



Wisconsin Department of Transportation

November 19, 2019

Division of Transportation Systems Development
Bureau of Project Development
4822 Madison Yards Way, 4th Floor South
Madison, WI 53705

NOTICE TO ALL CONTRACTORS:

Telephone: (608) 266-1631
Facsimile (FAX): (608) 266-8459

Proposal #06: 5992-10-31, WISC 2019 771
City of Madison, Gammon Road
W Twn Mall to Grand Canyon Dr
Local Street
Dane County

5992-10-32, WISC 2019 772
City of Madison, Gammon Road
USH 12 to Mineral Point Rd
Local Street
Dane County

5992-10-33
City of Madison, Gammon Road
USH 12 to Mineral Point Road
Local Street
Dane County

Letting of December 10, 2019

This is Addendum No. 01, which provides for the following:

Plan Sheets:

Revised Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
519	Structure B-13-870 - Railing Steel Details (Railing Revisions)
524	Structure R-13-338 - Railing Details (Railing Revisions)
529	Structure R-13-339 - Railing Details (Railing Revisions)
534	Structure R-13-340 - Railing Details (Railing Revisions)
539	Structure R-13-341 - Railing Details (Railing Revisions)
545	Structure R-13-342 - Railing Details (Railing Revisions)
551	Structure R-13-343 - Railing Details (Railing Revisions)

Plan Sheets

The following 8½ x 11-inch sheets are attached and made part of the plans for this proposal:
Revised: 519, 524, 529, 534, 539, 545 and 551.

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

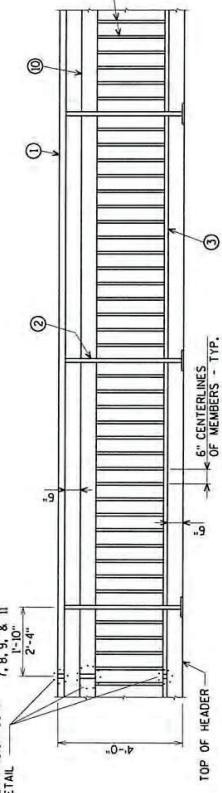
Sincerely,

Mike Coleman

Proposal Development Specialist
Proposal Management Section

END OF ADDENDUM

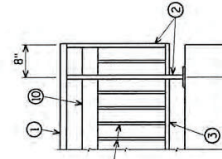
FIELD ERECTION /EXPANSION JOINT DETAIL
SEE NOTES 7, 8, 9 & 11
2'-4"



PART ELEVATION OF RAILING STEEL

5 SPA. @ 5'-0" = 25'-0"
5 SPA. @ 5'-0" = 25'-0"

END SECTION



LEGEND

- ① 2 1/2" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS.
- ② TS 2" x 2" x 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B. CUT BOTTOM OF POST TO ALLOW POST AND BASE PLATE TO BE WELDED TOGETHER. PLACE POST VERTICAL AND CENTERED ON BASE PLATE.
- ③ TS 1/2" x 1/2" x 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
- ④ 1" x 1" BAR CONFORMING TO ASTM DESIGNATION A709 GRADE 36.
- ⑤ BASE PLATE 1/2" x 1/2" x 7" CONFORMING TO ASTM DESIGNATION WELD TO NO. 2 AS SHOWN.
- ⑥ CONCRETE MASONRY ANCHORS, TYPE S, 3/8" - PULLOUT STRENGTH SHALL BE 3/5 KIPS.
- ⑦ SQUARE SLEEVE FABRICATED FROM 1/2" - GOLD-DRAWN-STEEL-ALLOY SQUARE CONFORMING TO ASTM-A337 x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" x 1/2" SURFACE WELDS ON TOP AND BOTTOM SURFACES TO FIT FREE INTO I.D. OF NO. 3. PROVIDE 3/8" x 1/2" SURFACE WELDS TO FIT FREE INTO I.D. OF NO. 1. PROVIDE 1/2" x 1/2" SURFACE WELDS TO FIT FREE INTO I.D. OF NO. 2.
- ⑧ 1/2" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 1. PROVIDE 3/8" x 1/2" SURFACE WELDS TO FIT FREE INTO I.D. OF NO. 2. PROVIDE 1/2" x 1/2" SURFACE WELDS TO FIT FREE INTO I.D. OF NO. 3.
- ⑨ 2" DIA. PIPE SLEEVE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS. PROVIDE "SLIDING FIT".
- ⑩ TS 6" x 2" x 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
- ⑪ 1" x 5/8" SLEEVE CONFORMING TO ASTM DESIGNATION A709 GRADE 36 x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 1. PROVIDE 3/8" x 1/2" SURFACE WELDS TO FIT FREE INTO I.D. OF NO. 2. PROVIDE 1/2" x 1/2" SURFACE WELDS TO FIT FREE INTO I.D. OF NO. 3.

