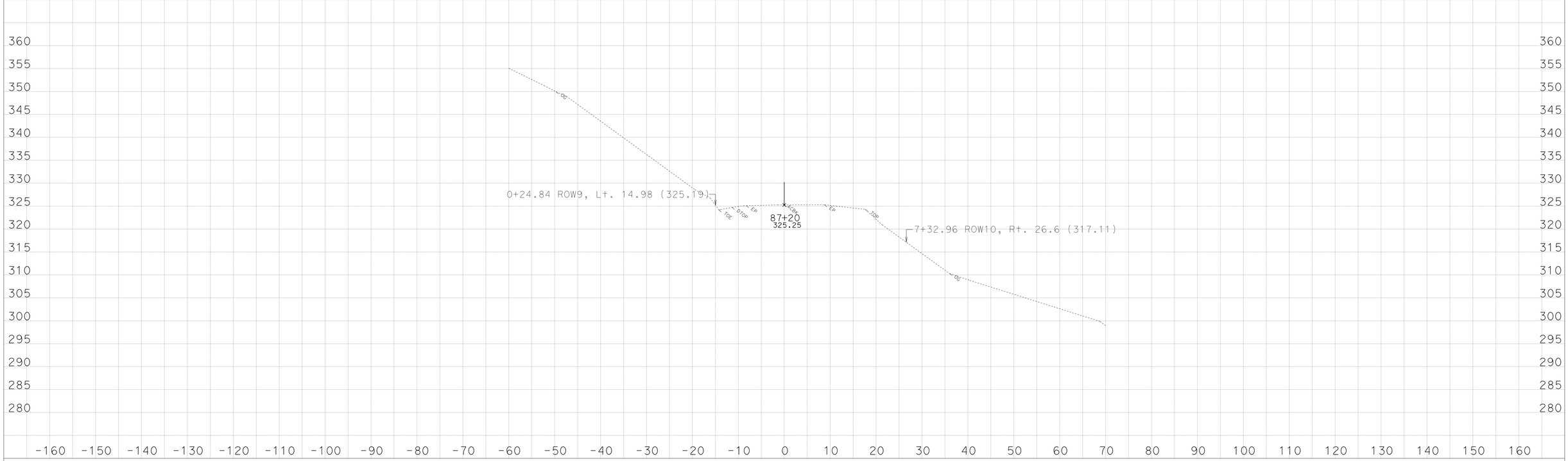
For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

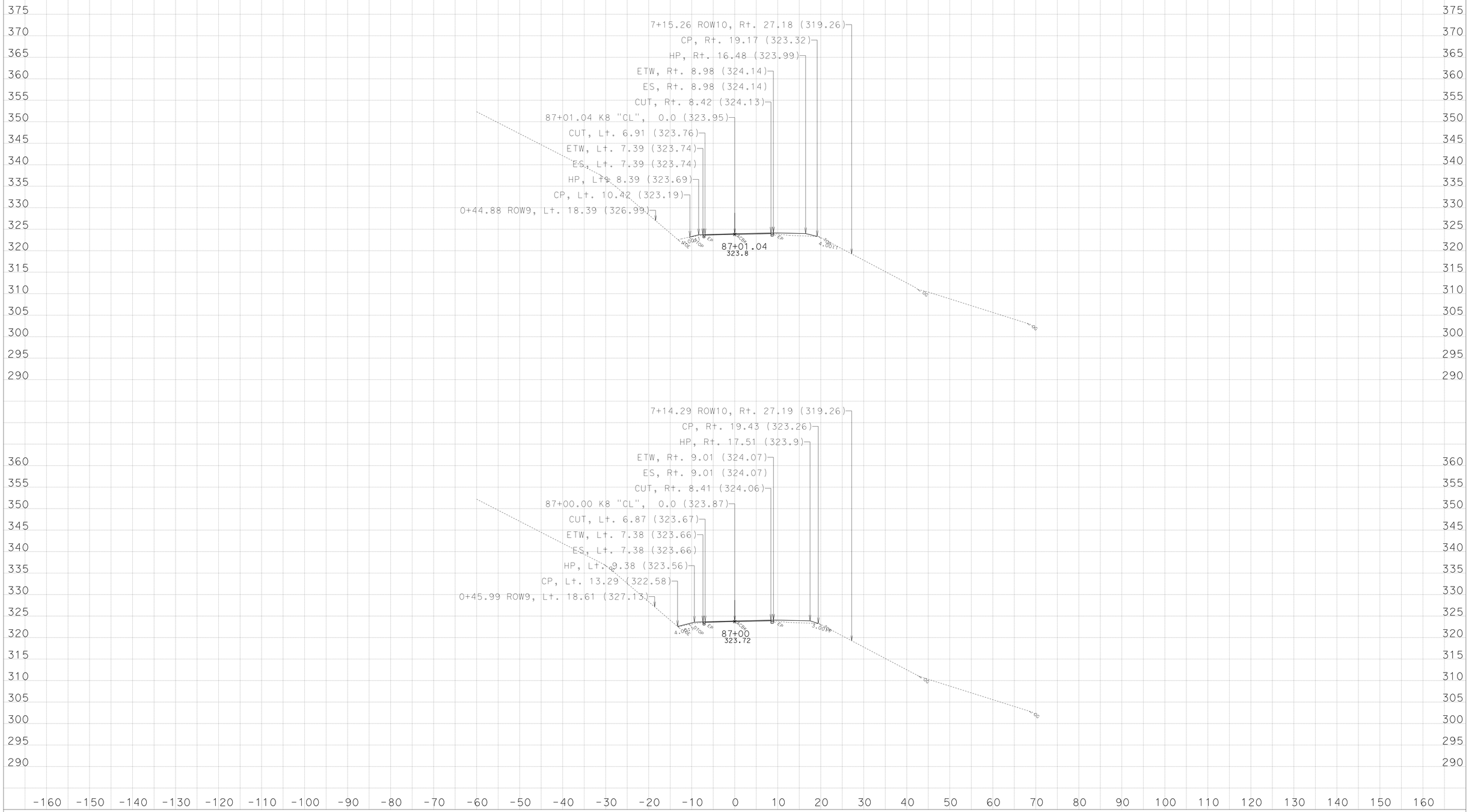
Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 43 OF 43

For Earthwork Development Only

Safety Improvements

(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"

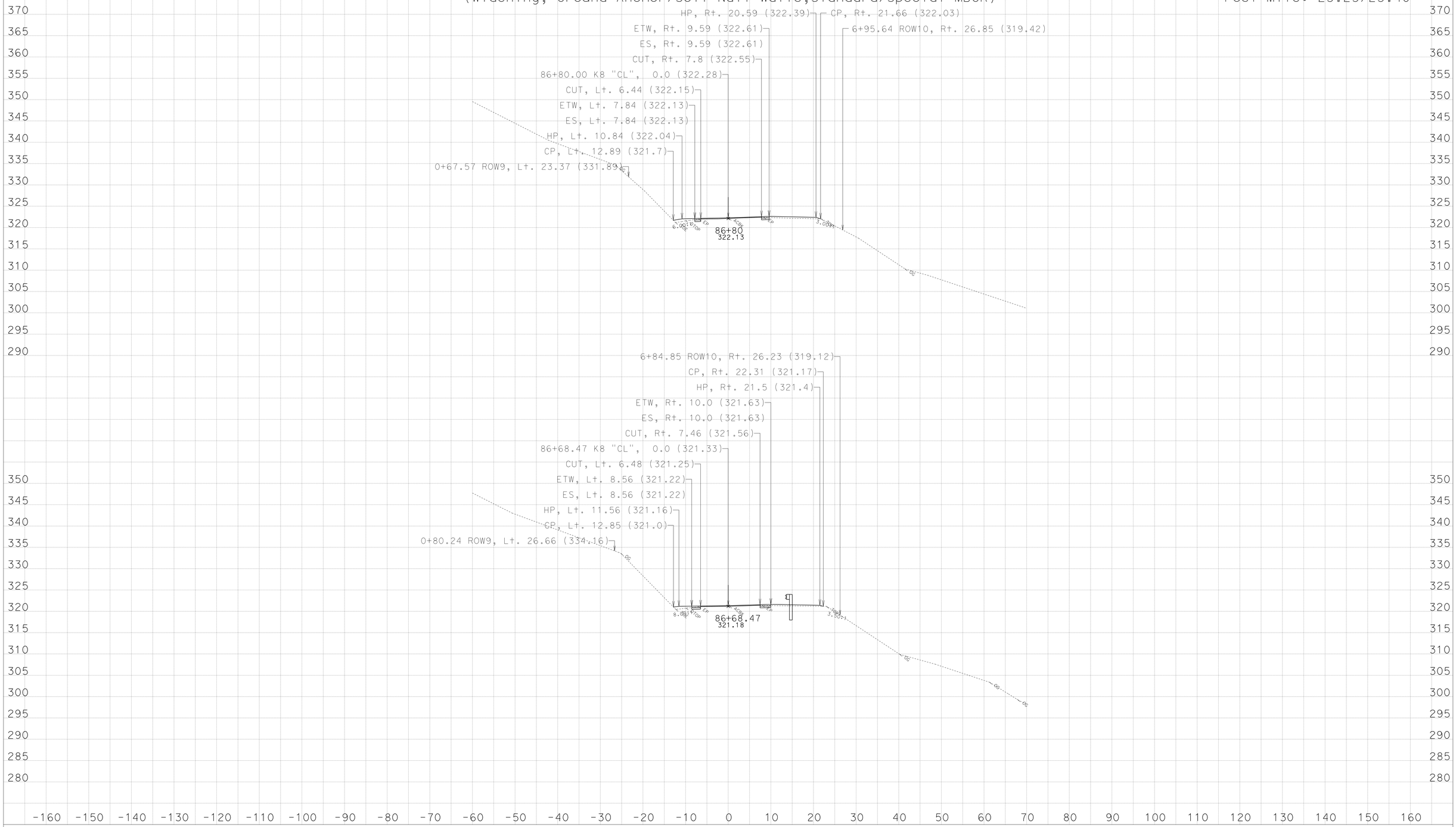
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements

(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

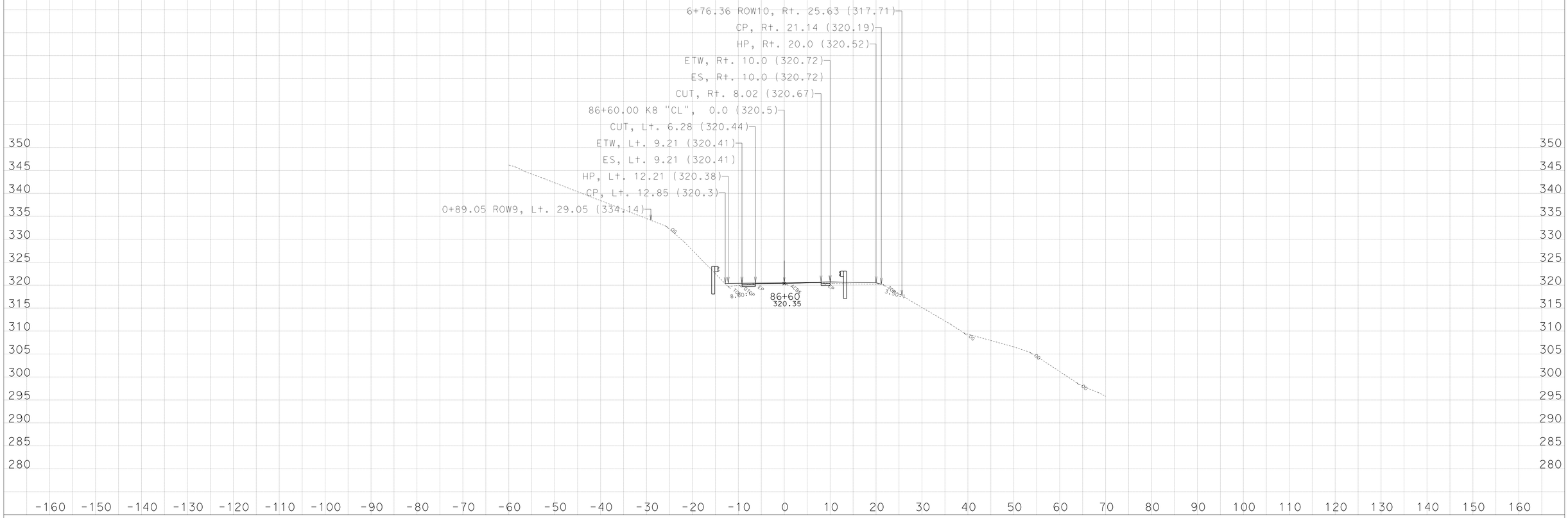
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 41 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

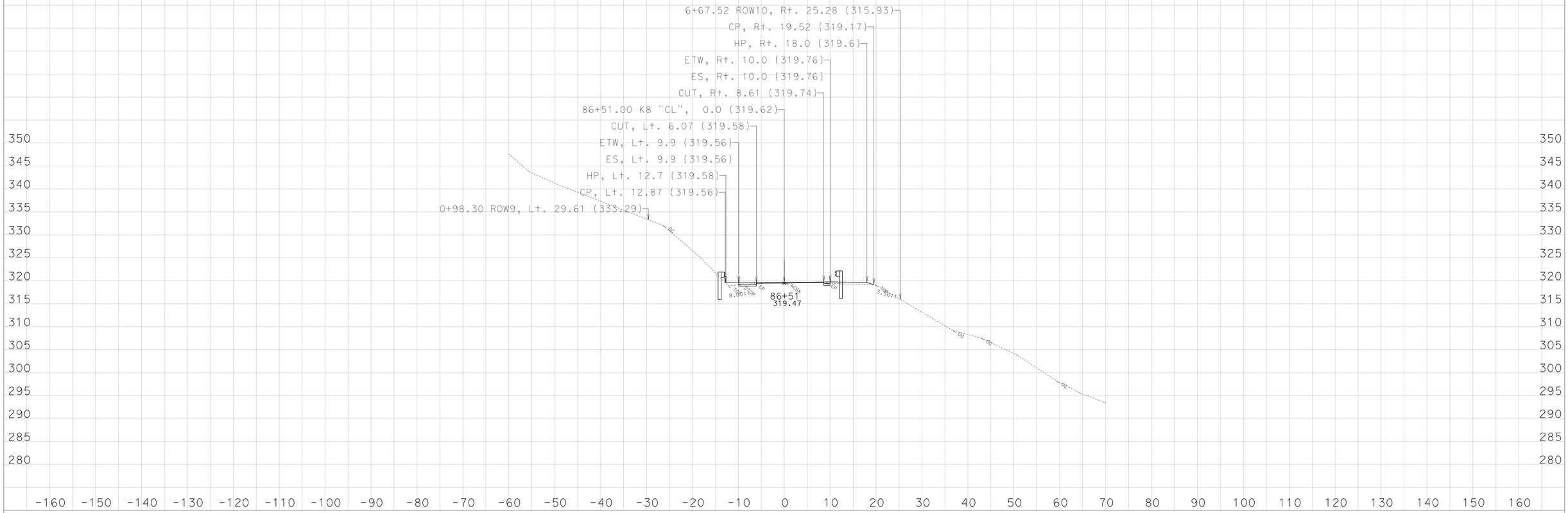
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 40 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

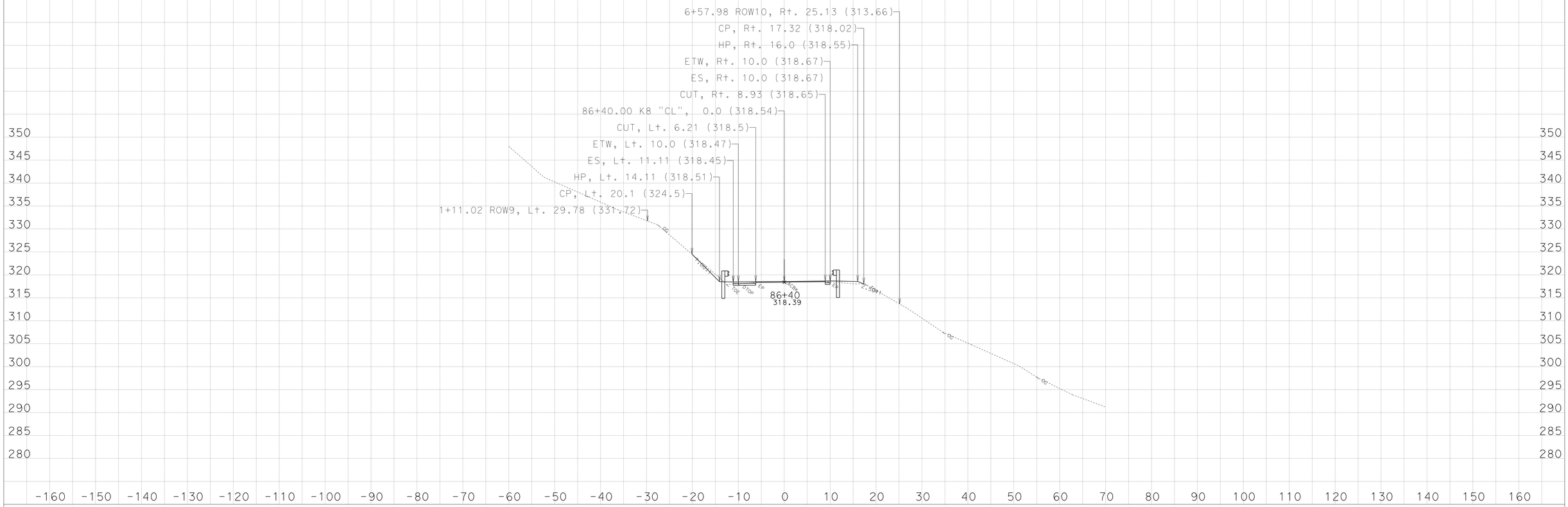
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 39 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

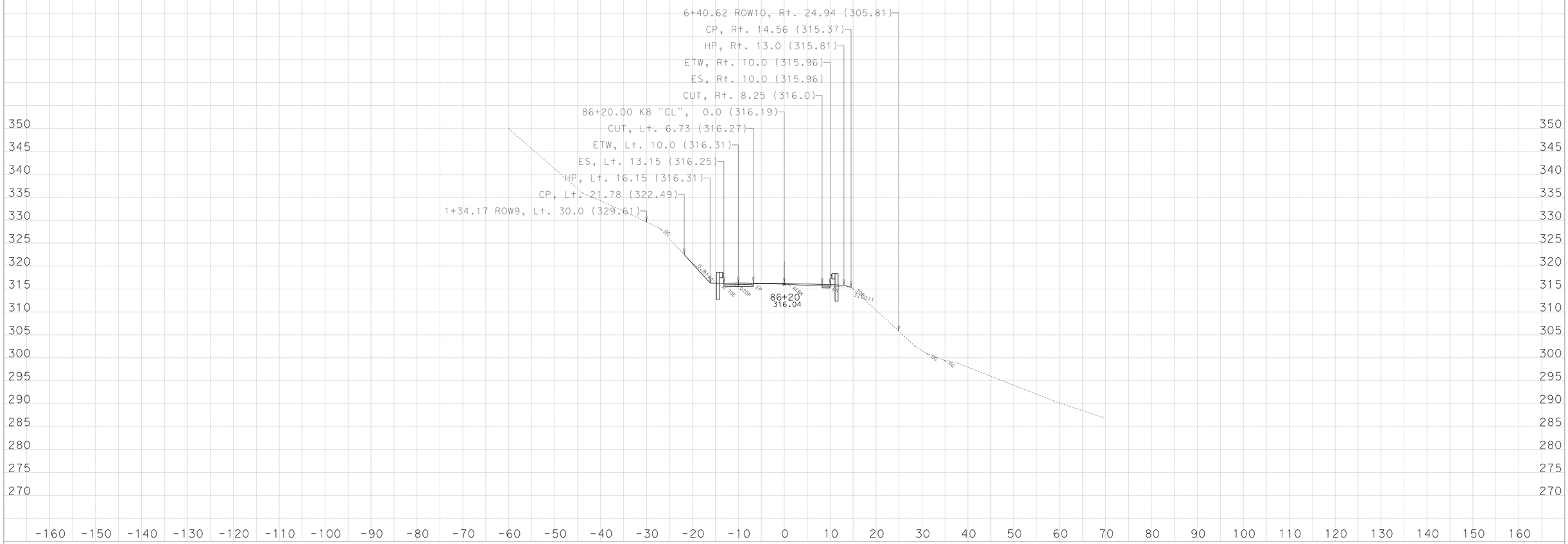
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

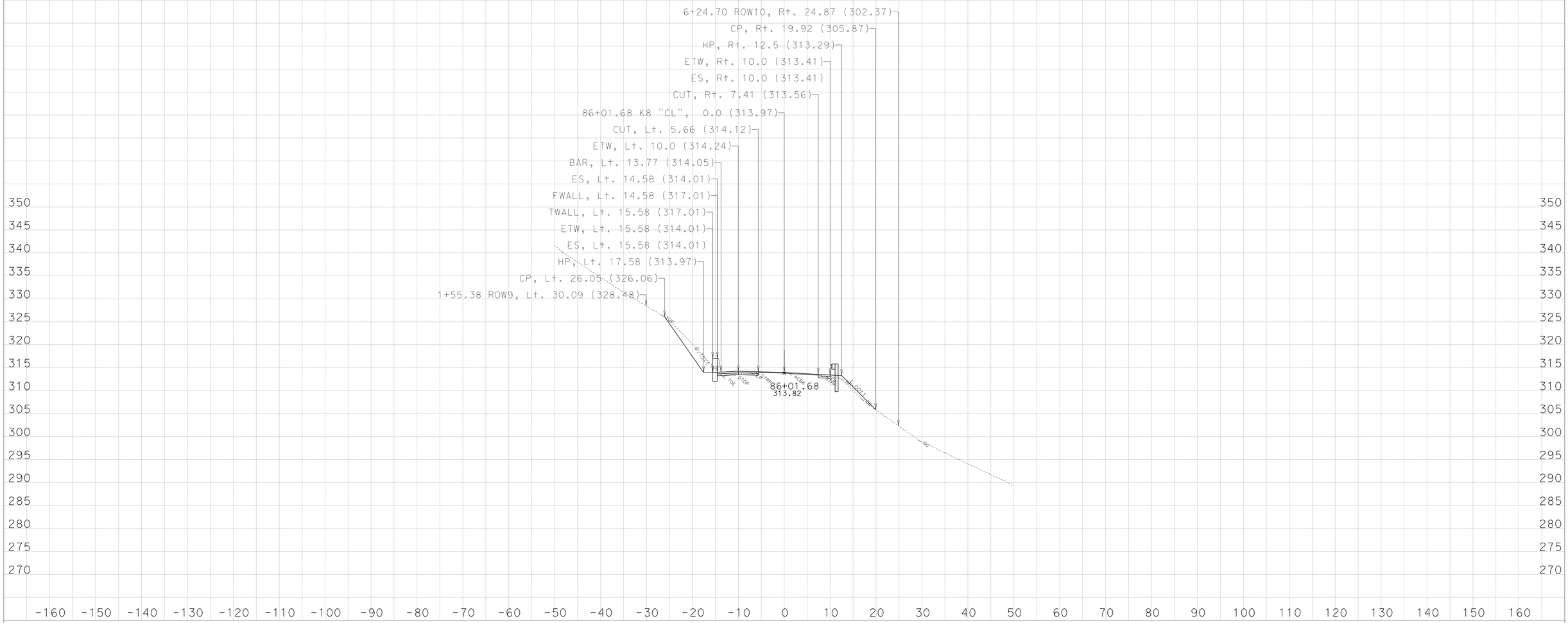
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 37 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

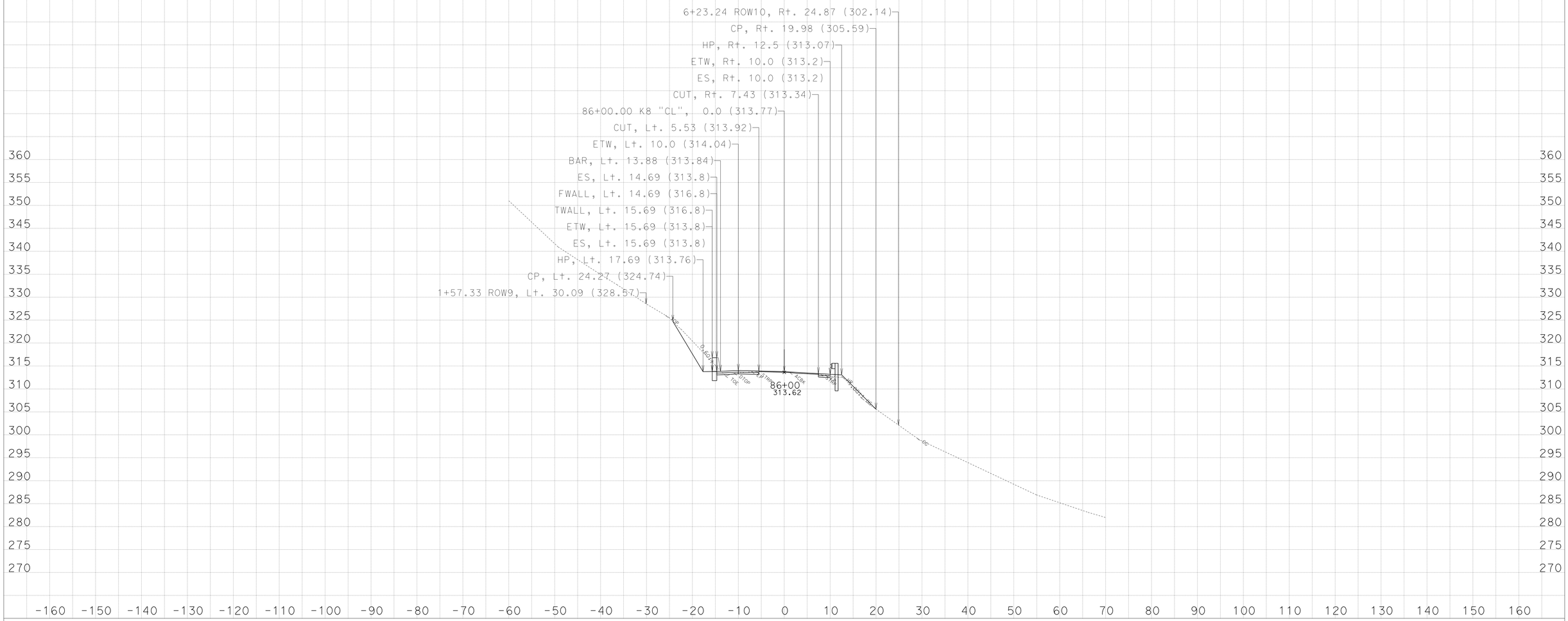
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



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DATE: 3/29/2013

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PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

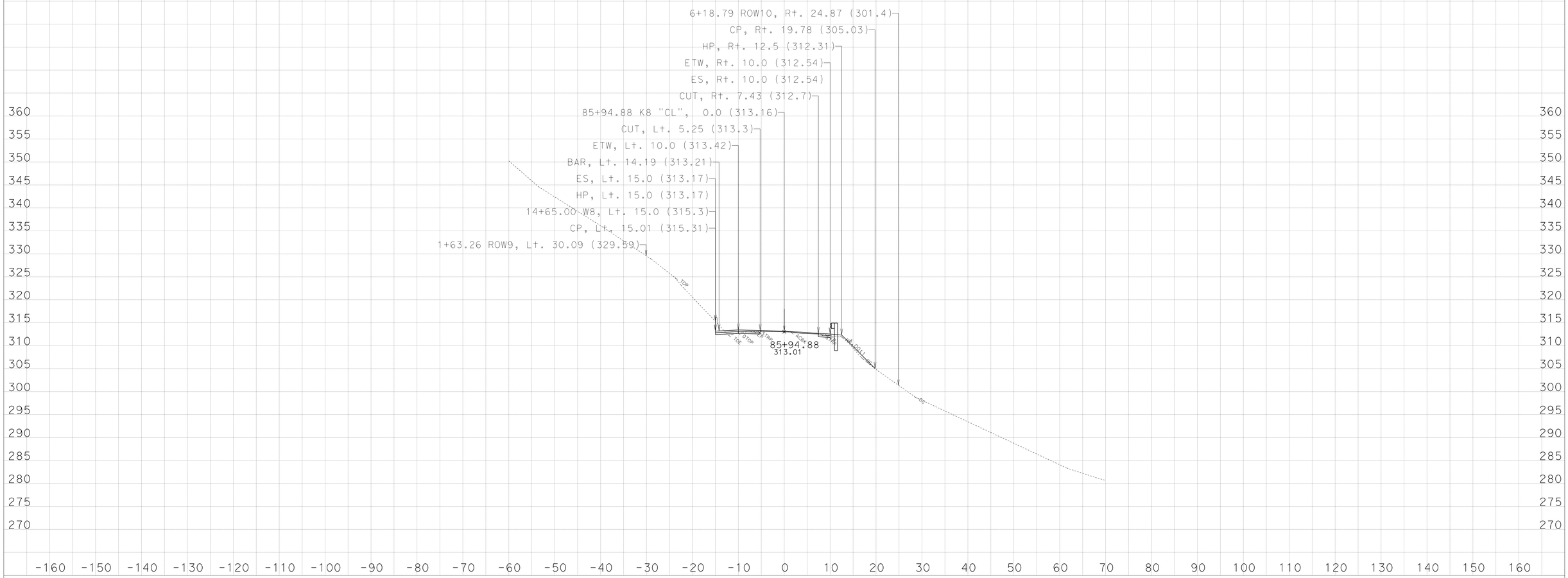
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 35 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

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PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

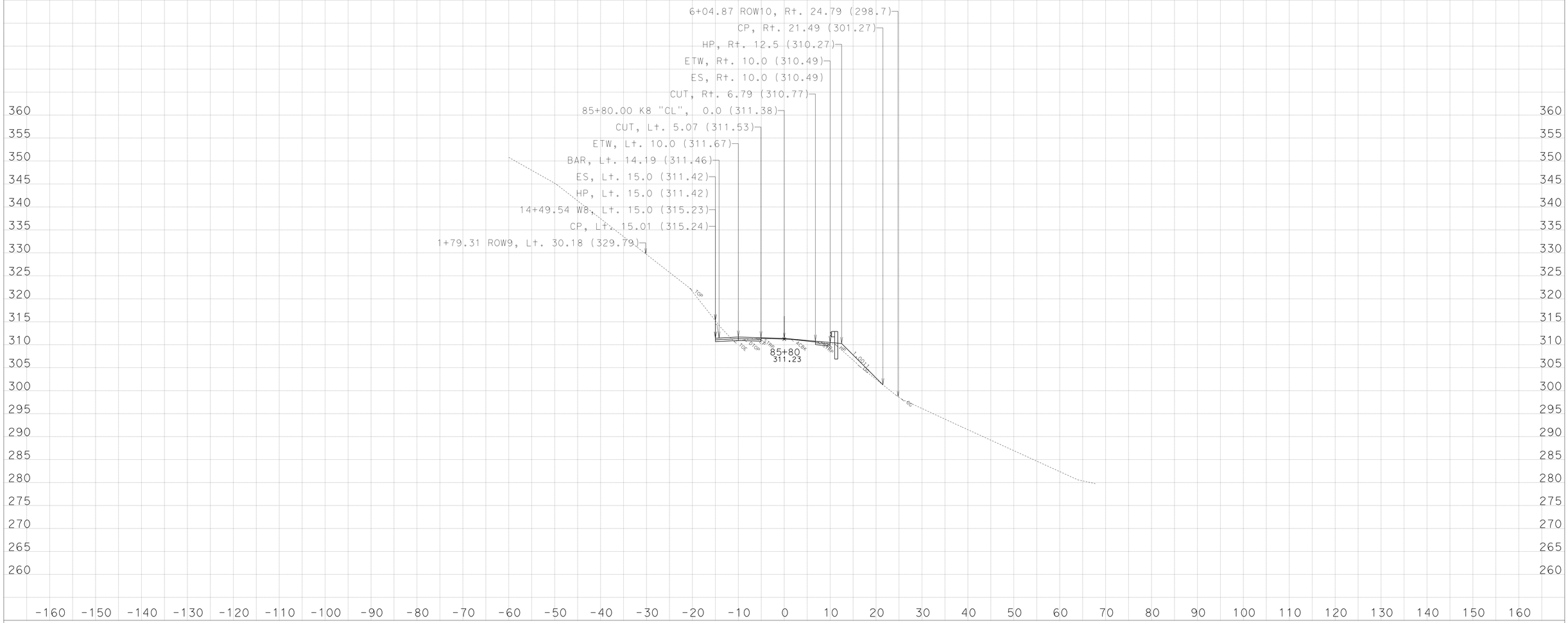
Alignment: "K8"
DESIGN CROSS SECTIONS

SHEET 34 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

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PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

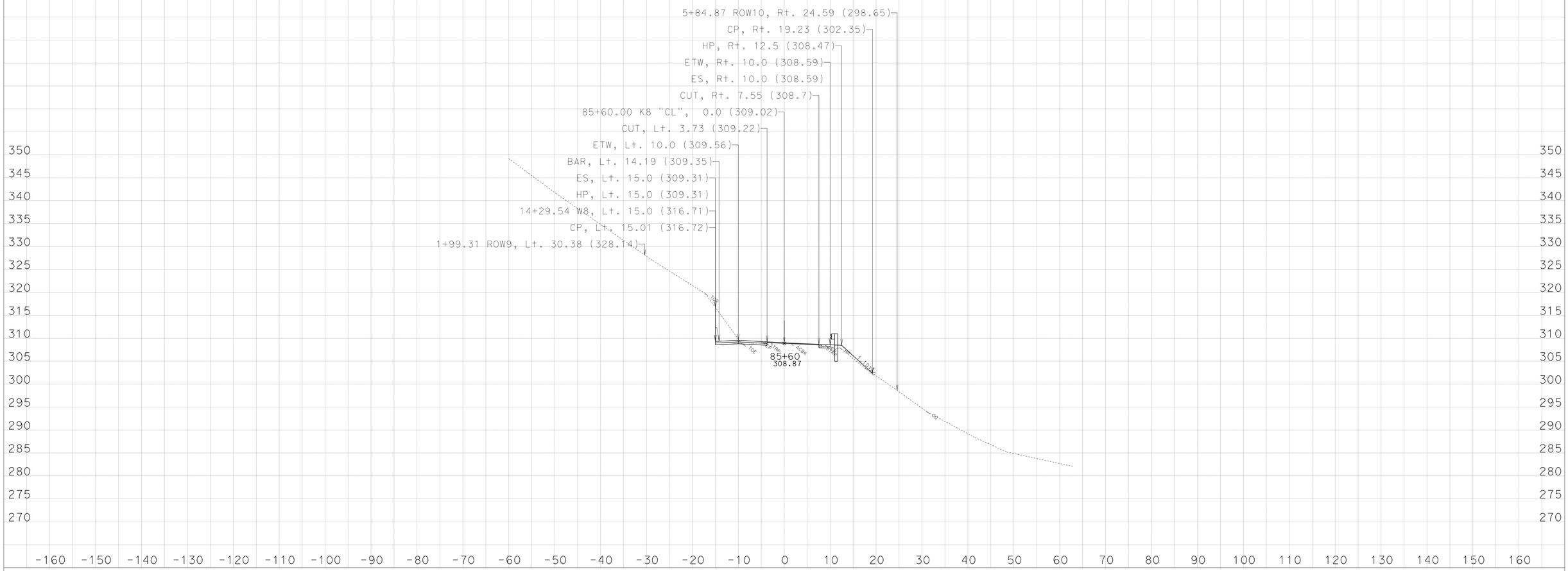
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 33 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



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DATE: 3/29/2013

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PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

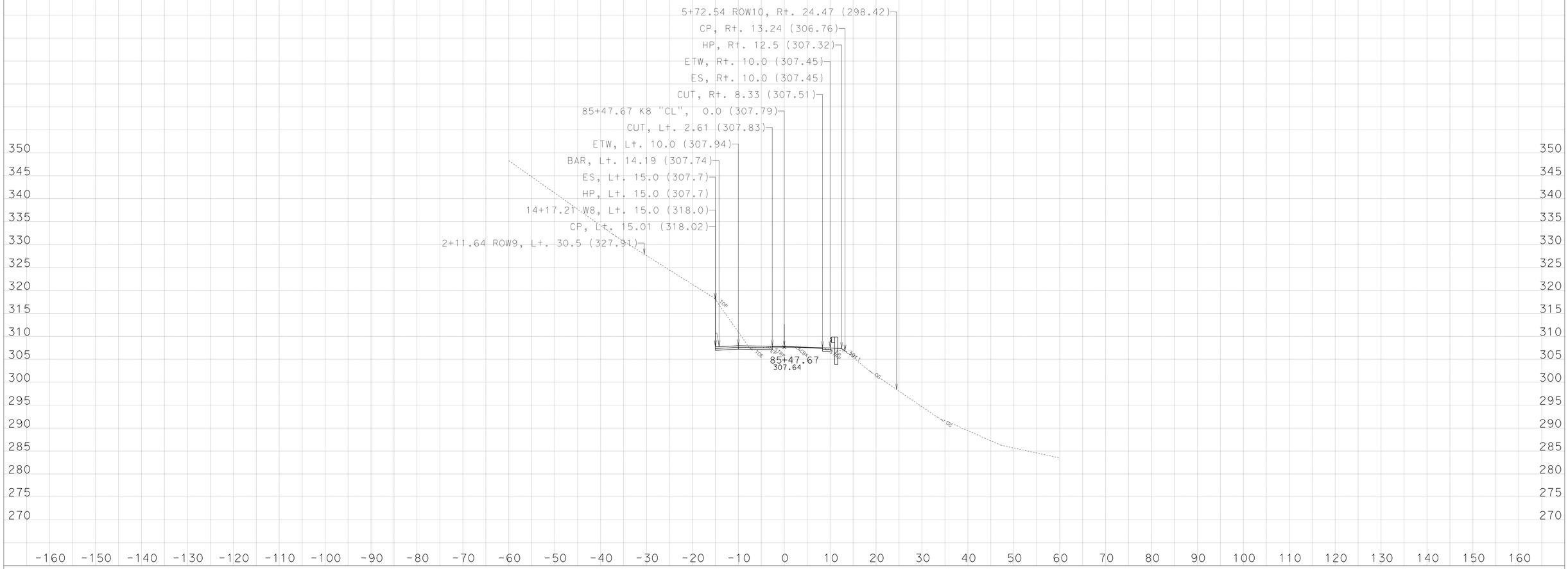
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 32 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



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DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

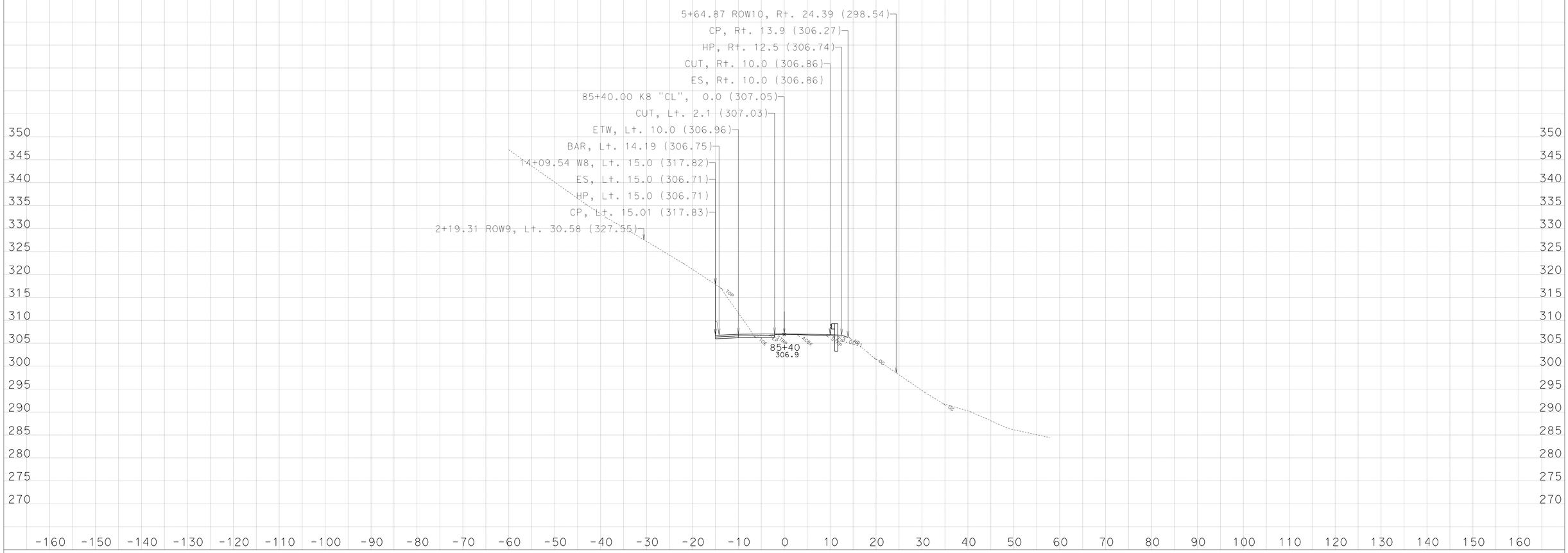
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

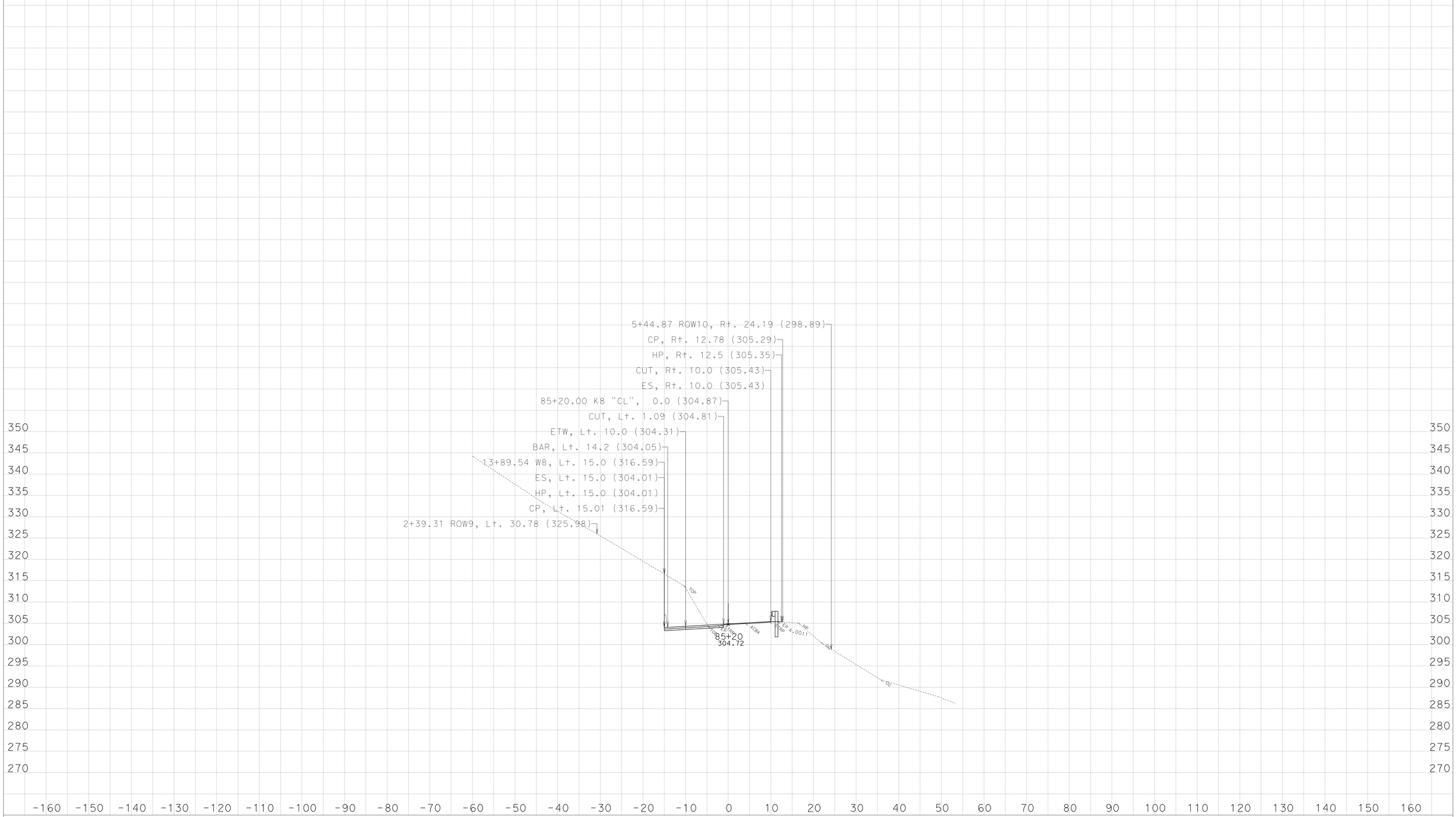
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 30 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



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DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

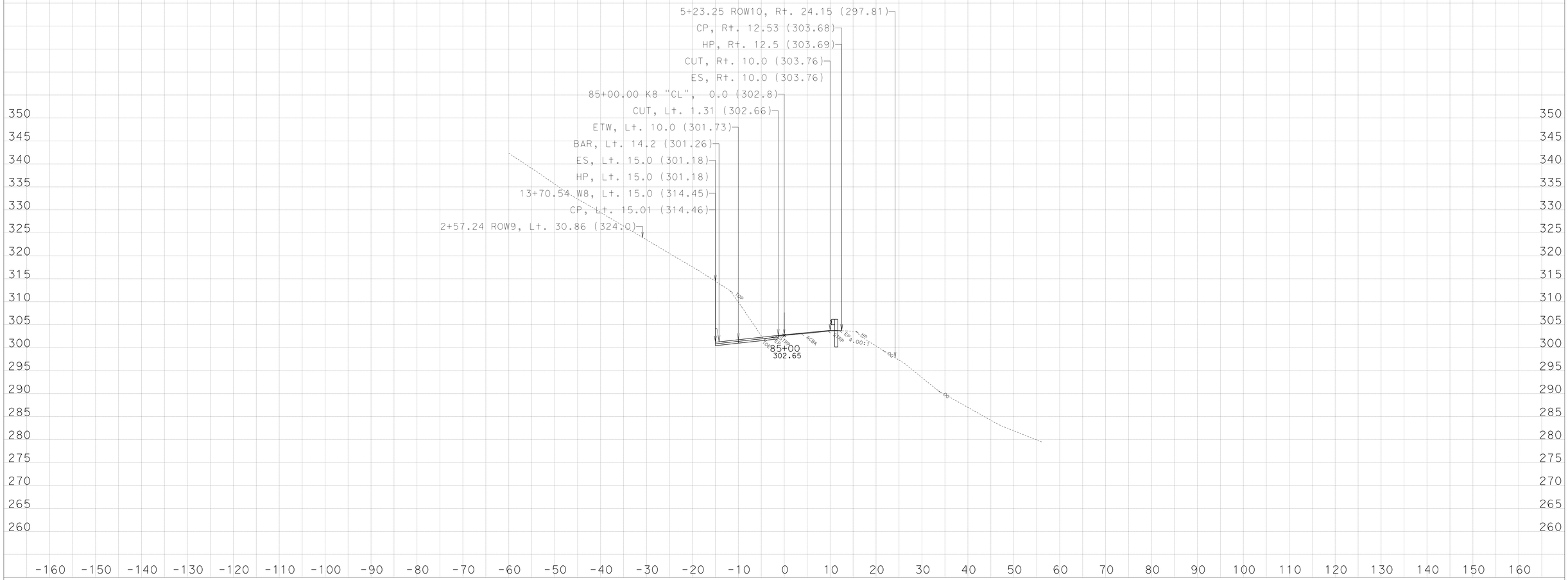
Alignment: "K8"
DESIGN CROSS SECTIONS

SHEET 29 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

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PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

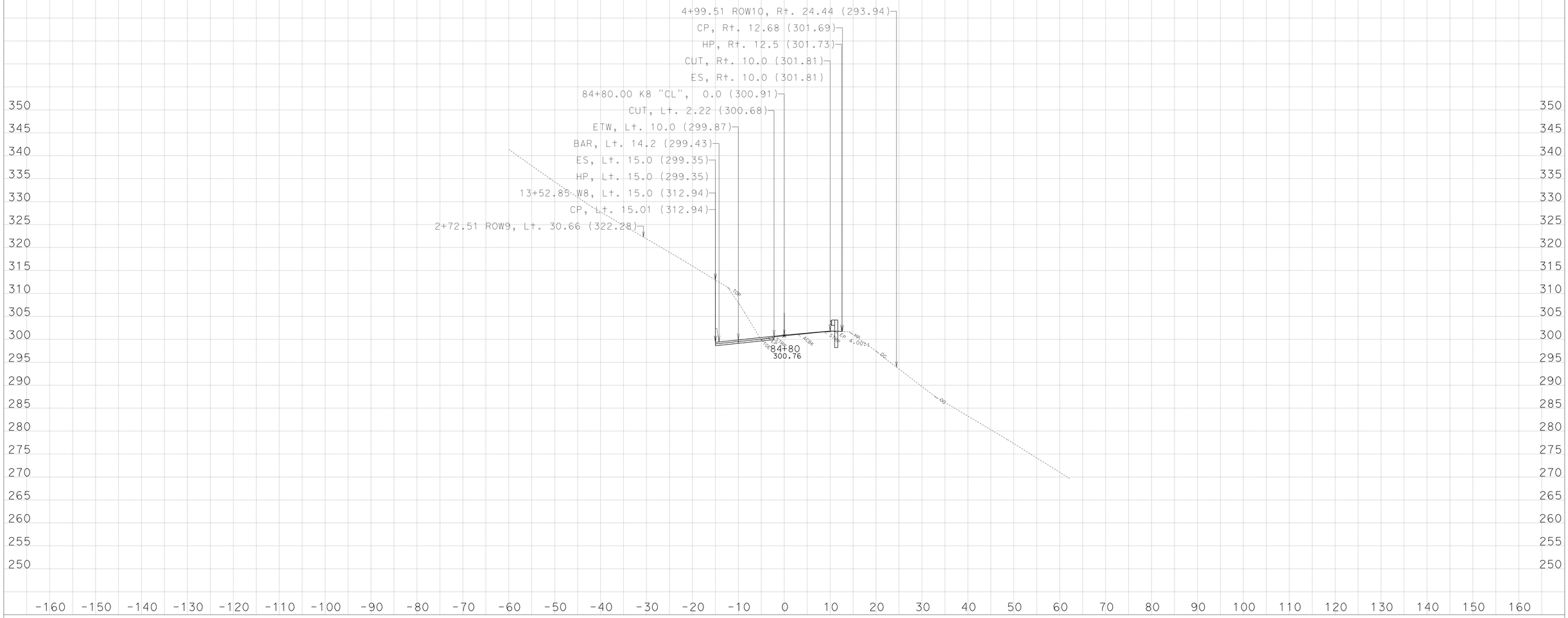
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 28 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

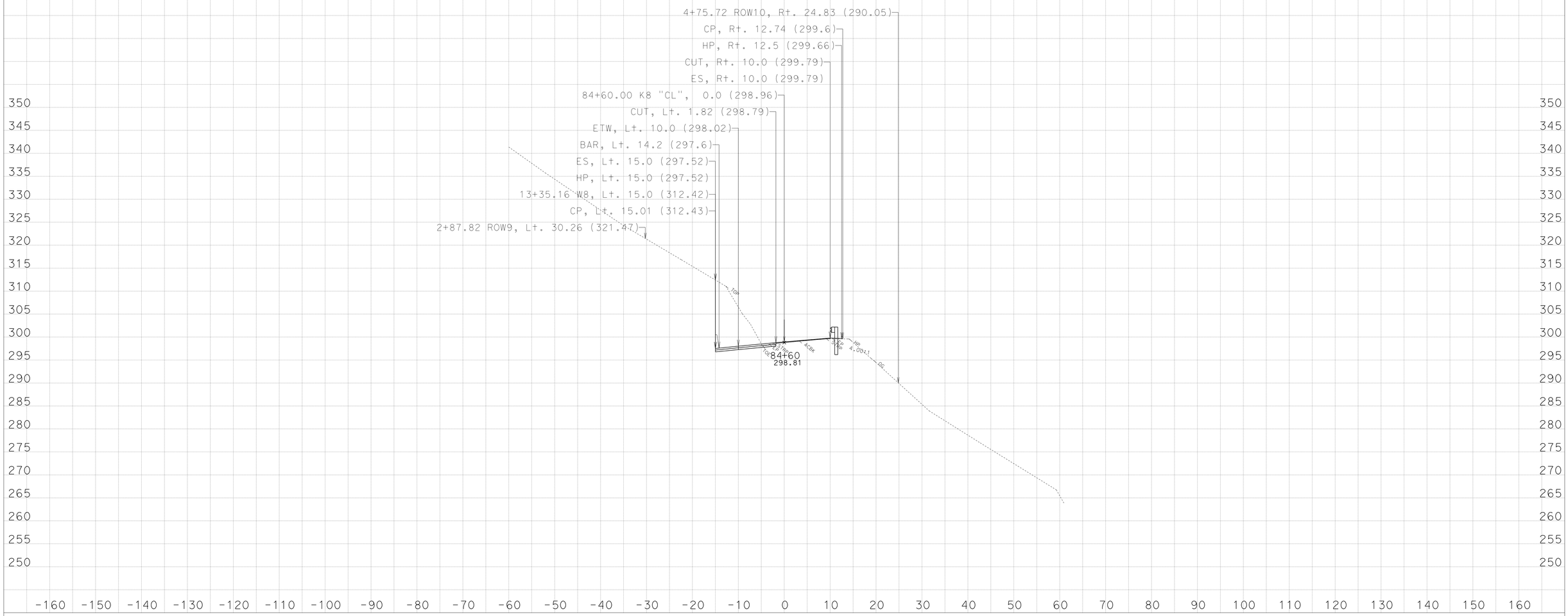
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 27 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

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PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

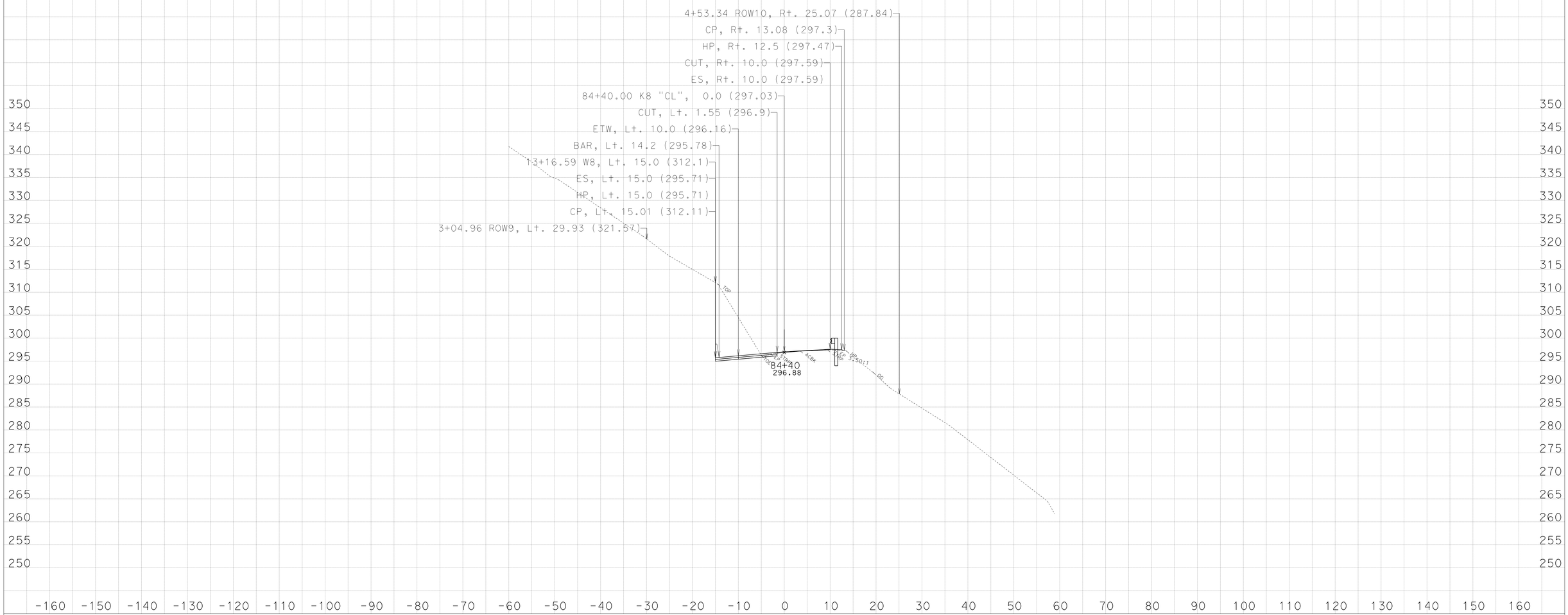
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 26 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

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PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

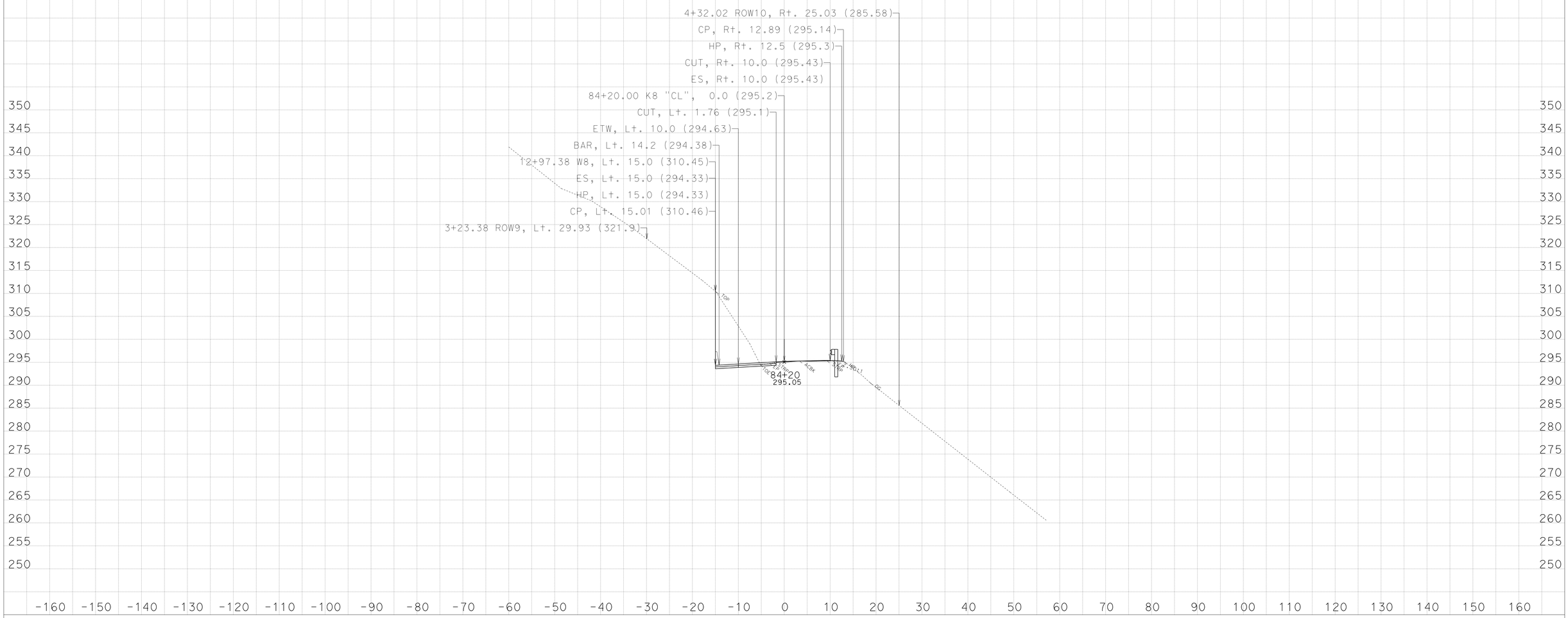
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 25 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



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DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

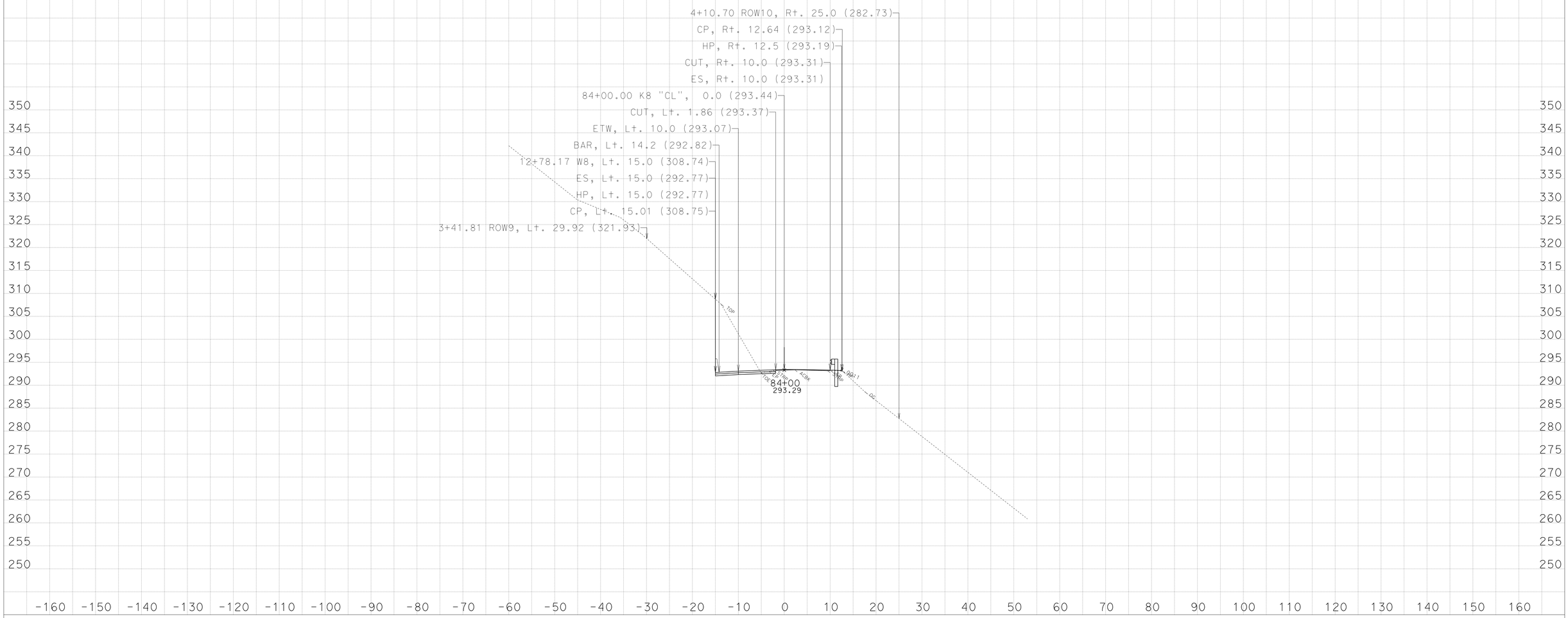
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 24 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



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DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

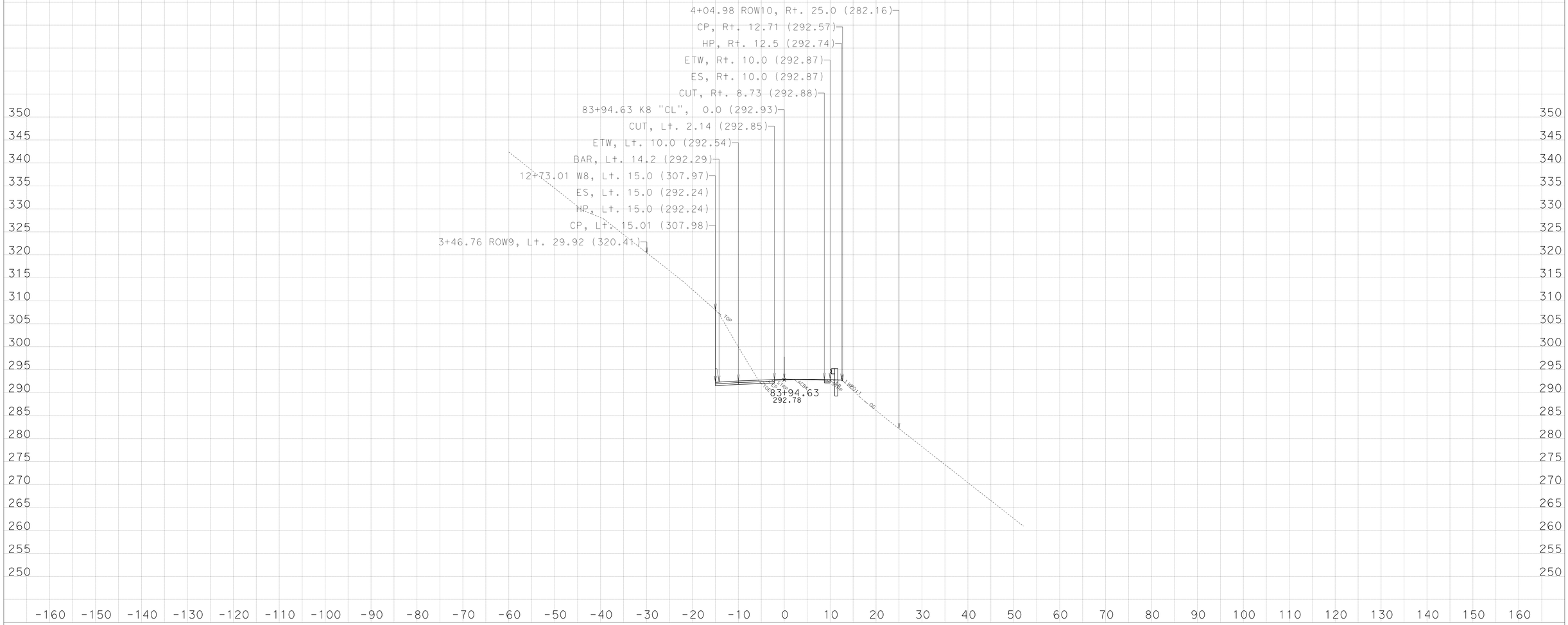
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 23 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

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DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

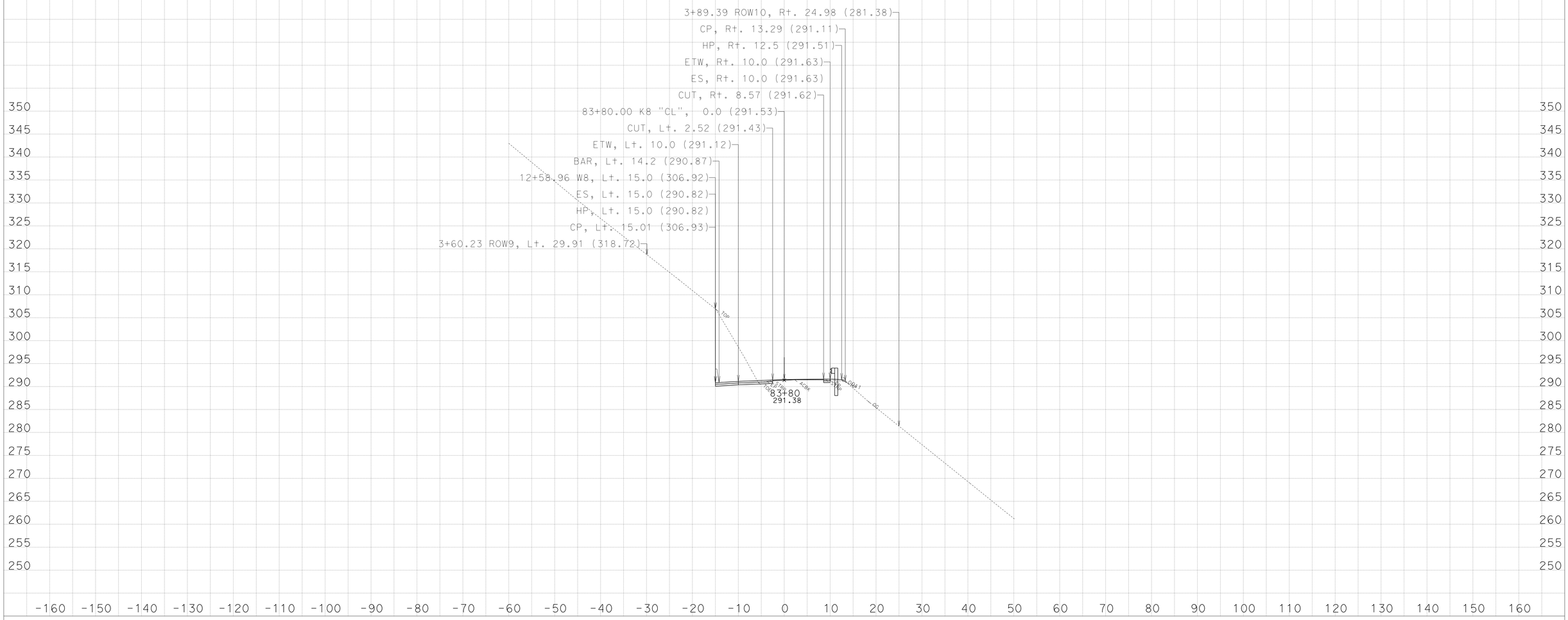
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 22 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

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DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

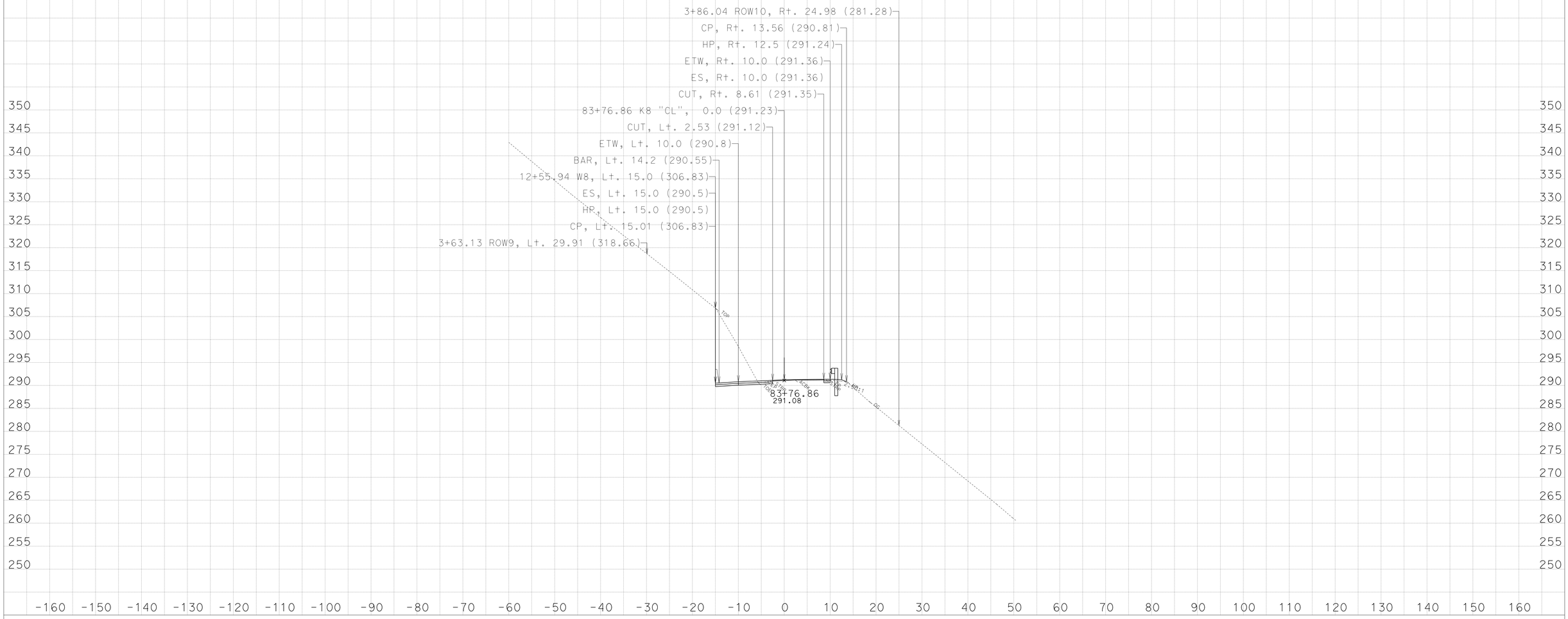
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 21 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

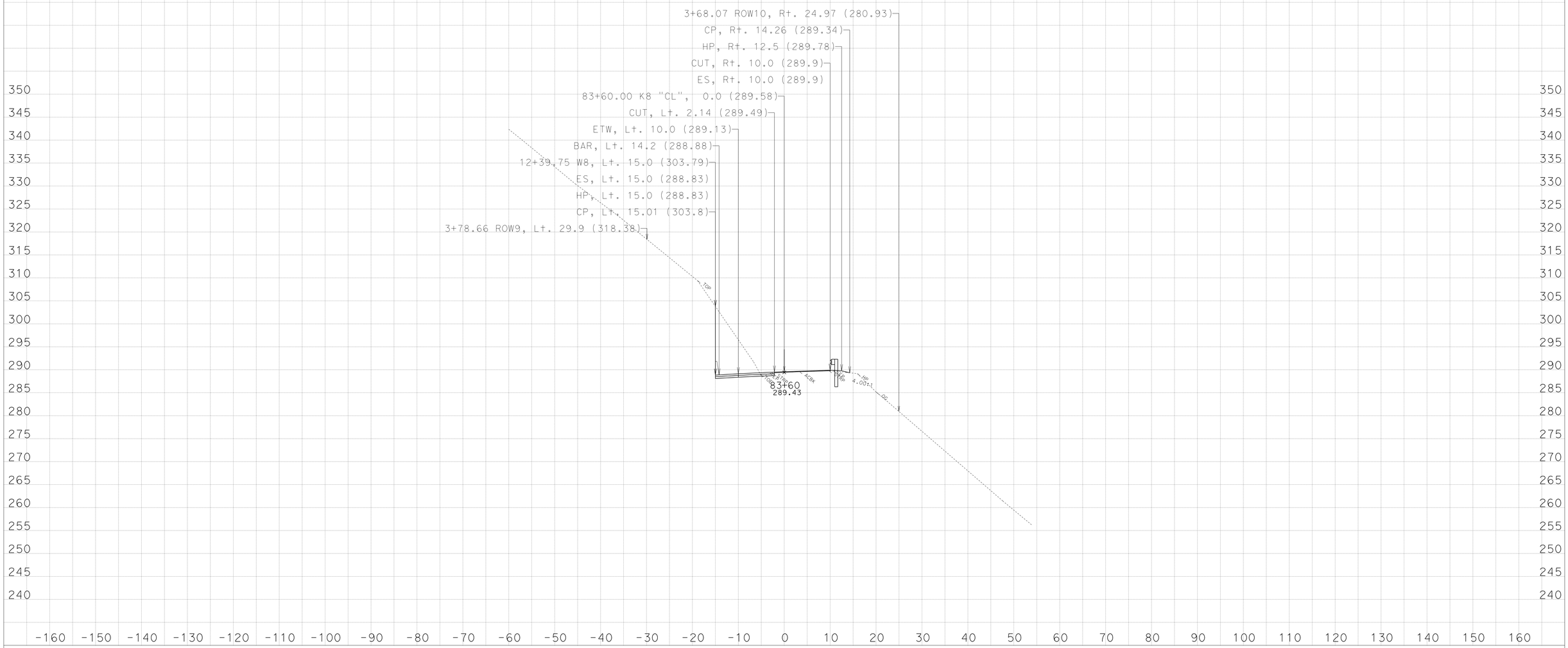
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 20 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

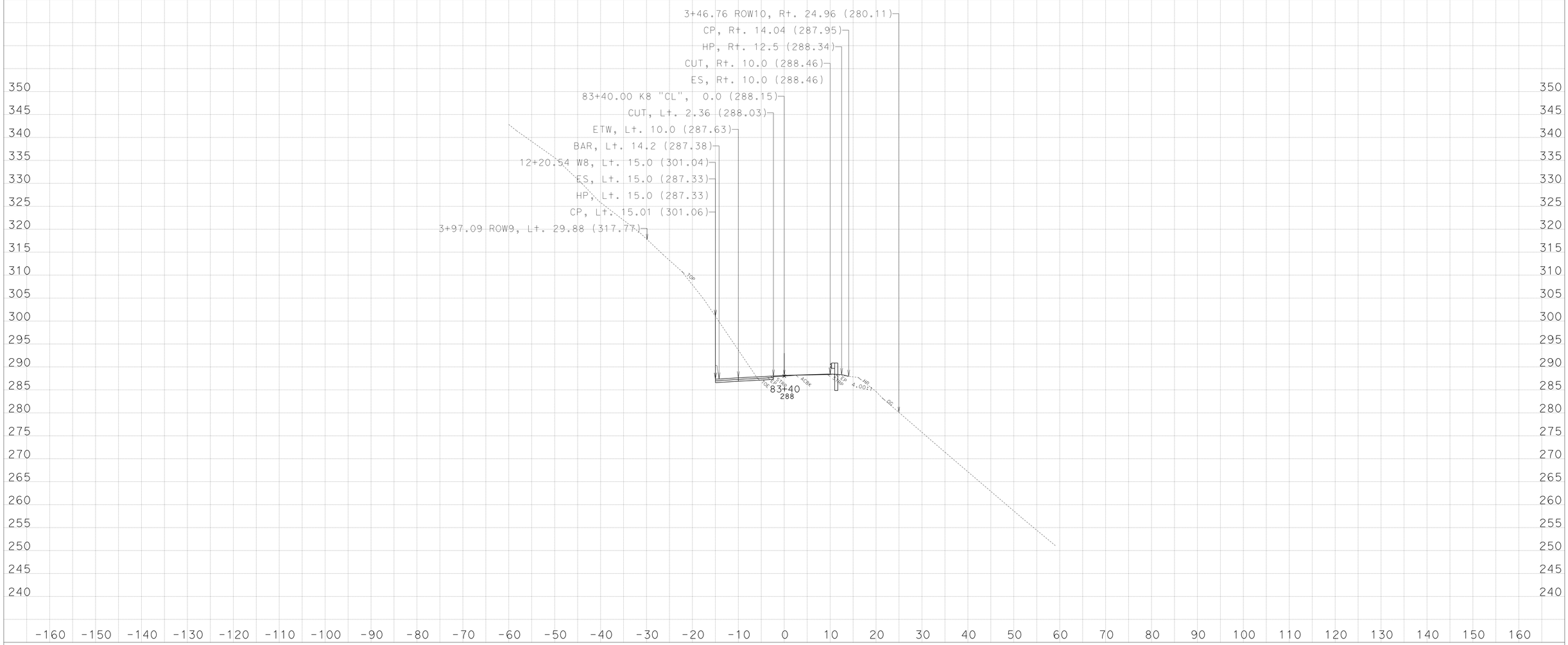
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 19 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 18 OF 43

For Earthwork Development Only

Safety Improvements

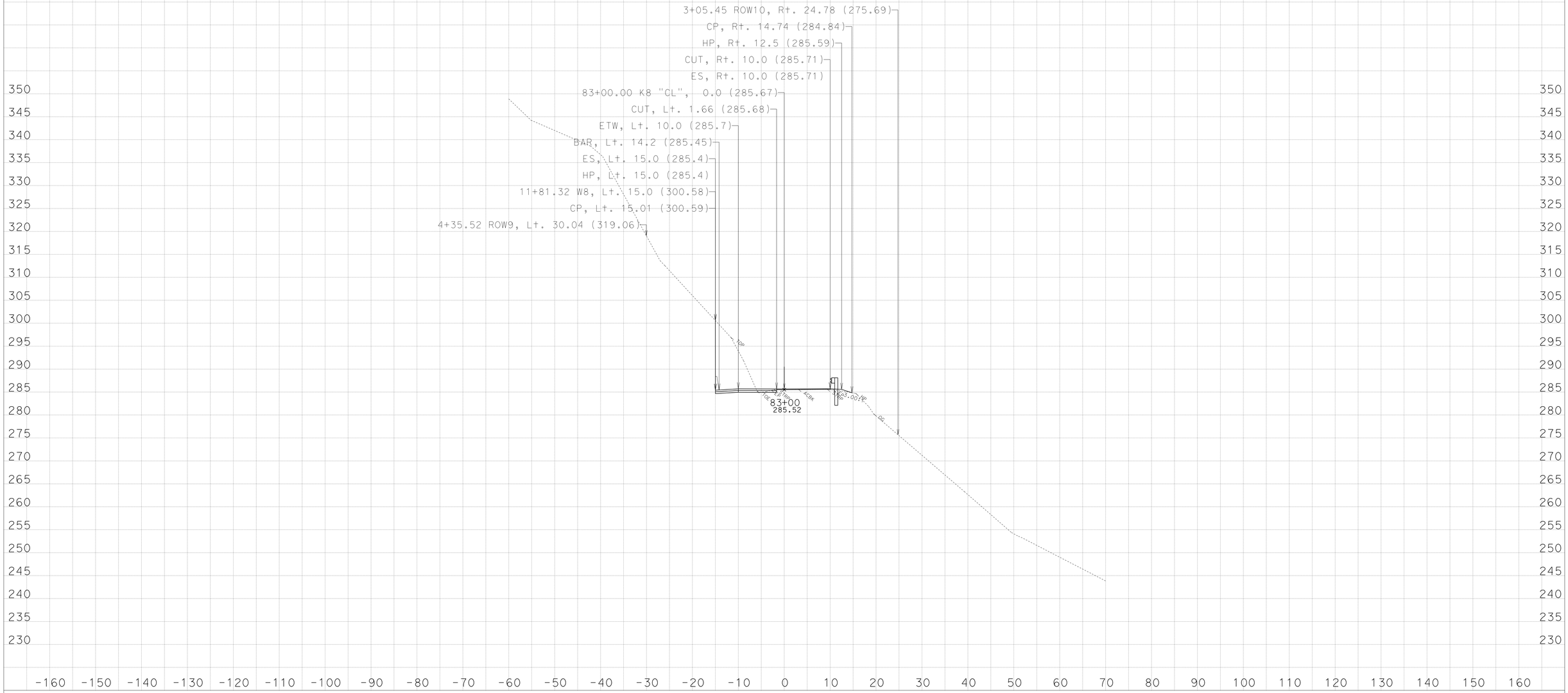
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

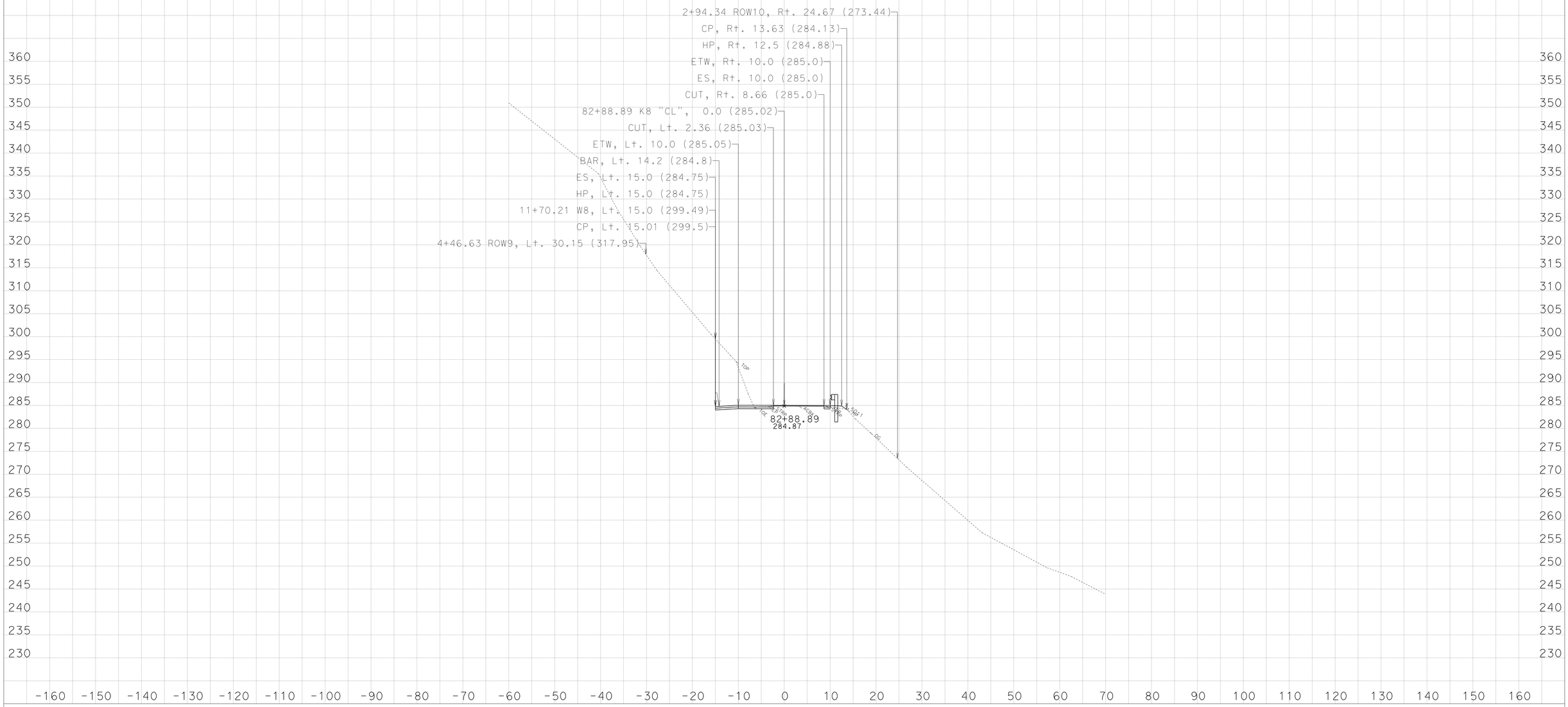
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 16 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

