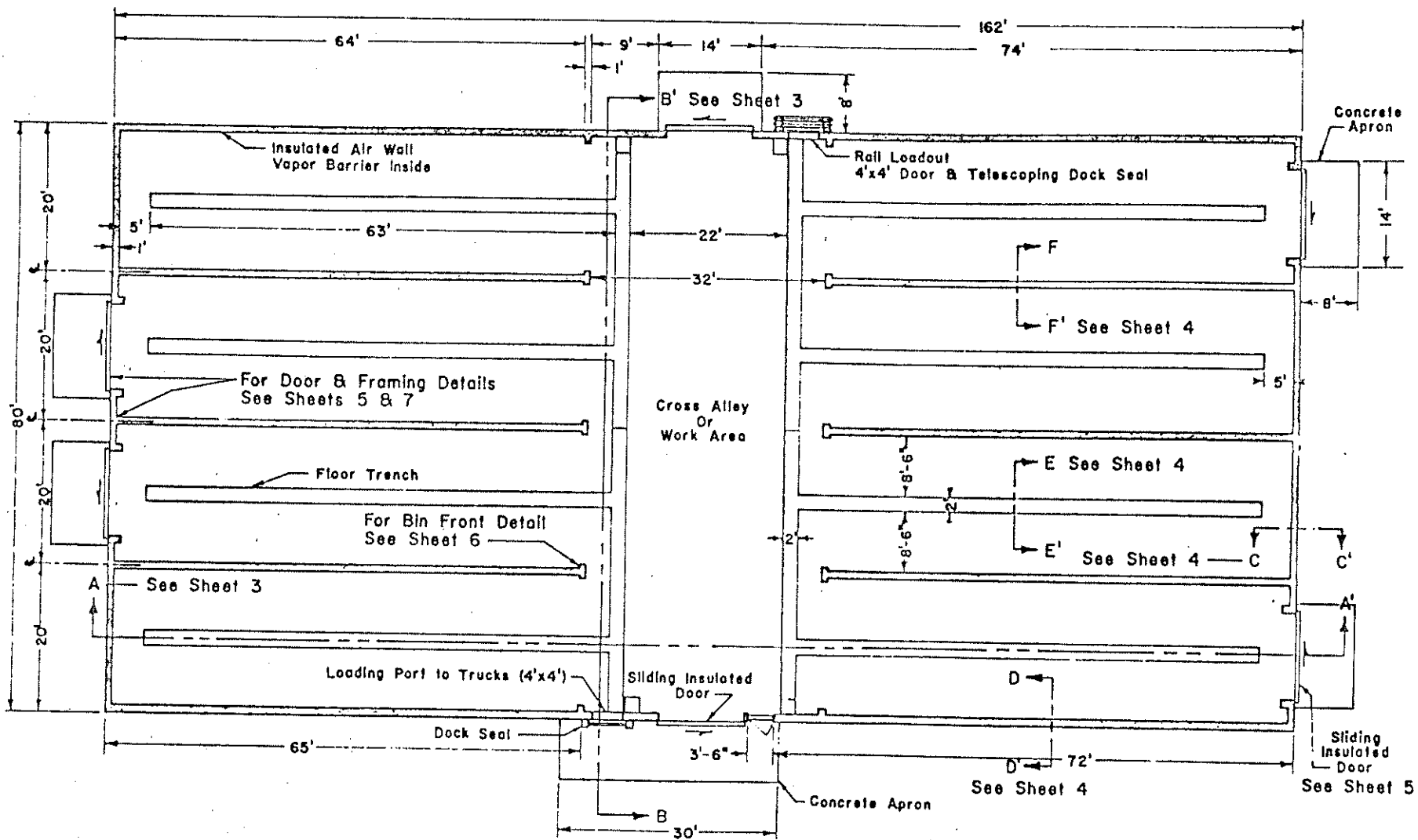


THE OPERATOR PLANNING TO BUILD A STORAGE SHOULD RETAIN THE SERVICES OF A PROFESSIONAL ENGINEER TO DESIGN THE STORAGE TO MEET THE OPERATOR'S PARTICULAR NEEDS AND TO MEET LOCAL CONDITIONS, AS WELL AS TO SUPERVISE CONSTRUCTION.

