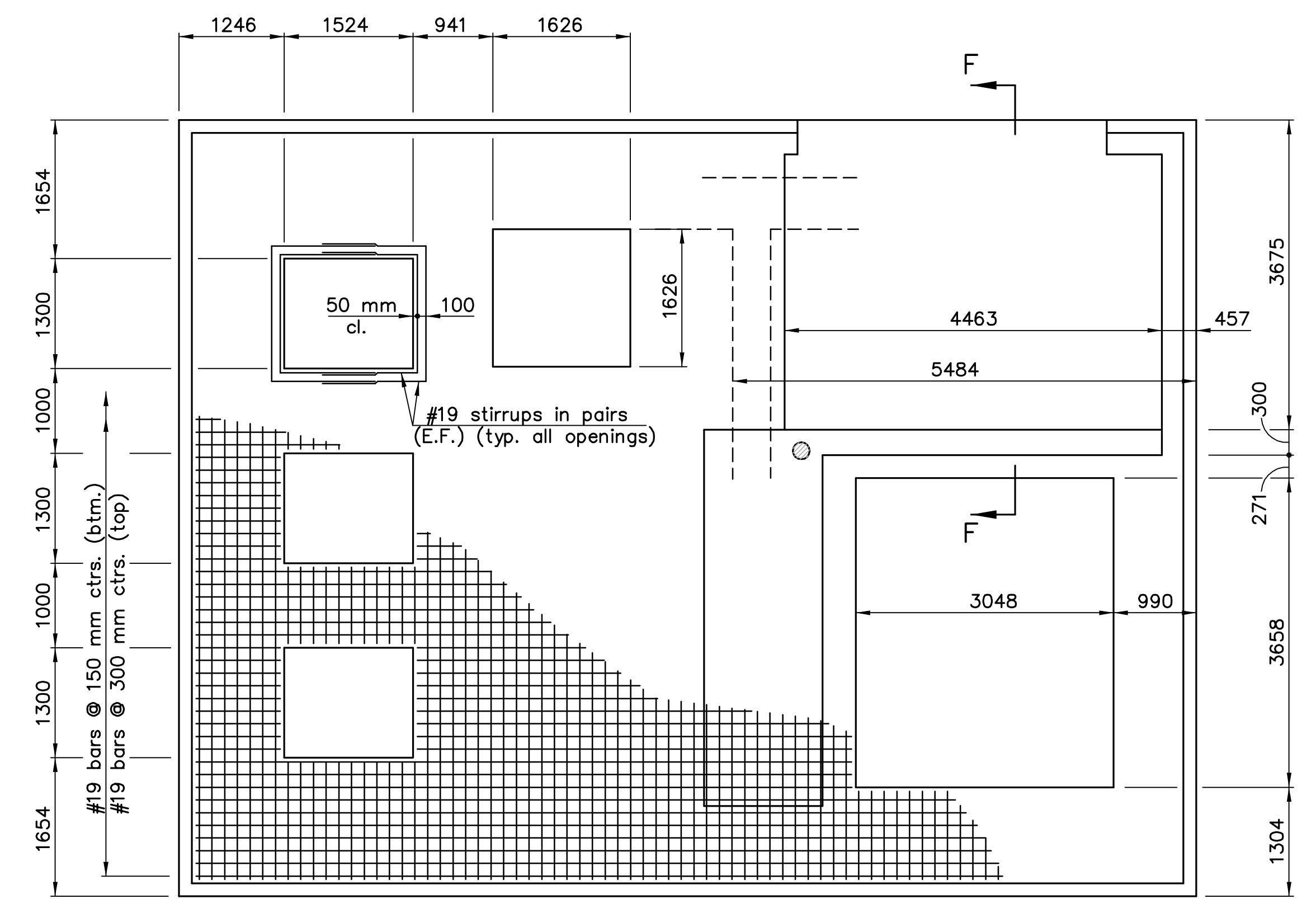
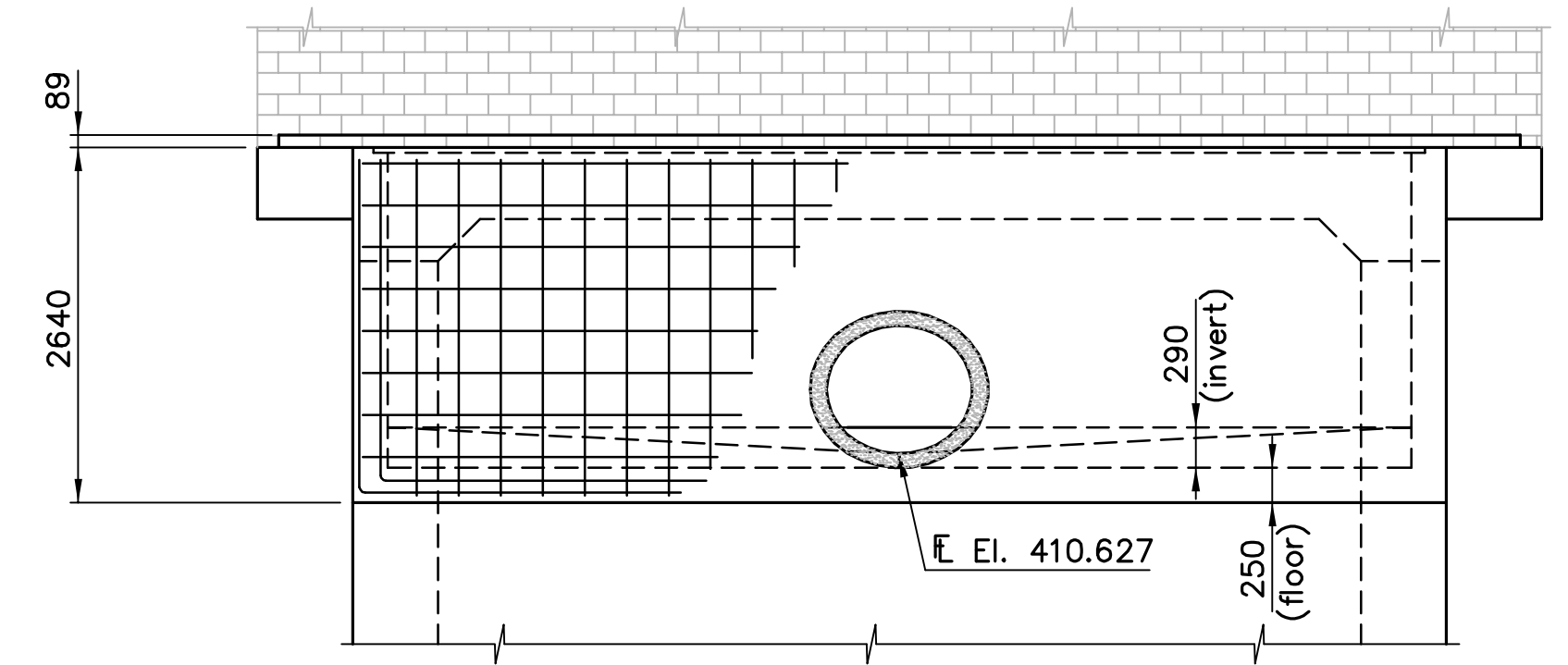


E.F. INDICATES EACH FACE.
N.F. INDICATES NEAR FACE.
F.F. INDICATES FAR FACE.

