

SPECIFICATIONS

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND REQUIREMENTS OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY, THE OHIO DEPARTMENT OF TRANSPORTATION "CONSTRUCTION AND MATERIAL SPECIFICATIONS", AND THE OHIO DEPARTMENT OF HEALTH "MOBILE HOME PARK LAWS AND RULES."

THE CONCRETE RUNNER PADS OR PIERS FOR EACH LOT SHALL MEET THE REQUIREMENTS OF THE "MOBILE HOME PARK LAWS AND RULES" OF THE OHIO DEPARTMENT OF HEALTH. IN ADDITION EACH MOBILE HOME SHALL BE SECURED WITH "TIE DOWNS" IN ACCORDANCE WITH THE REQUIREMENTS OF THE INDIVIDUAL MOBILE HOME MANUFACTURER OR SHALL BE PROVIDED TO MEET THE REQUIREMENTS OF THE NORTHERN ZONE OF NATIONAL FIRE PROTECTION ASSOCIATION 1977 STANDARD NFPA 501A.

EXCESS EXCAVATED MATERIAL SHALL BE PLACED ON THE SITE AS DIRECTED BY THE ENGINEER OR OWNER OR AS SHOWN ON THE PLANS.

EXISTING UTILITIES INDICATED ON THE PLANS ARE BASED ON AVAILABLE INFORMATION AND ARE NOT GUARANTEED BY THE ENGINEER FOR ACCURACY OR COMPLETENESS. ANY WORK TO BE PERFORMED IN THE AREA OF EXISTING UTILITIES SHALL REQUIRE PRIOR NOTICE TO THE UTILITY OWNER.

SPECIFICATIONS FOR SANITARY PIPE AND FITTINGS SHALL BE:

PIPE MATERIAL	MATERIAL SPEC.	JOINT SPEC.
POLYVINYL CHLORIDE	ASTM D-3034	C-5212

MANHOLES SHALL BE FOUR FOOT INSIDE DIAMETER WITH STEPS CAST AT VERTICAL INTERVALS NOT TO EXCEED SIXTEEN INCHES NOR LESS THAN 12" BUT SPACED UNIFORM THROUGHOUT. PRE-CAST CONCRETE CONFORMING TO ASTM C-478 WITH O-RING JOINTS CONFORMING TO ASTM C-443. PRE-CAST MANHOLE ADJUSTING RINGS PROPERLY GROUTED SHALL BE USED TO BRING THE TOP OF MANHOLE TO PROPER GRADE. EXFILTRATION OF THE COMPLETED SEWER SHALL NOT EXCEED 100 GALLONS PER INCH OF DIAMETER PER MILE PER 24 HOURS. THE LEAKAGE TEST SHALL BE PERFORMED UNDER THE SUPERVISION OF THE OWNER'S ENGINEER. SEWER LINE CROSSINGS OF PAVEMENT SHALL BE BACKFILLED WITH 703II TYPE 2 STONE MATERIAL PLACED IN LAYERS NOT TO EXCEED SIX (6) INCHES COMPACTED THICKNESS. A MINIMUM VERTICAL CLEARANCE OF 18 INCHES BETWEEN WATER AND SEWER PIPE SHALL BE MAINTAINED. IN AREAS WHERE THIS REQUIREMENT CANNOT BE MET, THE SEWER PIPE SHALL BE OF WATER MAIN TYPE PIPE (WHICH WILL WITHSTAND A 100 PSI PRESSURE TEST) FOR A DISTANCE OF TEN (10) FEET EACH SIDE OF THE WATER PIPE. ENDS OF SEWER SERVICES SHALL BE MARKED BY PLACING WOODEN MARKERS. THE WOODEN MARKERS SHALL EXTEND FOUR (4) FEET ABOVE THE TOP OF THE SEWER PIPE. WHENEVER THE WATER LINE CROSSES A SEWER TRENCH, #8'S SHALL BE INSTALLED FROM THE TOP OF THE SANITARY SEWER TO THE BOTTOM OF THE WATER MAIN.

ALL SANITARY SEWER TESTS SUCH AS DEFLECTION AND INFILTRATION TESTS SHALL BE PERFORMED UNDER THE SUPERVISION OF THE OWNER'S ENGINEER WHO SHALL SUPPLY THE CITY OF NAPOLEON WITH A COPY OF THE CALCULATIONS TO DETERMINE THE INFILTRATION RATE AND WHAT THE FINAL RATE WAS FOR EACH SECTION TESTED. THE TEST RESULT SHALL BE ON THE ENGINEER'S STATIONARY AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF OHIO. THE CITY OF NAPOLEON SHALL BE NOTIFIED OF THE TESTING TIME, SO THAT A REPRESENTATIVE CAN REVIEW AND WITNESS THE RESULTS. ALL TESTS PERFORMED WITHOUT VILLAGE NOTIFICATION SHALL BE REPERFORMED IN THE PRESENCE OF THE CITY REPRESENTATIVE.

A SEWER LASER SHALL BE USED FOR GRADE ON ALL SEWERS.

THE WATER LINE PIPE SHALL BE POLYVINYL CHLORIDE CONFORMING TO AWWA C-900 OR 18" PIPE BARRELS SHALL BE SUPPORTED BY A MINIMUM OF SIX (6) INCHES OF #8 GRANULAR MATERIAL. WATER LINE CROSSING OF THE SEWER TRENCH SHALL BE BACKFILLED WITH #8'S FROM THE TOP OF THE SANITARY SEWER TO THE BOTTOM OF THE WATER MAIN PAVEMENT CROSSINGS. SHALL BE BACKFILLED WITH 703II TYPE 2 STONE MATERIAL SIX INCHES COMPACTED THICKNESS. WATER LINES SHALL BE CHLORINATED IN ACCORDANCE WITH PROVISIONS OF THE AWWA SPECIFICATIONS. THE LINE LEAKAGE SHALL BE AS PER AWWA STANDARDS AT A PRESSURE OF 150 PSI. LEAKAGE TEST SHALL BE PERFORMED UNDER THE SUPERVISION OF THE OWNER'S ENGINEER. SAMPLING TAPS ARE TO BE INSTALLED AS DIRECTED BY THE CITY OF NAPOLEON FOR THE BACTERIOLOGICAL TESTING. THE TAPS SHALL CONSIST OF MUELLER H-150008 CORP STDP WITH A 5" PIECE OF 1" TYPE "K" COPPER GATE VALVES SHALL BE MUELLER OR KENNEDY RESILIENT SEATED GATE VALVES WITH NON-RISING STEM MECHANICAL JOINTS AND SHALL OPEN IN COUNTERCLOCKWISE DIRECTION.

IN ADDITION THE WATER LINES & TESTING MUST MEET THE FOLLOWING REQUIREMENTS:

AWWA WATER LINE SPECIFICATIONS:	FITTINGS - AWWA C-110
PVC - AWWA C-900	WATER LINE CHLORINATION - C-501
HYDRANTS - AWWA C-502	ALL NUTS AND BOLTS USED SHALL BE
SMALLER SIZES TO BE:	COR-TEN MATERIAL ONLY. NO
POLYBUTYLENE AWWA C-901-SDR-9 (200 PSI)	DUCTILE IRON PERMITTED.
POLYETHYLENE AWWA C-901-SDR-9 (200 PSI)	

TRACING WIRE IS TO BE PLACED UNDER ALL WATER MAINS. THE TRACING WIRE SHALL BE SOLID NO. 12 COPPER ELECTRICAL WIRE (THW) WITH CONNECTIONS MADE WITH AN ELECTRICAL WIRE NUT ENCAPSULATED WITH 3M SCOTCHKOTE ELECTRICAL COATING. CONNECT TRACING WIRE TO HYDRANTS.

