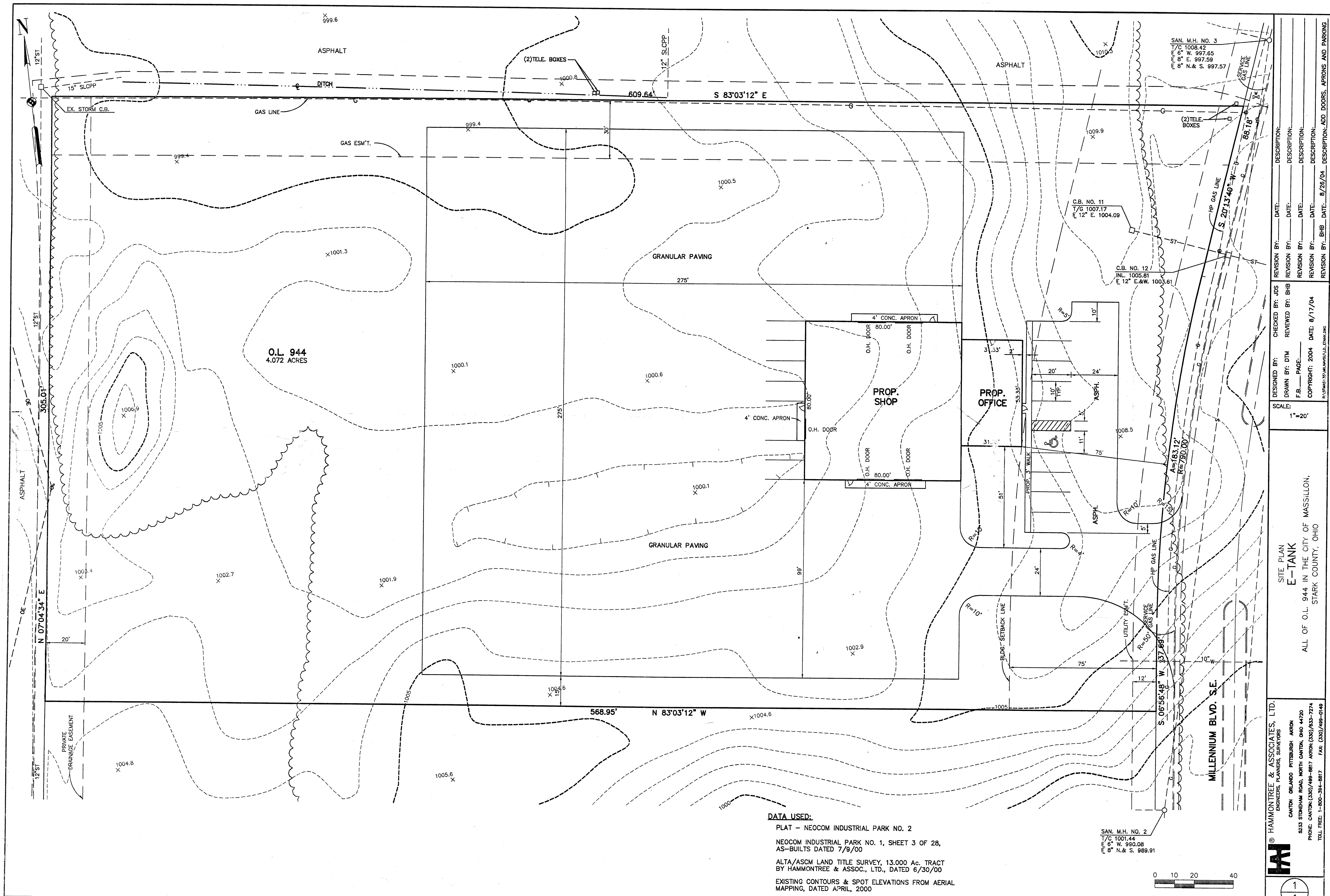
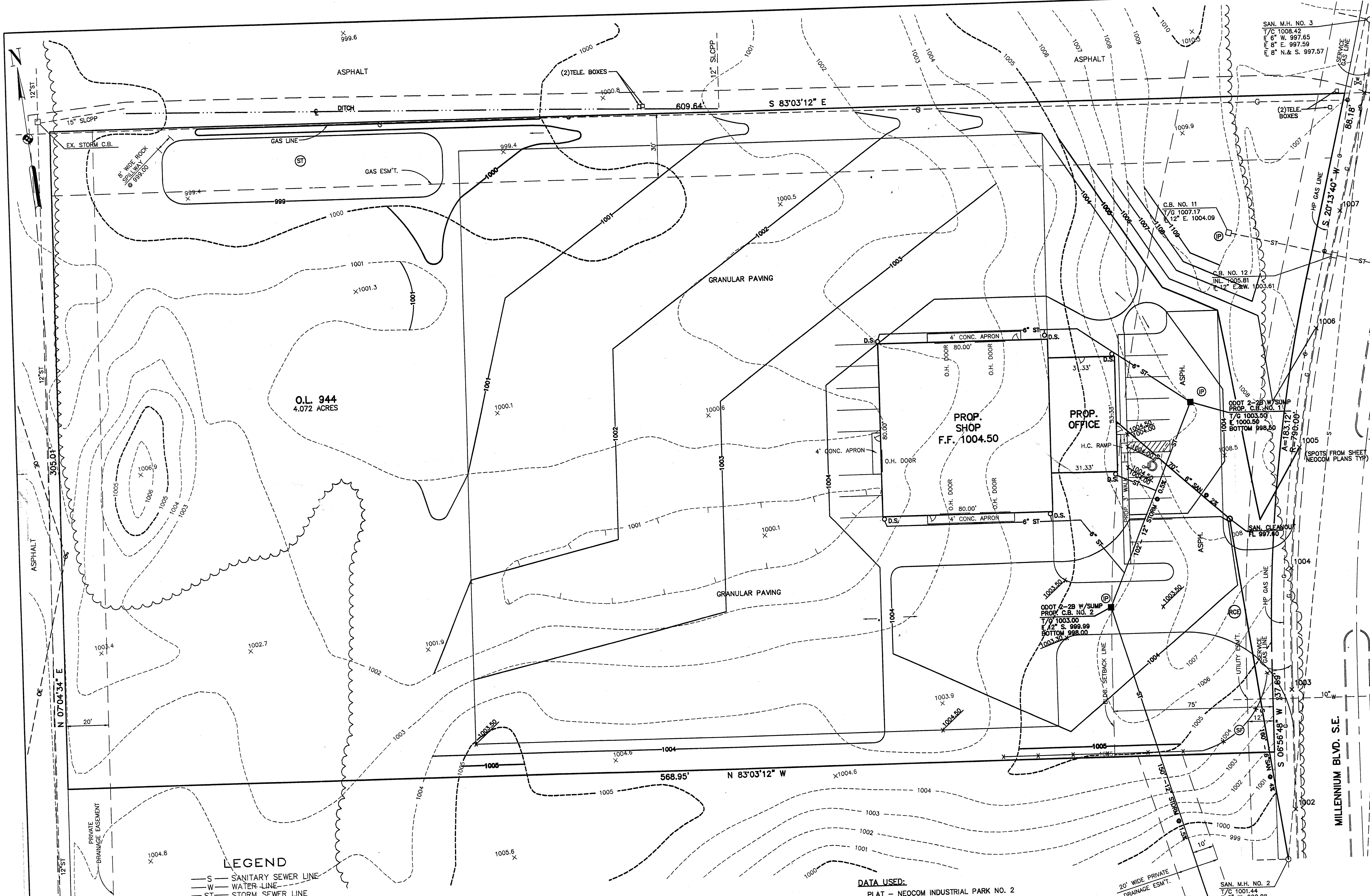






- LEGEND**
- S — SANITARY SEWER LINE
 - W — WATER LINE
 - ST — STORM SEWER LINE
 - IP — INLET PROTECTION
 - SP — SILT FENCE
 - RCE — ROCK CHANNEL PROTECTION
 - ST — SEDIMENT TRAP
 - SP — SPOT ELEV. TOP & BOTTOM OF CURB
 - SP — SPOT ELEV. EDGE OF PAVEMENT
 - DS — DOWN SPOT

OWNER
E-TANK
5232 SOUTHWAY STREET SW
CANTON, OH 44706
PHONE: 330-478-2221

- NOTES**
- A DETENTION BASIN WAS PROVIDED FOR THE NEOCOM INDUSTRIAL PARK NO. 1 SO DETENTION IS NOT REQUIRED ON SITE.
 - FOR SOIL EROSION CONTROL NOTES & DETAILS, SEE SHEETS 2 AND 3.

DATA USED:
PLAT — NEOCOM INDUSTRIAL PARK NO. 2
NEOCOM INDUSTRIAL PARK NO. 1, SHEET 3 OF 28,
AS-BUILTS DATED 7/9/00
ALTA/ASCM LAND TITLE SURVEY, 13.000 AC. TRACT
BY HAMMONTREE & ASSOC., LTD., DATED 6/30/00
EXISTING CONTOURS & SPOT ELEVATIONS FROM AERIAL
MAPPING, DATED APRIL, 2000, EXCEPT AS NOTED



REVISIONS

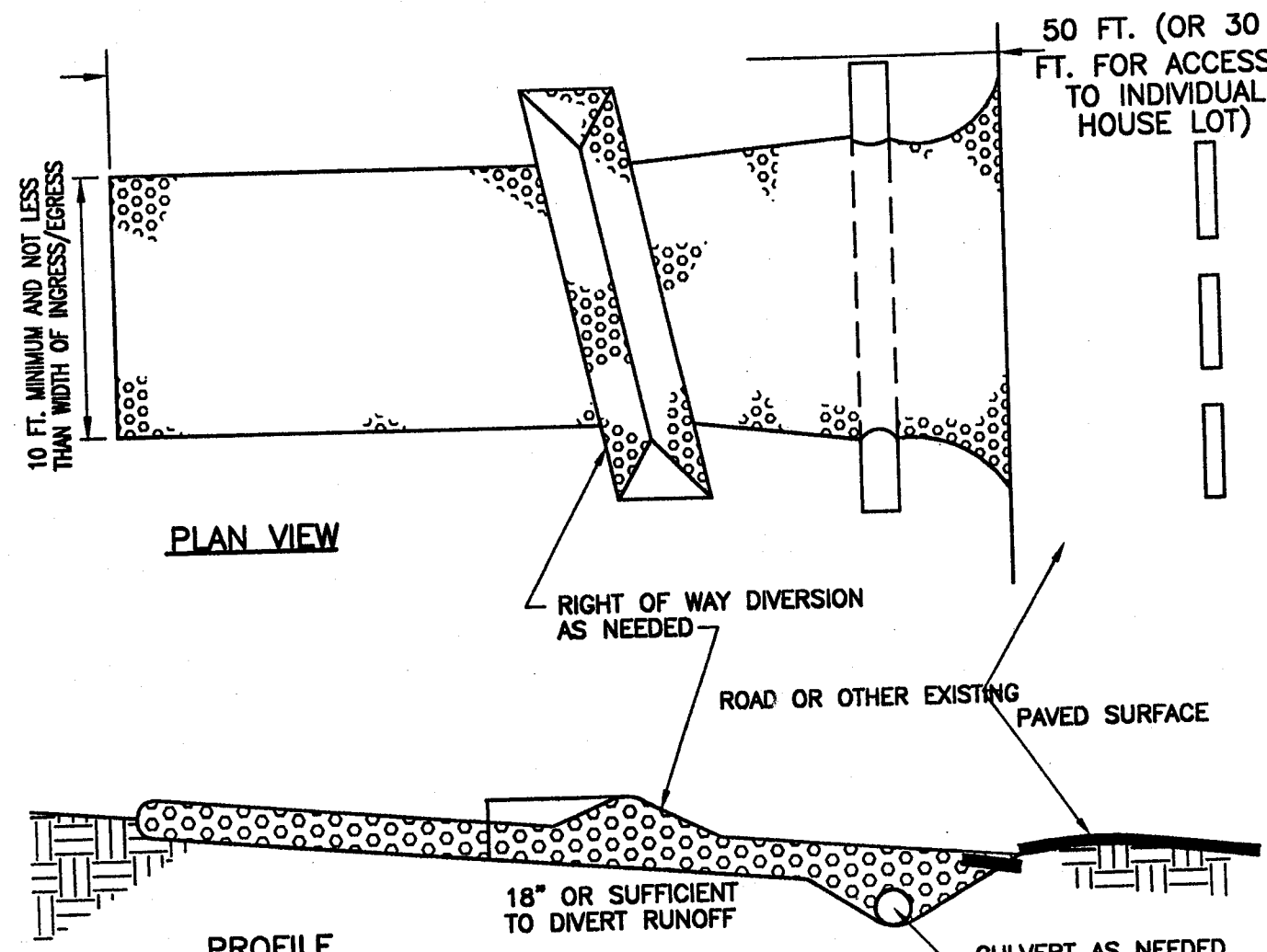
NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		
91		
92		
93		
94		
95		
96		
97		
98		
99		
100		
101		
102		
103		
104		
105		
106		
107		
108		
109		
110		
111		
112		
113		
114		
115		
116		
117		
118		
119		
120		
121		
122		
123		
124		
125		
126		
127		
128		
129		
130		
131		
132		
133		
134		
135		
136		
137		
138		
139		
140		
141		
142		
143		
144		
145		
146		
147		
148		
149		
150		
151		
152		
153		
154		
155		
156		
157		
158		
159		
160		
161		
162		
163		
164		
165		
166		
167		
168		
169		
170		
171		
172		
173		
174		
175		
176		
177		
178		
179		
180		
181		
182		
183		
184		
185		
186		
187		
188		
189		
190		
191		
192		
193		
194		
195		
196		
197		
198		
199		
200		
201		
202		
203		
204		
205		
206		
207		
208		
209		
210		
211		
212		
213		
214		
215		
216		
217		
218		
219		
220		
221		
222		
223		
224		
225		
226		
227		
228		
229		
230		
231		
232		
233		
234		
235		
236		
237		
238		
239		
240		
241		
242		
243		
244		
245		
246		
247		
248		
249		
250		
251		
252		
253		
254		
255		
256		
257		
258		
259		
260		
261		
262		
263		
264		
265		
266		
267		
268		
269		
270		
271		
272		
273		
274		
275		
276		
277		
278		
279		
280		
281		
282		
283		
284		
285		
286		
287		
288		
289		
290		
291		
292		
293		
294		
295		
296		
297		
298		
299		
300		
301		
302		
303		
304		
305		
306		
307		
308		
309		
310		
311		
312		
313		
314		
315		
316		
317		
318		
319		
320		
321		
322		
323		
324		
325		
326		
327		
328		
329		
330		
331		
332		
333		
334		
335		
336		
337		
338		
339		
340		
341		
342		
343		
344		
345		
346		
347		
348		
349		
350		
351		
352		
353		
354		
355		
356		
357		
358		
359		
360		
361		
362		
363		
364		
365		
366		
367		
368		
369		
370		
371		
372		
373		
374		
375		
376		
377		
378		
379		
380		
381		
382		
383		
384		
385		
386		
387		
388		
389		
390		
391		
392		
393		
394		
395		
396		
397		
398		
399		
400		
401		
402		
403		
404		
405		
406		
407		
408		
409		
410		
411		
412		
413		
414		
415		
416		
417		
418		
419		
420		
421		
422		
423		
424		
425		
426		
427		
428		
429		
430		
431		
432		
433		
434		
435		
436		
437		
438		
439		
440		
441		
442		
443		
444		
445		
446		
447		
448		
449		
450		
451		
452		
453		
454		
455		
456		
457		
458		
459		
460		
461		
462		
463		
464		
465		
466		
467		
468		
469		
470		
471		
472		
473		
474		
475		
476		
477		
478		
479		
480		
481		
482		
483		
484		
485		
486		
487		
488		
489		
490		
491		
492		
493		
494		
495		
496		
497		
498		
499		
500		
501		
502		
503		
504		
505		
506		
507		
508		
509		
510		
511		
512		
513		
514		
515		
516		
517		
518		
519		
520		
521		
522		
523		
524		
525		
526		
527		
528		
529		
530		
531		
532		
533		
534		
535		
536		
537		
538		
539		
540		
541		
542		
543		
544		
545		
546		
547		
548		
549		
550		
551		
552		
553		
554		
555		
556		
557		
558		
559		
560		
561		
562		
563		
564		
565		
566		
567		
568		
569		
570		
571		
572		
573		
574		
575		
576		
577		
578		
579		
580		
581		
582		

