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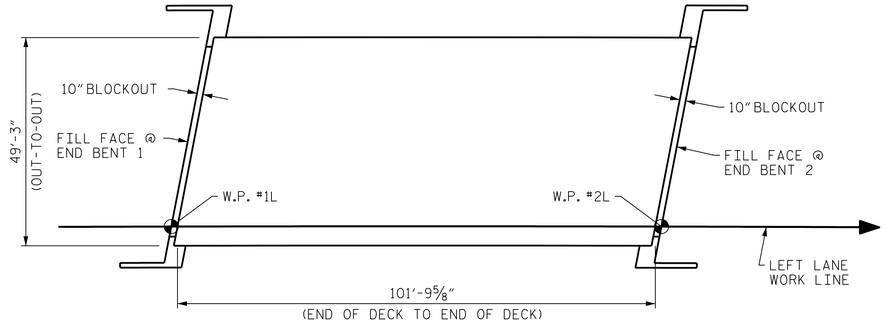
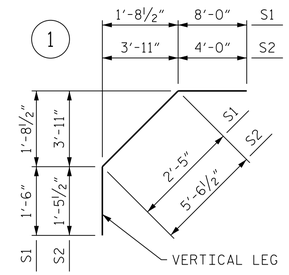
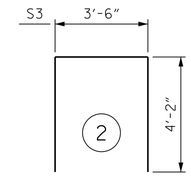



## LAYOUT FOR COMPUTING AREA REINFORCED CONCRETE DECK SLAB (SQ. FT. = 5,014)

## BAR TYPES




ALL BAR DIMENSIONS ARE OUT TO OUT.

## BILL OF MATERIAL

| BAR | NUMBER | SIZE | TYPE | LENGTH | WEIGHT |
|---|---|---|---|---|---|
| ✳ A1 | 170 | 5 | STR | 48'-10" | 8659 |
| ✳ A101 | 2 | 5 | STR | 47'-1" | 98 |
| ✳ A102 | 2 | 5 | STR | 44'-3" | 92 |
| ✳ A103 | 2 | 5 | STR | 41'-6" | 87 |
| ✳ A104 | 2 | 5 | STR | 38'-8" | 81 |
| ✳ A105 | 2 | 5 | STR | 35'-10" | 75 |
| ✳ A106 | 2 | 5 | STR | 33'-1" | 69 |
| ✳ A107 | 2 | 5 | STR | 30'-3" | 63 |
| ✳ A108 | 2 | 5 | STR | 27'-5" | 57 |
| ✳ A109 | 2 | 5 | STR | 24'-8" | 51 |
| ✳ A110 | 2 | 5 | STR | 21'-10" | 46 |
| ✳ A111 | 2 | 5 | STR | 19'-1" | 40 |
| ✳ A112 | 2 | 5 | STR | 16'-3" | 34 |
| ✳ A113 | 2 | 5 | STR | 13'-5" | 28 |
| ✳ A114 | 2 | 5 | STR | 10'-8" | 22 |
| ✳ A115 | 2 | 5 | STR | 7'-10" | 16 |
| ✳ A116 | 2 | 5 | STR | 5'-0" | 10 |
| ✳ A117 | 2 | 5 | STR | 2'-3" | 5 |
| | | | | | |
| A2 | 170 | 5 | STR | 48'-10" | 8659 |
| A201 | 2 | 5 | STR | 47'-1" | 98 |
| A202 | 2 | 5 | STR | 44'-3" | 92 |
| A203 | 2 | 5 | STR | 41'-6" | 87 |
| A204 | 2 | 5 | STR | 38'-8" | 81 |
| A205 | 2 | 5 | STR | 35'-10" | 75 |
| A206 | 2 | 5 | STR | 33'-1" | 69 |
| A207 | 2 | 5 | STR | 30'-3" | 63 |
| A208 | 2 | 5 | STR | 27'-5" | 57 |
| A209 | 2 | 5 | STR | 24'-8" | 51 |
| A210 | 2 | 5 | STR | 21'-10" | 46 |
| A211 | 2 | 5 | STR | 19'-1" | 40 |
| A212 | 2 | 5 | STR | 16'-3" | 34 |
| A213 | 2 | 5 | STR | 13'-5" | 28 |
| A214 | 2 | 5 | STR | 10'-8" | 22 |
| A215 | 2 | 5 | STR | 7'-10" | 16 |
| A216 | 2 | 5 | STR | 5'-0" | 10 |
| A217 | 2 | 5 | STR | 2'-3" | 5 |

