

Dimension Table

| S x H | 10' x 12' | 10' x 11' | 10' x 10' | 10' x 9' | 10' x 8' | 10' x 7' | 10' x 6' | 10' x 5' | 10' x 4' | 8' x 10' | 8' x 9' | 8' x 8' | 8' x 7' | 8' x 6' | 8' x 5' | 8' x 4' | 6' x 8' | 6' x 7' | 6' x 6' | 6' x 5' | 6' x 4' | 6' x 3' | 5' x 6' | 5' x 5' | 5' x 4' | 5' x 3' | S x H |    |
|-------|-----------|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|----|
| A     | 37'-0     | 34'-0     | 31'-0     | 28'-0    | 25'-0    | 22'-0    | 19'-0    | 16'-0    | 13'-0    | 31'-0    | 28'-0   | 25'-0   | 22'-0   | 19'-0   | 16'-0   | 13'-0   | 25'-0   | 22'-0   | 19'-0   | 16'-0   | 13'-0   | 10'-0   | 19'-0   | 16'-0   | 13'-0   | 10'-0   | A     |    |
| B     | 12'-4     | 11'-4     | 10'-4     | 9'-4     | 8'-4     | 7'-4     | 6'-4     | 5'-4     | 4'-4     | 10'-4    | 9'-4    | 8'-4    | 7'-4    | 6'-4    | 5'-4    | 4'-4    | 8'-4    | 7'-4    | 6'-4    | 5'-4    | 4'-4    | 3'-4    | 6'-4    | 5'-4    | 4'-4    | 3'-4    | B     |    |
| C     | 24'-8     | 22'-8     | 20'-8     | 18'-8    | 16'-8    | 14'-8    | 12'-8    | 10'-8    | 8'-8     | 20'-8    | 18'-8   | 16'-8   | 14'-8   | 12'-8   | 10'-8   | 8'-8    | 16'-8   | 14'-8   | 12'-8   | 10'-8   | 8'-8    | 6'-8    | 12'-8   | 10'-8   | 8'-8    | 6'-8    | C     |    |
| C1    | 25'-6½    | 23'-5½    | 21'-4½    | 19'-3½   | 17'-3    | 15'-2½   | 13'-1½   | 11'-0½   | 8'-11½   | 21'-4½   | 19'-3½  | 17'-3   | 15'-2½  | 13'-1½  | 11'-0½  | 8'-11½  | 17'-3   | 15'-2½  | 13'-1½  | 11'-0½  | 8'-11½  | 6'-10½  | 13'-1½  | 11'-0½  | 8'-11½  | 6'-10½  | C1    |    |
| DL    | 10'-3¾    | 9'-5¾     | 8'-7¾     | 7'-9¾    | 6'-11¾   | 6'-1¾    | 5'-3¾    | 4'-5¾    | 3'-7¾    | 8'-7¾    | 7'-9¾   | 6'-11¾  | 6'-1¾   | 5'-3¾   | 4'-5¾   | 3'-7¾   | 6'-11¾  | 6'-1¾   | 5'-3¾   | 4'-5¾   | 3'-7¾   | 6'-11¾  | 6'-1¾   | 5'-3¾   | 4'-5¾   | 3'-7¾   | DL    |    |
| DS    | 8'-11½    | 8'-3      | 7'-6½     | 6'-9½    | 6'-0¾    | 5'-4     | 4'-7¾    | 3'-10¾   | 3'-1¾    | 7'-6½    | 6'-9½   | 6'-0¾   | 5'-4    | 4'-7¾   | 3'-10¾  | 3'-1¾   | 6'-0¾   | 5'-4    | 4'-7¾   | 3'-10¾  | 3'-1¾   | 2'-5½   | 4'-7¾   | 3'-10¾  | 3'-1¾   | 2'-5½   | DS    |    |
| D1    | 20'-6½    | 18'-10½   | 17'-2½    | 15'-6½   | 13'-10½  | 12'-2½   | 10'-6½   | 8'-10½   | 7'-2½    | 17'-2½   | 15'-6½  | 13'-10½ | 12'-2½  | 10'-6½  | 8'-10½  | 7'-2½   | 13'-10½ | 12'-2½  | 10'-6½  | 8'-10½  | 7'-2½   | 5'-6½   | 10'-6½  | 8'-10½  | 7'-2½   | 5'-6½   | D1    |    |
| D2    | 7½        | 6½        | 6¾        | 5½       | 5        | 4¾       | 3¾       | 3¼       | 2¾       | 6¾       | 5½      | 5       | 4¾      | 3¾      | 3¼      | 2¾      | 5       | 4¾      | 3¾      | 3¼      | 2¾      | 2       | 3¾      | 3¼      | 2¾      | 2       | D2    |    |
