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30-OCT-09                                 GEORGIA DEPARTMENT OF TRANSPORTATION                                 PROB. NO. 0001
15:00:43                     PRECONSTUCTION DIVISION - OFFICE OF BRIDGE & STRUCTURAL DESIGN
                  THE ANALYSIS AND DESIGN OF PIERS FOR BRIDGES - V 4.2.07 - AASHTO SPECS 1984 INTERIM
                                                 REVISED:  JUNE 30, 2008
                          60' CURB-CURB; 8 BEAMS; 120' SPAN; 50' TALL; BRIDGE 13A ; PIER 2

                                                            DESIGN DATA
 DESIGN NO. NO. NO. SKEW ANG  F'C   FC    N   FY     FS     EC    ES    CONC.   Z   *  *  * CAP REINFORCING STEEL  *  *  *   CAP
OPTIONS CAN COL LLC  D  M  S  PSI   PSI       PSI    PSI    KSI   KSI   STRAIN FACT MAIN STR MAX  MAX  MIN  MIN  TOP   MIN DEPTH BOT
                                                                                    SIZE SIZ TOP  BOT SIZE  NO.  CL.  S.SP INCR. CL.
D D D L  2   3  23   0-00-00 3500. 1400.  8. 60000. 24000. 3409. 29000. 0.0030 170.  11   5  13   13   11    2  2.00  4.00 3.00 2.00

COLUMN REINFORCING STEEL    R   KL  OC   OF   CM  BD1  BD2 IMPACT SOIL WT ALL.S.P.  MIN   MAX  EDGE  PILE  REBAR ALL.PILE ALL.PILE I
MIN.P MAX.P CL.SP. CLEAR MODE COEF                           %      KCF      KSF   PL SP PL SP DIST  DEPTH CLEAR CAPACITY  UPLIFT  P
 1.00  8.00  2.50  3.750   2  2.00 0.70 0.90 0.00 1.00 0.75 18.87  0.120   10.000  3.00  9.00  1.250 1.000 3.000 235.000    -9.999

                                                         CAP DATA

CN  C     L       A      DE      BC      BE      DH      LH      XB1     XB2     XB3     XB4     XB5     XB6     XB7     XB8

11  L  12.000   2.500   4.000   5.000   5.000   2.000   9.500   8.377   5.877

12  C  19.630   2.500   6.000   5.000           0.000   0.000   2.500   5.127   8.002   1.501

13  3 SAME AS CAP SECTION 2

14  4 SAME AS CANTILEVER  1

                                                         COLUMN DATA

CN P I T S   HT     A      DT     BT     DB     BB     DL     FLEX  ND NB SZ ND NB SZ ND NB SZ ND NB SZ  SLOPE    EP     AP

21 1 C T   50.000  0.000  5.000  5.000  5.000  5.000  4.000  0.000    5  5 11  5  5 11 13 13 11 13 13 11  0.000  0.000  0.000

22 0 2 SAME AS COLUMN 1

23 1 3 SAME AS COLUMN 1

                                                FOOTING DATA

CN S/P   B       D       T      DEL.B   DEL.D   DEL.T  R.B/D  R.D/B   S.HT.  NP  SYM.   BP      DP      SET.

31  S   7.000   7.000   3.000   0.500   0.500   0.250  1.000  1.000   2.500   4   3    0.000   0.000   0.000

32  S   7.000   7.000   3.000   0.500   0.500   0.250  1.000  1.000   2.500   4   3    0.000   0.000   0.000

33  P   7.000   7.000   3.000   0.500   0.500   0.250  1.000  1.000   2.500   4   3    0.000   0.000   0.000
                                                     GROUP II WIND
SUPERSTRUCTURE AREA*STD.        WIND ON SUPERSTRUCTURE INTENSITIES       * WIND FORCE ARM  * WIND ON PIER
  TRANS.     LONG.  WIND FT1 FL1   FT2 FL2   FT3 FL3   FT4 FL4   FT5 FL5     APT     APL     PT       PL

   1170.     2340.   1    50   0    44   6    41  12    33  16    17  19    7.375   7.375    5.396  40.082

                                                          GROUP III WIND
STD. *   WIND ON SUPERSTRUCTURE INTENSITIES    *  STD. *      WIND ON LIVE LOAD INTENSITIES      *  LENGTHS OF LL * WIND ON LL ARMS
WIND FT1 FL1  FT2 FL2  FT3 FL3  FT4 FL4  FT5 FL5  WIND FT1 FL1  FT2 FL2  FT3 FL3  FT4 FL4  FT5 FL5   TRANS.  LONGI.   APT     APL

  1   50   0   44   6   41  12   33  16   17  19   1   100   0   88  12   82  24   66  32   34  38   120.0   240.0  15.583  15.583

                          MISCELLANEOUS FORCES
CENTRI.  TRACTION FORCE AND ARMS   EXPANSION   SHRINKAGE     STREAM FLOW
  FT       FL      APT     APL    COEFFICIENT COEFFICIENT    PT       PL

 0.000    8.580  15.583  15.583    0.00018000  0.00044000   0.000   0.000

                               DEAD LOAD SUPERSTRUCTURE AND LIVE LOAD CASES

I.D.  NL    P1       P2       P3       P4       P5       P6       P7       P8       P9      P10      P11      P12

D.L.   0  236.315    0.000  275.029    0.000  275.029  275.029    0.000    0.000  275.029  275.029    0.000  275.029
            0.000  236.315

LL 1   1   77.569    0.000   46.572    0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000
            0.000    0.000

LL 2   2   77.569    0.000   93.145    0.000   77.569    0.000    0.000    0.000    0.000    0.000    0.000    0.000
            0.000    0.000

LL 3   3   77.569    0.000   93.145    0.000  108.628   77.600    0.000    0.000   15.482    0.000    0.000    0.000
            0.000    0.000