| BAR | NUMBER | SIZE | TYPE | LENGTH | WEIGHT |
|---|---|---|---|---|---|
| B1 | 110 | 5 | STR | 51'-9" | 5937 |
| ✳ B2 | 64 | 4 | STR | 33'-1" | 1414 |
| ✳ B3 | 6 | 5 | STR | 35'-6" | 222 |
| ✳ B4 | 258 | 5 | STR | 20'-7" | 5539 |
| | | | | | |
| K1 | 20 | 4 | STR | 25'-8" | 343 |
| K2 | 10 | 4 | STR | 6'-1" | 41 |
| K3 | 10 | 4 | STR | 7'-2" | 48 |
| K4 | 20 | 4 | STR | 7'-7" | 101 |
| K5 | 10 | 4 | STR | 6'-7" | 44 |
| K6 | 4 | 4 | STR | 2'-2" | 6 |
| K7 | 8 | 4 | STR | 2'-9" | 15 |
| K8 | 4 | 4 | STR | 2'-5" | 6 |
| K9 | 4 | 4 | STR | 1'-11" | 5 |
| | | | | | |
| ✳ S1 | 82 | 4 | 1 | 11'-11" | 653 |
| ✳ S2 | 74 | 4 | 1 | 11'-0" | 544 |
| S3 | 82 | 4 | 2 | 11'-10" | 648 |

REINFORCING STEEL = 16,727 LBS.

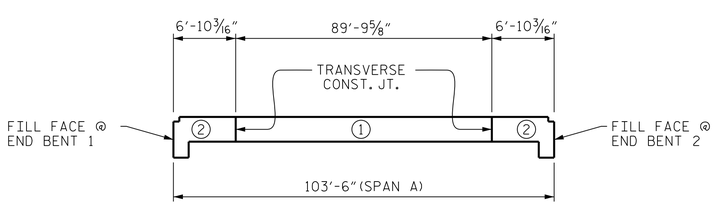
EPOXY COATED REINFORCING STEEL = 17,905 LBS.

## GROOVING BRIDGE FLOORS

| | |
|---|---|
| APPROACH SLABS | 2,078 SQ. FT. |
| BRIDGE DECK | 4,363 SQ. FT. |
| TOTAL | 6,441 SQ. FT. |

## SUPERSTRUCTURE BILL OF MATERIAL

| | CLASS AA CONCRETE | REINFORCING STEEL | EPOXY COATED REINFORCING STEEL |
|---|---|---|---|
| | (CU. YDS.) | (LBS.) | (LBS.) |
| POUR #1 | 140.2 | 16,727 | 17,905 |
| POUR #2 | 78.8 | | |
| | | | |
| | | | |
| TOTALS ✳✳ | 219.0 | 16,727 | 17,905 |




## POUR SEQUENCE

## SUPERSTRUCTURE REINFORCING STEEL LENGTHS ARE BASED ON THE FOLLOWING MINIMUM SPLICE LENGTHS

| BAR SIZE | SUPERSTRUCTURE EXCEPT APPROACH SLABS, PARAPETS, AND BARRIER RAILS | | APPROACH SLABS | | PARAPETS AND BARRIER RAILS |
|---|---|---|---|---|---|
| | EPOXY COATED | UNCOATED | EPOXY COATED | UNCOATED | |
| #4 | 1'-11" | 1'-7" | 1'-11" | 1'-7" | 2'-6" |
| #5 | 2'-5" | 2'-0" | 2'-5" | 2'-0" | 3'-1" |
| #6 | 2'-10" | 2'-5" | 3'-7" | 2'-5" | 3'-8" |
| #7 | 4'-2" | 2'-9" | | | |
| #8 | 4'-9" | 3'-2" | | | |

PROJECT NO. R-2233BB
RUTHERFORD COUNTY
STATION: 774+41.49 -L3-

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE
BILL OF MATERIAL

MODJESKI and MASTERS
Experience great bridges.
333 FAYETTEVILLE STREET, SUITE 500
RALEIGH, NC 27601
NC LICENSE NO. C-2979

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NORTH CAROLINA PROFESSIONAL SEAL 032967 ENGINEER JASON R. DOUGHTY
4/22/2020
DocuSigned by: Jason R Doughty
5F73FA2DEA974E8...

| | | | |
|---|---|---|---|
| DESIGNED BY: | A. DUTTA | DATE : | AUG 2019 |
| DRAWN BY: | K. WHITE | DATE : | JULY 2019 |
| CHECKED BY: | J. BORUTA | DATE : | SEPT 2019 |
| DESIGN ENGINEER OF RECORD: | J. DOUGHTY | DATE : | NOV 2019 |

DRAWN BY : JMB 5/87
CHECKED BY : SJD 9/87

REV. 10/1/11 MAA/GM
REV. 12/17 MAA/THC
REV. 06/19 BNB/THC

REVISIONS

| NO. | BY: | DATE: | NO. | BY: | DATE: |
|---|---|---|---|---|---|
| 1 | | | 3 | | |
| 2 | | | 4 | | |

SHEET NO. S1-19
TOTAL SHEETS 28

STR. #1 STD. NO. BOM2

4/22/2020
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