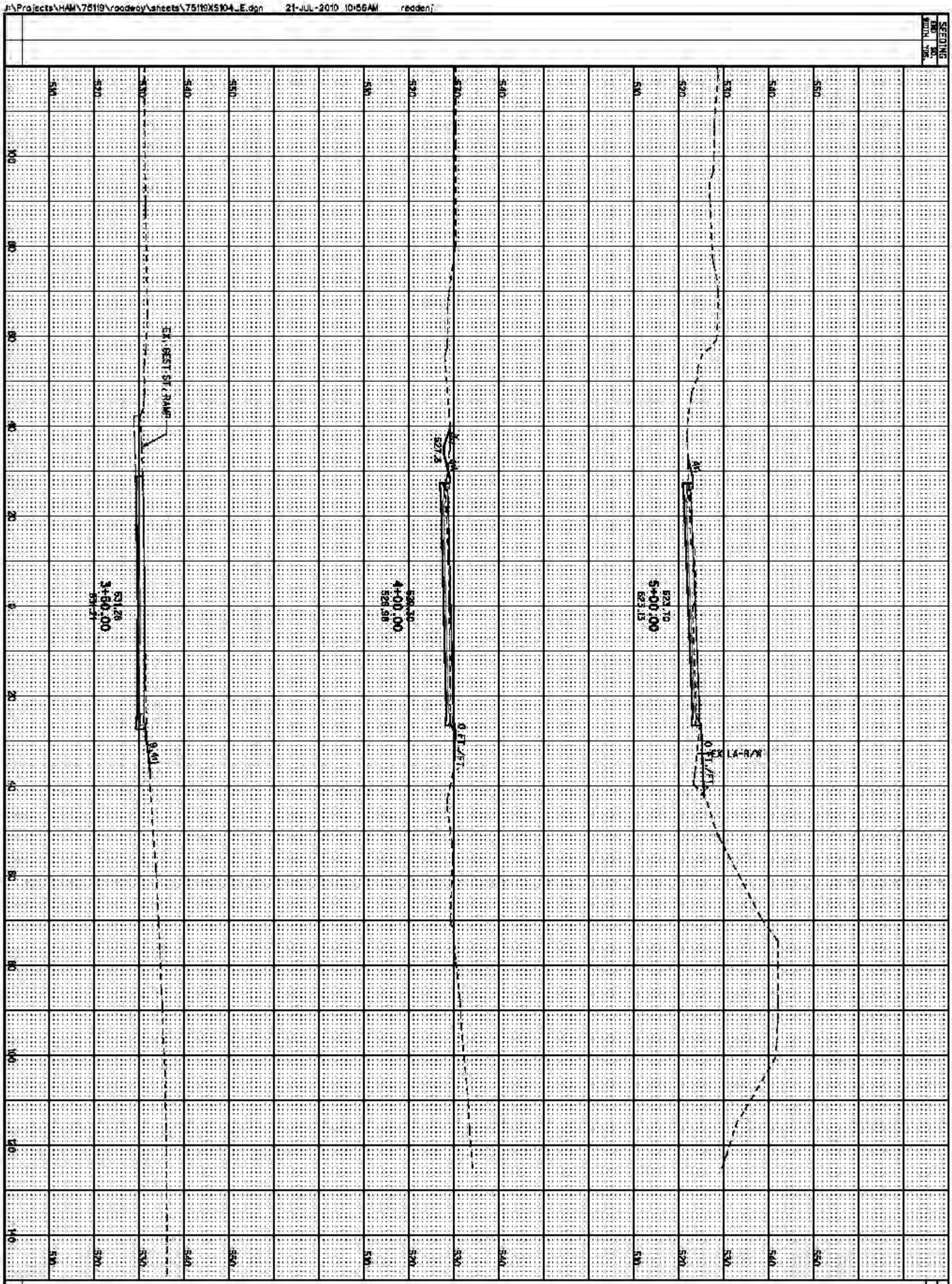
CALCULATED JMR
CHECKED NAH

J:\Projects\HAM\75119\roadway\sheets\75119XS108_E.dgn 21-JUL-2010 10:55AM redden



HAM-71/75-0.00/0.22	CROSS SECTIONS - 7TH ST STA. 46+00.00	CALCULATED JMR CHECKED NAH

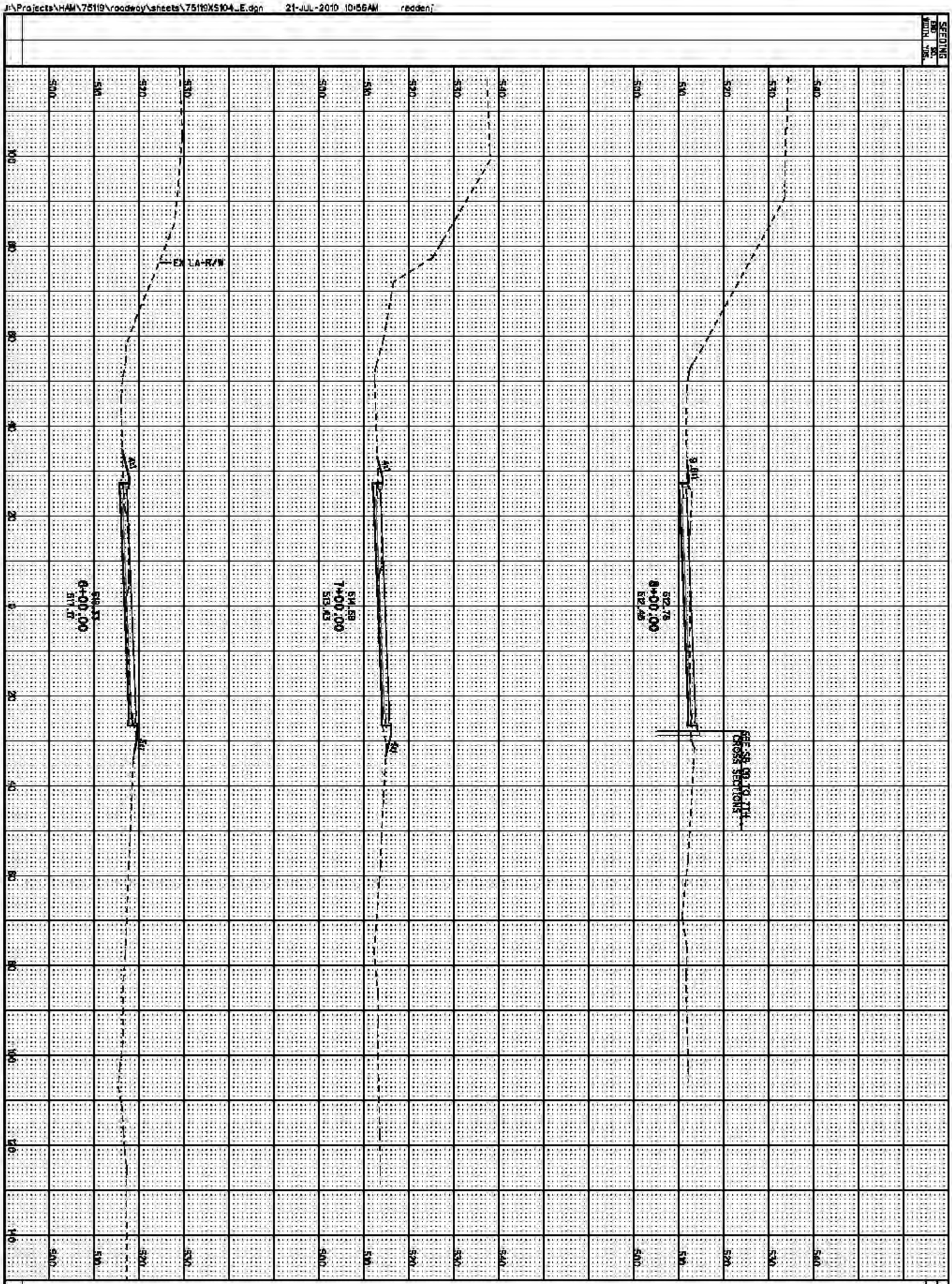
J:\Projects\HAM\75119\roadway\sheets\75119XS104_E.dgn 21-JUL-2010 10:56AM reddenj



112	HAM-71/75-0.00/0.22	CROSS SECTIONS - GEST ST STA. 3+50.00 TO STA. 5+00.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS104_E.dgn 21-JUL-2010 10:56AM reddenj



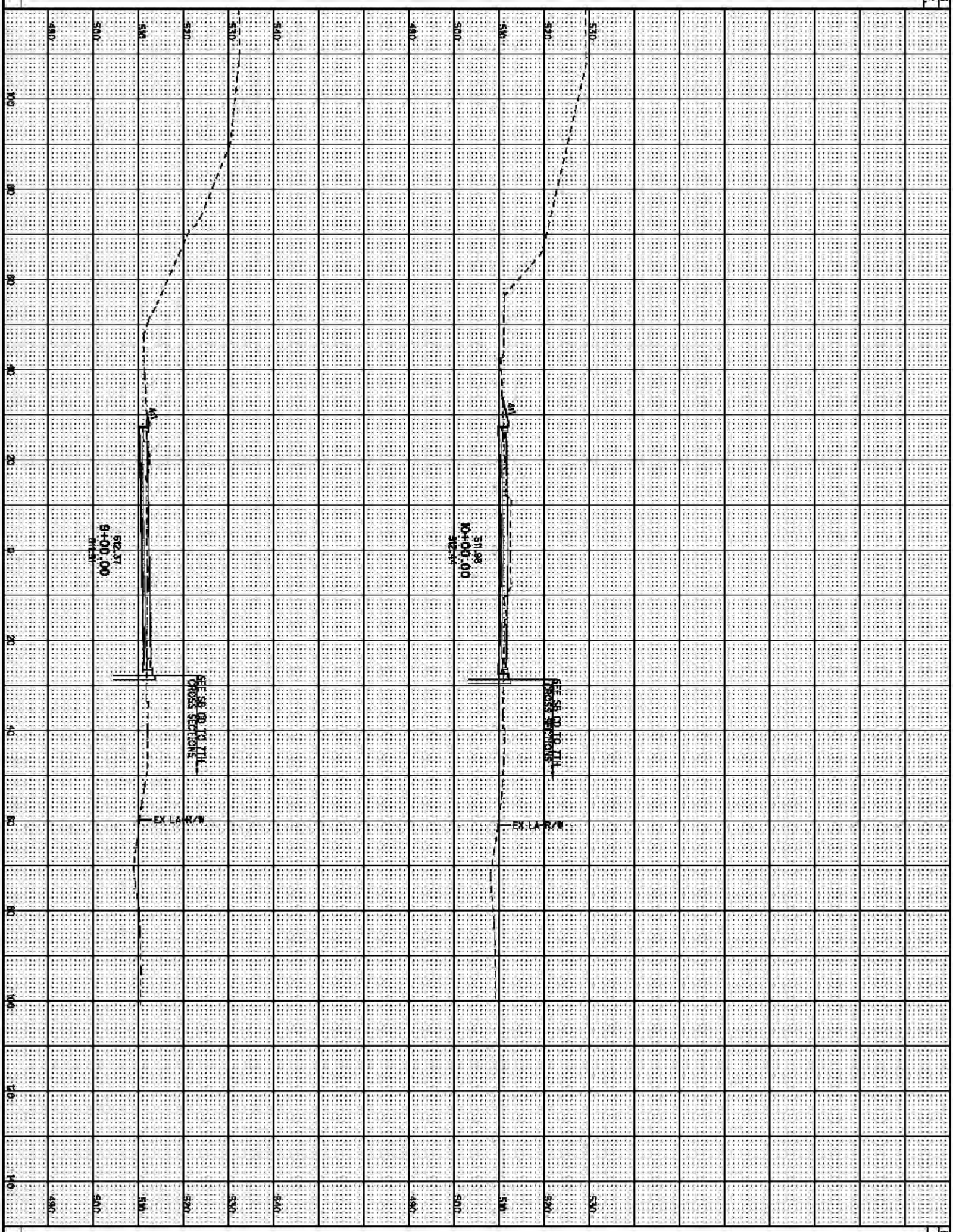
END AREA VOLUME
CUT FILL CUT FILL

HAM-71/75-0.00/0.22

CROSS SECTIONS - GEST ST
STA. 6+00.00 TO STA. 8+00.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS104_E.dgn 21-JUL-2010 10:56AM reddenj



SEEDING	
END	SQ.
WIDTH	YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

114

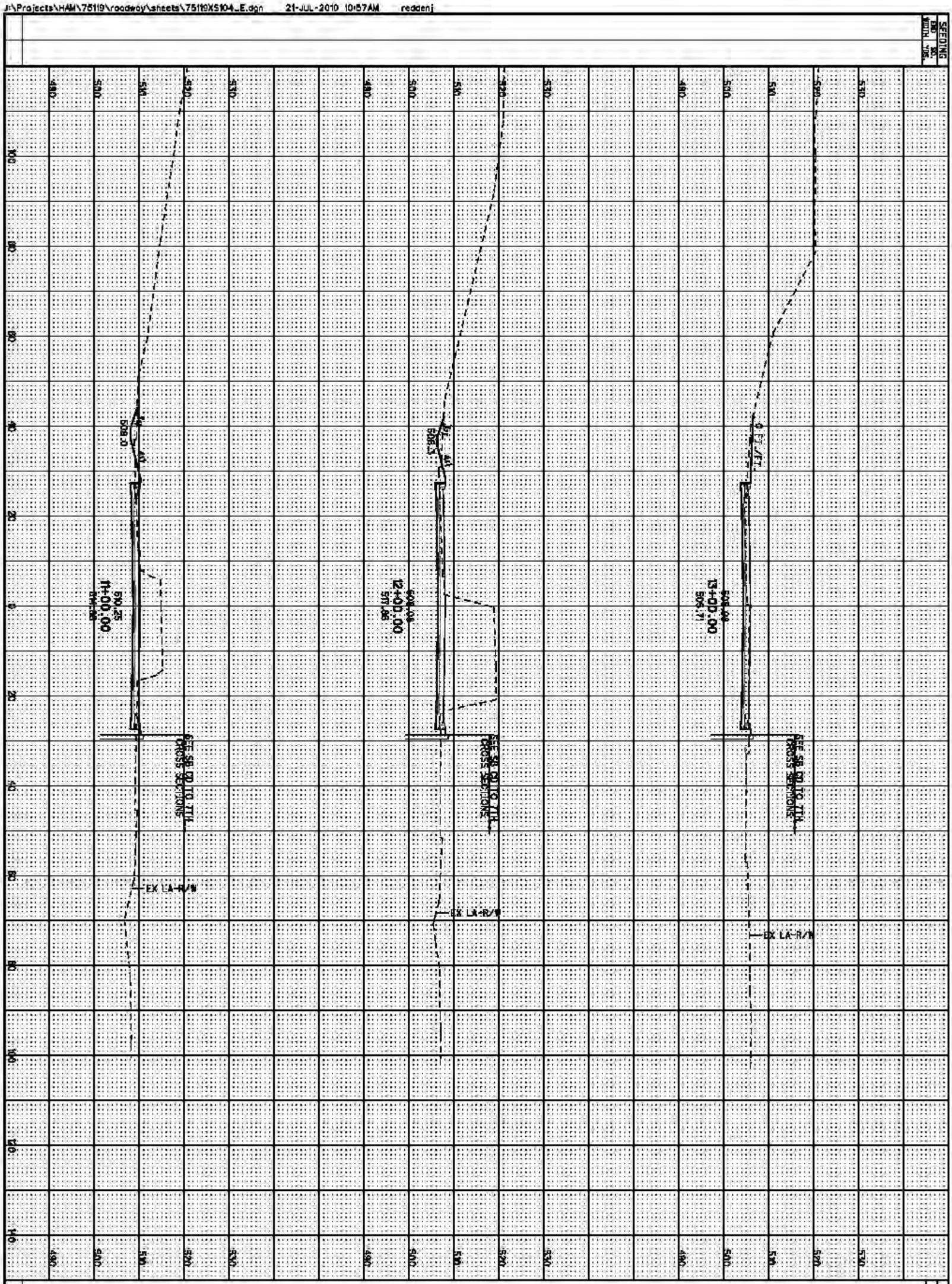
HAM-71/75-0.00/0.22

CROSS SECTIONS - GEST ST
STA. 9+00.00 TO STA. 10+00.00

CALCULATED

CHECKED

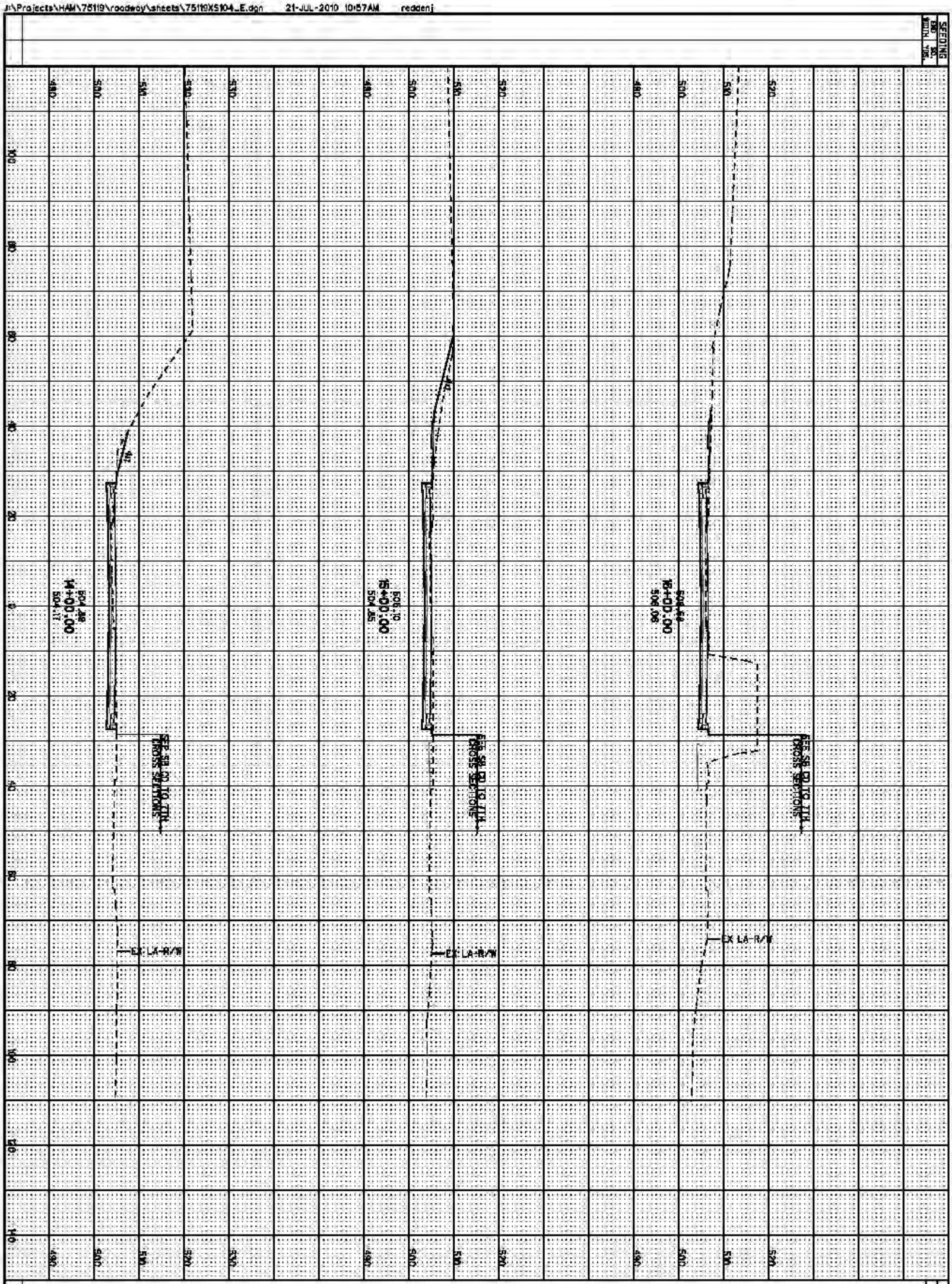
J:\Projects\HAM\75119\roadway\sheets\75119XS104_E.dgn 21-JUL-2010 10:57AM reddenj



ISI	HAM-71/75-0.00/0.22	CROSS SECTIONS - GEST ST STA. 11+00.00 TO STA. 13+00.00

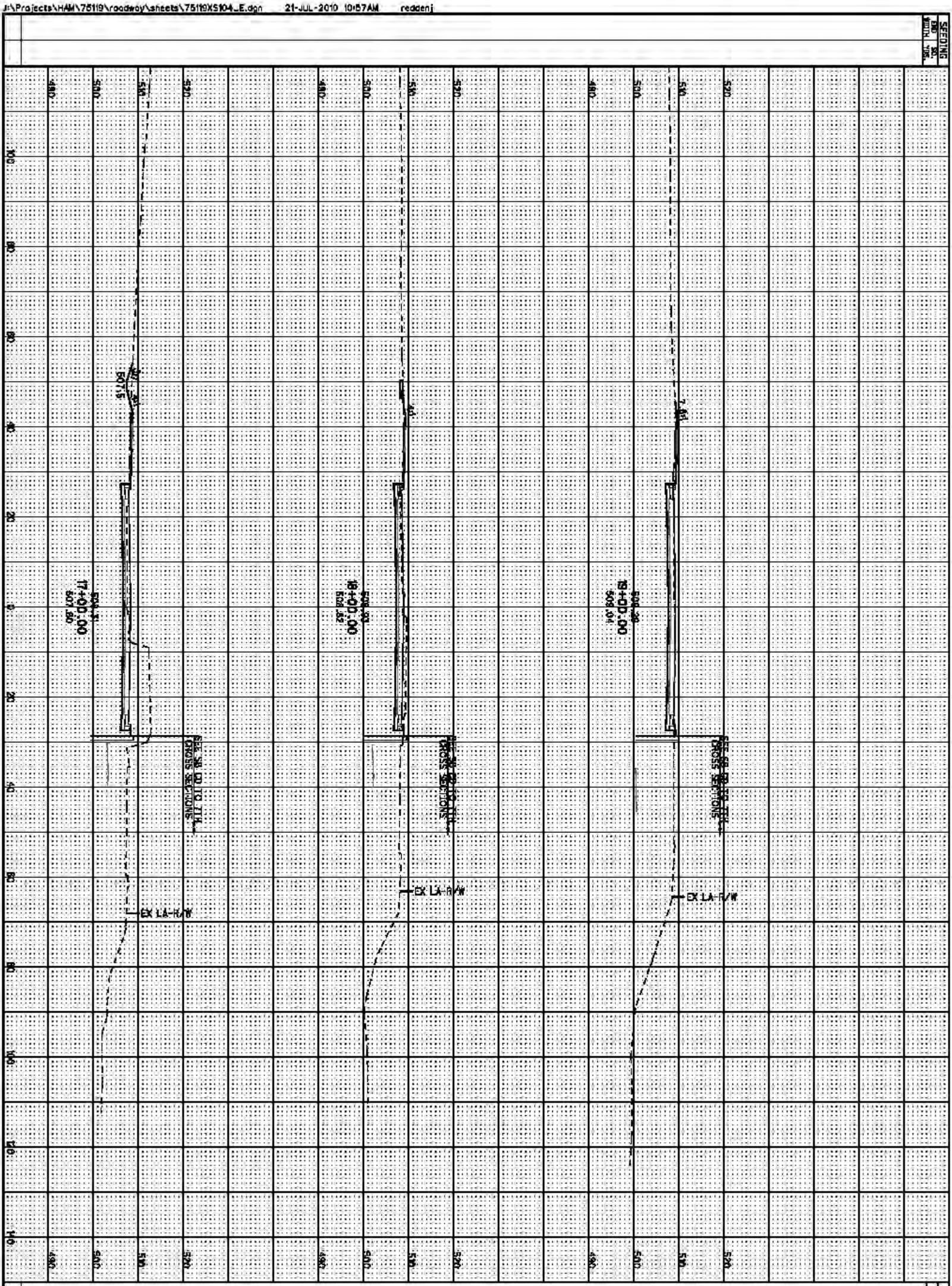
CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS104_E.dgn 21-JUL-2010 10:57AM reddenj



116	HAM-71/75-0.00/0.22	CROSS SECTIONS - GEST ST STA. 14+00.00 TO STA. 16+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS104_E.dgn 21-JUL-2010 10:57AM reddenj

