

# Criscuolo Engineering, LLC

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Consulting Engineers  
Civil Engineers  
Land Surveyors

Robert A. Criscuolo, P.E., L.S.  
Paul L. Nott, L.S.  
James M. Pretti, Jr., P.E.  
Linda C. Dow, P.E.

Records of:

Associated Surveys  
Charles H. Miller  
George A. Firth

## MEMORANDUM

**To:** Greater New Haven Water Pollution Control Authority  
**From:** James M. Pretti, Jr., P.E.  
**Date:** 2/12/2020  
**Re:** James Street Siphon Chamber Upgrades Project – Addendum #1  
**CE File No:** 2017.097  
**cc:** file

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In regards to questions set forth in email from Delray Contracting, Inc. dated 1/21/2020, we have the following responses:

1. The contractor shall be responsible for obtaining the building permit and paying for any permit fees.
2. The contract duration is 270 days
3. The existing T-111 fascia is 3'-10" high. All fascia is to be replaced with fiber cement board siding. (HardiePanel Vertical Siding – Sierra 8, or equal)
4. The contractor shall be responsible for providing enough fuel to properly test the generator.
5. There is currently no existing generator. There is a receptacle and a transfer switch in the boiler room for the GNHWPCA to connect a portable generator if it becomes necessary.
6. The GNHWPCA will operate the slide gates prior to the date of last questions and the final addendum will include any issues discovered.
7. All trees/shrubs that are in conflict with the new driveway and sidewalks are to be removed.
8. The setting of the new pole by U.I. will be paid directly by the GNHWPCA
9. Grating shall be 1 1/2" thick min. Additional supports may be necessary to meet manufacturer's recommendations regarding deflection. See the submittal requirements in the FRP Grating Section 06600 of the specifications.
10. The area of the roof repair is the entire lower roof (approx. 12'x31').
11. The washer/compactor has been deleted from this project.
12. The two doors to the old bathrooms are 2'-8"x7'-2". All other doors are 3'-0"x7'-2". All dimensions should be verified in the field.
13. The bar screens will need to be replaced one at a time. Flow through the station will have to be maintained.
14. The new fence gate will match the existing 6' high chain link fence.
15. The granite curbing can be set using concrete backing at the joints.
16. The contractor is responsible for getting the curb to the site and installing it as indicated. Curbing is currently located at 345 East Shore Parkway, New Haven.

420 East Main Street, Building 1, Suite 9, Branford, CT 06405  
Phone (203) 481-0807 Fax (203) 488-5729 e-mail: [office@cengineeringllc.com](mailto:office@cengineeringllc.com)

In regards to questions set forth in email from Delray Contracting, Inc. dated 1/28/2020, we have the following responses:

1. Only the walls and ceilings of the new electrical room and bathroom need to be prepped and painted.
2. Rusted though door lintels are to be replaced. Lintels that have only surface rust can be ground smooth primed and painted.
3. Any existing openings in the CMU that are no longer needed are to be filled in.
4. The existing recessed lights in the toilet and utility rooms get removed and filled in.
5. The 12 large rocks can remain on site.
6. The intake louver and exhaust fan are 36"x36". The exhaust fan will be mounted in the existing door opening. The remainder of the opening shall be infilled with masonry. The intake louver will need to be cut into the existing masonry. A new lintel shall be installed. Notes regarding fan and louver are on sheet J105.
7. The observation window is depicted on sheet J105.

In regards to questions set forth in email from Kovacs Construction Corporation dated 2/5/2020, we have the following responses:

1. a. 1. All existing fascia board is to be replaced. 2. Soffit shall be replaced with fiber cement board as well. 3. There is existing 2x framing behind the existing T-111. The original detail of the framing is included in Sheet A-3 of the original plans. 4. Original plans for the building are attached. 5. The rain cap will need to be removed and replaced for new fiber cement board replacement and rubber roofing installation.  
  
b. 1. Only the lower level roofing is to be replaced. 2. Original construction details are attached. 3. Rain cap shall be removed and replaced. 4. There is only one roof drain. Roof drain shall be 8" domed roof drain to mate with the existing 4" cast iron rain leader. 5. Roof replacement: vacuum clear all loose gravel from roof surface. Remove existing metal rain cap. Install 1/2" high density polyisocyanurate coverboard set in Olybond adhesive directly over the existing roof surface. If necessary, replace any framing at the top of the parapet. Install an adhered 90" EPDM roof system over the cover board. Flash all roof penetrations, walls and drainage scuppers according to manufacturer's specifications. Coordinate re-installation of metal rain cap with replacement of fascia..  
  
2. a. Existing doors and jambs to be placed with new steel doors and jambs. Sized noted above. Interior and exterior of the doors to be primed and painted. b. Walls and ceiling to be cleaned prepped and painted in bathroom and electrical room only. c. See note above regarding grating. d. See notes above regarding louver and exhaust fan. An example of a remote fuel fill box is attached. e. Slop sink shall be white thermoplastic floor mounted 24"Lx20"Wx34"H. f. floor plates. g. The existing walls and ceiling in the bathroom shall be repaired and painted. The floor shall be stripped to existing concrete and painted. Toilet shall be a wall mounted unit, with a manual flush valve as manufactured by American Standard or approved equal. Sink shall be a wall mounted unit as manufactured by American Standard or approved equal. Water heater shall be a point of use, wall mounted, tank-less, 3.5 kw, 120V electric water heater. Proper corresponding breaker shall be installed in Power Panel "LP", and a local disconnect shall be located near the installation. Water supply piping currently exists and will need to be reconnected to where undamaged. h. see notes above regarding generator intake and exhaust vent. An example generator fuel fill containment box is attached.
3. See note above regarding trees/bushes.
4. See note above regarding granite curbing. The bollard detail can be disregarded.

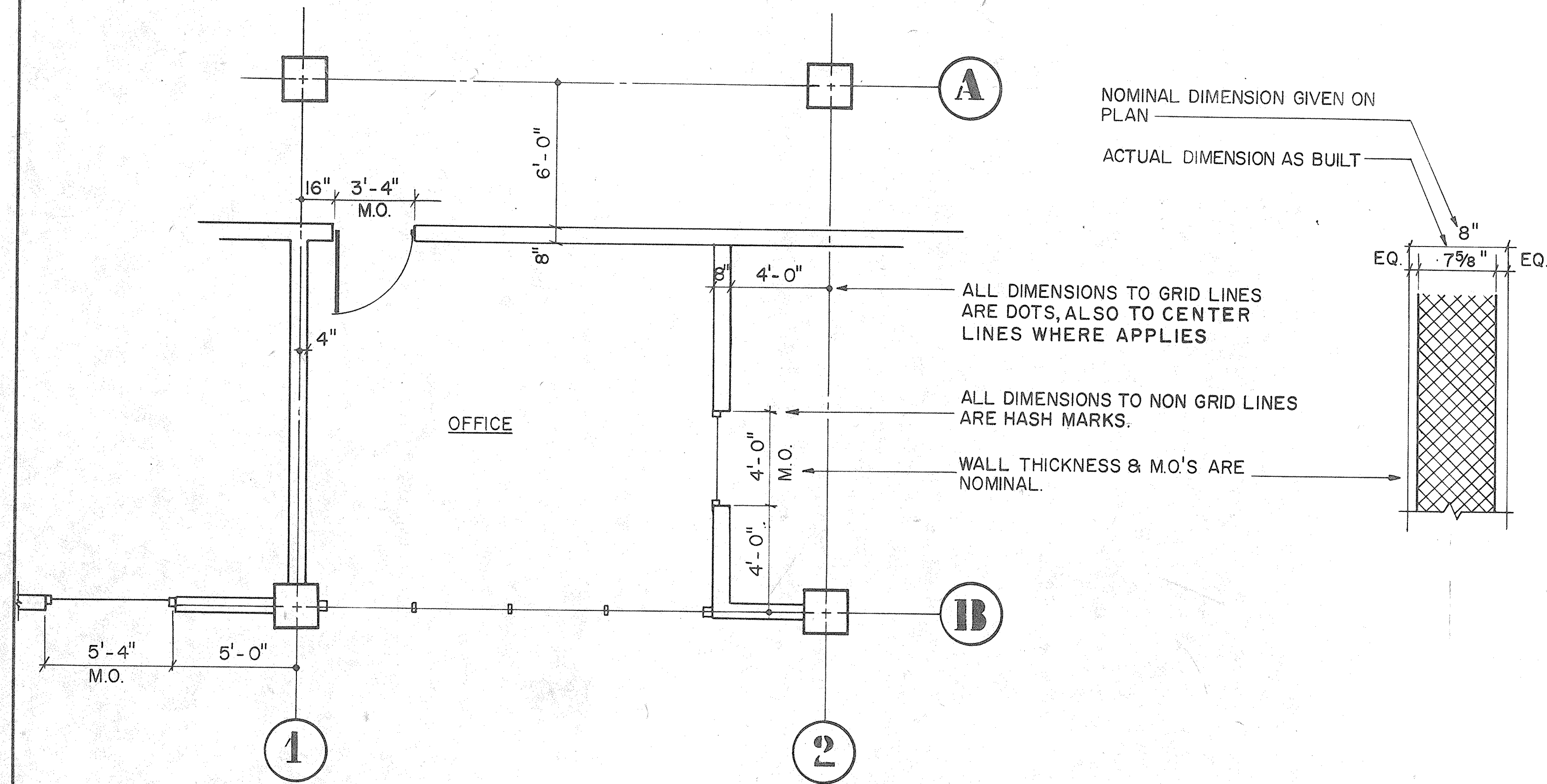
- 5 a. The bar screen that was used for the planning of this project is attached. b. The existing men's room (as noted on J104) and storage room are to be combined into the new electrical room. The existing women's room will be refitted as a bathroom. The slop sink is in the screen room. c. See previous comment. d. See notes above regarding the roof. The allowance for testing is noted in the Schedule of Bid Items.

Additional items:

1. Prevailing wages rates are attached.
2. The existing exterior brick surface of the building shall be cleaned and sealed. Sealer to be SureKlean Siloxane PD weather seal or approved equal.
3. All 3 level transducers shall have home runs in conduit to the new SCADA panel in the utility room.
4. On sheet J110, one of the contact labels on the Building Intrusion/Door Entry Alarm Panel should read "Utility Room" instead of "Public Toilet Room"
5. The Base Flood Elevation at the building is Elevation 12.0 The bottom of all electrical boxes, cabinets, etc. should be 3 feet above the Base Flood Elevation.
6. It should be noted that this station serves combined sewers and flow must be continuous. A conveyance of 20 mgd through one channel must be maintained and it is likely that the work are will unavailable during wet weather flow. It is possible that the water level may exceed the top of isolation gates during heavy wet weather events. Contractor shall be responsible for securing work area and/or pumping out channel as necessary. A copy of the overflow structure has been included with the original construction drawings attached.



# MODULAR DIMENSIONING



## ABBREVIATIONS

ACST.	ACOUSTIC	DET.	DETAIL
ADH.	ADHESIVE	Ø OR DIA.	DIAMETER
A.B.	ANCHOR BOLT	DIM.	DIMENSION
ASSY	ASSEMBLY	DISP.	DISPENSER
ALUM.	ALUMINUM	DR.	DRAIN
L	ANGLE	DN.	DOWN
ASPH.	ASPHALT	DWG.	DRAWING
		D.F.	DRINKING FOUNTAIN
		(") OR DO	DITTO
BLK.	BLOCK, BLOCKING	EA.	EACH
BD.	BOARD	EL.	ELEVATION
BRK.	BRICK	EQ.	EQUAL
BLD'G.	BUILDING	EQUIP.	EQUIPMENT
BT.	BOLT	EXIST.	EXISTING
BIT.	BITUMINOUS	EXP.JT.	EXPANSION JOINT
		ENCL.	ENCLOSED
CLK'G.	CAULKING	EXT.	EXTERIOR
CL'G.	CEILING	EPX.	EPOXY
CEM.	CEMENT		
C TO C	CENTER TO CENTER	FIN.	FINISH
Ø OR C	CENTER LINE	FE.	FIRE EXTINGUISHER
CHAM.	CHAMFER	FXD.	FIXED
COL.	COLUMN	FL.	FLOOR
CONC.	CONCRETE	FD.	FLOOR DRAIN
CMU.	CONC MASONRY UNITS	FR.	FRAME
CONT.	CONTINUOUS - CONTINUE	FLSH.	FLASHING
C.J.	CONTROL JOINT	(') OR FT.	FEET OR FOOT
CR'S.	COURSES		
C	CHANNEL		
CONST.	CONSTRUCTION		
CL.	CLEAR OR CLEARANCE		
C.M.T.	CERAMIC MOSAIC TILE		
C.I.	CAST IRON		

GA.	GAUGE
GALV.	GALVANIZE
GL.	GLASS
GRTG.	GRATING

HDR.	HAND RAIL
HGR.	HANGER
HDW.	HARDWARE
HGT.	HEIGHT
H.P.T.	HIGH POINT
H.M.	HOLLOW METAL
HOR.	HORIZONTAL

INS.	INSULATE, INSULATION
I.D.	INSIDE DIAMETER
INT.	INTERIOR

J.C.	JANITOR'S CLOSET
JT.	JOINT
JT.FLR.	JOINT FILLER

LAMPL.	LAMINATED PLASTIC
LAB.	LABORATORY
LAD.	LADDER
LAV.	LAVATORY
LNT'L.	LINTEL
LKR.	LOCKER
L.P.	LOW POINT
L.V.	LOUVER

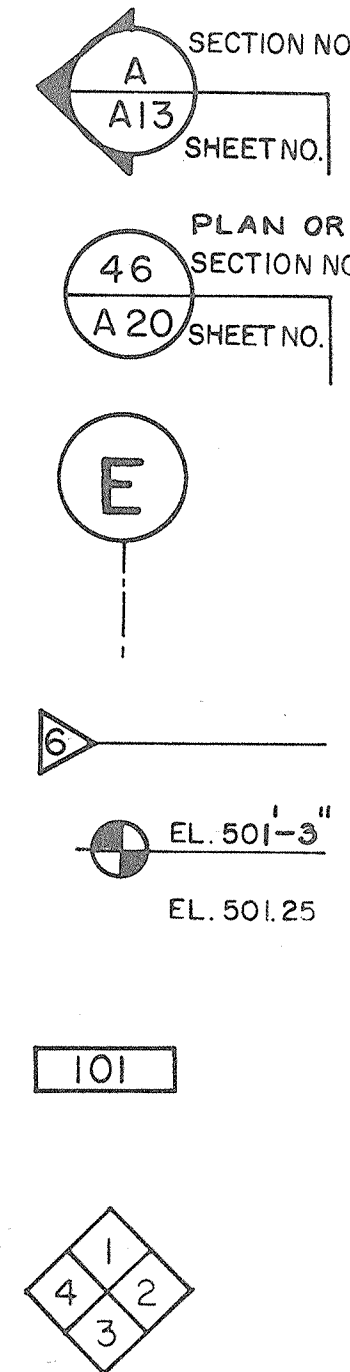
MFR.	MANUFACTURER
MO.	MASONRY OPENING
MAT'L.	MATERIAL
MAX.	MAXIMUM
MTL.	METAL
MISC.	MISCELLANEOUS
MTD.	MOUNTED, MOUNTING
MIN.	MINIMUM
MEMBR.	MEMBRANE

NOM.	NOMINAL
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
NO.	NUMBER

OD.	OUTSIDE DIAMETER
OFF.	OFFICE
OC.	ON CENTER
OPNG.	OPENING
OVHD.	OVERHEAD

PNL.	PANEL
PTN.	PARTITION
PLAS.	PLASTER
PR.	PAIR
PTD.	PAINTED
PL.	PLATE
PLY.WD.	PLY WOOD
PPG.	POLISHED PLATE GLASS
PSF.	POUNDS PER SQ. FT.
PSI.	POUNDS PER SQ. IN.
PRCST.	PRECAST
PRMLD.	PREMOULDED
PLTC.	PLASTIC
**OR LB.	POUND

## SYMBOLS



BUILDING SECTION

PLAN OR SECTION DETAIL

COLUMN CENTER LINES

NUMBER OF WALL OR PARTITION

ELEVATION IN SECTION  
ELEVATION ON PLAN

ROOM NUMBER

ROOM ELEVATION INDICATOR

001 SUB BASEMENT  
01 BASEMENT  
101 FIRST FL.  
201 SECOND FL.  
301 THIRD FL.

## FURNITURE & EQUIPMENT

F 20	FURNITURE NUMBER
E 18	EQUIPMENT NUMBER
L 41	LABORATORY EQUIPMENT NUMBER
R 60	RESTROOM/LOCKER ROOM EQUIPMENT OR ACCESSORY NUMBER

