

GENERAL NOTES

STORM WATER SEWER IMPROVEMENTS TO SERVE LOT 21 & 22, COMOTARA INDUSTRIAL PARK FOURTH ADDITION

KANSAS HEART HOSPITAL OFFICE PLAZA

Project Number

946 PPS(607861)

CITY OF WICHITA, KANSAS

Michael E. Lindebak, P. E., City Engineer

1. Contractor will be required to provide notice to utility companies a minimum of twenty-four (24) hours prior to any excavation, as follows:

Kansas One-Call 687-2470

The Contractor must notify the following in case of an emergency:

Cablevision 262-4270

or 263-2061

K.P.L. Gas Service Company 383-8650

Kansas Gas & Electric Company 383-8600

Peoples Natural Gas 942-8811

or 1-800-303-0357

Southwestern Bell Telephone Company 1-571-2611

City of Wichita Water Department 268-4908

City of Wichita Sewer Department 268-4071

2. Exist. utilities and their locations, as shown on the plans, represent the best information obtainable for design. Location information has been obtained from the various utility companies and is either from company record drawings or company-provided field locations. The Contractor will be required to work around existing utilities which do not conflict with proposed construction.

3. The Contractor to verify utility locations prior to construction of this project.

4. Utility service and installation shall be coordinated with the respective utility owners. Contacts are:

KG&E Gas Steve Orth 261-6567

K.G. & E. Miles Capps 261-6434

Wichita Water Paul Bryant 268-4555

Steve Palmer 268-4908

Southwestern Bell Jim Tobin 268-2759

5. All areas disturbed by construction shall be seeded with rye Rebel II Fescue grass at a rate of 350 lbs./acre immediately following construction in that area.

6. Traffic affected by the construction of this project shall be handled in accordance with the latest edition of the Manual on Uniform Traffic Control Devices.

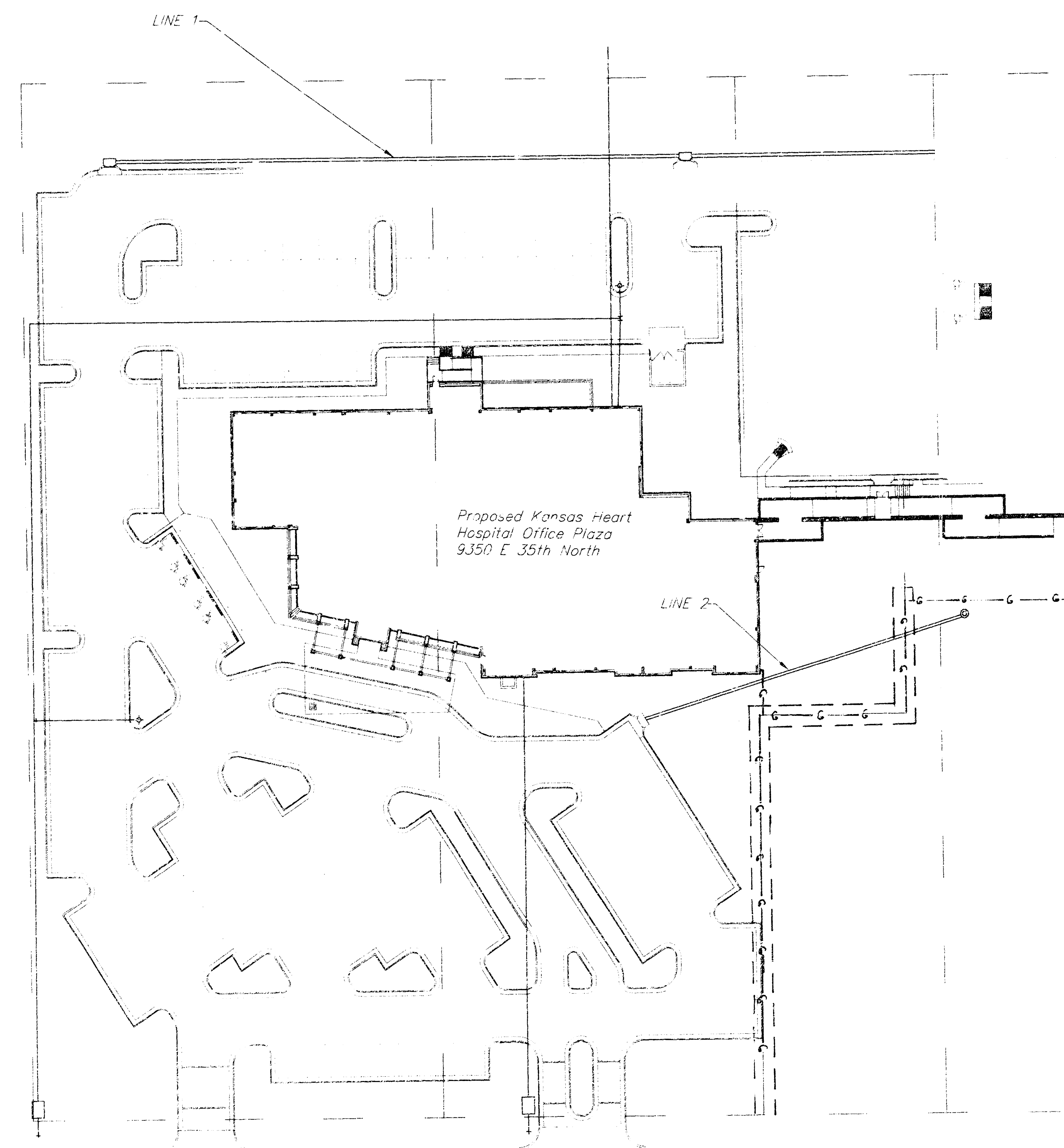
7. All lawn/turf areas disturbed by construction of proposed improvements shall be restored with the same grass/sod as existing. Restoration of disturbed areas shall include, but not be limited to, top soil preparation, seeding, mulch and/or reseeding. All seeding/sodding work shall be in accordance with the City of Wichita standard specifications and the City of Wichita administrative regulation No. AR78 which governs cleanup and replacement following construction. All costs for this work shall be subsidiary to the lump sum price bid for "Site Restoration."

BENCHMARK:

Temporary Bench Mark. Box cut top
North Curb 34th St. 100+/- west
of Center Webb Rd. Elev. 244.04

INDEX:

1. Title Sheet
2. Plan and Profile of Line 1
3. Plan and Profile of Line 2
4. Standard/Special Shallow Manhole Type "A" & "B"
5. Standard Type 1-A Curb Inlet.