THE PRESSURE AND LEAKAGE TESTS SHALL BE PERFORMED UNDER THE SUPERVISION OF THE OWNER'S ENGINEER WHO SHALL SUPPLY THE CITY OF NAPOLEON WITH A COPY OF THE CALCULATIONS TO DETERMINE THE AMOUNT OF LEAKAGE AND WHAT THE TEST RESULTS WERE FOR EACH SECTION. THE TEST RESULTS SHALL BE ON THE ENGINEER'S STATIONARY AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF OHIO. THE CITY OF NAPOLEON SHALL BE NOTIFIED OF THE TESTING TIME SO THAT A REPRESENTATIVE CAN REVIEW AND WITNESS THE RESULTS. ALL TESTS PERFORMED WITHOUT CITY NOTIFICATION SHALL BE REPERFORMED IN THE PRESENCE OF THE CITY REPRESENTATIVE.

RESTRAINED JOINTS SHALL BE BY UNI-FLANGE SERIES 1300-C FOR MECHANICAL JOINTS AND SERIES 1350-C FOR PVC BELL JOINTS OR EBAA IRON, INC. SERIES 500 OR SERIES 1100 PV FOR MECHANICAL JOINTS AND SERIES 1500 OR 1100 HV FOR PVC BELL JOINTS. ALL BOLTS AND NUTS SHALL BE COR-TEN.

Utilities:

- Water - Water supply will be provided by the City of Napoleon
- Sewage - Sewage will be discharged into the City of Napoleon system
- Refuse - Weekly refuse pick-up will be provided by the City of Napoleon
- Electric - Electric power will be provided to each lot by the City of Napoleon
- Street lighting of 0.3 foot candle will be provided by City of Napoleon
- Telephone - Telephone service will be provided by UTS

UNDERGROUND UTILITIES

TWO WORKING DAYS BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICES
NONMEMBERS MUST BE CALLED DIRECTLY

Construction Plans Portion of Glenwood Estates Mobile Home Community City of Napoleon, Ohio Addition of Lots 286 thru 304



CITY OF NAPOLEON, OHIO

OHIO EPA REQUIREMENTS

ROOF DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED. THE OHIO ENVIRONMENTAL PROTECTION AGENCY REQUIRES CONFORMANCE TO THE 1987 EDITION OF "RECOMMENDED STANDARDS FOR WATER WORKS." THIS STANDARD SHALL BE EQUALLED OR EXCEEDED FOR WATER LINES. SPECIAL ATTENTION SHALL BE GIVEN TO THE FOLLOWING SECTIONS OF PART B:

- B.0.1. MATERIALS CONFORM TO AWWA STANDARDS
- B.1.2. MINIMUM 6" FOR FIRE PROTECTION
- B.5.3. MINIMUM 4" GROUND COVER
- B.5.5. PRESSURE TESTING AWWA C-600-RESPONSIBILITY
- B.5.6. DISINFECTION AWWA C-651-RESPONSIBILITY
- B.6.2. 10' HORIZONTAL SEPARATION WATER MAIN/SEWER
- B.6.3. 18" VERTICAL SEPARATION WATER MAIN/SEWER
- B.6.6. NO ENTRY AND NO CONTACT WITH SEWER MANHOLE

NOTE: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM THIS TEST PROPERLY. RESPONSIBILITY FOR SUPERVISION AND APPROVAL RESTS WITH THE WATER SUPPLIER OR LOCAL GOVERNMENTAL AGENCY.

IN CASES WHERE ONE OR MORE OF THE ABOVE MENTIONED OHIO EPA STANDARDS FALL SHORT OF LOCAL STANDARDS, THE LATTER SHALL GOVERN.

RECEIVED

MAR 03 1999

CITY OF NAPOLEON

POGGEMEYER ENGINEERS - ARCHITECTS

03 01 1999

PRINTED

APPROVALS

Thomas J. Short
THOMAS J. SHORT, OWNER

5/19/98
DATE

CERTIFICATION

Kenneth A. Maag
KENNETH A. MAAG, P.E.

4-1-98
DATE

Richard E. Weaver
RICHARD E. WEAVER, P.E.

4-13-98
DATE



POGGEMEYER DESIGN GROUP, INC.
ARCHITECTS - ENGINEERS - PLANNERS PH. 419-782-3067
417 WAYNE AVENUE P.O. BOX 7040 DEFIANCE, OHIO 43512

1 Devanshire Dr.



8" GAS LINE:
 Call before excavating
 in this area:
 Ohio Gas Company
 614 N. Perry Street
 Napoleon, Ohio
 592-7060

B.M. Top Rim Existing MH 19
 Elev: 694.58

Total Area	2368900 SF
Lot Area	1654250 SF
Roadway Area	240678 SF
Recreation Area	200960 SF 8.5%
Green Belt	272912 SF

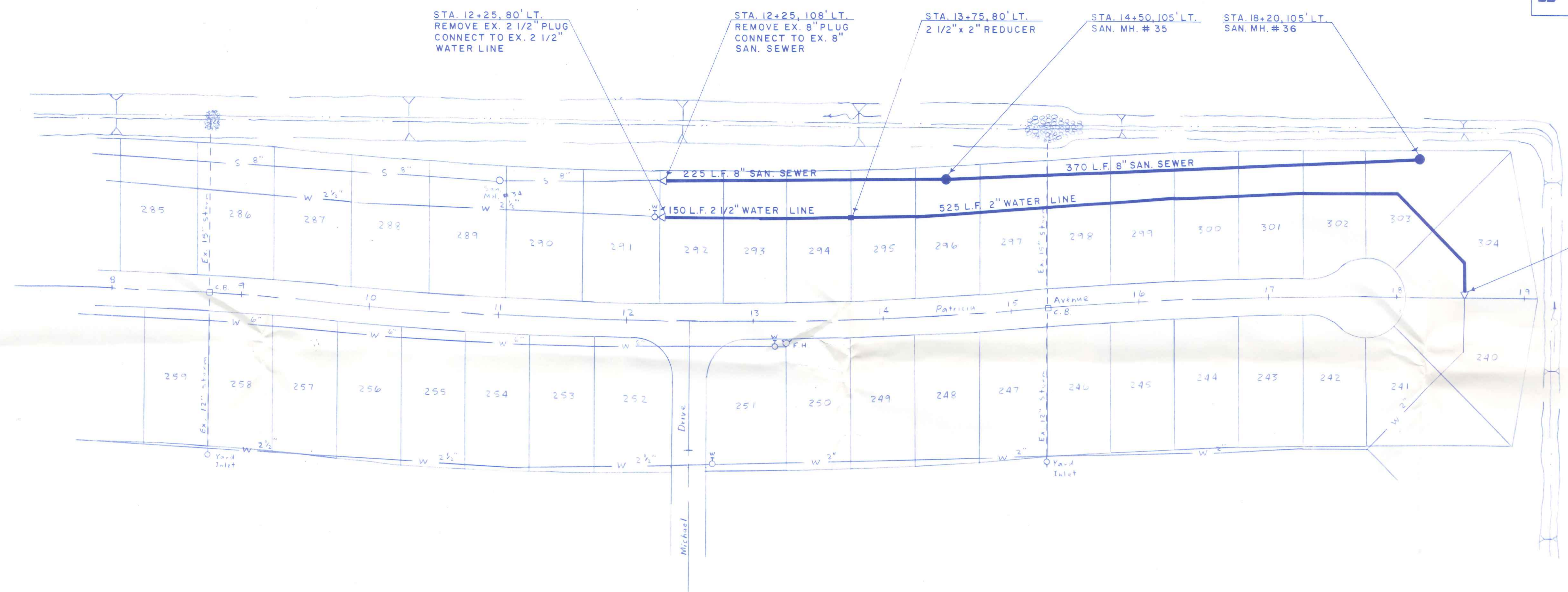
Roadway Curve Data	
R	= 1909.86'
D	= 3°
Δ	= 4° 35' 25"

Legends:
 ■ = Extent of this phase of development

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	GLENWOOD ESTATES		DATE
	POGGEMEYER DESIGN GROUP, INC. ARCHITECTS + ENGINEERS + PLANNERS		7-10-11
DATE	DATE	DATE	DATE
11/11	11/11	11/11	11/11
REVISIONS	REVISIONS	REVISIONS	REVISIONS