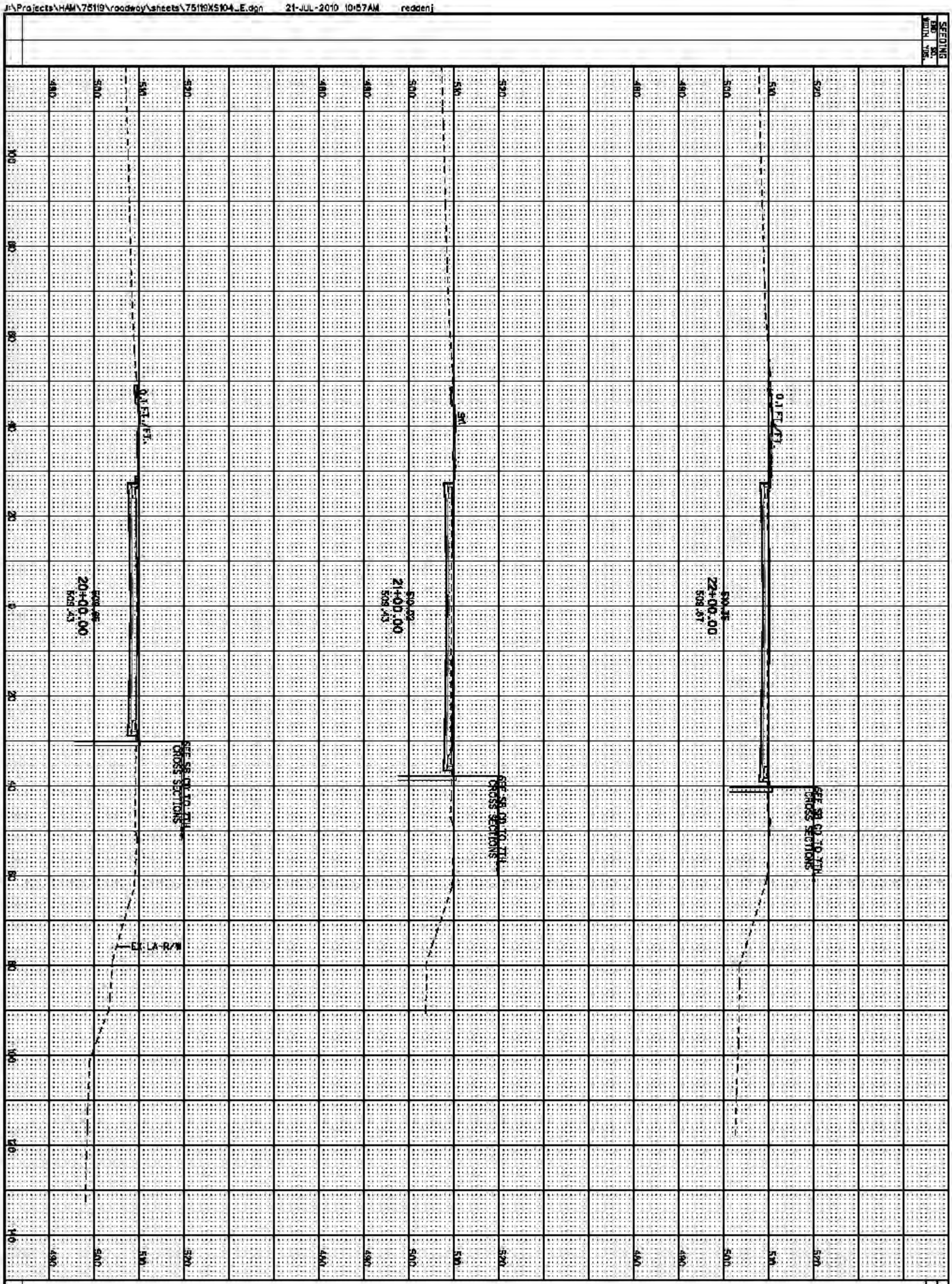


HAM-71/75-0.00/0.22

CROSS SECTIONS - GEST ST
STA. 17+00.00 TO STA. 19+00.00

CALCULATED
CHECKED

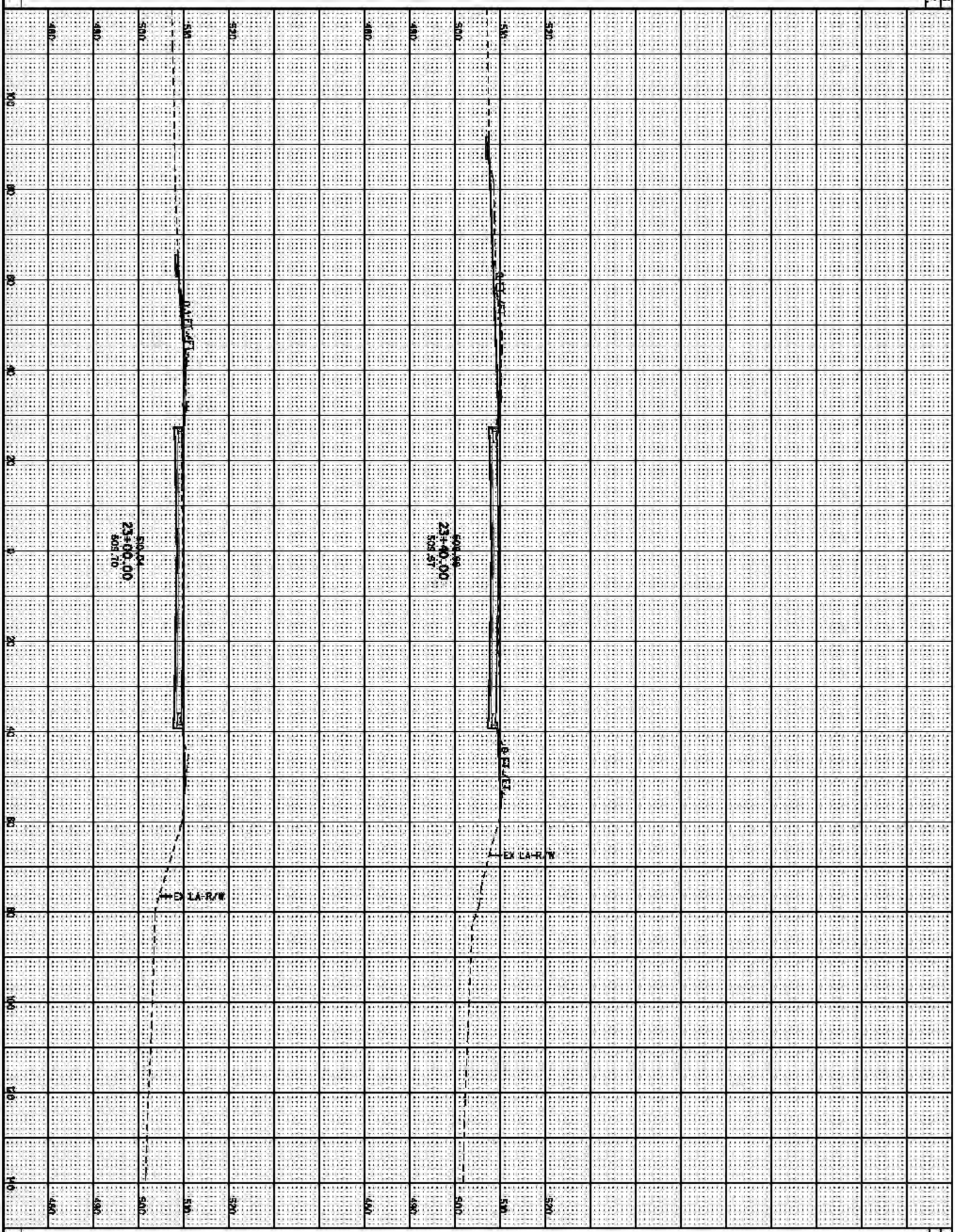
J:\Projects\HAM\75119\roadway\sheets\75119XS104_E.dgn 21-JUL-2010 10:57AM reddenj



181	HAM-71/75-0.00/0.22	CROSS SECTIONS - GEST ST STA. 20+00.00 TO STA. 22+00.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS104_E.dgn 21-JUL-2010 10:58AM reddenj



SEEDING	
END	SQ.
WIDTH	YDS.

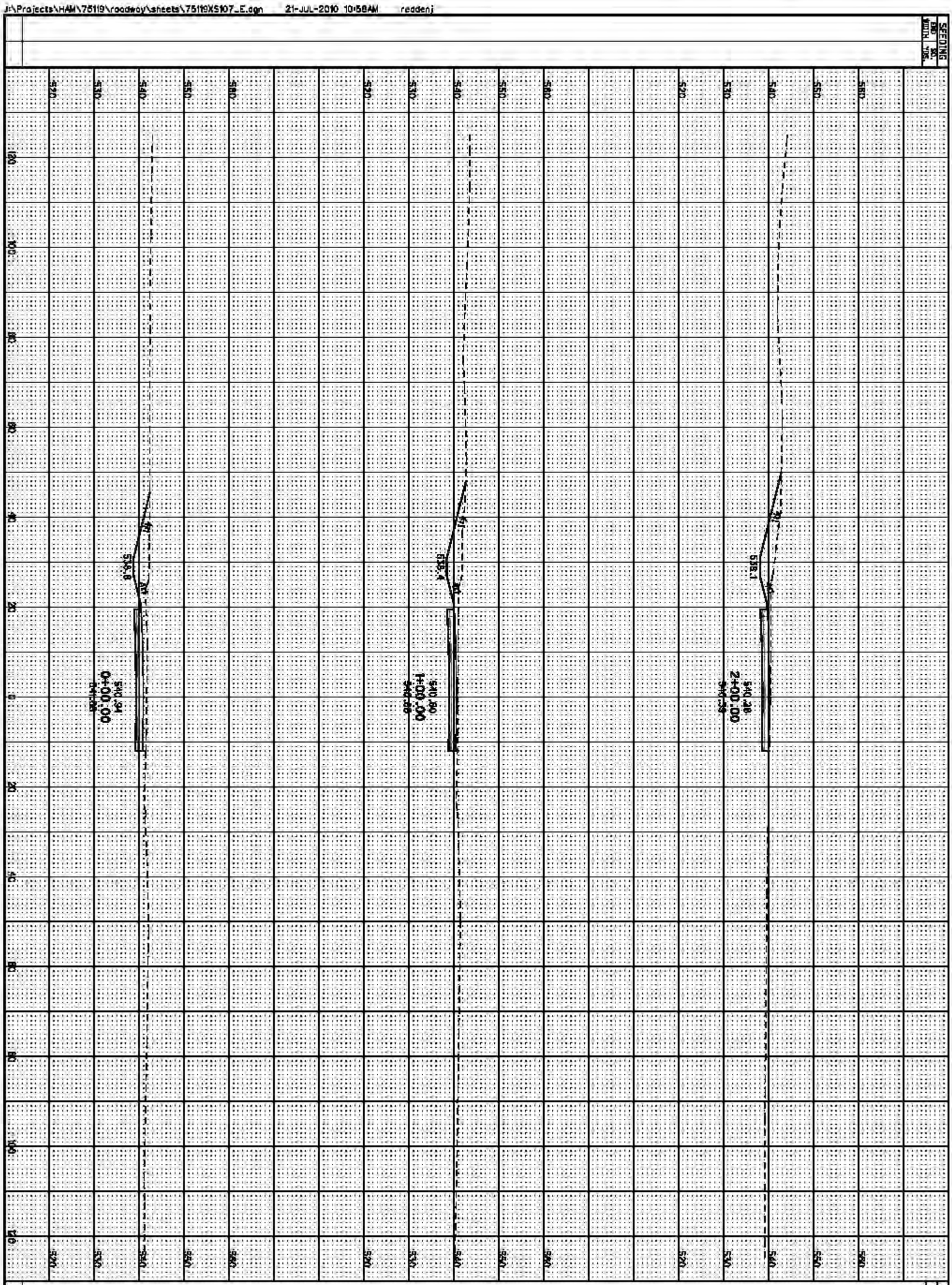
END AREA		VOLUME	
CUT	FILL	CUT	FILL

118	HAM-71/75-0.00/0.22	CROSS SECTIONS - GEST ST STA. 23+00.00 TO STA. 23+40.00

CALCULATED

CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS107_E.dgn 21-JUL-2010 10:58AM reddenj

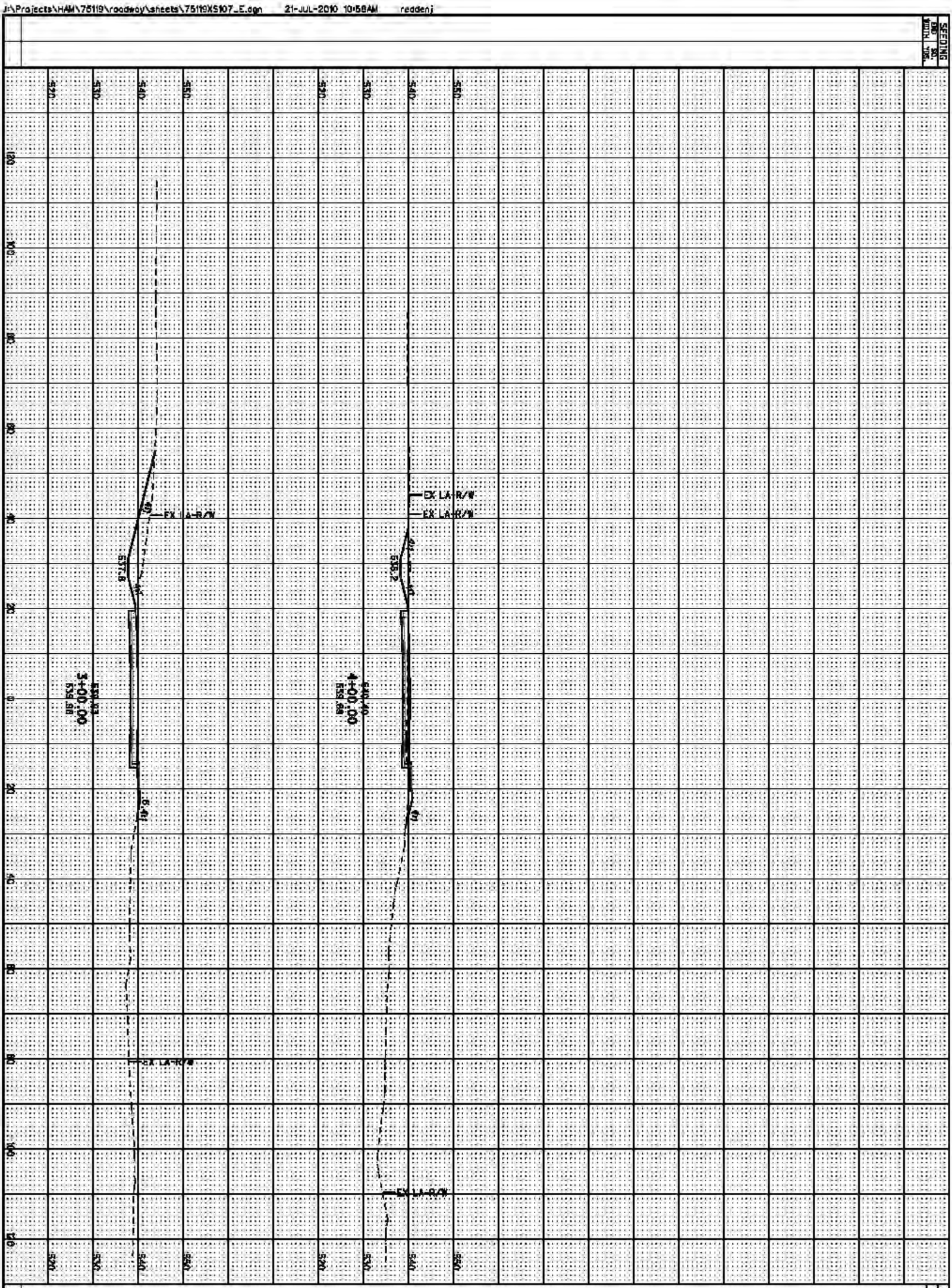


120

HAM-71/75-0.00/0.22

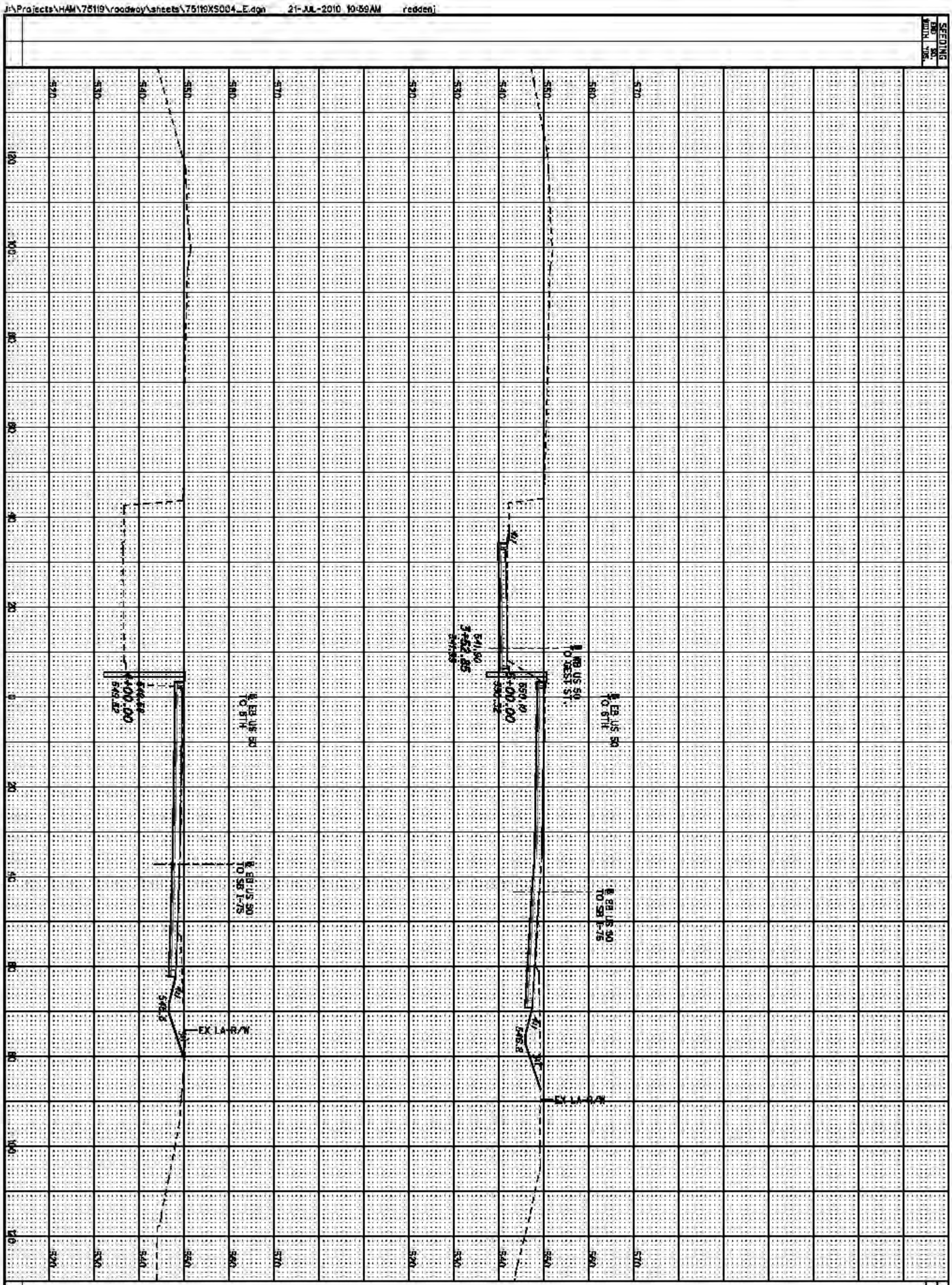
CROSS SECTIONS - NINTH ST
STA. 0+00.00 TO STA. 2+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS107_E.dgn 21-JUL-2010 10:58AM reddenj



121	HAM-71/75-0.00/0.22	CROSS SECTIONS - NINTH ST STA. 3+00.00 TO STA. 4+00.00	CALCULATED CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS004_E.dgn 21-JUL-2010 10:59AM reddenj



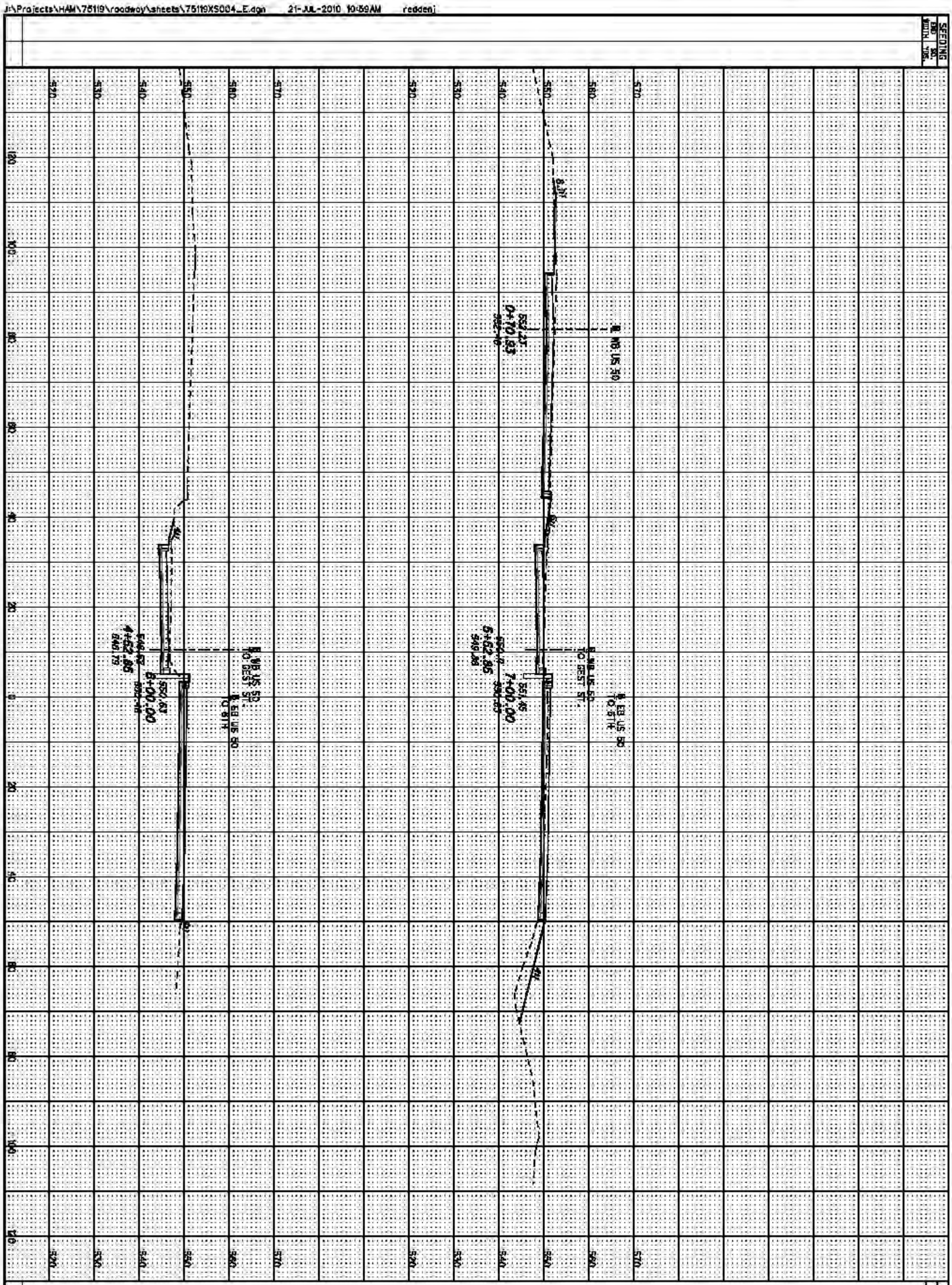
122

HAM-71/75-0.00/0.22

CROSS SECTIONS - US 50 EB
STA. 4+00.00 TO STA. 5+00.00

CALCULATED JMR
CHECKED ABS

J:\Projects\HAM\75119\roadway\sheets\75119XS004_E.dgn 21-JUL-2010 10:59AM reddenj



