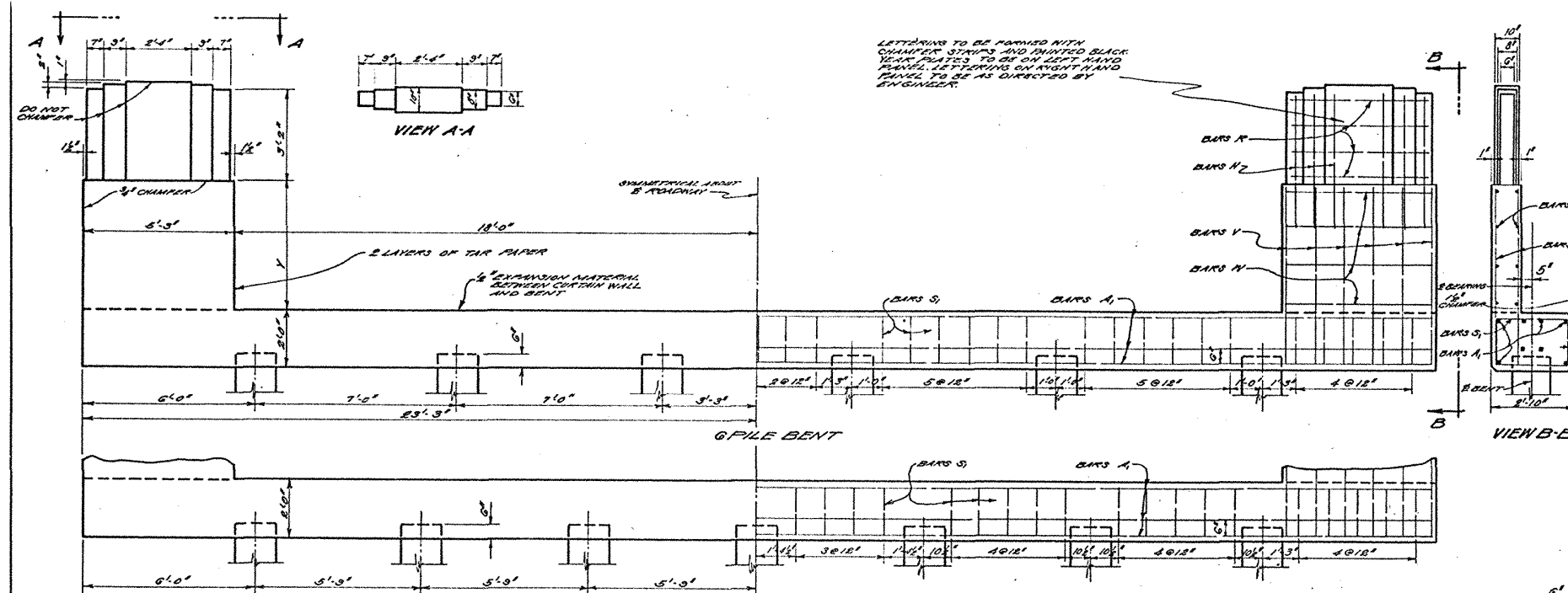
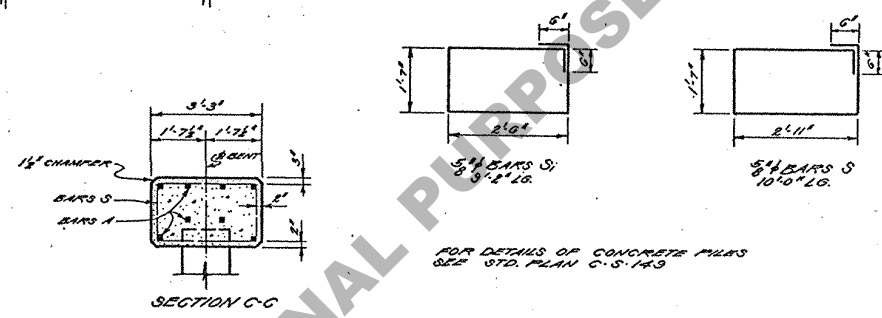
