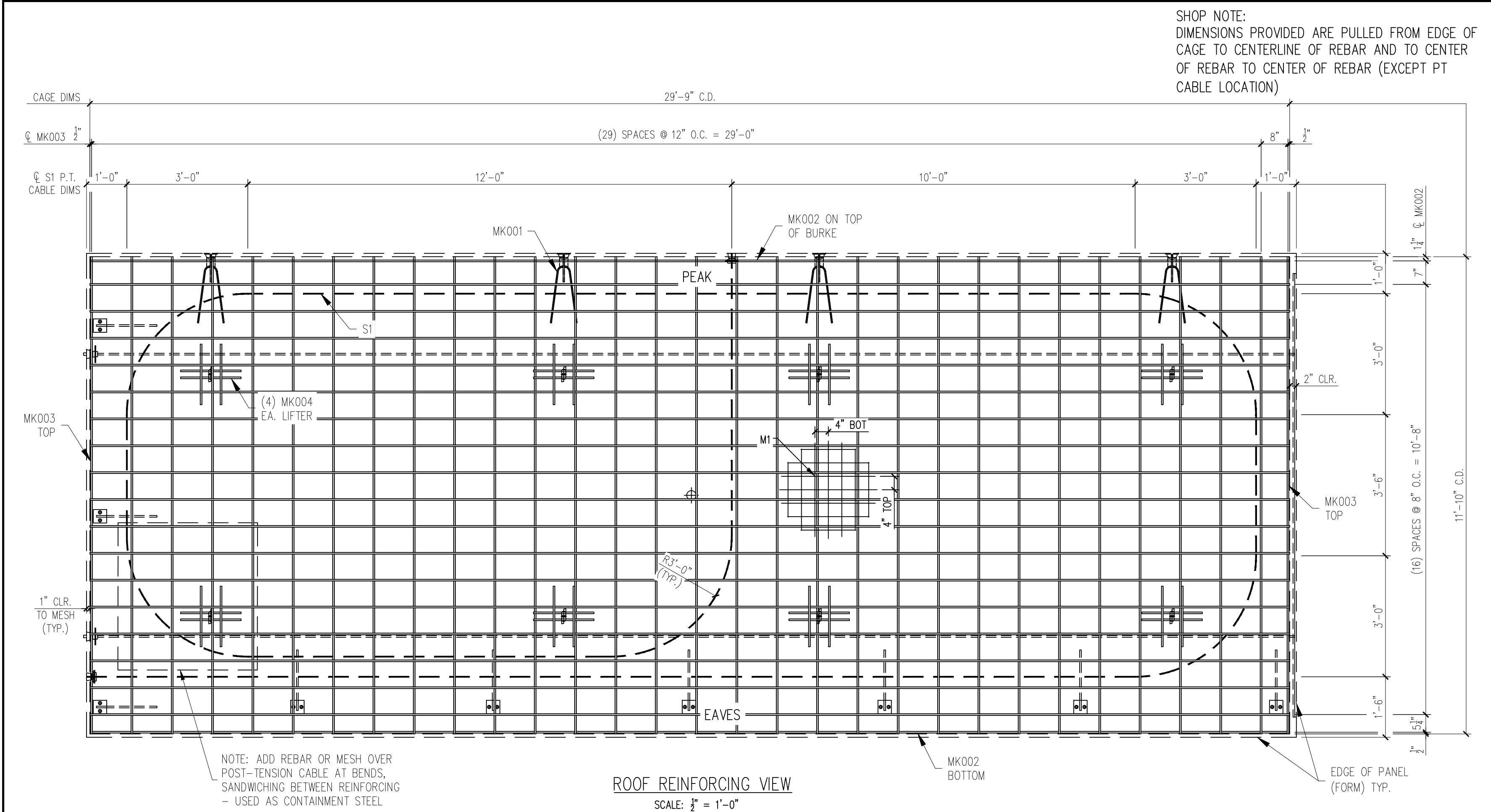
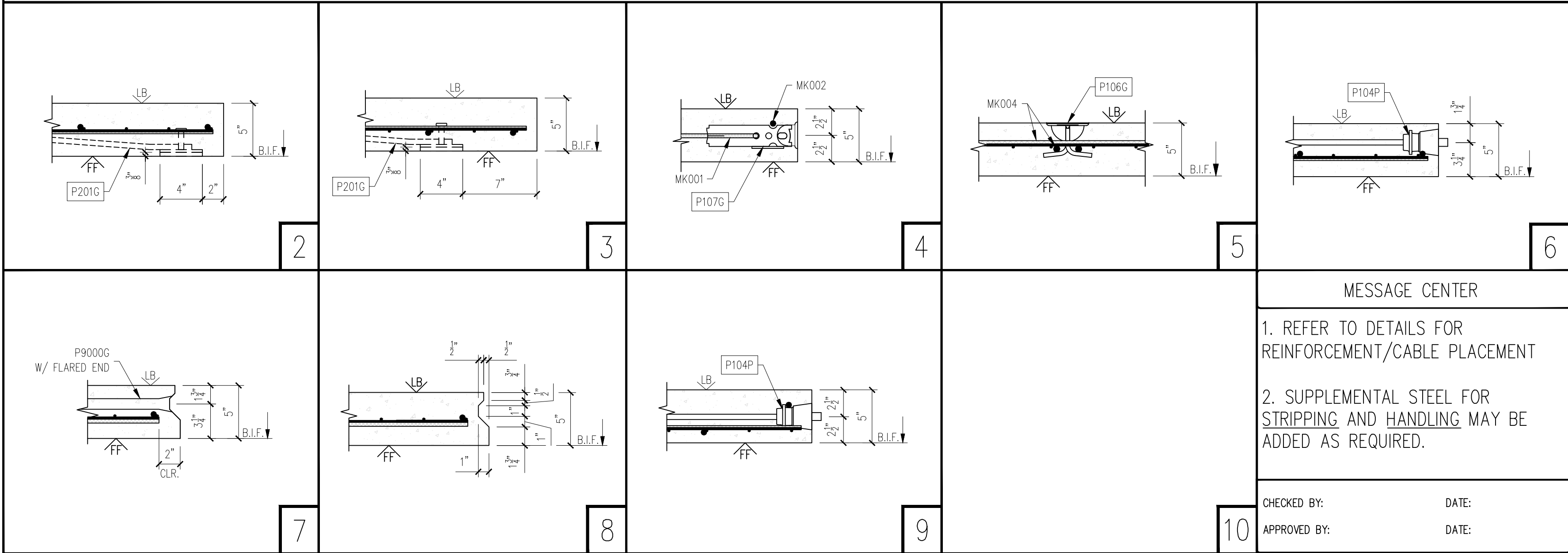