## OPENINGS

002	DOOR NUMBER
B	WINDOW TYPE
G	LOUVER TYPE
2	GLASS TYPE

## MATERIALS

[Symbol]	EARTH, SOIL
[Symbol]	GRAVEL
[Symbol]	BRICK
[Symbol]	CONCRETE BLOCK (CMU)
[Symbol]	TERRAZZO
[Symbol]	CONC.
[Symbol]	WOOD-BLOCKING
[Symbol]	WOOD-FINISH
[Symbol]	PLYWOOD
[Symbol]	RIGID INSULATION
[Symbol]	BLANKET INSULATION
[Symbol]	STEEL
[Symbol]	ALUMINUM
[Symbol]	GROUT
[Symbol]	CAULKING
[Symbol]	GLASS
[Symbol]	STRUCTURAL STEEL
[Symbol]	SHEET METAL, STEEL, GLASS, WATERPROOFING
[Symbol]	EXIST. STRUCTURES
[Symbol]	ACOUSTIC TILE
[Symbol]	SLATE, BLUESTONE

UR.	URINAL
VENT.	VENTILATE
VERT.	VERTICAL
VNL.	VINYL
VAT.	VINYL ASBESTOS TILE

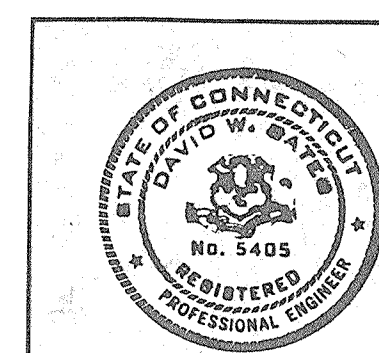
WTH.	WIDTH
W.C.	WATER CLOSET
W.F.	WIDE FLANGE
WDW.	WINDOW
W/.	WITH
W/O.	WITHOUT
WD.	WOOD
WD.BLK.	WOOD BLOCK
W.P.	WATERPROOFING
WGL.	WIRE GLASS

&	AND
@	AT

TERZ.	TERRAZZO
TRD.	TREAD
T.F.	TOP OF FRAME

Approved by:	Date	Name
Structural		
Electrical		
Architectural		
Project Coordinator		
Project Engineer	7/75	
Project Manager		

ANDREW T. JOHNSON CO., INC.



Prepared by:  
James P. Purcell Assoc. Inc.  
Glastonbury, Conn.

NO.	DATE	DESCRIPTION	BY
REVISIONS			
APPROVED BY	R.C.M.	DATE	JULY, 1975
CHECKED BY	B.B.	DATE	JUNE, 1973
DRAWN BY	A.D.	DATE	JUNE 1973

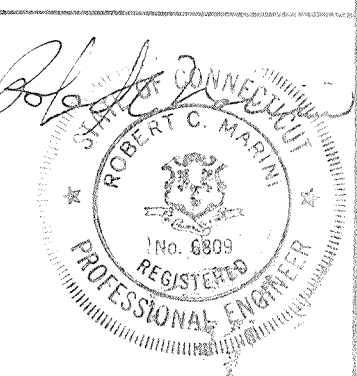
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CITY OF NEW HAVEN  
DEPARTMENT OF PUBLIC WORKS  
EAST SHORE  
WATER POLLUTION ABATEMENT PROJECT

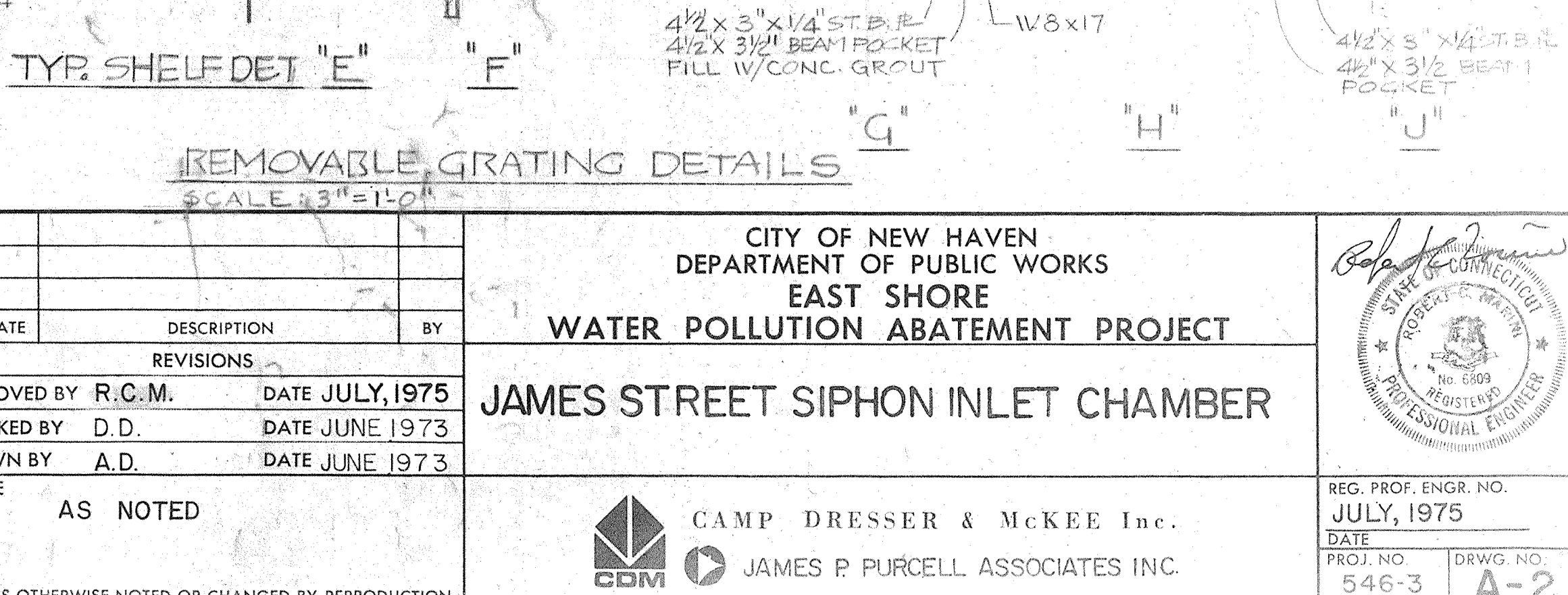
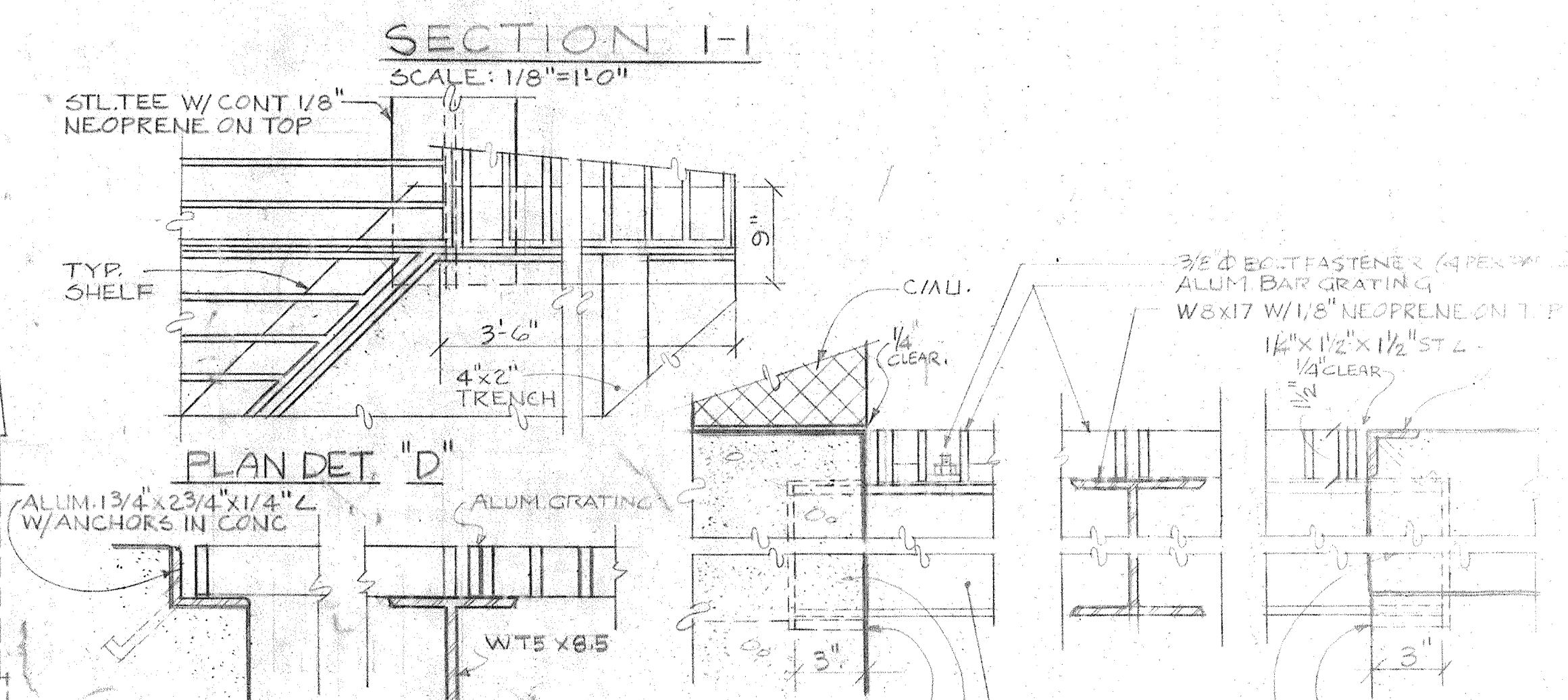
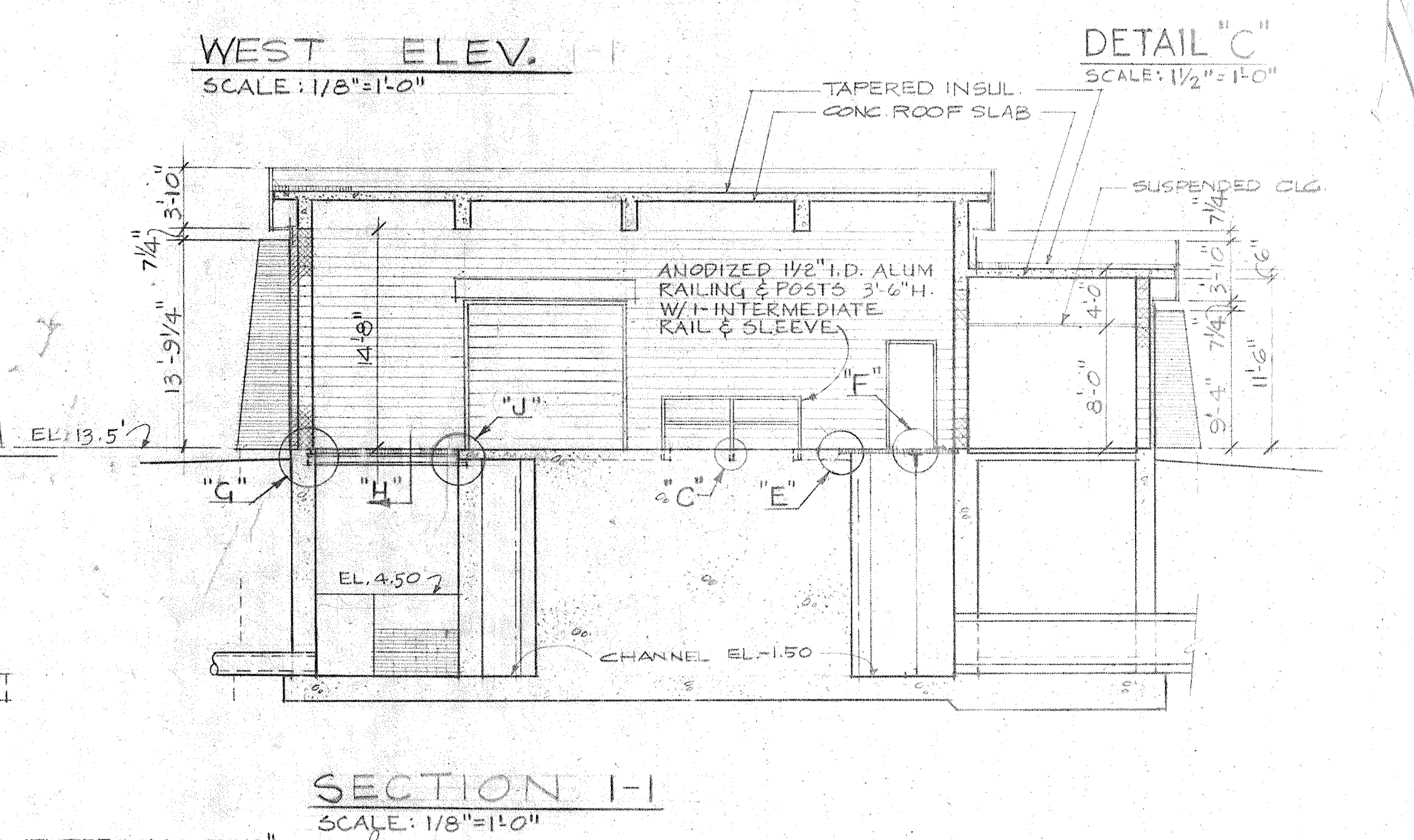
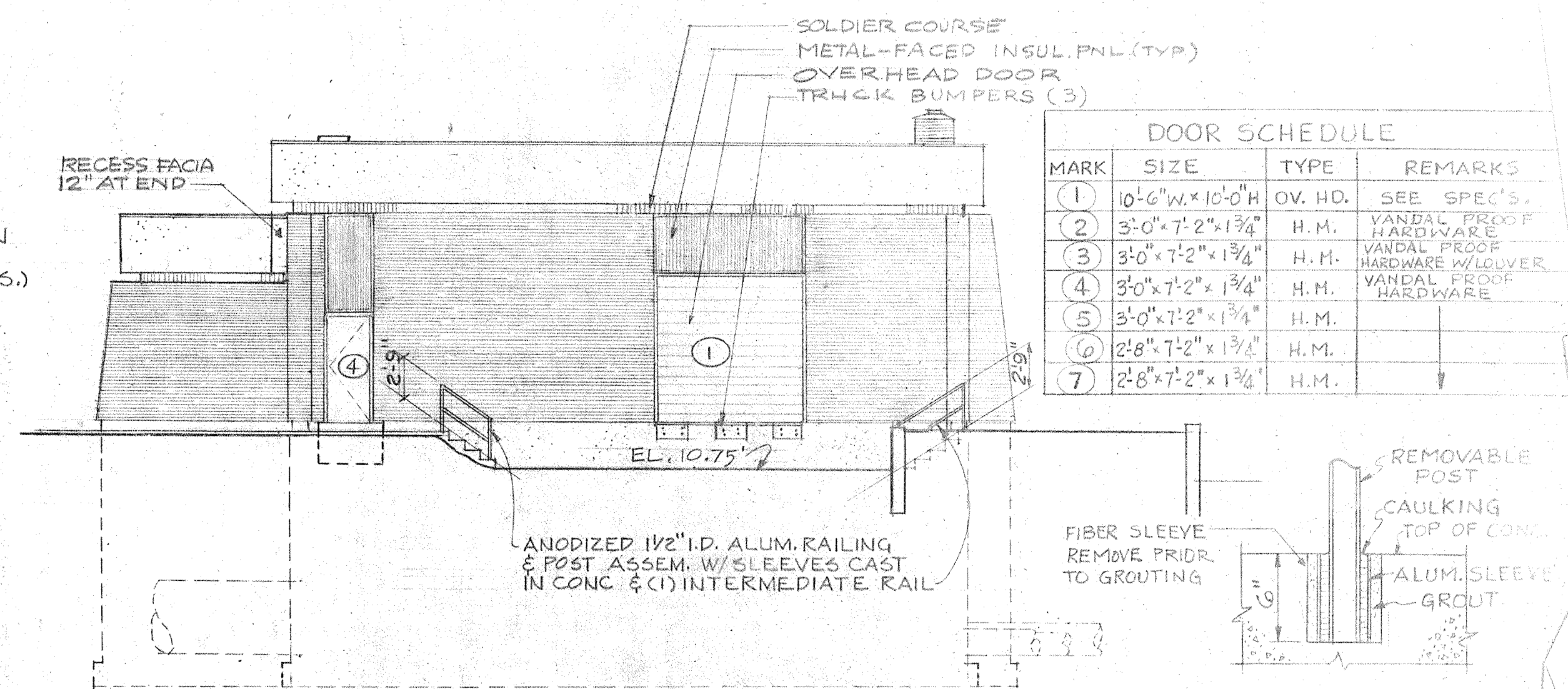
## ARCHITECTURAL LEGEND

CAMP DRESSER & MCKEE Inc.  
JAMES P. PURCELL ASSOCIATES INC.