3/4" DIA. x 1/2" SLOTTED HOLES FOR ANCHOR

3/8" PLATES CONFORMING TO ASTM DESIGNATION A709 GRADE 36

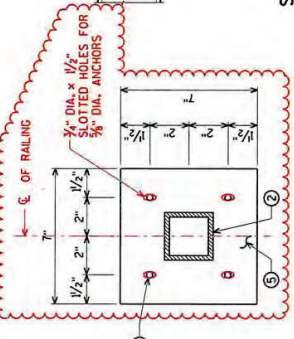
WEST HEADER RAIL POST SPACING
EAST HEADER RAIL POST SPACING

Addendum No. 01
ID 5992-10-31
Revised Sheet 519
November 19, 2019

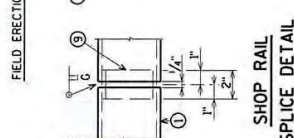
William C. Decker
11/08/19



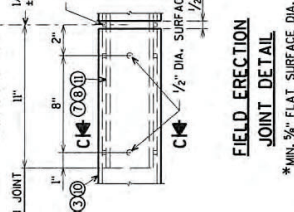
SPR NAMES
DGN NA



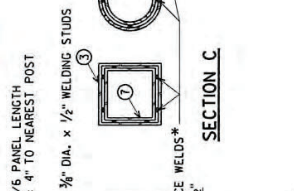
RAILING BASE PLATE



SHOP RAIL SPlice DETAIL



FIELD ERECTION JOINT DETAIL



SECTION C

GENERAL NOTES

- BD ITEM SHALL BE "RAILING STEEL B-13-870", WHICH INCLUDE ALL ITEMS SHOWN.
- RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.
- POST BASE PLATES NO. 5 SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT. ALL MATERIAL EXCEPT ANCHOR BOLTS NO. 6 SHALL BE GALVANIZED AFTER FABRICATION.
- PRIOR TO GALVANIZING ALL STEEL RAILING POSTS, STEEL TUBING, AND BASE PLATES SHALL BE GIVEN A NO. 6 BLAST CLEANING PER S.S.P.C. SPECIFICATIONS.
- VERTICAL MEMBERS SHALL BE PLUMB.
- HORIZONTAL MEMBERS SHALL PARALLEL TO GRADE.
- PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT. RAILING TO BE PAINTED AMS STANDARD COLOR NO. 17039 (BLACK).

SECTION THRU RAILING STEEL

NO. DATE	REVISION	BY
11/19	RAILING REVISIONS	AYRES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

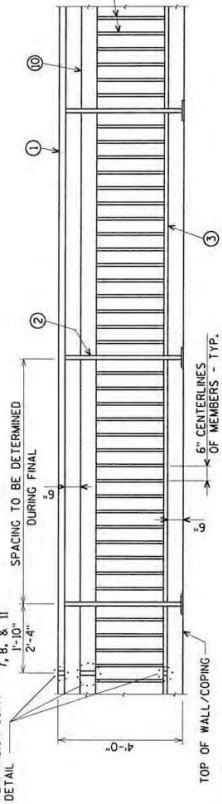
STRUCTURE B-13-870

DRAWN BY: CJS/SS
PLANS LOG: GBM
SHEET 11 OF 12
RAILING STEEL DETAILS
519

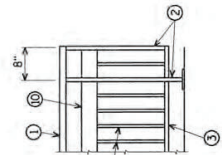
ORIGINAL PLANS PREPARED BY
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.ayresassociates.com



FIELD ERECTION /EXPANSION JOINT
DETAIL
SEE NOTES
1, 1'-10", II
2'-4"



PART ELEVATION OF RAILING STEEL



END SECTION

LEGEND

- ① 2 1/2" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS.
- ② TS 2" x 2" x 0.1875" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B, CUT TO BOTTOM OF POST TO ALLOW POST AND BASE PLATE TO BE WELDED TOGETHER. PLACE POST VERTICAL AND CENTERED ON BASE PLATE.
- ③ TS 1/2" x 1/2" x 0.1875" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
- ④ 1" x 1" BAR CONFORMING TO ASTM DESIGNATION A709 GRADE 36.

