

DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE:
 FILE:

| TABLE OF FOUNDATION LOADS | | | | | | | | | |
|---------------------------|---------------------|------------|------------------|-------------------|------------|-----------|-----------|------------------|-------------------|
| 24' Roadway - 0° Skew | | | | | | | | | |
| Span Length | Drilled Shaft Loads | | | | Pile Loads | | | | |
| | DC | LL | Service I (1) | Strength I (2) | DC | EH (3) | LL | Service I (1) | Strength I (2) |
| Ft | Tons/Shaft | Tons/Shaft | Tons/Shaft | Tons/Shaft | Tons/Pile | Tons/Pile | Tons/Pile | Tons/Pile | Tons/Pile |
| 30 | 25 | 20 | 45 | 67 | 13 | 11 | 21 | 45 | 70 |
| 35 | 27 | 22 | 49 | 73 | 14 | 11 | 22 | 47 | 73 |
| 40 | 29 | 23 | 52 | 77 | 15 | 11 | 22 | 48 | 74 |
| 45 | 31 | 24 | 55 | 81 | 16 | 11 | 23 | 50 | 77 |
| 50 | 33 | 25 | 58 | 85 | 17 | 11 | 23 | 51 | 78 |
| 55 | 35 | 26 | 61 | 90 | 18 | 11 | 24 | 53 | 81 |
| 60 | 37 | 27 | 64 | 94 | 19 | 11 | 24 | 54 | 83 |
| 65 | 39 | 28 | 67 | 98 | 20 | 11 | 25 | 56 | 86 |
| 70 | 41 | 29 | 70 | 102 | 21 | 11 | 25 | 57 | 87 |
| 75 | 43 | 30 | 73 | 107 | 23 | 11 | 26 | 60 | 91 |
| 80 | 45 | 30 | 75 | 109 | 24 | 11 | 26 | 61 | 92 |
| 85 | 48 | 31 | 79 | 115 | 25 | 11 | 26 | 62 | 94 |
| 90 | 50 | 32 | 82 | 119 | 26 | 11 | 27 | 64 | 97 |
| 95 | 53 | 32 | 85 | 123 | 28 | 11 | 27 | 66 | 99 |
| 100 | 56 | 33 | 89 | 128 | 29 | 11 | 27 | 67 | 100 |
| 105 | 59 | 34 | 93 | 134 | 31 | 11 | 28 | 70 | 105 |
| 110 | 62 | 34 | 96 | 137 | 32 | 11 | 28 | 71 | 106 |
| 115 | 65 | 35 | 100 | 143 | 34 | 11 | 28 | 73 | 108 |
| 120 | 69 | 35 | 104 | 148 | 36 | 11 | 29 | 76 | 113 |

| TABLE OF FOUNDATION LOADS | | | | | | | | | |
|---------------------------|---------------------|------------|------------------|-------------------|------------|-----------|-----------|------------------|-------------------|
| 24' Roadway - 15° Skew | | | | | | | | | |
| Span Length | Drilled Shaft Loads | | | | Pile Loads | | | | |
| | DC | LL | Service I (1) | Strength I (2) | DC | EH (3) | LL | Service I (1) | Strength I (2) |
| Ft | Tons/Shaft | Tons/Shaft | Tons/Shaft | Tons/Shaft | Tons/Pile | Tons/Pile | Tons/Pile | Tons/Pile | Tons/Pile |
| 30 | 26 | 20 | 46 | 68 | 14 | 11 | 21 | 46 | 71 |
| 35 | 28 | 22 | 50 | 74 | 15 | 11 | 22 | 48 | 74 |
| 40 | 30 | 23 | 53 | 78 | 16 | 11 | 22 | 49 | 75 |
| 45 | 32 | 24 | 56 | 82 | 16 | 11 | 23 | 50 | 77 |
| 50 | 33 | 25 | 58 | 85 | 17 | 11 | 23 | 51 | 78 |
| 55 | 35 | 26 | 61 | 90 | 19 | 11 | 24 | 54 | 83 |
| 60 | 37 | 27 | 64 | 94 | 20 | 11 | 24 | 55 | 84 |
| 65 | 39 | 28 | 67 | 98 | 21 | 11 | 25 | 57 | 87 |
| 70 | 41 | 29 | 70 | 102 | 22 | 11 | 25 | 58 | 88 |
| 75 | 44 | 30 | 74 | 108 | 23 | 11 | 26 | 60 | 91 |
| 80 | 46 | 30 | 76 | 110 | 24 | 11 | 26 | 61 | 92 |
| 85 | 48 | 31 | 79 | 115 | 25 | 11 | 26 | 62 | 94 |
| 90 | 51 | 32 | 83 | 120 | 26 | 11 | 27 | 64 | 97 |
| 95 | 53 | 32 | 85 | 123 | 28 | 11 | 27 | 66 | 99 |
| 100 | 56 | 33 | 89 | 128 | 29 | 11 | 27 | 67 | 100 |
| 105 | 60 | 34 | 94 | 135 | 31 | 11 | 28 | 70 | 105 |
| 110 | 62 | 34 | 96 | 137 | 32 | 11 | 28 | 71 | 106 |
| 115 | 66 | 35 | 101 | 144 | 34 | 11 | 28 | 73 | 108 |
| 120 | 70 | 35 | 105 | 149 | 36 | 11 | 29 | 76 | 113 |