REG. PROF. ENGR. NO.  
JULY, 1975  
DATE  
PROJ. NO.  
546-3  
DRWG. NO.  
A-1



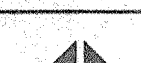





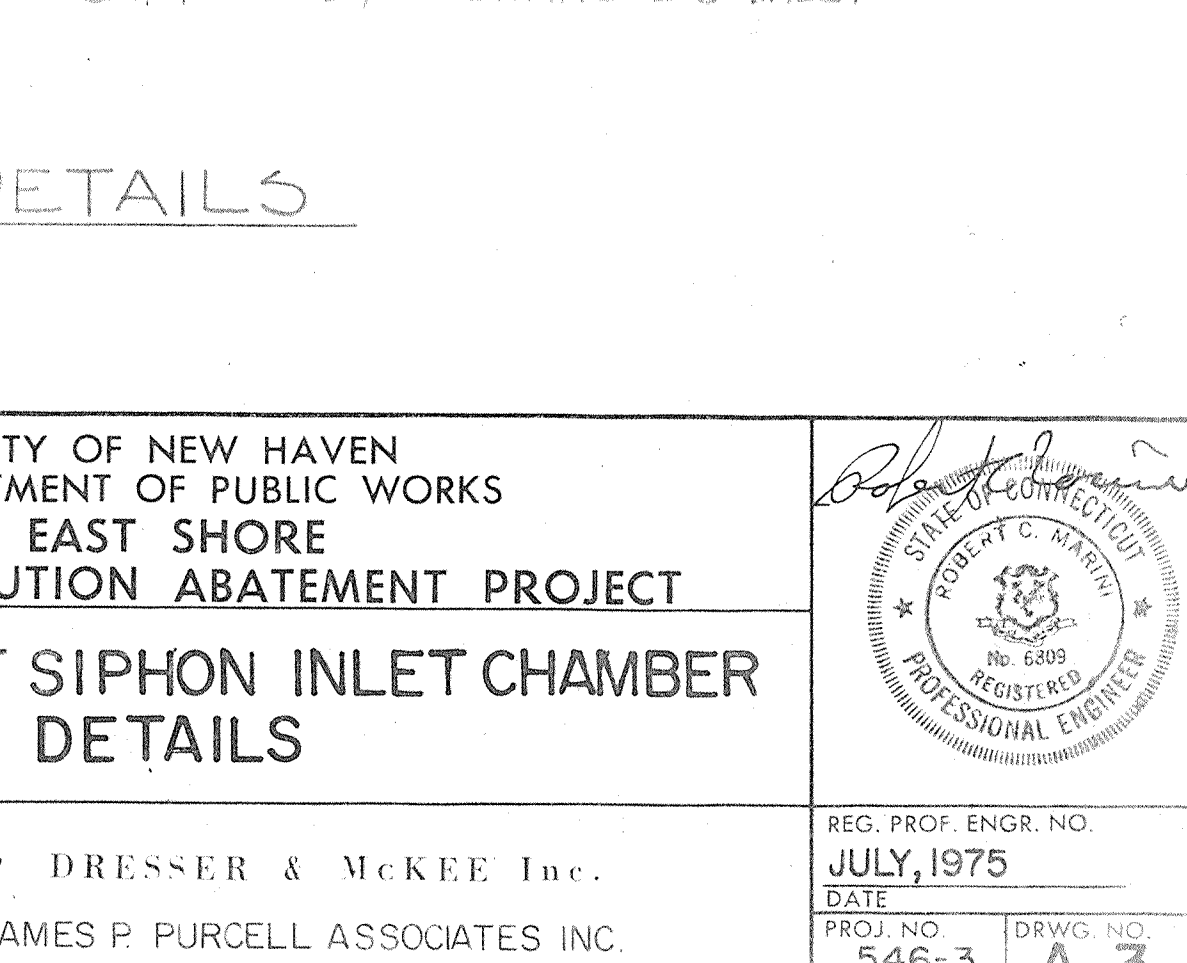
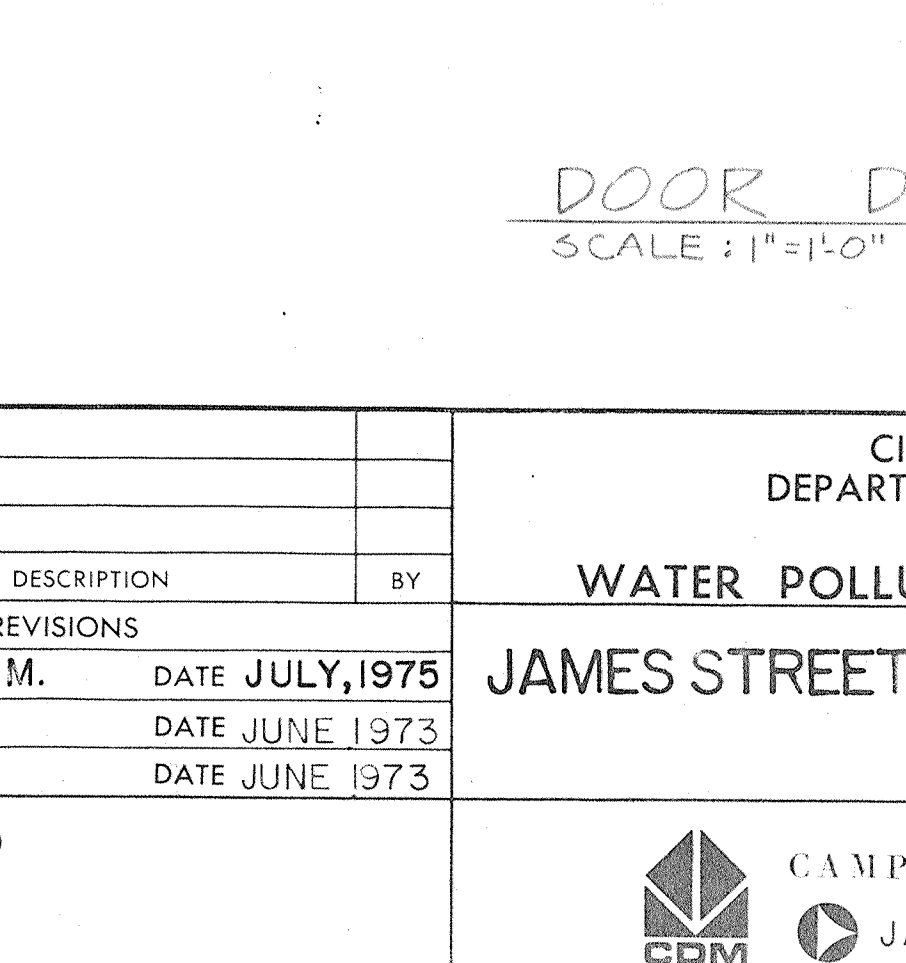
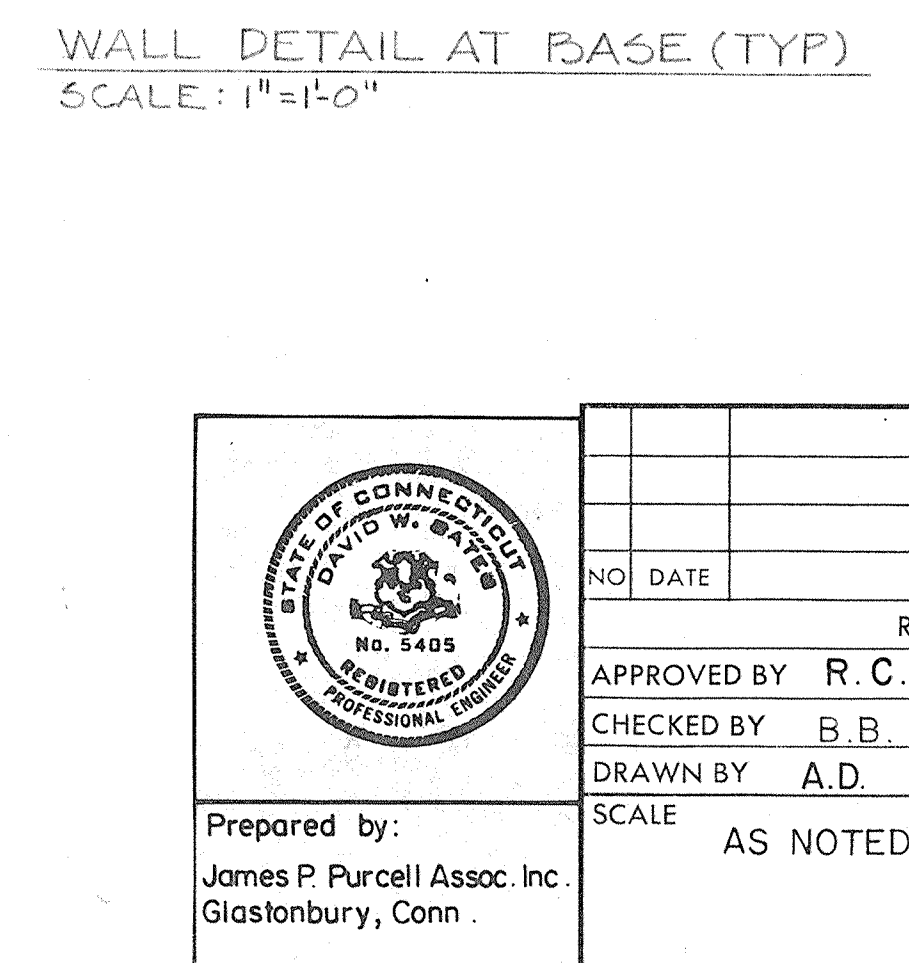
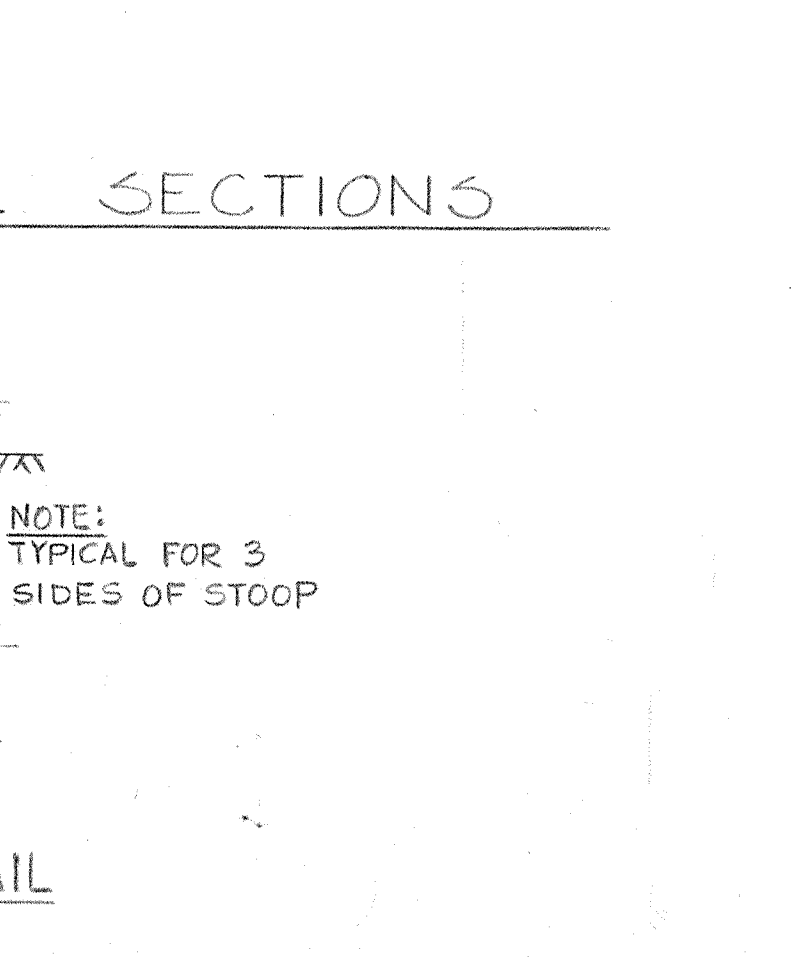
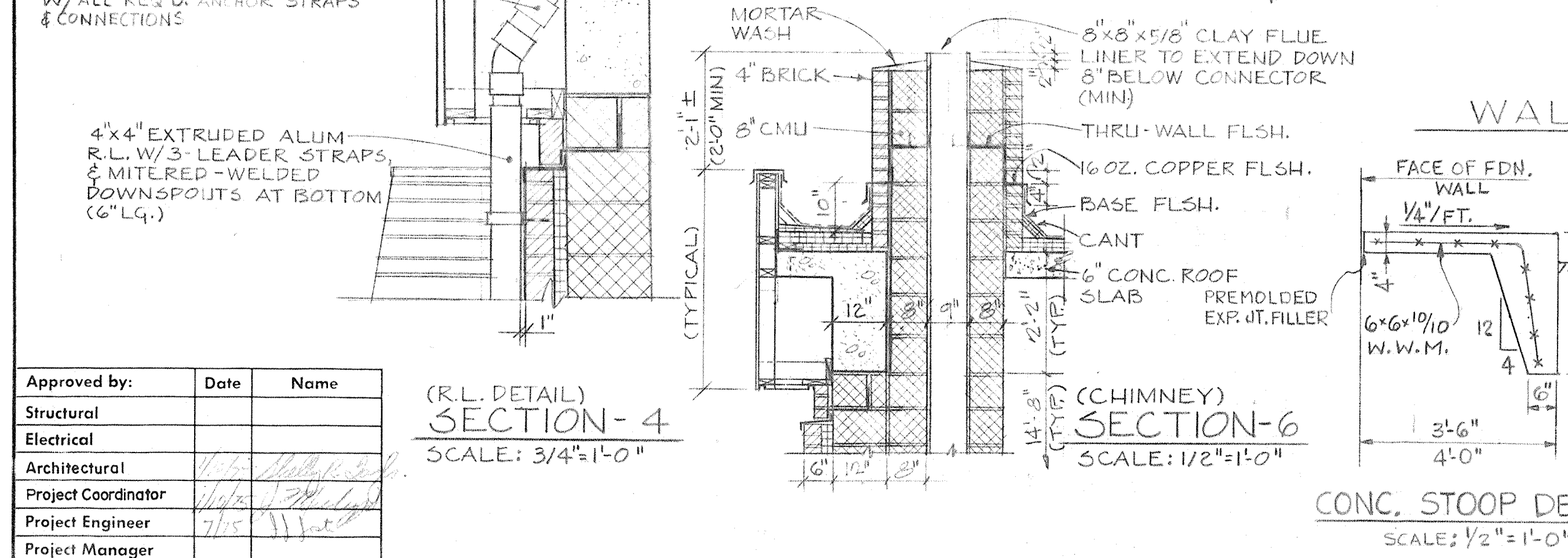
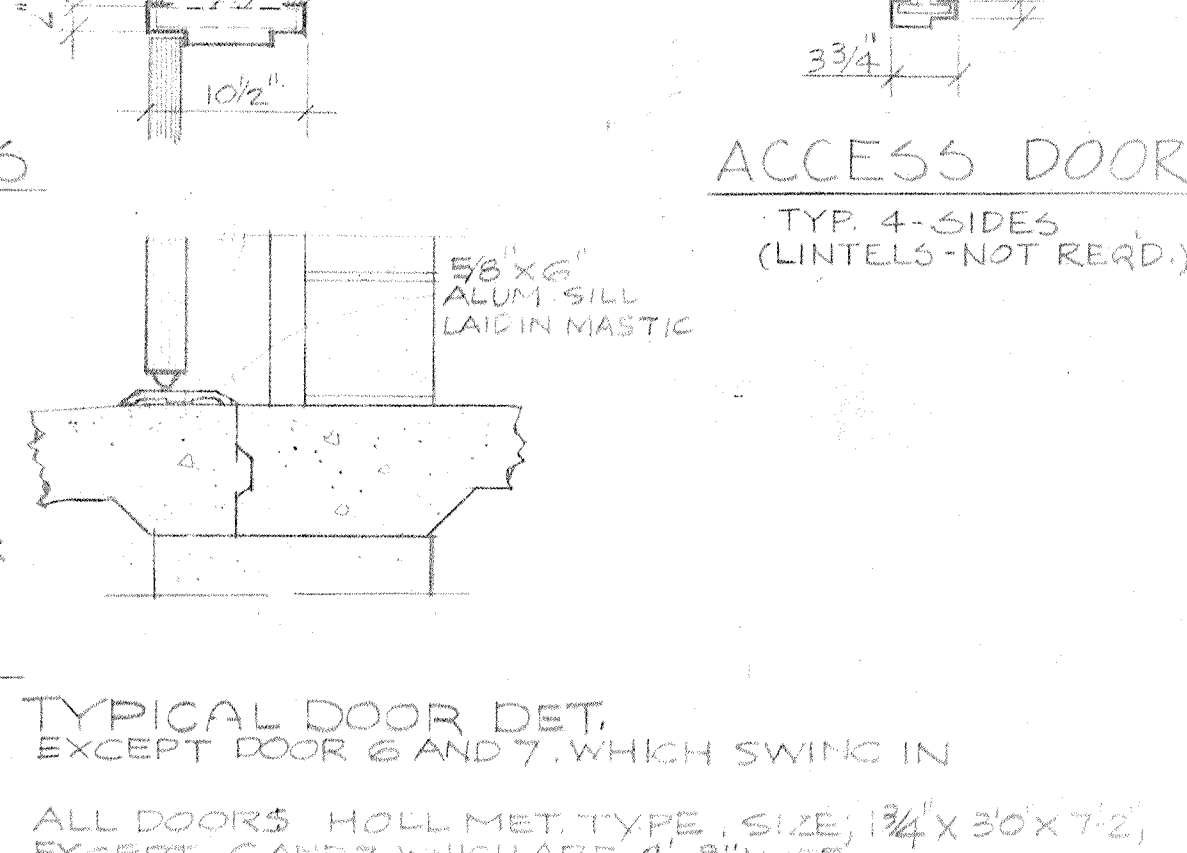
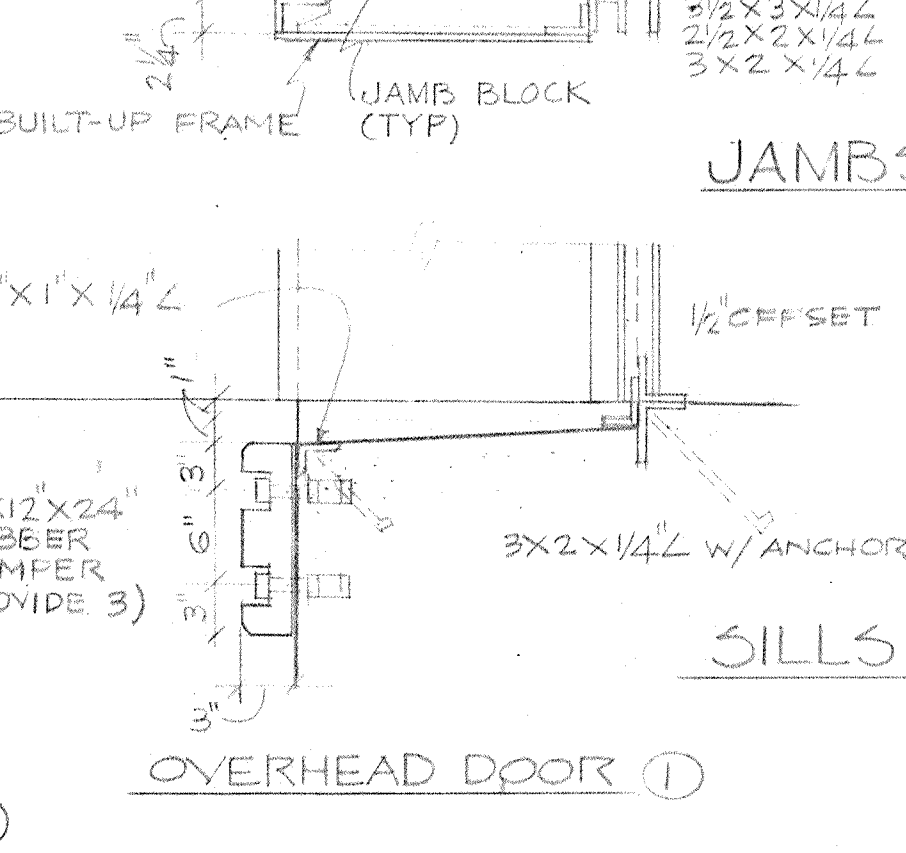
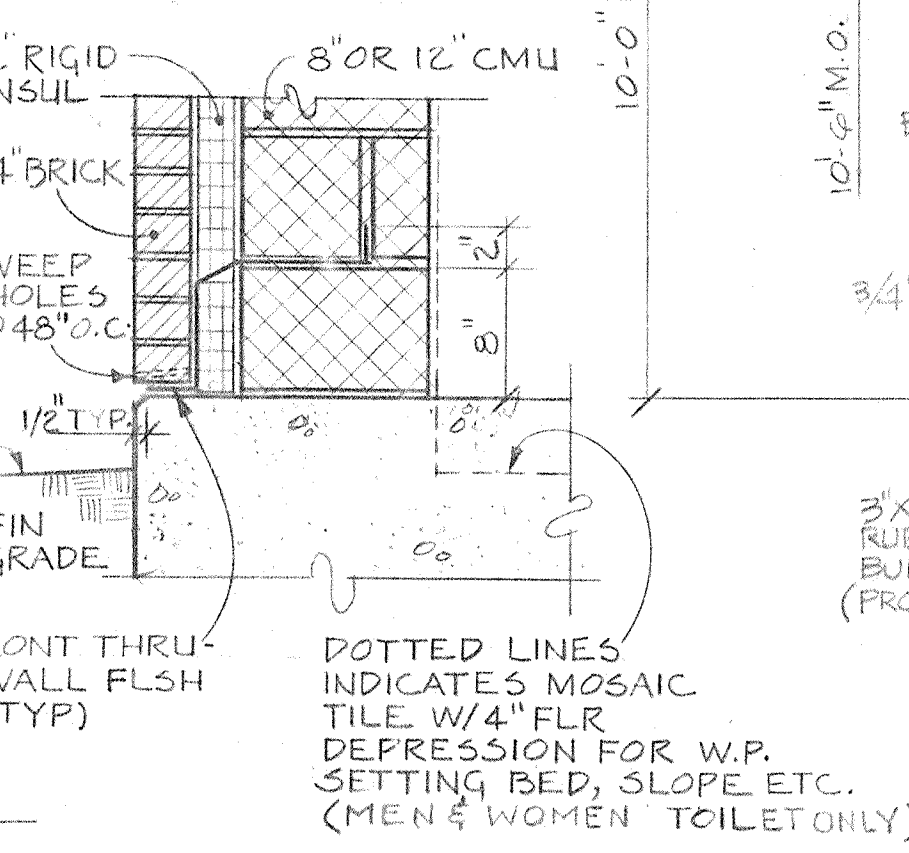
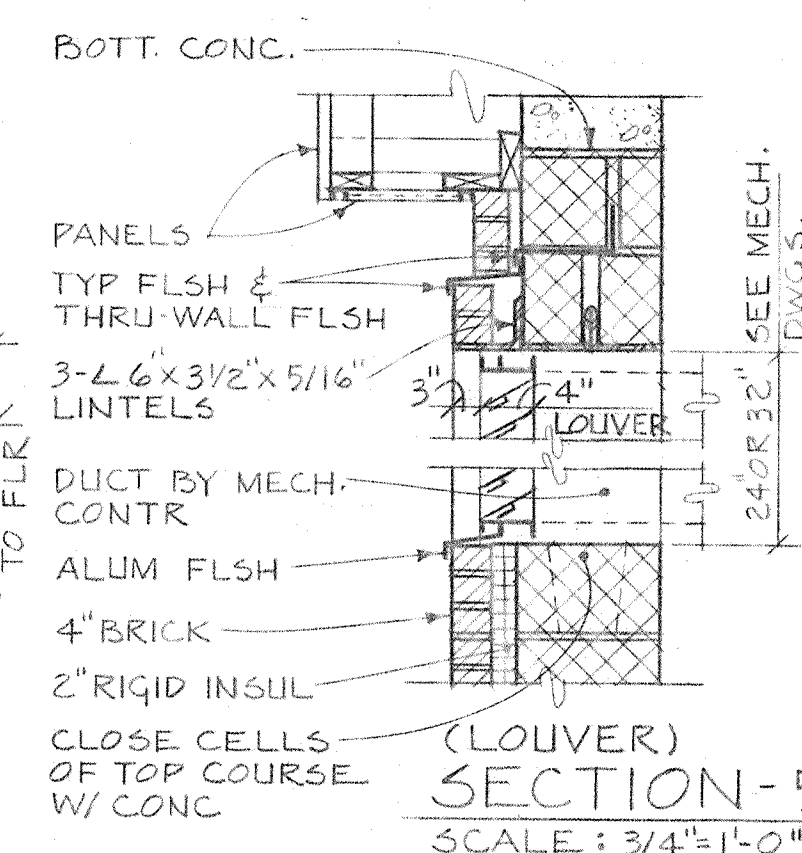
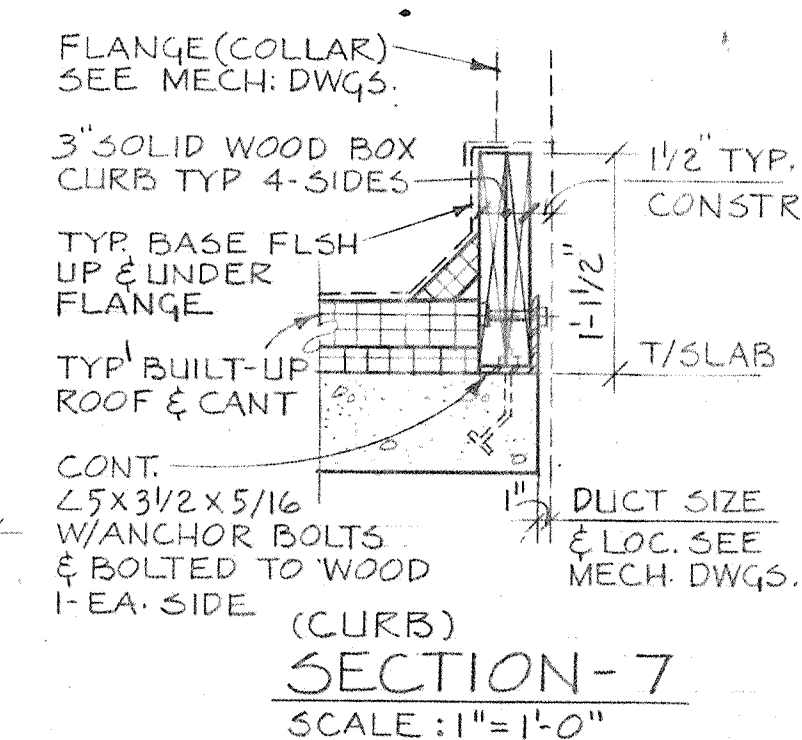