LL 4   4   77.569    0.000   93.145    0.000  108.628   93.160    0.000    0.000   93.083   30.981    0.000    0.000
            0.000    0.000

LL 5   5   77.569    0.000   93.145    0.000  108.628   93.160    0.000    0.000   93.145  108.581    0.000   46.479
            0.000    0.000

LL 6   1    0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000   46.572
            0.000   77.569

LL 7   2    0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000   77.569    0.000   93.145
            0.000   77.569

LL 8   3    0.000    0.000    0.000    0.000    0.000   15.482    0.000    0.000   77.600  108.628    0.000   93.145
            0.000   77.569

LL 9   4    0.000    0.000    0.000    0.000   30.981   93.083    0.000    0.000   93.160  108.628    0.000   93.145
            0.000   77.569

LL10   5    0.000    0.000   46.479    0.000  108.581   93.145    0.000    0.000   93.160  108.628    0.000   93.145
            0.000   77.569

LL11   1    0.000    0.000    0.000    0.000   23.270   77.600    0.000    0.000   23.270    0.000    0.000    0.000
            0.000    0.000
                                DEAD LOAD SUPERSTRUCTURE AND LIVE LOAD CASES
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I.D.  NL     P1       P2       P3       P4       P5       P6       P7       P8       P9      P10      P11      P12

LL12   2    0.000    0.000   38.769    0.000  100.871   85.372    0.000    0.000   23.270    0.000    0.000    0.000
            0.000    0.000

LL13   3    0.000    0.000   38.769    0.000  100.871   93.145    0.000    0.000  100.871   38.769    0.000    0.000
            0.000    0.000

LL14   4   61.993    0.000  100.917    0.000  100.871   93.145    0.000    0.000  100.871   38.769    0.000    0.000
            0.000    0.000

LL15   5   61.993    0.000  100.917    0.000  100.871   93.145    0.000    0.000  100.871  100.917    0.000   61.993
            0.000    0.000

LL16   2    0.000    0.000    0.000    0.000   31.019   93.122    0.000    0.000   93.122   31.019    0.000    0.000
            0.000    0.000

LL17   3    0.000    0.000   46.518    0.000  108.620   93.145    0.000    0.000   93.122   31.019    0.000    0.000
            0.000    0.000

LL18   4    0.000    0.000   46.518    0.000  108.620   93.145    0.000    0.000   93.145  108.620    0.000   46.518
            0.000    0.000

LL19   5   77.491    0.000   93.168    0.000  108.620   93.145    0.000    0.000   93.145  108.620    0.000   46.518
            0.000    0.000

LL20   2   77.569    0.000   46.572    0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000   46.572
            0.000   77.569

LL21   3   77.569    0.000   93.145    0.000   77.569    0.000    0.000    0.000    0.000    0.000    0.000   46.572
            0.000   77.569

LL22   4   77.569    0.000   93.145    0.000   77.569    0.000    0.000    0.000    0.000   77.569    0.000   93.145
            0.000   77.569

LL23   5   77.569    0.000   93.145    0.000  108.628   77.600    0.000    0.000   15.482   77.569    0.000   93.145
            0.000   77.569
                                             COLUMN MOMENTS(KIP-FEET), SHEARS(KIPS), REACTIONS(KIPS)

                                                          TRANSVERSE                               *            LONGITUDINAL

       LOAD          COL     PC        MT         V         MB        RF        ML        MR        MT         V        MB        MF

UNIT F.AT CL.CAP   1     0.615     7.579     0.319     8.386     0.615     0.000    -7.579     1.333     0.333    16.667    16.667
                   2     0.000     8.982     0.361     9.088     0.000    -4.491    -4.491     1.333     0.333    16.667    16.667
                   3    -0.615     7.579     0.319     8.386    -0.615    -7.579     0.000     1.333     0.333    16.667    16.667

EXPANSION OF CAP   1    13.500   176.676     7.468   196.746    13.500     0.000  -176.676     0.000     0.000     0.000     0.000
                   2   -27.001     0.000     0.000     0.000   -27.001   -88.338    88.338     0.000     0.000     0.000     0.000
                   3    13.500  -176.676    -7.468  -196.746    13.500   176.676     0.000     0.000     0.000     0.000     0.000

SHRINKAGE OF CAP   1   -33.001  -431.874   -18.256  -480.935   -33.001     0.000   431.874     0.000     0.000     0.000     0.000
                   2    66.002     0.000     0.000     0.000    66.002   215.937  -215.937     0.000     0.000     0.000     0.000
                   3   -33.001   431.874    18.256   480.935   -33.001  -431.874     0.000     0.000     0.000     0.000     0.000

DEAD LOAD TOTAL    1   885.309  -209.819    -6.295  -104.910  1057.809  2240.673 -2030.854     0.000     0.000     0.000     0.000
                      1057.809
                   2   622.605     0.000     0.000     0.000   795.105   878.640  -878.640     0.000     0.000     0.000     0.000
                       795.105
                   3   885.309   209.819     6.295   104.910  1057.809  2030.854 -2240.673     0.000     0.000     0.000     0.000
                      1057.809

TRAC. FORCE 1 LN   1     0.000     0.000     0.000     0.000     0.000     0.000     0.000   -56.007    -2.860  -187.567  -187.567
                   2     0.000     0.000     0.000     0.000     0.000     0.000     0.000   -56.007    -2.860  -187.567  -187.567
                   3     0.000     0.000     0.000     0.000     0.000     0.000     0.000   -56.007    -2.860  -187.567  -187.567

WIND ON SUBSTR.    1     3.318    40.894     1.723    45.253     3.318     0.000   -40.894   -53.443   -13.361  -668.033  -668.033
                   2     0.000    48.465     1.950    49.039     0.000   -24.233   -24.233   -53.443   -13.361  -668.033  -668.033
                   3    -3.318    40.894     1.723    45.253    -3.318   -40.894     0.000   -53.443   -13.361  -668.033  -668.033

