

Important: Warranty Disclaimer for Plans

For the convenience of our clientele, this website makes available conceptual plans that can be helpful in planning buildings, facilities, or other structures. They were developed over many years by engineers at Land Grant universities through the former USDA Cooperative Farm Buildings Plan Exchange. *Regardless of the original intent, these are older plans that provide conceptual information only, and are not to be considered or used as construction plans.*

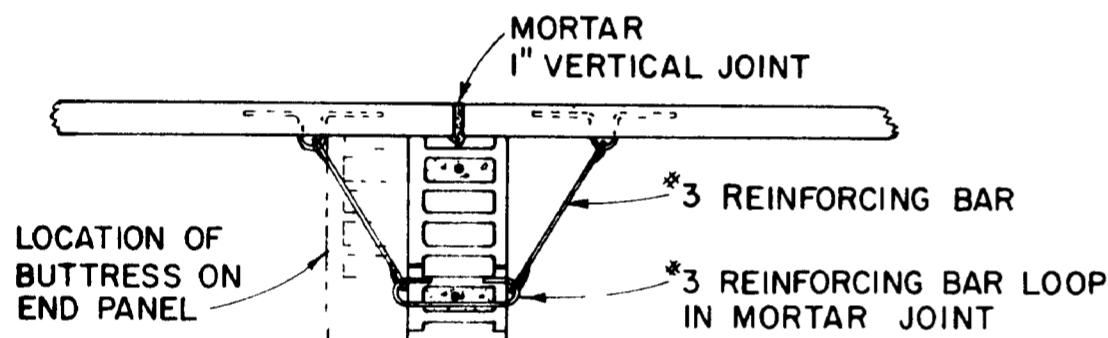
These plans do not claim to represent the most current technology or the most recent construction techniques, standards, or codes. For example, over the years there have been changes in the National Design Specifications for Wood Construction, changes in the strengths and types of building materials, and changes in fasteners, among other things. Those changes, along with variations in climate, building codes, and other factors, make it imperative that professional services be utilized for your specific project. Suggested services include, but are not limited to, structural design, assurance of compliance with codes and regulations, site selection, construction supervision, and provision for utilities, waste management, and access. *These plans do not replace the need for competent design assistance in developing safe, legal, and well-functioning agricultural buildings and systems.*

Neither the University of Kentucky, the Midwest Plan Service, the United States Department of Agriculture, nor any of the cooperating Land Grant universities, warranty these plans. They are for conceptual use only and are not for use as construction plans.

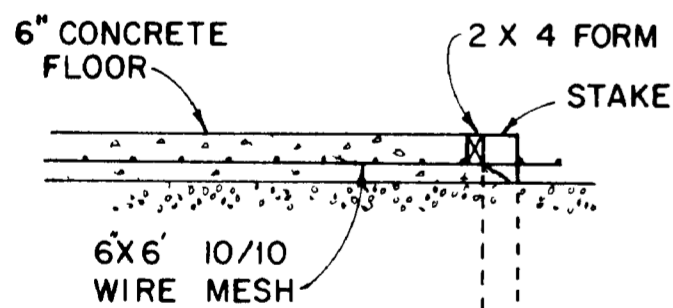
NOTES:

- 1 DIMENSIONS IN PARENTHESIS PERTAIN ONLY TO THE 14 FOOT HIGH PANEL
- 2 SPECIFY MIN 4000 PSI COMPRESSIVE STRENGTH CONCRETE, ie 6 GALLONS OF WATER PER SACK OF CEMENT, MIN 7 SACKS OF CEMENT PER CU YD CONCRETE USE 6% AIR ENTRAINMENT
- 3 MINIMUM LAP FOR ALL REINFORCING SHALL BE 10"
- 4 CAST FLOOR IN LENGTHWISE STRIPS 10' WIDE
- 5 USE POLYETHYLENE OR TREATED PAPER BOND BREAKER BETWEEN FLOOR & PANELS
- 6 USE A VIBRATOR TO ELIMINATE VOIDS IN THE CONCRETE
- 7 WET CURE PANELS 5 TO 7 DAYS BEFORE TILTING INTO PLACE
APPROXIMATE PANEL WEIGHT (10 FT - 3460 LBS)
(14 FT - 7630 LBS)