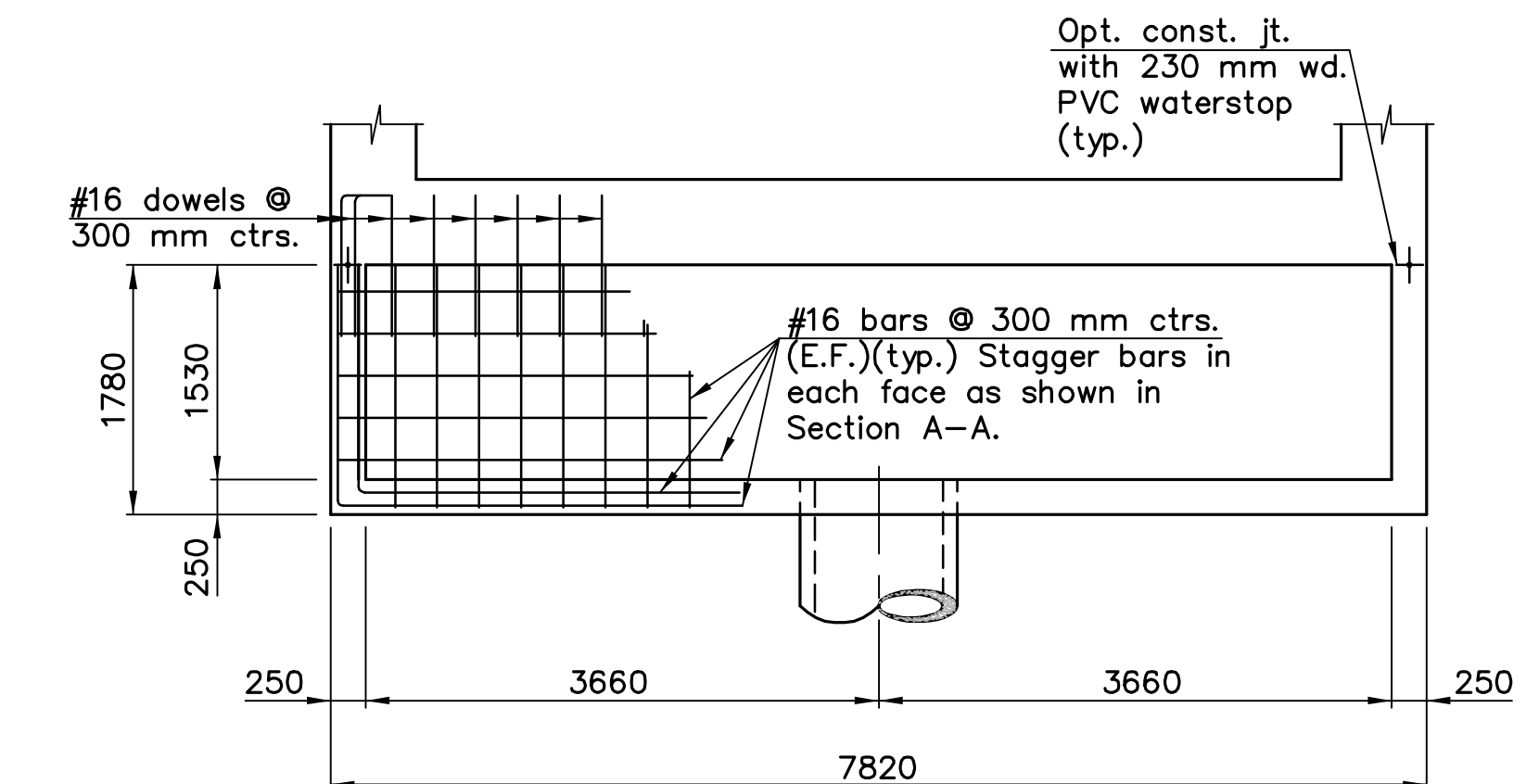
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	54-87 K-8258-03	2003	14	27



PLAN
(Building slab reinforcing)

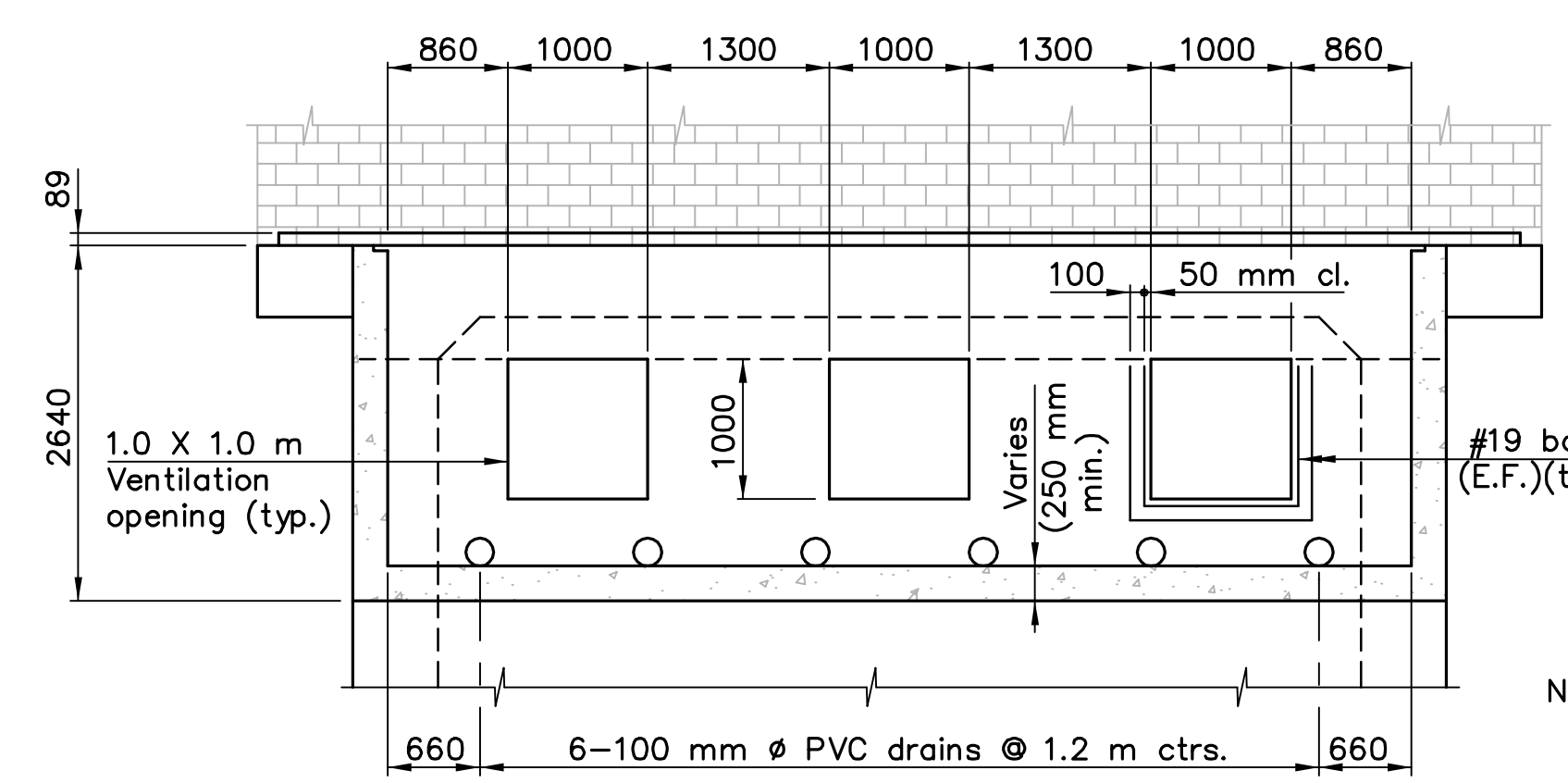


ELEVATION WEST BASIN
(Outlet basin)

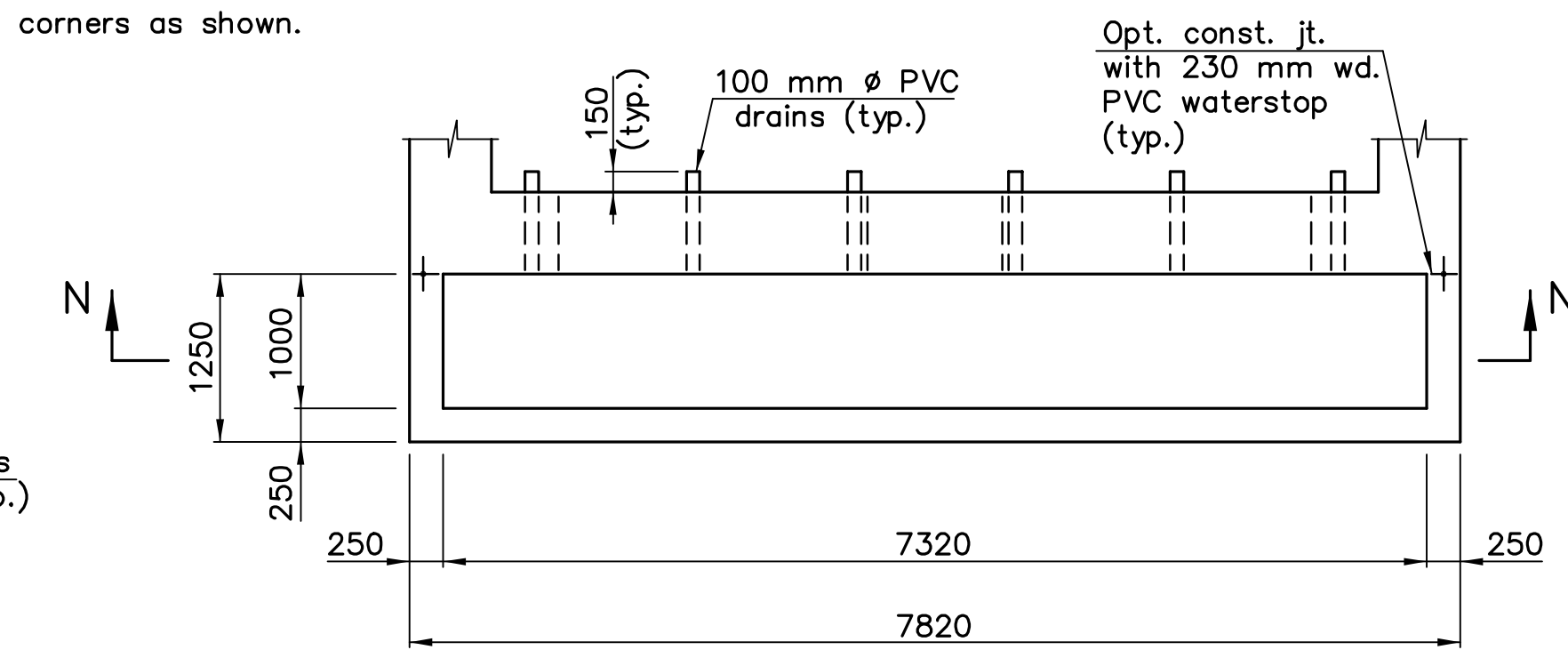


PLAN WEST BASIN
(Outlet basin)

Note: All reinforcing in outlet basin and ventilation basin shall be #16 bars at 300 mm ctrs. each face and staggered. Bars to be continuous around corners as shown.