123

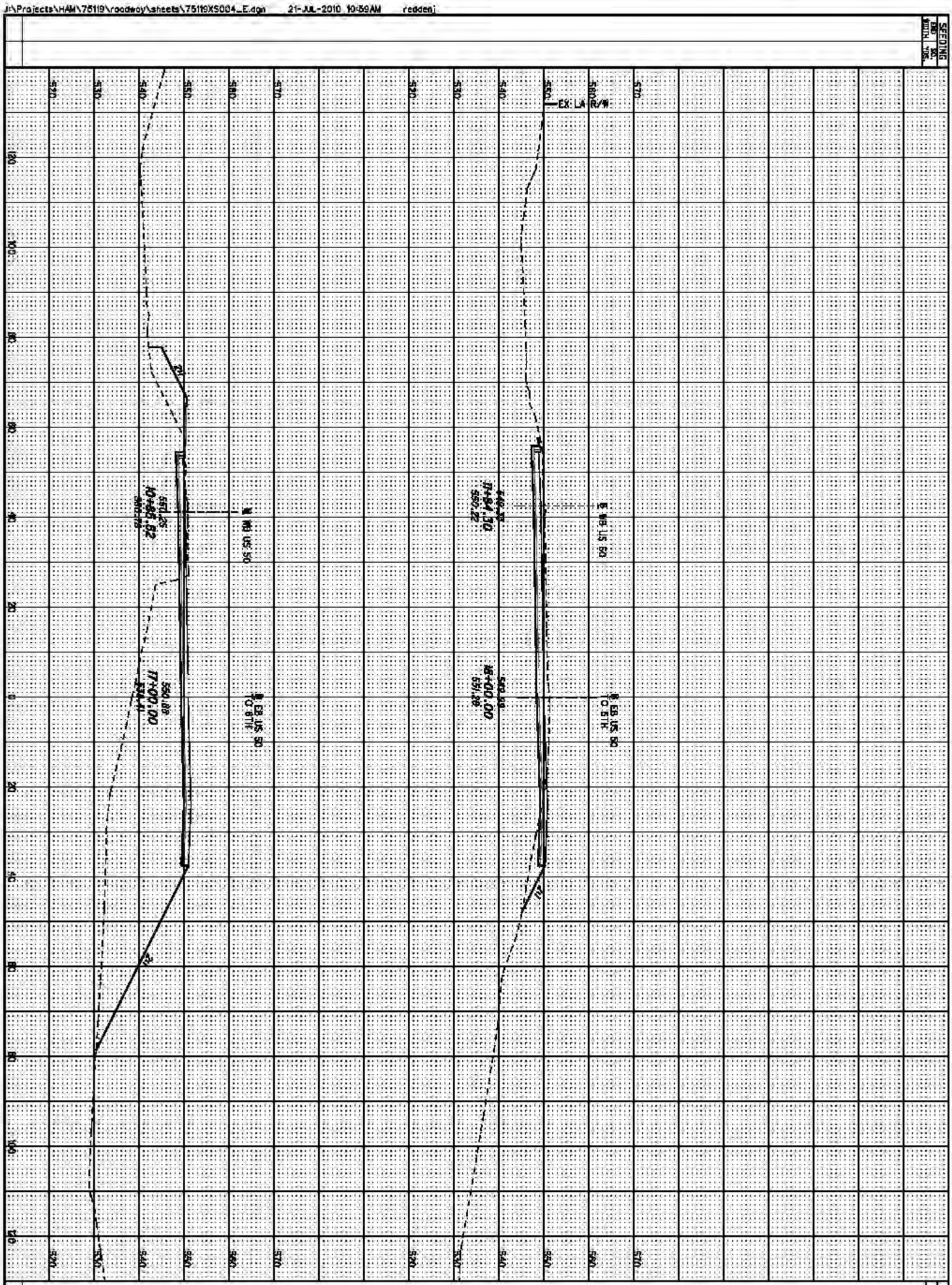
HAM-71/75-0.00/0.22

CROSS SECTIONS - US 50 EB
STA. 6+00.00 TO STA. 7+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS004_E.dgn 21-JUL-2010 10:59AM redden


SEEDING
END AREA
CUT
FILL
VOLUME
CUT
FILL
552.77
552.99
552.88
552.27
552.99
552.99
552.99

J:\Projects\HAM\75119\roadway\sheets\75119XS004_E.dgn 21-JUL-2010 10:59AM redden



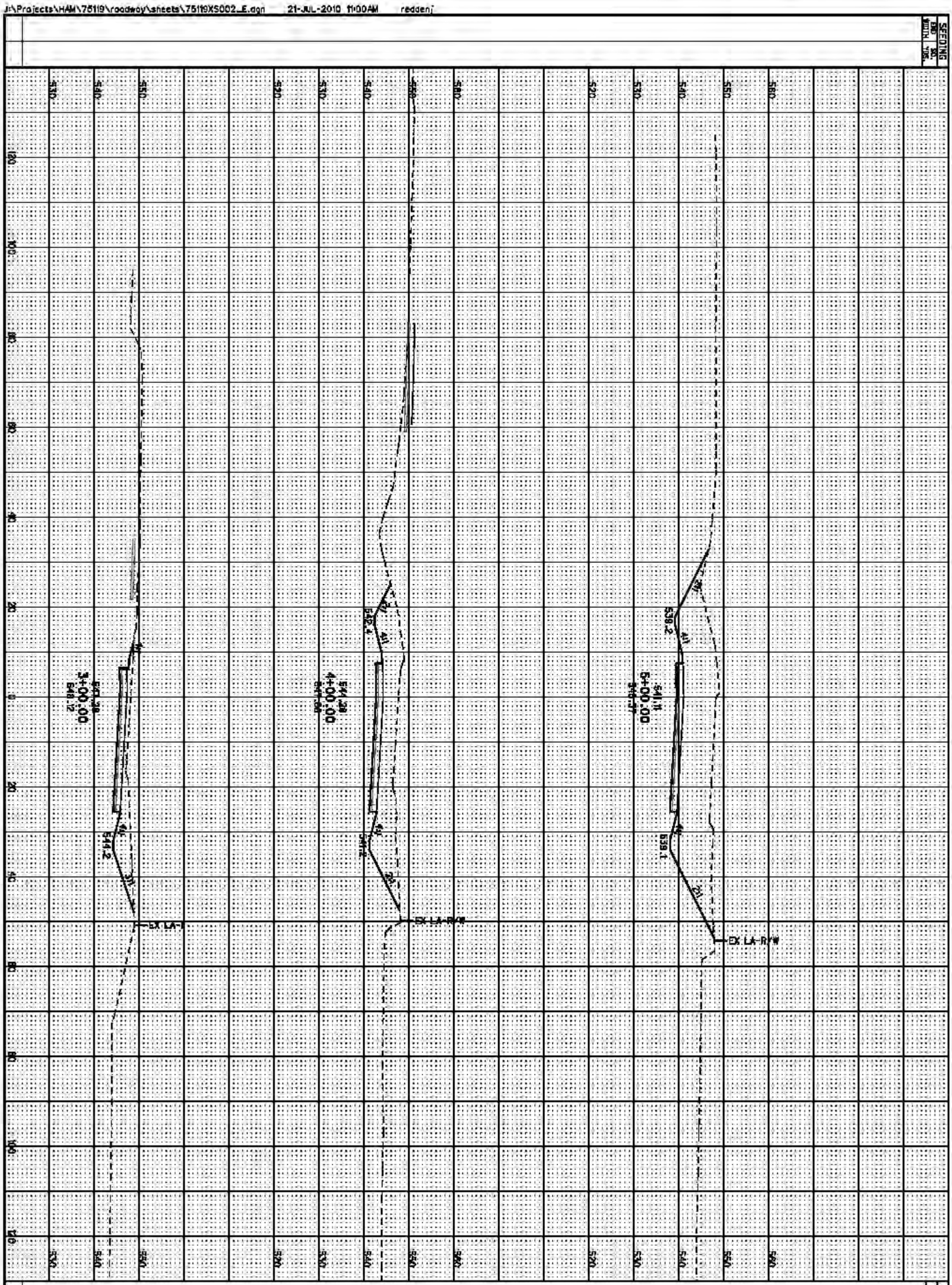
123

HAM-71/75-0.00/0.22

CROSS SECTIONS - US 50 EB
STA. 17+00.00 TO STA. 18+00.00

CALCULATED JMR
CHECKED ABS

J:\Projects\HAM\75119\roadway\sheets\75119XS002_E.dgn 21-JUL-2010 11:00AM reddenj



SEEDING	
END	SO.
WIDTH	YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

126

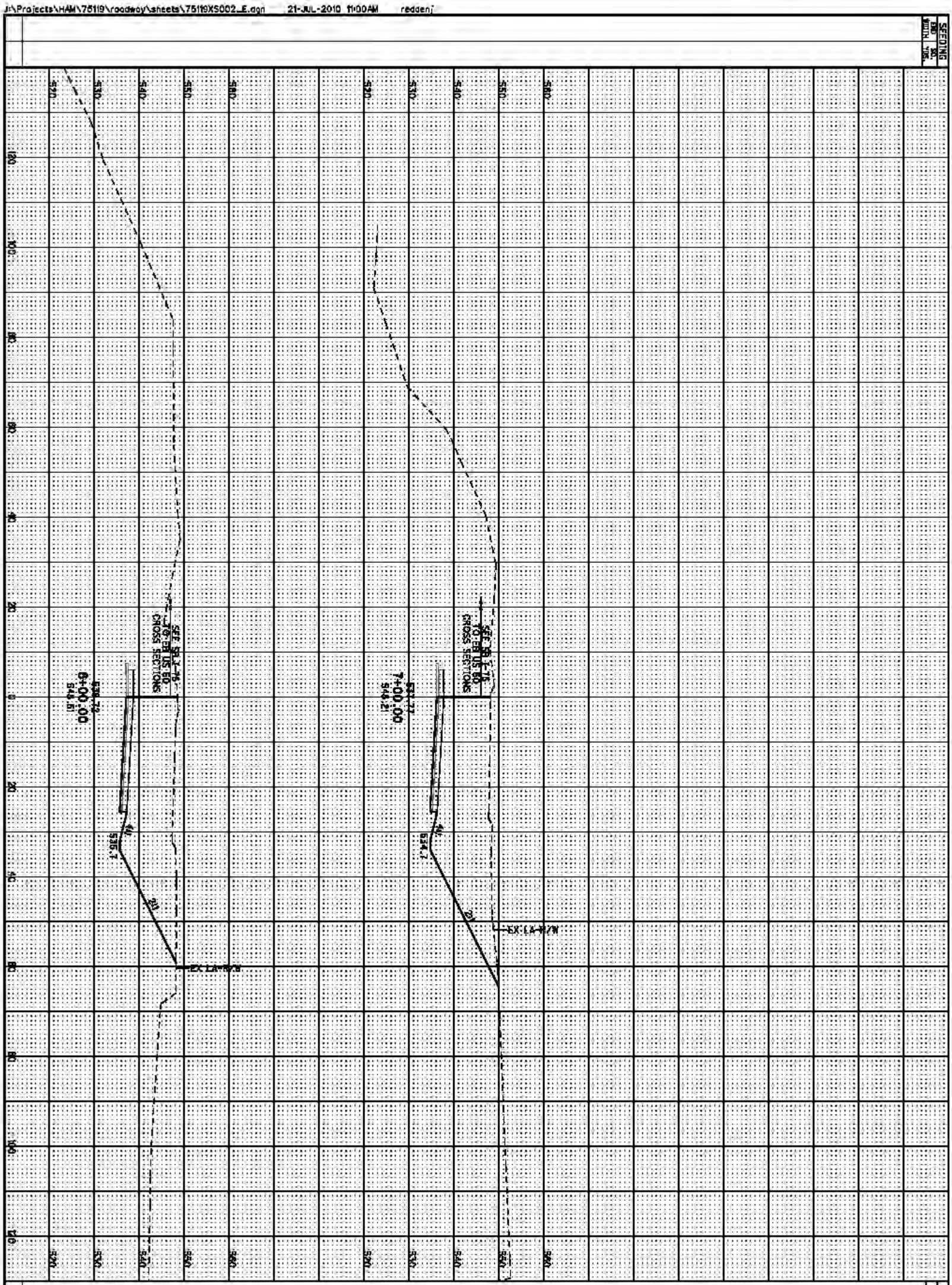
HAM-71/75-0.00/0.22

CROSS SECTIONS - EB US 50 TO I-75 SB
STA. 3+00.00 TO STA. 5+00.00

CALCULATED

CHECKED

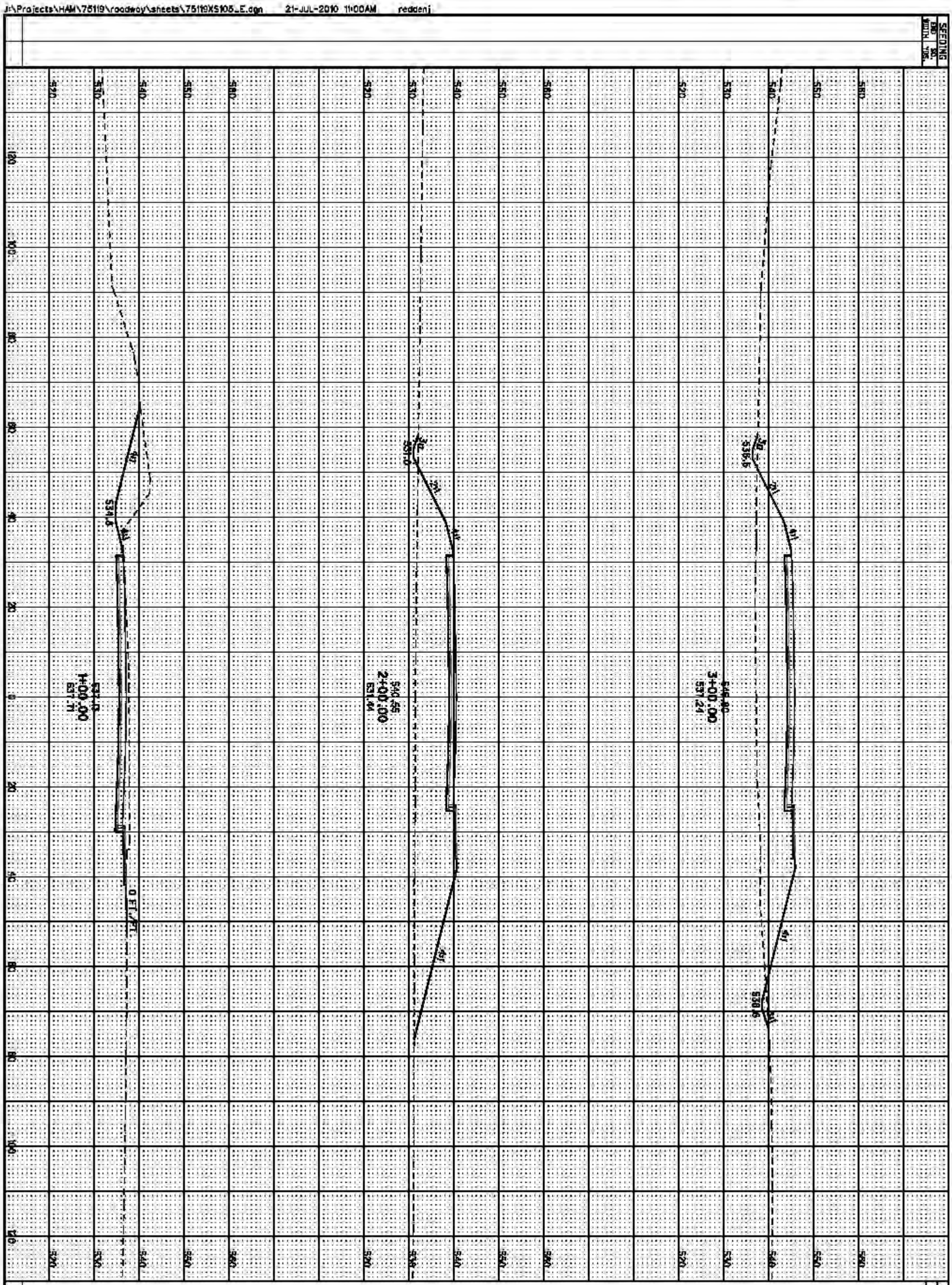
J:\Projects\HAM\75119\roadway\sheets\75119XS002_E.dgn 21-JUL-2010 11:00AM reddenj



121	HAM-71/75-0.00/0.22	CROSS SECTIONS - EB US 50 TO I-75 SB STA. 6+00.00 TO STA. 7+00.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS105_E.dgn 21-JUL-2010 11:00AM reddenj



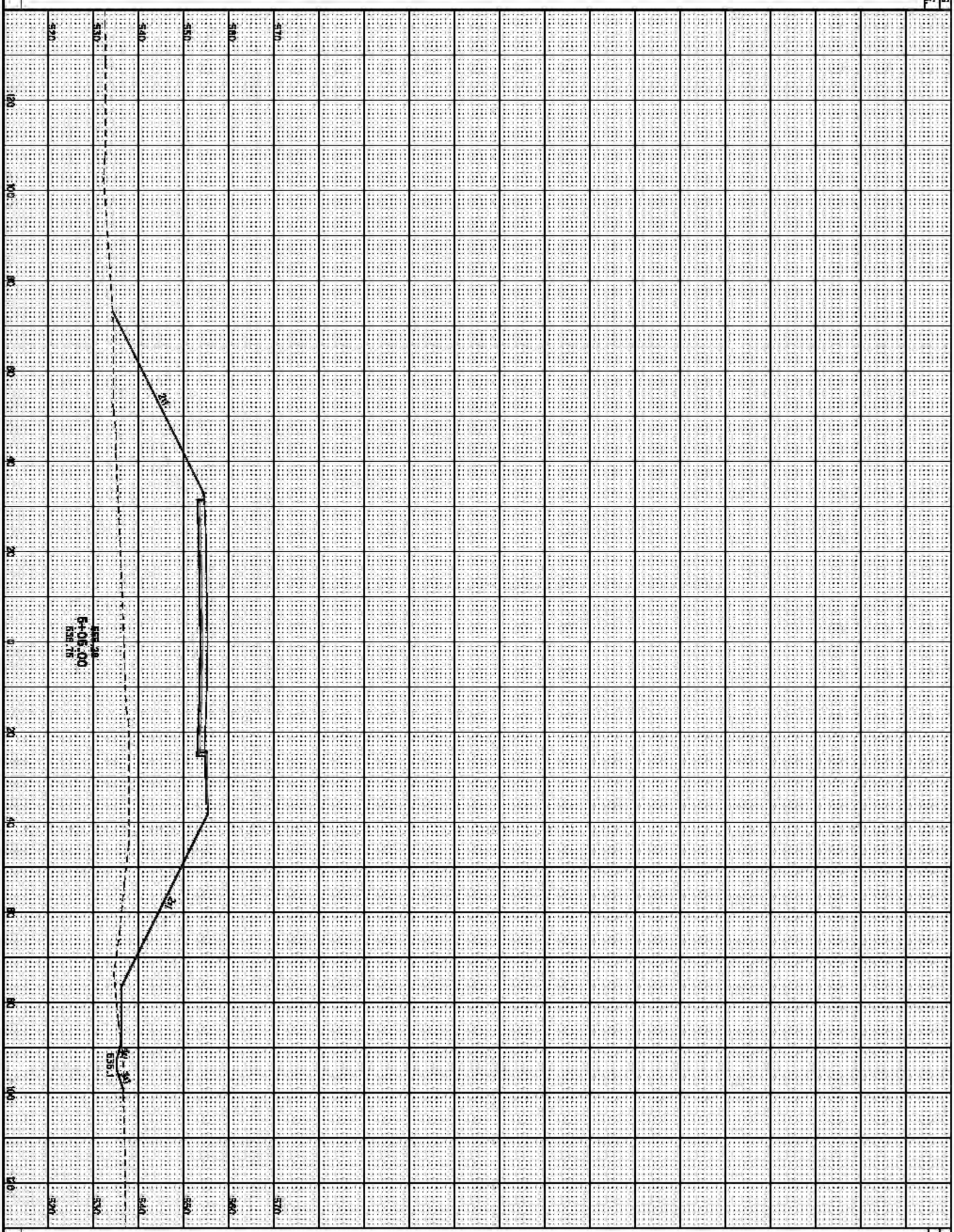
128

HAM-71/75-0.00/0.22

CROSS SECTIONS - FOURTH ST
STA. 1+00.00 TO STA. 3+00.00

J:\Projects\HAM\75119\roadway\sheets\75119XS105_E.dgn 21-JUL-2010 11:01AM reddenj

SEEDING
END SQ.
WIDTH YDS.



END AREA
CUT FILL
VOLUME
CUT FILL

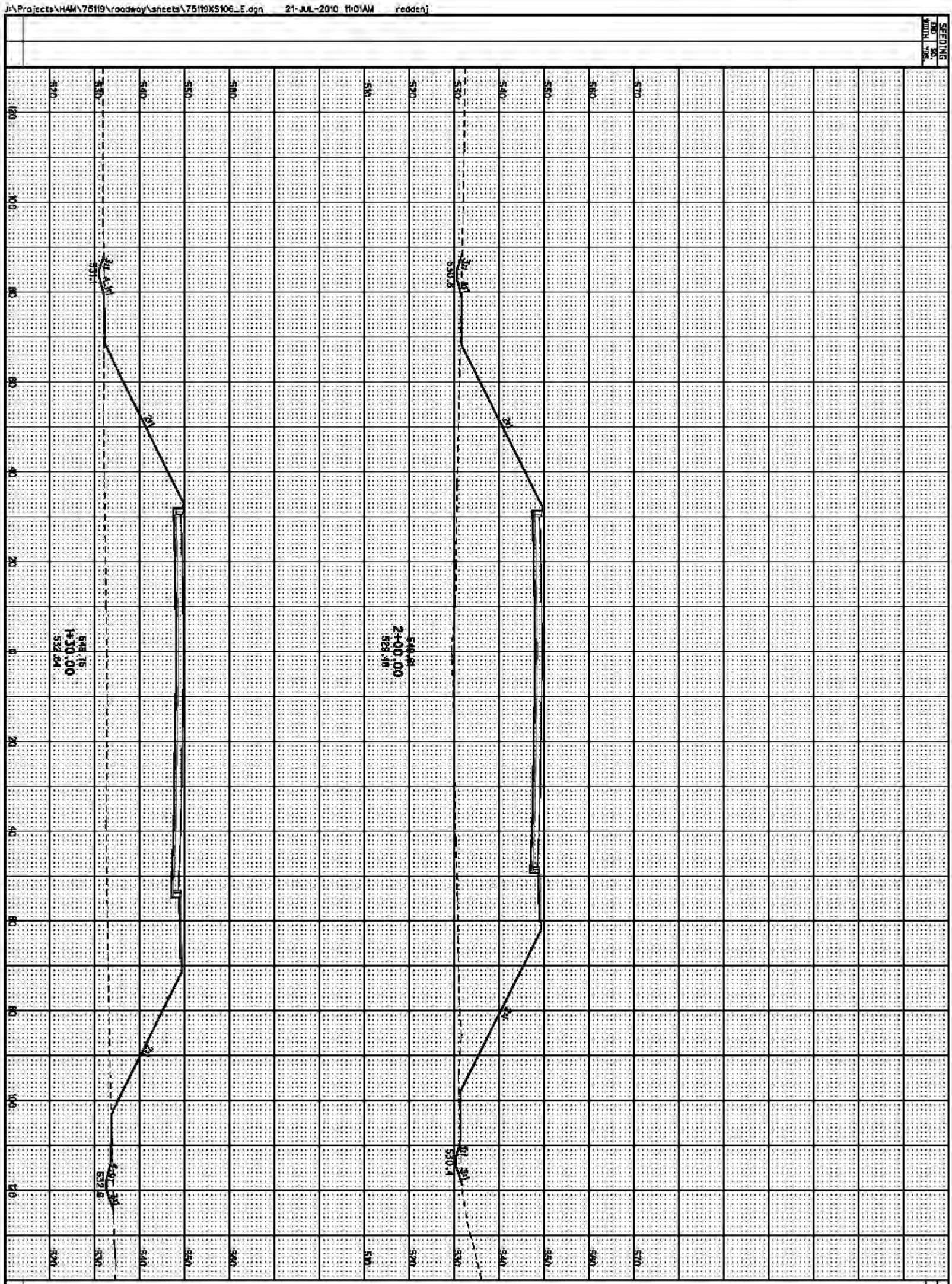
129

HAM-71/75-0.00/0.22

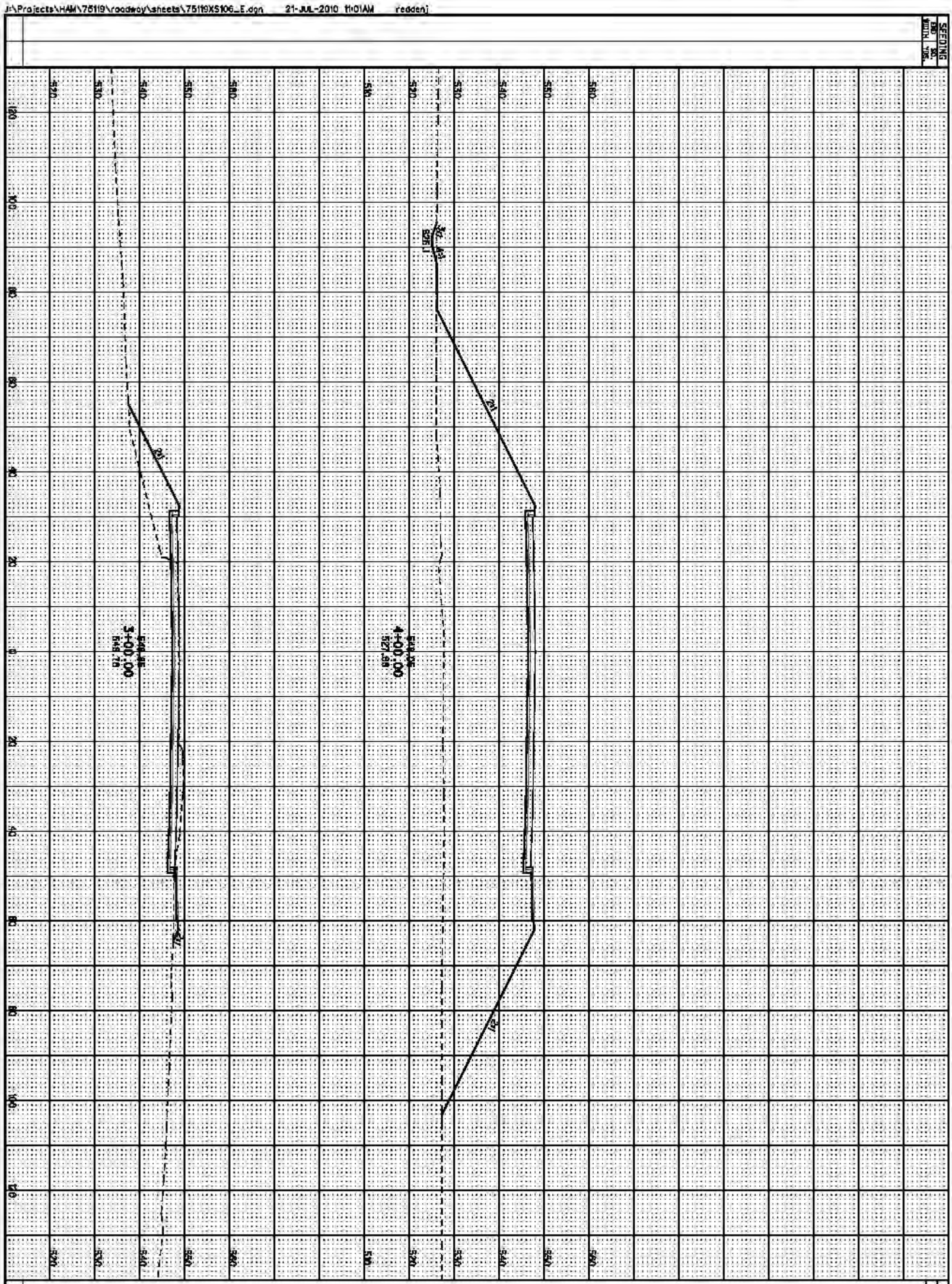
CROSS SECTIONS - FOURTH ST
STA. 5+05.00

CALCULATED
CHECKED

J:\Projects\HAM\75119\roadway\sheets\75119XS106_E.dgn 21-JUL-2010 11:01AM reddenj



