

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

TRU-11-19.02

**GREENE TOWNSHIP
GUSTAVUS TOWNSHIP
JOHNSTON TOWNSHIP**

TRUMBULL COUNTY

PROJECT DESCRIPTION

REHABILITATION OF 9.45 MILES OF S.R. 11 BY PAVEMENT RESURFACING. INCLUDES MINOR BRIDGE WORK TO STRUCTURES TRU-5-2229, TRU-88-1552, TRU-11-2382, TRU-11-2485, TRU-87-1512, TRU-11-2691, TRU-11-2791.

PROJECT EARTH DISTURBED AREA: N/A (MAINTENANCE PROJECT)
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A (MAINTENANCE PROJECT)
NOTICE OF INTENT EARTH DISTURBED AREA: N/A (MAINTENANCE PROJECT)

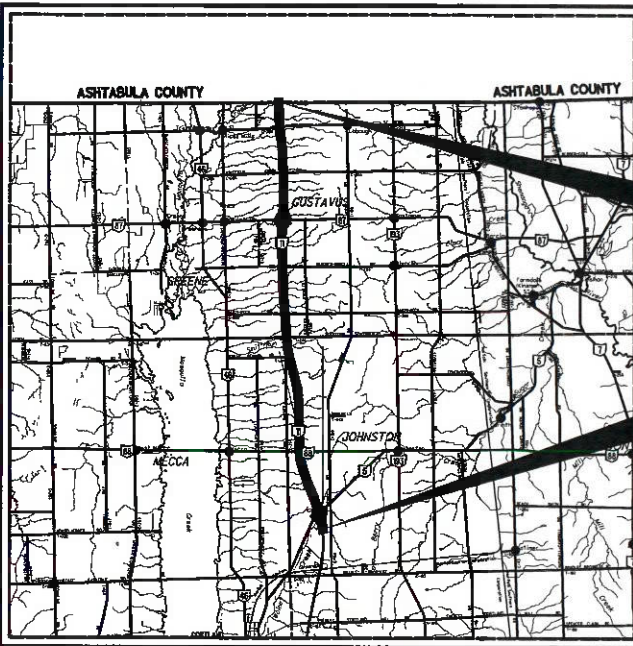
LIMITED ACCESS

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

2019 SPECIFICATIONS

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

I HEREBY APPROVED THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.



LOCATION MAP

LATITUDE: 41°25'52" LONGITUDE: 80°42'44"

SCALE IN MILES



| | |
|-------------------------|-------|
| PORTION TO BE IMPROVED | ----- |
| INTERSTATE HIGHWAY | ===== |
| FEDERAL ROUTES | ----- |
| STATE ROUTES | ----- |
| COUNTY & TOWNSHIP ROADS | ----- |
| OTHER ROADS | ----- |

END PROJECT
SLM: 28.47
TRU-11

BEGIN PROJECT
SLM: 19.02
TRU-11

INDEX OF SHEETS:

| | |
|-----------------------------|-------|
| TITLE SHEET | 1 |
| TYPICAL SECTION | 2 |
| GENERAL NOTES | 3 |
| MAINTENANCE OF TRAFFIC | 4-5 |
| GENERAL SUMMARY | 6 |
| PAVEMENT CALCULATIONS | 7 |
| RAISED PAVEMENT MARKERS | 8 |
| PAVEMENT MARKING SUBSUMMARY | 9 |
| STRUCTURES | 10-17 |

DESIGN DESIGNATION

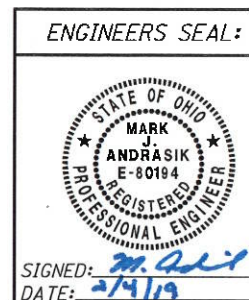
DESIGN FUNCTIONAL CLASSIFICATION:
URBAN FREEWAYS & EXPRESSWAYS TRU-11 (19.02-19.66)
RURAL FREEWAYS & EXPRESSWAYS TRU-11 (19.66-28.47)
NHS PROJECT ----- YES

