STATE OF VERMONT
AGENCY OF TRANSPORTATION

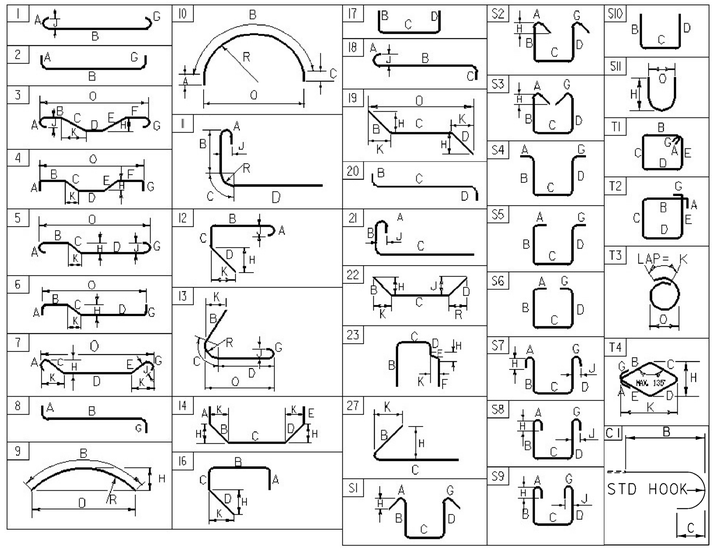
# REINFORCING STEEL SCHEDULE

| ITEM | EACH | SIZE | LENGTH | MARK | TYPE | A | B | C | D | E | F | G | H | J | K | R | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **ABUTMENT #1 FOOTING** | | | | | | | | | | | | | | |
| x | 66 | 5 | 10'- 6" | 1A501 | STR | | | | | | | | | | | | |
| | 24 | 5 | 40'- 0" | 1A502 | STR | | | | | | | | | | | | |
| | 24 | 5 | 27'- 6" | 1A503 | STR | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| x | 130 | 6 | 10'- 6" | 1A601 | STR | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 32 | 8 | 3'- 6" | 1A801 | STR | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 66 | 5 | 4'- 7" | 1A504 | 17 | | 1'- 6" | 3'- 1" | --- | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| ✳ | 67 | 8 | 4'- 9" | 1A802 | 17 | | 1'- 6" | 3'- 3" | --- | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | **ABUTMENT #2 FOOTING** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| x | 47 | 5 | 10'- 6" | 2A501 | STR | | | | | | | | | | | | |
| | 8 | 5 | 14'- 3" | 2A502 | STR | | | | | | | | | | | | |
| | 18 | 5 | 9'- 9" | 2A503 | STR | | | | | | | | | | | | |
| | 24 | 5 | 37'- 2" | 2A504 | STR | | | | | | | | | | | | |
| | 24 | 5 | 18'- 10" | 2A505 | STR | | | | | | | | | | | | |
| | 5 | 5 | 6'- 9" | 2A506 | STR | | | | | | | | | | | | |
| | 22 | 5 | 16'- 1" | 2A507 | STR | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| x | 93 | 6 | 10'- 6" | 2A601 | STR | | | | | | | | | | | | |
| | 15 | 6 | 14'- 3" | 2A602 | STR | | | | | | | | | | | | |
| | 35 | 6 | 9'- 9" | 2A603 | STR | | | | | | | | | | | | |
| | 8 | 6 | 6'- 9" | 2A604 | STR | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 40 | 8 | 3'- 6" | 2A801 | STR | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 83 | 5 | 4'- 7" | 2A508 | 17 | | 1'- 6" | 3'- 1" | --- | | | | | | | | |
| | 12 | 5 | 9'- 0" | 2A509 | 20 | | 2'- 6" | 4'- 0" | 2'- 6" | | | | | | | | |
| | 12 | 5 | 10'- 8" | 2A510 | 19 | | 2'- 6" | 5'- 8" | 2'- 6" | | | | 1'- 9" | | 1'- 9" | | 9'- 2" |
| | | | | | | | | | | | | | | | | | |
| x | 26 | 7 | 4'- 9" | 2A701 | 17 | | 1'- 6" | 3'- 3" | --- | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 51 | 8 | 4'- 9" | 2A802 | 17 | | 1'- 6" | 3'- 3" | --- | | | | | | | | ADDED |
| | | | | | | | | | | | | | | | | | |
| | | | **ABUTMENT #1 CURTAIN WALL** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 16 | 5 | 44'- 6" | 1C501.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 2'- 1" | 1C502.2 | STR | | | | | | | | | | | | |
| | 27 | 5 | 2'- 2" | 1C503.2 | STR | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 41 | 5 | 6'- 3" | 1C504.2 | 16 | 0'- 9" | 1'- 10" | 1'- 11" | 1'- 9" | | | | 1'- 3" | | 1'- 3" | | |
| x ✳ | 42 | 5 | 5'- 3" | 1C505.2 | 17 | | 2'- 2" | 0'- 11" | 2'- 2" | | | | | | | | |
| | 6 | 5 | 10'- 0" | 1C506.2 | 16 | 2'- 0" | 2'- 7" | 3'- 2" | 2'- 3" | | | | 1'- 7" | | 1'- 7" | | |
| △ | 71 | 5 | 1'- 9" | 1EC507 | C1 | | 1'- 1" | 0'- 5" | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| x ✳ | 34 | 6 | 10'- 8" | 1C601.2 | 17 | | 6'- 0" | 4'- 8" | --- | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | **ABUTMENT #2 CURTAIN WALL** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 16 | 5 | 44'- 6" | 2C501.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 2'- 1" | 2C502.2 | STR | | | | | | | | | | | | |
| | 27 | 5 | 2'- 2" | 2C503.2 | STR | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 41 | 5 | 6'- 3" | 2C504.2 | 16 | 0'- 9" | 1'- 10" | 1'- 11" | 1'- 9" | | | | 1'- 3" | | 1'- 3" | | |
| | 41 | 5 | 5'- 3" | 2C505.2 | 17 | | 2'- 2" | 0'- 11" | 2'- 2" | | | | | | | | |
| | 6 | 5 | 10'- 0" | 2C506.2 | 16 | 2'- 0" | 2'- 7" | 3'- 2" | 2'- 3" | | | | 1'- 7" | | 1'- 7" | | |
| | | | | | | | | | | | | | | | | | |
| ✳ | 70 | 5 | 1'- 9" | 2EC507 | C1 | | 1'- 1" | 0'- 5" | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 33 | 6 | 10'- 8" | 2C601.2 | 17 | | 6'- 0" | 4'- 8" | --- | | | | | | | | |
| | | | **5" CIP OVERLAY (DECK)** | | | | | | | | | | | | | | |
| ✳ | 100 | 4 | 43'- 10" | S401.2 | STR | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| ADDED x | 95 | 5 | 31'- 6" | S501.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 30'- 6" | S502.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 29'- 6" | S503.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 28'- 6" | S504.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 27'- 6" | S505.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 26'- 6" | S506.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 25'- 6" | S507.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 24'- 6" | S508.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 23'- 6" | S509.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 22'- 6" | S510.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 21'- 6" | S511.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 20'- 6" | S512.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 19'- 6" | S513.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 18'- 6" | S514.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 17'- 6" | S515.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 16'- 6" | S516.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 15'- 6" | S517.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 14'- 6" | S518.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 13'- 6" | S519.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 12'- 6" | S520.2 | STR | | | | | | | | | | | | |