J:\Projects\HAM\75119\roadway\sheets\75119XS106_E.dgn 21-JUL-2010 11:01AM reddenj

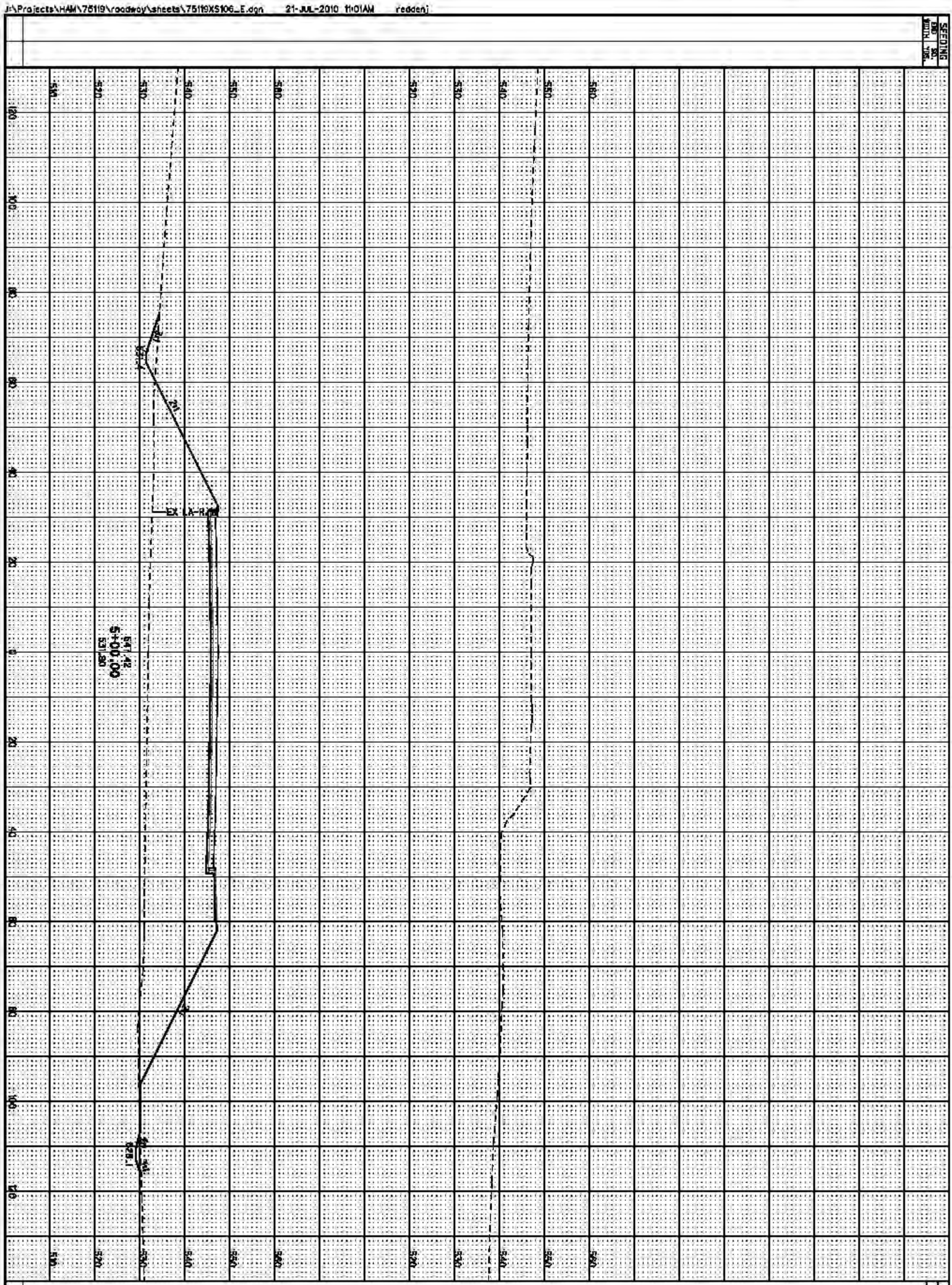


131

HAM-71/75-0.00/0.22

CROSS SECTIONS - FIFTH ST
STA. 3+00.00 TO STA. 4+00.00

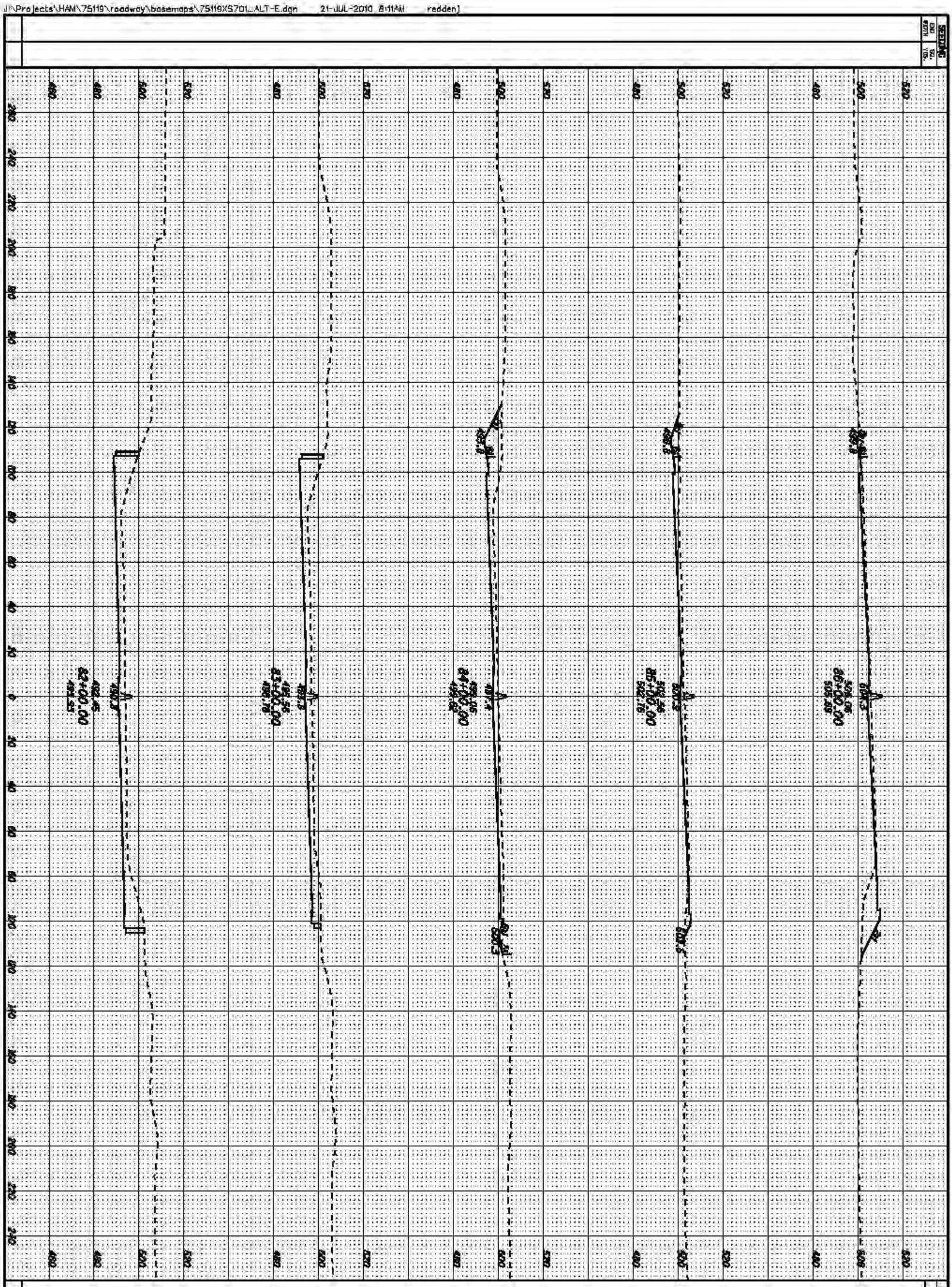
J:\Projects\HAM\75119\roadway\sheets\75119XS106_E.dgn 21-JUL-2010 11:01AM redden



132	HAM-71/75-0.00/0.22	CROSS SECTIONS - FIFTH ST STA. 5+00.00 TO STA. 5+45.00

CALCULATED
CHECKED

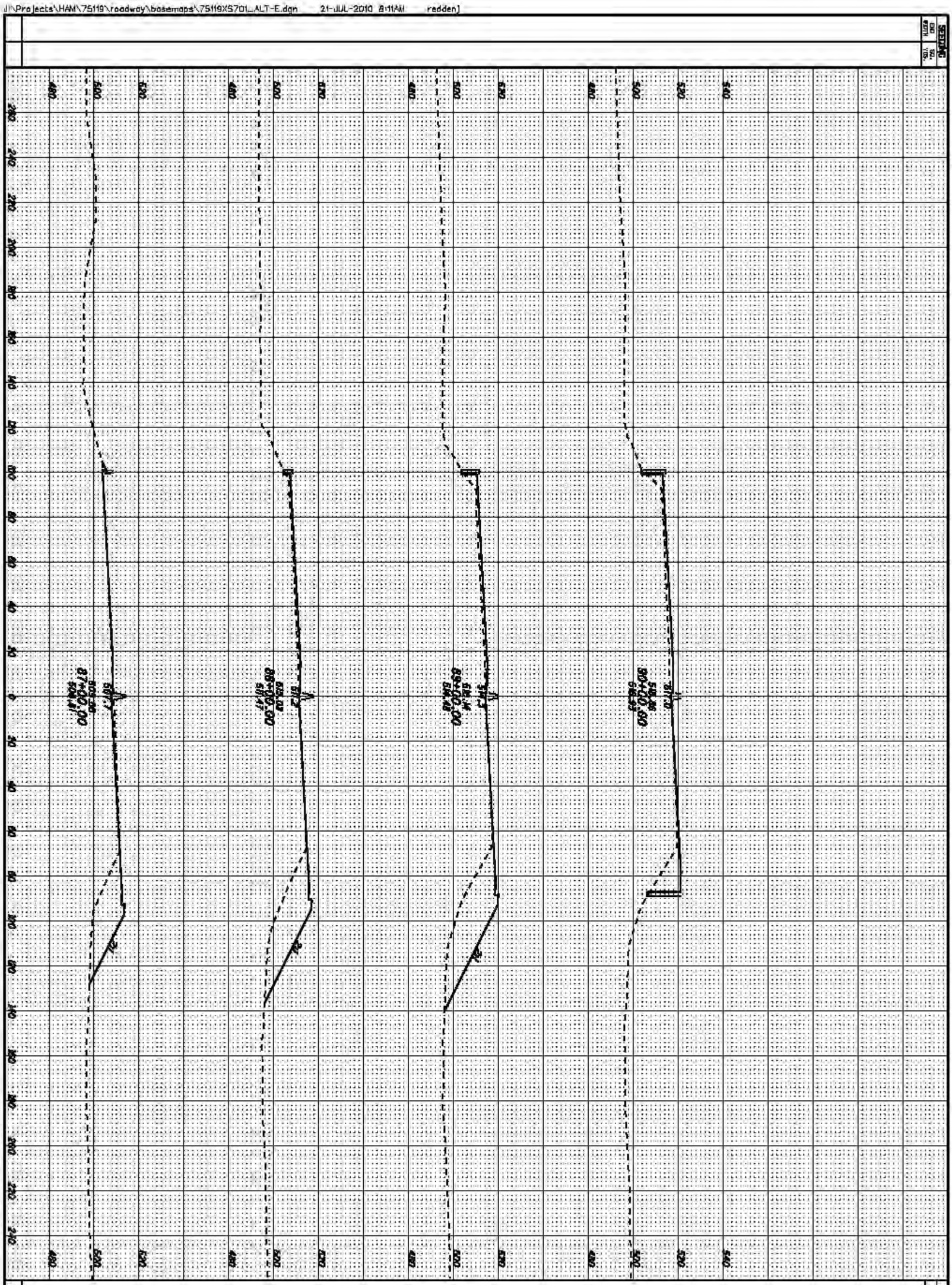
J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:11AM redden]



HAM-71/75-0.00/0.22

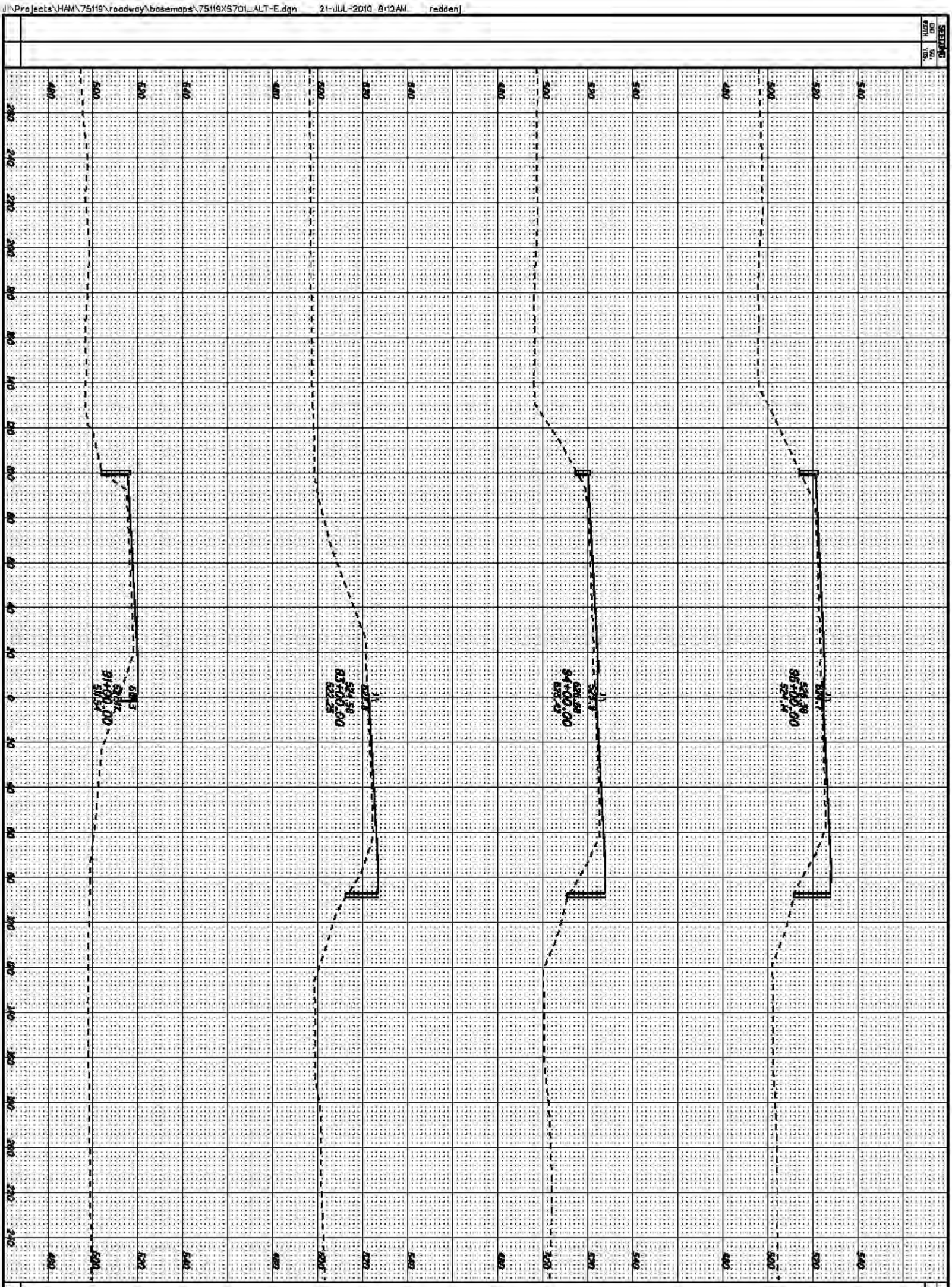
CROSS SECTIONS
I-75 - ALTERNATIVE E

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:11AM redden]



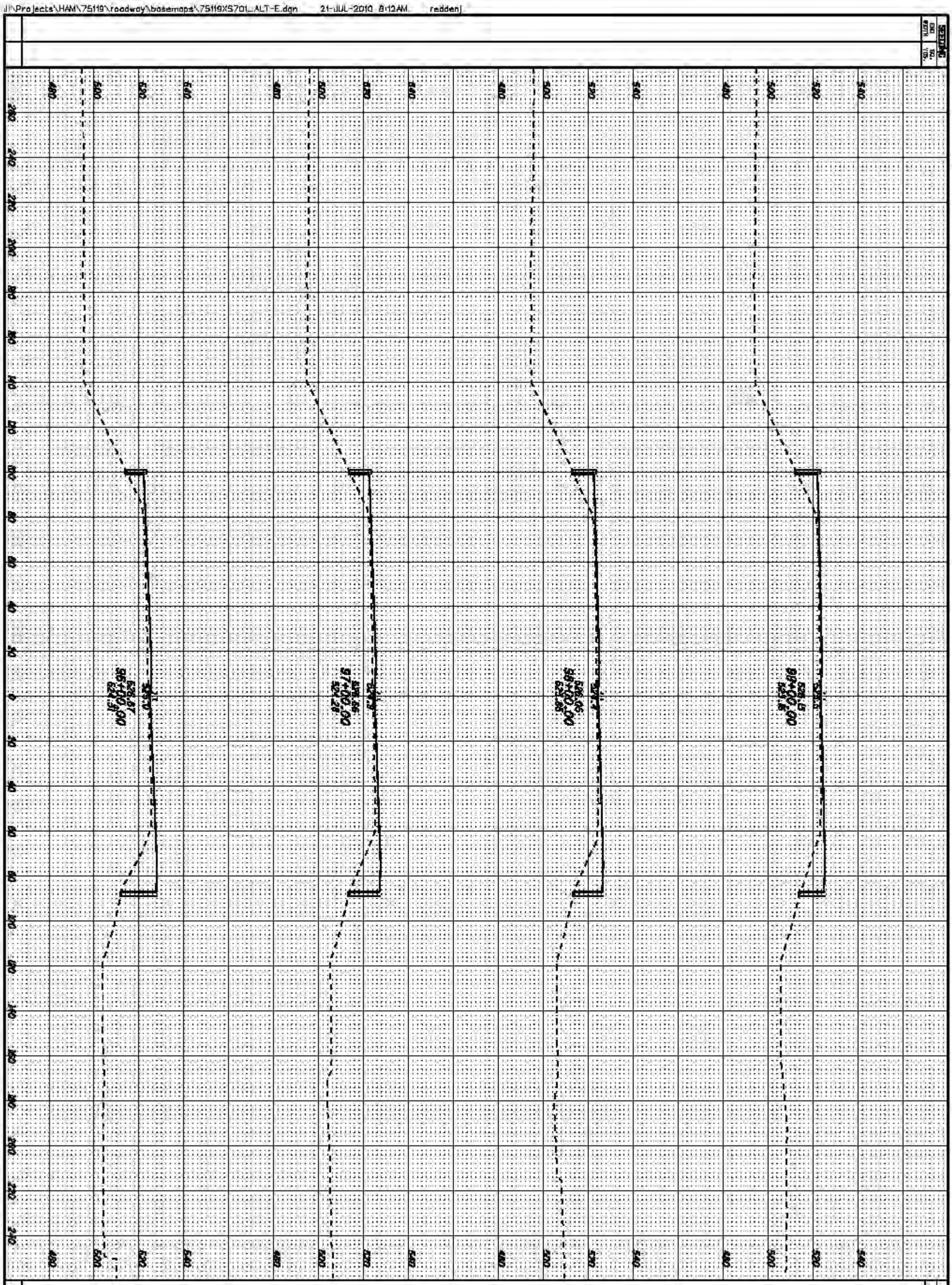
HAM-71/75-0.00/0.22	CROSS SECTIONS I-75 - ALTERNATIVE E	CALCULATED CHECKED

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:12AM redden



135	HAM-71/75-0.00/0.22	CROSS SECTIONS I-75 - ALTERNATIVE E	CALCULATED CHECKED

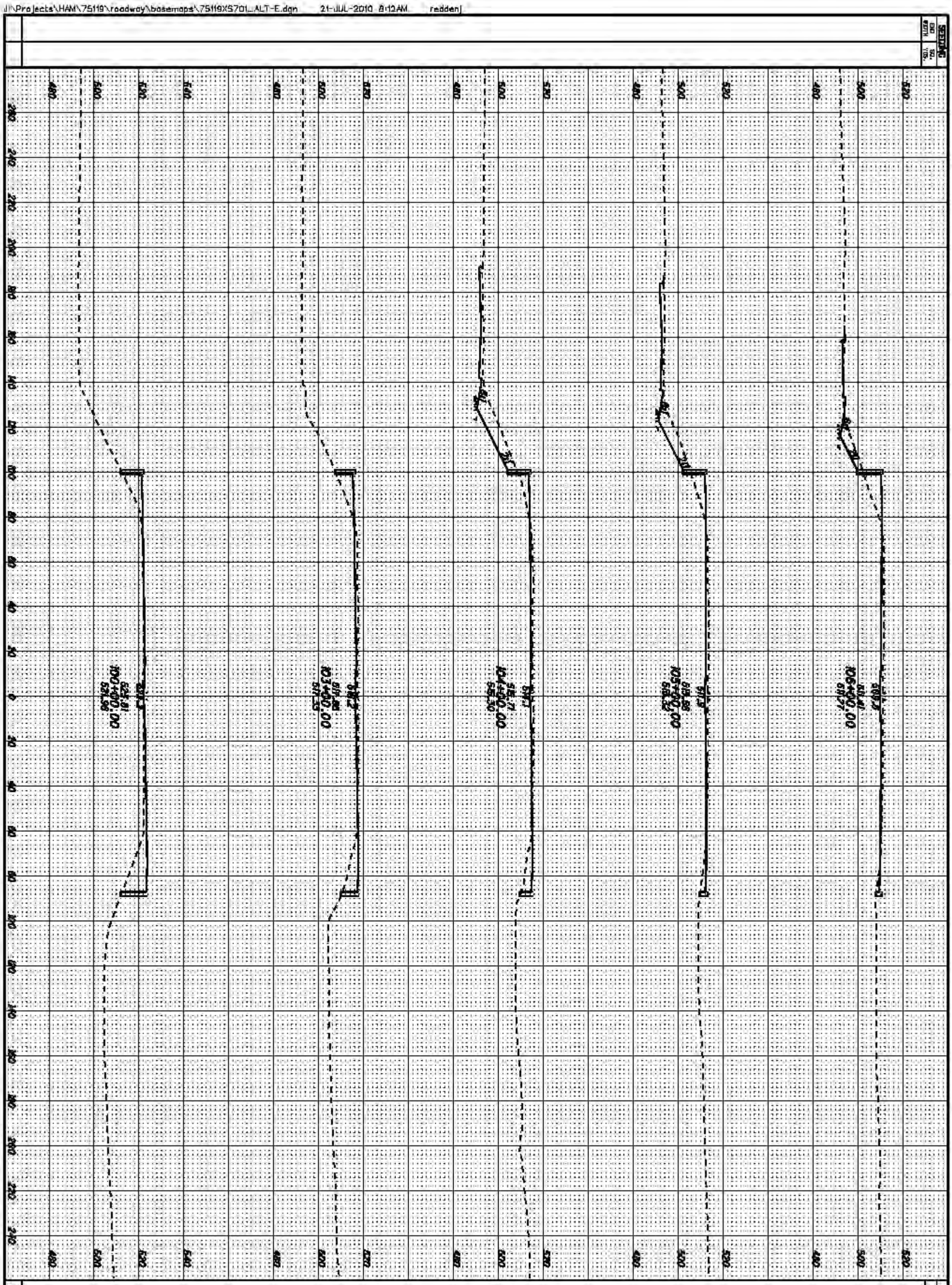
J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:12AM reddenj