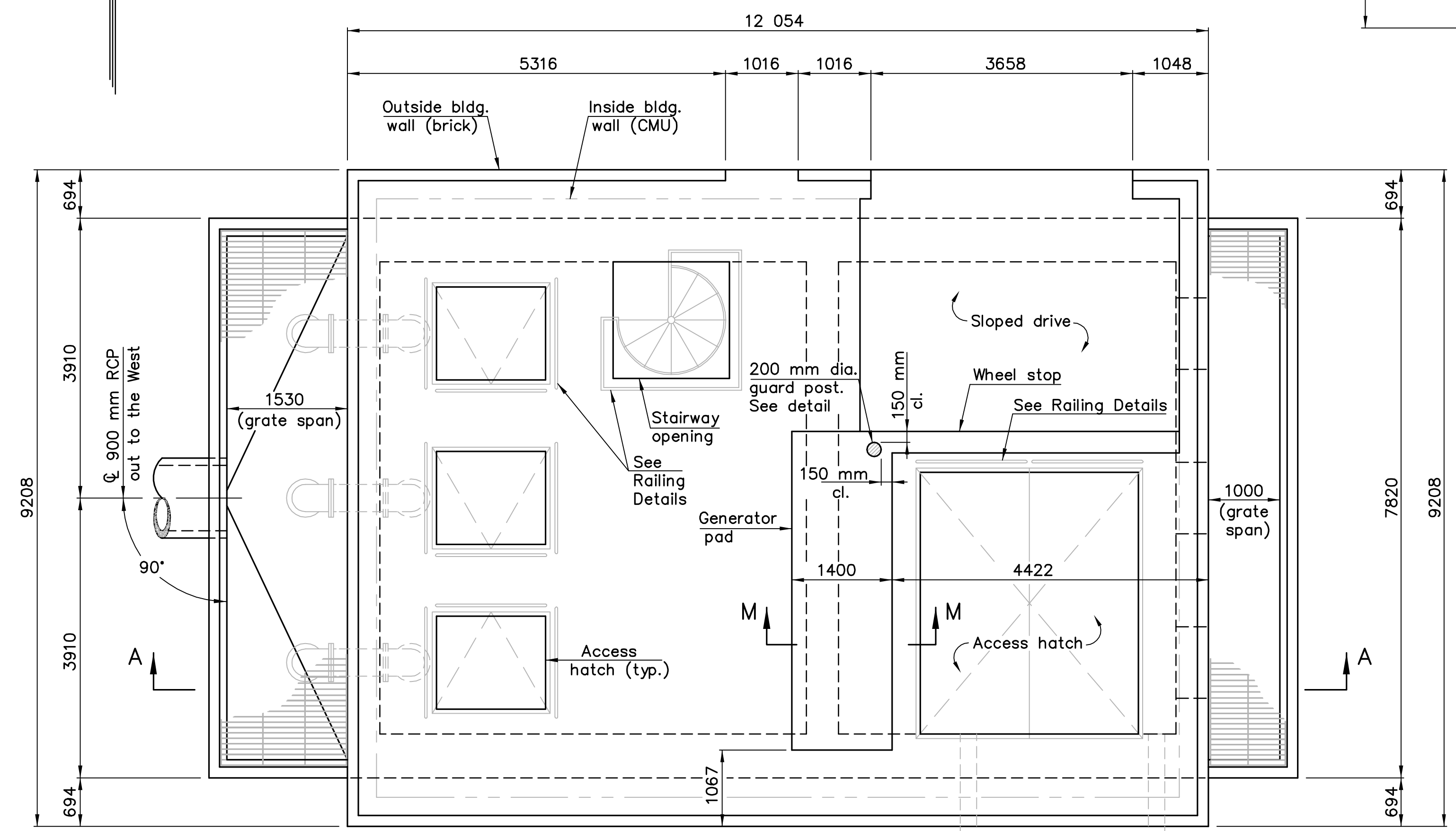


SECTION N-N

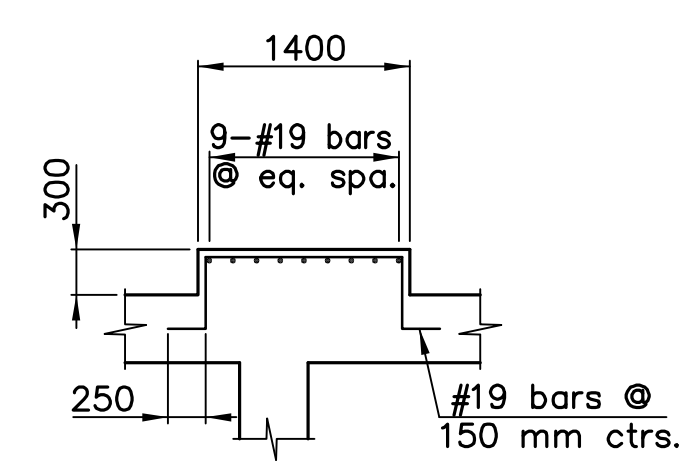


PLAN EAST BASIN
(Ventilation basin)

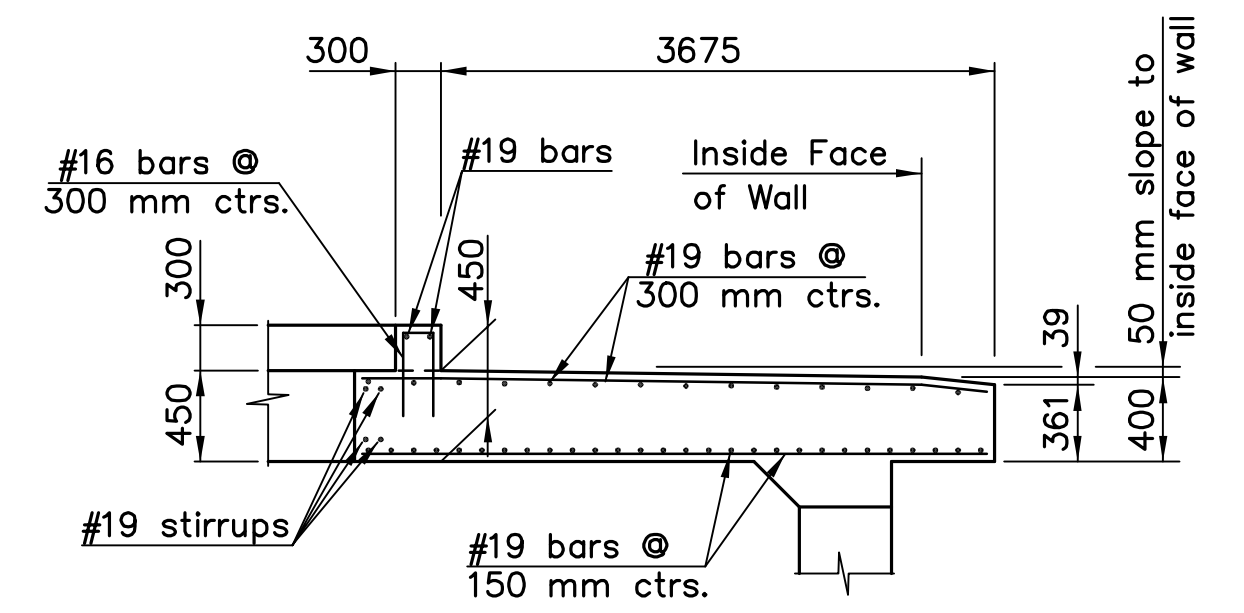
Note: Reinforcing to be same size, spacing and configuration as the west outlet basin.



