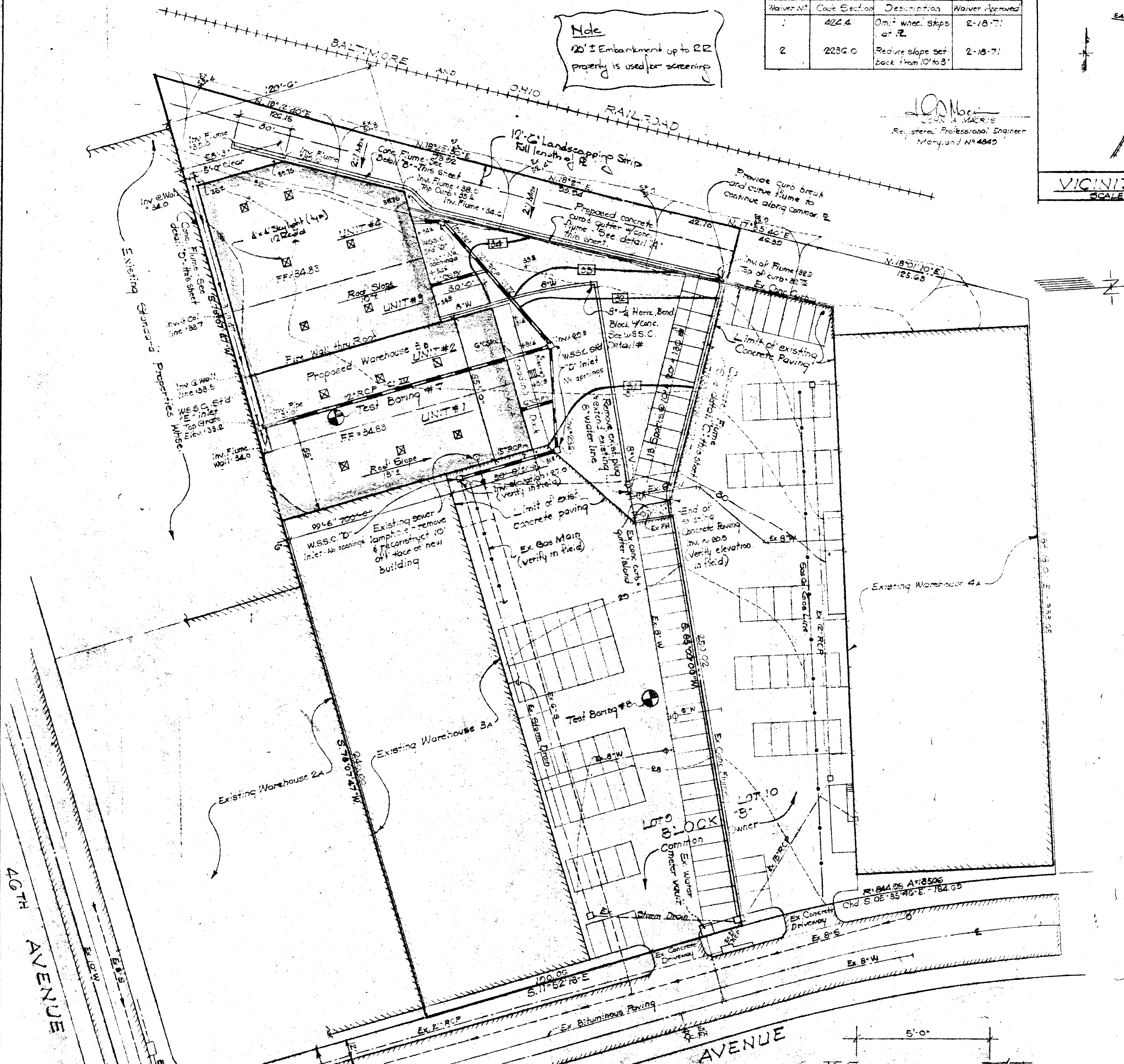
ENGINEERS CERTIFICATE

I hereby certify that these plans are in conformance with the Grading Ordinance of Prince Georges County, Article 22, except for the following:

Waiver No.	Code Section	Description	Waiver Approved
1	424.4	Omit wheel stops at ℞	2-18-71
2	2236.0	Reduce slope set back from 10' to 3'	2-18-71