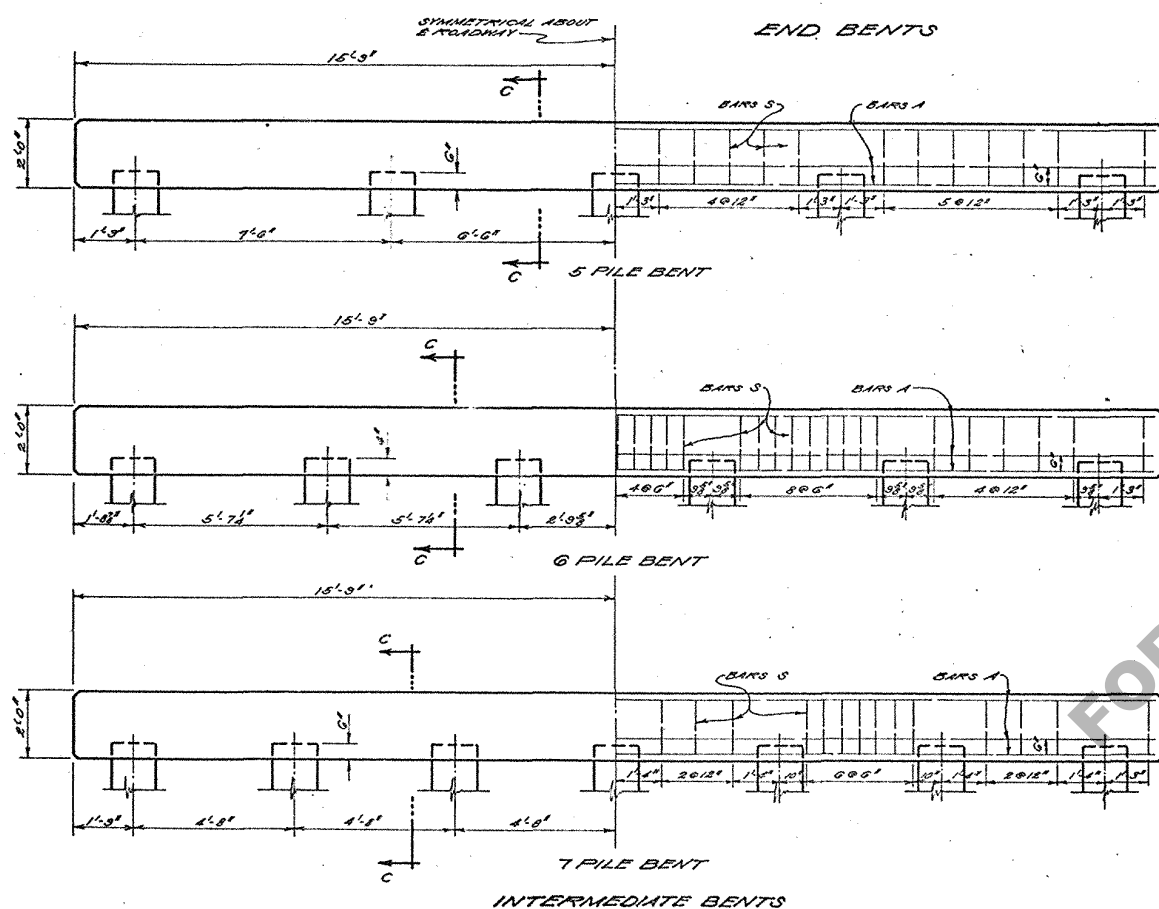