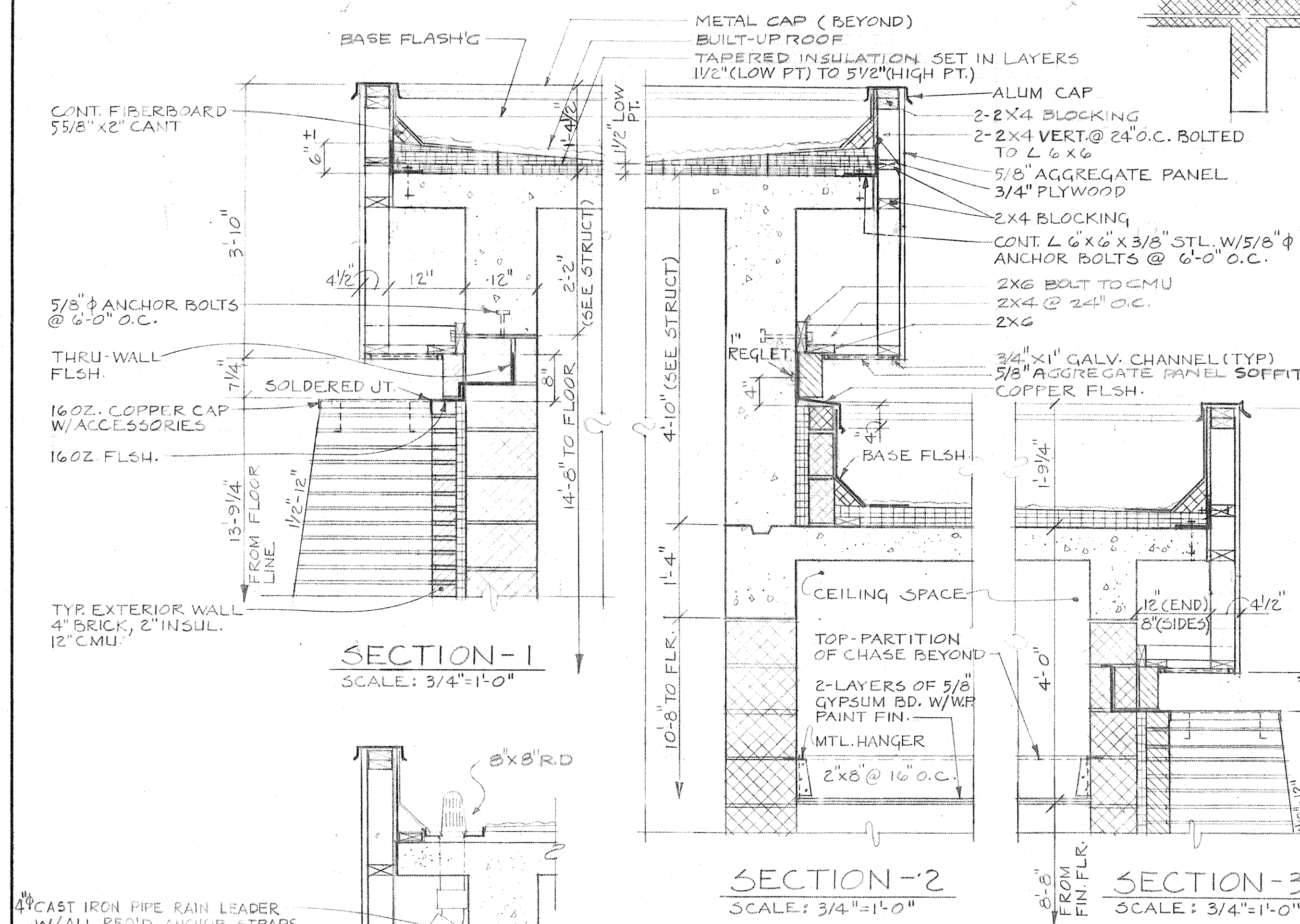
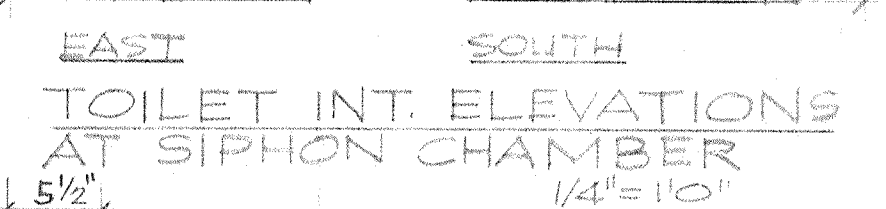
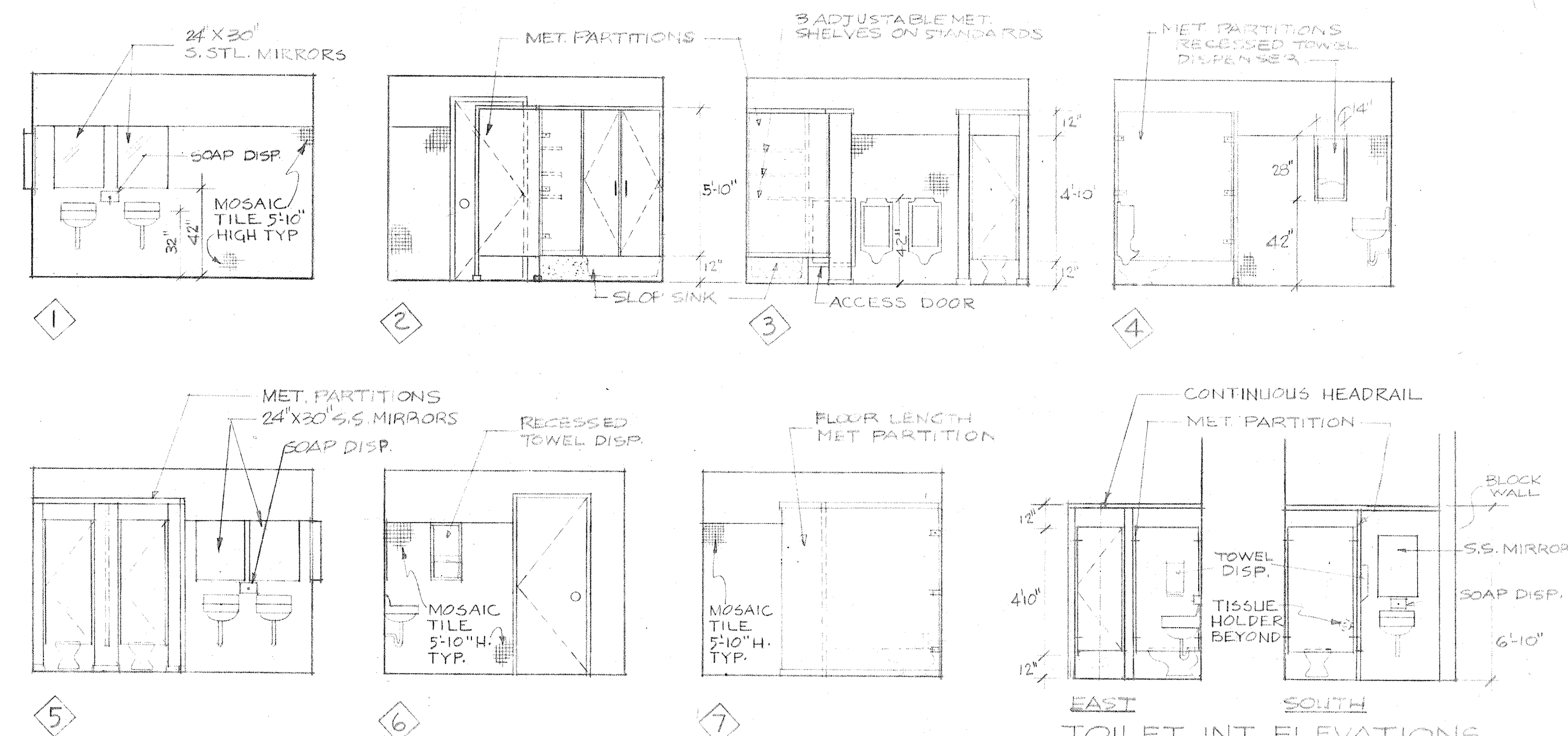
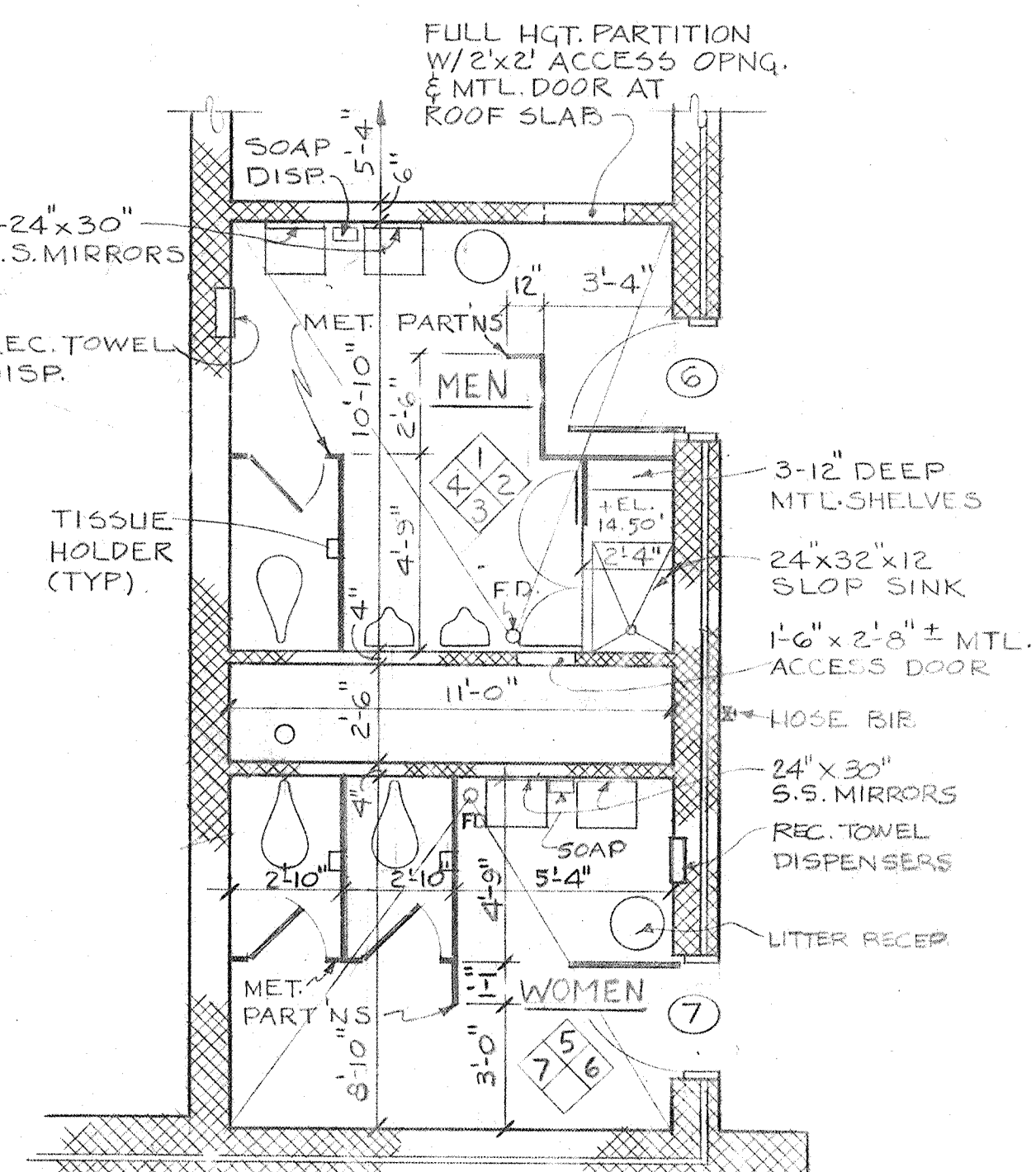
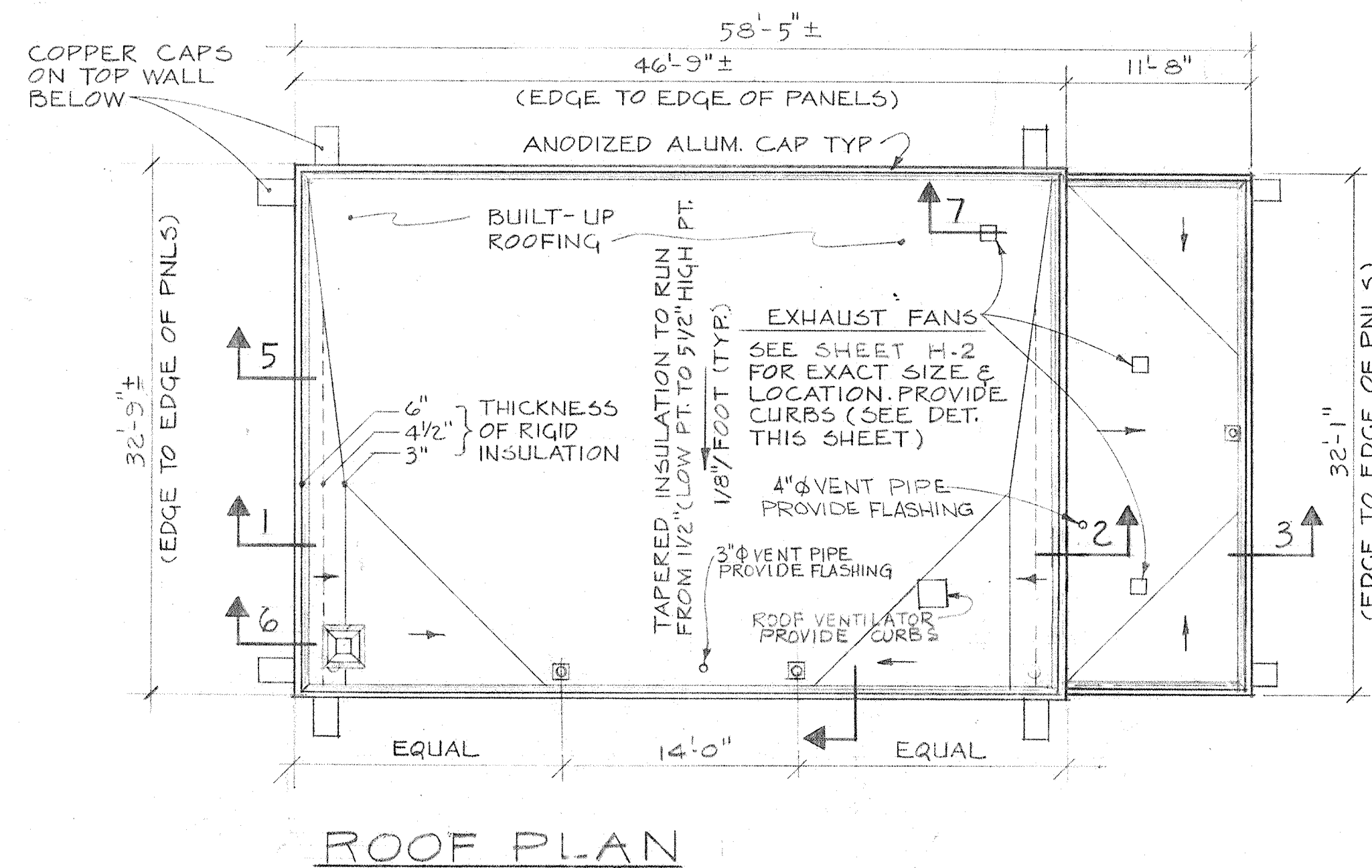
DOOR SCHEDULE			
MARK	SIZE	TYPE	REMARKS
(1)	10'-6" W x 10'-0" H	OV. HD.	SEE SPEC'S.
(2)	3'-0" x 7'-2" x 1 3/4"	H.M.	VANDAL PROOF HARDWARE
(3)	3'-0" x 7'-2" x 1 3/4"	H.M.	VANDAL PROOF HARDWARE W/DOVER
(4)	3'-0" x 7'-2" x 1 3/4"	H.M.	VANDAL PROOF HARDWARE
(5)	3'-0" x 7'-2" x 1 3/4"	H.M.	
(6)	2'-8" x 7'-2" x 1 3/4"	H.M.	
(7)	2'-8" x 7'-2" x 1 3/4"	H.M.	

