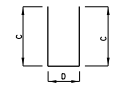
# BILL OF REINFORCING STEEL

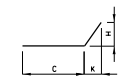
| NO. REQ'D. | MARK NO. SIZE MARK | LOCATION | SHAPE NO. | STIRRUP (S) EPOXY (E) VARIES (V) | NO. EACH | DIMENSIONS B FT. | C FT. | D or F FT. | E FT. | H FT. | K FT. | NOMINAL LENGTH FT. IN. | ACTUAL LENGTH FT. IN. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | |

# BILL OF REINFORCING STEEL

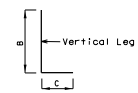
| NO. REQ'D. | MARK NO. SIZE MARK | LOCATION | SHAPE NO. | STIRRUP (S) EPOXY (E) VARIES (V) | NO. EACH | DIMENSIONS B FT. | C FT. | D or F FT. | E FT. | H FT. | K FT. | NOMINAL LENGTH FT. IN. | ACTUAL LENGTH FT. IN. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | |



SHAPE 10

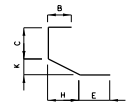


SHAPE 15



SHAPE 19

SHAPE 20



SHAPE 27

| SPLICE LENGTH | |
|---|---|
| BAR SIZE | NON-EPOXY |
| #4 | 21 IN. |
| #5 | 26 IN. |
| #6 | 31 IN. |
| #7 | 39 IN. |
| #8 | 51 IN. |
| #9 | 65 IN. |
| #10 | 82 IN. |
| #11 | 101 IN. |

| MAX BAR LENGTH | |
|---|---|
| BAR SIZE | NON-EPOXY |
| #4 | 60 FT. |
| #5 | 60 FT. |
| #6 | 60 FT. |
| #7 | 60 FT. |
| #8 | 60 FT. |
| #9 | 60 FT. |
| #10 | 60 FT. |
| #11 | 60 FT. |

NOTE:
THE BAR LIST IS BASED ON THE MISSOURI STANDARD PLANS.
THIS BAR LIST IS FOR QUANTITY ESTIMATION PURPOSE ONLY AND SHALL BE VERIFIED OR MODIFIED BY THE CONTRACTOR.

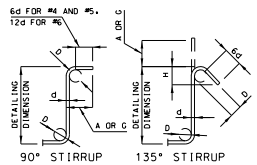
"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 6/13/2013
ROUTE * STATE MO
DISTRICT BR SHEET NO. *
COUNTY
JOB NO.
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

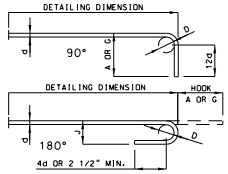
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.




| STIRRUP HOOK DIMENSIONS | | | | |
|---|---|---|---|---|
| BAR SIZE | D (IN.) | 90° HOOK | 135° HOOK | |
| | | HOOK A OR G | HOOK A OR G | APPROX. H |
| #4 | 2" | 4 1/2" | 4 1/2" | 3" |
| #5 | 2 1/2" | 6" | 5 1/2" | 3 3/4" |
| #6 | 4 1/2" | 12" | 8" | 4 1/2" |

NOTE: UNLESS OTHERWISE NOTED, DIAMETER "D" IS THE SAME FOR ALL BENDS AND HOOKS ON A BAR.




| END HOOK DIMENSIONS | | | | |
|---|---|---|---|---|
| BAR SIZE | D (IN.) | GRADE 60 | | |
| | | 180° HOOKS | | 90° HOOKS |
| | | A OR G | J | A OR G |
| #4 | 3" | 6" | 4" | 8" |
| #5 | 3 3/4" | 7" | 5" | 10" |
| #6 | 4 1/2" | 8" | 6" | 12" |
| #7 | 5 1/4" | 10" | 7" | 14" |
| #8 | 6" | 11" | 8" | 16" |
| #9 | 9 1/2" | 15" | 11 3/4" | 19" |
| #10 | 10 3/4" | 17" | 13 1/4" | 22" |
| #11 | 12" | 19" | 14 3/4" | 24" |

NOTE:
ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEGREE ARE TO BE BENT WITH SAME PROCEDURE AS FOR 90 DEGREE STANDARD HOOKS.
HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE PROCEDURES AS SHOWN ON THIS SHEET.
FB = BARS MAY BE BENT IN FIELD TO FIT.
E = EPOXY COATED REINFORCEMENT.
S = STIRRUP.
V = BAR DIMENSIONS VARY IN EQUAL INCREMENTS BETWEEN DIMENSIONS SHOWN ON THIS LINE AND THE FOLLOWING LINE. A BLANK IN THE SECOND LINE REPRESENTS THE SAME BAR DIMENSION AS THAT IN THE FIRST LINE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ADD A SPLICE LENGTH TO A BAR LENGTH WHICH EXCEEDS ITS MAXIMUM ALLOWABLE LENGTH.
NO. EA. = NUMBER OF BARS OF EACH LENGTH.
NOMINAL LENGTHS ARE BASED ON OUT TO OUT DIMENSIONS SHOWN IN BENDING DIAGRAMS AND ARE LISTED FOR FABRICATORS USE. (NEAREST INCH)
ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.
PAYWEIGHTS ARE BASED ON ACTUAL LENGTHS.
REINFORCING STEEL (GRADE 60) FY = 60,000 PSI.

Detailed
Checked

Note: This drawing is not to scale. Follow dimensions.

Sheet No. of