2/4

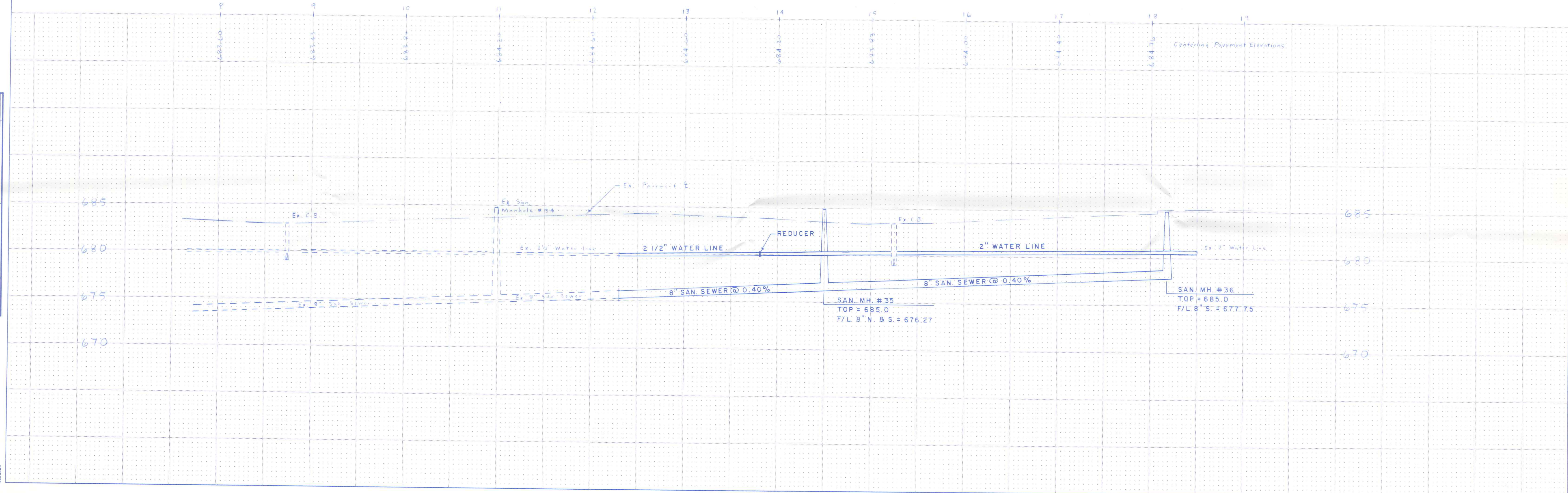


SCALE: 1" = 50'

STA. 18+53, 0' LT.
REMOVE EX. 2" PLUG
CONNECT TO EX. 2" WATER LINE

DATE	
BY	
FINAL SURVEY	
FLIGHTED	
NOTE BOOK	
NO.	
AREAS CHECKED	

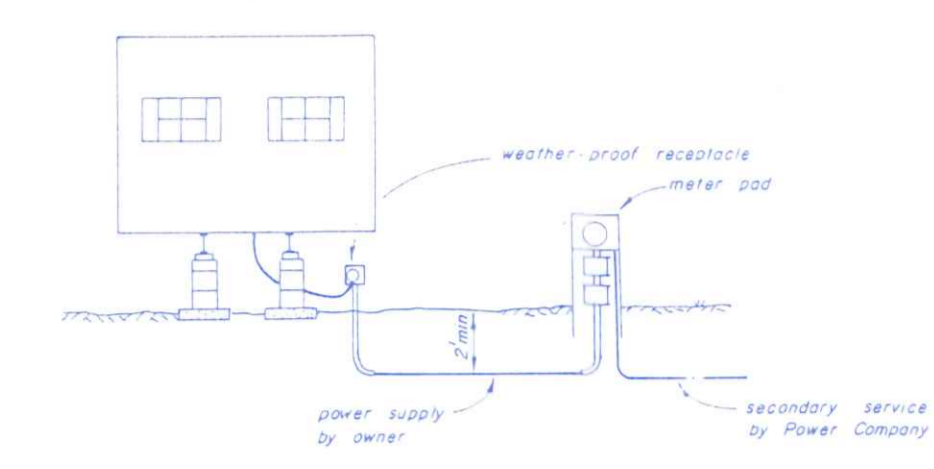
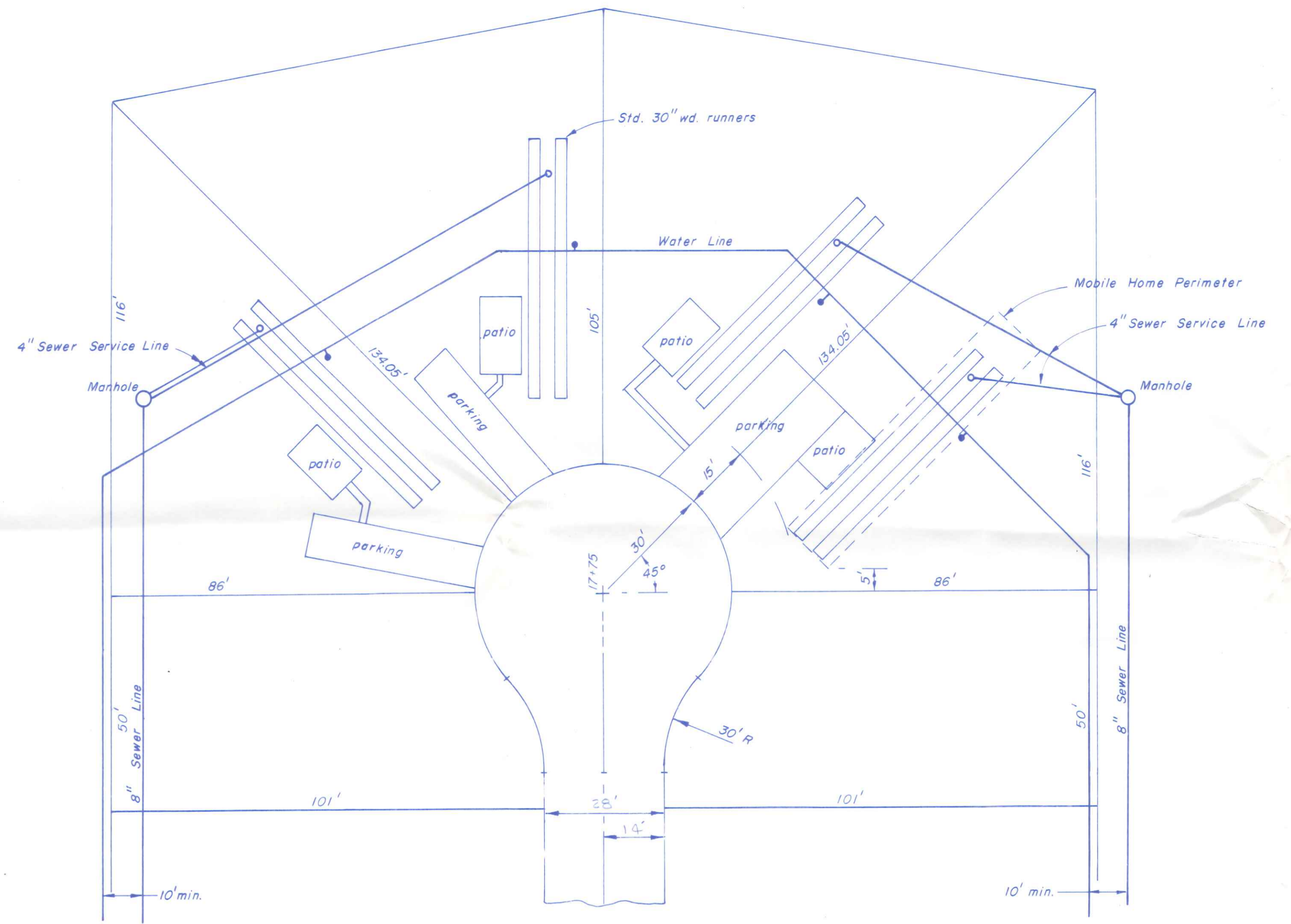
DATE	
BY	
ORIGINAL SURVEY	
FLIGHTED	
NOTE BOOK	
NO.	
AREAS CHECKED	



HIGHWAY FEDERAL AID SHEET
PLATE 4-SINGLE PLAN AND CROSS SECTION-FULL DOT
PRINTED IN U.S.A.