EROSION CONTROL NOTES

- ALL PROPERTIES ADJACENT TO THE SITE OF SOIL-DISTURBING ACTIVITY SHALL BE PROTECTED TO THE MAXIMUM EXTENT PRACTICABLE, FROM SOIL EROSION AND SEDIMENT RUNOFF AND DRAINAGE, INCLUDING, BUT NOT LIMITED TO PRIVATE PROPERTIES, NATURAL AND ARTIFICIAL WATERWAYS, WETLANDS, STORM SEWERS AND PUBLIC LANDS.
- CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL PRACTICES USED TO SATISFY THIS REQUIREMENT SHALL CONFORM, AS A MINIMUM, TO STATE OF OHIO STANDARDS AS SET FORTH IN THE MOST CURRENT EDITION OF THE RAINWATER AND LAND DEVELOPMENT MANUAL DEFINED BY THE OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF SOIL AND WATER CONSERVATION AND NATURAL RESOURCE CONSERVATION SERVICE AND SHALL CONFORM TO THE MOST CURRENT OHIO ENVIRONMENTAL PROTECTION AGENCY, OHIO REVISED CODE CHAPTER 6111 REQUIREMENTS.
- EROSION AND SEDIMENT CONTROL PLAN APPROVALS ISSUED IN ACCORDANCE WITH THESE RULES DO NOT RELIEVE THE OWNER OF RESPONSIBILITY FOR OBTAINING ALL OTHER NECESSARY PERMITS AND OR APPROVALS FROM FEDERAL STATE, AND/OR COUNTY AGENCIES. IF REQUIREMENTS VARY, THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.
- EROSION AND SEDIMENT CONTROL PRACTICES AT THE SITE, AND AS IDENTIFIED IN THE ESC PLAN SHALL COMPLY WITH THE FOLLOWING:
 - AN APPROVED EROSION AND SEDIMENT CONTROL PLAN OR APPROVAL LETTER FROM THE STARK SWCD SHALL BE LOCATED ON SITE FOR REVIEW.
 - LIMITS TO CLEARING AND GRADING SHALL BE CLEARLY MARKED ON SITE WITH SIGNAGE, FLAGGING, AND/OR FENCING ETC.
 - INSTALL EROSION AND SEDIMENT PERIMETER CONTROLS AS A FIRST ACTION OF CONSTRUCTION AS SPECIFIED BY CONSTRUCTION SEQUENCE. THIS SHALL INCLUDE AND IS NOT LIMITED TO PROTECTIVE BMP'S FOR STREAM CORRIDORS AND CROSSINGS, WETLANDS, SITE ENTRANCE, SEDIMENT TRAPS & BASINS, BARRIERS, AND DIVERSION DIKES.
 - CONCENTRATED STORM WATER RUNOFF SHALL PASS THROUGH A SEDIMENT CONTROL DEVICE BEFORE EXITING THE SITE BOUNDARIES. CONCENTRATED RUNOFF FROM BARE SOIL AREAS SHALL BE DIVERTED INTO A SETTLING POND OR SEDIMENT CONTROL STRUCTURE, OR OTHER APPROVED SEDIMENT BARRIER BEFORE LEAVING THE SITE.
 - EARTHEN STRUCTURES SUCH AS DAMS, BASINS, STREAM MODIFICATIONS AND WATER DIVERSIONS SHALL BE SEEDED AND MULCHED WITHIN SEVEN (7) DAYS OF THE COMPLETION OF INSTALLATION. DAMS SHALL CONFORM TO THE OHIO DAM LAWS (ORC 1521.06).
 - STABILIZATION OF CRITICAL AREAS WITHIN 50 FEET OF ANY STREAM OR WETLAND SHALL BE TEMPORARILY STABILIZED WITHIN TWO (2) DAYS OF DISTURBANCE IF AREA WILL REMAIN INACTIVE FOR SEVEN (7) DAYS OR LONGER. CONSTRUCTION VEHICLES SHALL AVOID STREAMS AND THE 50 FOOT BUFFER AREAS. IF AN ACTIVE DRAINAGEWAY MUST BE CROSSED BY CONSTRUCTION VEHICLES REPEATEDLY DURING CONSTRUCTION, A TEMPORARY STREAM BY CONSTRUCTION SHALL BE CONSTRUCTED ACCORDING TO THE SPECIFICATIONS IN THE CROSSING SHALL & LAND DEVELOPMENT BOOK. CONSTRUCTION OF BRIDGES, CULVERTS OR SEDIMENT CONTROL STRUCTURES SHALL NOT PLACE SOIL, DEBRIS AND OTHER FINE PARTICULATE MATERIAL INTO OR CLOSE TO THE WATER RESOURCE IN SUCH A MANNER THAT IT MAY SLOUGH, SLIP OR ERODE.
 - STORM SEWER INLETS (AND SANITARY) SHALL BE PROTECTED SO THAT SEDIMENT-LADEN RUNOFF WILL NOT ENTER THE STORM SEWER SYSTEM WITHOUT FIRST BEING FILTERED AND/OR TREATED.
 - RE-VEGETATE SOIL. TEMPORARY SOIL STABILIZATION SHALL OCCUR WITHIN SEVEN (7) DAYS AFTER ROUGH GRADING IF THE AREA WILL REMAIN IDLE LONGER THAN TWENTY-ONE (21) DAYS. PERMANENT SOIL STABILIZATION SHALL BE INSTALLED WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. PERMANENT VEGETATION IS A GROUND COVER DENSE ENOUGH TO COVER 80% OF THE SOIL SURFACE AND MATURE ENOUGH TO SURVIVE WINTER WEATHER CONDITION.
 - SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED TO PREVENT SOIL LOSS. STABILIZATION SHALL BE REQUIRED IF STOCKPILES ARE LOCATED WITHIN CRITICAL AREAS NEAR STREAMS OR WETLANDS, OR IF DETERMINED BY THE STARK SWCD THAT SEDIMENT FROM STOCKPILES WILL LEAVE THE SITE.
 - UNSTABLE SOILS PRONE TO SLIPPING OR SLOUGHING SHALL NOT BE CLEARED, GRADED, EXCAVATED, FILLED OR HAVE LOADS IMPOSED UPON THEM UNLESS THE WORK IS PLANNED BY A QUALIFIED PROFESSIONAL ENGINEER AND INSTALLED IN ACCORDANCE WITH THE ESC PLAN. CUT AND FILL SLOPES SHOULD BE DESIGNED TO MINIMIZE EROSION PROBLEMS.

ADEQUATE SLOPE DESIGN INCLUDES USE OF ROUGH SOIL SURFACE ALONG THE FACE OF THE SLOPE; WATER DIVERSION ALONG THE TOP OF THE SLOPE AWAY FROM THE FACE; TERRACES TO REDUCE SLOPE LENGTH; DELIVERY OF CONCENTRATED STORM WATER FLOWS TO THE BASE OF THE SLOPE VIA ADEQUATE CHANNEL OR PIPE; AND DRAINAGE FOR WATER SEEPS IN THE SLOPE THAT ENDANGER SLOPE STABILITY.

 - SOIL SHALL BE REMOVED FROM PAVED SURFACES AND/OR PUBLIC ROADS AT THE END OF EACH DAY IN SUCH A MANNER THAT DOES NOT CREATE OFF-SITE SEDIMENTATION IN ORDER TO ENSURE SAFETY AND ABATE OFF-SITE SOIL LOSS. COLLECTED SEDIMENTS SHALL BE PLACED IN A STABLE LOCATION ON SITE OR TAKEN OFF-SITE TO A STABLE LOCATION.
 - STABILIZE DISTURBED OR MODIFIED DRAINAGE WAYS. REDUCE EROSION EFFECTS OF STORM WATER BY USING AND/OR MAINTAINING GRASSSED SWALES, INFILTRATION STRUCTURES, OR WATER DIVERSIONS.
 - SEDIMENT AND EROSION CONTROLS SHALL BE INSPECTED ONCE EVERY SEVEN (7) DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL EVENT. A WRITTEN LOG OF THESE INSPECTIONS AND IMPROVEMENTS TO CONTROLS SHALL BE KEPT ON SITE. THE INSPECTIONS SHALL INCLUDE THE DATE OF INSPECTION, NAME OF INSPECTOR, WEATHER CONDITIONS, ACTIONS TAKEN TO CORRECT ANY PROBLEMS AND THE DATE CORRECTIVE ACTIONS WERE TAKEN.
 - TRENCHES FOR UNDERGROUND UTILITY LINES AND PIPES SHALL BE TEMPORARILY STABILIZED WITHIN SEVEN (7) DAYS IF THEY ARE TO REMAIN INACTIVE FOR THIRTY (30) DAYS. TRENCH DEWATERING DEVICES SHALL DISCHARGE IN A MANNER THAT FILTERS SOIL-LADEN WATER BEFORE DISCHARGING IT TO A RECEIVING DRAINAGE DITCH OR POND. IF SEEDING, MULCHING, OR OTHER EROSION AND SEDIMENT CONTROL MEASURES WERE PREVIOUSLY INSTALLED, THESE PROTECTIVE MEASURES SHALL BE REINSTALLED.
- CONTRACTOR'S CONSTRUCTION SEQUENCE:
 - CONTRACTOR TO SETUP A PRE-CONSTRUCTION MEETING WITH STARK SWCD TO REVIEW THE PLAN AND CONSTRUCTION SEQUENCING BEFORE EARTHWORK IS PERMITTED. CALL STARK SWCD AT (330) 489-4476.
 - INITIAL CLEARING AND GRUBBING TO GAIN ACCESS, AND INSTALLATION OF PERIMETER CONTROLS WITHIN SEVEN (7) DAYS OF CLEARING AND GRUBBING.
 - CLEARING AND GRUBBING FOLLOWED BY EXCAVATION OF SEDIMENT TRAPS AND BASINS; TEMPORARY SOIL STABILIZATION FOR THESE SEDIMENT SETTLING DEVICES WITHIN FOURTEEN (14) DAYS OF EXCAVATION.
 - MAINTENANCE INSPECTION SCHEDULE AND PARTY RESPONSIBLE FOR INSPECTION AND REPAIR OF EROSION AND SEDIMENT CONTROL DEVICES.
 - PRE-WINTER STABILIZATION MEETING IF PROJECT IS TO BE THROUGH THE WINTER.
 - FINAL GRADING AND PERMANENT SOIL STABILIZATION WITHIN 30 DAYS OF FINISHING FINAL GRADE.
 - REMOVAL OF TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES.
 - FINAL STABILIZATION MEETING WITH PROVISIONS FOR LONG-TERM MAINTENANCE OF STORM WATER FACILITIES INCLUDING MECHANISMS FOR NOTIFICATION OF FUTURE RESPONSIBLE PARTIES AND/OR PROPERTY OWNERS.



- STONE SIZE - TWO-INCH STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 50 FT. (EXCEPT ON SINGLE RESIDENCE LOT WHERE A 30-FT. MINIMUM LENGTH APPLIES.
- THICKNESS - THE STONE LAYER SHALL BE AT LEAST 6 IN. THICK.
- WIDTH - THE ENTRANCE SHALL BE AT LEAST 10 FT. WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- BEDDING - A GEOTEXTILE SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL HAVE A GRAB TENSILE STRENGTH OF AT LEAST 200 LB. AND A MULLEN BURST STRENGTH OF AT LEAST 190 LB.
- CULVERT - A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FLOWING ACROSS THE ENTRANCE FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
- WATER BAR - A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
- MAINTENANCE - TOP DRESSING OF ADDITIONAL STONE WALL SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
- CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION SITE SHALL BE RESTRICTED FROM MUDDY AREAS.

CONSTRUCTION ENTRANCE

N.T.S.

RCE

SITE INFORMATION

SITE DESCRIPTION: EXISTING - INDUSTRIAL LOT
PROPOSED - OFFICE/SHOP BUILDING W/ GRAVEL STORAGE

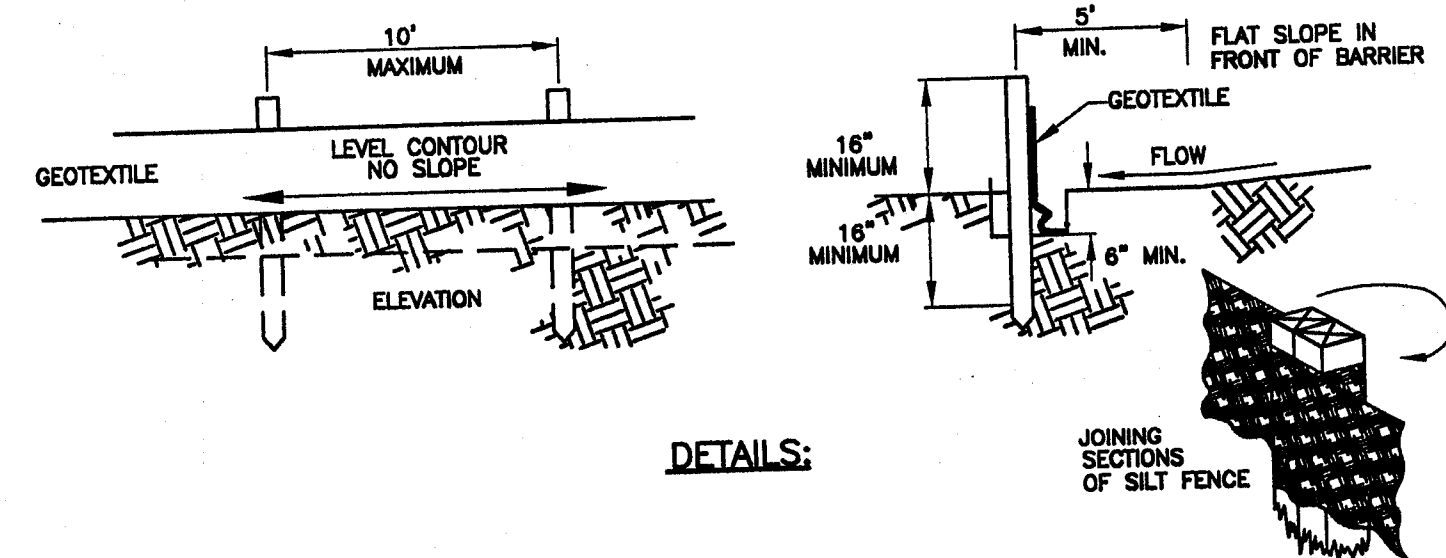
TOTAL AREA OF SITE - 4.072 AC.
AREA OF SITE TO UNDERGO EXCAVATION - 3.0 AC.

PRE-CONSTRUCTION RUNOFF COEFFICIENT - 0.40
POST-CONSTRUCTION RUNOFF COEFFICIENT - 0.60

SCHEDULE OF MAJOR CONSTRUCTION
COMMENCEMENT - FALL 2004
COMPLETION - SPRING 2005

RECEIVING STREAM AND SURFACE WATERS
NEOCOM INDUSTRIAL PARK STORM SEWERS IN THE STREET AND DRAINAGE EASEMENT TO DETENTION BASIN.

EXISTING SOILS ON SITE
CdB CANFIELD SILT LOAM, 2 TO 6 PERCENT SLOPES
ReB RAVENNA SILT LOAM, 2 TO 6 PERCENT SLOPES
Se SEBRING SILT LOAM, TILL SUBSTRATUM
Wd2 WOOSTER SILT LOAM, 12 TO 18 PERCENT SLOPES, MODERATELY ERODED



DETAILS:

NOTES:

- SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
- ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
- TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.
- WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
- WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FT. (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE RE-ESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE FENCE.
- SOIL STOCKPILES OR OTHER SOURCES OF SEDIMENT SHALL HAVE SILT FENCE PROTECTION.
- THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM OF 6" DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICE WHICH WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
- THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT 6" OF CLOTH ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6" DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED.
- SEAMS BETWEEN SECTION OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
- MAINTENANCE - SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE:
 - THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED.
 - ACCUMULATED SEDIMENT SHALL BE REMOVED.
 - OTHER PRACTICES SHALL BE INSTALLED.

