

Smart, Jack



STATE OF MAINE
DEPARTMENT OF HUMAN SERVICES
AUGUSTA, MAINE 04333

DAVID E. SMITH
COMMISSIONER

March 30, 1977

Mr. Jack Smart
Old Kents Hill Road
Readfield, Maine

Subject: Waiver to the Maine Plumbing Code, Part II,
Ziebart Store, Leighton Road, Augusta

Dear Sir:

This will acknowledge receipt of a waiver request and a plan with soils information by William Rideout, Certified Site Evaluator, showing the proposed sewage disposal system for the subject project. It is not in compliance with the Maine Plumbing Code, Part II, because of distance of the chamber system to the building, the reason for the waiver request.

In consideration of the plan dated March 18, 1977, and recommendations by Mr. Rideout, and Richard Baker, Local Plumbing Inspector, this office will grant the responsible Local Plumbing Inspector the right to waive certain provisions of the Maine Plumbing Code for the following disposal system under authority of Section 10.3.

The installation of a 1000 gallon septic tank to be followed by the installation of 10 type "B" chambers. Chambers shall be at least 10 feet from the building slab.

In all other respects the installation is to comply with the Maine Plumbing Code, Part II, Private Sewage Disposal Regulations and follow the plan submitted with this proposal.

Final approval of the sewage portion is subject to permit by the Local Plumbing Inspector before the construction of this system. A completed HHE-200 Form must be submitted to him for processing. The inspector is to be notified before covering the work, and the work is to be left uncovered until his inspection. He shall be supplied with copies of approved plans for his reference at inspection. Approval is also subject to any local ordinances.

Yours very truly,

J. Bruce Johnson, Sanitary Engineer
Plans and Standards Review
Division of Health Engineering

JBj/mm

cc: Richard Baker, LPI ✓
Freeman Eugley

MAINE DEPARTMENT OF HEALTH AND WELFARE APPLICATION FOR PRIVATE SEWAGE DISPOSAL PERMIT		(For systems disposing of less than 2000 gallons per day)	This is NOT a permit; this form when completed must be presented to the Local Plumbing Inspector to obtain a permit		Page 1 of 2
Town Augusta	Street, Road, etc. Leighton Road <small>If on water body, give name</small>		Permit No. 15064M	Date 3/30/77	
Owner of property Jack Smart Co, Readfield, Maine			Size of lot 9+- acres	<input type="checkbox"/> Sq. feet <input type="checkbox"/> Acres	
Name & type of establishment if other than private home Ziebart Store; 150 GPD			Is lot Zoned <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Type of Zoning <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Resource Protection	
Name of applicant Owner's agent			If you plan to use a previous subdivision approval in lieu of site investigation, please submit one of the following: <input type="checkbox"/> Deed restriction re. private sewage disposal <input type="checkbox"/> Copy of the subdivision's soils report <input type="checkbox"/> Soils report from a State Agency		
Applicant's address Street, Box, etc.		Tel. No.			
Town		zip code			
Applicant's signature <i>Jack Smart by RAE</i>		Date 3-29-77			
This application is for: <input checked="" type="checkbox"/> New System <input type="checkbox"/> Expanded System <input type="checkbox"/> Replacement System <input type="checkbox"/> Replacement of <input type="checkbox"/> Treatment Tank Only <input type="checkbox"/> Disposal Area Only			The water supply for this property is: <input type="checkbox"/> Dug well, depth _____, lining _____; <input type="checkbox"/> Drilled well, depth _____, lining _____; <input type="checkbox"/> Spring <input type="checkbox"/> depth _____, lining _____; <input type="checkbox"/> Surface water <input type="checkbox"/> Body, <input type="checkbox"/> Course— <input type="checkbox"/> with disinfection, <input type="checkbox"/> without disinfection. <input type="checkbox"/> Public Utility, name _____		