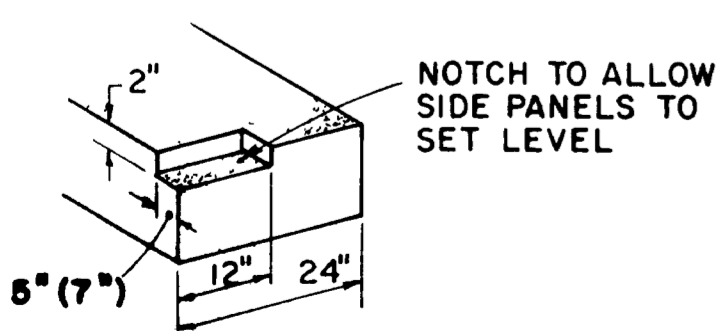
SILO CAPACITY - TONS/FT OF LENGTH						
DEPTH	DENSITY	AVERAGE SILO WIDTH				
		20	30	40	50	60
10 FT	40 ^{*/FT³}	4	6	8	10	12
14 FT	45 ^{*/FT³}	6.3	9.4	12.6	15.8	18.9



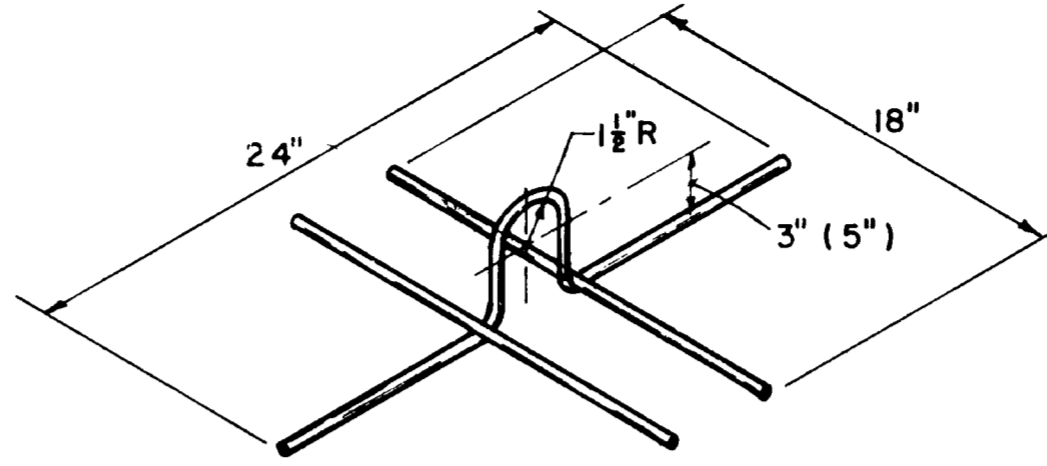
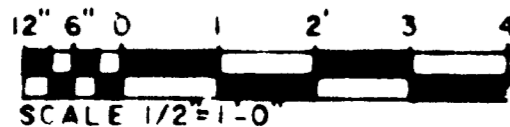
BUTTRESS-PANEL TIE
SCALE 1/2" = 1'-0"



