



Client: ODOT District 12
PID No.: 105260
Subject: Estimated Quantities - Final Tracings
Bridge No. CUY-422-1390R

Job No.: 2019254.06
Sheet No.: 1 Of 1
Made By: RFV Date: 7/15/2021
Chk'd By: MOJ Date: 7/26/2021

ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL

No. of beams to be painted = 4 each
Length of each beam to be painted = 140.92 ft
Total beam length = 563.67 ft

Nominal beam depth = 2.99 ft
Nominal beam flange width = 1.00 ft
Painted perimeter = 8.98 ft

Additional % for incidentals = 15.00 % ODOT CMS 514.23

Total = 5,824 sf ODOT CMS 514.23

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT

Total = 5,824 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT

Total = 5,824 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (EXTERIOR COLOR)

No. Exterior Beams = 2
Length of Exterior Beams = 140.92 ft
Painted perimeter = 4.99 ft

Total = 1,407 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (INTERIOR COLOR)

Total = 4,417 sf

ITEM 514 - GRINDING FINIS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL

Time = 1 min/ft 2020 ODOT BDM 404.1.11
Total beam length = 564 ft

Total = 10 mnhr

ITEM 514 - FINAL INSPECTION REPAIR

Total beam length = 564 ft
No. of crossframe locations = 27 each

Total = 6 each ODOT CMS 514.21.A



Client: ODOT District 12
PID No.: 105260
Subject: Estimated Quantities - Final Tracings
Bridge No. CUY-480-0140WE

Job No.: 2019254.06
Sheet No.: 1 Of 1
Made By: RFV Date: 7/15/2021
Chk'd By: MOJ Date: 7/26/2021

ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL

No. of beams to be painted = 5 each
Length of each beam to be painted = 137.91 ft
Total beam length = 689.53 ft

Nominal beam depth = 2.99 ft
Nominal beam flange width = 1.13 ft
Painted perimeter = 9.36 ft

Additional % for incidentals = 15.00 % ODOT CMS 514.23

Total = 7,421 sf ODOT CMS 514.23

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT

Total = 7,421 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT

Total = 7,421 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (EXTERIOR COLOR)

No. Exterior Beams = 2
Length of Exterior Beams = 137.91 ft
Painted perimeter = 5.24 ft

Total = 1,446 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (INTERIOR COLOR)

Total = 5,975 sf

ITEM 514 - GRINDING FINIS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL

Time = 1 min/ft 2020 ODOT BDM 404.1.11
Total beam length = 690 ft

Total = 12 mnhr

ITEM 514 - FINAL INSPECTION REPAIR

Total beam length = 690 ft
No. of crossframe locations = 36 each

Total = 7 each ODOT CMS 514.21.A



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Job No.: 2019254.06
Sheet No.: 1 Of 2
Made By: RFV Date: 7/15/2021
Chk'd By: MOJ Date: 7/26/2021

ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL

Beam A

No. of beams to be painted = 1 each
Length of each beam to be painted = 157.73 ft
Total beam length = 157.73 ft

Nominal beam depth = 2.99 ft
Nominal beam flange width = 1.00 ft
Painted perimeter = 8.98 ft

Beam B

No. of beams to be painted = 1 each
Length of each beam to be painted = 56.70 ft
Total beam length = 56.70 ft

Nominal beam depth = 2.97 ft
Nominal beam flange width = 1.00 ft
Painted perimeter = 8.93 ft

Beam C

No. of beams to be painted = 1 each
Length of each beam to be painted = 96.41 ft
Total beam length = 96.41 ft

Nominal beam depth = 2.99 ft
Nominal beam flange width = 1.00 ft
Painted perimeter = 8.98 ft

Beams D thru K

No. of beams to be painted = 7 each
Length of each beam to be painted = 148.56 ft
Total beam length = 1039.94 ft

Nominal beam depth = 2.99 ft
Nominal beam flange width = 1.00 ft
Painted perimeter = 8.98 ft

Additional % for incidentals = 15.00 % ODOT CMS 514.23

Total = 13,952 sf ODOT CMS 514.23

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT

Total = 13,952 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT

Total = 13,952 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (EXTERIOR COLOR)

Beam A length = 157.73 ft
Nominal Beam A depth = 2.99 ft
Nominal Beam A flange width = 1.00 ft
Painted perimeter = 4.99 ft

Beam K length = 148.56 ft
Nominal Beam K depth = 2.99 ft
Nominal Beam K flange width = 1.00 ft
Painted perimeter = 4.99 ft