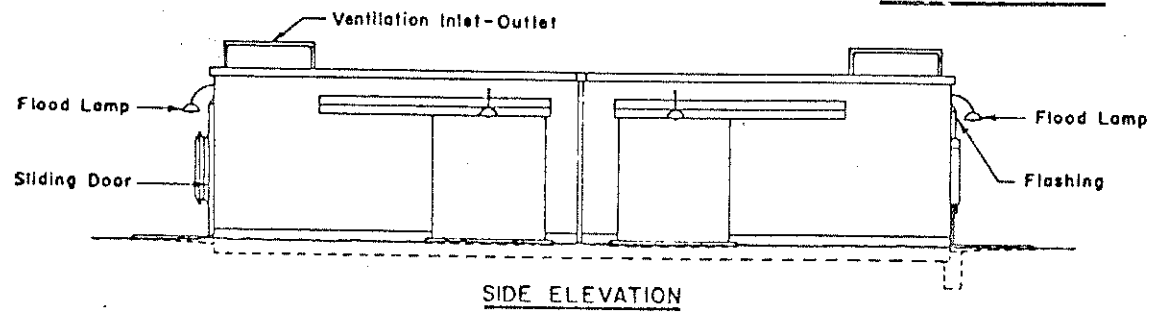
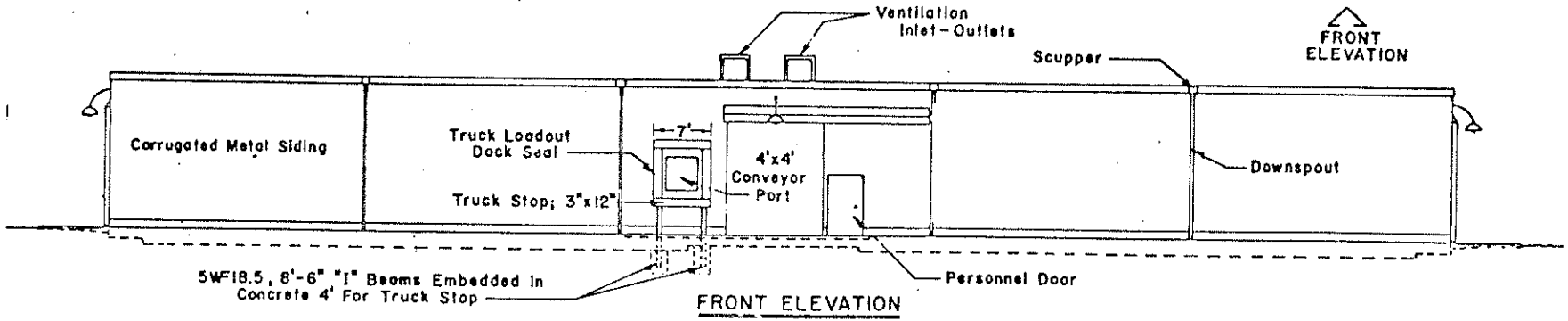
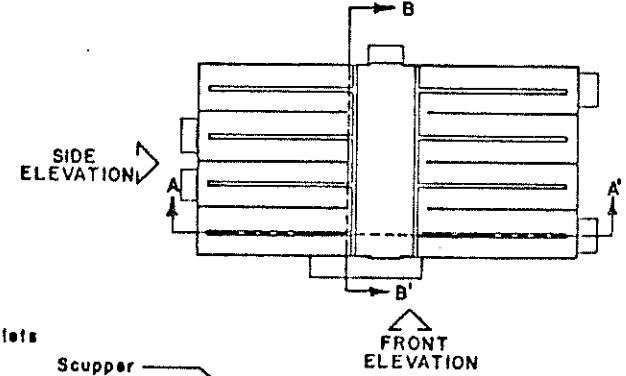
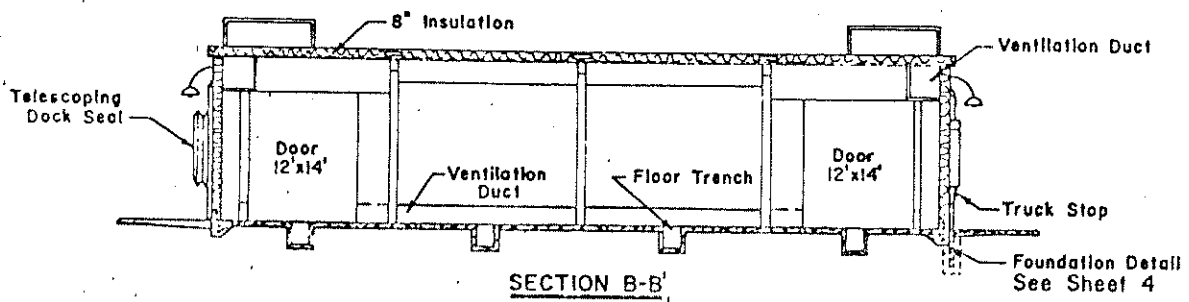
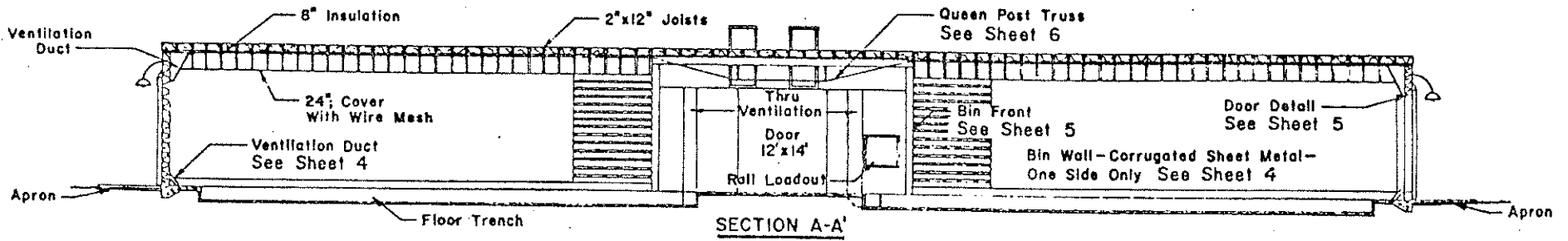
NOTE ADDED-SHEET 1  
REVISED: 5-2-61

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS		
AND UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING		
POTATO STORAGE 60,000 CWT. CROSS ALLEY		
ARS-TFRD	EX. 6018	SHEET 1 OF 10
PERSPECTIVE		



Note: Walls Between Bins Are  
Not Insulated See Section  
F-F', Sheet 4

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS		
AND UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING		
POTATO STORAGE 60,000CWT. CROSS ALLEY		
ARS-TFRD	EX. 6018	SHEET 2 OF 10
LAYOUT		