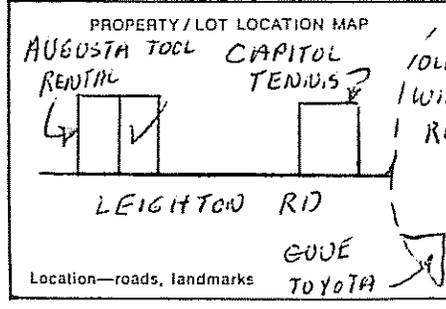
SITE INVESTIGATION						
Show location of pits and/or borings on sketch on page 2, and refer to completed sample form and Chapter 4 of the Code, II.						
Soil Profile No.	Soil Profile No. 1		Soil Profile No.		Soil Profile No.	
	<input type="checkbox"/> Pit	<input checked="" type="checkbox"/> Boring	<input type="checkbox"/> Pit	<input type="checkbox"/> Boring	<input type="checkbox"/> Pit	<input type="checkbox"/> Boring
Thickness and Description of each soil strata encountered	Organic strata Inches	Organic strata Inches	Organic strata Inches	Organic strata Inches	Organic strata Inches	Organic strata Inches
	1st strata Brown silt loam Inches	1st strata Inches				
	2nd strata Mottled fine sand, silt and clay Inches	2nd strata Inches				
	3rd strata Inches	3rd strata Inches	3rd strata Inches	3rd strata Inches	3rd strata Inches	3rd strata Inches
Depth from surface of ground to:	Total Depth of observation hole Inches 48	Total Depth of observation hole Inches				
	Max. Ground water table— mottling 17 Inches	Max. Ground water table— mottling Inches				
	Impervious layer, clay, etc. 30+- Inches	Impervious layer, clay, etc. Inches				
	Bedrock <input checked="" type="checkbox"/> None Evident Type of Bedrock	Bedrock <input type="checkbox"/> None Evident Type of Bedrock				
Surface slope 3-5 %	Surface slope %	Surface slope %	Surface slope %	Surface slope %	Surface slope %	
Soil Group & Condition per Table 9-1 of the Code, II 3-C	Soil Group & Condition per Table 9-1 of the Code, II	Soil Group & Condition per Table 9-1 of the Code, II	Soil Group & Condition per Table 9-1 of the Code, II	Soil Group & Condition per Table 9-1 of the Code, II	Soil Group & Condition per Table 9-1 of the Code, II	

On **3/18/77** (date), a site investigation for this project was completed. I supervised this soil evaluation and certify that the results indicated above best represent the soil conditions found. I recommend the following type and size of private sewage disposal system. I also recommend the proposed private sewage disposal system layout and location shown on page 2.

Signature and Registration Certification Number: *William W. Redman*
Date signed: **3/18/77**

Soil Scientist
 Biologist
 Soil Engineer
 Other, must show current letter of certification to LPI

PRIVATE SEWAGE DISPOSAL SYSTEM PROPOSED			
Show location of system and details on sketches on page 2, and refer to completed sample form			
SYSTEM: <input checked="" type="checkbox"/> COMBINED SYSTEM <input type="checkbox"/> SEPARATED SYSTEM If separated system—type of human waste disposal system to be used: <input type="checkbox"/> Sealed Vault Privy <input type="checkbox"/> Open Pit Privy <input type="checkbox"/> Compost Toilet <input type="checkbox"/> Incinerator Toilet <input type="checkbox"/> Chemical Toilet <input type="checkbox"/> Other, describe _____ See Chapter 9 of the Code, II.	TREATMENT TANK: <input checked="" type="checkbox"/> Septic Tank <input type="checkbox"/> Concrete <input type="checkbox"/> Fiberglass <input type="checkbox"/> Metal Manufacturer— Size in gallons 1000 <input type="checkbox"/> Aerobic Tank Manufacturer— Model No. Size in gallons	SUBSURFACE ABSORPTION AREA	
		Type <input type="checkbox"/> Trench System: Total trench length _____ <input type="checkbox"/> Bed System Length _____ Width _____ <input checked="" type="checkbox"/> Chamber System Number 10 <input type="checkbox"/> Type A <input type="checkbox"/> Single File <input checked="" type="checkbox"/> Cluster <input type="checkbox"/> Mound System Length _____ Width _____ at base <input type="checkbox"/> Special System Length _____ Width _____ <input type="checkbox"/> Non-discharge System Bed-Length _____ Width _____ Holding Tank Size _____ Gal. Manufacturer _____ <input type="checkbox"/> Alarm device provided, type _____	



FOR THE USE OF LPI ONLY

Denial: Application is denied for following reasons; portions of the Code II are cited.
 Form is incomplete (_____ pg.) as to General info, Site Investigation, System Proposed, Site Plan, Disposal System Plan, Cross-Section, Statement. See Section 2.3.

Site Investigation indicates site is totally unsuitable for disposal system; Sections 4.5 and 9.5, Table 9-1 Group 9 and 10. Unsuitable for system proposed; Sections 4.3, 4.6, 9.5, Table 9-1.