Patricia Ave. Sta. 8+00 to Sta. 19+00

6720-009

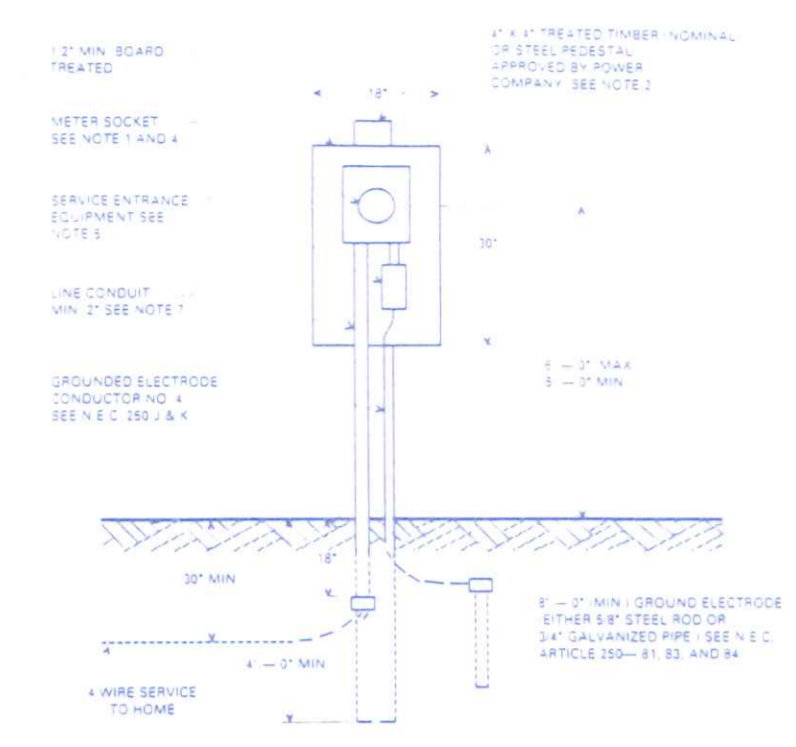


Service Size	Type Use Conductor		Type UF Conductor	
	Copper	Aluminum	Copper	Aluminum
200 A	3/0 wire conduit	250 18CM	4/0	1/2
150 A	2"	2"	2"	2"
100 A	1 1/2"	2"	1 1/2"	2"
50 A	3/4"	1 1/2"	3/4"	1 1/2"

All materials to be UL listed.
All work to conform to the 1978 NEC and local electrical codes.

ELECTRIC SERVICE

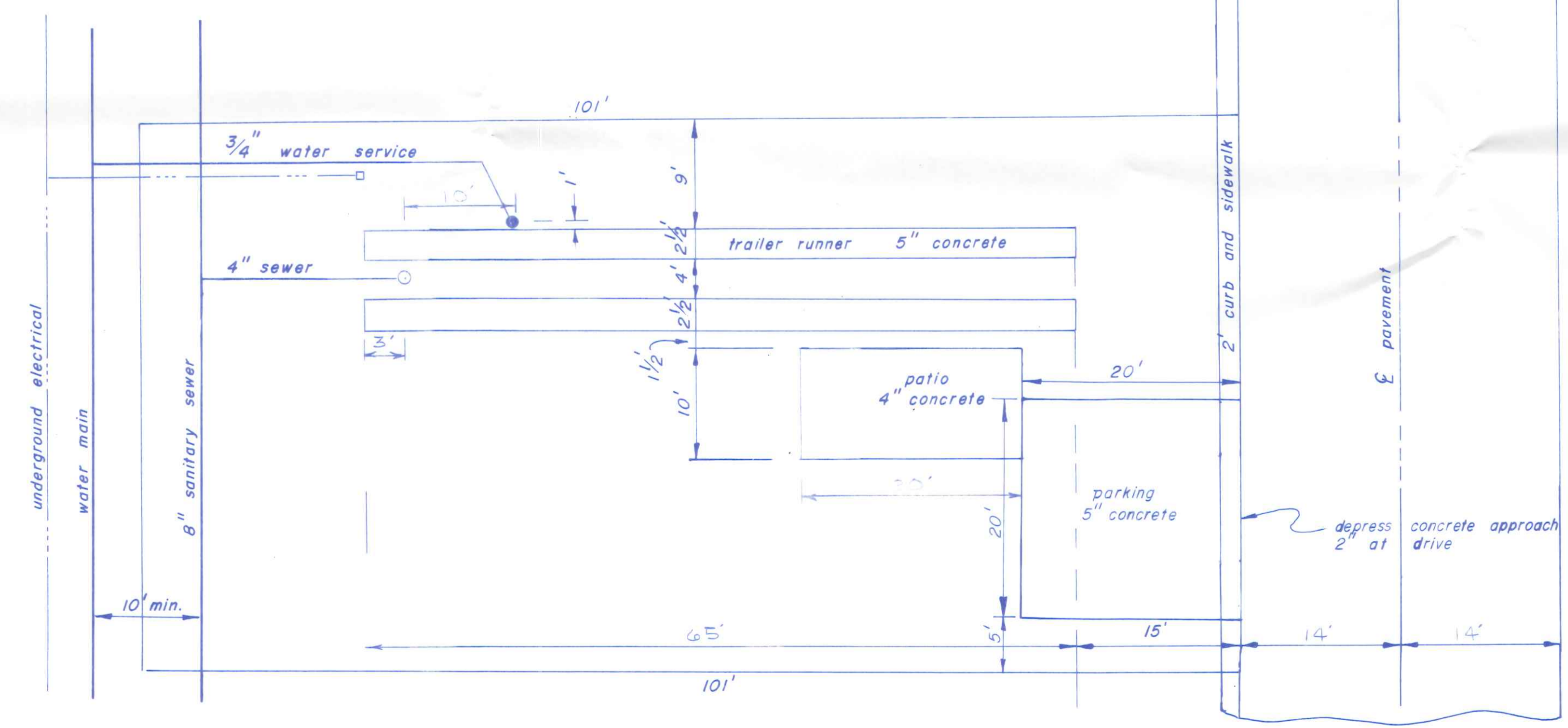
- Sewer Riser
- Water Riser
- ◻ Electric Meter



