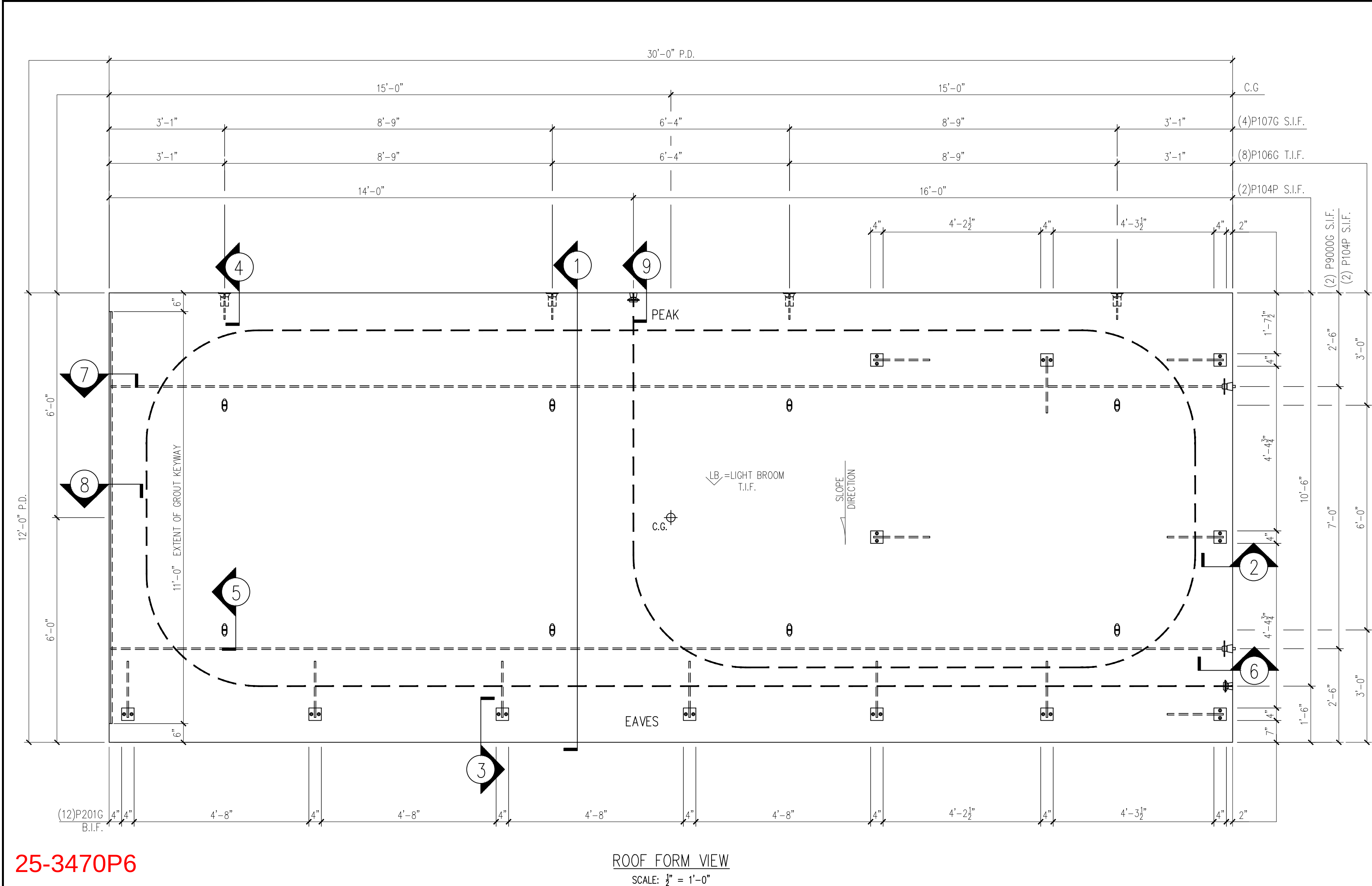
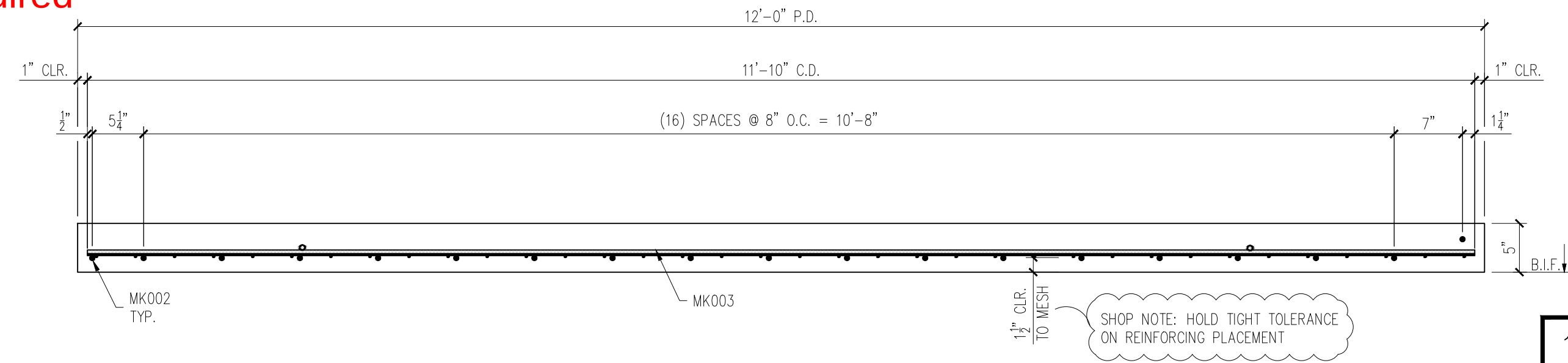