System Proposed does not conform to Code; See Sections 9.

Site Investigation indicates site modifications are necessary; See Sections 4.3, 4.4, 4.6, 8.7.

Miscellaneous _____ See Section _____

Acceptance: Application for permit is approved with condition specified, comply with Section **SEE WAIVER**
 without condition

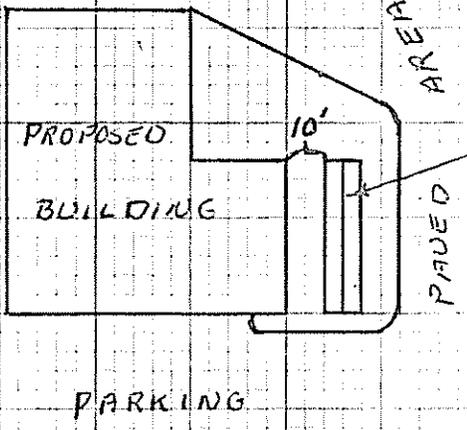
Signed LPI: *Richard G. Baber* Date: **3-29-77** HHE-200 5/75

APPLICATION FOR PRIVATE SEWAGE DISPOSAL PERMIT
(For systems disposing of less than 2000 gallons per day)

Town Augusta	Street, Road, etc. Leighton Road <small>If on water body, give name</small>	Owner of property Jack Smart Co.
------------------------	--	--

Site Plan

Scale 1" = 10 Ft. or 1" = 50'



2 ROWS OF FLOW DIFFUSORS, 5 EACH ROW; 10' FROM BUILDING AND 5' FROM PAVED AREA.
SYSTEM WILL BE INSTALLED IN 4 FEET + SANDY LOAM TO LOAMY SAND FILL PLACED IN CONJUNCTION WITH GRADING OPERATION.