# END BENTS - SPANS 30 TO 40 FT.

| 30 FT. SPAN                       |     |      |        |        | 32 FT. SPAN                       |     |      |        |        | 34 FT. SPAN                       |     |      |        |        | 36 FT. SPAN                       |     |      |        |        | 38 FT. SPAN                       |     |      |        |        | 40 FT. SPAN                       |     |      |        |        |                                   |    |     |       |        |
|-----------------------------------|-----|------|--------|--------|-----------------------------------|-----|------|--------|--------|-----------------------------------|-----|------|--------|--------|-----------------------------------|-----|------|--------|--------|-----------------------------------|-----|------|--------|--------|-----------------------------------|-----|------|--------|--------|-----------------------------------|----|-----|-------|--------|
| BAR                               | NO. | SIZE | UNIT   | TOTAL  | BAR                               | NO. | SIZE | UNIT   | TOTAL  | BAR                               | NO. | SIZE | UNIT   | TOTAL  | BAR                               | NO. | SIZE | UNIT   | TOTAL  | BAR                               | NO. | SIZE | UNIT   | TOTAL  | BAR                               | NO. | SIZE | UNIT   | TOTAL  |                                   |    |     |       |        |
|                                   |     |      | LB/FT. |        |                                   |     |      | LB/FT. |        |                                   |     |      | LB/FT. |        |                                   |     |      | LB/FT. |        |                                   |     |      | LB/FT. |        |                                   |     |      | LB/FT. |        |                                   |    |     |       |        |
| FILE BENT                         | 33  | 5/8  | 0.8"   | 357.6" | FILE BENT                         | 33  | 5/8  | 0.8"   | 357.6" | FILE BENT                         | 33  | 5/8  | 0.8"   | 357.6" | FILE BENT                         | 33  | 5/8  | 0.8"   | 357.6" | FILE BENT                         | 33  | 5/8  | 0.8"   | 357.6" | FILE BENT                         | 33  | 5/8  | 0.8"   | 357.6" | FILE BENT                         | 33 | 5/8 | 0.8"  | 357.6" |
| FILE BENT                         | 38  |      | 0.2"   | 348.4" | FILE BENT                         | 38  |      | 0.2"   | 348.4" | FILE BENT                         | 38  |      | 0.2"   | 348.4" | FILE BENT                         | 38  |      | 0.2"   | 348.4" | FILE BENT                         | 38  |      | 0.2"   | 348.4" | FILE BENT                         | 38  |      | 0.2"   | 348.4" | FILE BENT                         | 38 |     | 0.2"  | 348.4" |
| V                                 | 24  |      | 5.1"   | 142.0" | V                                 | 24  |      | 6.0"   | 140.0" | V                                 | 24  |      | 6.1"   | 140.0" | V                                 | 24  |      | 6.1"   | 140.0" | V                                 | 24  |      | 6.1"   | 140.0" | V                                 | 24  |      | 6.1"   | 140.0" | V                                 | 24 |     | 6.1"  | 140.0" |
| TOTAL 6 FILE BENTS 350.6" = 52.7" |     |      |        |        | TOTAL 6 FILE BENTS 350.6" = 52.7" |     |      |        |        | TOTAL 6 FILE BENTS 350.6" = 52.7" |     |      |        |        | TOTAL 6 FILE BENTS 350.6" = 52.7" |     |      |        |        | TOTAL 6 FILE BENTS 350.6" = 52.7" |     |      |        |        | TOTAL 6 FILE BENTS 350.6" = 52.7" |     |      |        |        | TOTAL 6 FILE BENTS 350.6" = 52.7" |    |     |       |        |
| 7 FILE BENT 350.6" = 51.8"        |     |      |        |        | 7 FILE BENT 350.6" = 51.8"        |     |      |        |        | 7 FILE BENT 350.6" = 51.8"        |     |      |        |        | 7 FILE BENT 350.6" = 51.8"        |     |      |        |        | 7 FILE BENT 350.6" = 51.8"        |     |      |        |        | 7 FILE BENT 350.6" = 51.8"        |     |      |        |        | 7 FILE BENT 350.6" = 51.8"        |    |     |       |        |