ROOM FINISH SCHEDULE						
ROOM NO.	ROOM NAME	FLOOR	BASE	WALL	CEILING	REMARKS
1	PROCESS	CONC.	—	PTD.	PTD.	—
2	BOILER	CONC.	—	PTD.	PTD.	—
3	STORAGE	CONC.	—	PTD.	PTD.	—
4	MEN'S TOILET	C.M.T.	C.M.T.	C.M.T.	PTD.	70" WAINSCOT
5	WOMEN'S TOILET	C.M.T.	C.M.T.	C.M.T.	PTD.	70" WAINSCOT

Approved by:	Date	Name
Structural		
Electrical		
Architectural	11/1/75	Shelley G. Zang
Project Coordinator	11/1/75	J. M. [Signature]
Project Engineer	7/75	[Signature]
Project Manager		

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NO    DATE                      DESCRIPTION                      BY			<b>JAMES STREET SIPHON INLET CHAMBER</b>																			
REVISIONS																						
APPROVED BY    R.C.M.                      DATE    JULY, 1975 CHECKED BY     D.D.                      DATE    JUNE 1973 DRAWN BY        A.D.                      DATE    JUNE 1973																						
Prepared by: James P Purcell Assoc. Inc. Glastonbury, Conn.	SCALE                      AS NOTED			 CAMP DRESSER & McKEE Inc.  JAMES P PURCELL ASSOCIATES INC.		REG. PROF. ENGR. NO. JULY, 1975 DATE																
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION			PROJ. NO.                      DRWG. NO. 546-3                              A-2																			






Approved by:	Date	Name
Structural		
Electrical		
Architectural	6/1/20	John K. S.
Project Coordinator	6/1/20	John K. S.
Project Engineer	7/1/20	John K. S.
Project Manager		

NO	DATE	DESCRIPTION		BY
REVISIONS				
APPROVED BY	R. C. M.		DATE	JULY, 1975
CHECKED BY	B. B.		DATE	JUNE 1973
DRAWN BY	A. D.		DATE	JUNE 1973
SCALE				
AS NOTED				

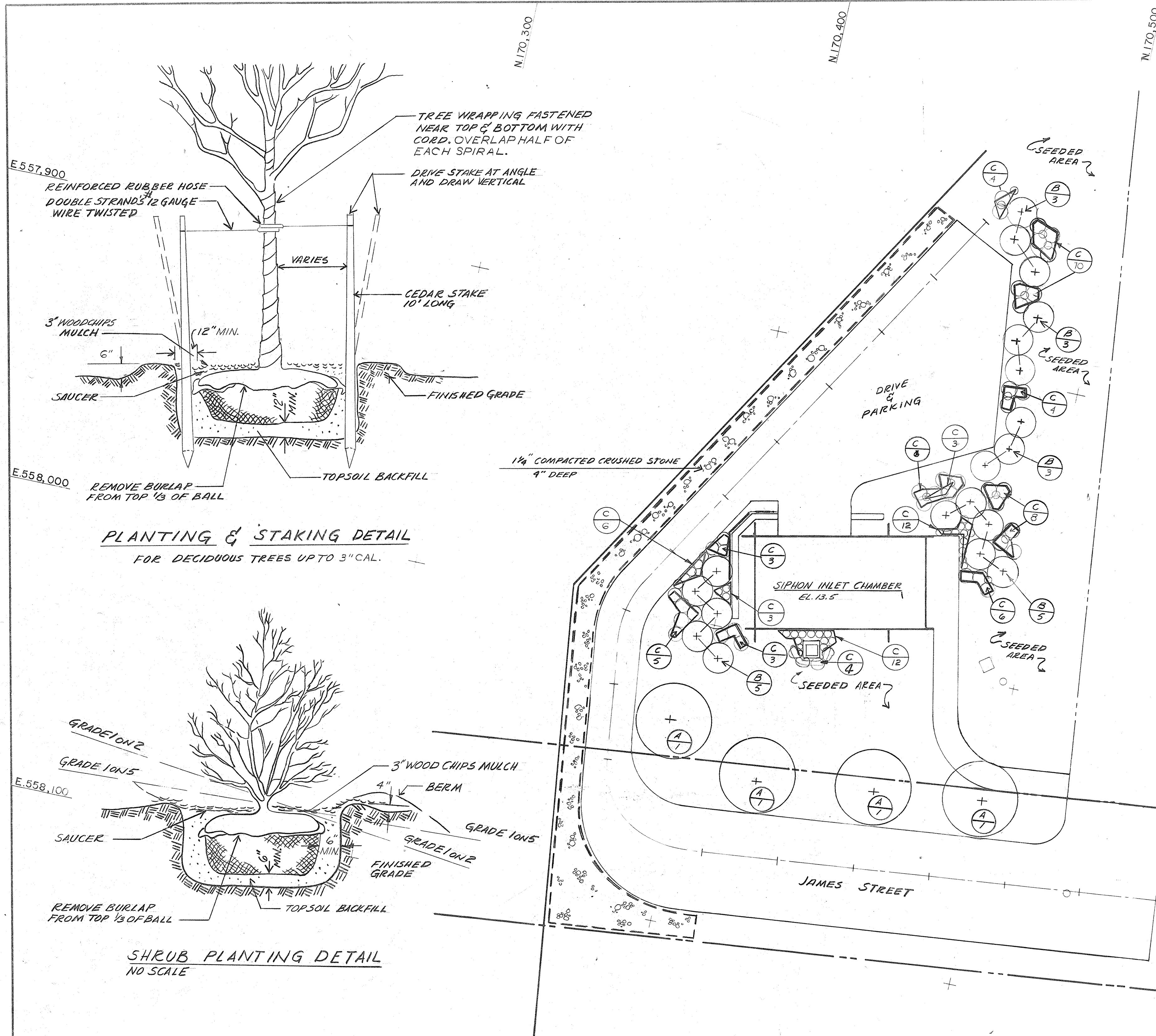
CITY OF NEW HAVEN  
DEPARTMENT OF PUBLIC WORKS  
EAST SHORE  
WATER POLLUTION ABATEMENT PROJECT  
JAMES STREET SIPHON INLET CHAMBER  
DETAILS

CDM  
CAMP DRESSER & MCKEE Inc.  
JAMES P. PURCELL ASSOCIATES INC.