DESIGN EXCEPTIONS

NONE



PLAN PREPARED BY:
ODOT DISTRICT 4, PLANNING & ENGINEERING
2088 S. ARLINGTON ROAD
AKRON, OH 44306



SIGNED: *[Signature]*
DATE: 2/4/19

| STANDARD CONSTRUCTION DRAWINGS | | | | SUPPLEMENTAL SPECIFICATIONS | | SPECIAL PROVISIONS | |
|--------------------------------|----------|----------|----------|-----------------------------|----------|--------------------|--|
| BP-3.1 | 1/17/20 | TC-41.20 | 10/18/13 | 800 | 10/16/20 | | |
| BP-9.1 | 1/18/19 | TC-42.10 | 10/18/13 | 808 | 1/18/19 | | |
| | | TC-42.20 | 10/18/13 | 809 | 7/17/20 | | |
| DM-4.3 | 1/15/16 | TC-52.10 | 10/18/13 | 821 | 4/20/12 | | |
| DM-4.4 | 1/15/16 | TC-52.20 | 7/20/18 | 832 | 10/19/18 | | |
| | | TC-65.10 | 1/17/14 | 908 | 10/20/17 | | |
| MT-95.30 | 7/19/19 | TC-65.11 | 7/21/17 | 921 | 4/20/12 | | |
| MT-95.50 | 7/21/17 | TC-72.20 | 7/20/18 | 875 | 1/18/19 | | |
| MT-98.10 | 1/17/20 | TC-73.20 | 1/17/20 | | | | |
| MT-98.20 | 4/19/19 | | | | | | |
| MT-99.20 | 4/19/19 | MGS-1.1 | 1/19/18 | | | | |
| MT-101.90 | 7/17/20 | MGS-2.1 | 1/19/18 | | | | |
| MT-102.20 | 4/19/19 | MGS-2.4 | 7/19/20 | | | | |
| MT-104.10 | 10/16/15 | | | | | | |
| MT-105.10 | 1/17/20 | | | | | | |

APPROVED _____
DATE 2/4/19 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

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FEDERAL PROJECT NO.
E130(851)

PID NO.
83046

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
NONE

TRU-11-19.02

UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE OHIO & GAS PROCEDURES UNDERGROUND PROTECTION SERVICE (OGPUPS), THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEAD-QUARTERS AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION IN ALL AREAS.

OUPS 1-800-362-2764 (CONTACT LIMITED BASIS PARTICIPANTS DIRECTLY)
 OGPUPS 1-800-925-0988
 ODOT 330-786-2267 MICHELLE CHANEY
 ODOT ITS - EMAIL: CEN.ITS.LAB@DOT.OHIO.GOV
 TRAFFIC MONITORING SECTION ODOT, 1980 W. BROAD ST, COLUMBUS, OH 43223
 DAN DIDDLE 614-560-9541

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS, BUT CAN BE OBTAINED FROM THE OWNERS OF THE UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PAVEMENT MARKING LANE WIDTHS

THE NORMAL LANE WIDTH FOR THE PAVEMENT MARKINGS ON THIS PROJECT SHALL BE AS FOLLOWS:

| ROUTE | S.L.M. TO S.L.M. | LANE WIDTH |
|-------|------------------|------------|
| SR 11 | 19.02 28.47 | 12' |

PAVEMENT MARKING DETAILS

THE PAVEMENT MARKING DETAIL SHEETS WILL BE SUPPLIED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.

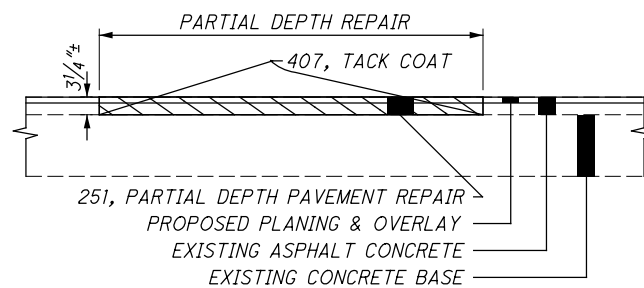
PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441)

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS EXHIBITING SURFACE DETERIORATION AND PLACING ITEM 441 ASPHALT CONCRETE, TYPE 2. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE I PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.13. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, PERFORMED BEFORE THE MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE BEFORE MAINLINE PAVEMENT PLANING. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

251, PARTIAL DEPTH PAVEMENT REPAIR (441), 15,000 SQ. YD.



ITEM 618 - RUMBLE STRIPS, (ASPHALT CONCRETE)

FOR USE ALONG SR-11 WITHIN THE PROJECT LIMITS, FROM SLM 19.02 TO SLM 28.47. OFFSET "A" AND "B" SHALL FOLLOW THE OFFSET DIMENSION TABLE AS SHOWN ON STANDARD CONSTRUCTION DRAWING B.P-9.1 FOR THIS ITEM OF WORK.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
 ITEM 618, RUMBLE STRIPS (ASPHALT CONCRETE) 37.8 MILES

ITEM 203 - EXCAVATION (FOR PAVEMENT REPAIR)