AS-BUILT

Date: 7-1-80

Signed: R. G. M.

RECKED
12-4-80
MCS
D-268

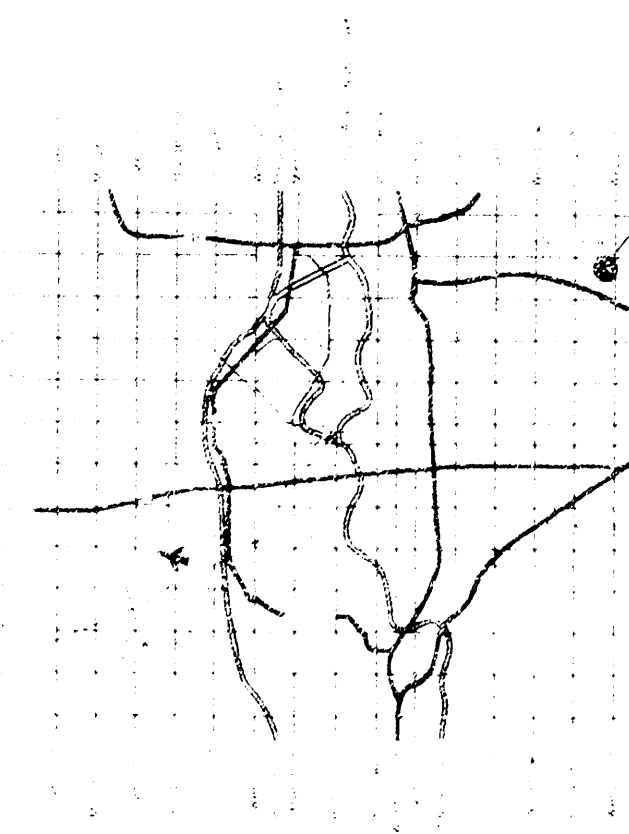


SCALE 1" = 40'

APPROVED AS NOTED BY CITY ENGINEER OF WICHITA

STORM SEWERS VRH 11/30/99

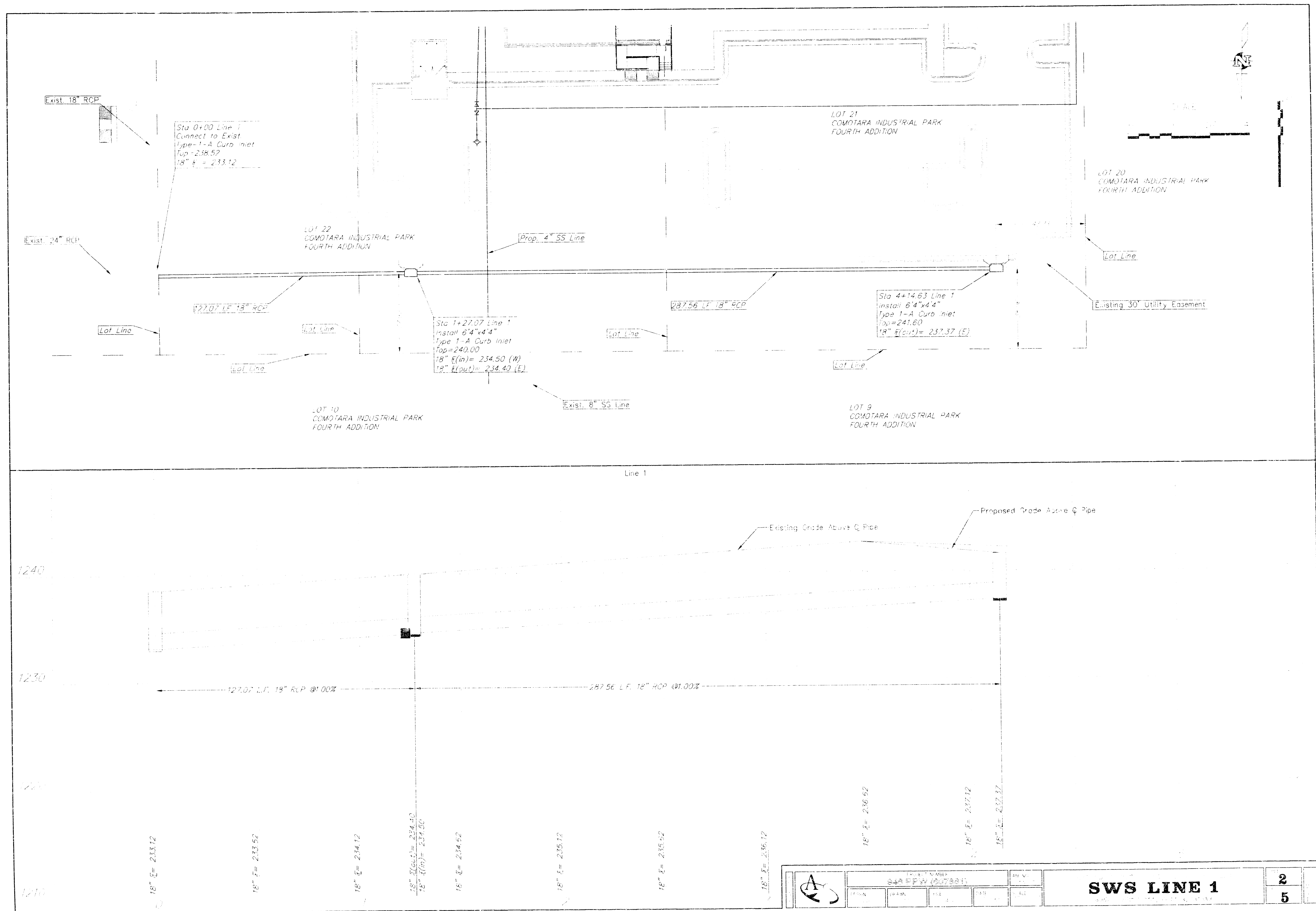
Inspection and testing for this project shall be conducted by a licensed Consulting Engineering firm under contract with the owner/engineer. The firm shall be responsible for the design and construction of the storm sewer system. The firm shall also be responsible for the construction of the storm sewer system. The firm shall also be responsible for the construction of the storm sewer system.