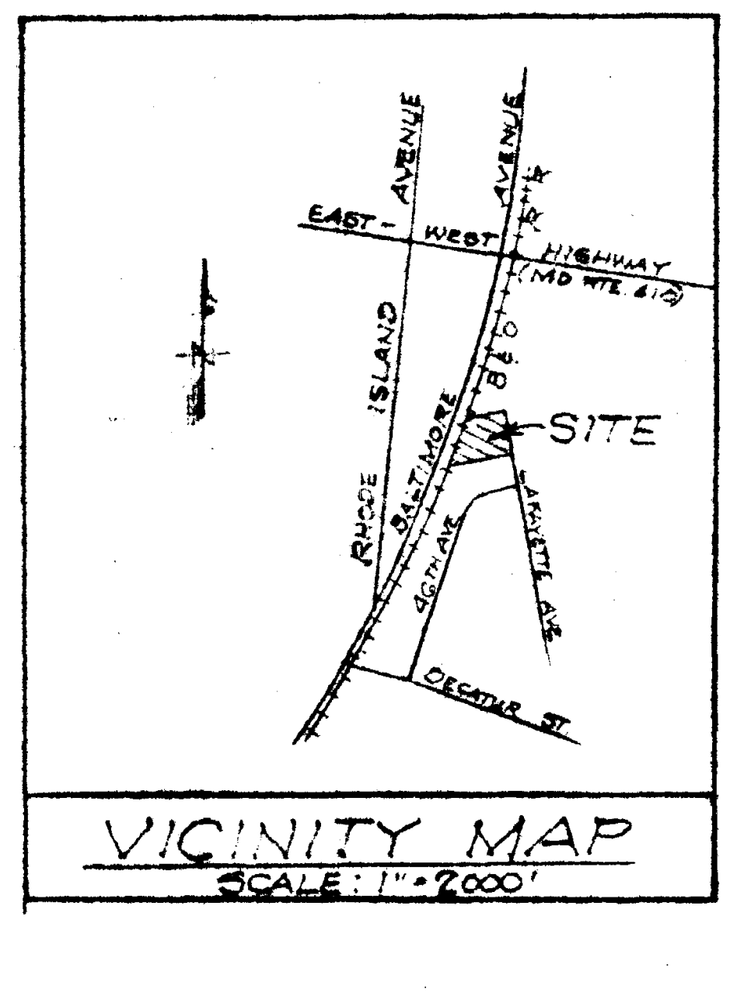
John A. Macris
JOHN A. MACRIS
Registered Professional Engineer
Maryland No 4849

Note
20' ± Embankment up to RR property is used for screening



PLAN
SCALE: 1" = 30'

NOTE:
Lafayette Ave. has been constructed to its ultimate section in conformance with plans prepared by Greenhorne and O'Mara; File No. 50-869.



VICINITY MAP
SCALE: 1" = 2000'

GENERAL Included is furnishing of all labor, equipment, and material necessary to construct a one story warehouse. The contract for erection of the building shall be prepared and executed in accordance with the "Standard General Conditions of the Construction Contract", of the National Society of Professional Engineers. Copies of this form are available on demand from the Office of the Engineer.

DESIGN CRITERIA A.I.S.C. Manual (1963); A.C.I. Manual (1963); B.O.C.A. Code (latest edition).

EXISTING CONDITIONS All existing conditions and dimensions shall be determined and verified in the field prior to fabrication of any materials.

LIVE LOADS Roof - 30 psf; Warehouse floor - 250 psf.

SOIL VALUE In compliance with Section 725.0 as amended, we have made an investigation of the proposed site for this project. In conjunction with soil boring information supplied by Granger & Oliver, July 15, 1968, in our opinion the soil is capable of sustaining a superimposed load of 2000 psf. The soil is sandy clay and clayey sand with a moderate shrink-swell potential. Notify Macris and Simko for footing inspection prior to pouring foundations. Final bearing capacity shall be ascertained at time of footing inspection.

FOOTINGS To be minimum of 2'-6" below finished grade and bearing on undisturbed soil 1'-0" below original grade. All footings not shown will be 12" thick and project 6" on each side.