| ITEM | EACH | SIZE | LENGTH | MARK | TYPE | A | B | C | D | E | F | G | H | J | K | R | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 5 | 11'- 6" | S521.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 10'- 6" | S522.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 9'- 6" | S523.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 8'- 6" | S524.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 7'- 6" | S525.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 6'- 6" | S526.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 5'- 6" | S527.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 4'- 6" | S528.2 | STR | | | | | | | | | | | | |
| | 2 | 5 | 3'- 6" | S529.2 | STR | | | | | | | | | | | | |
| | 4 | 5 | 44'- 6" | S530.2 | STR | | | | | | | | | | | | |
| | 18 | 5 | 44'- 3" | S531.2 | STR | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 2 | 5 | 2'- 11" | S532.2 | 19 | | 1'- 3" | 1'- 8" | --- | | | | | | | | |
| | 2 | 5 | 2'- 7" | S533.2 | 19 | | 1'- 3" | 1'- 4" | --- | | | | | | | | |
| | 346 | 5 | 4'- 9" | S534.2 | S5 | 1'- 0" | 0'- 8" | 1'- 5" | 0'- 8" | | | 1'- 0" | | | | | |
| | 16 | 5 | 6'- 5" | S535.2 | 17 | | 2'- 6" | 1'- 5" | 2'- 6" | | | | | | | | |
| | 4 | 5 | 5'- 10" | S536.2 | 17 | | 2'- 6" | 0'- 10" | 2'- 6" | | | | | | | | |
| | 4 | 5 | 5'- 6" | S537.2 | 17 | | 2'- 6" | 0'- 6" | 2'- 6" | | | | | | | | |
| | 4 | 5 | 8'- 8" | S538.2 | T4 | --- | 2'- 6" | 1'- 10" | 4'- 4" | --- | | --- | | | | | |
| | | | **CIP RETAINING WALL FOOTING** | | | | | | | | | | | | | | |
| | 21 | 5 | 7'- 6" | F501 | STR | | | | | | | | | | | | |
| | 22 | 5 | 9'- 9" | F502 | STR | | | | | | | | | | | | |
| | 18 | 5 | 16'- 6" | F503 | STR | | | | | | | | | | | | |
| ▲ | 22 | 5 | 14'- 6" | F504 | STR | | | | | | | | | | | | |
| ▲ | 22 | 5 | 8'- 0" | F505 | STR | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 23 | 6 | 7'- 6" | F601 | STR | | | | | | | | | | | | |
| | 42 | 6 | 9'- 9" | F602 | STR | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| x | 20 | 8 | 3'- 6" | F801 | STR | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| x | 20 | 5 | 10'- 8" | F506 | 19 | | 2'- 6" | 5'- 8" | 2'- 6" | | | | | | 1'- 9" | | 9'- 2" |
| | 20 | 5 | 9'- 0" | F507 | 20 | | 2'- 6" | 4'- 0" | 2'- 6" | | | | | | | | |
| | 55 | 5 | 5'- 5" | F508 | 17 | | 1'- 0" | 4'- 5" | --- | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 19 | 7 | 8'- 11" | F701 | 17 | | 1'- 2" | 7'- 9" | --- | | | | | | | | |
| | | | **CIP RETAINING WALL STEM** | | | | | | | | | | | | | | |
| x ▲ | 10 | 5 | 10'- 0" | EW501 | STR | | | | | | | | | | | | |
| | 8 | 5 | 24'- 6" | EW502 | STR | | | | | | | | | | | | |
| | 18 | 5 | 17'- 6" | EW503 | STR | | | | | | | | | | | | |
| | 8 | 5 | 4'- 9" | EW504 | STR | | | | | | | | | | | | |
| | --- | --- | --- | EW505 | --- | | | | | | | | | | | | |
| | 13 | 5 | 6'- 9" | EW506 | STR | | | | | | | | | | | | |
| | 6 | 5 | 10'- 9" | EW507 | STR | | | | | | | | | | | | |
| ▲ | 2 | 5 | 10'- 3" | EW508 | STR | | | | | | | | | | | | |
| | 3 | 6 | 9'- 9" | EW601 | STR | | | | | | | | | | | | |
| | 3 | 6 | 21'- 6" | EW602 | STR | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| ✳ | 14 | 7 | 6'- 9" | EW701 | STR | | | | | | | | | | | | |
| | 6 | 7 | 10'- 9" | EW702 | STR | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| ▲ | 48 | 5 | 8'- 10" | EW509 | 17 | | 3'- 9" | 1'- 4" | 3'- 9" | | | | | | | | |
| ▲ | 11 | 5 | 10'- 4" | EW510 | 17 | | 4'- 6" | 1'- 4" | 4'- 6" | | | | | | | | |
| ▲ | 2 | 5 | 6'- 0" | EW511 | 17 | | 2'- 0" | 2'- 0" | 2'- 0" | | | | | | | | |
| | | | **APPROACH SLABS** | | | | | | | | | | | | | | |
| | 24 | 5 | 24'- 3" | AS501.2 | STR | | | | | | | | | | | | |