CRITERIA FOR SILT FENCE MATERIALS

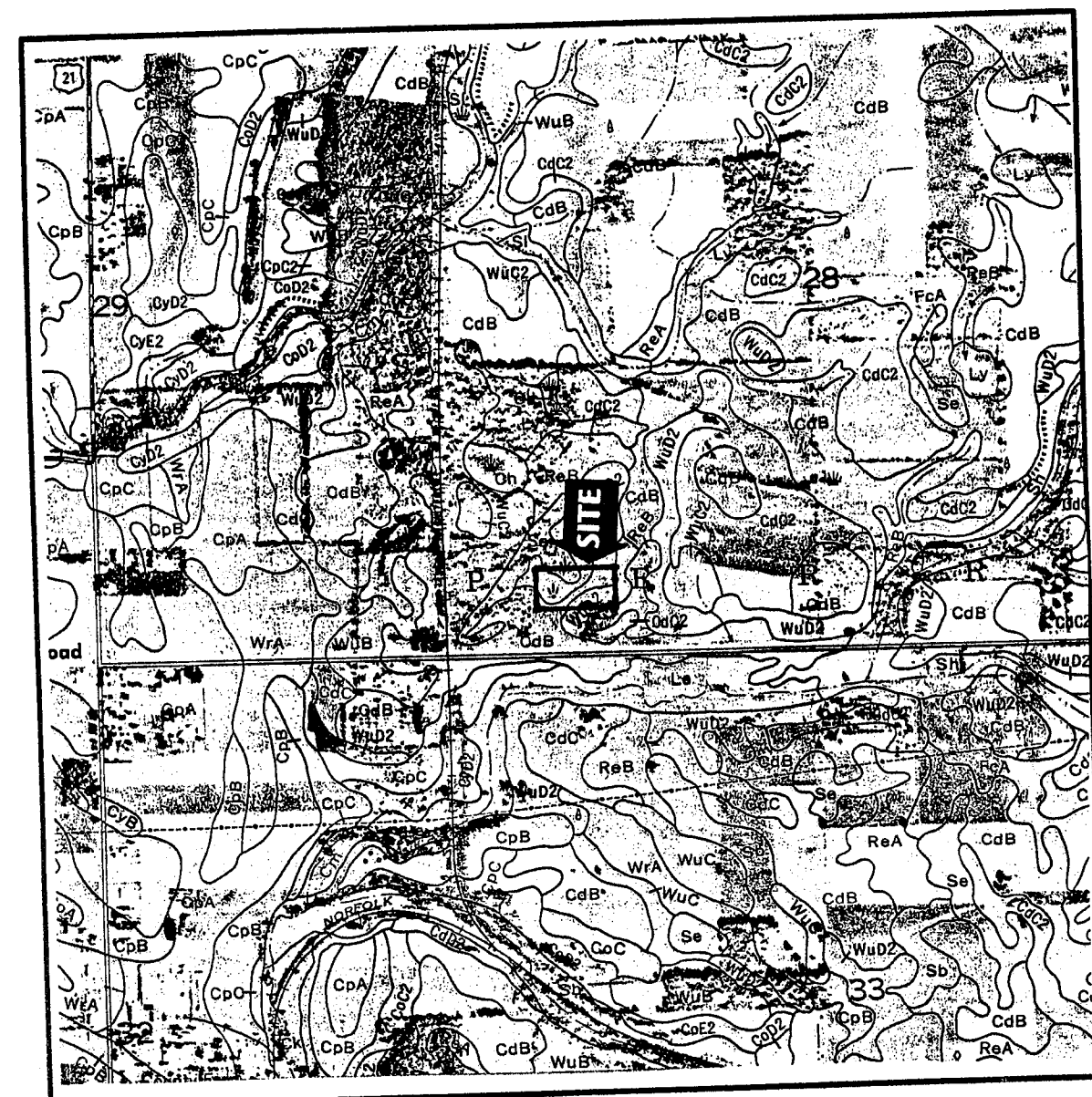
- FENCE POSTS - THE LENGTH SHALL BE A MINIMUM OF 32" LONG. WOOD POST WILL BE 2" X 2" HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT.
- SILT FENCE FABRIC (SEE CHART BELOW):

FABRIC PROPERTIES	VALUES	TEST METHOD
GRAB TENSILE STRENGTH	90 LB. MINIMUM	ASTM D 1682
MULLEN BURST STRENGTH	190 P.S.I. MINIMUM	ASTM D 3786
SLURRY FLOW RATE	0.3 GAL./MIN./FT. ² MAXIMUM	
EQUIVALENT OPENING SIZE	40-80	US STD. SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY	90% MINIMUM	ASTM-G-26

SILT FENCE

N.T.S.

SF



COUNTY SOILS MAP

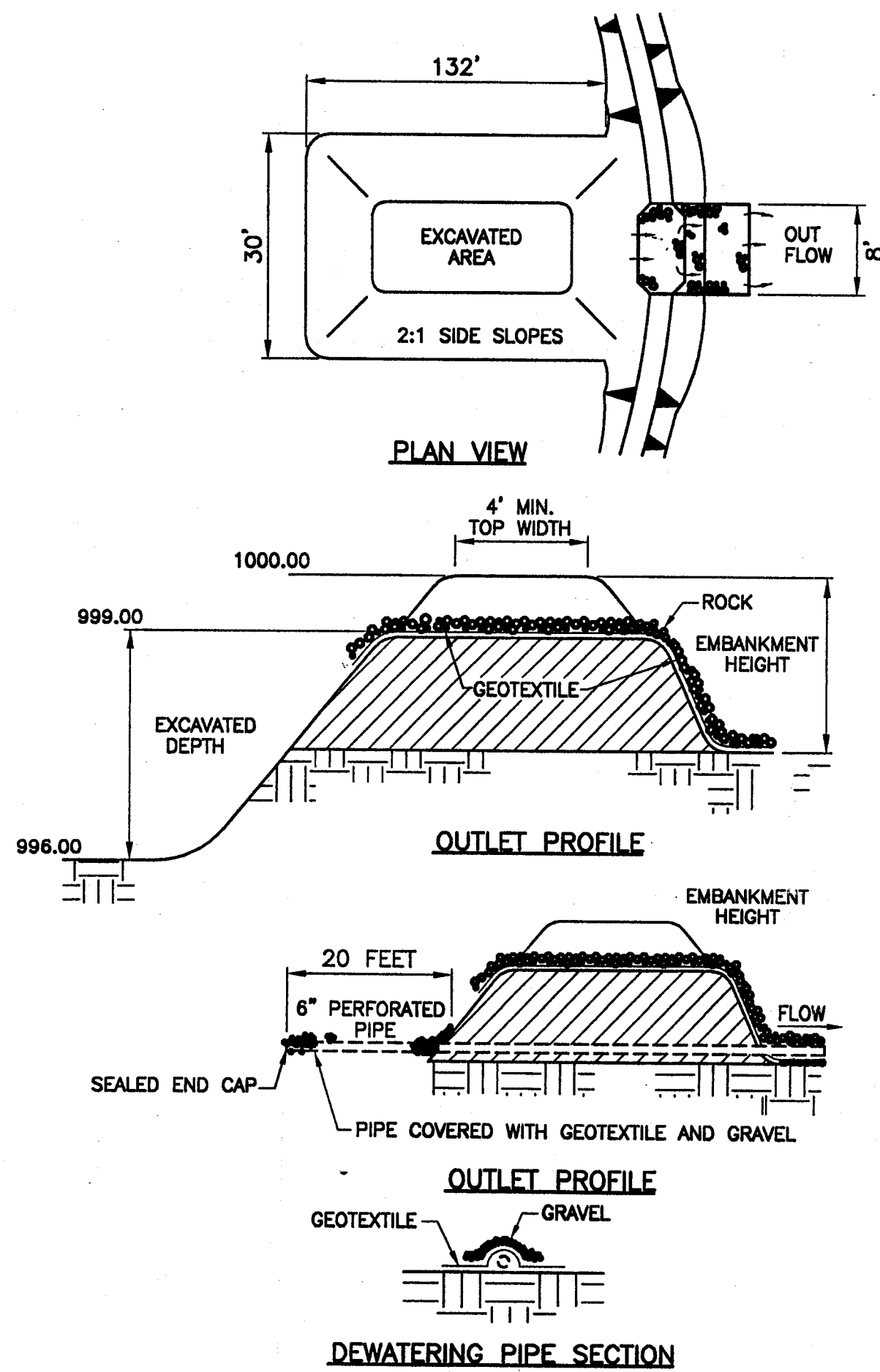
SOIL EROSION CONTROL NOTES & DETAILS
E-TANK
ALL OF O.L. 944 IN THE CITY OF MASSILLON,
STARK COUNTY, OHIO

HAMMONTREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
CANTON ORLANDO PITTSBURGH AKRON
8233 STONEHILL ROAD, NORTH CANTON, OHIO 44720
PHONE: CANTON (330) 489-8817 FAX: (330) 489-8817
FAX: (330) 489-0149

SEDIMENT TRAP NOTES:

- SEDIMENT TRAPS SHALL BE CONSTRUCTED AND OPERATIONAL BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
- THE AREA UNDER THE EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED AS NEEDED TO FACILITATE SEDIMENT CLEANOUT.
- FILL MATERIAL USED FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVERSIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED. MAXIMUM HEIGHT OF THE EMBANKMENT SHALL BE 5 FT. AS MEASURED FROM THE SURROUNDING GROUND.
- CUT-AND-FILL SLOPES SHALL BE 2:1 OR FLATTER.
- DIKES DIRECTING WATER TO THE TRAP SHALL BE HIGHER THAN THE HEIGHT OF THE EMBANKMENT.
- TEMPORARY SEEDING SHALL BE ESTABLISHED ON ALL NON-SUBMERGED AREAS OF THE SEDIMENT TRAP.
- THE STORAGE VOLUME SHALL BE ACHIEVED TO THE DIMENSIONS SHOWN IN THE PLANS TO ACHIEVE 67 CY OF STORAGE VOLUME BELOW THE CREST OF THE OUTLET FOR EVERY ACRE OF CONTRIBUTING DRAINAGE AREA.
- THE OUTLET SPILLWAY SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN IN THE PLANS.
- GEOTEXTILE SHALL BE PLACED OVER THE BOTTOM AND SLOPES OF THE OUTLET SPILLWAY. GEOTEXTILE SHALL CONTINUE DOWNSTREAM OF THE EMBANKMENT TO FORM AN APRON ON THE SURROUNDING GROUND. TO PREVENT RUNOFF FROM FLOWING UNDER THE GEOTEXTILE, THE SECTIONS PLACED NEAREST THE FRONT SHALL OVERLAP FOLLOWING SECTIONS. SECTIONS OF GEOTEXTILE SHALL OVERLAP AT LEAST 2 FT.
- ROCK USED IN THE OUTLET SPILLWAY SHALL BE PLACED 1 FT. THICK ON THE GEOTEXTILE. THE ROCK SHALL BE BETWEEN TYPE C AND TYPE D ROCK WHERE D₅₀ IS ABOUT 8 IN.
- SEDIMENT SHALL BE REMOVED AND THE SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS FILLED ONE-HALF THE POND'S ORIGINAL DEPTH. REMOVED SEDIMENT SHALL BE SPREAD IN A SUITABLE AREA AND STABILIZED SO IT WILL NOT ERODE.
- THE STRUCTURE AND ACCUMULATED SEDIMENT SHALL BE PERMANENTLY STABILIZED WHEN THE DRAINAGE AREA HAS BEEN STABILIZED.

TOTAL DRAINAGE AREA TO SEDIMENT TRAP = 2.0 ACRES
REQUIRED STORAGE = 2 AC. x 120 C.Y./AC. = 240 C.Y.
PROVIDED STORAGE = 240 C.Y. (120'L x 18'W x 3'D) © 999.00



SEDIMENT TRAPS (ST)

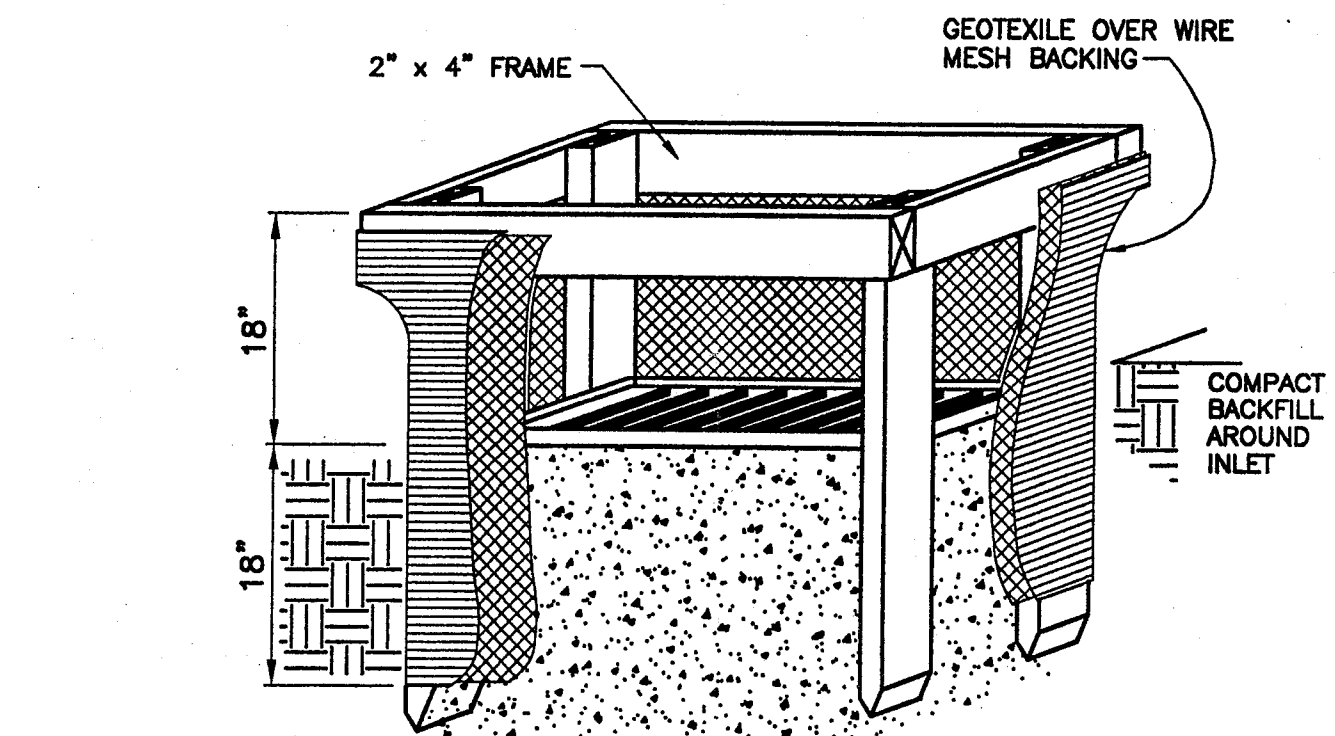
TEMPORARY SEEDING SPECIES SELECTION			
SEEDING DATES	SPECIES	LB./1,000 FT. ²	PER ACRE
MARCH 1 TO AUGUST 15	OATS	3	4 BUSHEL
	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
	PERENNIAL RYEGRASS	1	40 LB.
	TALL FESCUE	1	40 LB.
AUGUST 16 TO NOVEMBER 1	RYE	3	2 BUSHEL
	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
	WHEAT	3	2 BUSHEL
	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
	PERENNIAL RYEGRASS	1	40 LB.
	TALL FESCUE	1	40 LB.
NOVEMBER 1 TO SPRING SEEDING USE MULCH ONLY, SODDING PRACTICES OR DORMANT SEEDING.			
NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED.			

- STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS AND SEDIMENT TRAPS SHALL BE INSTALLED AND STABILIZED WITH TEMPORARY SEEDING PRIOR TO GRADING THE REST OF THE CONSTRUCTION SITE.
- TEMPORARY SEED SHALL BE APPLIED BETWEEN CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED OR RE-WORKED FOR 21 DAYS OR MORE. THESE IDLE AREAS SHOULD BE SEED AS SOON AS POSSIBLE AFTER GRADING OR SHALL BE SEED WITHIN 7 DAYS. SEVERAL APPLICATIONS OF TEMPORARY SEEDING ARE NECESSARY ON TYPICAL CONSTRUCTION PROJECTS.
- THE SEED BED SHOULD BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION. HOWEVER, TEMPORARY SEEDING SHALL NOT BE POSTPONED IF IDEAL SEED BED PREPARATION IS NOT POSSIBLE.
- SOIL AMENDMENTS - APPLICATIONS OF TEMPORARY VEGETATION SHALL ESTABLISH ADEQUATE STANDS OF VEGETATION WHICH MAY REQUIRE THE USE OF SOIL AMENDMENTS. SOIL TESTS SHOULD BE TAKEN ON THE SITE TO PREDICT THE NEED FOR LIME AND FERTILIZER.
- SEEDING METHOD - SEED SHALL BE APPLIED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER. WHEN FEASIBLE, SEED THAT HAS BEEN BROADCAST SHALL BE COVERED BY RAKING OR BAGGING AND THEN LIGHTLY TAMPED INTO PLACE USING A ROLLER OR OF CULTIPACKER. IF HYDROSEEDING IS USED, THE SEED AND FERTILIZER WILL BE MIXED ON-SITE AND THE SEEDING SHALL BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.