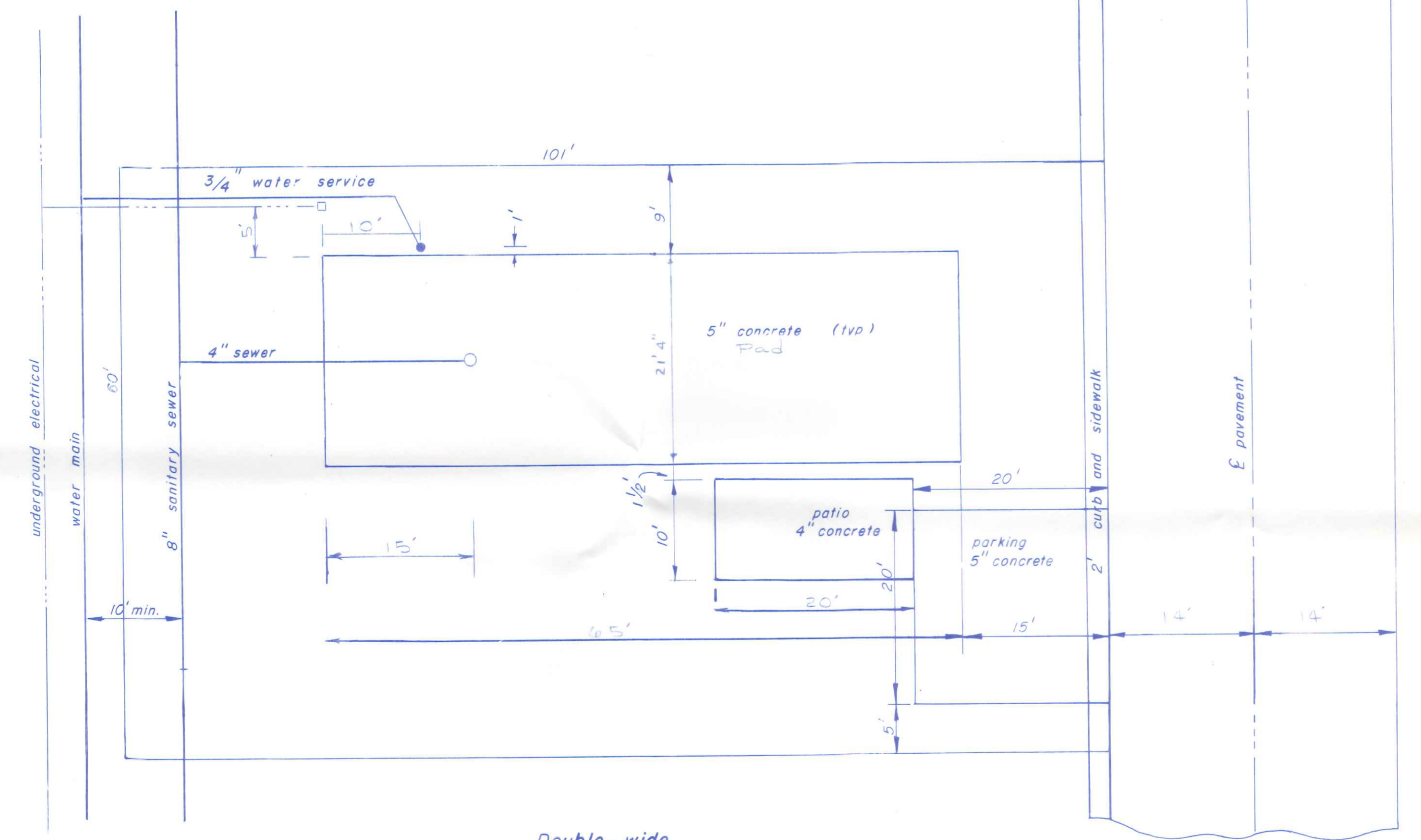
- REGULAR NOTE: CUSTOMER TO LOCATE BURIED UTILITIES BEFORE STARTING AN INSTALLATION.
- NOTE:
- POWER COMPANY TO PROVIDE METER AND METER SOCKET. DO NOT WIRE THRU BACK OF METER SOCKET. SOCKET TO BE SECURELY MOUNTED BY CUSTOMER IN A PLUMB POSITION. CUSTOMER TO FURNISH AND INSTALL CONDUIT AND ALL OTHER EQUIPMENT INCLUDING SERVICE AND GROUNDING FACILITIES.
 - THE POST TO BE INSTALLED AT A LOCATION TO BE DESIGNATED BY POWER COMPANY. THE POST SHALL NOT BE LOCATED IN LINE WITH THE PROPOSED REMAINING SERVICE.
 - CONNECTION OF CUSTOMER CONDUCTORS TO POWER COMPANY FACILITIES SHALL BE THE RESPONSIBILITY OF THE POWER COMPANY.
 - ALUMINUM ELECTRICAL JOINT COMPOUND SHALL BE APPLIED TO ALL ALUMINUM CONDUCTORS BEFORE INSTALLING IN TERMINALS OF METER SOCKET. SEE N.E.C. 110.14.
 - WEATHER PROOF SERVICE ENTRANCE EQUIPMENT TO LISTED WITH FUSED DISCONNECT SWITCH OR CIRCUIT BREAKER. WIRE SIZE AS REQUIRED MOUNTED ON A BOARD BASE. SEE N.E.C. ARTICLE 90 AMP MIN. 200 AMP ELECTRICAL HEAT.
 - POWER COMPANY DETERMINE LOCATION OF TRENCH FOR SERVICE INSTALLATION.
 - LINE CONDUIT MAY BE GALVANIZED RIGID OR RIGID NONMETALLIC CONDUIT. LISTED FOR THE USE SCHEDULE 90 OR BETTER. EMT AND RMC SHALL NOT BE USED FOR LINE CONDUIT.

MOBILE HOME SERVICE FROM AN UNDERGROUND SOURCE
 (NOT TO SCALE)

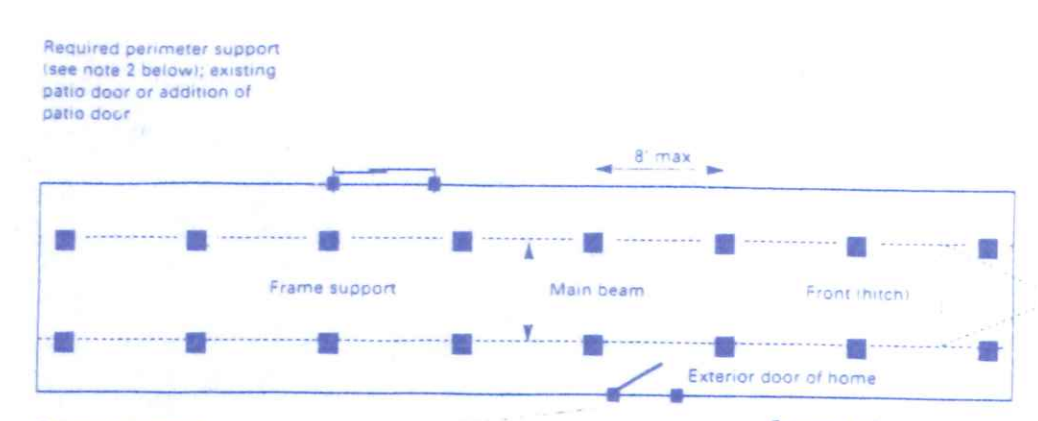
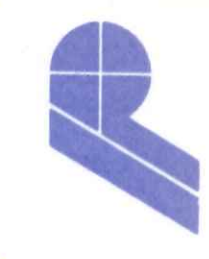
Cul-de-sac 1" = 20'
 LOTS: 240 thru 282
 283 thru 304