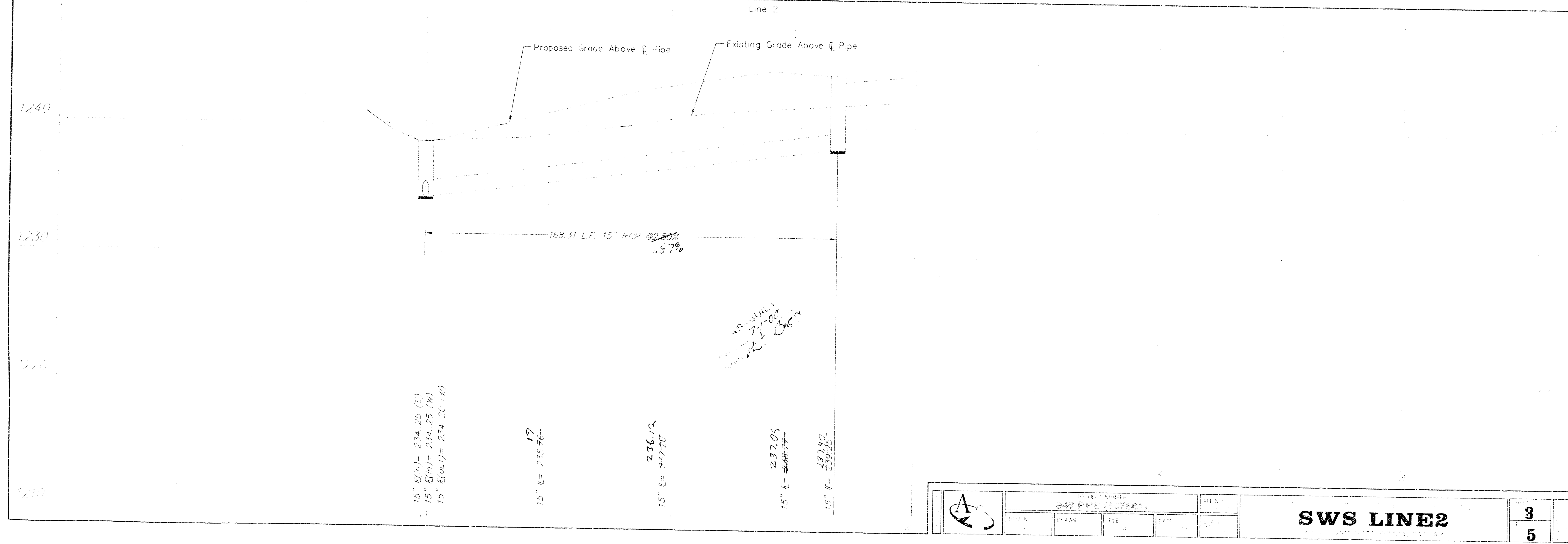
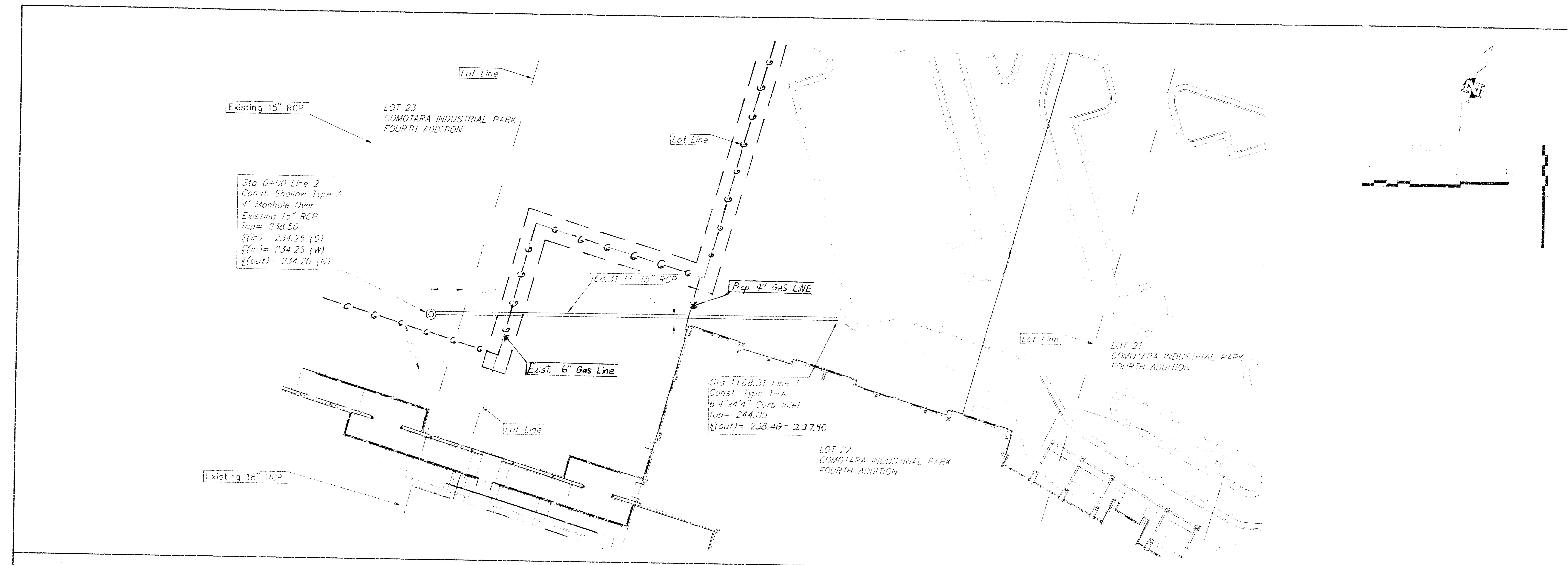
LOCATION MAP