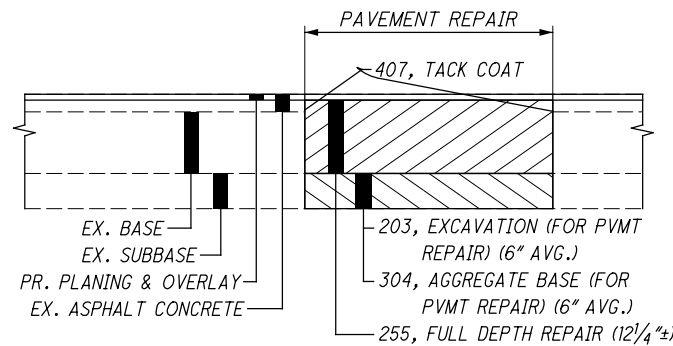
THIS ITEM OF WORK SHALL CONSIST OF REMOVING AND DISPOSING OF ALL UNSUITABLE MATERIAL BY EXCAVATING THE EXISTING SUBGRADE AND SUBBASE TO AN AVERAGE DEPTH OF 6 INCHES OR AS DIRECTED BY THE ENGINEER. EXACT LIMITS OF REMOVAL SHALL BE DETERMINED BY THE ENGINEER. ALL EQUIPMENT, LABOR, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 EXCAVATION (FOR PAVEMENT REPAIR). THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

203, EXCAVATION (FOR PAVEMENT REPAIR), 833 CU YD

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, CLASS RRCM

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THIS ITEM SHALL CONSIST OF CUTTING AND REMOVING DETERIORATED PAVEMENT FULL DEPTH AND PLACING 12"± FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, CLASS RRCM. THE MAXIMUM COMPACTED DEPTH OF ANY ONE LAYER SHALL BE 6 INCHES. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED BEFORE THE COMPLETION OF MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE WITHIN 3 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REMOVED AND REPLACED TO THE LIMITS DESIGNATED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

255, FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, CLASS RRCM, 5,000 SY
 255, FULL DEPTH PAVEMENT SAWING, 26,250 FT



ITEM 304 - AGGREGATE BASE (FOR PAVEMENT REPAIR)

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND SHALL BE USED AS DIRECTED BY THE ENGINEER TO BACKFILL AREAS WHICH WERE EXCAVATED UNDER ITEM 203 EXCAVATION (FOR PAVEMENT REPAIR). THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

304, AGGREGATE BASE (FOR PAVEMENT REPAIR), 833 CU YD

ITEM 408 - PRIME COAT, AS PER PLAN

APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE SAFETY EDGE, OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:

| SIEVE | TOTAL PERCENT PASSING |
|---------|-----------------------|
| 1-1/2" | 100 |
| 3/4" | 50-100 |
| NO. 4 | 35-70 |
| NO. 30 | 9-33 |
| NO. 200 | 0-13 |

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), AS PER PLAN (PG70-22M)

703.05 DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED "SR" OR "SRH" ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

ASPHALT GRINDINGS

THE CONTRACTOR SHALL DELIVER A MINIMUM OF 3,000 TONS OF ASPHALT GRINDINGS TO THE BELOW LOCATIONS:

ODOT D4 OUTPOST (GUSTAVUS OUTPOST)
 2979 KINSMAN ROAD, NORTH BLOOMFIELD, OHIO 44450
 JOE PARTHEMER - 330.786.4988

THIS WORK SHALL BE COORDINATED BETWEEN THE PROJECT ENGINEER, THE CONTRACTOR, AND JOE PARTHEMER. PAYMENT FOR THIS WORK WILL BE INCIDENTAL TO:

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T=1 1/2")

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CALCULATED
 CMR
 CHECKED
 MJA