Total = 1,529 sf



Client: ODOT District 12
PID No.: 105260
Subject: Estimated Quantities - Final Tracings
Bridge No. CUY-422-1390L

Job No.: 2019254.06
Sheet No.: 2 Of 2
Made By: RFV Date: 7/15/2021
Chk'd By: MOJ Date: 7/26/2021

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (INTERIOR COLOR)

Total = 12,423 sf

ITEM 514 - GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL

Time = 1 min/ft 2020 ODOT BDM 404.1.11
Total beam length = 1,351 ft

Total = 23 mnhr

ITEM 514 - FINAL INSPECTION REPAIR

Total beam length = 1,351 ft
No. of crossframe locations = 81 each
Total = 15 each ODOT CMS 514.21.A



Client: ODOT District 12
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 Subject: Estimated Quantities - Final Tracings
Bridge No. CUY-422-1804L

Job No.: 2019254.06
 Sheet No.: 1 Of 2
 Made By: RFV Date: 7/15/2021
 Chk'd By: MOJ Date: 7/26/2021

ITEM 513 - REPLACEMENT OF DETERIORATED END CROSSFRAMES, AS PER PLAN

Rear Abut. Crossframes

No. of assemblies = 1 each
 Span Length/Horizontal Leg = 9.90 ft
 Total Length of Outside Diagonals = 8.58 ft
 Total Length of Inside Diagonals = 6.40 ft
 weight of 4x4x3/8 angles = 9.80 lbs/ft
 no. of plates per assembly = 3 each
 approx. volume per plate = 0.06250 cf
 weight per plate = 30.63 lbs
 weight = 335.74 lbs

No. of assemblies = 1 each
 Span Length/Horizontal Leg = 8.46 ft
 Total Length of Outside Diagonals = 7.87 ft
 Total Length of Inside Diagonals = 6.17 ft
 weight of 4x4x3/8 angles = 9.80 lbs/ft
 no. of plates per assembly = 3 each
 approx. volume per plate = 0.06250 cf
 weight per plate = 30.63 lbs
 weight = 312.38 lbs

Frwd Abut. Crossframes

No. of assemblies = 5 each
 Span Length/Horizontal Leg = 9.90 ft
 Total Length of Outside Diagonals = 8.58 ft
 Total Length of Inside Diagonals = 6.40 ft
 weight of 4x4x3/8 angles = 9.80 lbs/ft
 no. of plates per assembly = 3 each
 approx. volume per plate = 0.06250 cf
 weight per plate = 30.63 lbs
 weight = 1678.72 lbs

Total = 2,327 lbs

ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL

Beam 1L

No. of beams to be painted = 1 each
 Length of each beam to be painted = 173.60 ft
 Total beam length = 173.60 ft

Nominal beam depth = 2.75 ft
 Nominal beam flange width = 0.96 ft
 Painted perimeter = 8.38 ft

Beam 2L

No. of beams to be painted = 1 each
 Length of each beam to be painted = 173.72 ft
 Total beam length = 173.72 ft

Nominal beam depth = 2.75 ft
 Nominal beam flange width = 0.96 ft
 Painted perimeter = 8.38 ft

Beam 3L

No. of beams to be painted = 1 each
 Length of each beam to be painted = 173.85 ft
 Total beam length = 173.85 ft

Nominal beam depth = 2.75 ft
 Nominal beam flange width = 0.96 ft
 Painted perimeter = 8.38 ft



Client: ODOT District 12
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Subject: Estimated Quantities - Final Tracings
Bridge No. CUY-422-1804L

Job No.: 2019254.06
Sheet No.: 2 Of 2
Made By: RFV Date: 7/15/2021
Chk'd By: MOJ Date: 7/26/2021

Beams 4L thru 7L

No. of beams to be painted = 4 each
Length of each beam to be painted = 174.00 ft

Total beam length = 696.00 ft

Nominal beam depth = 2.75 ft
Nominal beam flange width = 0.96 ft

Painted perimeter = 8.38 ft

Additional % for incidentals = 15.00 % ODOT CMS 514.23

Total = 11,723 sf ODOT CMS 514.23

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT

Total = 11,723 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT

Total = 11,723 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (EXTERIOR COLOR)

No. Exterior Beams = 2
Length of Exterior Beams = 173.80 ft
Painted perimeter = 4.67 ft

Total = 1,623 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (INTERIOR COLOR)