TEMPORARY SEEDING (TS)

PERMANENT SEEDING			
SEED MIX	SEEDING RATE		NOTES:
	LB./AC.	LB./1,000 FT. ²	
GENERAL USE			
CREEPING RED FESCUE	20-40	1/2-1	
DOMESTIC RYEGRASS	10-20	1/4-1/2	
KENTUCKY BLUEGRASS	10-20	1/4-1/2	
TALL FESCUE	40	1	
DWARF FESCUE	40	1	
STEEP BANKS OR CUT SLOPES			
TALL FESCUE	40	1	
CROWN VETCH	10	1/4	DO NOT SEED LATER THAN AUGUST.
TALL FESCUE	20	1/2	
FLAT PEA	20	1/2	DO NOT SEED LATER THAN AUGUST.
TALL FESCUE	20	1/2	
ROAD DITCHES AND SWALES			
TALL FESCUE	40	1	
DWARF FESCUE	90	2 1/4	
KENTUCKY BLUEGRASS	5		
LAWNS			
KENTUCKY BLUEGRASS	60	1 1/2	
PERENNIAL RYEGRASS	60	1 1/2	
KENTUCKY BLUEGRASS	60	1 1/2	FOR SHADED AREAS.
CREEPING RED FESCUE	60	1 1/2	
NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED.			

PERMANENT SEEDING (S)



- INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
- THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH AT LEAST 18 IN.
- THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2 IN. BY 4 IN. CONSTRUCTION GRADE LUMBER. THE 2 IN. BY 4 IN. POSTS SHALL BE DRIVEN 18 IN. INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2 IN. BY 4 IN. FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6 IN. BELOW ADJACENT ROADS IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC.
- WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
- GEOTEXTILE SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20 - 40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM THE TOP OF THE FRAME TO 18 IN. BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ON SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
- BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6 IN. LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
- A COMPACTED EARTH DIKE OR A CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION AND IF RUNOFF BYPASSING THE INLET WILL NOT FLOW TO A SETTLING POND. THE TOP OF EARTH DIKES SHALL BE AT LEAST 6 IN. HIGHER THAN THE TOP OF THE FRAME.

INLET PROTECTION IN SWALES, DITCH LINES OR YARD INLETS

N.T.S.

(IP)

- PERMANENT SEEDING SHALL NOT BE CONSIDERED ESTABLISHED FOR AT LEAST 1 FULL YR. FROM THE TIME OF PLANTING. SEEDING AREAS SHALL BE INSPECTED FOR FAILURE AND VEGETATION RE-ESTABLISHED AS NEEDED. DEPENDING ON SITE CONDITIONS, IT MAY BE NECESSARY TO IRRIGATE, FERTILIZE, OVER SEED, OR RE-ESTABLISH PLANTINGS IN ORDER TO PROVIDE PERMANENT VEGETATION FOR ADEQUATE EROSION CONTROL.
- MAINTENANCE FERTILIZATION RATES SHALL BE ESTABLISHED BY SOIL TEST RECOMMENDATIONS OR BY USING THE RATES SHOWN IN THE FOLLOWING

MAINTENANCE FOR PERMANENT SEEDINGS FERTILIZATION AND MOWING TABLE.					
MIXTURE	FORMULA	LB./AC.	LB./1,000 FT. ²	TIME	MOWING
CREEPING RED FESCUE RYEGRASS KENTUCKY BLUEGRASS	10-10-10	500	12	FALL, YEARLY OR AS NEEDED.	NOT CLOSER THAN 3"
TALL FESCUE	10-10-10	500	12		NOT CLOSER THAN 4"
DWARF FESCUE	10-10-10	500	12		NOT CLOSER THAN 2"
CROWN VETCH FESCUE	0-20-20	400	10	SPRING, YEARLY FOLLOWING ESTABLISH- MENT AND EVERY 4-7 YR. THEREAFTER	DO NOT MOW
FLAT PEA FESCUE	0-20-20	400	10		DO NOT MOW
NOTE: FOLLOWING SOIL TEST RECOMMENDATIONS IS PREFERRED TO FERTILIZER RATES SHOWN ABOVE.					

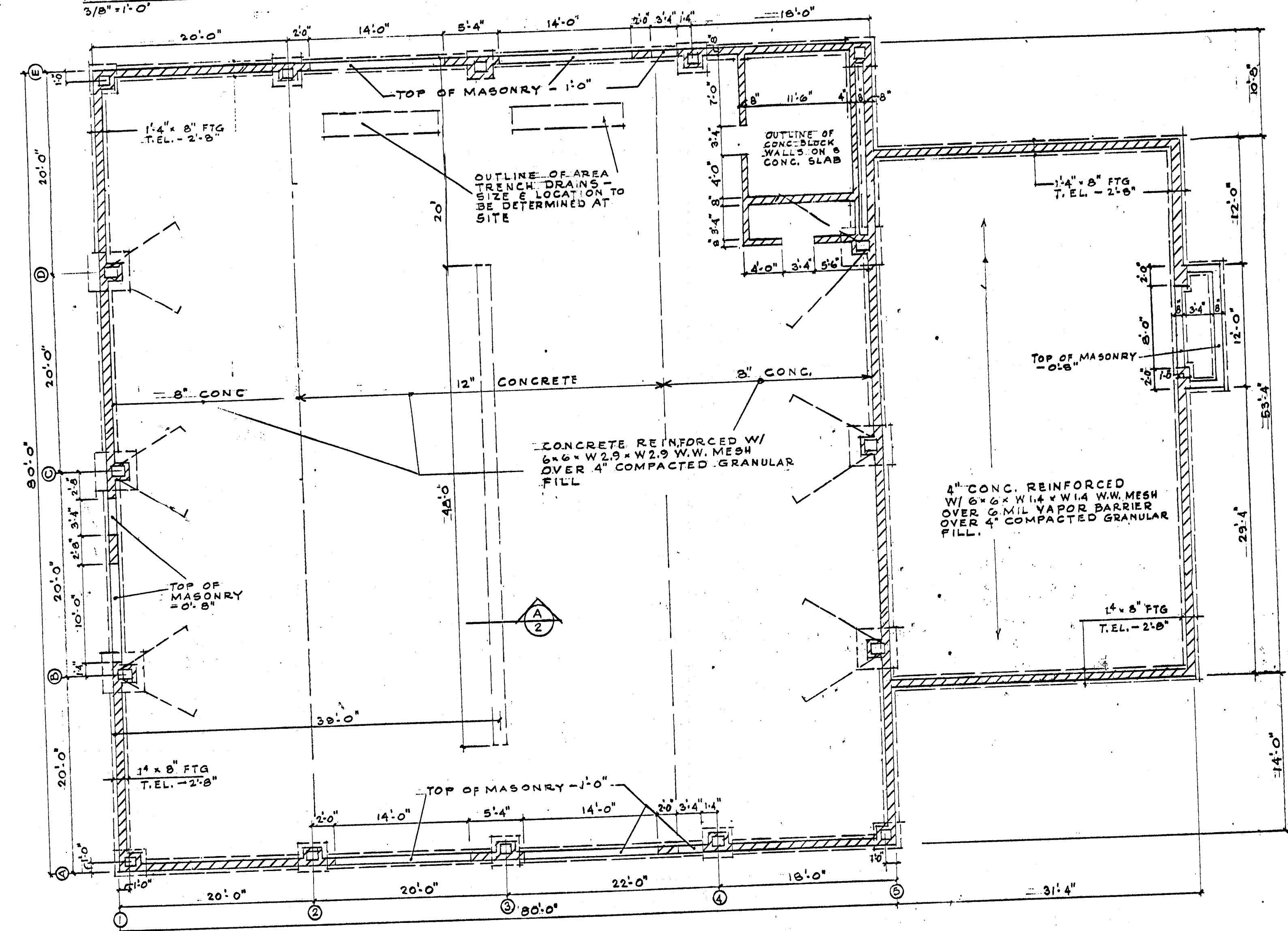
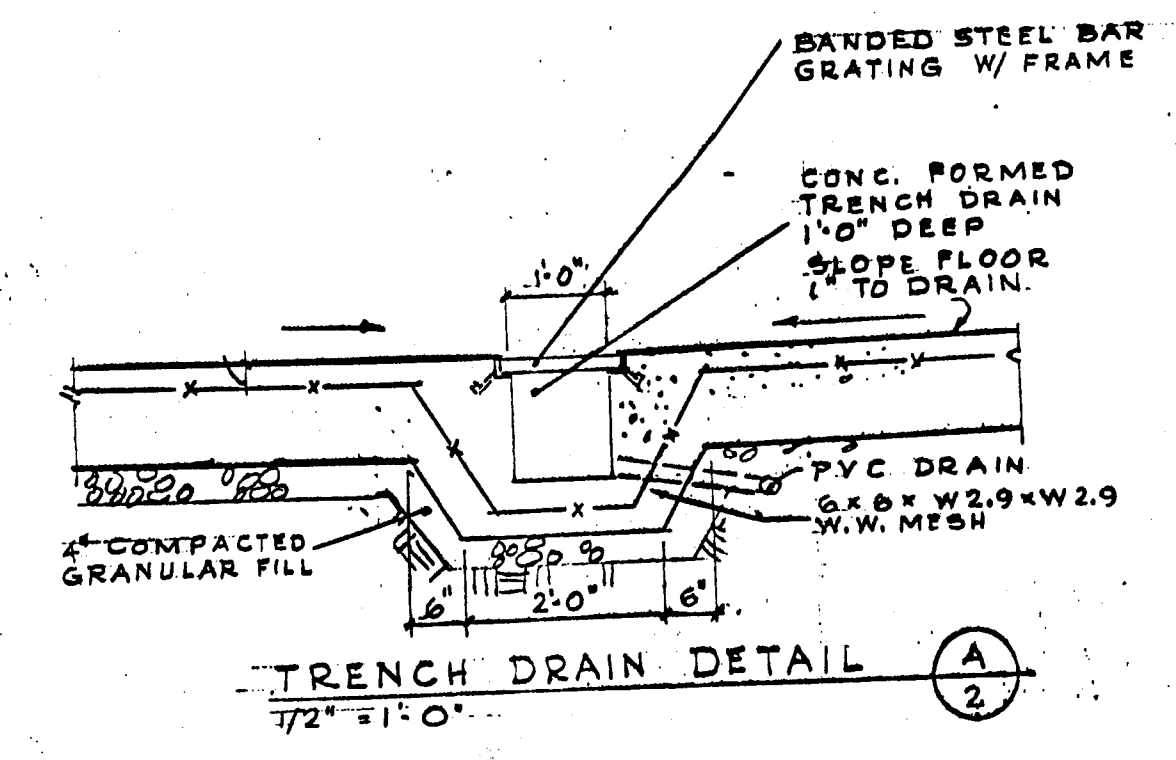
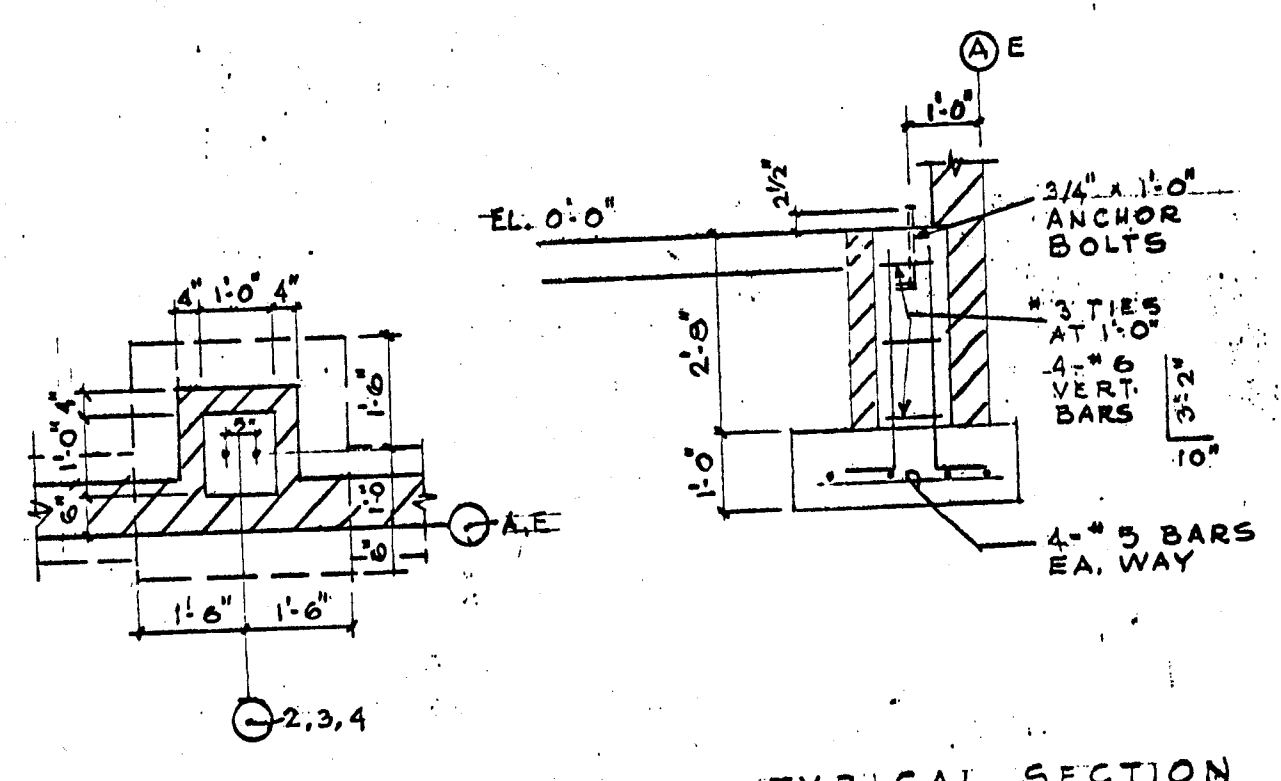
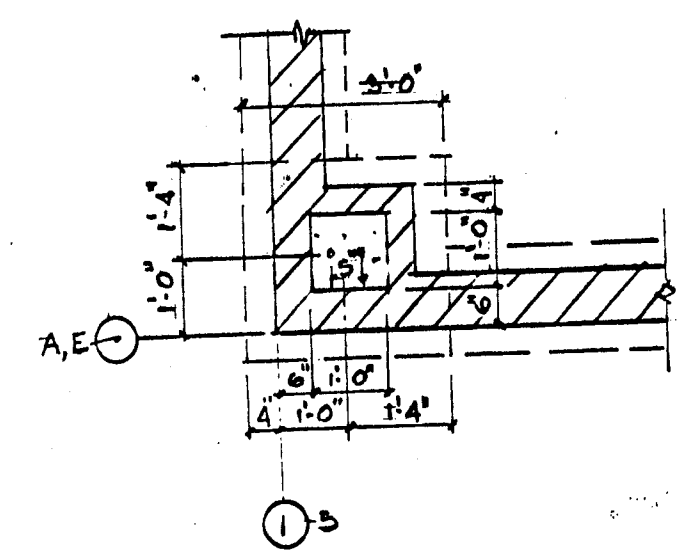
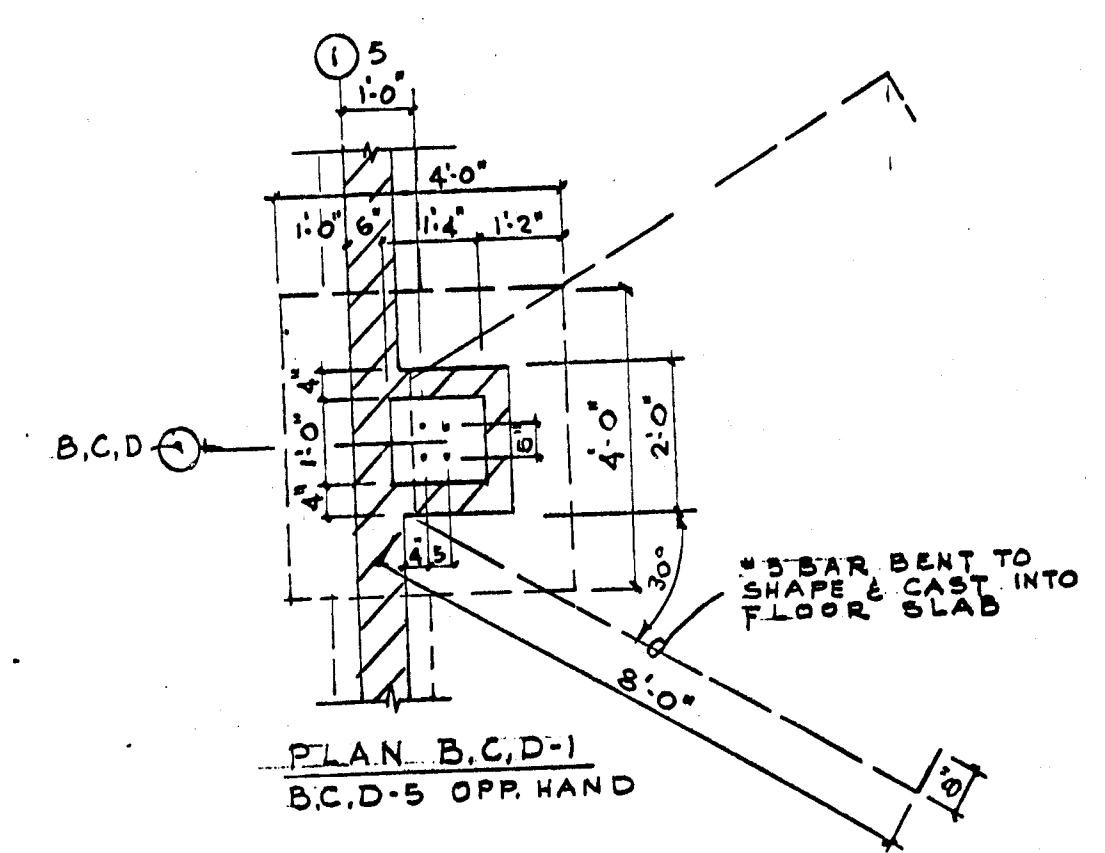
MAINTENANCE OF PERMANENT SEEDING (S)

SOIL EROSION CONTROL NOTES & DETAILS
E-TANK
ALL OF O.L. 944 IN THE CITY OF MASSILLON,
STARK COUNTY, OHIO

HAMMON TREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
CANTON ORLANDO PITTSBURGH ARKON
5233 STONEHAM ROAD, NORTH CANTON, OHIO 44720
PHONE: CANTON (330)/499-8817 ARKON (330)/533-7274
TOLL FREE 1-800-394-8817 FAX: (330)/499-0149

CONSTRUCTION NOTES

1. RIGID FRAME PIERS ARE DETAILED SHOWING 4" CONC BLOCK AS FORMWORK. IT SHALL BE CONTRACTORS OPTION TO USE PLYWOOD OR METAL FORMS IN LIEU OF SHOWN.
2. SOIL BEARING CAPACITY IS ASSUMED TO BE 2500 P.S.F. FOR PAD/FOOTING DESIGN BASED ON SOIL SAMPLES OF GRAVEL & SANDY CLAY MIX FOUND AT SITE. OBC TABLE 1804.3.