GENERAL NOTES

TRU-11-19.02

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| SHEET NUM. | | | | | | | | | | | PART. | ITEM | ITEM | GRAND | UNIT | DESCRIPTION | SEE SHEET NO. |
|-------------------------------|-------|----|---|---|---|---------|--|--|--|--|---------------|------|-------|---------|------|---|---------------|
| 3 | 4 | 5 | 7 | 8 | 9 | | | | | | 01/NHS/P V | EXT | TOTAL | | | | |
| ROADWAY | | | | | | | | | | | | | | | | | |
| 833 | | | | | | | | | | | 833 | 203 | 10000 | 833 | CY | EXCAVATION | |
| EROSION CONTROL | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | 3,000 | 832 | 30000 | 3,000 | EACH | EROSION CONTROL | |
| PAVEMENT | | | | | | | | | | | | | | | | | |
| 15,000 | | | | | | | | | | | 15,000 | 251 | 01000 | 15,000 | SY | PARTIAL DEPTH PAVEMENT REPAIR (441) | |
| | | | | | | 437,074 | | | | | 437,074 | 254 | 01000 | 437,074 | SY | PAVEMENT PLANING, ASPHALT CONCRETE (T=1 1/2") | |
| 5,000 | | | | | | | | | | | 5,000 | 255 | 10500 | 5,000 | SY | FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS RRCM | |
| 26,250 | | | | | | | | | | | 26,250 | 255 | 20000 | 26,250 | FT | FULL DEPTH PAVEMENT SAWING | |
| 833 | | | | | | | | | | | 833 | 304 | 20000 | 833 | CY | AGGREGATE BASE | |
| | | | | | | 39,337 | | | | | 39,337 | 407 | 20000 | 39,337 | GAL | NON-TRACKING TACK COAT | |
| | | | | | | 19,691 | | | | | 19,691 | 408 | 10001 | 19,691 | GAL | PRIME COAT, AS PER PLAN | |
| | | | | | | 12,281 | | | | | 12,281 | 441 | 00100 | 12,281 | CY | ANTI-SEGREGATION EQUIPMENT | |
| | | | | | | 18,212 | | | | | 18,212 | 442 | 10001 | 18,212 | CY | ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN (PG70-22M) (T=1 1/2") | |
| | | | | | | 2,735 | | | | | 2,735 | 617 | 10101 | 2,735 | CY | COMPACTED AGGREGATE, AS PER PLAN | |
| | | | | | | 38 | | | | | 38 | 618 | 40600 | 38 | MILE | RUMBLE STRIPS, (ASPHALT CONCRETE) | |
| | | | | | | 26,546 | | | | | 26,546 | 875 | 10000 | 26,546 | LB | LONGITUDINAL JOINT ADHESIVE | |
| TRAFFIC CONTROL | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | 1,148 | 621 | 00100 | 1,148 | EACH | RPM | |
| | | | | | | | | | | | 870 | 621 | 54000 | 870 | EACH | RAISED PAVEMENT MARKER REMOVED | |
| | | | | | | | | | | | 40.8 | 646 | 10010 | 40.8 | MILE | EDGE LINE, 6" | |
| | | | | | | | | | | | 18.9 | 646 | 10110 | 18.9 | MILE | LANE LINE, 6" | |
| | | | | | | | | | | | 3,020 | 646 | 10310 | 3,020 | FT | CHANNELIZING LINE, 12" | |
| | | | | | | | | | | | 225 | 646 | 10400 | 225 | FT | STOP LINE | |
| | | | | | | | | | | | 8 | 646 | 20320 | 8 | EACH | WRONG WAY ARROW | |
| | | | | | | | | | | | 6,775 | 646 | 20504 | 6,775 | FT | DOTTED LINE, 6" | |
| STRUCTURE REPAIRS | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | FOR TRU-11-2383 ESTIMATED QUANTITIES | |
| | | | | | | | | | | | | | | | | FOR TRU-11-2485 ESTIMATED QUANTITIES | |
| | | | | | | | | | | | | | | | | FOR TRU-11-2691 ESTIMATED QUANTITIES | |
| | | | | | | | | | | | | | | | | FOR TRU-11-2790 ESTIMATED QUANTITIES | |
| | | | | | | | | | | | | | | | | FOR TRU-87-1513 ESTIMATED QUANTITIES | |
| MAINTENANCE OF TRAFFIC | | | | | | | | | | | | | | | | | |
| | 200 | | | | | | | | | | 200 | 614 | 11110 | 200 | hour | LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE | |
| | 32 | | | | | | | | | | 32 | 614 | 12460 | 32 | EACH | WORK ZONE MARKING SIGN | |
| | 20 | | | | | | | | | | 20 | 614 | 13000 | 20 | CY | ASPHALT CONCRETE FOR MAINTAINING TRAFFIC | |
| | | 6 | | | | | | | | | 6 | 614 | 18601 | 6 | SNMT | PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN | |
| | 18.9 | | | | | | | | | | 18.9 | 614 | 20010 | 18.9 | MILE | WORK ZONE LANE LINE, CLASS I, 6" | |
| | 18.9 | | | | | | | | | | 18.9 | 614 | 20560 | 18.9 | MILE | WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT | |
| | 40.8 | | | | | | | | | | 40.8 | 614 | 22360 | 40.8 | MILE | WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT | |
| | 3,020 | | | | | | | | | | 3,020 | 614 | 23010 | 3,020 | FT | WORK ZONE CHANNELIZING LINE, CLASS I, 12" | |
| | 3,020 | | | | | | | | | | 3,020 | 614 | 23690 | 3,020 | FT | WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT | |
| | | 24 | | | | | | | | | 24 | 808 | 18700 | 24 | SNMT | DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY | |
| INCIDENTALS | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | LS | 614 | 11000 | LS | | MAINTAINING TRAFFIC | |
| | | | | | | | | | | | 6 | 619 | 16020 | 6 | MNTH | FIELD OFFICE, TYPE C | |
| | | | | | | | | | | | LS | 623 | 10000 | LS | | CONSTRUCTION LAYOUT STAKES AND SURVEYING | |
| | | | | | | | | | | | LS | 624 | 10000 | LS | | MOBILIZATION | |