REINFORCING SCHEDULE		
MARK #	DESCRIPTION	QTY
MK001	#4 X 4'-0"	4
MK002	#3 X 29'-9"	19
MK003	#3 X 11'-10"	31
MK004	#4 X 1'-6"	32
S1	$\frac{1}{2}'' \phi$ X 97'-0" LONG P.T. CABLE	1
MESH SCHEDULE		
MARK #	DESCRIPTION	QTY
M1	W4XW4 4"X4" WWF 29'-9" X 11'-10"	1

25-3470P6
Baseball Dugout 7B
ID - CTS
Floor - RP-01
Weight - 22,500
1 Required

- NOTES:
1. TRIM PLASTIC SHEATH AT BOTH ENDS OF THE PT CABLE TO FIT BETWEEN U-5 ANCHOR PLATES
 2. CONSTRUCT REBAR-MESH CAGE ACCORDING TO THE DRAWINGS. SECURE LIFTING APPARATUS TO FORM AND ADD PROPER REINFORCEMENT. PLACE REBAR-MESH CAGE AND HAIRPINS AT INSERTS WITH PROPER CLEARANCES (PER DRAWINGS).
 3. PLACE AND SECURE PT CABLE AS INDICATED ON THE DRAWINGS (REINFORCING VIEW)