GROUP 2 WIND 1 1   1    50.276   484.246    20.402   535.861    50.276     0.000  -484.246   -53.443   -13.361  -668.033  -668.033
                   2     0.000   573.898    23.092   580.687     0.000  -286.949  -286.949   -53.443   -13.361  -668.033  -668.033
                   3   -50.276   484.246    20.402   535.861   -50.276  -484.246     0.000   -53.443   -13.361  -668.033  -668.033

GROUP 2 WIND 1 2   1    50.276   484.246    20.402   535.861    50.276     0.000  -484.246    53.443    13.361   668.033   668.033
                   2     0.000   573.898    23.092   580.687     0.000  -286.949  -286.949    53.443    13.361   668.033   668.033
                   3   -50.276   484.246    20.402   535.861   -50.276  -484.246     0.000    53.443    13.361   668.033   668.033

GROUP 2 WIND 2 1   1    44.641   431.044    18.161   476.988    44.641     0.000  -431.044  -106.678   -18.041  -936.548  -936.548
                   2     0.000   510.846    20.555   516.889     0.000  -255.423  -255.423  -106.678   -18.041  -936.548  -936.548
                   3   -44.641   431.044    18.161   476.988   -44.641  -431.044     0.000  -106.678   -18.041  -936.548  -936.548

GROUP 2 WIND 2 2   1    44.641   431.044    18.161   476.988    44.641     0.000  -431.044   106.678    18.041   936.548   936.548
                   2     0.000   510.846    20.555   516.889     0.000  -255.423  -255.423   106.678    18.041   936.548   936.548
                   3   -44.641   431.044    18.161   476.988   -44.641  -431.044     0.000   106.678    18.041   936.548   936.548

GROUP 2 WIND 3 1   1    41.823   404.443    17.040   447.552    41.823     0.000  -404.443  -159.913   -22.721 -1205.063 -1205.063
                   2     0.000   479.320    19.286   484.991     0.000  -239.660  -239.660  -159.913   -22.721 -1205.063 -1205.063
                   3   -41.823   404.443    17.040   447.552   -41.823  -404.443     0.000  -159.913   -22.721 -1205.063 -1205.063

GROUP 2 WIND 3 2   1    41.823   404.443    17.040   447.552    41.823     0.000  -404.443   159.913    22.721  1205.063  1205.063
                   2     0.000   479.320    19.286   484.991     0.000  -239.660  -239.660   159.913    22.721  1205.063  1205.063
                   3   -41.823   404.443    17.040   447.552   -41.823  -404.443     0.000   159.913    22.721  1205.063  1205.063
                                             COLUMN MOMENTS(KIP-FEET), SHEARS(KIPS), REACTIONS(KIPS)

                                                          TRANSVERSE                               *            LONGITUDINAL

       LOAD          COL     PC        MT         V         MB        RF        ML        MR        MT         V        MB        MF

GROUP 2 WIND 4 1   1    34.310   333.507    14.051   369.055    34.310     0.000  -333.507  -195.403   -25.841 -1384.073 -1384.073
                   2     0.000   395.251    15.904   399.927     0.000  -197.625  -197.625  -195.403   -25.841 -1384.073 -1384.073
                   3   -34.310   333.507    14.051   369.055   -34.310  -333.507     0.000  -195.403   -25.841 -1384.073 -1384.073

GROUP 2 WIND 4 2   1    34.310   333.507    14.051   369.055    34.310     0.000  -333.507   195.403    25.841  1384.073  1384.073
                   2     0.000   395.251    15.904   399.927     0.000  -197.625  -197.625   195.403    25.841  1384.073  1384.073
                   3   -34.310   333.507    14.051   369.055   -34.310  -333.507     0.000   195.403    25.841  1384.073  1384.073

GROUP 2 WIND 5 1   1    19.283   191.634     8.074   212.060    19.283     0.000  -191.634  -222.020   -28.181 -1518.331 -1518.331
                   2     0.000   227.112     9.138   229.799     0.000  -113.556  -113.556  -222.020   -28.181 -1518.331 -1518.331
                   3   -19.283   191.634     8.074   212.060   -19.283  -191.634     0.000  -222.020   -28.181 -1518.331 -1518.331

GROUP 2 WIND 5 2   1    19.283   191.634     8.074   212.060    19.283     0.000  -191.634   222.020    28.181  1518.331  1518.331
                   2     0.000   227.112     9.138   229.799     0.000  -113.556  -113.556   222.020    28.181  1518.331  1518.331
                   3   -19.283   191.634     8.074   212.060   -19.283  -191.634     0.000   222.020    28.181  1518.331  1518.331

GROUP 3 WIND 1 1   1    27.224   236.218     9.952   261.396    27.224     0.000  -236.218   -16.033    -4.008  -200.410  -200.410
                   2     0.000   279.950    11.264   283.262     0.000  -139.975  -139.975   -16.033    -4.008  -200.410  -200.410
                   3   -27.224   236.218     9.952   261.396   -27.224  -236.218     0.000   -16.033    -4.008  -200.410  -200.410

GROUP 3 WIND 1 2   1    27.224   236.218     9.952   261.396    27.224     0.000  -236.218    16.033     4.008   200.410   200.410
                   2     0.000   279.950    11.264   283.262     0.000  -139.975  -139.975    16.033     4.008   200.410   200.410
                   3   -27.224   236.218     9.952   261.396   -27.224  -236.218     0.000    16.033     4.008   200.410   200.410

GROUP 3 WIND 2 1   1    24.077   209.344     8.820   231.658    24.077     0.000  -209.344   -50.803    -6.372  -343.924  -343.924
                   2     0.000   248.101     9.983   251.036     0.000  -124.050  -124.050   -50.803    -6.372  -343.924  -343.924
                   3   -24.077   209.344     8.820   231.658   -24.077  -209.344     0.000   -50.803    -6.372  -343.924  -343.924

