

### SUMMARY OF QUANTITIES:

CONSTRUCTION TYPE CODE: 0021

| Item | Pay Item Number | Pay Item Description | Unit of Measure                              | Quantity |         |
|------|-----------------|----------------------|--|----------|---------|
| Δ    | 1               | 35101400             | AGGREGATE BASE COURSE, TY B                  | TON      | 6,300   |
| Δ    | 2               | 48203029             | HMA SHOULDERS, 8"                            | SY       | 8,850   |
|      | 3*              | 50104000             | BRIDGE RAIL REMOVAL                          | FOOT     | 225     |
| Δ    | 4*              | 60600605             | CONCRETE CURB, TY B                          | FOOT     | 64      |
|      | 5               | 63000001             | STEEL PLATE BEAM GUARDRAIL, TY A, 6 FT POSTS | FOOT     | 6,375   |
|      | 6               | 63000030             | STRONG POST GUARDRAIL, ATTACH TO STRUCTURE   | FOOT     | 825     |
|      | 7               | 63100041             | TRAFFIC BARRIER TERMINAL, TY 1B              | EACH     | 1       |
|      | 8               | 63100089             | TRAFFIC BARRIER TERMINAL, TY 6B              | EACH     | 8       |
|      | 9               | 63100167             | TRAFFIC BARRIER TERMINAL, TY 1 (SP) TANGENT  | EACH     | 57      |
|      | 10*             | 63200310             | GUARDRAIL REMOVAL                            | FOOT     | 6,287.5 |
|      | 11              | 67100100             | MOBILIZATION                                 | LSUM     | 1       |
|      | 12              | Z0048665             | RAILROAD PROTECTIVE LIABILITY INSURANCE      | LSUM     | 1       |
| Δ    | 13*             | X0327584             | GRADING AND SHAPING SHOULDERS, SPECIAL       | FOOT     | 10,000  |
|      | 14*             | X6330725             | STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)    | FOOT     | 187.5   |
|      | 15*             | X7010216             | TRAFFIC CONTROL & PROTECTION, SPECIAL        | LSUM     | 1       |

\* SEE SPECIAL PROVISIONS Δ SPECIALTY ITEMS



ROUTE  
VARIOUS

SECTION  
17-00637-00-GR

SHEET  
2 OF 6

GUARDRAIL HSIP - COUNTY-WIDE

### GENERAL NOTES:

- GUARDRAIL REMOVAL SHALL INCLUDE DISMANTLING, DISPOSAL AND RESTORATION OF THE SITE IN PREPARATION FOR INSTALLATION OF NEW GUARDRAIL.
- PRIOR TO THE COMMENCEMENT OF WORK BY THE CONTRACTOR, ALL REQUIRED TREE REMOVAL AT WCHD SN 07-01 WILL BE COMPLETED BY WINNEBAGO COUNTY. TREE REMOVAL IS NOT INCLUDED IN THIS CONTRACT.
- THE COST OF REMOVING AND REPLACING EARTH AND SHOULDER MATERIAL NECESSARY FOR INSTALLATION OF STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURE, WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THIS ITEM. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK ALL FIELD CONDITIONS WHICH RELATE TO THIS ITEM AS WELL AS TO ALL ITEMS ASSOCIATED WITH THIS CONTRACT.
- ALL COST ASSOCIATED WITH FURNISHING AND INSTALLING SHORT RADIUS GUARDRAIL, AS INDICATED IN THE GUARDRAIL LAYOUTS AT WCHD SN 48-35, 71A-29 AND 88-04, SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS). THE GUARDRAIL ELEMENT PLATES SHALL BE FACTORY-FABRICATED TO THE INDICATED RADIUS OF CURVATURE OR TO THE RADIUS NECESSARY TO MATCH THE GUARDRAIL CONFIGURATION SPECIFIED BY THE ENGINEER.
- ANY COST ASSOCIATED WITH FURNISHING AND INSTALLING SHORTER OR LONGER POSTS FOR THE GUARDRAIL ATTACHED TO STRUCTURES WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR STRONG POST GUARDRAIL, ATTACHED TO STRUCTURES.
- ONCE WORK HAS BEGUN ON A CONTINUOUS RUN OF GUARDRAIL, ALL OF THE GUARDRAIL THAT IS REMOVED IN THAT RUN MUST BE REPLACED WITH NEW GUARDRAIL IN THE SAME DAY AND THE NEW GUARDRAIL SHALL BE TEMPORARILY CONNECTED TO ANY REMAINING OLD GUARDRAIL IN A MANNER APPROVED BY THE ENGINEER.
- WORK AREAS SHALL BE LEFT IN SAFE AND ORDERLY CONDITION. NO MATERIAL SHALL BE LEFT ON OR NEAR THE ROAD OR SHOULDERS DURING NON-WORKING HOURS.
- ALL GUARDRAIL AND TERMINAL MARKERS SHALL BE INSTALLED IN THE SAME DAY THE GUARDRAIL AND TERMINAL SECTIONS TO WHICH THEY ARE TO BE ATTACHED ARE INSTALLED. GUARDRAIL MARKERS SHALL NOT BE ATTACHED TO TERMINAL SECTIONS. ALL GUARDRAIL DELINEATORS MUST BE INSTALLED IN THE SAME DAY AS THEIR CORRESPONDING GUARDRAIL AND TERMINAL SECTIONS. GUARDRAIL MARKERS, TERMINAL MARKERS AND GUARDRAIL DELINEATORS WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR STEEL PLATE BEAM GUARDRAIL AND THE APPROPRIATE TRAFFIC BARRIER TERMINALS.
- WHERE GUARDRAIL IS TO BE REMOVED ON BOTH SIDES OF THE ROAD, REPLACEMENT ON ONE SIDE SHALL BE COMPLETE BEFORE REMOVAL ON THE SECOND SIDE SHALL BEGIN.
- HOLES REMAINING AT LOCATIONS WHERE GUARDRAIL POSTS ARE PULLED OR CUT OFF (AT LEAST 6 INCHES BELOW THE GROUND SURFACE) SHALL BE FILLED IN LAYERS WITH GRANULAR MATERIAL AND TAMPED. THIS WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR GUARDRAIL REMOVAL.
- AT BRIDGE LOCATIONS, FLAGGERS WILL NOT BE ALLOWED TO STAND ON THE BRIDGE TO PERFORM FLAGGING OPERATIONS. FLAGGERS WILL BE REQUIRED TO OPERATE AT OR NEAR THE BRIDGE APPROACHES IN ORDER TO PROVIDE AN ACCEPTABLE ESCAPE ROUTE.
- AT ALL GUARDRAIL LOCATIONS THE LIMITS FOR GRADING & SHAPING SHOULDERS, SPECIAL SHALL INCLUDE THE ENTIRE "INSTALL GUARDRAIL (ALL COMPONENTS)" LIMIT AND AN ADDITIONAL THIRTY-FIVE (35) FEET AT BOTH ENDS OF THE GUARDRAIL AS DETAILED IN THE GUARDRAIL LAYOUTS.