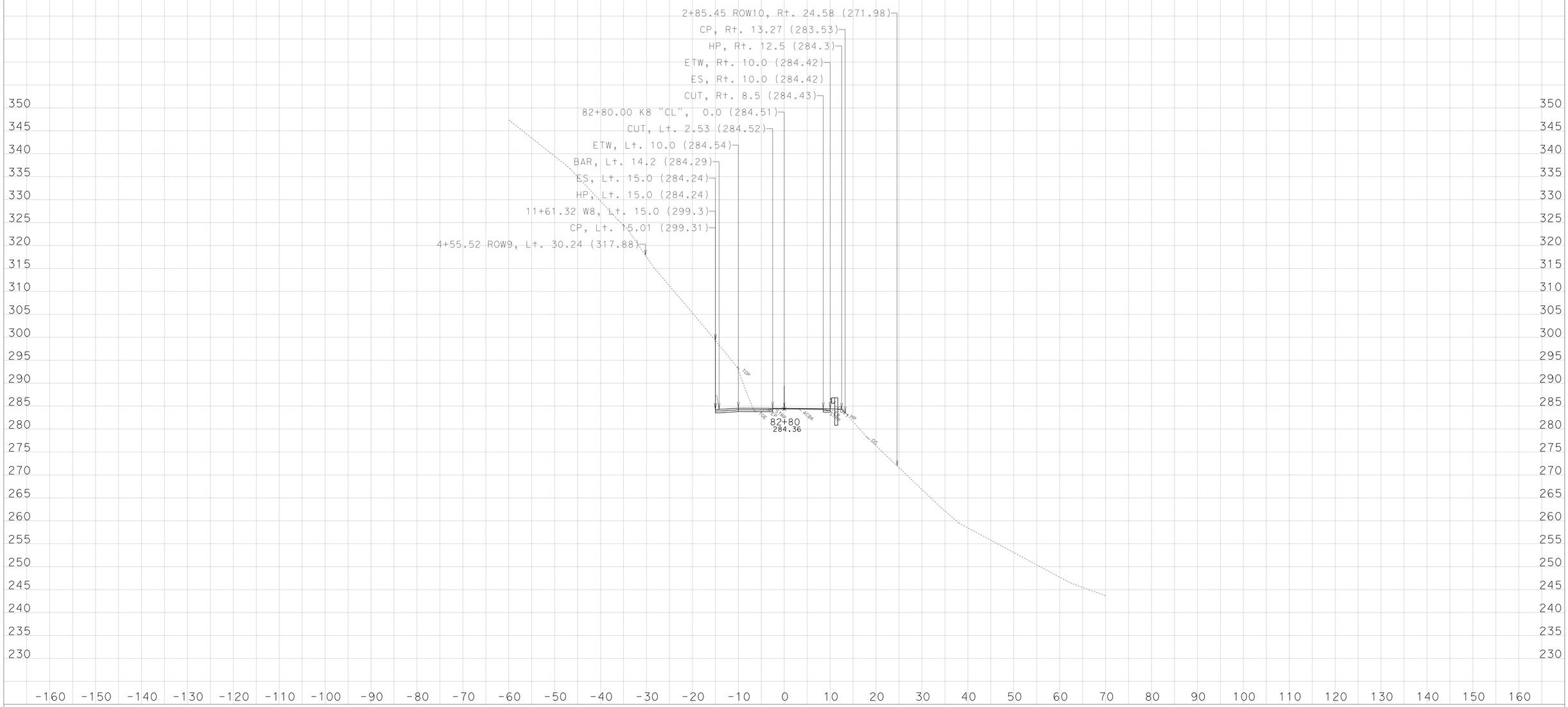
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 15 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 14 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40

CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

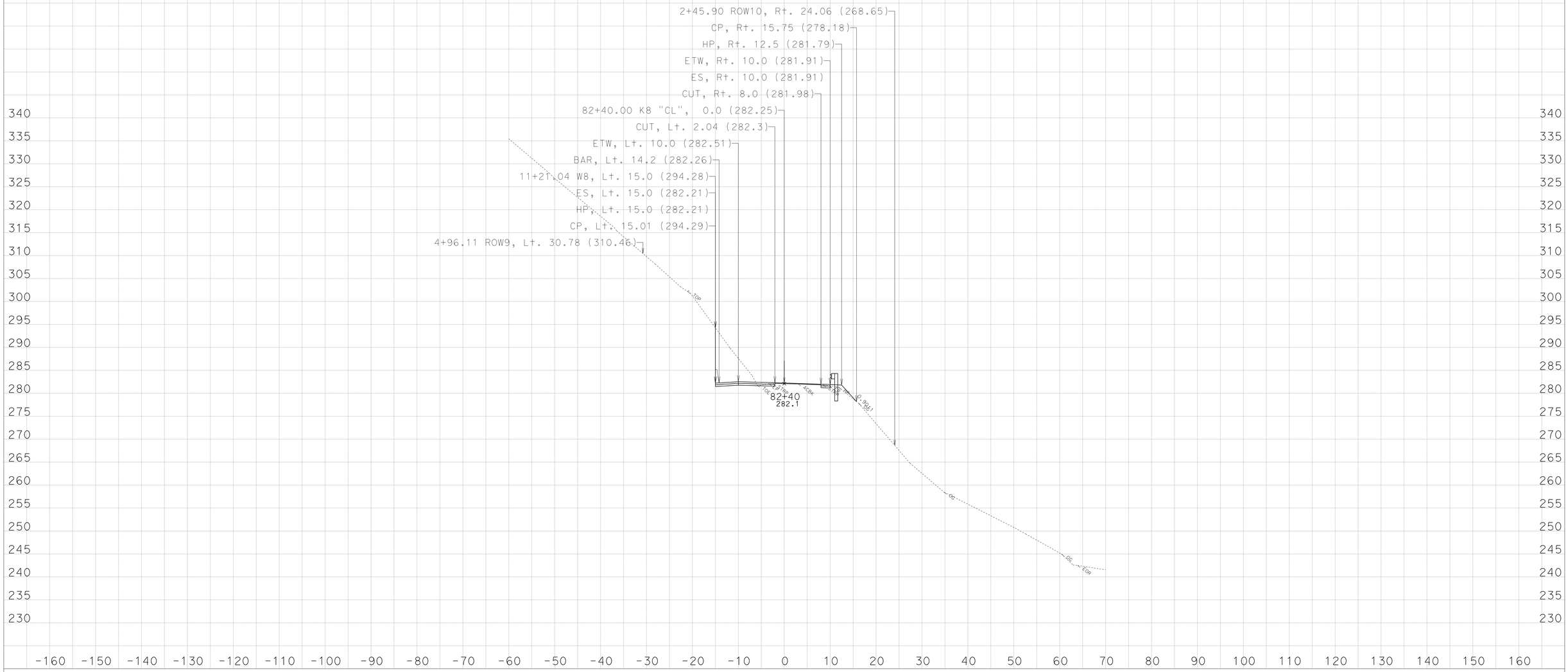
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 13 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

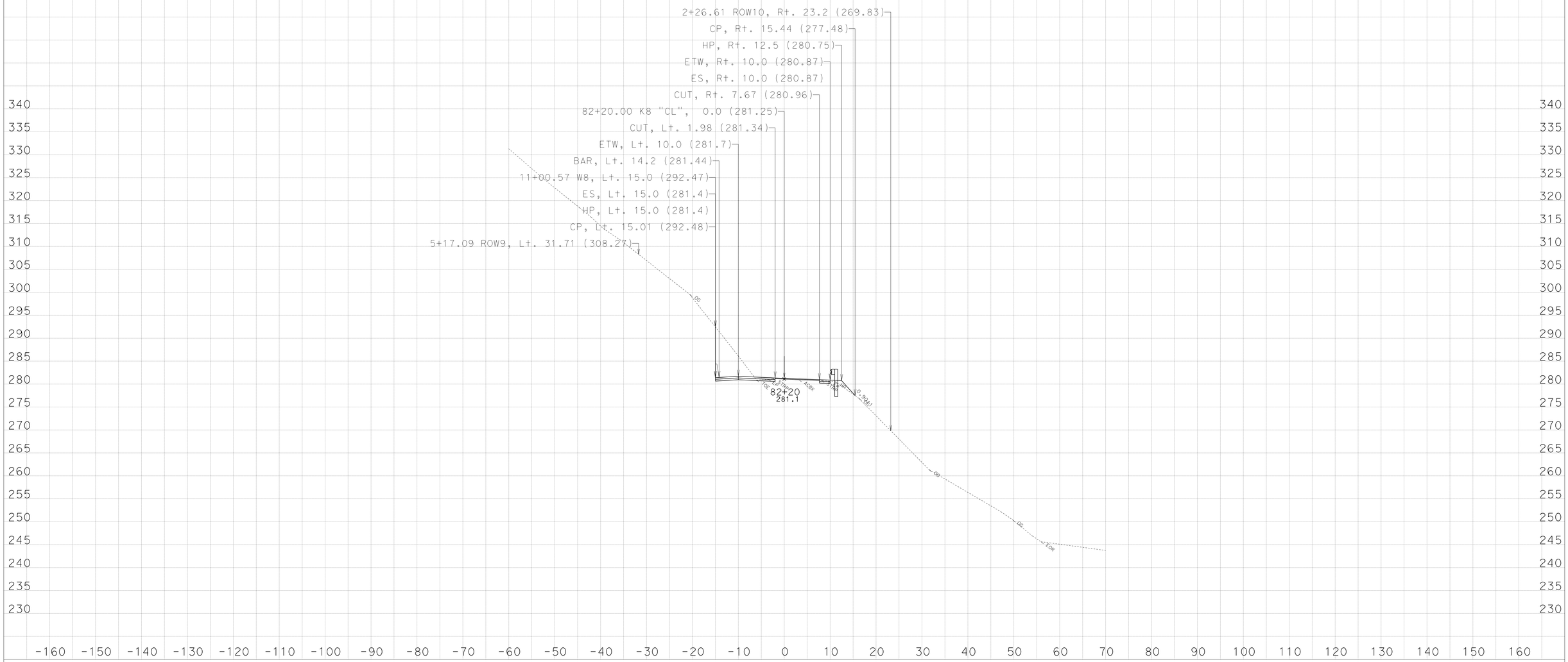
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 12 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

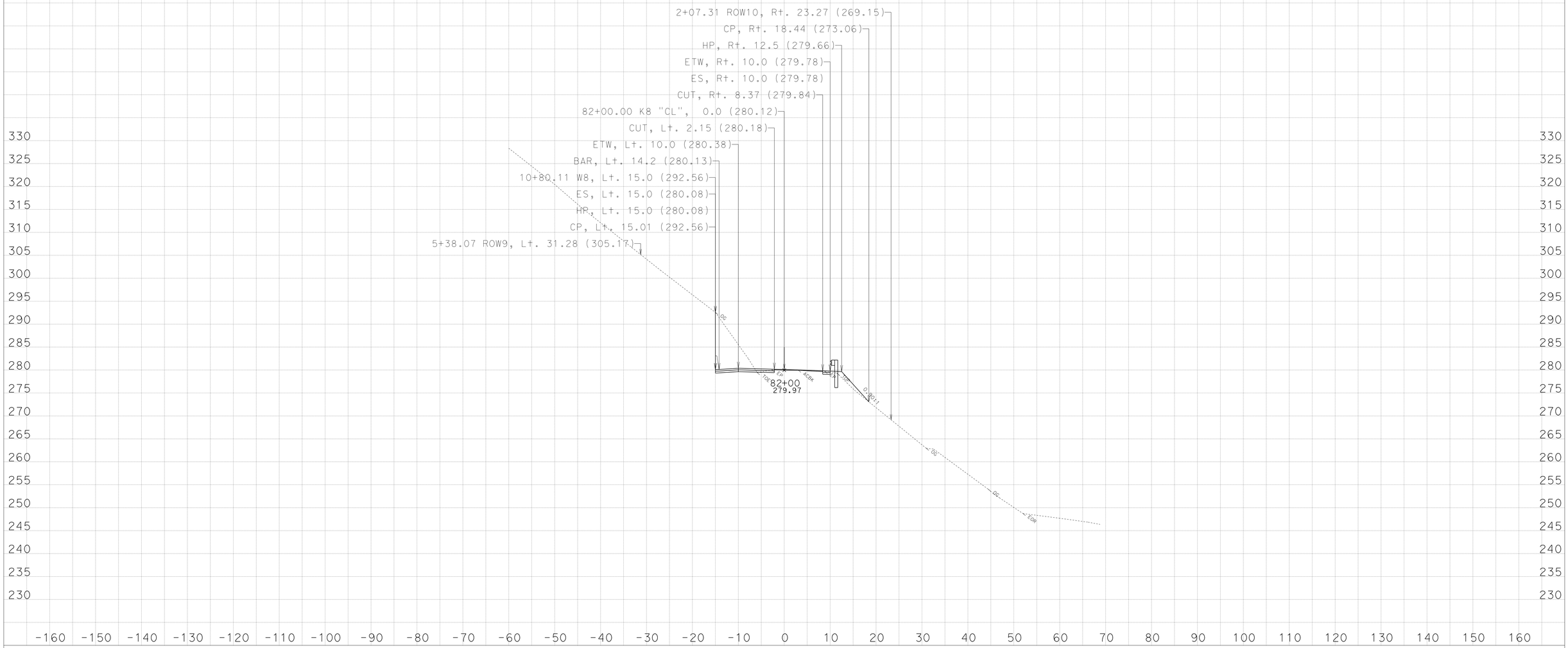
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 11 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

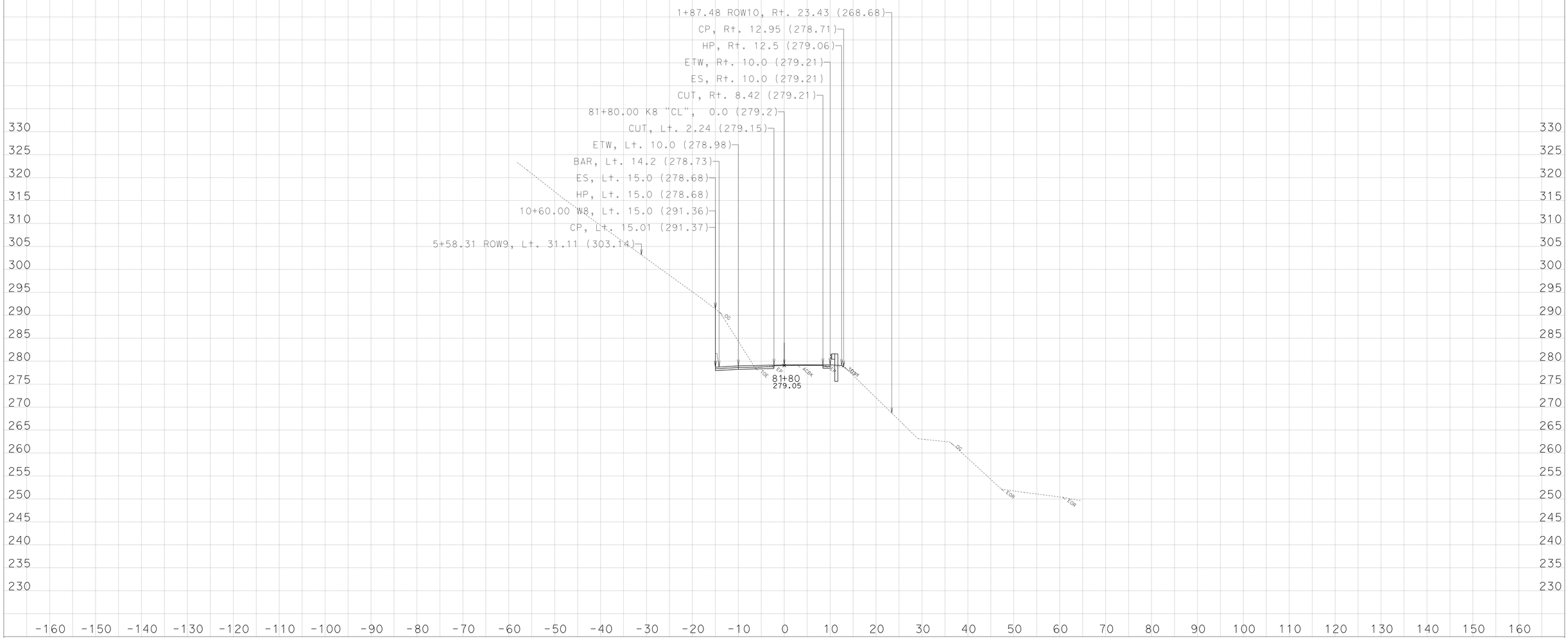
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

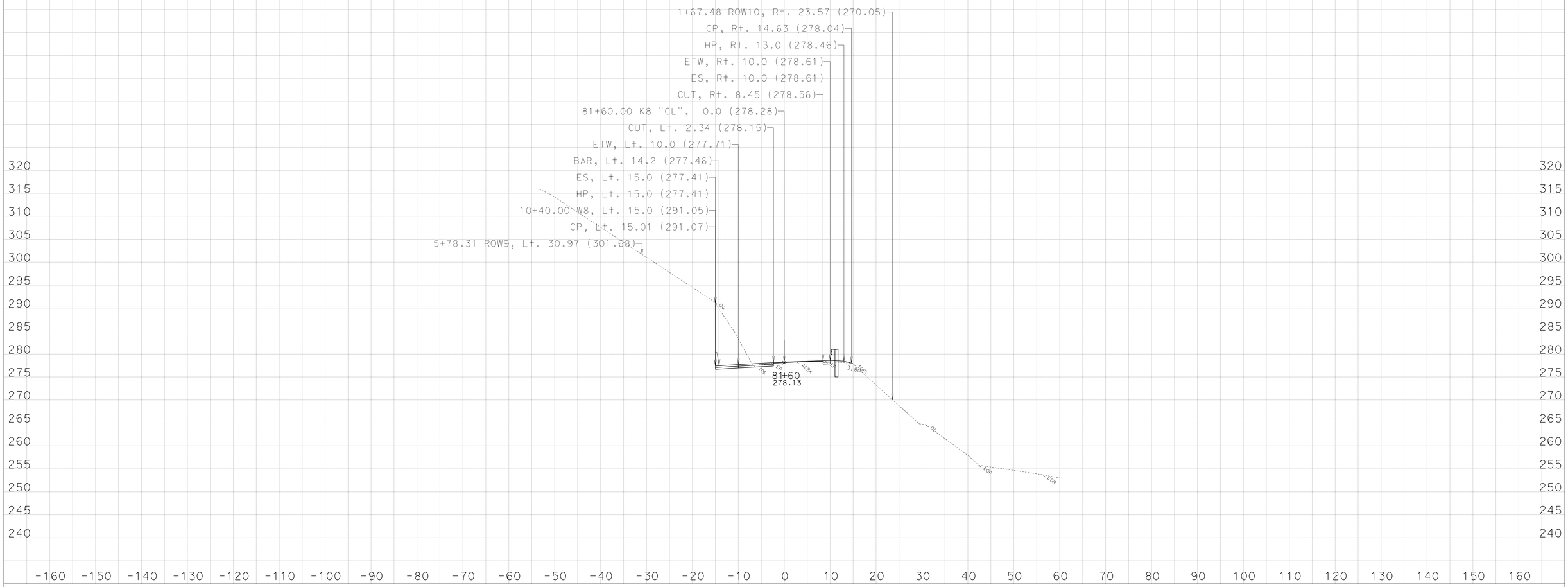
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 9 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

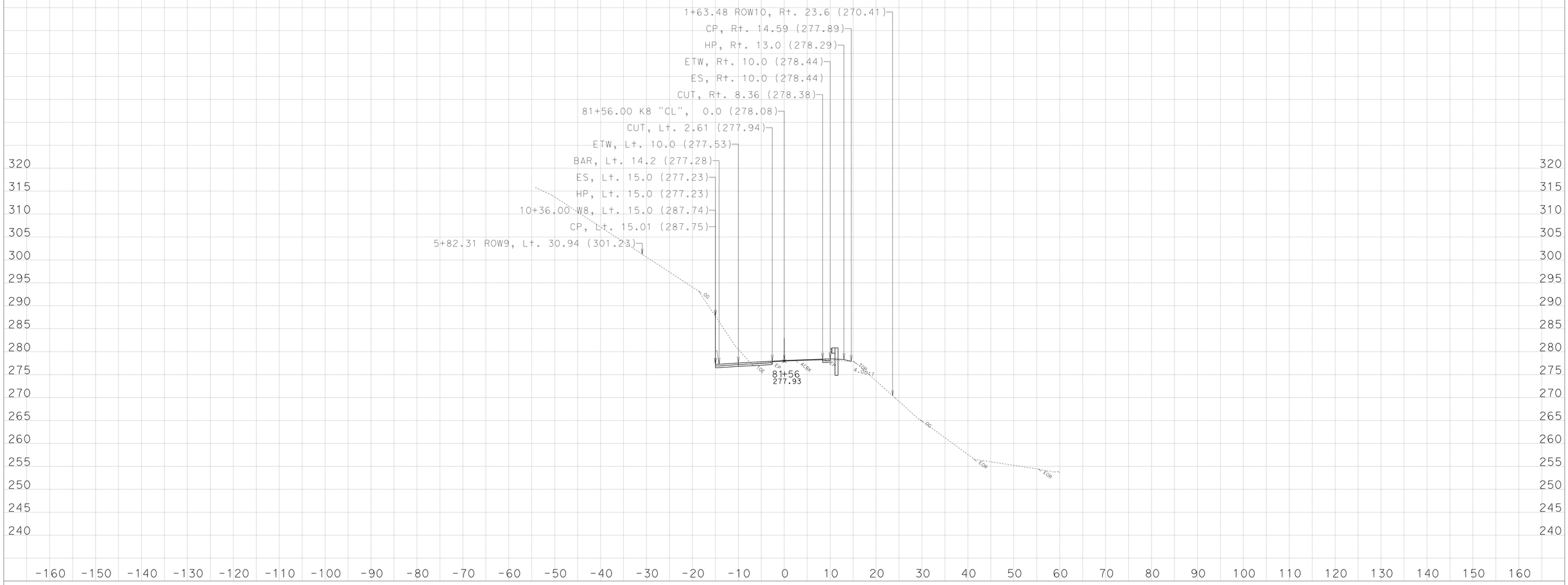
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 8 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

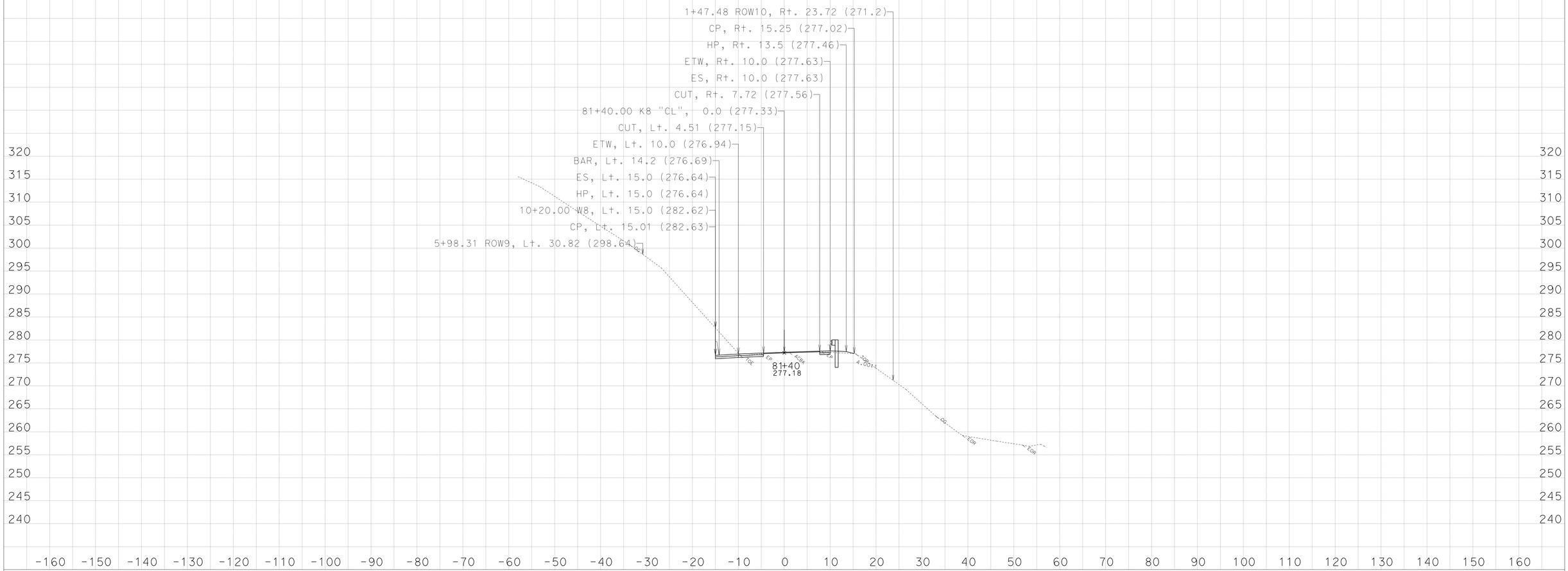
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

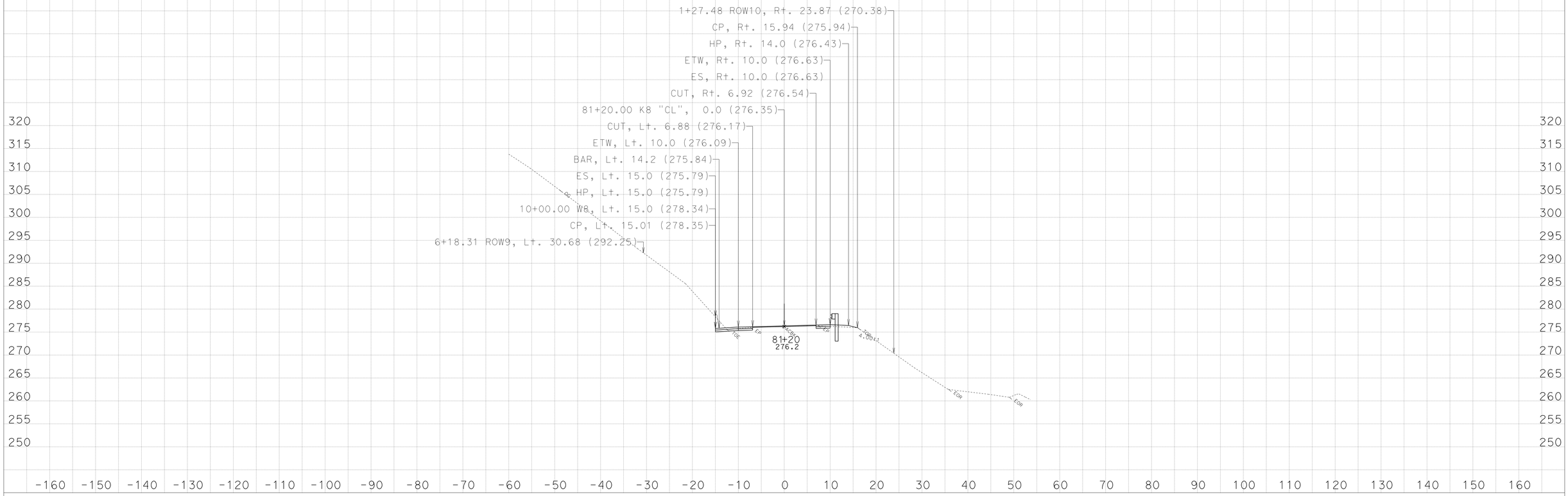
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 6 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

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PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

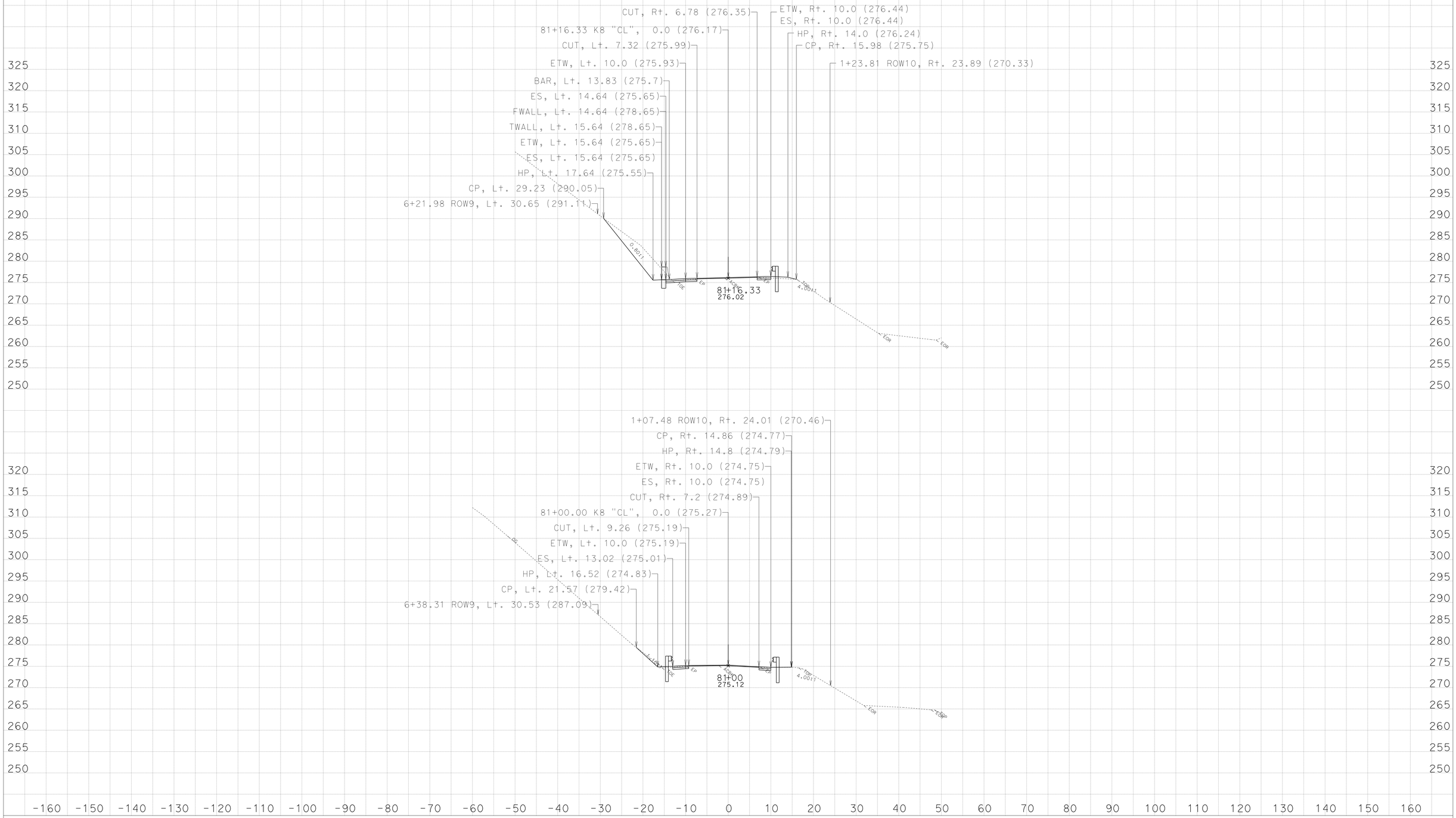
Alignment: "K8"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements

(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"

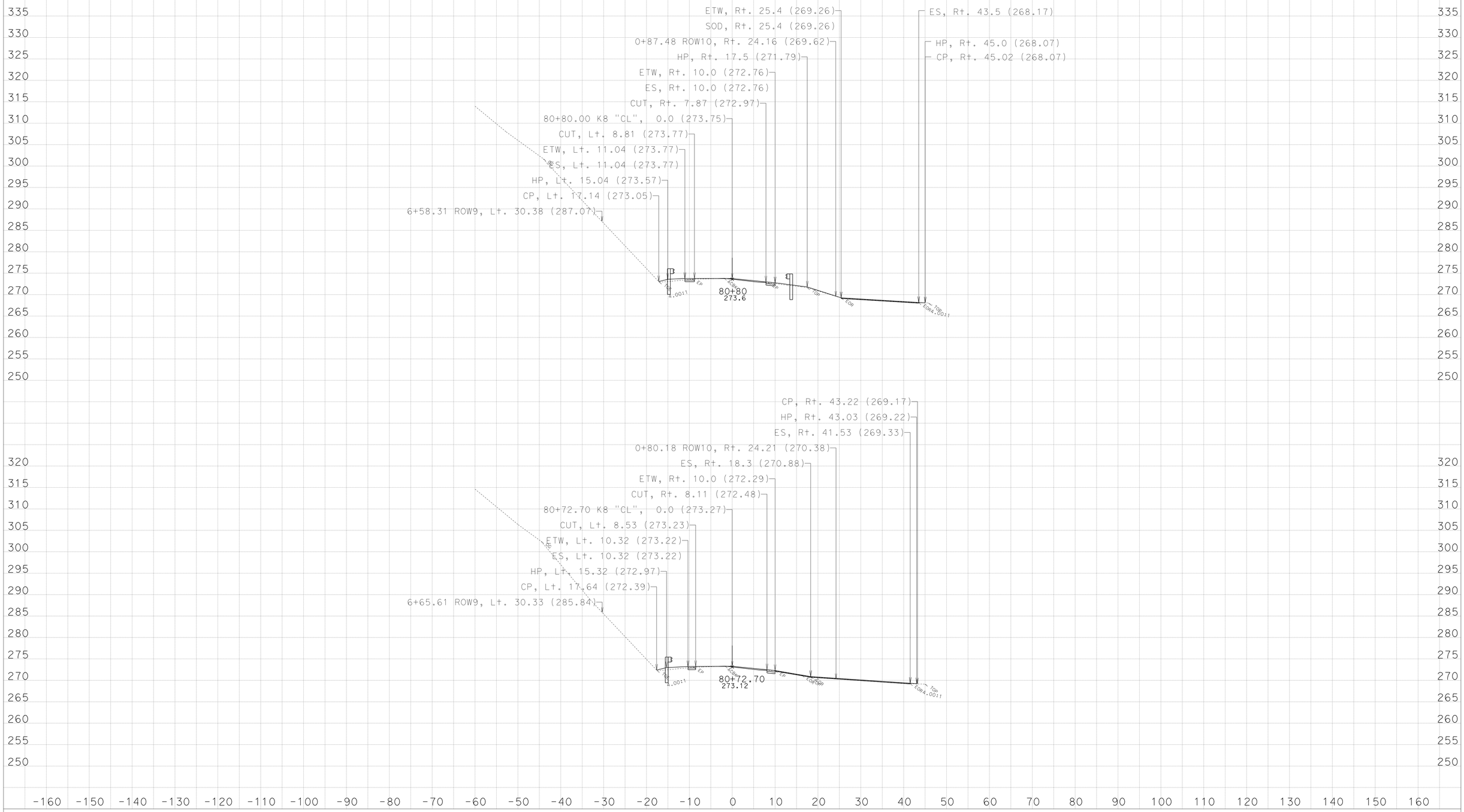
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements

(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

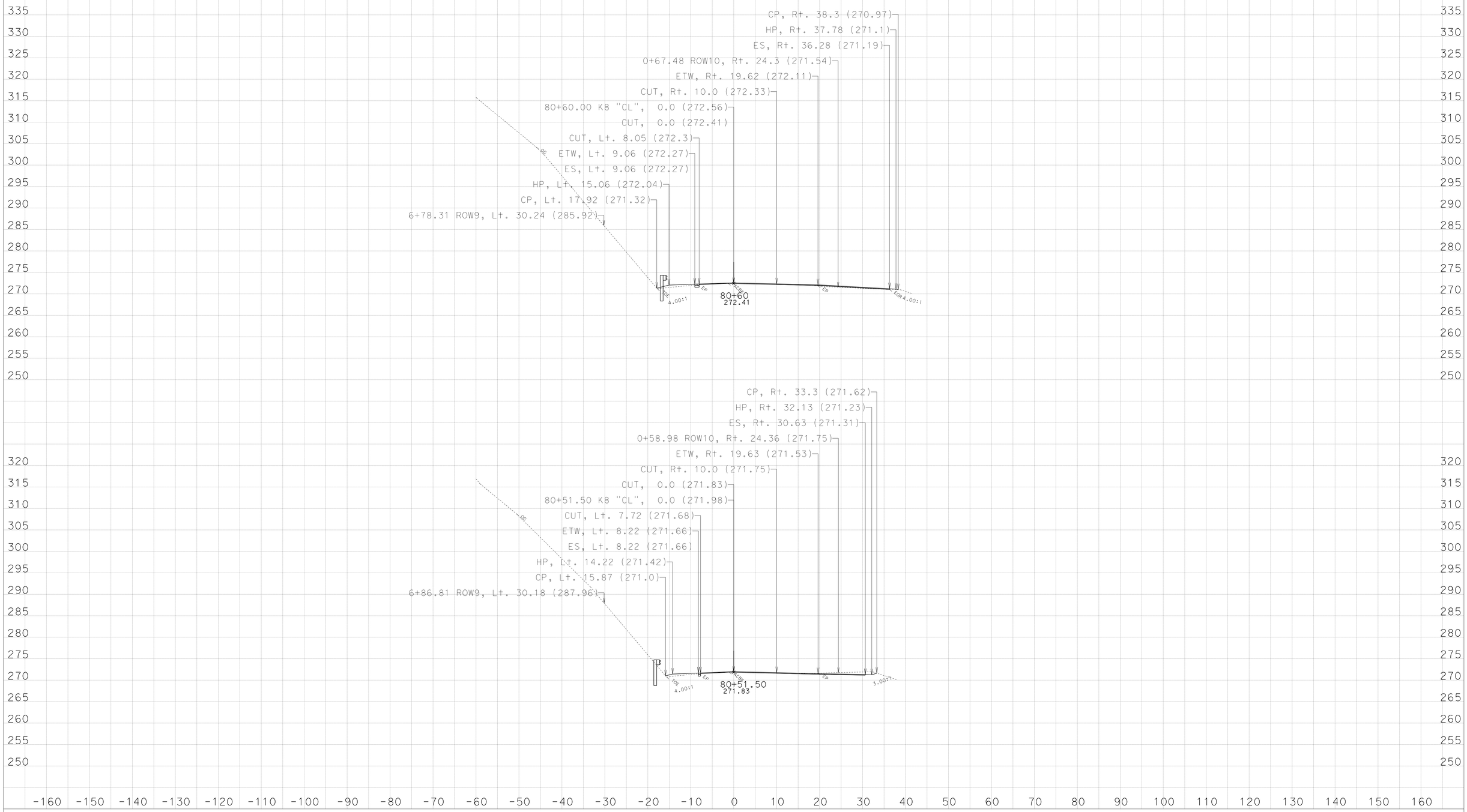
Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 3 OF 43

For Earthwork Development Only

Safety Improvements

(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

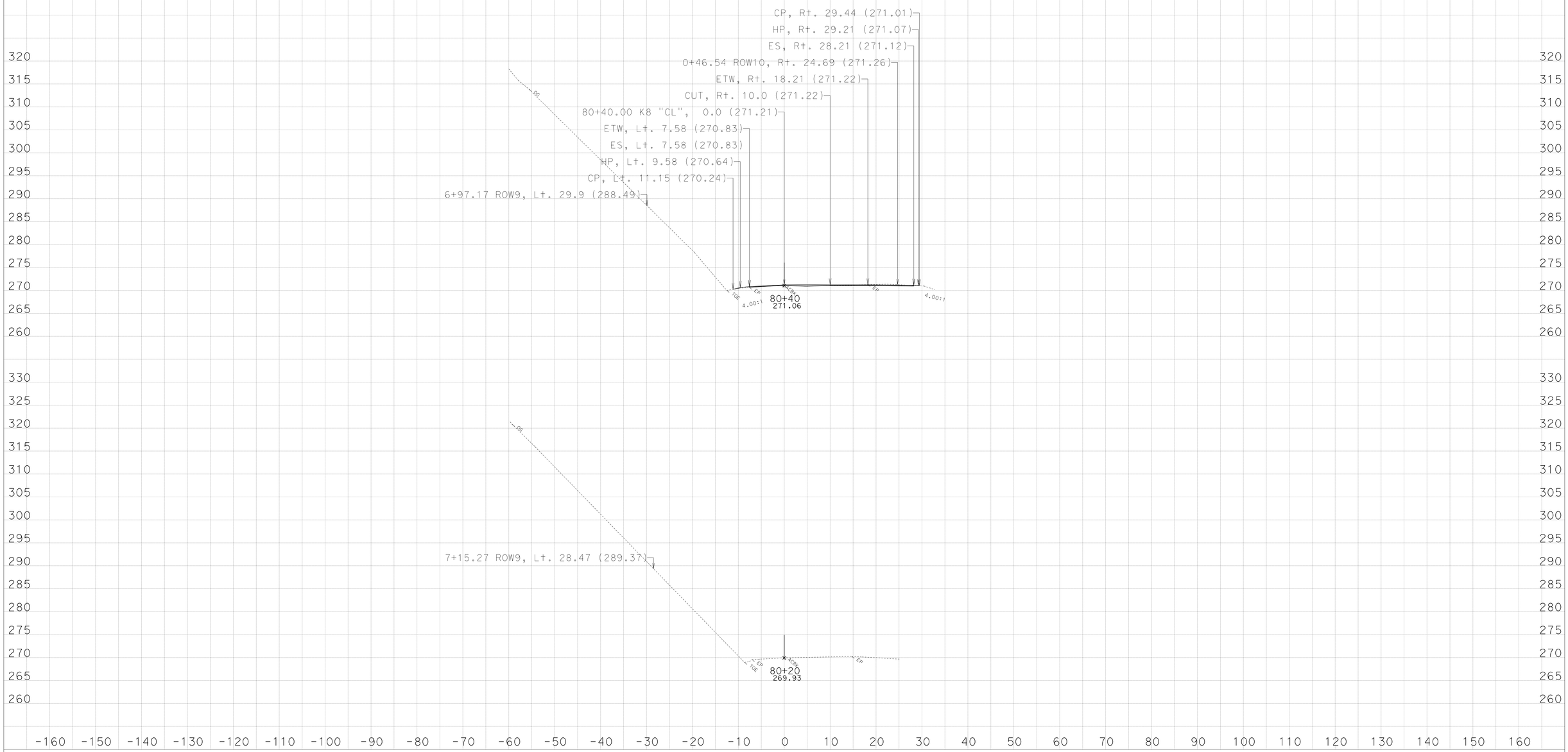
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 2 OF 43

For Earthwork Development Only

Safety Improvements
(Widening, Ground Anchor/Soil Nail Walls,Standard/Special MBGR)

Route 169- Location 8,
Post Mile: 23.25/23.40



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k8finv2.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

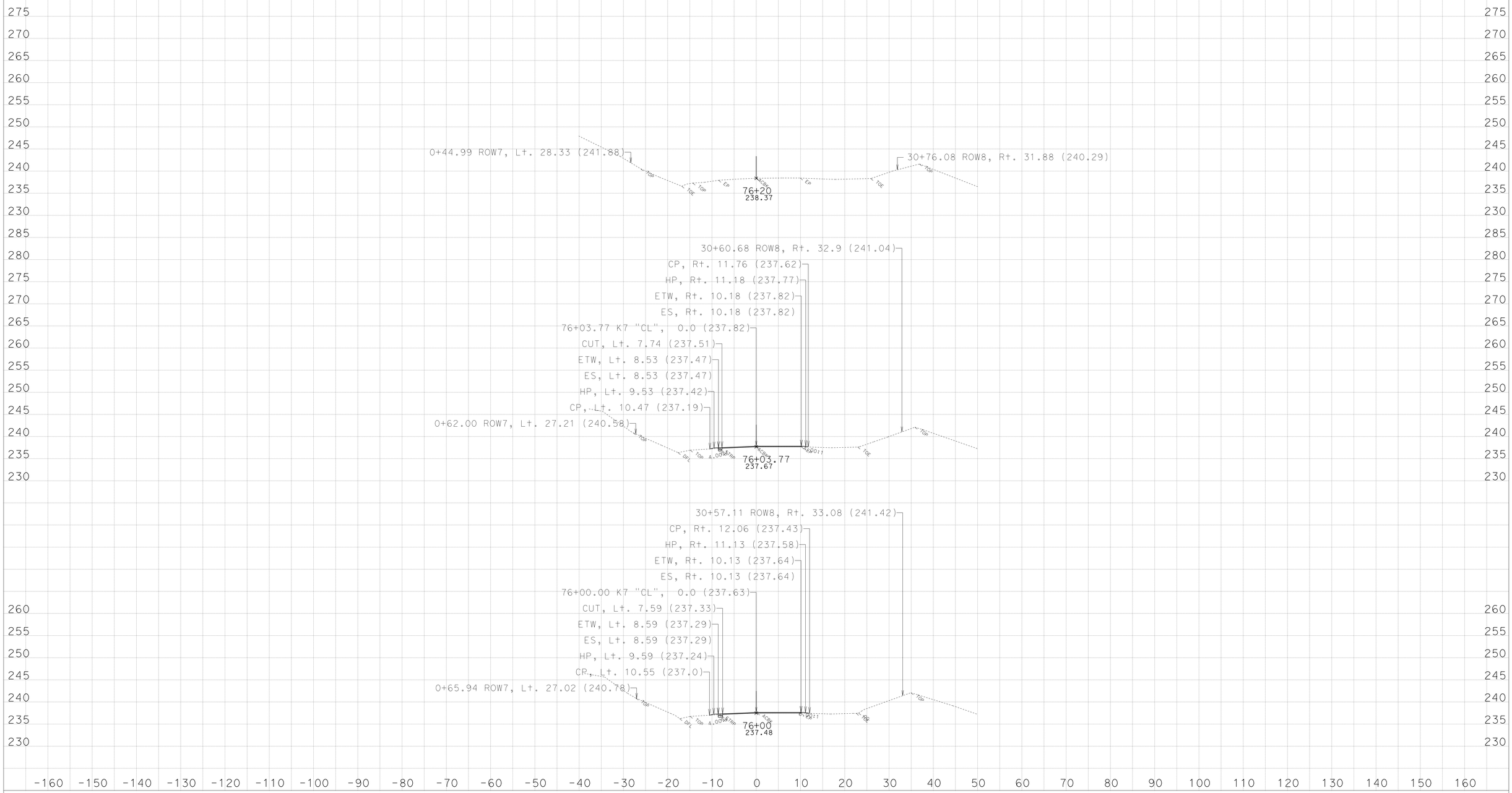
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K8"
DESIGN CROSS SECTIONS
SHEET 1 OF 43

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

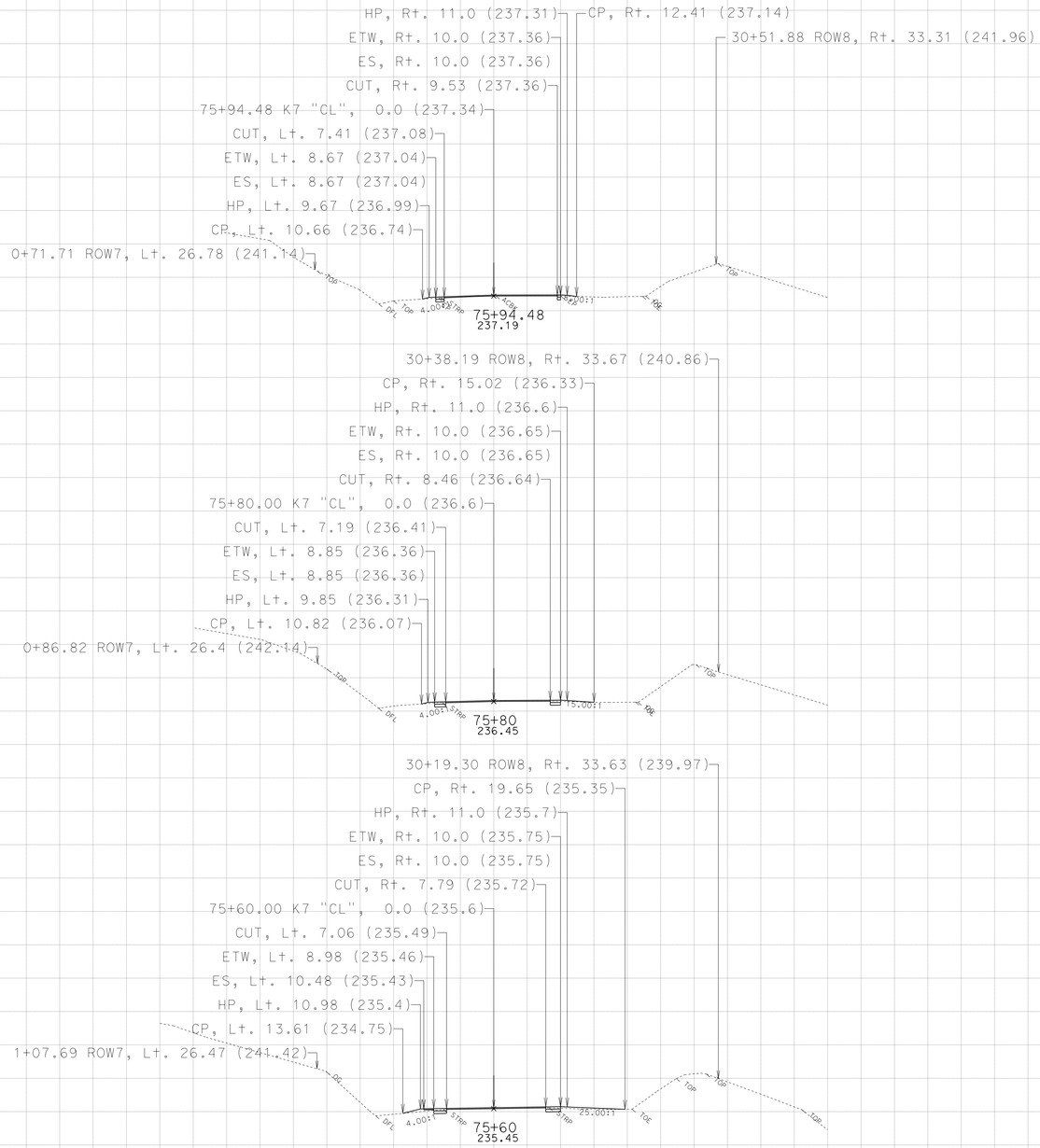
Alignment: "K7"
DESIGN CROSS SECTIONS

SHEET 26 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"

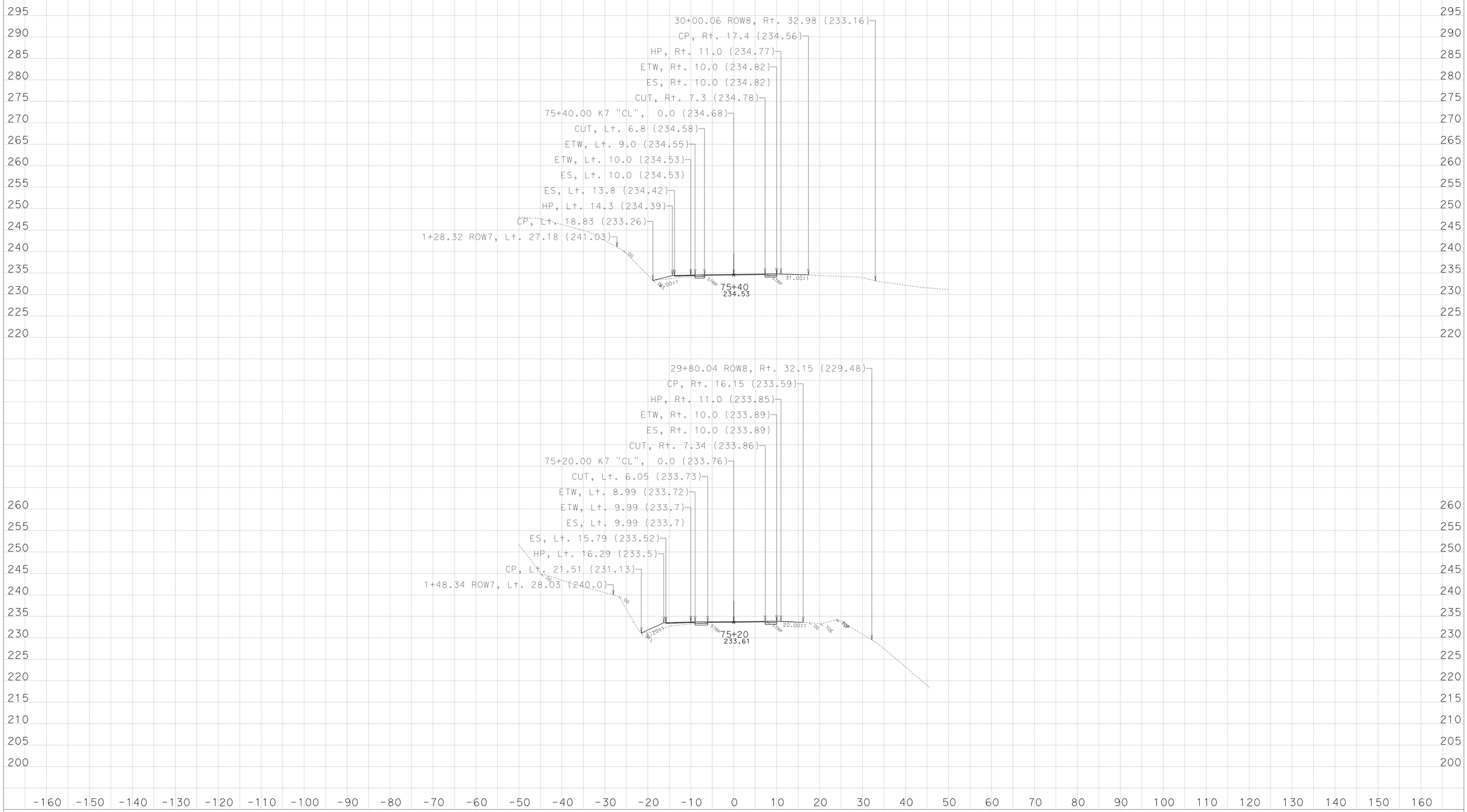
DESIGN CROSS SECTIONS

SHEET 25 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

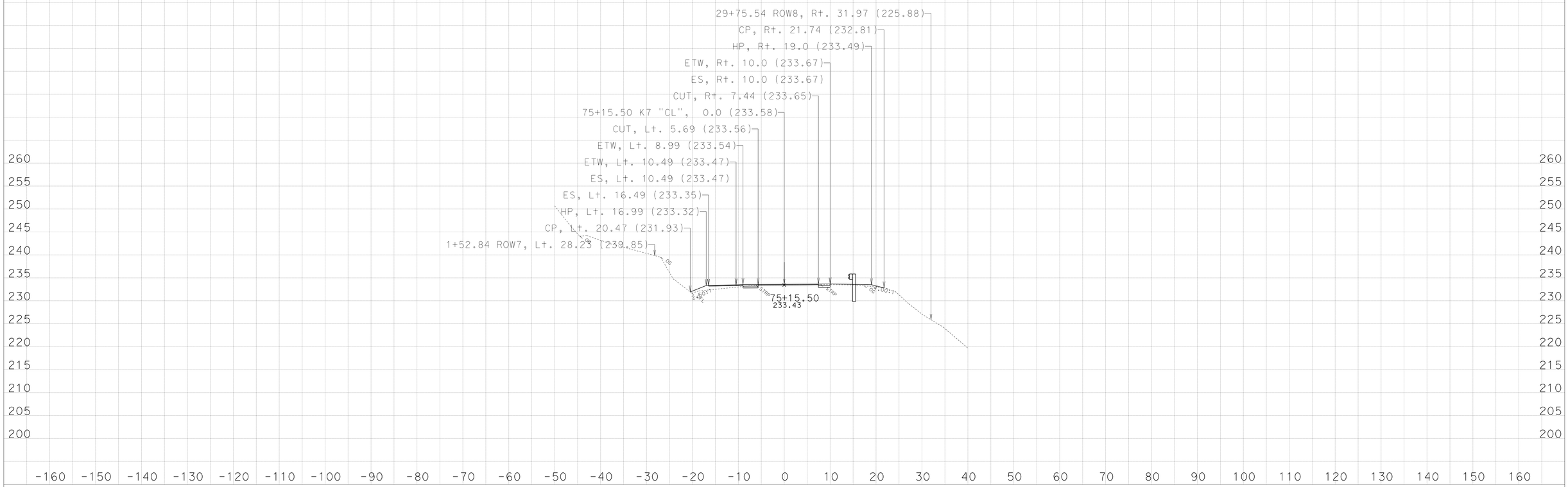
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS
SHEET 24 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

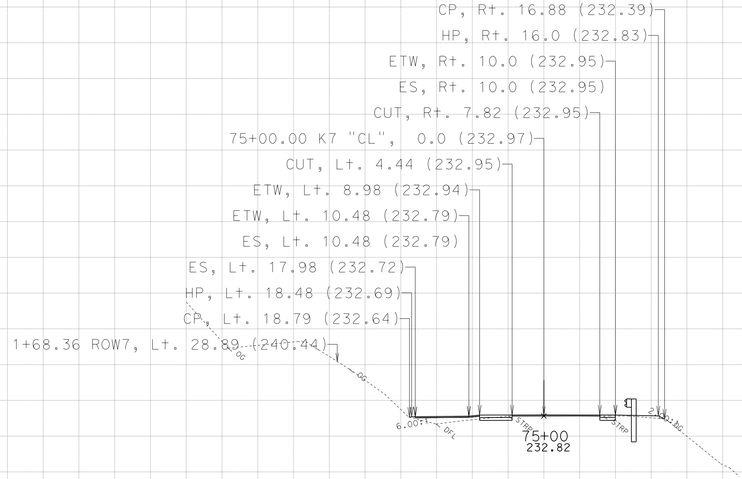
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

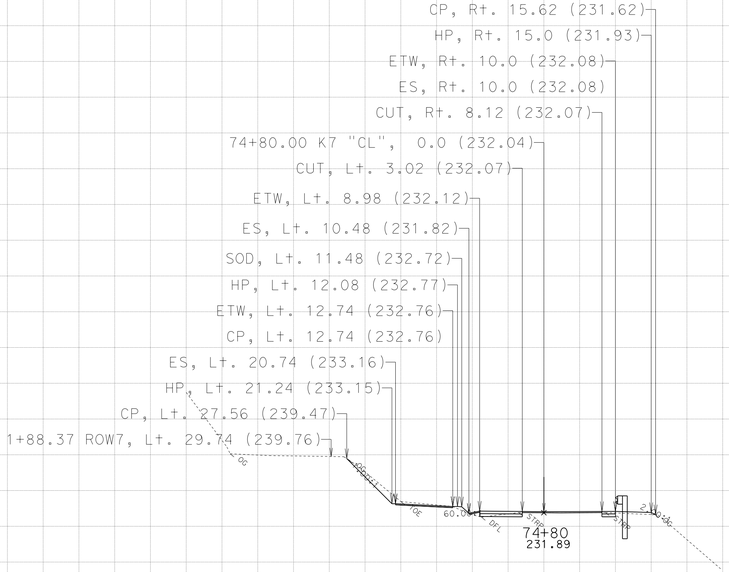
Alignment: "K7"
DESIGN CROSS SECTIONS
SHEET 23 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99

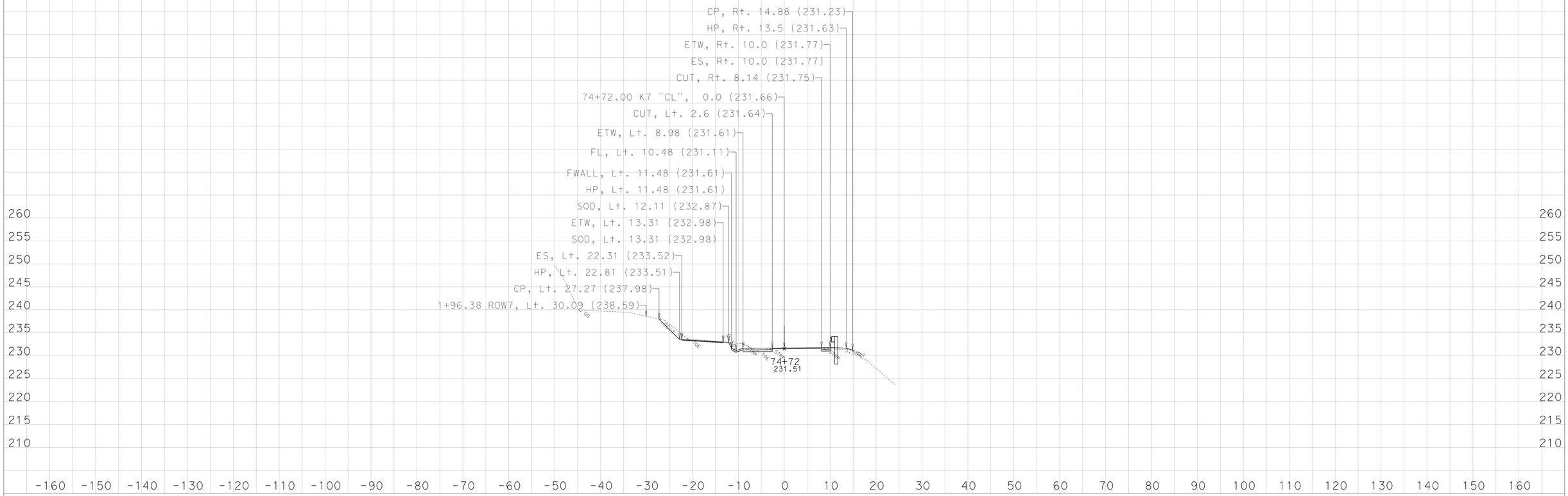




For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

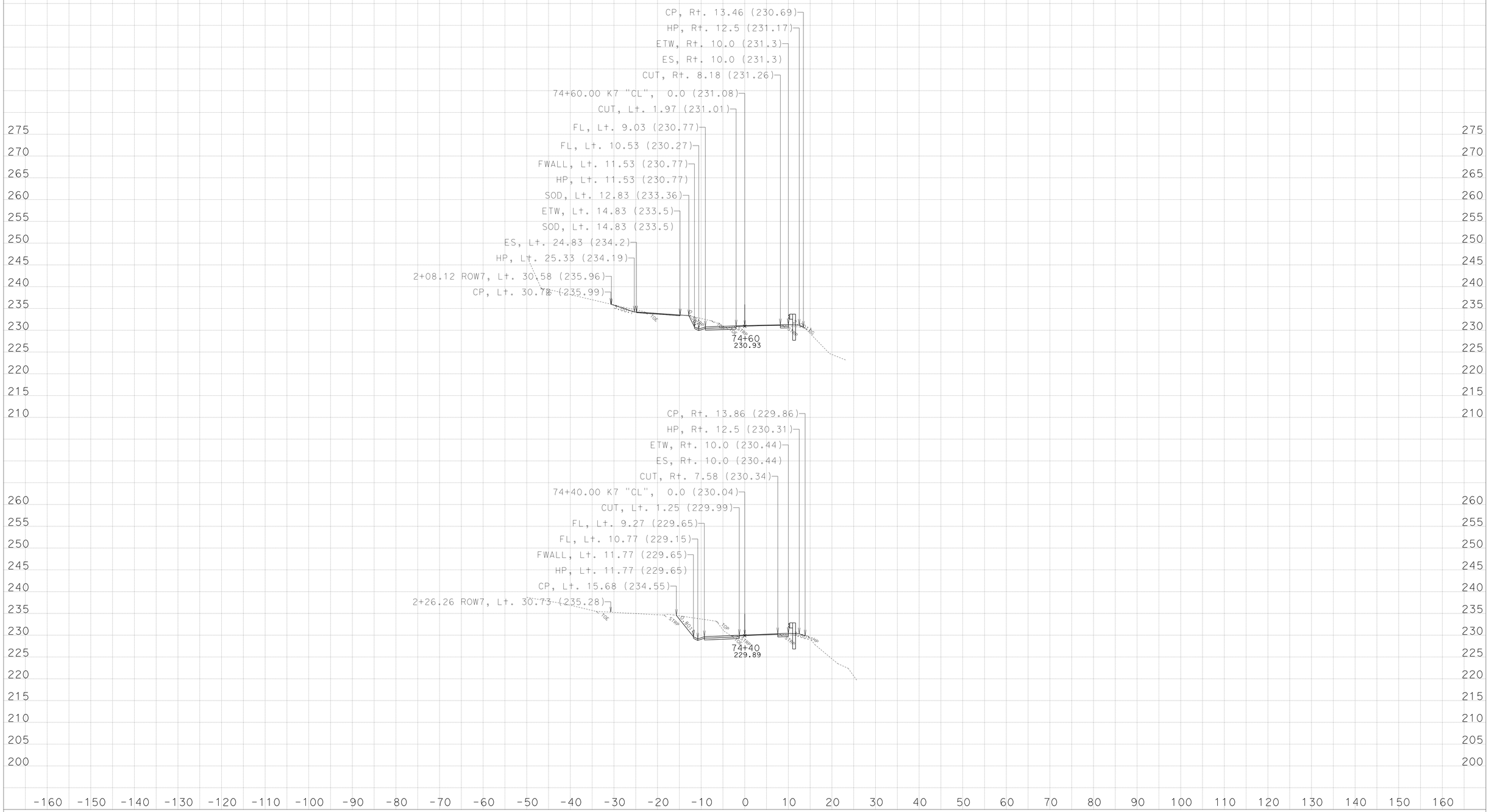
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS
SHEET 21 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

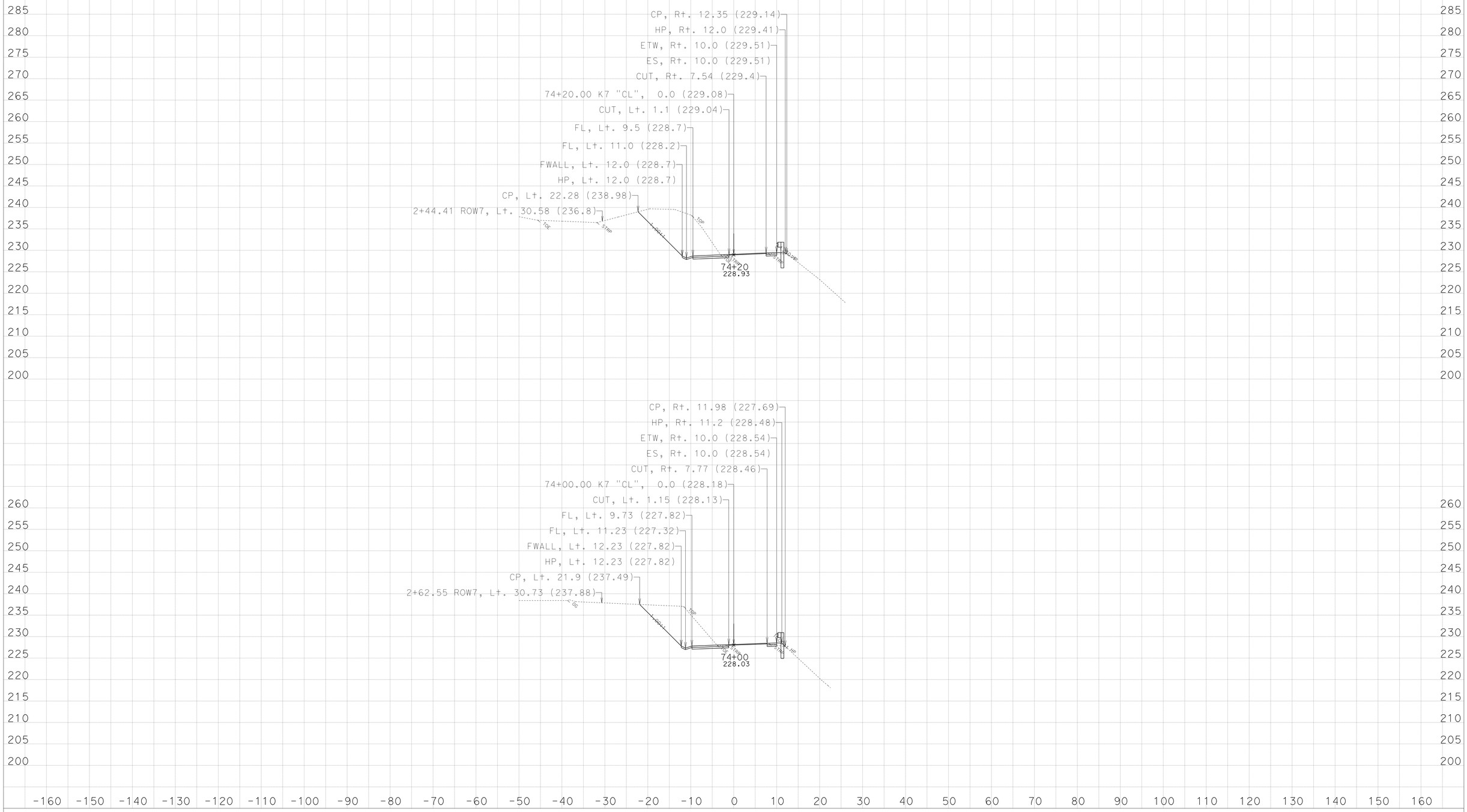
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS
SHEET 20 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

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DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

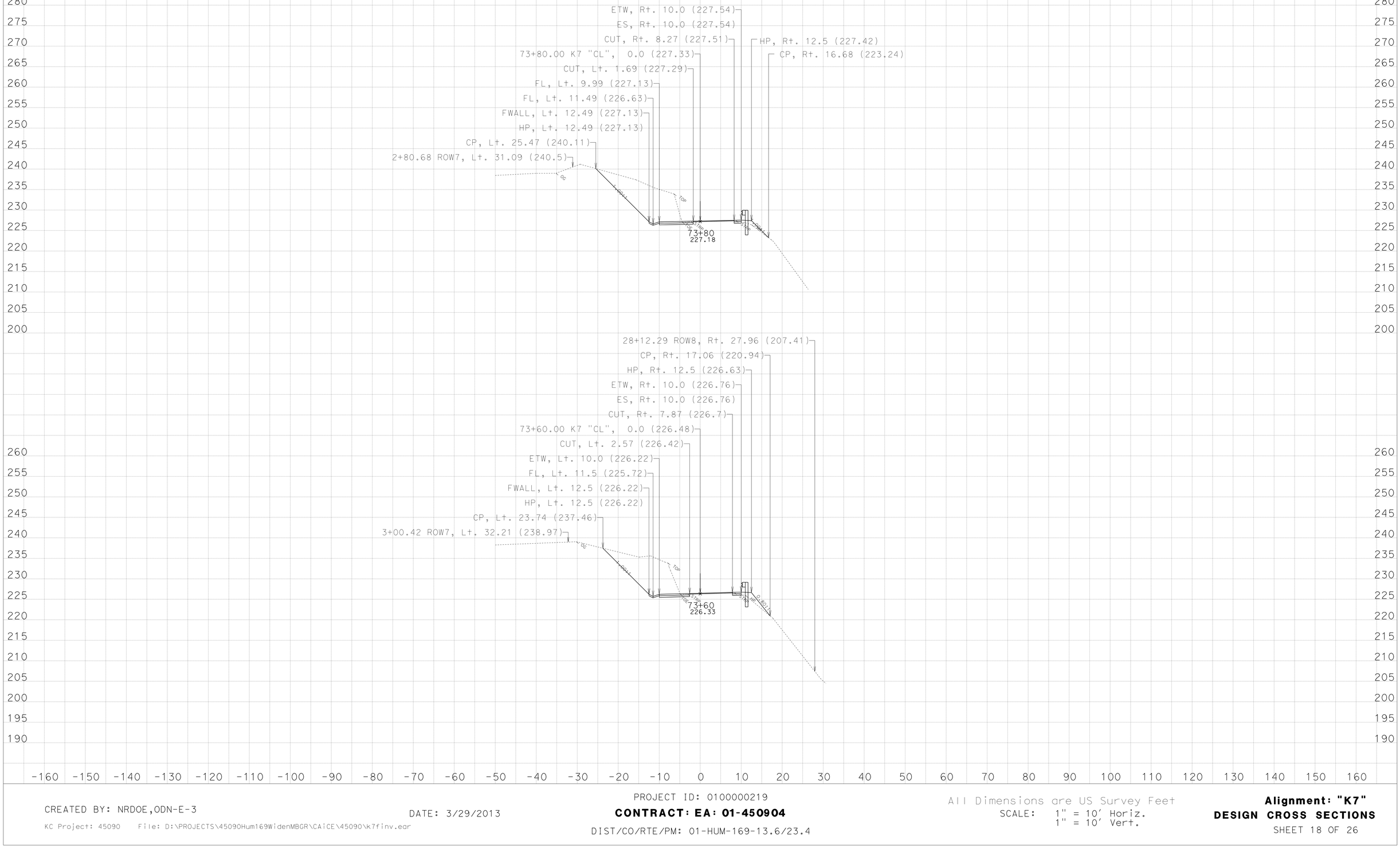
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

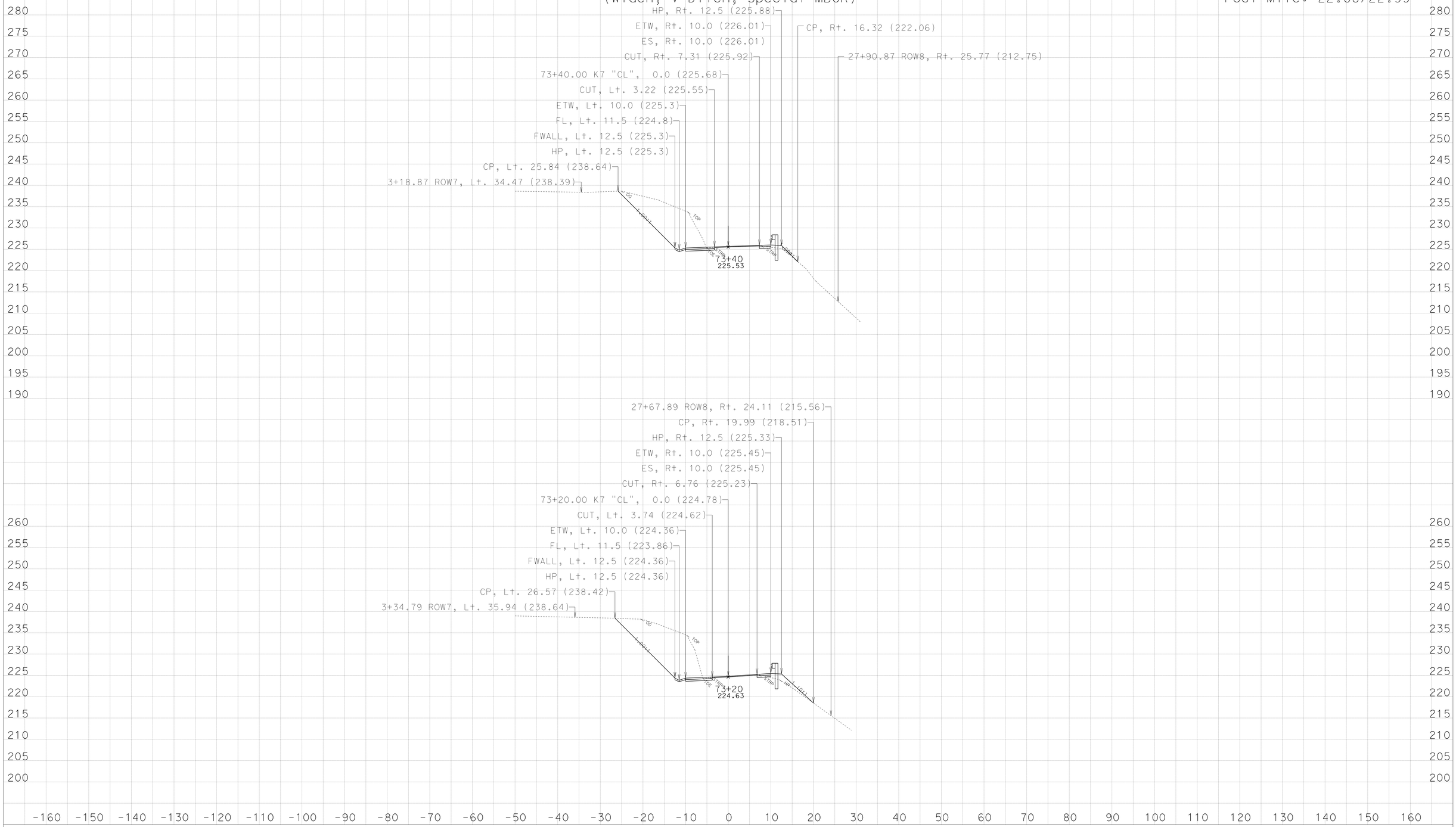
Alignment: "K7"

DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

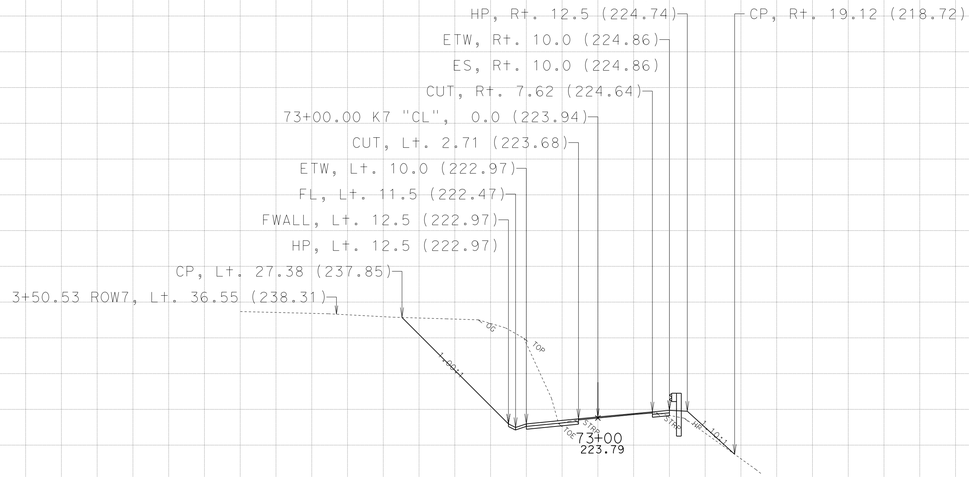
Alignment: "K7"
DESIGN CROSS SECTIONS

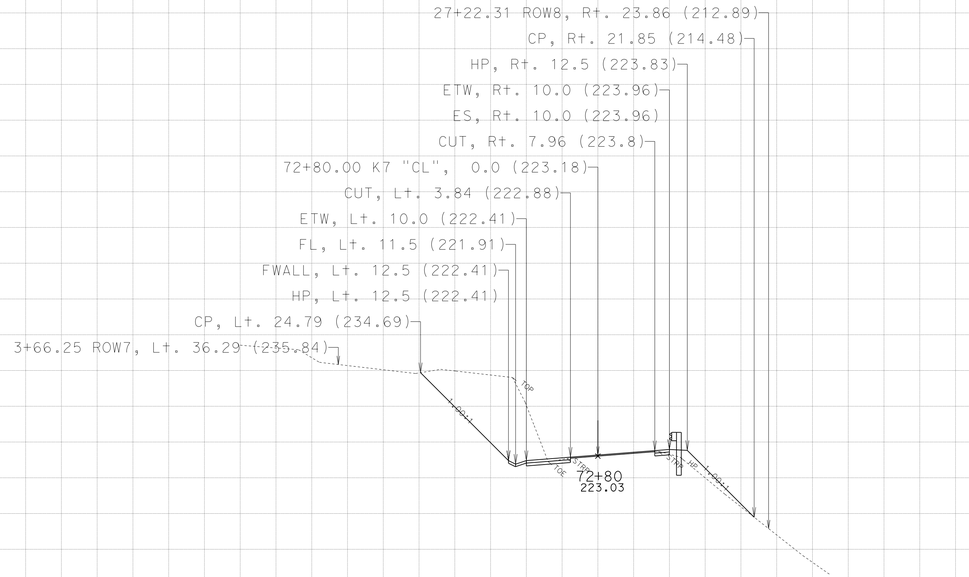
For Earthwork Development Only

Safety Improvements

(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99





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CREATED BY: NRDOE,ODN-E-3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"

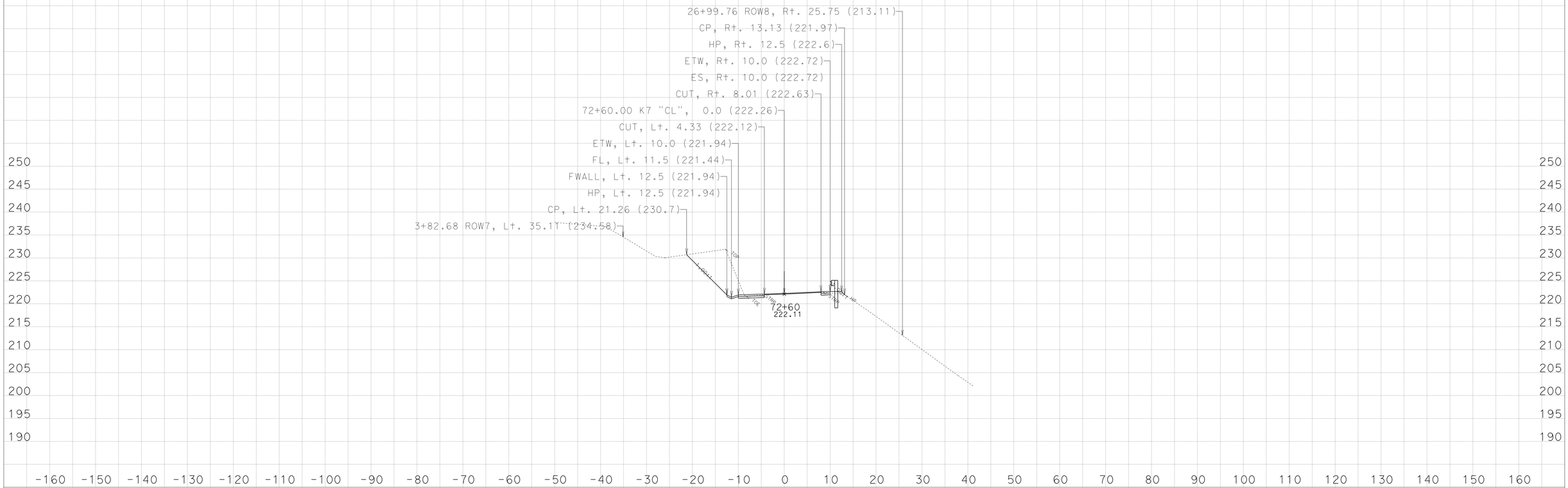
DESIGN CROSS SECTIONS

SHEET 16 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

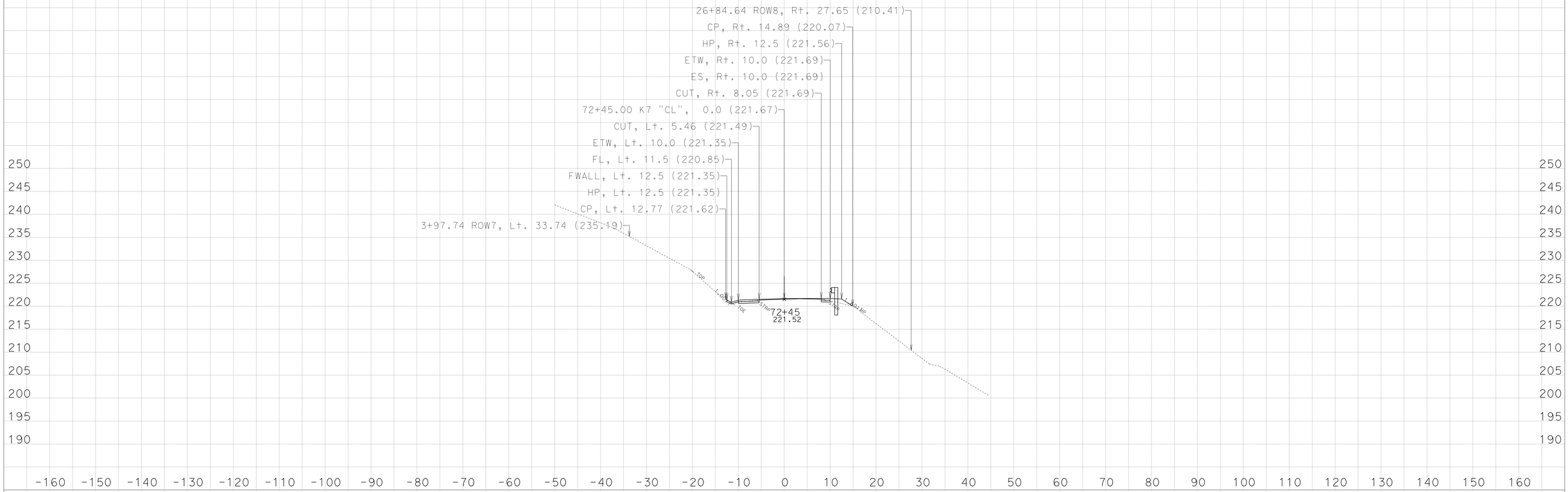
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

