

| CAST IRON PIPE CULVERT DESIGNATION | | | | |
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| DIAMETER INCHES | AREA SQ. FT. | MAXIMUM HEIGHT OF COVER IN FEET | | |
| | | 1-13 | 14-21 | 22-35 (2) |
| 12 (2) | 0.8 | STANDARD PIPE | HEAVY PIPE | EXTRA HEAVY PIPE |
| 15 (3) | 1.2 | | | |
| 16 (2) (4) | 1.4 | | | |
| 18 (1) | 1.8 | | | |
| 24 (1) | 3.1 | | | |
| 30 (1) | 4.9 | | | |
| 36 (1) | 7.1 | | | |
| 42 (2) | 9.6 | | | |
| 48 (2) | 12.6 | | | |

- (1) PIPE MAY BE SMOOTH CAST IRON, CORRUGATED CAST IRON, OR RIBBED CAST IRON.
- (2) PIPE TO BE SMOOTH CAST IRON ONLY.
- (3) PIPE TO BE CORRUGATED CAST IRON OR RIBBED CAST IRON.
- (4) MAY BE SUBSTITUTED FOR 15" PIPE CULVERT AT NO INCREASE IN PRICE BID FOR 15" PIPE, WHERE APPROVED BY THE ENGINEER.

NOTES:

- 1. COVER HEIGHTS INDICATED IN TABLES ARE FOR FINISHED CONSTRUCTION WHICH MATCH FORMER VDOT ALLOWABLE STRESS DESIGN TABLES. COVER HEIGHTS WERE NOT RE-CALCULATED USING LRFD
- 2. TO PROTECT PIPE DURING CONSTRUCTION, MINIMUM HEIGHT OF COVER PRIOR TO ALLOWING CONSTRUCTION TRAFFIC TO CROSS INSTALLATION IS TO BE 24". THIS COVER IS TO EXTEND THE FULL LENGTH OF THE PIPE CULVERT. THE APPROACH FILL RAMP IS TO EXTEND A MINIMUM OF 10 (DIAMETER + 36") ON EACH SIDE OF THE CULVERT, OR TO THE INTERSECTION WITH A CUT.
- 3. MINIMUM FINISHED HEIGHT OF COVER TO BE 24", EXCEPT PIPE UNDER ENTRANCES AND MEDIAN CROSSOVERS WHERE A 9" MINIMUM WILL BE PERMITTED.
- 4. SEE STANDARD PB-1 FOR PIPE BEDDING AND BACKFILL REQUIREMENTS.

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| SPECIFICATION REFERENCE |
| 232 302 |

A COPY OF THE ORIGINAL SEALED AND SIGNED STANDARD DRAWING IS ON FILE IN THE CENTRAL OFFICE

CAST IRON PIPE
HEIGHT OF COVER TABLE FOR HL-93 LIVE LOAD
 VIRGINIA DEPARTMENT OF TRANSPORTATION

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| VDOT ROAD AND BRIDGE STANDARDS | |
| REVISION DATE 11/15 | SHEET 14 OF 18 107.18 |