Single 1" = 10'
 LOTS: 292 thru 304

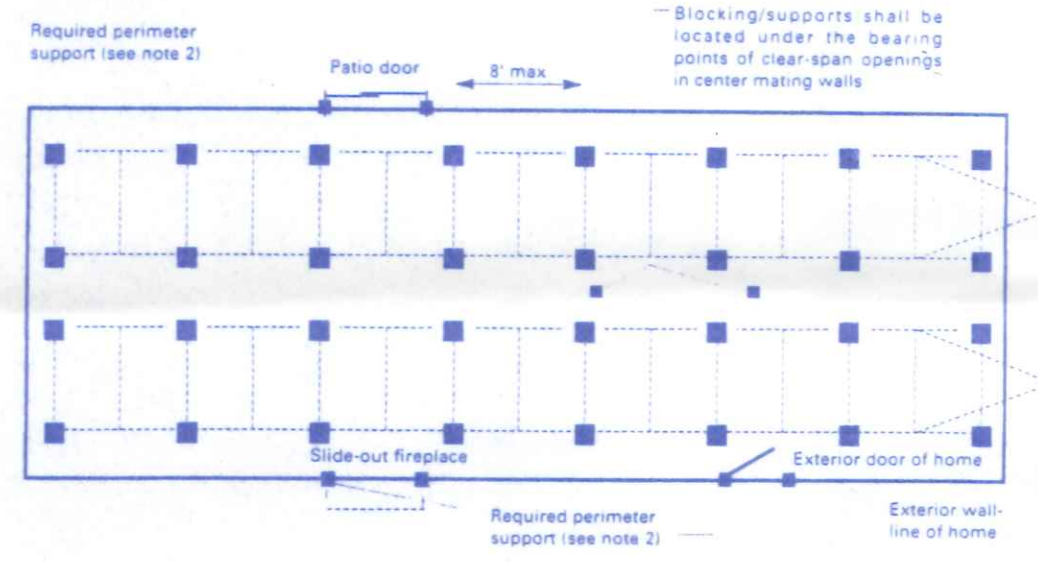


Double-wide
 LOTS: 286 thru 291
 TYPICAL LOT LAYOUT



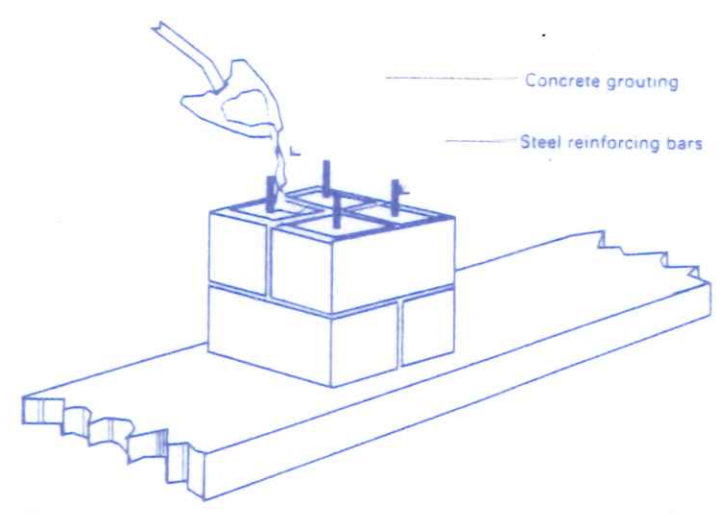
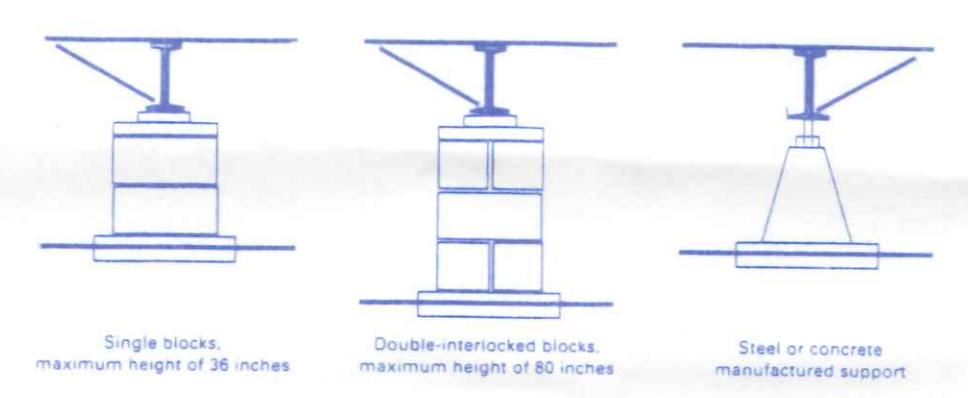
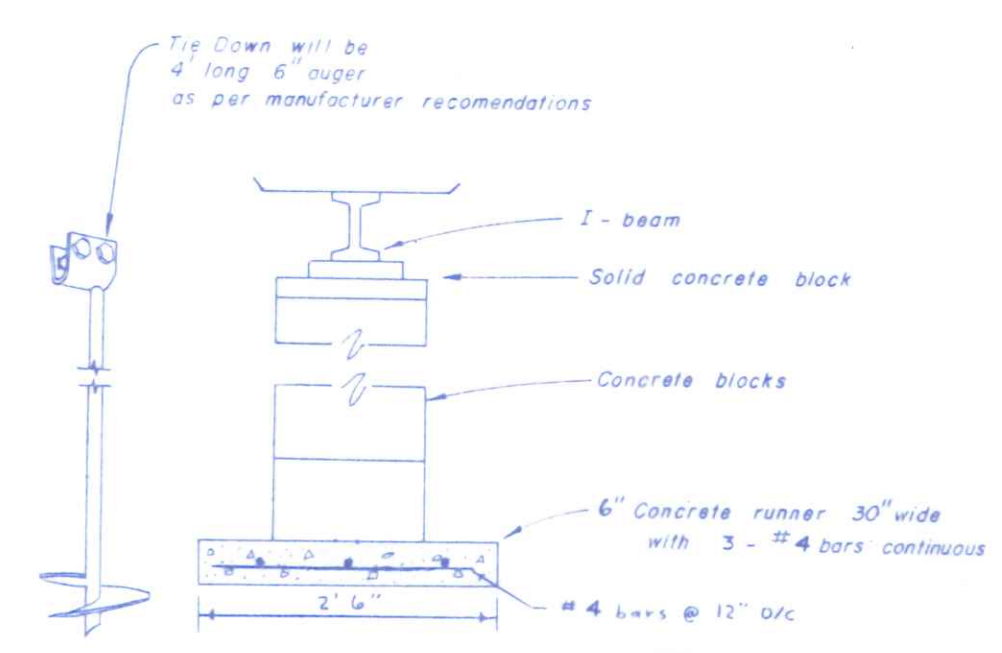
Typical blocking diagram for single-section home when manufacturer's instructions are not available

1. Blocking shall be located at a maximum of 2 feet from both ends.
2. Place blocking on both sides of entry doors and at any other openings greater than 4 feet in width, such as patio or atrium doors, under porch posts, fireplaces, and wood stoves, and under those places where heavy pieces of furniture such as pianos, organs, waterbeds, etc. may be placed.



Typical blocking diagram for multisection home when manufacturer's installation instructions are not available

Blocking Diagrams
(Not to scale)

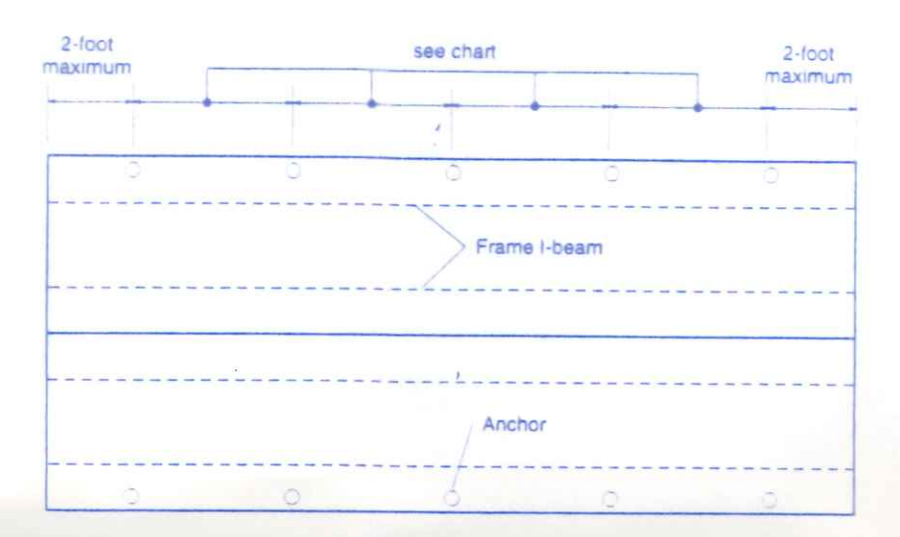


For blocking exceeding 80 inches in height, the concrete blocks must be filled with concrete grouting and steel reinforcing bars used.