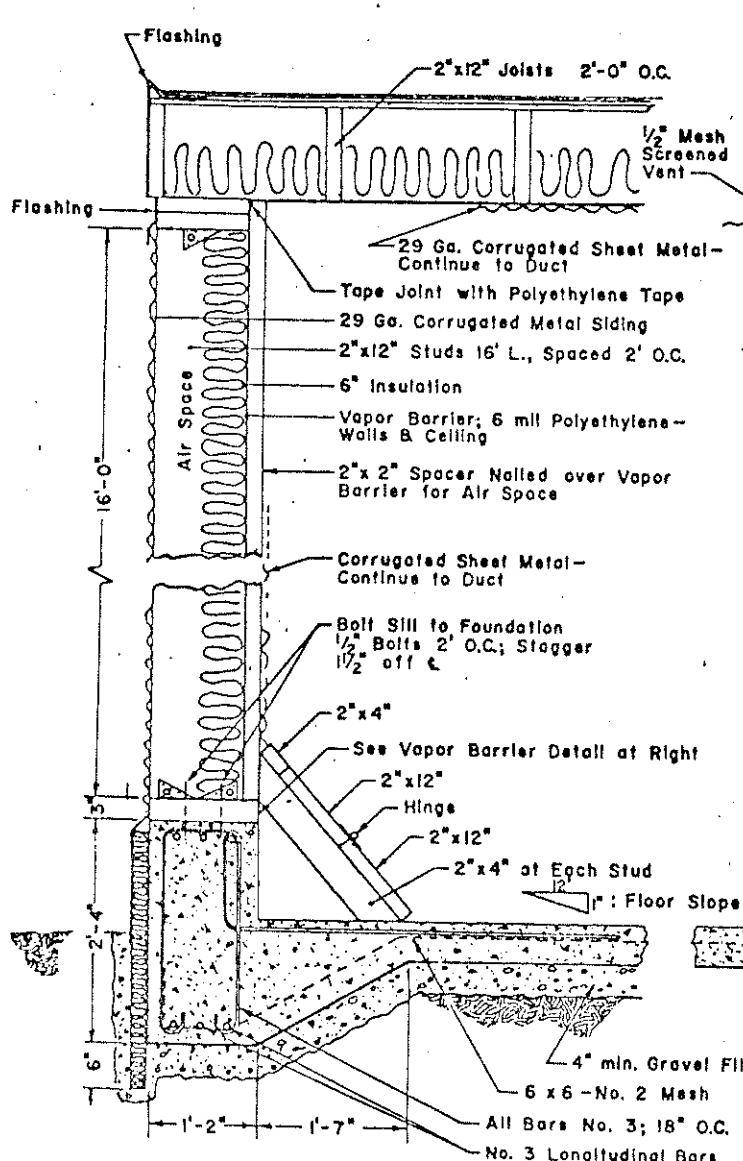
COOPERATIVE EXTENSION WORK IN  
 AGRICULTURE AND HOME ECONOMICS

AND  
 UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

POTATO STORAGE  
 60,000 CWT. CROSS ALLEY

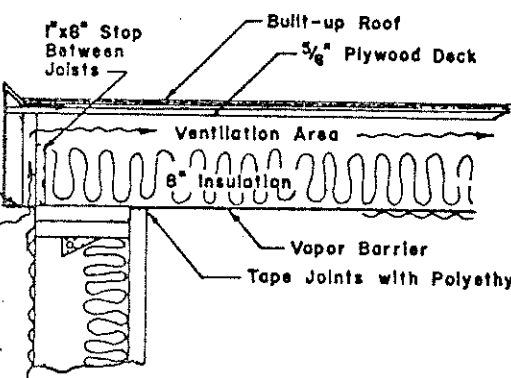
ARS-TFRD EX. 6018 SHEET 3 OF 10

ELEVATIONS & SECTIONS



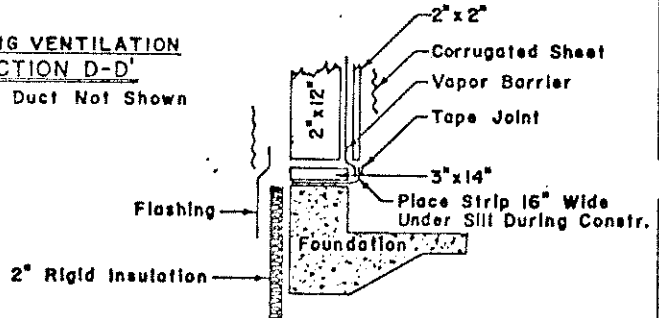
**TYPICAL AIR WALL**  
**SECTION C-C'**

Ventilation Duct Not Shown

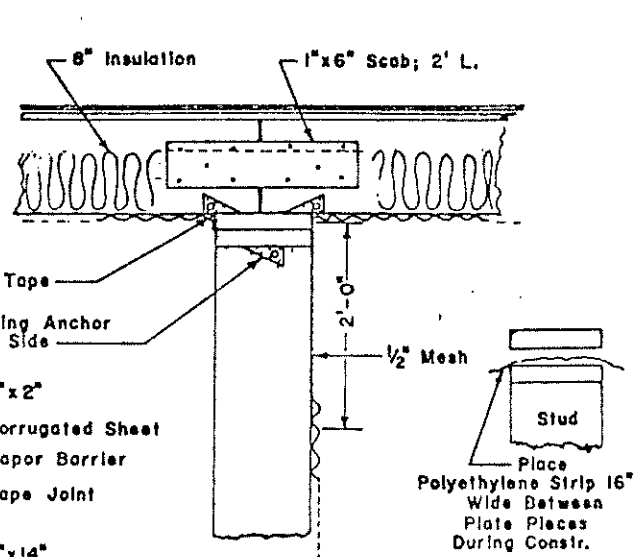


**CEILING VENTILATION**  
**SECTION D-D'**

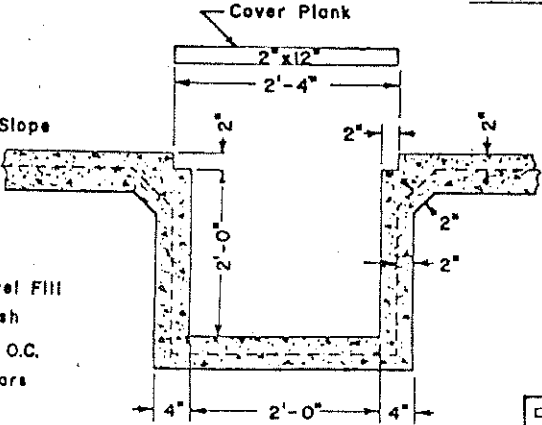
Ventilation Duct Not Shown



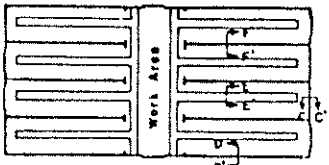
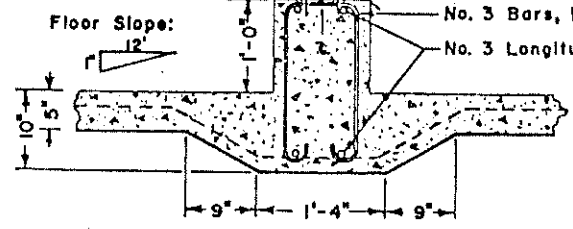
**VAPOR BARRIER DETAIL**  
Scale: 1/2" = 1'