### SCHEDULE OF WORK:

|                             | WCHD SN 07-01 | WCHD SN 24-03 | WCHD SN 24-13 | WCHD SN 24-16 | WCHD SN 24-21 | WCHD SN 24-31 | WCHD SN 48-35 | WCHD SN 49-28 | WCHD SN 49-30 | WCHD SN 71A-29 | WCHD SN 76-02 | WCHD SN 78-02 | WCHD SN 79-05 | WCHD SN 84-01 | TOTALS |         |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|--------|---------|
| 1. Install ABC, TYB         | --            | 580           | 760           | 335           | 465           | 425           | 160           | 425           | 1,240         | 500            | 510           | 670           | 85            | --            | 145    | 6,300   |
| 2. Install HMA Shoulders    | --            | 870           | 1,140         | 500           | 700           | 640           | --            | 640           | 1,850         | 750            | 760           | 1,000         | --            | --            | --     | 8,850   |
| 3. Remove BR                | --            | --            | --            | --            | --            | --            | 225           | --            | --            | --             | --            | --            | --            | --            | --     | 225     |
| 4. Install CONC CURB, TYB   | --            | --            | --            | --            | 64            | --            | --            | --            | --            | --             | --            | --            | --            | --            | --     | 64      |
| 5. Install SPBGR            | 37.5          | 500           | 725           | 287.5         | 312.5         | 312.5         | 362.5         | 287.5         | 1,775         | 212.5          | 225           | 600           | 50            | 337.5         | 375    | 6,375   |
| 6. Install SPGR-ATS         | 25            | 25            | 50            | --            | 50            | --            | 225           | 25            | --            | 25             | --            | 75            | 125           | 75            | 125    | 825     |
| 7. Install TBT-TY1B         | --            | --            | --            | --            | --            | --            | --            | --            | --            | 1              | --            | --            | --            | --            | --     | 1       |
| 8. Install TBT-TY6B         | --            | --            | --            | --            | --            | --            | --            | --            | --            | 4              | 4             | --            | --            | --            | --     | 8       |
| 9. Install TBT-TY1(SP)TAN   | 2             | 4             | 4             | 2             | 4             | 4             | 4             | 4             | 6             | 3              | 4             | 4             | 4             | 4             | 4      | 57      |
| 10. Remove GR               | 100           | 625           | 750           | 200           | 412.5         | 375           | --            | 275           | 1,650         | --             | 337.5         | 625           | 125           | 712.5         | 100    | 6,287.5 |
| 13. Grade & Shape Shld., SP | --            | 780           | 1,100         | 465           | 590           | 590           | 690           | 565           | 2,150         | 665            | 650           | 875           | 330           | --            | 650    | 10,000  |
| 14. Install SPBGR-SR        | --            | --            | --            | --            | --            | --            | 50            | --            | --            | 37.5           | --            | --            | --            | 75            | --     | 187.5   |

ABC - Aggregate Base Course  
ATS - Attached to Structure  
BR - Bridge Rail

DA - Direct Applied  
DEL - Delineator  
GR - Guardrail

MRKR - Marker  
SP - Special  
SPBGR - Steel Plate Beam Guardrail

SPBGR-SR - Steel Plate Beam Guardrail (Short Radius)  
TBT - Traffic Barrier Terminal  
WCHD - Winnebago County Highway Department