BACKFILL All backfill to be compacted by means approved by the Engineer in 6" layers. Compacted fill prior to laying of the floor slabs shall have a density and compressive value of not less than 95% of the normal undisturbed soil value, which shall be determined by an approved testing laboratory as prescribed by the pertinent A.A.S.H.O. Specifications.

EXCAVATION The Contractor shall be responsible for providing adequate vertical and horizontal support of adjacent buildings, excavation and utilities. Grade all areas to drain.

CONSTRUCTION LOADS The Contractor shall ask for and obtain the Engineer's approval before placing on the structure any loads greater than the above design loads.

CONCRETE In general to conform to the A.C.I. Building Code Requirements for Reinforced Concrete (1963). Concrete for slabs shall have a compressive strength of 3000 psi @ 28 days, with 6 bags of cement per cubic yard, and 6 gallons of water per bag of cement. Footing concrete shall be 2500 psi, with 5 1/2 bags of cement per cubic yard. Maximum slump - 5".

CONCRETE PROTECTION Reinforcing steel to have the following minimum concrete cover: footings - 3"; slabs - middle of slab

REINFORCING STEEL All reinforcing steel shall be new, high strength billet steel conforming to A.S.T.M. Specifications A-432 and A-305 (Min. Fy + 60,000 psi). All reinforcing steel shall be detailed, fabricated and placed in accordance with the latest edition of the A.C.I. Manual of Standard Practice.

WELDED WIRE MESH To conform to A.S.T.M. Specification A-185, and to be placed as indicated on the drawings. Lap edges at least 6" in each direction.

STRUCTURAL STEEL In general to conform to A.S.T.M. Specification A-36. All steel shall be detailed, fabricated and erected in accordance with the latest edition of the A.I.S.C. Manual. All connections shall develop the full strength of the beams. In general, field connections shall be made with 3/4" high strength bolts (A-325), and shop connections shall be welded. Frame all openings in roof with 4" x 4" x 5/16" angles, unless otherwise noted. All structural steel shall be painted one shop coat of light colored zinc chromate. Minimum bearing plates shall be 8" x 8" x 5/8", unless otherwise shown.

STEEL JOISTS All steel joists shall conform to the latest S.J.I. Specifications, and the Prince Georges County Building Department, in all respects. Joists shall be welded to steel supports with two 1/4" welds, 1" long.

METAL ROOF DECK To be 1 1/2", 22 gauge, galvanized or painted. Deck shall extend over three supports, and shall be capable of supporting a minimum uniform load of 50 psf. Metal deck shall be manufactured by a member of the Steel Deck Institute, and shall be installed in struct accordance with the specifications of the Steel Deck Institute.

LINTELS Unless otherwise indicated, provide loose angle lintels as follows, with one angle for each 4" of masonry, with 3 1/2" leg horizontal and 6" minimum bearing each end:

opening to 3'-0", 3 1/2" x 3 1/2" x 1/4" L
3'-1" to 5'-0", 4" x 3 1/2" x 5/16 L
5'-1" to 6'-6", 5" x 3 1/2" x 3/8" L
6'-6" to 8'-0", 6" x 3 1/2" x 3/8" L

Openings greater than 8'-0" - 8B13 with suspended 5/16" plate and minimum of 8" bearing each end. Lintels over openings in interior masonry walls, not otherwise specified, shall be pre-cast, lightweight concrete lintels with 1 - #5 bar top and bottom for each 4" width.

STEEL INSPECTION Field structural steel to be inspected by qualified inspectors approved by the structural engineer. Field inspection reports to be filed with the structural engineer within 5 days of the time of actual inspection. Inspectors must be notified of all phases of construction and welding by the general contractor.

APPROVAL OF SHOP DRAWINGS Shop drawings for all structural items mentioned above are a part of the structural design of this project, and must be submitted to and approved by this office. If a contractor or owner fails to obtain our approval of the shop drawings, we will not be responsible for the structural design of this project.

ROOFING To be "bonded-type" 4-ply built up over 1" rigid insulation. No bond required. Provide all membrane flashing, cants and counter flashing, all as shown on plans. The Contractor shall properly flash and waterproof all openings in roof for heater flues, skylights, plumbing vents and roof drains. Furnish and install skylights as shown in plans.