**TYPICAL BIN DIVIDER**  
**SECTION F-F'**



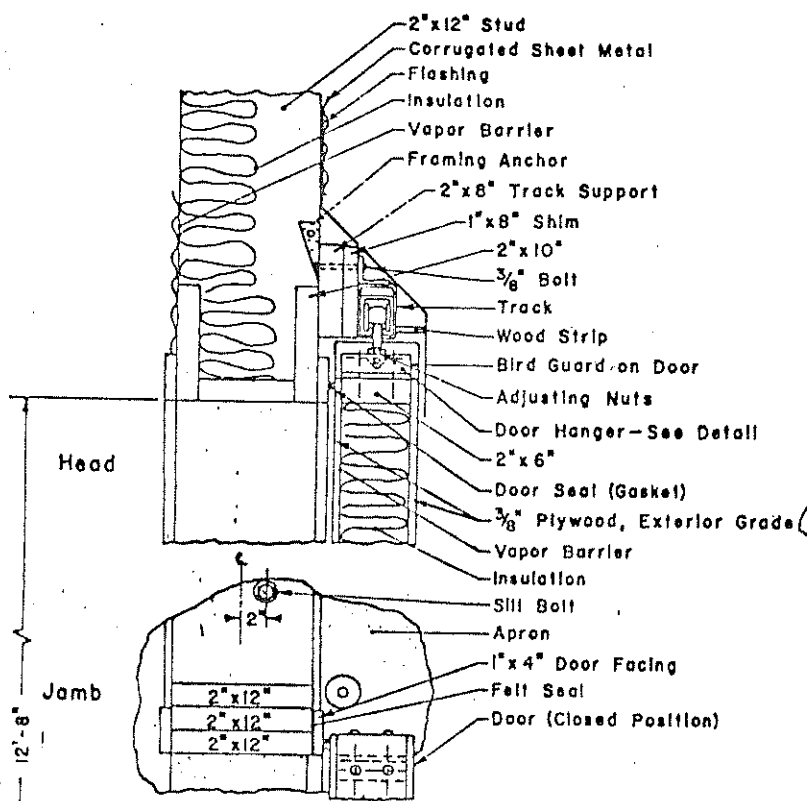
**TYPICAL FLOOR TRENCH**  
**SECTION E-E'**



**SECTION LOCATIONS**

Caution: Many Areas Cannot Use "Floating" Slab Foundation Shown.

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS		
AND UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING		
POTATO STORAGE		
60,000 CWT. CROSS ALLEY		
ARS-TFRD	EX. 6018	SHEET 4 OF 10
STRUCTURAL DETAILS		



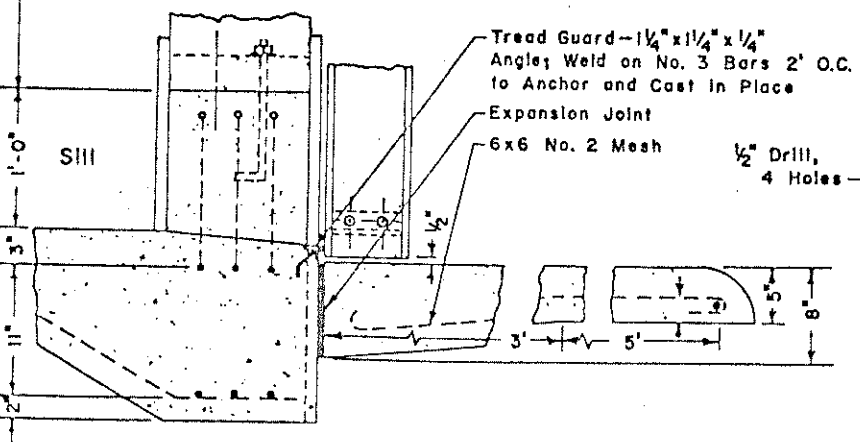
See Hanger Detail Below

See Door Detail

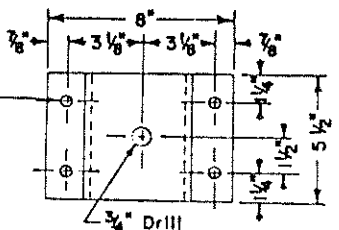
Vapor Barrier  
Insulation  
2"x6"

Door Construction Details  
Bin Drive Door Shown  
Do Not Scale

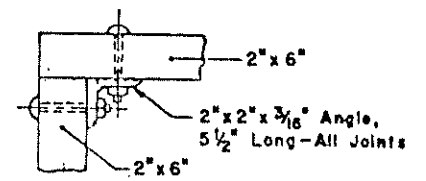
4" Roller



Door Details



Door Hanger Detail

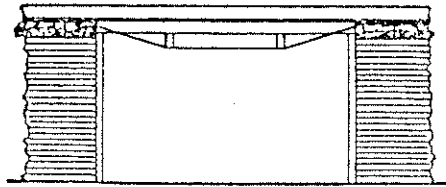


Door Corner Detail

COOPERATIVE EXTENSION WORK IN  
AGRICULTURE AND HOME ECONOMICS

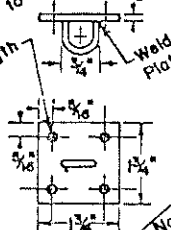
AND  
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

POTATO STORAGE  
60,000 CWT. CROSS ALLEY  
ARS-TFRD EX. 6018 SHEET 5 OF 10  
SLIDING DOOR DETAILS

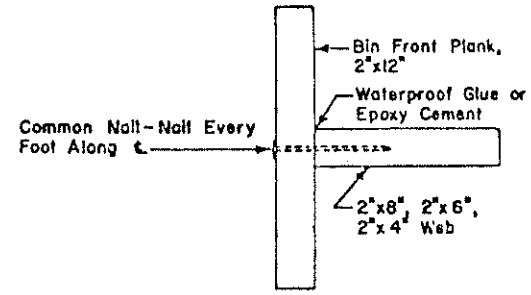


**QUEEN POST TRUSS**

Drill 4  $\frac{3}{8}$ " Holes with  $\frac{1}{4}$ " Diameter Countersink to Fit Flat Head Wood Screws 2" in Length