MESSAGE CENTER

1. REFER TO DETAILS FOR REINFORCEMENT/CABLE PLACEMENT

2. SUPPLEMENTAL STEEL FOR STRIPPING AND HANDLING MAY BE ADDED AS REQUIRED.

CHECKED BY: DATE:
APPROVED BY: DATE:

PRODUCT	SALES ORDER NUMBER
BUILDING	-
SHEET NUMBER	NUMBER REQUIRED
2 OF 2	1

5119 Catlett Rd. • Midland, VA 22728 • info@EasiSet.com
www.EasiSet.com • 800-547-4045 • Fax 540-439-2541

DATE	REV	DESCRIPTION
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT: 60'x10'x9'-10" BASEBALL DUGOUT
5185 FORT CAMPBELL BOULEVARD
HOPKINSVILLE, KY 42240
CONTRACTOR: CHRISTIAN COUNTY SCHOOLS

SCALE
NTS

DRAWN BY
FTL

CHECK BY
WCR

ISSUE DATE
08.04.26

PIECE MARK
RP-01

PT Check for RP-01 & RP-02 60' Dugout(PCI MNL -

Material Data

(7) Wire lo-lax Strand - ASTM A416

Φ_{ps} 0.500 in,

A= 0.153 in²

E= 28500000 psi

f_{pu} 270 ksi

Strand Length **1128 in**

Assume (Info supplied by strand manufacturer)

k= 0.0007 Wobble Friction Coeff.

μ = 0.05 Curvature friction coeff. (Initial tension of 3,000 lbs)

Strand is to be stressed 70% of ultimate

= 28917 lbs

Adjustments to tensioning

1) Dead end anchor wedge seating loss

~ Expected to be 1/8 in

2) Live end anchor wedge seating loss

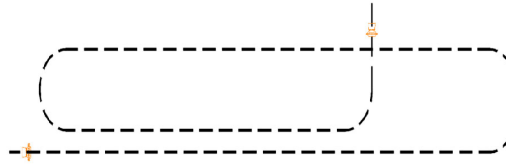
~ Expected to be 1/8 in, recommend over pull 1/8"

3) Elastic Shortening

Neglect for this pnl

4) Friction Loss

Additional force to overcome frictional forces between strand and sheathing



Cable Configuration

25-3470
Baseball Dugout 7B
ID - CTS
Roof - RP-01
Weight - 22,500
1 Required

Tensioning Computations

Basic Elongation = $\frac{(\text{Force required beyond initial tension}) (\text{Length of strand between anchorages})}{(\text{Area of strand}) (\text{Modulus of Elasticity})}$

= 6.70 in

Adjustments

a) Dead end anchor wedge seating: Add 1/8" to elong. No force adjustment req'd

Add 1/8 in

b) Live end seating: over pull by 1/8"

1/8 in

Force adjustment t = 483 lbs lbs α = curvature = $\pi(2.5)$ 7.85 radians

c) Friction losses $\frac{PD}{PS} = e^{-(kL + \mu\alpha)}$

= 0.632

Avg. strand force = 0.816 18.39% Loss

Recommend sequential jacking at both ends of the tendon be used to reduce the overstressing the strand at the live end

Friction loss at mid-point of tendon

$\frac{PD}{PS} = e^{\frac{-(kL + \mu\alpha)}{2}}$

= 0.795

Avg. strand force over

half of tendon = 0.898 10.24% Loss

Total force and elongation at live end must be increased to compensate for friction losses

Elong. Adjustment = 0.687 in

Force Adjustment = 2962 lbs

Total Force Required = 32362 lbs **OK**

Elongation Summary:

Gross Theoretical Elongation			
Basic Elongation	6.70 in		
Dead End Seating Loss	0.125 in		
Live End Seating Loss	0.125 in		
Friction Losses	0.687 in		
Total Elongation	7.64 in		
Rounded	7 10/16 in		
Tolerance limits	-7.0%	7.11 in	7 2/16 in
	+7.0%	8.18 in	8 3/16 in