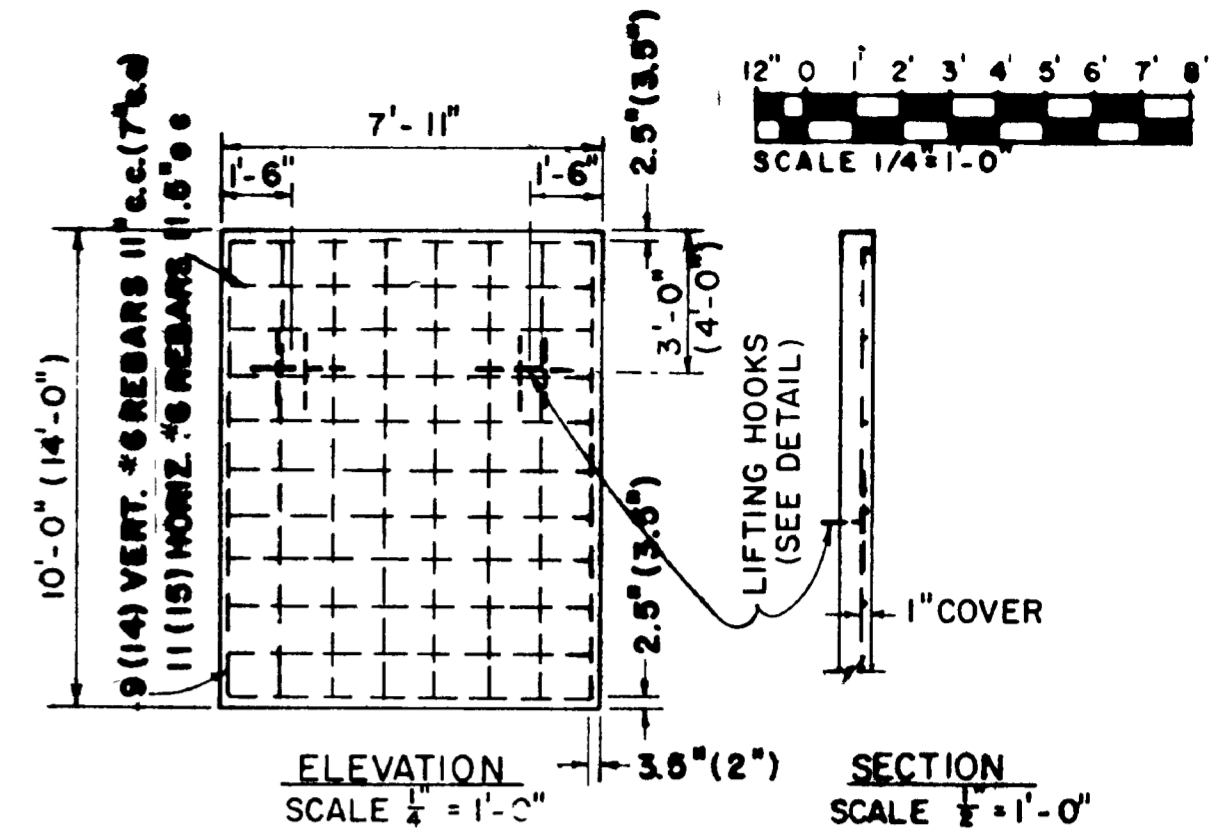
FORMING DETAIL FOR ADJOINING FLOOR STRIPS
SCALE 1/2" = 1'-0"