## ~ NOTES ~

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO. 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31 (ASTM A 615-SI). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS, AND OTHER STANDARD PRACTICE, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
5. "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
8. ▲ DENOTES BARS TO BE CUT IN FIELD.
9. ✳ DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
10. △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
11. E IN BAR MARK PREFIX DENOTES EPOXY COATED REINFORCING STEEL.




## ASTM STANDARD REINFORCING BARS

| BAR SIZE DESIGNATION | WEIGHT POUNDS PER FOOT | NOMINAL DIMENSIONS ROUND SECTION | | |
|---|---|---|---|---|
| | | DIAMETER INCHES | AREA INCHES$^2$ | PERIMETER INCHES |
| #3 | 0.376 | 0.375 | 0.11 | 1.178 |
| #4 | 0.668 | 0.500 | 0.20 | 1.571 |
| #5 | 1.043 | 0.625 | 0.31 | 1.963 |
| #6 | 1.502 | 0.750 | 0.44 | 2.356 |
| #7 | 2.044 | 0.875 | 0.60 | 2.749 |
| #8 | 2.670 | 1.000 | 0.79 | 3.142 |
| #9 | 3.400 | 1.128 | 1.00 | 3.544 |
| #10 | 4.303 | 1.270 | 1.27 | 3.990 |
| #11 | 5.313 | 1.410 | 1.56 | 4.430 |
| #14 | 7.65 | 1.693 | 2.25 | 5.32 |
| #18 | 13.60 | 2.257 | 4.00 | 7.09 |

## ~ REINFORCING STEEL CORROSION RESISTANCE LEVEL ~

THE REINFORCING STEEL MARKS IN THIS SCHEDULE INDICATE THE REQUIRED BAR CORROSION RESISTANCE LEVEL. CORROSION RESISTANCE LEVEL IS DENOTED WITH A .2 FOR LEVEL TWO SUFFIX OR .3 FOR LEVEL THREE SUFFIX, .1 FOR LEVEL ONE IS TO BE OMITTED. THE BAR MATERIAL TYPE AND BAR STEEL GRADE PROVIDED FOR EACH CORROSION LEVEL WILL BE RECORDED ON THE PLAN SET PI SHEET FOR AS-BUILT RECORD PLAN ARCHIVES.

PROJECT NAME: **LINCOLN**
PROJECT NUMBER: **BRF 0188 (8)**

FILE NAME: **52545TSK01_engreinf.xls**
PROJECT MANAGER: **G.K. DONINGTON**
DESIGNED BY: **K. JAMES**
**REINFORCING STEEL SCHEDULE**

PLOT DATE: **8-DEC-2014**
DRAWN BY: **W. GERHOLD**
CHECKED BY: **A. STOCKIN**
SHEET **35** OF **62**