REG. PROF. ENGR. NO.	
JULY, 1975	
DATE	
PROJ. NO.	DRWG. NO.
546-3	A 3

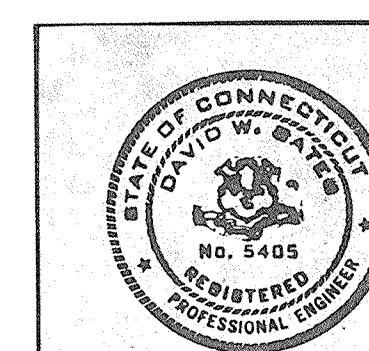




PLANT SCHEDULE						
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QUANT.	REMARKS
MAJOR TREES						
A	ACER PLATANODES	EMERALD QUEEN	3" CAL.	35' O.C.	4	FULL, WELL-BRANCHED PLANTS WITH STRAIGHT TRUNKS & MAIN LEADER INTACT
EVERGREEN TREES						
B	PINUS THUNBERGI	JAPANESE BLACK PINE	7-8' HT.	10' O.C.	19	HEAVY, LOW-BRANCHED PLANTS WITH MAIN LEADER INTACT
SHRUBS						
C	EUONYMUS ALATUS COMPACT A	DWARF WINGED EUONYMUS	3'	3" O.C.	88	FULL PLANTS WITH 5 CONES MIN. LOW BRANCHED

KEY:  
 CAL. - CALIPER  
 HT. - HEIGHT  
 SPD. - SPREAD  
 O.C. - ON CENTER  
 — BED LINE  
 (C/6) SYMBOL OF PLANT  
 (6) QUANTITY  
 --- LIMIT LINE  
 1/4" COMPACTED CRUSH STONE  
 SEEDER AREA - LOAMED, FERTILIZED & MULCHED

Approved by:	Date	Name
Structural		
Electrical		
Architectural		
Project Coordinator	11/15/75	J. Purcell
Project Engineer	7/1/75	J. Purcell
Project Manager		



Prepared by:  
 James P. Purcell Assoc. Inc.  
 Glastonbury, Conn.

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APPROVED BY	R.C.M.	DATE JULY, 1975	
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SCALE 1" = 20'

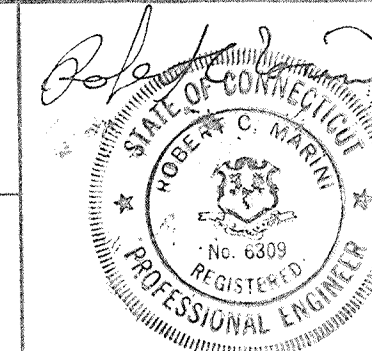
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CITY OF NEW HAVEN  
 DEPARTMENT OF PUBLIC WORKS  
 EAST SHORE  
 WATER POLLUTION ABATEMENT PROJECT

## JAMES STREET SIPHON INLET CHAMBER LANDSCAPING PLAN

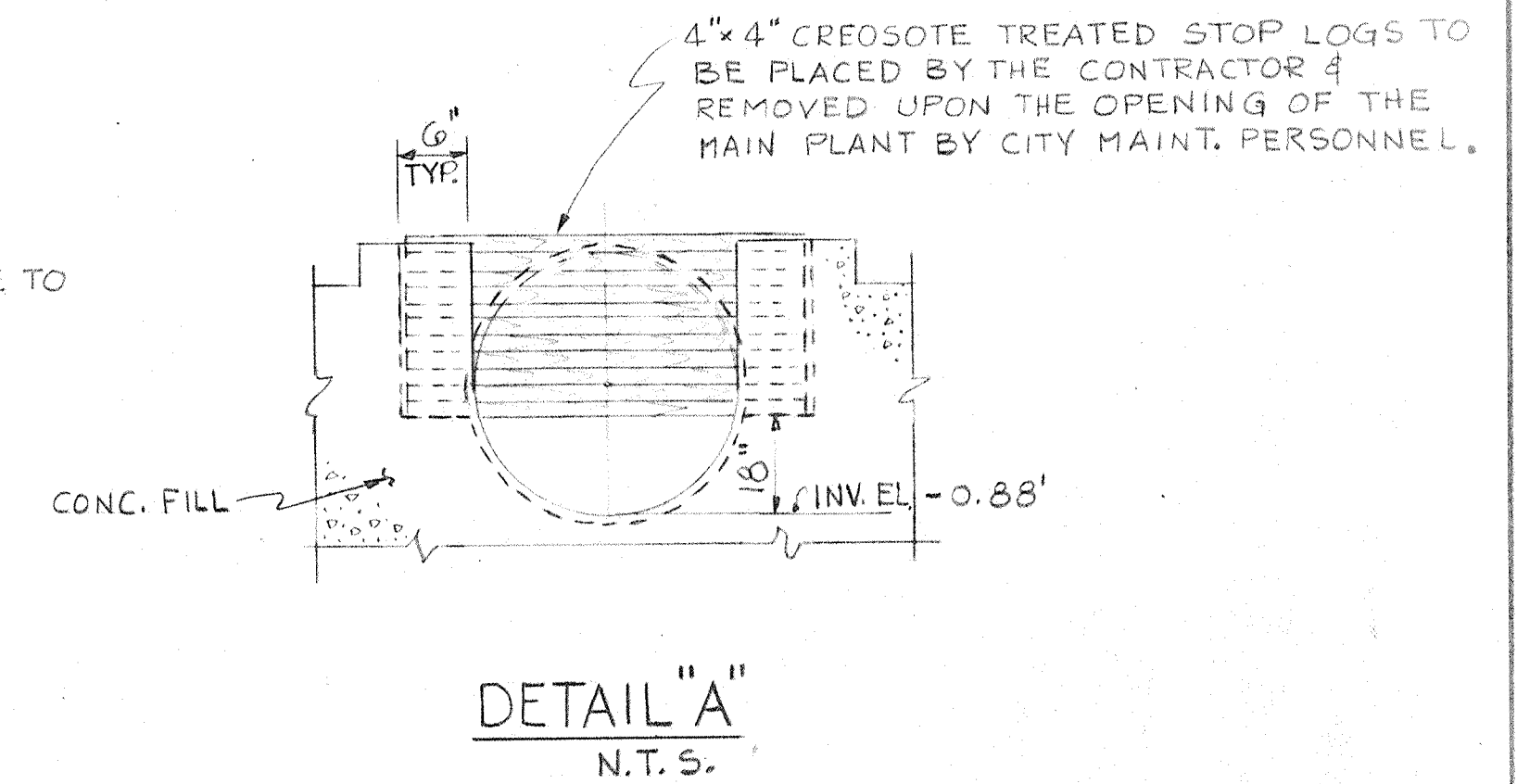
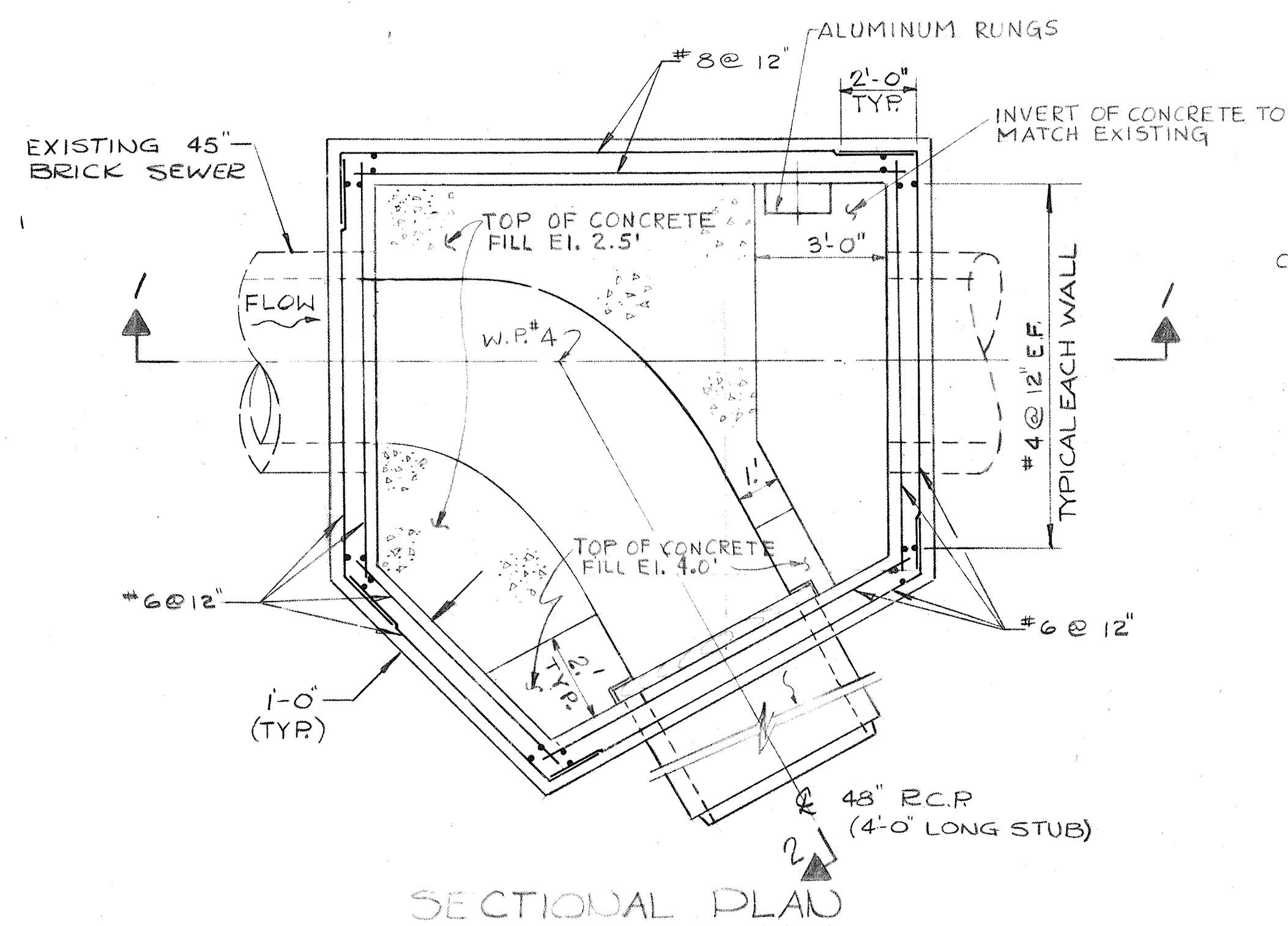
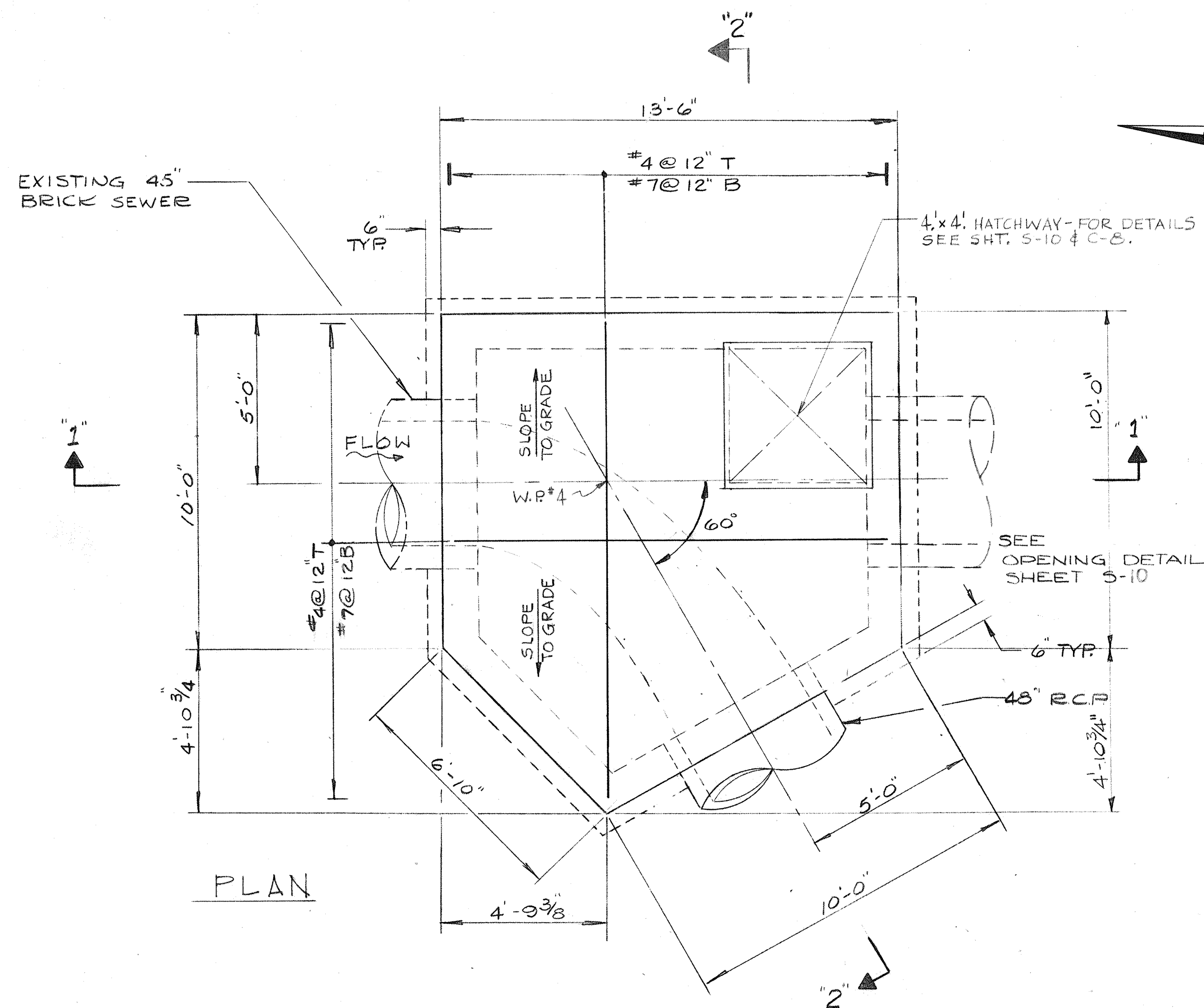


CAMP DRESSER & MCKEE Inc.  
 JAMES P. PURCELL ASSOCIATES INC.