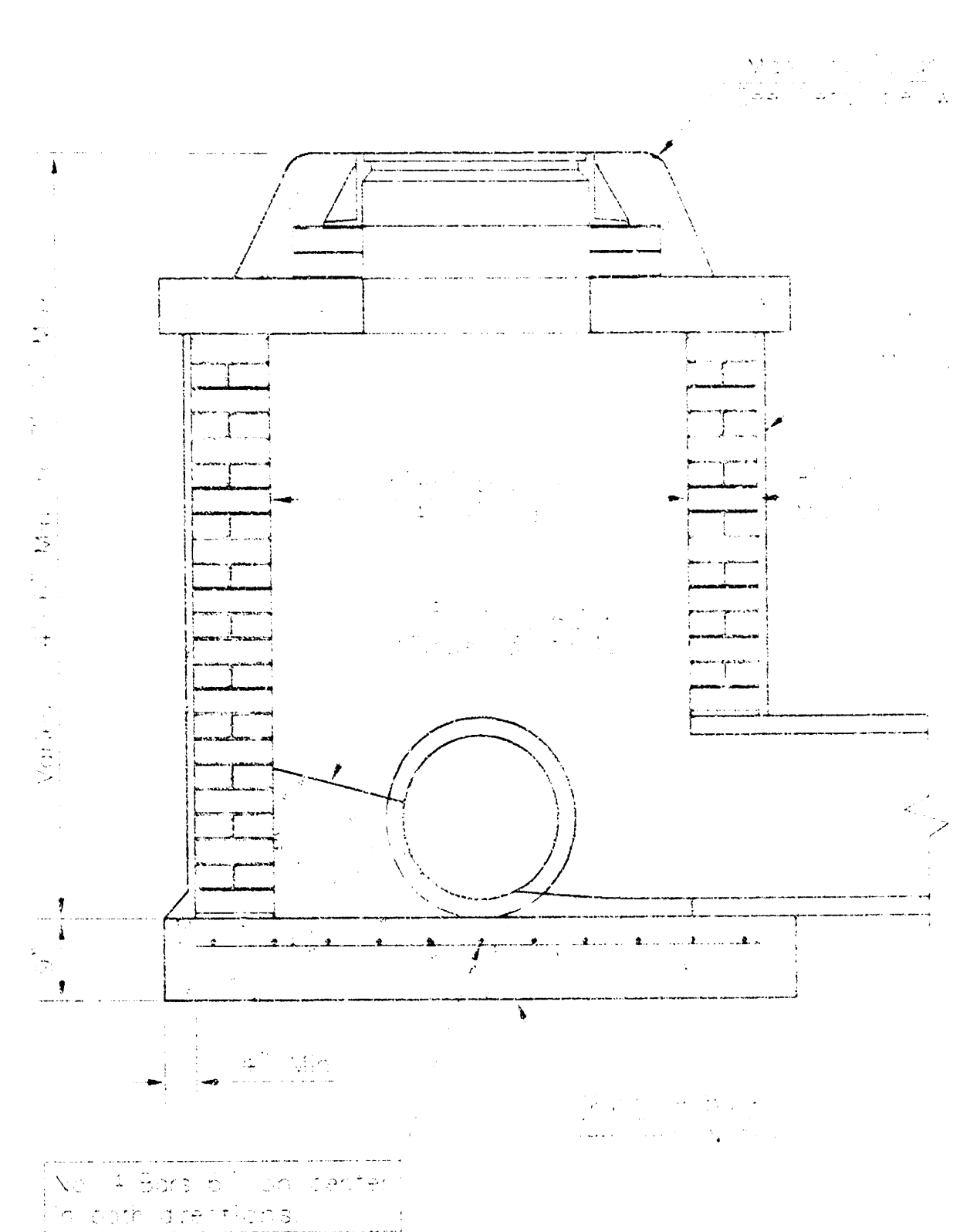


AUSTIN
ENGINEERING SERVICES
P.A.