HAM-71/75-0.00/0.22

CROSS SECTIONS
I-75 - ALTERNATIVE E

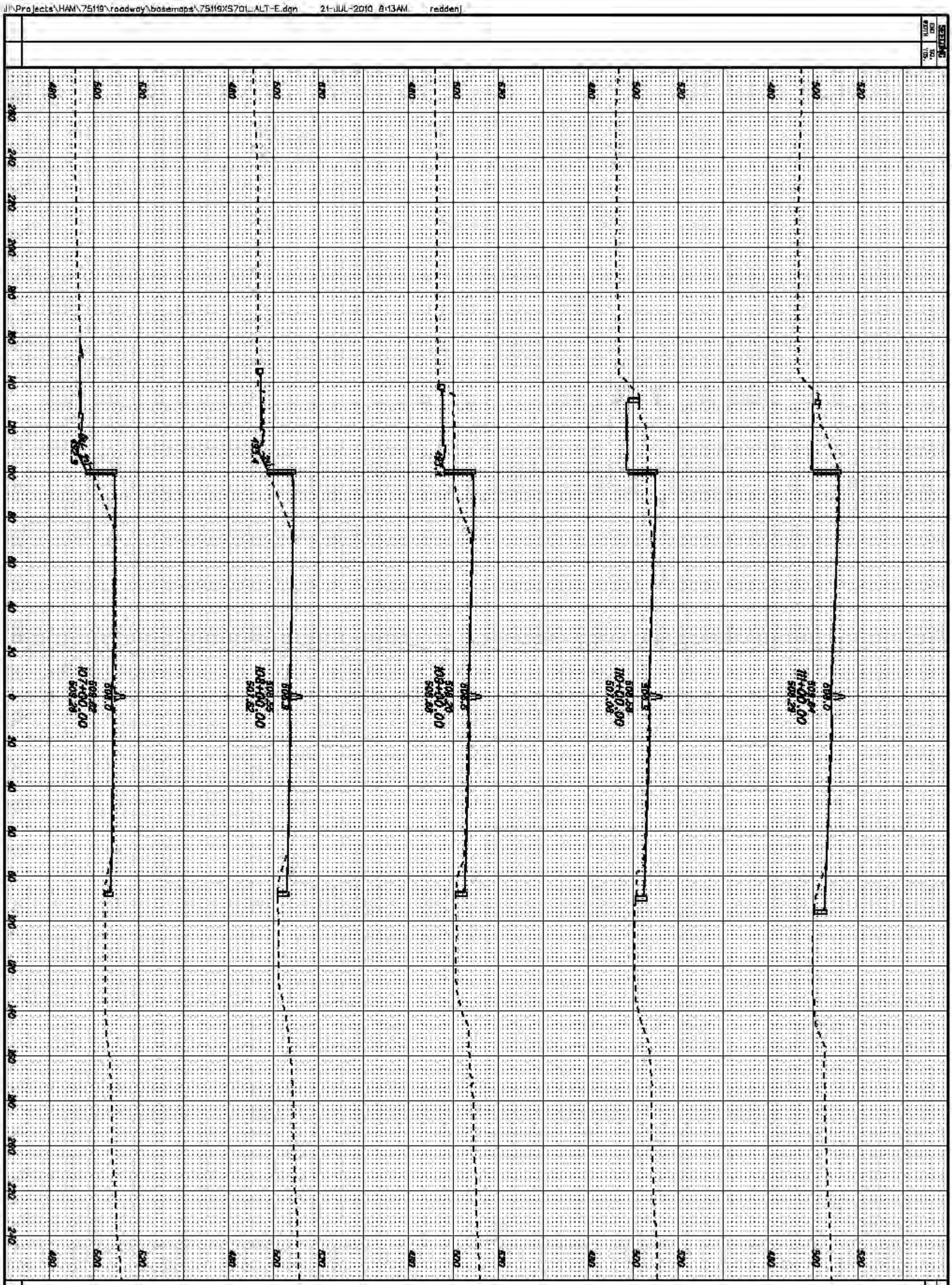
J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:12AM redden



HAM-71/75-0.00/0.22

CROSS SECTIONS
I-75 - ALTERNATIVE E

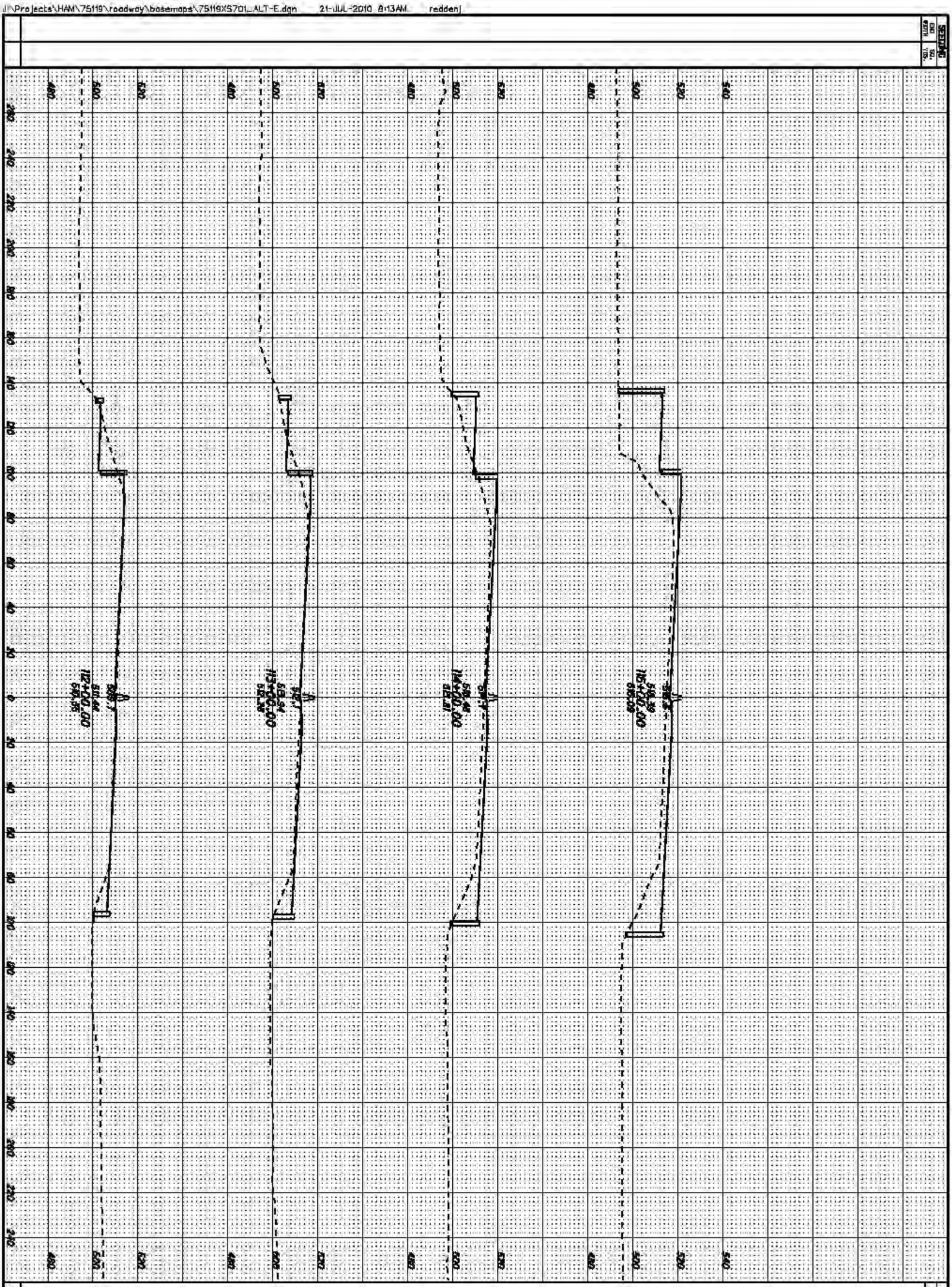
J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:13AM reddenj



HAM-71/75-0.00/0.22

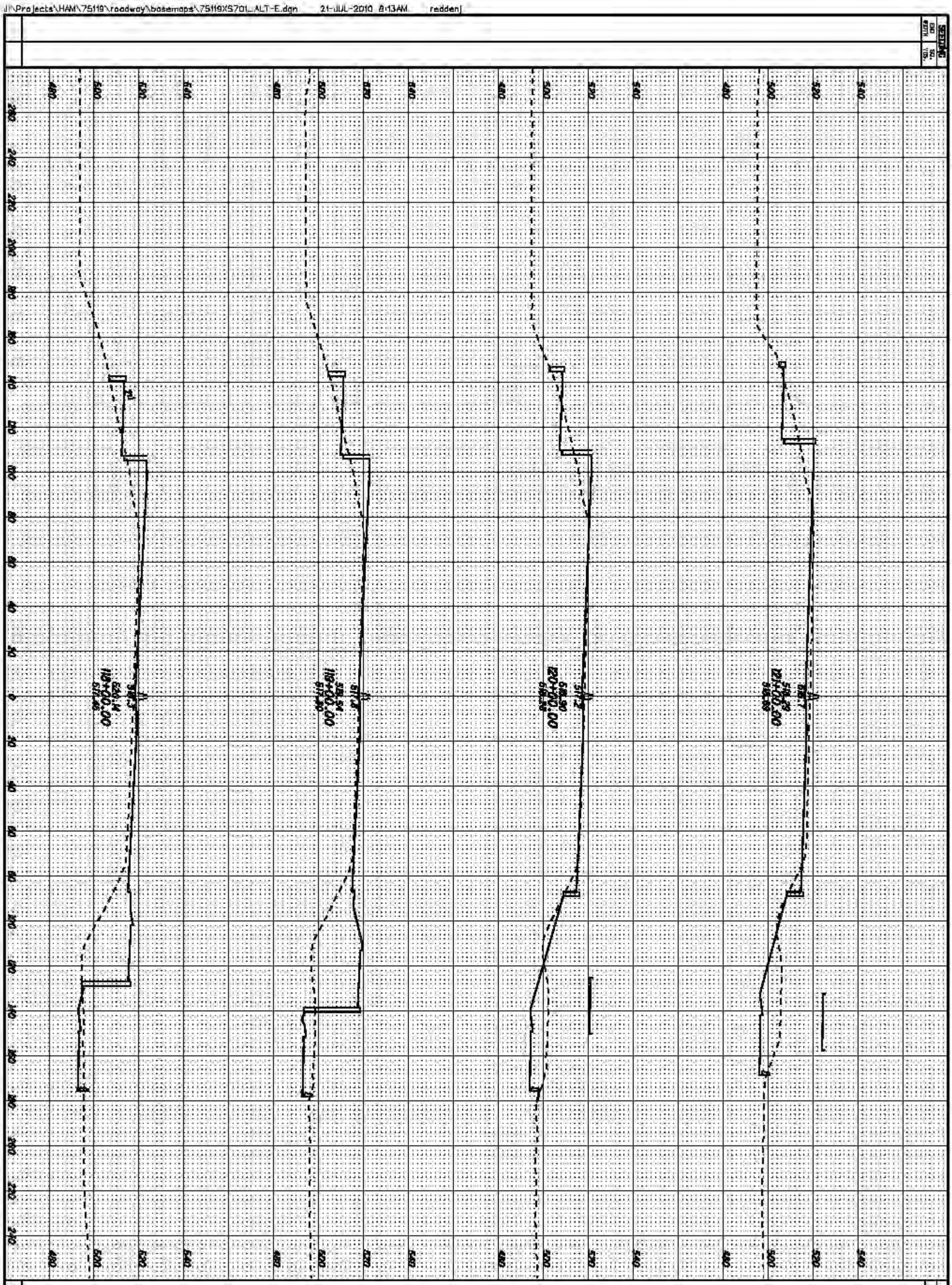
CROSS SECTIONS
I-75 - ALTERNATIVE E

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:13AM redden



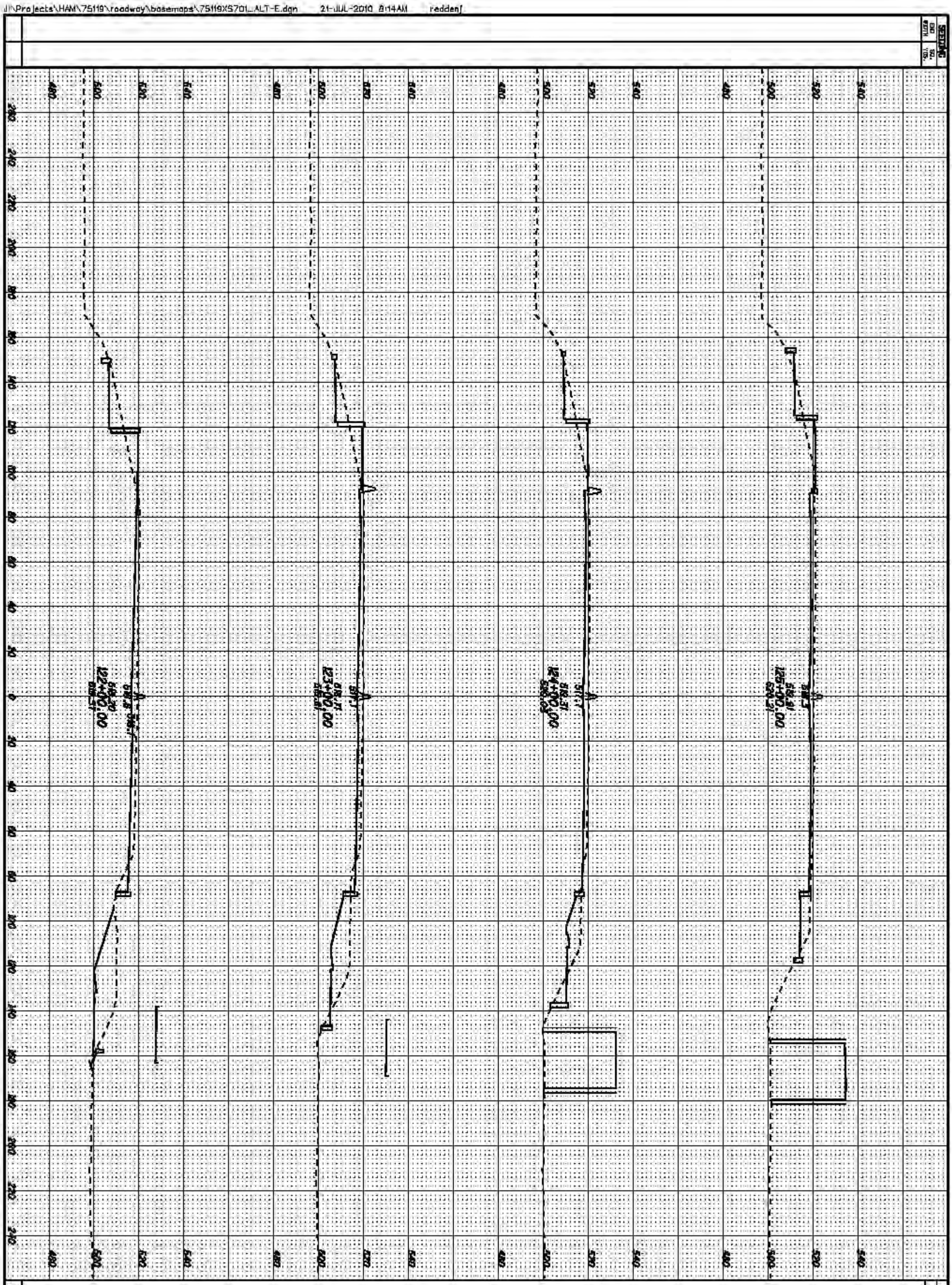
B9	HAM-71/75-0.00/0.22	CROSS SECTIONS I-75 - ALTERNATIVE E	CALCULATED CHECKED

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:13AM redden



140	HAM-71/75-0.00/0.22	CROSS SECTIONS I-75 - ALTERNATIVE E	CALCULATED CHECKED

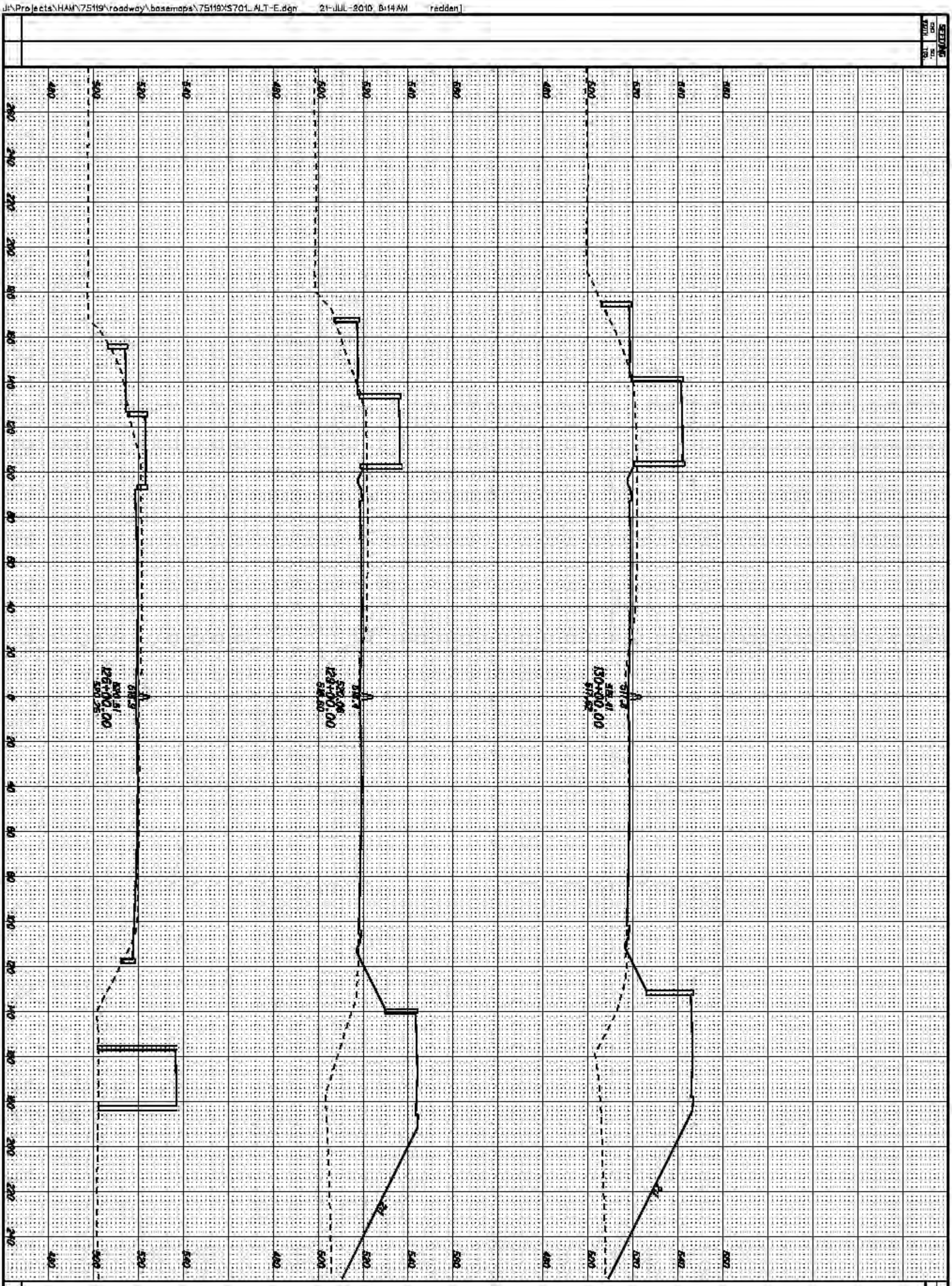
J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:14AM redden



HAM-71/75-0.00/0.22

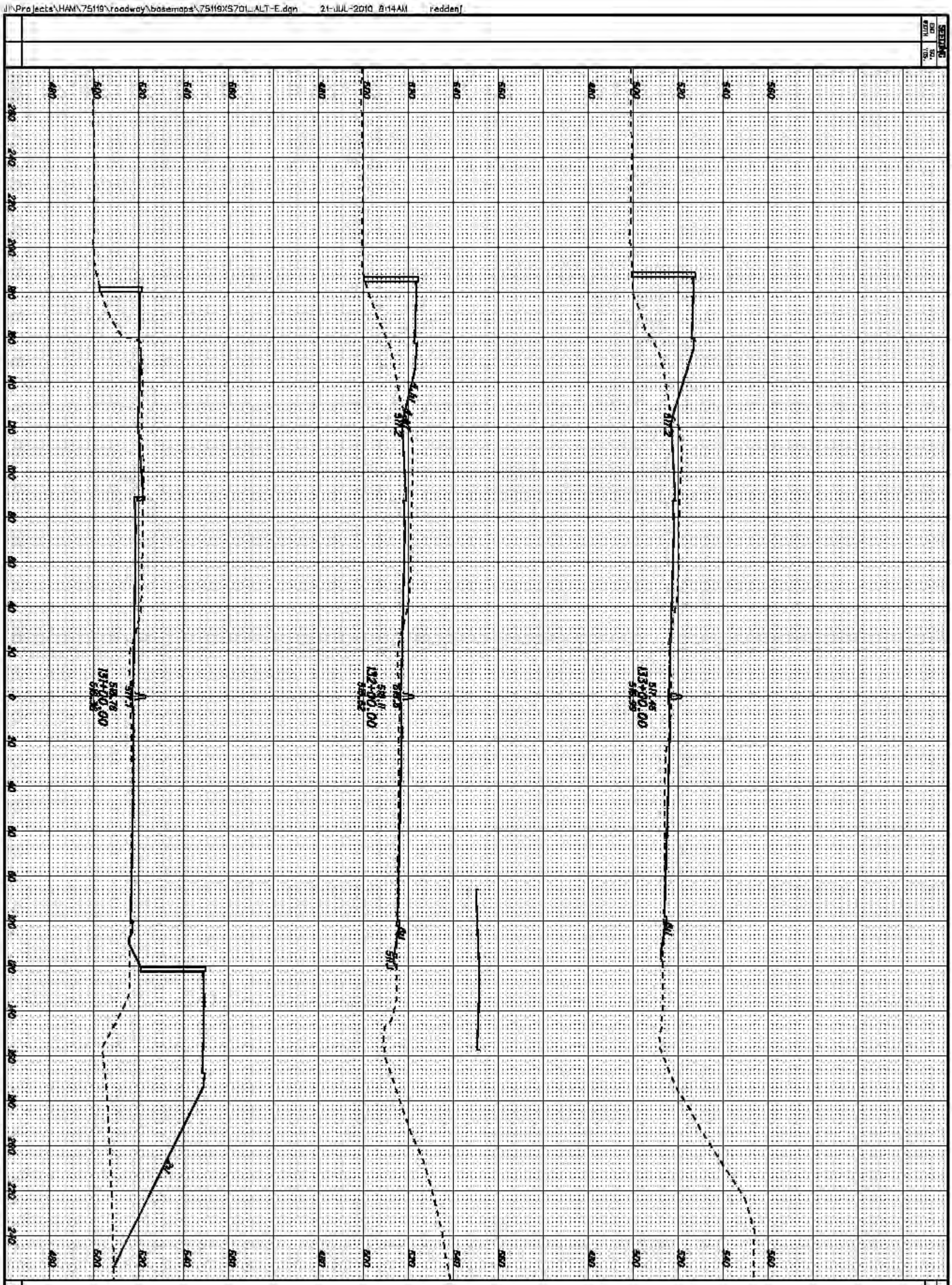
CROSS SECTIONS
I-75 - ALTERNATIVE E

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:14AM redden]