GROUP 3 WIND 2 2   1    24.077   209.344     8.820   231.658    24.077     0.000  -209.344    50.803     6.372   343.924   343.924
                   2     0.000   248.101     9.983   251.036     0.000  -124.050  -124.050    50.803     6.372   343.924   343.924
                   3   -24.077   209.344     8.820   231.658   -24.077  -209.344     0.000    50.803     6.372   343.924   343.924

GROUP 3 WIND 3 1   1    22.503   195.907     8.254   216.788    22.503     0.000  -195.907   -85.573    -8.736  -487.438  -487.438
                   2     0.000   232.176     9.342   234.923     0.000  -116.088  -116.088   -85.573    -8.736  -487.438  -487.438
                   3   -22.503   195.907     8.254   216.788   -22.503  -195.907     0.000   -85.573    -8.736  -487.438  -487.438

GROUP 3 WIND 3 2   1    22.503   195.907     8.254   216.788    22.503     0.000  -195.907    85.573     8.736   487.438   487.438
                   2     0.000   232.176     9.342   234.923     0.000  -116.088  -116.088    85.573     8.736   487.438   487.438
                   3   -22.503   195.907     8.254   216.788   -22.503  -195.907     0.000    85.573     8.736   487.438   487.438

GROUP 3 WIND 4 1   1    18.306   160.075     6.744   177.137    18.306     0.000  -160.075  -108.753   -10.312  -583.115  -583.115
                   2     0.000   189.711     7.633   191.955     0.000   -94.855   -94.855  -108.753   -10.312  -583.115  -583.115
                   3   -18.306   160.075     6.744   177.137   -18.306  -160.075     0.000  -108.753   -10.312  -583.115  -583.115

GROUP 3 WIND 4 2   1    18.306   160.075     6.744   177.137    18.306     0.000  -160.075   108.753    10.312   583.115   583.115
                   2     0.000   189.711     7.633   191.955     0.000   -94.855   -94.855   108.753    10.312   583.115   583.115
                   3   -18.306   160.075     6.744   177.137   -18.306  -160.075     0.000   108.753    10.312   583.115   583.115

GROUP 3 WIND 5 1   1     9.913    88.411     3.725    97.835     9.913     0.000   -88.411  -126.138   -11.494  -654.872  -654.872
                   2     0.000   104.779     4.216   106.019     0.000   -52.390   -52.390  -126.138   -11.494  -654.872  -654.872
                   3    -9.913    88.411     3.725    97.835    -9.913   -88.411     0.000  -126.138   -11.494  -654.872  -654.872
                                        COLUMN MOMENTS(KIP-FEET), SHEARS(KIPS), REACTIONS(KIPS)

                                                    TRANSVERSE                             *            LONGITUDINAL

       LOAD        COL      PC        MT         V        MB        RF        ML        MR        MT         V        MB        MF

GROUP 3 WIND 5 2   1     9.913    88.411     3.725    97.835     9.913     0.000   -88.411   126.138    11.494   654.872   654.872
                   2     0.000   104.779     4.216   106.019     0.000   -52.390   -52.390   126.138    11.494   654.872   654.872
                   3    -9.913    88.411     3.725    97.835    -9.913   -88.411     0.000   126.138    11.494   654.872   654.872

LIVE LOAD LL 1     1   160.120  -107.808    -2.919   -38.157   160.120   649.796  -541.988     0.000     0.000     0.000     0.000
                   2   -40.461    63.820     2.230    47.657   -40.461  -164.284   100.464     0.000     0.000     0.000     0.000
                   3     4.481    12.493     0.690    21.994     4.481   -12.493     0.000     0.000     0.000     0.000     0.000

LIVE LOAD LL 2     1   249.541   -63.220    -1.680   -20.775   249.541   649.796  -586.575     0.000     0.000     0.000     0.000
                   2    -0.657    25.422     0.979    23.546    -0.657   -29.746     4.324     0.000     0.000     0.000     0.000
                   3    -0.601    16.129     0.701    18.899    -0.601   -16.129     0.000     0.000     0.000     0.000     0.000

LIVE LOAD LL 3     1   248.565   -25.176    -0.604    -5.034   248.565   584.816  -559.640     0.000     0.000     0.000     0.000
                   2    91.891   -11.342    -0.189     1.882    91.891   149.219  -137.877     0.000     0.000     0.000     0.000
                   3    -5.275    21.411     0.793    18.259    -5.275   -21.411     0.000     0.000     0.000     0.000     0.000

LIVE LOAD LL 4     1   203.205   -26.708    -0.639    -5.232   203.205   487.347  -460.638     0.000     0.000     0.000     0.000
                   2   153.670    19.017     0.733    17.630   153.670   242.511  -261.528     0.000     0.000     0.000     0.000
                   3    15.550    -8.552    -0.094     3.846    15.550     8.552     0.000     0.000     0.000     0.000     0.000

LIVE LOAD LL 5     1   199.388   -29.442    -0.647    -2.913   199.388   487.347  -457.904     0.000     0.000     0.000     0.000
                   2   183.578    47.844     1.671    35.730   183.578   314.701  -362.545     0.000     0.000     0.000     0.000
                   3    82.564   -42.018    -1.024    -9.201    82.564    42.018     0.000     0.000     0.000     0.000     0.000

LIVE LOAD LL 6     1     4.481   -12.493    -0.690   -21.994     4.481     0.000    12.493     0.000     0.000     0.000     0.000
                   2   -40.461   -63.820    -2.230   -47.657   -40.461  -100.464   164.284     0.000     0.000     0.000     0.000
                   3   160.120   107.808     2.919    38.157   160.120   541.988  -649.796     0.000     0.000     0.000     0.000