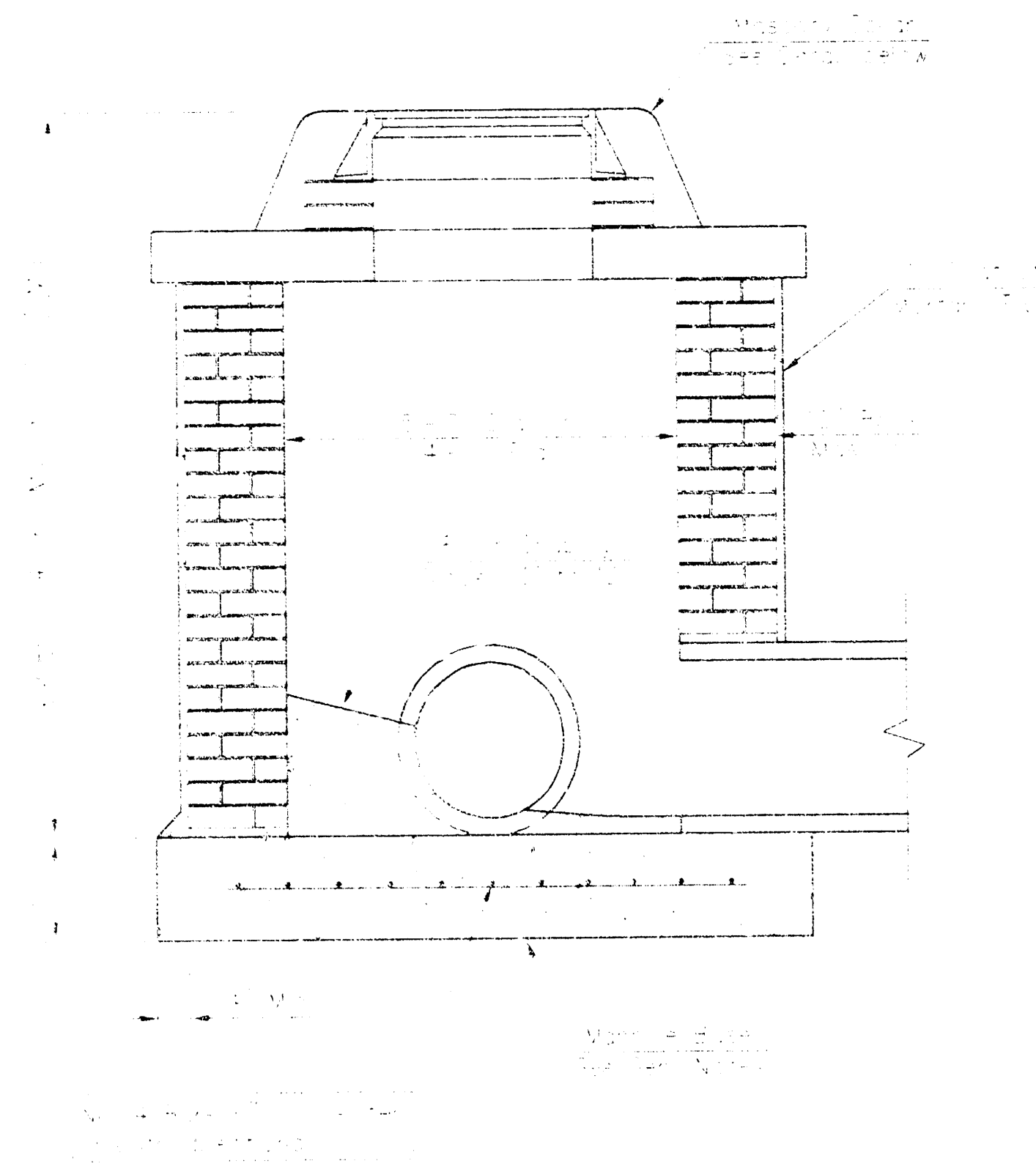


PROJECT NUMBER				SWS LINE 1		2
DRAWN BY				5		
CHECKED BY						
DATE						
SCALE						
SHEET NUMBER						

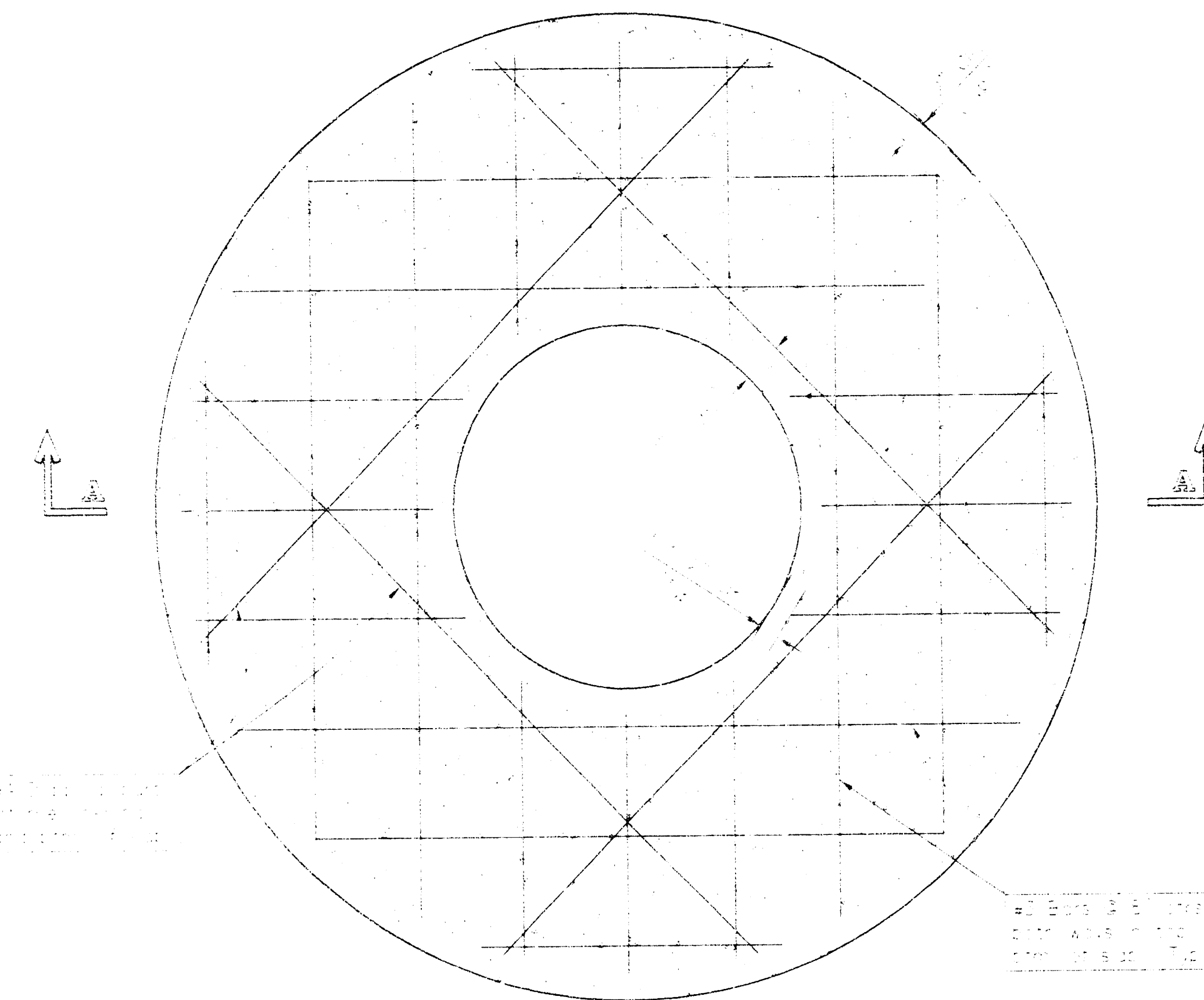




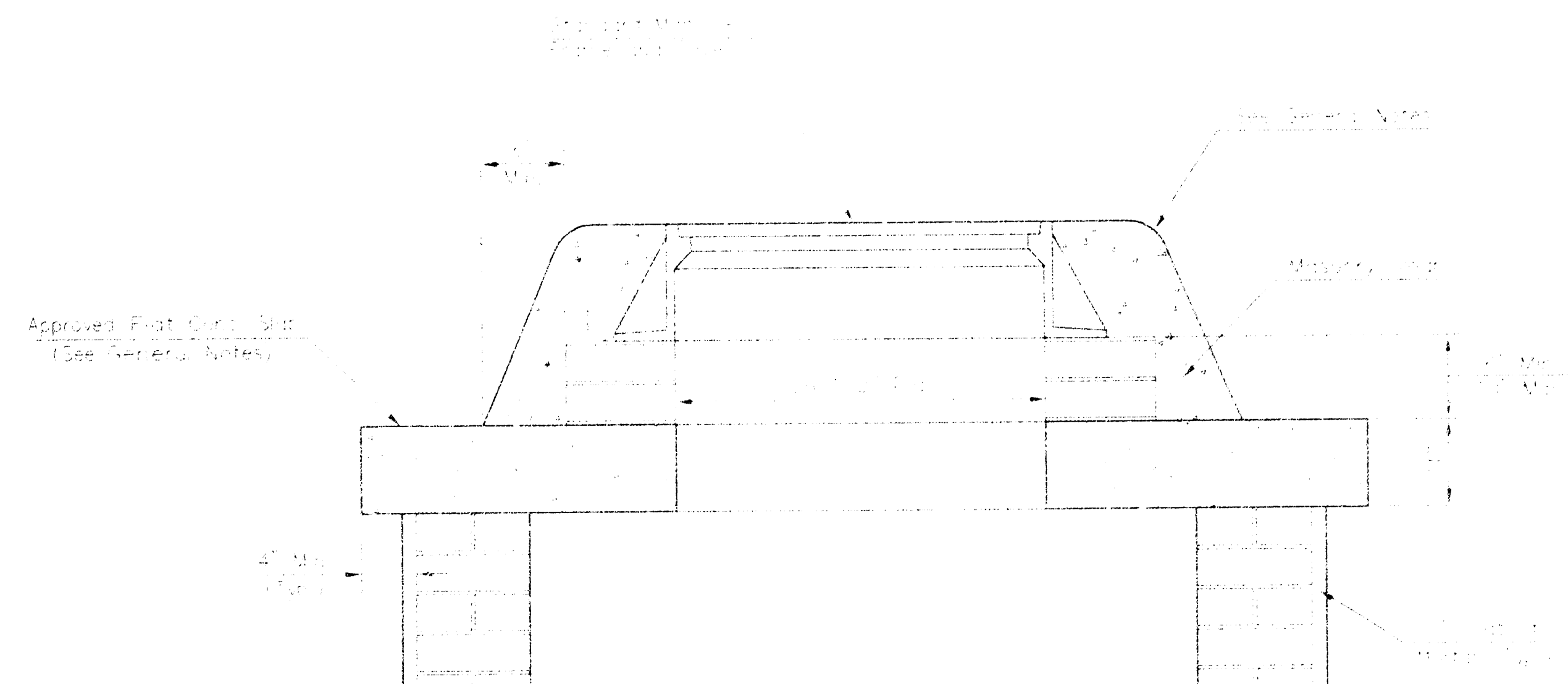
SHALLOW TYPE "A" MANHOLE



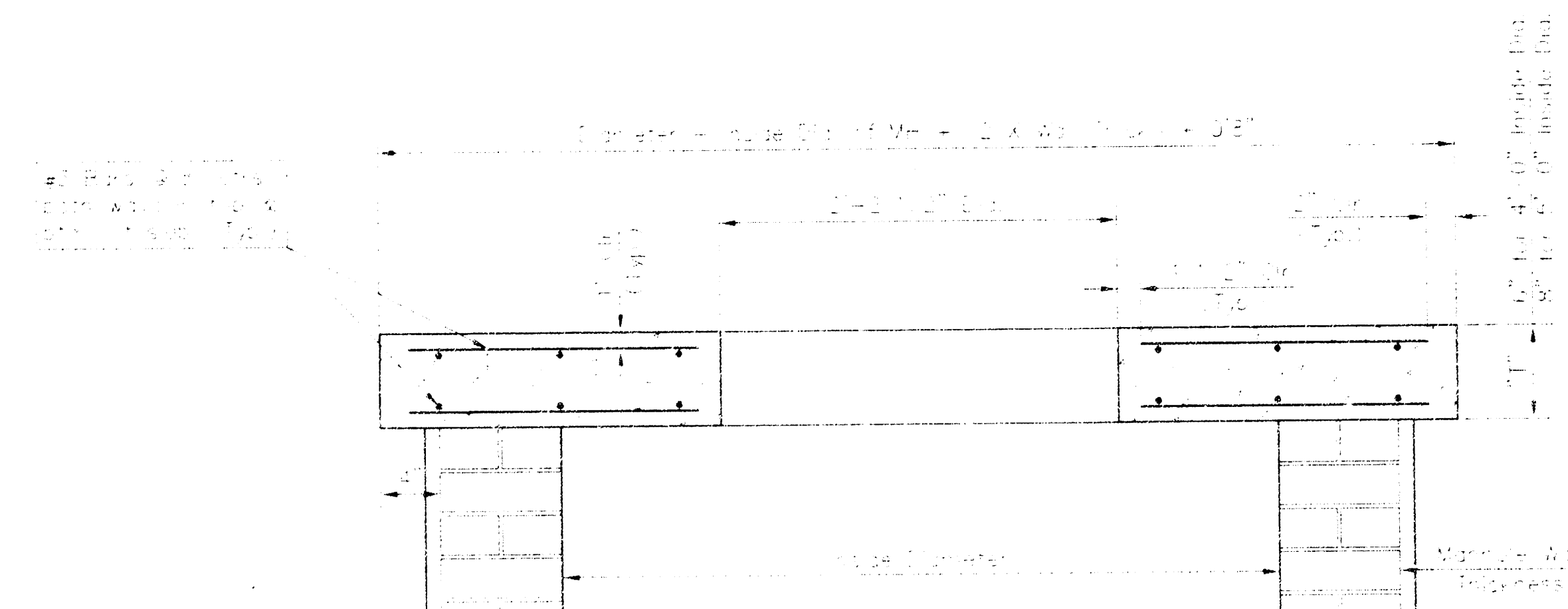
SHALLOW TYPE "B" MANHOLE



PLAN



MASONRY COLLAR DETAIL

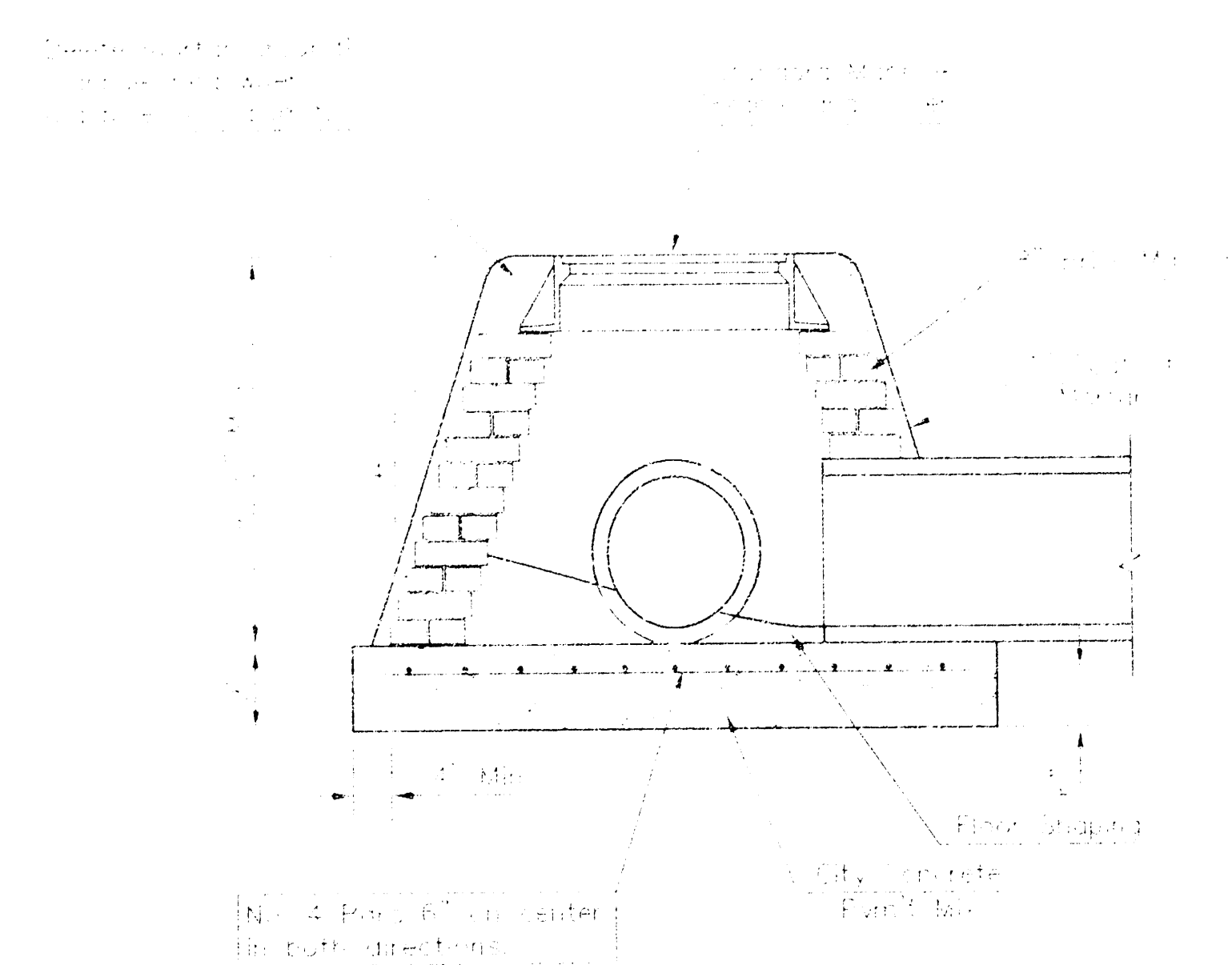


SECTION A-A

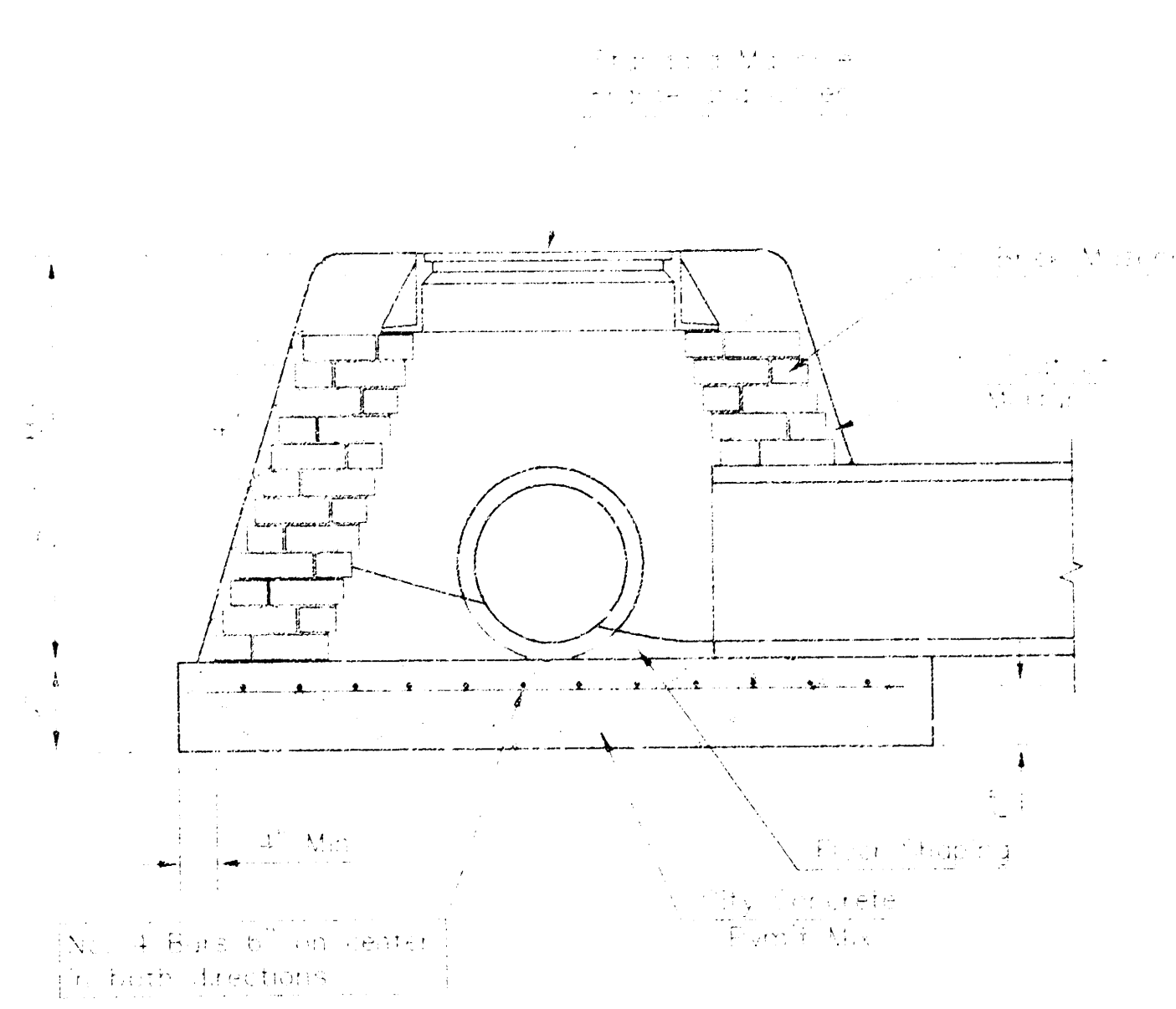
FLAT CONCRETE SLAB DETAILS

GENERAL NOTES

- Mortar used in masonry construction shall contain 8 sacks of cement per cubic yard. Concrete used in manhole bases shall conform to the requirements of concrete for concrete pavement construction as specified in the city standard paving specifications using city concrete cement mix without air entraining admixture. Mortar shall be placed around the manhole ring as shown on the drawings when manholes are constructed in unpaved areas. Type "A" shallow manholes can be used on sewers when the manhole is not located within public street pavement. Manholes constructed where pipe sizes are smaller than 24" shall have an inside diameter of 4'. Manholes constructed where pipe sizes are 24" or larger shall have an inside diameter of 5'. Completed manhole shall be without leaks and water tight.
- Reinforcing steel shall be installed in the manhole bases and shall consist of no. 4 bars placed on 6" centers in both directions. The manhole base reinforcement shall be placed 6" above the bottom of the manhole base. All costs for furnishing and installing reinforcing steel shall be included in the unit price bid for the manhole.