Blocking Requirements
(Not to scale)

Strap Method:	Anchor Min. Ultimate Load Capacity:	Maximum Anchor Spacing:		
		Zone II ¹	Zone III ²	Zone III ³
Single Strap	4725 lbs.	11'-0"	8'-0"	4'-6"
Double Strap	4725 lbs.	11'-0"	8'-0"	4'-6"

- Note --
1. Unless listed/labelled for a higher capacity by the anchor manufacturer.
 2. Unless a greater spacing is specified by the anchor manufacturer.
 3. All homes located in Wind Zones II and III shall have a vertical tie installed at each diagonal tie location.



Number and location of straps and ground anchors

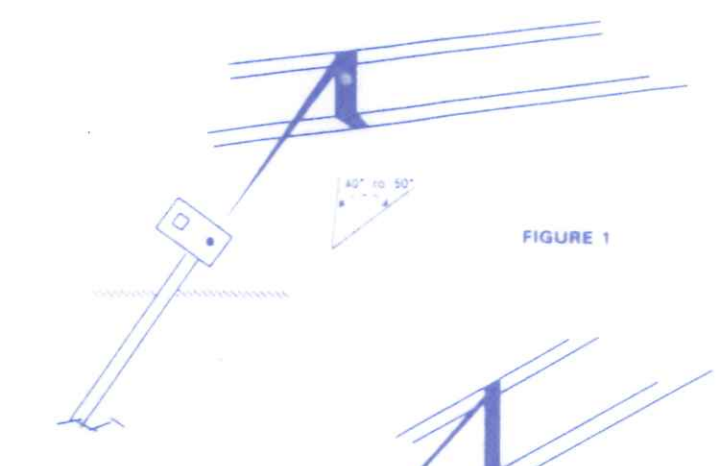


FIGURE 1

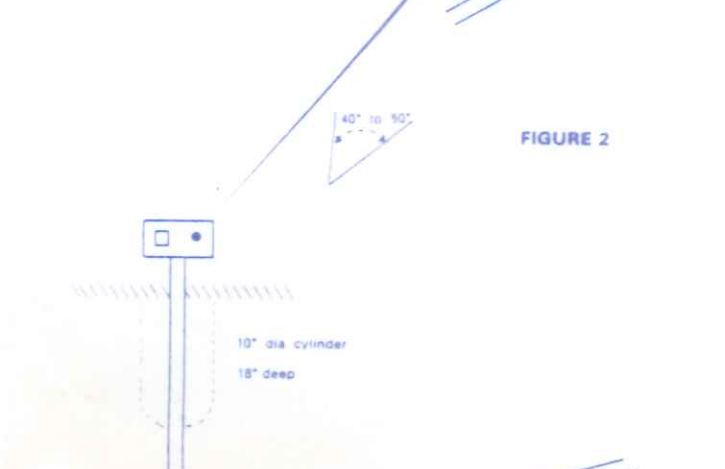


FIGURE 2

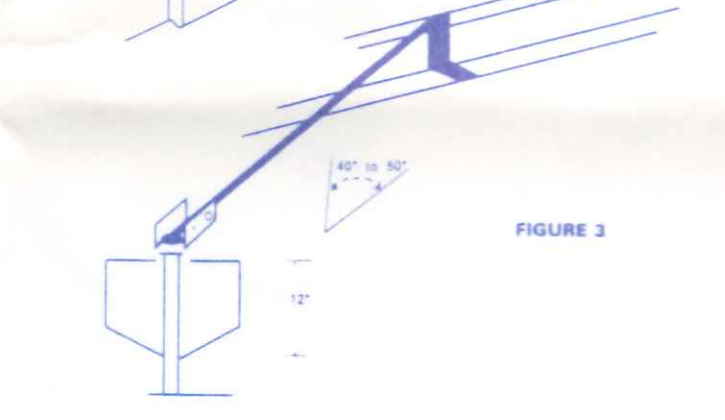
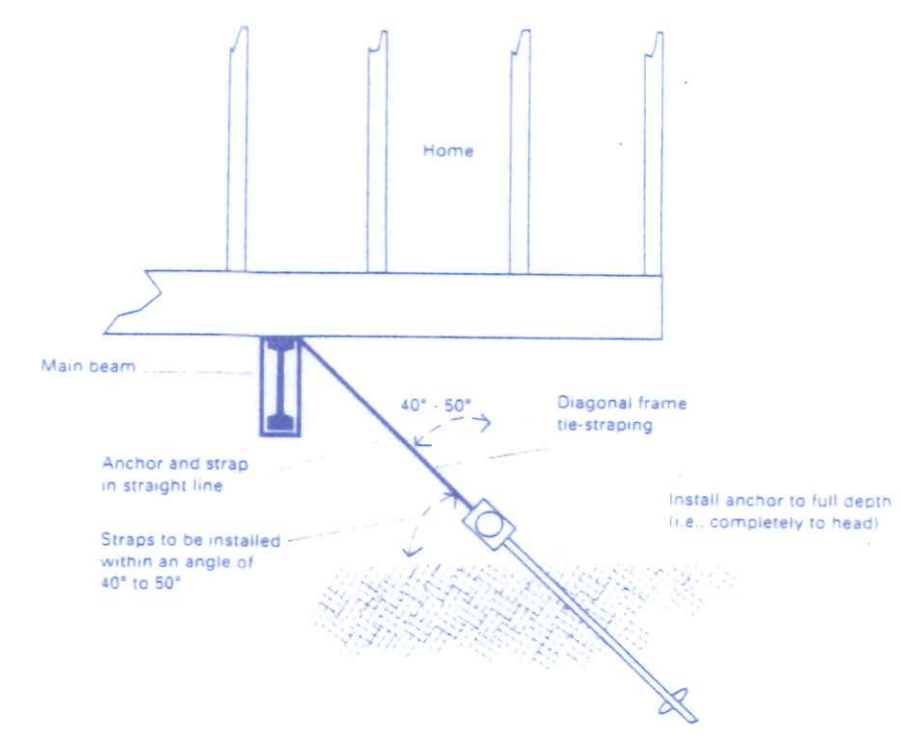


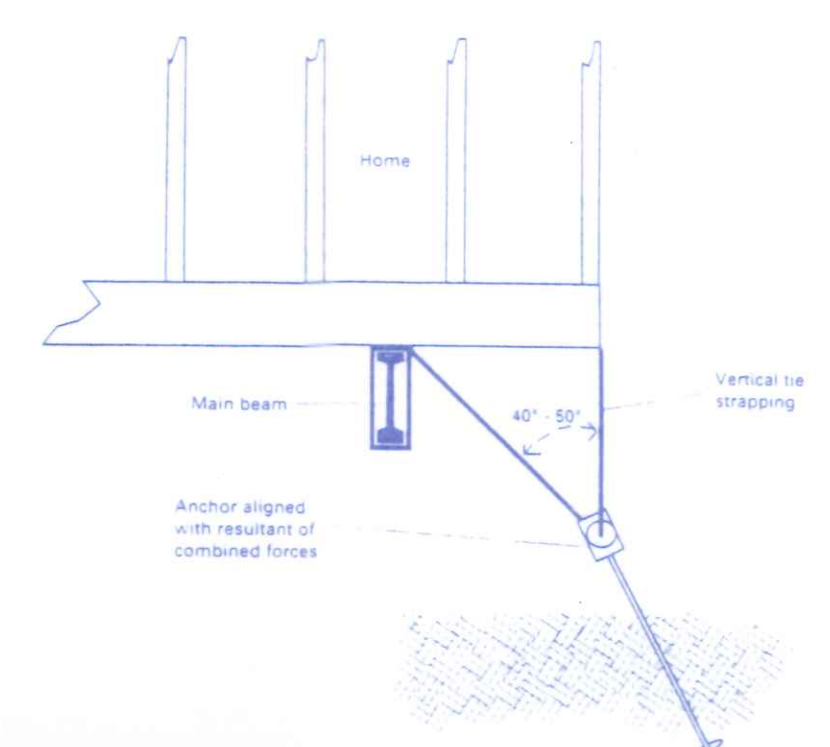
FIGURE 3

Anchor & Frame connection
(Not to Scale)

Diagonal anchors should be installed in-line with the tie-strap (FIGURE 1). One method of reducing lateral deflection is shown in FIGURE 2. To minimize the deflection of being through the soil by the anchor rod at ground level when frame ties are connected to provide a diagonal tension it is recommended that a concrete cylindrical collar approximately 10" in diameter and 18" deep be installed around the anchor shaft. Another accepted way to limit lateral deflection is by use of a tested and approved 'Metal Stabilizing Device'. This plate is driven in front of the anchor's direction of pull and will act to minimize rod deflection.