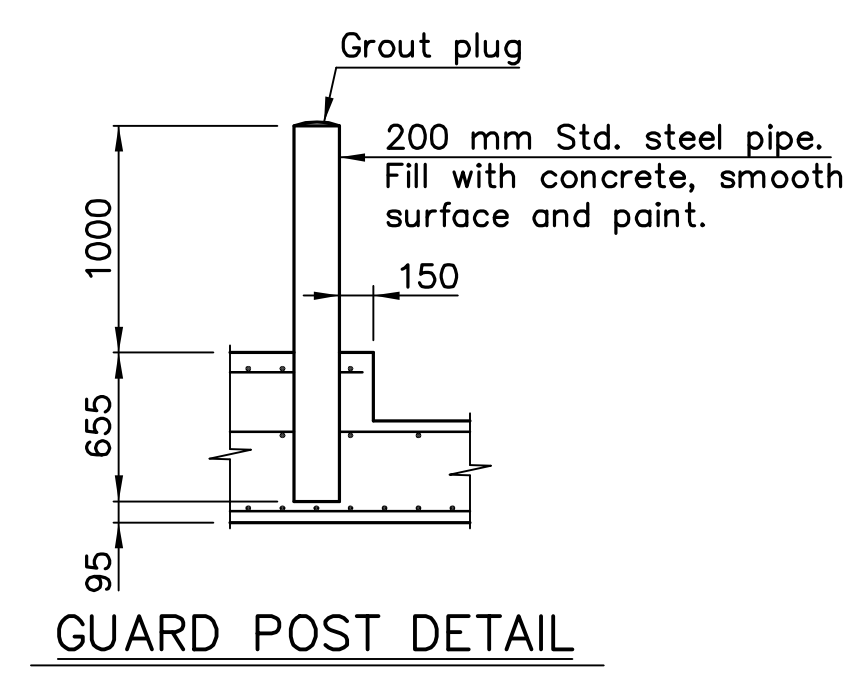
PLAN
(Building slab, outlet basin & ventilation basin)



SECTION M-M



SECTION F-F



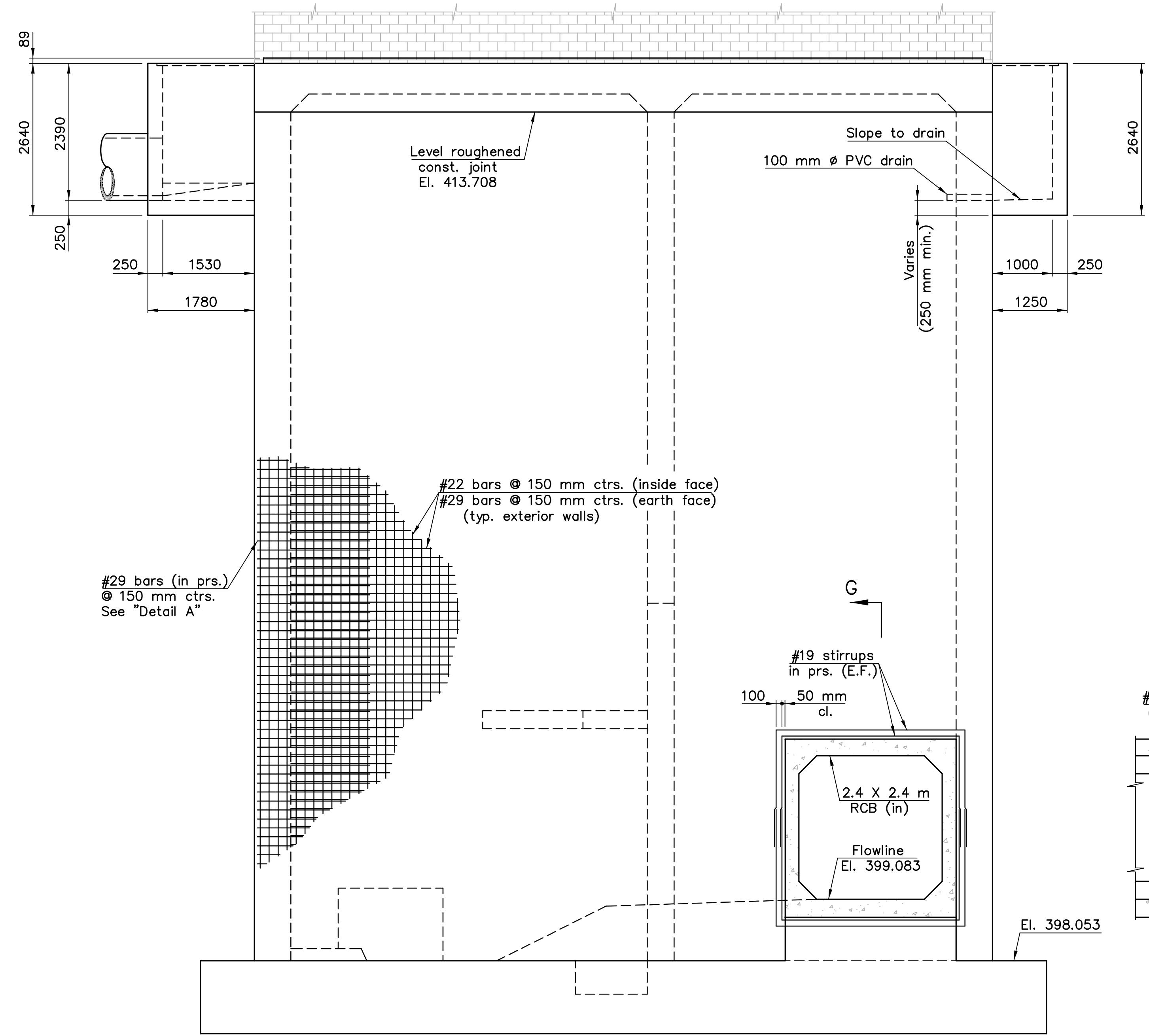
GUARD POST DETAIL

/PUMP-STATION/DETAILS 1:50 (Plot 1:05)

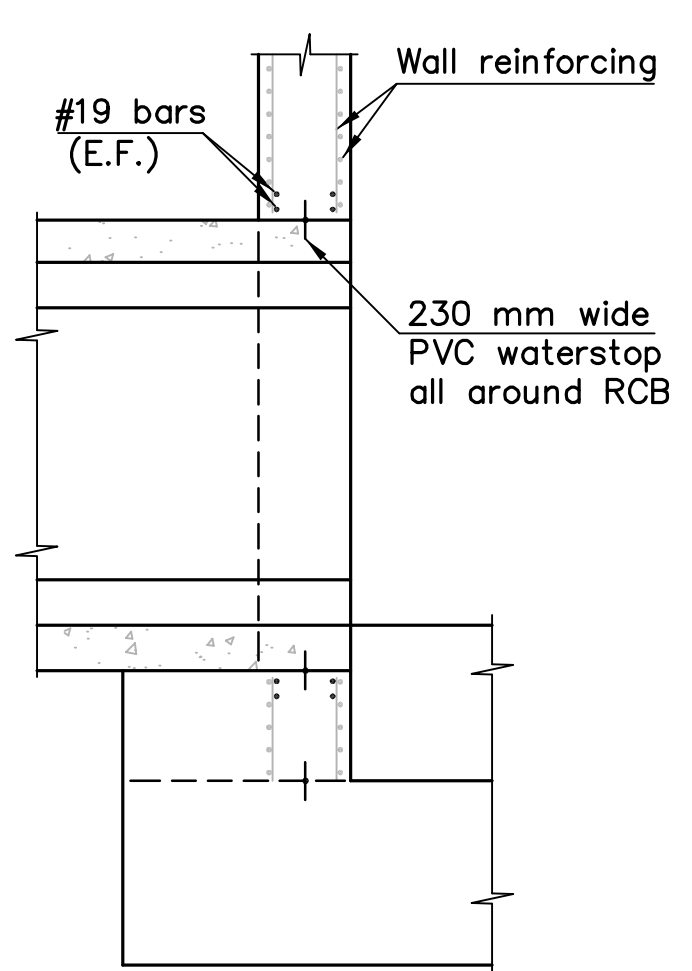
KANSAS DEPARTMENT OF TRANSPORTATION			
ROCK ROAD PUMP STATION		WETWELL DETAILS	
DESIGNED R.S.C.		SCALE Varies	
DETAILED D.E.G.		DATE	
Proj. No. 54-87 K-8258-03		SEDGWICK COUNTY	
QUANTITIES D.E.G.		SHEET 1 OF 5	

E.F. INDICATES EACH FACE.
 N.F. INDICATES NEAR FACE.
 F.F. INDICATES FAR FACE.