DRAWING INDEX	
1/1	SITE PLAN
2	FOUNDATION PLAN, PIER PAD DETAILS
3	FLOOR PLAN, RFS, DOOR SCHEDULE, INT. ELEV.
4	EXTERIOR ELEVATIONS
5	WALL SECTIONS

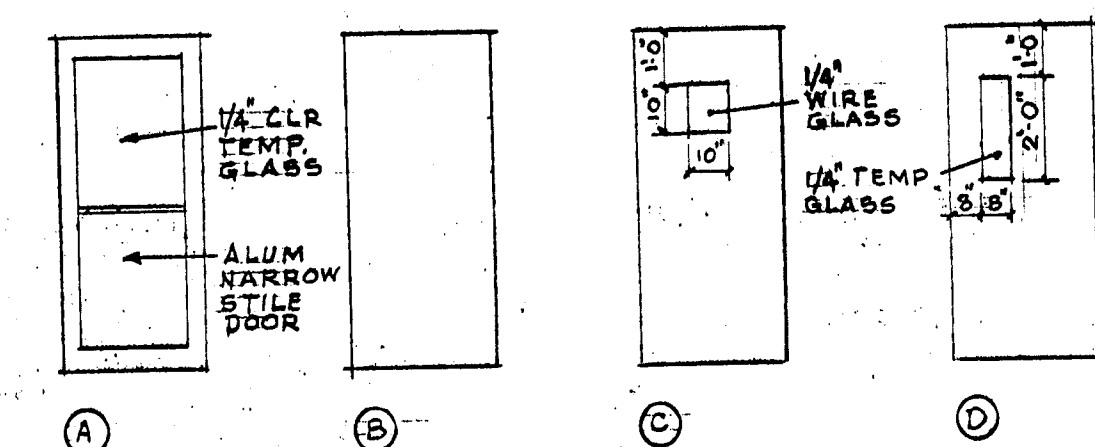
OBC INFORMATION

USE GROUP: B/S-2
CONSTRUCTION TYPE: V-B
OFFICE: 11-B
SHOP: 11-B
BUILDING SIZE: 8070.83 S.F. GROSS
OCCUPANT LOAD:
SHOP: 6400 = 12.8
500
OFFICE: 1670.83 = 16.7
100 = 29.5 OR 30
BUILDING IS NOT PROTECTED BY A SPRINKLER SYSTEM.

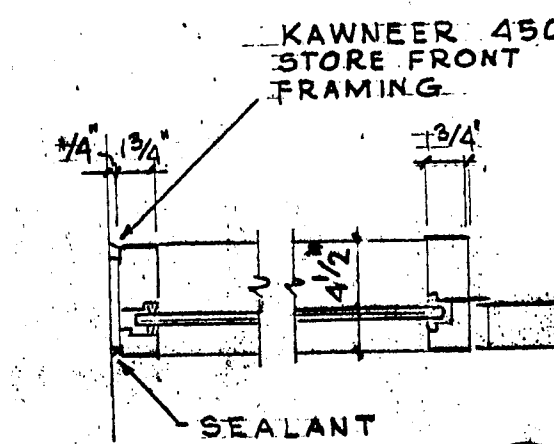
	EDWARD R. STAIGER, ARCHITECT 5851 LAWNVIEW ST. N.W. CANTON, OH 44718 PH. (330) 494 1815	DATE: 9-1-04 REV:
	EDWARD R. STAIGER, ARCHITECT 5851 LAWNVIEW ST. N.W. CANTON, OH 44718 PH. (330) 494 1815	DWG NO:
	2	

ROOM FINISH SCHEDULE									
		FLOOR	BASE	WALLS	CEILING	REMARKS			
SPACE		CONCRETE	VINYL COMP. TILE	WOOD	6" RUBBER (COVE)	4" RUBBER (COVE)	CONC. BLOCK	INSUL. METAL SIDING	DRYWALL
NO NAME									
100	LOBBY / WAITING								
101	ACCOUNTING								
101A	STORAGE								
102	PRESIDENT								
102A	PVT TOILET								
103	SALES								
104	SALES								
105	HALL								
106	MULTI-FUNCTION								
107	WOMEN								
108	MEN								
109	UTILITY ROOM								
110	CONFERENCE								
111	OPERATIONS MGR								
112	MENS LOCKER RM								
113	CUSTODIAN								
114	SHOP								

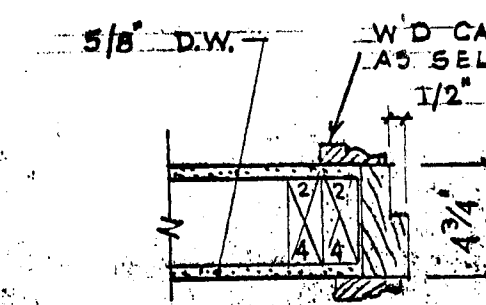
DOOR SCHEDULE									
		DOOR		FRAME		HARDWARE		REMARKS	
DOOR NUMBER	SIZE	PR	W	H	TH	TYPE	MATERIAL	FRAME MATERIAL	SECTION
100	3'-0" x 6'-0"	1 3/4"	A	AL	A/B	4 1/2"	1 3/4"	SEE REMARKS	
100A						B	WD	WD B/3	OFFICE
101						D	WD	WD B/3	OFFICE
101A	2'-0" x 1'-0"	1 3/8"	B	WD	WD B/3				BI-PARTING
102	3'-0" x 1'-0"	1 3/4"	D	WD	WD B/3				OFFICE
102A	2'-0" x 1'-0"		B	WD	WD B/3				PRIVACY
103	3'-0" x 1'-0"		D	WD	WD B/3				OFFICE
104			D	WD	WD B/3				OFFICE
105	7'-0" x 1'-0"		C	HM	HM D/3	5 3/4"	4"		OFFICE
106	6'-0" x 1'-0"		D	WD	WD B/3				PASSAGE
107			B	WD	WD B/3				PRIVACY
108			B	WD	WD B/3				PRIVACY
109			B	HM	HM C/3	5 3/4"	2"		STORE RM
110			D	WD	WD B/3				PASSAGE
111			D	WD	WD B/3				OFFICE
111A	7'-0" x 1'-0"		C	HM	HM D/3	5 3/4"	4"		OFFICE
112	6'-0" x 1'-0"		B	HM	HM E/3	5 3/4"	4"		PASSAGE
113	6'-0" x 1'-0"		B	HM	HM E/3	5 3/4"	4"		PASSAGE
114	7'-0" x 1'-0"		B	HM	HM E/3	5 3/4"	4"		ENTRANCE
114A	7'-0" x 1'-0"		B	HM	HM E/3	5 3/4"	4"		ENTRANCE
114B	7'-0" x 1'-0"		B	HM	HM E/3	5 3/4"	4"		ENTRANCE



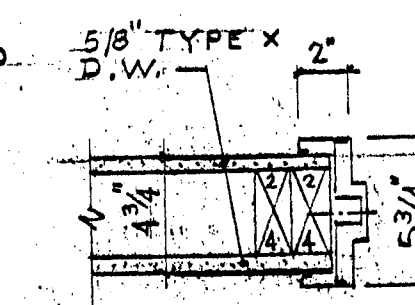
DOOR TYPES



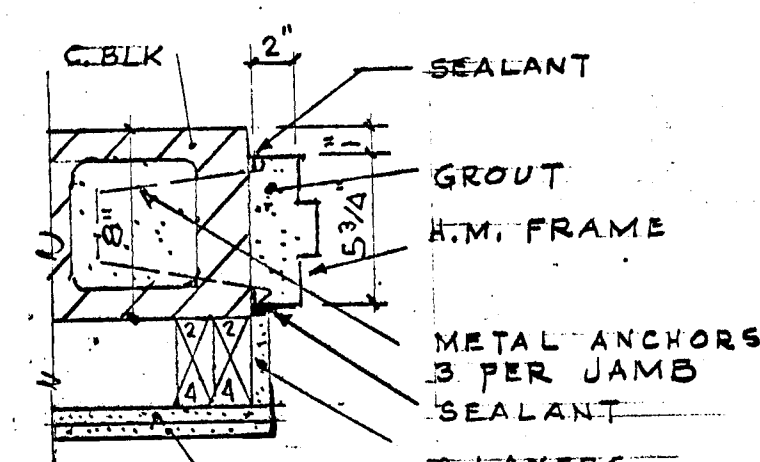
DOOR FRAME JAMB SECTIONS



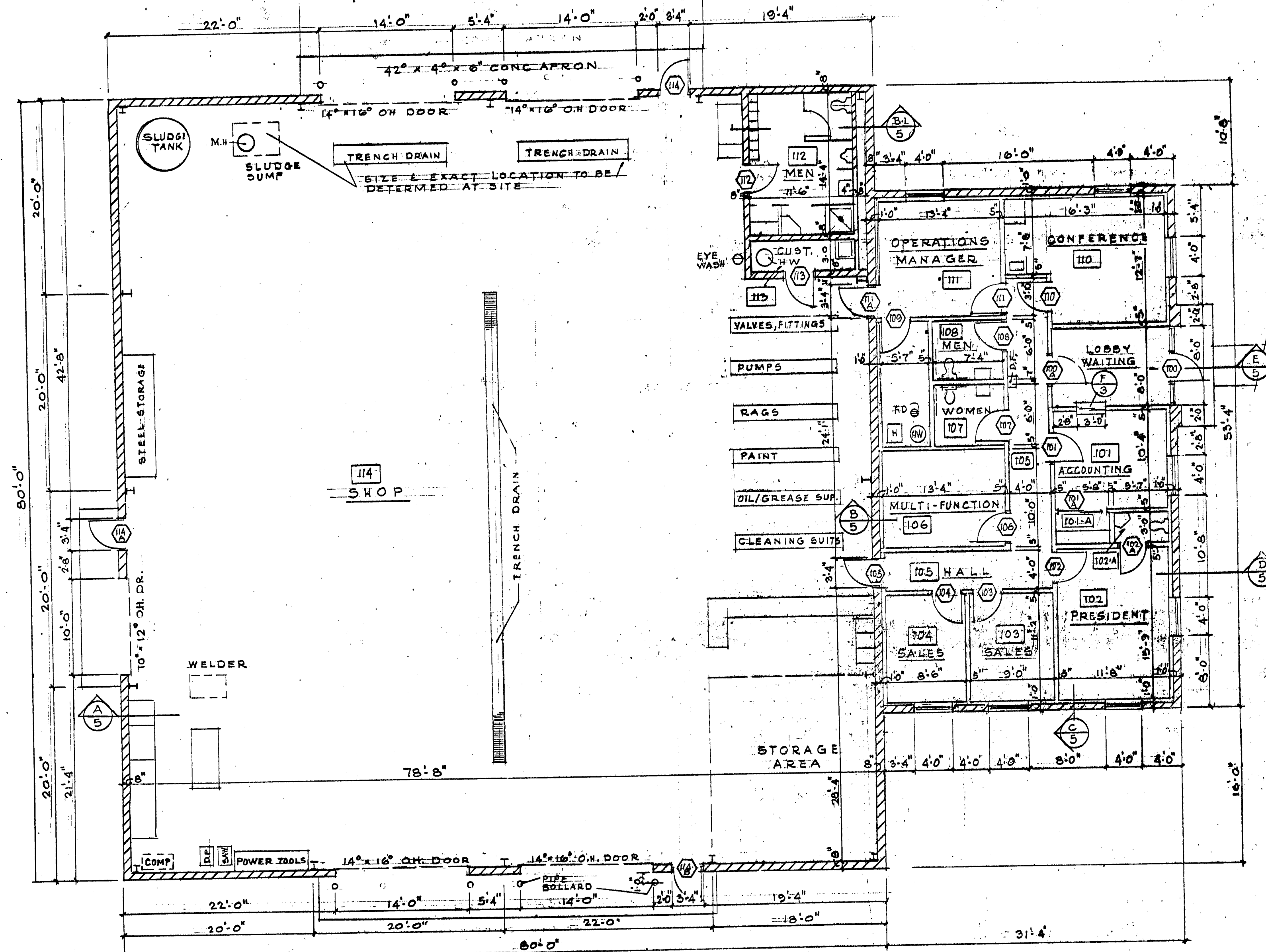
B



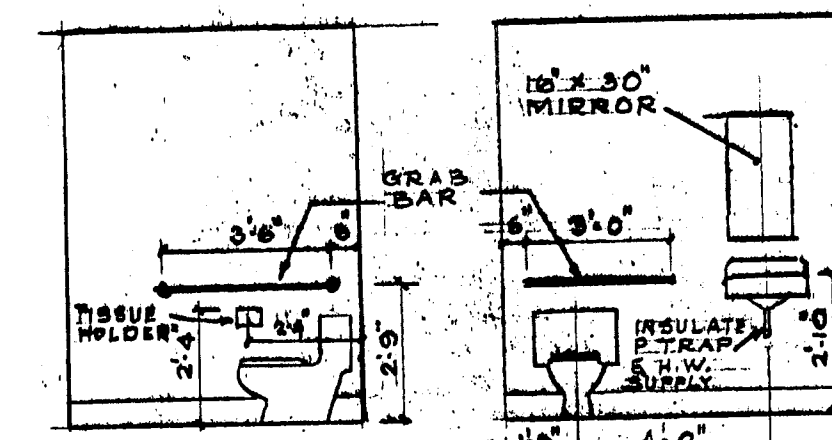
C



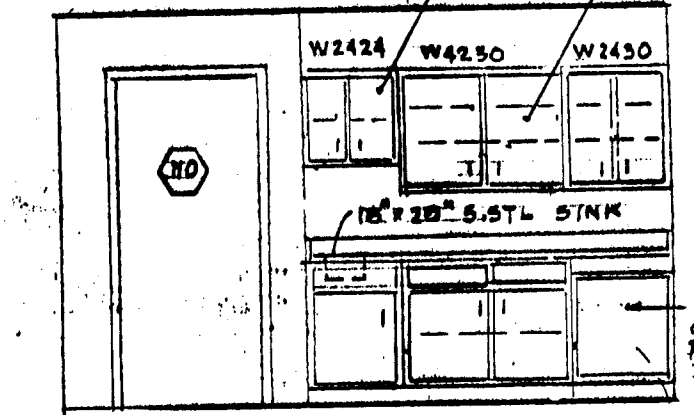
D



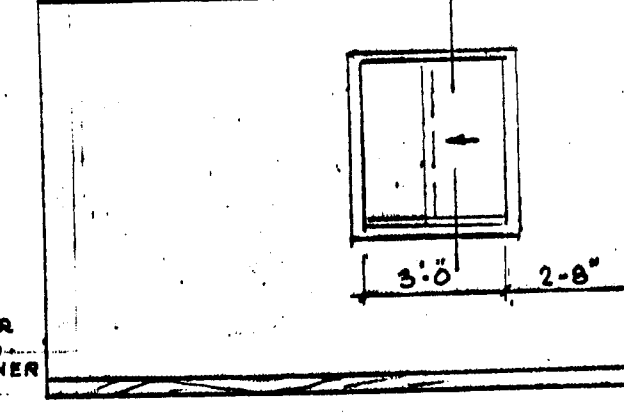
FLOOR PLAN
1/8" = 1'-0"