| TABLE OF FOUNDATION LOADS | | | | | | | | | |
|---------------------------|---------------------|------------|------------------|-------------------|------------|-----------|-----------|------------------|-------------------|
| 24' Roadway - 30° Skew | | | | | | | | | |
| Span Length | Drilled Shaft Loads | | | | Pile Loads | | | | |
| | DC | LL | Service I (1) | Strength I (2) | DC | EH (3) | LL | Service I (1) | Strength I (2) |
| Ft | Tons/Shaft | Tons/Shaft | Tons/Shaft | Tons/Shaft | Tons/Pile | Tons/Pile | Tons/Pile | Tons/Pile | Tons/Pile |
| 30 | 26 | 20 | 46 | 68 | 14 | 11 | 21 | 46 | 71 |
| 35 | 28 | 22 | 50 | 74 | 15 | 11 | 22 | 48 | 74 |
| 40 | 30 | 23 | 53 | 78 | 16 | 11 | 22 | 49 | 75 |
| 45 | 32 | 24 | 56 | 82 | 17 | 11 | 23 | 51 | 78 |
| 50 | 34 | 25 | 59 | 87 | 18 | 11 | 23 | 52 | 80 |
| 55 | 36 | 26 | 62 | 91 | 19 | 11 | 24 | 54 | 83 |
| 60 | 38 | 27 | 65 | 95 | 20 | 11 | 24 | 55 | 84 |
| 65 | 40 | 28 | 68 | 99 | 21 | 11 | 25 | 57 | 87 |
| 70 | 42 | 29 | 71 | 104 | 22 | 11 | 25 | 58 | 88 |
| 75 | 44 | 30 | 74 | 108 | 23 | 11 | 26 | 60 | 91 |
| 80 | 46 | 30 | 76 | 110 | 24 | 11 | 26 | 61 | 92 |
| 85 | 49 | 31 | 80 | 116 | 25 | 11 | 26 | 62 | 94 |
| 90 | 51 | 32 | 83 | 120 | 27 | 11 | 27 | 65 | 98 |
| 95 | 54 | 32 | 86 | 124 | 28 | 11 | 27 | 66 | 99 |
| 100 | 57 | 33 | 90 | 129 | 30 | 11 | 27 | 68 | 102 |
| 105 | 60 | 34 | 94 | 135 | 31 | 11 | 28 | 70 | 105 |
| 110 | 63 | 34 | 97 | 139 | 33 | 11 | 28 | 72 | 107 |
| 115 | 66 | 35 | 101 | 144 | 34 | 11 | 28 | 73 | 108 |
| 120 | 70 | 35 | 105 | 149 | 37 | 11 | 29 | 77 | 114 |

- (1) 1.00DC + 1.00EH + 1.00LL (all other loads not included)
- (2) 1.25DC + 1.50EH + 1.75LL (all other loads not included)
- (3) Axial load due to the soil pressure acting on the backwall, which is generated due to the pile batter.

GENERAL NOTES:
 Designed according to AASHTO LRFD Bridge Design Specifications.

FOR DESIGNER'S INFORMATION ONLY.
 Loads included here within are to be added to the Foundation Notes sheet.

The values shown on these sheets are applicable for use only with the steel beam abutments shown on the standards ASB-24, ASB-24-15, and ASB-24-30.

NOT A STANDARD / NOT FOR INCLUSION IN THE PLANS.

| | | | | | |
|----------------------------------|-----------|-----------|-----------|---|---------------------------------|
| HL93 LOADING | | | | Texas Department of Transportation | Bridge Division Standard |
| ABUTMENT FOUNDATION LOADS | | | | | |
| STEEL BEAMS | | | | | |
| 24' ROADWAY | | | | | |
| SB-AFL24-24 | | | | | |
| FILE: SB-AFL24-24.dgn | DN: TxDOT | CK: TxDOT | DW: TxDOT | CR: TxDOT | |
| © TxDOT May 2024 | CONT | SECT | JOB | HIGHWAY | |
| REVISIONS | | | | | |
| | DIST | COUNTY | | | SHEET NO. |