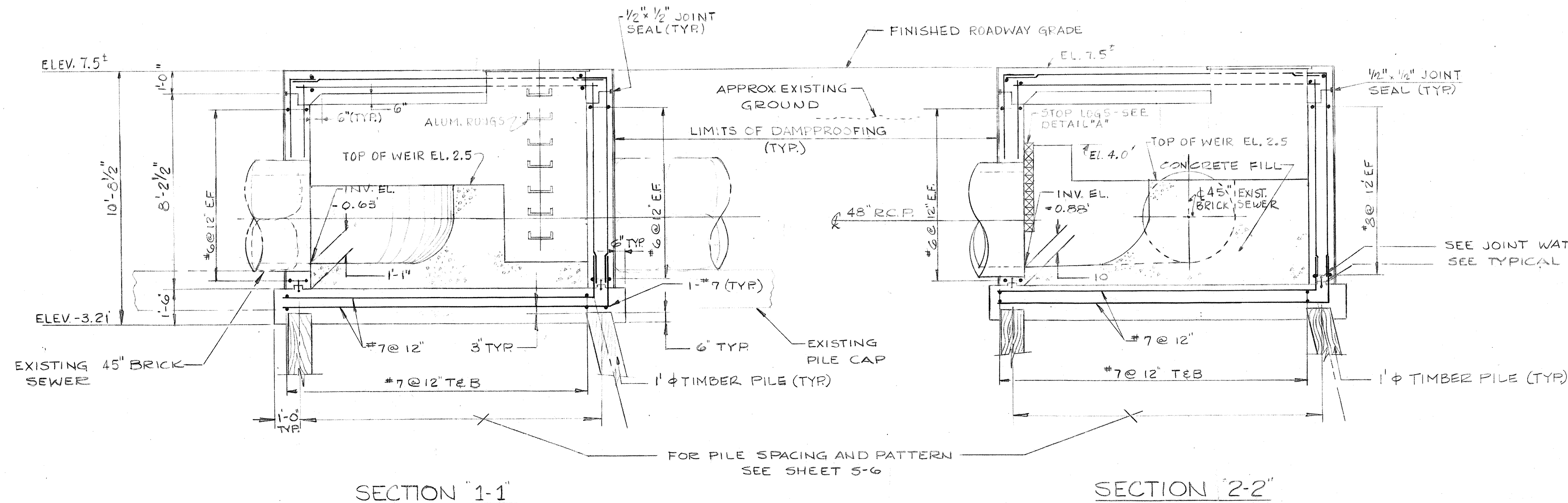


REG. PROF. ENGR. NO.  
 JULY, 1975  
 DATE  
 PROJ. NO. 546-3  
 DRWG. NO. A-4

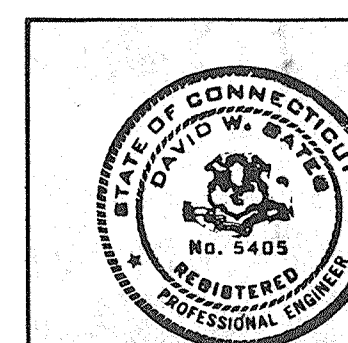




- NOTES:
1. ALL VERTICAL WALL REINFORCING TO BE #4 @ 12"
  2. SEWAGE FLOW SHALL BE MAINTAINED AROUND THE PROPOSED DIVERSION CHAMBER AS OUTLINED IN DIVISION #1 OF THE SPECIFICATIONS
  3. E.F. DENOTES EACH FACE
  4. EXISTING 45" BRICK SEWER FLOW WILL NOT BE DISRUPTED UNTIL SEWER BYPASS AS SHOWN ON SHEET CG-2 IS COMPLETE AND OPERABLE
  5. FOR CLEARANCES OF REINFORCEMENT SEE SHT. S-10.



Approved by:	Date	Name
Structural	1-10-75	S. Shah
Electrical		
HVAC		
Project Coordinator		
Project Engineer	7/15/75	
Project Manager		



Prepared by:  
James P. Purcell Assoc. Inc.  
Glastonbury, Conn.

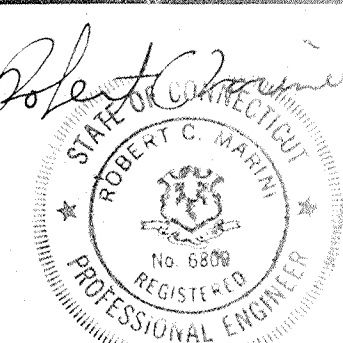
NO.	DATE	DESCRIPTION	BY
REVISIONS			
APPROVED BY	R.C.M.	DATE	JULY, 1975
CHECKED BY	R.F.L.	DATE	JUNE, 1973
DRAWN BY	R.F.G.	DATE	JUNE, 1973

SCALE 3/8" = 1'-0"

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

CITY OF NEW HAVEN  
DEPARTMENT OF PUBLIC WORKS  
EAST SHORE  
WATER POLLUTION ABATEMENT PROJECT  
**JAMES STREET SIPHON  
DIVERSION & OVERFLOW CHAMBER**

CAMP DRESSER & MCKEE Inc.  
JAMES P. PURCELL ASSOCIATES INC.

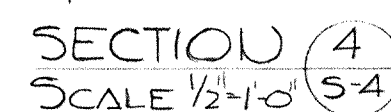
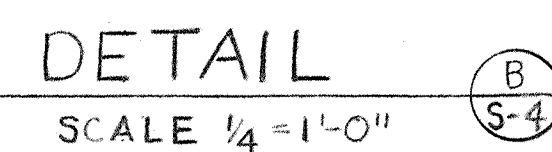
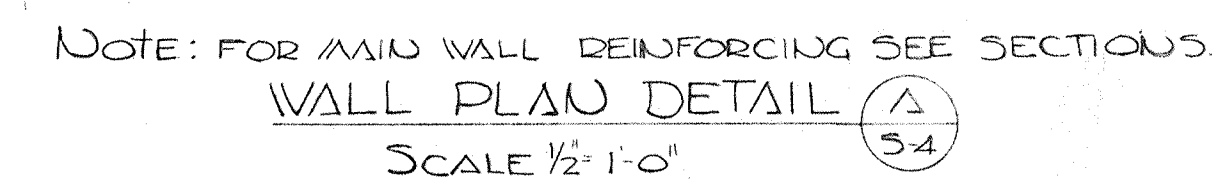
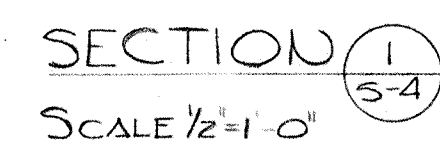


REG. PROF. ENGR. NO.  
JULY, 1975  
DATE  
PROJ. NO. 546-3  
DRWG. NO. S-1

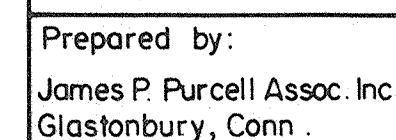






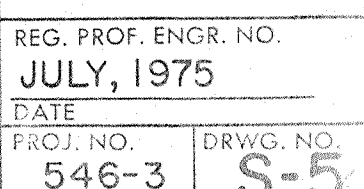


ANDREW T. JOHNSON CO., INC.



UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

CAMP DRESSER & McKEE Inc.  
 JAMES P. PURCELL ASSOCIATES INC.





# MECHANICALLY CLEANED BAR SCREENS

## COARSE SCREENING

## Full-Range Flexibility and Thru-Bar™ Cleaning; Ideal for Difficult-to-Capture Debris



### FlexRake® FP Thru-Bar™ Cleaning Coarse Screen

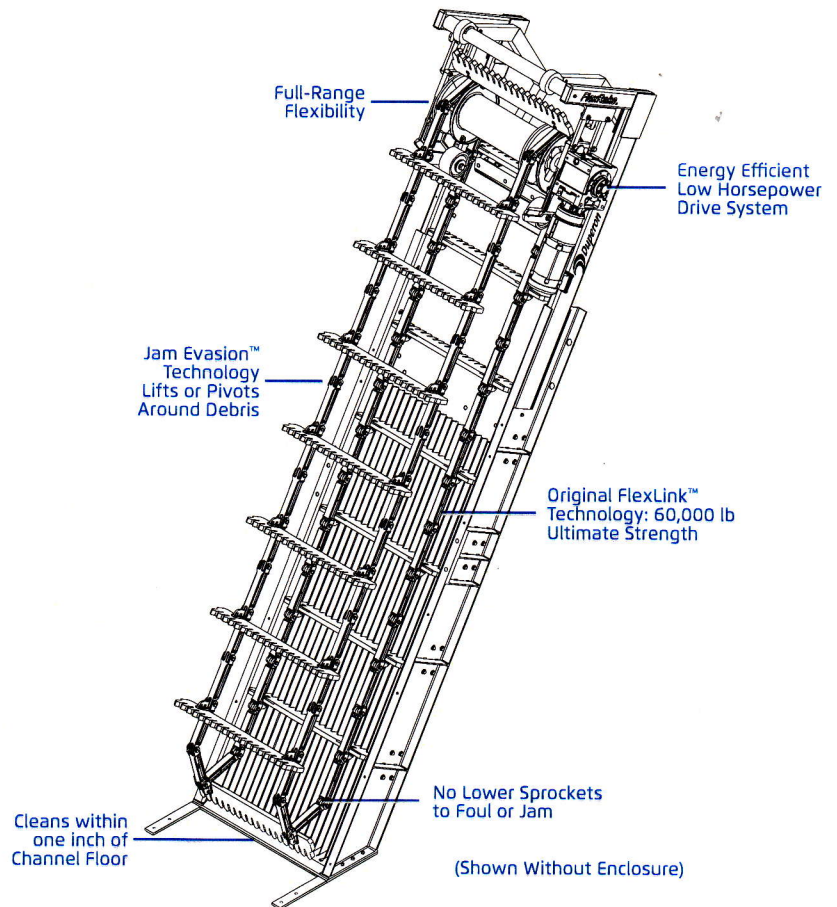
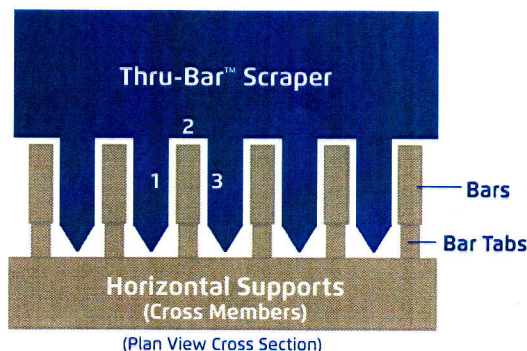
Simple front cleaning, front return Duperon® FlexRake® technology. Stainless steel, rectangular true bar construction with openings of 5/8 inches to 4 inches.

- No Lower Sprockets, Bearings or Tracks to Foul or Jam
- Adapts to a Wide Range of Debris Variations; Full-Range Flexibility
- Toughest Link System in the Industry: 60,000 lb. Ultimate Strength; 1,000 lb. Debris Lifting Capacity
- High-Capture Thru-Bar™ UHMW-PE Scrapers
- Minimal HP Requirements for Energy-Efficient Operation
- Five-Year Warranty for Wastewater Applications



# The Duperon® FlexRake® FP

- Eliminates Need for Confined Space Entries and Below Deck Maintenance with no Lower Sprockets, Bearings, Tracks or Guides to Foul or Jam
- Thru-Bar™ Scrapers Clean 3 Sides of the Bar



## TYPICAL APPLICATIONS

Wastewater, combined sewer overflows, prisons and pulp and paper mills. Also used in raw water intakes and applications where debris is clingy, highly variable, difficult to capture or where debris may accumulate in or around bars.

## UNIT WIDTH

- 18 inches to 12 feet
- Single Strand FlexRake® configuration available for channel widths of 18 inches to 24 inches

## UNIT LENGTH

10 to 100 feet

## ANGLE OF INSTALLATION

Vertical to 45 degrees

## STANDARD MATERIALS OF CONSTRUCTION

- Standard: 304 Stainless Steel
- Alternative: 316 Stainless Steel

## BAR OPENING

0.63 inches to 4 inches

## STANDARD SCRAPER SPACING

Every 2nd link (21 inches)

## SCRAPER CONFIGURATION

UHMW-PE Thru-Bar™ scrapers

## TYPICAL MOTOR

1/2 HP, inverter duty, explosion proof

## STANDARD OPERATING SPEED

- 0.5 RPM
- Can be increased to 2.2 RPM in high flow conditions
- 1 discharge/minute on low; 4 discharges/minute on high
- Scrapers move 28 inches/minute

## SHIPPING DATA

Ships fully assembled or can be provided in modular form to support install.

## STANDARD CONTROLS OPTIONS

Packages range from simple start/stop to sophisticated automation, including motor overload protection. Contact Duperon® for further details and assistance in selecting the perfect package for your site.

## OPERATION OPTIONS

- Continuous/Manual
- Automatic with timer, float, SCADA, differential/high level sensing options with I/O as needed



To Learn more about Duperon® Adaptive Technology, scan this QR code or visit [www.duperon.com](http://www.duperon.com)

**Duperon® ADAPTIVE TECHNOLOGY™**  
Let's Build a System that Works for You™

1200 Leon Scott Court | Saginaw, MI 48601 | P 989.754.8800 | F 989.754.2175 | TF 800.383.8479 | [www.duperon.com](http://www.duperon.com)

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Project: James Street Siphon Station Upgrades Project SSF 2017-02

**Minimum Rates and Classifications  
for Heavy/Highway Construction**

**ID#: H 26865**

**Connecticut Department of Labor  
Wage and Workplace Standards Division**

By virtue of the authority vested in the Labor Commissioner under provisions of Section 31-53 of the General Statutes of Connecticut, as amended, the following are declared to be the prevailing rates and welfare payments and will apply only where the contract is advertised for bid within 20 days of the date on which the rates are established. Any contractor or subcontractor not obligated by agreement to pay to the welfare and pension fund shall pay this amount to each employee as part of his/her hourly wages.

Project Number:

Project Town: New Haven

FAP Number:

State Number:

Project: James Street Siphon Station Upgrades Project SSF 2017-02

<b>CLASSIFICATION</b>	<b>Hourly Rate</b>	<b>Benefits</b>
1) Boilermaker	33.79	34% + 8.96
1a) Bricklayer, Cement Masons, Cement Finishers, Plasterers, Stone Masons	34.72	32.15
2) Carpenters, Piledrivermen	33.53	25.66
2a) Diver Tenders	33.53	25.66

**As of:** Thursday, January 09, 2020



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3) Divers	41.99	25.66
03a) Millwrights	34.04	26.09
4) Painters: (Bridge Construction) Brush, Roller, Blasting (Sand, Water, etc.), Spray	51.00	21.80
4a) Painters: Brush and Roller	34.62	21.80
4b) Painters: Spray Only	36.62	21.80
4c) Painters: Steel Only	35.62	21.80
4d) Painters: Blast and Spray	37.62	21.80

Project: James Street Siphon Station Upgrades Project SSF 2017-02

4e) Painters: Tanks, Tower and Swing	36.62	21.80
5) Electrician (Trade License required: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	38.50	28.61+3% of gross wage
6) Ironworkers: Ornamental, Reinforcing, Structural, and Precast Concrete Erection	36.67	35.77 + a
7) Plumbers (Trade License required: (P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2) and Pipefitters (Including HVAC Work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4 G-1, G-2, G-8, G-9)	43.62	32.06
----LABORERS-----		
8) Group 1: Laborer (Unskilled), Common or General, acetylene burner, concrete specialist	30.75	20.84
9) Group 2: Chain saw operators, fence and guard rail erectors, pneumatic tool operators, powdermen	31.00	20.84

Project: James Street Siphon Station Upgrades Project SSF 2017-02

10) Group 3: Pipelayers	31.25	20.84
11) Group 4: Jackhammer/Pavement breaker (handheld); mason tenders (cement/concrete), catch basin builders, asphalt rakers, air track operators, block paver, curb setter and forklift operators	31.25	20.84
12) Group 5: Toxic waste removal (non-mechanical systems)	32.75	20.84
13) Group 6: Blasters	32.50	20.84
Group 7: Asbestos/lead removal, non-mechanical systems (does not include leaded joint pipe)	31.75	20.84
Group 8: Traffic control signalmen	18.00	20.84
Group 9: Hydraulic Drills	29.30	18.90



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----LABORERS (TUNNEL CONSTRUCTION, FREE AIR). Shield Drive and  
Liner Plate Tunnels in Free Air.----

13a) Miners, Motormen, Mucking Machine Operators, Nozzle Men, Grout Men, Shaft & Tunnel Steel & Rodmen, Shield & Erector, Arm Operator, Cable Tenders	32.98	20.84 + a
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13b) Brakemen, Trackmen	32.01	20.84 + a
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----CLEANING, CONCRETE AND CAULKING TUNNEL----

14) Concrete Workers, Form Movers, and Strippers	32.01	20.84 + a
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15) Form Erectors	32.34	20.84 + a
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---ROCK SHAFT LINING, CONCRETE, LINING OF SAME AND TUNNEL  
IN FREE AIR:----