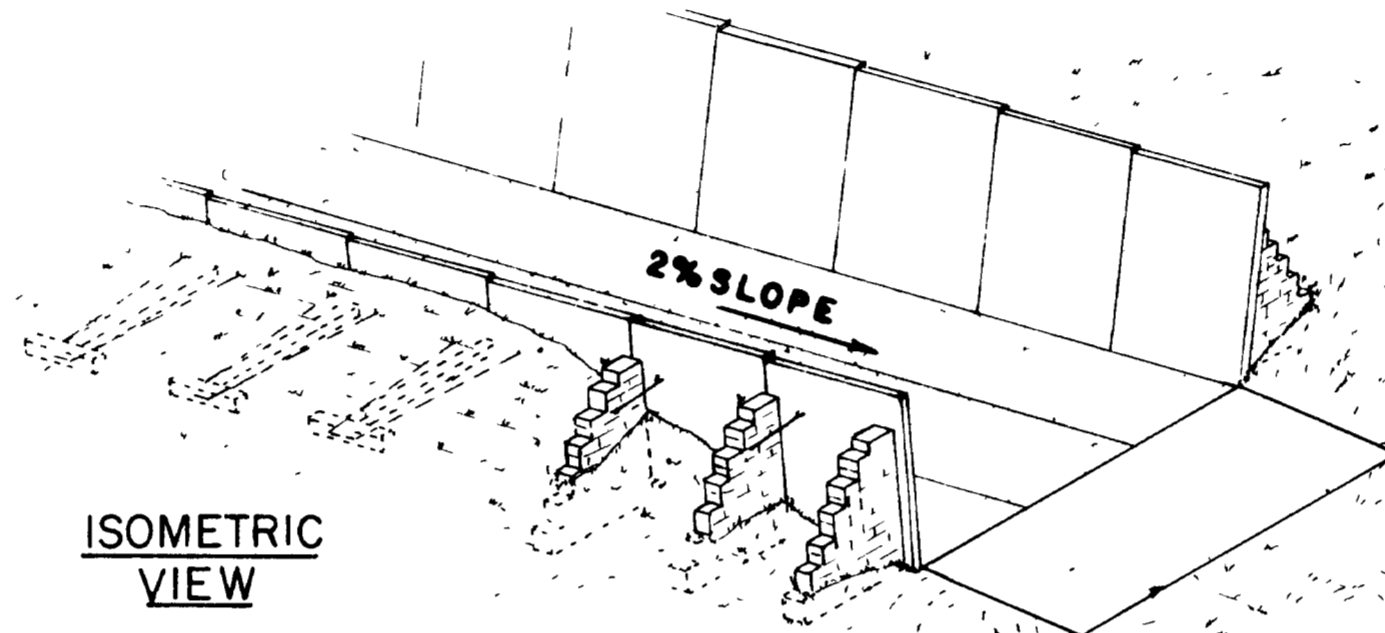
FOOTING DETAIL
SCALE 1/2" = 1'-0"



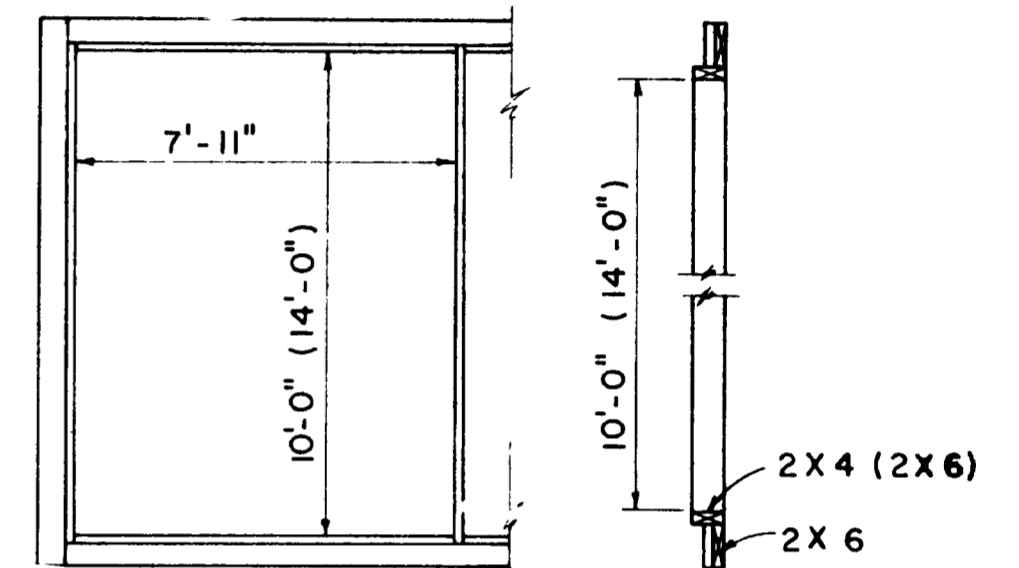
LIFTING HOOK
(*5 REINFORCING BARS)