Total = 10,100 sf

ITEM 514 - GRINDING FINIS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL

Time = 1 min/ft 2020 ODOT BDM 404.1.11
Total beam length = 1,217 ft

Total = 21 mnhr

ITEM 514 - FINAL INSPECTION REPAIR

Total beam length = 1,217 ft
No. of crossframe locations = 84 each

Total = 14 each ODOT CMS 514.21.A



Client: ODOT District 12
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Bridge No. CUY-422-1804R

Job No.: 2019254.06
Sheet No.: 1 Of 2
Made By: RFV Date: 7/15/2021
Chk'd By: MOJ Date: 7/26/2021

ITEM 513 - REPLACEMENT OF DETERIORATED END CROSSFRAMES, AS PER PLAN

Rear Abut. Crossframes

No. of assemblies = 2 each
Span Length/Horizontal Leg = 9.68 ft
Total Length of Outside Diagonals = 8.47 ft
Total Length of Inside Diagonals = 6.36 ft
weight of 4x4x3/8 angles = 9.80 lbs/ft
no. of plates per assembly = 3 each
approx. volume per plate = 0.06250 cf
weight per plate = 30.63 lbs
weight = 664.28 lbs

Frwd Abut. Crossframes

No. of assemblies = 3 each
Span Length/Horizontal Leg = 9.68 ft
Total Length of Outside Diagonals = 8.47 ft
Total Length of Inside Diagonals = 6.36 ft
weight of 4x4x3/8 angles = 9.80 lbs/ft
no. of plates per assembly = 3 each
approx. volume per plate = 0.06250 cf
weight per plate = 30.63 lbs
weight = 996.42 lbs

Total = 1,661 lbs

ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL

No. of beams to be painted = 5 each
Length of each beam to be painted = 169.00 ft
Total beam length = 845.00 ft

Nominal beam depth = 2.75 ft
Nominal beam flange width = 0.96 ft
Painted perimeter = 8.38 ft

Additional % for incidentals = 15.00 % ODOT CMS 514.23

Total = 8,139 sf ODOT CMS 514.23

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT

Total = 8,139 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT

Total = 8,139 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (EXTERIOR COLOR)

No. Exterior Beams = 2
Length of Exterior Beams = 169.00 ft
Painted perimeter = 4.67 ft

Total = 1,578 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (INTERIOR COLOR)

Total = 6,561 sf



Client: ODOT District 12
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Bridge No. CUY-422-1804R

Job No.: 2019254.06
Sheet No.: 2 Of 2
Made By: RFV Date: 7/15/2021
Chk'd By: MOJ Date: 7/26/2021

ITEM 514 - GRINDING FINNS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL

Time = 1 min/ft 2020 ODOT BDM 404.1.11
Total beam length = 845 ft
Total = 15 mnhr

ITEM 514 - FINAL INSPECTION REPAIR

Total beam length = 845 ft
No. of crossframe locations = 56 each
Total = 9 each ODOT CMS 514.21.A



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Job No.: 2019254.06
Sheet No.: 1 Of 1
Made By: RFV Date: 7/15/2021
Chk'd By: MOJ Date: 7/26/2021

ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL

No. of beams to be painted = 6 each
Length of each beam to be painted = 236.00 ft
Total beam length = 1416.00 ft

Nominal beam depth = 4.50 ft
Nominal beam flange width = 1.50 ft
Painted perimeter = 13.50 ft

Additional % for incidentals = 15.00 % ODOT CMS 514.23

Total = 21,984 sf ODOT CMS 514.23

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT

Total = 21,984 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT

Total = 21,984 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (EXTERIOR COLOR)

No. Exterior Beams = 2
Length of Exterior Beams = 236.00 ft
Painted perimeter = 7.50 ft

Total = 3,540 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (INTERIOR COLOR)

Total = 18,444 sf

ITEM 514 - GRINDING FINIS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL

Time = 1 min/ft 2020 ODOT BDM 404.1.11
Total beam length = 1,416 ft

Total = 24 mnhr

ITEM 514 - FINAL INSPECTION REPAIR

Total beam length = 1,416 ft
No. of crossframe locations = 113 each

Total = 16 each ODOT CMS 514.21.A



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Job No.: 2019254.06
Sheet No.: 1 Of 2
Made By: RFV Date: 7/15/2021
Chk'd By: MOJ Date: 7/26/2021

ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL

Beams 1R thru 4R

No. of beams to be painted = 4 each
Length of each beam to be painted = 236.00 ft
Total beam length = 944.00 ft