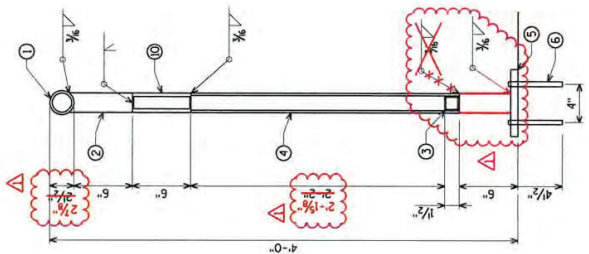
⑤ BASE PLATE 1/2" x 1/2" x 1/2" CONFORMING TO ASTM DESIGNATION A709 GRADE 36 WITH 3/8" HOLES FOR 1/2" DIA. BOLTS NO. 6. 3/4" DIA. x 1/2" SLOTTED HOLES FOR ANCHOR

- ⑥ CONCRETE MASONRY ANCHORS, TYPE S, 3/8" PULLOUT STRENGTH SHALL BE 305 LBS.
- ⑦ SQUARE SLEEVE FABRICATED FROM 1/2" COLD-DRAWN STEEL-ALLOY CONFORMING TO ASTM-A331 x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE IN I.D. OF NO. 10. PROVIDE 3/4" DIA. x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

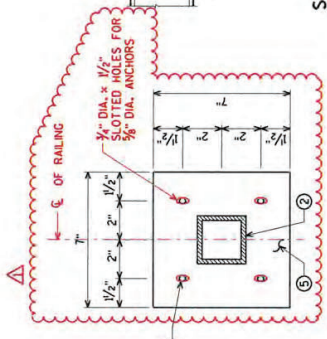
- ⑧ 1/2" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE IN I.D. OF NO. 10. PROVIDE 3/4" DIA. x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.
- ⑨ 2" DIA. PIPE SLEEVE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS. PROVIDE "SLIDING FIT".
- ⑩ TS 6" x 2" x 0.1875" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
- ⑪ 1" x 5" SLEEVE CONFORMING TO ASTM DESIGNATION A709 GRADE 36 x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE IN I.D. OF NO. 10. PROVIDE 3/4" DIA. x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

Addendum No. 01
ID 5992-10-31
Revised Sheet 524
November 19, 2019

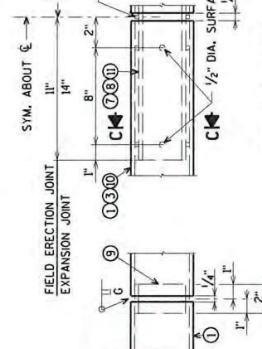
William C. Decker
11/08/19



SECTION THRU RAILING STEEL

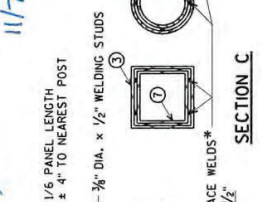


RAILING BASE PLATE



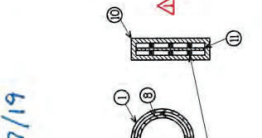
SHOP RAIL SPlice DETAIL

(LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS)



FIELD ERECTION JOINT DETAIL

*MIN. 3/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



SECTION C

GENERAL NOTES

- BID ITEM SHALL BE "RAILING STEEL R-13-338", WHICH INCLUDE ALL ITEMS SHOWN INCLUDING GALVANIZED COATING. RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.
- POST BASE PLATES NO. 5 SHALL BE FLAT WITH ALL SURFACES SMOOTH AND BE FINISHED WITH AN ANTI-RUST COATING ON ALL VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT. ALL MATERIAL EXCEPT ANCHOR BOLTS NO. 6 SHALL BE GALVANIZED AFTER FABRICATION.
- PRIOR TO GALVANIZING ALL STEEL RAILING POSTS, STEEL TUBING, AND STEEL PIPE SHALL BE GIVEN A NO. 6 BLAST CLEANING PER S.S.P.C. SPECIFICATIONS.
- VERTICAL MEMBERS SHALL BE PLUMB.
- HORIZONTAL MEMBERS SHALL PARALLEL TO GRADE.
- PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.
- RAILING TO BE PAINTED FEDERAL COLOR NO. 101038 (BLACK).
- CURVE RAILING TO MATCH WALL ALIGNMENT.