GENERAL SUMMARY

TRU-11-19.02

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

SS 856 DATED 10/20/17

DESIGN SPECIFICATIONS

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH EDITION, INCLUDING THE 2002 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

EXISTING STRUCTURE VERIFICATION

EXISTING STRUCTURE VERIFICATION: DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

PROPOSED WORK:

TRU-87-1513 (OVER TRU-11-2588)

- REMOVE AND REPLACE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING WITH NEW BRIDGE DECK WATERPROOFING ASPHALT CONCRETE AND ASPHALT CONCRETE OVERLAY
- REMOVE AND REPLACE 50 FEET OF APPROACH ASPHALT ON BOTH SIDES OF THE STRUCTURE
- REPAIR EROSION AT THE FORWARD RIGHT AND LEFT OF THE STRUCTURE
- PATCH ALL UNSOUND AREAS OF THE CONCRETE SUBSTRUCTURE AND PARAPETS, AND SEAL WITH EPOXY-URETHANE
- REMOVE ALL SPALLED AREAS FROM THE BOTTOM OF BRIDGE DECK AND SEAL WITH EPOXY-URETHANE
- CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION

TRU-11-2383 (UNDER DAVIS-PECK RD.)

- REMOVE AND REPLACE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING WITH NEW BRIDGE DECK WATERPROOFING ASPHALT CONCRETE AND ASPHALT CONCRETE OVERLAY
- REMOVE AND REPLACE 50 FEET OF APPROACH ASPHALT ON BOTH SIDES OF THE STRUCTURE
- REPAIR EROSION AT THE FORWARD RIGHT OF THE STRUCTURE
- REPLACE THE EXISTING APPROACH GUARDRAIL
- CLEAN OUT EXISTING SCUPPERS
- CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION

TRU-11-2485 (UNDER GARDNER BARCLAY RD.)

- REMOVE AND REPLACE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING WITH NEW BRIDGE DECK WATERPROOFING ASPHALT CONCRETE AND ASPHALT CONCRETE OVERLAY
- REMOVE AND REPLACE 50 FEET OF APPROACH ASPHALT ON BOTH SIDES OF THE STRUCTURE
- REPAIR EROSION AT THE FORWARD & REAR CONCRETE POST ANCHORS
- REPLACE THE EXISTING APPROACH GUARDRAIL
- CLEAN OUT EXISTING SCUPPERS
- CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION

TRU-11-2691 (UNDER WAKEFIELD CREEK RD.)

- REMOVE AND REPLACE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING WITH NEW BRIDGE DECK WATERPROOFING ASPHALT CONCRETE AND ASPHALT CONCRETE OVERLAY
- REMOVE AND REPLACE 50 FEET OF APPROACH ASPHALT ON BOTH SIDES OF THE STRUCTURE
- REPAIR EROSION AT THE FORWARD AND REAR RIGHT OF THE STRUCTURE
- REPLACE THE EXISTING APPROACH GUARDRAIL
- CLEAN OUT AND EXTEND EXISTING SCUPPERS
- CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION

TRU-11-2790 (UNDER YORK STREET)

- REMOVE AND REPLACE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING WITH NEW BRIDGE DECK WATERPROOFING ASPHALT CONCRETE AND ASPHALT CONCRETE OVERLAY
- REMOVE AND REPLACE 50 FEET OF APPROACH ASPHALT ON BOTH SIDES OF THE STRUCTURE
- REPAIR EROSION AT THE FORWARD LEFT OF THE STRUCTURE
- REPLACE THE EXISTING APPROACH GUARDRAIL
- CLEAN OUT AND EXTEND EXISTING SCUPPERS
- CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION

BRIDGE TERMINAL ASSEMBLY, TYPE 2, AS PER PLAN

THE CONTRACTOR SHALL INSTALL BRIDGE TERMINAL ASSEMBLIES TYPE 2 AS SHOWN ON PAGE 7/8. THE BRIDGE TERMINAL ASSEMBLIES SHALL INCLUDE ADDITIONAL POSTS AT THE SECOND AND THIRD BAYS (FROM THE PARAPET) WITH EQUAL SPACING BETWEEN THE ADDITIONAL POSTS AND THE SURROUNDING POSTS. THESE BRIDGE TERMINAL ASSEMBLIES SHALL ALSO INCLUDE EXTRA W-BEAM AS SHOWN ON SECTION A-A OF STANDARD CONSTRUCTION DRAWING MGS-2.4 FOR A LENGTH OF 25 FEET STARTING AT THE BRIDGE PARAPET.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

ITEM 202 - WEARING COURSE REMOVED, AS PER PLAN

REMOVE ALL OF THE ASPHALT CONCRETE ON ALL STRUCTURE(S) FOR THIS PROJECT. THICKNESS VARIES WITH A MINIMUM THICKNESS OF 3". MILLING OR OTHER MECHANICAL METHOD OF ASPHALT DECK REMOVAL MAY BE PERFORMED TO WITHIN 1/2" OF THE TOP OF THE ORIGINAL BRIDGE DECK SURFACE. THE LAST 1/2" OF ASPHALT CONCRETE TO BE REMOVED AND THE WATERPROOFING WILL BE REMOVED USING A NONDESTRUCTIVE METHOD SUCH AS HAND SCRAPING. THE CONTRACTOR WILL USE CAUTION IN REMOVING THE REMAINING ASPHALT AND WATERPROOFING TO ENSURE NO DAMAGE OCCURS TO THE ORIGINAL BRIDGE DECK SURFACE. ANY DAMAGE TO THE ORIGINAL DECK SURFACE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

PAYMENT FOR THIS ITEM WILL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND ANY INCIDENTALS REQUIRED TO PERFORM THIS WORK. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER SQUARE YARD FOR ITEM 202, WEARING COURSE REMOVED, AS PER PLAN.

SPECIAL - STRUCTURES: CONCRETE SPALL REMOVAL

THIS WORK WILL CONSIST OF REMOVING ALL VISIBLY SPALLED AREAS OF THE BOTTOM DECK FLOOR OF STRUCTURES TRU-5-2229 AND TRU-87-1513 WITHOUT SOUNDING. AFTER SPALLED CONCRETE AREAS HAVE BEEN REMOVED, REMOVAL AREAS WILL BE SEALED WITH ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY - URETHANE).

CONCRETE SPALL REMOVAL WILL BE PAID FOR AT THE UNIT BID PRICE FOR SPECIAL - STRUCTURE MISC.: CONCRETE SPALL REMOVAL. THIS PRICE WILL INCLUDE THE COST OF LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

TRU-87-1513
SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), 15 SQ YD
SPEC, STRUCTURES: CONCRETE SPALL REMOVAL, 15 SQ YD

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN (PG70-22M)

703.05 DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED "SR" OR "SRH" ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

ITEM 518 - SCUPPER, MISC.: CLEANOUT

THIS WORK WILL CONSIST OF REMOVING ALL DEBRIS FROM ON TOP AND INSIDE OF THE SCUPPERS. SCUPPER CLEANOUT WILL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 518, SCUPPER MISC.: CLEANOUT. THIS PRICE WILL INCLUDE THE COST FOR LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

ITEM 518 - SCUPPER, LENGTHENING, AS PER PLAN

THIS WORK WILL CONSIST OF EXTENDING ALL EXISTING SCUPPERS OF STRUCTURES TRU-11-2691 AND TRU-11-2791 TO A MINIMUM OF 8" BELOW THE EXISTING STEEL BEAMS.

PAYMENT FOR THIS ITEM WILL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND ANY INCIDENTALS REQUIRED TO PERFORM THIS WORK. PAYMENT WILL BE MADE AT THE UNIT BID PRICE EACH FOR ITEM 618, SCUPPER, LENGTHENING, AS PER PLAN.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

BARRIER REFLECTORS

THE FOLLOWING ESTIMATED QUANTITY WILL BE USED AT LOCATIONS AS DIRECTED BY THE ENGINEER FOR INSTALLING BARRIER REFLECTORS ON THE EXISTING BARRIER RUNS.

626, BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL, 30 EACH

EROSION REPAIR

THE FOLLOWING QUANTITIES FOR THE STRUCTURES LISTED BELOW SHALL BE USED TO REPAIR THE EROSION ON THE RIGHT AND LEFT SIDES OF THE FORWARD AND REAR APPROACH FOR EACH STRUCTURE.