CARPENTRY Provide all wood framing plates, blocking and other rough lumber, securely anchored or fastened in place where shown or called for in plans. Studs and joists shall be structural grade douglas fir.

PAINTING The Contractor to furnish all labor and materials necessary for the painting of the following areas:

1. All doors, trims and mouldings to receive two coats of semi-gloss paint.
2. All galvanized roof leaders and scuppers shall receive one coat of galvanized metal prime, and one coat of semi-gloss paint. Cast iron roof leader extensions shall be primed and painted to match.
3. All exposed exterior block masonry walls shall receive one coat of "Spraycrete" or approved equal.

MASONRY Clay facing brick shall conform to A.S.T.M. Specification C-216-67, oversize (5 courses per 2 block courses). Allow $52.00 per thousand. All masonry construction shall be in accordance with the American Standard Building Code Requirements for masonry. Where specified as solid, bearing walls shall be constructed of 75% solid, load-bearing masonry units. Isolated piers and pilasters shall be constructed of clay bricks with a minimum strength of 4500 psi, unless otherwise noted.

Provide #9 duro-wall or equivalent in all masonry walls every other block course (i.e. 16" c.c. vert.) unless noted otherwise. Above and below wall openings, place duro-wall at 8" o.c. for two block courses. Provide 3 courses of solid brick or 100% solid masonry below all joist and slab bearing lines. Provide 16" minimum solid brick or 100% solid masonry below all lintels and/or minor wall bearing beams. Brick piers shall be fully bonded into adjacent walls. Unless otherwise specified in plans, all masonry shall conform to the following specifications:

Hollow load-bearing concrete masonry units - A.S.T.M. - C-90 -66T
Hollow non-load bearing concrete mas.units - A.S.T.M. - C-129-64T
Solid load-bearing concrete masonry units - A.S.T.M. - C-145-66T
Facing brick - A.S.T.M. - C-216-67
Mortar (Type "N"-750 psi) - A.S.T.M. - C-270-64T
(Type "M"-2500 psi-below grade) - A.S.T.M. - C-270-64T

DRAINAGE The Contractor shall furnish all labor, materials and equipment for roof and parking lot drainage, including but not limited to the following:

1. Thru parapet galvanized roof scuppers
2. Galvanized leaders and cast iron leader extensions
3. Concrete drainage pipe along building wall
4. Parking lot drainage manholes and inlets
5. Connection to existing storm drain

PLUMBING The Contractor shall furnish all labor, materials, equipment and connection fees necessary to complete and leave ready for operation the plumbing system, in accordance with the plans and all applicable codes, including but not limited to the following:

1. Domestic water connection and extension
2. Sanitary sewer system and connection to existing line
3. Fire sprinkler main and connection thru and including the O.S. & Y. valve at the building wall. Interior fire sprinkler system not included in this contract.
4. Plumbing fixtures and hot water heaters
5. Individual interior water meters not included in base bid
6. All necessary gas connection and piping system

ALTERNATE BID Interior 5/8" disk type water meters, in place. Add ______ per meter.

ELECTRICAL, HEATING AND VENTILATING The Contractor shall furnish all labor, materials and equipment necessary to complete and leave ready for operation all the items in accordance with the plans and all applicable codes, including, but not limited to the following:

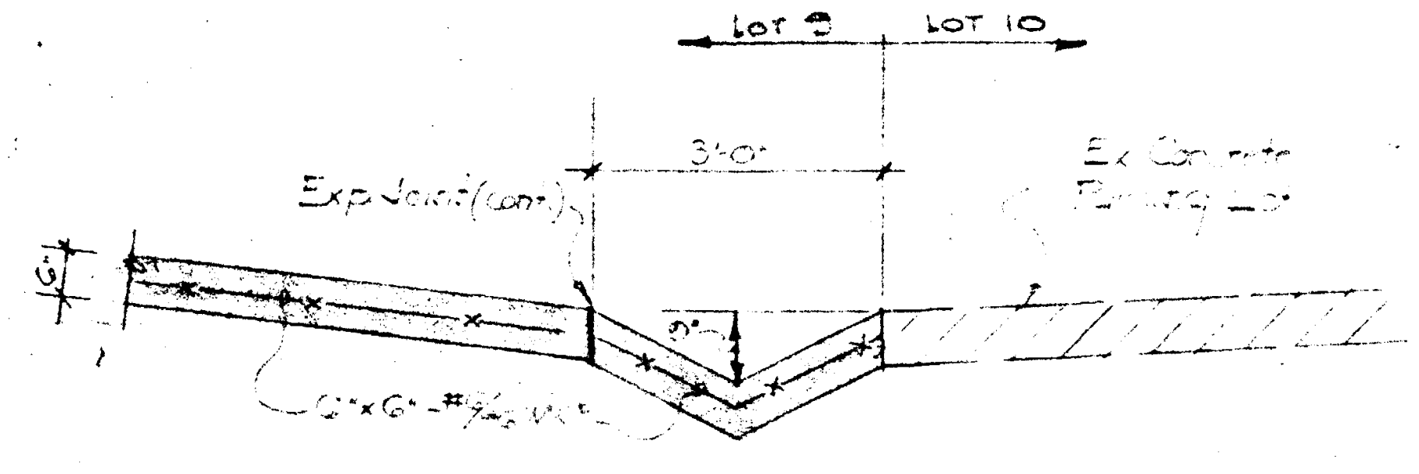
1. Payment of Pepco permit fees and related costs for electrical service
2. All electrical fixtures, wiring and bath exhausts. Furnish bulbs for all lighting fixtures
3. All gas fired space heaters
4. Wiring of electrical equipment furnished and installed by others

STUD WALLS AND DRYWALL All stud walls shall be constructed of metal studs. Drywall shall be 1/2" firecode sheetrock, recessed, with taped joints. Provide corner beads at all outside corners.

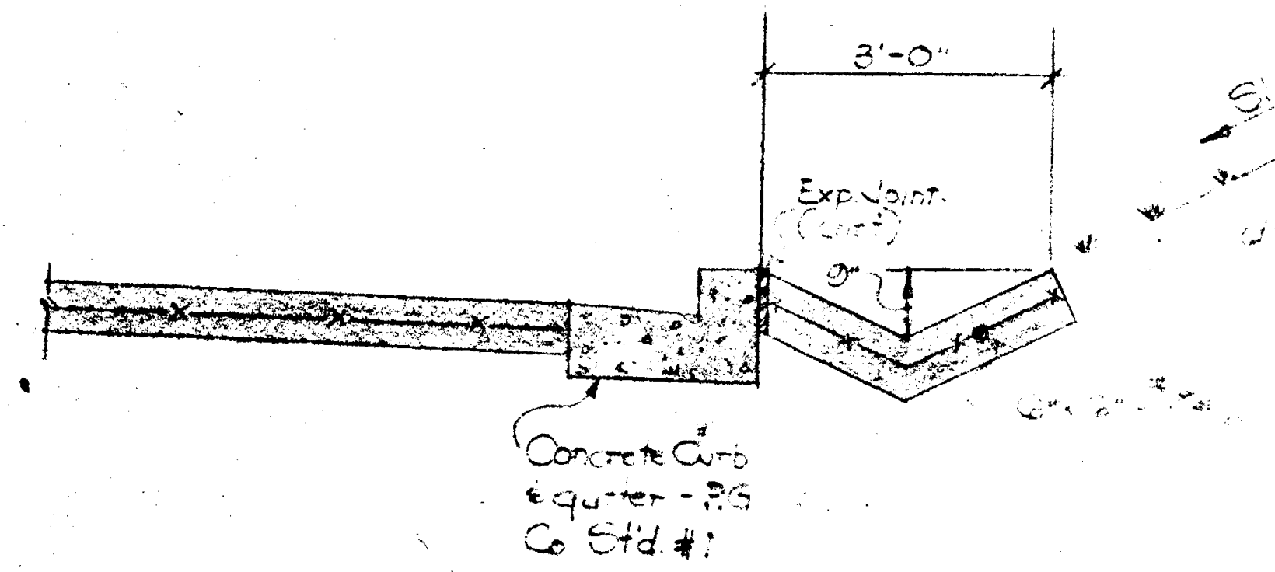
SOIL BORING LOGS
By Grainger & Oliver - July 15, 1968

BORING #7	Depth	Blows
0' to 1' Sand and Gravel		
1' to 15' Brown-Grey Clay, Trace Sand	3'	10
	5	10
	8'	7
	10'	8
	13'	8
	15'	14