LIVE LOAD LL 7     1    -0.601   -16.129    -0.701   -18.899    -0.601     0.000    16.129     0.000     0.000     0.000     0.000
                   2    -0.657   -25.422    -0.979   -23.546    -0.657    -4.324    29.746     0.000     0.000     0.000     0.000
                   3   249.541    63.220     1.680    20.775   249.541   586.575  -649.796     0.000     0.000     0.000     0.000

LIVE LOAD LL 8     1    -5.275   -21.411    -0.793   -18.259    -5.275     0.000    21.411     0.000     0.000     0.000     0.000
                   2    91.891    11.342     0.189    -1.882    91.891   137.877  -149.219     0.000     0.000     0.000     0.000
                   3   248.565    25.176     0.604     5.034   248.565   559.640  -584.816     0.000     0.000     0.000     0.000

LIVE LOAD LL 9     1    15.550     8.552     0.094    -3.846    15.550     0.000    -8.552     0.000     0.000     0.000     0.000
                   2   153.670   -19.017    -0.733   -17.630   153.670   261.528  -242.511     0.000     0.000     0.000     0.000
                   3   203.205    26.708     0.639     5.232   203.205   460.638  -487.347     0.000     0.000     0.000     0.000

LIVE LOAD LL10     1    82.564    42.018     1.024     9.201    82.564     0.000   -42.018     0.000     0.000     0.000     0.000
                   2   183.578   -47.844    -1.671   -35.730   183.578   362.545  -314.701     0.000     0.000     0.000     0.000
                   3   199.388    29.442     0.647     2.913   199.388   457.904  -487.347     0.000     0.000     0.000     0.000

LIVE LOAD LL11     1    21.805    29.759     0.855    12.990    21.805     0.000   -29.759     0.000     0.000     0.000     0.000
                   2   106.026   -31.329    -0.978   -17.554   106.026   191.522  -160.193     0.000     0.000     0.000     0.000
                   3    -3.690     5.349     0.123     0.785    -3.690    -5.349     0.000     0.000     0.000     0.000     0.000

LIVE LOAD LL12     1   104.496    76.308     2.152    31.291   104.496     0.000   -76.308     0.000     0.000     0.000     0.000
                   2   153.095   -72.577    -2.315   -43.152   153.095   338.416  -265.839     0.000     0.000     0.000     0.000
                   3    -9.309     9.995     0.163    -1.866    -9.309    -9.995     0.000     0.000     0.000     0.000     0.000
                                        COLUMN MOMENTS(KIP-FEET), SHEARS(KIPS), REACTIONS(KIPS)

                                                    TRANSVERSE                             *            LONGITUDINAL
       LOAD        COL      PC        MT         V        MB        RF        ML        MR        MT         V        MB        MF

LIVE LOAD LL13     1    87.915    59.722     1.722    26.374    87.915     0.000   -59.722     0.000     0.000     0.000     0.000
                   2   227.358   -25.132    -0.824   -16.053   227.358   443.964  -418.832     0.000     0.000     0.000     0.000
                   3    19.909   -27.617    -0.898   -17.295    19.909    27.617     0.000     0.000     0.000     0.000     0.000

LIVE LOAD LL14     1   187.934   -14.852    -0.315    -0.892   187.934   389.487  -374.635     0.000     0.000     0.000     0.000
                   2   165.213    17.310     0.650    15.189   165.213   271.498  -288.809     0.000     0.000     0.000     0.000
                   3    19.277   -15.526    -0.335    -1.229    19.277    15.526     0.000     0.000     0.000     0.000     0.000

LIVE LOAD LL15     1   184.880   -17.036    -0.321     0.967   184.880   389.487  -372.450     0.000     0.000     0.000     0.000
                   2   189.131    40.384     1.401    29.677   189.131   329.268  -369.652     0.000     0.000     0.000     0.000
                   3    91.519   -42.318    -1.080   -11.674    91.519    42.318     0.000     0.000     0.000     0.000     0.000

LIVE LOAD LL16     1    21.366    27.570     0.827    13.785    21.366     0.000   -27.570     0.000     0.000     0.000     0.000
                   2   205.550     0.000     0.000     0.000   205.550   353.059  -353.059     0.000     0.000     0.000     0.000
                   3    21.366   -27.570    -0.827   -13.785    21.366    27.570     0.000     0.000     0.000     0.000     0.000

LIVE LOAD LL17     1    99.678    64.963     1.860    28.058    99.678     0.000   -64.963     0.000     0.000     0.000     0.000
                   2   220.852   -34.580    -1.126   -21.713   220.852   438.920  -404.340     0.000     0.000     0.000     0.000
                   3    14.651   -21.537    -0.735   -15.192    14.651    21.537     0.000     0.000     0.000     0.000     0.000

LIVE LOAD LL18     1    79.250    51.406     1.542    25.703    79.250     0.000   -51.406     0.000     0.000     0.000     0.000
                   2   213.925     0.000     0.000     0.000   213.925   437.922  -437.922     0.000     0.000     0.000     0.000
                   3    79.250   -51.406    -1.542   -25.703    79.250    51.406     0.000     0.000     0.000     0.000     0.000

LIVE LOAD LL19     1   199.313   -29.369    -0.645    -2.886   199.313   486.857  -457.488     0.000     0.000     0.000     0.000
                   2   183.610    47.817     1.670    35.707   183.610   314.833  -362.650     0.000     0.000     0.000     0.000
                   3    82.608   -42.046    -1.025    -9.224    82.608    42.046     0.000     0.000     0.000     0.000     0.000

LIVE LOAD LL20     1   164.602  -120.301    -3.609   -60.150   164.602   649.796  -529.495     0.000     0.000     0.000     0.000
                   2   -80.921     0.000     0.000     0.000   -80.921  -264.747   264.747     0.000     0.000     0.000     0.000
                   3   164.602   120.301     3.609    60.150   164.602   529.495  -649.796     0.000     0.000     0.000     0.000