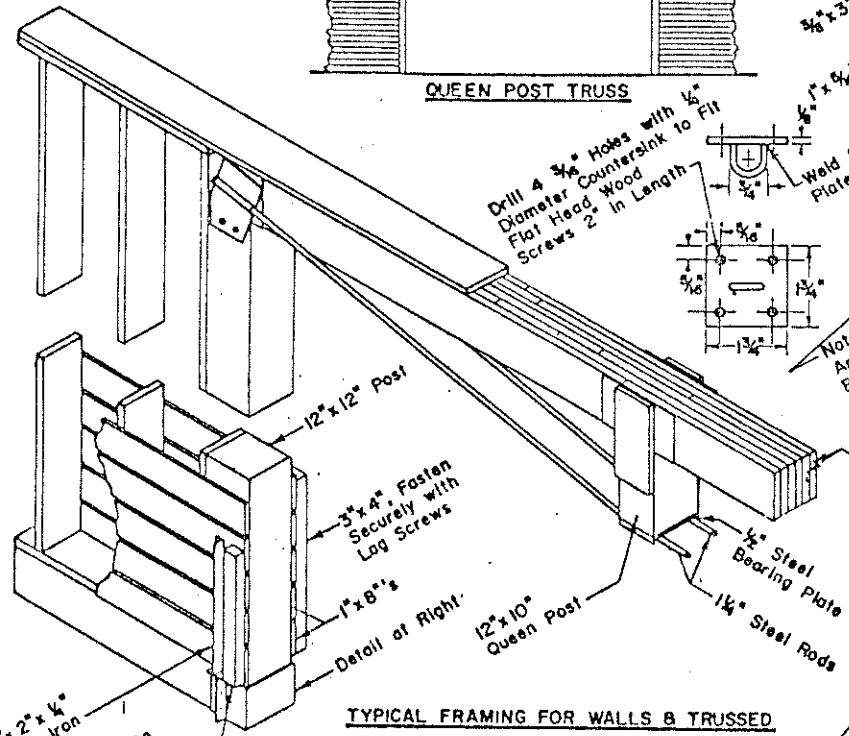
Note:  $3 \times 2 \times \frac{1}{4}$ " Angles Are in 4' Sections with Brackets 6" from Ends



Common Nail-Nail Every Foot Along  $\leftarrow$

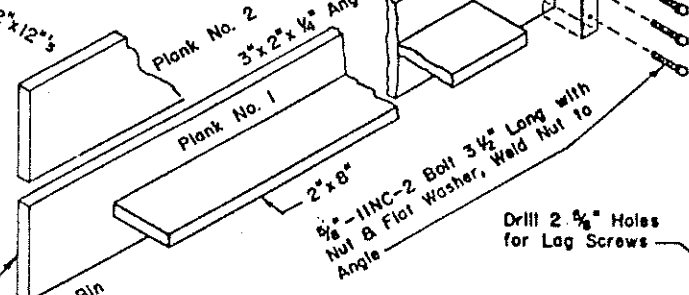
Note:  $2 \times 8$ " Web, First 6 Planks, Use 40d Nail  
 $2 \times 6$ " Web, Next 9 Planks, Use 20d Nail  
 $2 \times 4$ " Web, Last 2 Planks, Use 16d Nail

**BIN FRONT PLANK-END VIEW**

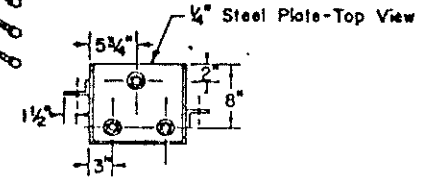


**TYPICAL FRAMING FOR WALLS & TRUSSED BEAMS**

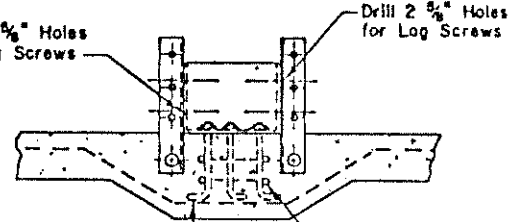
$3 \times 2 \times \frac{1}{4}$ " Angle Iron  
 $3 \times 2 \times \frac{1}{4}$ " Angle to Support Bin Fronts No. 2 and Above



Plank No. 2  
 $3 \times 2 \times \frac{1}{4}$ " Angle  
 Plank No. 1  
 $2 \times 8$ "  
 $\frac{5}{8}$ "-IINC-2 Bolt  $3 \frac{1}{2}$ " Long with Nut & Flat Washer, Weld Nut to Angle

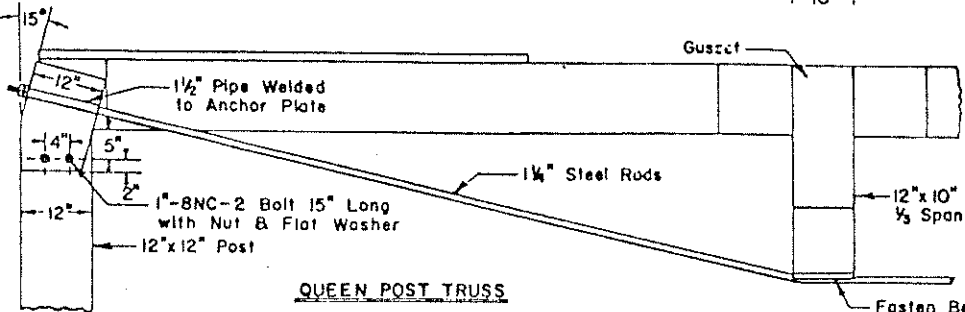
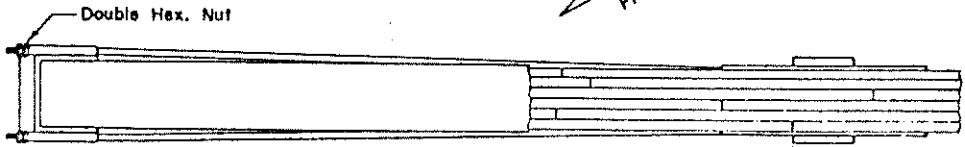


**$\frac{1}{4}$ " Steel Plate-Top View**



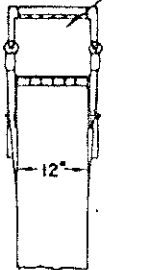
**CROSS SECTION BIN WALL ANCHOR DETAIL**

Drill 2  $\frac{5}{8}$ " Holes for Lag Screws  
 Drill 2  $\frac{5}{8}$ " Holes for Lag Screws  
 $\frac{5}{8}$ "-IINC-2 Bolt 16" Long with Nut & Flat Washer  
 No. 3 Bars Looped Around Anchor Bolts