| 8 FILE BENT 350.6" = 51.8"        |     |      |        |        | 8 FILE BENT 350.6" = 51.8"        |     |      |        |        | 8 FILE BENT 350.6" = 51.8"        |     |      |        |        | 8 FILE BENT 350.6" = 51.8"        |     |      |        |        | 8 FILE BENT 350.6" = 51.8"        |     |      |        |        | 8 FILE BENT 350.6" = 51.8"        |     |      |        |        | 8 FILE BENT 350.6" = 51.8"        |    |     |       |        |
| 9 FILE BENT 350.6" = 51.8"        |     |      |        |        | 9 FILE BENT 350.6" = 51.8"        |     |      |        |        | 9 FILE BENT 350.6" = 51.8"        |     |      |        |        | 9 FILE BENT 350.6" = 51.8"        |     |      |        |        | 9 FILE BENT 350.6" = 51.8"        |     |      |        |        | 9 FILE BENT 350.6" = 51.8"        |     |      |        |        | 9 FILE BENT 350.6" = 51.8"        |    |     |       |        |
| 10 FILE BENT 350.6" = 51.8"       |     |      |        |        | 10 FILE BENT 350.6" = 51.8"       |     |      |        |        | 10 FILE BENT 350.6" = 51.8"       |     |      |        |        | 10 FILE BENT 350.6" = 51.8"       |     |      |        |        | 10 FILE BENT 350.6" = 51.8"       |     |      |        |        | 10 FILE BENT 350.6" = 51.8"       |     |      |        |        | 10 FILE BENT 350.6" = 51.8"       |    |     |       |        |
| 11 FILE BENT 350.6" = 51.8"       |     |      |        |        | 11 FILE BENT 350.6" = 51.8"       |     |      |        |        | 11 FILE BENT 350.6" = 51.8"       |     |      |        |        | 11 FILE BENT 350.6" = 51.8"       |     |      |        |        | 11 FILE BENT 350.6" = 51.8"       |     |      |        |        | 11 FILE BENT 350.6" = 51.8"       |     |      |        |        | 11 FILE BENT 350.6" = 51.8"       |    |     |       |        |
| 12 FILE BENT 350.6" = 51.8"       |     |      |        |        | 12 FILE BENT 350.6" = 51.8"       |     |      |        |        | 12 FILE BENT 350.6" = 51.8"       |     |      |        |        | 12 FILE BENT 350.6" = 51.8"       |     |      |        |        | 12 FILE BENT 350.6" = 51.8"       |     |      |        |        | 12 FILE BENT 350.6" = 51.8"       |     |      |        |        | 12 FILE BENT 350.6" = 51.8"       |    |     |       |        |
| 13 FILE BENT 350.6" = 51.8"       |     |      |        |        | 13 FILE BENT 350.6" = 51.8"       |     |      |        |        | 13 FILE BENT 350.6" = 51.8"       |     |      |        |        | 13 FILE BENT 350.6" = 51.8"       |     |      |        |        | 13 FILE BENT 350.6" = 51.8"       |     |      |        |        | 13 FILE BENT 350.6" = 51.8"       |     |      |        |        | 13 FILE BENT 350.6" = 51.8"       |    |     |       |        |
| 14 FILE BENT 350.6" = 51.8"       |     |      |        |        | 14 FILE BENT 350.6" = 51.8"       |     |      |        |        | 14 FILE BENT 350.6" = 51.8"       |     |      |        |        | 14 FILE BENT 350.6" = 51.8"       |     |      |        |        | 14 FILE BENT 350.6" = 51.8"       |     |      |        |        | 14 FILE BENT 350.6" = 51.8"       |     |      |        |        | 14 FILE BENT 350.6" = 51.8"       |    |     |       |        |
| TOTAL 14 FILE BENTS 350.6" = 177" |     |      |        |        | TOTAL 14 FILE BENTS 350.6" = 177" |     |      |        |        | TOTAL 14 FILE BENTS 350.6" = 177" |     |      |        |        | TOTAL 14 FILE BENTS 350.6" = 177" |     |      |        |        | TOTAL 14 FILE BENTS 350.6" = 177" |     |      |        |        | TOTAL 14 FILE BENTS 350.6" = 177" |     |      |        |        | TOTAL 14 FILE BENTS 350.6" = 177" |    |     |       |        |
| FILE BENT                         | 8   | 1/2  | 46.1"  | 368.8" | FILE BENT                         | 8   | 1/2  | 46.1"  | 368.8" | FILE BENT                         | 8   | 1/2  | 46.1"  | 368.8" | FILE BENT                         | 8   | 1/2  | 46.1"  | 368.8" | FILE BENT                         | 8   | 1/2  | 46.1"  | 368.8" | FILE BENT                         | 8   | 1/2  | 46.1"  | 368.8" | FILE BENT                         | 8  | 1/2 | 46.1" | 368.8" |