Nominal beam depth = 4.50 ft
Nominal beam flange width = 1.50 ft
Painted perimeter = 13.50 ft

Beam 5R

No. of beams to be painted = 1 each
Length of each beam to be painted = 238.56 ft
Total beam length = 238.56 ft

Nominal beam depth = 4.50 ft
Nominal beam flange width = 1.50 ft
Painted perimeter = 13.50 ft

Beam 6R

No. of beams to be painted = 1 each
Length of each beam to be painted = 241.14 ft
Total beam length = 241.14 ft

Nominal beam depth = 4.50 ft
Nominal beam flange width = 1.50 ft
Painted perimeter = 13.50 ft

Beam 7R

No. of beams to be painted = 1 each
Length of each beam to be painted = 243.73 ft
Total beam length = 243.73 ft

Nominal beam depth = 4.50 ft
Nominal beam flange width = 1.50 ft
Painted perimeter = 13.50 ft

Additional % for incidentals = 15.00 % ODOT CMS 514.23

Total = 25,887 sf ODOT CMS 514.23

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT

Total = 25,887 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT

Total = 25,887 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (EXTERIOR COLOR)

No. Exterior Beams = 2
Length of Exterior Beams = 239.86 ft
Painted perimeter = 7.50 ft

Total = 3,598 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (INTERIOR COLOR)

Total = 22,289 sf



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Bridge No. CUY-422-1827R

Job No.: 2019254.06
Sheet No.: 2 Of 2
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Chk'd By: MOJ Date: 7/26/2021

ITEM 514 - GRINDING FINNS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL

Time = 1 min/ft 2020 ODOT BDM 404.1.11
Total beam length = 1,667 ft
Total = 28 mnhr

ITEM 514 - FINAL INSPECTION REPAIR

Total beam length = 1,667 ft
No. of crossframe locations = 137 each
Total = 19 each ODOT CMS 514.21.A



Client: ODOT District 12
PID No.: 105260
Subject: Estimated Quantities - Final Tracings
Bridge No. CUY-422-1911L

Job No.: 2019254.06
Sheet No.: 1 Of 1
Made By: RFV Date: 7/15/2021
Chk'd By: MOJ Date: 7/26/2021

ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL

No. of beams to be painted = 5 each
Length of each beam to be painted = 124.50 ft
Total beam length = 622.50 ft

Nominal beam depth = 2.74 ft
Nominal beam flange width = 0.96 ft
Painted perimeter = 8.36 ft

Additional % for incidentals = 15.00 % ODOT CMS 514.23

Total = 5,984 sf ODOT CMS 514.23

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT

Total = 5,984 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT

Total = 5,984 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (EXTERIOR COLOR)

No. Exterior Beams = 2
Length of Exterior Beams = 124.50 ft
Painted perimeter = 4.66 ft

Total = 1,160 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (INTERIOR COLOR)

Total = 4,824 sf

ITEM 514 - GRINDING FINNS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL

Time = 1 min/ft 2020 ODOT BDM 404.1.11
Total beam length = 623 ft

Total = 11 mnhr

ITEM 514 - FINAL INSPECTION REPAIR

Total beam length = 623 ft
No. of crossframe locations = 44 each

Total = 8 each ODOT CMS 514.21.A



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Sheet No.: 1 Of 1
Made By: RFV Date: 7/15/2021
Chk'd By: MOJ Date: 7/26/2021

ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL

No. of beams to be painted = 5 each
Length of each beam to be painted = 124.50 ft
Total beam length = 622.50 ft

Nominal beam depth = 2.74 ft
Nominal beam flange width = 0.96 ft
Painted perimeter = 8.36 ft

Additional % for incidentals = 15.00 % ODOT CMS 514.23

Total = 5,984 sf ODOT CMS 514.23

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT

Total = 5,984 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT

Total = 5,984 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (EXTERIOR COLOR)

No. Exterior Beams = 2
Length of Exterior Beams = 124.50 ft
Painted perimeter = 4.66 ft

Total = 1,160 sf

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (INTERIOR COLOR)

Total = 4,824 sf

ITEM 514 - GRINDING FINNS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL

Time = 1 min/ft 2020 ODOT BDM 404.1.11
Total beam length = 623 ft

Total = 11 mnhr

ITEM 514 - FINAL INSPECTION REPAIR

Total beam length = 623 ft
No. of crossframe locations = 44 each

Total = 8 each ODOT CMS 514.21.A