TRU-87-1513
ITEM 203, BORROW, 5 CU YD
ITEM 601, DUMPED ROCK FILL, TYPE C, 5 CU YD

TRU-11-2383
ITEM 203, BORROW, 5 CU YD
ITEM 601, DUMPED ROCK FILL, TYPE C, 5 CU YD

TRU-11-2485
ITEM 203, BORROW, 5 CU YD
ITEM 601, DUMPED ROCK FILL, TYPE C, 5 CU YD

TRU-11-2691
ITEM 203, BORROW, 5 CU YD
ITEM 601, DUMPED ROCK FILL, TYPE C, 5 CU YD

TRU-11-2790
ITEM 203, BORROW, 5 CU YD
ITEM 601, DUMPED ROCK FILL, TYPE C, 5 CU YD

DESIGN AGENCY
ODOT --- DISTRICT 4
PLANNING & ENGINEERING

DATE
12/14/18

REVIEWED
RS
STRUCTURE FILE NUMBER

DRAWN
CMR
REVISED
CMR

DESIGNED
CMR
CHECKED
MJA

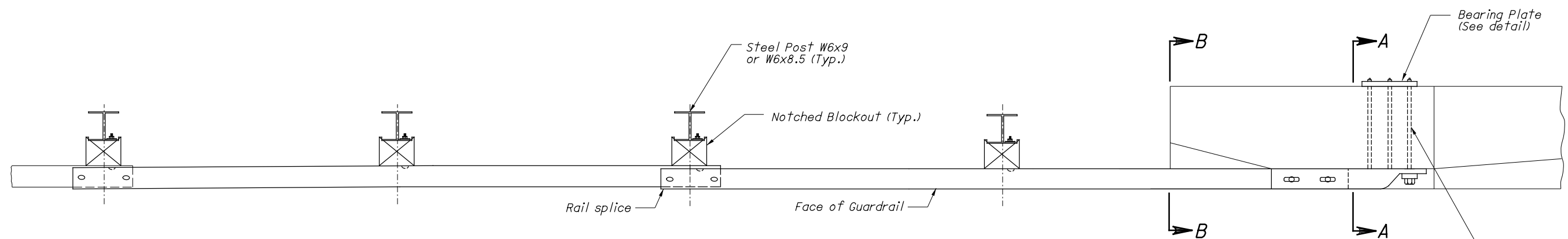
STRUCTURE GENERAL NOTES
TRU-11-2382, TRU-11-2485, TRU-11-2691, TRU-11-2791, TRU-5-2229, TRU-87-1512, TRU-88-1552
UNDER DAVIS-PECK RD, GARDNER BARCLAY RD, WAKEFIELD CREEK RD., YORK ST.
OVER TRU-11-1937, TRU-11-2588, TRU-11-2080

TRU-11-19.02
PID No. 83046

1 / 8

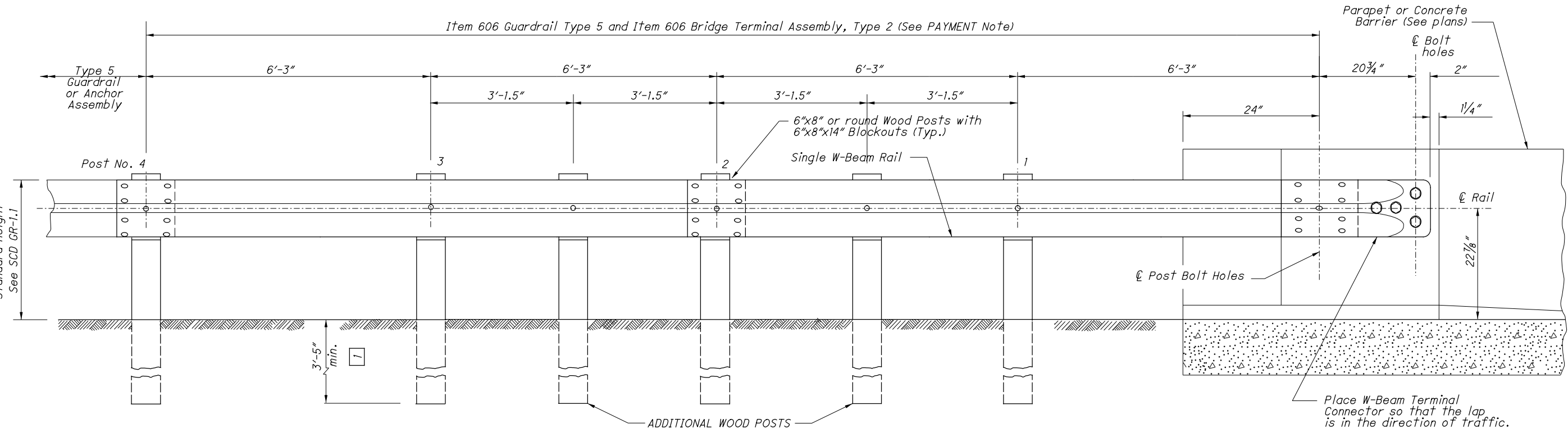
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17

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PLAN (Steel Posts shown. See POSTS Note.)