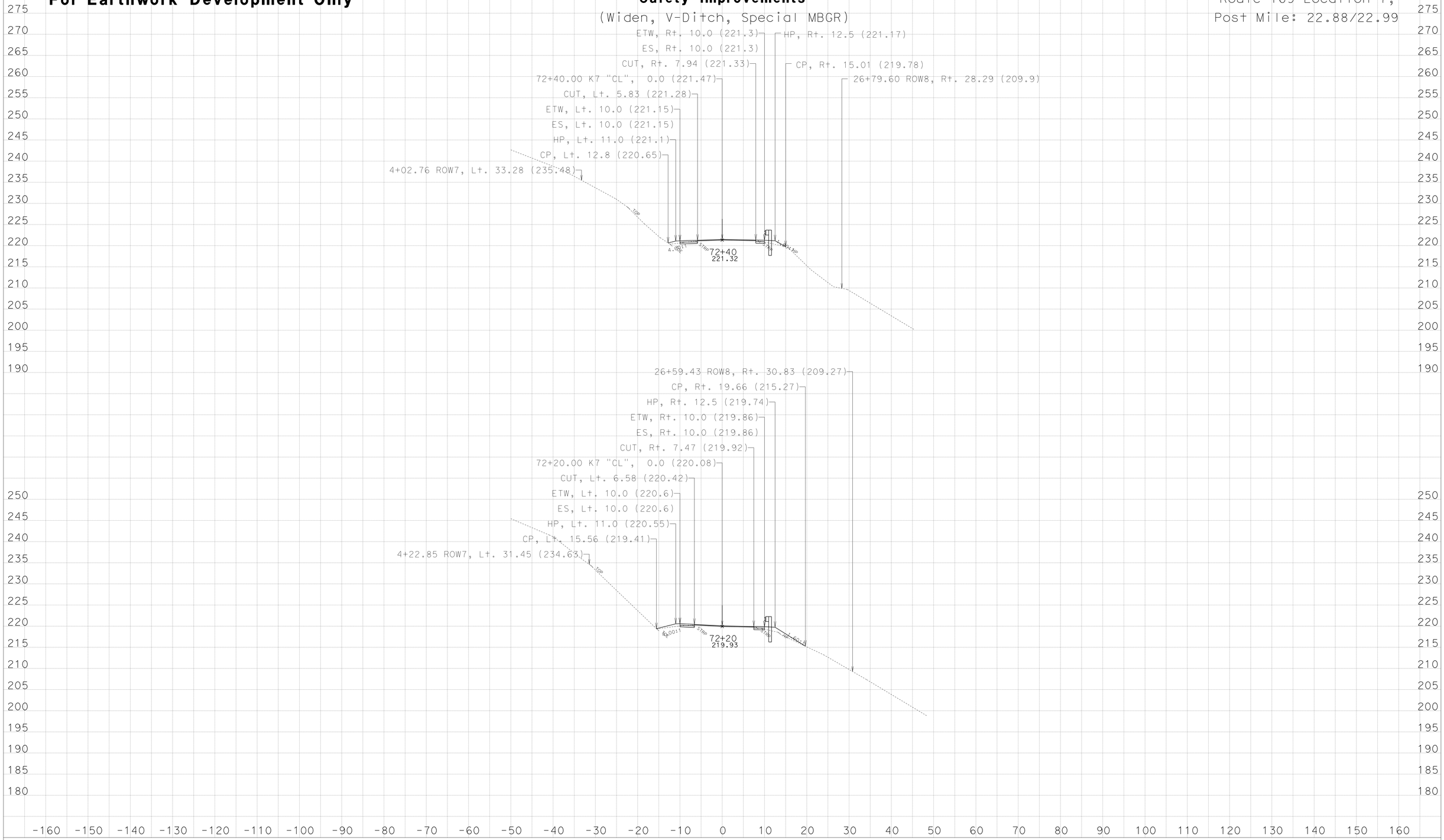
Alignment: "K7"
DESIGN CROSS SECTIONS
SHEET 14 OF 26

For Earthwork Development Only

Safety Improvements

(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

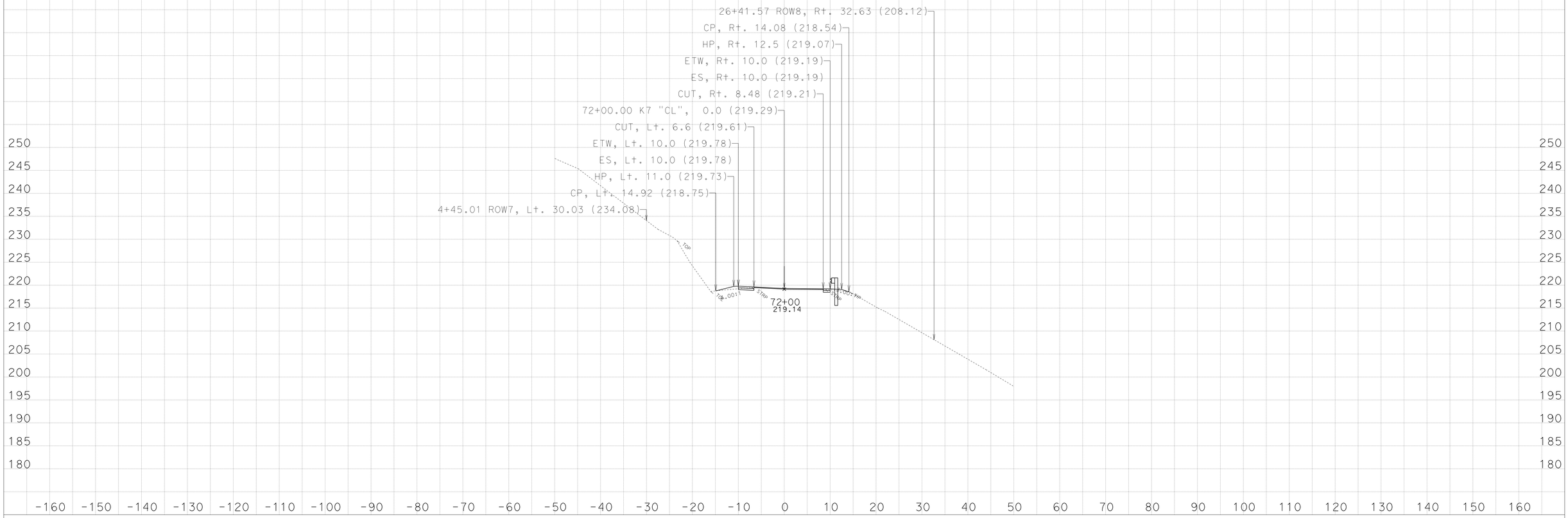
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

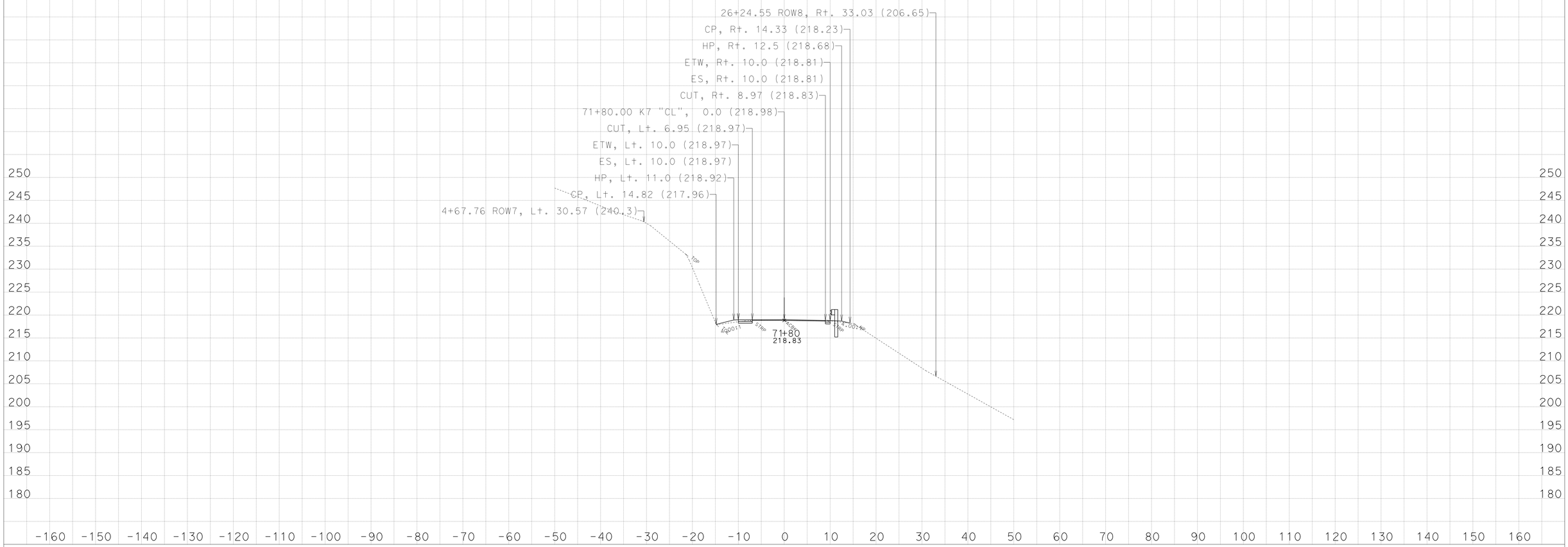
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS
SHEET 12 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

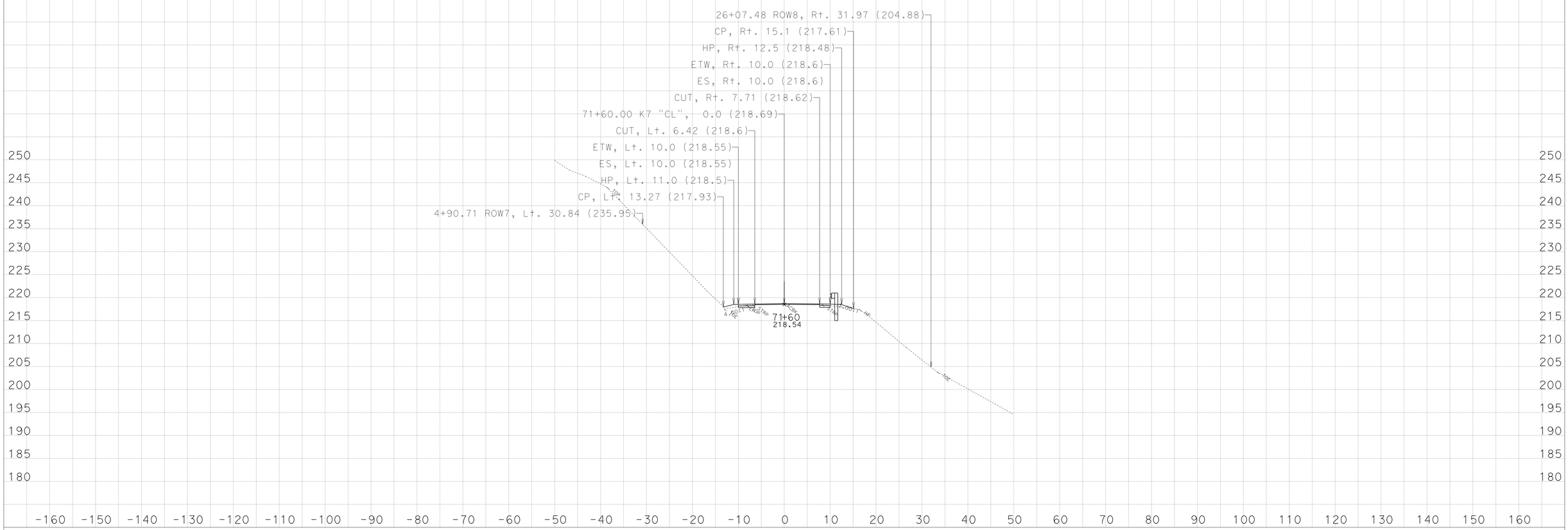
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS
SHEET 11 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

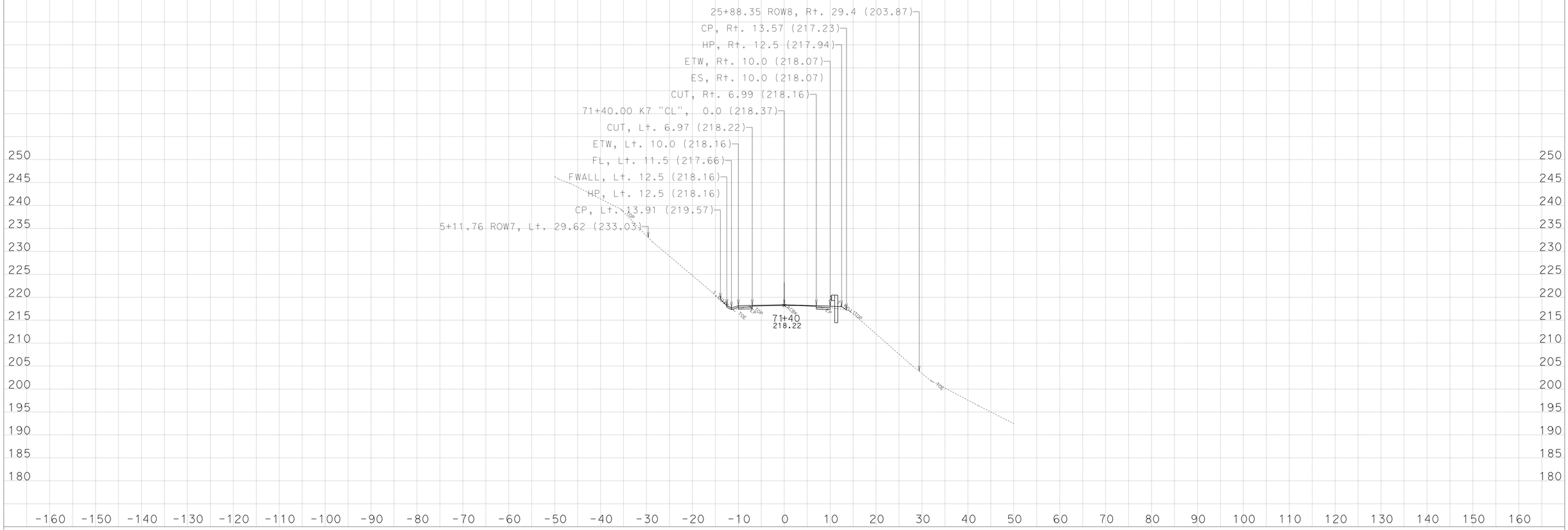
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS
SHEET 10 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

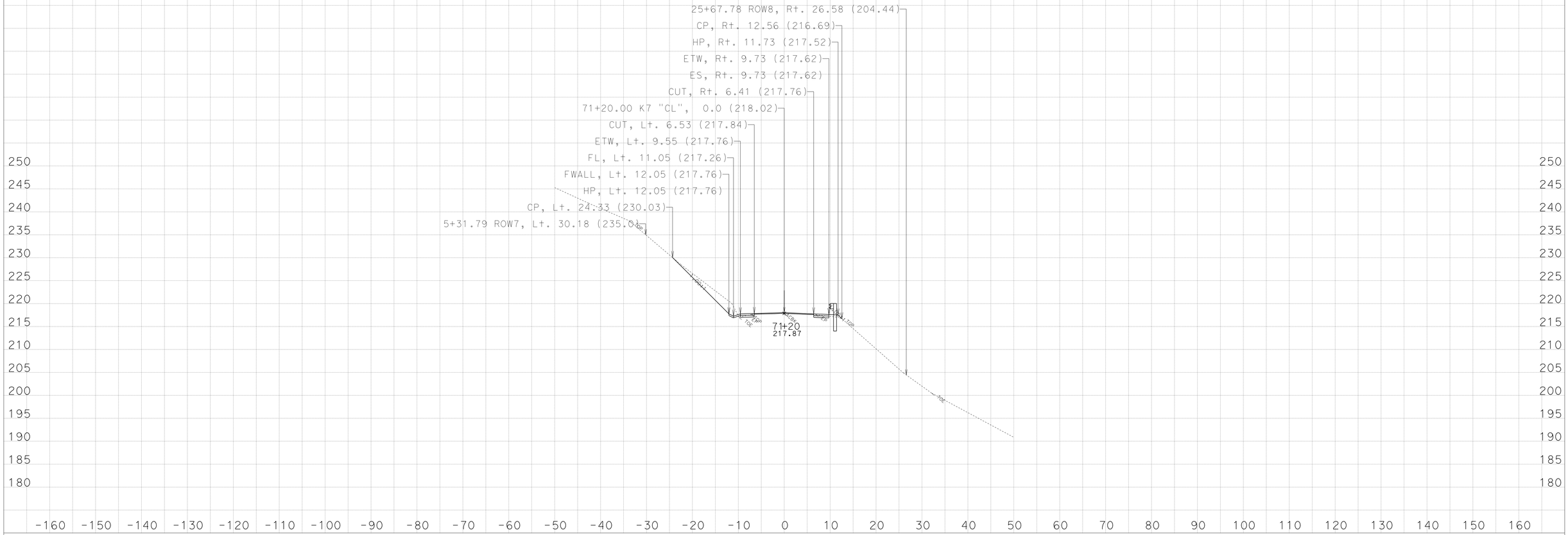
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS
SHEET 9 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

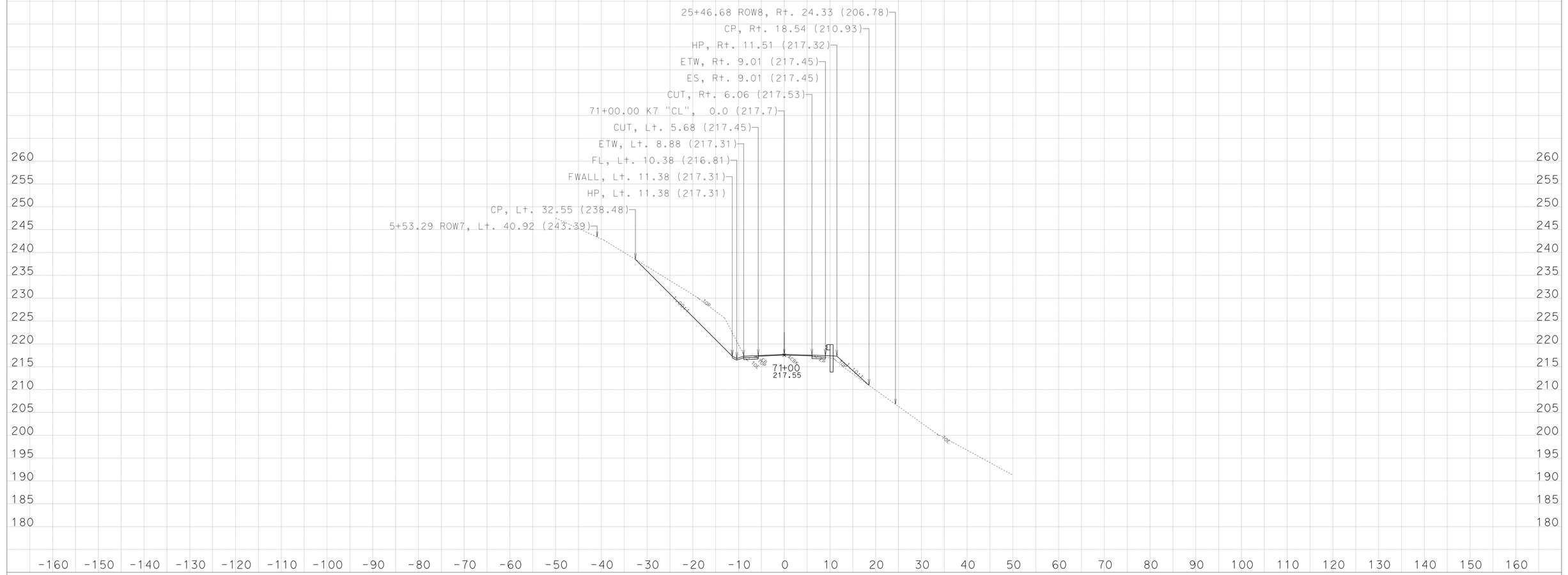
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS
SHEET 8 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"

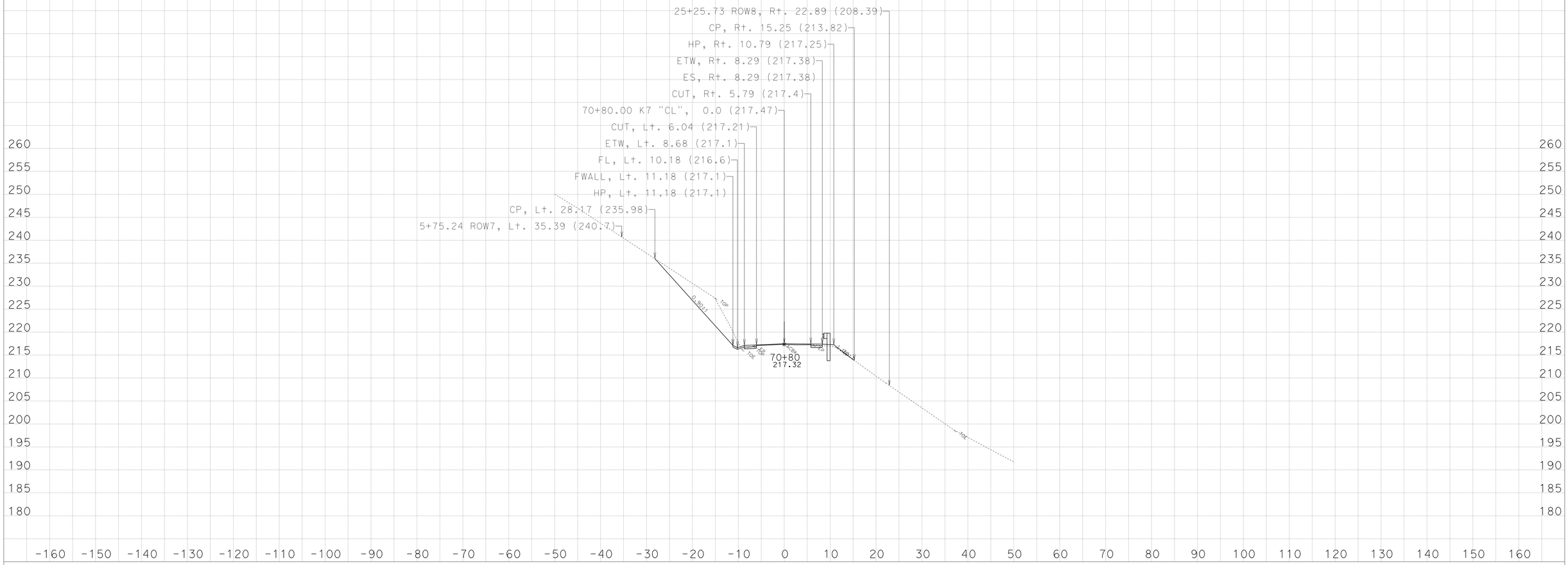
DESIGN CROSS SECTIONS

SHEET 7 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219
CONTRACT: EA: 01-450904
DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

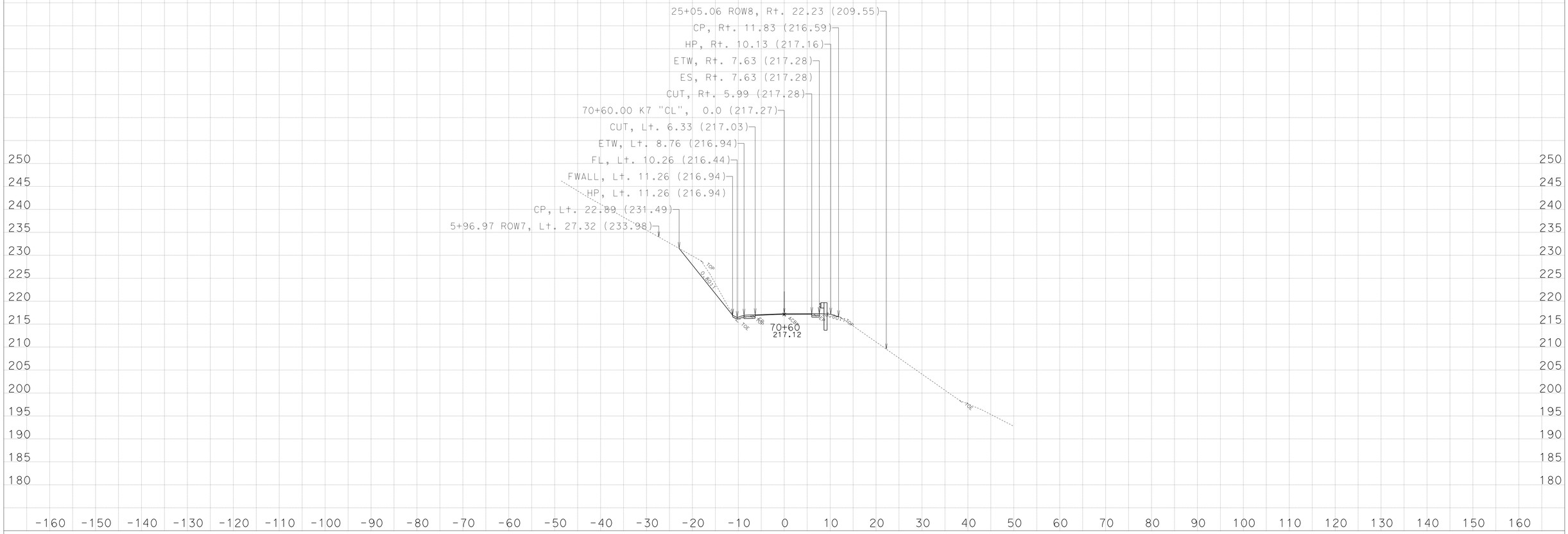
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS
SHEET 6 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

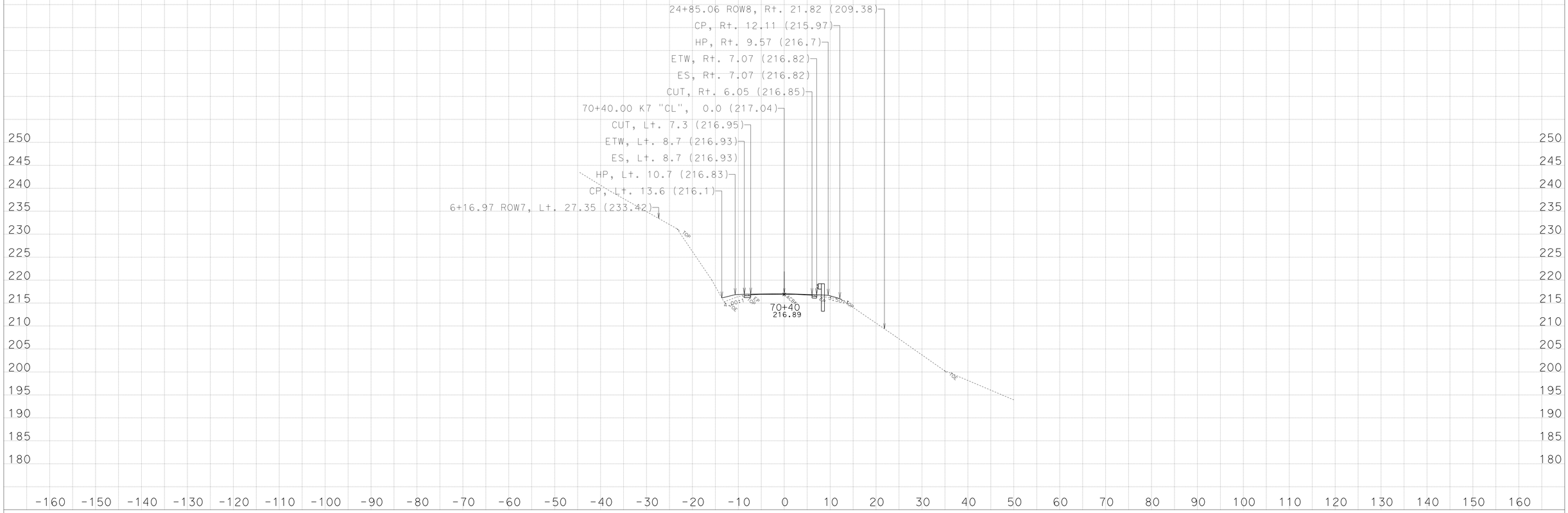
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS
SHEET 5 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

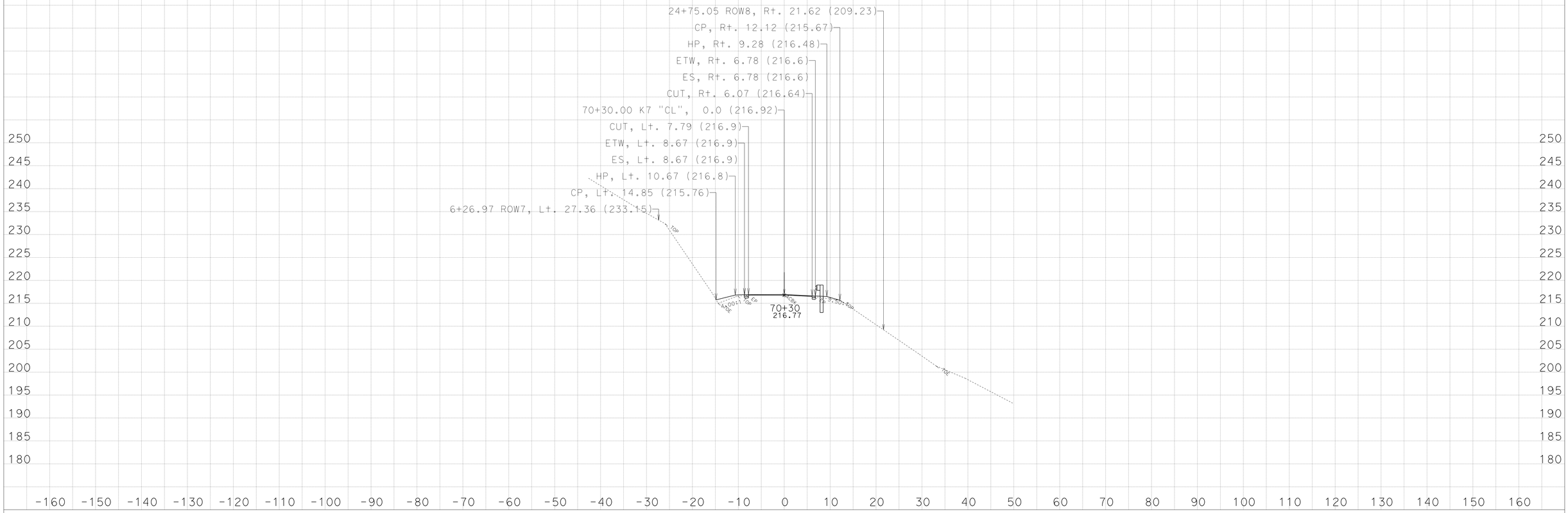
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS
SHEET 4 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

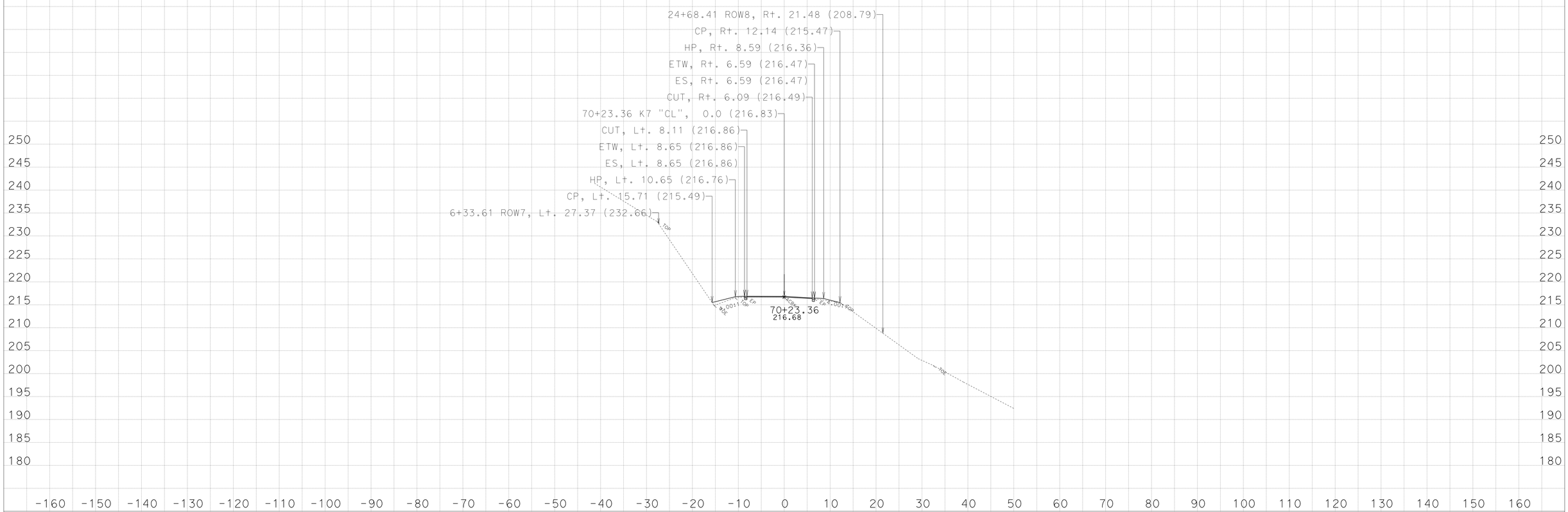
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS
SHEET 3 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

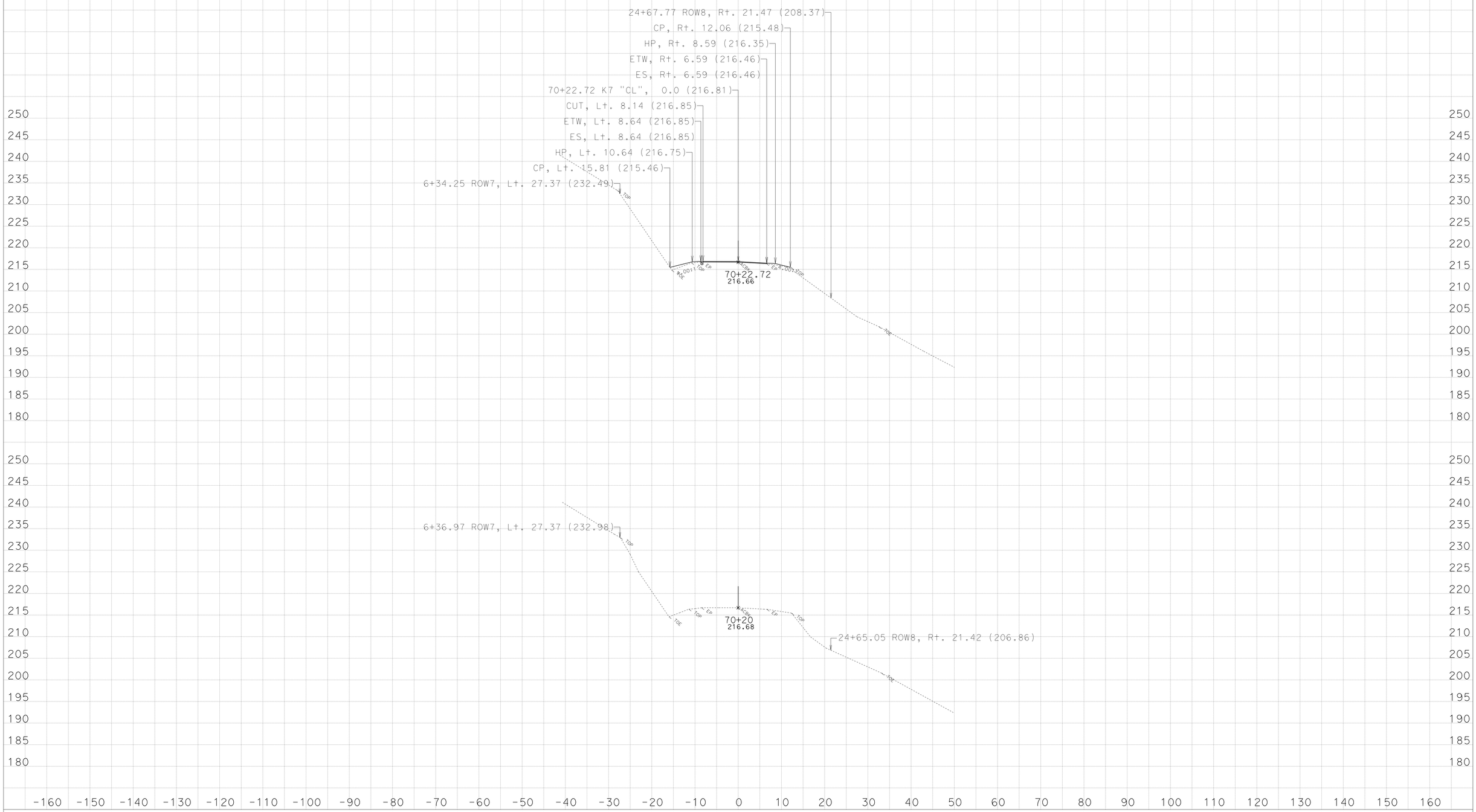
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169-Location 7,
Post Mile: 22.88/22.99



CREATED BY: NRDOE,ODN-E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k7finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

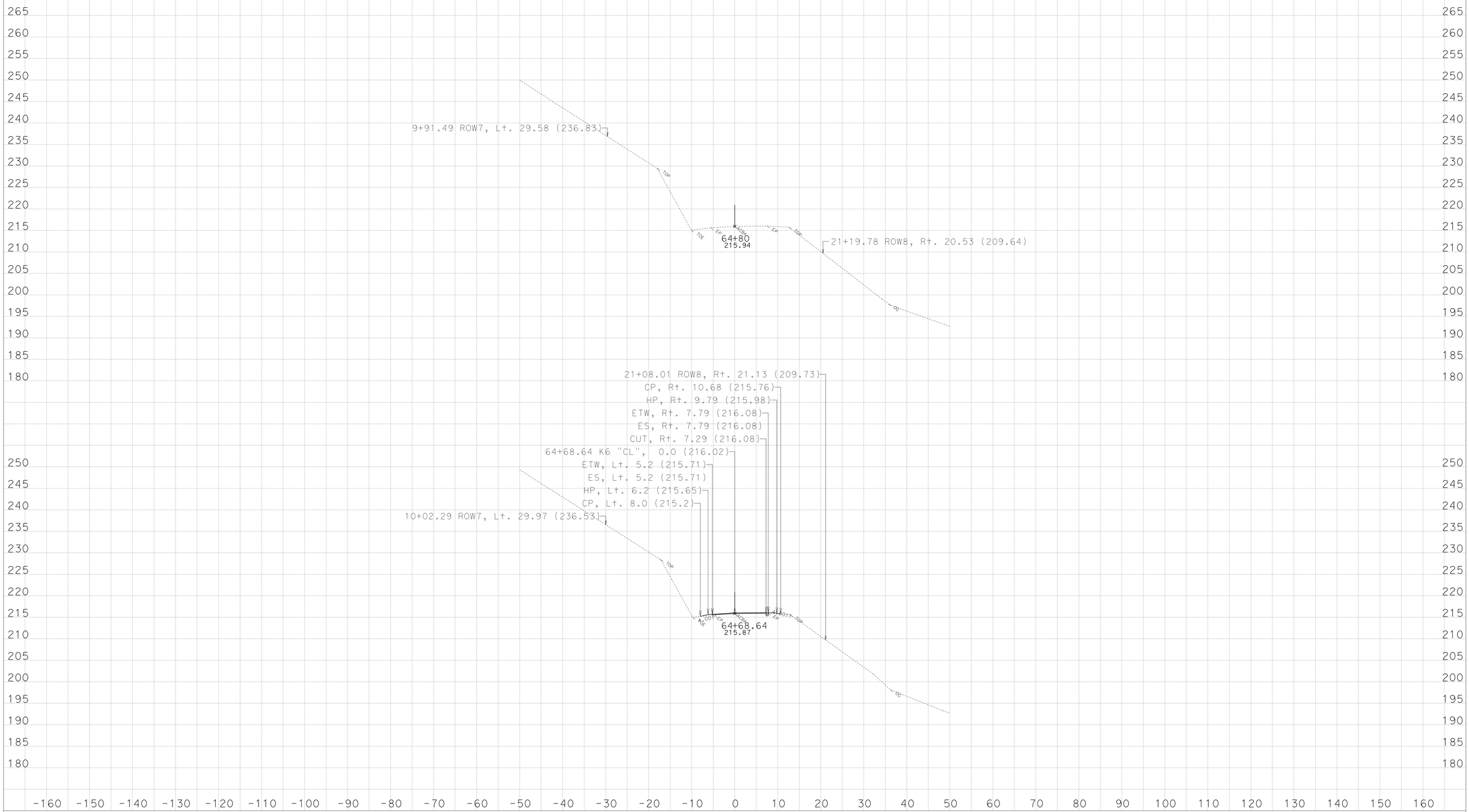
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K7"
DESIGN CROSS SECTIONS
SHEET 1 OF 26

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

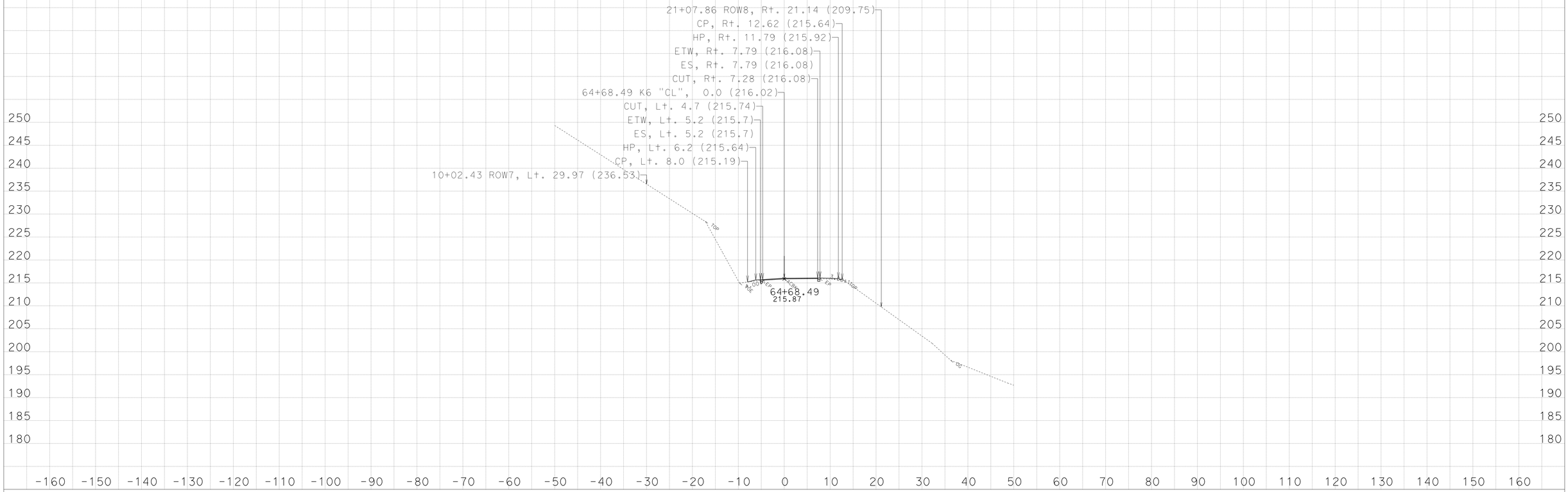
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 25 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

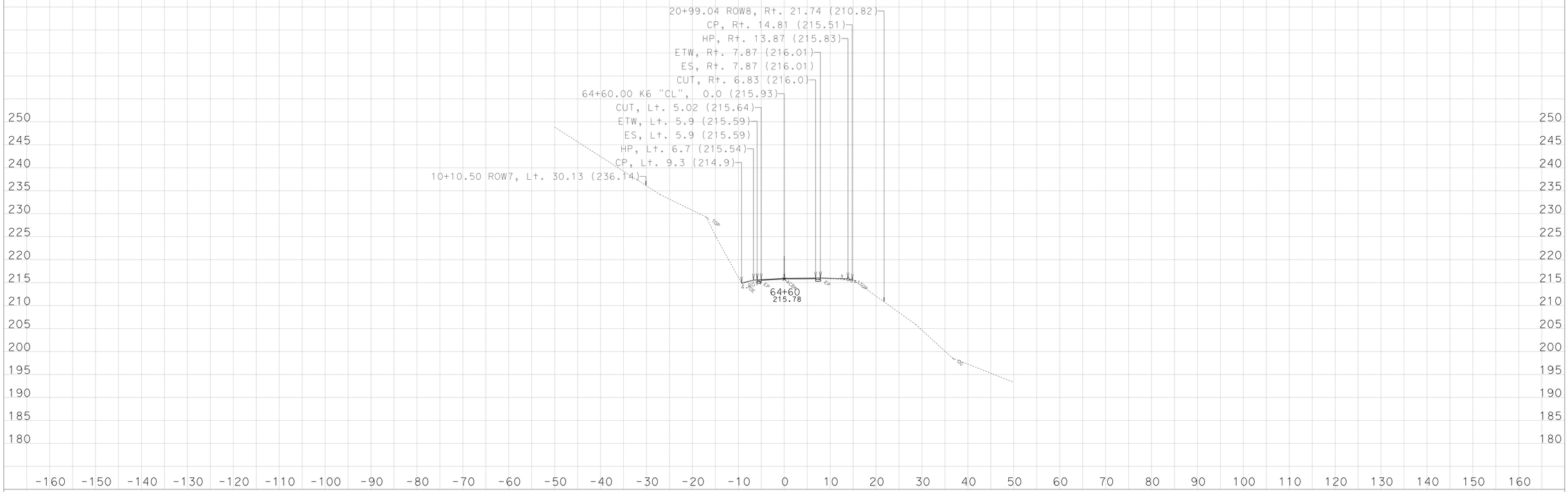
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 24 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

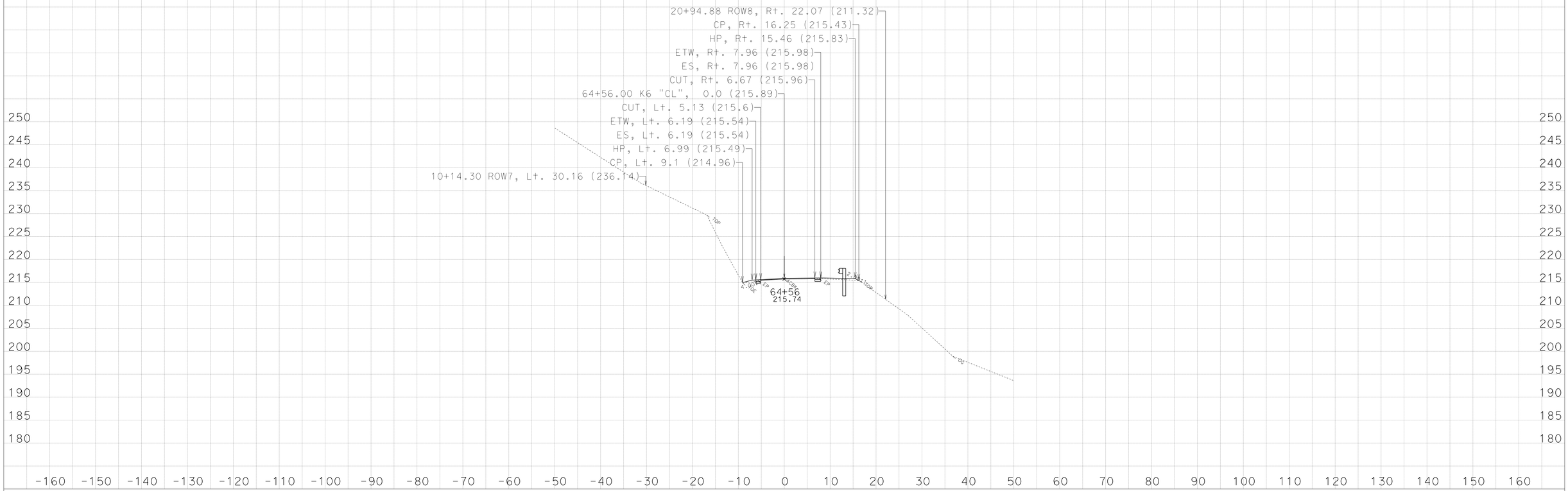
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 23 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

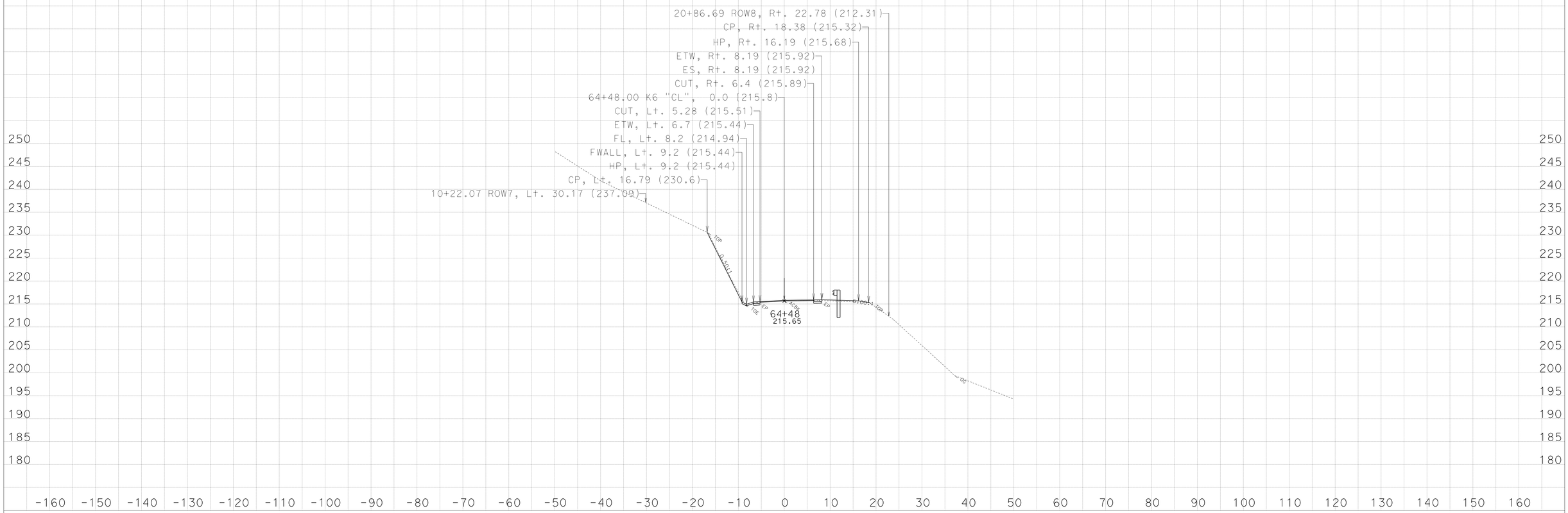
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 22 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

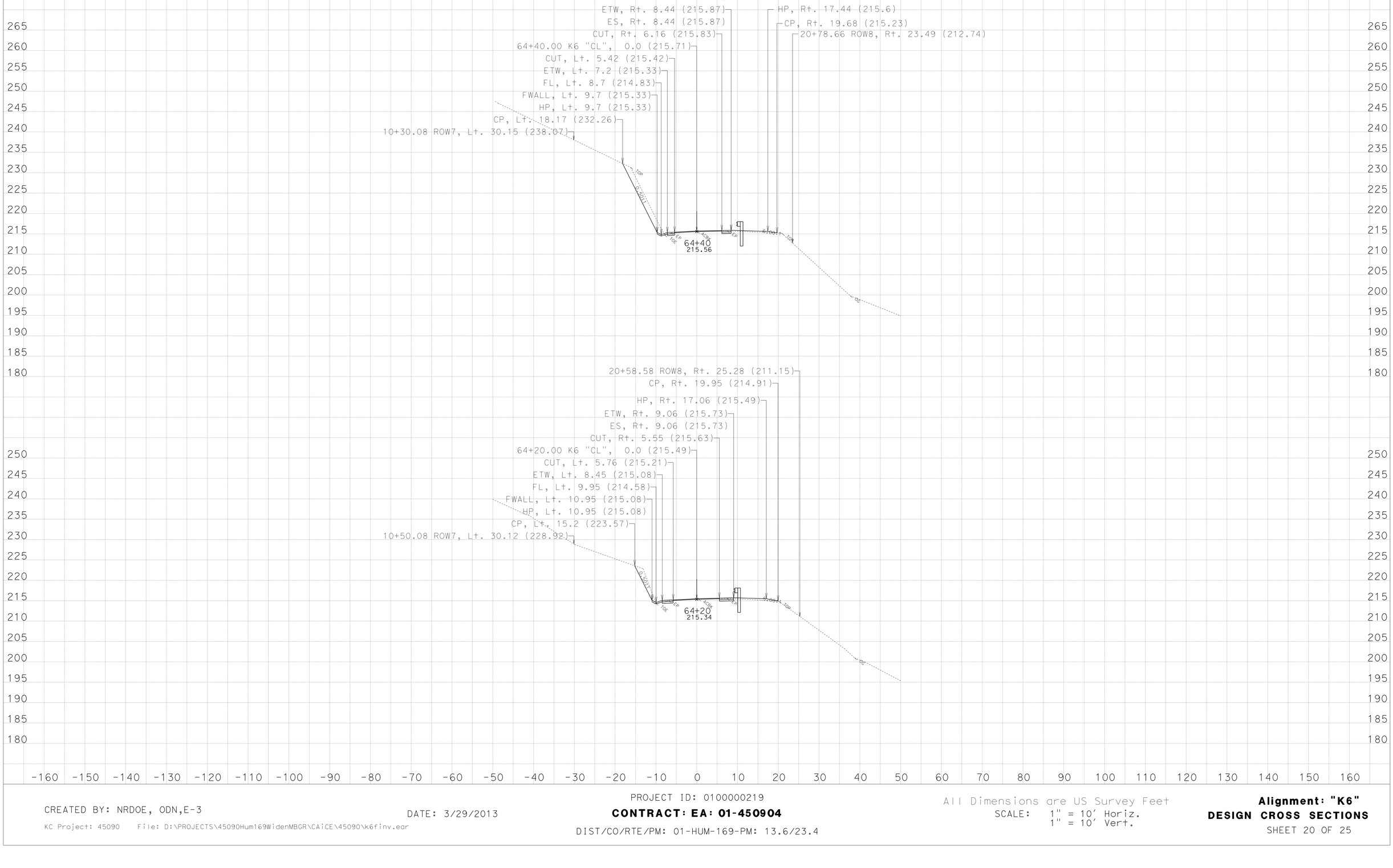
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 21 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

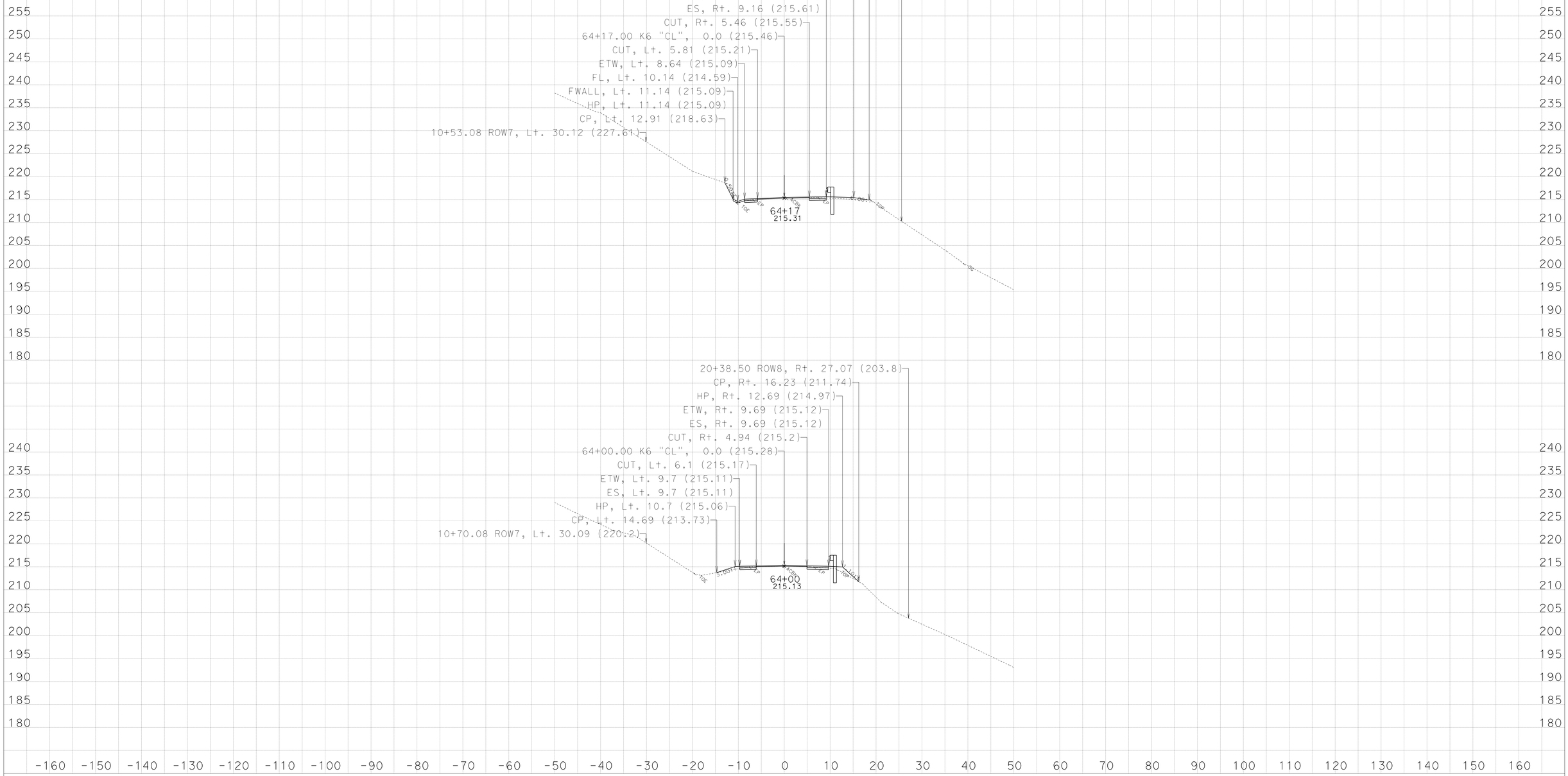
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 20 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219
CONTRACT: EA: 01-450904
DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

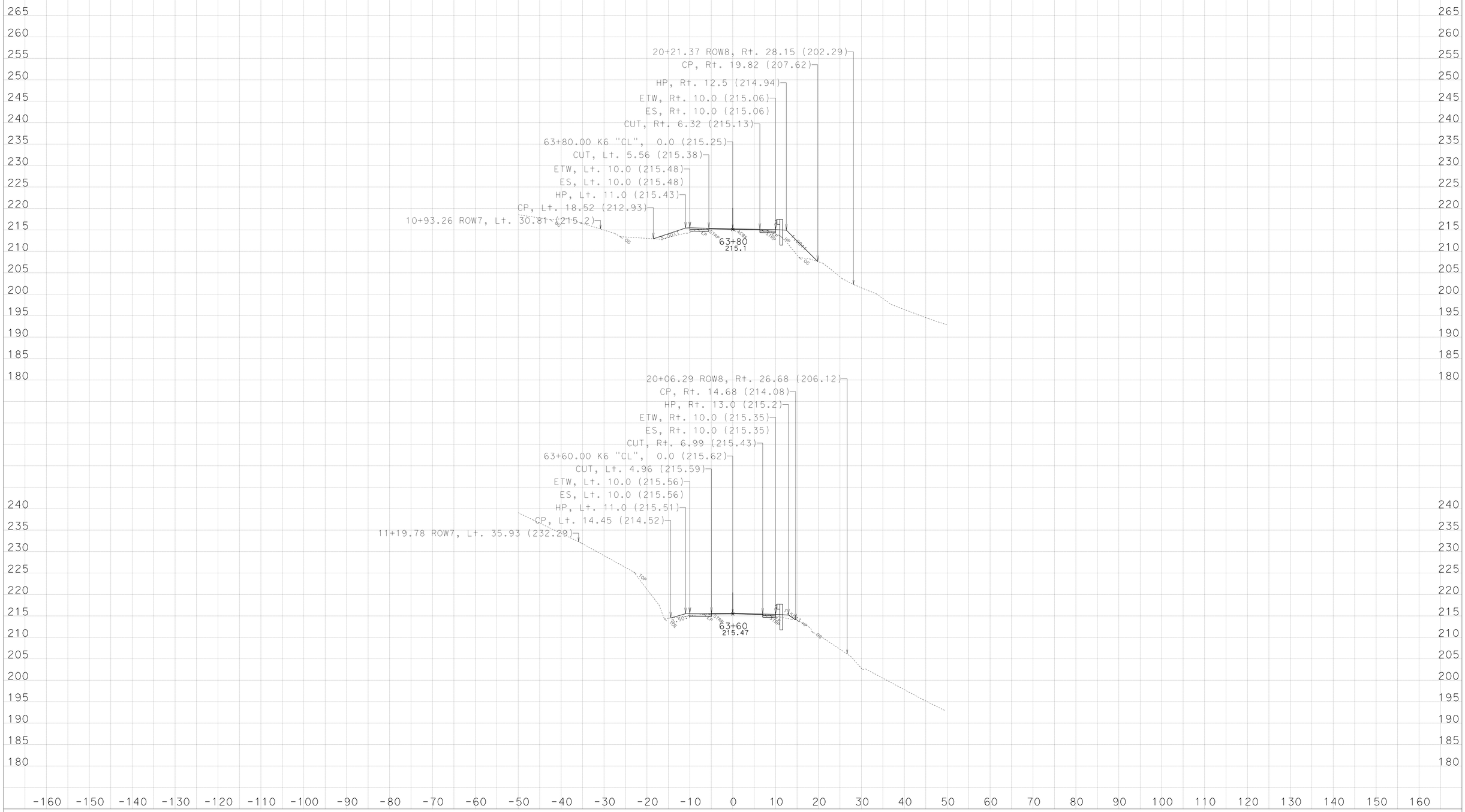
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 19 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

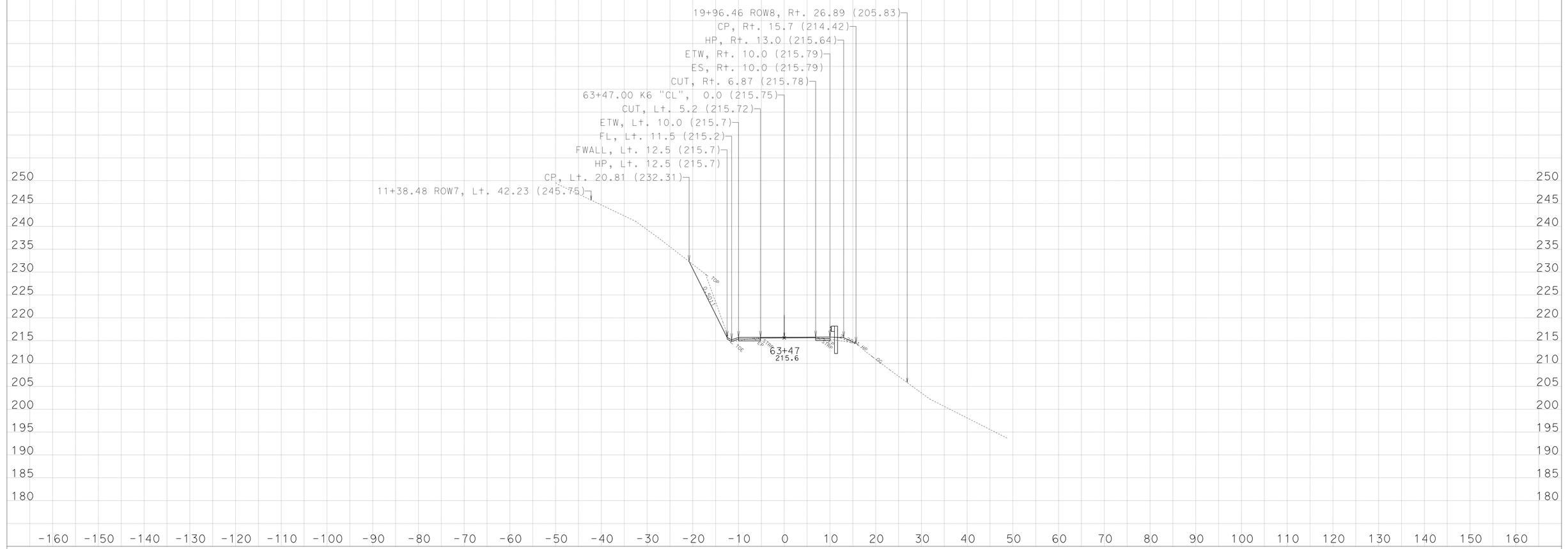
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 18 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

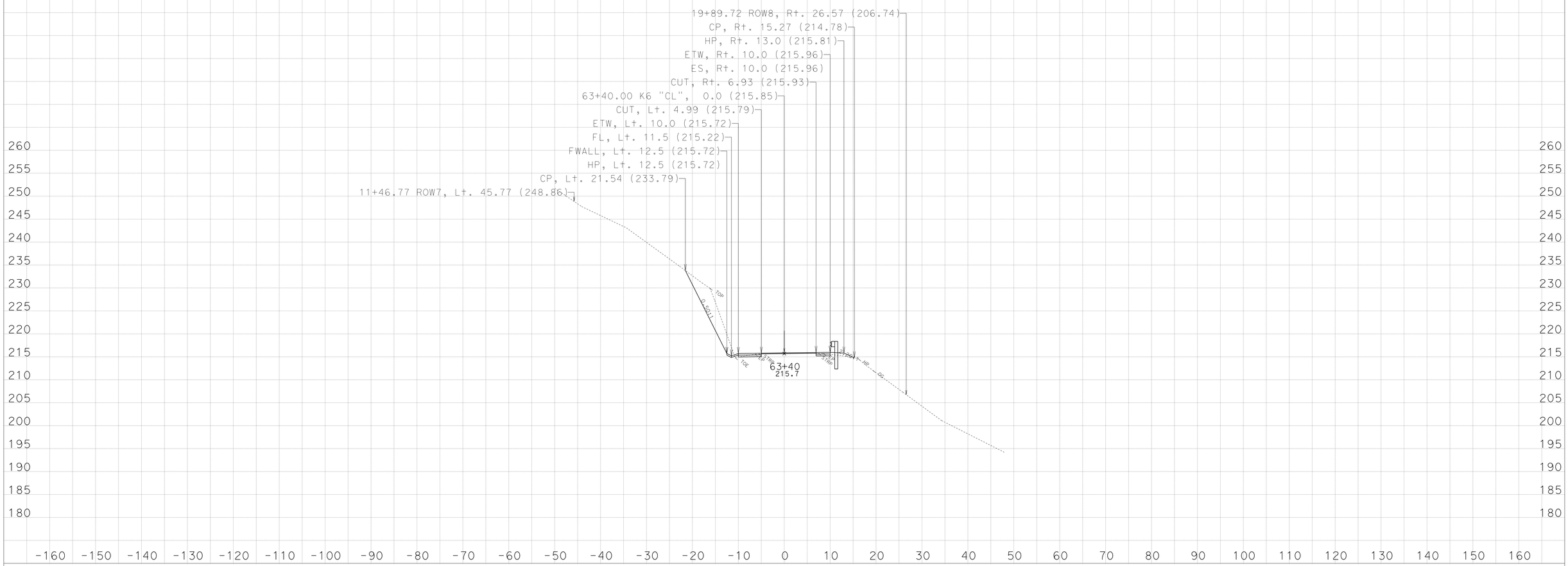
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 17 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

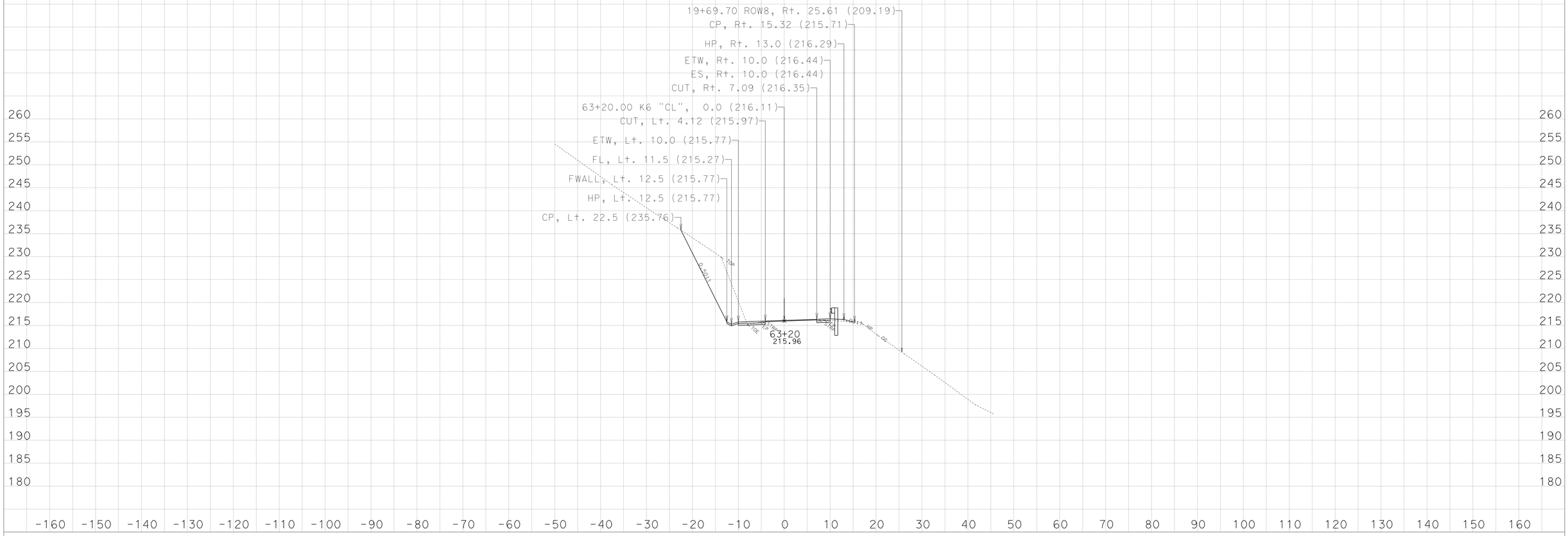
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 16 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

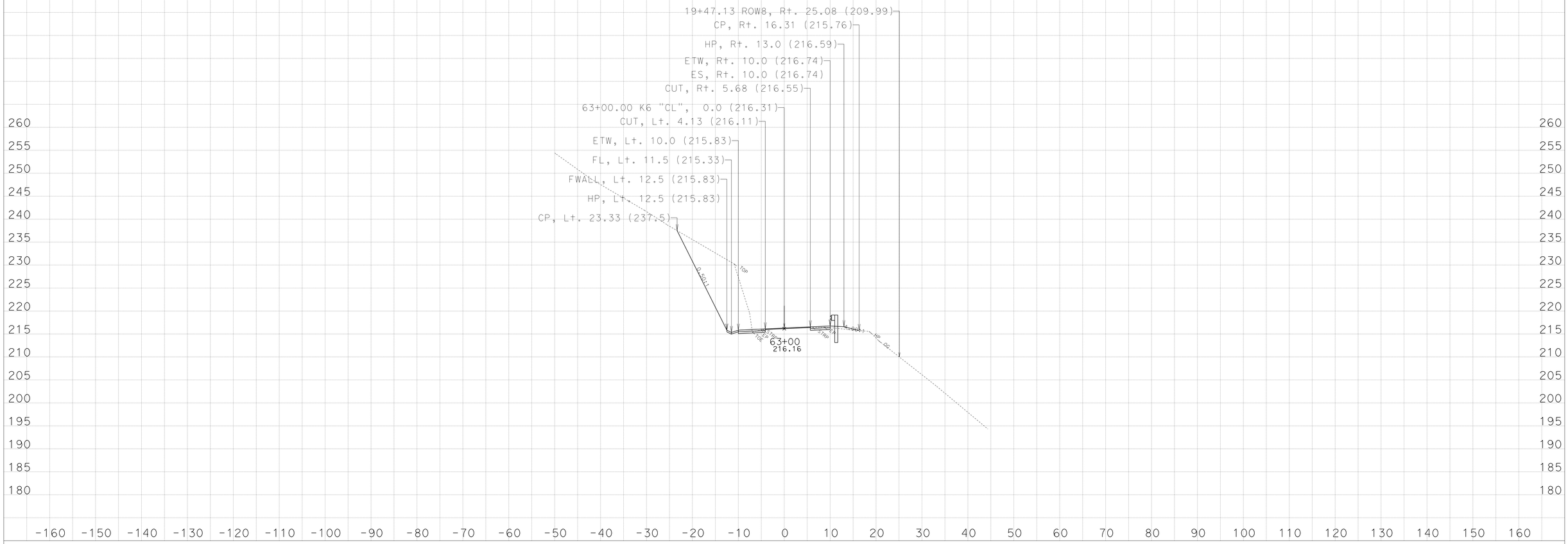
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 15 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

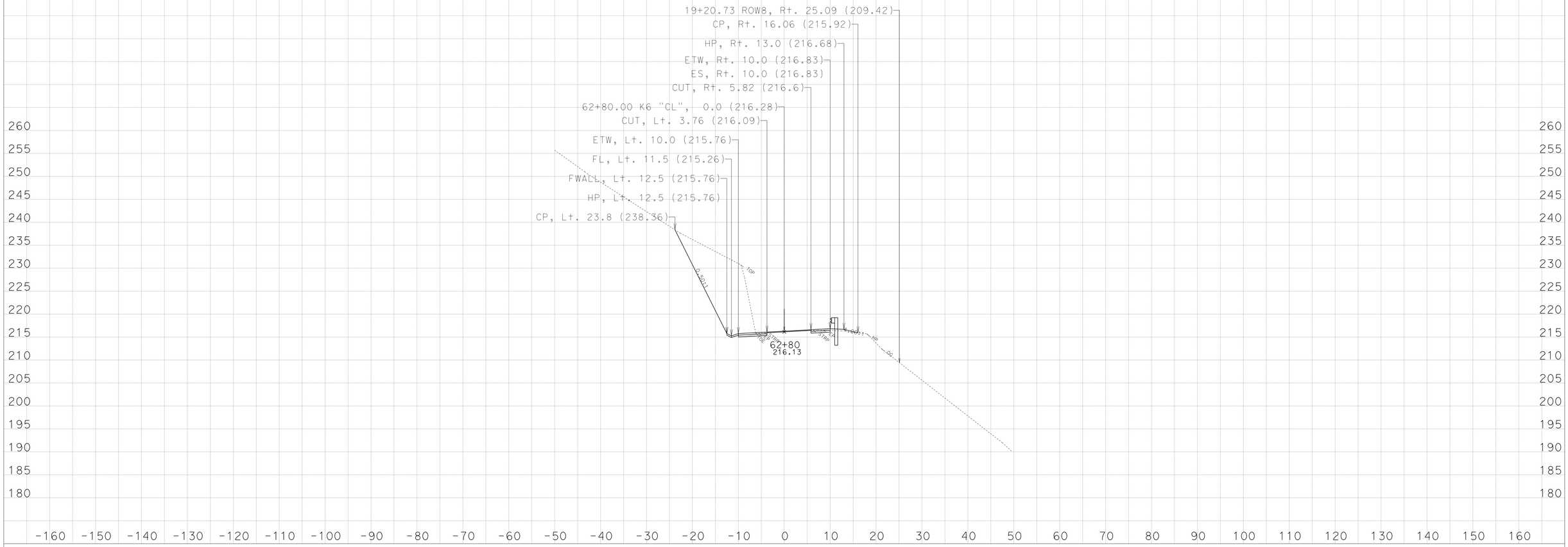
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 13 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82

CREATED BY: NRDOE, ODN,E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

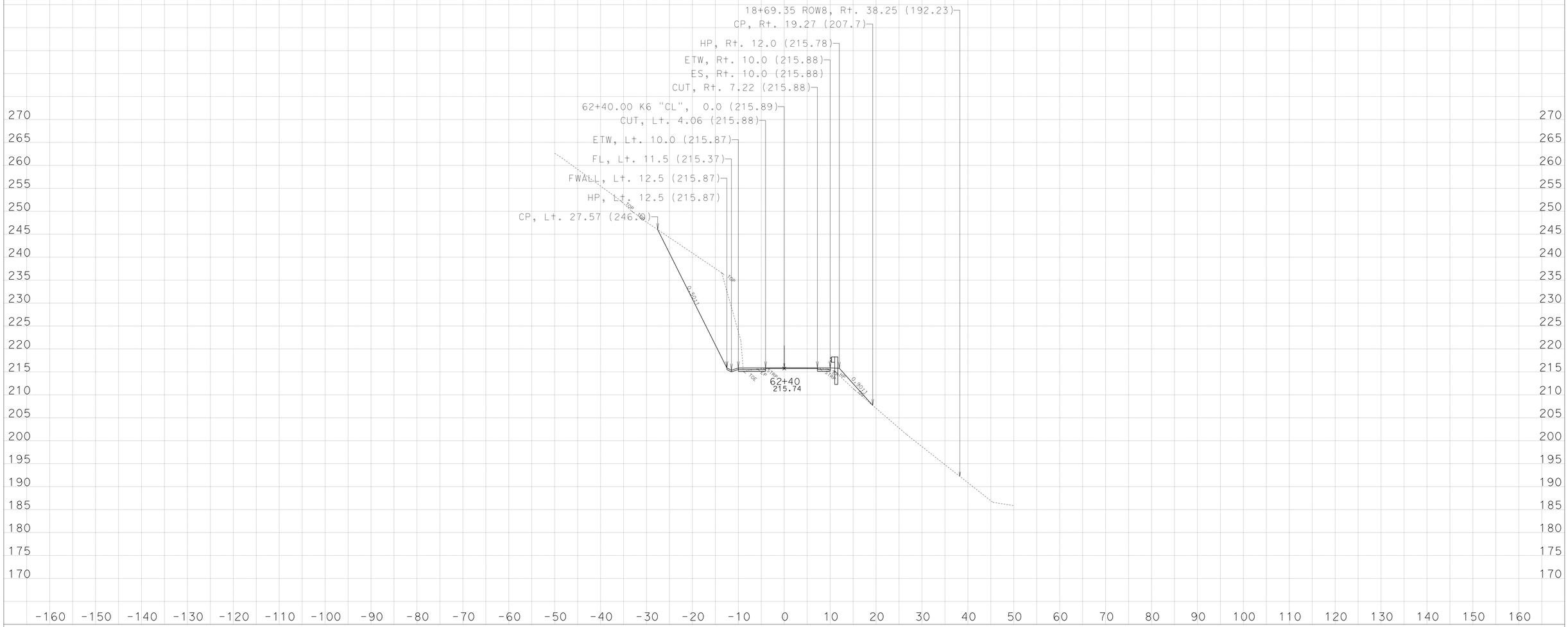
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 12 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

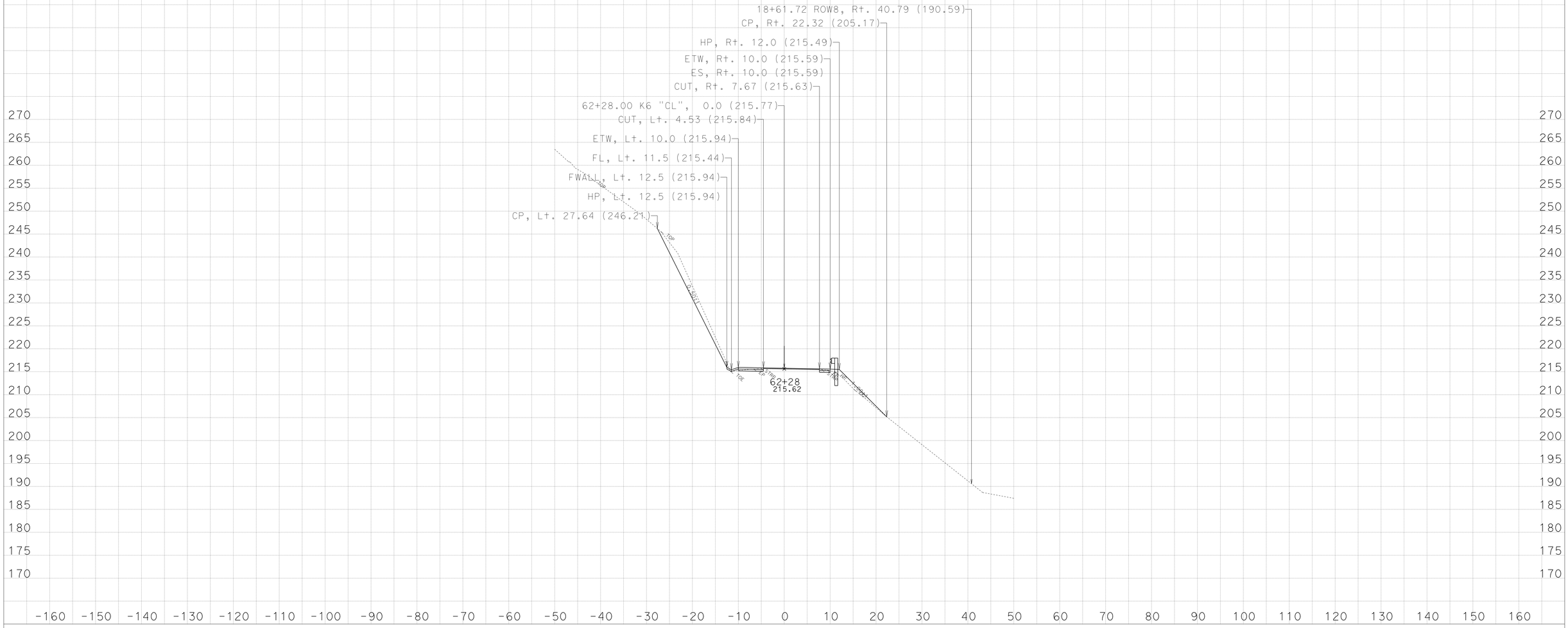
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 11 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

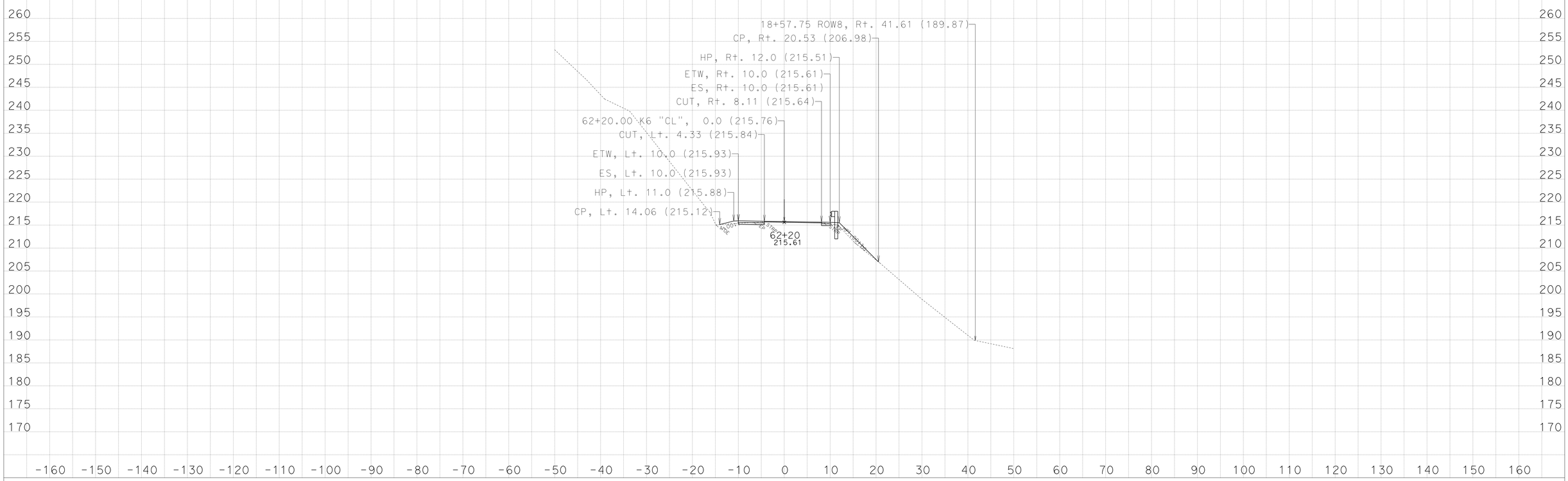
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 10 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