| FILE BENT                         | 8   | 1/2  | 46.1"  | 368.8" | FILE BENT                         | 8   | 1/2  | 46.1"  | 368.8" | FILE BENT                         | 8   | 1/2  | 46.1"  | 368.8" | FILE BENT                         | 8   | 1/2  | 46.1"  | 368.8" | FILE BENT                         | 8   | 1/2  | 46.1"  | 368.8" | FILE BENT                         | 8   | 1/2  | 46.1"  | 368.8" | FILE BENT                         | 8  | 1/2 | 46.1" | 368.8" |
| TOTAL 14 FILE BENTS 368.8" = 158" |     |      |        |        | TOTAL 14 FILE BENTS 368.8" = 158" |     |      |        |        | TOTAL 14 FILE BENTS 368.8" = 158" |     |      |        |        | TOTAL 14 FILE BENTS 368.8" = 158" |     |      |        |        | TOTAL 14 FILE BENTS 368.8" = 158" |     |      |        |        | TOTAL 14 FILE BENTS 368.8" = 158" |     |      |        |        | TOTAL 14 FILE BENTS 368.8" = 158" |    |     |       |        |
| 7 FILE BENT 368.8" = 128.3"       |     |      |        |        | 7 FILE BENT 368.8" = 128.3"       |     |      |        |        | 7 FILE BENT 368.8" = 128.3"       |     |      |        |        | 7 FILE BENT 368.8" = 128.3"       |     |      |        |        | 7 FILE BENT 368.8" = 128.3"       |     |      |        |        | 7 FILE BENT 368.8" = 128.3"       |     |      |        |        | 7 FILE BENT 368.8" = 128.3"       |    |     |       |        |
| 8 FILE BENT 368.8" = 128.3"       |     |      |        |        | 8 FILE BENT 368.8" = 128.3"       |     |      |        |        | 8 FILE BENT 368.8" = 128.3"       |     |      |        |        | 8 FILE BENT 368.8" = 128.3"       |     |      |        |        | 8 FILE BENT 368.8" = 128.3"       |     |      |        |        | 8 FILE BENT 368.8" = 128.3"       |     |      |        |        | 8 FILE BENT 368.8" = 128.3"       |    |     |       |        |
| 9 FILE BENT 368.8" = 128.3"       |     |      |        |        | 9 FILE BENT 368.8" = 128.3"       |     |      |        |        | 9 FILE BENT 368.8" = 128.3"       |     |      |        |        | 9 FILE BENT 368.8" = 128.3"       |     |      |        |        | 9 FILE BENT 368.8" = 128.3"       |     |      |        |        | 9 FILE BENT 368.8" = 128.3"       |     |      |        |        | 9 FILE BENT 368.8" = 128.3"       |    |     |       |        |
| 10 FILE BENT 368.8" = 128.3"      |     |      |        |        | 10 FILE BENT 368.8" = 128.3"      |     |      |        |        | 10 FILE BENT 368.8" = 128.3"      |     |      |        |        | 10 FILE BENT 368.8" = 128.3"      |     |      |        |        | 10 FILE BENT 368.8" = 128.3"      |     |      |        |        | 10 FILE BENT 368.8" = 128.3"      |     |      |        |        | 10 FILE BENT 368.8" = 128.3"      |    |     |       |        |
| 11 FILE BENT 368.8" = 128.3"      |     |      |        |        | 11 FILE BENT 368.8" = 128.3"      |     |      |        |        | 11 FILE BENT 368.8" = 128.3"      |     |      |        |        | 11 FILE BENT 368.8" = 128.3"      |     |      |        |        | 11 FILE BENT 368.8" = 128.3"      |     |      |        |        | 11 FILE BENT 368.8" = 128.3"      |     |      |        |        | 11 FILE BENT 368.8" = 128.3"      |    |     |       |        |
| 12 FILE BENT 368.8" = 128.3"      |     |      |        |        | 12 FILE BENT 368.8" = 128.3"      |     |      |        |        | 12 FILE BENT 368.8" = 128.3"      |     |      |        |        | 12 FILE BENT 368.8" = 128.3"      |     |      |        |        | 12 FILE BENT 368.8" = 128.3"      |     |      |        |        | 12 FILE BENT 368.8" = 128.3"      |     |      |        |        | 12 FILE BENT 368.8" = 128.3"      |    |     |       |        |
| 13 FILE BENT 368.8" = 128.3"      |     |      |        |        | 13 FILE BENT 368.8" = 128.3"      |     |      |        |        | 13 FILE BENT 368.8" = 128.3"      |     |      |        |        | 13 FILE BENT 368.8" = 128.3"      |     |      |        |        | 13 FILE BENT 368.8" = 128.3"      |     |      |        |        | 13 FILE BENT 368.8" = 128.3"      |     |      |        |        | 13 FILE BENT 368.8" = 128.3"      |    |     |       |        |
| 14 FILE BENT 368.8" = 128.3"      |     |      |        |        | 14 FILE BENT 368.8" = 128.3"      |     |      |        |        | 14 FILE BENT 368.8" = 128.3"      |     |      |        |        | 14 FILE BENT 368.8" = 128.3"      |     |      |        |        | 14 FILE BENT 368.8" = 128.3"      |     |      |        |        | 14 FILE BENT 368.8" = 128.3"      |     |      |        |        | 14 FILE BENT 368.8" = 128.3"      |    |     |       |        |
