

**BILL OF MATERIAL**

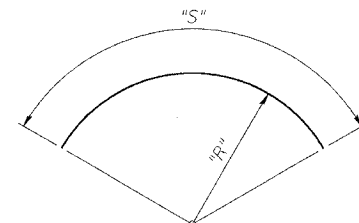
Light Tower Service Pad, Special with 3'-6" Wall (Note 4)

Bar	No.	Size	Length	Shape
h <sub>13</sub> (E)	1	#5	23'-6"	
h <sub>14</sub> (E)	1	#5	18'-11"	
h <sub>15</sub> (E)	1	#5	13'-7"	
h <sub>16</sub> (E)	1	#5	8'-4"	
h <sub>17</sub> (E)	1	#4	22'-1"	
h <sub>18</sub> (E)	1	#4	17'-9"	
h <sub>19</sub> (E)	1	#4	12'-9"	
h <sub>20</sub> (E)	1	#4	7'-10"	
n <sub>2</sub> (E)	25	#6	5'-10"	
t <sub>1</sub> (E)	25	#6	5'-1"	
v <sub>3</sub> (E)	7	#4	3'-10"	
v <sub>4</sub> (E)	7	#4	3'-2"	
w <sub>1</sub> (E)	1	#5	24'-4"	
w <sub>2</sub> (E)	1	#5	21'-7"	
w <sub>3</sub> (E)	1	#5	18'-10"	
w <sub>4</sub> (E)	1	#5	15'-5"	
w <sub>5</sub> (E)	1	#5	11'-6"	
Concrete Structures		Cu. Yd.	2.2	
Reinforcement Bars, Epoxy Coated		Pound	150	
Protective Coat		Sq. Yd.	9	
Rustication Finish		Sq. Ft.	32	

**BILL OF MATERIAL**

Light Tower Service Pad, Special with 5'-0" Wall (Note 4)

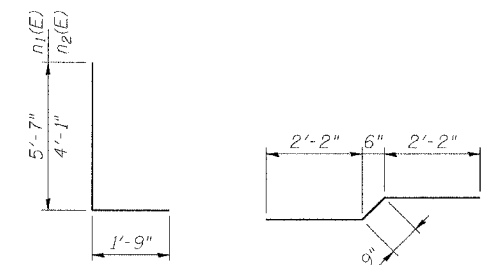
Bar	No.	Size	Length	Shape
h <sub>1</sub> (E)	1	#5	23'-6"	
h <sub>2</sub> (E)	1	#5	20'-10"	
h <sub>3</sub> (E)	1	#5	17'-8"	
h <sub>4</sub> (E)	1	#5	14'-6"	
h <sub>5</sub> (E)	1	#5	11'-4"	
h <sub>6</sub> (E)	1	#5	8'-2"	
h <sub>7</sub> (E)	1	#4	22'-1"	
h <sub>8</sub> (E)	1	#4	19'-7"	
h <sub>9</sub> (E)	1	#4	16'-7"	
h <sub>10</sub> (E)	1	#4	13'-7"	
h <sub>11</sub> (E)	1	#4	10'-8"	
h <sub>12</sub> (E)	1	#4	7'-8"	
n <sub>1</sub> (E)	25	#6	7'-4"	
t <sub>1</sub> (E)	25	#6	5'-1"	
v <sub>1</sub> (E)	7	#4	5'-0"	
v <sub>2</sub> (E)	8	#4	4'-8"	
w <sub>1</sub> (E)	1	#5	24'-4"	
w <sub>2</sub> (E)	1	#5	21'-7"	
w <sub>3</sub> (E)	1	#5	18'-10"	
w <sub>4</sub> (E)	1	#5	15'-5"	
w <sub>5</sub> (E)	1	#5	11'-6"	
Concrete Structures		Cu. Yd.	3.0	
Reinforcement Bars, Epoxy Coated		Pound	210	
Protective Coat		Sq. Yd.	12	
Rustication Finish		Sq. Ft.	53	