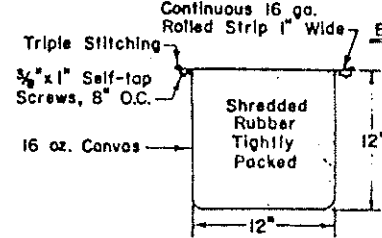


**QUEEN POST TRUSS**

Form Anchor & Secure to the Truss Beam

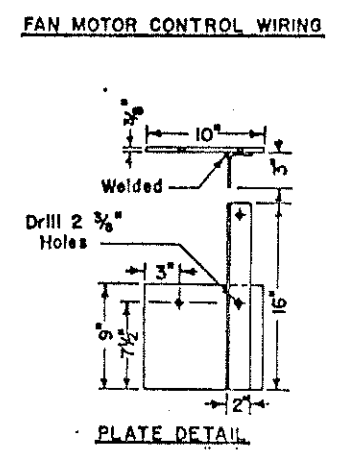
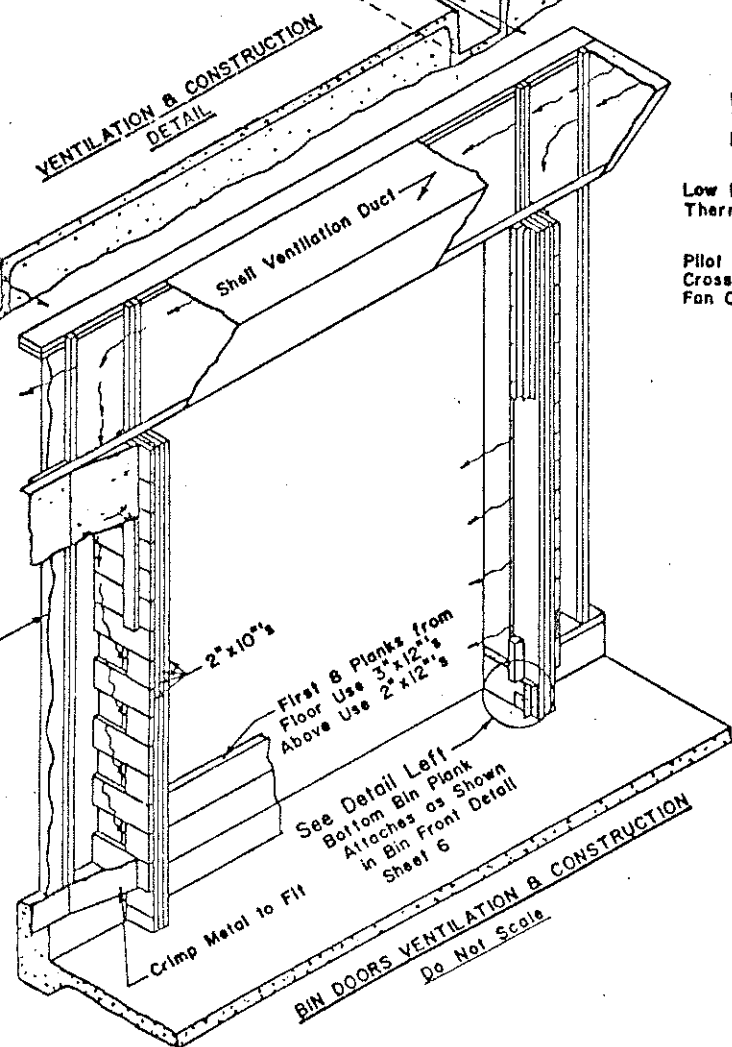
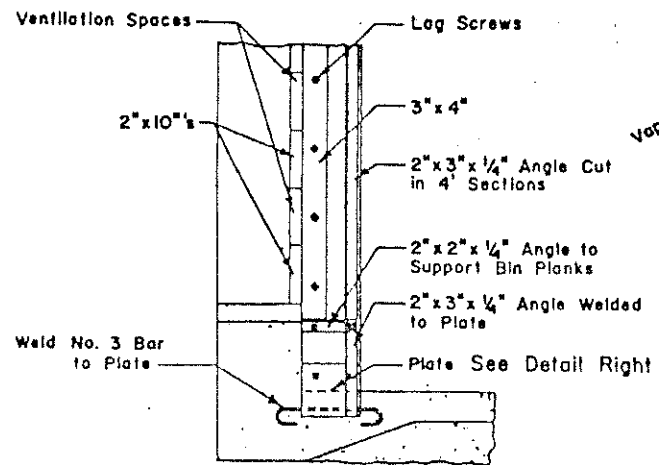
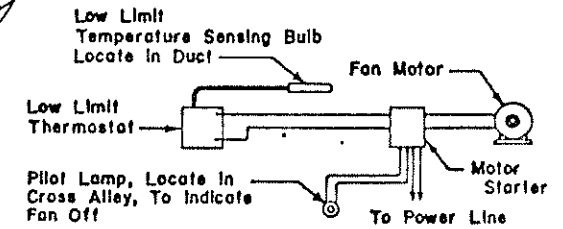
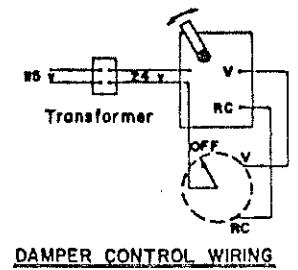
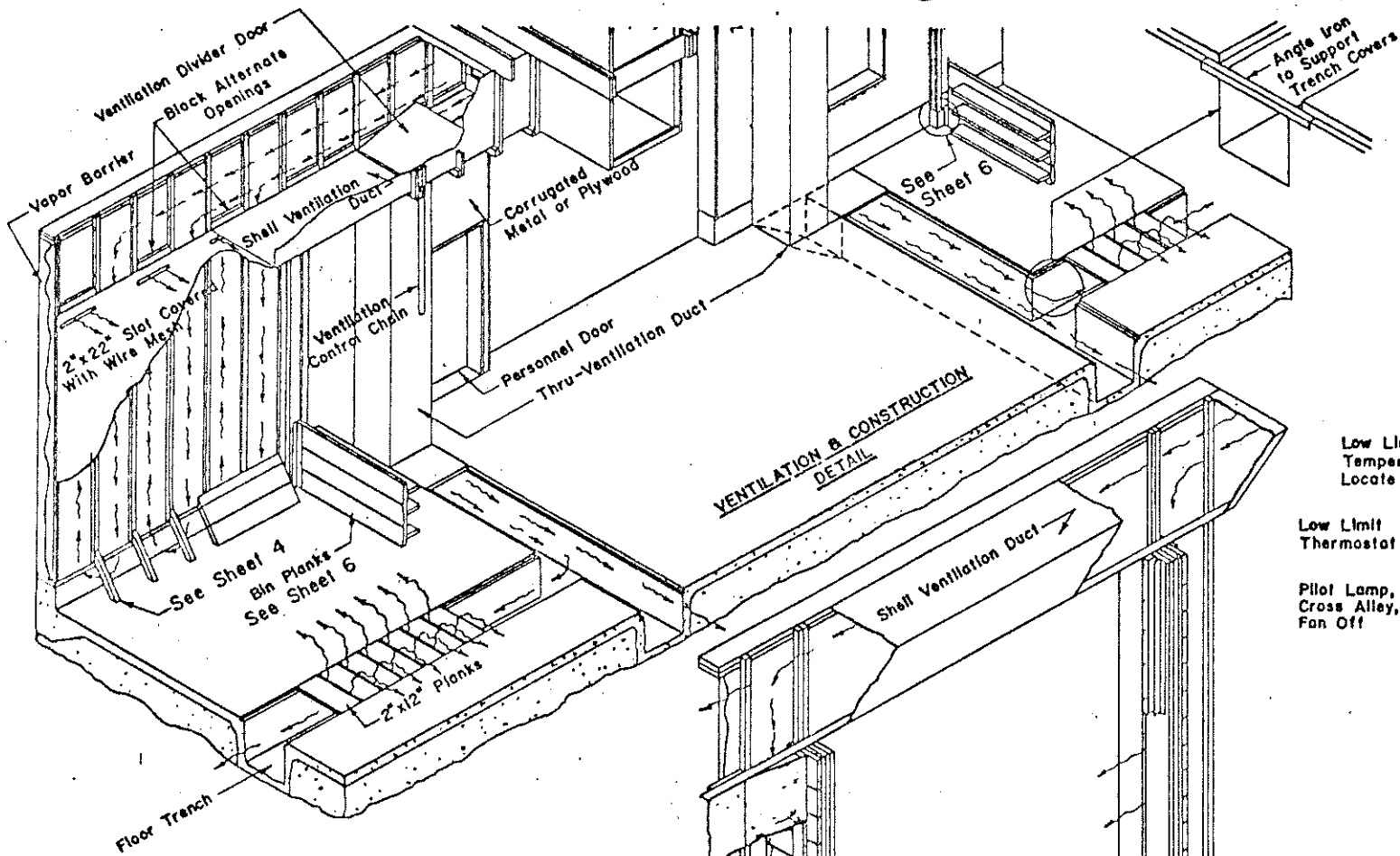