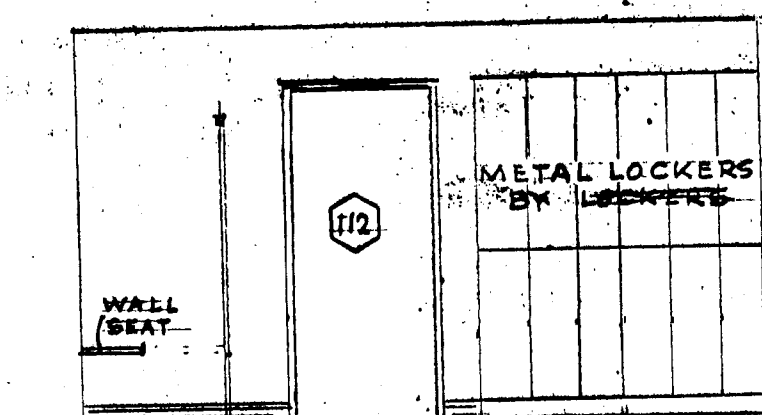
WEST WOMEN 107 ELEVATIONS
MEN 108 OPP. HAND



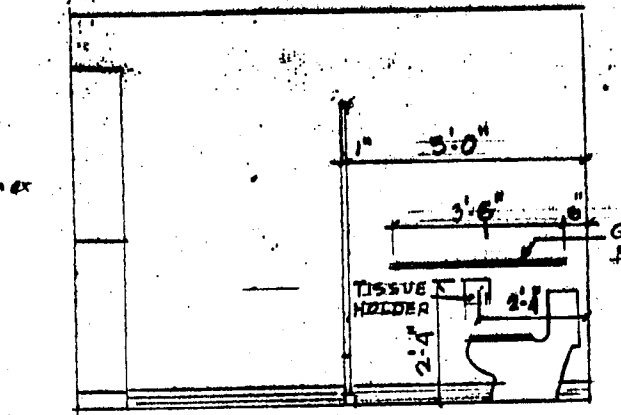
WEST ELEVATION
CONFERENCE 110



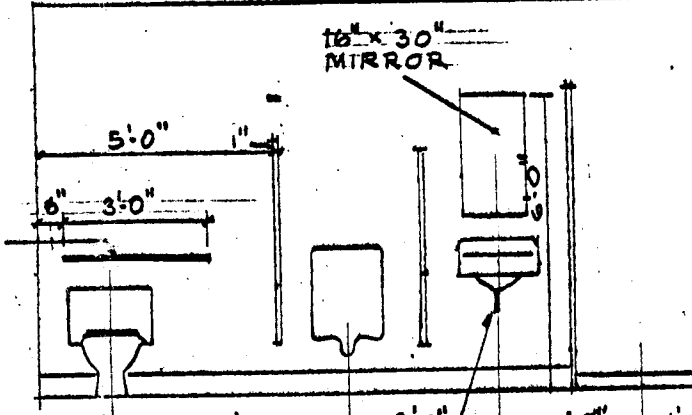
SOUTH ELEVATION
LOBBY / WAITING



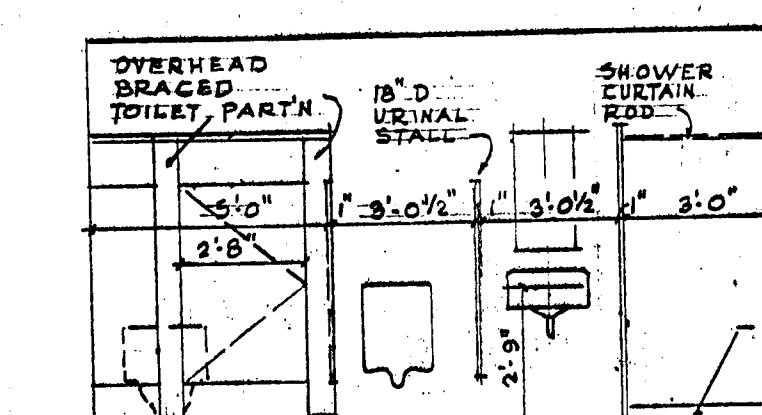
WEST



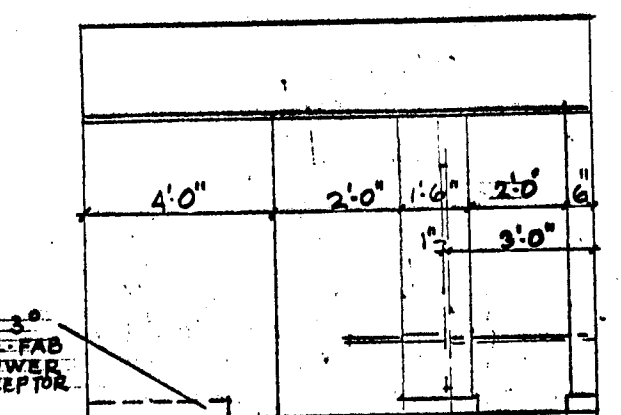
NORTH



EAST

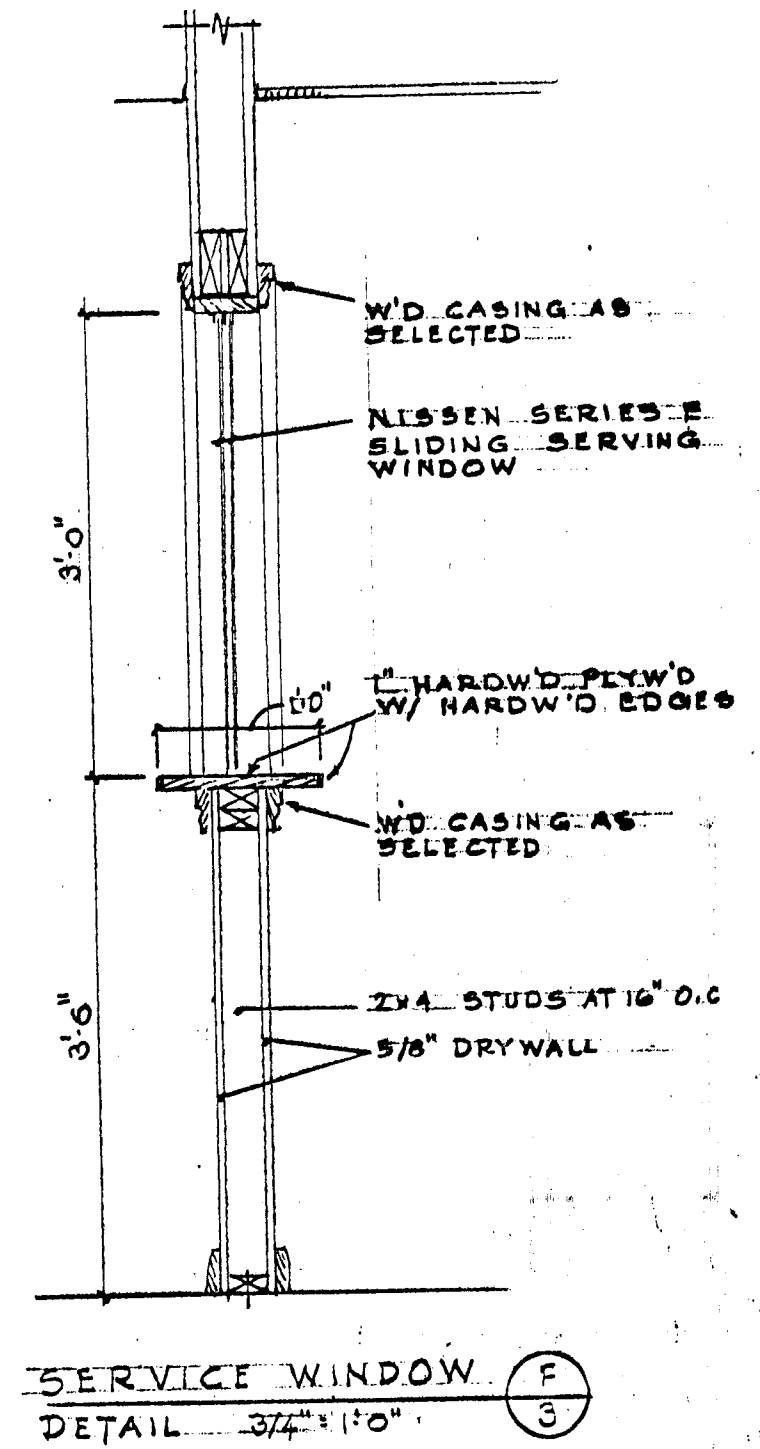


EAST



WEST

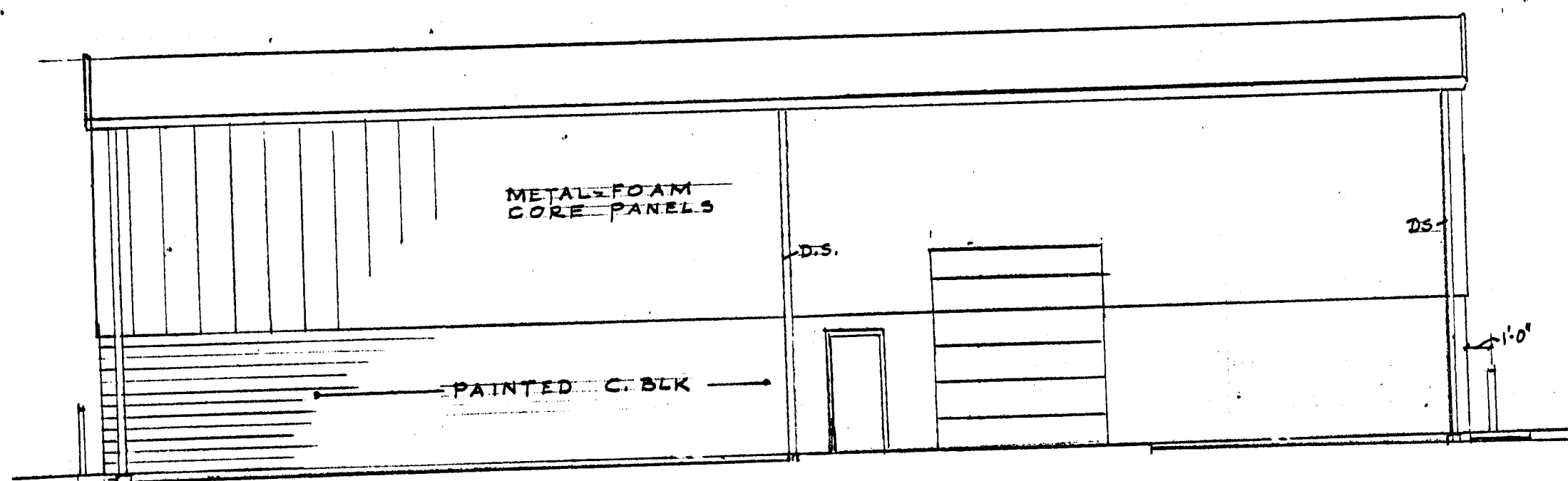
MEN 112 ELEVATIONS
1/4" = 1'-0"



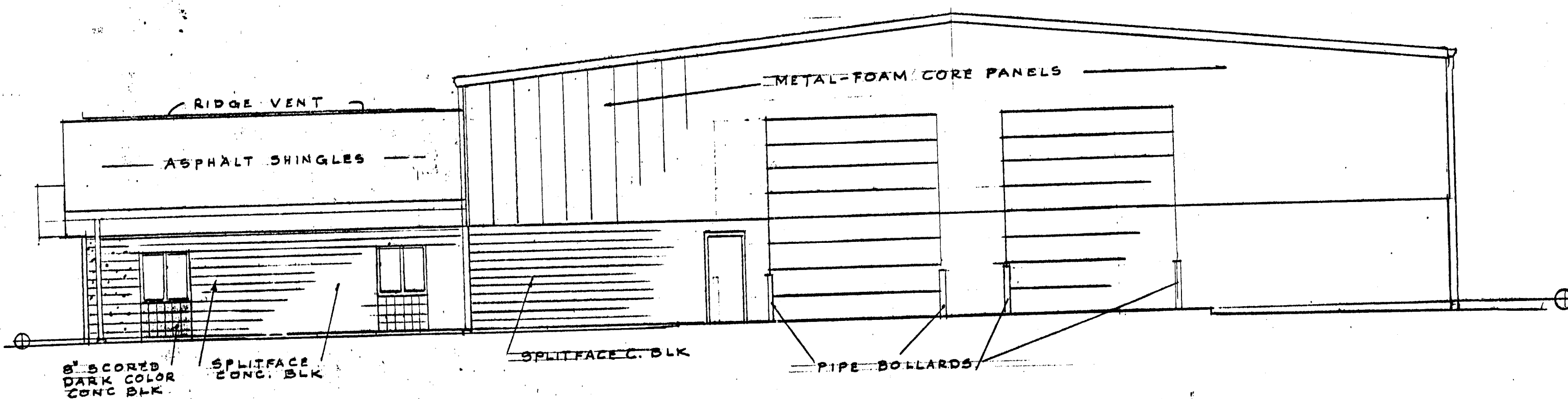
SERVICE WINDOW
DETAIL 3/4" = 1'-0"

	E-TANK OFFICE/SHOP		DATE: 9-1-04
	MILLENNIUM BLVD		REV:
	MASSILLON, OHIO 44646		DWG NO:
	EDWARD R. STAIGER, ARCHITECT		3

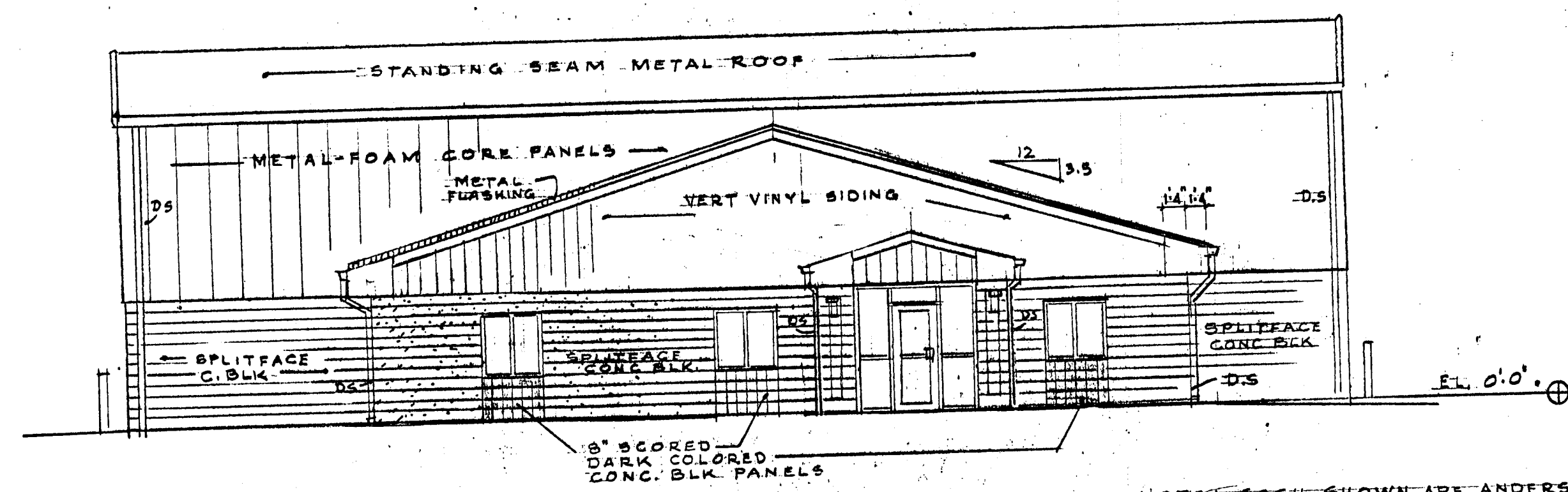
6881 LAMVIEW ST. N.W.
CANTON, OH 44718 PH. (330) 404-1816



WEST ELEVATION
1/8" = 1'-0"