DATE: 3/29/2013

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PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

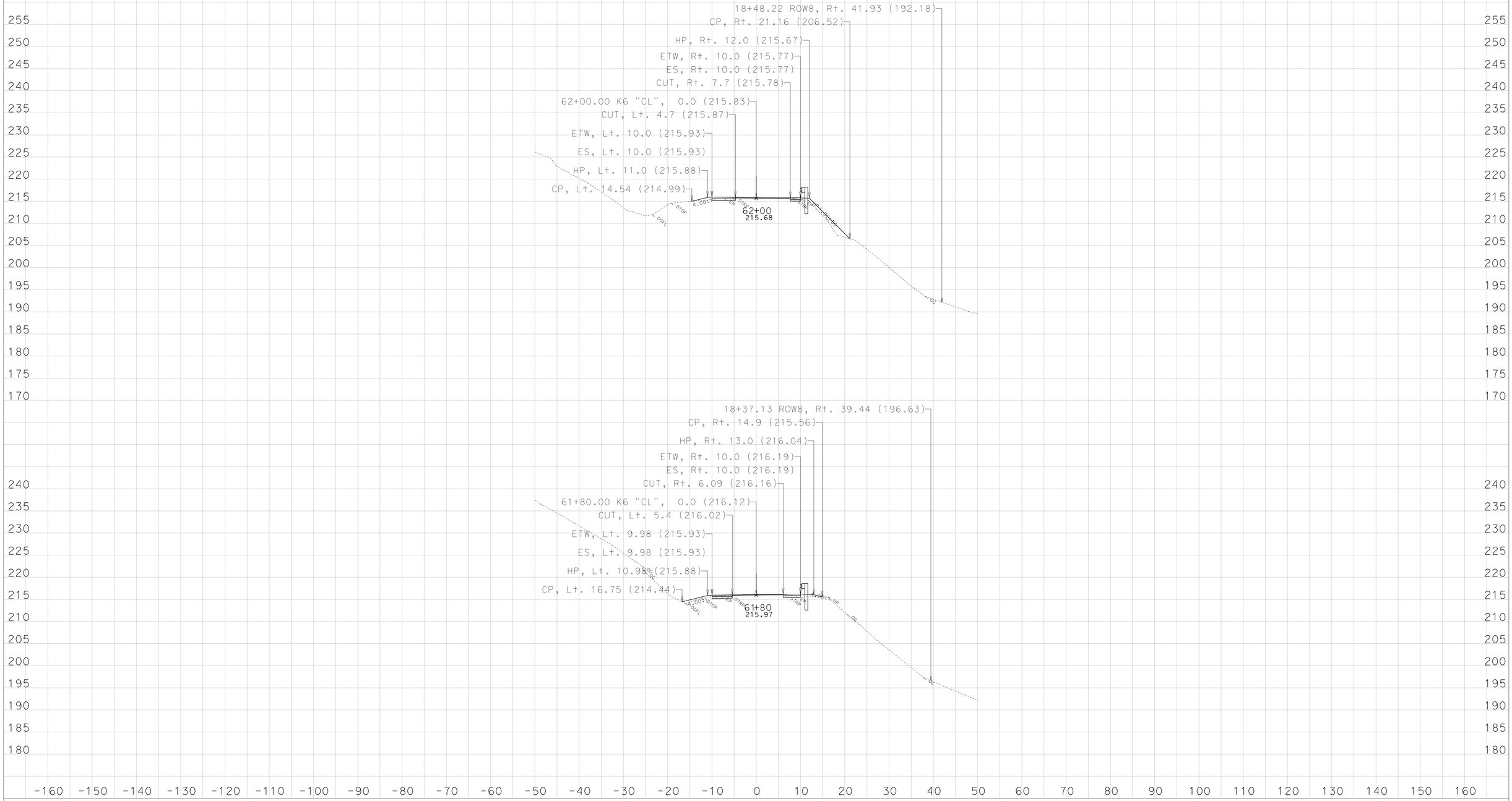
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

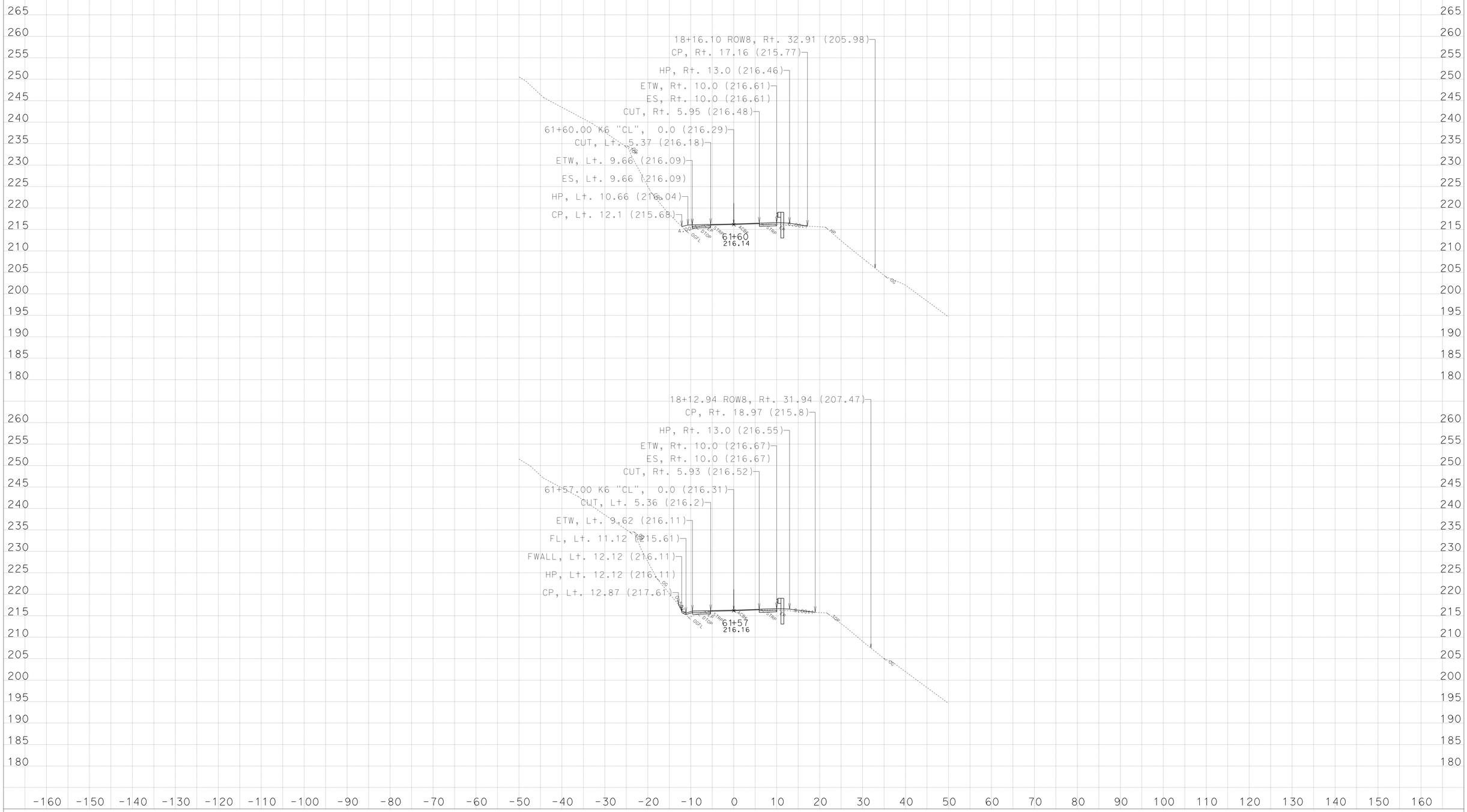
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 8 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

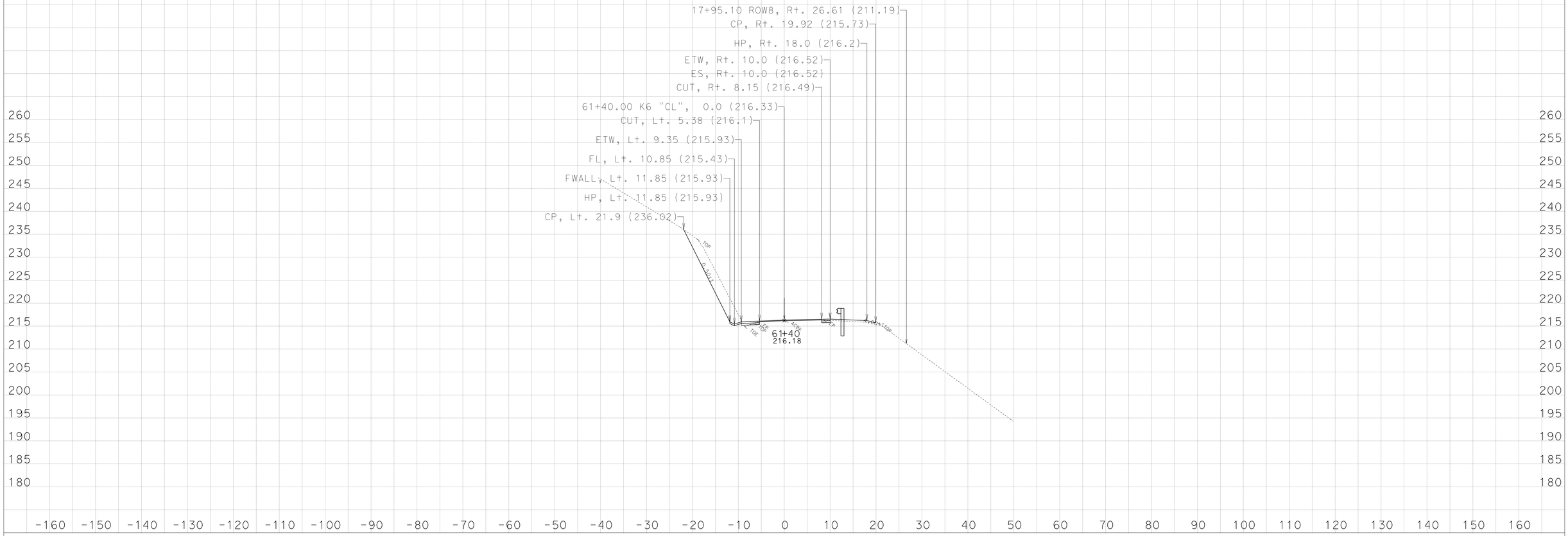
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 7 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

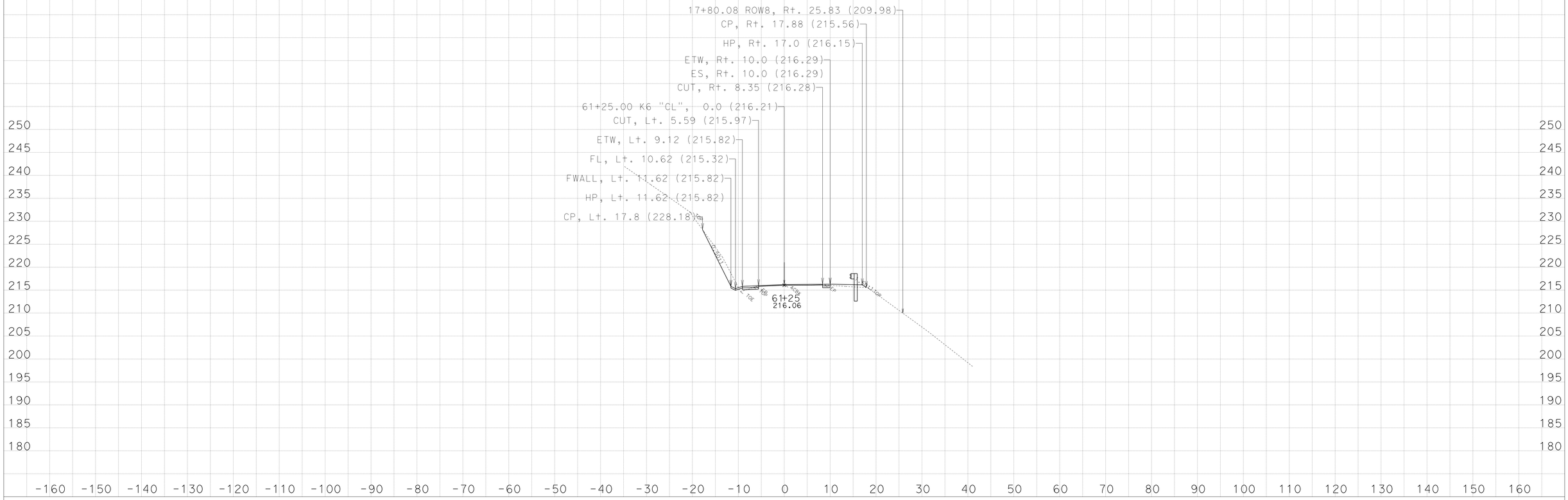
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 6 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

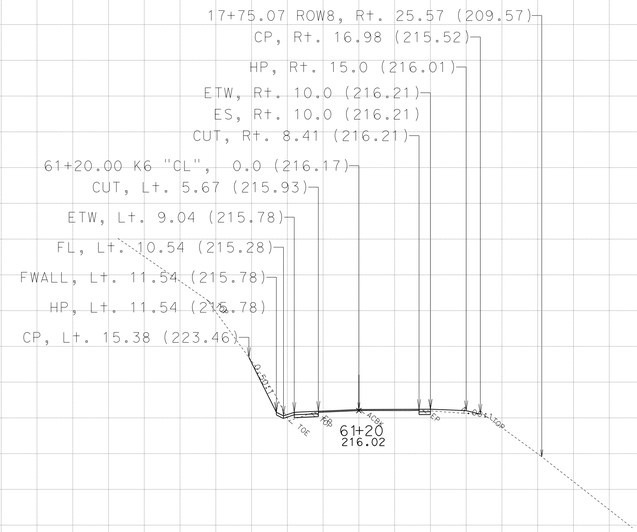
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

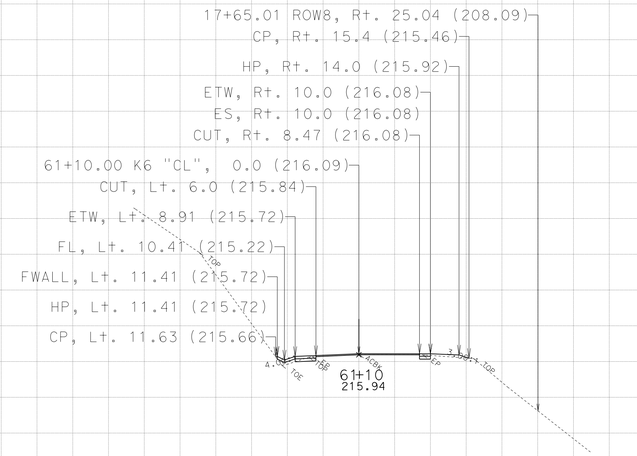
Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 5 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82





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240 235 230 225 220 215 210 205 200 195 190

-160 -150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

CREATED BY: NRDOE, ODN,E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

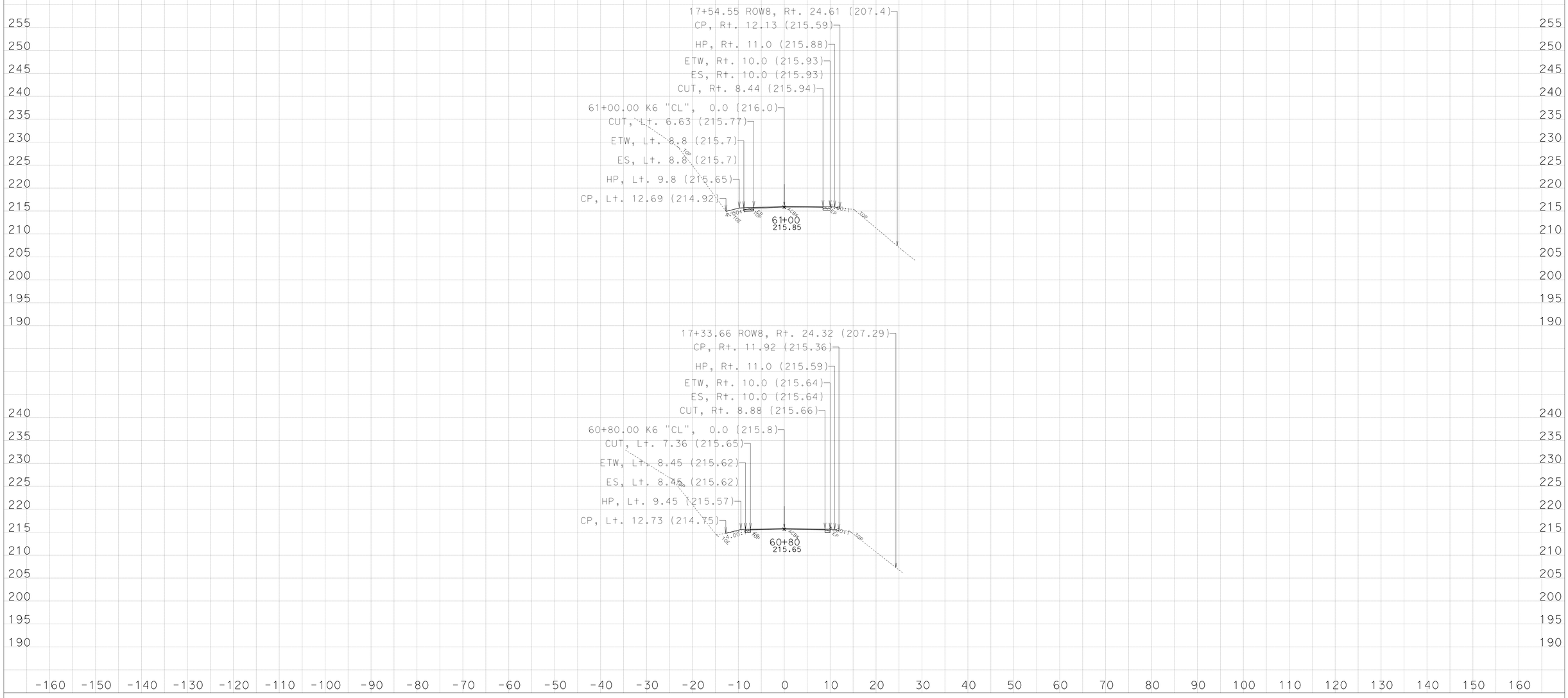
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 4 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

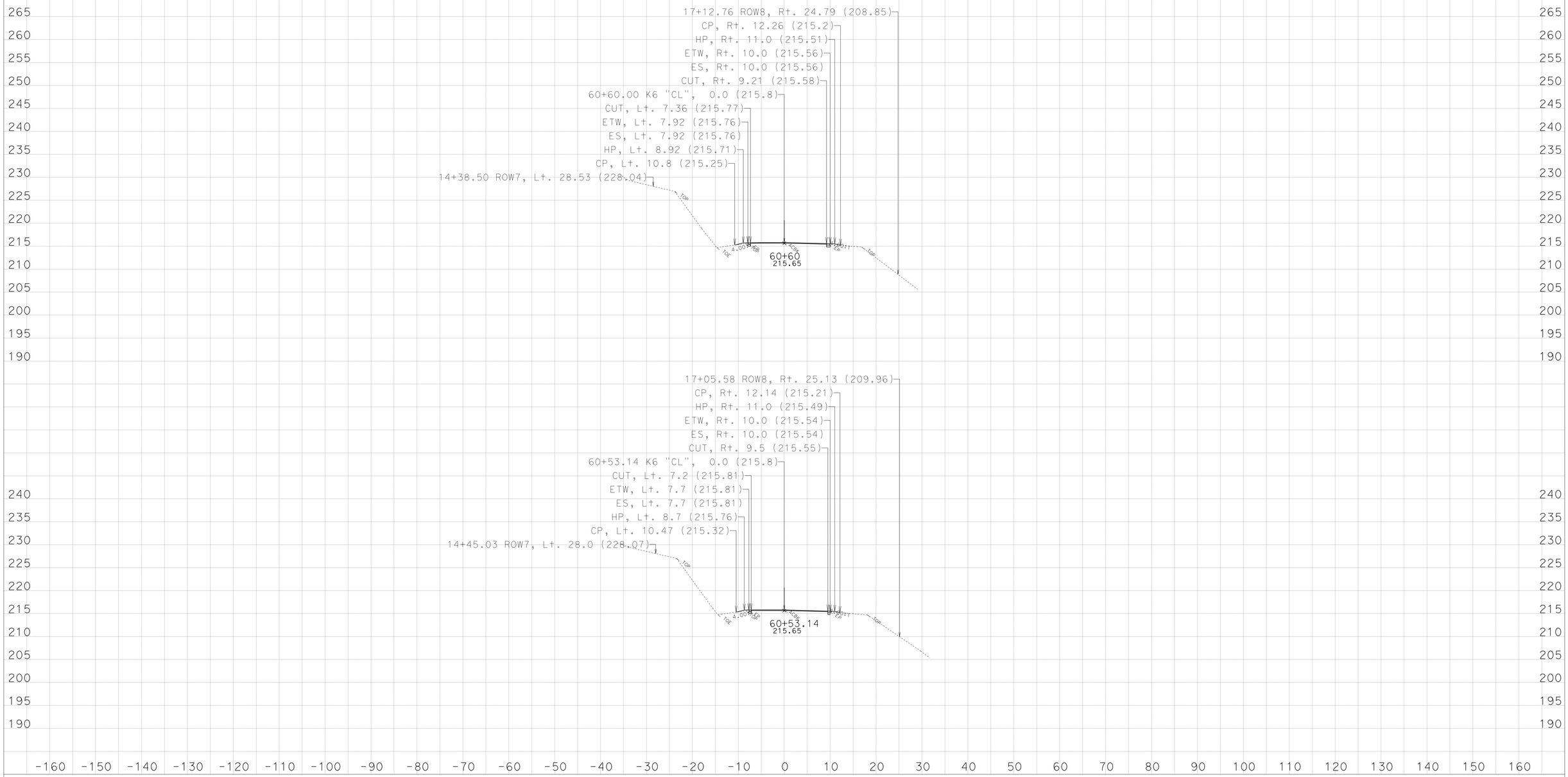
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 3 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

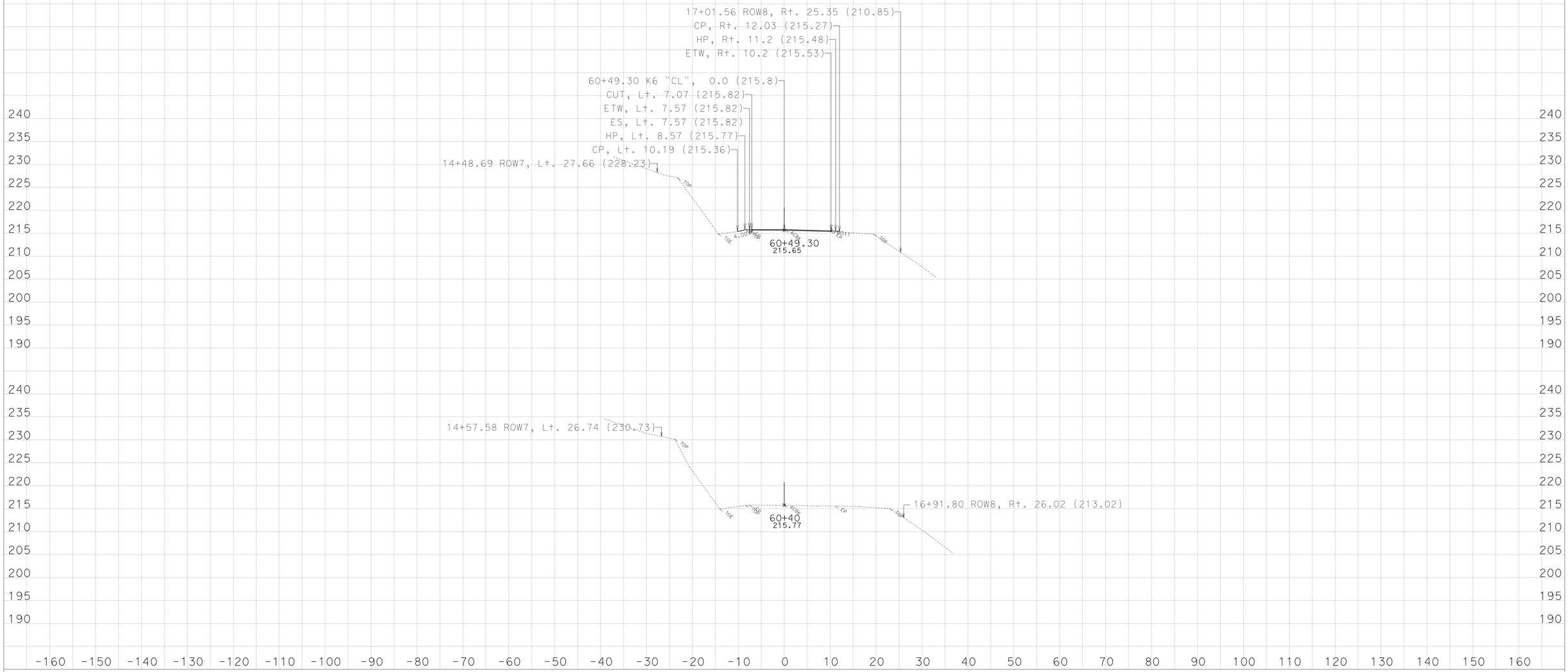
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 2 OF 25

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169, Location 6,
Post Mile: 22.73/22.82



CREATED BY: NRDOE, ODN,E-3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k6finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM: 13.6/23.4

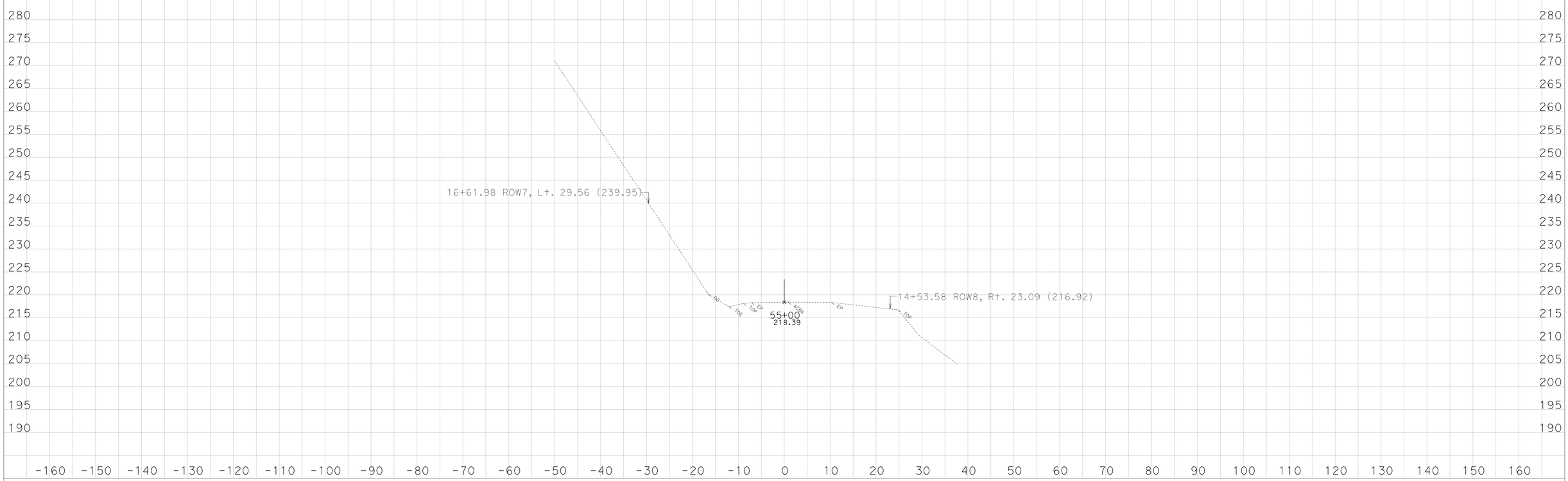
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K6"
DESIGN CROSS SECTIONS
SHEET 1 OF 25

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

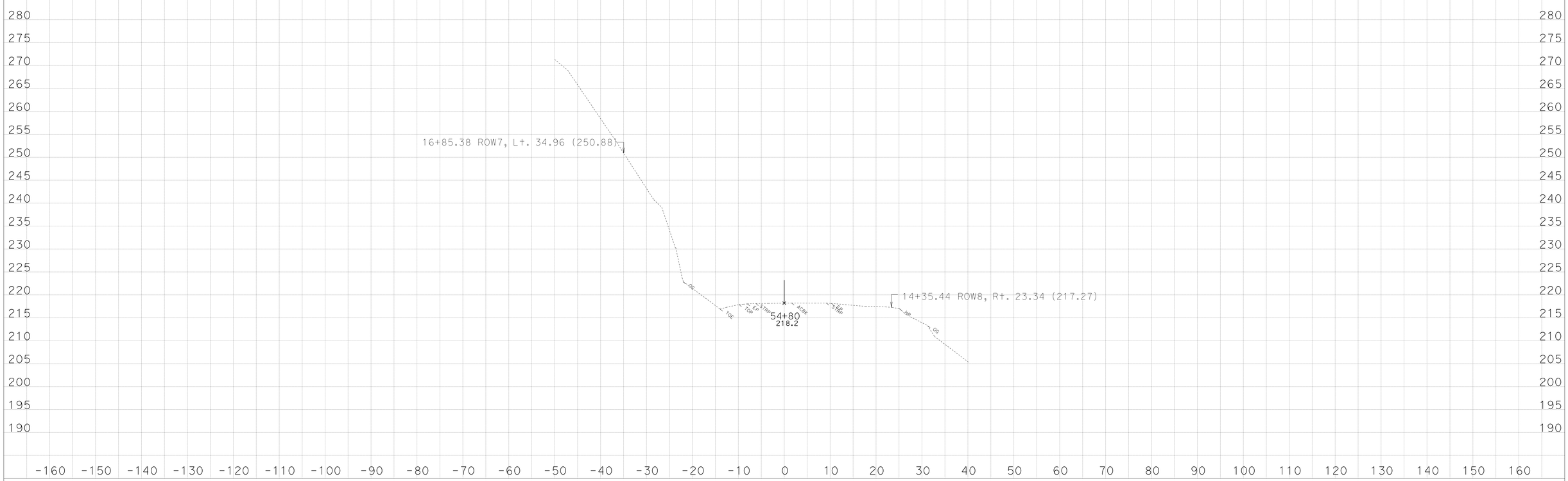
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 28 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219
CONTRACT: EA: 01-450904
DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

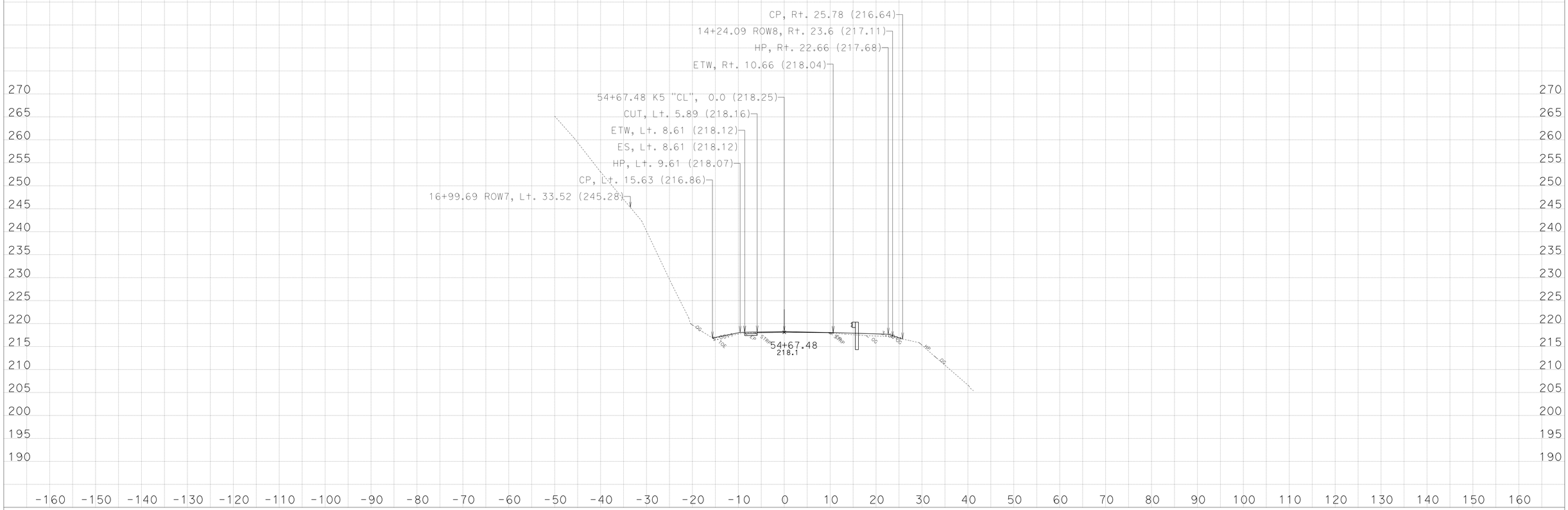
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 27 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

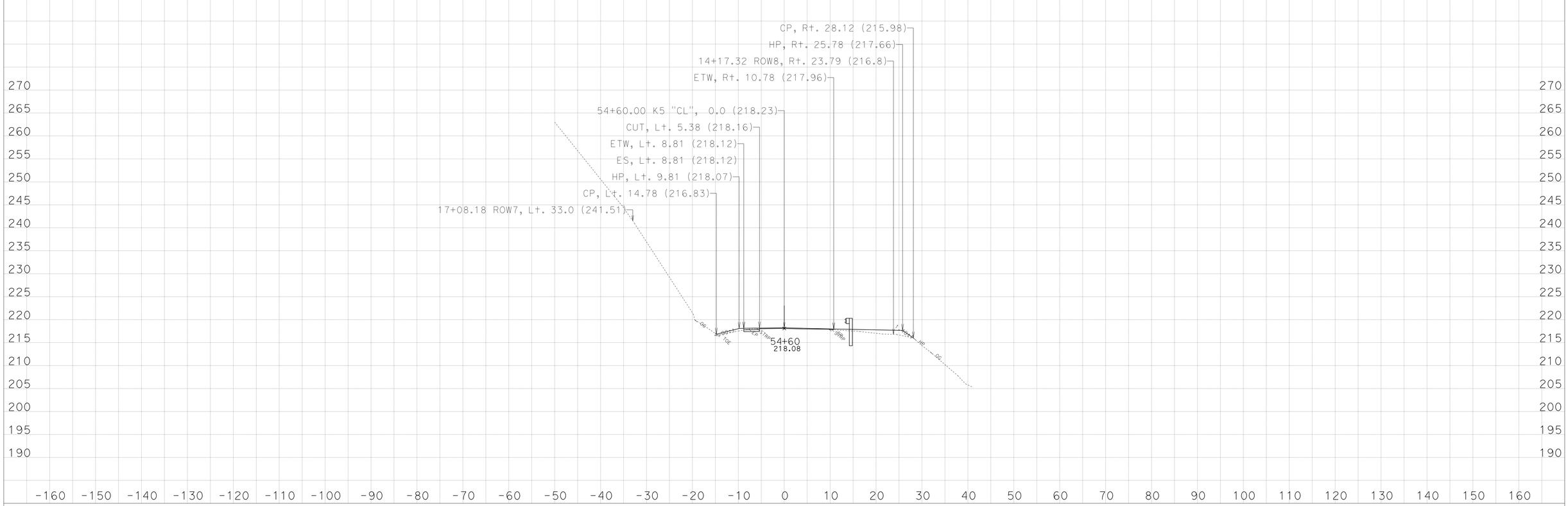
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 26 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

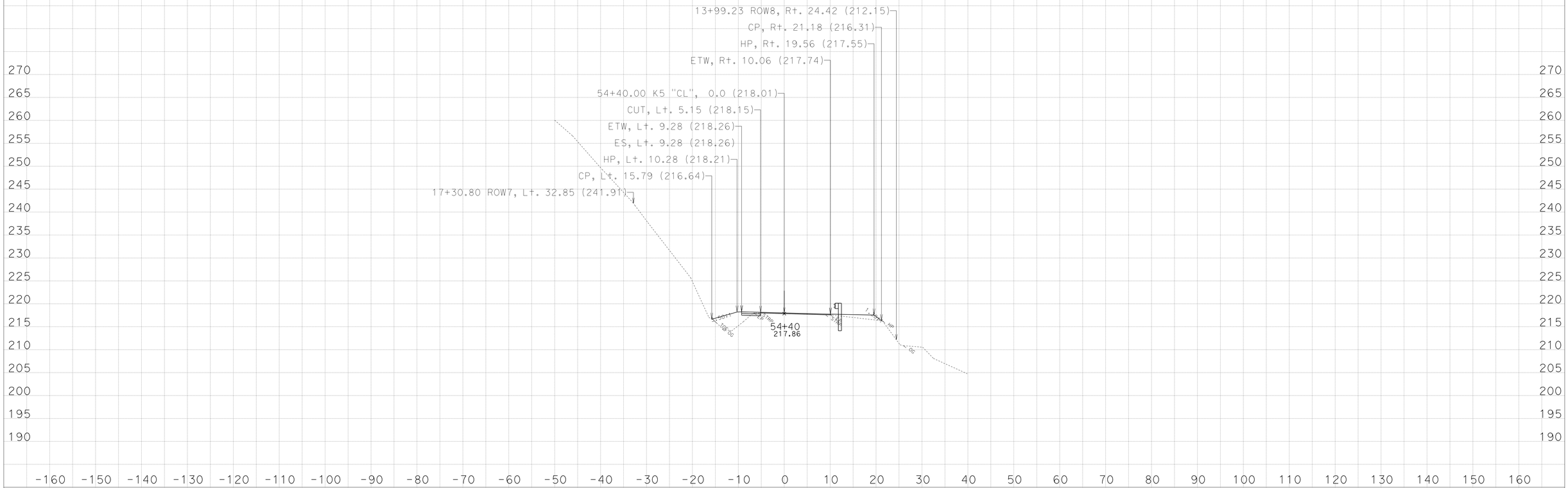
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 25 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

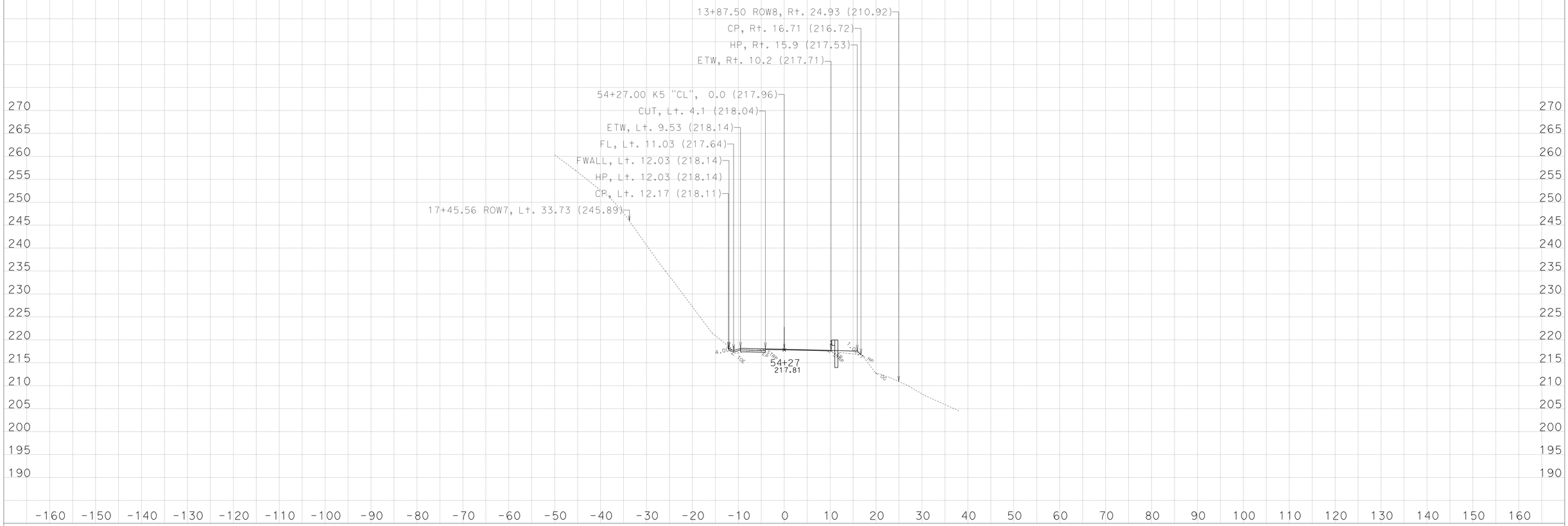
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 24 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

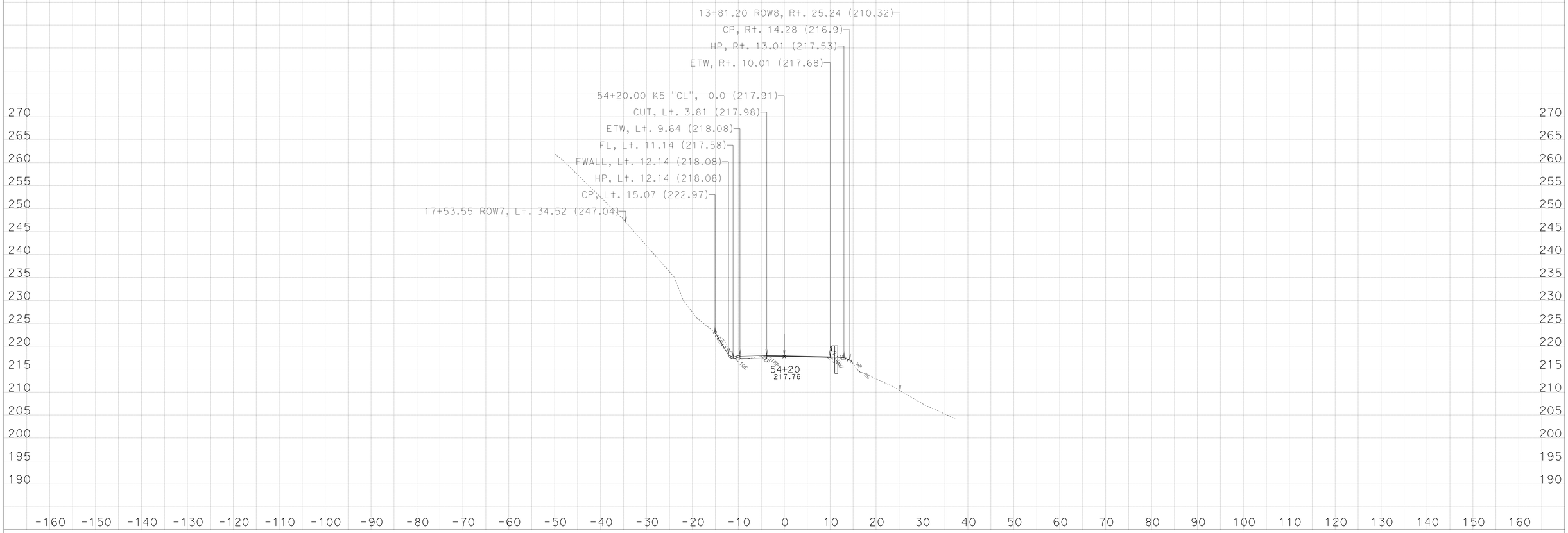
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

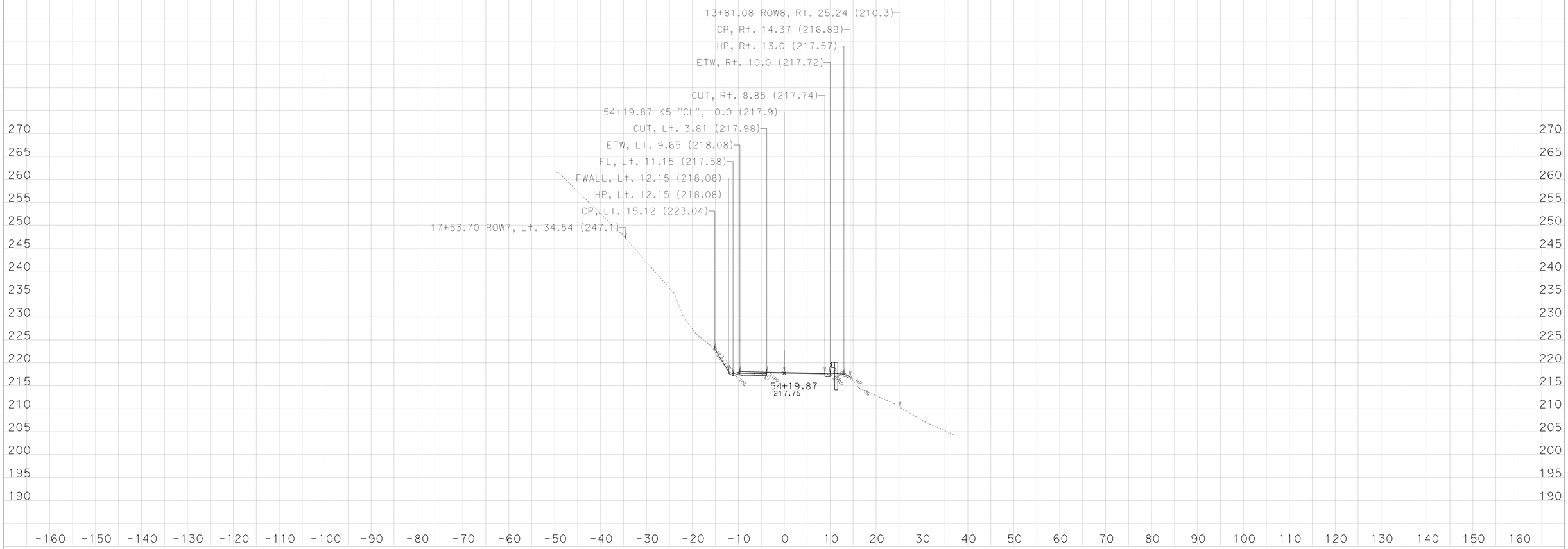
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 22 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

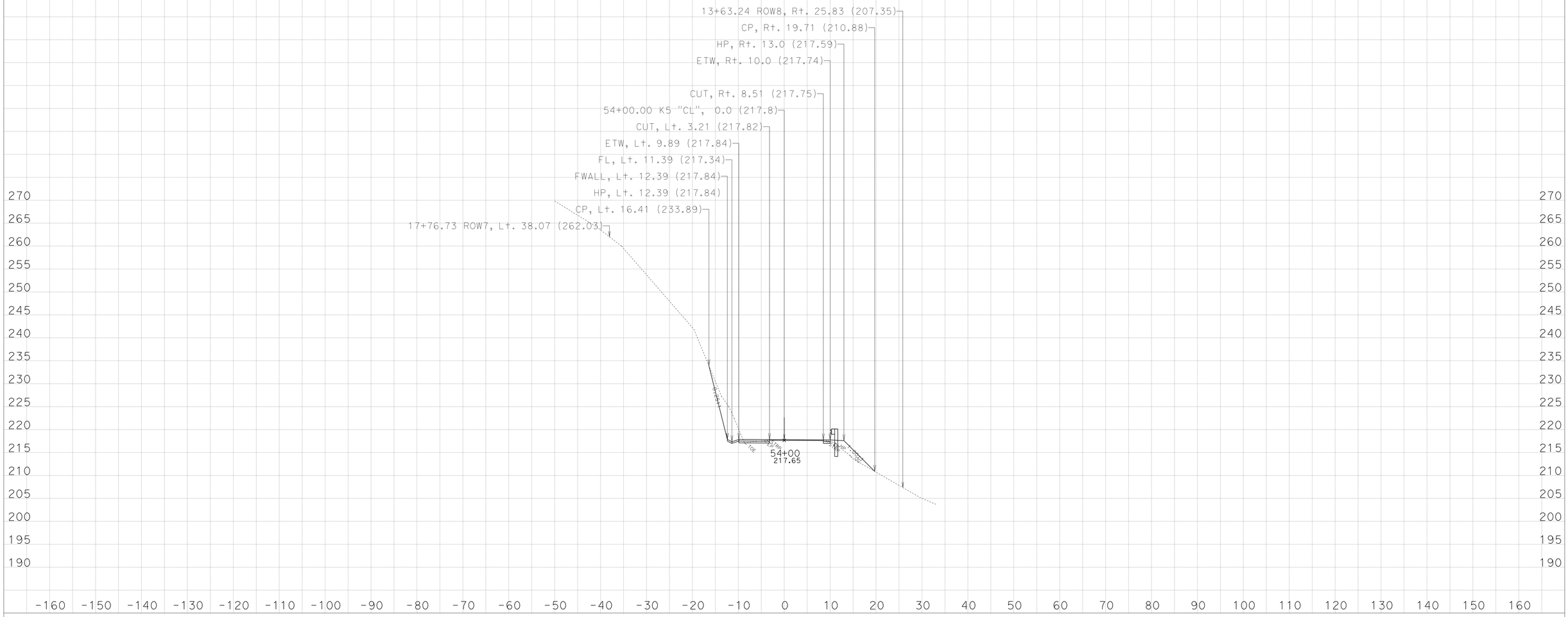
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 21 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

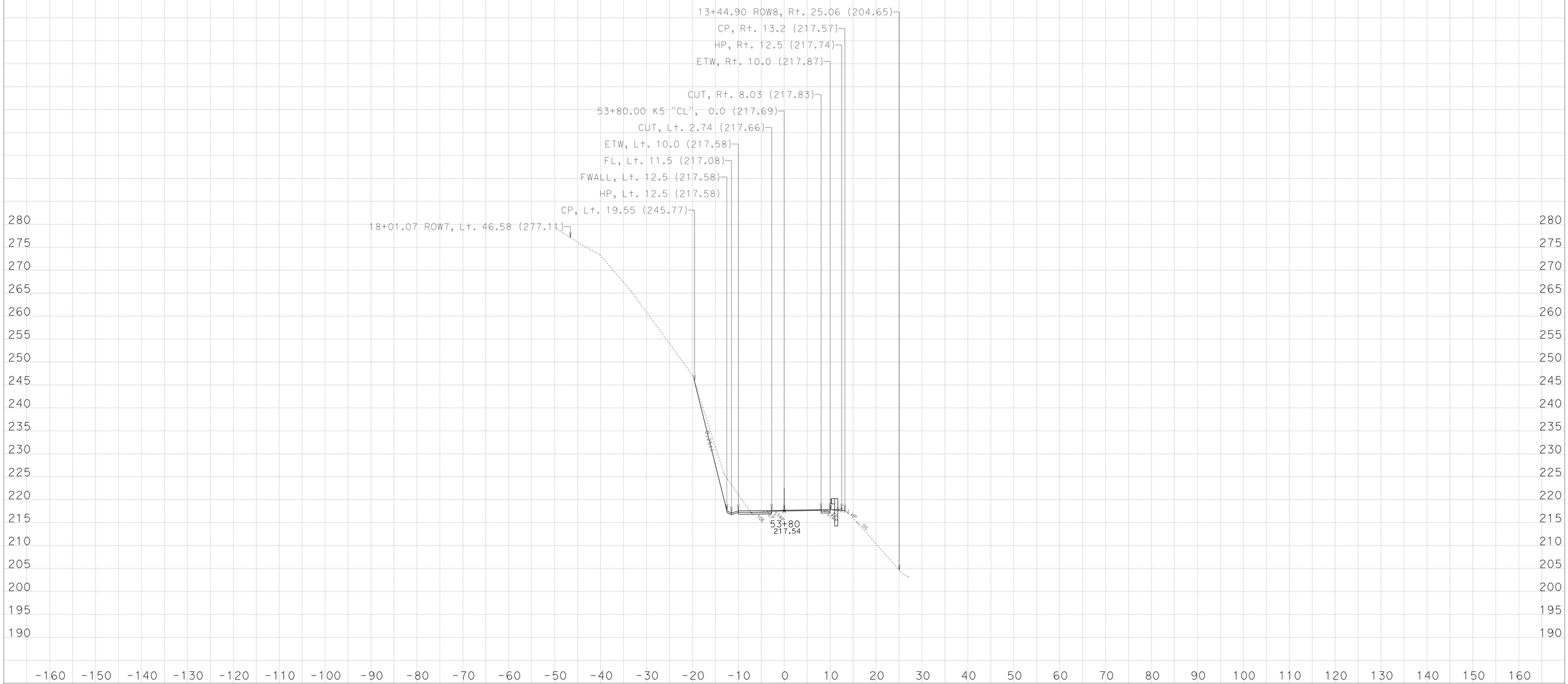
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 20 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219
CONTRACT: EA: 01-450904
DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

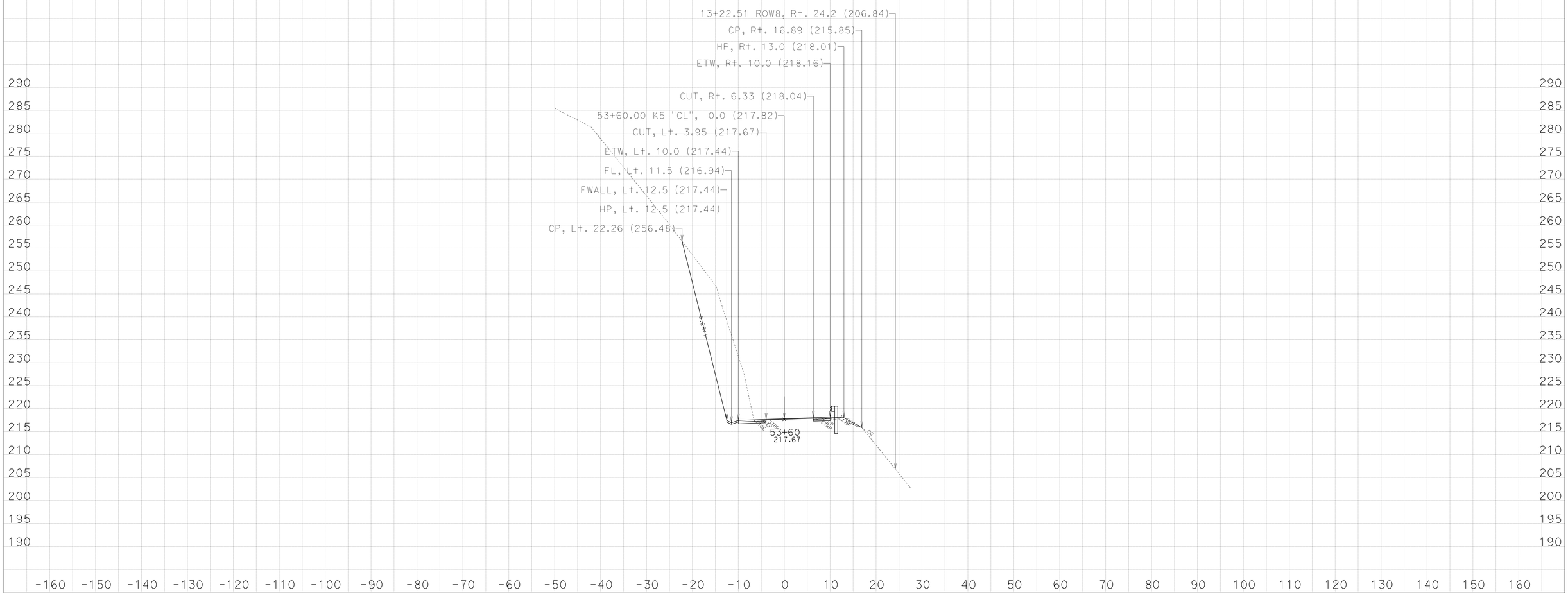
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 19 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219
CONTRACT: EA: 01-450904
DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

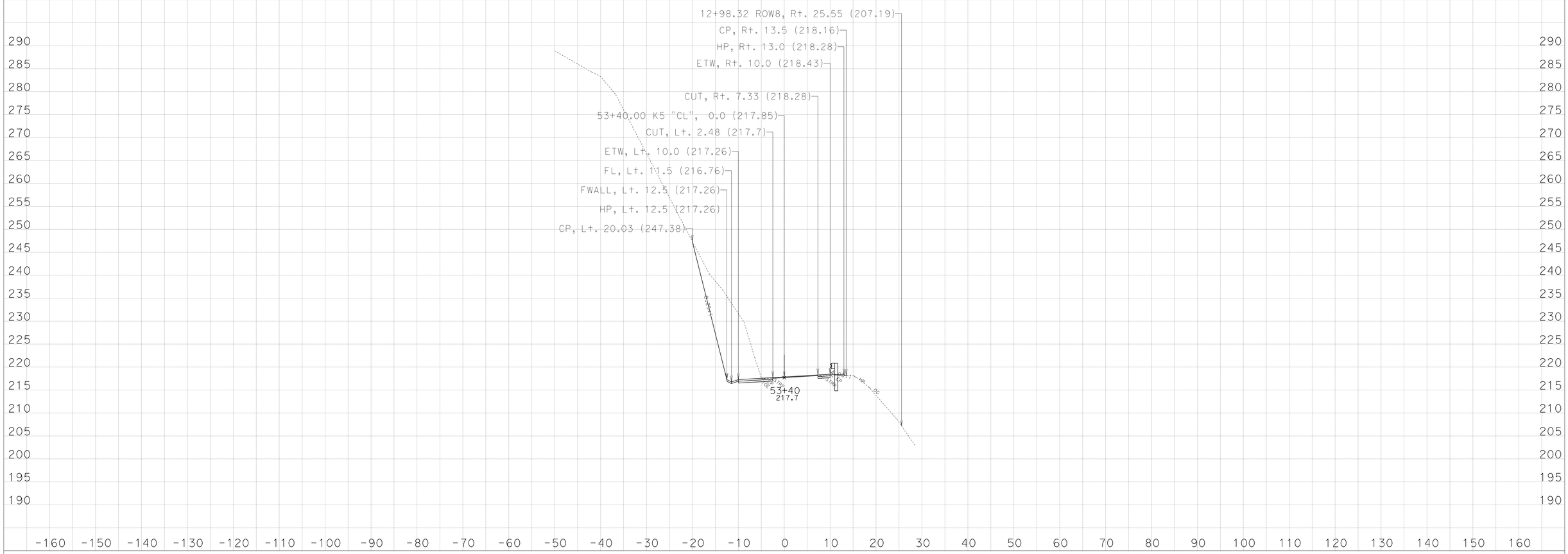
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 18 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

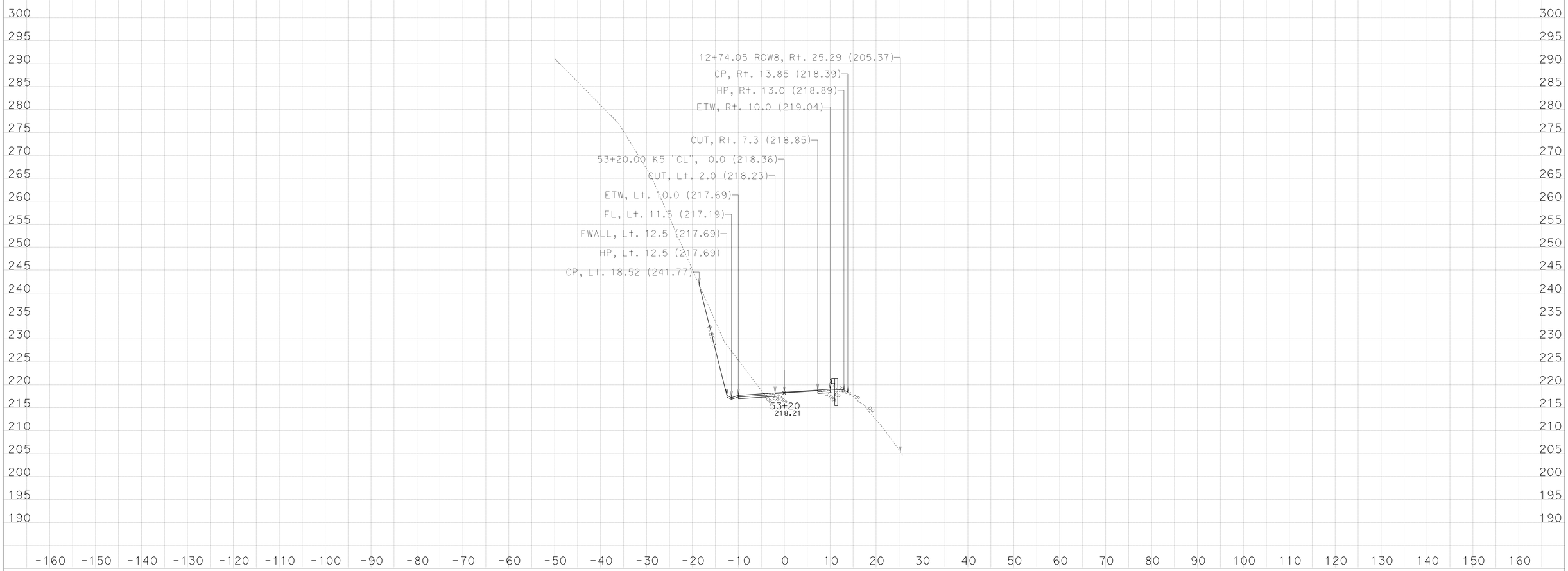
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 17 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

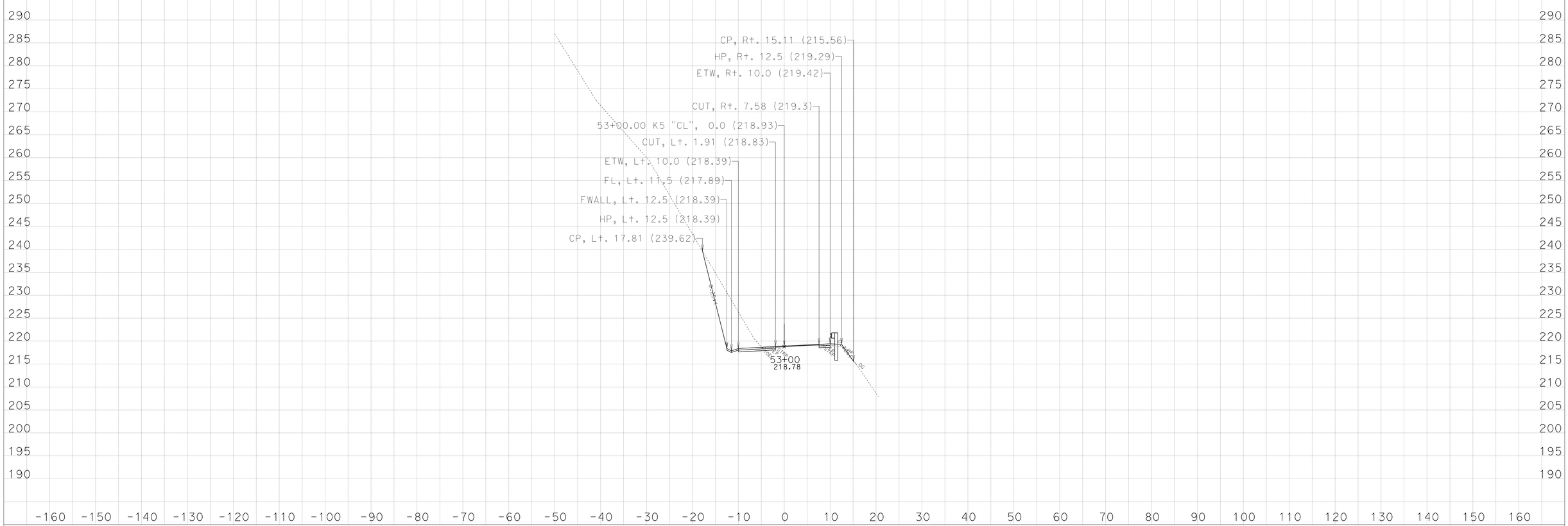
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 16 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

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PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

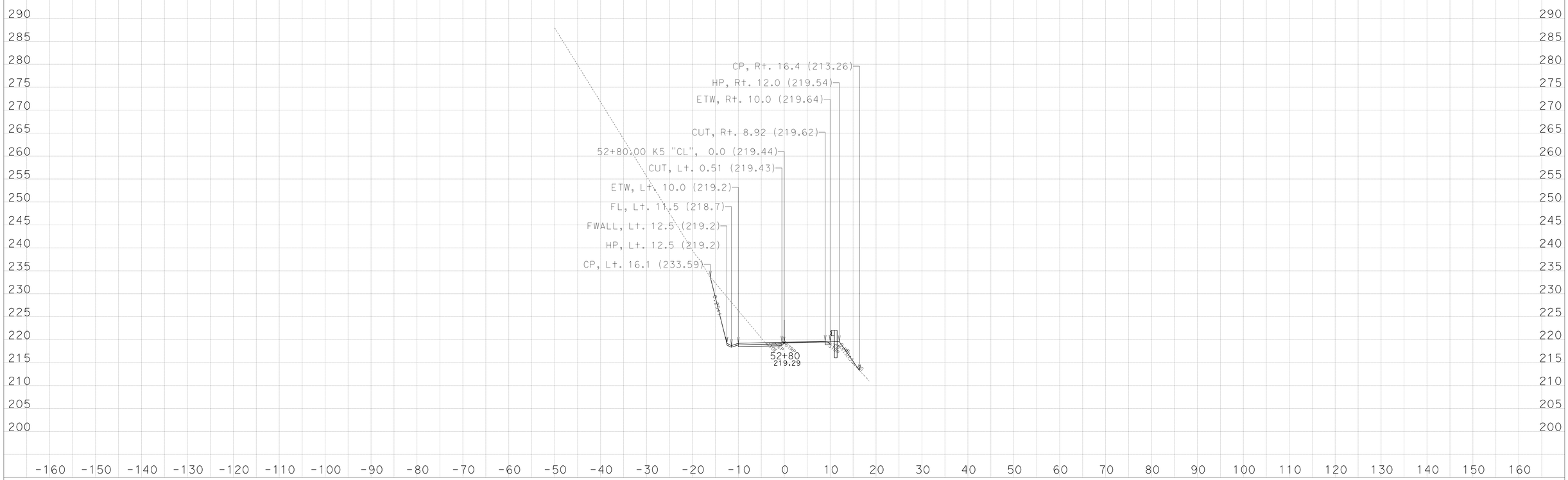
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 15 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

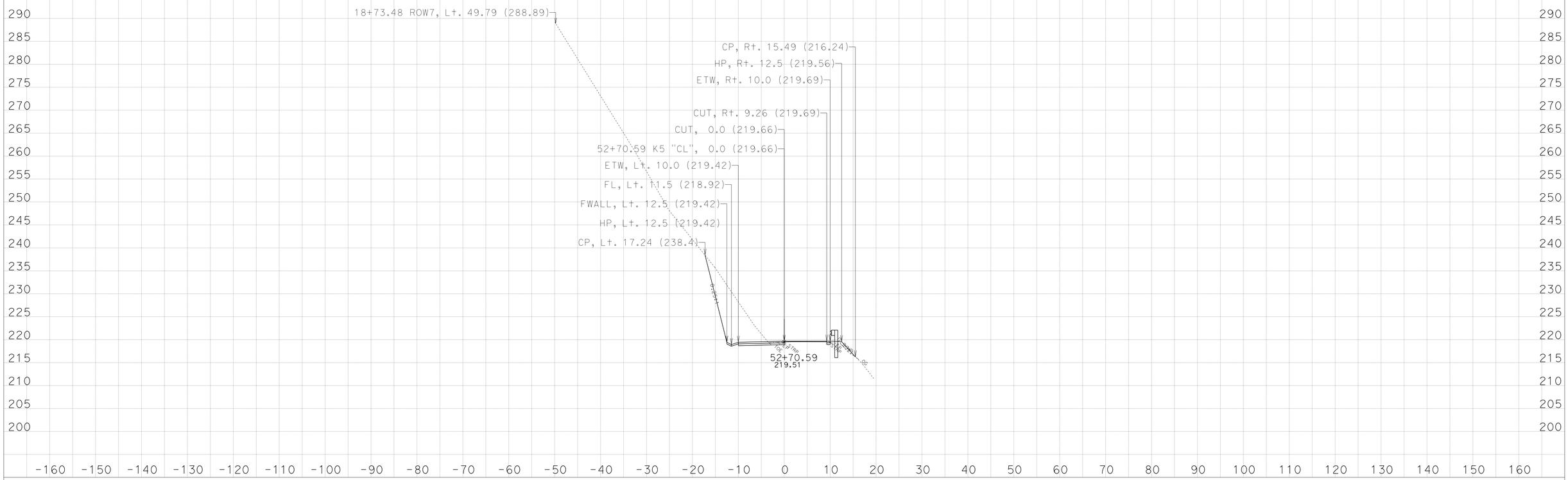
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

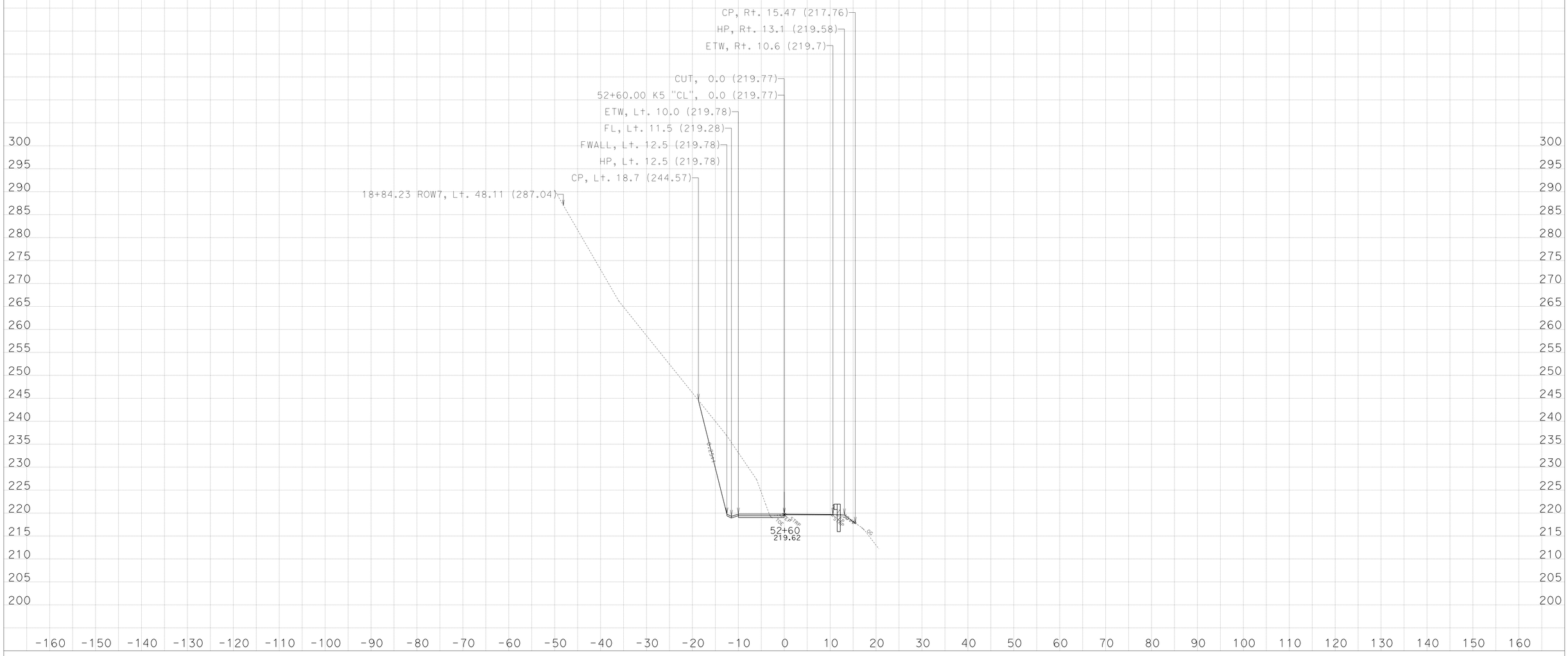
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 13 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219
CONTRACT: EA: 01-450904
DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

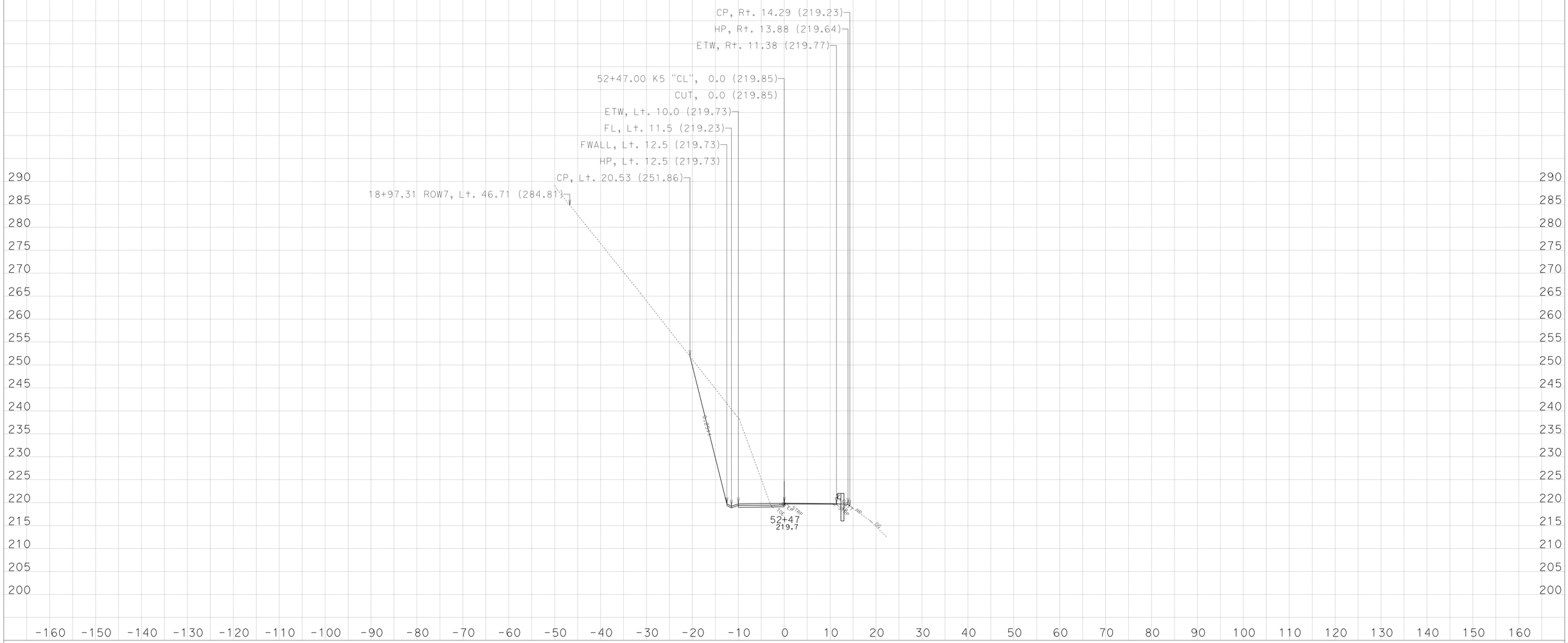
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 12 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219
CONTRACT: EA: 01-450904
DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

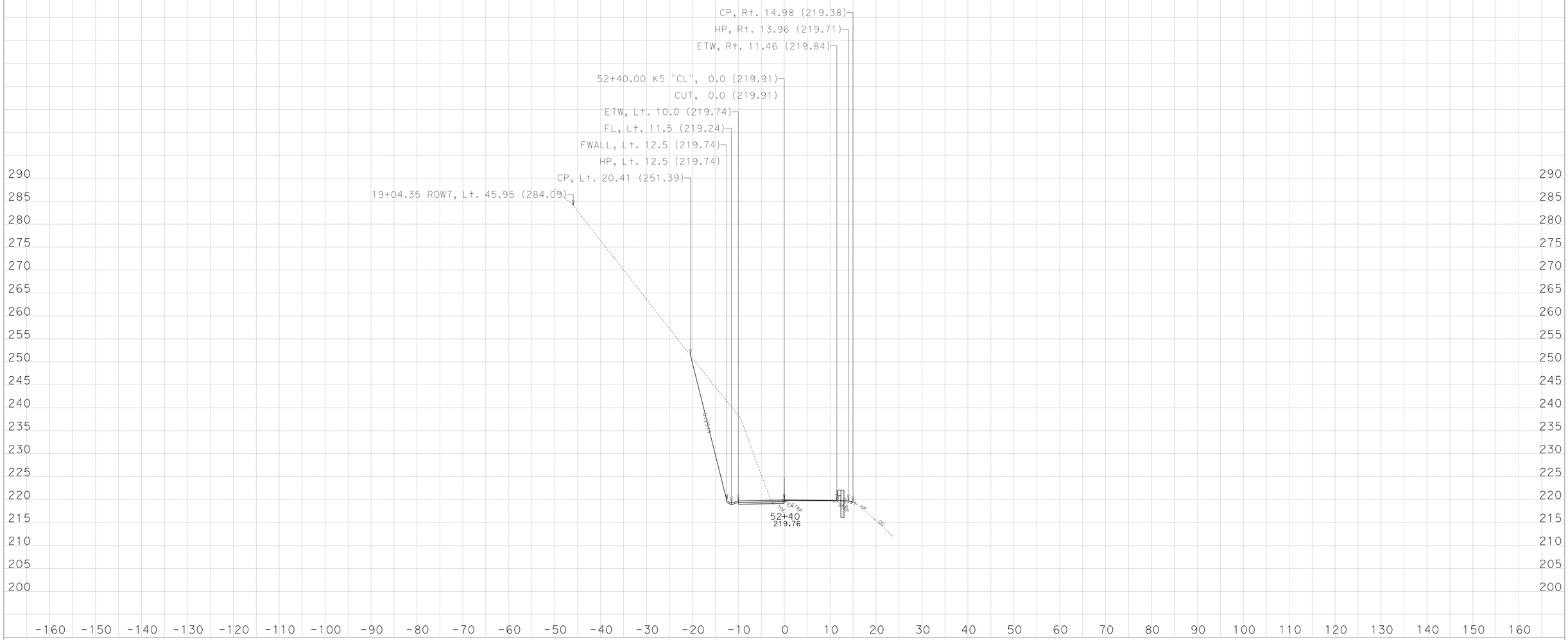
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 11 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219
CONTRACT: EA: 01-450904
DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

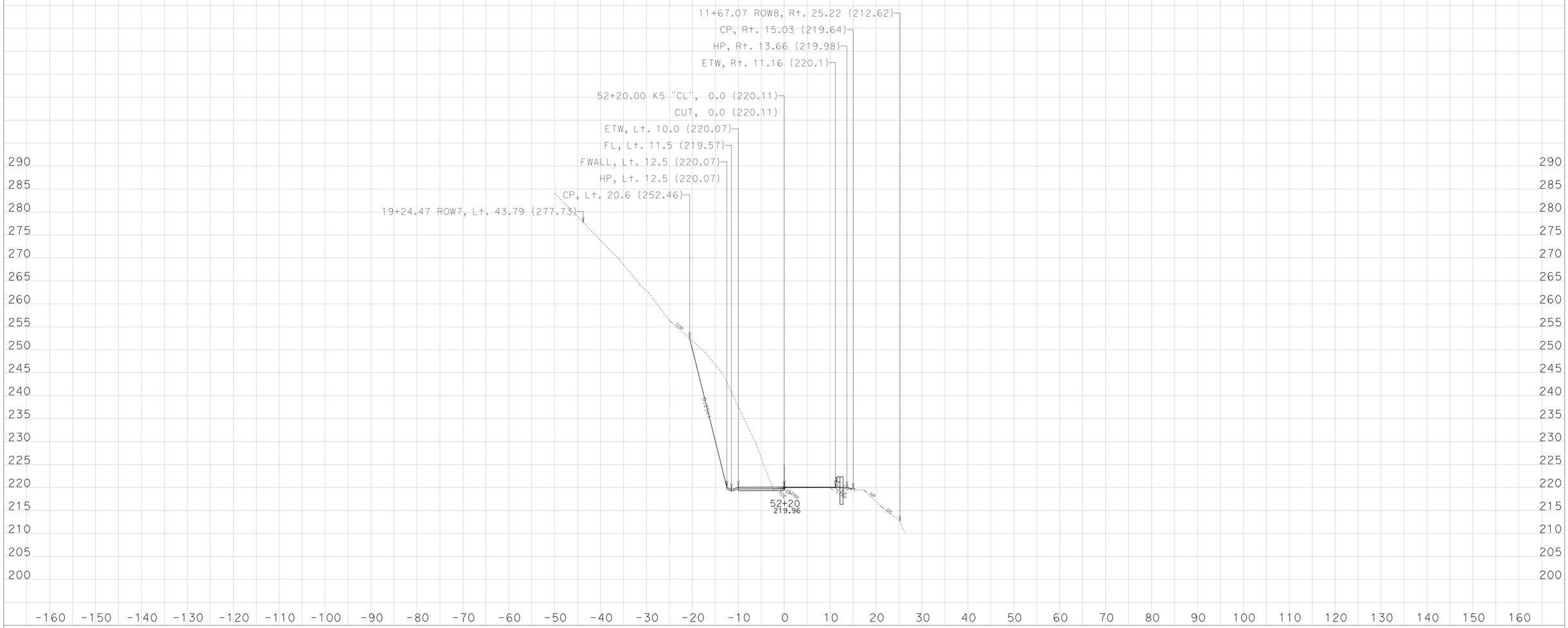
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 10 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

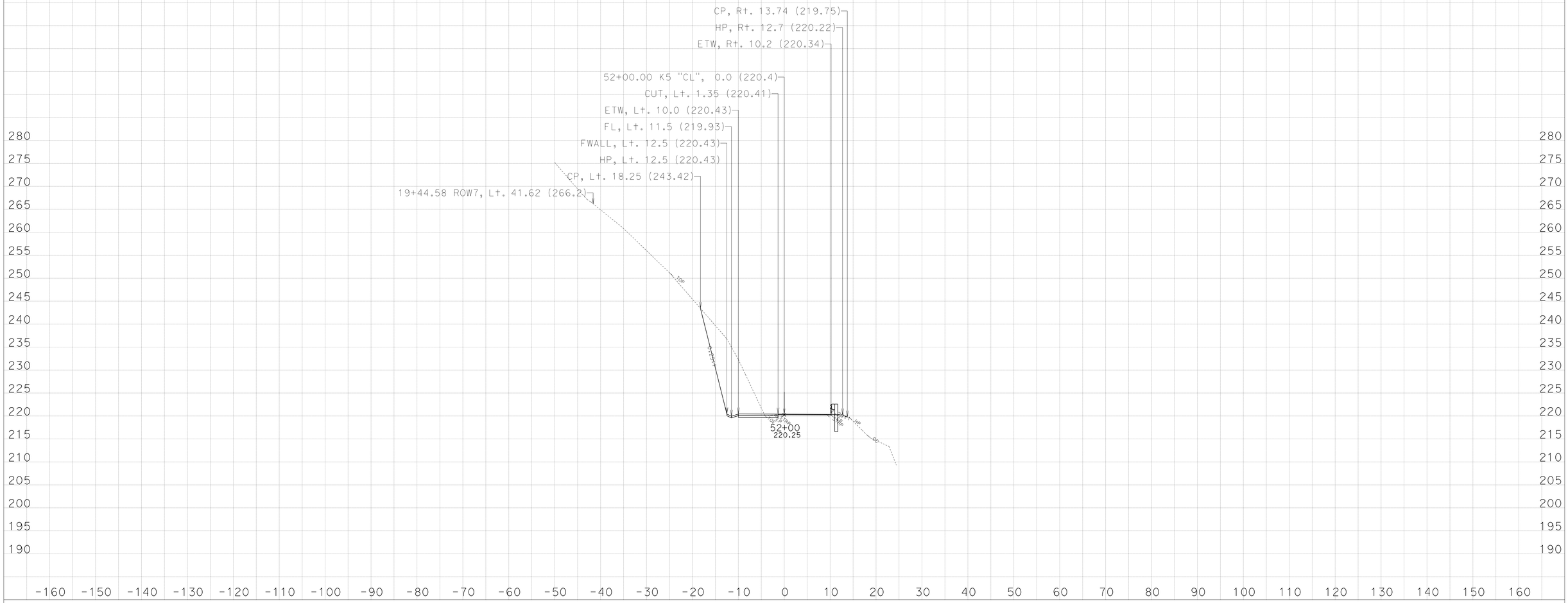
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 9 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219
CONTRACT: EA: 01-450904
DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