Double Hex. Nut  
 15"  
 12"  
 15°  
 1 1/2" Pipe Welded to Anchor Plate  
 4"  
 5"  
 2"  
 1"-BNC-2 Bolt 15" Long with Nut & Flat Washer  
 12"x12" Post  
 1 1/4" Steel Rods  
 Gusset  
 12"x10" Queen Post 1/2 Span  
 Fasten Bearing Plate Firmly to Queen Post



**DOCK SEAL See Sheet 3**

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS  
 AND UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING  
 POTATO STORAGE  
 60,000CWT. CROSS ALLEY  
 ARS-TFRD EX. 6018 SHEET 6 OF 10  
 TRUSS & BIN FRONT DETAILS



COOPERATIVE EXTENSION WORK IN  
AGRICULTURE AND HOME ECONOMICS

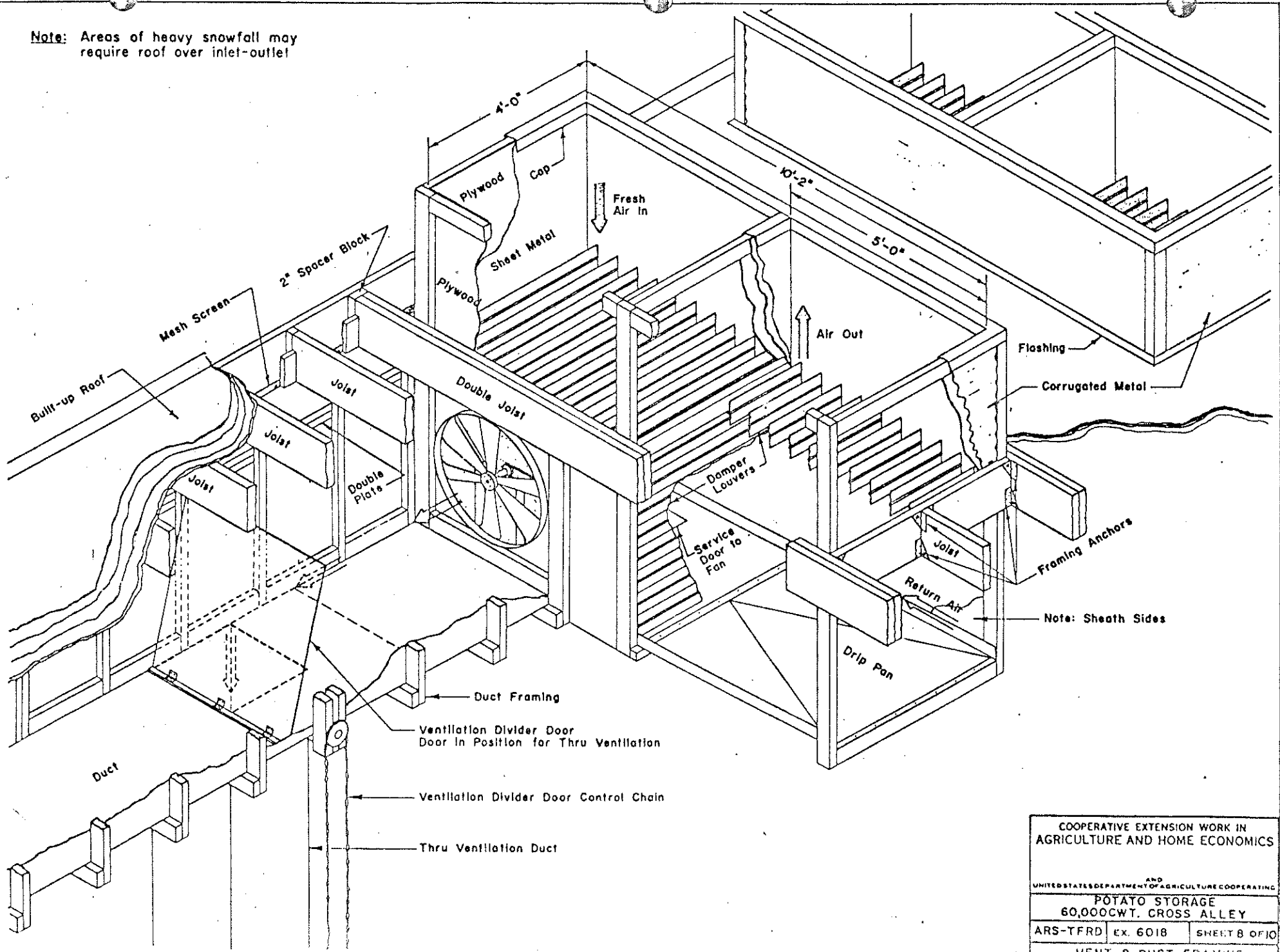
AND  
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