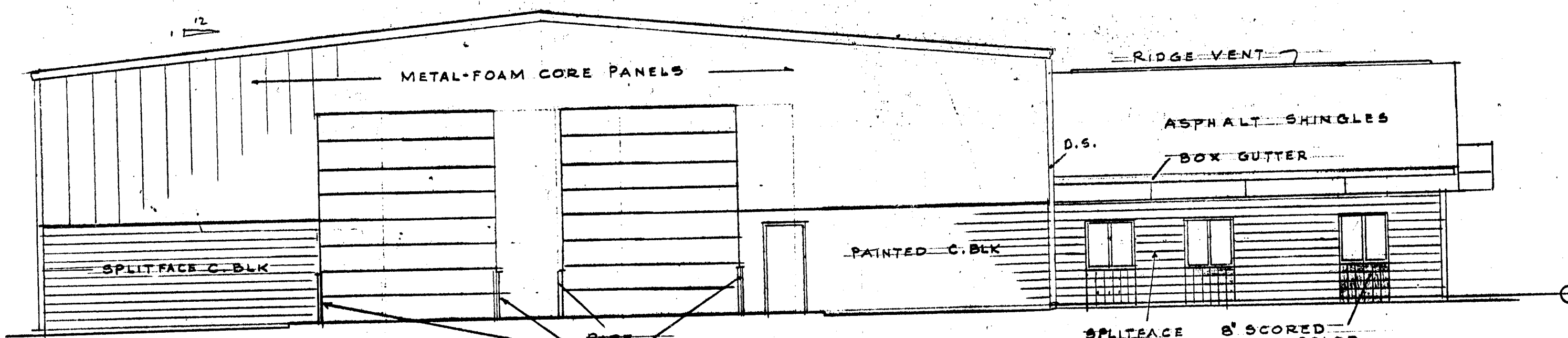


NORTH ELEVATION
1/8" = 1'-0"



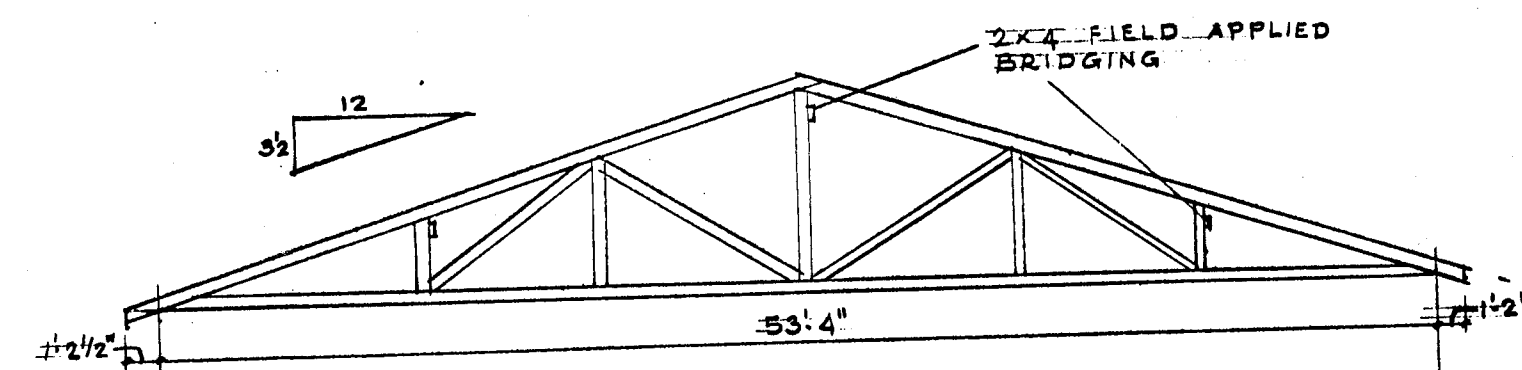
EAST (FRONT) ELEVATION
1/8" = 1'-0"

NOTE: GASH SHOWN ARE ANDERSON C-24
PERMA-SHIELD GLAZED W/ DOUBLE PANE
INSULATING GLASS OR EQUIVALENT BY
OTHER SUPPLIERS



SOUTH ELEVATION
1/8" = 1'-0"

PIPE
BOLLARDS (TYP.)
6\"/>



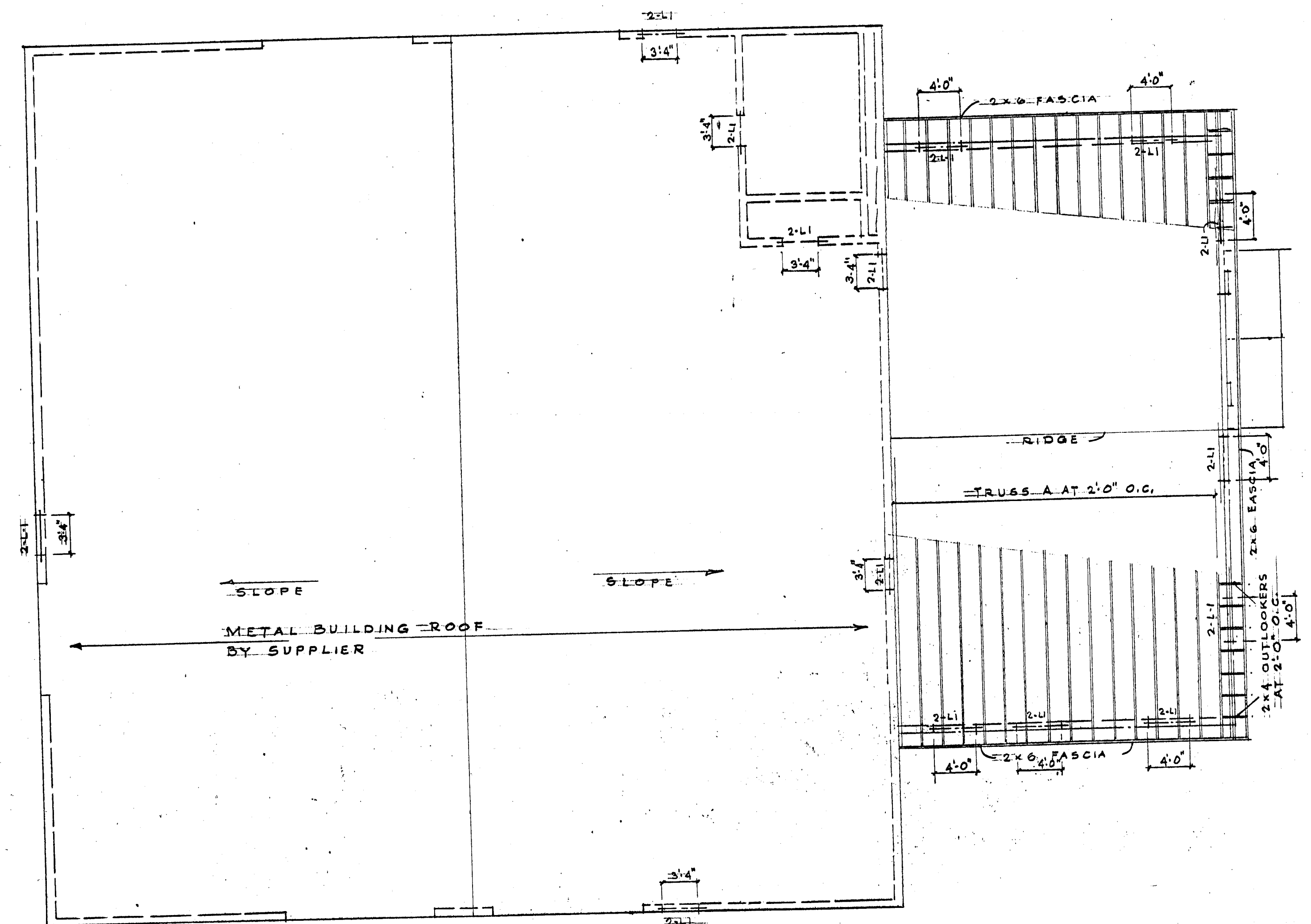
TRUSS A ELEVATION

WOOD TRUSS DESIGN CRITERIA:

TOP CHORD = 25 P.S.F. LIVE LOAD
" = 10 P.S.F. DEAD LOAD
BOTTOM CHORD = 0 P.S.F. LIVE LOAD
" = 10 P.S.F. DEAD LOAD
DESIGN LOAD = 45 P.S.F.
TRUSS SPACING = 2'-0" O.C.
INPUT DEFLECTION = L/260

WIND LOAD
1. BASIC WIND SPEED = 90 MPH
2. IMPORTANCE FACTOR = 1.0
3. WIND EXPOSURE = B
4. WIND DESIGN PRESSURE: 16.4
WINDWARD = 1.08
LEEWARD = 1.08
SIDE = 1.35

NOTE: ALL TRUSS SHOP DRAWINGS SHALL BE CERTIFIED
BY A REGISTERED ENGINEER IN STATE OF OHIO TO MEET
TRUSS DESIGN CRITERIA AS SHOWN PRIOR TO FABRICATION
AND DELIVERY TO JOB SITE. SHOP DRAWINGS TO BE
SUBMITTED TO BUILDING DEPARTMENT FOR THEIR
FILES & APPROVAL WHEN AVAILABLE FROM SUPPLIER.