| E     | 29'-2½    | 27'-8½    | 26'-1½    | 24'-6½   | 23'-0    | 21'-5½   | 19'-10½  | 18'-3½   | 16'-9½   | 24'-1½   | 22'-6½  | 21'-0   | 19'-5½  | 17'-10½ | 16'-3½  | 14'-9½  | 19'-0   | 17'-5½  | 15'-10½ | 14'-3½  | 12'-9½  | 11'-2½  | 14'-10½ | 13'-3½  | 11'-9½  | 10'-2½  | E     |    |
| E1    | 30'-3½    | 28'-7½    | 27'-0½    | 25'-5½   | 23'-9½   | 22'-2½   | 20'-7    | 18'-11½  | 17'-4½   | 24'-11½  | 23'-4½  | 21'-8½  | 20'-1½  | 18'-6½  | 16'-10½ | 15'-3½  | 19'-8   | 18'-0½  | 16'-5½  | 14'-9½  | 13'-2½  | 11'-7½  | 15'-4½  | 13'-9½  | 12'-2½  | 10'-6½  | E1    |    |
| FL    | 10'-7½    | 9'-9½     | 8'-11½    | 8'-1½    | 7'-3½    | 6'-5½    | 5'-7½    | 4'-9½    | 3'-11½   | 8'-11½   | 8'-1½   | 7'-3½   | 6'-5½   | 5'-7½   | 4'-9½   | 3'-11½  | 7'-3½   | 6'-5½   | 5'-7½   | 4'-9½   | 3'-11½  | 3'-1½   | 5'-7½   | 4'-9½   | 3'-11½  | 3'-1½   | FL    |    |
| FS    | 9'-5¾     | 8'-7      | 7'-10¾    | 7'-1½    | 6'-4¾    | 5'-8     | 4'-11¾   | 4'-2¾    | 3'-5¾    | 7'-10¾   | 7'-1½   | 6'-4¾   | 5'-8    | 4'-11¾  | 4'-2¾   | 3'-5¾   | 6'-4¾   | 5'-8    | 4'-11¾  | 4'-2¾   | 3'-5¾   | 2'-9¾   | 4'-11¾  | 4'-2¾   | 3'-5¾   | 2'-9¾   | FS    |    |
| F1    | 14'-5¾    | 13'-1¾    | 12'-0¾    | 10'-10¾  | 9'-9¾    | 8'-7¾    | 7'-6     | 6'-4¾    | 5'-2¾    | 12'-0¾   | 10'-10¾ | 9'-9¾   | 8'-7¾   | 7'-6    | 6'-4¾   | 5'-2¾   | 9'-9¾   | 8'-7¾   | 7'-6    | 6'-4¾   | 5'-2¾   | 4'-1¾   | 7'-6    | 6'-4¾   | 5'-2¾   | 4'-1¾   | F1    |    |
| F2    | 6'-4      | 5'-10¾    | 5'-4¾     | 4'-10¾   | 4'-4¾    | 3'-10¾   | 3'-5     | 2'-11¾   | 2'-5¾    | 5'-4     | 4'-10¾  | 4'-4¾   | 3'-10¾  | 3'-5    | 2'-11¾  | 2'-5¾   | 4'-4¾   | 3'-10¾  | 3'-5    | 2'-11¾  | 2'-5¾   | 1'-11¾  | 3'-5    | 2'-11¾  | 2'-5¾   | 1'-11¾  | F2    |    |
| G     | 9'-4      | 9'-4      | 9'-4      | 9'-4     | 9'-4     | 9'-4     | 9'-4     | 9'-4     | 9'-4     | 9'-4     | 9'-4    | 9'-4    | 9'-4    | 9'-4    | 9'-4    | 9'-4    | 9'-4    | 9'-4    | 9'-4    | 9'-4    | 9'-4    | 9'-4    | 9'-4    | 9'-4    | 9'-4    | 9'-4    | 9'-4  | G  |
| G1    | 9'-8      | 9'-8      | 9'-8      | 9'-8     | 9'-8     | 9'-8     | 9'-8     | 9'-8     | 9'-8     | 9'-8     | 9'-8    | 9'-8    | 9'-8    | 9'-8    | 9'-8    | 9'-8    | 9'-8    | 9'-8    | 9'-8    | 9'-8    | 9'-8    | 9'-8    | 9'-8    | 9'-8    | 9'-8    | 9'-8    | 9'-8  | G1 |
| G2    | 10'-10½   | 10'-10½   | 10'-10½   | 10'-10½  | 10'-10½  | 10'-10½  | 10'-10½  | 10'-10½  | 10'-10½  | 10'-10½  | 8'-9½   | 8'-9½   | 8'-9½   | 8'-9½   | 8'-9½   | 8'-9½   | 8'-9½   | 8'-9½   | 8'-9½   | 8'-9½   | 8'-9½   | 6'-8½   | 6'-8½   | 6'-8½   | 6'-8½   | 6'-8½   | 6'-8½ | G2 |