Bar	"R"	"S"
h <sub>1</sub> (E)	7'-7"	23'-6"
h <sub>2</sub> (E)	7'-7"	20'-10"
h <sub>3</sub> (E)	7'-7"	17'-8"
h <sub>4</sub> (E)	7'-7"	14'-6"
h <sub>5</sub> (E)	7'-7"	11'-4"
h <sub>6</sub> (E)	7'-7"	8'-2"
h <sub>7</sub> (E)	7'-1 1/2"	22'-1"
h <sub>8</sub> (E)	7'-1 1/2"	19'-7"
h <sub>9</sub> (E)	7'-1 1/2"	16'-7"
h <sub>10</sub> (E)	7'-1 1/2"	13'-7"
h <sub>11</sub> (E)	7'-1 1/2"	10'-8"
h <sub>12</sub> (E)	7'-1 1/2"	7'-8"
h <sub>13</sub> (E)	7'-7"	23'-6"
h <sub>14</sub> (E)	7'-7"	18'-11"
h <sub>15</sub> (E)	7'-7"	13'-7"
h <sub>16</sub> (E)	7'-7"	8'-4"
h <sub>17</sub> (E)	7'-1 1/2"	22'-1"
h <sub>18</sub> (E)	7'-1 1/2"	17'-9"
h <sub>19</sub> (E)	7'-1 1/2"	12'-9"
h <sub>20</sub> (E)	7'-1 1/2"	7'-10"
w <sub>1</sub> (E)	7'-7"	24'-4"
w <sub>2</sub> (E)	6'-8"	21'-7"
w <sub>3</sub> (E)	5'-10"	18'-10"
w <sub>4</sub> (E)	4'-9"	15'-5"
w <sub>5</sub> (E)	3'-6"	11'-6"

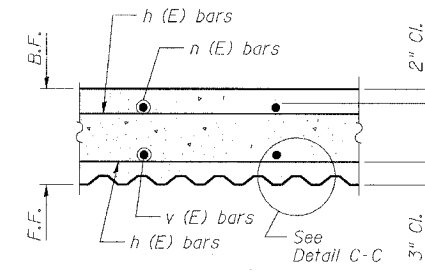
Note: "R" and "S" measured along bar @

**BARS w<sub>1</sub>(E) thru w<sub>5</sub>(E) & h<sub>1</sub>(E) thru h<sub>20</sub>(E)**

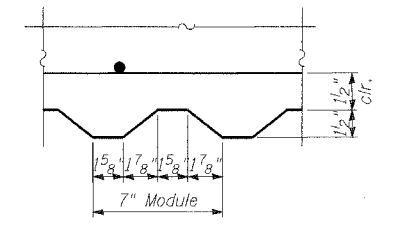


**BARS n<sub>1</sub>(E) & n<sub>2</sub>(E)**

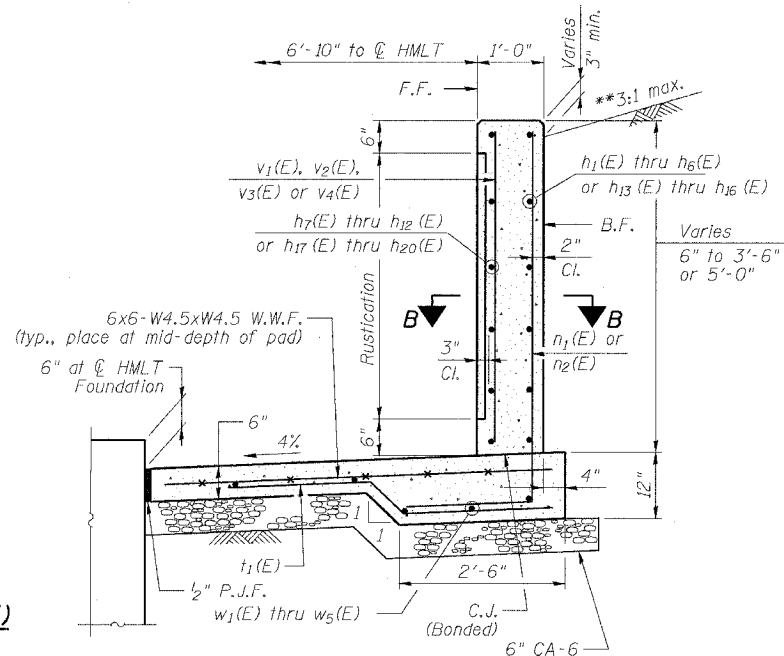
**BAR t<sub>1</sub>(E)**



**SECTION B-B**

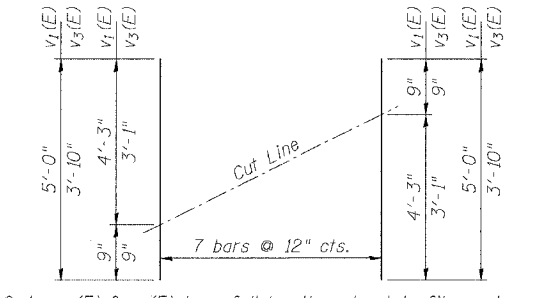


**DETAIL C-C**



**SECTION A-A**

\*\*See Roadway Cross Section Shts.