LIVE LOAD LL21     1   228.621   -68.142    -2.133   -38.492   228.621   584.816  -516.674     0.000     0.000     0.000     0.000
                   2   -37.006   -34.558    -1.125   -21.700   -37.006  -117.189   151.747     0.000     0.000     0.000     0.000
                   3   143.567   111.543     3.258    51.350   143.567   473.273  -584.816     0.000     0.000     0.000     0.000

LIVE LOAD LL22     1   186.705   -59.512    -1.785   -29.756   186.705   487.347  -427.835     0.000     0.000     0.000     0.000
                   2    -0.986     0.000     0.000     0.000    -0.986   -25.552    25.552     0.000     0.000     0.000     0.000
                   3   186.705    59.512     1.785    29.756   186.705   427.835  -487.347     0.000     0.000     0.000     0.000

LIVE LOAD LL23     1   206.686   -33.076    -1.029   -18.370   206.686   487.347  -454.270     0.000     0.000     0.000     0.000
                   2    76.083   -28.518    -0.892   -16.091    76.083   121.107   -92.588     0.000     0.000     0.000     0.000
                   3   182.761    65.258     1.921    30.797   182.761   422.089  -487.347     0.000     0.000     0.000     0.000
                                                   CAP ANALYSIS AND DESIGN DATA

                                                     CAP MOMENTS AND SHEARS

                              MOMENTS(KIP-FEET)                                   **                   SHEARS(KIPS)

POINT   D.L.TOT.  G1 MAX.+  G1 MAX.-  G2 MAX.+  G2 MAX.-  G3 MAX.+  G3 MAX.-    DL T.LT  DL T.RT  G1 + LT  G1 + RT  G1 - LT  G1 - RT

P 1      -27.223   -27.223   -27.223   -27.223   -27.223   -27.223   -27.223    -15.477 -322.686  -15.477 -322.686  -15.477 -491.089

P 2    -2010.789 -2010.789 -3000.489 -2010.789 -2010.789 -2010.789 -2603.424   -353.522 -353.522 -353.522 -353.522 -521.924 -521.924

C 1L   -2912.875 -2912.875 -4323.582 -2912.875 -2912.875 -2912.875 -3757.609   -368.147          -368.147          -536.549

C 1R   -2640.110 -2593.627 -3913.565 -2010.590 -3269.630 -2305.193 -3709.741             425.218           631.294           413.767

P 4    -1595.348 -1404.280 -2576.726 -1093.509 -2097.186 -1236.136 -2427.799    410.593  410.593  616.669  616.669  399.142  399.142

P 5      432.874  1355.530  -148.030   672.864   192.884  1102.431   -32.041    380.600   23.062  586.676  110.902  369.149  -63.662

P 6      430.122   742.243   297.637   598.814   261.430   699.310   268.501    -23.750 -381.287   64.090 -293.447 -110.474 -650.007

P 7     -148.780   206.386  -518.971    96.572  -394.132   183.579  -490.135   -390.068 -390.068 -302.228 -302.228 -658.788 -658.788

C 2L   -1142.232  -567.465 -2106.077  -769.198 -1515.265  -616.092 -1901.352   -404.693          -316.853          -673.413

C 2R   -1142.232  -567.465 -2092.961  -769.198 -1515.265  -616.092 -1893.498             404.693           636.909           316.853

P 8     -148.780   206.386  -549.097    96.572  -394.133   183.578  -508.175    390.068  390.068  622.284  622.284  302.228  302.228

P 9      430.122   737.502   135.969   598.815   261.430   696.471   171.694    381.287   23.750  613.503  104.302  293.447  -64.090

P10      432.874  1131.735  -148.030   672.864   192.884   968.422   -32.041    -23.062 -380.600   57.490 -360.390 -110.902 -586.676

P11    -1595.346 -1427.632 -2576.724 -1093.508 -2097.185 -1250.119 -2427.797   -410.592 -410.592 -390.383 -390.383 -616.669 -616.669

C 3L   -2640.110 -2593.627 -3913.565 -2010.590 -3269.630 -2305.193 -3709.741   -425.218          -405.008          -631.294

C 3R   -2912.875 -2912.875 -4323.582 -2912.875 -2912.875 -2912.875 -3757.609             368.147           536.549           368.147

P13    -2010.789 -2010.789 -3000.490 -2010.789 -2010.789 -2010.789 -2603.424    353.522  353.522  521.924  521.924  353.522  353.522

P14      -27.223   -27.223   -27.223   -27.223   -27.223   -27.223   -27.223    322.686   15.477  491.089   15.477  322.686   15.477
                                                         CAP DESIGN DATA
PT.   M+ UNF.   M- UNF.  TOP REINFORCE.  BOT.REINFORCE.    LEFT STIRRUPS         RIGHT STIRRUPS       D      FC    PS   FS/FF  FS/FZ
       K-FT.     K-FT.     AS  NO.SIZE     AS  NO.SIZE   M.SP. AV/IN BAR&SPAC  M.SP. AV/IN BAR&SPAC  IN.    PSI    %   RATIO  RATIO

P 1   -20.941   -20.941    3.12  2 # 11    3.12  2 # 11    0.00 0.000 #5@ 0.00  24.00 0.061 #5@10.24  57.16        0.10  0.000  0.080

P 2 -1546.761 -2002.634    9.95  7 # 11    3.12  2 # 11   24.00 0.050 #5@12.40  24.00 0.050 #5@12.40  72.00        0.26  0.531  1.153

C 1 -2009.443 -2890.469   14.48 10 # 11    3.12  2 # 11   24.00 0.050 #5@12.40  24.00 0.062 #5@10.01  72.00        0.39  0.693  1.046

P 4 -1139.181 -1679.230    8.52  6 # 11    3.12  2 # 11   24.00 0.058 #5@10.73  24.00 0.058 #5@10.73  72.00        0.21  0.672  1.183