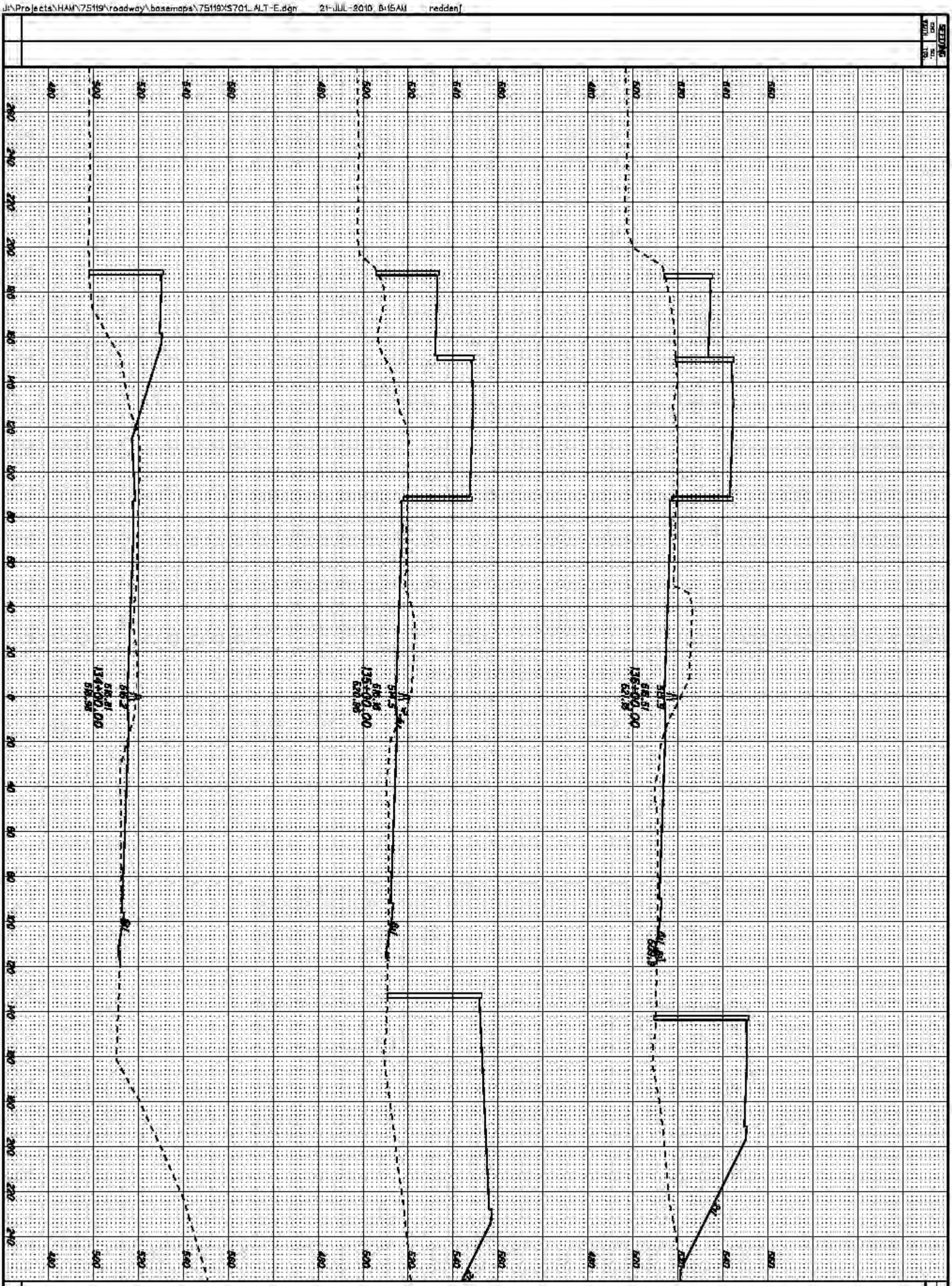
142	HAM-71/75-0.00/0.22	CROSS SECTIONS I-75 - ALTERNATIVE E	CALCULATED CHECKED

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:14AM reddenj



HAM-71/75-0.00/0.22	CROSS SECTIONS I-75 - ALTERNATIVE E	CALCULATED CHECKED

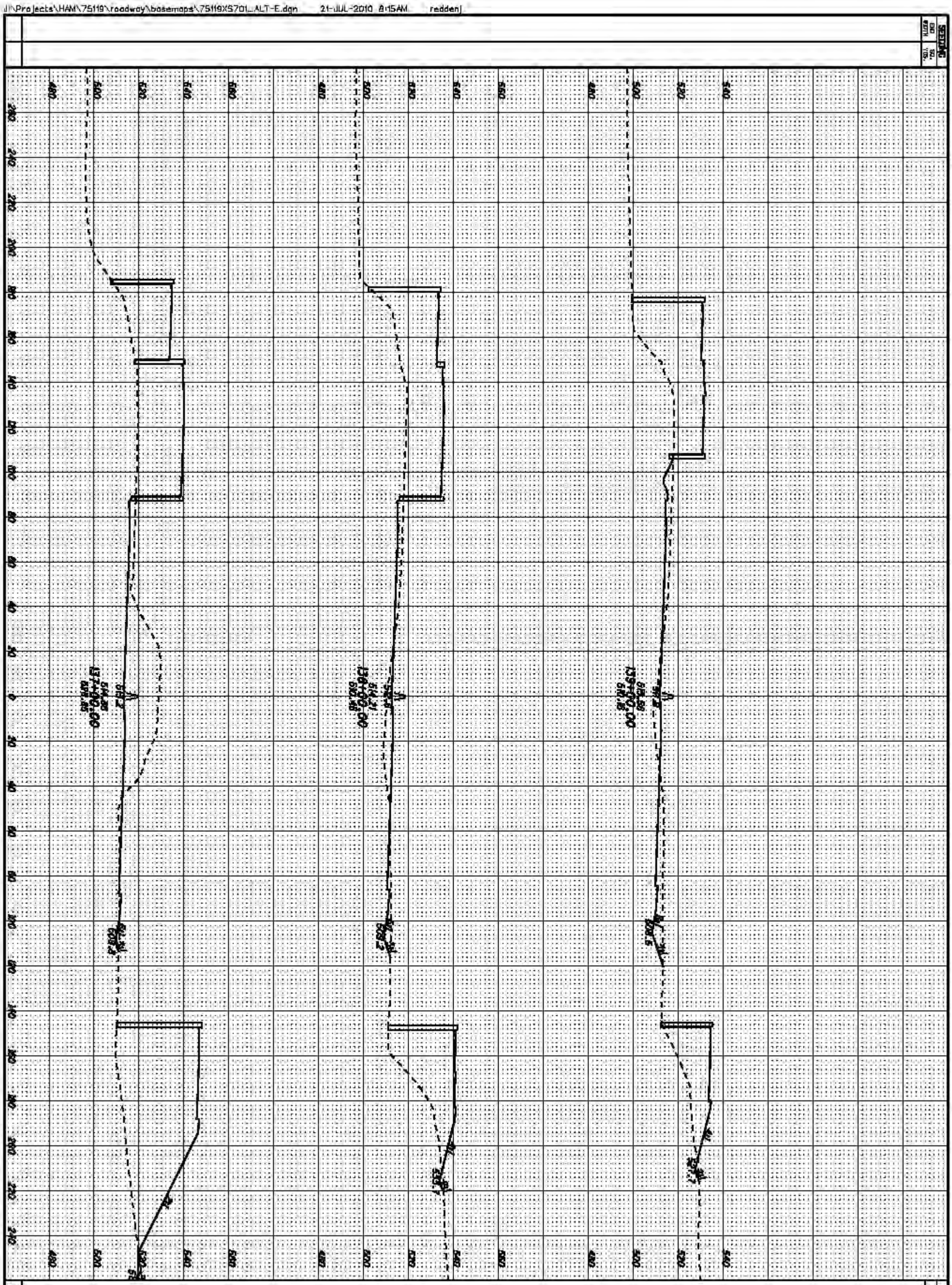
J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:15AM redden



HAM-71/75-0.00/0.22

CROSS SECTIONS
I-75 - ALTERNATIVE E

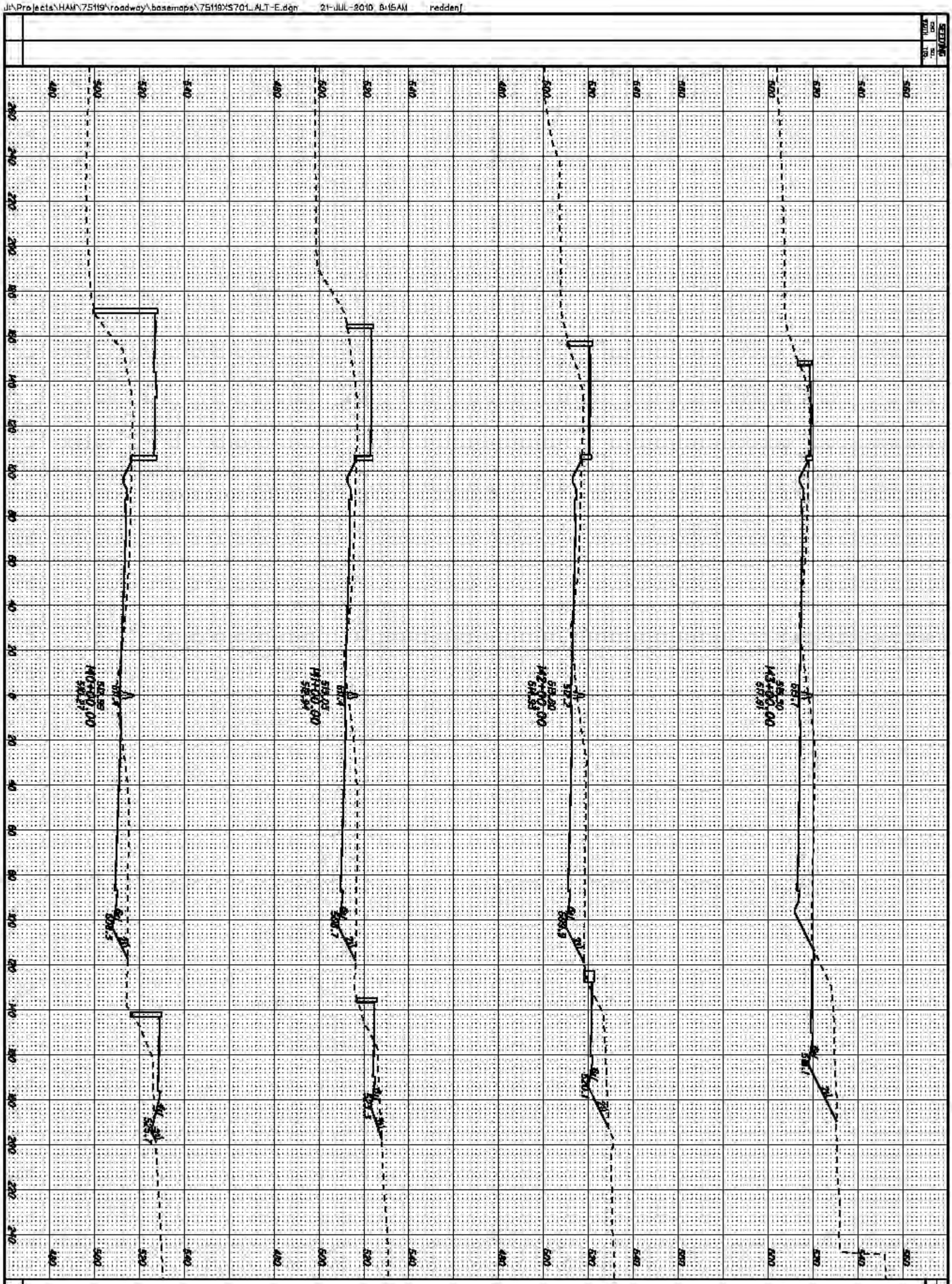
J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:15AM reddenj



HAM-71/75-0.00/0.22

CROSS SECTIONS
I-75 - ALTERNATIVE E

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:15AM redden

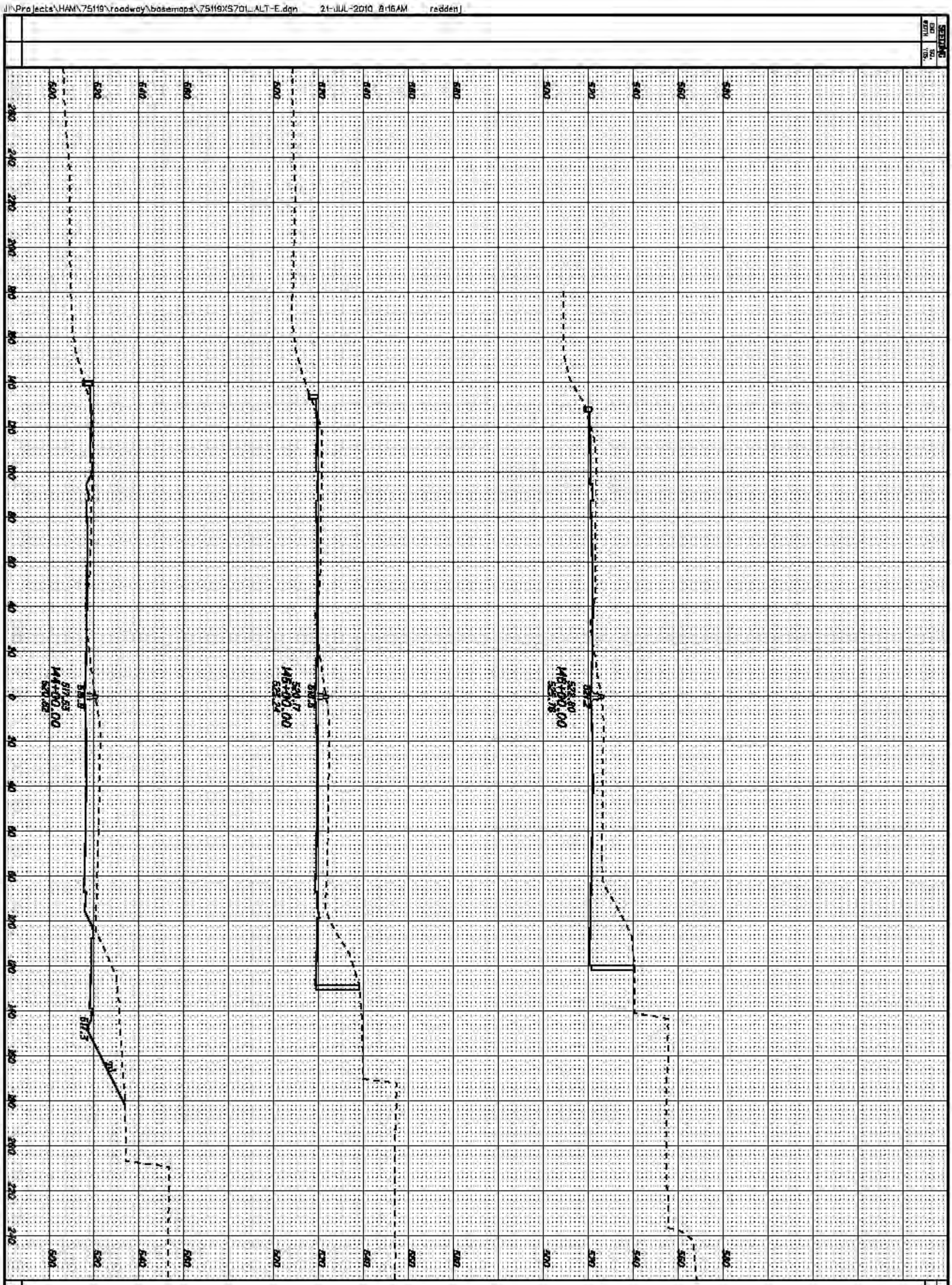


146

HAM-71/75-0.00/0.22

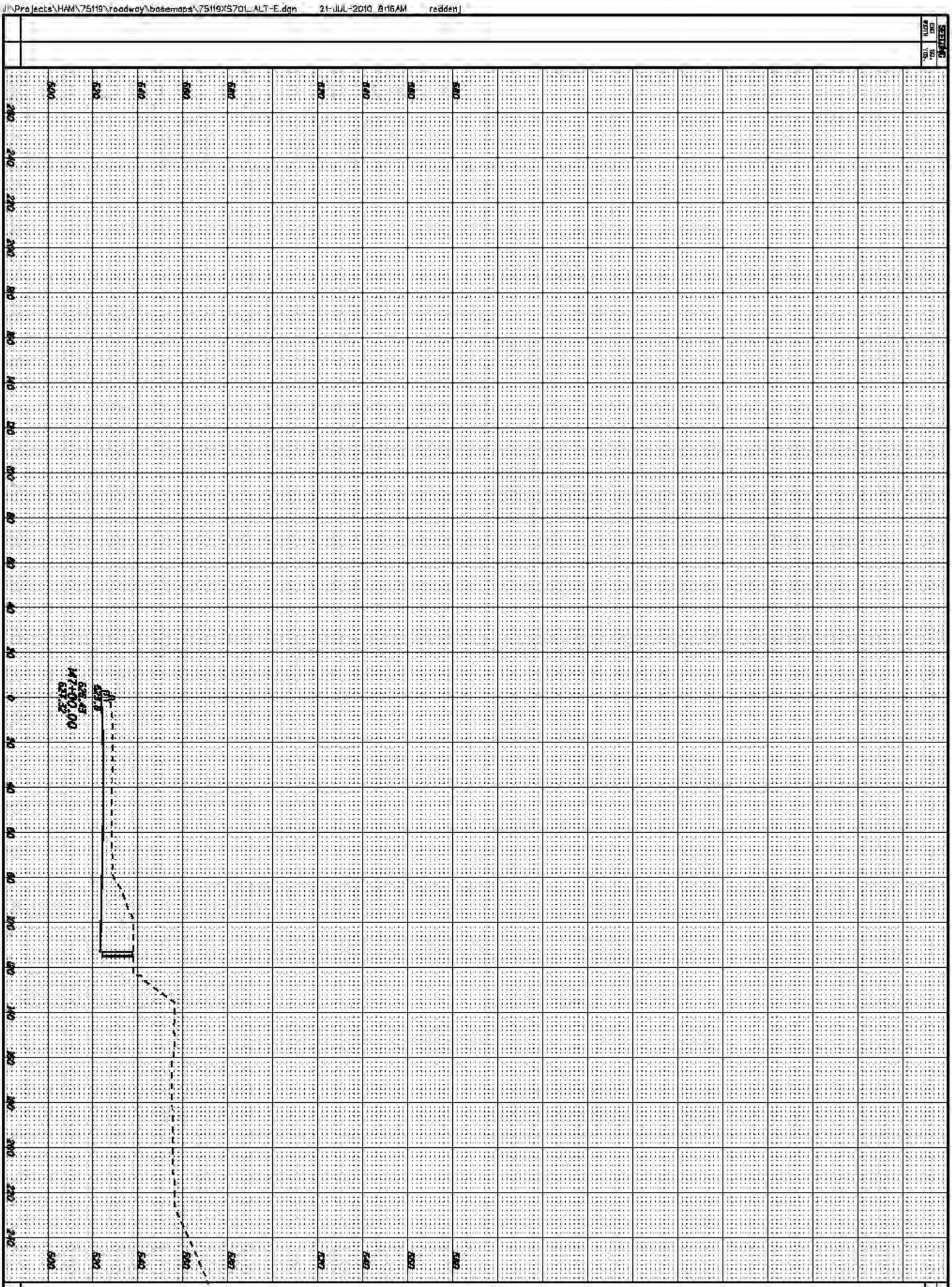
CROSS SECTIONS
I-75 - ALTERNATIVE E

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:16AM redden



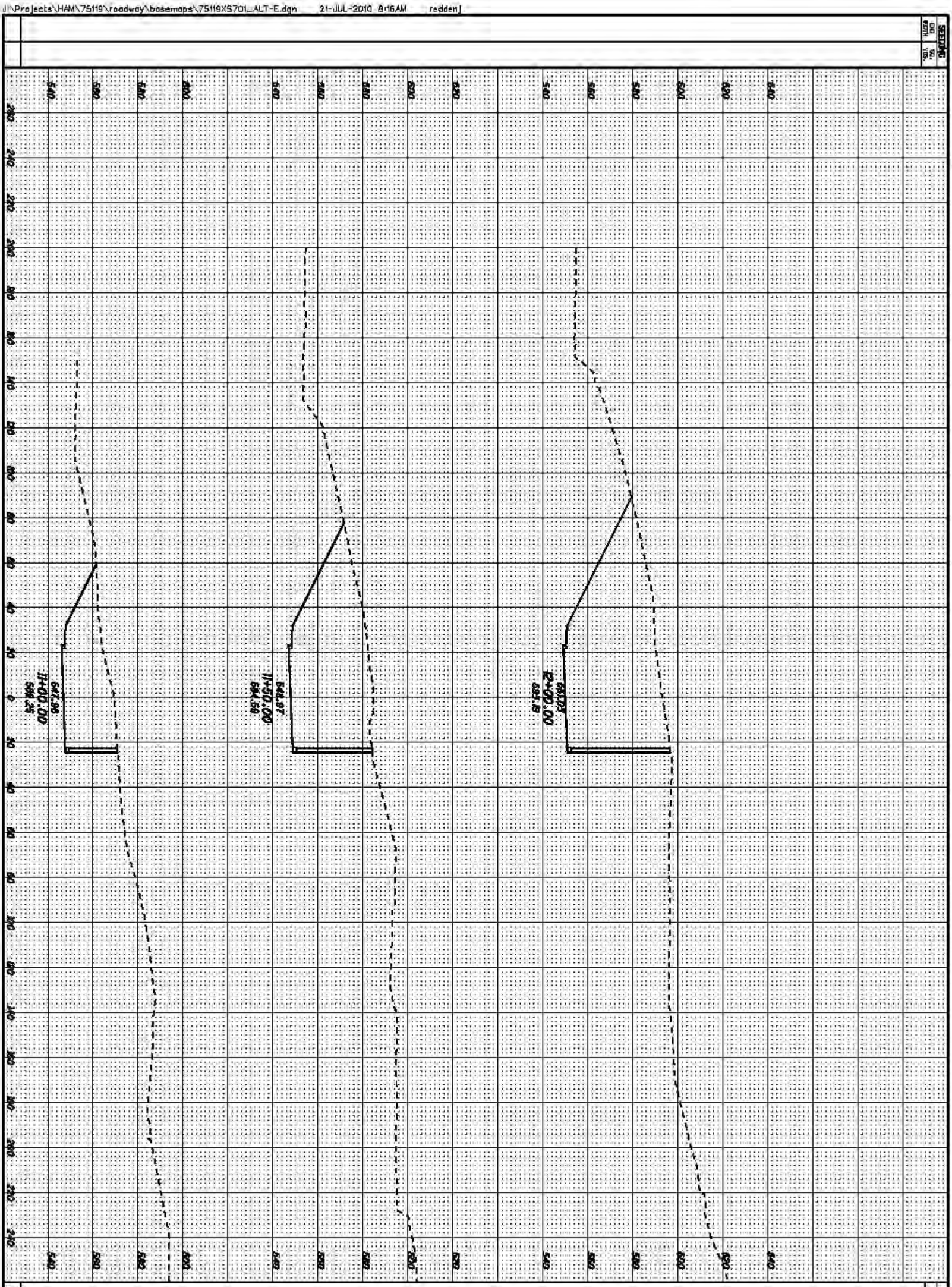
HAM-71/75-0.00/0.22	CROSS SECTIONS I-75 - ALTERNATIVE E	CALCULATED CHECKED