POTATO STORAGE  
60,000 CWT. CROSS ALLEY

ARS-TFRD EX. 6018 SHEET 7 OF 10

VENTILATION & CONSTRUCTION

**Note:** Areas of heavy snowfall may require roof over inlet-outlet



COOPERATIVE EXTENSION WORK IN  
 AGRICULTURE AND HOME ECONOMICS

AND  
 UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

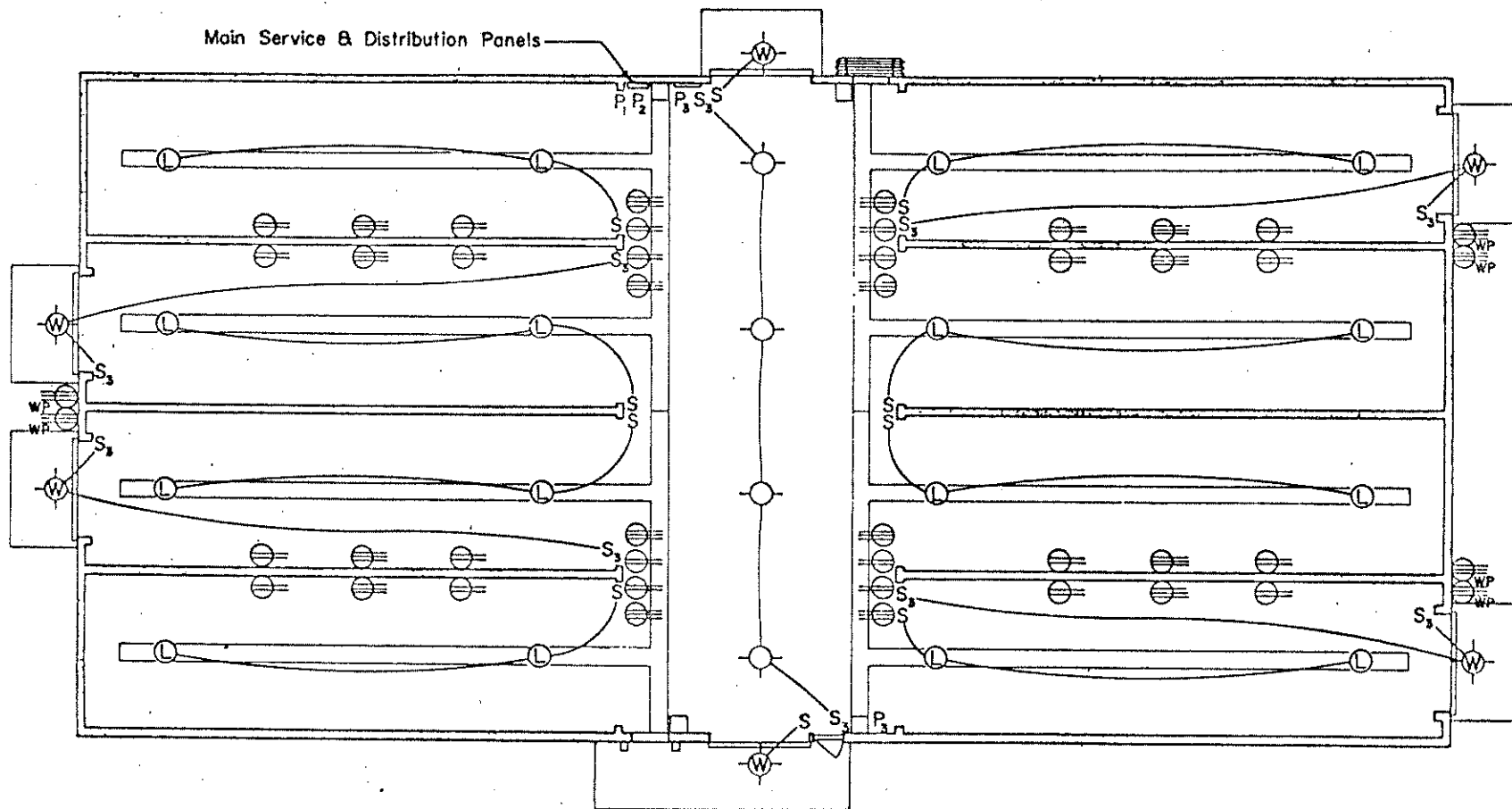
POTATO STORAGE  
 60,000 CWT. CROSS ALLEY

ARS-TFRD EX. 6018 SHEET 8 OF 10

VENT & DUCT FRAMING







**Legend**

- ⊙ Ceiling Lamp, 100w., Vaporproof
- ⊙ Floodlamp, 1000w., Waterproof
- ⊙ Floodlamp, 1000w.
- ⊕ Duplex Outlet, 110v., 1  $\phi$ , Grounded
- ⊕ Duplex Outlet, 208v., 3  $\phi$ , or 230v., 1  $\phi$ , Grounded
- ⊕ Duplex Outlet, 208v., 3  $\phi$ , or 230v., 1  $\phi$ , Grounded & Weatherproof

- S Single Pole Switch
- S<sub>3</sub> Single Pole Switch, 3-way
- P<sub>1</sub> Main Service Panel
- P<sub>2</sub> Distribution Panel
- P<sub>3</sub> Panel, Wall-mounted under Air Intake for Ventilation Controls

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS		
AND UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING		
POTATO STORAGE 60,000CWT. CROSS ALLEY		
ARS-TFRD	EX. 601B	SHEET 10 OF 10
ELECTRICAL		