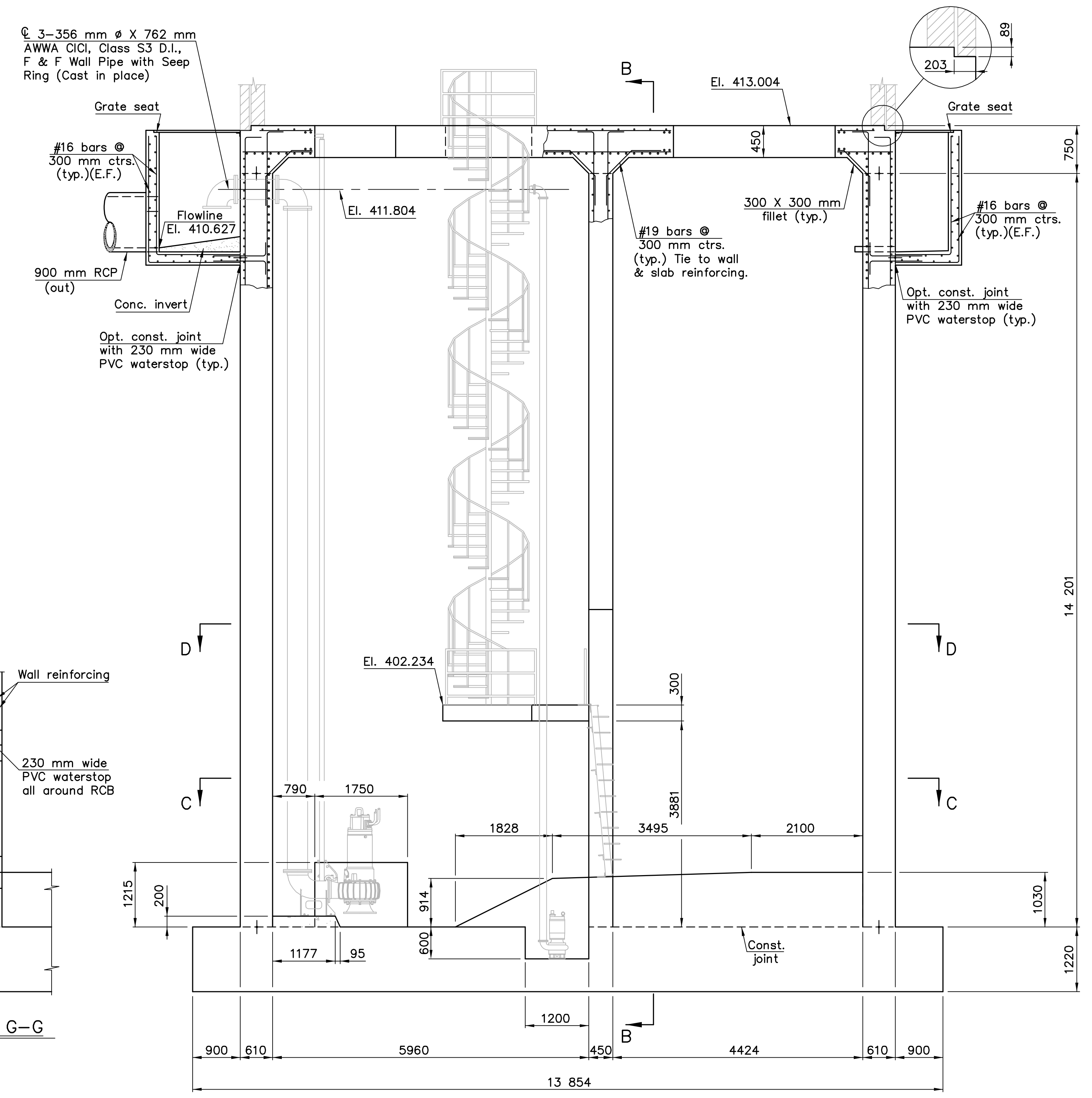
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KANSAS	54-87 K-8258-03	2003	15	27



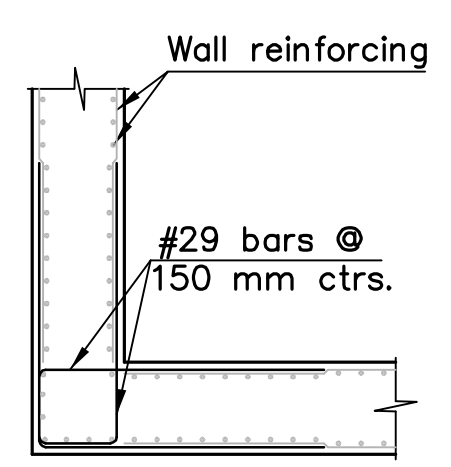
ELEVATION



SECTION G-G



SECTION A-A



DETAIL A

/PUMP-STATION/DETAILS 1:50 (Plot 1:05)

KANSAS DEPARTMENT OF TRANSPORTATION

**ROCK ROAD PUMP STATION
 WETWELL DETAILS**

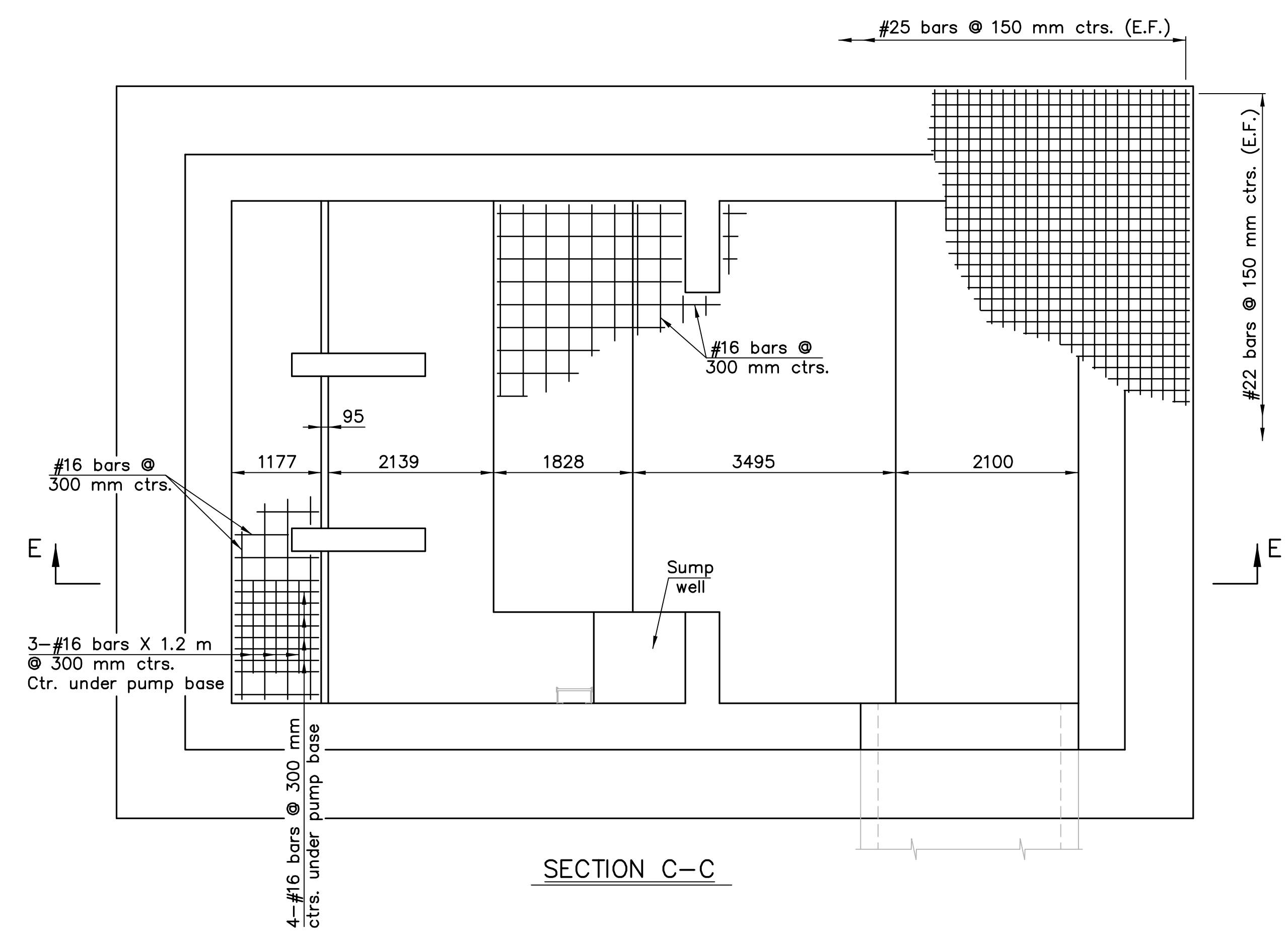
Cook, Flatt & Strobel
 ENGINEERS, P.A.