NO. DATE REVISION

11/19 RAILING REVISIONS

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

STRUCTURE R-13-338

PLANS CLS/255

RAILING DETAILS

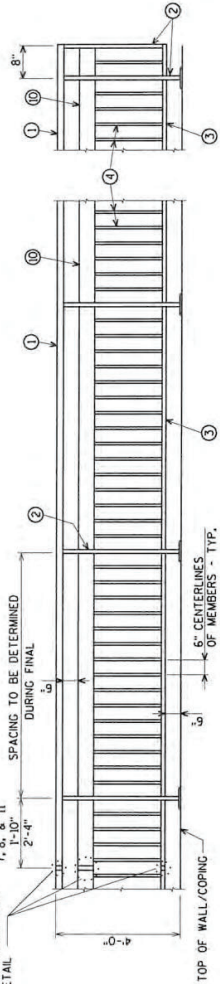
SHEET 4 OF 5

524

ORIGINAL PLANS PREPARED BY
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.avresassociates.com



SEE NOTES
1, 6, 11
FIELD ERECTION
/EXPANSION JOINT
DETAIL



PART ELEVATION OF RAILING STEEL

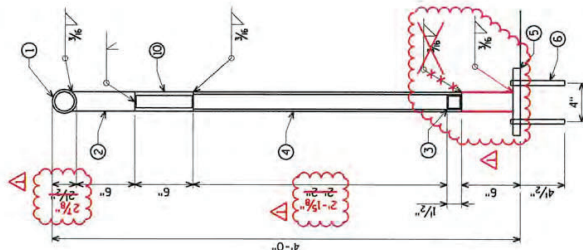
END SECTION

LEGEND

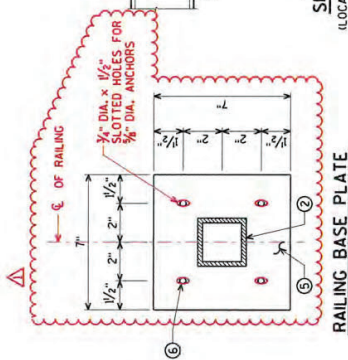
- ① 2 1/2" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS.
- ② TS 2" x 2" x 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B. CUT BOTTOM OF POST TO ALLOW FOR WELDING TO BASE PLATE TO BE WELDED TOGETHER. PLACE POST VERTICAL AND CENTERED ON BASE PLATE.
- ③ TS 1/2" x 1/2" x 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
- ④ 1" x 1" BAR CONFORMING TO ASTM DESIGNATION A709 GRADE 36.
- ⑤ BASE PLATE 1/2" x 7" x 7" CONFORMING TO ASTM DESIGNATION A709 GRADE 36 WITH 7/8" HOLES FOR 1/2" DIA. BOLTS NO. 6.
- ⑥ 3/4" DIA. x 1/2" SLOTTED HOLES FOR ANCHOR WELD TO NO. 2 AS SHOWN.
- ⑦ CONCRETE MASONRY ANCHORS, TYPE S, 3/4" PULLOUT STRENGTH SHALL BE 3/8" DIA.
- ⑧ SQUARE SLEEVE FABRICATED FROM 1/2" COLD-DRAWN STEEL-ALLOY CONFORMING TO ASTM A333-3 x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" SURFACE WELDS ON ALL SIDES SHOWING GRIND WELDS TO FIT FREE INTO I.D. OF NO. 10. PROVIDE 3/4" DIA. x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.
- ⑨ 1/2" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 10. PROVIDE 3/4" DIA. x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.
- ⑩ 2" DIA. PIPE SLEEVE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS. PROVIDE "SLIDING FIT".
- ⑪ TS 6" x 2" x 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
- ⑫ 1" x 5" SLEEVE CONFORMING TO ASTM DESIGNATION A709 GRADE 36 x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE IN I.D. OF NO. 10. PROVIDE 3/4" x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

Addendum No. 01
ID 5992-10-32
Revised Sheet 529
November 19, 2019

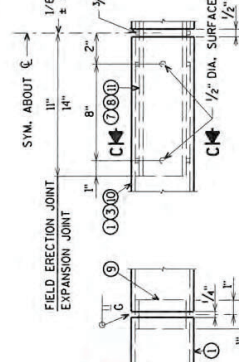
William C. DeLuca
11/08/19



SECTION THRU RAILING STEEL

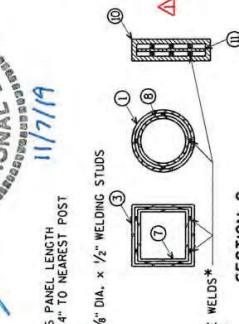


RAILING BASE PLATE



FIELD ERECTION JOINT DETAIL

*MIN 3/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE. (ON THE SHOP DRAWINGS)



SECTION C

SHOP RAIL SPlice DETAIL

LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS!