| TOTAL 14 FILE BENTS 368.8" = 158" |     |      |        |        | TOTAL 14 FILE BENTS 368.8" = 158" |     |      |        |        | TOTAL 14 FILE BENTS 368.8" = 158" |     |      |        |        | TOTAL 14 FILE BENTS 368.8" = 158" |     |      |        |        | TOTAL 14 FILE BENTS 368.8" = 158" |     |      |        |        | TOTAL 14 FILE BENTS 368.8" = 158" |     |      |        |        | TOTAL 14 FILE BENTS 368.8" = 158" |    |     |       |        |
| 7 FILE BENT 368.8" = 128.3"       |     |      |        |        | 7 FILE BENT 368.8" = 128.3"       |     |      |        |        | 7 FILE BENT 368.8" = 128.3"       |     |      |        |        | 7 FILE BENT 368.8" = 128.3"       |     |      |        |        | 7 FILE BENT 368.8" = 128.3"       |     |      |        |        | 7 FILE BENT 368.8" = 128.3"       |     |      |        |        | 7 FILE BENT 368.8" = 128.3"       |    |     |       |        |
| 8 FILE BENT 368.8" = 128.3"       |     |      |        |        | 8 FILE BENT 368.8" = 128.3"       |     |      |        |        | 8 FILE BENT 368.8" = 128.3"       |     |      |        |        | 8 FILE BENT 368.8" = 128.3"       |     |      |        |        | 8 FILE BENT 368.8" = 128.3"       |     |      |        |        | 8 FILE BENT 368.8" = 128.3"       |     |      |        |        | 8 FILE BENT 368.8" = 128.3"       |    |     |       |        |
| 9 FILE BENT 368.8" = 128.3"       |     |      |        |        |                                   |     |      |        |        |                                   |     |      |        |        |                                   |     |      |        |        |                                   |     |      |        |        |                                   |     |      |        |        |                                   |    |     |       |        |



| DESIGN LOAD NUMBER AND SIZE OF PILES |                              |                                                             |  |                              |                                                             |
|--------------------------------------|------------------------------|-------------------------------------------------------------|--|------------------------------|-------------------------------------------------------------|
| SPAN                                 |                              | END BENT                                                    |  | INTERMEDIATE BENT            |                                                             |
| STD.<br>C.G. TO                      | TOTAL DESIGN<br>LOAD IN TONS | MIN. SIZE & NO. OF PILES<br>AT EN. PILE LOAD IN TONS        |  | TOTAL DESIGN<br>LOAD IN TONS | MIN. SIZE & NO. OF PILES<br>AT EN. PILE LOAD IN TONS        |
| 30'                                  | 172.3                        | 14"-6 @ 23.4 TONS<br>16"-6 @ 29.4 TONS<br>18"-6 @ 29.4 TONS |  | 170.0                        | 14"-6 @ 28.3 TONS<br>16"-5 @ 34.0 TONS<br>18"-5 @ 34.0 TONS |
| 32'                                  | 180.0                        | 14"-6 @ 30.0 TONS<br>16"-6 @ 30.0 TONS<br>18"-6 @ 30.0 TONS |  | 179.1                        | 14"-6 @ 23.9 TONS<br>16"-6 @ 29.9 TONS<br>18"-5 @ 35.8 TONS |
| 34'                                  | 185.0                        | 14"-7 @ 26.4 TONS<br>16"-6 @ 30.8 TONS<br>18"-6 @ 30.8 TONS |  | 188.1                        | 14"-6 @ 26.9 TONS<br>16"-5 @ 37.6 TONS<br>18"-6 @ 27.8 TONS |
| 36'                                  | 193.4                        | 14"-7 @ 27.1 TONS<br>16"-7 @ 31.6 TONS<br>18"-6 @ 31.6 TONS |  | 195.0                        | 14"-6 @ 32.5 TONS<br>16"-5 @ 39.0 TONS                      |
| 38'                                  | 193.3                        | 14"-7 @ 27.7 TONS<br>16"-6 @ 32.3 TONS<br>18"-6 @ 32.3 TONS |  | 204.0                        | 14"-7 @ 29.1 TONS<br>16"-6 @ 34.0 TONS<br>18"-6 @ 34.0 TONS |
| 40'                                  | 193.4                        | 14"-7 @ 28.5 TONS<br>16"-6 @ 33.2 TONS<br>18"-6 @ 33.2 TONS |  | 215.5                        | 14"-7 @ 30.7 TONS<br>18"-6 @ 35.9 TONS                      |

Max. Pile Loads Unless Otherwise Instructed By Bridge Design Section.