DESIGNED R.S.C. SCALE Varies
 DETAILED D.E.G. DATE
 QUANTITIES D.E.G. SHEET 2 OF 5

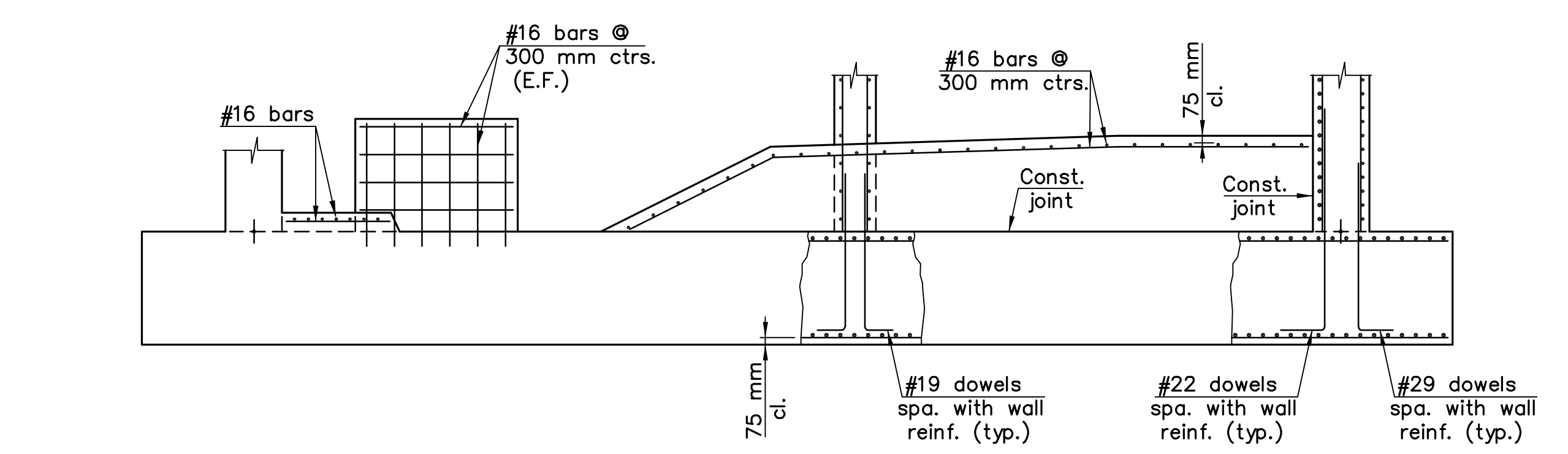
Proj. No. 54-87 K-8258-03 SEDGWICK COUNTY

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 F.F. INDICATES FAR FACE.

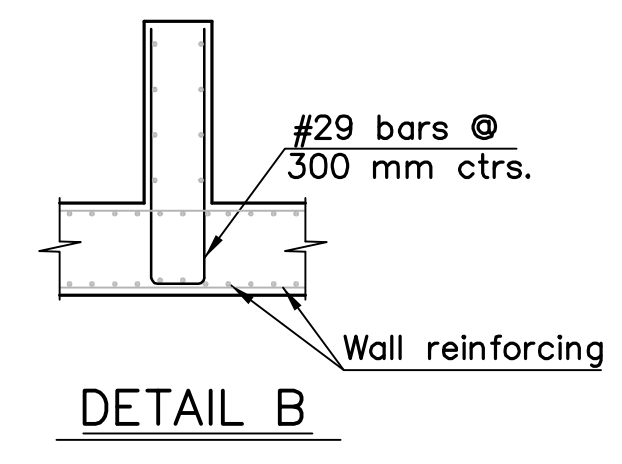
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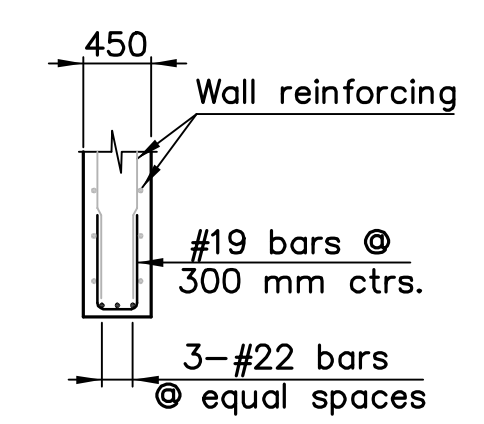
SECTION C-C