LEIGHTON ROAD

Private Sewage Disposal Plan

Scale 1" = 20' or

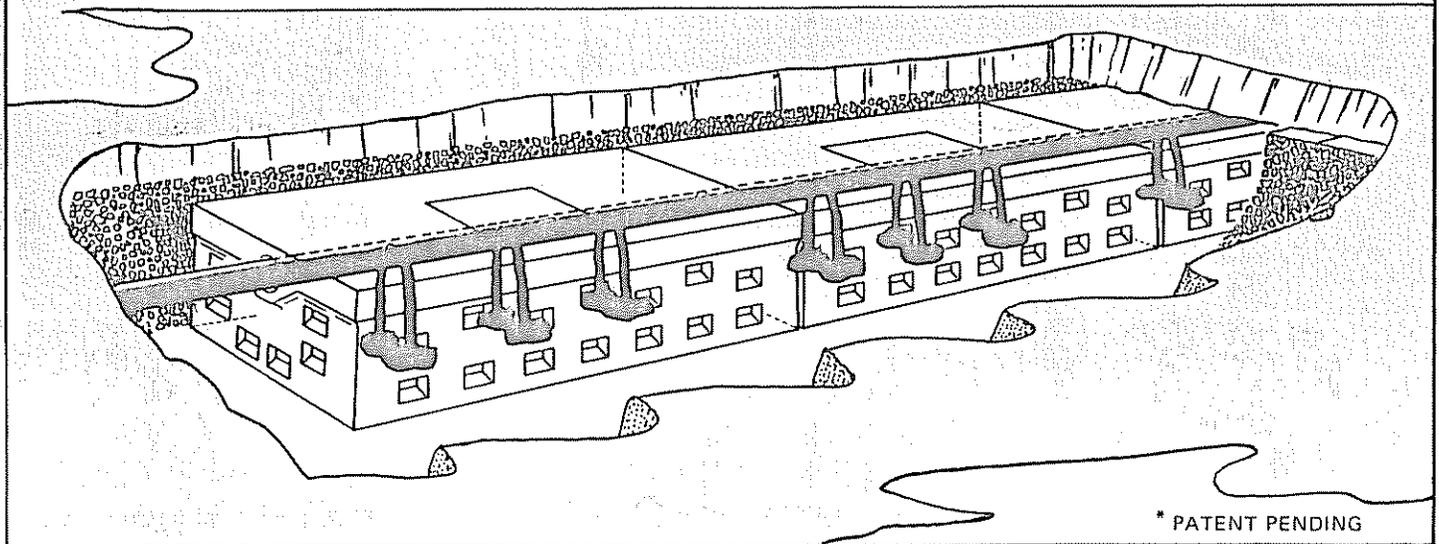
SEE ATTACHED LITERATURE FROM
SUPERIOR CONCRETE CO.
AUBURN, MAINE

Subsurface Absorption Area Cross-section

Scale: Vertical — 1" = 5' or
Horizontal — 1" = 20' or

Superior's FLOWDIFFUSOR™

LEACHING CHAMBERS*

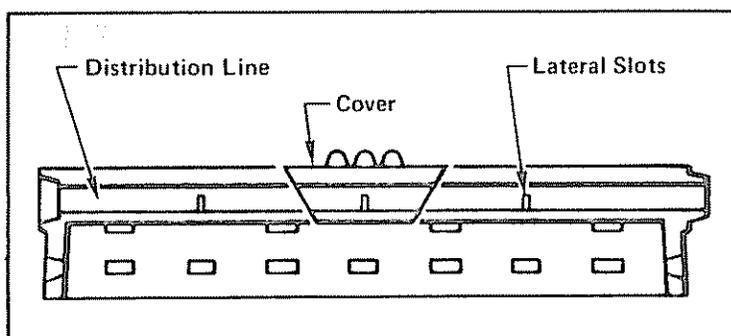


The Superior FLOWDIFFUSOR leaching chamber is a monolithically precast concrete open bottomed rectangular structure adapted to rest squarely on a prepared absorption bed and thusly enclose within its top, side and end walls a volume of free air space above the absorption bed. The liquid volume of each unit is 278 Gals.

The side and end walls of each chamber are provided with rows of inwardly bevelled openings above the absorption bed level to allow air movement, and after row levels are reached, allow fluid to spill over and out from one chamber to another. The openings are designed to preclude entry of stone and soil to the chamber interior and to allow air movement between chambers prolonging system life.

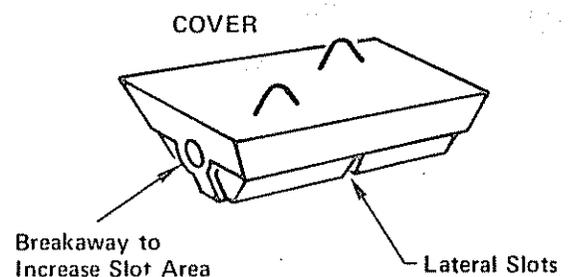
Each chamber is supported by the entire perimetral edge area of the side and end walls reducing any tendency to shift, fracture or be dislocated.

Each chamber is steel reinforced for a load capacity of 400 P.S.F. capable of withstanding H-20 wheel loading.



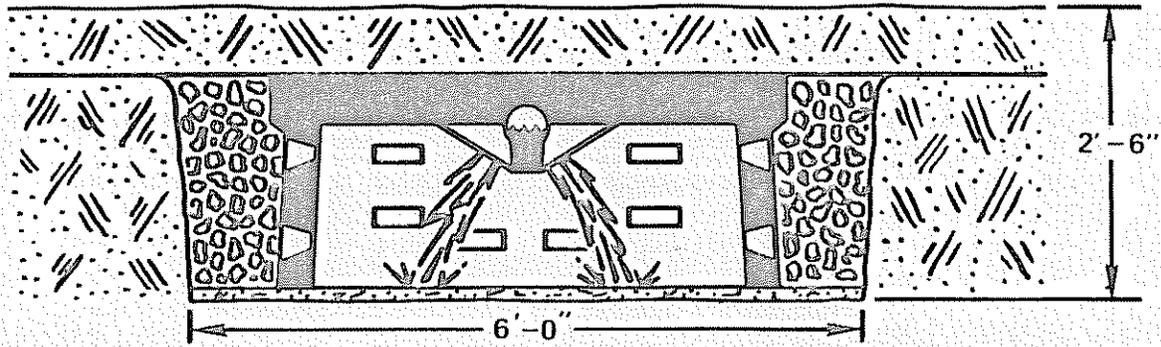
SECTIONAL VIEW

Within the ribbed ceiling top wall, which includes a removable inspection cover, a distribution line is formed extending end to end. The ceiling of the top wall is provided with slots at given intervals through lateral facing wall sections of the flow distribution line designed to meter flow into each chamber.