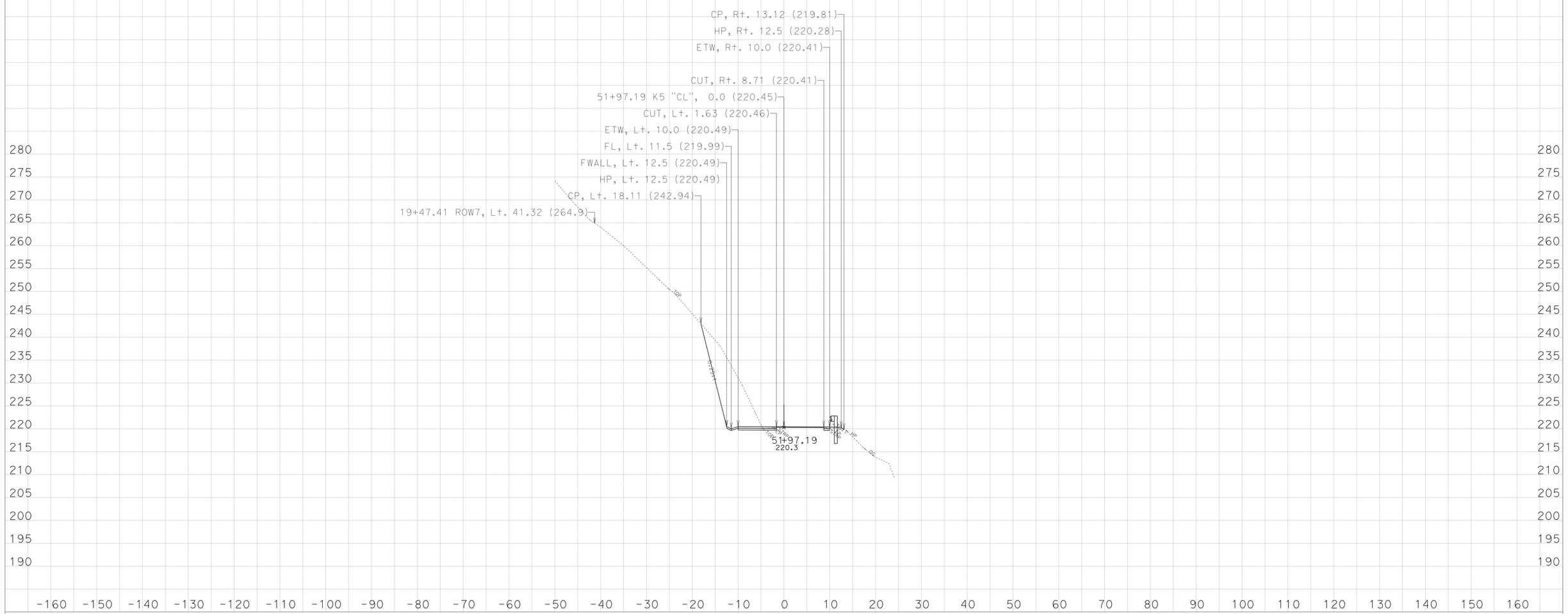
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 8 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219
CONTRACT: EA: 01-450904
DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

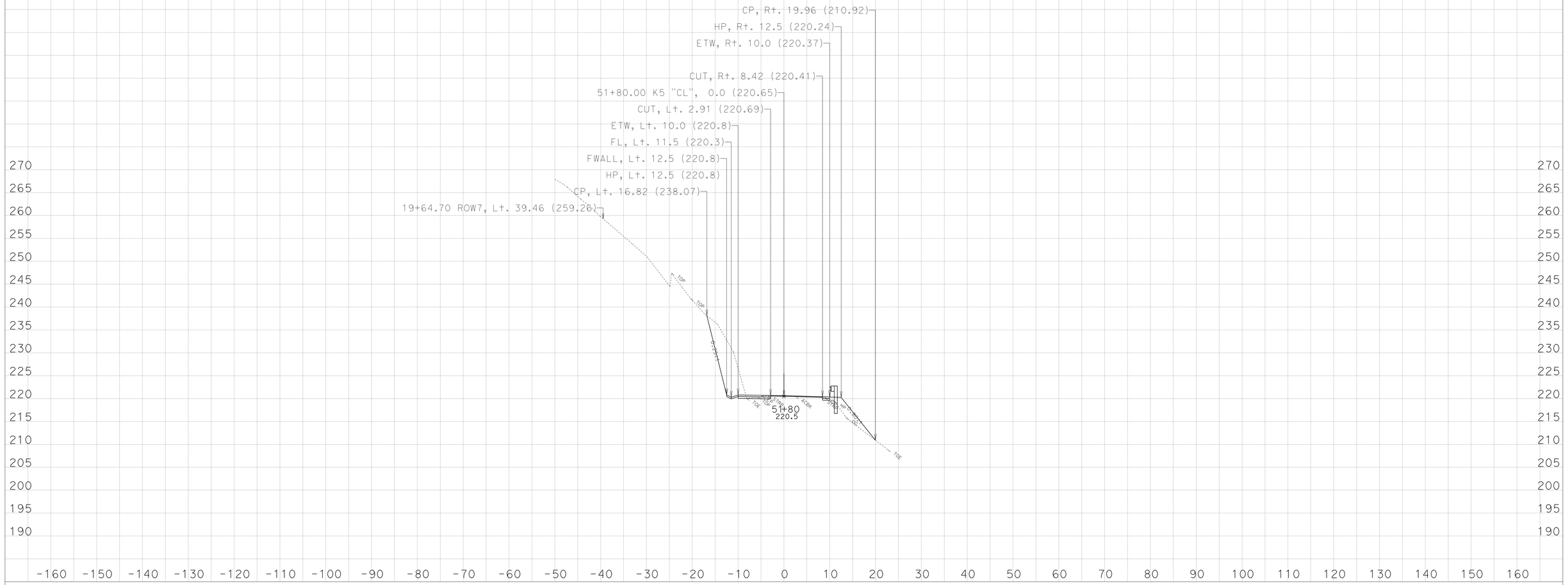
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 7 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219
CONTRACT: EA: 01-450904
DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

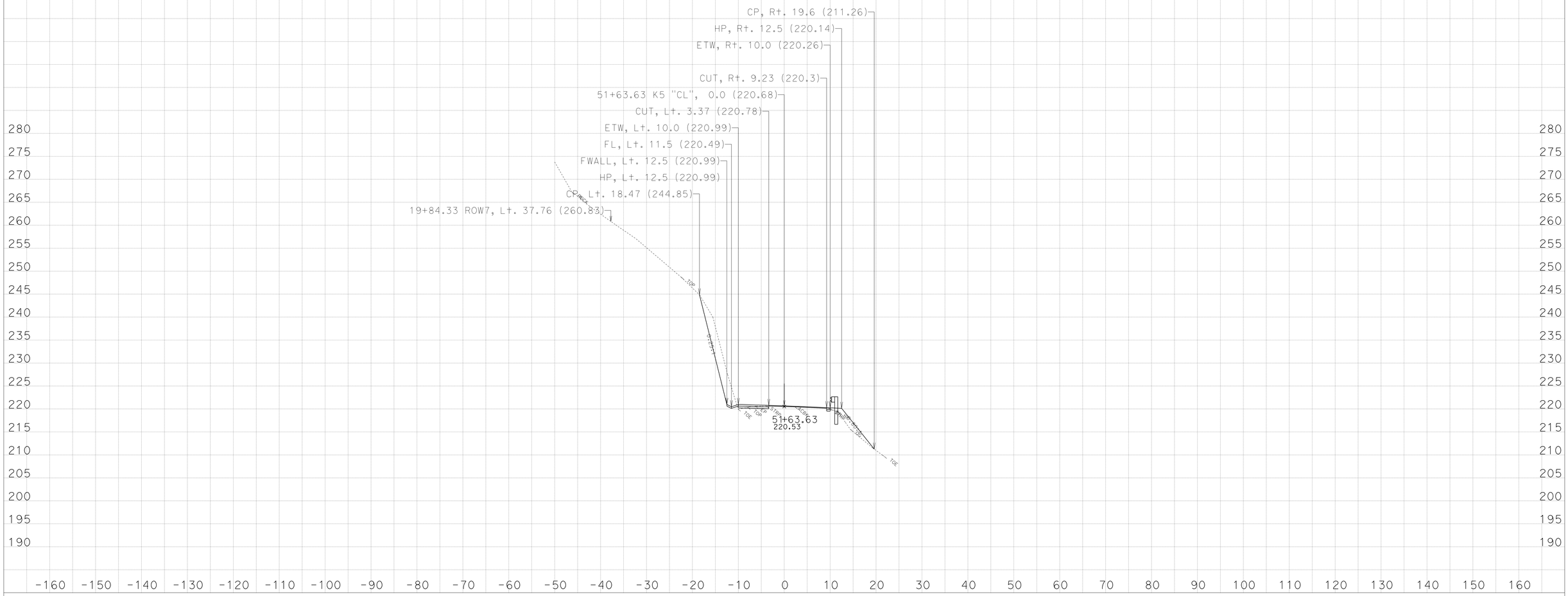
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 6 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 5 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71

CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"

DESIGN CROSS SECTIONS

SHEET 4 OF 28

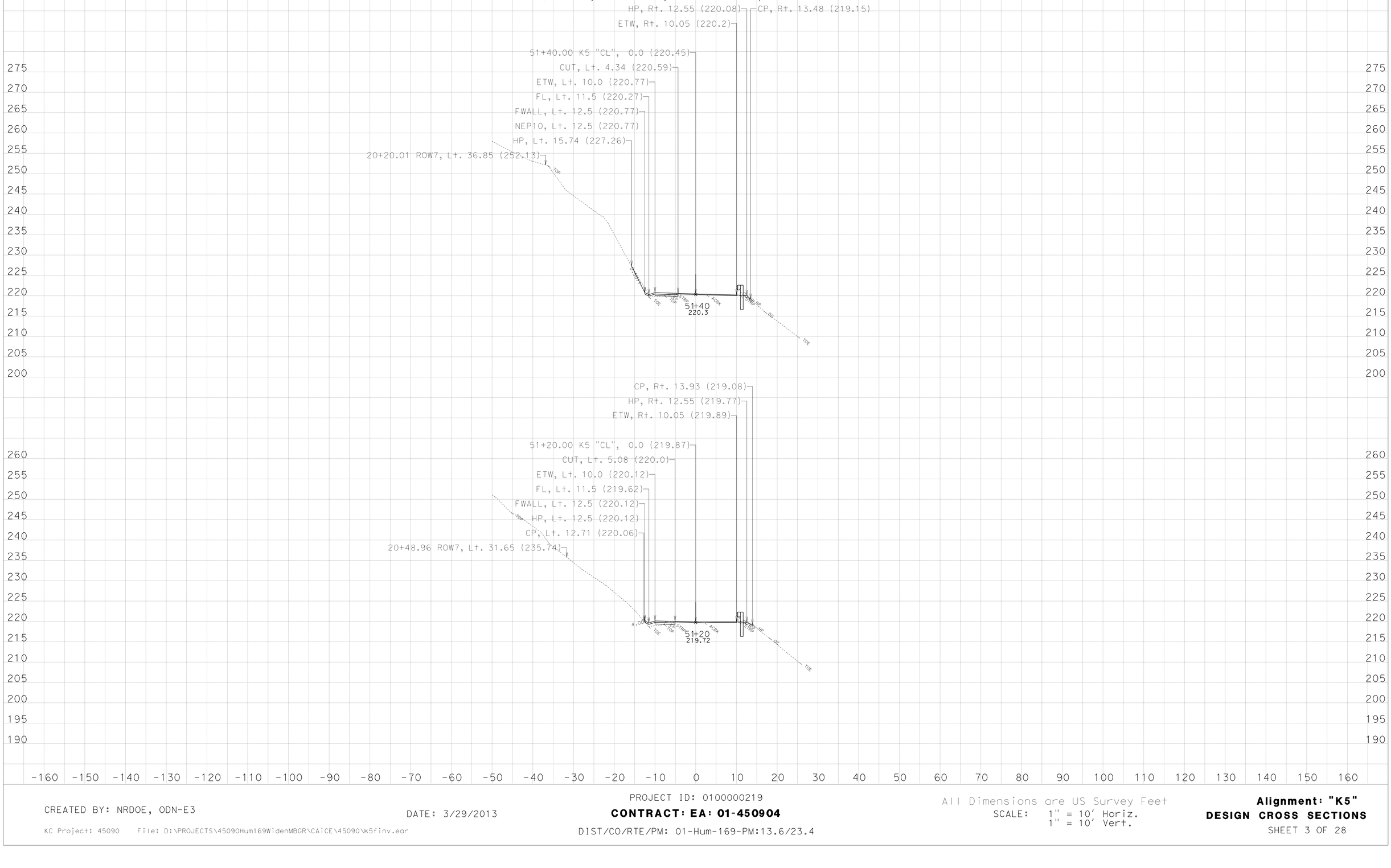
KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

For Earthwork Development Only

Safety Improvement

(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

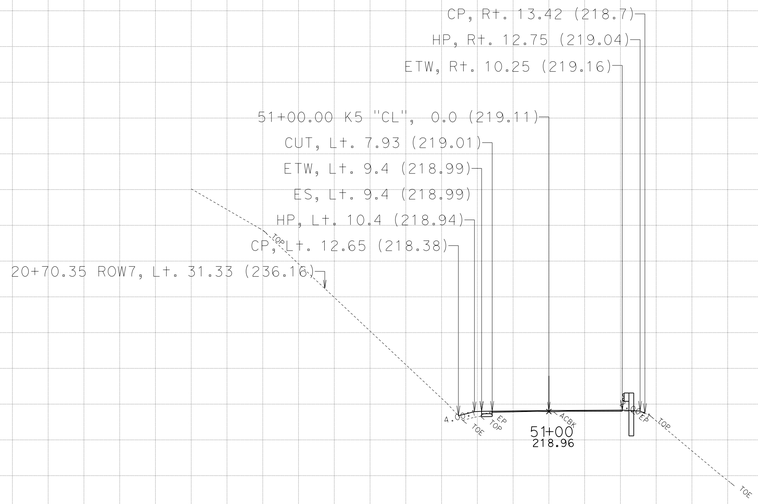
Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 3 OF 28

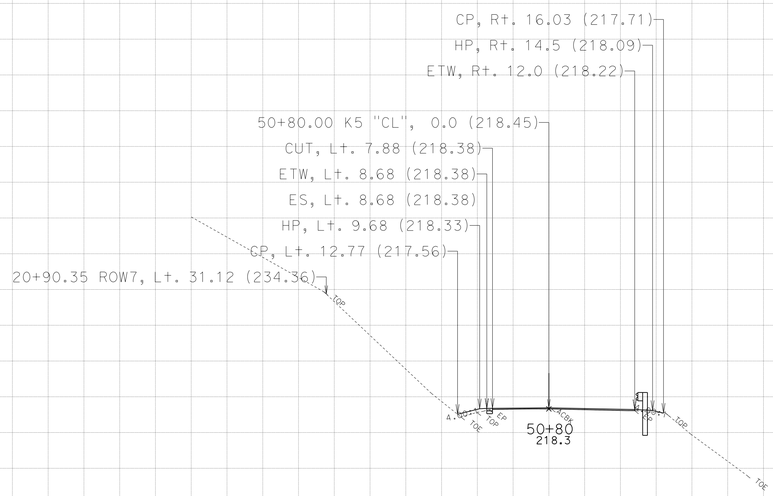
For Earthwork Development Only

Safety Improvement

(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71





CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"

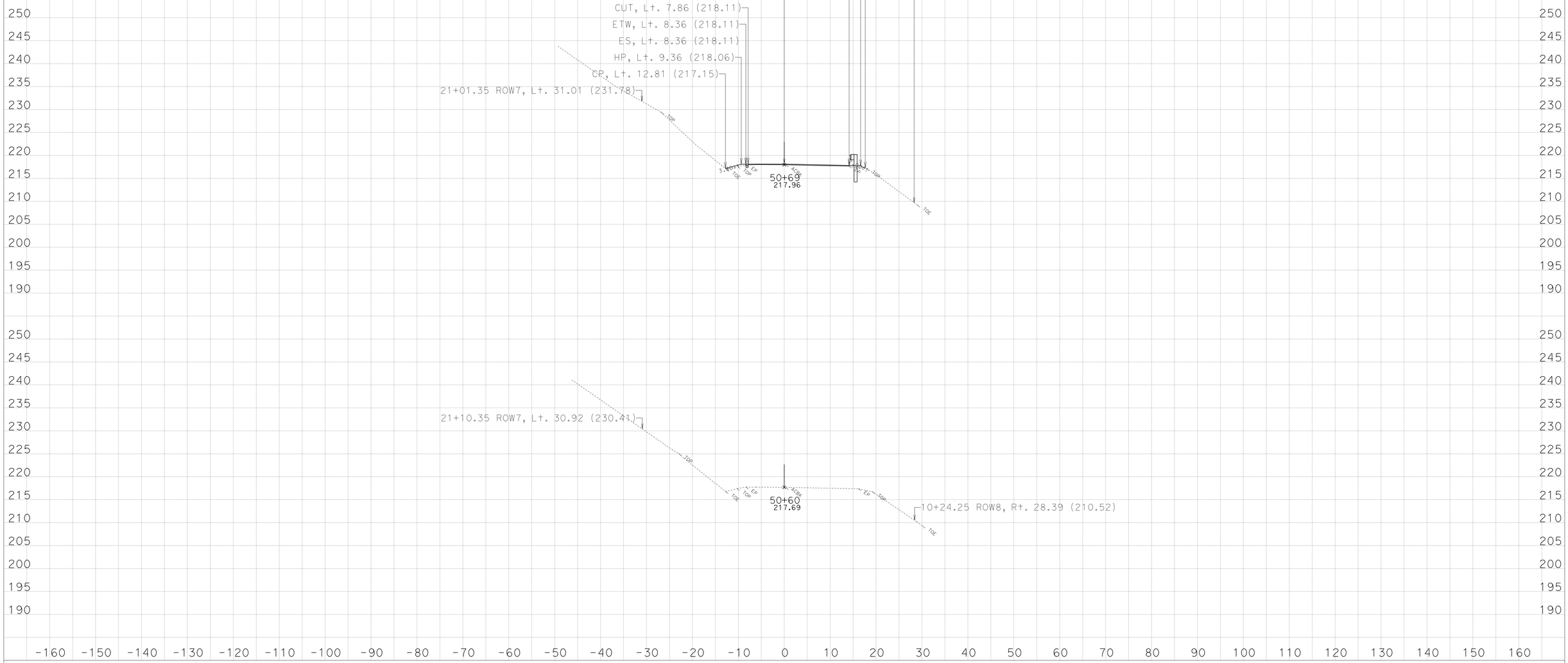
DESIGN CROSS SECTIONS

SHEET 2 OF 28

For Earthwork Development Only

Safety Improvement
(Widen, V-Ditch, Standard/Special MBGR)

Route 169- Location 5,
Post Mile: 22.60/22.71



CREATED BY: NRDOE, ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k5finv.ear

PROJECT ID: 0100000219
CONTRACT: EA: 01-450904
DIST/CO/RTE/PM: 01-Hum-169-PM:13.6/23.4

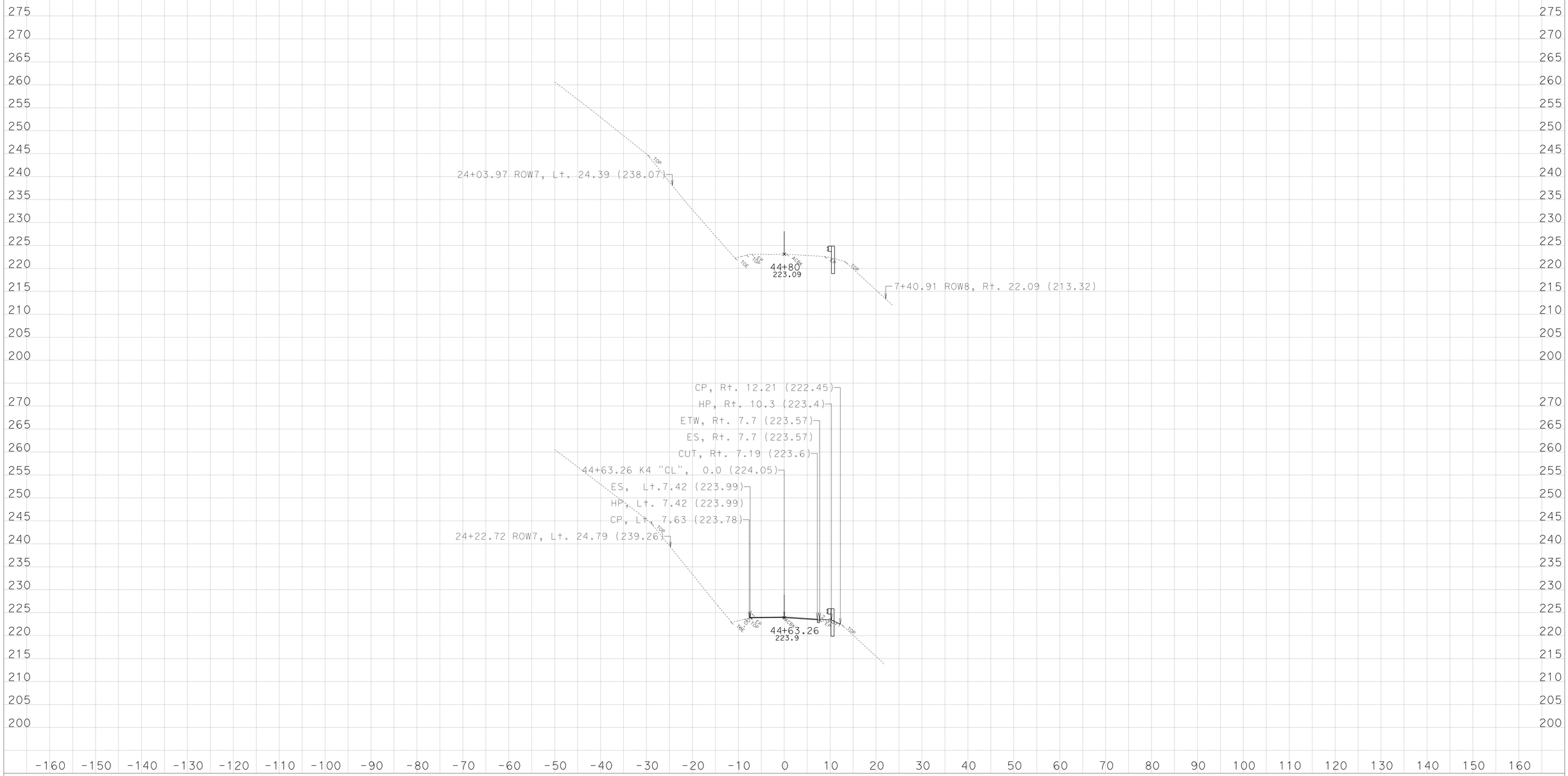
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K5"
DESIGN CROSS SECTIONS
SHEET 1 OF 28

For Earthwork Development Only

Safety Improvements
(Widen, Special MBGR)

Route 169- Location 4,
Post Mile: 22.46/22.54



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k4fin.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

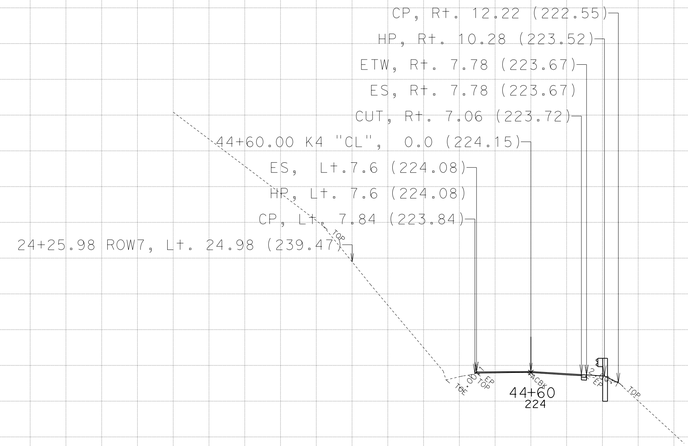
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

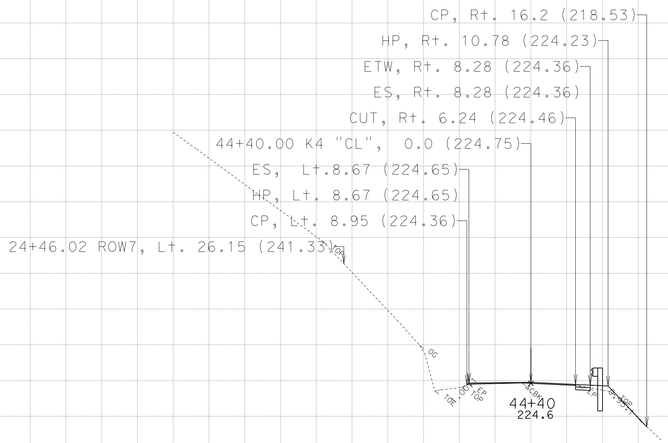
Alignment: "K4"
DESIGN CROSS SECTIONS
SHEET 15 OF 15

For Earthwork Development Only

Safety Improvements
(Widen, Special MBGR)

Route 169- Location 4,
Post Mile: 22.46/22.54





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-160 -150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k4fin.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

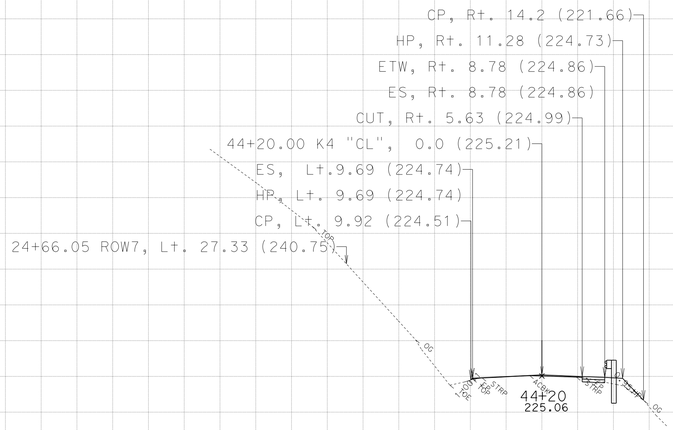
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

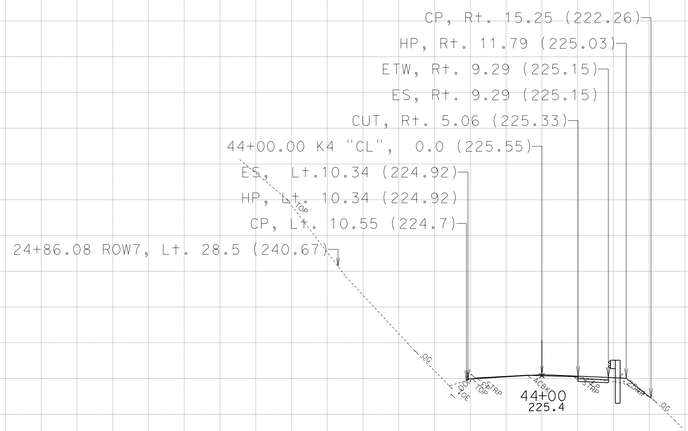
Alignment: "K4"
DESIGN CROSS SECTIONS
SHEET 14 OF 15

For Earthwork Development Only

Safety Improvements
(Widen, Special MBGR)

Route 169- Location 4,
Post Mile: 22.46/22.54





CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k4fin.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

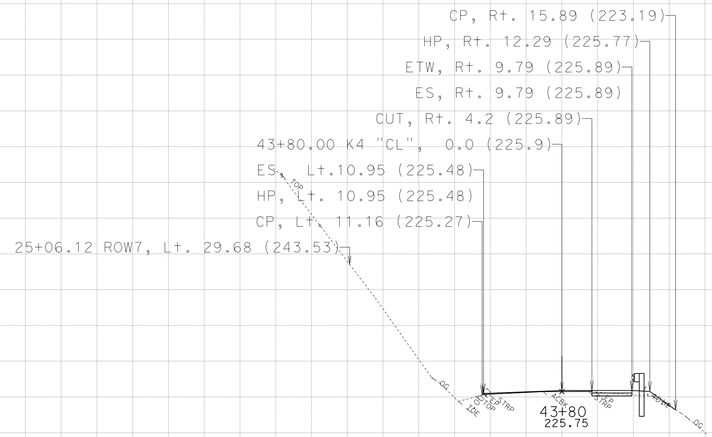
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

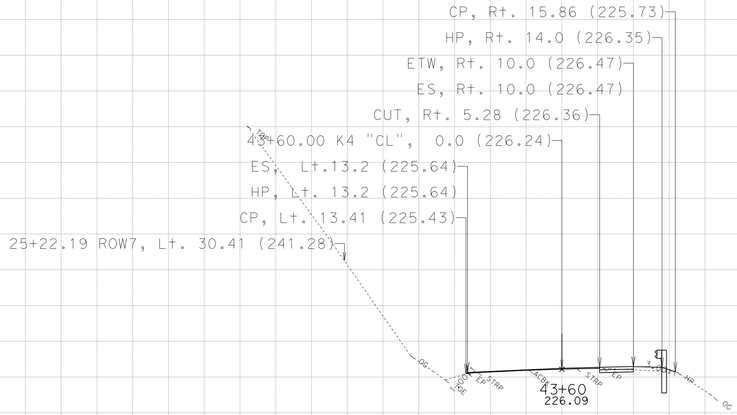
Alignment: "K4"
DESIGN CROSS SECTIONS
SHEET 13 OF 15

For Earthwork Development Only

Safety Improvements
(Widen, Special MBGR)

Route 169- Location 4,
Post Mile: 22.46/22.54





CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k4fin.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

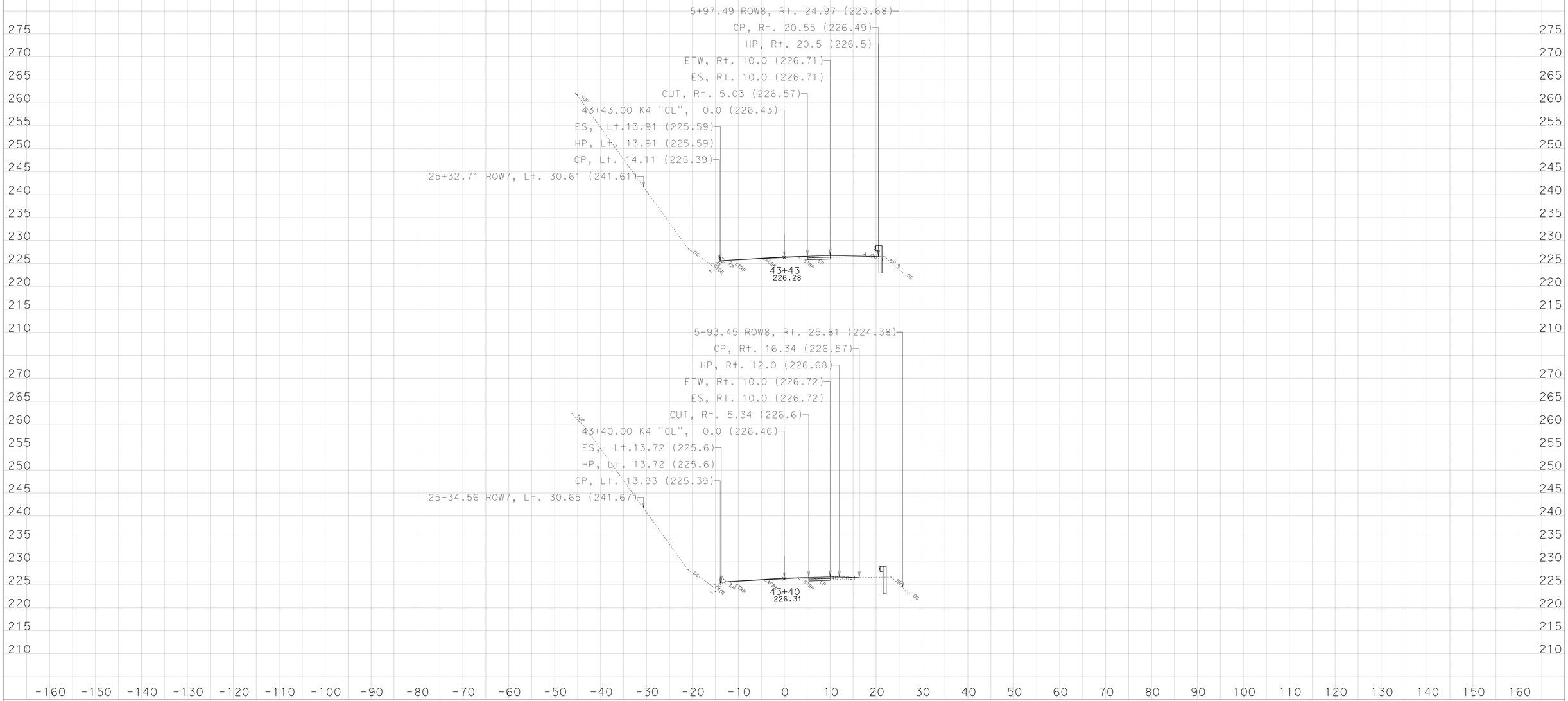
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K4"
DESIGN CROSS SECTIONS
SHEET 12 OF 15

For Earthwork Development Only

Safety Improvements
(Widen, Special MBGR)

Route 169- Location 4,
Post Mile: 22.46/22.54



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k4fin.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

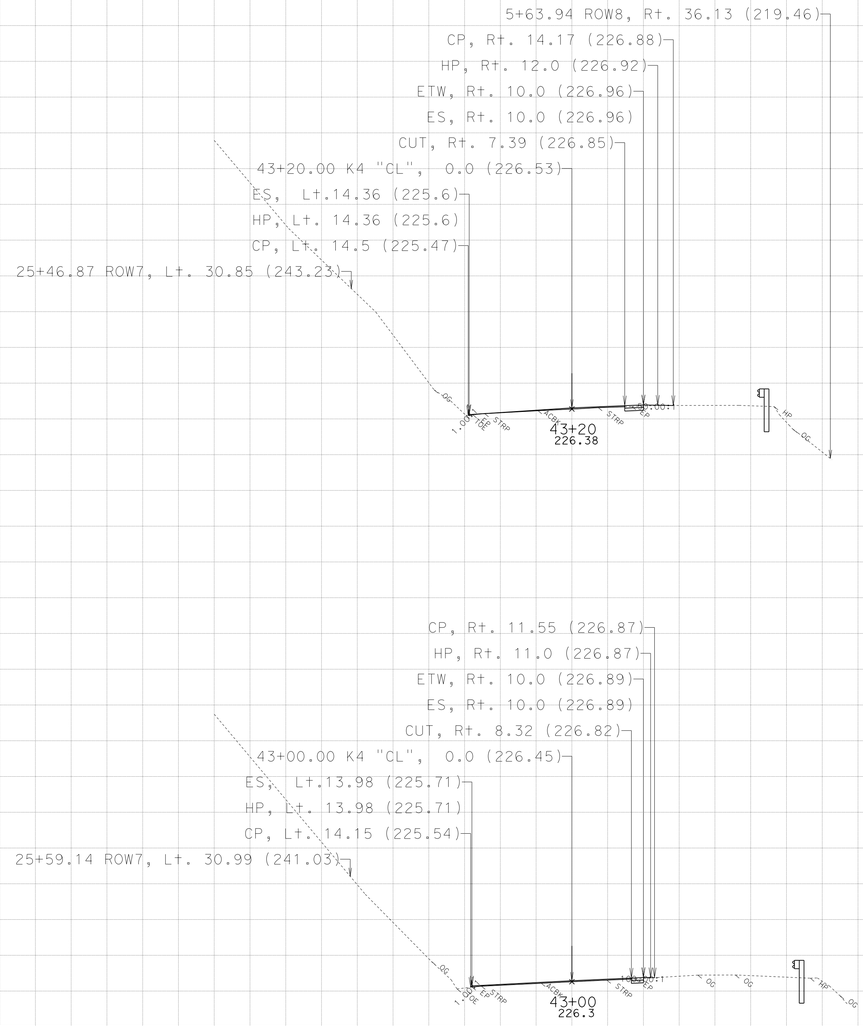
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K4"
DESIGN CROSS SECTIONS
SHEET 11 OF 15

For Earthwork Development Only

Safety Improvements
(Widen, Special MBGR)

Route 169- Location 4,
Post Mile: 22.46/22.54



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k4fin.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

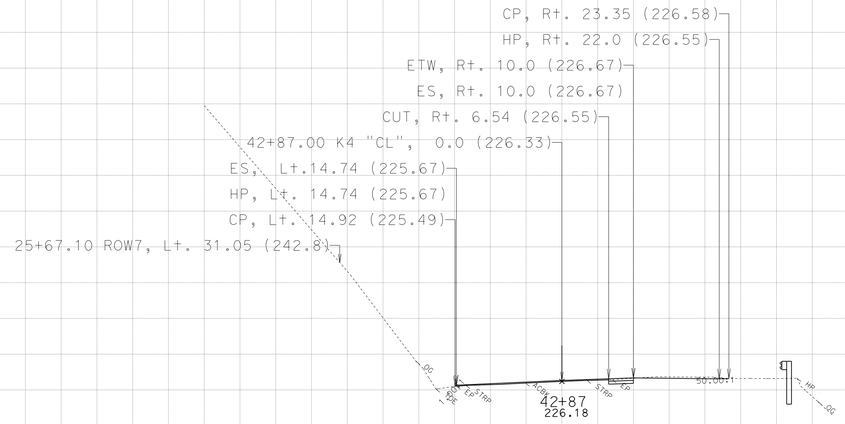
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K4"
DESIGN CROSS SECTIONS
SHEET 10 OF 15

For Earthwork Development Only

Safety Improvements
(Widen, Special MBGR)

Route 169- Location 4,
Post Mile: 22.46/22.54



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k4fin.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

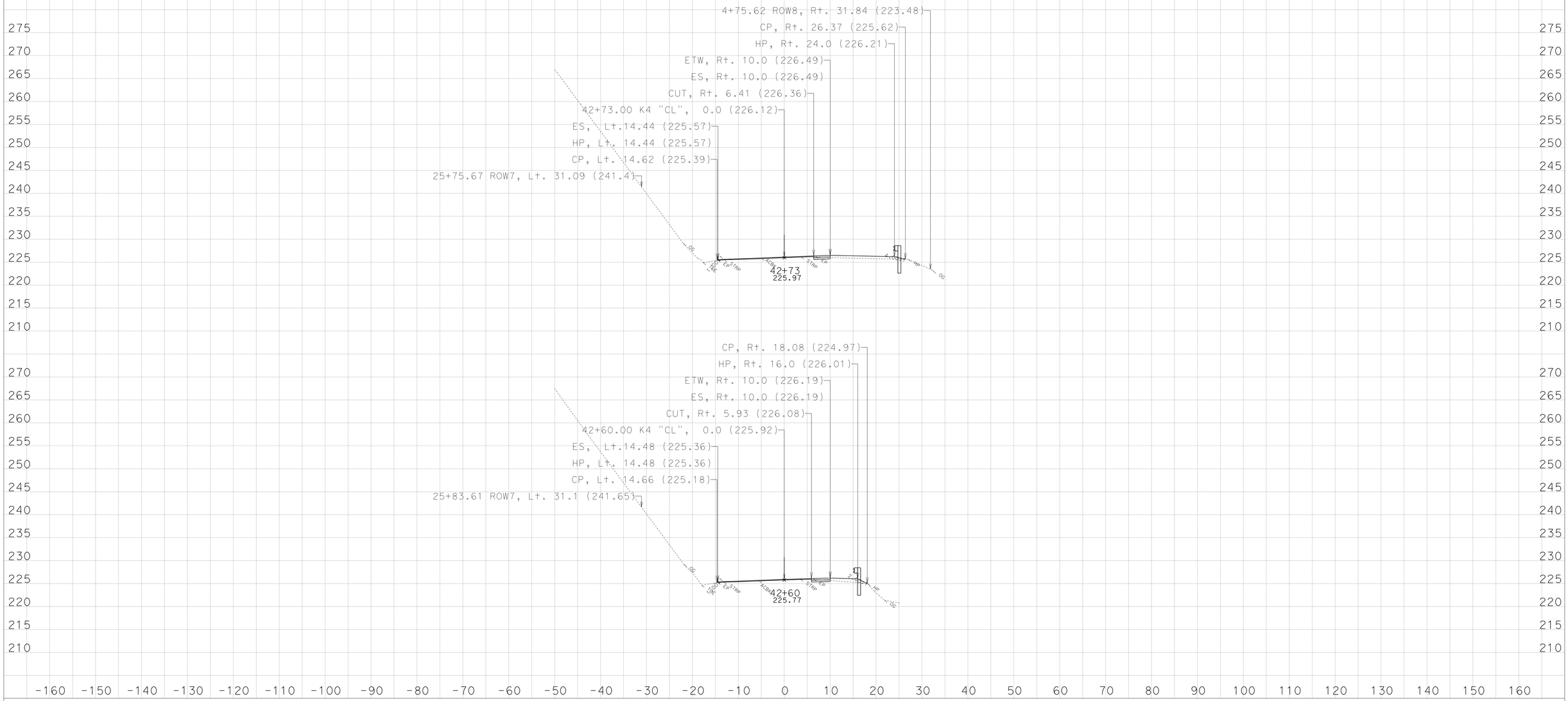
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K4"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, Special MBGR)

Route 169- Location 4,
Post Mile: 22.46/22.54



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k4fin.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

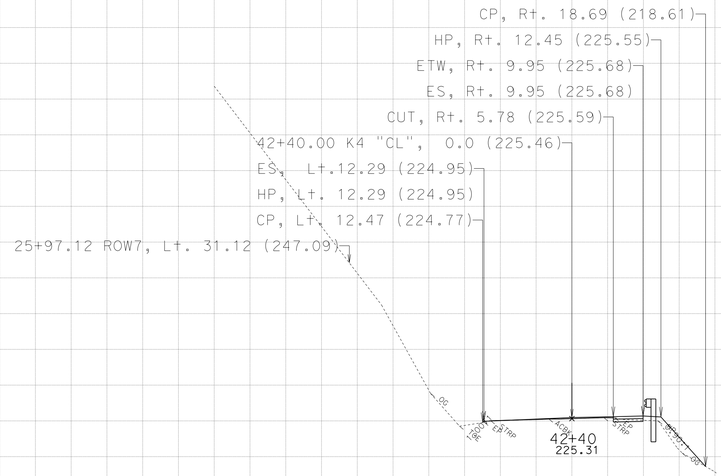
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

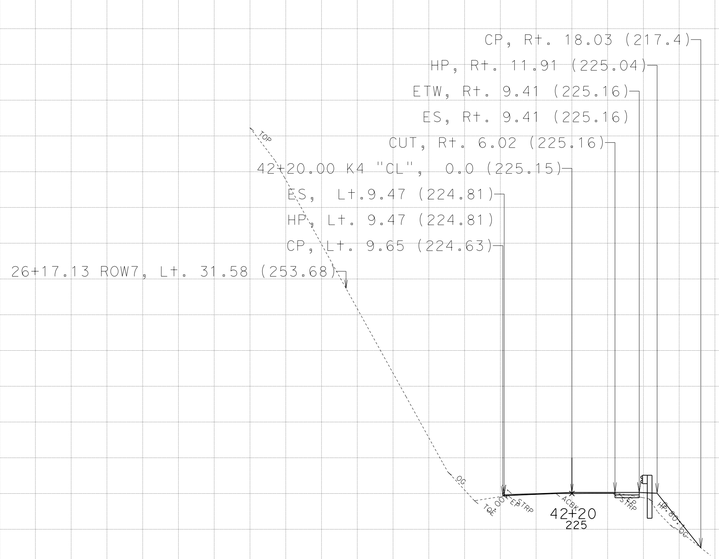
Alignment: "K4"
DESIGN CROSS SECTIONS
SHEET 8 OF 15

For Earthwork Development Only

Safety Improvements
(Widen, Special MBGR)

Route 169- Location 4,
Post Mile: 22.46/22.54





CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k4fin.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

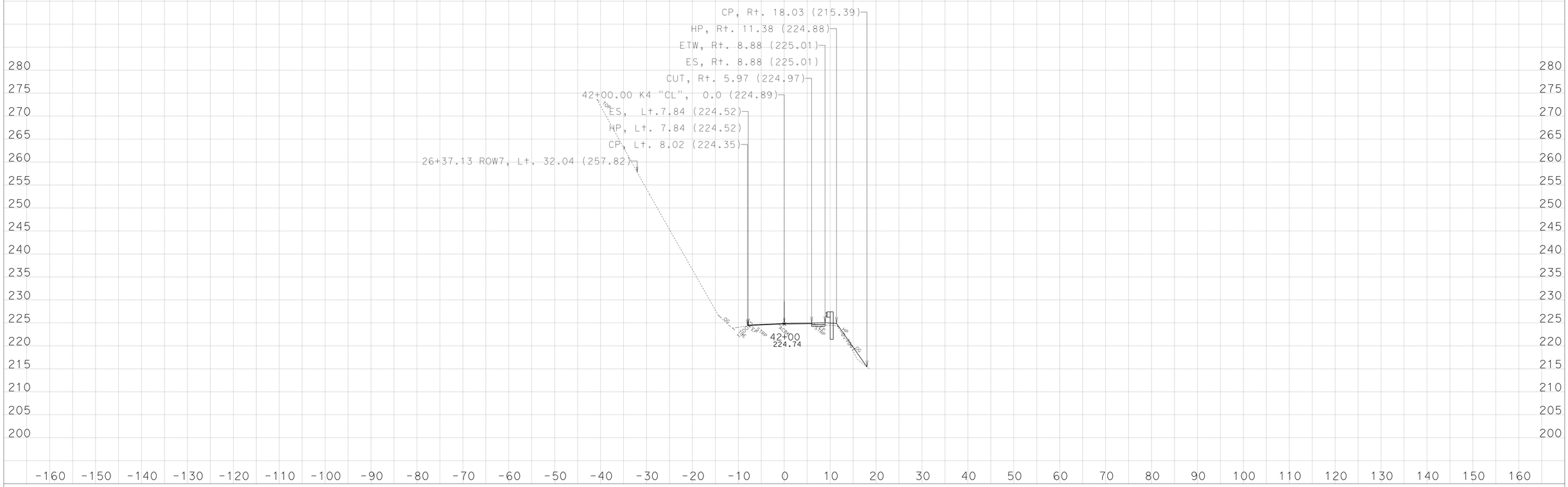
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K4"
DESIGN CROSS SECTIONS
SHEET 7 OF 15

For Earthwork Development Only

Safety Improvements
(Widen, Special MBGR)

Route 169- Location 4,
Post Mile: 22.46/22.54



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k4fin.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

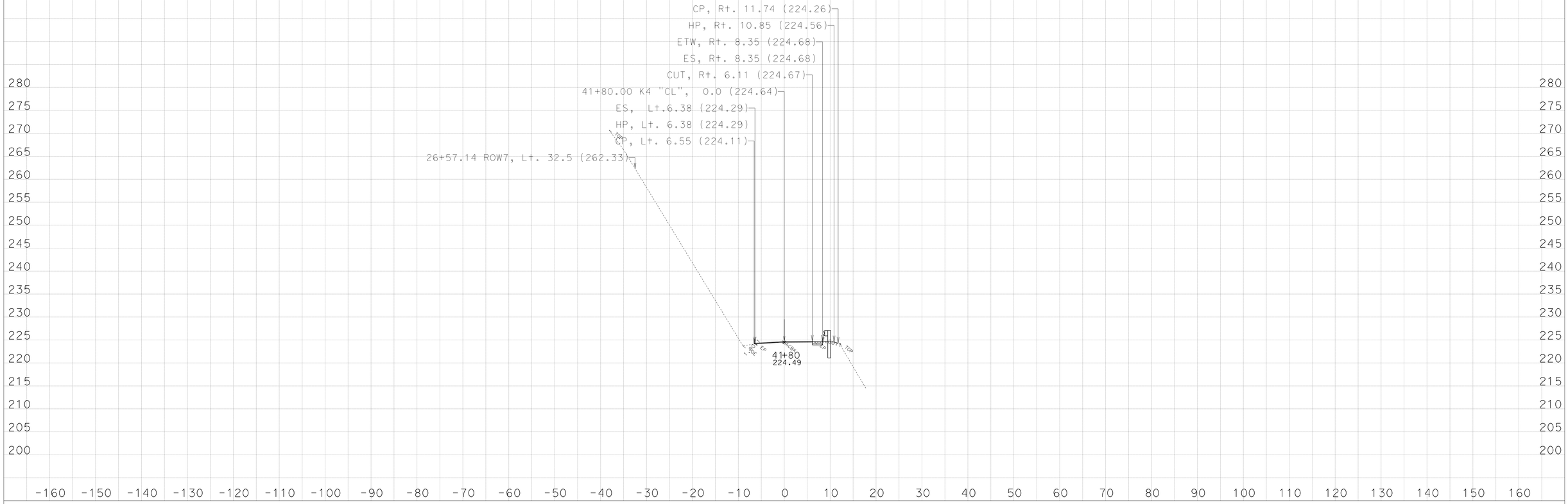
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K4"
DESIGN CROSS SECTIONS
SHEET 6 OF 15

For Earthwork Development Only

Safety Improvements
(Widen, Special MBGR)

Route 169- Location 4,
Post Mile: 22.46/22.54



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k4fin.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

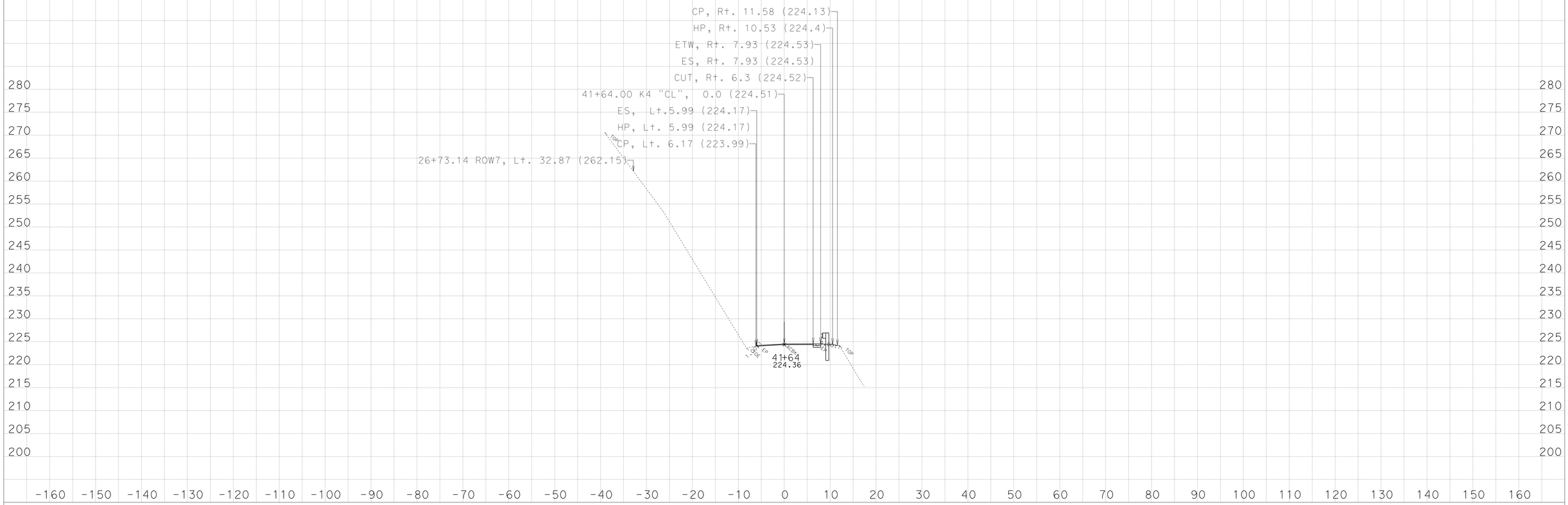
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K4"
DESIGN CROSS SECTIONS
SHEET 5 OF 15

For Earthwork Development Only

Safety Improvements
(Widen, Special MBGR)

Route 169- Location 4,
Post Mile: 22.46/22.54



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k4fin.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

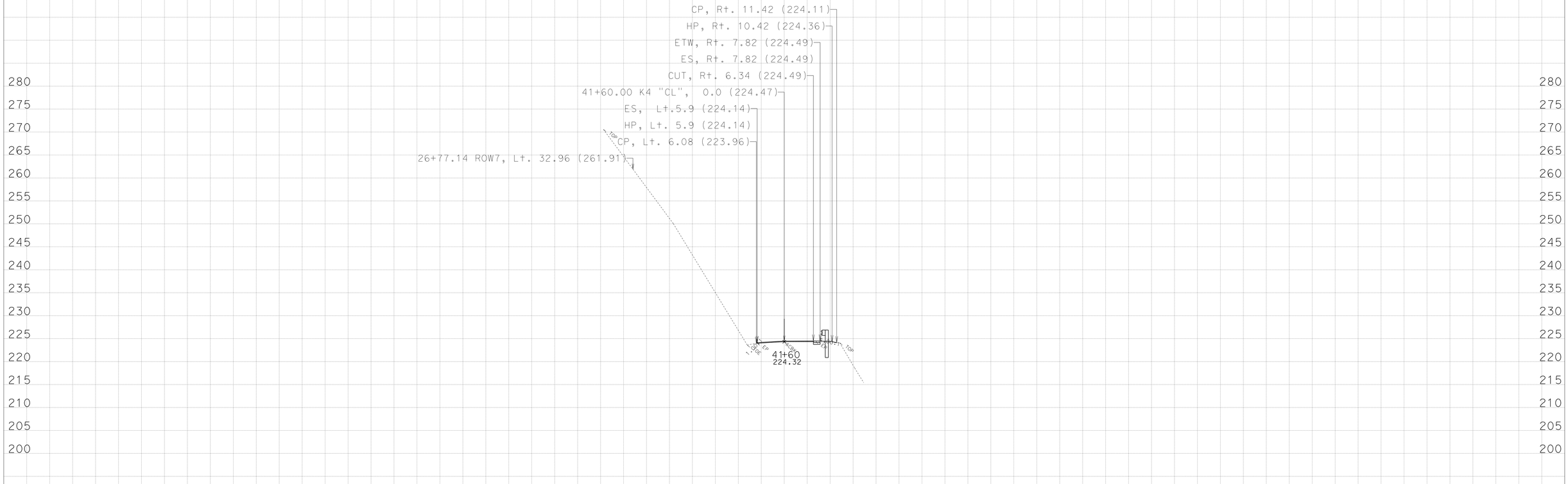
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K4"
DESIGN CROSS SECTIONS
SHEET 4 OF 15

For Earthwork Development Only

Safety Improvements
(Widen, Special MBGR)

Route 169- Location 4,
Post Mile: 22.46/22.54



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k4fin.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

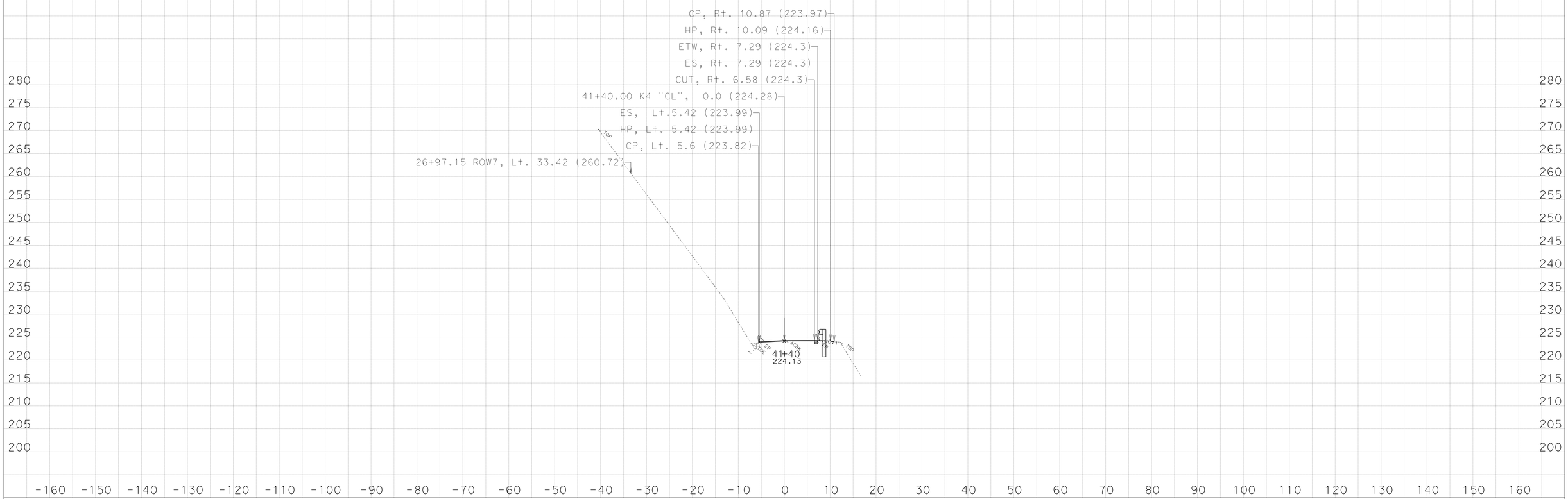
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K4"
DESIGN CROSS SECTIONS
SHEET 3 OF 15

For Earthwork Development Only

Safety Improvements
(Widen, Special MBGR)

Route 169- Location 4,
Post Mile: 22.46/22.54



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k4fin.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

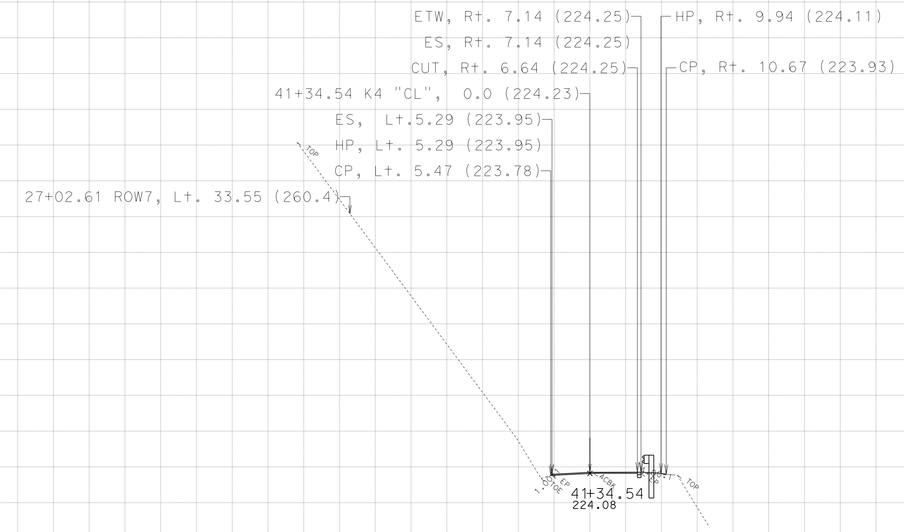
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K4"
DESIGN CROSS SECTIONS
SHEET 2 OF 15

For Earthwork Development Only

Safety Improvements
(Widen, Special MBGR)

Route 169- Location 4,
Post Mile: 22.46/22.54



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k4fin.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

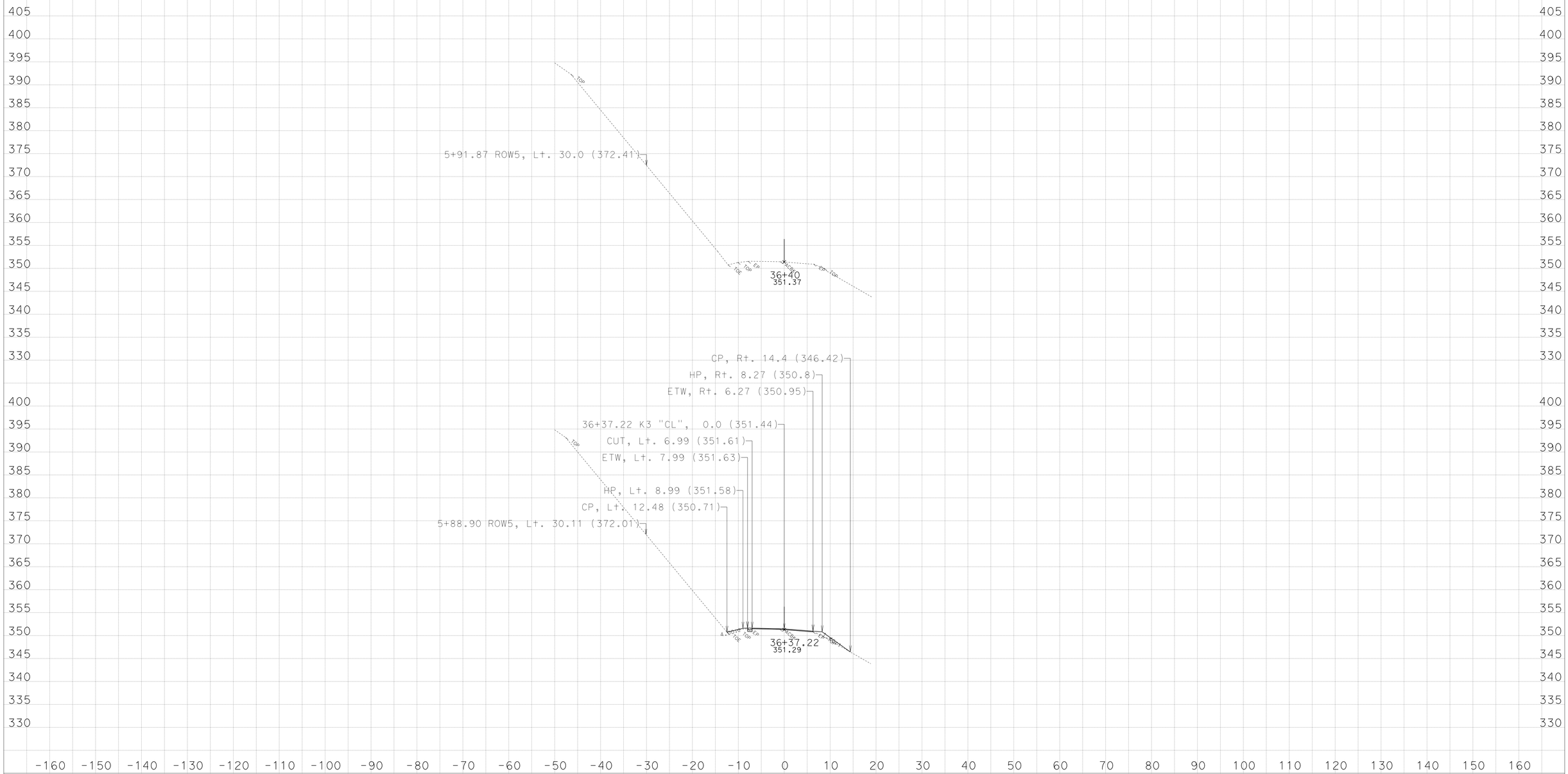
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K4"
DESIGN CROSS SECTIONS
SHEET 1 OF 15

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

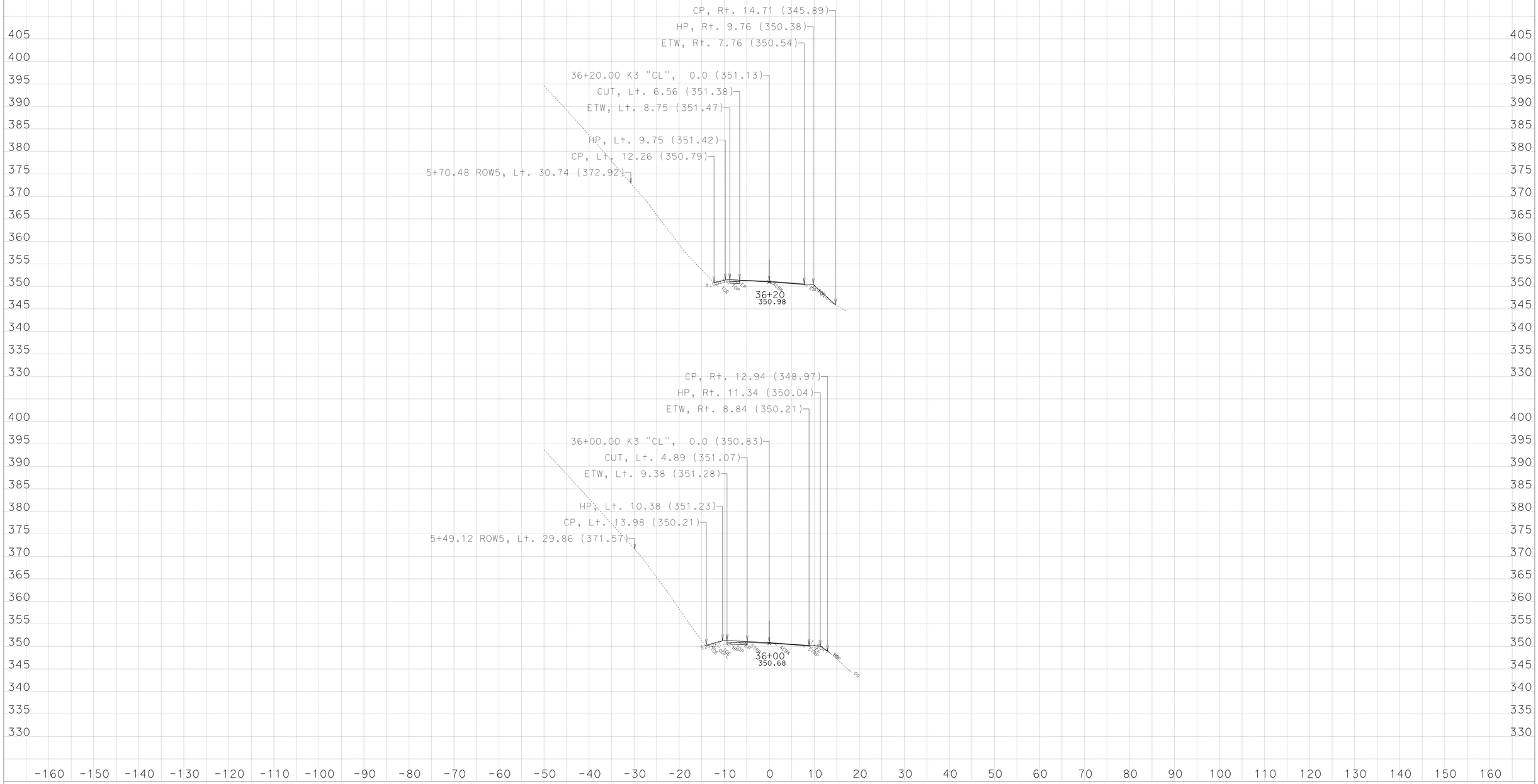
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 33 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions are US Survey Feet

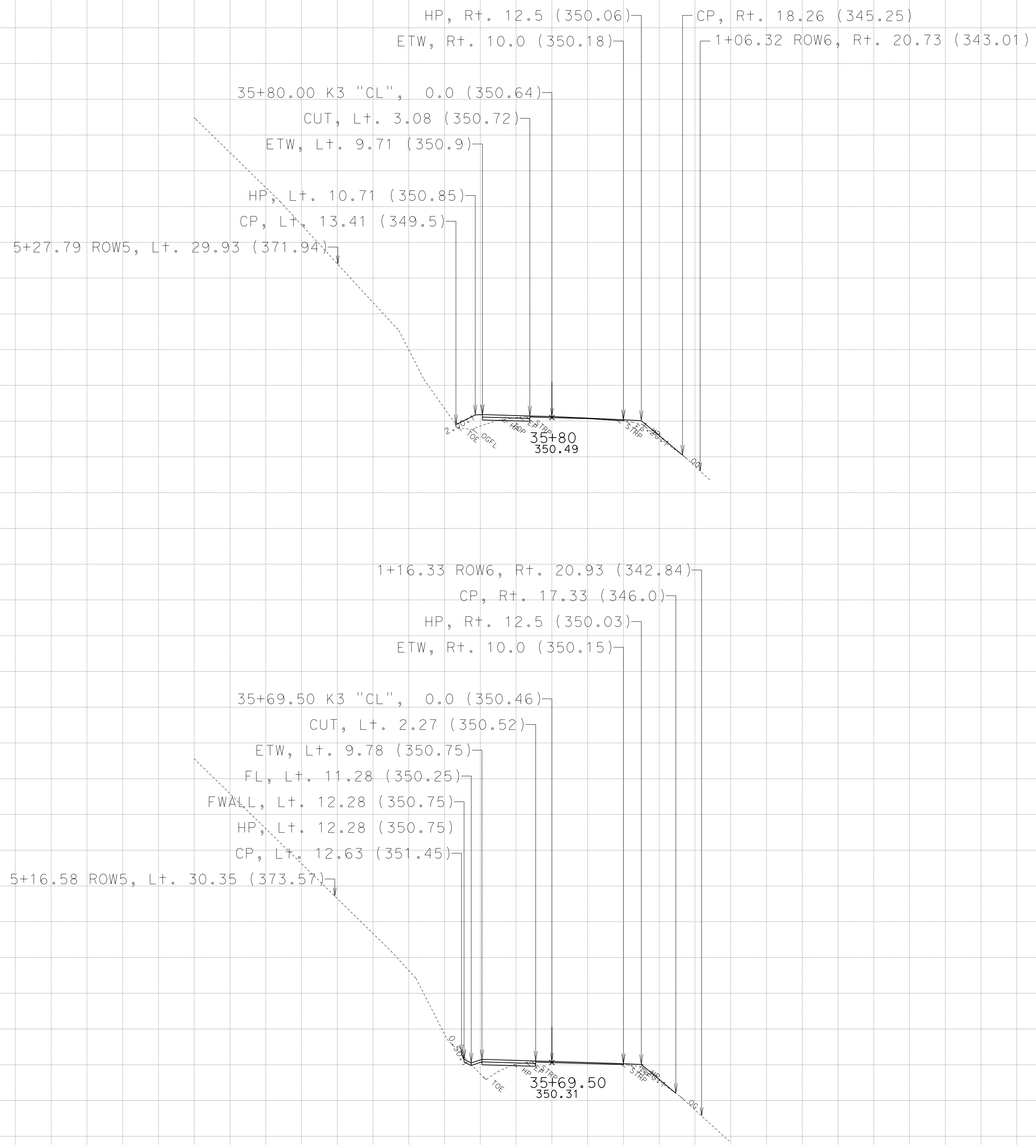
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

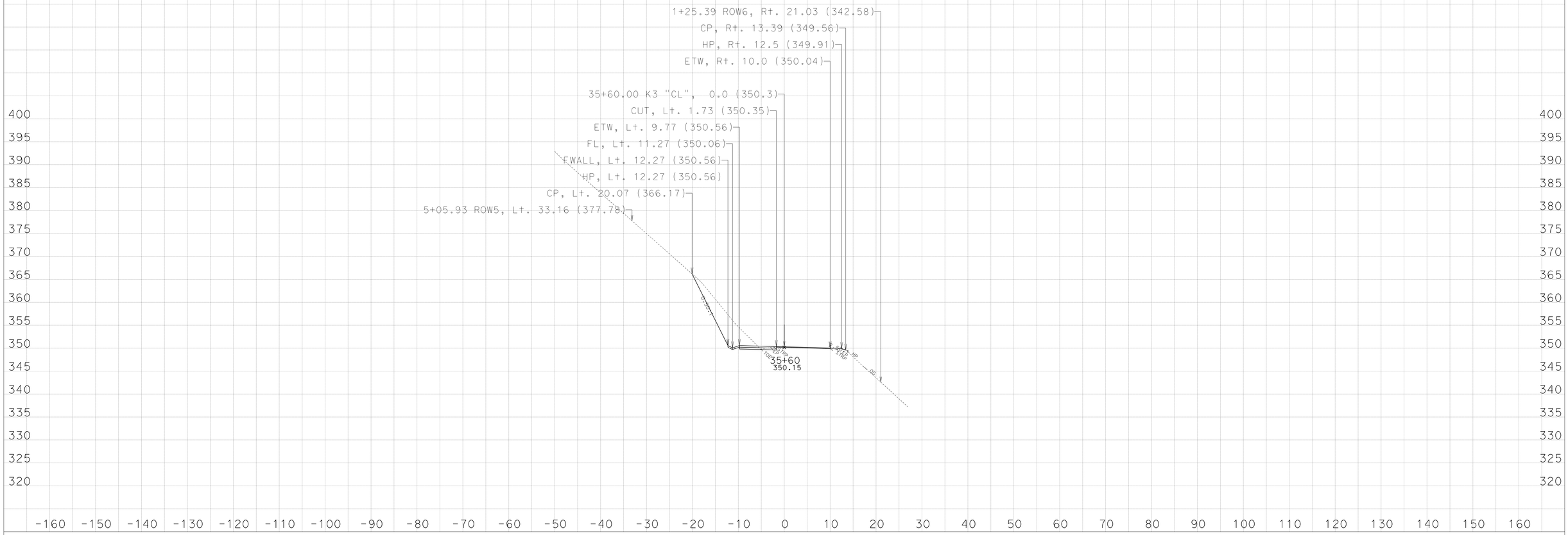
Alignment: "K3"

DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

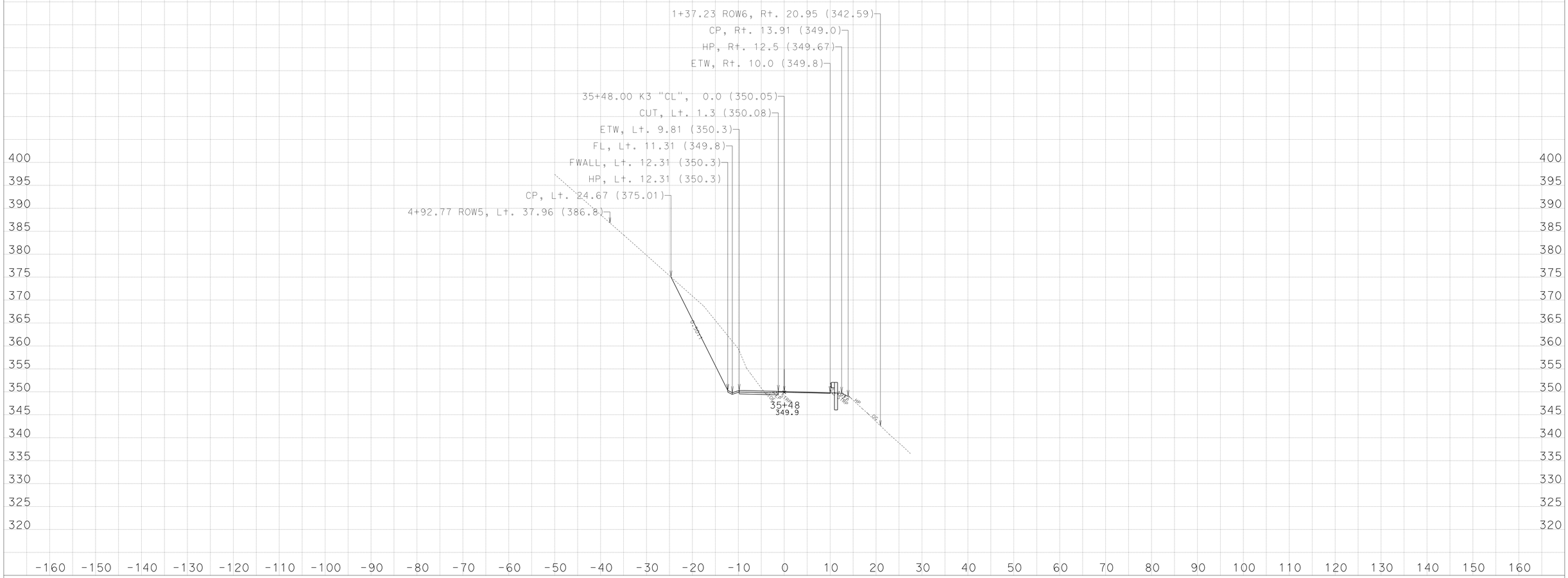
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 30 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions are US Survey Feet

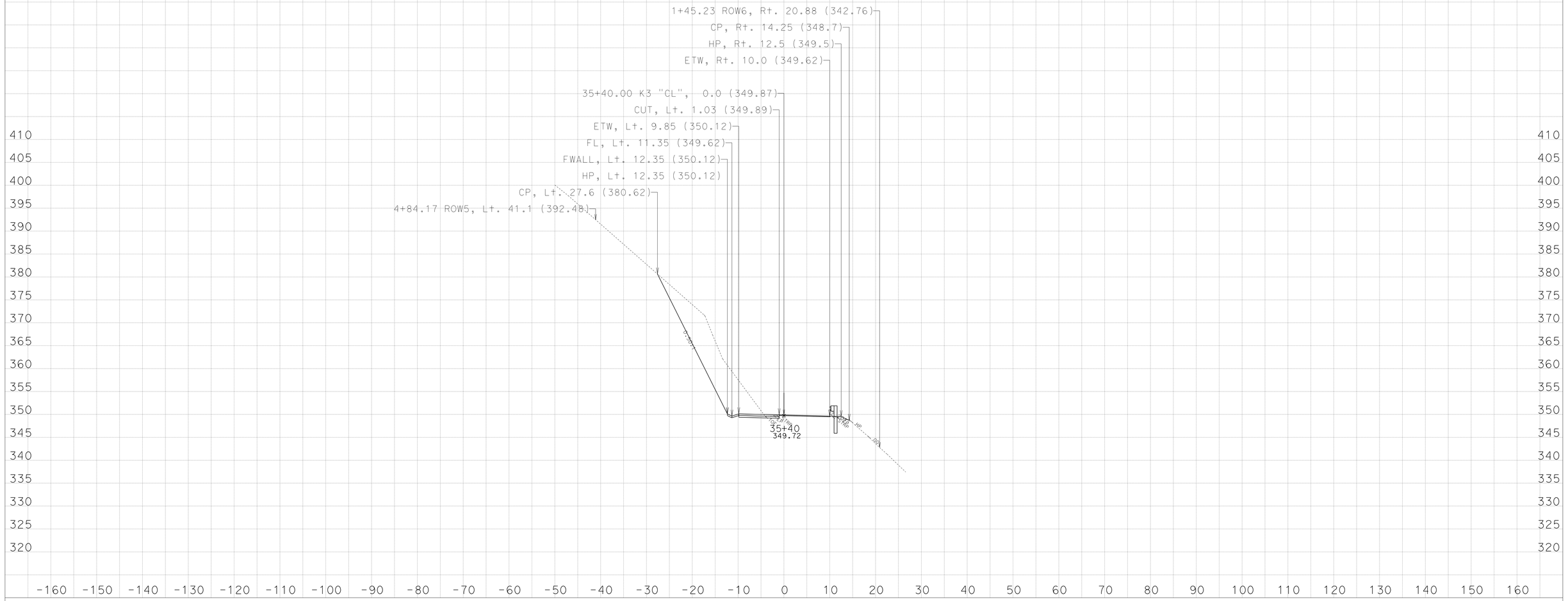
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

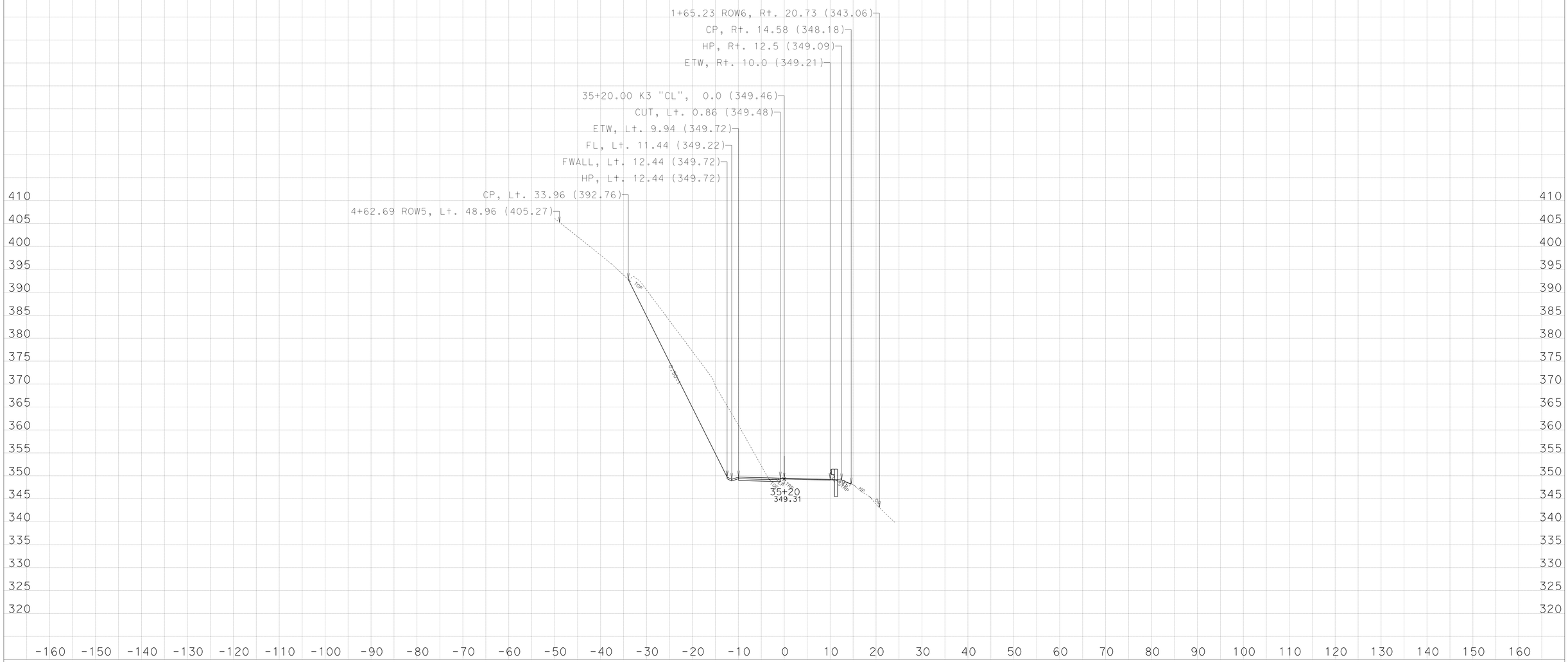
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

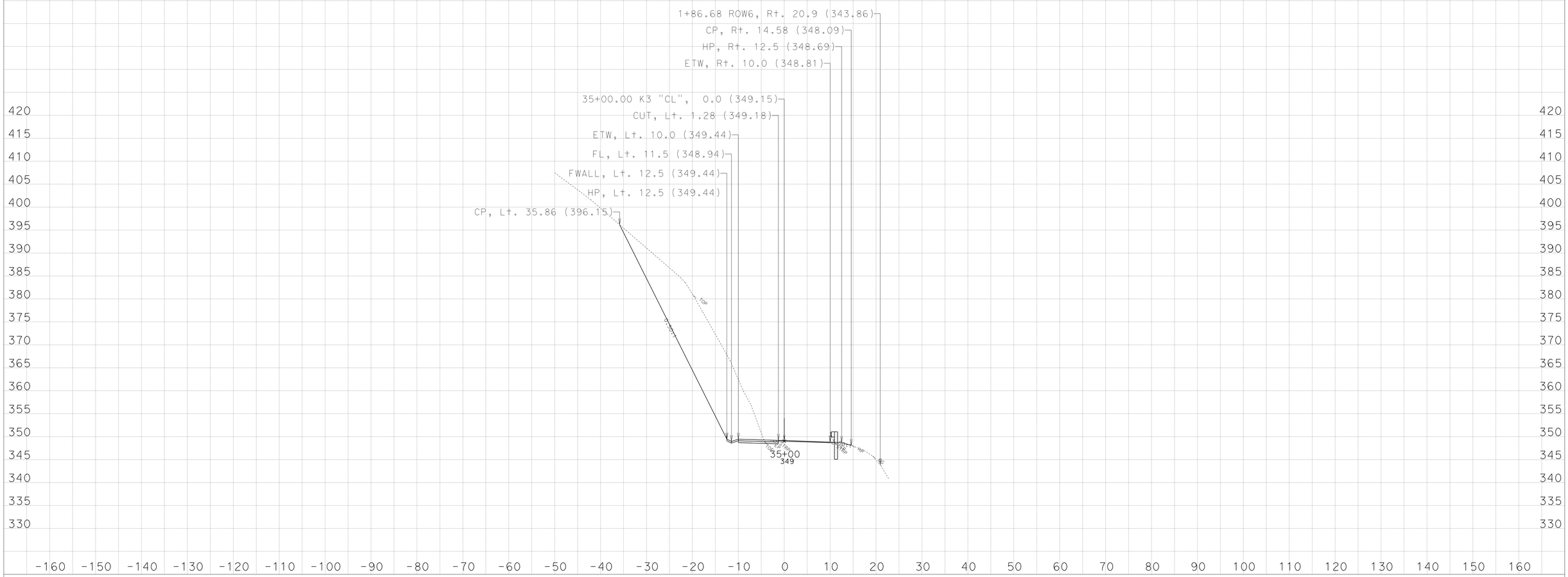
Alignment: "K3"
DESIGN CROSS SECTIONS

SHEET 27 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

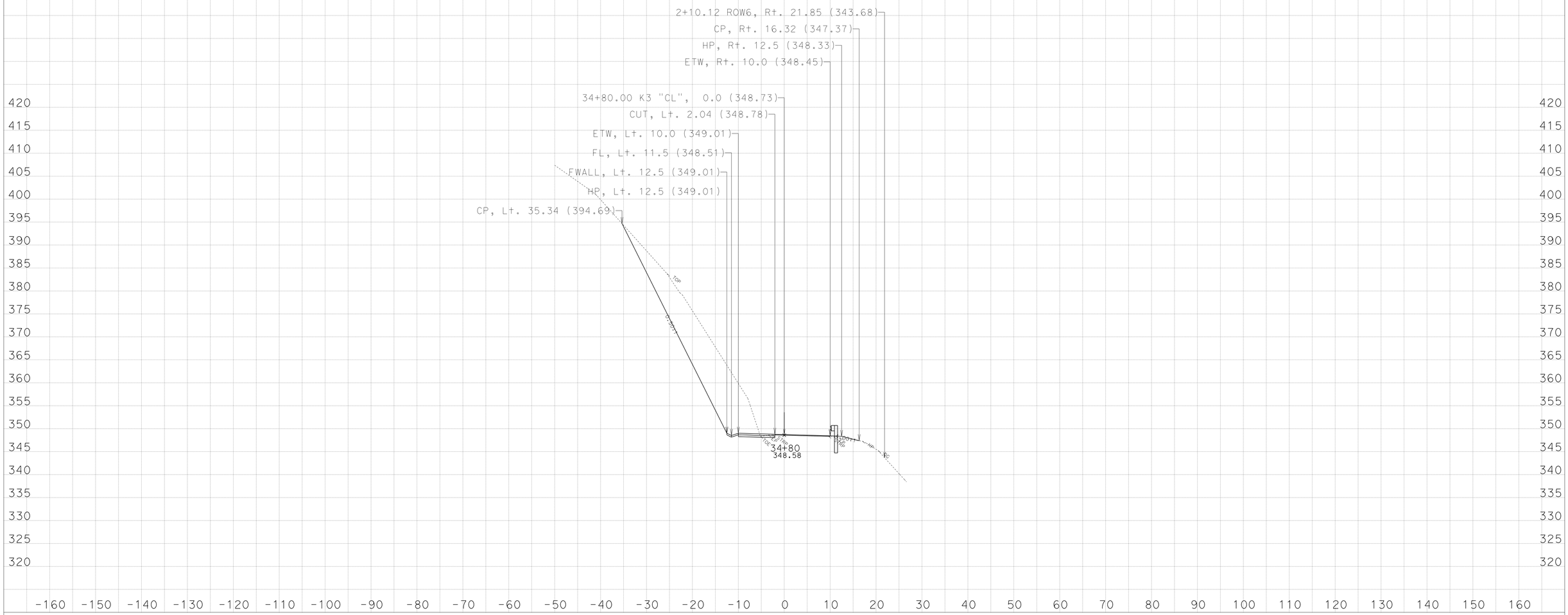
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