- The floors of all manholes shall be shaped with flow channels such that the manholes will be self cleaning and free of areas where solids could be deposited as sewage flows through the manhole from inlet pipes to the outlet pipe. Flow channels shall be formed to match the bottom halves of the inflowing pipes and the outflowing pipe as shown by the drawings. Manhole floors shall have slopes of 3 inches per foot in the areas outside of the flow channels sloped toward the flow channels. Pipes laid through manholes shall have the top half removed to neat lines for the full inside diameter of the manhole. Manhole floors shall then be shaped around the bottom half of the pipe which forms the flow channel.
- Pipes installed within the excavation made for the manhole shall be cradled with concrete to the limits of the manhole excavation. When clay pipe is used, the cradle shall extend to the first joint outside the manhole. The cradle shall be terminated at the clay pipe joint in a manner which will maintain the flexibility of the joint. Cost of cradle within manhole excavation or to clay pipe joints adjacent to manhole shall be included in the unit price bid for the manhole.
- Manhole cover castings and manhole frame castings shall conform to the requirements as indicated in the standard specifications and as shown in the standard detail drawings.
- The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.
- Standard shallow manholes type "A" and "B" shall be paid for at the unit price bid per each for the type and diameter indicated. Standard special shallow manholes type "A" and "B" shall be paid for at the unit price bid per each for the type indicated. All standard shallow manhole diameters will be 4' unless indicated otherwise.
- All brick used in manhole construction shall meet Grade SW of ASTM C652 or C62-67.

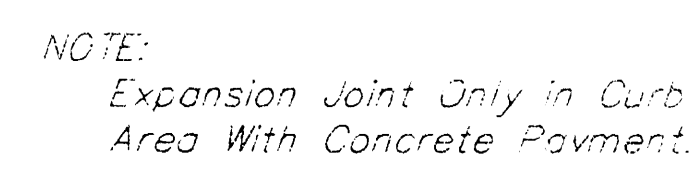


SPECIAL SHALLOW TYPE "A" MANHOLE



SPECIAL SHALLOW TYPE "B" MANHOLE

CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 435 NORTH MAIN STREET WICHITA, KANSAS 67202 (316) 268-4114 FAX	STANDARD/SPECIAL SHALLOW MANHOLES TYPE "A" & "B"	
	M. E. LINDEBAK P.E. - CITY ENGINEER	
	PROJECT NUMBER XXX-XXXX	INDEX CODE XXXXXX
	DATE MAR 95	SHEET 4 OF 5



NOTE:
Inlet Top Reinforcing shall be
Spaced on 6" Max. Centers.
Inlet Lids Shall be Notched Out
as Indicated to Facilitate
Construction of Curb.

NOTE:
Concrete Taps to be installed on
thin mortar cushion to insure full
support along brick walls. Concrete
taps may be cast in place or precast.
Concrete used for inlet construction
shall be concrete pavement mix
with air entrainment.



NOTE: Contractor shall have the option of constructing 8" brick masonry walls between the concrete inlet base and top on this inlet when W=6'-4" and H=7'-0" or less.

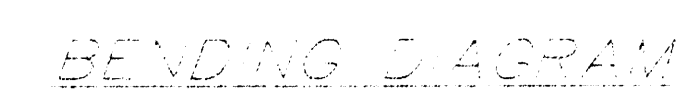
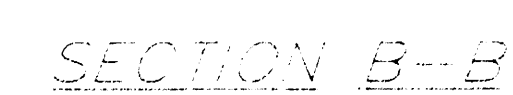
Additional curb and gutter construction necessary to connect set-back inlet to pavement will be paid for at the unit price bid for each inlet hookup.

inlet invert shall be started with 8 sack sand mix concrete to create flow channels and to increase hydraulic efficiency such that the inlet will be self-cleaning between all inlet and/or outlet pipes.