The inspection cover forming part of the top wall and a section of the distribution line includes centrally located slots affording flow between the distribution line and chamber. The end facing sides of the inspection cover are formed so that thin sections may be broken away to provide additional flow when desired. The inspection covers are removable to facilitate cleaning and renewal of the bed.

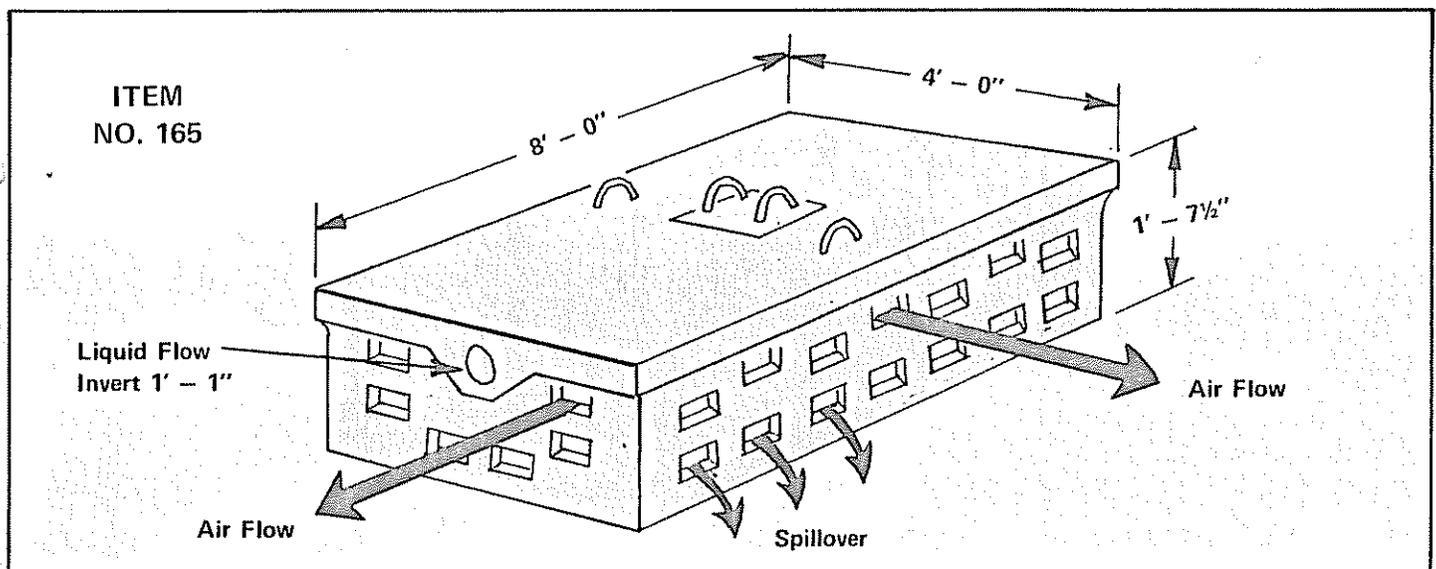
CROSS SECTION OF TYPICAL INSTALLATION IN TRENCHES

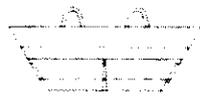


Installation of the Superior FLOWDIFFUSOR leaching chamber is familiar. A trench is dug 6 feet wide and approximately 2½ feet deep. Preferably to facilitate cleaning, 2 inches of sand deposited in the trench bed. The chambers are then placed into the trench and interconnected. One foot of gravel stone is placed between chamber side walls and trench walls to the top surface of the chamber and covered with salt hay or tar paper. Grading with soil completes the job.

HIGHLIGHTS

- Effluent carried to ends of trench assuring fair distribution to each chamber.
- Cascading effluent is oxygenated and absorption bed is aerated; this serves to inhibit slime formation and therefor clogging of the porous bed.
- The absence of stone in the chamber means that the exposed absorption surface area as compared to the conventional stone trench is greater by three times; thus for a given area the chamber is less prone to clog and is useable longer before slime accumulation clogs the bed. Beyond this and further increasing life is the action of aeration.
- When the bed becomes clogged, the slime layer, usually no more than an inch, may be removed by way of the cover opening.
- Side to side configuration are achieved with top wall edges abutting.
- Greater capacity is also realized because of greater volume for effluent which may accumulate in each compartment to the levels of side perforations and overflow for absorption into the lateral walls of the trenches, and adjacent compartments.
- Storage of fluid in each compartment serves to arrest movement of fluids to the lowest level of a bed. This is of particular advantage in view of the fact that it is usually impossible to maintain bed surface levels. This feature, together with slotted flow through the distribution lines to carry effluent to the entire system yet allowing portions of the flow to fall into each compartment for absorption, provides even distribution of effluent.
- Side wall drainage openings angled to keep out gravel and dirt.
- Adjustable slots in cover to differentially control flow in serial chambers according to grade.