| G3    | 18'-10½   | 17'-4½    | 15'-10½   | 14'-4½   | 12'-10   | 11'-3½   | 9'-9½    | 8'-3½    | 6'-9½    | 15'-10½  | 14'-4½  | 12'-10  | 11'-3½  | 9'-9½   | 8'-3½   | 6'-9½   | 12'-10  | 11'-3½  | 9'-9½   | 8'-3½   | 6'-9½   | 5'-3½   | 9'-9½   | 8'-3½   | 6'-9½   | 5'-3½   | G3    |    |
| G4    | 19'-6½    | 17'-9½    | 16'-0¾    | 14'-6½   | 13'-0¾   | 11'-3½   | 9'-9½    | 8'-3½    | 6'-9½    | 16'-0¾   | 14'-6½  | 13'-0¾  | 11'-3½  | 9'-9½   | 8'-3½   | 6'-9½   | 13'-0¾  | 11'-3½  | 9'-9½   | 8'-3½   | 6'-9½   | 5'-3½   | 9'-9½   | 8'-3½   | 6'-9½   | 5'-3½   | G4    |    |
| G5    | 13'-10½   | 12'-9     | 11'-7¾    | 10'-6¾   | 9'-5     | 8'-3¾    | 7'-2¾    | 6'-1     | 4'-11¾   | 11'-7¾   | 10'-6¾  | 9'-5    | 8'-3¾   | 7'-2¾   | 6'-1    | 4'-11¾  | 9'-5    | 8'-3¾   | 7'-2¾   | 6'-1    | 4'-11¾  | 3'-10½  | 7'-2¾   | 6'-1    | 4'-11¾  | 3'-10½  | G5    |    |
| G6    | 14'-11¾   | 13'-7¾    | 12'-4¾    | 11'-3¾   | 10'-1¾   | 8'-10¾   | 7'-9¾    | 6'-7¾    | 5'-6¾    | 12'-4¾   | 11'-3¾  | 10'-1¾  | 8'-10¾  | 7'-9¾   | 6'-7¾   | 5'-6¾   | 10'-1¾  | 8'-10¾  | 7'-9¾   | 6'-7¾   | 5'-6¾   | 4'-5¾   | 7'-9¾   | 6'-7¾   | 5'-6¾   | 4'-5¾   | G6    |    |
| G7    | 2½        | 5½        | 8½        | 8½       | 8½       | 10½      | 10½      | 10½      | 10½      | 8½       | 8½      | 8½      | 10½     | 10½     | 10½     | 10½     | 10½     | 10½     | 10½     | 10½     | 10½     | 10½     | 10½     | 10½     | 10½     | 10½     | 10½   | G7 |
| G8    | 3½        | 5½        | 7½        | 7½       | 7½       | 9½       | 9½       | 9½       | 9½       | 7½       | 7½      | 7½      | 9½      | 9½      | 9½      | 9½      | 9½      | 9½      | 9½      | 9½      | 9½      | 9½      | 9½      | 9½      | 9½      | 9½      | 9½    | G8 |
| PL    | 42'-3½    | 38'-10½   | 35'-5½    | 32'-0½   | 28'-7½   | 25'-2    | 21'-8½   | 18'-3½   | 14'-10½  | 35'-5½   | 32'-0½  | 28'-7½  | 25'-2   | 21'-8½  | 18'-3½  | 14'-10½ | 28'-7½  | 25'-2   | 21'-8½  | 18'-3½  | 14'-10½ | 11'-5½  | 21'-8½  | 18'-3½  | 14'-10½ | 11'-5½  | PL    |    |
| PS    | 37'-0½    | 34'-0     | 31'-0     | 28'-0    | 25'-0    | 22'-0    | 19'-0    | 16'-0    | 13'-0    | 31'-0    | 28'-0   | 25'-0   | 22'-0   | 19'-0   | 16'-0   | 13'-0   | 25'-0   | 22'-0   | 19'-0   | 16'-0   | 13'-0   | 10'-0   | 19'-0   | 16'-0   | 13'-0   | 10'-0   | PS    |    |
| RL    | 44'-1     | 40'-6½    | 36'-11½   | 33'-4½   | 29'-9½   | 26'-2½   | 22'-7½   | 19'-0¾   | 15'-5¾   | 36'-11½  | 33'-4½  | 29'-9½  | 26'-2½  | 22'-7½  | 19'-0¾  | 15'-5¾  | 29'-9½  | 26'-2½  | 22'-7½  | 19'-0¾  | 15'-5¾  | 11'-11  | 22'-7½  | 19'-0¾  | 15'-5¾  | 11'-11  | RL    |    |
