



BAR LIST
42" BARRIER HEIGHT

| BAR NUMBER | SIZE | LENGTH | SHAPE |
|------------|------|--------|-------|
| h1(E) | #4 | 2'-8" | — |
| s1(E) | #4 | 10'-3" | ⌋ |
| s2(E) | #4 | 9'-6" | ⌋ |
| v1(E) | #6 | --- | — |

#3(E) BAR SPIRAL SEE SECTION A-A

BAR LIST
48" BARRIER HEIGHT

| BAR NUMBER | SIZE | LENGTH | SHAPE |
|------------|------|--------|-------|
| h1(E) | #4 | 2'-8" | — |
| s3(E) | #4 | 10'-9" | ⌋ |
| s4(E) | #4 | 10'-0" | ⌋ |
| v1(E) | #6 | --- | — |

#3(E) BAR SPIRAL SEE SECTION A-A

- NOTES**
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
 - THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
 - THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
 - THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OF FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20mm).
 - THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
 - THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
 - THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
 - ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
 - THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150mm) WITH A MINIMUM OF 3 INCHES (75mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
 - ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKWAY COUPLINGS.
 - THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH APPROVAL OF THE ENGINEER.
 - THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
 - THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
 - THE COST OF REINFORCEMENT BARS, ANCHOR RODS, PREFORMED JOINT FILLER, AND STRUCTURE EXCAVATION SHALL BE INCLUDED IN THE COST OF DRILLED SHAFT CONCRETE FOUNDATIONS.

LIGHT POLE FOUNDATION DEPTH TABLE
47.5 FT. (14.478m) MOUNTING HEIGHT

| SOIL CONDITIONS | DESIGN DEPTH "D" OF FOUNDATION |
|------------------------------------|--------------------------------|
| | SINGLE ARM POLE |
| SOFT CLAY Qu=0.375 TON/SQ. FT. | 13'-0" (3.96m) |
| MEDIUM CLAY Qu=0.75 TON/SQ. FT. | 9'-6" (2.93m) |
| STIFF CLAY Qu=1.50 TON/SQ. FT. | 7'-0" (2.13m) |
| LOOSE SAND φ = 34° | 9'-0" (2.74m) |
| MEDIUM SAND φ = 37.5° | 8'-3" (2.52m) |
| DENSE SAND φ = 40° | 7'-9" (2.36m) |

BILL OF MATERIAL
42" BARRIER HEIGHT

| | | |
|---|-------|------|
| * CONCRETE REQUIRED FOR EACH FOUNDATION | CU YD | 1.73 |
| * REBAR REQUIRED FOR EACH FOUNDATION | POUND | 310 |

BILL OF MATERIAL
48" BARRIER HEIGHT

| | | |
|---|-------|------|
| * CONCRETE REQUIRED FOR EACH FOUNDATION | CU YD | 1.79 |
| * REBAR REQUIRED FOR EACH FOUNDATION | POUND | 320 |

BILL OF MATERIAL
42" BARRIER HEIGHT

| ITEM | UNIT | TOTAL |
|---|-------|-------|
| * DRILLED SHAFT CONCRETE FOUNDATIONS, SPECIAL | CU YD | 12.1 |

BILL OF MATERIAL
48" BARRIER HEIGHT

| ITEM | UNIT | TOTAL |
|---|-------|--------|
| * DRILLED SHAFT CONCRETE FOUNDATIONS, SPECIAL | CU YD | N.I.C. |

* QUANTITY BASED ON MEDIUM CLAY SOIL CONDITIONS N.I.C. = NOT IN CONTRACT

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