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:16AM redden



HAM-71/75-0.00/0.22	CROSS SECTIONS I-75 - ALTERNATIVE E	CALCULATED CHECKED

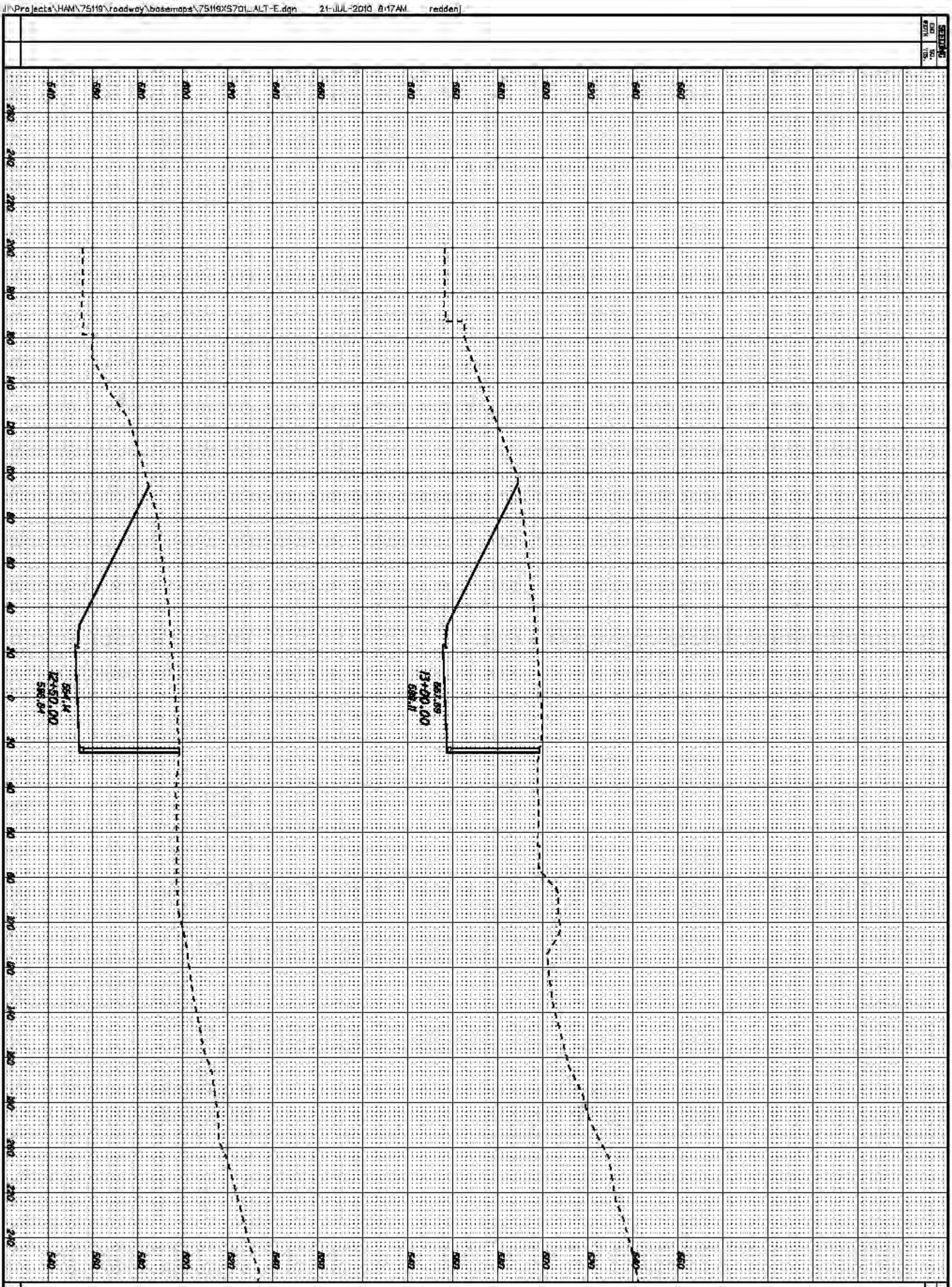
J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:16AM redden



HAM-71/75-0.00/0.22

CROSS SECTIONS
CONNECTOR ROAD - ALTERNATIVE E

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:17AM redden

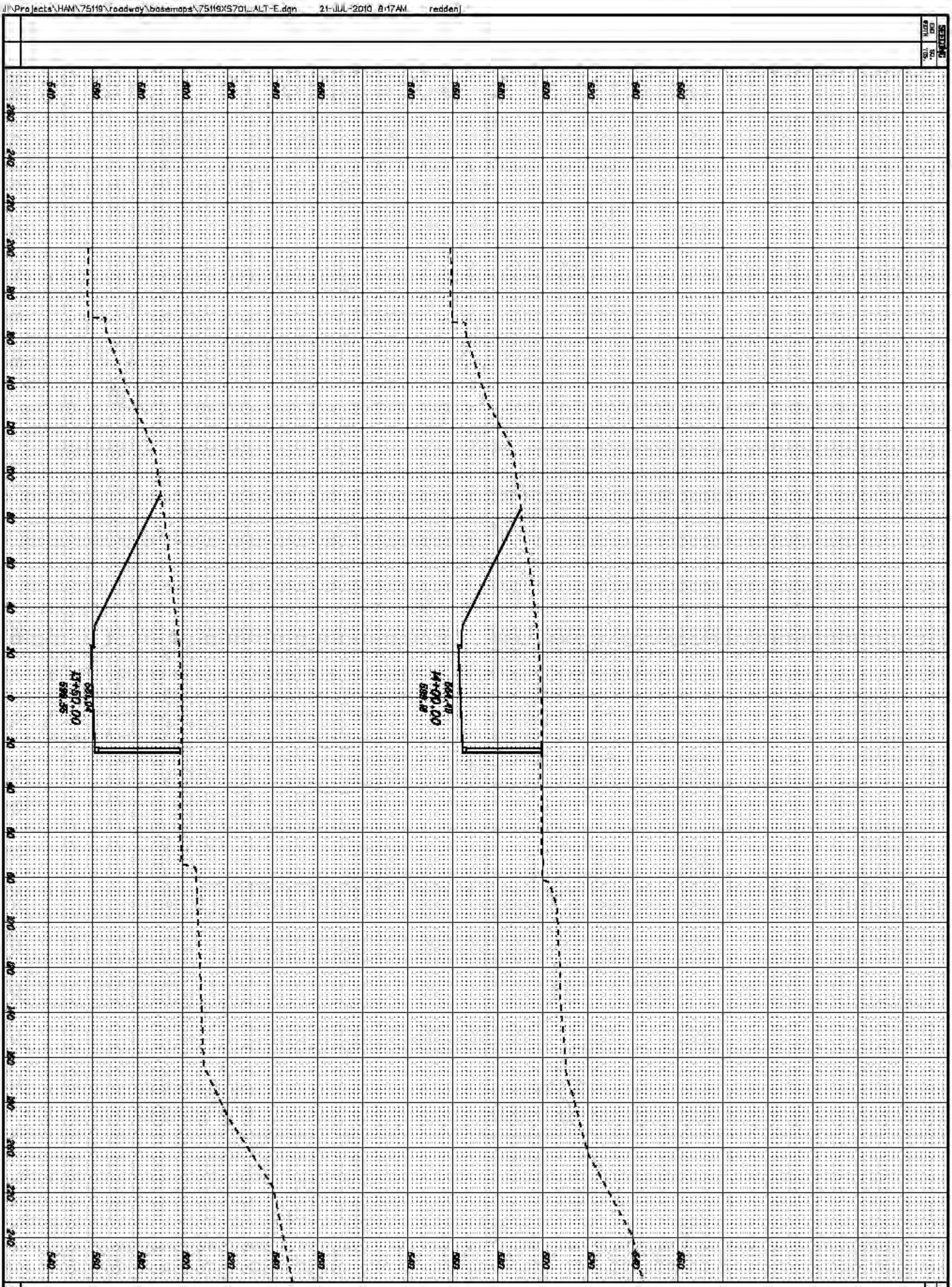


150

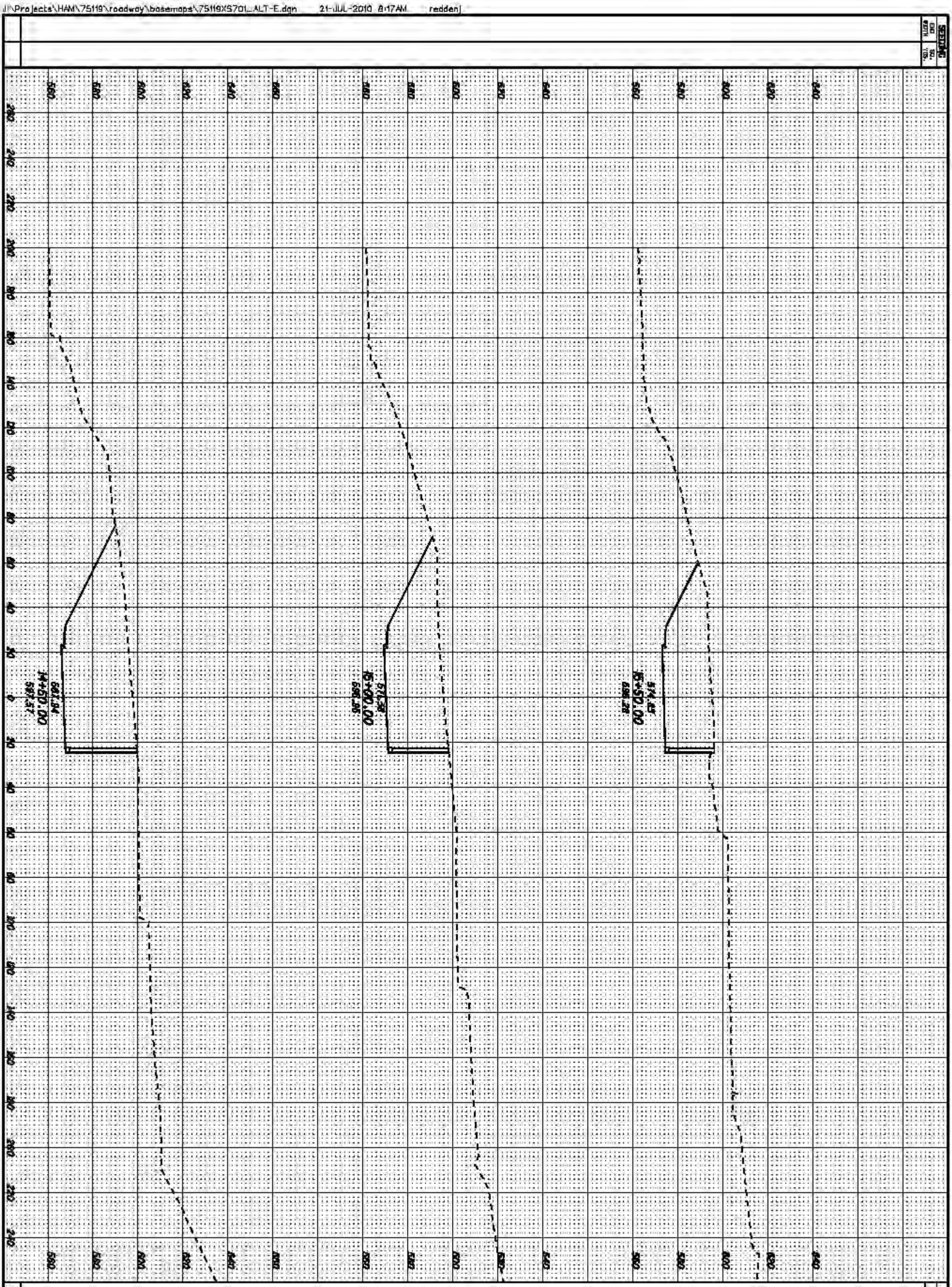
HAM-71/75-0.00/0.22

CROSS SECTIONS
CONNECTOR ROAD - ALTERNATIVE E

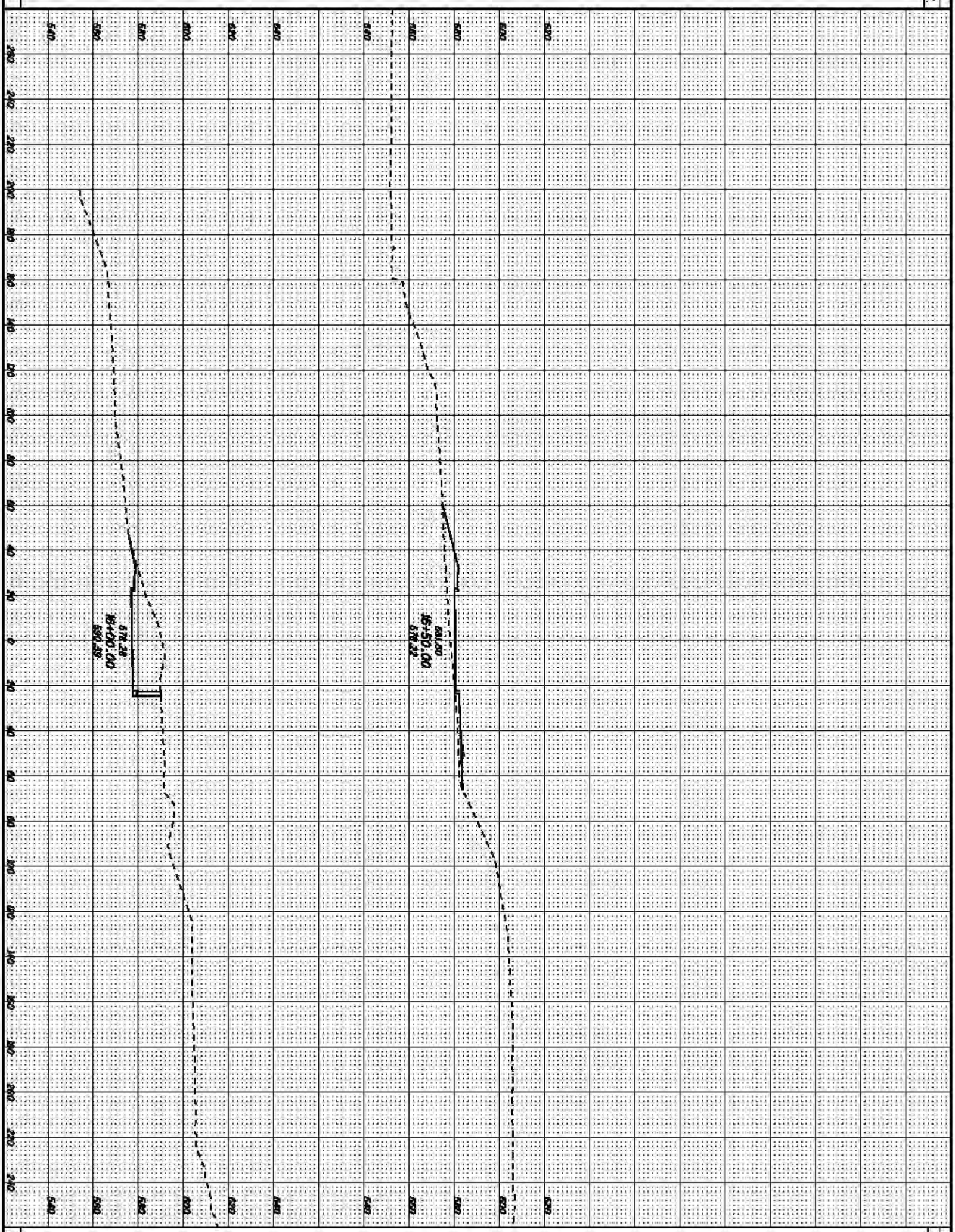
J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:17AM redden



J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:17AM reddenj

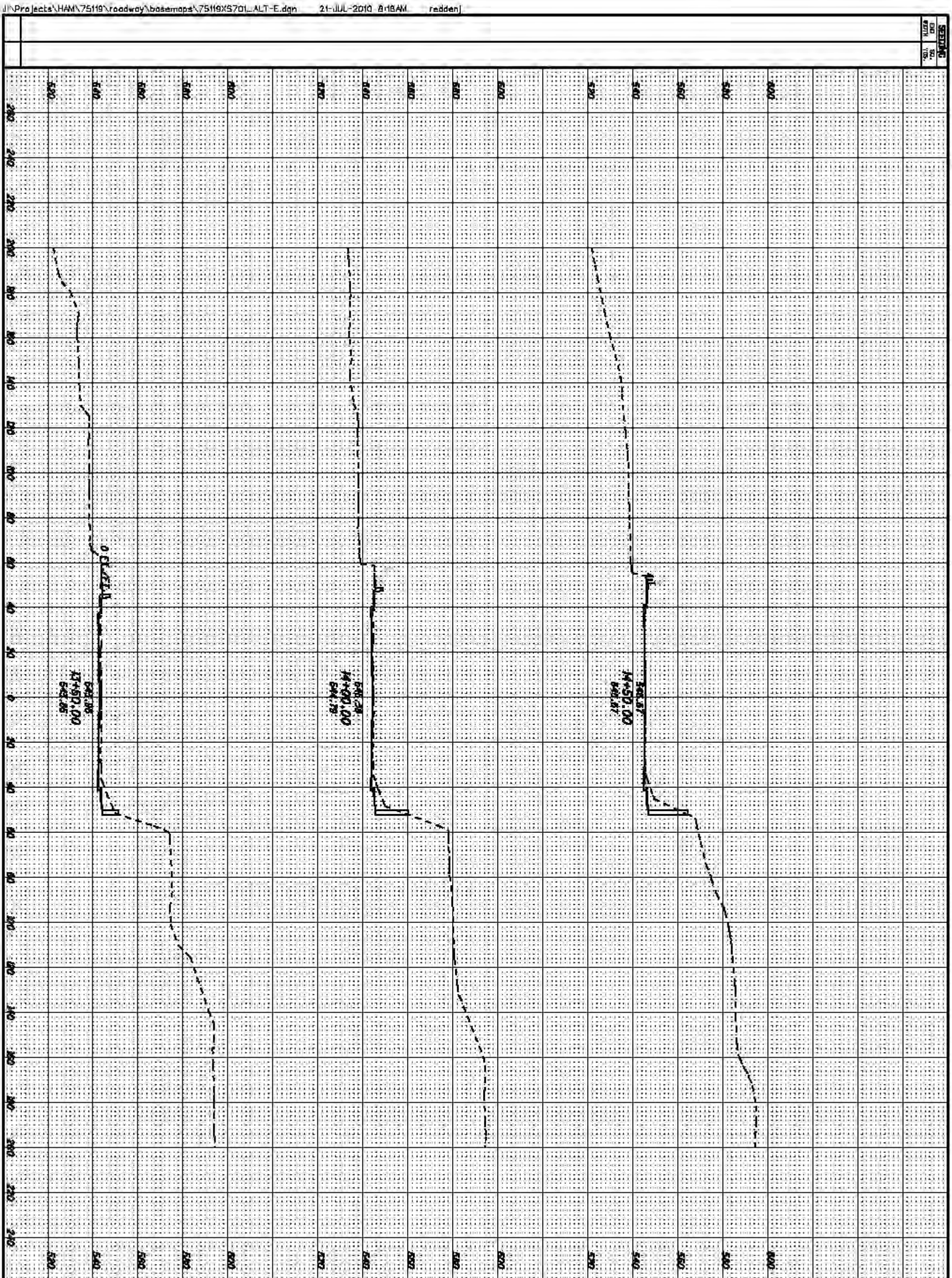


J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:18AM redden



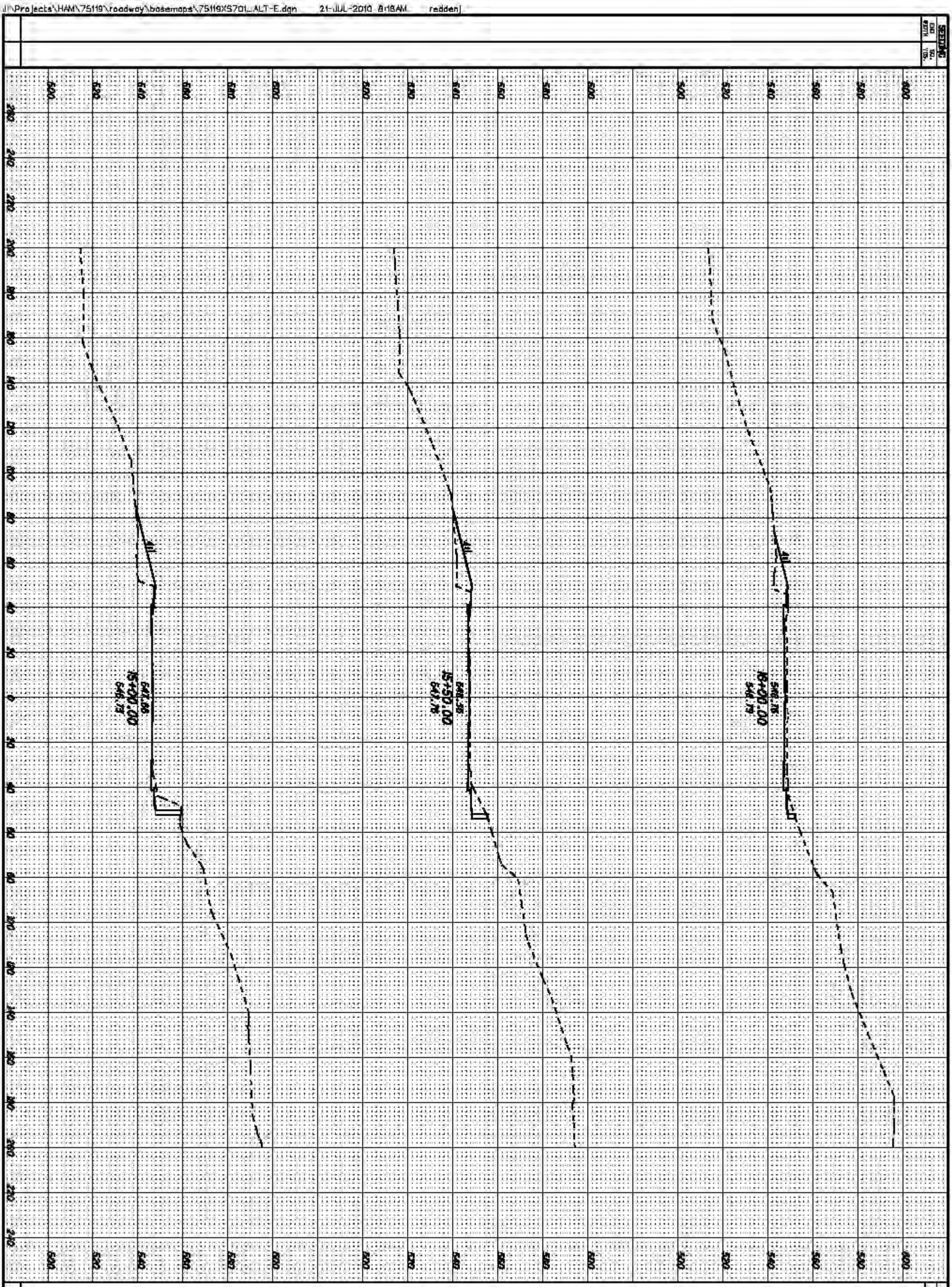
HAM-71/75-0.00/0.22	CROSS SECTIONS CONNECTOR ROAD - ALTERNATIVE E	CALCULATED CHECKED

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:18AM redden



	HAM-71/75-0.00/0.22	CROSS SECTIONS CENTRAL PARKWAY - ALTERNATIVE E	CALCULATED CHECKED

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:18AM redden



HAM-71/75-0.00/0.22

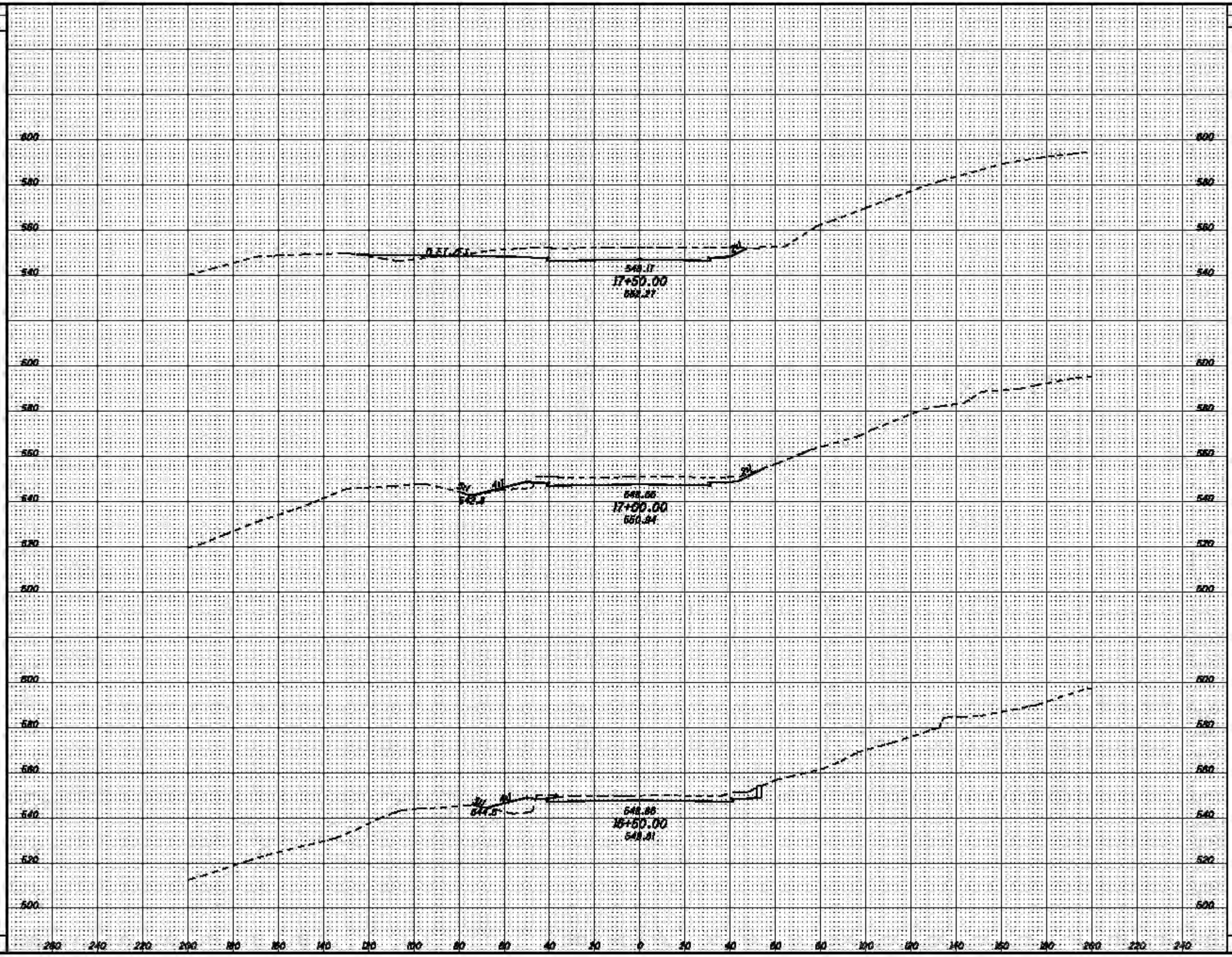
CROSS SECTIONS
CENTRAL PARKWAY - ALTERNATIVE E