P 5   757.971    65.405    3.12  2 # 11    5.91  4 # 11   24.00 0.050 #5@12.40   0.00 0.000 #5@ 0.00  72.00        0.14  0.847  0.908
                                                          CAP DESIGN DATA
PT.   M+ UNF.   M- UNF.  TOP REINFORCE.  BOT.REINFORCE.    LEFT STIRRUPS         RIGHT STIRRUPS       D      FC    PS   FS/FF  FS/FZ
       K-FT.     K-FT.     AS  NO.SIZE     AS  NO.SIZE   M.SP. AV/IN BAR&SPAC  M.SP. AV/IN BAR&SPAC  IN.    PSI    %   RATIO  RATIO
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P 6   474.632   269.838   3.12  2 # 11    3.37  3 # 11    0.00 0.000 #5@ 0.00  24.00 0.067 #5@ 9.22  72.00        0.14  0.401  0.829

P 7    49.150  -284.962   3.12  2 # 11    3.12  2 # 11   24.00 0.070 #5@ 8.88  24.00 0.070 #5@ 8.88  72.00        0.12  0.715  0.000

C 2  -613.892 -1322.604   7.58  5 # 11    3.12  2 # 11   24.00 0.074 #5@ 8.38  24.00 0.064 #5@ 9.76  72.00        0.18  0.902  1.183

P 8    49.149  -298.839   3.12  2 # 11    3.12  2 # 11   24.00 0.059 #5@10.44  24.00 0.059 #5@10.44  72.00        0.12  0.750  0.000

P 9   472.448   195.371   3.12  2 # 11    3.34  3 # 11   24.00 0.057 #5@10.90   0.00 0.000 #5@ 0.00  72.00        0.14  0.517  0.826

P10   654.888    65.406   3.12  2 # 11    4.93  4 # 11    0.00 0.000 #5@ 0.00  24.00 0.050 #5@12.40  72.00        0.12  0.721  0.784

P11 -1149.937 -1679.229   8.52  6 # 11    3.12  2 # 11   24.00 0.058 #5@10.73  24.00 0.058 #5@10.73  72.00        0.21  0.662  1.183

C 3 -2009.443 -2890.469  14.48 10 # 11    3.12  2 # 11   24.00 0.062 #5@10.01  24.00 0.050 #5@12.40  72.00        0.39  0.693  1.046

P13 -1546.761 -2002.634   9.95  7 # 11    3.12  2 # 11   24.00 0.050 #5@12.40  24.00 0.050 #5@12.40  72.00        0.26  0.531  1.153

P14   -20.941   -20.941   3.12  2 # 11    3.12  2 # 11   24.00 0.061 #5@10.24   0.00 0.000 #5@ 0.00  57.16        0.10  0.000  0.080

NOTE: *** FS/FZ RATIO EXCEEDS 1.0! ***
                                         COLUMN ANALYSIS AND DESIGN OUTPUT

                                             CRITICAL COLUMN LOADS
    T                  E  C  S
CN  B  GR  LLC  WC  R  S  F  F    PF     MTF    MLF     PM     MTM     MLM     PU      MTU     MLU   PU/PM    B      D

 1  T   1 LL 3 0.0             1690.5  -327.4    0.0  1690.5   956.5  1318.6  5246.0  2971.9  4097.0  3.105  60.00  60.00

 1  B   3 LL23 5.1             1656.7   -33.1-1765.7  1656.7   921.2  2550.1  3678.4  2037.2  5639.0  2.214  60.00  60.00

 2  T   1 LL13 0.0             1303.0   -54.6    0.0  1303.0   731.5   907.1  5461.5  3072.9  3810.6  4.196  60.00  60.00

 2  B   2      5.1             1033.6   298.7-1973.8  1033.6   558.9  2417.4  2574.9  1393.3  6027.1  2.493  60.00  60.00

 3  T   1 LL 8 0.0             1690.5   327.4    0.0  1690.5   956.5  1318.6  5246.0  2971.9  4097.0  3.105  60.00  60.00

 3  B   3 LL10 5.1  R          1647.2    13.0 1765.7  1647.2   917.2  2543.1  3669.7  2035.1  5643.0  2.221  60.00  60.00



                                           COLUMN DESIGN DATA
    T  B FACE 1  B FACE 2  D FACE 3  D FACE 4
CN  B   NO.SIZE   NO.SIZE   NO.SIZE   NO.SIZE   AS     PS    BD12   BD     SUMPU     SUMPC   DEL.T     DEL.L      CM    R  PHIC

 1  T    7 # 11    7 # 11    5 # 11    5 # 11  37.44  1.040  1.00  0.879    4175.    35905.  1.132     1.560     1.000  2  0.70

 1  B    7 # 11    7 # 11    5 # 11    5 # 11  37.44  1.040  1.00  0.489    4053.    40198.  1.112     1.444     1.000  2  0.70

 2  T    7 # 11    7 # 11    5 # 11    5 # 11  37.44  1.040  1.00  0.000    4175.    38174.  1.123     1.392     1.000  2  0.70

 2  B    7 # 11    7 # 11    5 # 11    5 # 11  37.44  1.040  1.00  0.000    3448.    45836.  1.081     1.225     1.000  2  0.70

 3  T    7 # 11    7 # 11    5 # 11    5 # 11  37.44  1.040  1.00  0.879    4175.    35905.  1.132     1.560     1.000  2  0.70

 3  B    7 # 11    7 # 11    5 # 11    5 # 11  37.44  1.040  1.00  0.407    4053.    39742.  1.114     1.440     1.000  2  0.70


                                                       FOOTING 1 DESIGN LOADS

F G LLID  WC   ES  C  S       P        MT      VT       ML      VL      P4      P3      P2      P1      MTF     VBF     VPF     LOAD