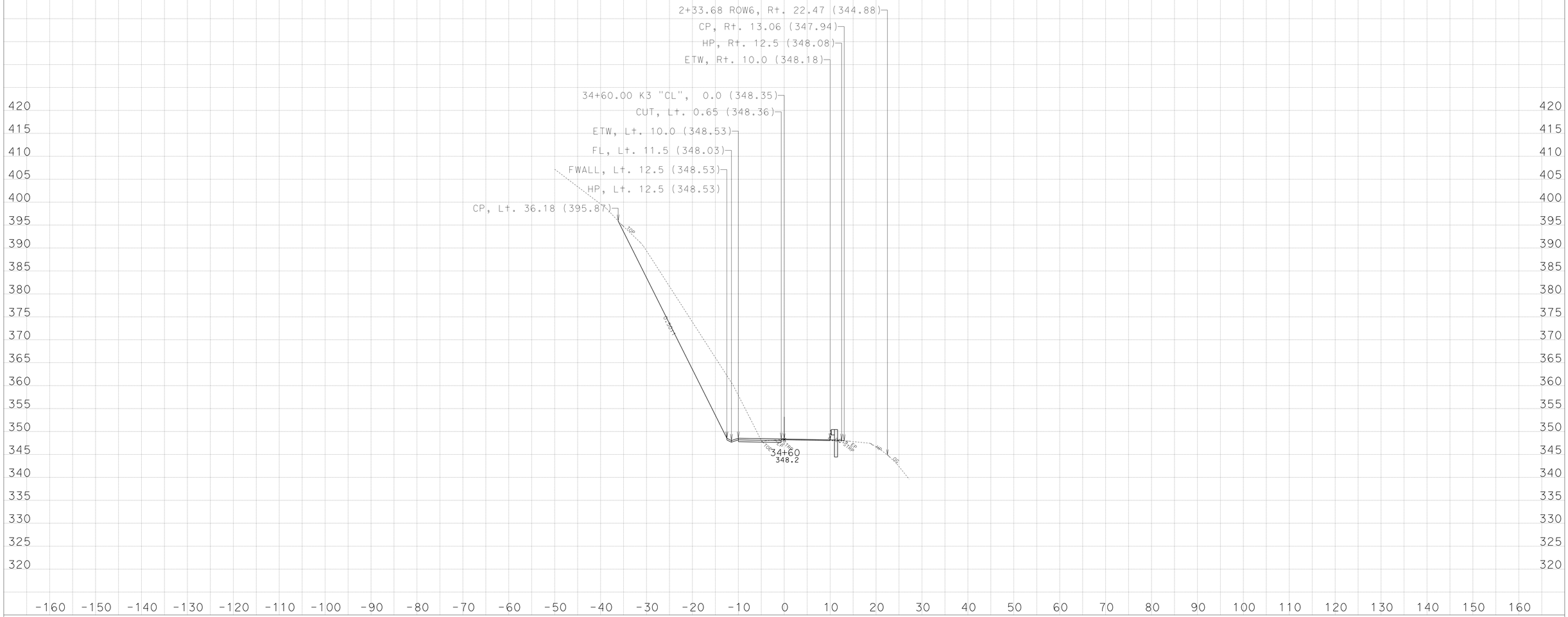
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 25 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

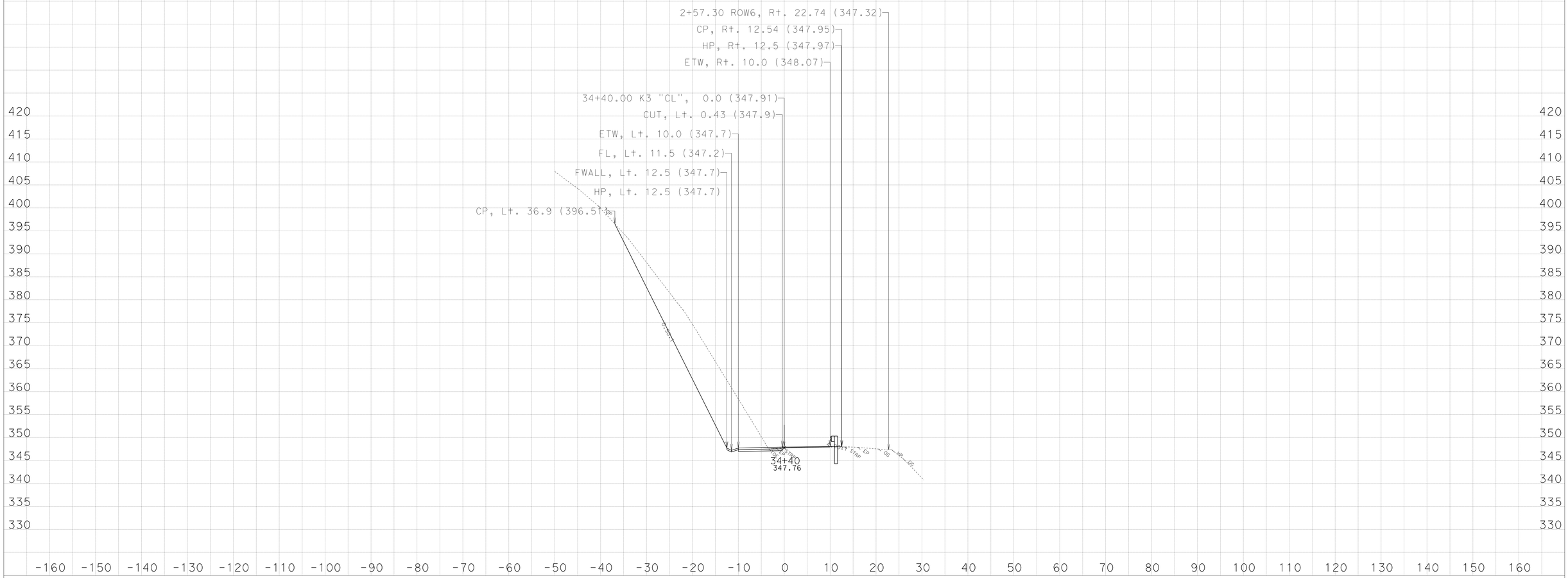
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 24 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

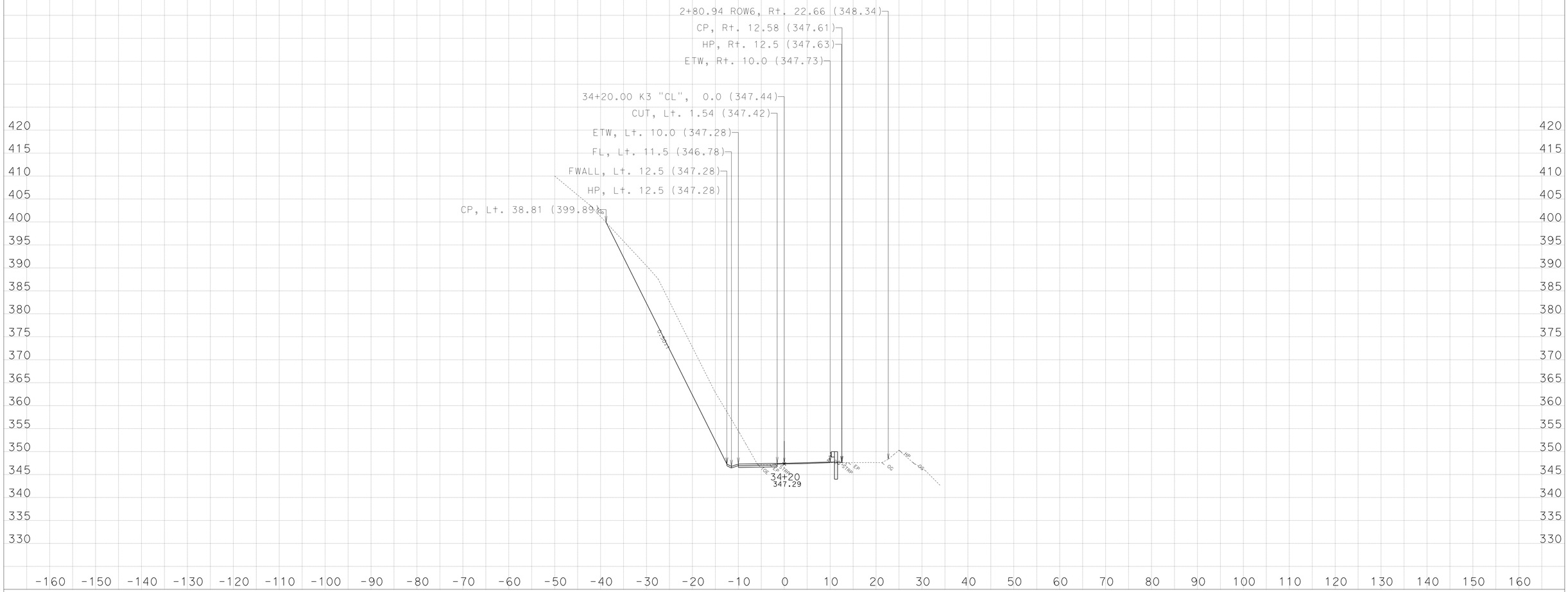
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 23 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

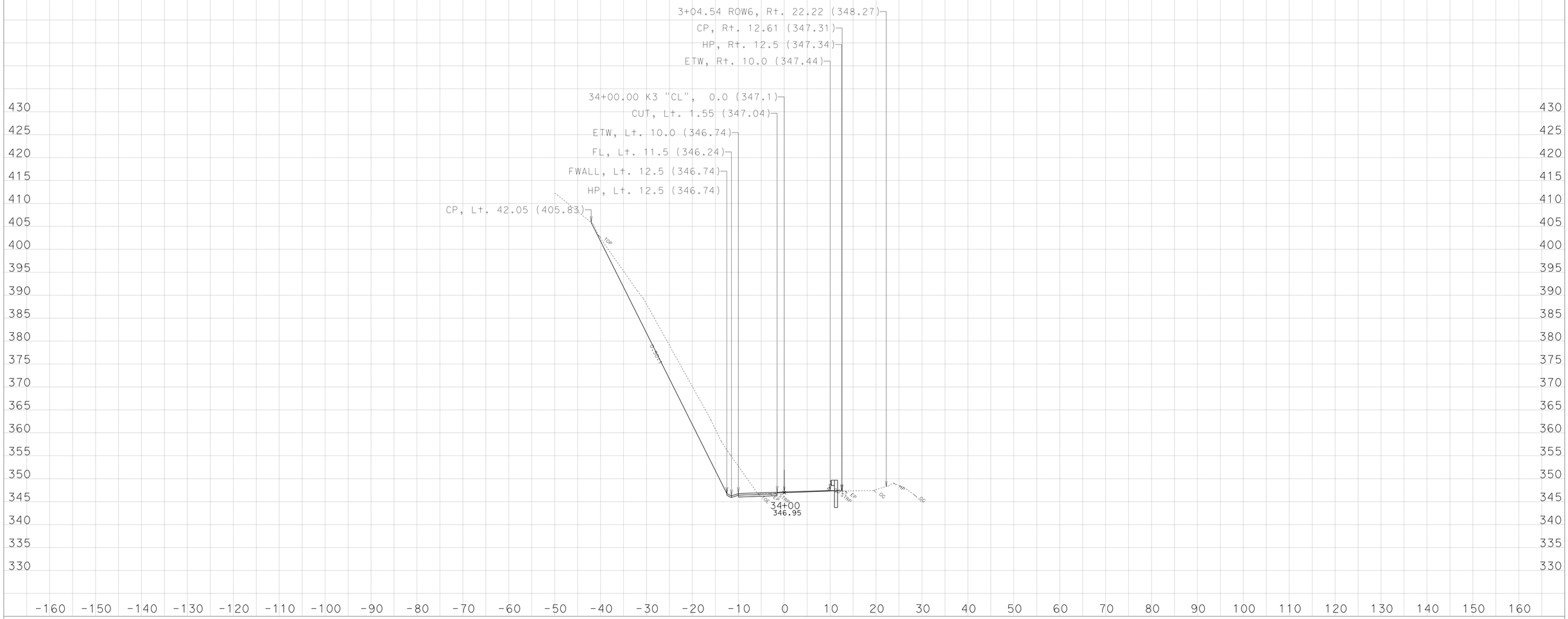
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 22 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

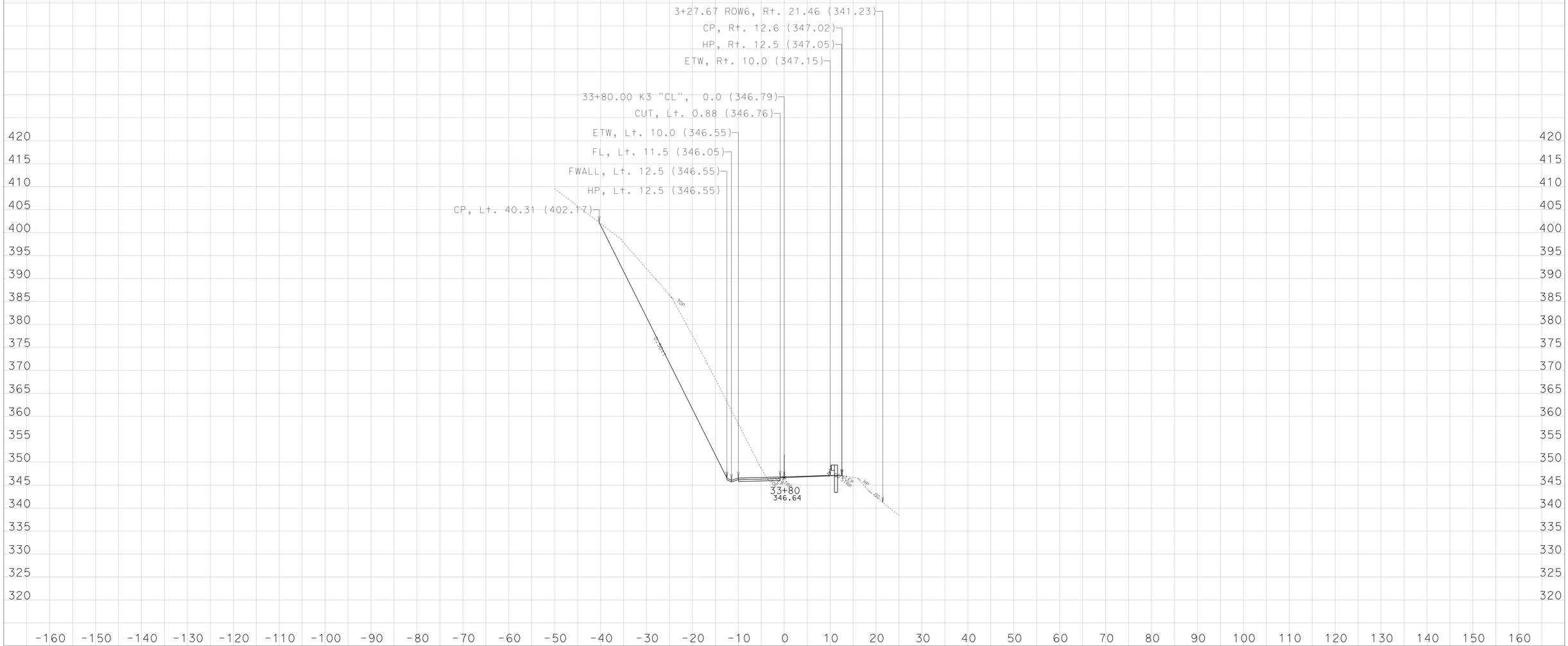
Alignment: "K3"
DESIGN CROSS SECTIONS

SHEET 21 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

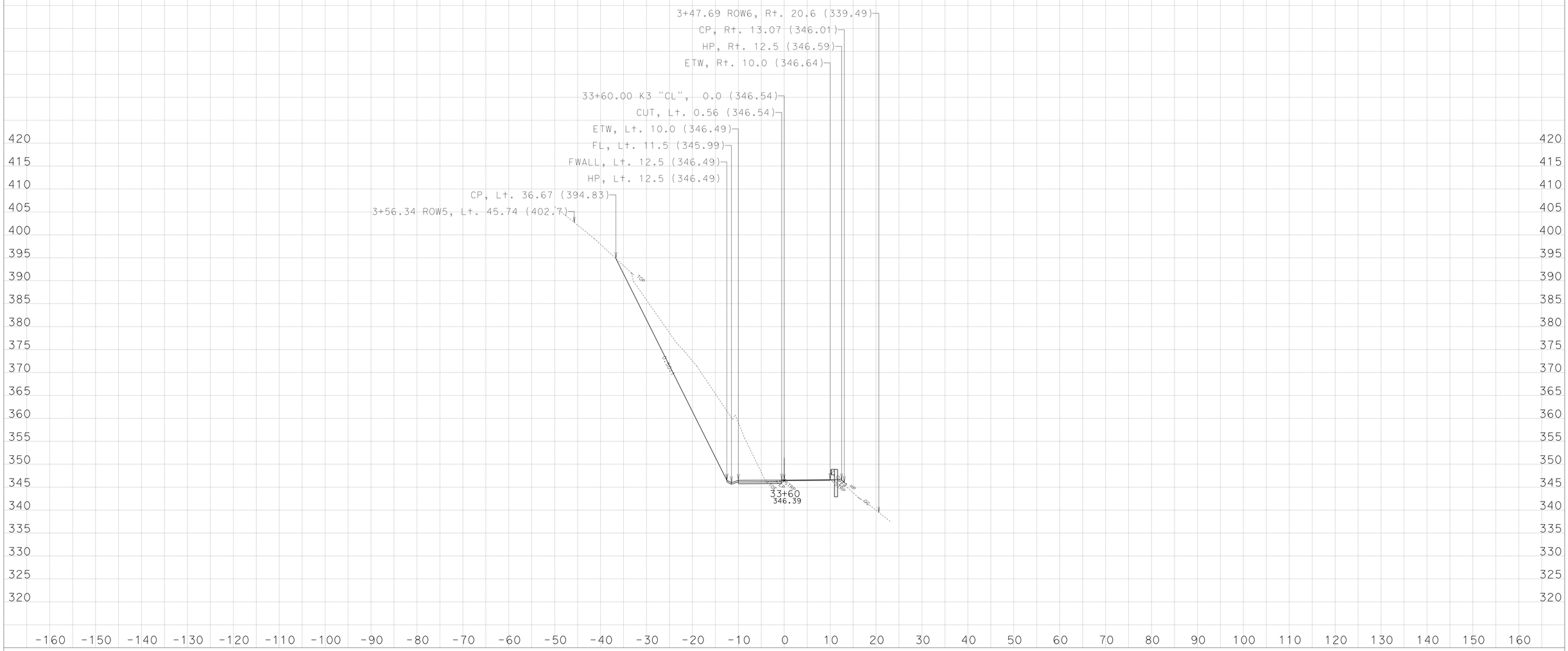
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 20 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

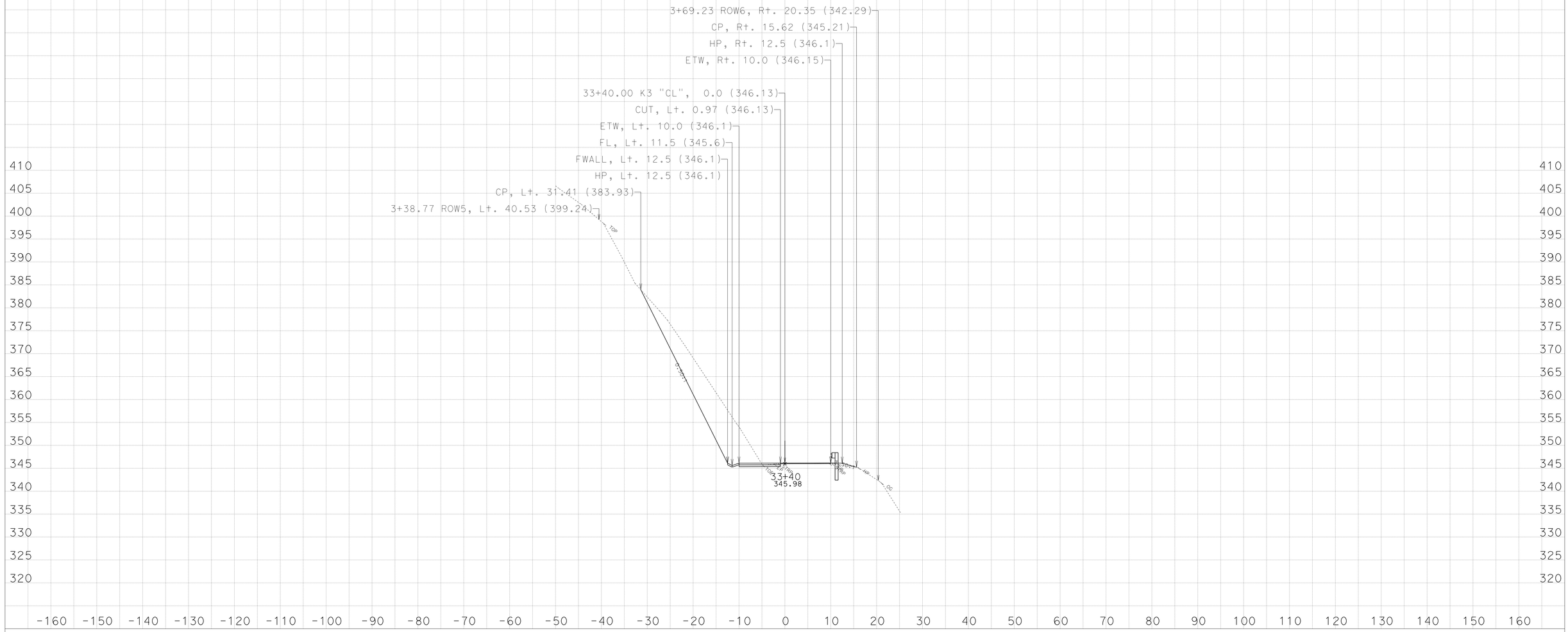
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

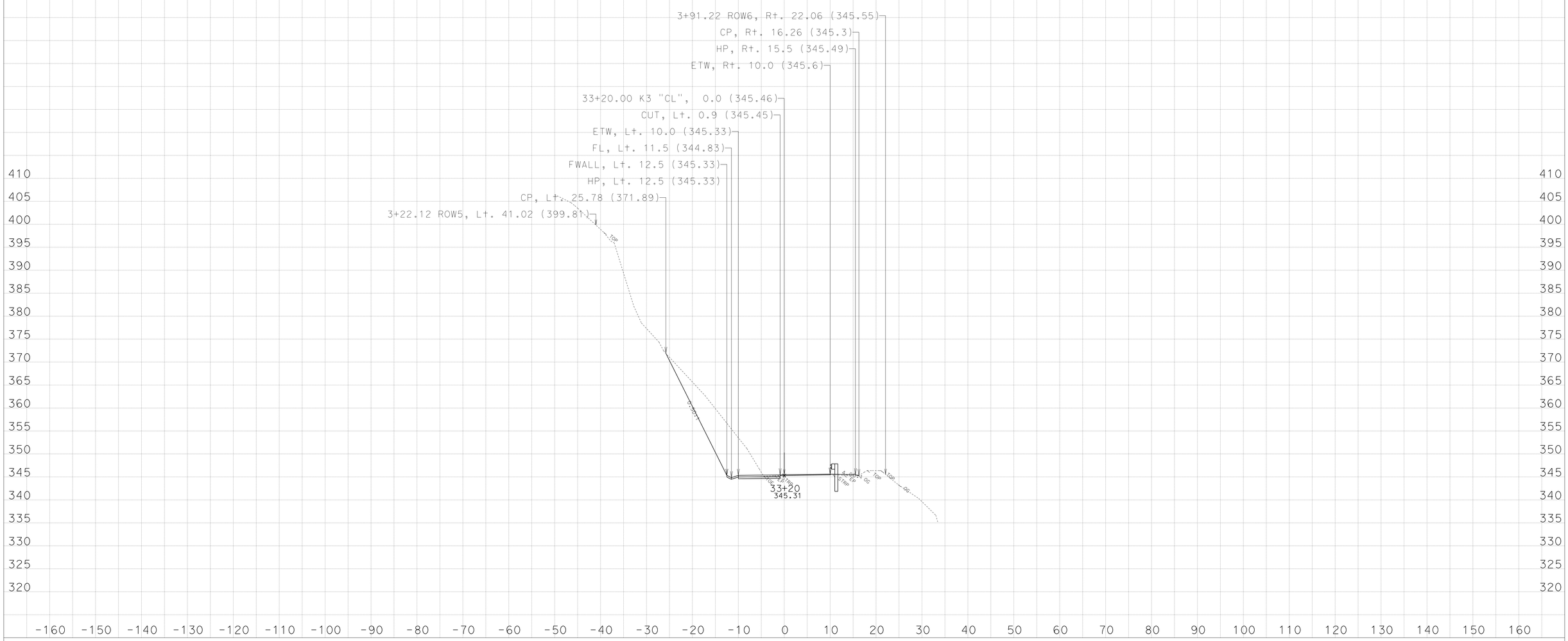
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 18 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

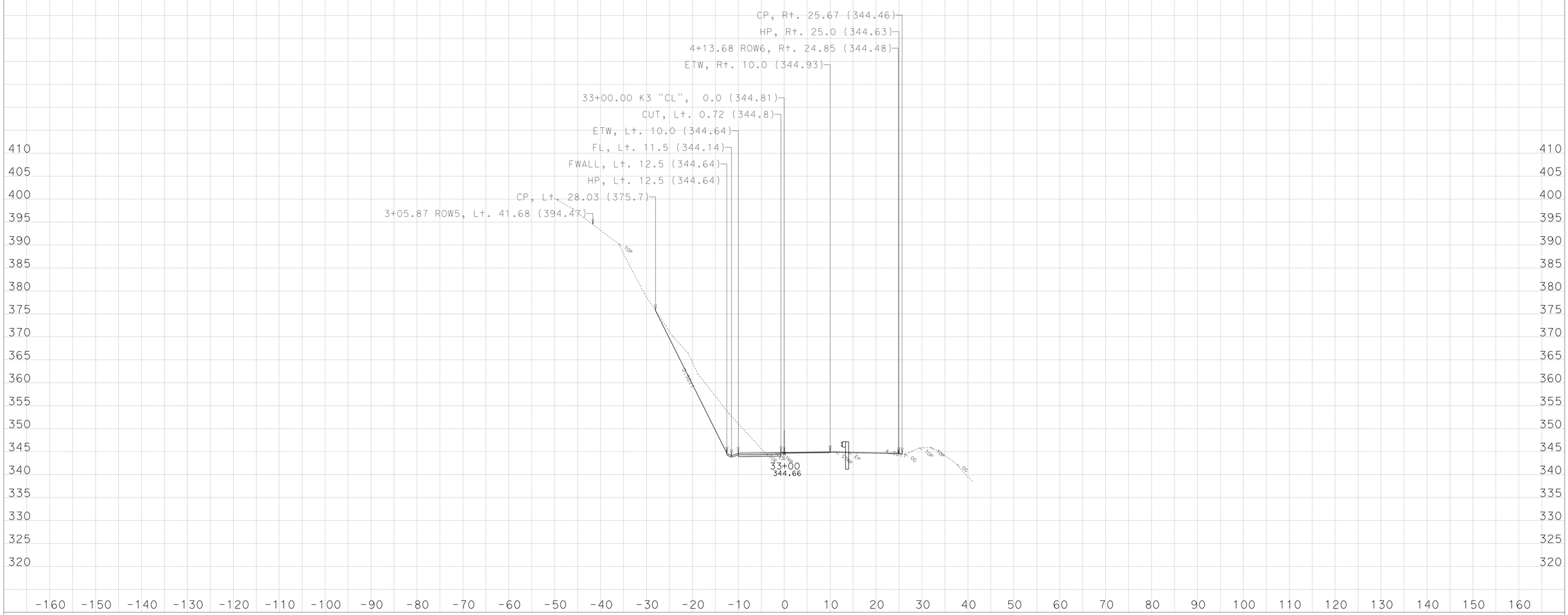
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 17 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

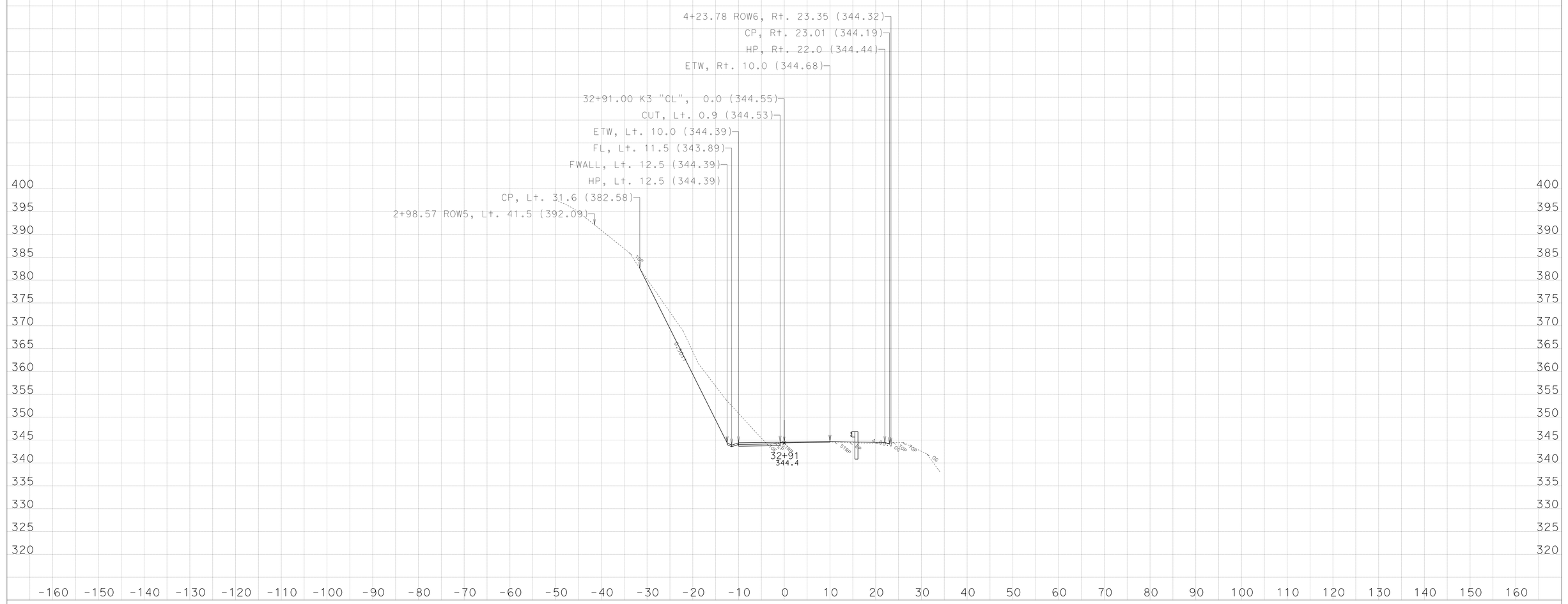
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 16 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

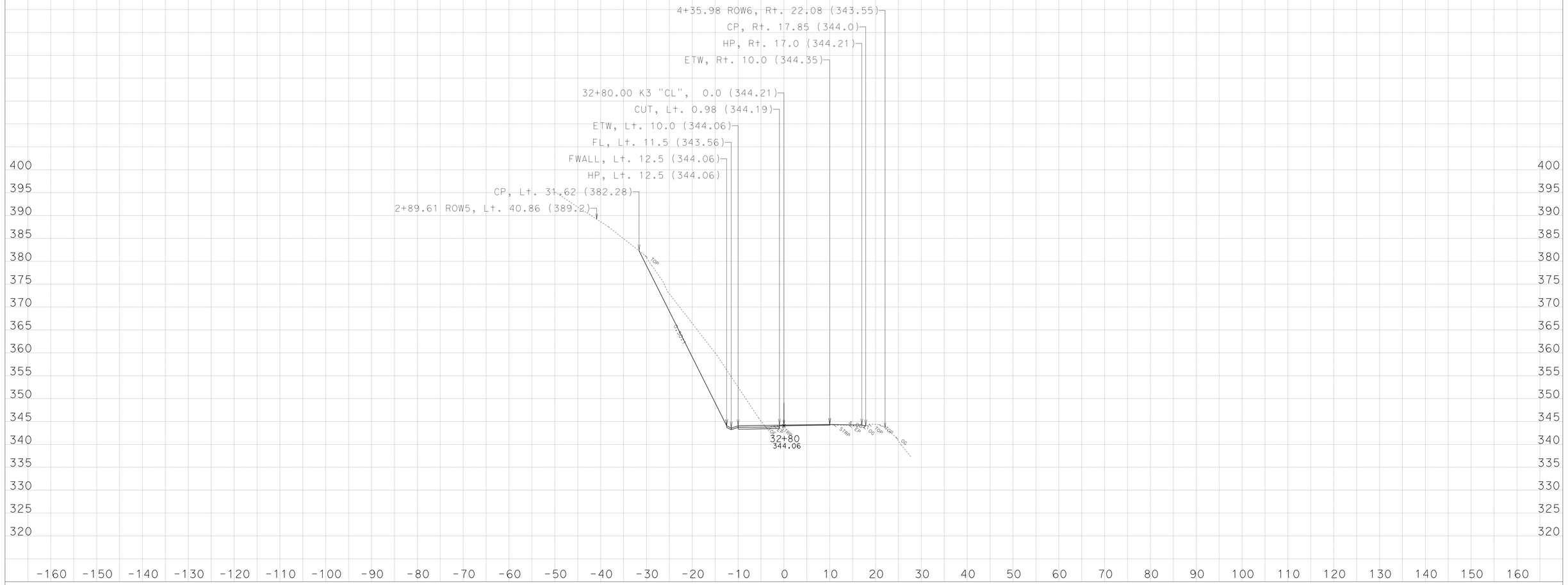
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 15 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

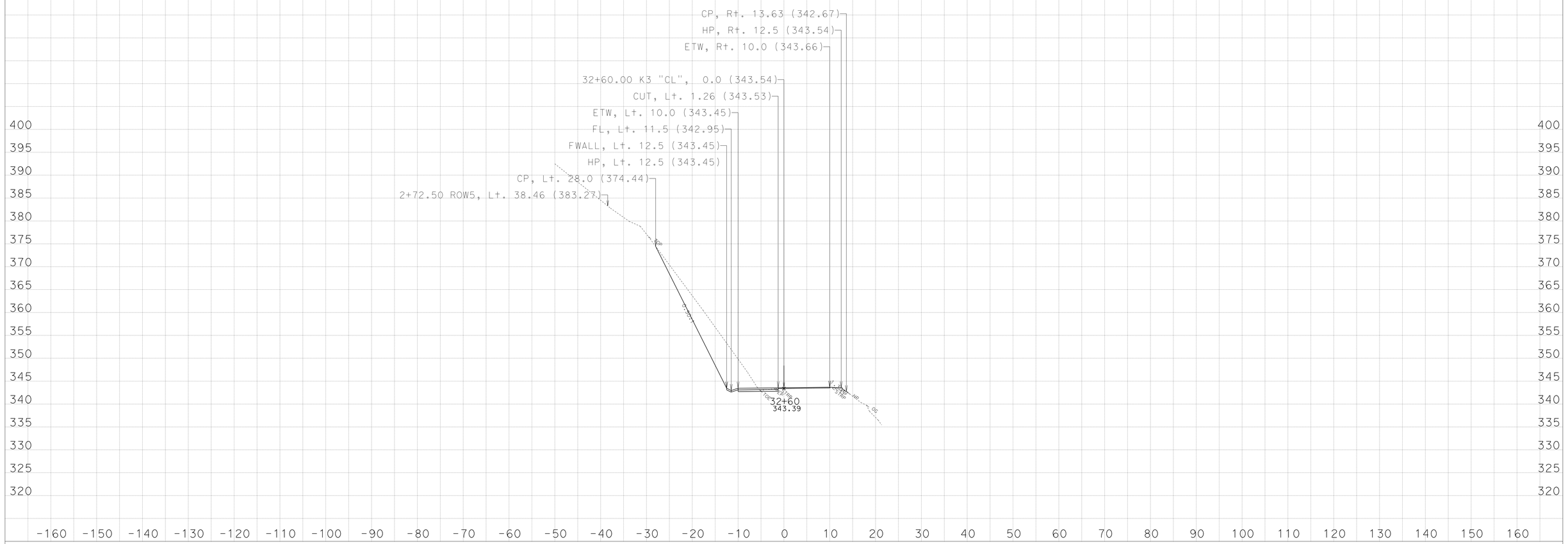
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 14 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

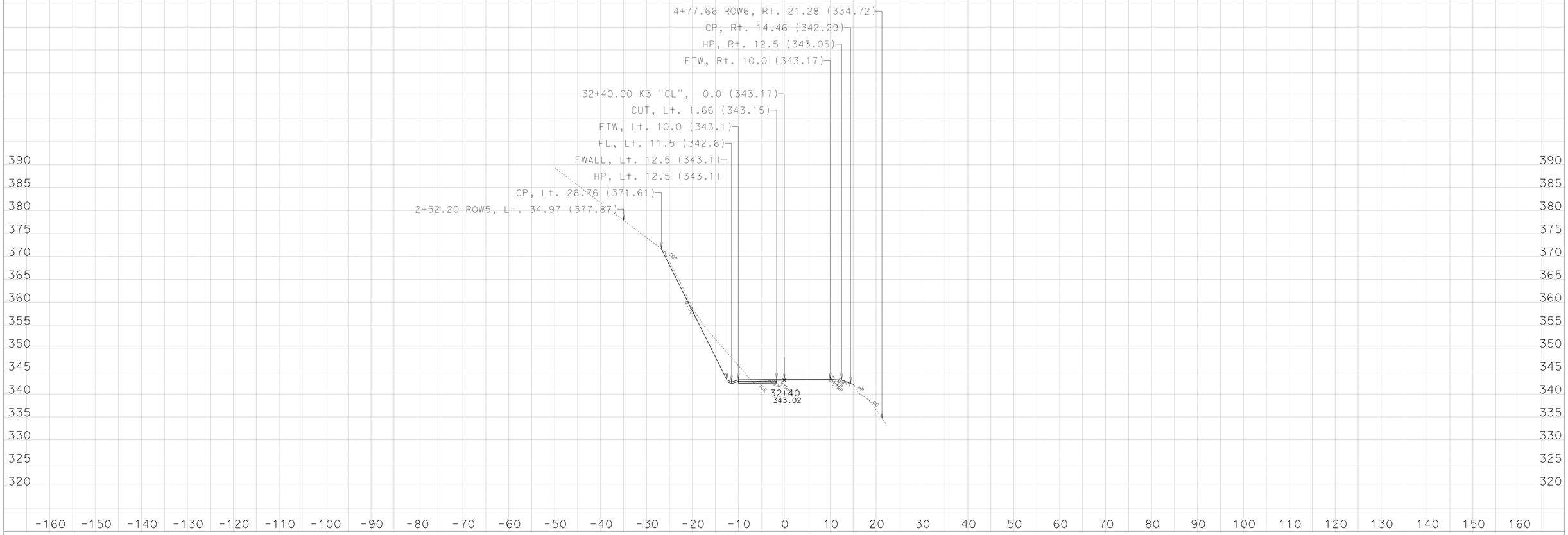
Alignment: "K3"
DESIGN CROSS SECTIONS

SHEET 13 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

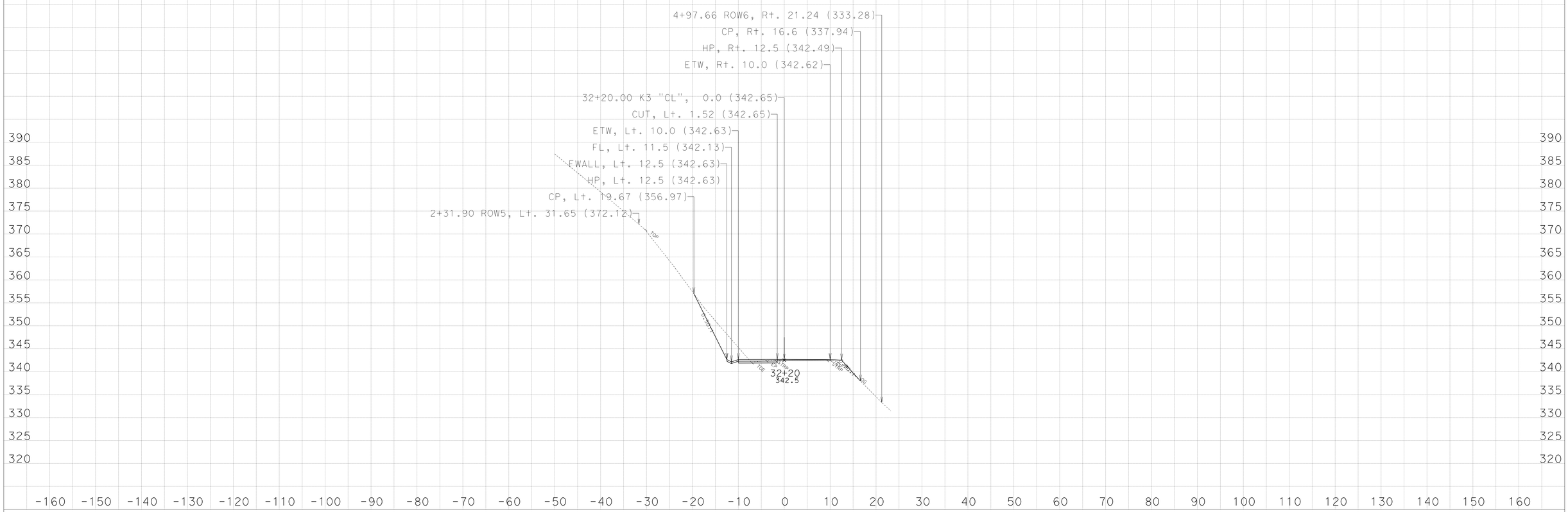
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 12 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

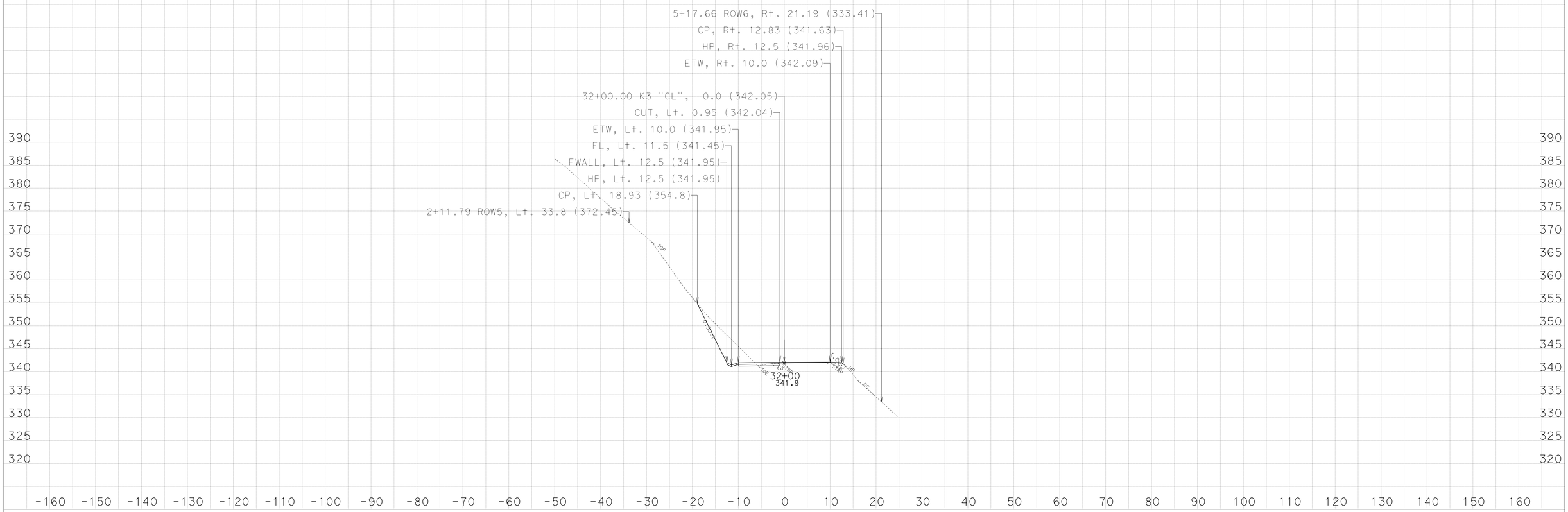
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 11 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

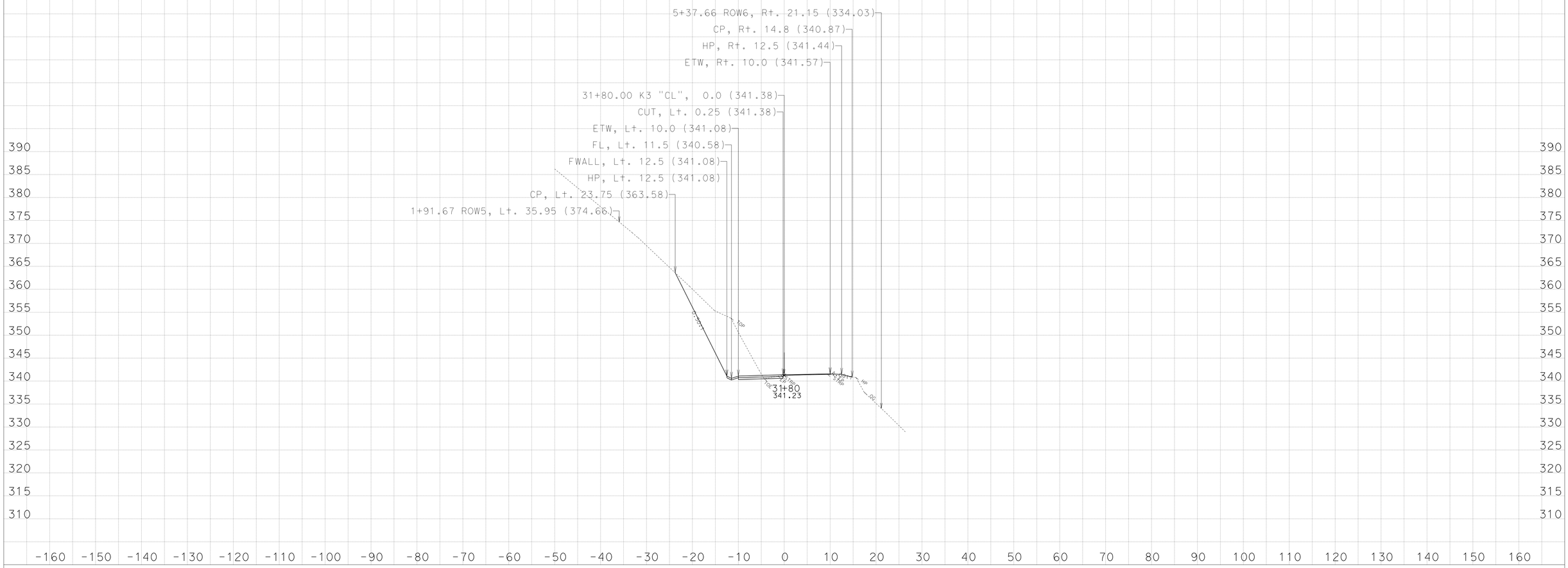
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 10 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

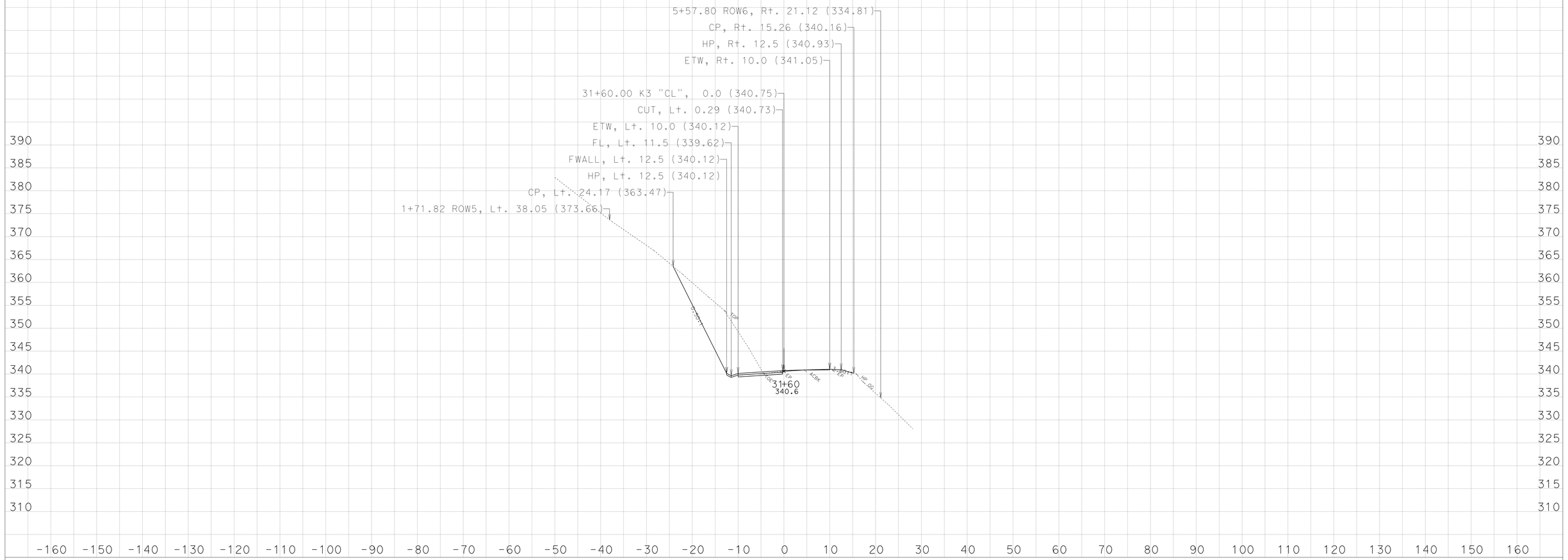
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 9 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

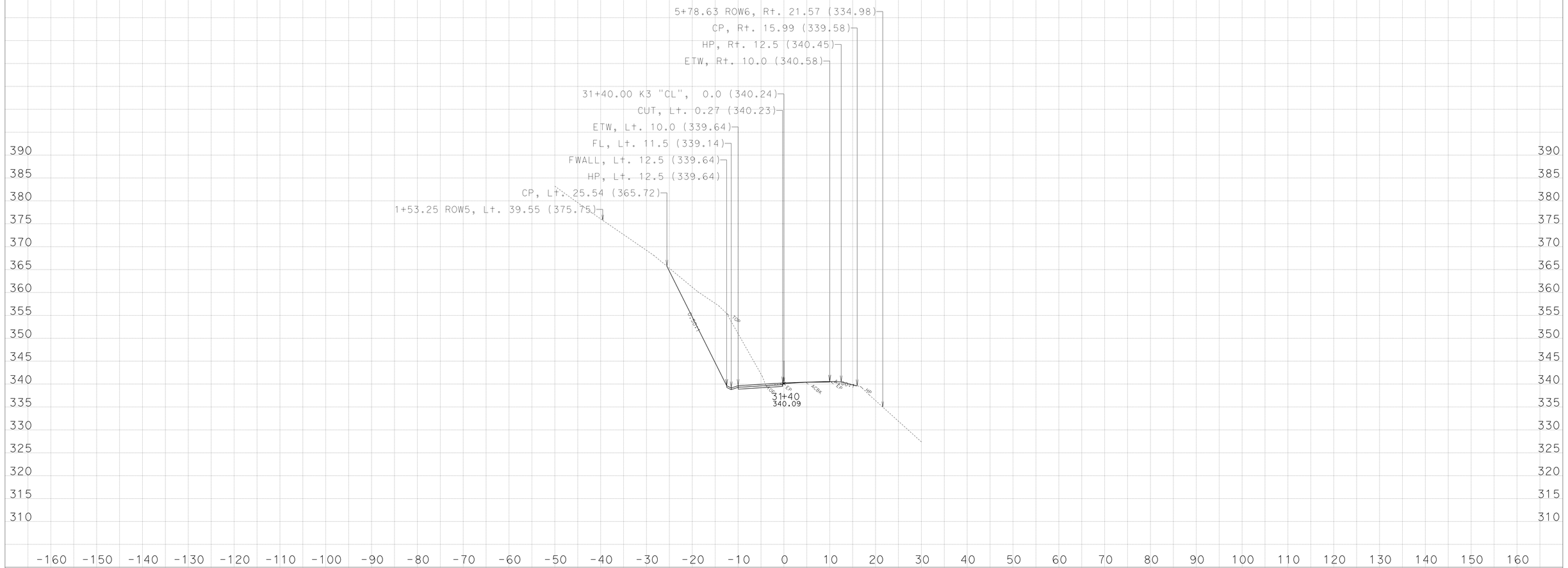
Alignment: "K3"
DESIGN CROSS SECTIONS

SHEET 8 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions are US Survey Feet

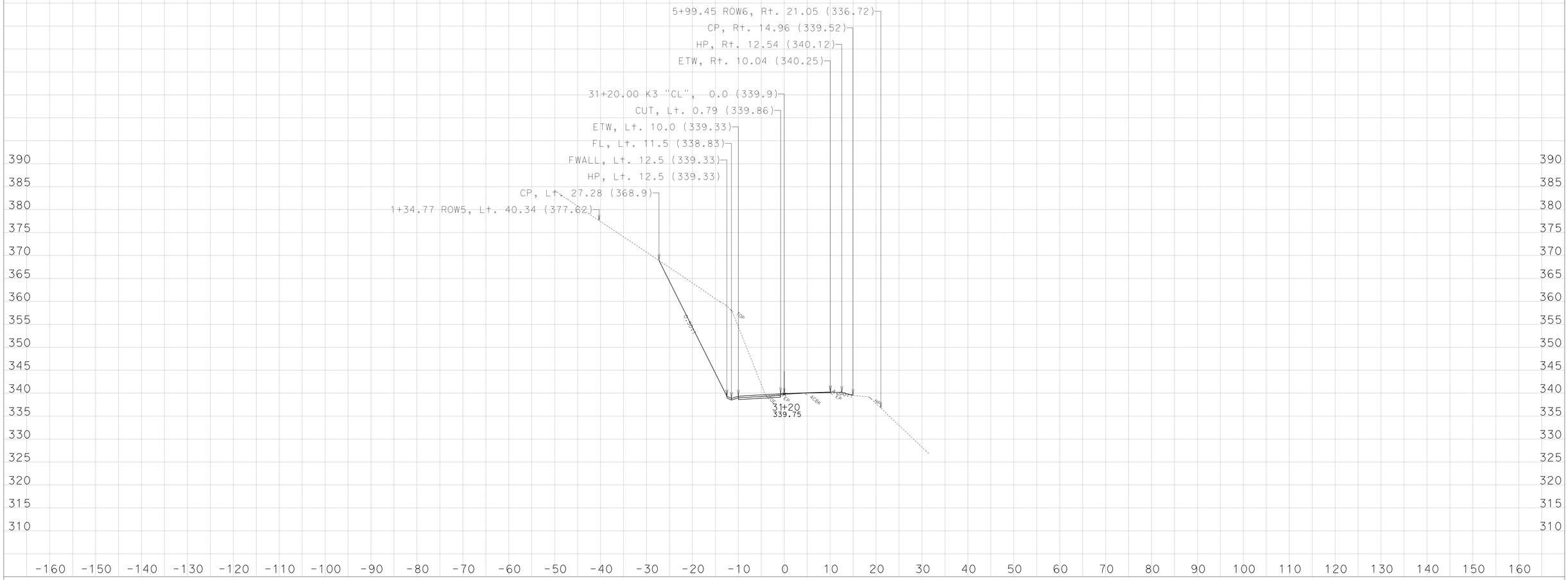
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS

SHEET 6 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64

CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

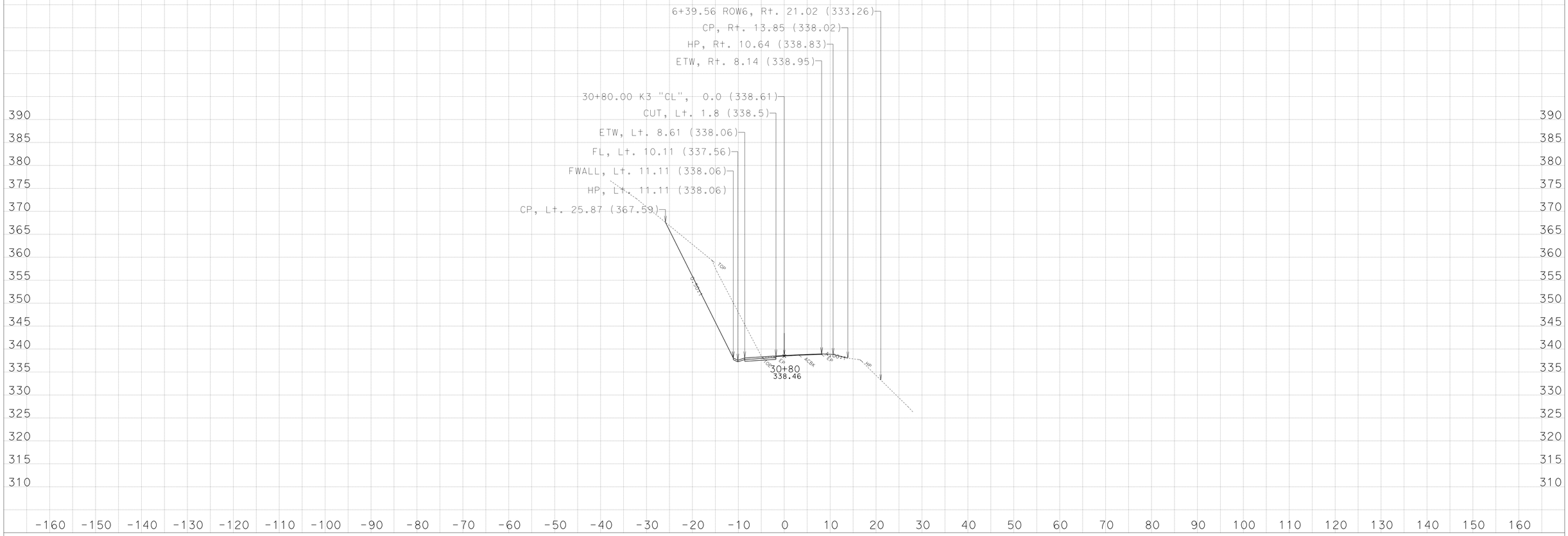
Alignment: "K3"

DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

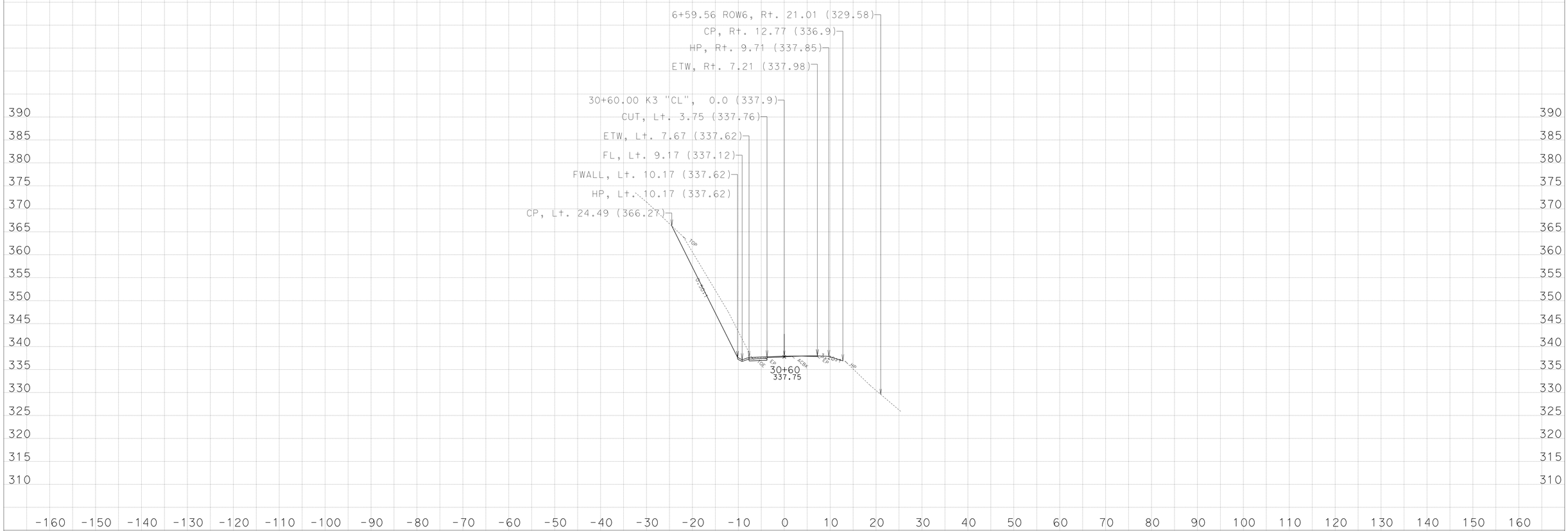
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 4 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

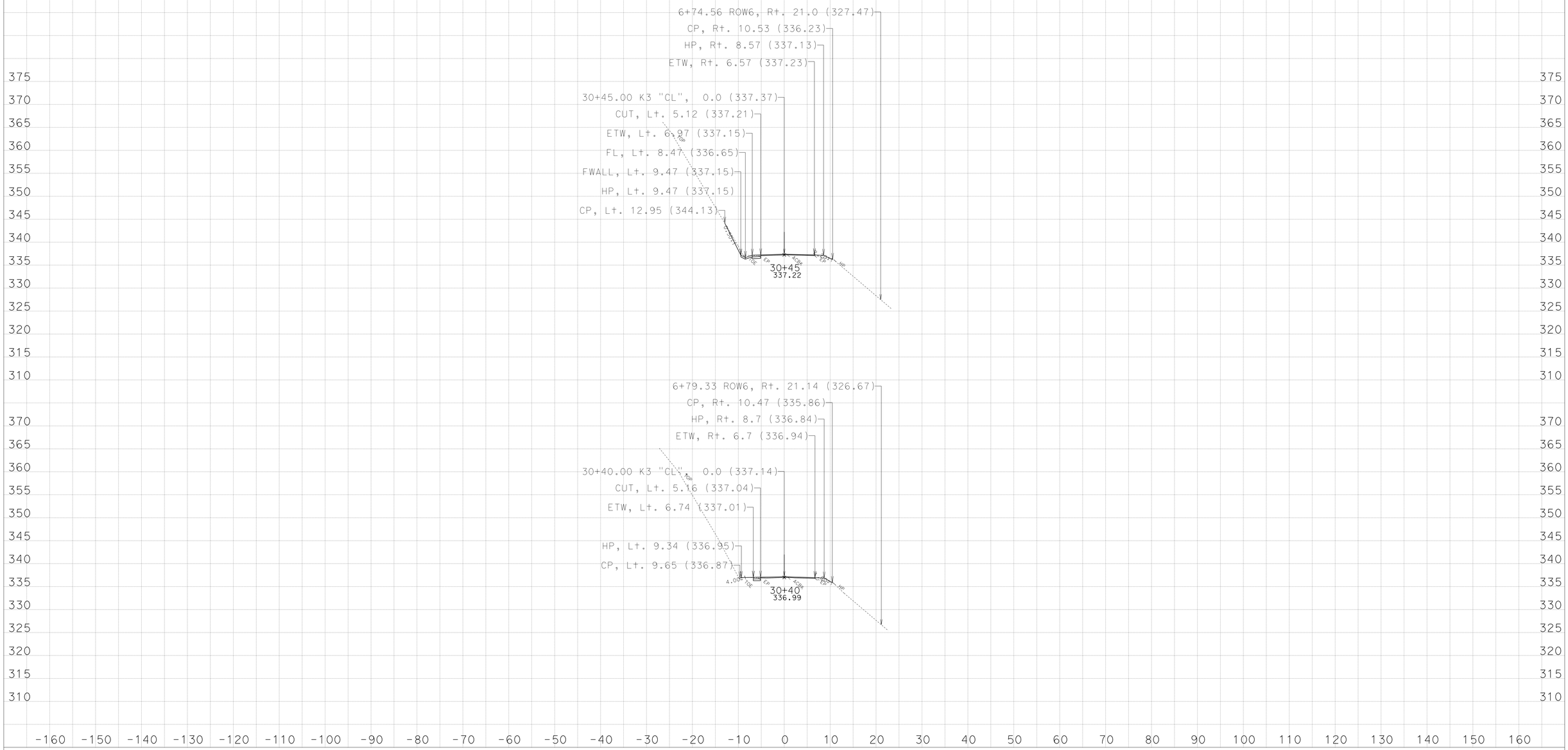
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 3 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"

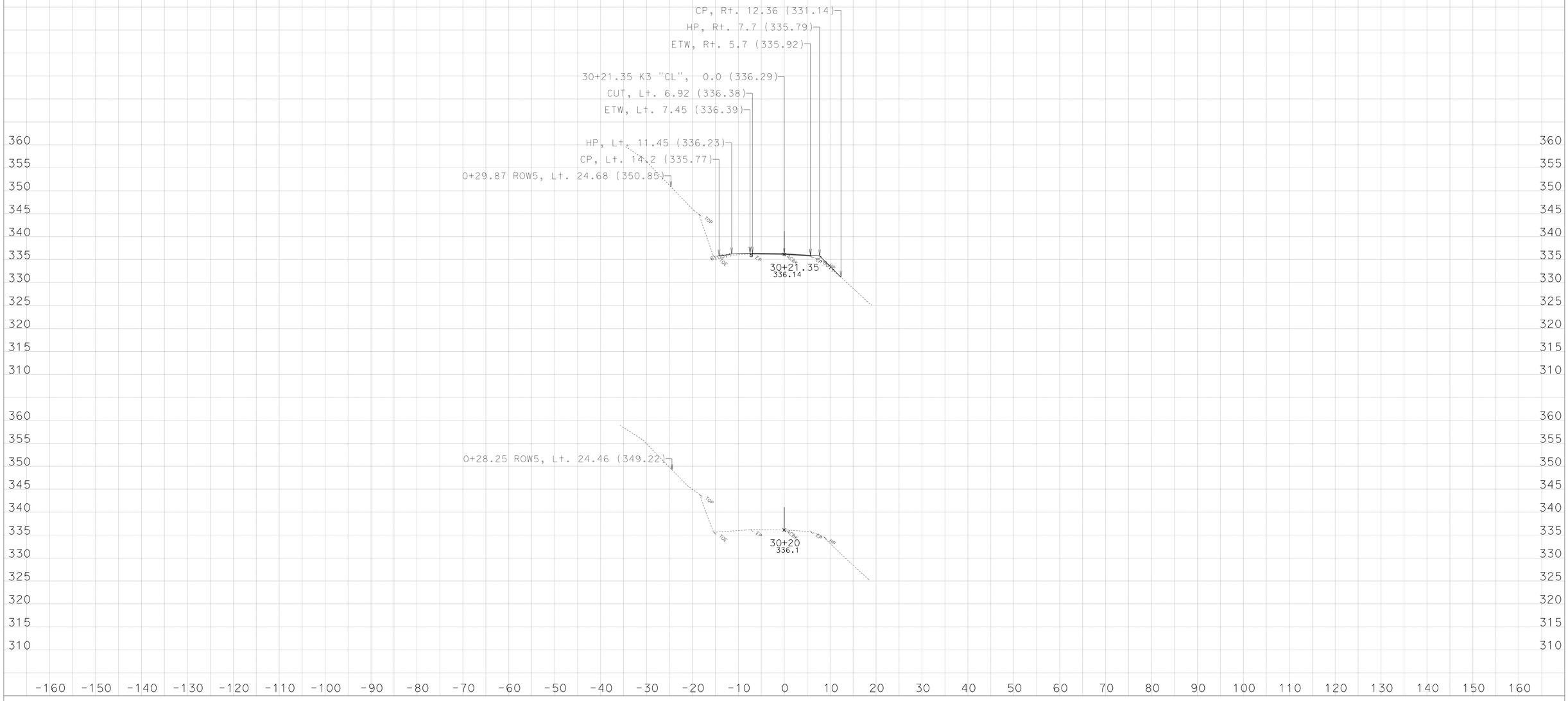
DESIGN CROSS SECTIONS

SHEET 2 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Standard MBGR)

Route 169 - Location 3,
Post Mile: 20.48/20.64



CREATED BY: NRDOE, ODN, E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k3finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

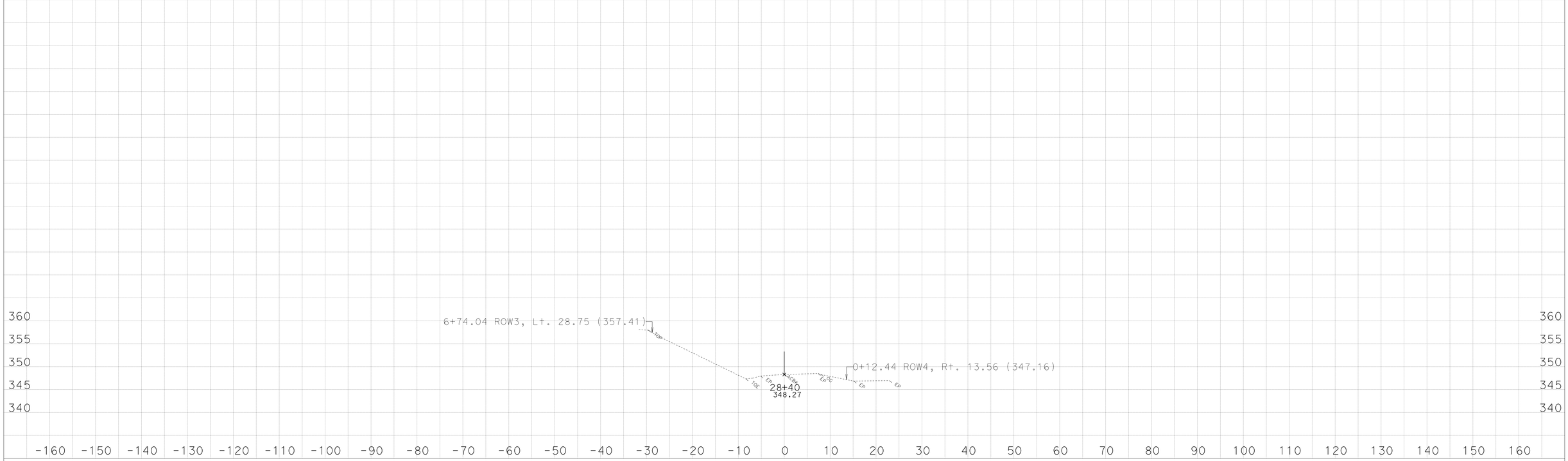
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K3"
DESIGN CROSS SECTIONS
SHEET 1 OF 33

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

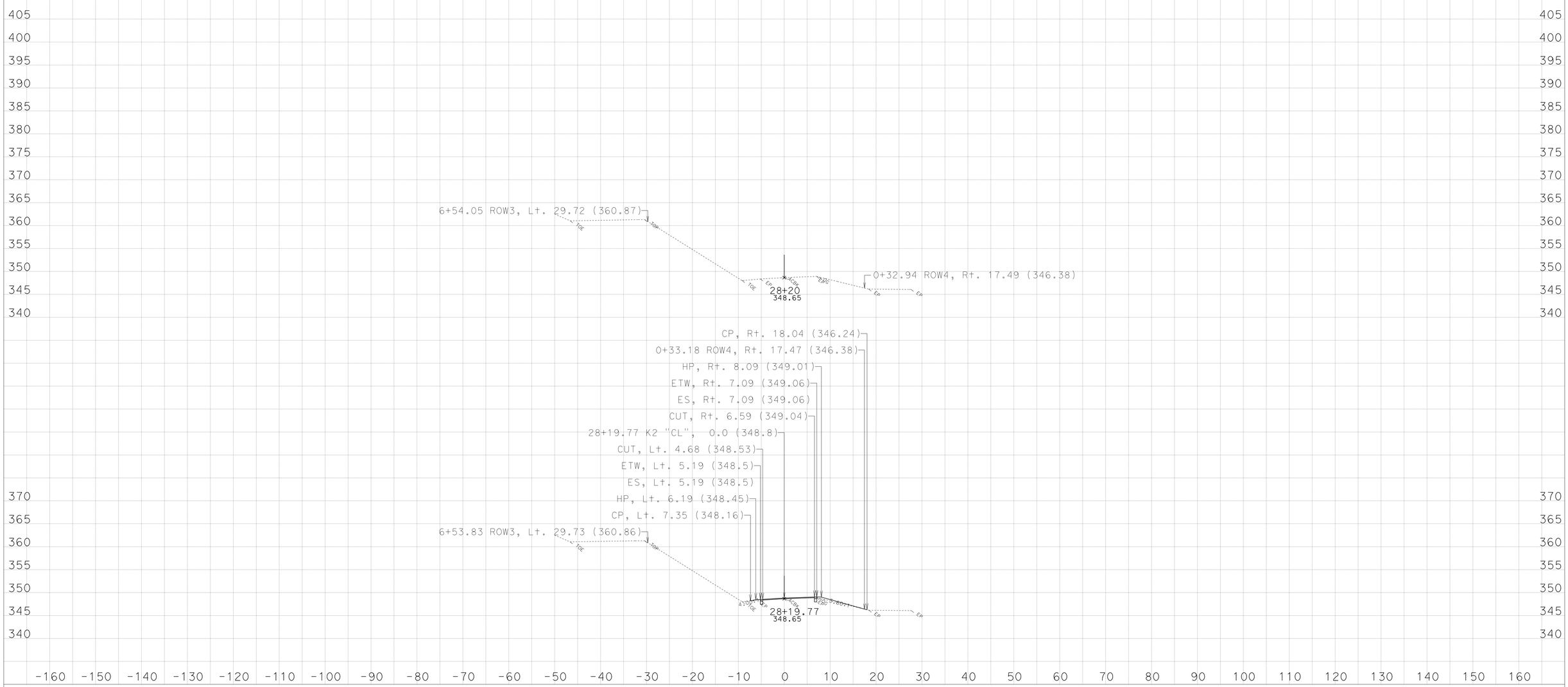
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 37 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

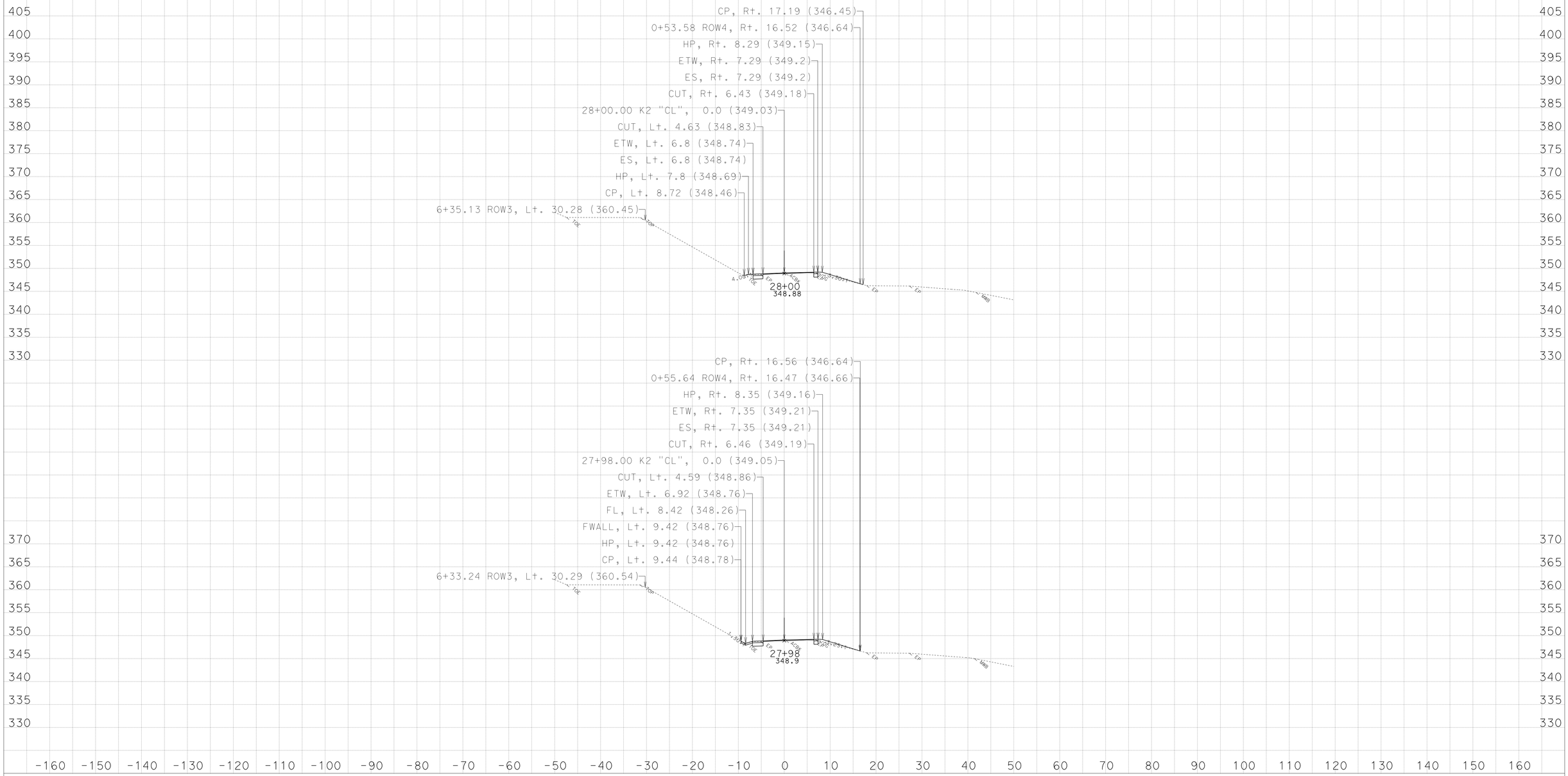
Alignment: "K2"
DESIGN CROSS SECTIONS

SHEET 36 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

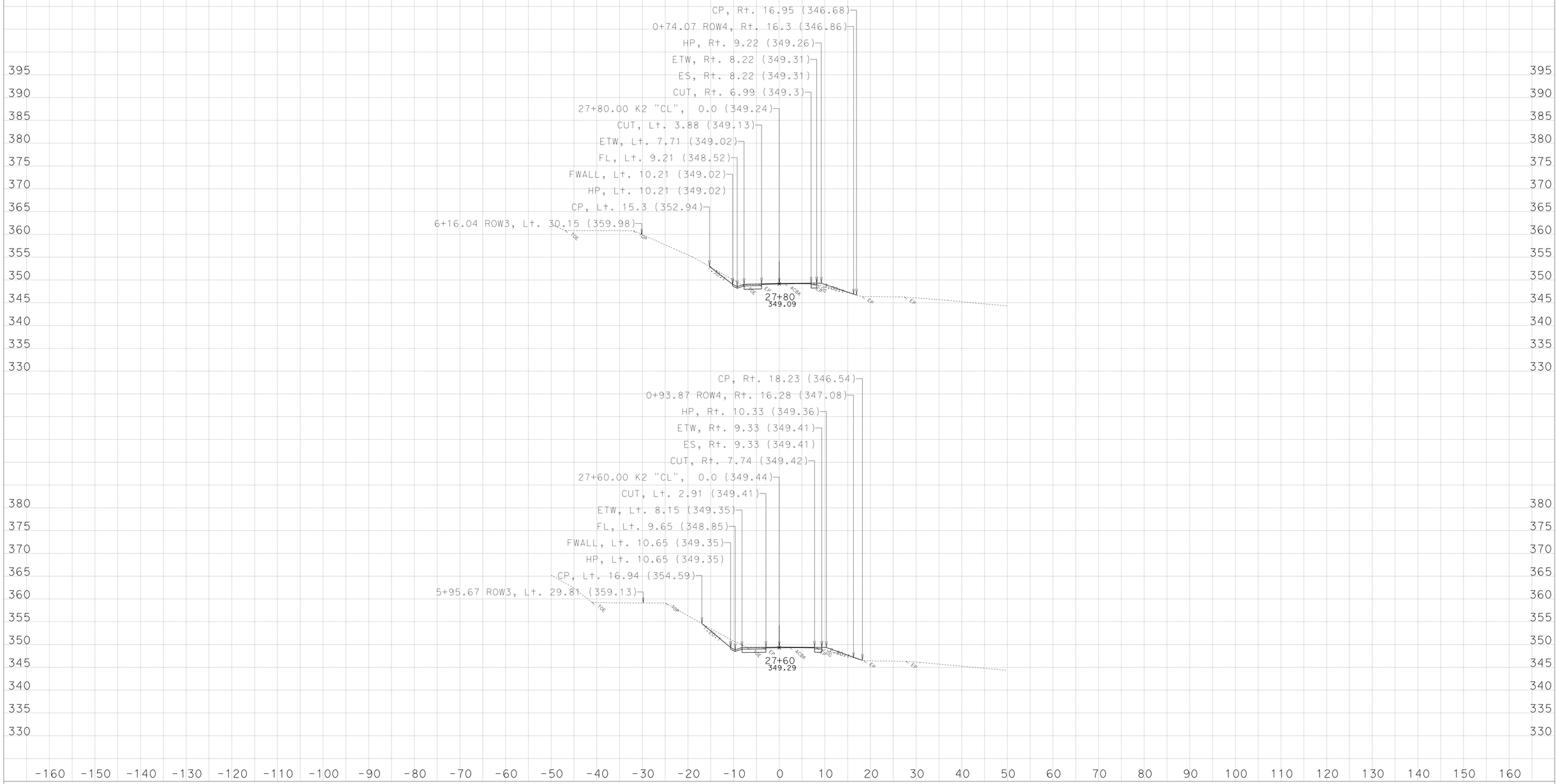
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