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED

CHECKED



CROSS SECTIONS
CENTRAL PARKWAY - ALTERNATIVE E

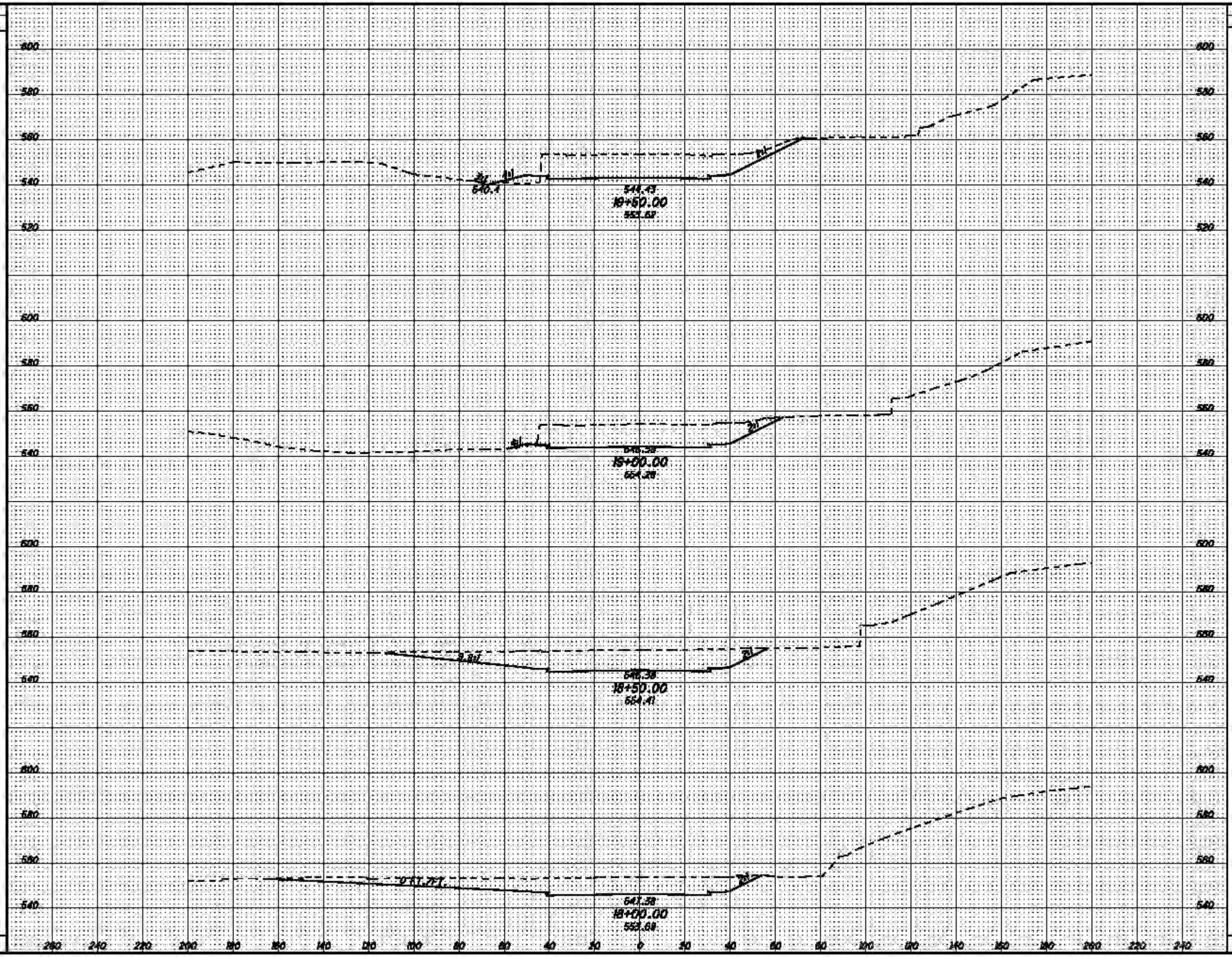
HAM-71/75-0.00/0.22

156

J:\Projects\HAM\75149\roadway\basemaps\75149XS3701_ALT-E.dgn 21-JUL-2010 8:19AM redden

SEEDING
END WIDTH | SQ. YDS.

END AREA: CUT | FILL
VOLUME: CUT | FILL
CALCULATED | CHECKED

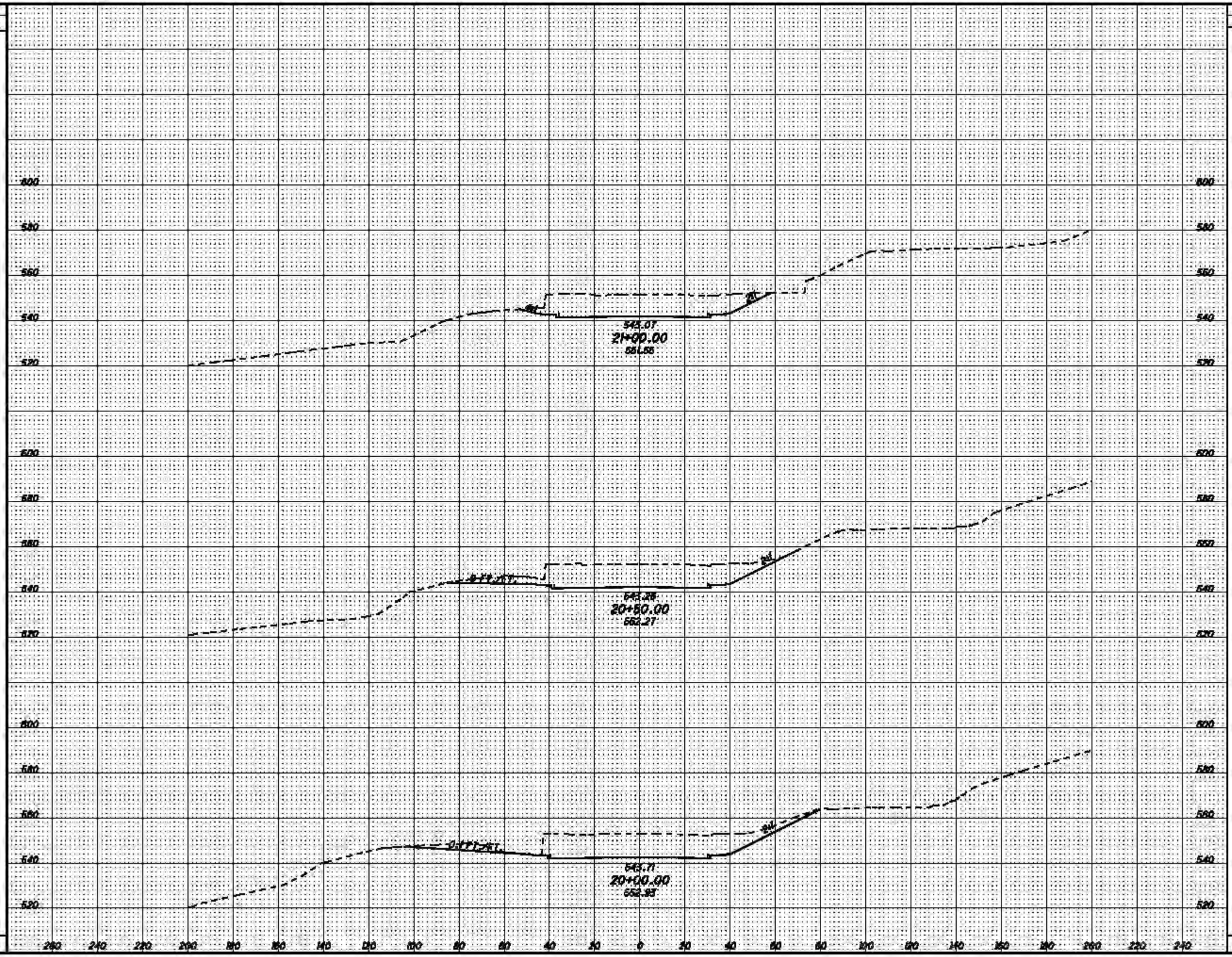


CROSS SECTIONS
CENTRAL PARKWAY - ALTERNATIVE E

HAM-71/75-0.00/0.22

57

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:19AM reidden



CALCULATED

CHECKED

CROSS SECTIONS
CENTRAL PARKWAY - ALTERNATIVE E

HAM-71/75-0.00/0.22

158

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:19AM redden

SEEDING	
SQ. YDS.	

END AREA		VOLUME	
CUT	FILL	CUT	FILL

DESCRIPTION	DATE

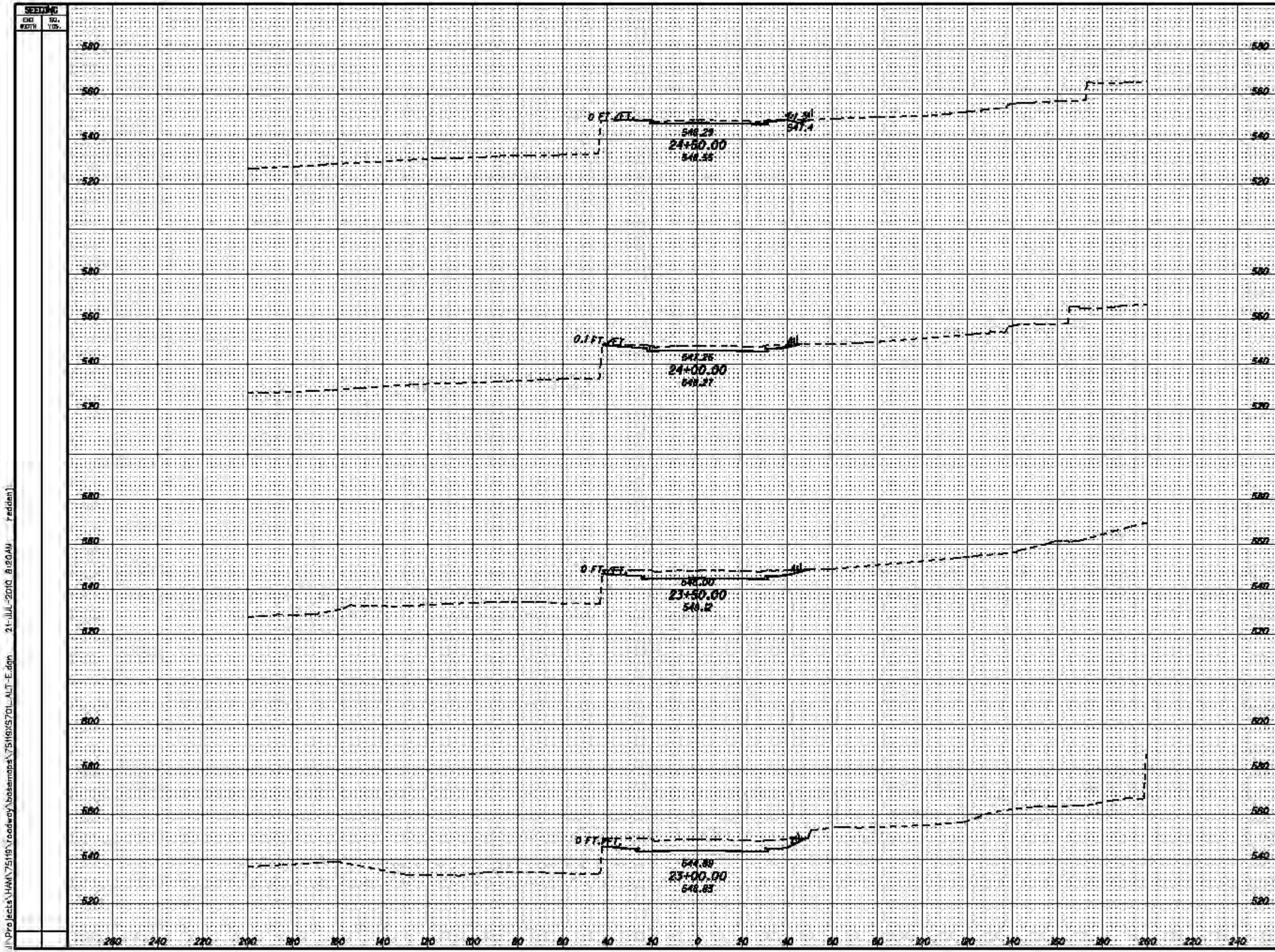
CROSS SECTIONS

CENTRAL PARKWAY - ALTERNATIVE E

HAM-71/75-0.00/0.22

59

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:20AM raddenj



CALCULATED

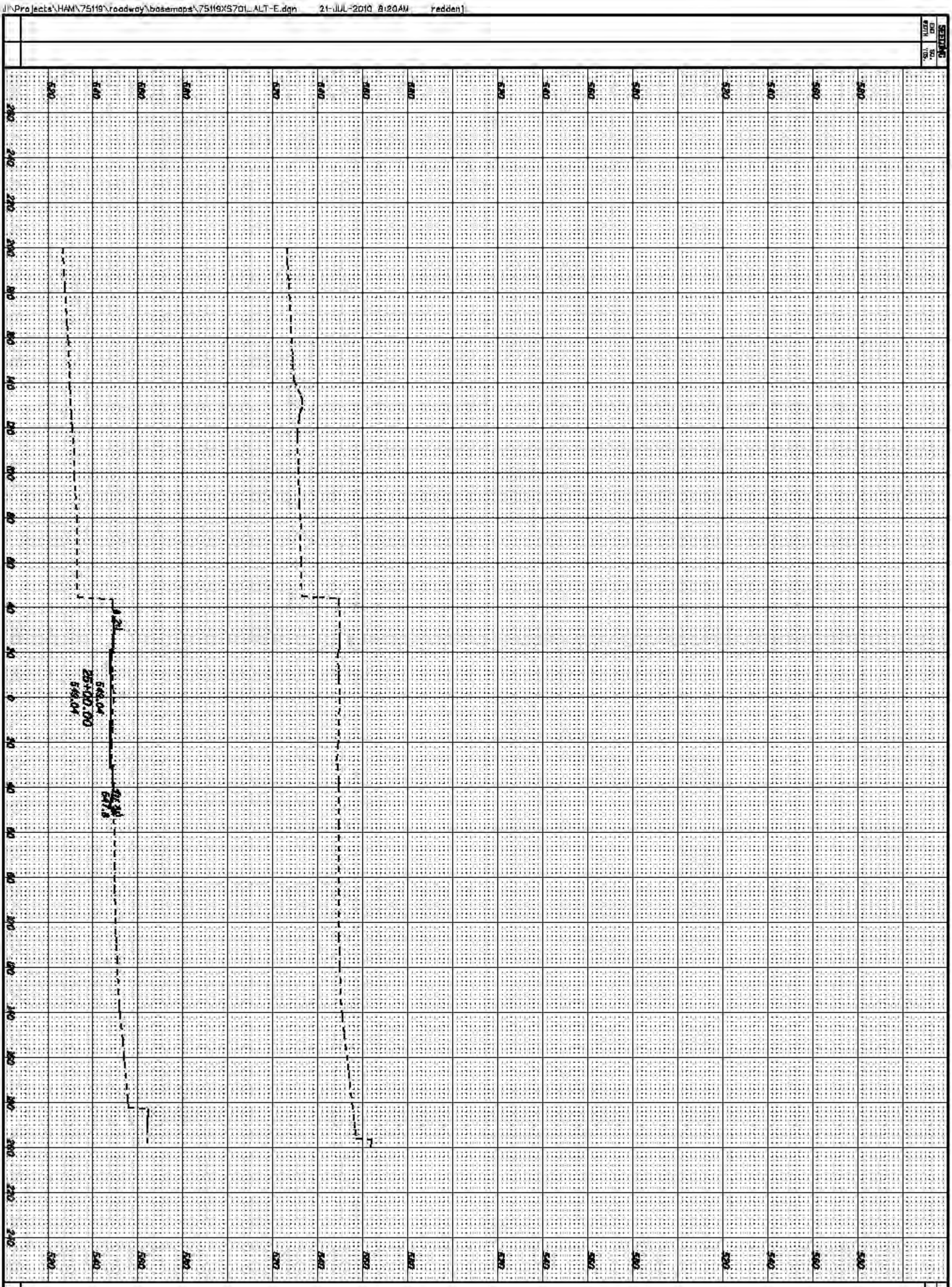
CHECKED

CROSS SECTIONS
CENTRAL PARKWAY - ALTERNATIVE E

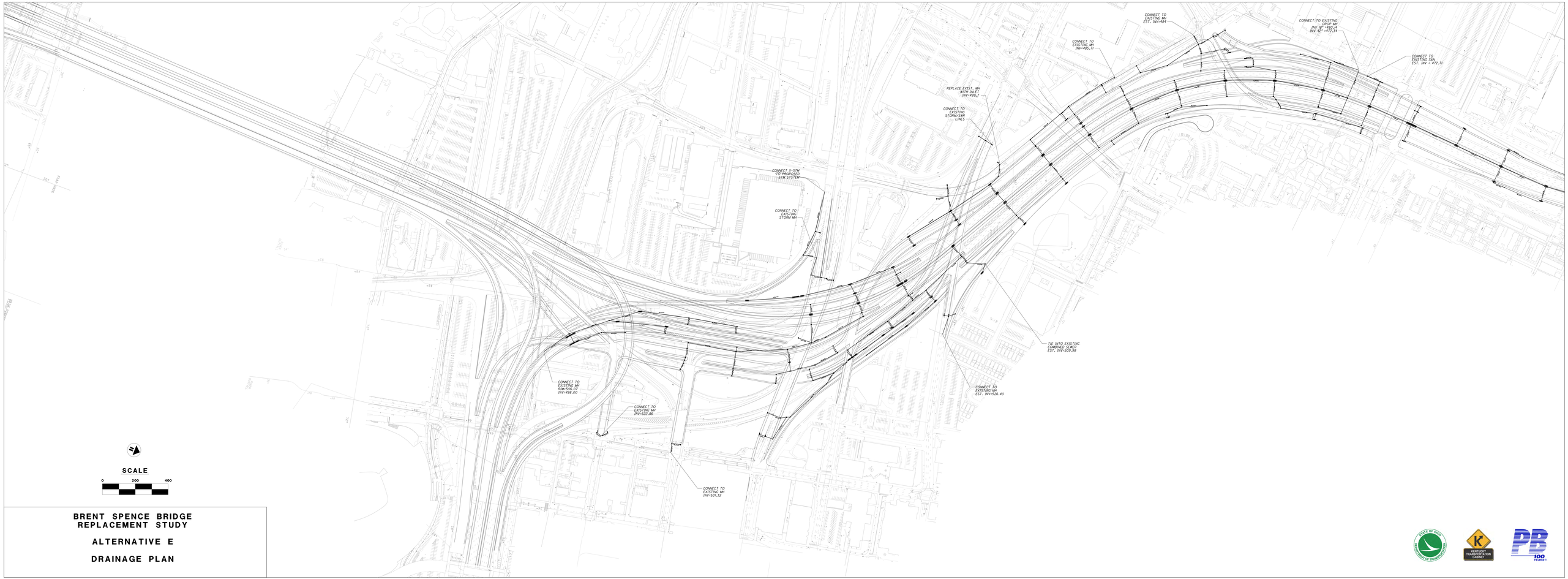
HAM-71/75-0.00/0.22

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:20AM redden]

J:\Projects\HAM\75119\roadway\basemaps\75119XS701_ALT-E.dgn 21-JUL-2010 8:20AM redden1



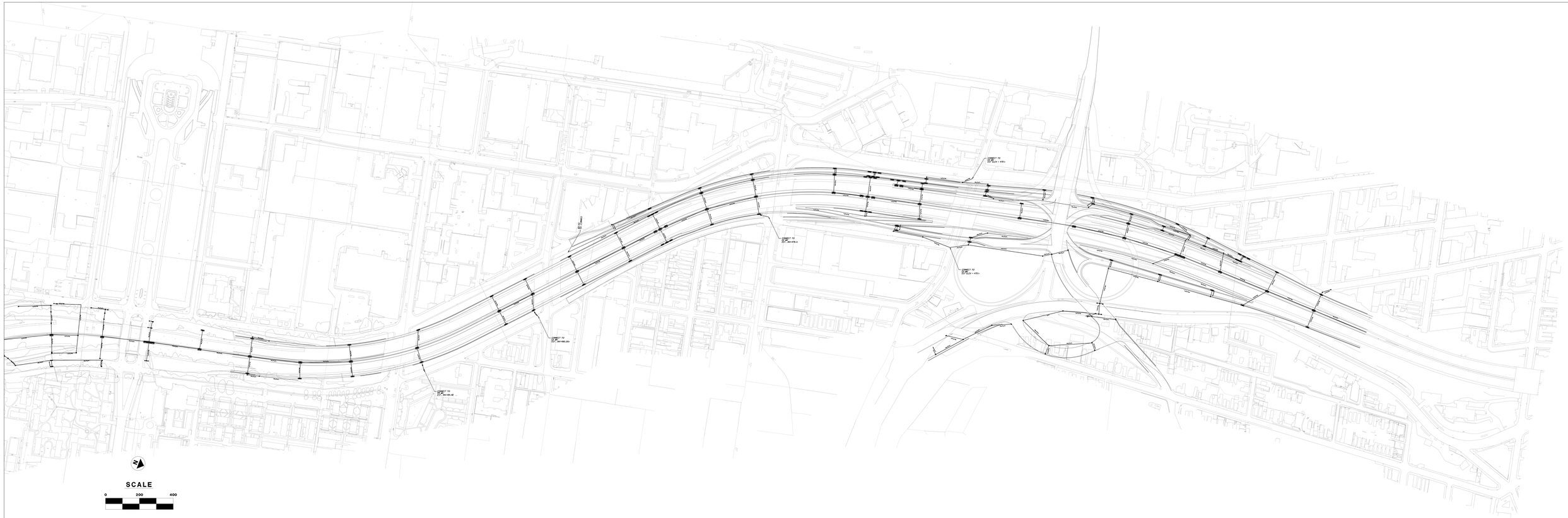
191	HAM-71/75-0.00/0.22	CROSS SECTIONS CENTRAL PARKWAY - ALTERNATIVE E



BRENT SPENCE BRIDGE REPLACEMENT STUDY

ALTERNATIVE E

DRAINAGE PLAN



SCALE

0 200 400

BRENT SPENCE BRIDGE REPLACEMENT STUDY

ALTERNATIVE E

DRAINAGE PLAN



BRENT SPENCE BRIDGE REPLACEMENT STUDY

ALTERNATIVE E

PAVEMENT MARKING PLAN



BRENT SPENCE BRIDGE REPLACEMENT STUDY

ALTERNATIVE E

PAVEMENT MARKING PLAN



BRENT SPENCE BRIDGE
REPLACEMENT STUDY

ALTERNATIVE E

PAVEMENT MARKING PLAN



BRENT SPENCE BRIDGE
REPLACEMENT STUDY

ALTERNATIVE E

PAVEMENT MARKING PLAN