GENERAL NOTES

- BI0 ITEM SHALL BE "RAILING STEEL R-13-339", WHICH INCLUDE ALL ITEMS SHOWN INCLUDING GALVANIZED COATING. RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.
- POST BASE PLATES NO. 5 SHALL BE FLAT WITH ALL SURFACES SMOOTH TO BE FURNISHED TO THE FIELD. ALL SURFACES SHALL BE VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT. ALL MATERIAL EXCEPT ANCHOR BOLTS NO. 6 SHALL BE GALVANIZED AFTER FABRICATION.
- PRIOR TO GALVANIZING ALL STEEL RAILING POSTS, STEEL TUBING, AND STEEL PIPE SHALL BE GIVEN A NO. 6 BLAST CLEANING PER S.S.P.C. SPECIFICATIONS.
- VERTICAL MEMBERS SHALL BE PLUMB.
- HORIZONTAL MEMBERS SHALL PARALLEL TO GRADE.
- PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.
- RAILING TO BE PAINTED FEDERAL COLOR NO. 17038 (BLACK).
- CURVE RAILING TO MATCH WALL ALIGNMENT.

REVISIONS

NO.	DATE	REVISION	BY
11/19		RAILING REVISIONS	AYRES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-13-339

DRWN BY: CLS/ZSS
CHKD BY: KJW

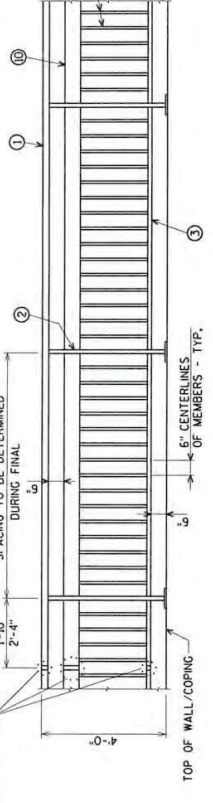
RAILING
DETAILS

ORIGINAL PLANS PREPARED BY:
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.ayresassociates.com

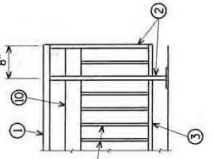
AYRES ASSOCIATES

SHEET 4 OF 5
529

FIELD ERECTION /EXPANSION JOINT DETAIL
SEE NOTES 1, 1-10, 11
2'-4" 1'-10"



PART ELEVATION OF RAILING STEEL



END SECTION

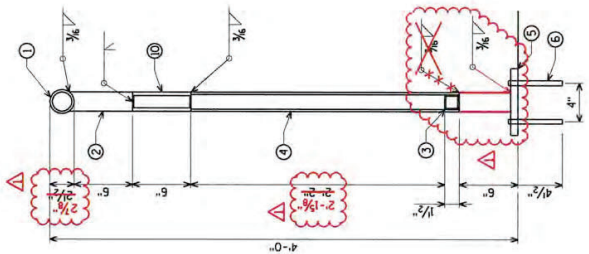
- LEGEND**
- ① 2 1/2" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS.
 - ② TS 2" x 2" x 0.1875" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B, CUT BOTTOM OF POST TO ALLOW FOR FIELD ERECTION JOINTS TO BE WELDED TOGETHER. PLACE POST VERTICAL AND CENTERED ON BASE PLATE.
 - ③ TS 1/2" x 1/2" x 0.1875" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
 - ④ 1" x 1" BAR CONFORMING TO ASTM DESIGNATION A709 GRADE 36.
 - ⑤ BASE PLATE 1/2" x 1/2" x 0.1875" CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B, WITH 1/4" HOLES FOR 1/2" DIA. ANCHOR BOLTS TO NO. 2 AS SHOWN.
 - ⑥ CONCRETE MASONRY ANCHORS, TYPE S, 3/8", PULLOUT STRENGTH SHALL BE 35 KIPS.
 - ⑦ SQUARE SLEEVE FABRICATED FROM 1/2" COLD-DRAWN STEEL-ALLOY SQUARE CONFORMING TO ASTM A331 x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 3. PROVIDE 3/8" DIA. x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.
 - ⑧ 1/2" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 1. PROVIDE 3/8" DIA. x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.
 - ⑨ 2" DIA. PIPE SLEEVE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS. PROVIDE "SLIDING FIT".
 - ⑩ TS 6" x 2" x 0.1875" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
 - ⑪ 1" x 5" SLEEVE CONFORMING TO ASTM DESIGNATION A709 GRADE 36 x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 10. PROVIDE 3/8" x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