Project: James Street Siphon Station Upgrades Project SSF 2017-02

16) Brakemen, Trackmen, Tunnel Laborers, Shaft Laborers	32.01	20.84 + a
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17) Laborers Topside, Cage Tenders, Bellman	31.90	20.84 + a
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18) Miners	32.98	20.84 + a
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---TUNNELS, CAISSON AND CYLINDER WORK IN COMPRESSED AIR:  
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18a) Blaster	39.47	20.84 + a
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19) Brakemen, Trackmen, Groutman, Laborers, Outside Lock Tender, Gauge Tenders	39.27	20.84 + a
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20) Change House Attendants, Powder Watchmen, Top on Iron Bolts	37.29	20.84 + a
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Project: James Street Siphon Station Upgrades Project SSF 2017-02

21) Mucking Machine Operator	40.06	20.84 + a
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----TRUCK DRIVERS----(\*see note below)

Two axle trucks	29.51	24.52 + a
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Three axle trucks; two axle ready mix	29.62	24.52 + a
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Three axle ready mix	29.67	24.52 + a
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Four axle trucks, heavy duty trailer (up to 40 tons)	29.72	24.52 + a
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Four axle ready-mix	29.77	24.52 + a
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Project: James Street Siphon Station Upgrades Project SSF 2017-02

Heavy duty trailer (40 tons and over)	29.98	24.52 + a
Specialized earth moving equipment other than conventional type on-the road trucks and semi-trailer (including Euclids)	29.77	24.52 + a
----POWER EQUIPMENT OPERATORS----		
Group 1: Crane handling or erecting structural steel or stone, hoisting engineer (2 drums or over), front end loader (7 cubic yards or over), Work Boat 26 ft. & Over, Tunnel Boring Machines. (Trade License Required)	40.97	24.80 + a
Group 2: Cranes (100 ton rate capacity and over); Excavator over 2 cubic yards; Piledriver (\$3.00 premium when operator controls hammer); Bauer Drill/Caisson. (Trade License Required)	40.64	24.80 + a
Group 3: Excavator/Backhoe under 2 cubic yards; Cranes (under 100 ton rated capacity), Gradall; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive power of operation), Rubber Tire Excavator (Drott-1085 or similar); Grader Operator; Bulldozer Fine Grade (slopes, shaping, laser or GPS, etc.). (Trade License Required)	39.88	24.80 + a
Group 4: Trenching Machines; Lighter Derrick; Concrete Finishing Machine; CMI Machine or Similar; Koehring Loader (Skooper)	39.48	24.80 + a

Project: James Street Siphon Station Upgrades Project SSF 2017-02

Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Spreader; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps; Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24" Mandrell)	38.87	24.80 + a
Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller.	38.87	24.80 + a
Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	38.55	24.80 + a
Group 7: Asphalt Roller; Concrete Saws and Cutters (ride on types); Vermeer Concrete Cutter; Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24" and Under Mandrel).	38.20	24.80 + a
Group 8: Mechanic, Grease Truck Operator, Hydroblaster, Barrier Mover, Power Stone Spreader; Welder; Work Boat under 26 ft.; Transfer Machine.	37.79	24.80 + a
Group 9: Front End Loader (under 3 cubic yards), Skid Steer Loader regardless of attachments (Bobcat or Similar); Fork Lift, Power Chipper; Landscape Equipment (including hydroseeder).	37.34	24.80 + a
Group 10: Vibratory Hammer, Ice Machine, Diesel and Air Hammer, etc.	35.24	24.80 + a

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Group 11: Conveyor, Earth Roller; Power Pavement Breaker (whiphammer), Robot Demolition Equipment.	35.24	24.80 + a
Group 12: Wellpoint Operator.	35.18	24.80 + a
Group 13: Compressor Battery Operator.	34.58	24.80 + a
Group 14: Elevator Operator; Tow Motor Operator (Solid Tire No Rough Terrain).	33.41	24.80 + a
Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	32.99	24.80 + a
Group 16: Maintenance Engineer/Oiler	32.32	24.80 + a
Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	36.76	24.80 + a



Project: James Street Siphon Station Upgrades Project SSF 2017-02

Group 18: Power Safety Boat; Vacuum Truck; Zim Mixer; Sweeper; (minimum for any job requiring CDL license).	34.26	24.80 + a
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\*\*NOTE: SEE BELOW

----LINE CONSTRUCTION----(Railroad Construction and Maintenance)----

20) Lineman, Cable Splicer, Technician	48.19	6.5% + 22.00
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21) Heavy Equipment Operator	42.26	6.5% + 19.88
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22) Equipment Operator, Tractor Trailer Driver, Material Men	40.96	6.5% + 19.21
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23) Driver Groundmen	26.50	6.5% + 9.00
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Project: James Street Siphon Station Upgrades Project SSF 2017-02

23a) Truck Driver	40.96	6.5% + 17.76
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----LINE CONSTRUCTION----

24) Driver Groundmen	30.92	6.5% + 9.70
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25) Groundmen	22.67	6.5% + 6.20
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26) Heavy Equipment Operators	37.10	6.5% + 10.70
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27) Linemen, Cable Splicers, Dynamite Men	41.22	6.5% + 12.20
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28) Material Men, Tractor Trailer Drivers, Equipment Operators	35.04	6.5% + 10.45
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Project: James Street Siphon Station Upgrades Project SSF 2017-02

01) Asbestos/Toxic Waste Removal Laborers: Asbestos removal and encapsulation (except its removal from mechanical systems which are not to be scrapped), toxic waste removers, blasters. \*\*See Laborers Group 5 and 7\*\*

**Project: James Street Siphon Station Upgrades Project SSF 2017-02**

*Welders: Rate for craft to which welding is incidental.*

*\*Note: Hazardous waste removal work receives additional \$1.25 per hour for truck drivers.*

*\*\*Note: Hazardous waste premium \$3.00 per hour over classified rate*

***ALL Cranes: When crane operator is operating equipment that requires a fully licensed crane operator to operate he receives an extra \$4.00 premium in addition to the hourly wage rate and benefit contributions:***

***1) Crane handling or erecting structural steel or stone; hoisting engineer (2 drums or over)***

***2) Cranes (100 ton rate capacity and over) Bauer Drill/Caisson***

***3) Cranes (under 100 ton rated capacity)***

*Crane with 150 ft. boom (including jib) - \$1.50 extra*

*Crane with 200 ft. boom (including jib) - \$2.50 extra*

*Crane with 250 ft. boom (including jib) - \$5.00 extra*

*Crane with 300 ft. boom (including jib) - \$7.00 extra*

*Crane with 400 ft. boom (including jib) - \$10.00 extra*

All classifications that indicate a percentage of the fringe benefits must be calculated at the percentage rate times the "base hourly rate".

Apprentices duly registered under the Commissioner of Labor's regulations on "Work Training Standards for Apprenticeship and Training Programs" Section 31-51-d-1 to 12, are allowed to be paid the appropriate percentage of the prevailing journeymen hourly base and the full fringe benefit rate, providing the work site ratio shall not be less than one full-time journeyman instructing and supervising the work of each apprentice in a specific trade.

*~~Connecticut General Statute Section 31-55a: Annual Adjustments to wage rates by contractors doing state work ~~*

*The Prevailing wage rates applicable to this project are subject to annual adjustments each July 1st for the duration of the project.*

*Each contractor shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.*

*It is the contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's website.*

*The annual adjustments will be posted on the Department of Labor's Web page: [www.ct.gov/dol](http://www.ct.gov/dol).*

*The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project.*

*All subsequent annual adjustments will be posted on our Web Site for contractor access.*

*Contracting Agencies are under no obligation pursuant to State labor law to pay any increase due to the annual adjustment provision.*

**As of:** Thursday, January 09, 2020



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*Effective October 1, 2005 - Public Act 05-50: any person performing the work of any mechanic, laborer, or worker shall be paid prevailing wage*

All Person who perform work ON SITE must be paid prevailing wage for the appropriate mechanic, laborer, or worker classification.

All certified payrolls must list the hours worked and wages paid to All Persons who perform work ON SITE regardless of their ownership i.e.: (Owners, Corporate Officers, LLC Members, Independent Contractors, et. al)

Reporting and payment of wages is required regardless of any contractual relationship alleged to exist between the contractor and such person.

**~~Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clause (29 CFR 5.5 (a) (1) (ii)).**

Please direct any questions which you may have pertaining to classification of work and payment of prevailing wages to the Wage and Workplace Standards Division, telephone (860)263-6790.

*As of:*

Thursday, January 09, 2020



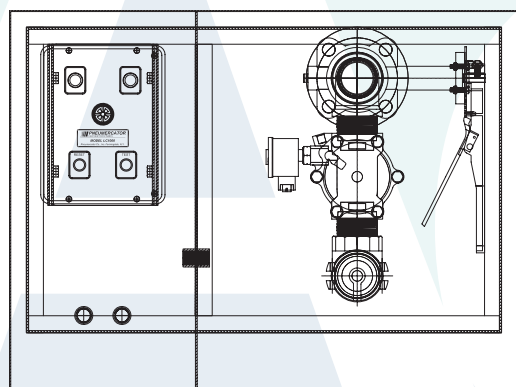
Durable Design... Reliable Results

## Durable Design - Reliable Results

Durability in design is our top priority, everything else follows. We believe this is accomplished through a constant focus on minimizing complexity, using high quality components and most importantly asking ourselves how we would want the system to be built. Focus on ease of use and maintenance maintains this perspective. Our goal is to become the gold standard for fuel system design by delivering on our promise of durable design and reliable results.

The Ace FuelSafe line was introduced as a safe, reliable and sensible option for the discerning owner/operator who prefers a durably designed system that will safely transfer fuel from point A to B with minimal complexity. Our FuelSafe systems are designed and built by service personnel who have maintained fuel system equipment in the field and have a deep appreciation for reliability and simplicity in fuel system design.

## REMOTE FILL SYSTEMS:



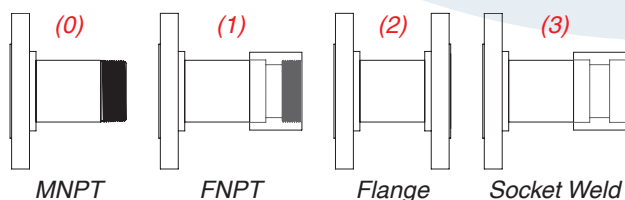
### RFI-E-C-wx-yyy-zzz

Includes:

- 5 Gallon Dual Compartment, Single Door, Remote Spill Container with (Specify) Discharge
- Mechanical Remote Overfill Prevention Valve (Optional) "E" becomes "F" if selected
- Normally Open Solenoid Valve (Specify Voltage)
- Kamlock Check Valve with Dust Plug.
- Mechanical Butterfly Valve
- Two-Point Alarm Console w/ Level Switch

### DISCHARGE CONNECTION (w) / PIPE SIZE (x):

- 2 2" Schedule 40 (Specify Piping Connection)
- 3 \* 3" Schedule 40 (Specify Piping Connection)



(Show with custom inlay door)

The Ace FuelSafe remote fill system is a safe and effective way to fill remote tanks and prevent spillage. The FuelSafe RFI series includes all valves, fittings necessary for hose connection from a pumper truck to the fill system. The spill containment box includes a double hasp lockable enclosure with a durable powder coat finish and split compartment for controls and fill line. Conduit and piping penetrations are included as part of the package, minimizing cost impacts at time of installation. Each unit can be ordered as a surface mounted unit, flush mount, with legs or pedestal to accommodate any site condition. The controls are simple and designed to interface with a two point level switch for annunciation and valve actuation. Please contact us if you have any more unique remote fill needs as we have provided many successful custom applications.

### INSTALLATION CONFIGURATION (yyy):

- IWM In-Wall Mounted Configuration
- SWM Surface Mounted Configuration
- PRM Pedestal Mounted Configuration
- LRM Leg Mounted Configuration

### DISCHARGE ORIENTATION (zzz):

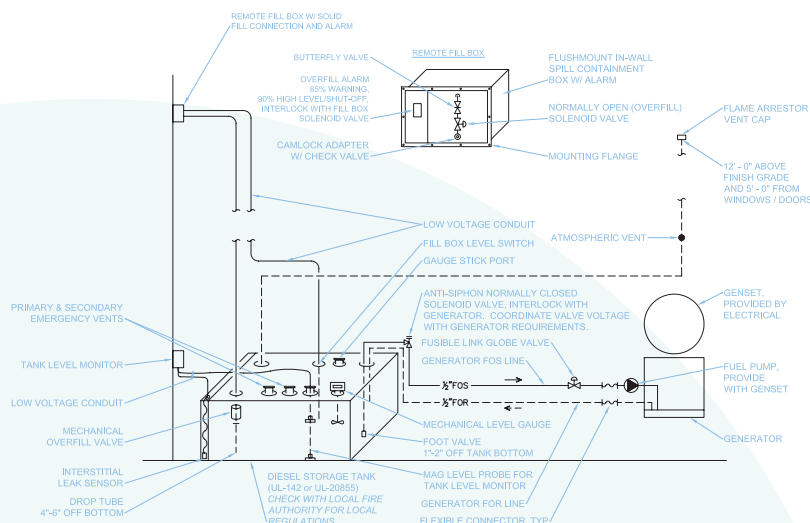
- PDT Top Oriented Discharge
- PDR Rear Oriented Discharge
- PDB Bottom Oriented Discharge

\* 3" Remote Fill Systems - Special Order

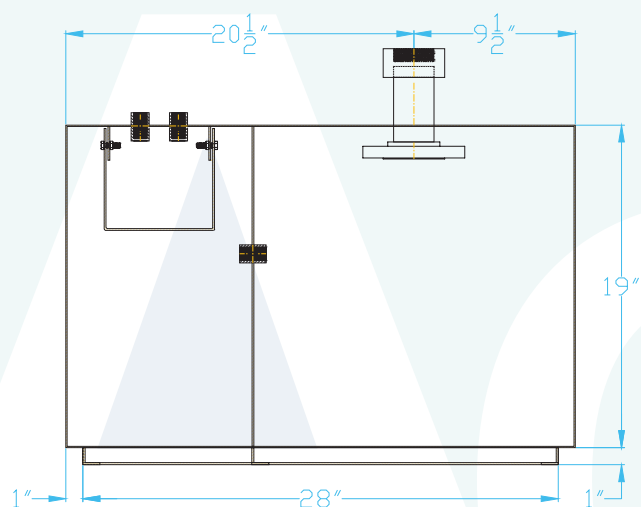


## Ace FuelSafe Remote Fill Package Specification & Typical Installation Drawing:

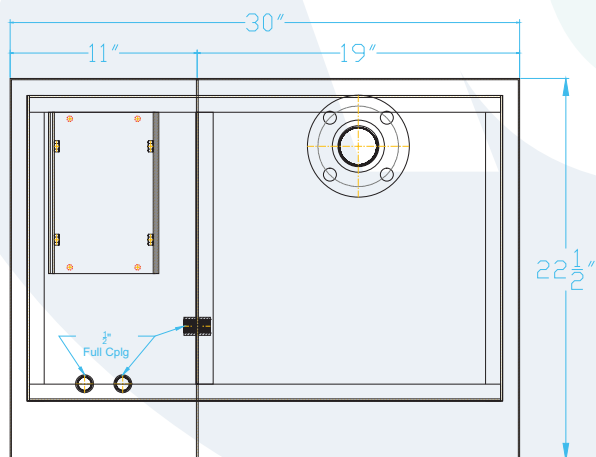
Fill box finish includes durable powder coat finish in Ace Tank Bright White, 5 gallons spill containment, piano hinged door with two hasp lockable enclosure. Controls are housed in a NEMA 4 enclosure with solid state circuitry, alarm lights, control relays, 85 decibel alarm horn, silence/reset button and test button. The fill side includes a Kamlock coupler with integral check valve, dust plug, isolation valve and normally open energized close solenoid valve. Custom colors or Stainless available upon request.



### REMOTE FILL CABINET:



Plan View



Elevation View - Front



### Seattle, Washington

18340 Andover Park West  
Tukwila, WA 98168

Tel: (800) 426-2880  
Fax: (888) 475-1418  
E-mail: FuelSafeSystems@acetank.com

### Alaska

Tel: (907) 562-1143  
Fax: (888) 475-1418  
E-mail: FuelSafeSystems@acetank.com