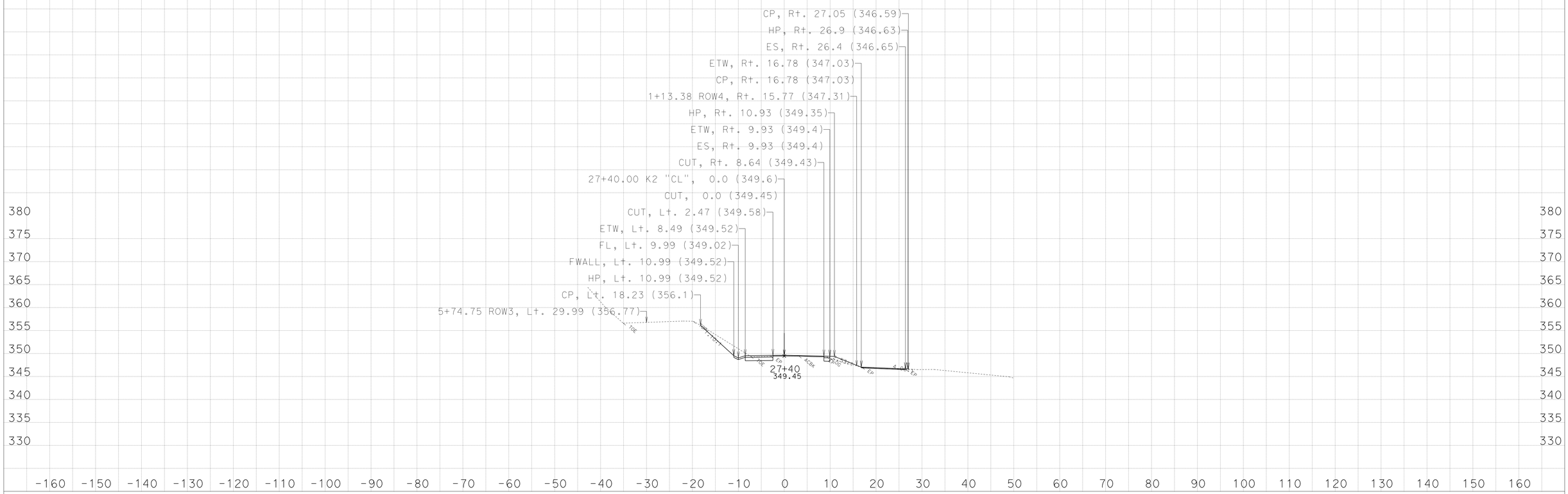
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 34 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

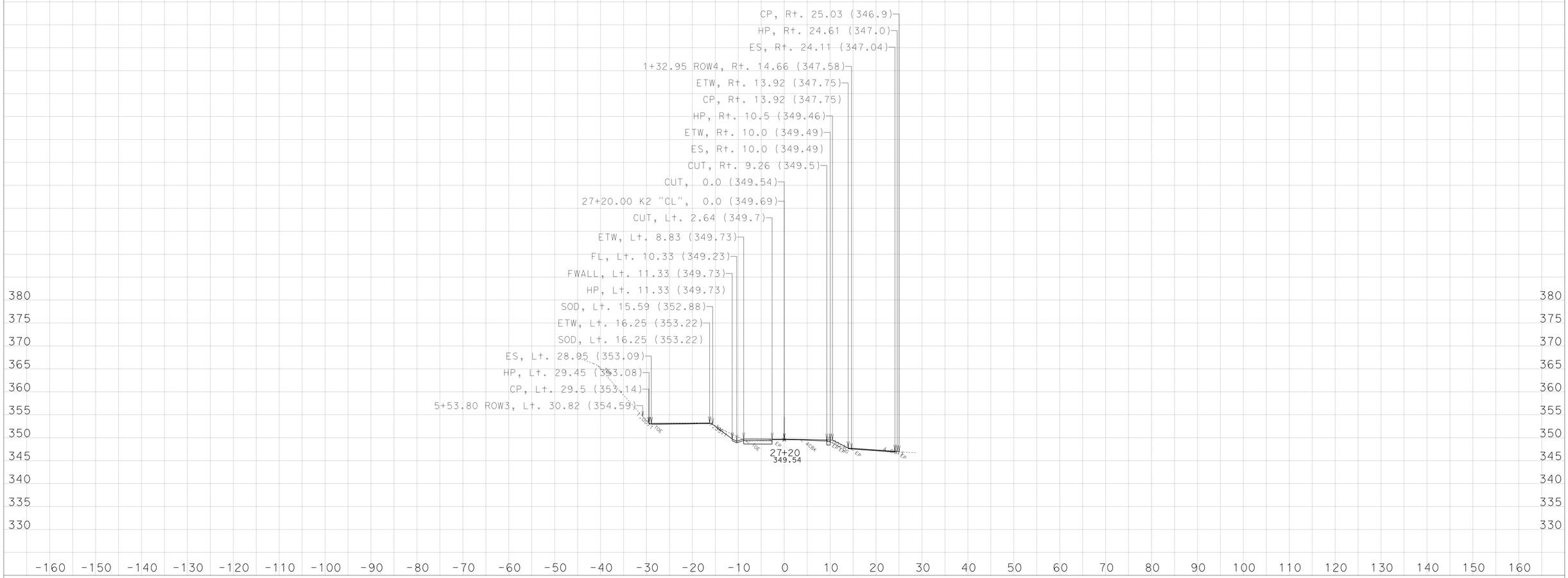
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 33 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

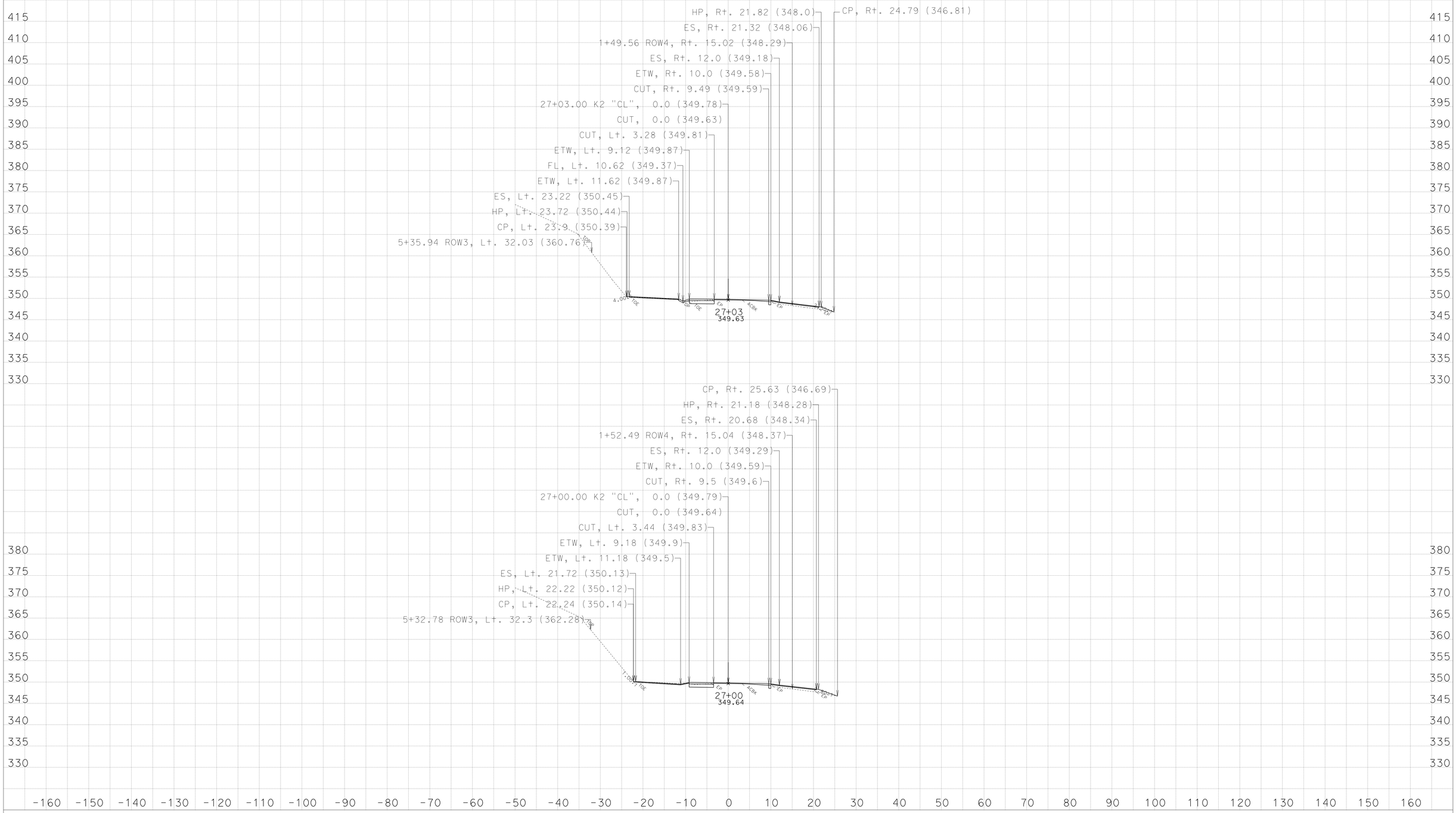
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

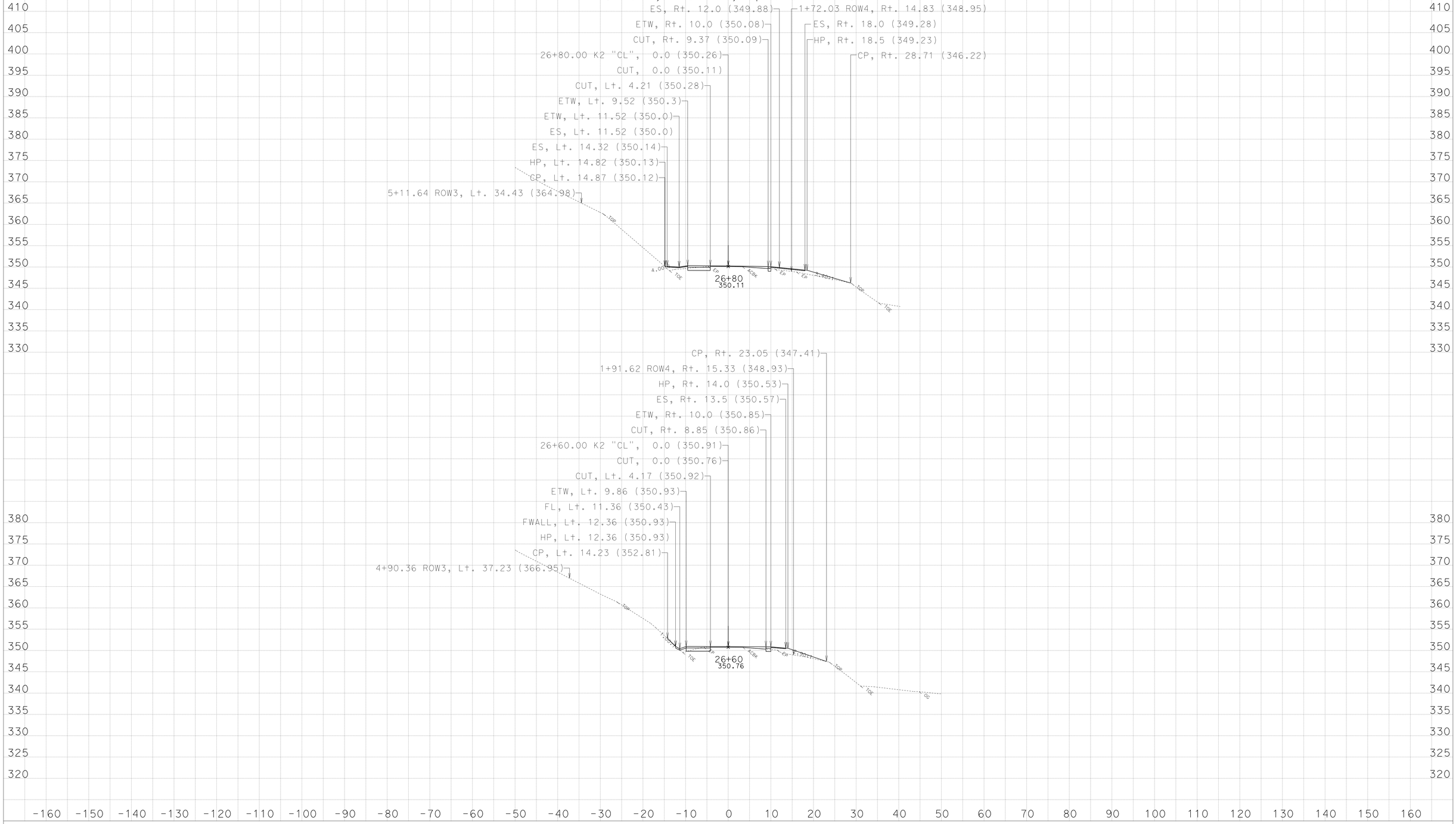
Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 31 OF 37

For Earthwork Development Only

Safety Improvements

(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

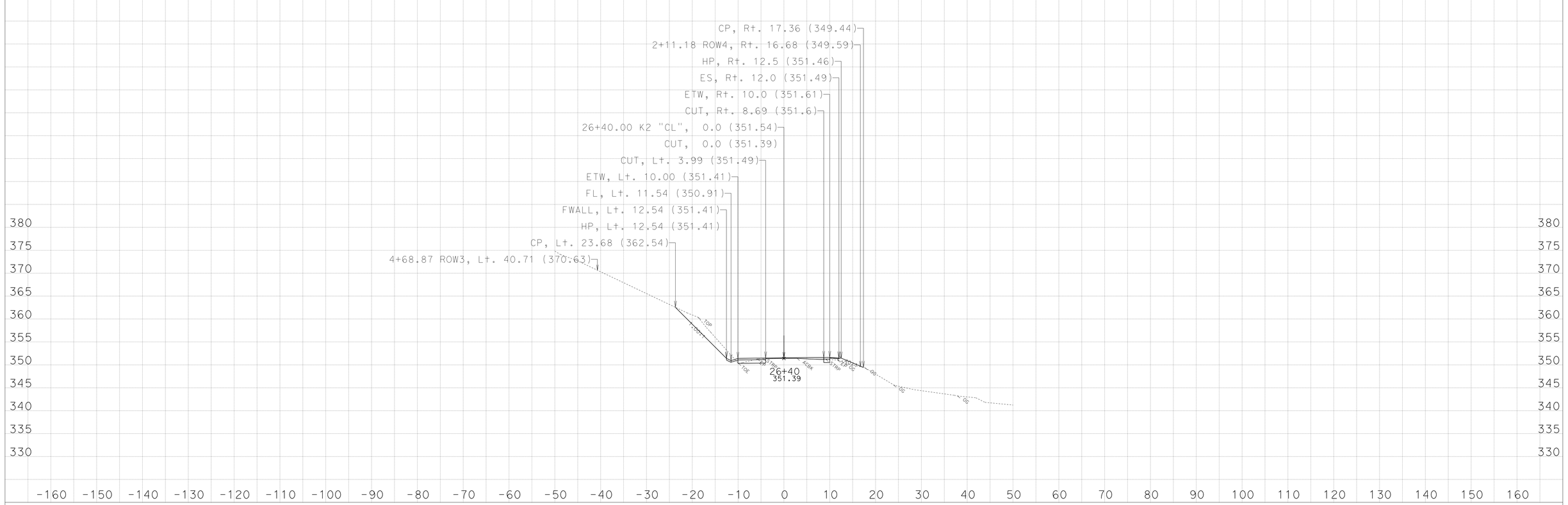
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 30 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

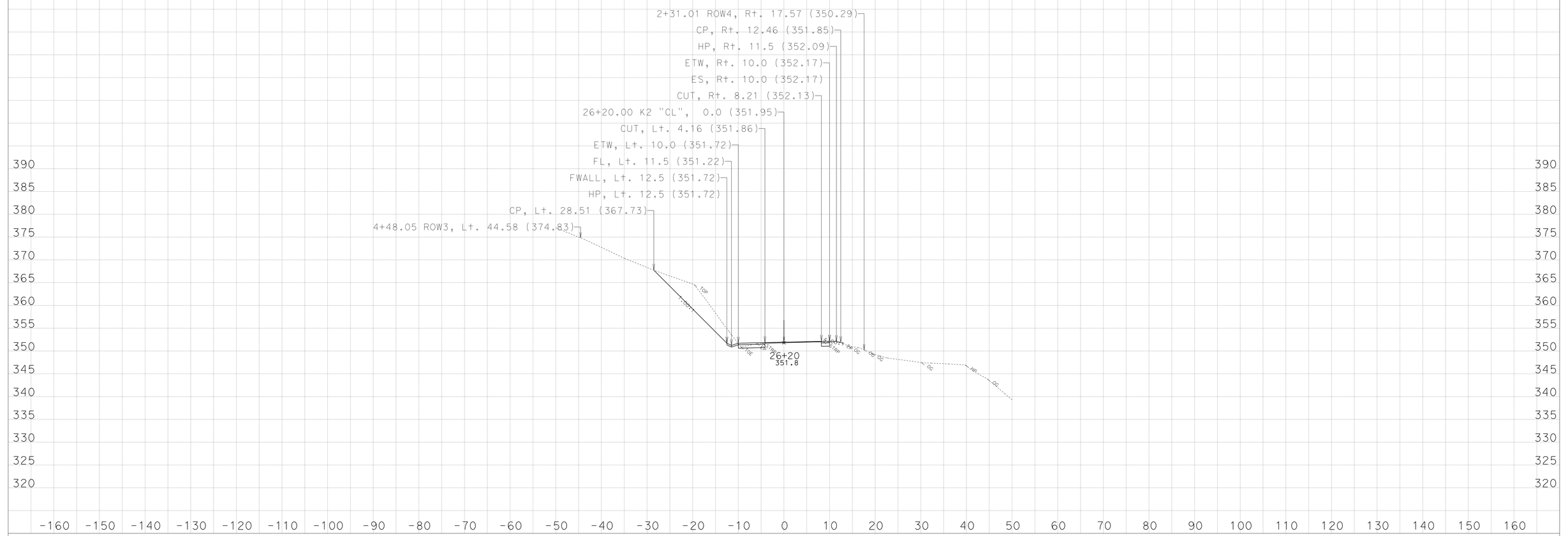
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 29 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"

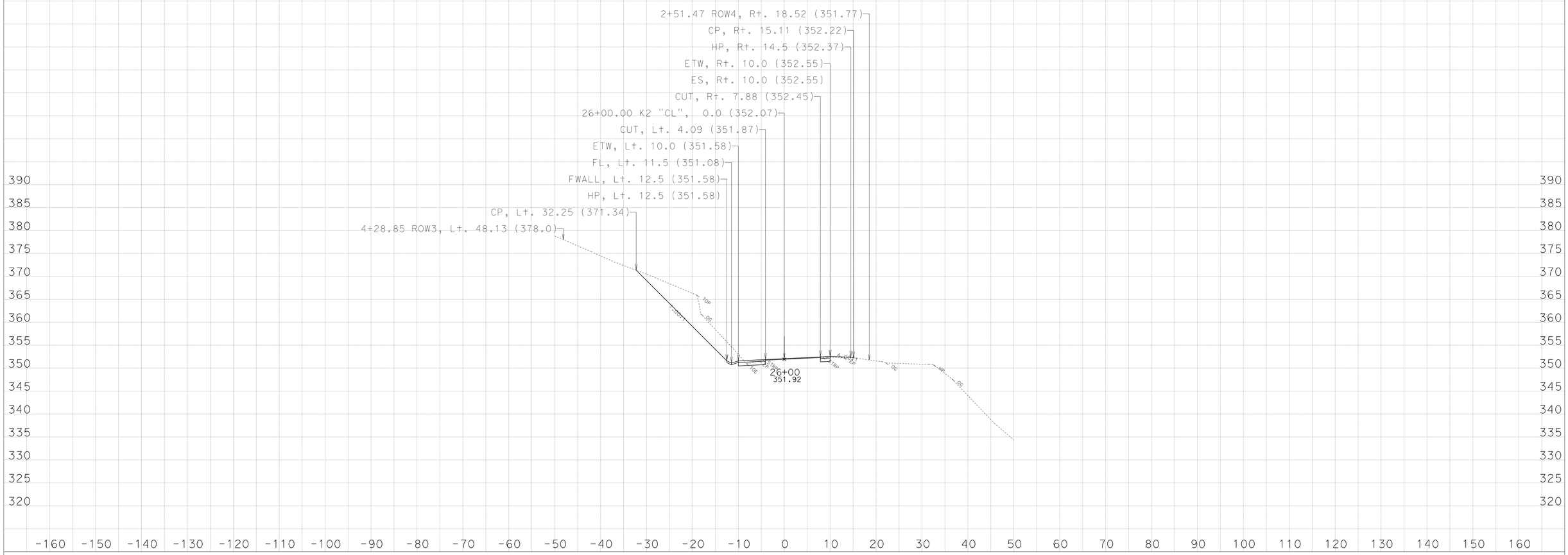
DESIGN CROSS SECTIONS

SHEET 28 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

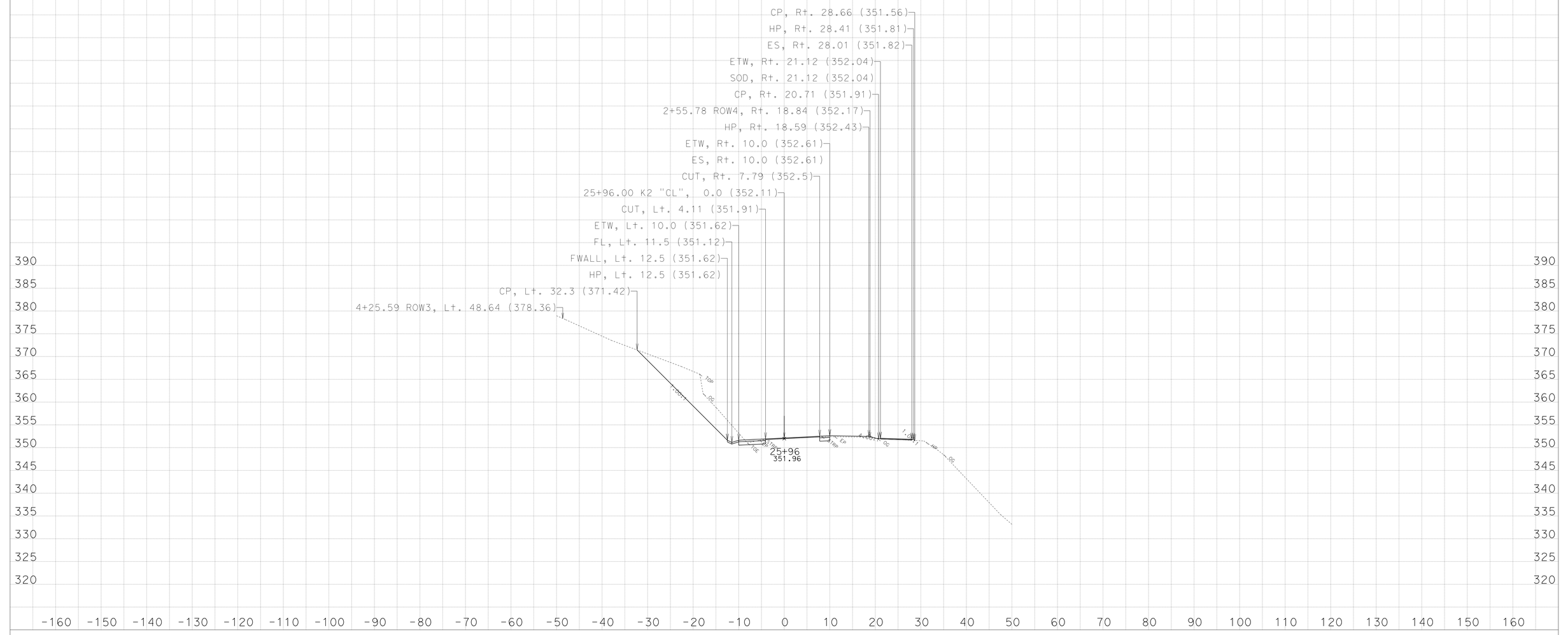
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

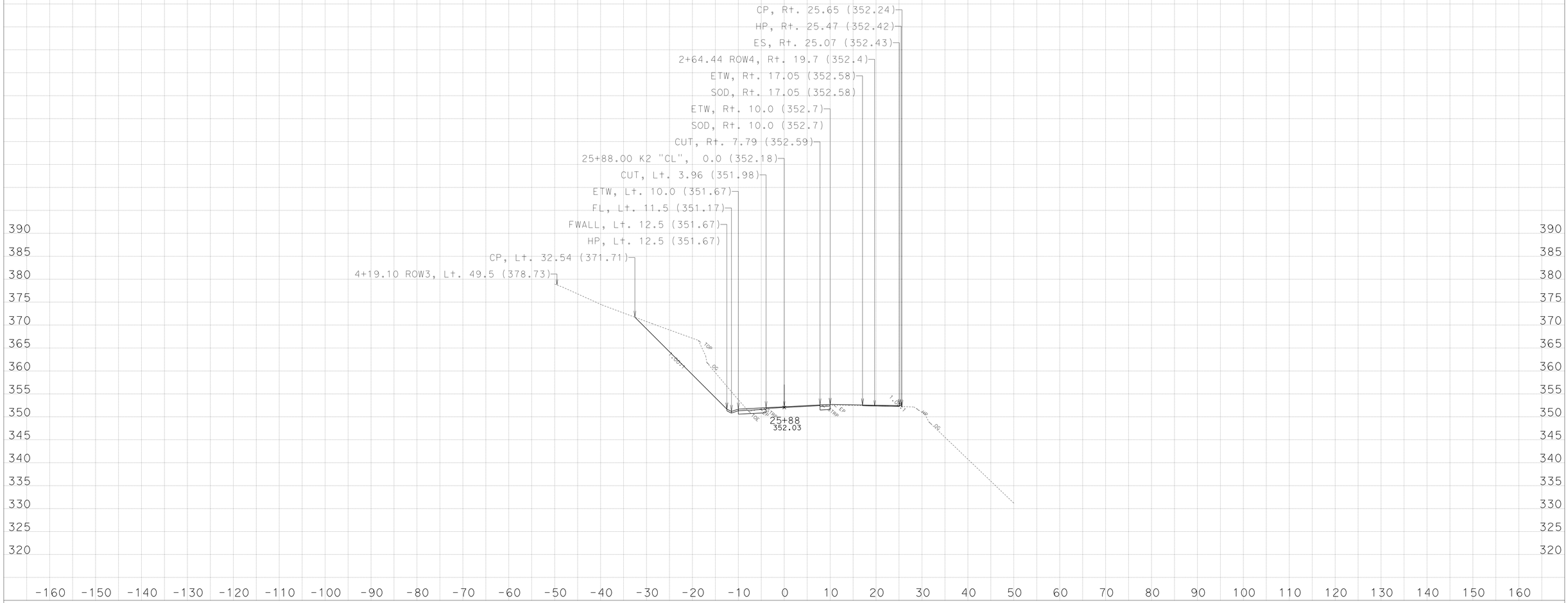
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 26 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

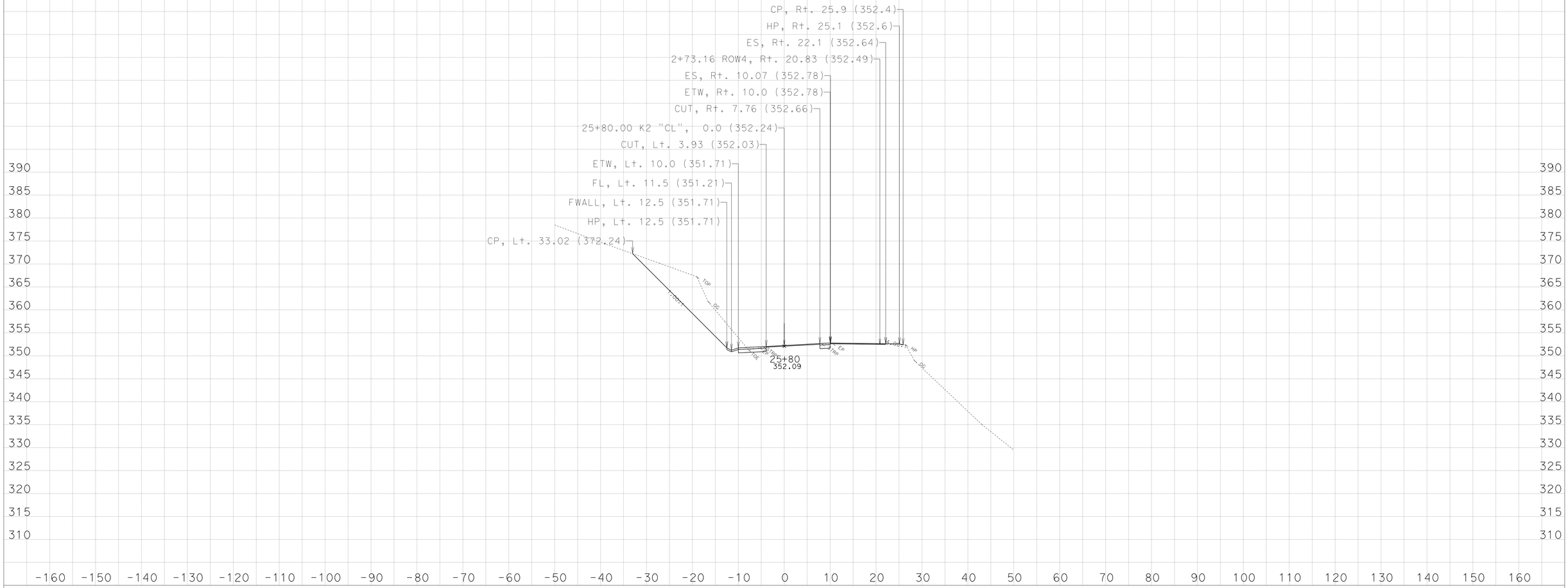
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 25 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

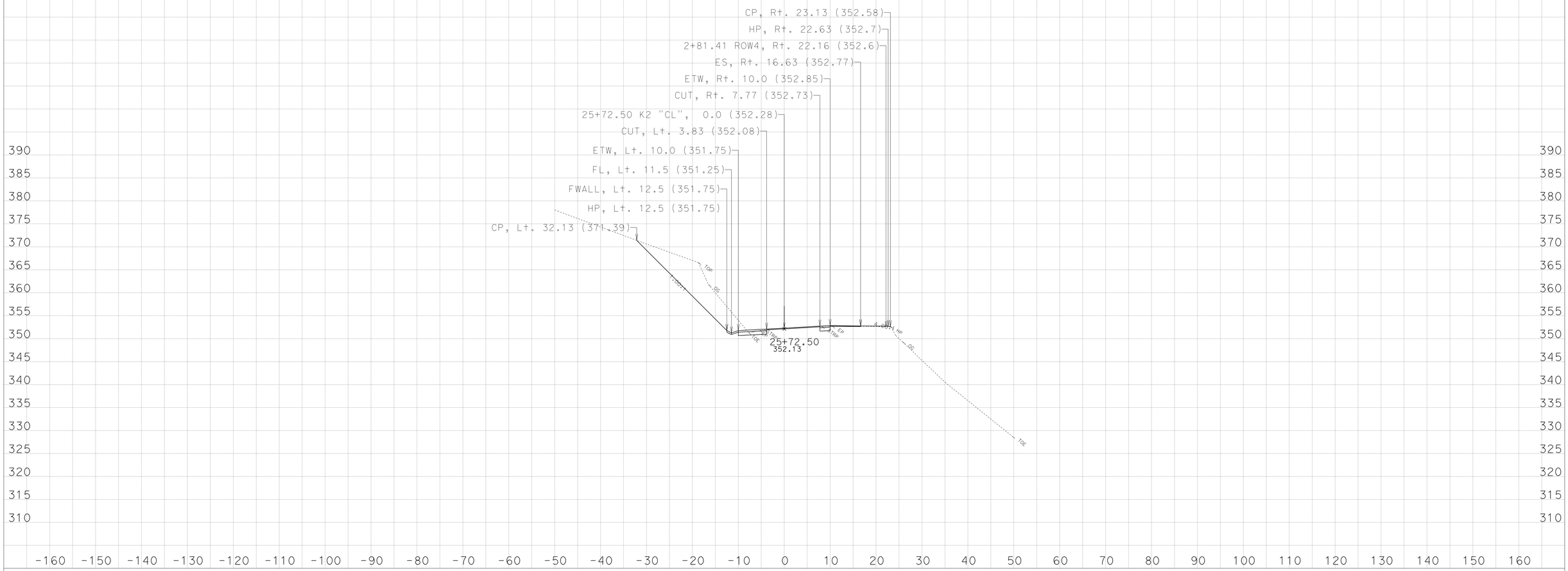
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 24 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

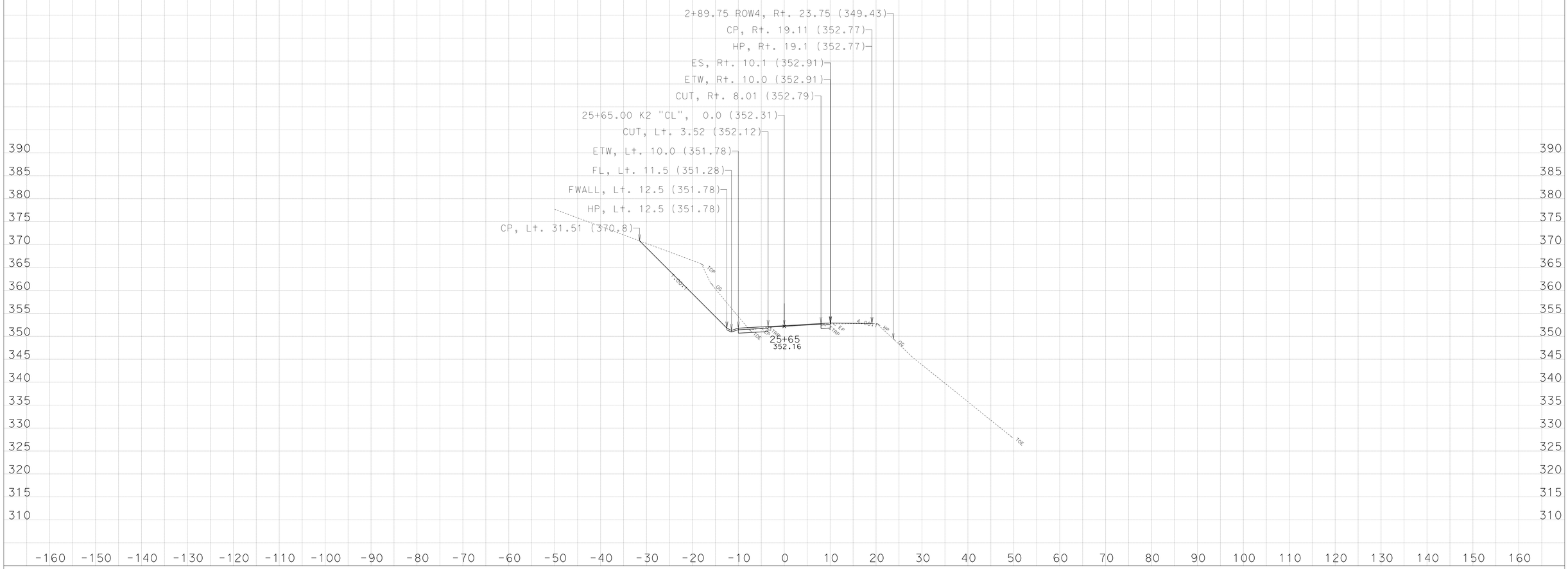
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 23 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

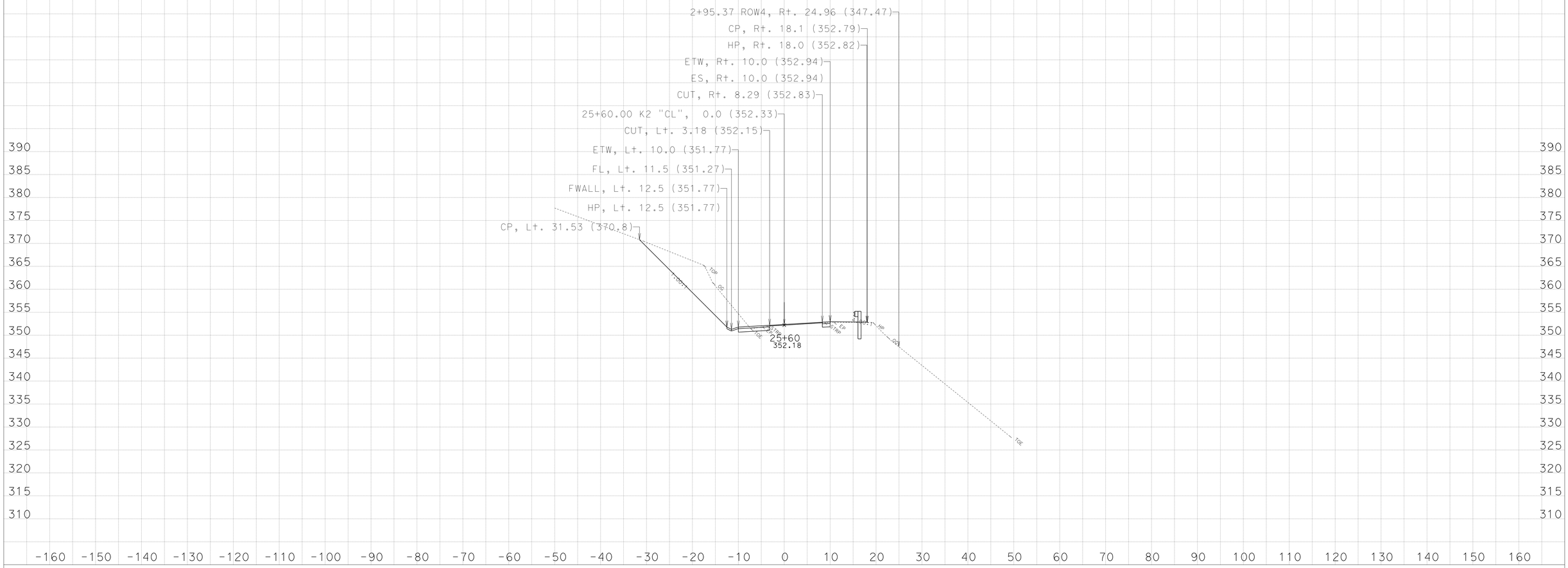
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 22 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

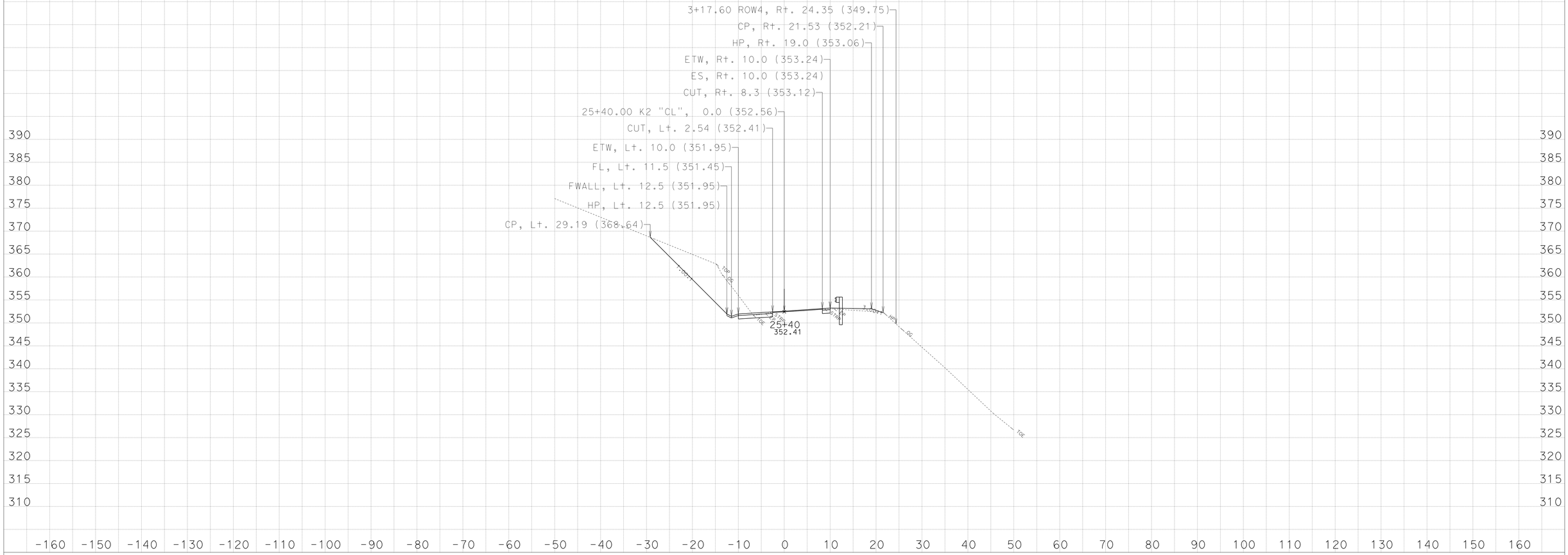
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 21 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

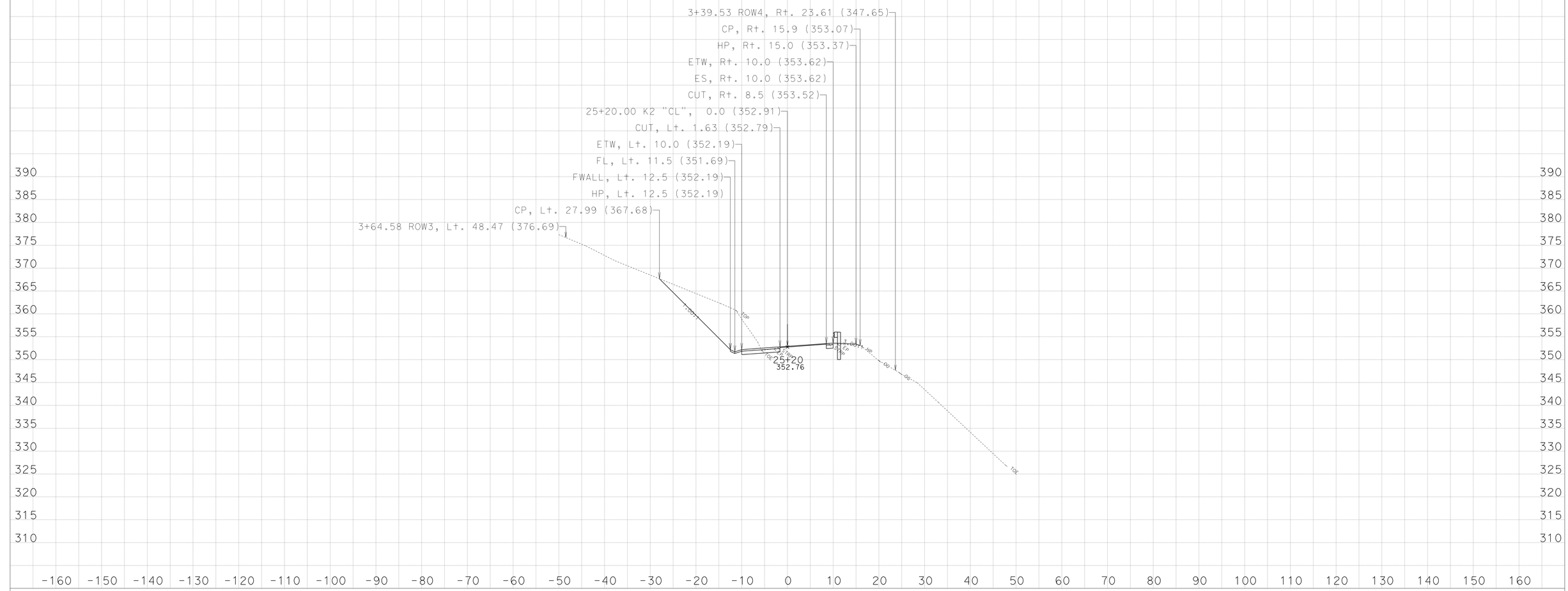
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

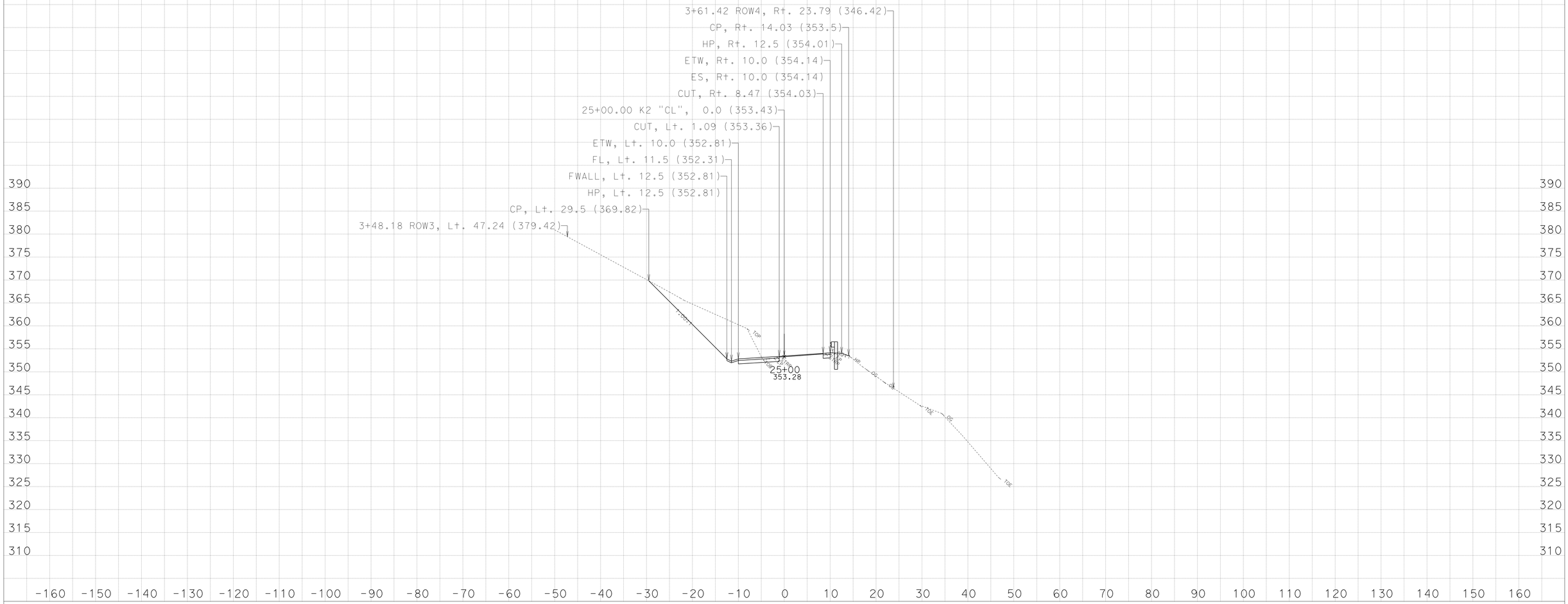
Alignment: "K2"
DESIGN CROSS SECTIONS

SHEET 19 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

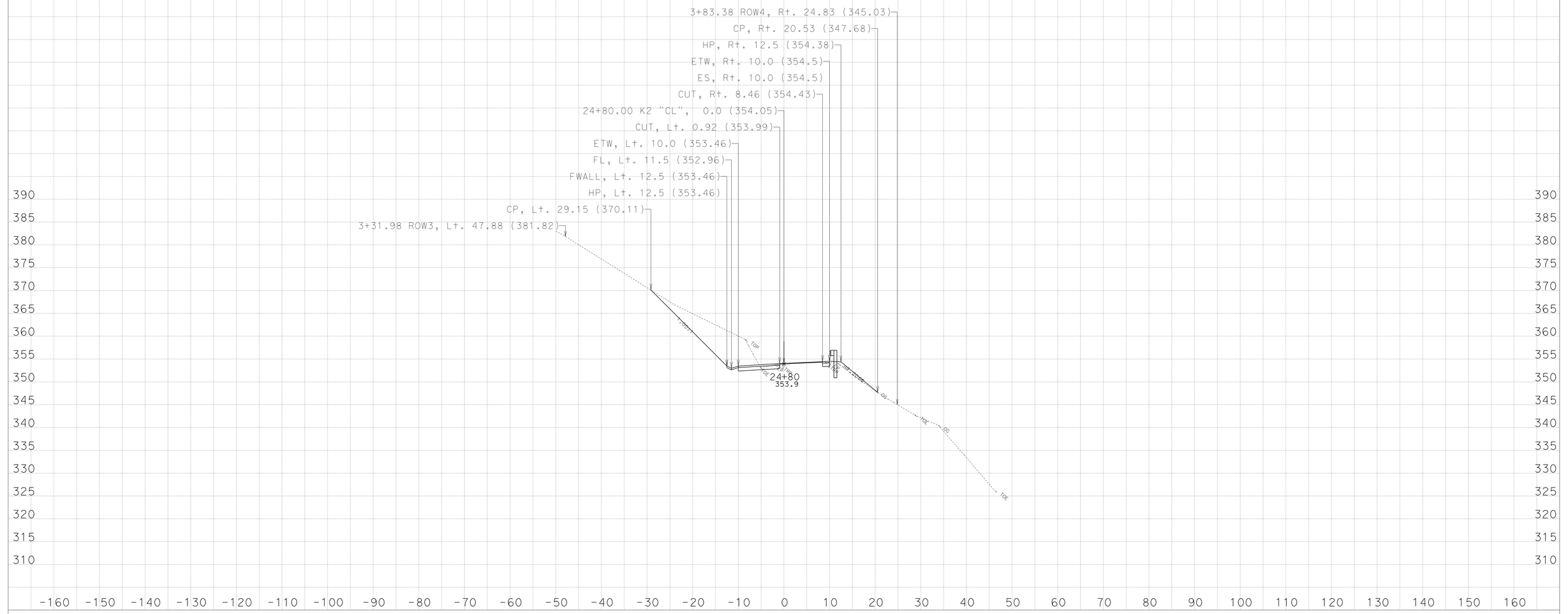
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

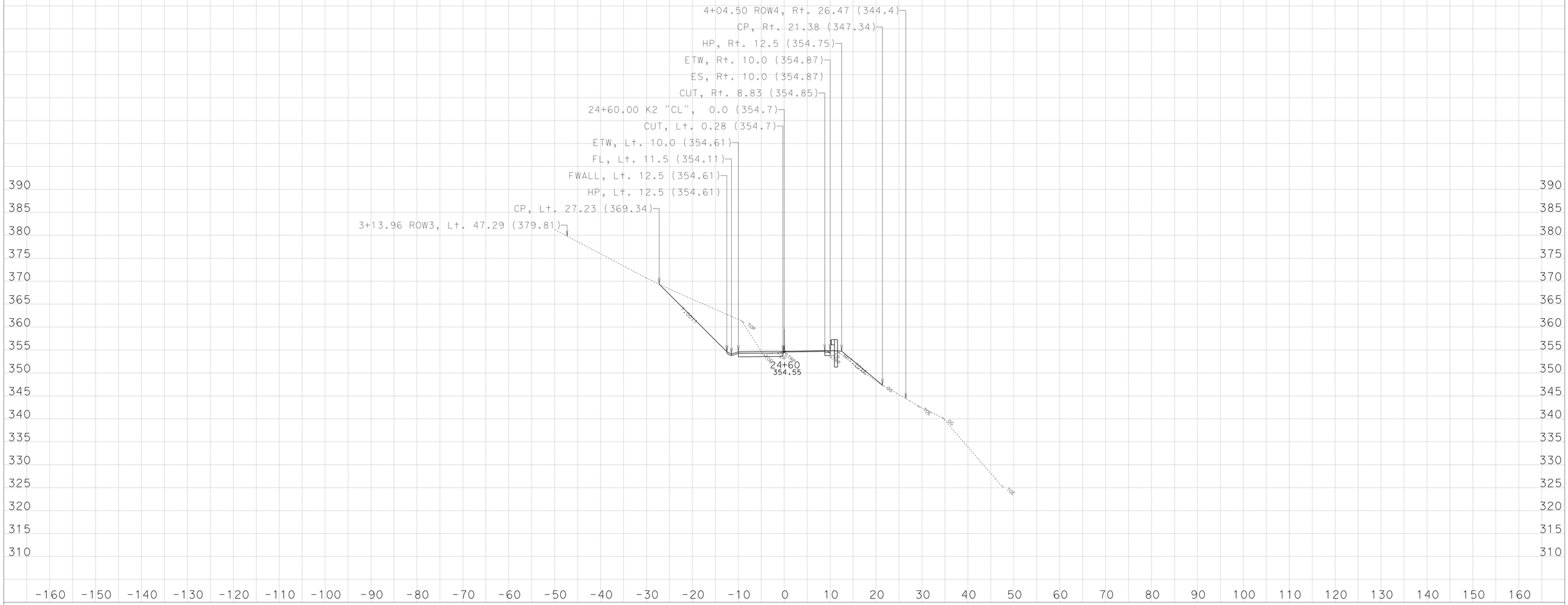
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 17 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

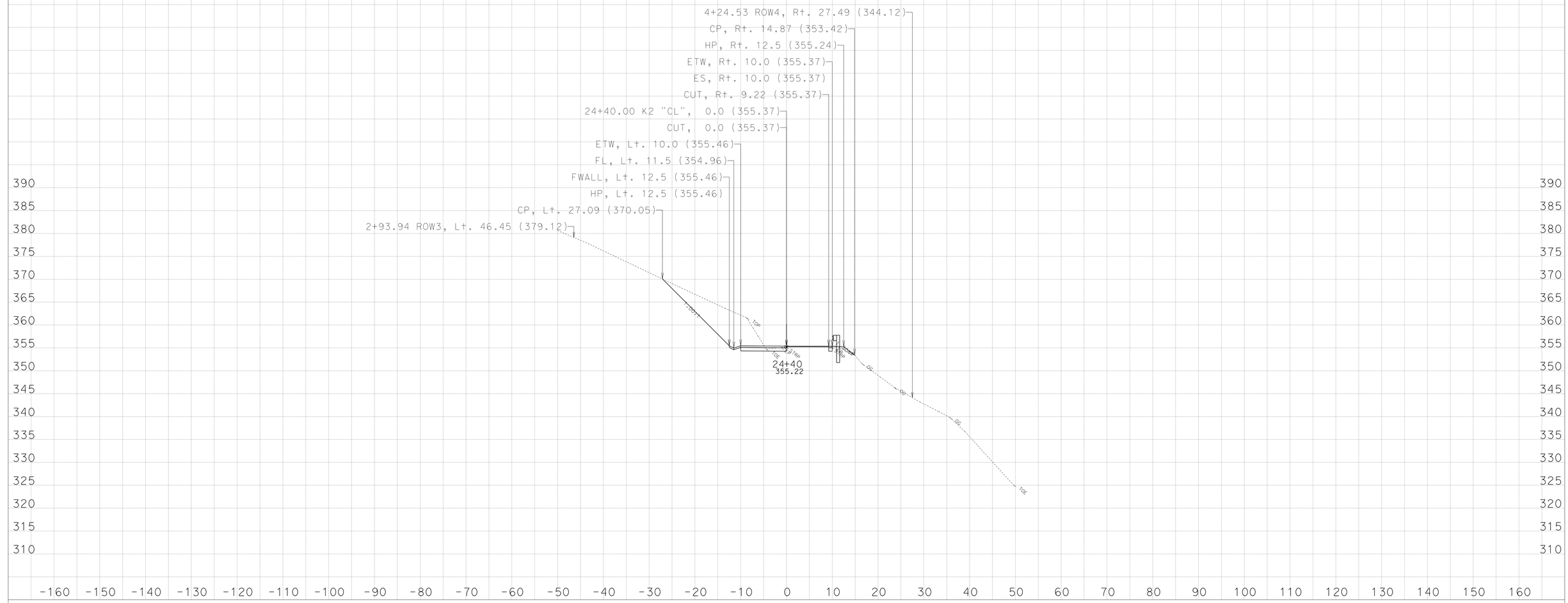
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

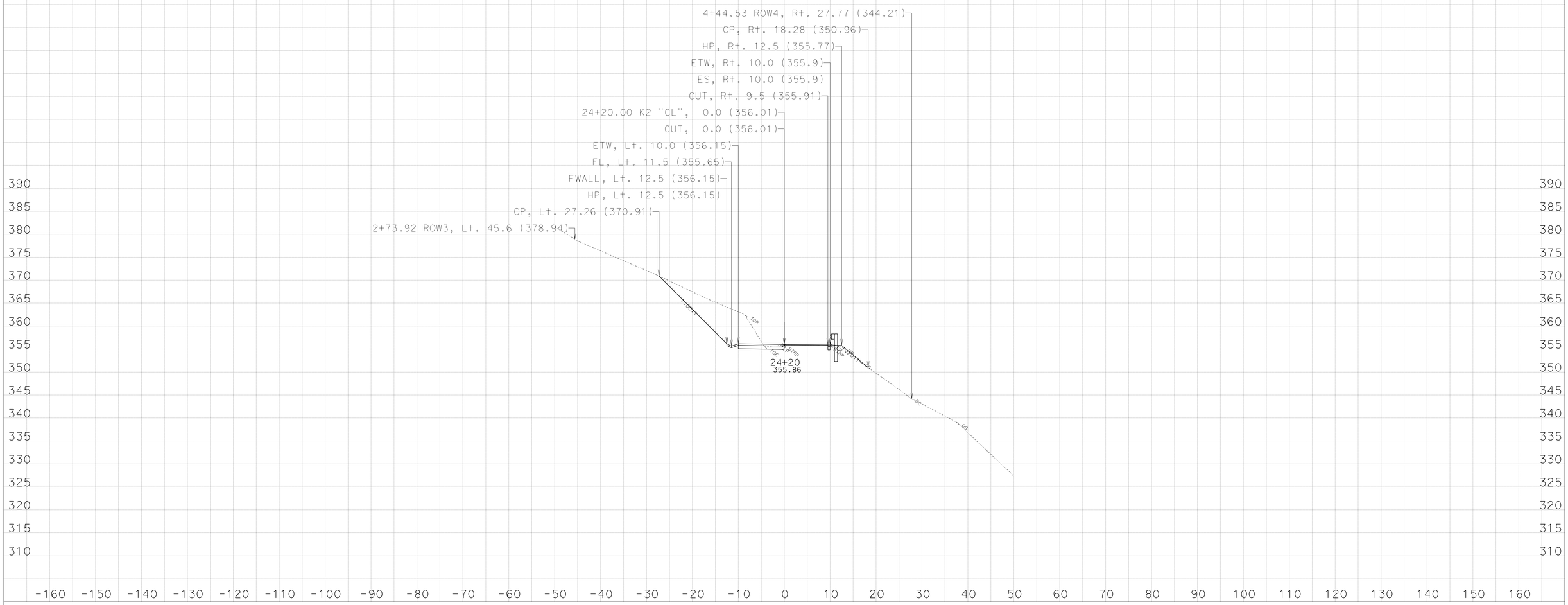
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

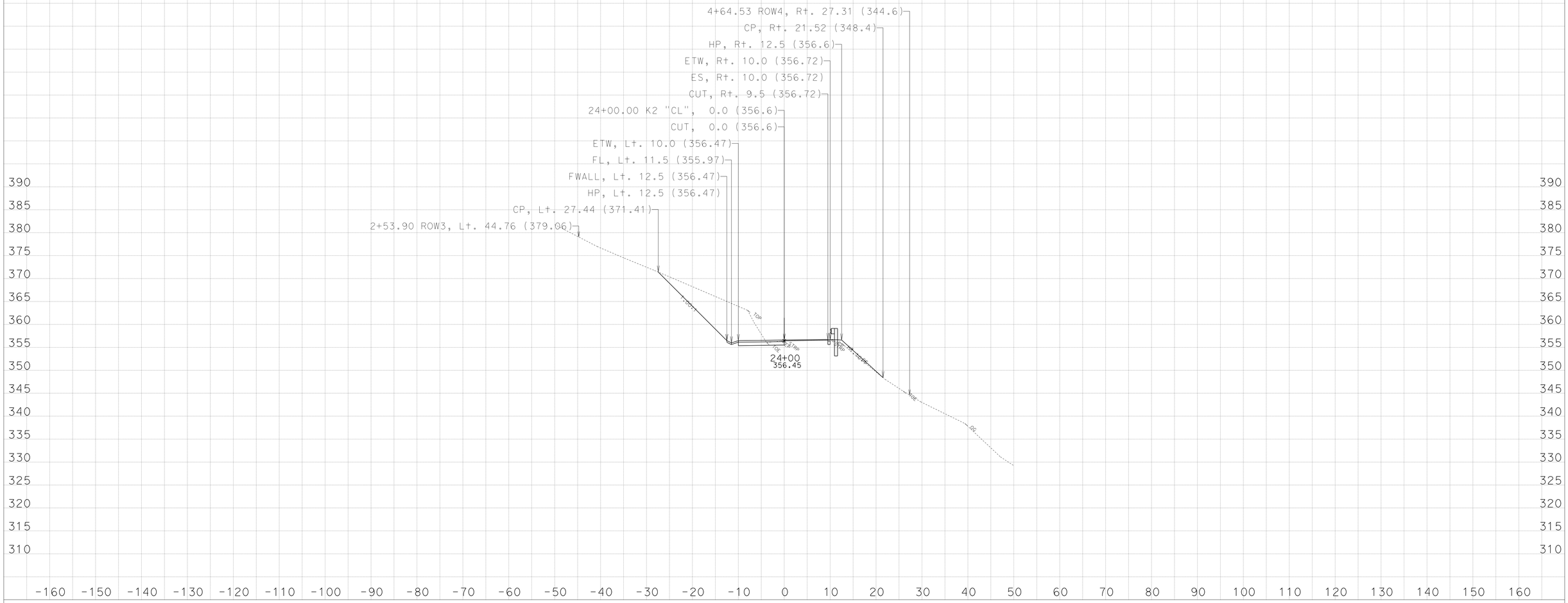
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

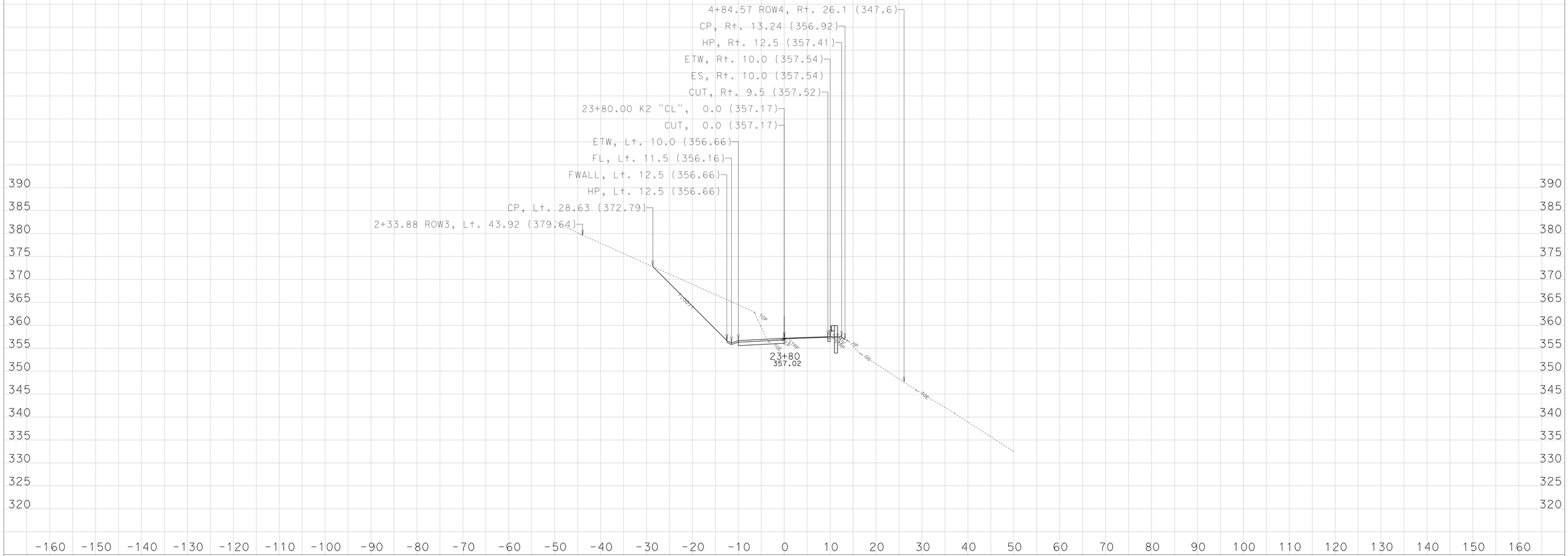
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

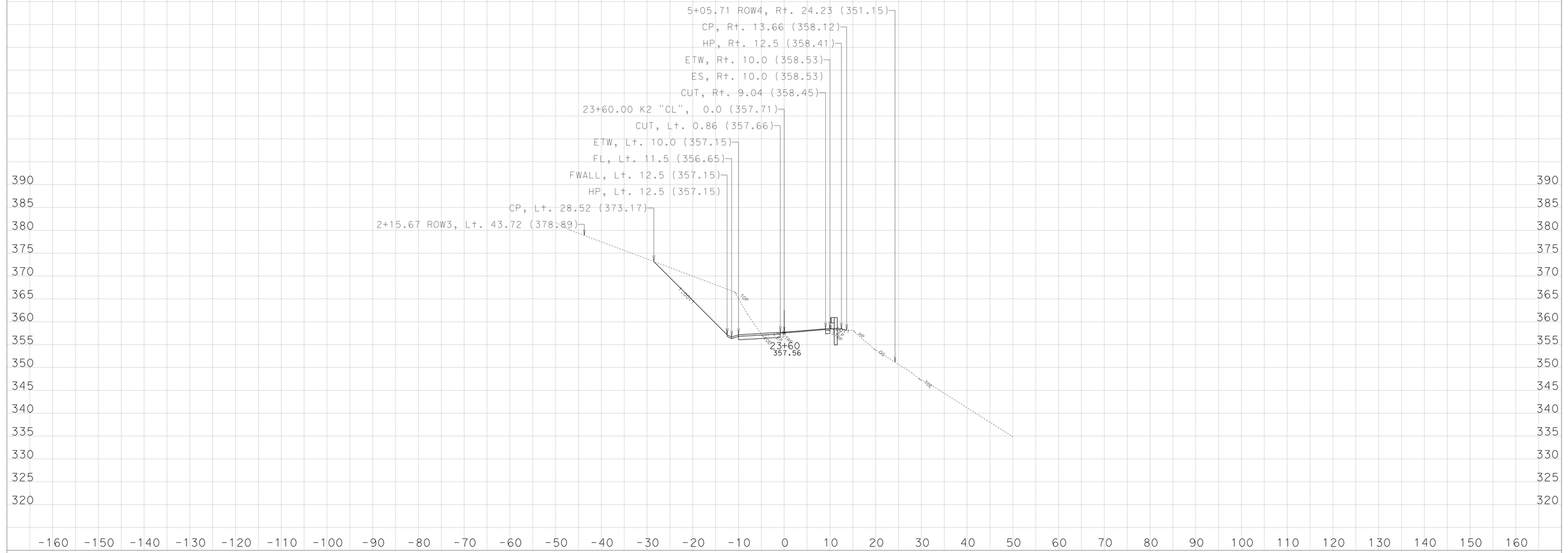
Alignment: "K2"
DESIGN CROSS SECTIONS

SHEET 12 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

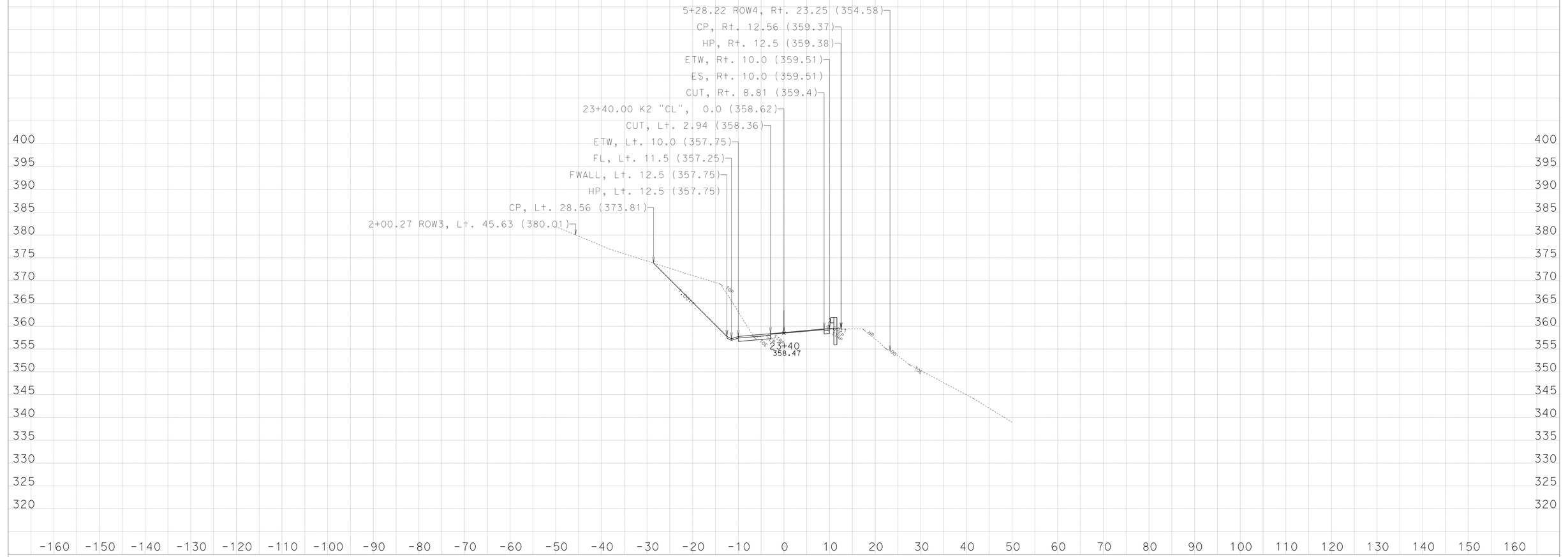
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

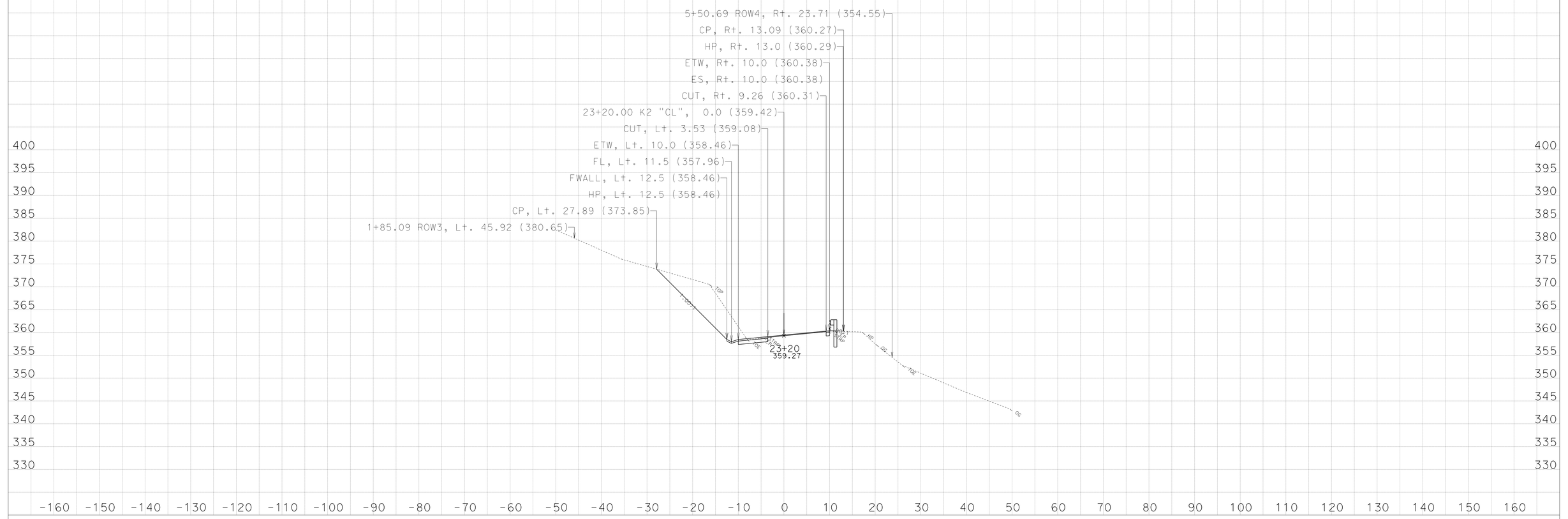
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

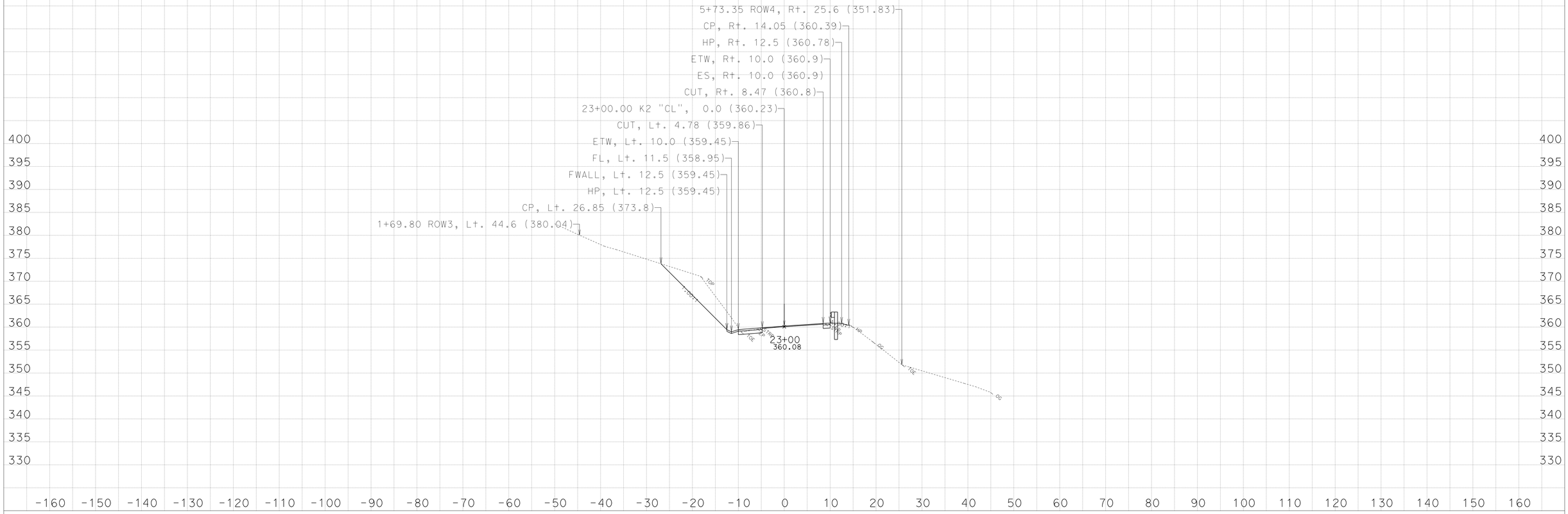
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 9 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

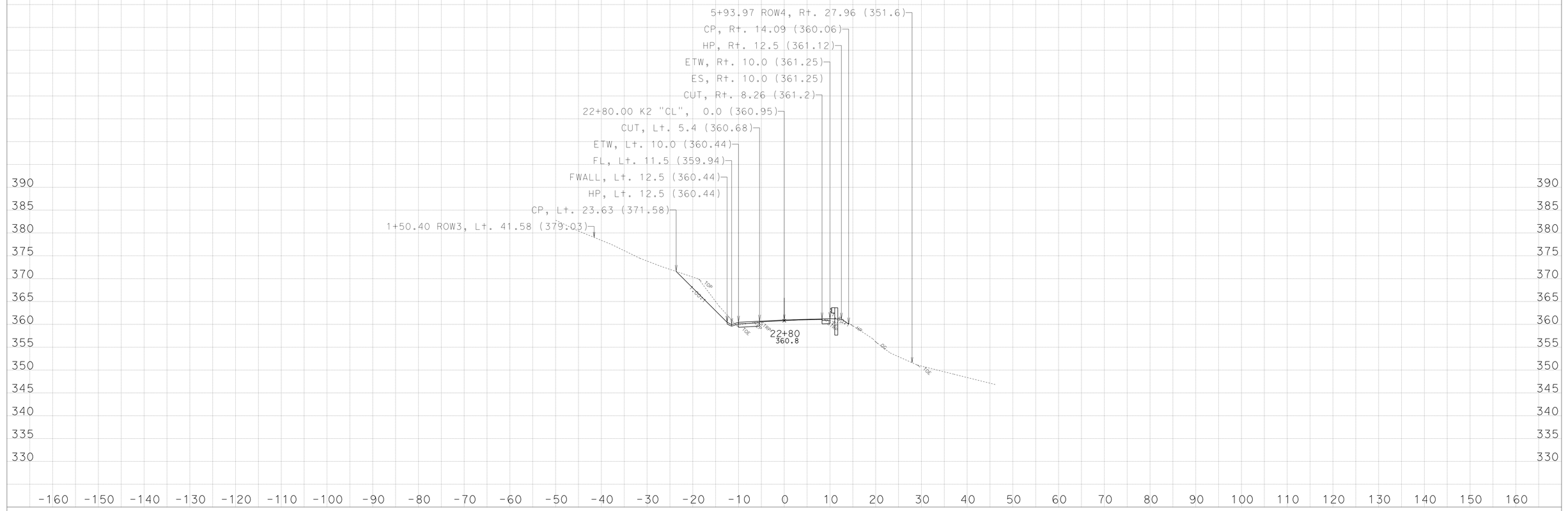
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

DATE: 3/29/2013

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

All Dimensions are US Survey Feet

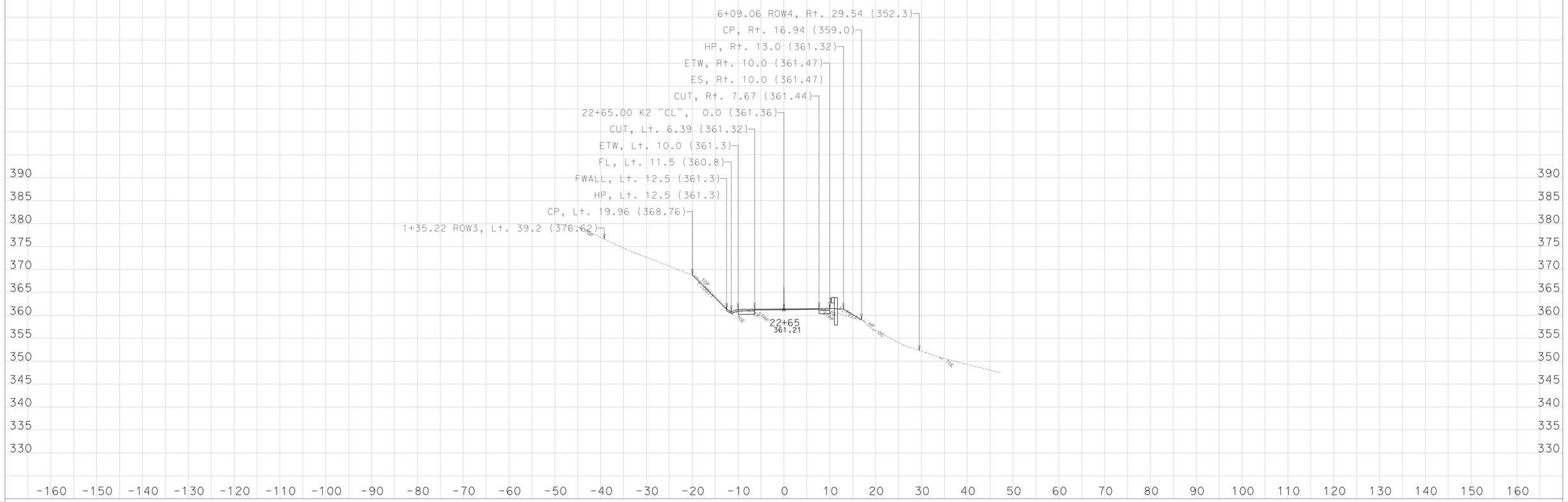
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

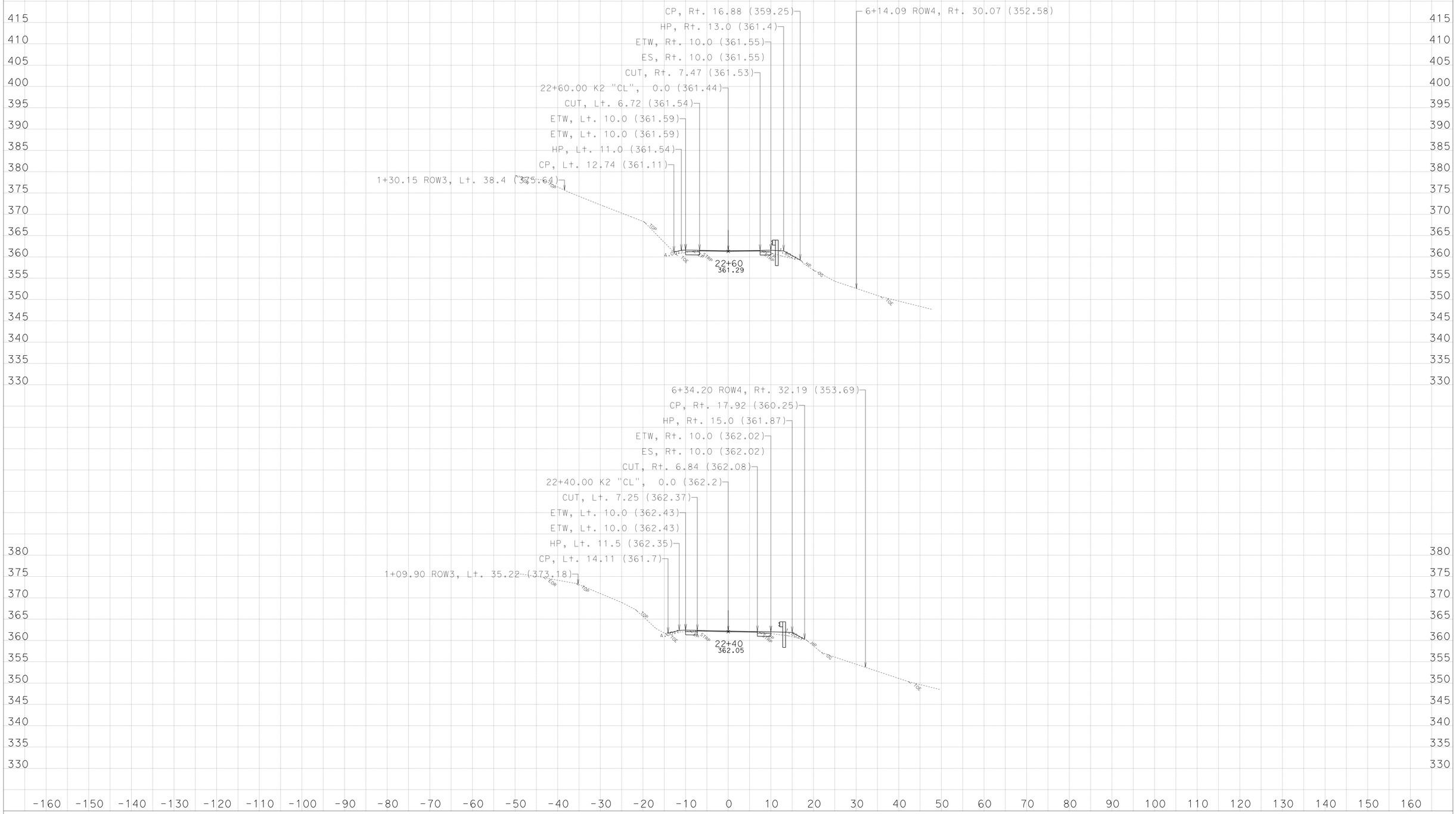
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 6 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

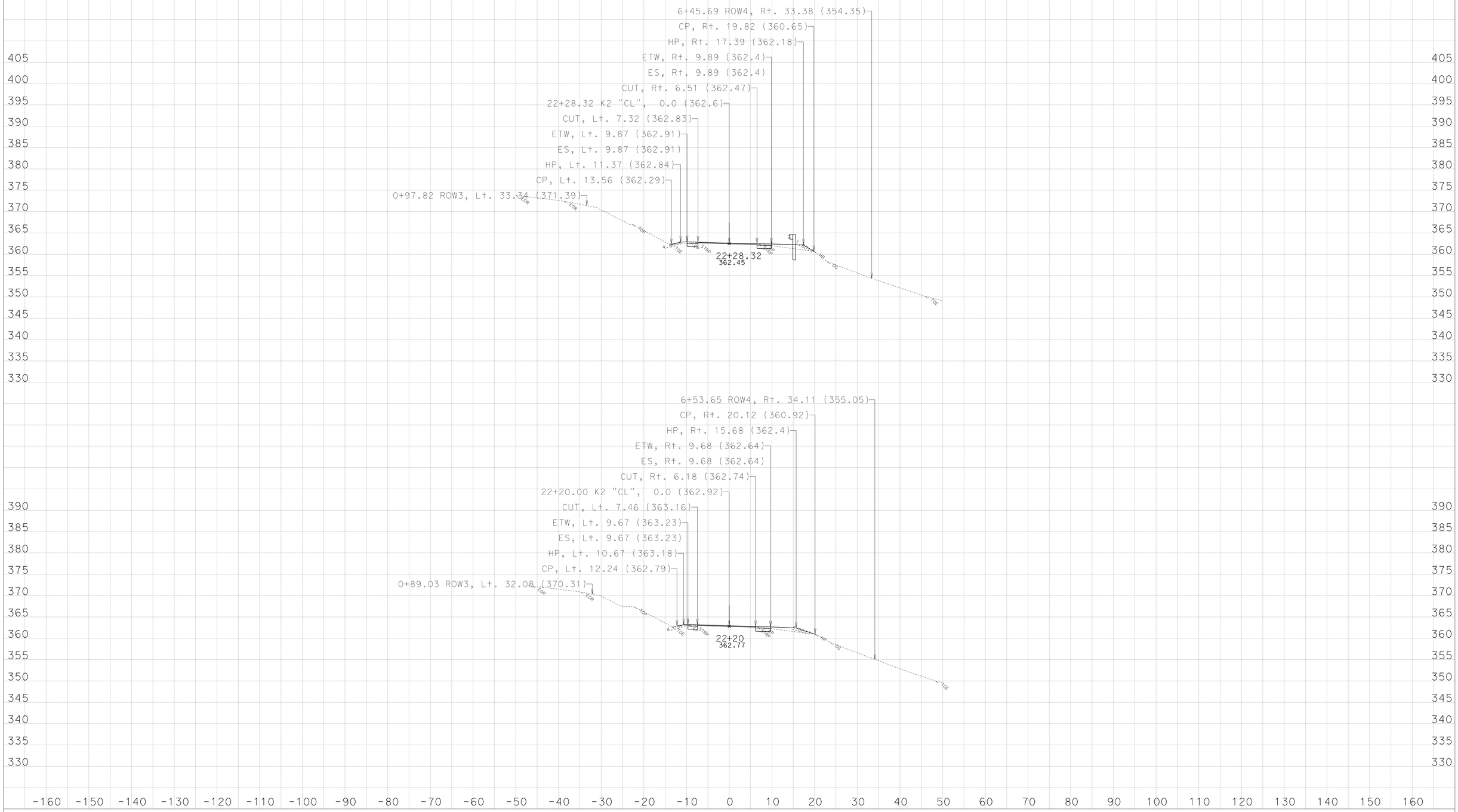
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