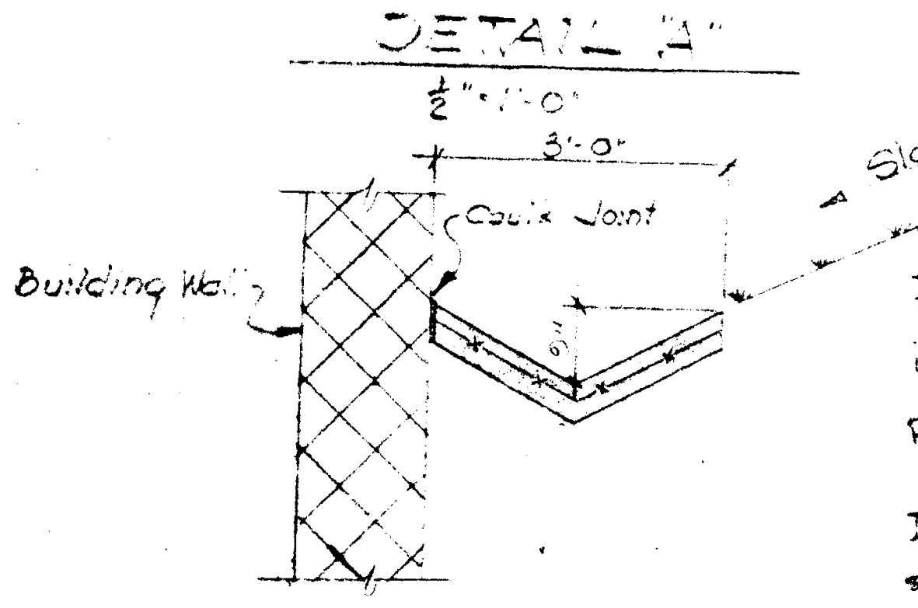
BORING #8	Depth	Blows
0' - 15' Fine Grey-Brown Sand, Trace Clay	3'	15
	5'	18
	8'	16
	10'	15
	13'	20
	15'	17



CONCRETE FLUME
DETAIL "C"
½" = 1'-0"



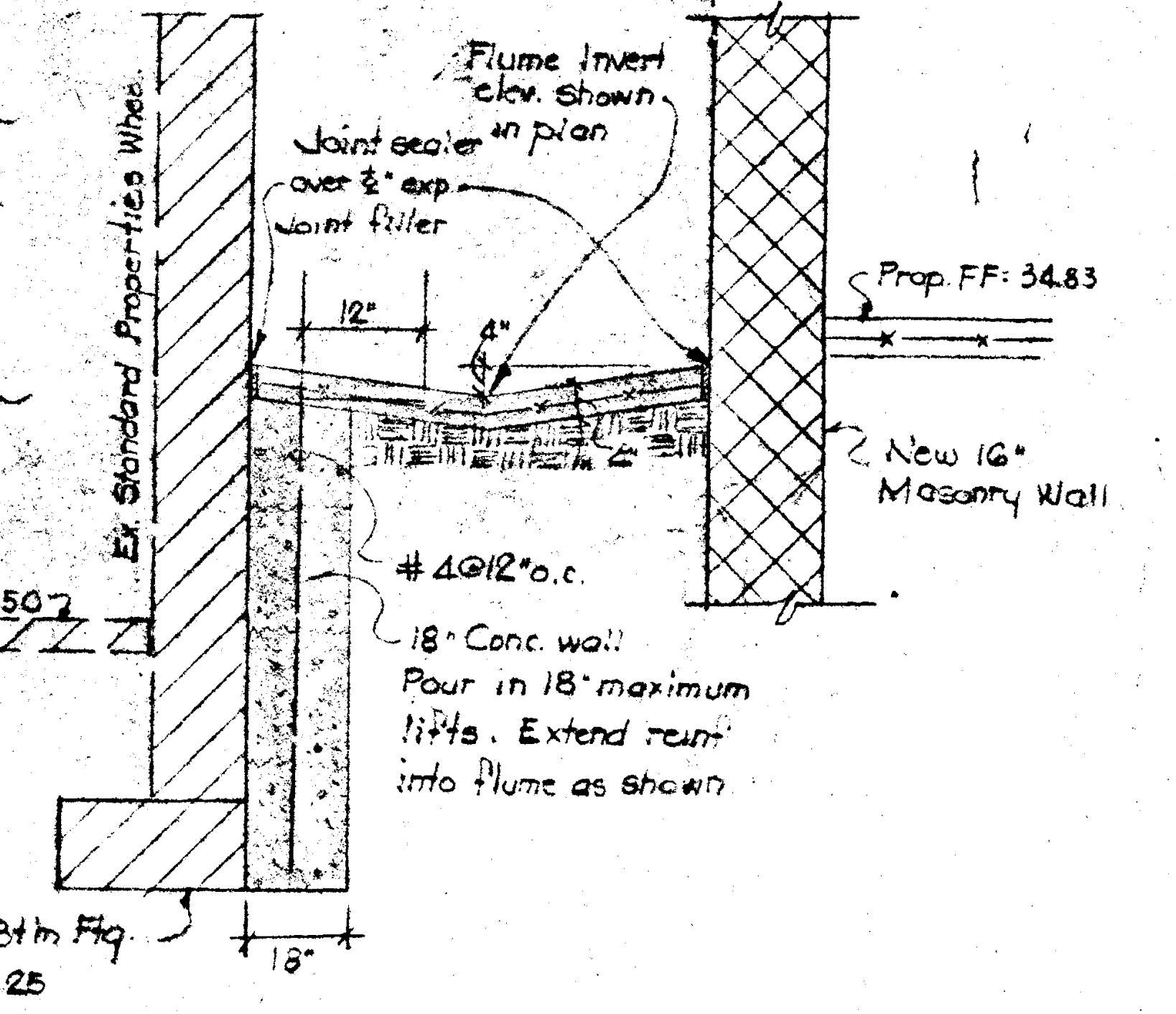
CONCRETE CURB & FLUME
DETAIL "A"
½" = 1'-0"