The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall.



***NOTE: Slope of Inlet tops to Match Sidewalk or Parking Slopes within Limits Indicated.



Weight = 180 lbs.

*See City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to Be Used With Inlet Frame.



STANDARD CURB INLET PRECAST TOPS			
#	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CON.
4'-0"	3'-8" x 6'-4" x 7 1/2"	36" x SWS, 12'	0.882
5'-0"	4'-8" x 6'-4" x 7 1/2"	36" x 36"	0.974
6'-0"	5'-8" x 6'-4" x 7 1/2"	36" x 42"	0.974
7'-0"	6'-8" x 6'-4" x 7 1/2"	48" x 36"	0.974
8'-0"	7'-8" x 6'-4" x 7 1/2"	60" x 36"	0.974

PREFAB SLAB AND FLOOR REINFORCING											
		H = 4'-6"		H = 5'-0"		H = 6'-0"		H = 7'-6"		H = 8'-6"	
WIDTH	SIZE	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH
01	#4	5	0'-7"	5	0'-7"	6	0'-7"	6	0'-7"	6	0'-7"
02	#4	4	5'-0"	4	5'-0"	4	10'-0"	4	12'-0"	4	14'-0"
03	#4	15	4'-0"	13	4'-0"	12	4'-0"	13	7'-0"	13	5'-0"
04	#4	1	4'-0"	1	4'-0"	4	8'-0"	1	8'-0"	1	5'-0"
100	#4	23	4'-0"	20	4'-0"	35	4'-0"	24	5'-0"	47	5'-0"
05	#4	9	3'-0"	5	4'-0"	5	4'-0"	6	3'-0"	8	5'-0"

		$N = 4 - 4^{\circ}$		$N = 5 - 4^{\circ}$		$N = 6 - 4^{\circ}$		$N = 7 - 4^{\circ}$		$N = 8 - 0^{\circ}$	
MARK	SIZE	N_2	LENGTH	N_3	LENGTH	N_4	LENGTH	N_5	LENGTH	N_6	LENGTH
n ₁	#4	12	6'-1"	10	6'-1"	8	6'-1"	6	6'-1"	4	6'-1"
n ₂	#4	12	6'-1"	10	6'-1"	8	6'-1"	6	6'-1"	4	6'-1"
n ₃	#4	32	7'-1"	36	7'-1"	40	7'-1"	44	7'-1"	48	7'-1"

* Field Bend or Cut Reinforcing as Required for Clearance.

① $4(HI - 12") (HI - 21")$ Rounded down to nearest 0.5"

$$\textcircled{2} M = 3^0$$