1 3 LL23  5.1R            1221.772 -218.198 -10.885 1358.249  22.219  10.276   3.326   4.550  11.499  64.538  11.033  26.635  MAX.P1

1 3 LL23  4.1R            1577.393 -386.750 -18.076 1672.440  27.348  12.780   4.223   6.373  14.931  85.357  14.631  34.388  MAX.MT

1 3 LL23  4.1R            1577.393 -386.750 -18.076 1672.440  27.348  12.780   4.223   6.373  14.931  85.357  14.631  34.388  MAX.VT

1 3 LL23  4.1             1624.989   73.806  -0.541-1672.440 -27.348  13.940   5.383   5.735  14.292  81.298  13.810  35.426  MAX.VP

1 3 LL23  5.1             1614.078  -29.287  -4.466-1765.724 -28.885  14.191   5.156   5.365  14.399 111.736  19.612  35.188  MAX.ML

1 3 LL23  5.1             1614.078  -29.287  -4.466-1765.724 -28.885  14.191   5.156   5.365  14.399 111.736  19.612  35.188  MAX.VL

1 2       5.1R            1038.526 -316.970 -14.368 1518.331  28.181   9.438   1.620   3.376  11.194  57.358   9.855  22.640  MAX.P3
                                   FOOTING 1 ANALYSIS/DESIGN RESULTS

     FOOTING SIZE             *   BAR REINFORCEMENT STEEL     *         SECTION CAPACITIES         *

   B       D       T    P1/PA   AS    NO.SIZE  SPAC. PLACEMENT    MT.     VB      VP      DS      FC

13.500  13.500   3.000  0.920  0.81  25 # 6 @ 6.375  TOP TRAN 114.364  38.469  76.939  31.875  0.000

                               0.80  25 # 6 @ 6.375  BOT.LONG 117.114  39.374  78.749  32.625  0.000
                                                       FOOTING 2 DESIGN LOADS

F G LLID  WC   ES  C  S       P        MT      VT       ML      VL      P4      P3      P2      P1      MTF     VBF     VPF     LOAD

2 3 LL15  4.1              954.212  216.921   8.812-1286.492 -21.037  10.207   1.915   3.411  11.703  46.807   6.956  19.121  MAX.P1

2 3 LL15  4.1             1240.476  281.997  11.456-1672.440 -27.348  13.270   2.490   4.434  15.213  60.849   9.042  24.857  MAX.MT

2 3 LL15  4.1             1240.476  281.997  11.456-1672.440 -27.348  13.270   2.490   4.434  15.213  60.849   9.042  24.857  MAX.VT

2 3 LL15  5.1             1240.476  170.280   7.013-1765.724 -28.885  13.954   2.573   3.749  15.130  58.689   8.679  24.857  MAX.VP

2 3 LL15  5.1             1240.476  170.280   7.013-1765.724 -28.885  13.954   2.573   3.749  15.130  87.392  13.507  24.857  MAX.ML

2 3 LL15  5.1             1240.476  170.280   7.013-1765.724 -28.885  13.954   2.573   3.749  15.130  87.392  13.507  24.857  MAX.VL

2 2       4.1              795.105  399.927  15.904-1384.073 -25.841   8.906  -0.075   2.676  11.656  43.177   6.499  15.933  MAX.P3
                                   FOOTING 2 ANALYSIS/DESIGN RESULTS
     FOOTING SIZE             *   BAR REINFORCEMENT STEEL     *         SECTION CAPACITIES         *

   B       D       T    P1/PA   AS   NO.SIZE  SPAC. PLACEMENT    MT.     VB      VP      DS      FC

12.500  12.500   3.000  0.936  0.57  36 # 4 @ 4.125  TOP TRAN  81.689  38.620  77.240  32.000  0.000

                               0.80  23 # 6 @ 6.500  BOT.LONG 116.381  39.374  78.749  32.625  0.000


                                                        FOOTING 3 DESIGN LOADS

F G LLID   WC  ES  C  S        P        MT      VT       ML      VL       P4      P3      P2      P1      MTF     VBF     VPF     LOAD

3 3 LL23  4.1             1193.251  307.955  14.655-1286.492 -21.037 222.785  72.829 131.483 281.439  23.141  -0.023   4.805  MAX.P1

3 3 LL23  4.1             1551.227  400.342  19.051-1672.440 -27.348 289.621  94.678 170.928 365.870  30.083  -0.030   6.246  MAX.MT

3 2       5.1             1350.084  412.061  18.679-1973.830 -36.635 278.295  46.768 124.785 356.311  26.807  -0.030   5.344  MAX.VT

3 3 LL10  4.1R            1617.007  -90.710   0.123 1672.440  27.348 329.614 134.672 149.729 344.671  27.589  -0.030   6.541  MAX.VP

3 3 LL10  5.1R            1606.096   12.383   4.048 1765.724  28.885 338.979 133.159 137.247 343.067  58.688  -0.030   6.492  MAX.ML

3 2       5.1             1350.084  412.061  18.679-1973.830 -36.635 278.295  46.768 124.785 356.311  54.502  -0.030   5.344  MAX.VL

3 2       4.1             1023.499  473.964  20.346-1384.073 -25.841 189.500  27.101 116.268 278.667  22.083  -0.023   4.043  MAX.P3

                                   FOOTING 3 ANALYSIS/DESIGN RESULTS

     FOOTING SIZE             *   BAR REINFORCEMENT STEEL     *         SECTION CAPACITIES         *

   B       D       T    P1/PA   AS   NO.SIZE  SPAC. PLACEMENT    MT.     VB      VP      DS      FC

 8.500   8.500   3.000  0.958  0.45  20 # 4 @ 5.000  TOP TRAN  41.780  24.288  48.577  20.125  0.000

                               0.65  18 # 5 @ 5.625  BOT.LONG  59.484  24.967  49.935  20.688  0.000

NUMBER OF PILES =  7  BP = 3.000  DP = 3.000
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