1/4" DIA. x 1/2" SLOTTED HOLES FOR ANCHOR

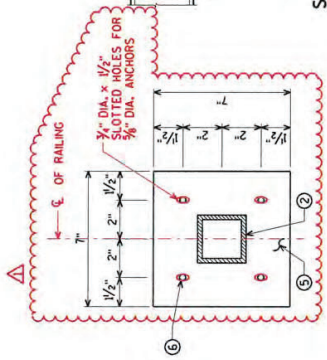
3/8" PLATES CONFORMING TO ASTM DESIGNATION A709 GRADE 36

Addendum No. 01
ID 5992-10-31
Revised Sheet 539
November 19, 2019

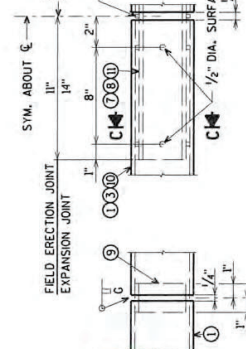
William C. Decker
11/08/19



SECTION THRU RAILING STEEL

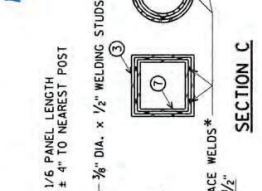


RAILING BASE PLATE



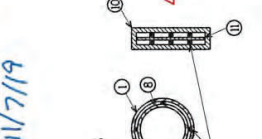
SHOP RAIL SPlice DETAIL

LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS!



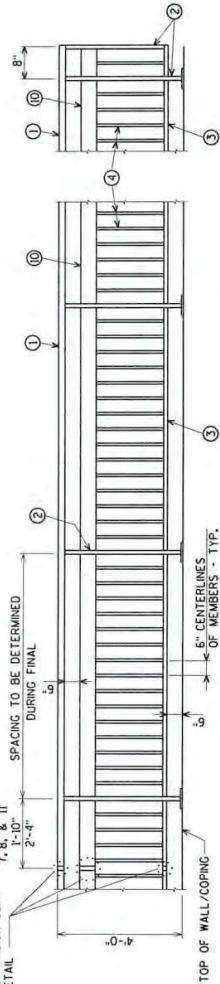
FIELD ERECTION JOINT DETAIL

*MIN. 3/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



SECTION C

SEE NOTES
1, 1-10, II
FIELD ERECTION
/EXPANSION JOINT
DETAIL



PART ELEVATION OF RAILING STEEL

END SECTION

LEGEND

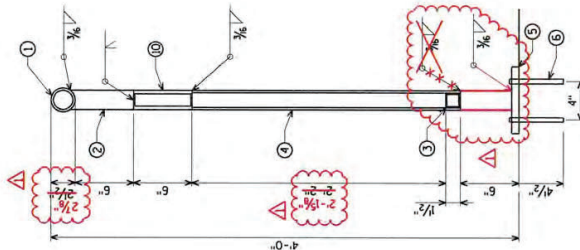
- 1 2 1/2" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS.
- 2 TS 2" x 2" x 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B, CUT BOTTOM OF POST TO MATCH TOP OF EXPANSION JOINT. ALL PLATE TO BE WELDED TO ALL FOUR POSTS AND BASE PLATE TO BE WELDED TOGETHER.
- 3 TS 1/2" x 1/2" x 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
- 4 1" x 1" BAR CONFORMING TO ASTM DESIGNATION A709 GRADE 36.

5 BASE PLATE 1/2" x 1/2" x 1/4" CONFORMING TO ASTM DESIGNATION A709 GRADE 36. PROVIDE 1/2" DIA. x 1/2" SLOTTED HOLES FOR ANCHOR WELD TO NO. 2 AS SHOWN.