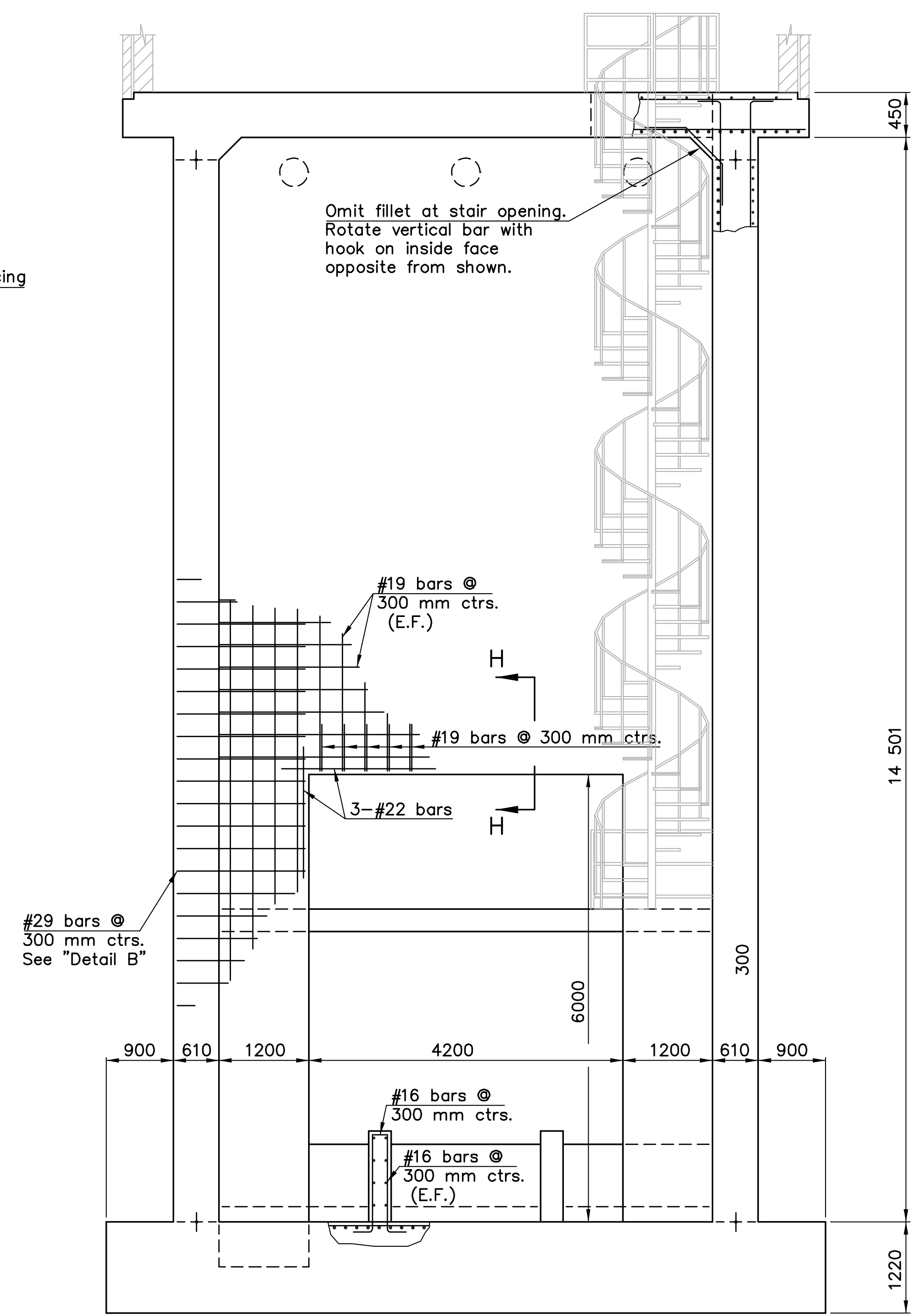
SECTION E-E



DETAIL B




SECTION H-H



SECTION B-B

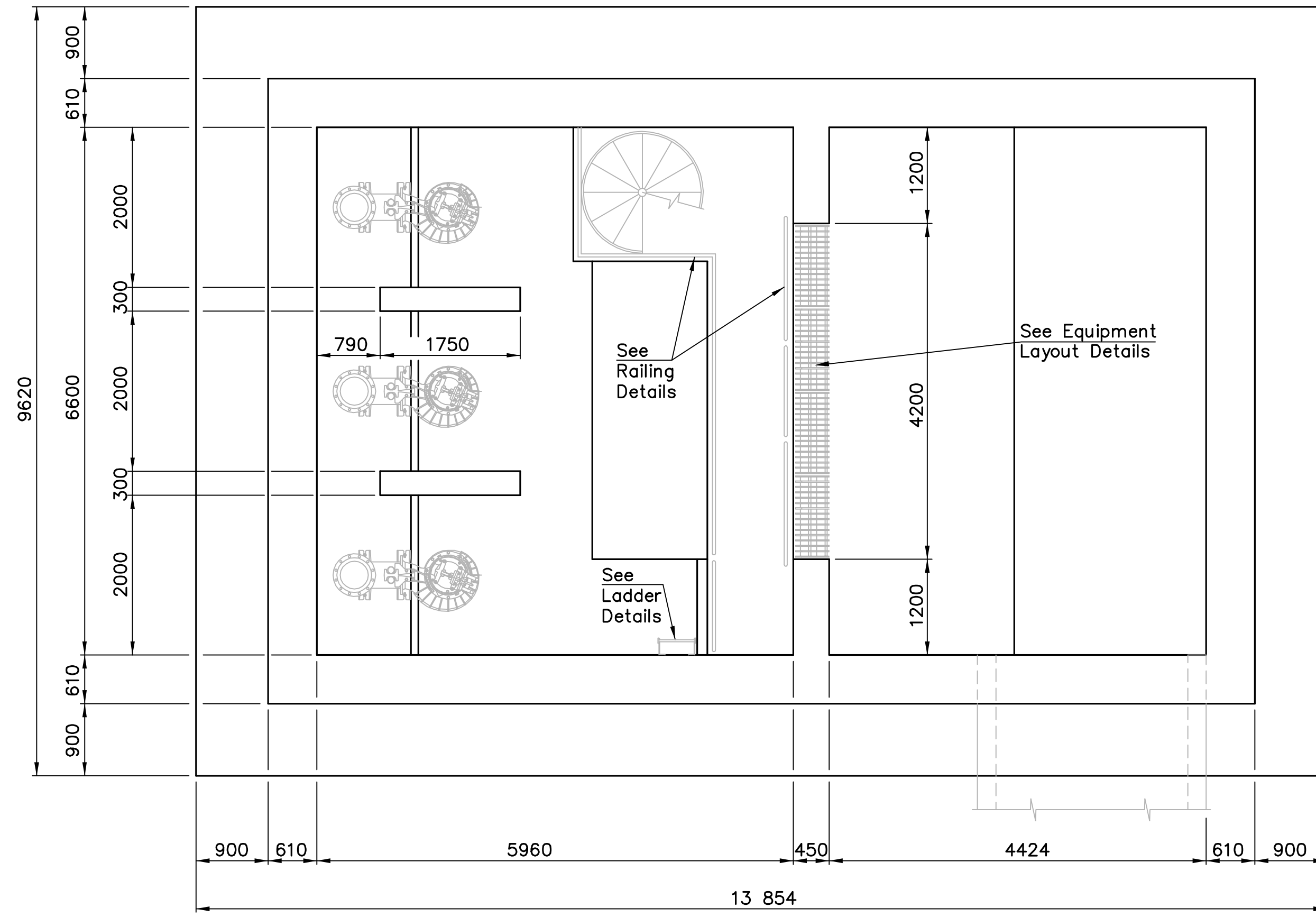
/PUMP-STATION/DETAILS 1:50 (Plot 1:05)

KANSAS DEPARTMENT OF TRANSPORTATION		 Cook, Flatt & Strobel ENGINEERS, P.A.	
ROCK ROAD PUMP STATION WETWELL DETAILS			
DESIGNED	R.S.C.	SCALE	Varies
DETAILED	D.E.G.	DATE	
QUANTITIES	D.E.G.	SHEET	3 OF 5

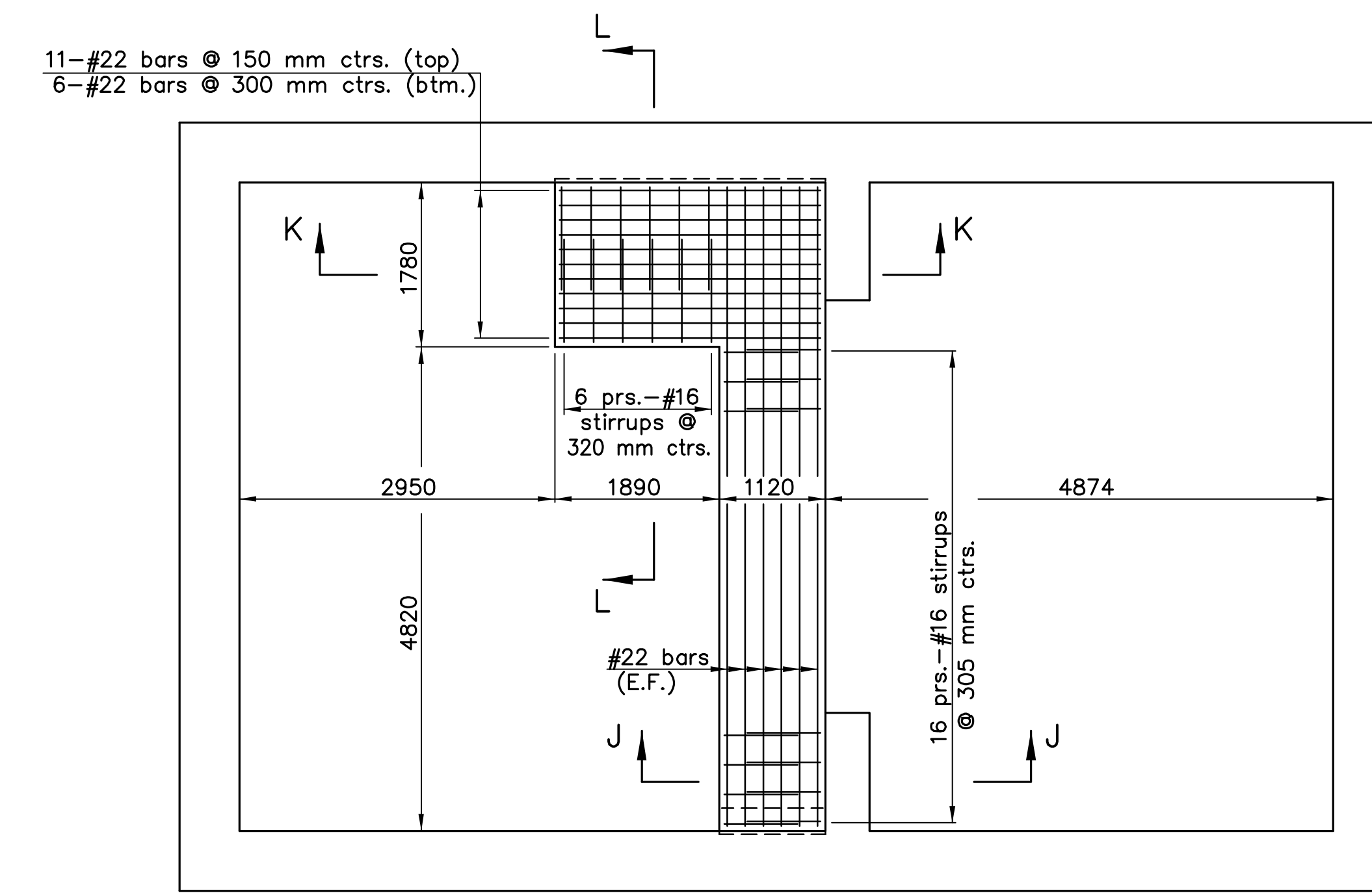
Proj. No. 54-87 K-8258-03 SEDGWICK COUNTY

E.F. INDICATES EACH FACE.
N.F. INDICATES NEAR FACE.
F.F. INDICATES FAR FACE.