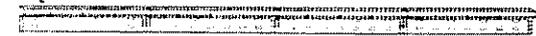
INSPECTION COVER



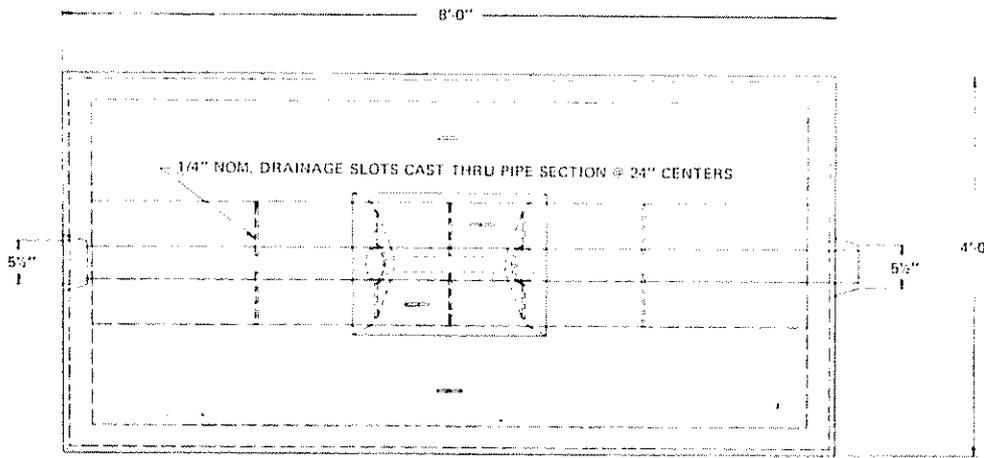
BREAKOUT FOR
 ADDITIONAL FLOW WHEN REED.



PLAN VIEW OF TYPICAL INSTALLATION



SECTION "A-A"



PLAN VIEW

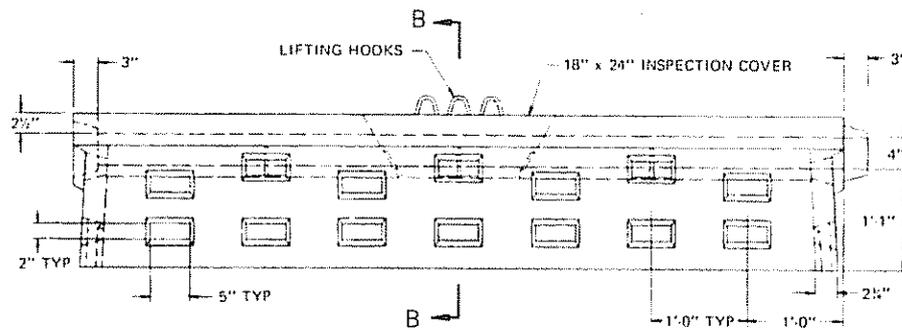


CROSS SECTION OF TYPICAL INSTALLATION

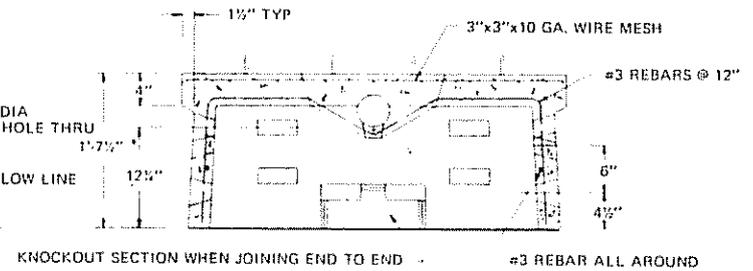
NOTES:

1. CONCRETE 5000 P.S.I. @ 28 DAYS
 2. WEIGHT PER UNIT APPROX. 2400 LBS.
 3. LOAD CAPACITY 400 P.S.F.
- PATENT APPLIED FOR

ITEM #165



SIDE VIEW



SECTION "B"-"B"