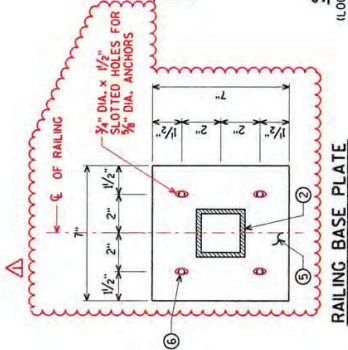
- 6 CONCRETE MASONRY ANCHORS, TYPE S, 3/8" PULLOUT STRENGTH SHALL BE 36 KIPS.
- 7 SQUARE SLEEVE FABRICATED FROM 1/2" GOLD-DRAWN-STEEL-ALLOY CONFORMING TO ASTM A331 x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 3. PROVIDE 3/8" DIA. x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.
- 8 1/2" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 1. PROVIDE 3/8" DIA. x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.
- 9 2" DIA. PIPE SLEEVE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS. PROVIDE "SLIDING FIT".
- 10 TS 6" x 2" x 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
- 11 1" x 5" SLEEVE CONFORMING TO ASTM DESIGNATION A709 GRADE 36 x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 1. PROVIDE 3/8" DIA. x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

1/2" PLATES CONFORMING TO ASTM DESIGNATION A709 GRADE 36

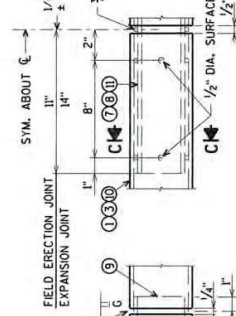
Addendum No. 01
ID 5992-10-31
Revised Sheet 545
November 19, 2019



SECTION THRU RAILING STEEL

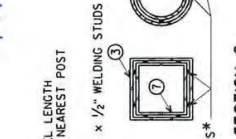


RAILING BASE PLATE



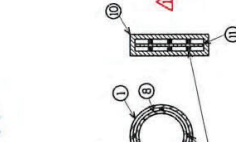
FIELD ERECTION JOINT DETAIL

*MIN. 3/4" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



SHOP RAIL SPlice DETAIL

LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS!



SECTION C

William C. Decker
11/08/19



11/7/19

GENERAL NOTES

- BID ITEM SHALL BE "RAILING STEEL R-13-342", WHICH INCLUDE ALL ITEMS SHOWN INCLUDING GALVANIZED COATING. RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.
- POST BASE PLATES NO. 5 SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM BURRS, EDGES AND ALL VERTICAL AND HORIZONTAL CUTS SHALL BE MACHINE OR MACHINE FLAME CUT. ALL MATERIAL EXCEPT ANCHOR BOLTS NO. 6 SHALL BE GALVANIZED AFTER FABRICATION.
- PRIOR TO GALVANIZING ALL STEEL RAILING POSTS, STEEL TUBING, AND STEEL PIPE SHALL BE GIVEN A NO. 6 BLAST CLEANING PER S.S.P.C. SPECIFICATIONS.
- VERTICAL MEMBERS SHALL BE PLUMB.
- HORIZONTAL MEMBERS SHALL PARALLEL TO GRADE.
- PAIN OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.
- RAILING TO BE PAINTED FEDERAL COLOR NO. 1038 (BLACK).
- CURVE RAILING TO MATCH WALL ALIGNMENT.

ORIGINAL PLANS PREPARED BY
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com



RAILING
DETAILS

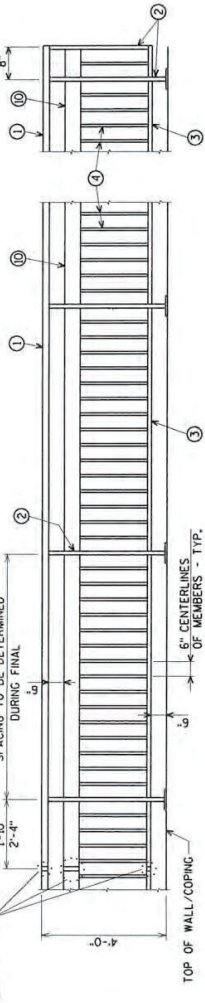
STRUCTURE R-13-342

NO. DATE	REVISION	BY
11/19	RAILING REVISIONS	AYRES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

DRWN BY: CLS/ZSS
PLNS: KLV
SHEET 5 OF 6

FIELD ERECTION /EXPANSION JOINT DETAIL
SEE NOTES
1, 1'-10", 11"



PART ELEVATION OF RAILING STEEL

END SECTION

LEGEND

- ① 2 1/2" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS.
- ② TS 2" x 2" x 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B. CUT BOTTOM OF POST TO ALLOW FOR FIELD ERECTION JOINT. FIELD ERECTION JOINT TO ALLOW POST AND BASE PLATE TO BE WELDED TOGETHER. PLACE POST VERTICAL AND CENTERED ON BASE PLATE.
- ③ TS 1/2" x 1/2" x 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
- ④ 1" x 1" BAR CONFORMING TO ASTM DESIGNATION A709 GRADE 36.