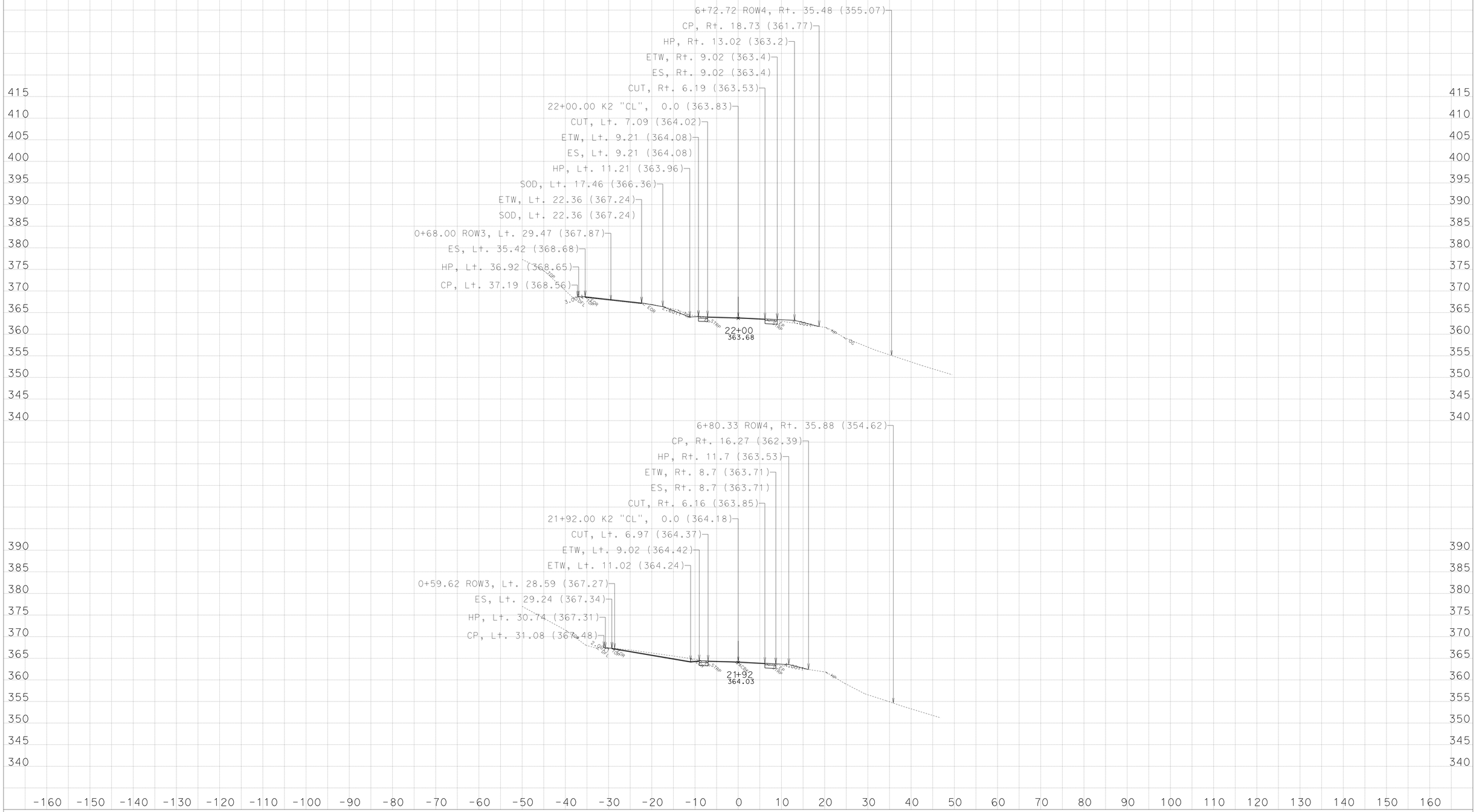
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

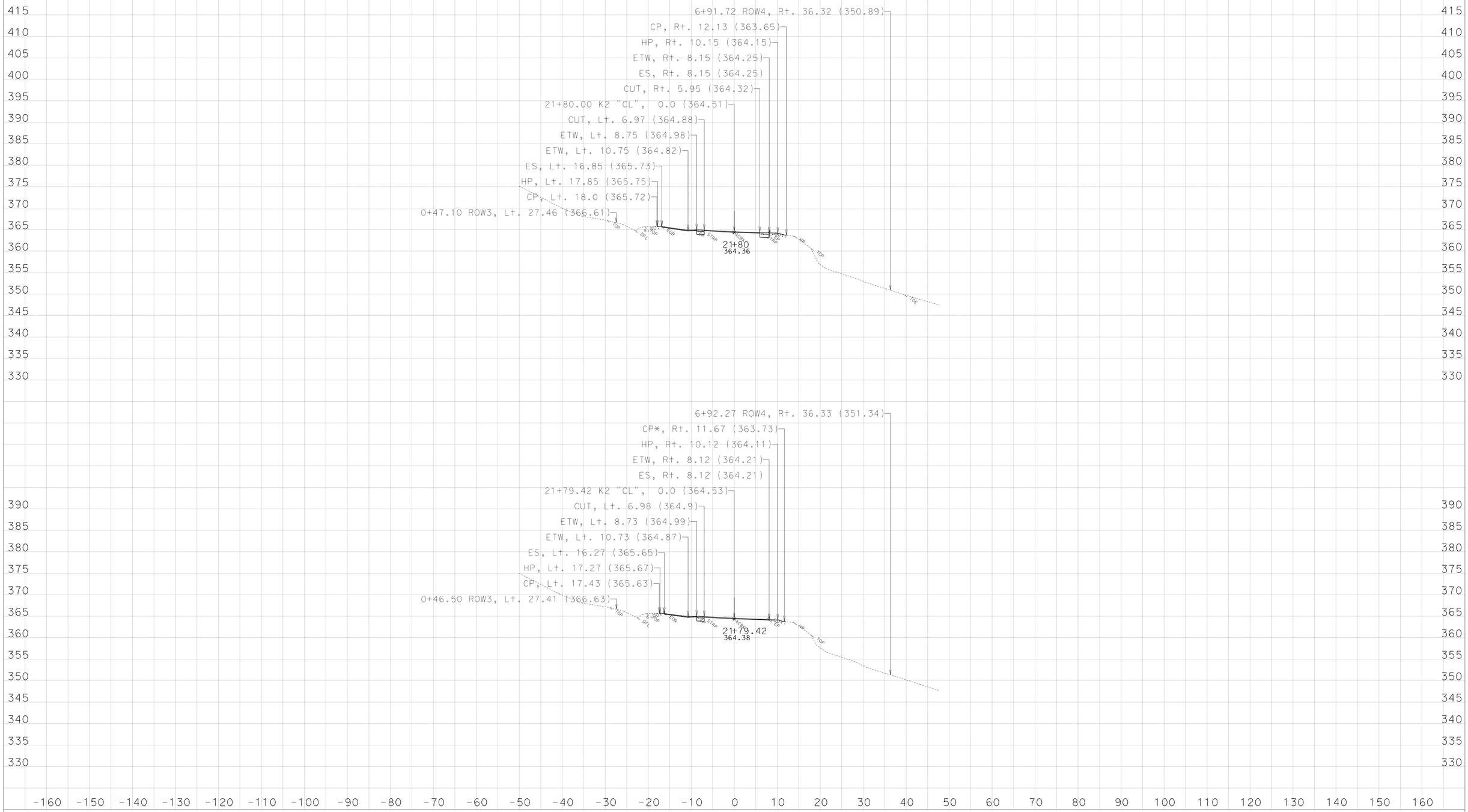
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 3 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

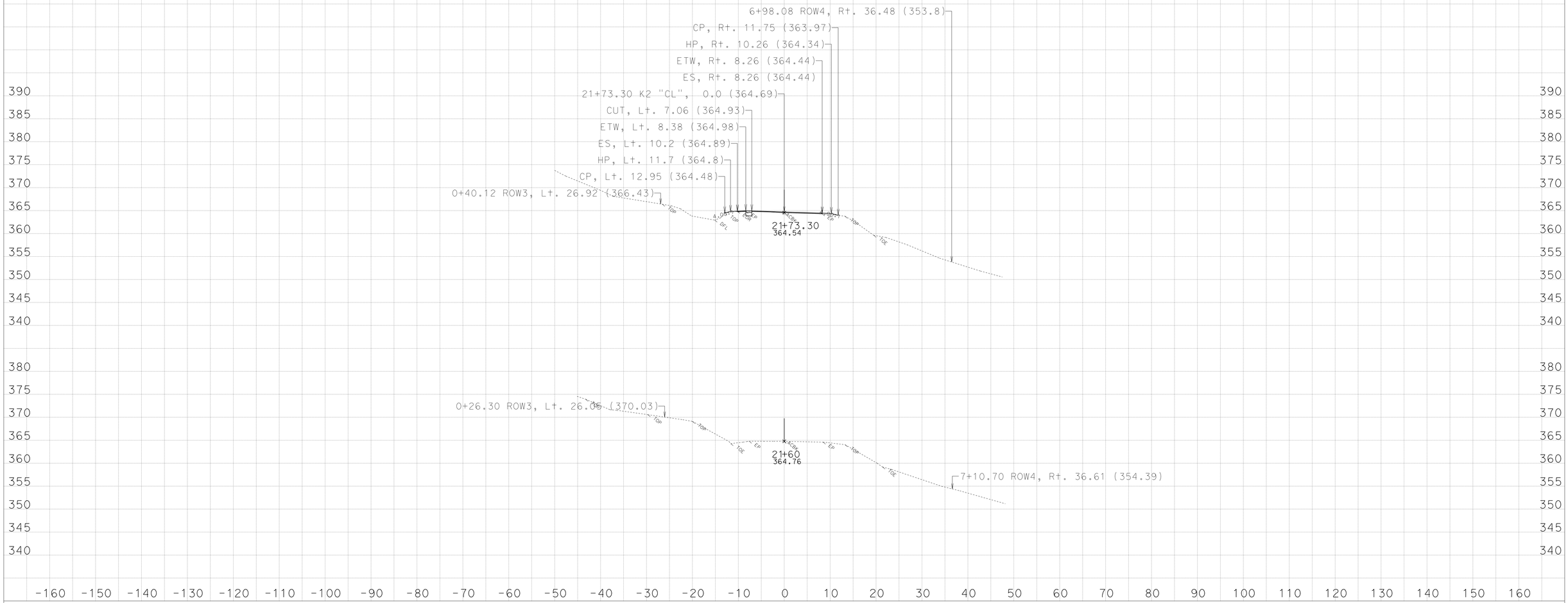
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 2 OF 37

For Earthwork Development Only

Safety Improvements
(Widen, V-Ditch, Special MBGR)

Route 169 - Location 2,
Post Mile: 18.94/19.08



CREATED BY: NRDOE,ODN-E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k2finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-13.6/23.4

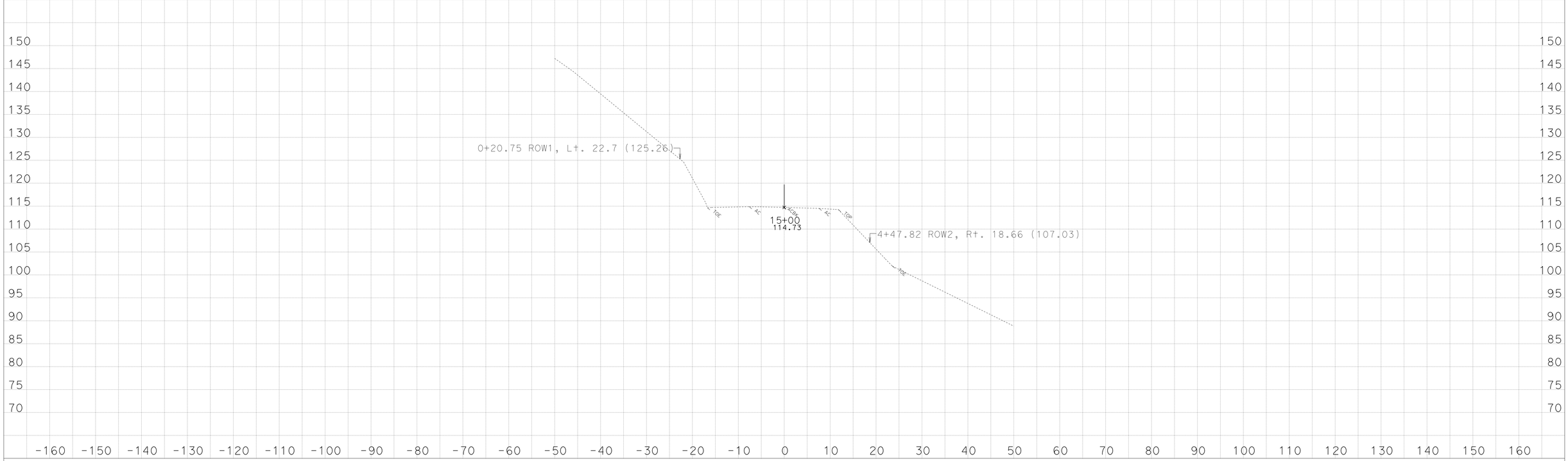
All Dimensions are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K2"
DESIGN CROSS SECTIONS
SHEET 1 OF 37

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



CREATED BY: NRPD-ODN- E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions Are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"

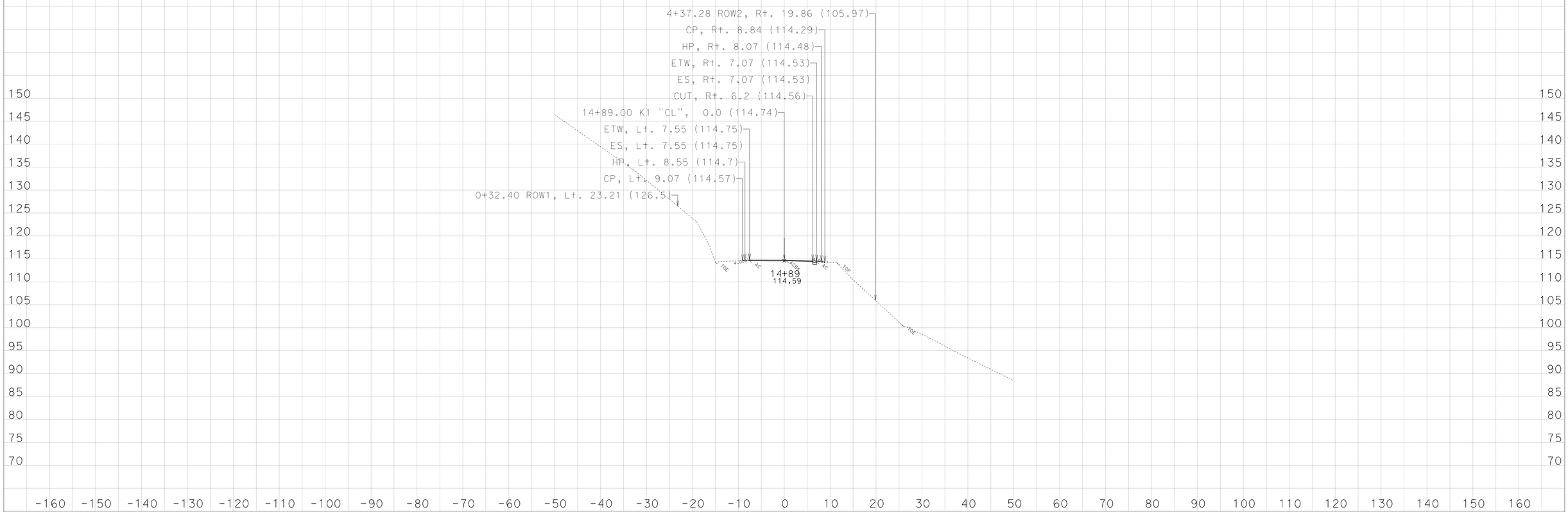
DESIGN CROSS SECTIONS

SHEET 25 OF 25

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



CREATED BY: NRPD-ODN- E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions Are US Survey Feet

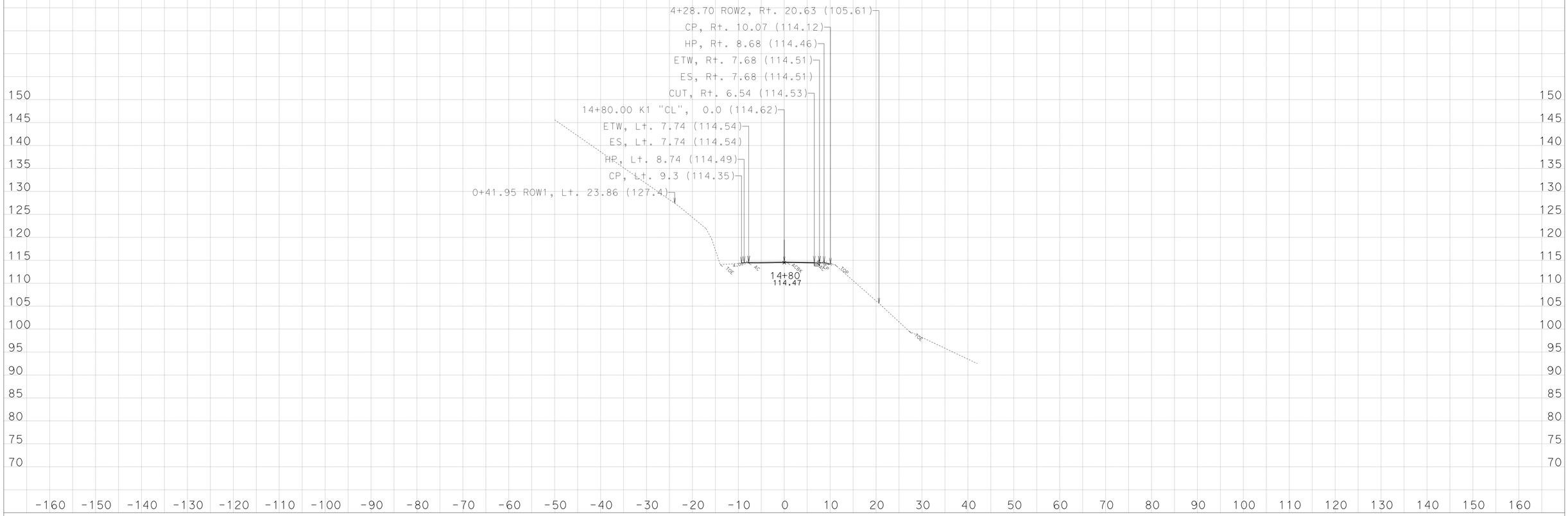
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



CREATED BY: NRPD-ODN- E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

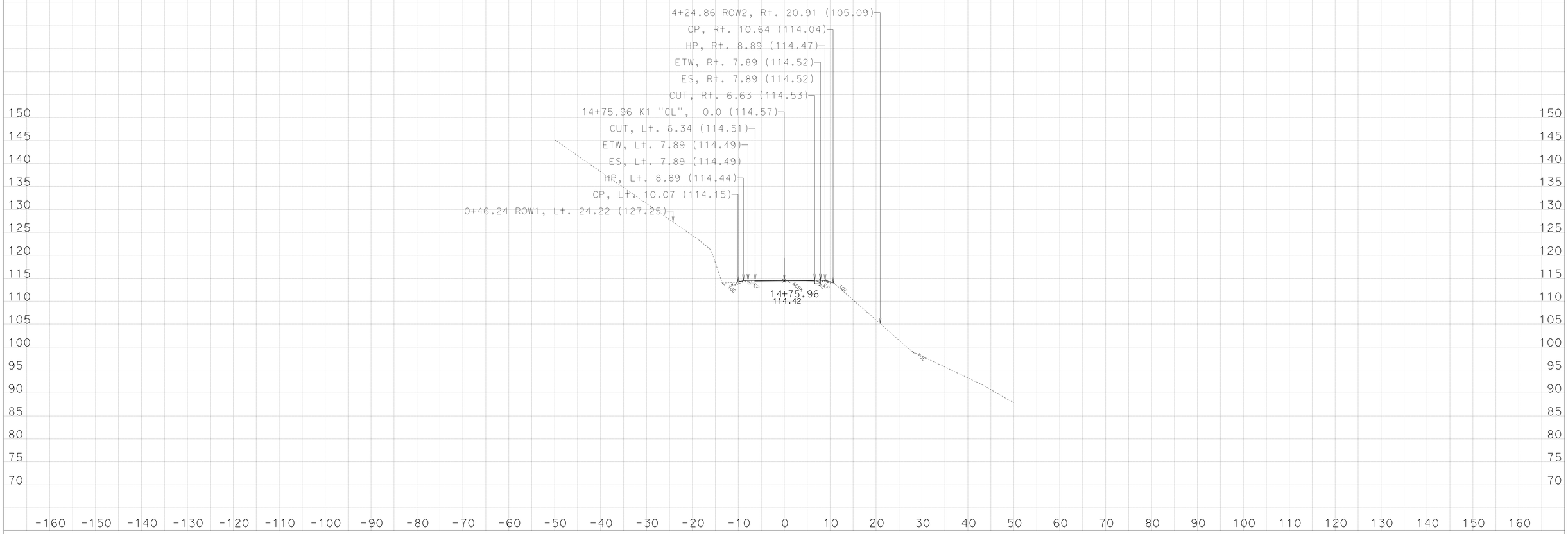
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



CREATED BY: NRPD-ODN- E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

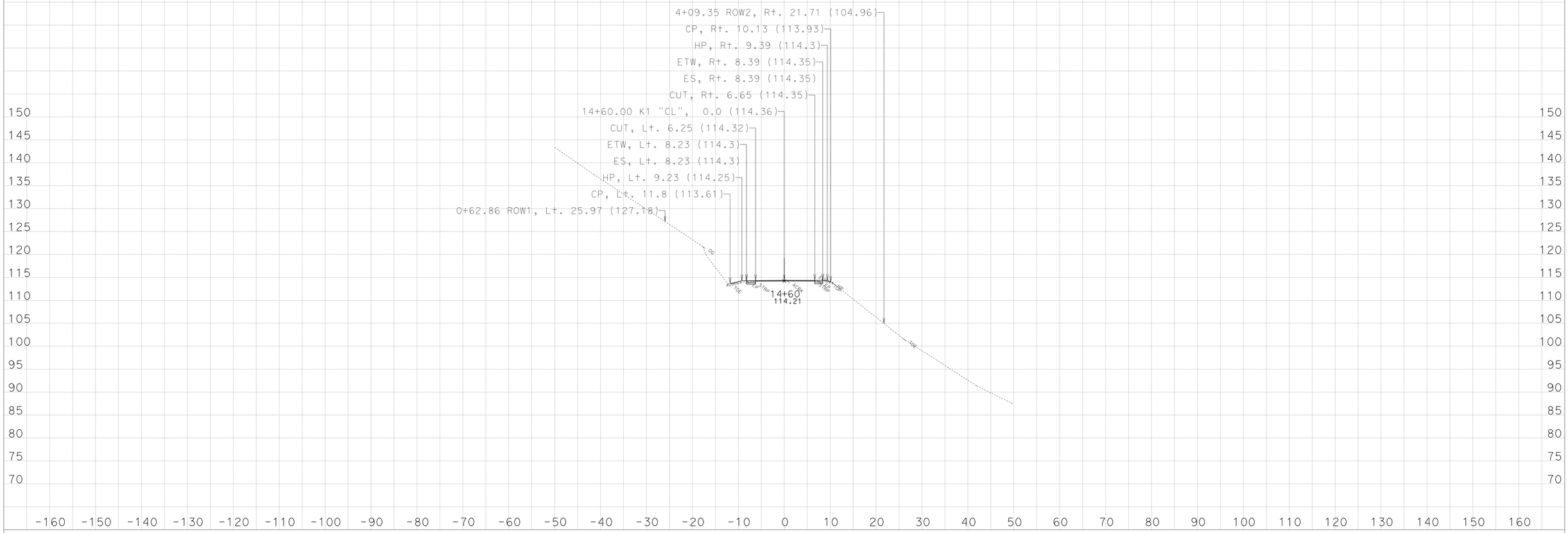
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



CREATED BY: NRPD-ODN- E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

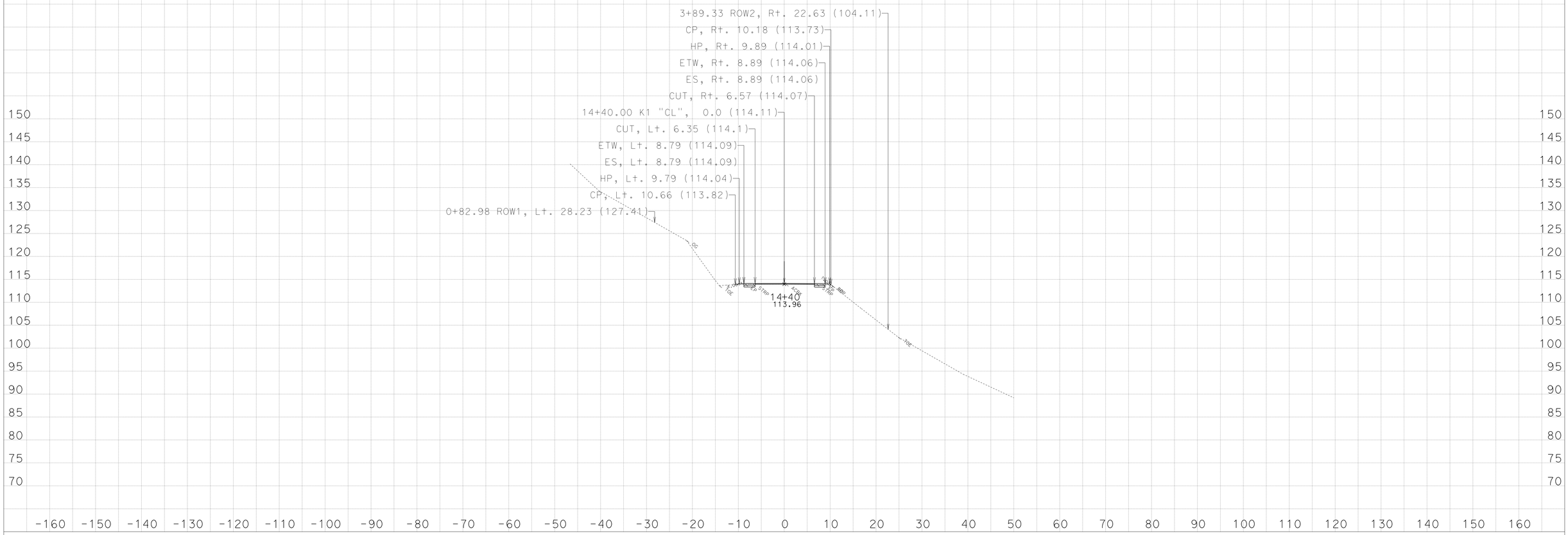
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



CREATED BY: NRPD-ODN- E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

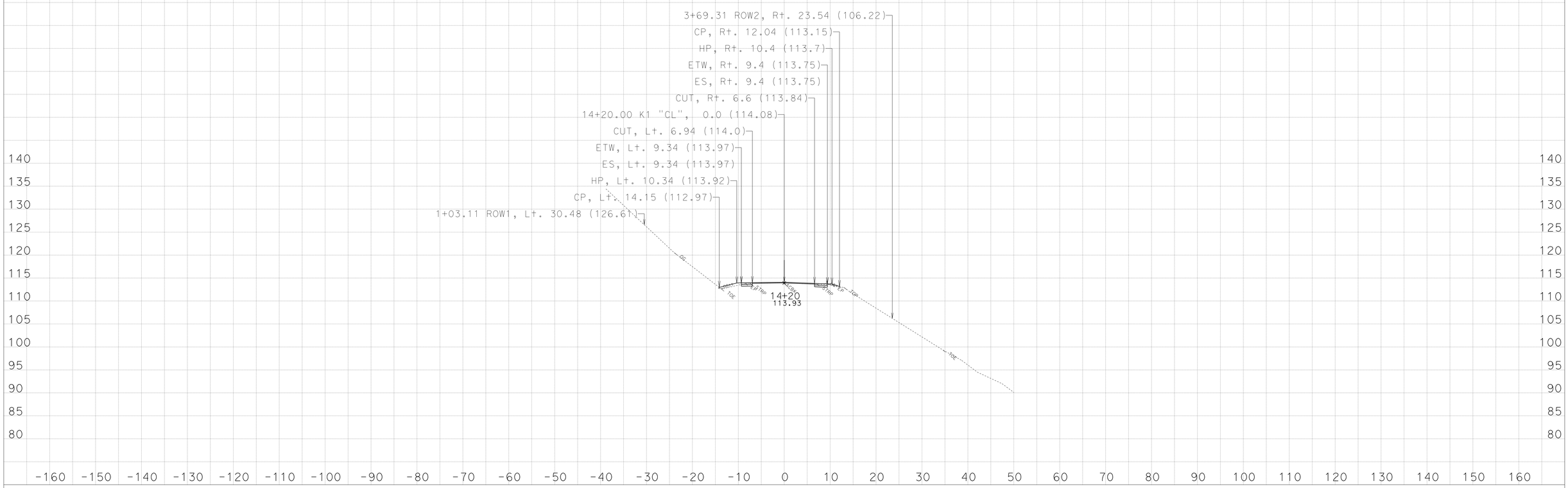
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS
SHEET 20 OF 25

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



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DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

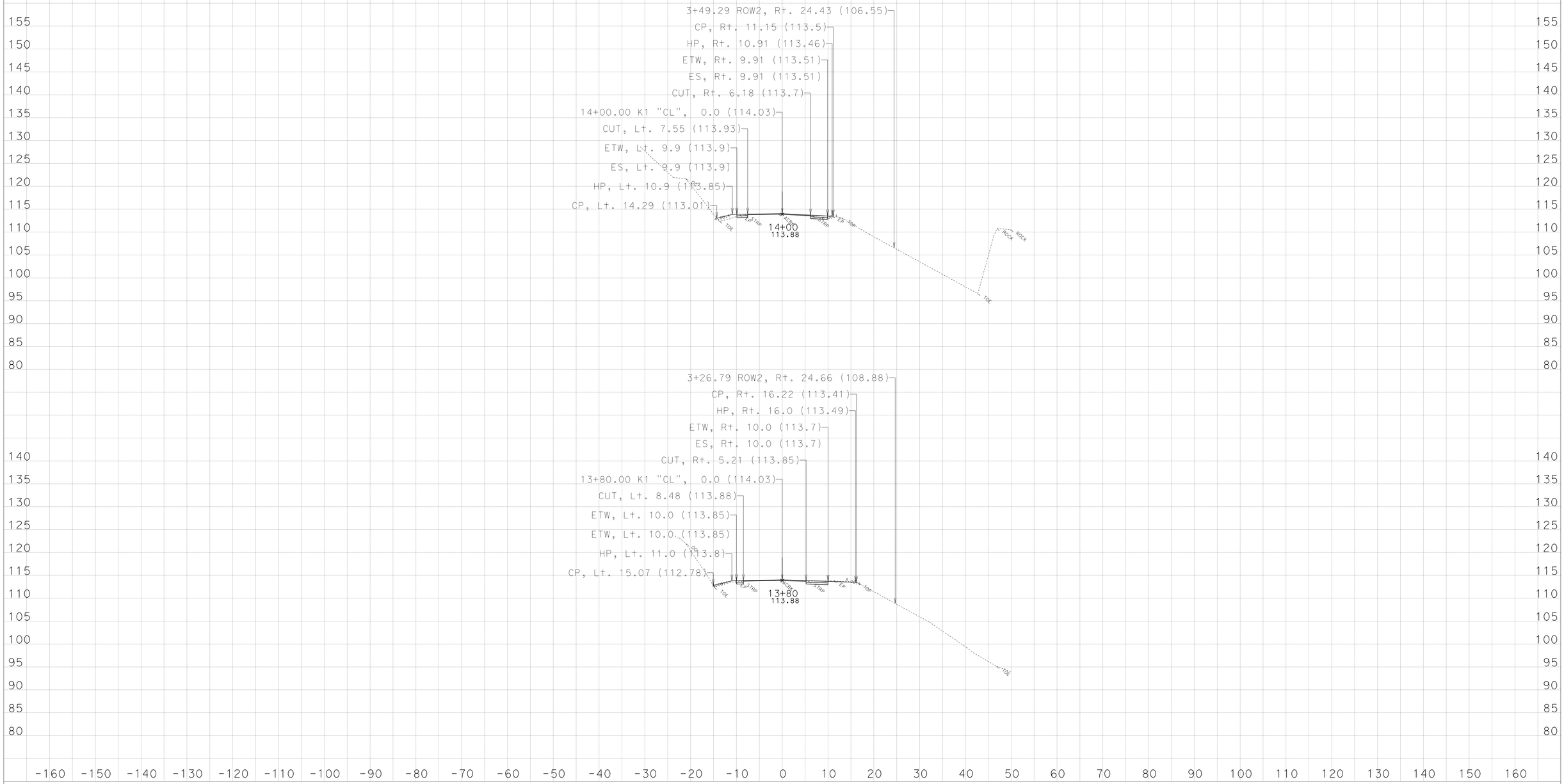
Alignment: "K1"
DESIGN CROSS SECTIONS
SHEET 19 OF 25

For Earthwork Development Only

Safety Improvement

(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



CREATED BY: NRPD-ODN- E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions Are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"

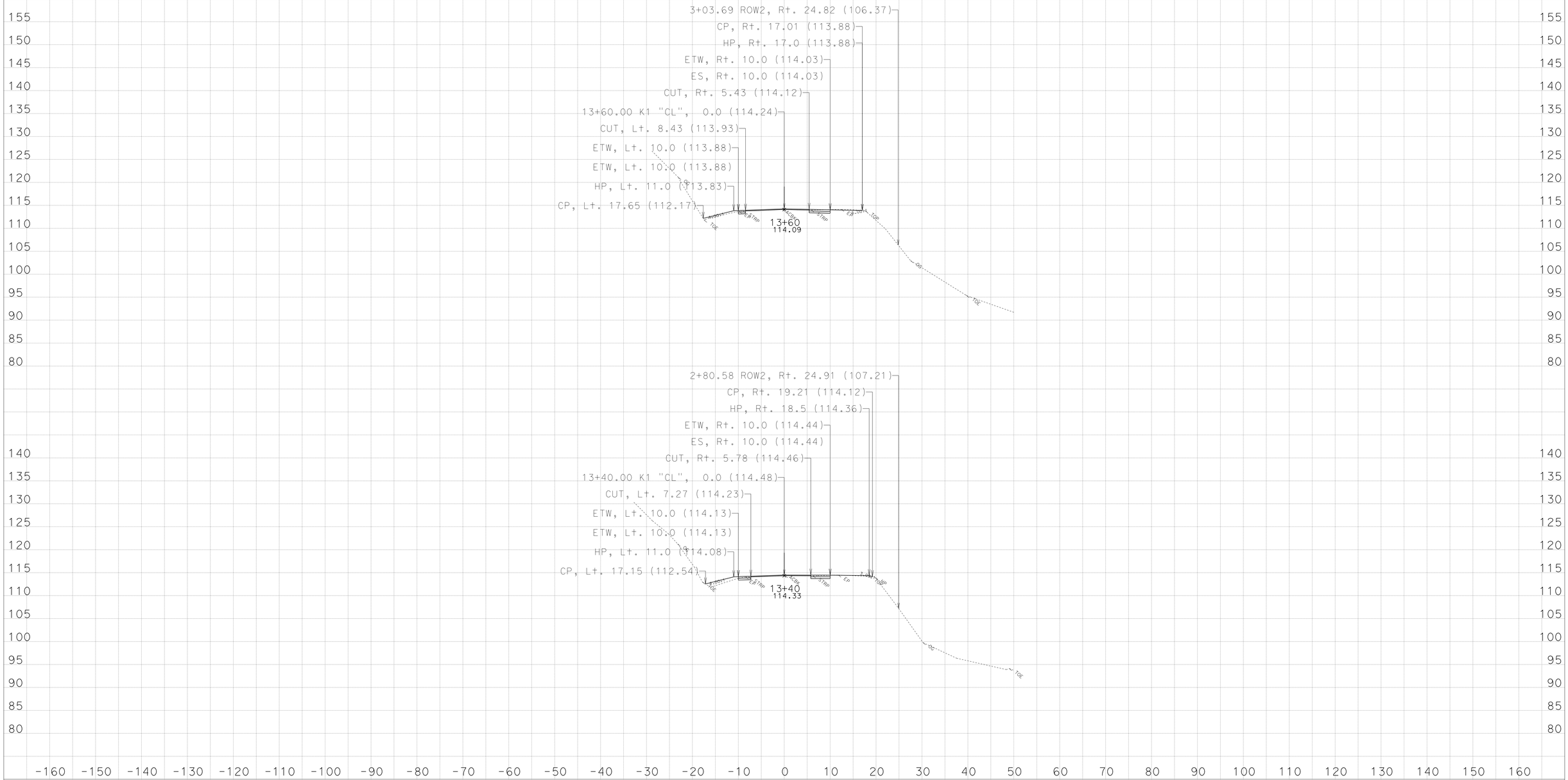
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvement

(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions Are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

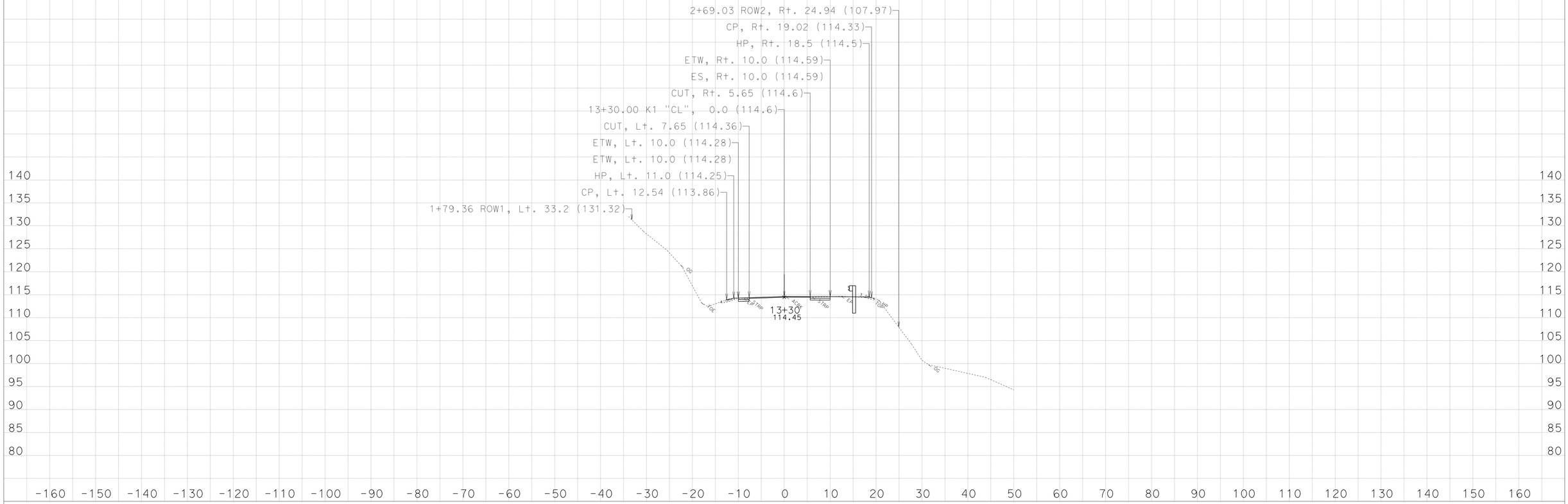
Alignment: "K1"

DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



CREATED BY: NRPD-ODN- E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

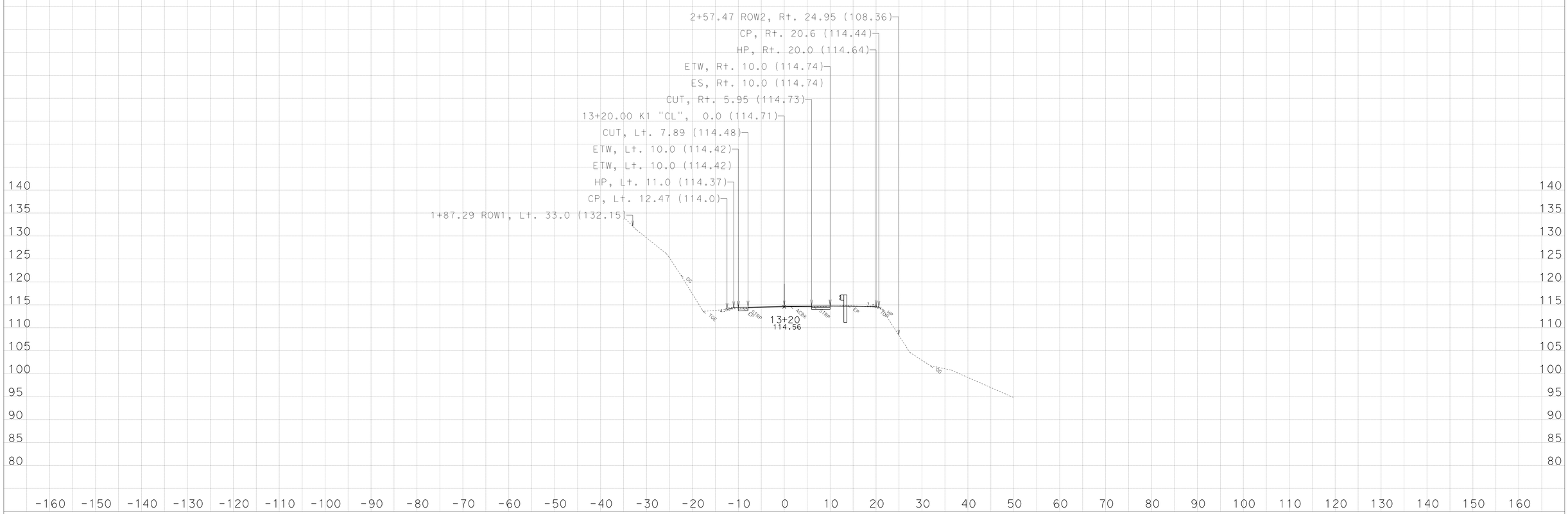
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS
SHEET 16 OF 25

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



CREATED BY: NRPD-ODN- E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

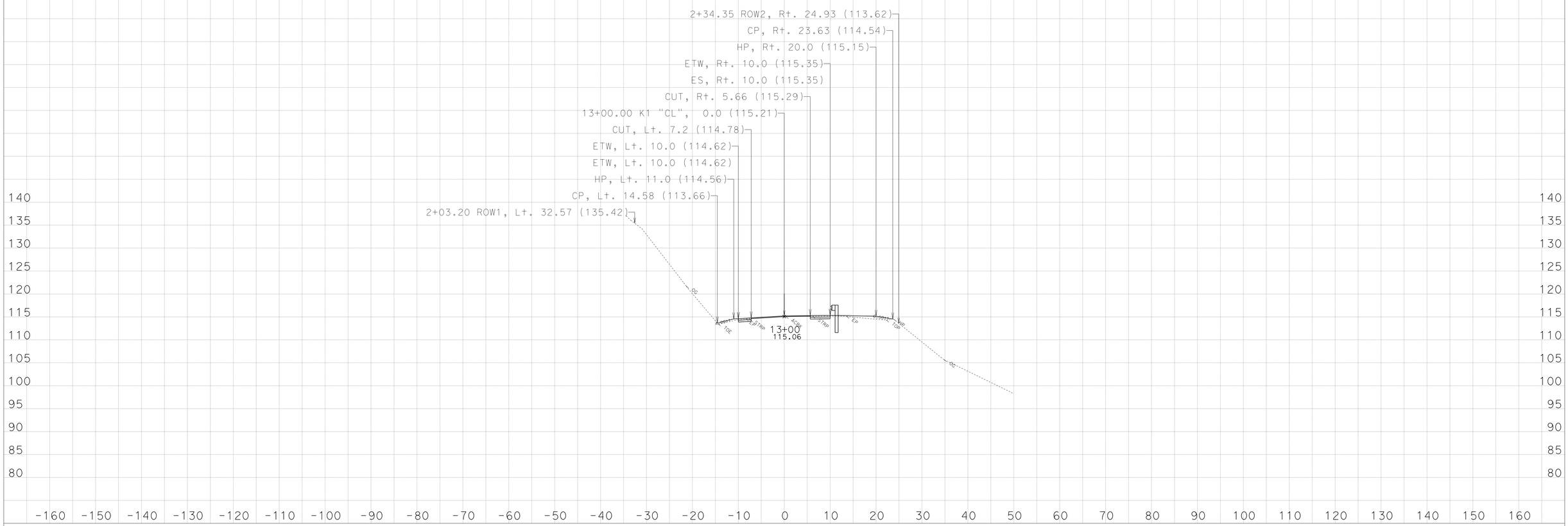
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

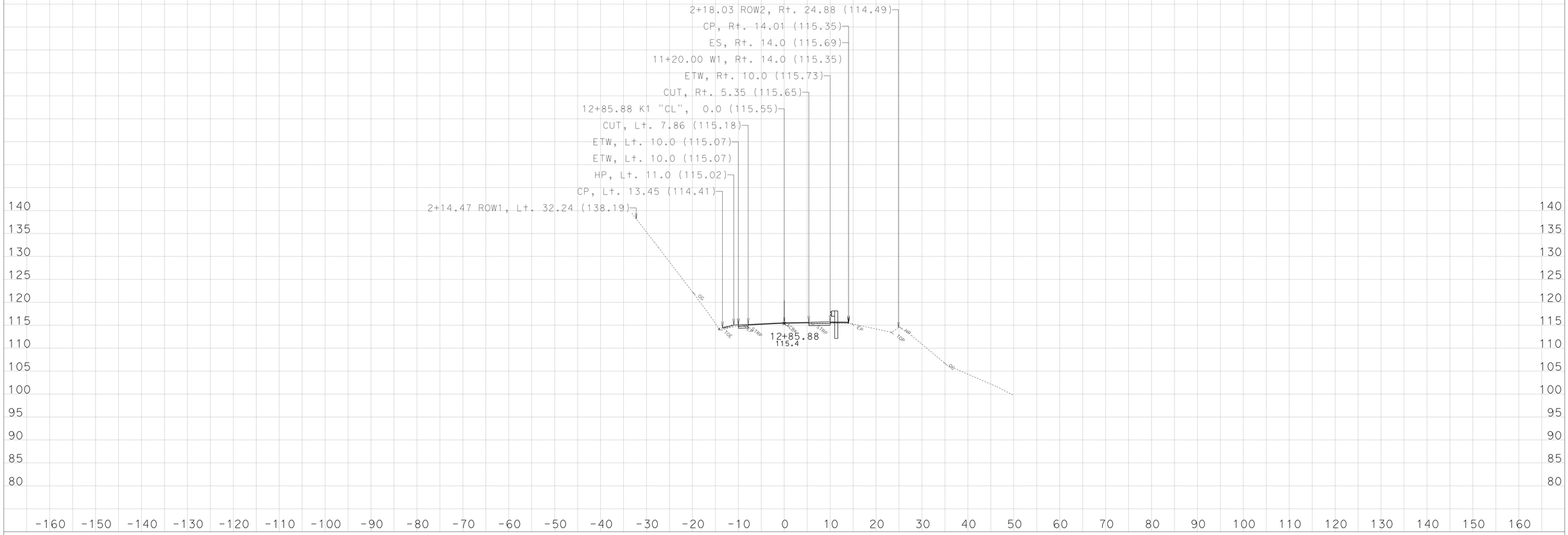
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



CREATED BY: NRPD-ODN- E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

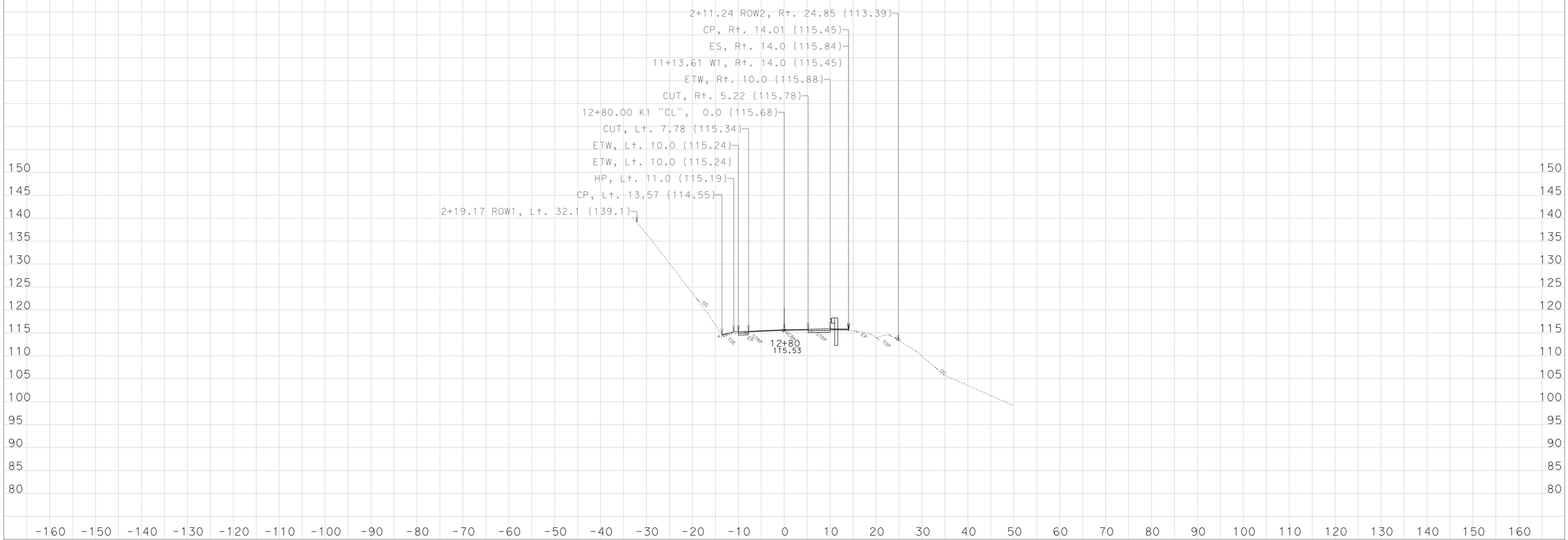
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS
SHEET 13 OF 25

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219
CONTRACT: EA: 01-450904
DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

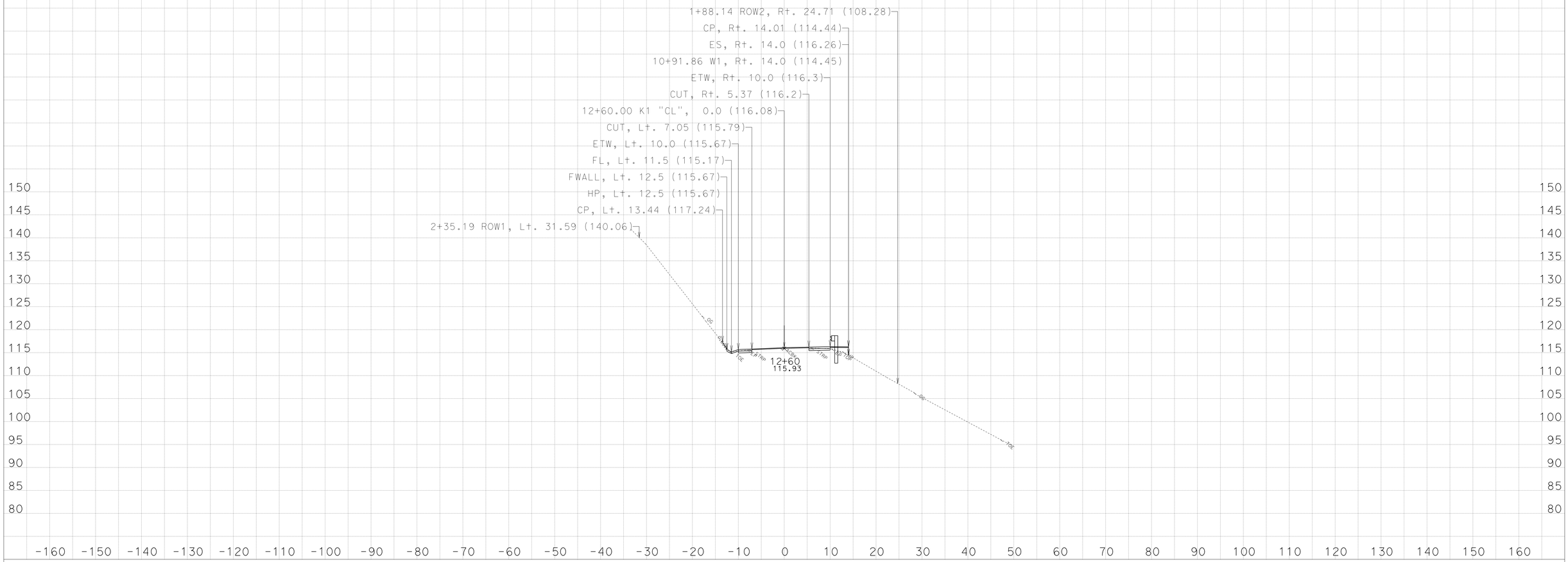
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS
SHEET 12 OF 25

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions Are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

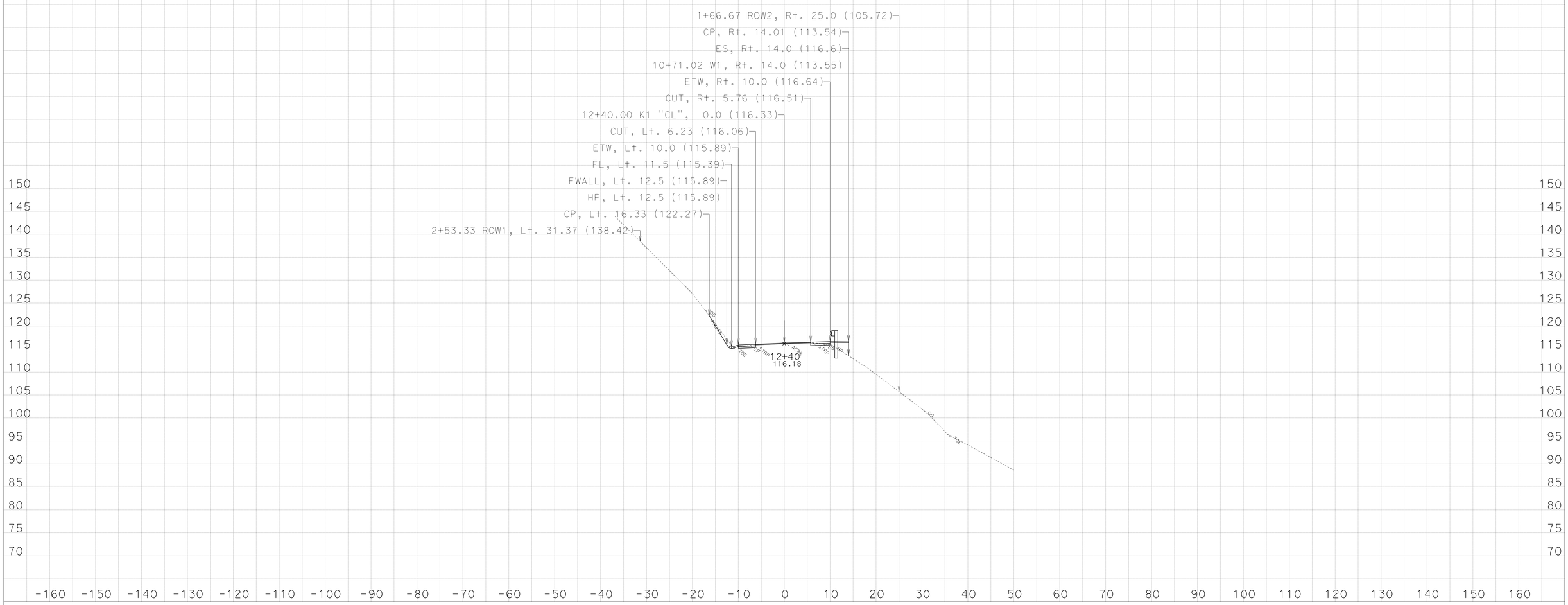
Alignment: "K1"
DESIGN CROSS SECTIONS

SHEET 11 OF 25

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

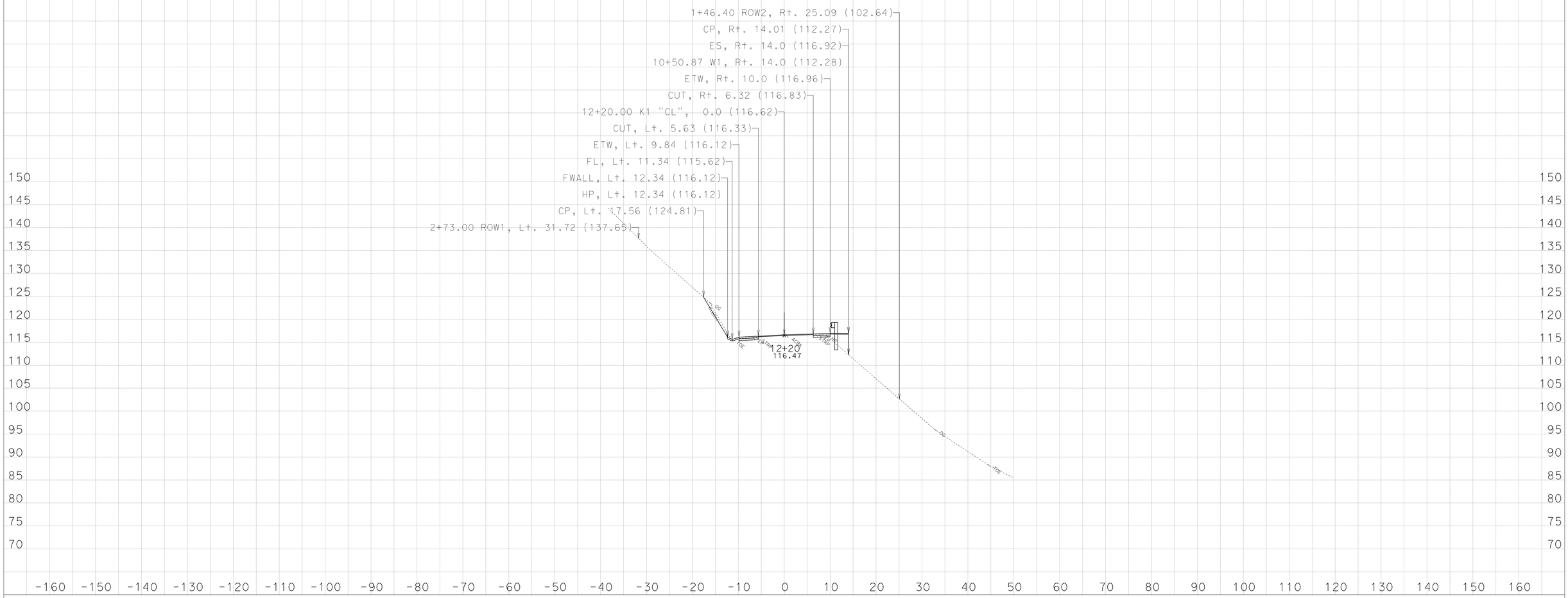
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

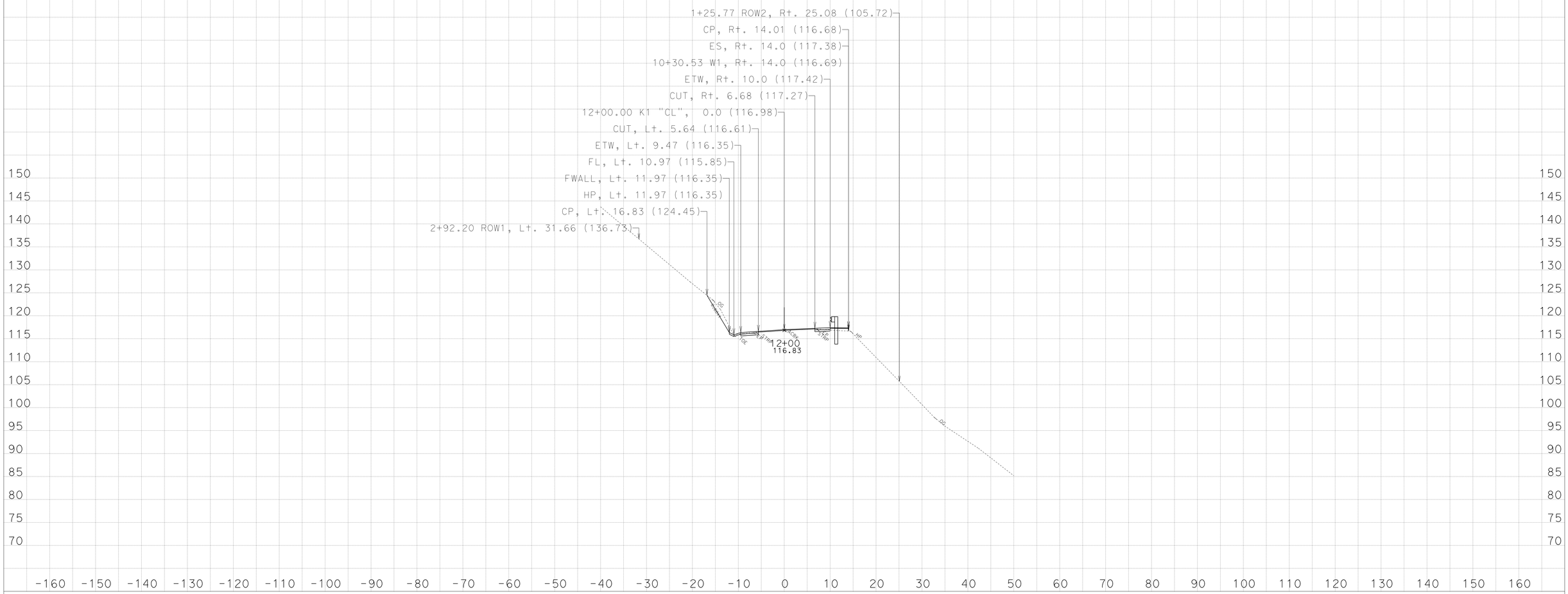
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



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DATE: 3/29/2013

PROJECT ID: 0100000219
CONTRACT: EA: 01-450904
DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

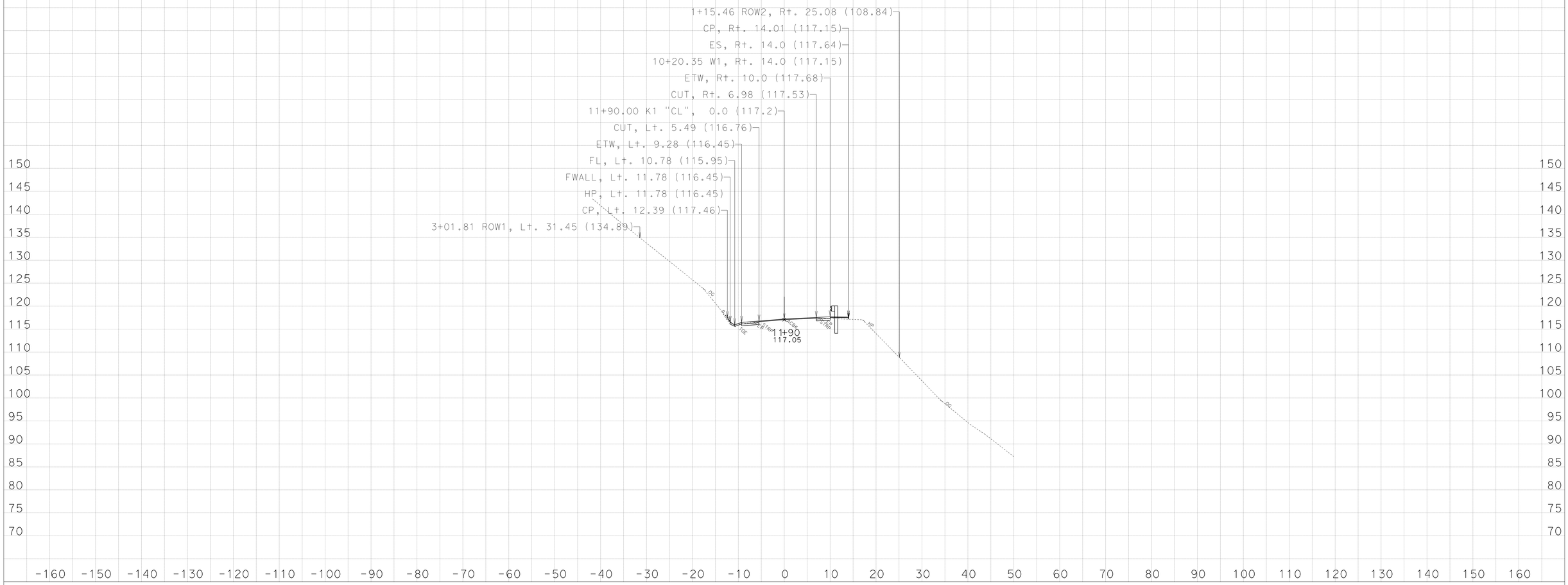
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS
SHEET 8 OF 25

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



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DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

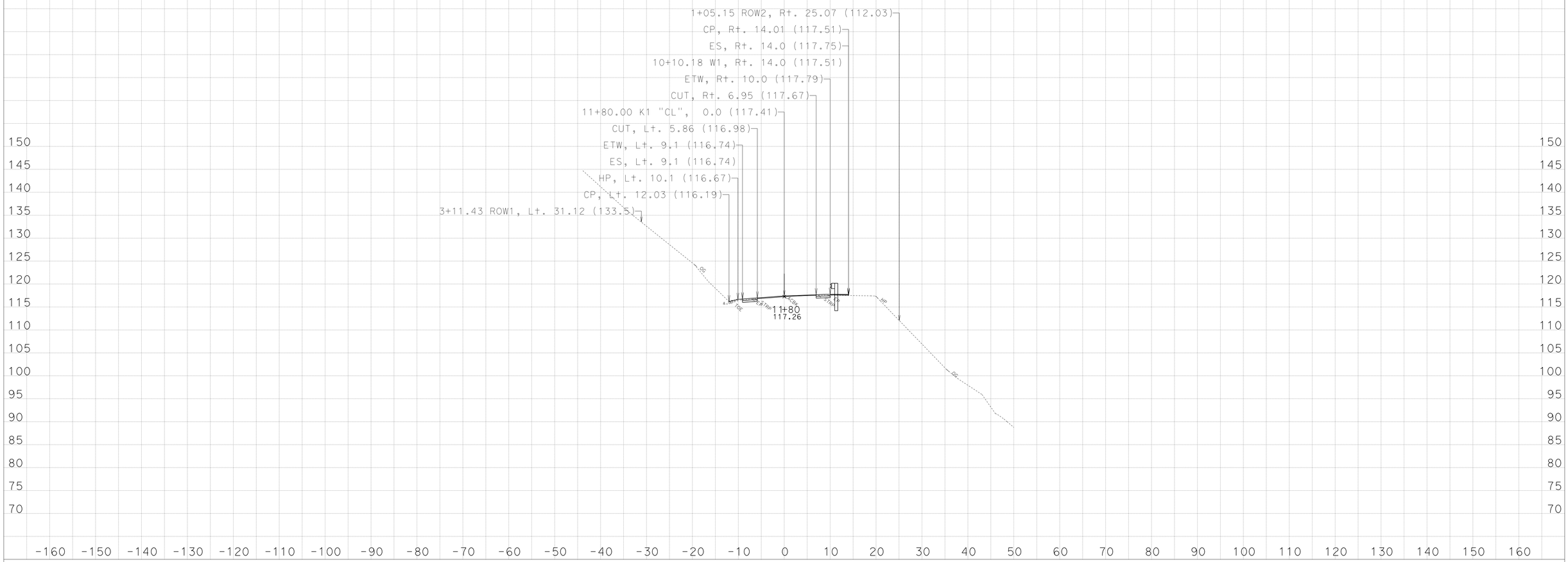
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



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DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

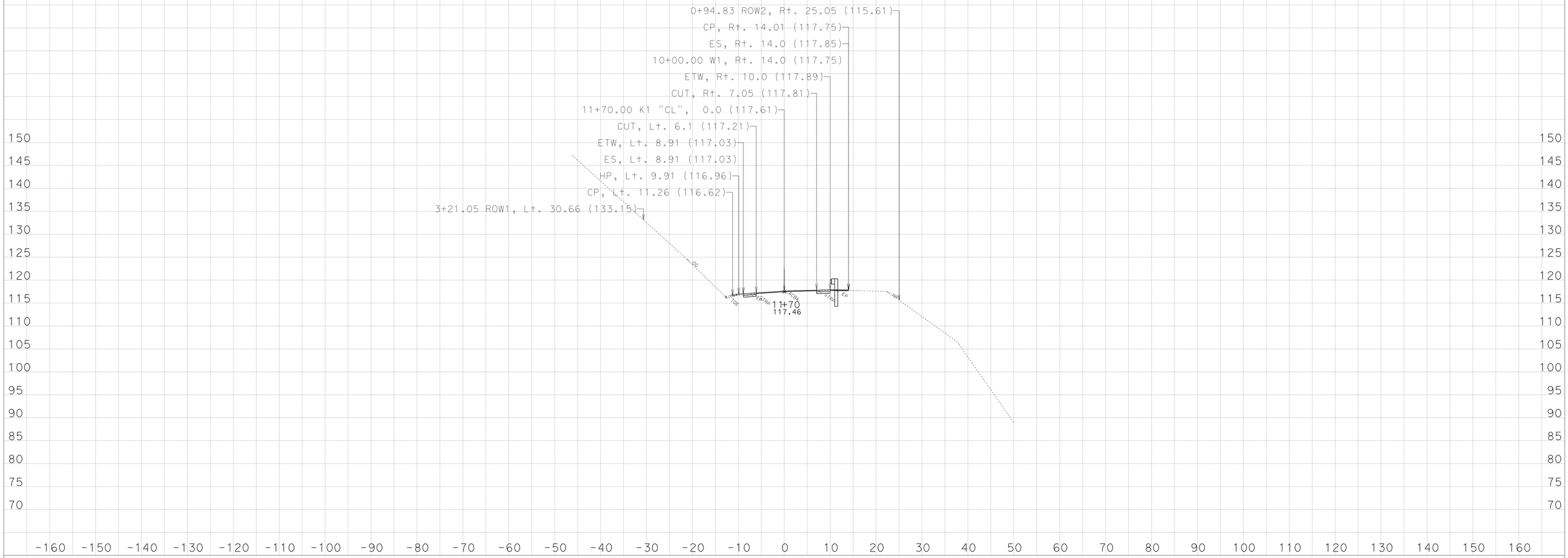
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS
SHEET 6 OF 25

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



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KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

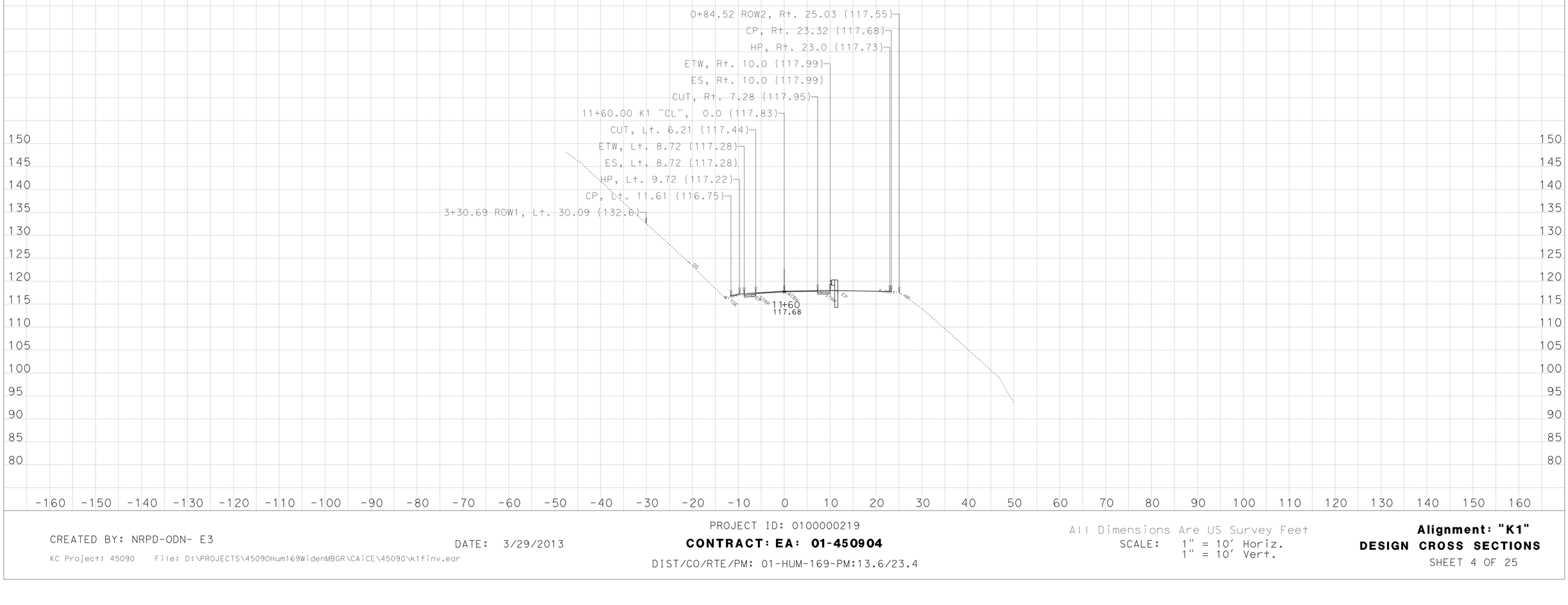
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS
SHEET 5 OF 25

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



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DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

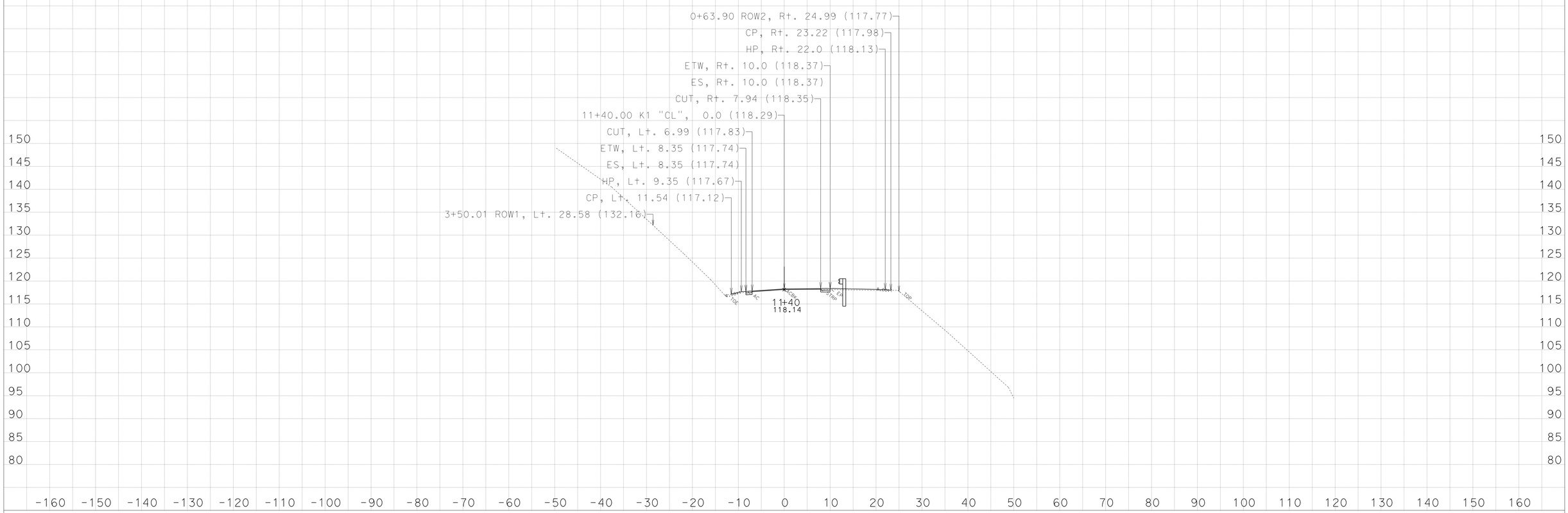
All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS
SHEET 4 OF 25

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



CREATED BY: NRPD-ODN- E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions Are US Survey Feet

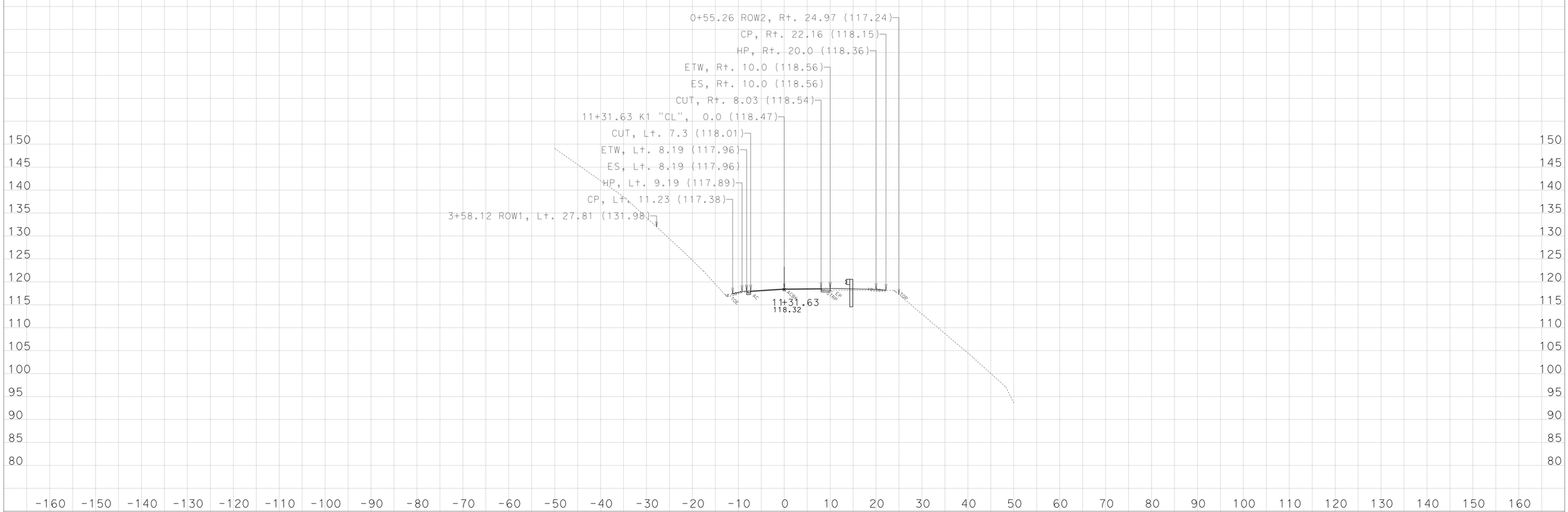
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvement
(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



CREATED BY: NRPD-ODN- E3

KC Project: 45090 File: D:\PROJECTS\45090Hum169WidenMBGR\CAiCE\45090\k1finv.ear

DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions Are US Survey Feet
SCALE: 1" = 10' Horiz.
1" = 10' Vert.

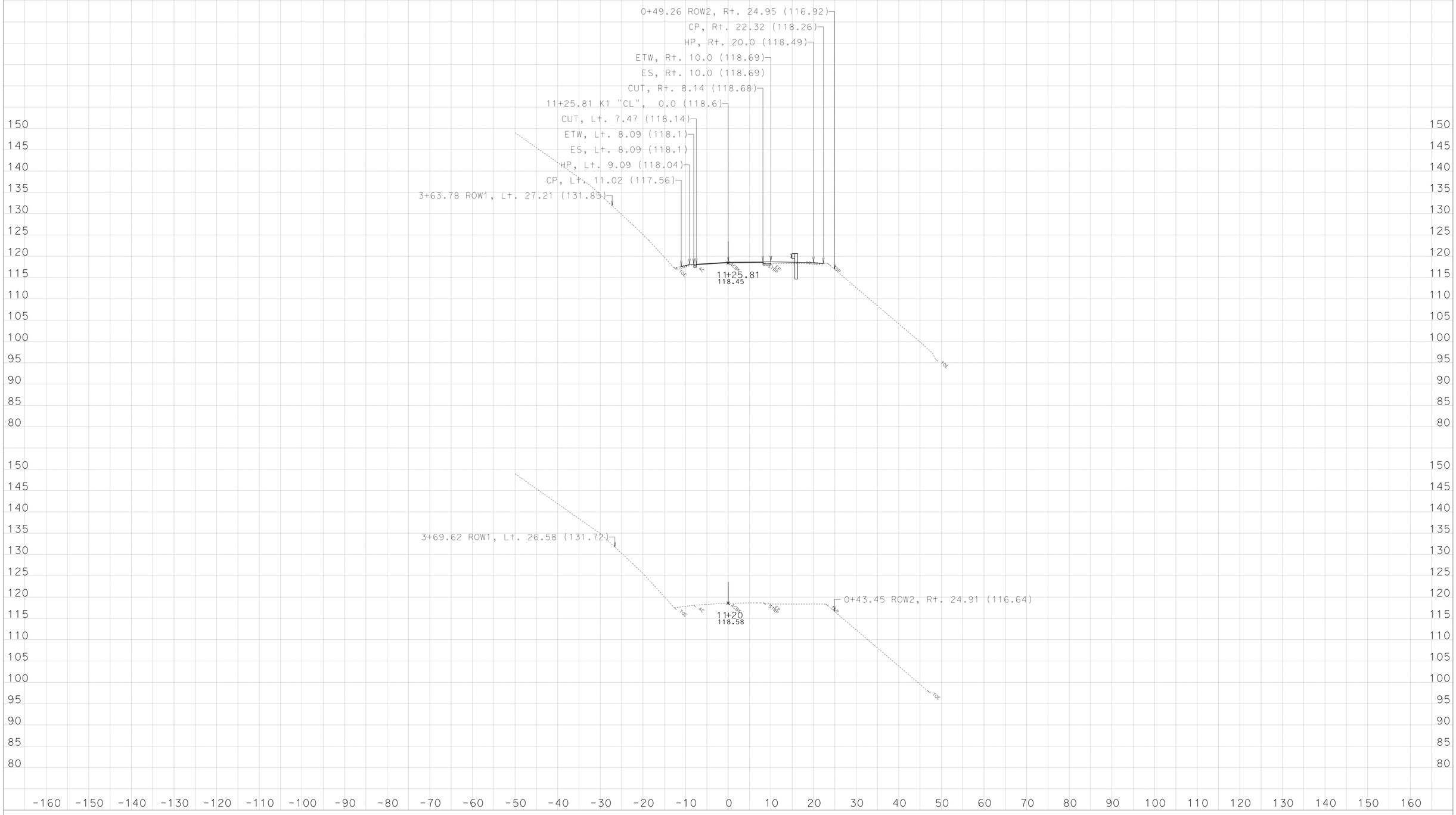
Alignment: "K1"
DESIGN CROSS SECTIONS

For Earthwork Development Only

Safety Improvement

(Widen,V-Ditch, Soldier Pile Wall, MBGR)

Route 169 - Location 1,
Post Mile: 13.66/13.73



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DATE: 3/29/2013

PROJECT ID: 0100000219

CONTRACT: EA: 01-450904

DIST/CO/RTE/PM: 01-HUM-169-PM:13.6/23.4

All Dimensions Are US Survey Feet

SCALE: 1" = 10' Horiz.
1" = 10' Vert.

Alignment: "K1"

DESIGN CROSS SECTIONS

SHEET 1 OF 25