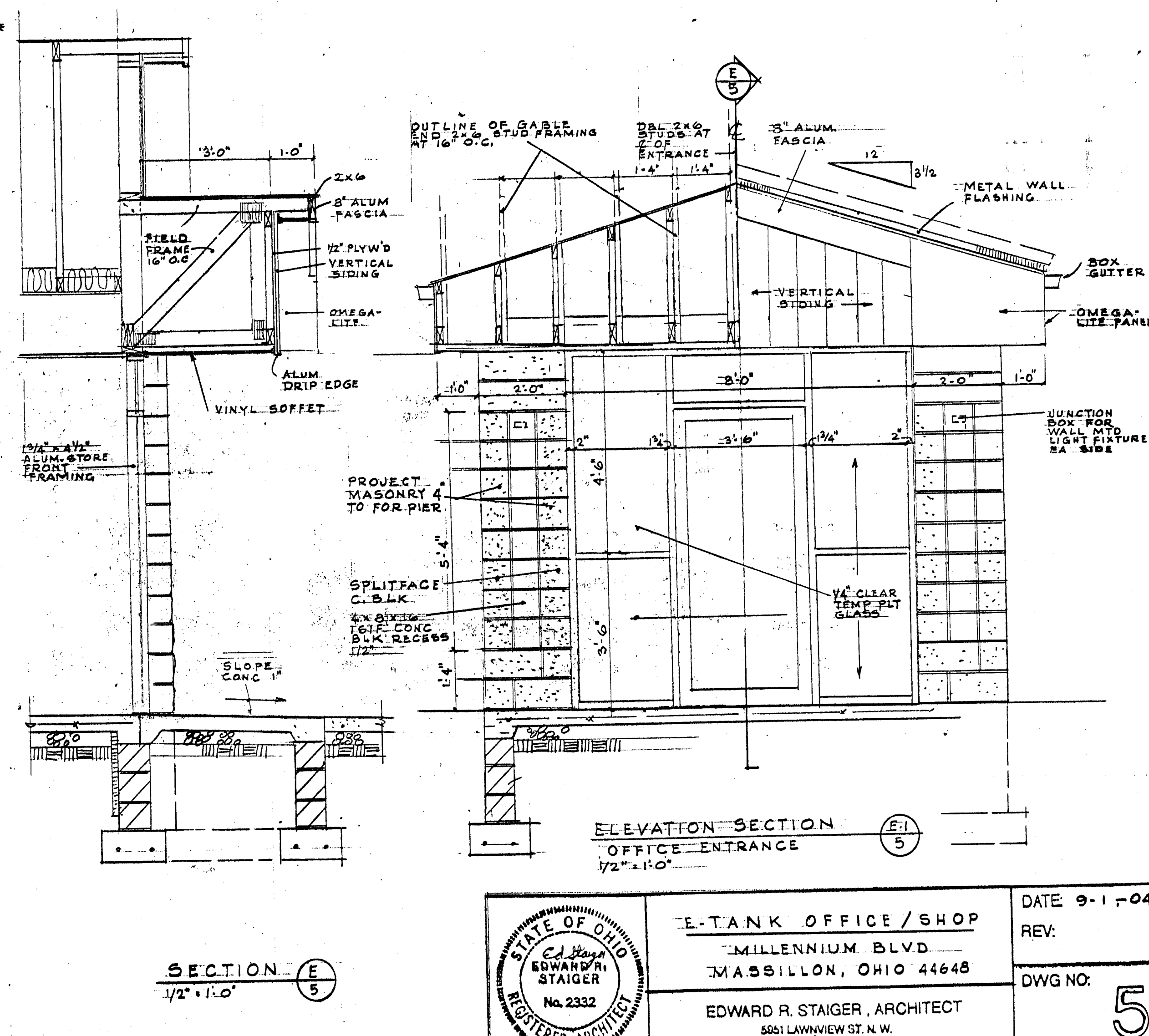
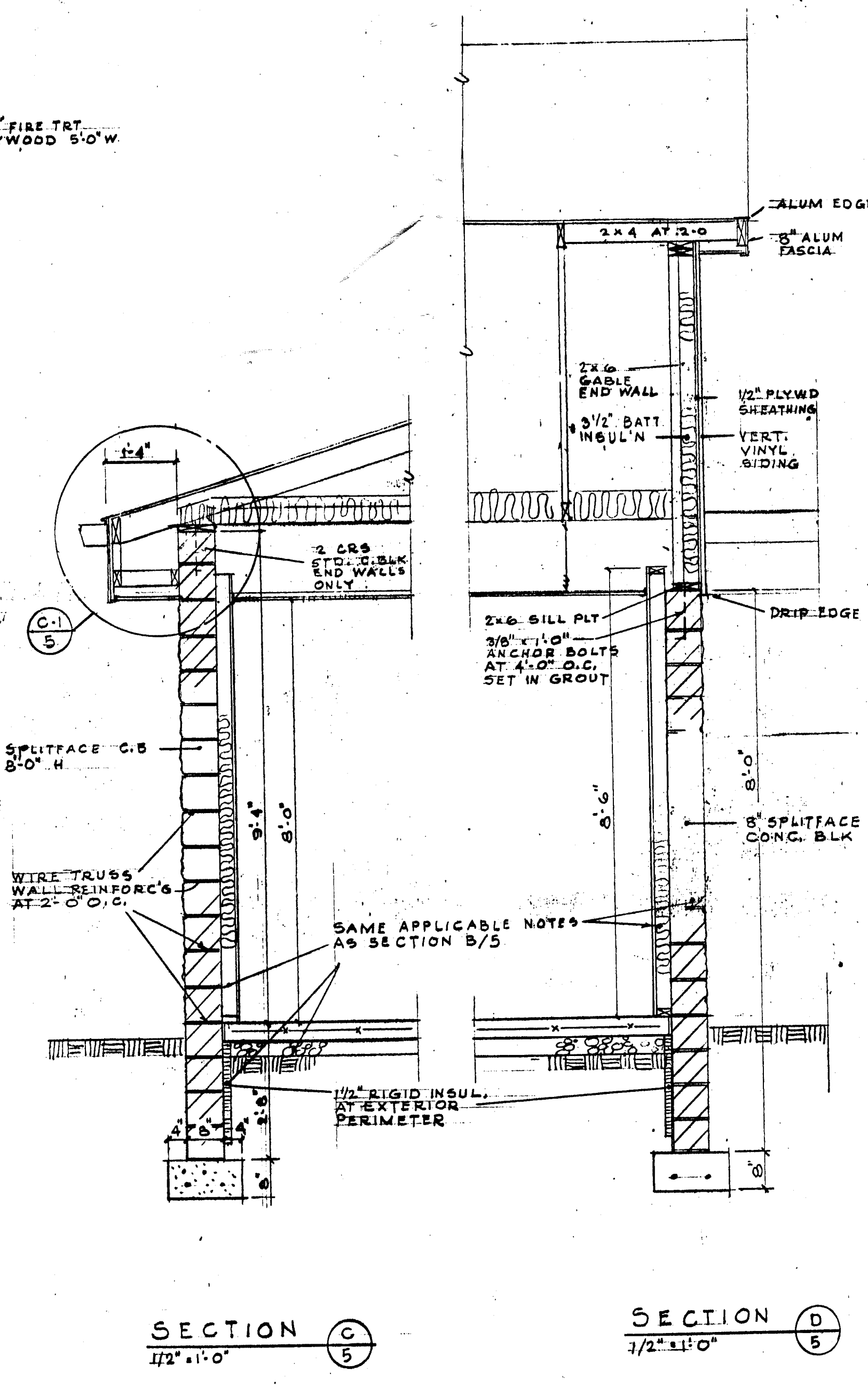
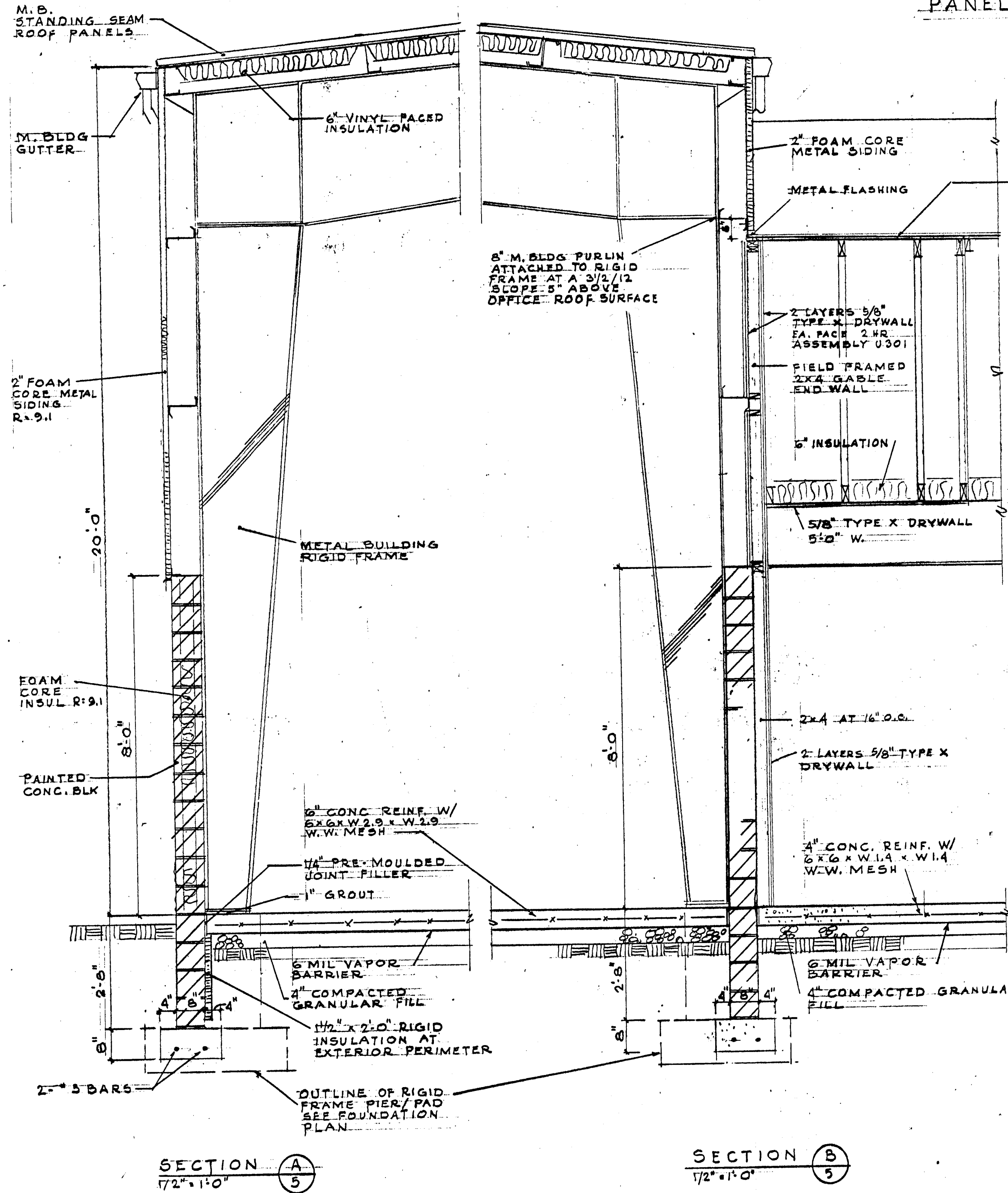
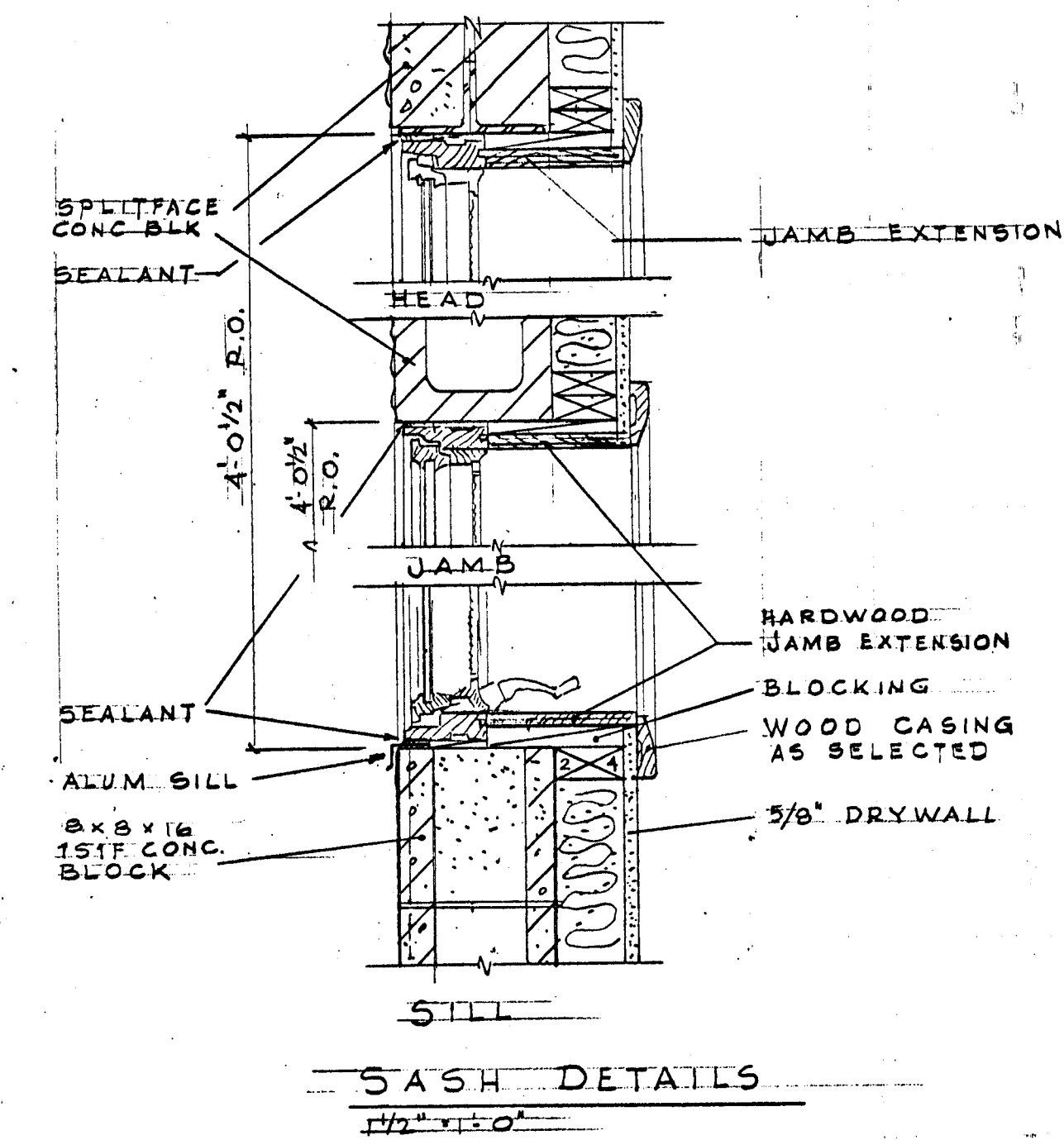
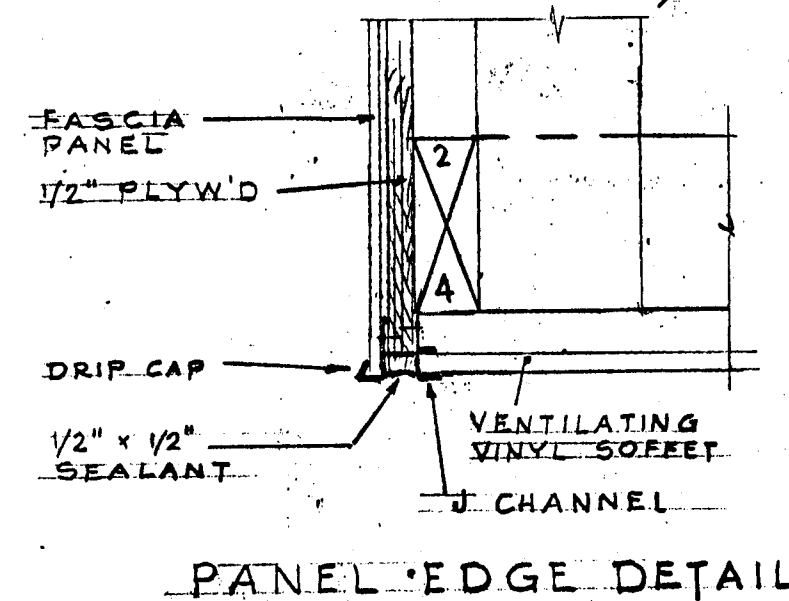
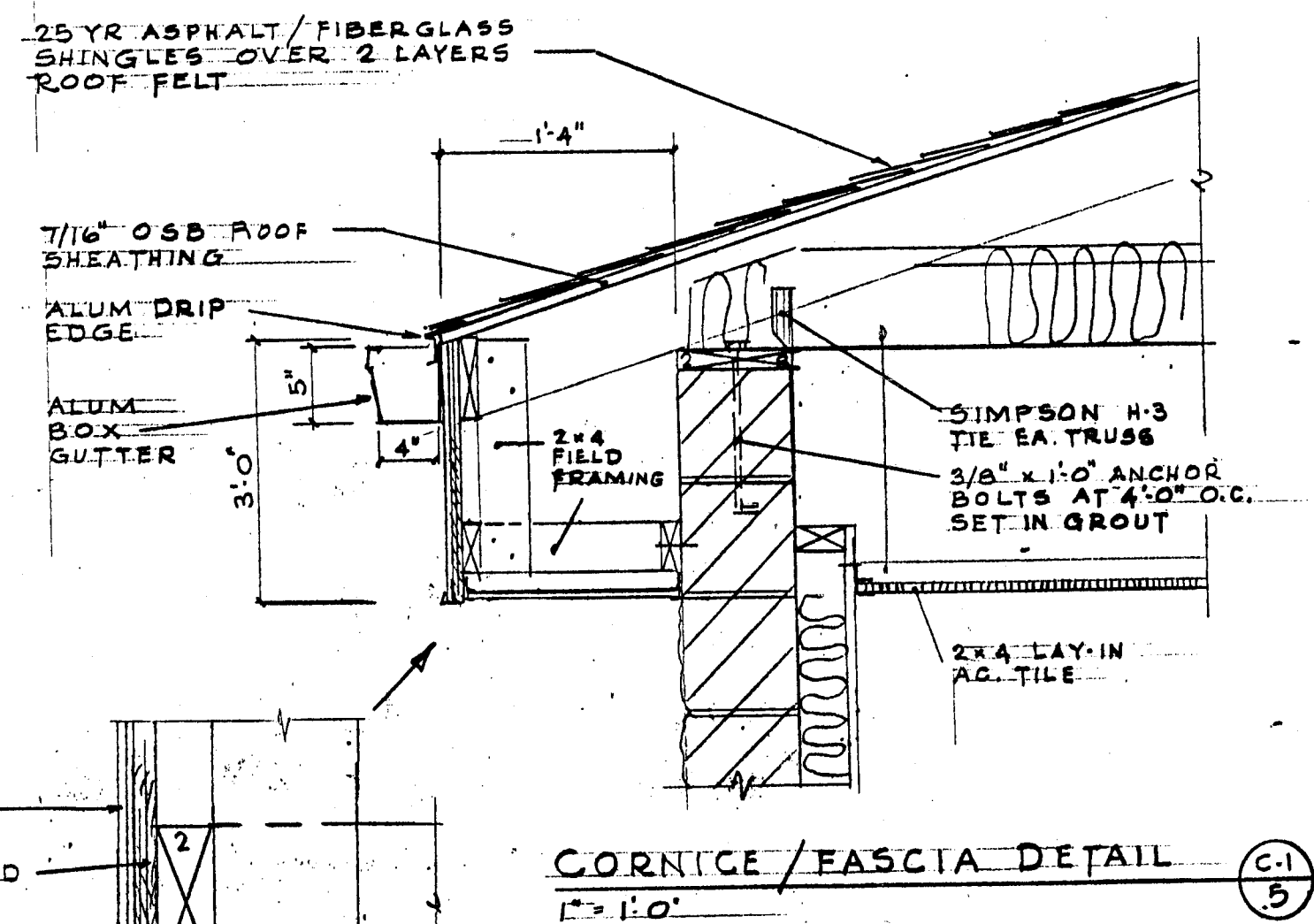
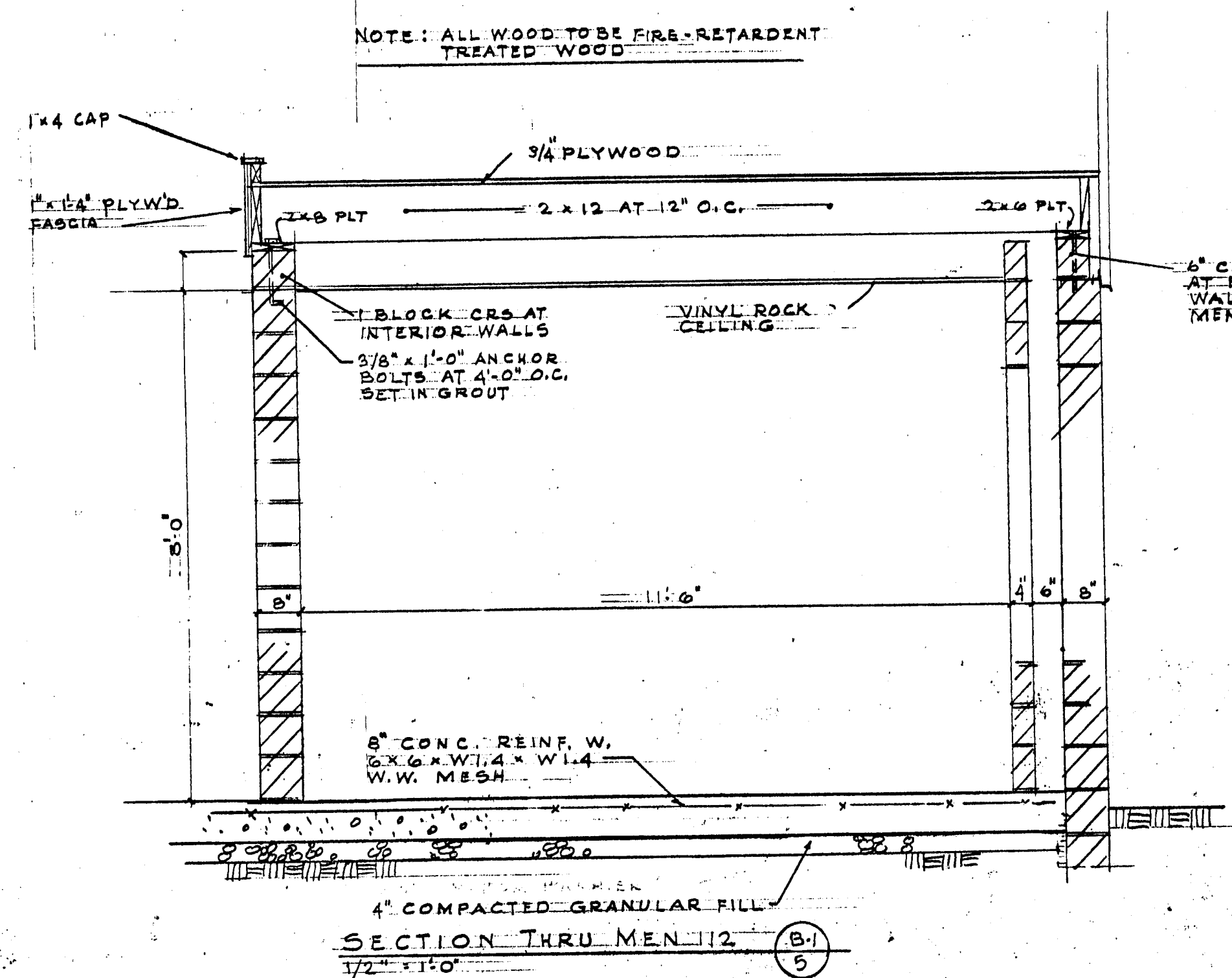


ROOF FRAMING PLAN
1/8" = 1'-0"
LINTEL PLAN

LINTEL SCHEDULE:
3 1/2" x 3 1/2" x 3/16" L-SPANS 3'-4"
W/4' BEARING EA' END.

	E-TANK OFFICE/SHOP		DATE 9-1-04
	1000 MILLENNium BLVD		REV.
	CANTON, OHIO 44608		DWG NO.
	EDWARD R. STAIGER, ARCHITECT		4

NOTE: ALL WOOD TO BE FIRE-RETARDANT TREATED WOOD



	E-TANK OFFICE / SHOP		DATE 9-1-04
	MILLENNIUM BLVD.		REV:
	MASSILLON, OHIO 44648		DWG NO:
	EDWARD R. STAIGER, ARCHITECT		5

8551 LAWNVIEW ST. N.W.
CANTON, OH 44718 PH (330) 494 1315