**\*CUTTING DIAGRAM**

Bars v<sub>1</sub>(E) & v<sub>3</sub>(E)

Order v<sub>1</sub>(E) & v<sub>3</sub>(E) bars full length and cut to fit as shown. Use remainder of bars as indicated on plans.

**NOTES**

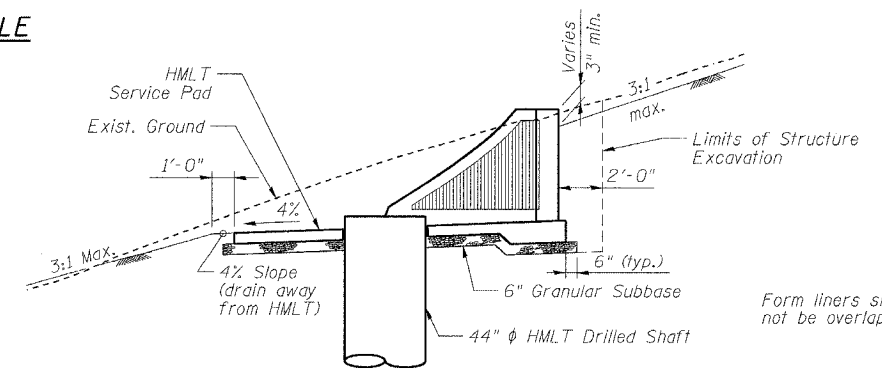
1. F.F. and B.F. denote Front Face and Back Face, respectively.
2. HMLT denotes High Mast Light Tower.
3. For location of High Mast Light Tower Foundations, see Roadway Lighting Plan sheets.
4. Bars n<sub>1</sub>(E), n<sub>2</sub>(E), t<sub>1</sub>(E) and w<sub>5</sub>(E) will not be measured and paid separately but will be included in the cost of Light Tower Service Pad, Special. See Special Provisions.
5. See IDOT Standard Drawing BE501 for additional High Mast Light Tower foundation and ground well details.
6. Reinforcement Bars designated (E) shall be epoxy coated.
7. Refer to High Mast Light Tower Service Pad & Retaining Wall Details 1 for location and orientation of conduit sleeves and grounding wells.
8. Contractor shall maintain integrity of Frontage Roads as may be required in excavating for HMLT service pad walls.
9. Provide Protective Coat to top, front face and ends of walls, and to the top of the concrete service pad.

**TOTAL BILL OF MATERIAL**

Item	Unit	Total
Light Tower Service Pad, Special	Sq. Ft.	959
Structure Excavation	Cu. Yd.	516
Concrete Structures	Cu. Yd.	21.0
Reinforcement Bars, Epoxy Coated	Pound	1470
Rustication Finish	Sq. Ft.	371
Protective Coat	Sq. Yd.	190.54

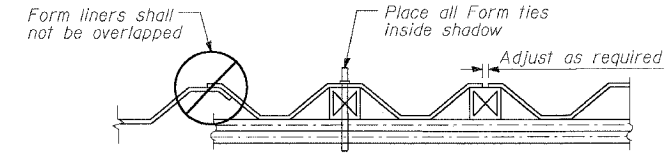
**HMLT SERVICE PAD/RETAINING WALL SCHEDULE**

HMLT I.D.	Service Pad/Retaining Wall Requirements
7 SGH2	Service Pad with 5'-0" Retaining Wall
7 SGH3	Service Pad with 5'-0" Retaining Wall
7 SGH4	Service Pad with 5'-0" Retaining Wall
7 SCD1	Service Pad with 5'-0" Retaining Wall
7 SCD3	Service Pad with 5'-0" Retaining Wall
7 SCD4	Service Pad with 5'-0" Retaining Wall
7 TAB1	Service Pad with 5'-0" Retaining Wall



**SECTION THRU EMBANKMENT**

(At Typ. Tower Location)  
HMLT not shown for clarity



**SUGGESTED FORMWORK DETAIL**

REVISIONS	
NAME	DATE

EI-105B

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)  
63rd ST TO 59th ST (FRONTAGE ROAD & RAMPS)  
**HIGH MAST LIGHT TOWER SERVICE PAD & RETAINING WALL DETAILS 2**

SCALE: N.T.S.      DRAWN BY:      CHECKED BY:  
DATE: October 29, 2004

11/23/2004 08:50:47 AM