PANEL DETAIL

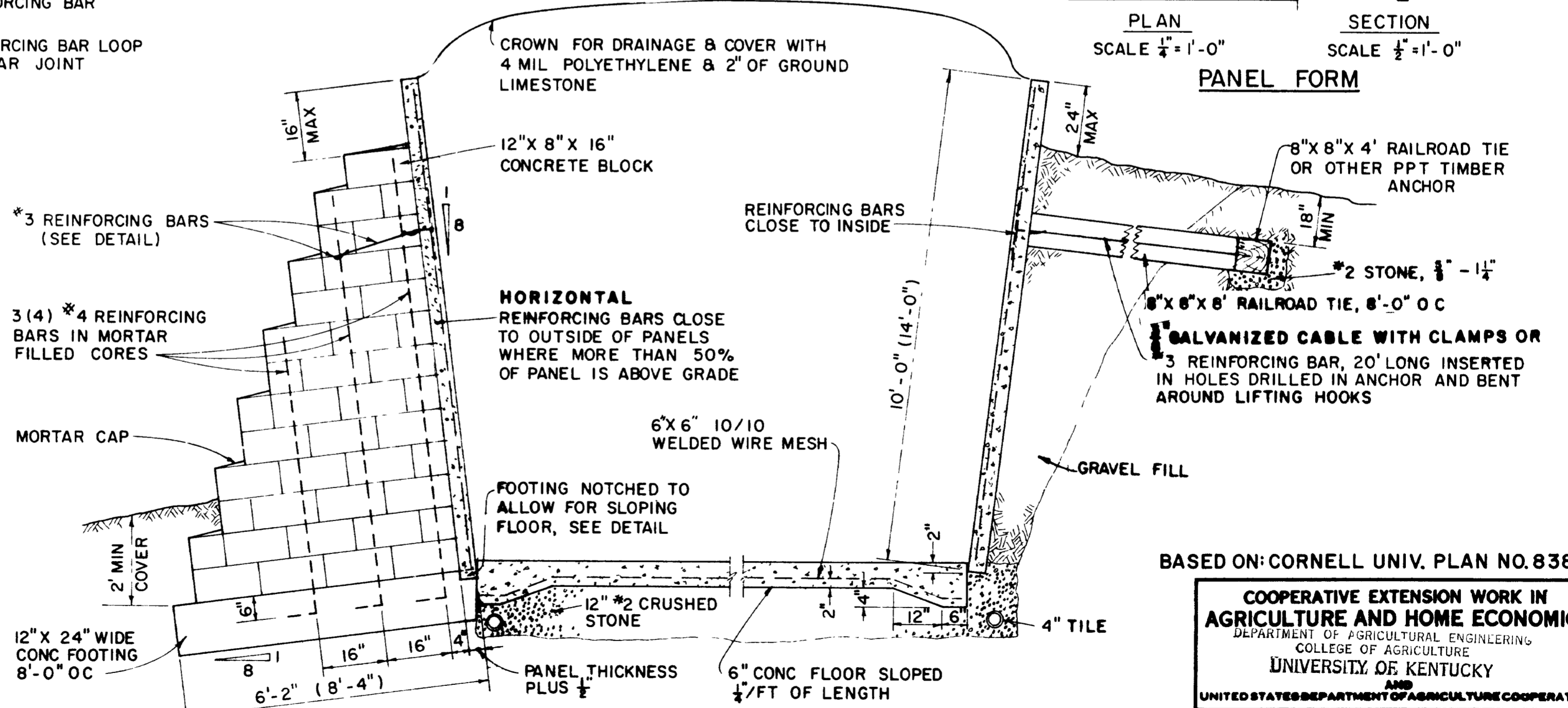


ISOMETRIC VIEW



PANEL FORM
SCALE 1/4" = 1'-0"

SECTION
SCALE 1/2" = 1'-0"



CROSS SECTION
SCALE 1/4" = 1'-0"

TIMBER & REBAR ANCHOR
BELOW GRADE

BASED ON: CORNELL UNIV. PLAN NO. 838

COOPERATIVE EXTENSION WORK IN
AGRICULTURE AND HOME ECONOMICS
DEPARTMENT OF AGRICULTURAL ENGINEERING
COLLEGE OF AGRICULTURE
UNIVERSITY OF KENTUCKY
AND
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

HORIZONTAL SILO
TILT-UP BELOW GRADE

N.Y. '73 EX. 6175 SHEET 1 OF 1