14" Square R.C. Piles @ 30 Tons  
16" Square R.C. Piles @ 34 Tons  
18" Square R.C. Piles @ 35 Tons

| INTERMEDIATE BENTS     |      |     |             |              |               |
|------------------------|------|-----|-------------|--------------|---------------|
| BAR                    | SIZE | NO. | JUNT LENGTH | TOTAL LENGTH | LOCATION      |
| 5 PILE BENT            |      |     |             |              |               |
| S                      | 5"   | 24  | 10'-0"      | 240'-0"      | 100PS IN CAP  |
| TOTAL 5/4 BARS 240'-0" |      |     |             |              | 250 LBS.      |
| A                      | 1"   | 8   | 31'-1"      | 248'-8"      | CAP           |
| TOTAL 1/4 BARS 248'-8" |      |     |             |              | 845 LBS.      |
| CLASS A' CONCRETE      |      |     |             |              | 743 CU. YDS.  |
| REIN. STEEL            |      |     |             |              | 1095 LBS.     |
| 6 PILE BENT            |      |     |             |              |               |
| S                      | 5"   | 33  | 10'-0"      | 330'-0"      | 100PS IN CAP  |
| TOTAL 5/4 BARS 330'-0" |      |     |             |              | 407 LBS.      |
| A                      | 1"   | 8   | 31'-1"      | 248'-8"      | CAP           |
| TOTAL 1/4 BARS 248'-8" |      |     |             |              | 845 LBS.      |
| CLASS A' CONCRETE      |      |     |             |              | 7.39 CU. YDS. |
| REIN. STEEL            |      |     |             |              | 1252 LBS.     |
| 7 PILE BENT            |      |     |             |              |               |
| S                      | 5"   | 48  | 10'-0"      | 280'-0"      | 100PS IN CAP  |
| TOTAL 5/4 BARS 280'-0" |      |     |             |              | 892 LBS.      |
| A                      | 1"   | 8   | 31'-1"      | 248'-8"      | CAP           |
| TOTAL 1/4 BARS 248'-8" |      |     |             |              | 845 LBS.      |
| CLASS A' CONCRETE      |      |     |             |              | 7.35 CU. YDS. |
| REIN. STEEL            |      |     |             |              | 1137 LBS.     |

GENERAL NOTES:  
CONT. SPECS. LATEST APPROVED LA HWY. DEPT. STD. SPECS.  
DESIGN SPECS. - LOUISIANA HIGHWAY COMMISSION, 1980.  
ALL DIMENSIONS TO BE REINFORCING ARE TO BAR CENTERS.  
ALL EXPOSED SURFACES TO HAVE A RUBBED FINISH.  
QUANTITIES COMPUTED ASSUMING USE OF 16" PILING.  
COST OF EXPANSION MATERIAL AND TAR PAPER TO BE  
INCLUDED IN PRICE BID FOR OTHER ITEMS.

|                                                        |             |    |                                                  |                         |                         |
|--------------------------------------------------------|-------------|----|--------------------------------------------------|-------------------------|-------------------------|
| 7-8-49 Note covering Max. Aft. Loading <i>M.G.H.G.</i> |             |    | STATE OF LOUISIANA                               |                         |                         |
| 6-23-48 Reference to pile left on field <i>G.H.</i>    |             |    | DEPARTMENT OF HIGHWAYS                           |                         |                         |
| Jan. 46 Gen. Notes & Std. No.                          |             |    | DESIGNED <i>Huey</i>                             | DETAILED <i>Huey</i>    | TRACED <i>Huey</i>      |
| DATE                                                   | DESCRIPTION | BY | CHECKED <i>M.G.H.G.</i>                          | CHECKED <i>M.G.H.G.</i> | CHECKED <i>M.G.H.G.</i> |
| REVISIONS                                              |             |    | IN CHARGE OF <i>LaPine</i> HEAD BRIDGE DRAFTSMAN |                         |                         |

STANDARD PLAN  
REINFORCED CONCRETE PILE BENTS  
FOR R.C.D.G. SPANS  
30'± CLEAR ROADWAY 1'± SIDEWALKS  
TO BE USED WITH STD. PLAN C.B. 4-20  
DATED FEB., 1944