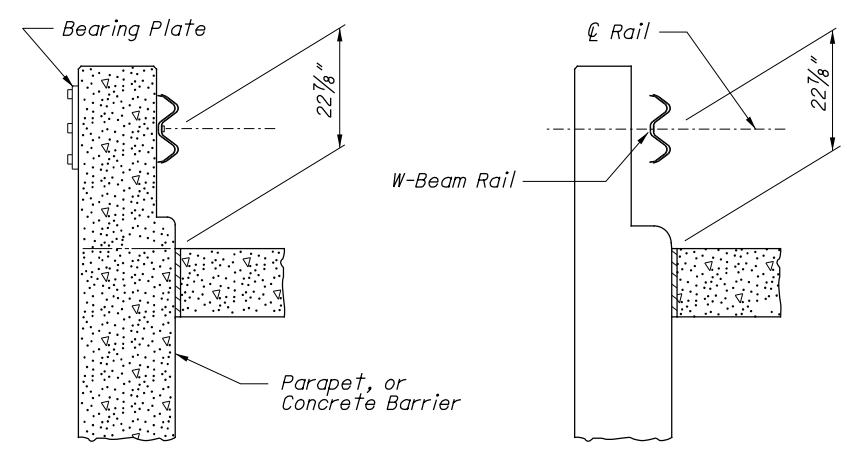
7/8" dia. ASTM A 325 through bolts (length to be determined in field in accordance with Parapet width) into Bearing Plate with standard washers and hex nuts



ELEVATION (Wood Posts shown. See POSTS Note.)

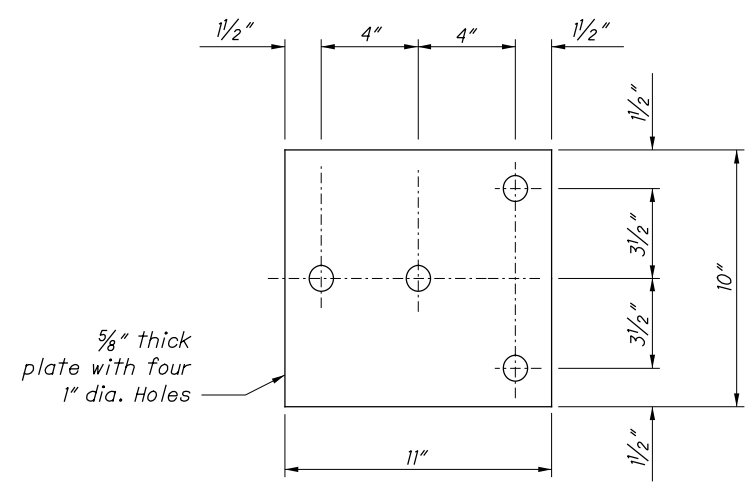
NOTES

- GENERAL:** For additional rail and post details, see SCD GR-1.1.
- APPLICATION:** Use Type 2 Bridge Terminal Assembly to connect guardrail runs to the trailing end of Parapets or Concrete Barriers (see SCD RM-4.6 for barrier) on one-directional roadways. Do not use if located within clear zone of opposing traffic.
- POSTS:** Posts shall be of standard size and material specified for the appropriate type of guardrail to be installed leaving the bridge or barrier. For Type 5 guardrail, see SCD GR-2.1.
- BLOCKOUTS:** Wood or plastic blockouts are permitted.
- FLARED GUARDRAIL:** Begin Standard Guardrail Flares as shown on SCD GR-5.1, preferably at or beyond Post No. 4, however, the flare may begin at Post No. 2.
- PAYMENT:** Item 606 - Bridge Terminal Assembly, Type 2, Each, includes the cost of extra components, in excess of normal guardrail for the Terminal connector, Bearing Plates, bolts, washers, nuts, and other hardware.



SECTION A-A

SECTION B-B



BEARING PLATE

| | |
|---------------|-----------|
| DESIGNED | XXX |
| REVISION DATE | 1/18/2013 |
| CHECKED | XXX |
| REVIEWED | XXX |
| CHECKED | XXX |