| RS    | 39'-0¾    | 35'-10¾   | 32'-8½    | 29'-6¾   | 26'-4¾   | 23'-2¾   | 20'-0¾   | 16'-10¾  | 13'-8¾   | 32'-8½   | 29'-6¾  | 26'-4¾  | 23'-2¾  | 20'-0¾  | 16'-10¾ | 13'-8¾  | 26'-4¾  | 23'-2¾  | 20'-0¾  | 16'-10¾ | 13'-8¾  | 10'-6¾  | 20'-0¾  | 16'-10¾ | 13'-8¾  | 10'-6¾  | RS    |    |
| S1    | 10'-4¾    | 10'-4¾    | 10'-4¾    | 10'-4¾   | 10'-4¾   | 10'-4¾   | 10'-4¾   | 10'-4¾   | 10'-4¾   | 10'-4¾   | 8'-3¾   | 8'-3¾   | 8'-3¾   | 8'-3¾   | 8'-3¾   | 8'-3¾   | 8'-3¾   | 8'-3¾   | 8'-3¾   | 8'-3¾   | 8'-3¾   | 6'-2¾   | 6'-2¾   | 6'-2¾   | 6'-2¾   | 6'-2¾   | 6'-2¾ | S1 |
| T     | 1'-1      | 1'-1      | 1'-1      | 1'-1     | 1'-1     | 1'-1     | 1'-1     | 1'-1     | 1'-1     | 1'-0     | 1'-0    | 1'-0    | 1'-0    | 1'-0    | 1'-0    | 1'-0    | 1'-0    | 1'-0    | 1'-0    | 1'-0    | 1'-0    | 1'-0    | 1'-0    | 1'-0    | 1'-0    | 1'-0    | 1'-0  | T  |
| U     | 1'-0      | 11        | 10        | 10       | 10       | 9        | 9        | 9        | 9        | 10       | 10      | 10      | 9       | 9       | 9       | 9       | 10      | 9       | 9       | 9       | 9       | 9       | 9       | 9       | 9       | 9       | U     |    |
| W     | 5'-0      | 4'-9      | 4'-6      | 4'-3     | 4'-0     | 3'-9     | 3'-6     | 3'-6     | 3'-6     | 4'-6     | 4'-3    | 4'-0    | 3'-9    | 3'-6    | 3'-6    | 3'-6    | 4'-0    | 3'-9    | 3'-6    | 3'-6    | 3'-6    | 3'-6    | 3'-6    | 3'-6    | 3'-6    | 3'-6    | W     |    |

Notes:

- 1. See Sheet FWH G2-21 for General Notes, Specifications, and Design Stresses.
- 2. See Sheet FWH 15-1-21 and sheets FWH 15-3-21 thru 15-5-21 for location of certain dimensions tabulated.
- 3. Dimensions are in feet and inches unless otherwise noted.

|                             |                                 |   |              |  |
|-----------------------------|---------------------------------|---|--------------|--|
| LATEST REVISION DATE        | <br>APPROVED BY BRIDGE ENGINEER | <br><b>IOWADOT Highway Division</b>                       |              |  |
|                             |                                 | Standard Design - Single Reinforced Concrete Box Culverts |              |  |
|                             |                                 | Flared Wing Headwalls                                     |              |  |
|                             |                                 | February, 2021  |              |  |
| Dimension Table<br>15° Skew |                                 | FWH 15-2-21   | Sheet 2 of 2 |  |