### NOTES:

1. **MINIMUM COVER HEIGHTS ARE BASED ON LIVE LOADING CALCULATIONS PER AASHTO LRFD SECTION 12. VEHICLE LOADS ARE BASED UPON DRIVING OVER THE PIPE WHILE NOT PERFORMING OPERATIONAL TASKS.**

2. **COVER HEIGHTS DO NOT TAKE INTO CONSIDERATION POTENTIAL RUTTING OF DRIVE SURFACE. BACKFILL MATERIAL IS ASSUMED FULLY COMPACTED TO SURFACE.**

3. **IF MINIMUM COVER CANNOT BE ACHIEVED, IT IS RECOMMENDED TO PERFORM PERIODIC DEFLECTION EVALUATIONS TO ENSURE PIPE ROUNDNESS. THE USE OF STEEL PLATES, MOUNDING, OR TEMPORARY FILL MAY BE REQUIRED TO DISTRIBUTE VEHICLE LOADING.**

4. **CONTACT YOUR LOCAL ADS REPRESENTATIVE WHEN VEHICLES ENCOUNTERED IN THE FIELD EXCEED THE MAXIMUM LOADINGS INCLUDED IN THE TABLE. VEHICLES LISTED IN THE TABLE ARE FOR REFERENCE AND COMPARISON PURPOSES.**

5. **REFER TO STANDARD STD-101D & STD-101F FOR RECOMMENDED INSTALLATION PRACTICES.**

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**VEHICLE** | **VEHICLE DESCRIPTION** | **MINIMUM TIRE** | **SINGLE AXLE LOAD lbs.** | **PIPE DIAMETER** | **TEMPORARY MINIMUM COVER HEIGHTS** |
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FORD F150 | PICKUP TRUCK (GWVR) | P275/55R20 | 7,450 (3379kg) | 12" - 48" | CLASS I 9" (76mm), CLASS II @ 95% SPD 6" (152mm) |
CHEVY 3500 | UTILITY TRUCK (GWVR) | 235/80-17 | 13,200 (5987kg) | 12" - 48" | CLASS I 9" (229mm), CLASS II @ 95% SPD 6" (152mm) |
CAT CS78B | DRUM ROLLER | 84" SMOOTH DRUM ROLLER | 29,626 (13438kg) | 12" - 48" | CLASS I 9" (229mm), CLASS II @ 95% SPD 6" (152mm) |
CAT 637G | SCRAPER | 37.25-35 | 102,145 (46332kg) | 12" - 60" | CLASS I 12" (305mm), CLASS II @ 95% SPD 9" (229mm) |
KOMATSU WA800-3 | MEDIUM LOADER | 45/65-45 | 158,270 (71790kg) | 12" - 60" | CLASS I 12" (305mm), CLASS II @ 95% SPD 9" (229mm) |
CAT 993K | LARGE LOADER | 50/65-51 | 276,808 (125559kg) | 12" - 15" | CLASS I 18" (457mm), CLASS II @ 95% SPD 21" (533mm) |
CAT 789D | MINING TRUCK | 37.00-R57 | 479,050 (217293kg) | 12" - 24" | CLASS I 24" (610mm), CLASS II @ 95% SPD 30" (762mm) |

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**GROUND PRESSURE AT SPRING LINE OF PIPE**

**GROUND PRESSURE OF TIRE FOOTPRINT**

**COVER OVER 60" (1500mm) PIPE SHOULD BE NO LESS THAN 6" (152mm)**