⑤ BASE PLATE 1/2" x 1/2" x 0.188" CONFORMING TO ASTM DESIGNATION A709 GRADE 36 WITH 7/8" HOLES FOR NER BOLTS NO. 6. WELDED TO NO. 2 AS SHOWN.

⑥ CONCRETE MASONRY ANCHORS, TYPE S, 3/4", PULLOUT STRENGTH SHALL BE 36 KIPS.

⑦ SQUARE SLEEVE FABRICATED FROM 1/2" COLD-DRAWN-STEEL-ALLOY CONFORMING TO ASTM-A331 x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" # SURFACE WELDS ON ALL SIDES TO FIELD JOINTS. PROVIDE 3/4" DIA. x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

⑧ 1/2" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FITS FREE IN I.D. OF NO. 1. PROVIDE 3/4" DIA. x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

⑨ 2" DIA. PIPE SLEEVE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS. PROVIDE "SLIDING FIT".

⑩ TS 6" x 2" x 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

⑪ 1" x 5" SLEEVE CONFORMING TO ASTM DESIGNATION A709 GRADE 36 x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FITS FREE IN I.D. OF NO. 10. PROVIDE 3/4" x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

GENERAL NOTES

BID ITEM SHALL BE "RAILING STEEL R-13-343", WHICH INCLUDE ALL ITEMS SHOWN INCLUDING GALVANIZED COATING. RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS. POST-BASE PLATES NO. 5 SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FINISHED TO MATCH RAILING. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT. ALL MATERIAL EXCEPT ANCHOR BOLTS NO. 6 SHALL BE GALVANIZED AFTER FABRICATION.

PRIOR TO GALVANIZING ALL STEEL RAILING POSTS, STEEL TUBING, AND STEEL PIPE SHALL BE GIVEN A NO. 6 BLAST CLEANING PER S.S.P.C. SPECIFICATIONS. VERTICAL MEMBERS SHALL BE PLUMB.

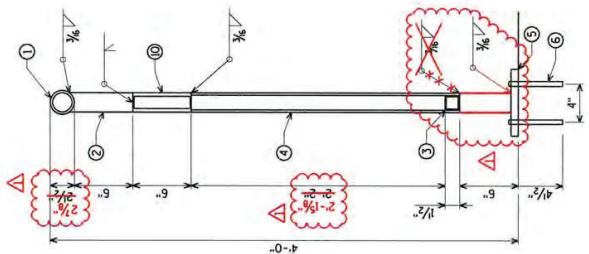
HORIZONTAL MEMBERS SHALL PARALLEL TO GRADE. PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT. RAILING TO BE PAINTED FEDERAL COLOR NO. 107038 (BLACK).

CURVE RAILING TO MATCH WALL ALIGNMENT.

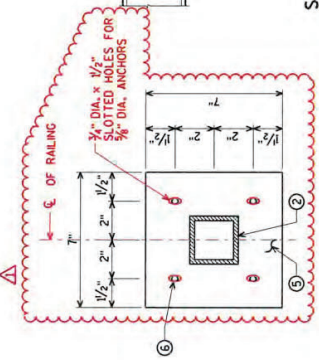


William C. Decker
11/08/19

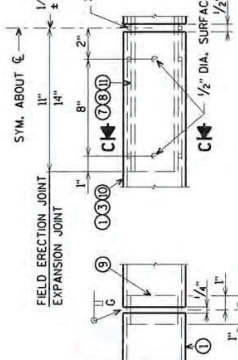
Addendum No. 01
ID 5992-10-31
Revised Sheet 551
November 19, 2019



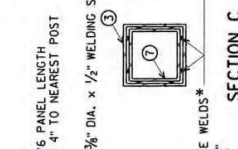
SECTION THRU RAILING STEEL



RAILING BASE PLATE

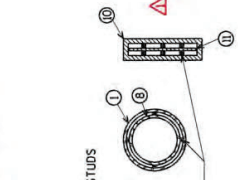


FIELD ERECTION JOINT DETAIL



SHOP RAIL SPlice DETAIL

LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS!
*MIN. 3/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



SECTION C

NO.	DATE	REVISION	BY
11/19		RAILING REVISIONS	ATRES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-13-343
DRAWN BY: CLS/ZSS
CHECKED BY: KJW

RAILING DETAILS
SHEET 5 OF 6

ORIGINAL PLANS PREPARED BY
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.avresassociates.com