25-3470P6
Baseball Dugout 7B

ID - CTS
Floor - RP-02
Weight - 22,500
1 Required



MESSAGE CENTER

1. REFER TO DETAILS FOR REINFORCEMENT/CABLE PLACEMENT

2. SHOP TICKET SHOWS EXTERIOR FINISH CAST FACE UP

CHECKED BY: DATE:

APPROVED BY: DATE:

BILL OF MATERIALS		
MARK #	DESCRIPTION	QTY.
P201G	4"x4"x $\frac{3}{8}$ " W/(2) $\frac{3}{8}$ "x1 $\frac{1}{2}$ " H.A.S. W/1'-4" BENT REBAR (GALVANIZED)	12
P104P	U-5 POST TENSION ANCHOR (PLAIN) WITH PLASTIC POCKET	4
P107G	4 TON RL-4 TECH ERECTION ANCHOR (79548SP) (GALVANIZED)	4
P106G	2 TON PLATE ANCHOR QL128G OR EQUAL (GALV.)	8
P9000G	1"ø E.M.T. TUBE 29'-10 $\frac{1}{2}$ " LONG (GALV.)	2

HANDLING INSTRUCTIONS

STRIPPING-TILT TABLE

SHIPPING

YARD STORAGE

ERECTION

CONCRETE INSTRUCTIONS	
CONCRETE @ RELEASE: 2,500 P.S.I.	
CONCRETE @ 28 DAYS: 5,000 P.S.I.	
POST-TENSION @ 3,500 P.S.I.	
CONCRETE MIXES	
CONCRETE - GRAY	VOLUME = 5.55 C.Y.
CONCRETE - MIX 1	VOLUME = - C.Y.
CONCRETE - MIX 2	VOLUME = - C.Y.
SOFT SOUND	VOLUME = - C.Y.
TOTALS	VOLUME = 5.55 C.Y.
WEIGHT: 22,500 LBS.	
FINISHING INSTRUCTIONS	
LB = LIGHT BROOM FINISH	
FF = FORM FINISH	
L = 12'-0"	SQ.FT.(T.I.F.) = 360.0
W = 30'-0"	SQ.FT.(T.I.F.) = -
D = 5"	SQ.FT.(T.I.F.) = -
CONTROL NUMBERS:	
-	
-	
PRODUCT	SALES ORDER NUMBER
BUILDING	-
SHEET NUMBER	NUMBER REQUIRED
1 OF 2	1

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

REV	INI.	DESCRIPTION	DATE
1	-		-
2	-		-
3	-		-
4	-		-
5	-		-

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

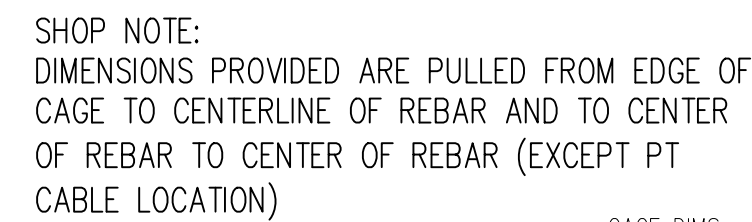
SCALE
NTS

DRAWN BY
FTL

CHECK BY
WCR

ISSUE DATE
08.04.26

PIECE MARK
RP-02



25-3470P6
Baseball Dugout 7B
ID - CTS
Floor - RP-02
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)

<u>PRODUCT</u>	<u>SALES ORDER NUMBER</u>
BUILDING	-
<u>SHEET NUMBER</u>	<u>NUMBER REQUIRED</u>
2 OF 2	1



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

CHECKED BY:	DATE:
APPROVED BY:	DATE:

DATE	DESCRIPTION	INI.	REV.
-		-	<u>△</u>
-			<u>△</u>
-		-	<u>△</u>
-		-	<u>△</u>
-		-	<u>△</u>
-		-	<u>△</u>

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-02

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

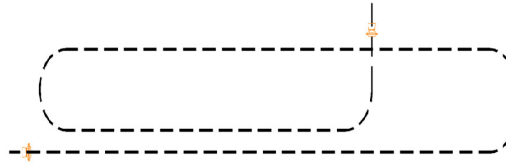
~ Expected to be 1/8 in, recommend over pull 1/8"

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-02
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 $\alpha = \text{curvature} = \pi(2.5) \quad 7.85 \text{ radians}$

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