I hereby certify that these plans are in conformance with Article 22 of the P.G. County Grading Ordinance.

I hereby accept responsibility for all structural & mechanical work shown on these plans.

DETAIL "B" - ½" = 1'-0"



CONCRETE FLUME BETWEEN BLDGS.
DETAIL "D"
SCALE: ½" = 1'-0"

Lot 9

Total Lot Area = 114,577 ⊄
Pervious paving and buildings = 64,120
Area to be disturbed by this permit = 50,457 sf

OWNER

MARTIN INDUSTRIAL PARK VENTURE
2013 UNIVERSITY BOULEVARD E
ADELPHI MARYLAND
TEL 439-2500

PROPERTY DESCRIPTION

LOT 9, BLOCK "B"
HYATTSVILLE INDUSTRIAL
EDMONSTON, MARYLAND
RECORDED 6-5-69
PLAT Book WWW 71 PLAT No. 63

PARKING SCHEDULE

Gross Property Area	LOT 9 = 114,577 ⊄ LOT 10 = 71,995 ⊄	186,572 ⊄
Gross Building Areas =	Whse. 3A = 29,260 ⊄ Whse. 3B = 24,470 ⊄ Whse. 4A = 35,480 ⊄ Total = 89,210 ⊄	
Parking Required - Complete development = 99 spaces		
Parking Furnished =		109 spaces

NOTE: All parking spaces 200 ⊄ - Either 10'×20' or 9'×22'-6" as shown

INDEX OF DRAWINGS

No.	
1	Site Plan, Structural Notes and Specifications, Boring Logs
2	Foundation Plan, Details
3	Floor Plan, Schedules
4	Elevations, Typical Cross Sections, Details
5	Wall Sections and Details
6	Roof Framing Plan and Details
7	Mechanical, Electrical and Plumbing

PROPOSED
WAREHOUSE No. 3B
HYATTSVILLE INDUSTRIAL
EDMONSTON - PRINCE GEORGES COUNTY, MARYLAND

REVISIONS

No.	DATE	BY

MACRIS AND SIMKO
CIVIL-STRUCTURAL ENGINEERS
817 SILVER SPRING AVE.
SILVER SPRING, MARYLAND 20910 (301)585-0030

DRAWN BY:
CHECKED BY:
JOB No.
DRAWING No.