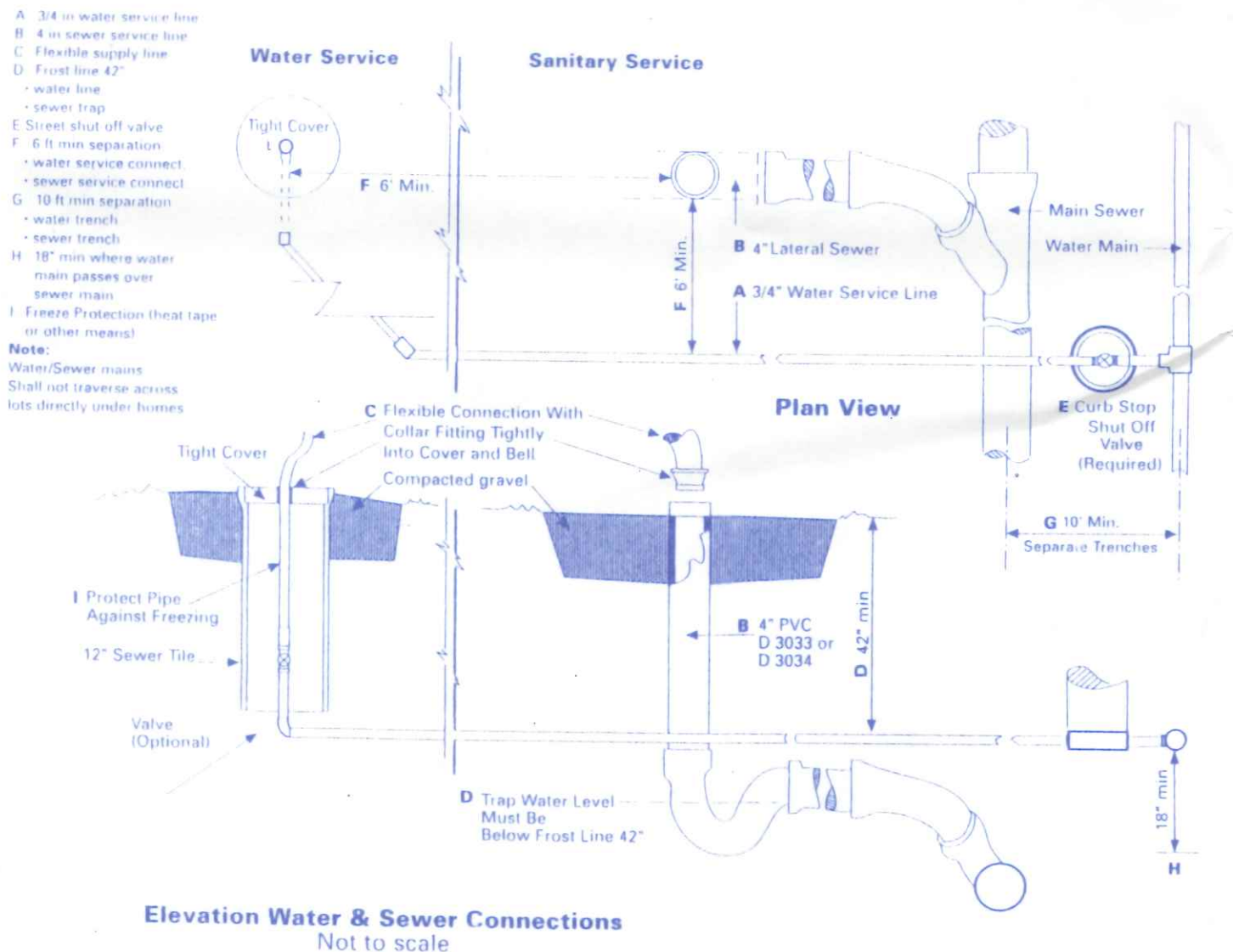
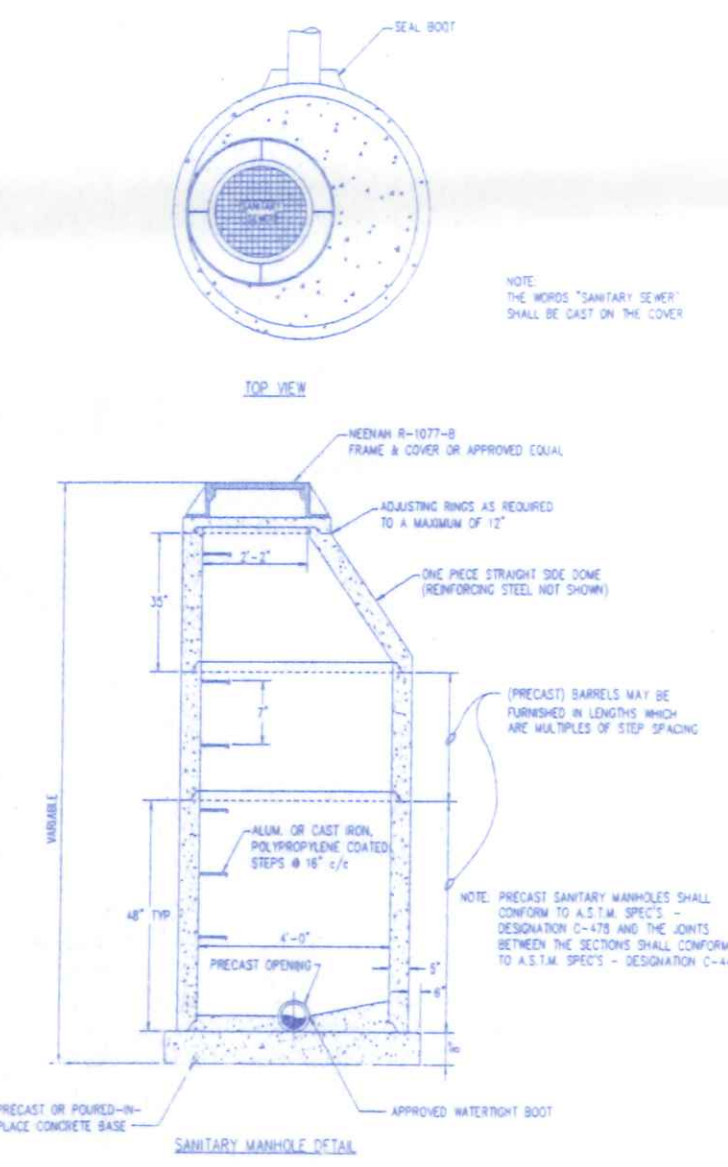
Diagonal ties
(Not to Scale)



Diagonal and vertical ties
(Not to Scale)

- Note --
1. All anchoring parts must be certified to a 4,725-pound capacity.
 2. The ground anchors must be sized in accordance with the direction of the load and the type of soil.
 3. The ground anchor's augers must be installed below the frost line.
 4. Ground anchors may be installed vertically if either a 10-inch x 18-inch (at a maximum) concrete collar or an approved metal stabilizing device is installed.

- Note --
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 2. The ground anchors must be sized in accordance with the direction of the load and the type of soil.
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 4. Ground anchors may be installed vertically if either a 10-inch x 18-inch (at a maximum) concrete collar or an approved metal stabilizing device is installed.



Elevation Water & Sewer Connections
(Not to scale)

UNDERGROUND UTILITIES
**TWO WORKING DAYS
 BEFORE YOU DIG**
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 OHIO UTILITIES PROTECTION SERVICE
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 MUST BE CALLED DIRECTLY

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