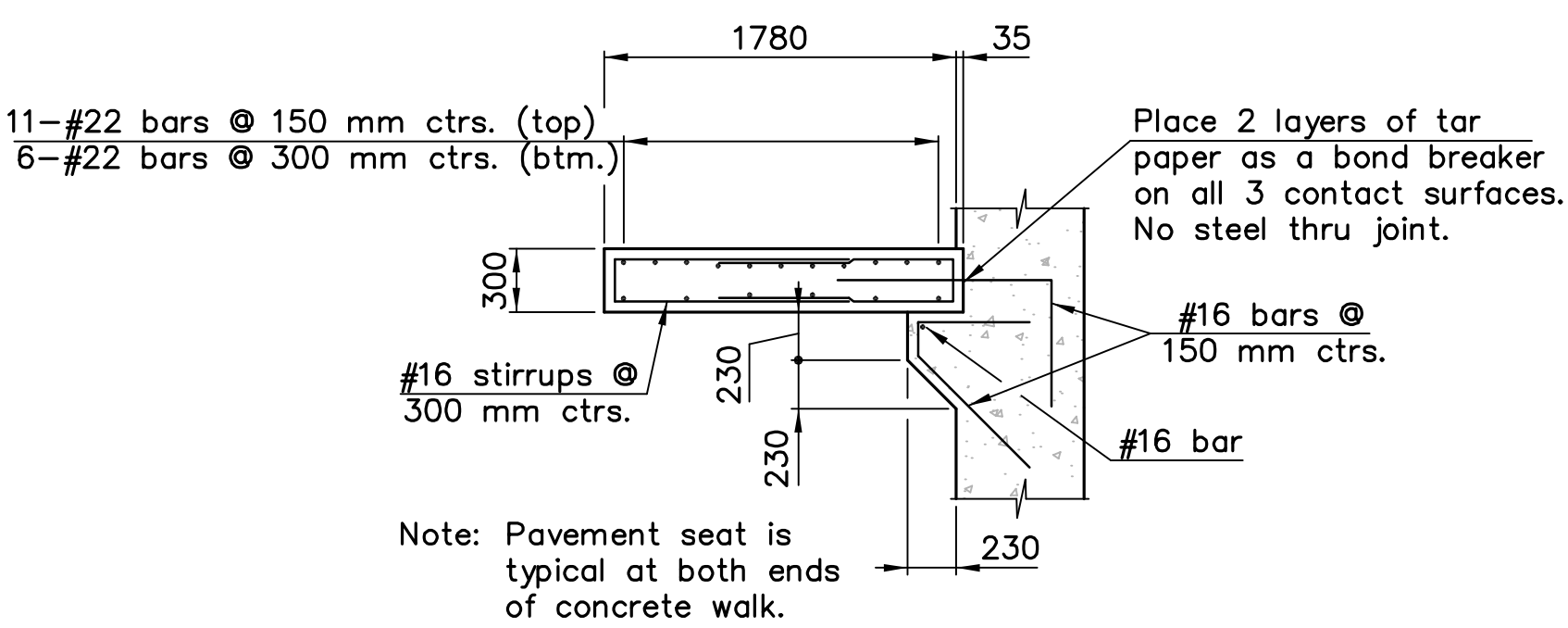
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	54-87 K-8258-03	2003	17	27



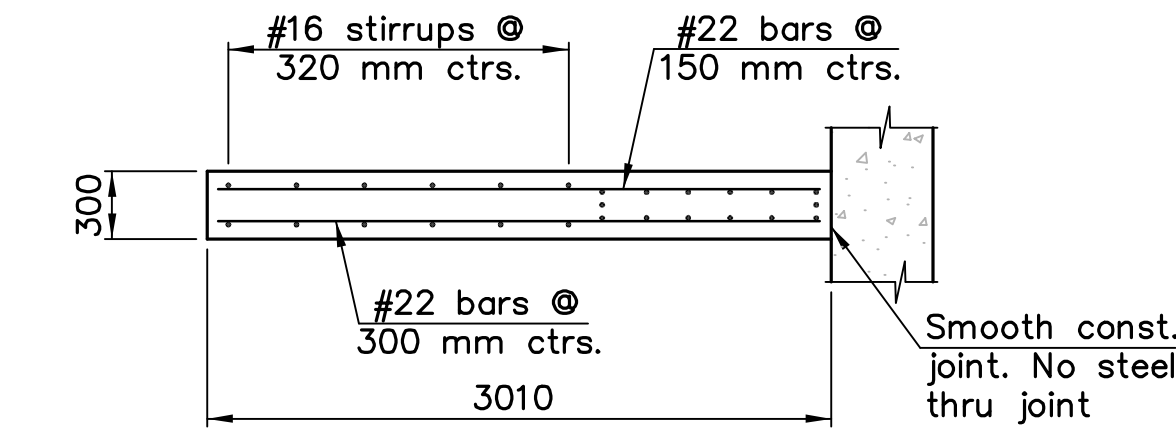
PLAN
(Wetwell)



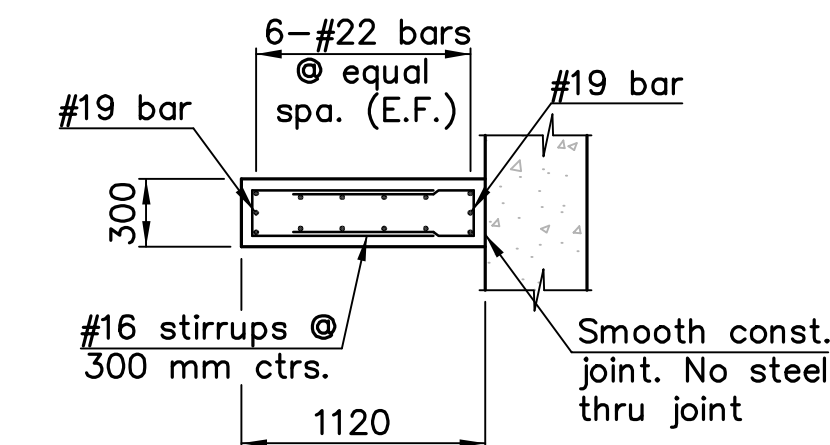
SECTION D-D



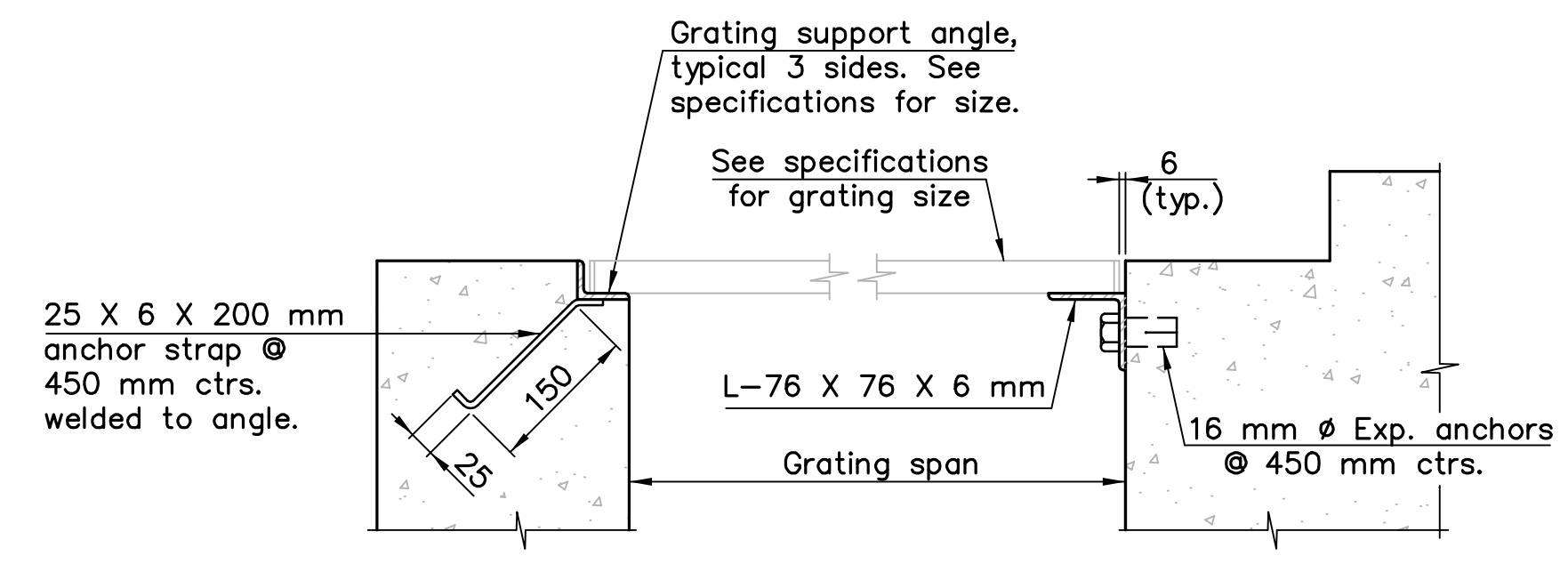
SECTION L-L



SECTION K-K



SECTION J-J



GRATING SUPPORT DETAILS

GENERAL NOTES

EXCAVATION AND BACKFILL: FOR DEWATERING, EXCAVATION & STRUCTURAL BACKFILL INFORMATION SEE SPECIFICATIONS.
 ALL EXCAVATION FOR STRUCTURES SHALL BE KEPT DEWATERED UNTIL BACKFILL IS IN PLACE AND THE MAXIMUM WEIGHT OF WATER DISPLACED BY THE STRUCTURE IS LESS THAN 85% OF THE UP-LIFT RESISTING CAPACITY OF DEAD WEIGHT OF THE STRUCTURE AND BACKFILL. CONTRACTOR SHALL SUBMIT UP-LIFT CALCULATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO STOPPING DEWATERING.
 BACKFILL SIMULTANEOUSLY ON OPPOSITE SIDES OF THE STRUCTURE. DO NOT BACKFILL BEFORE SLABS ARE CURED IN ACCORDANCE WITH THE SPECIFICATIONS AND CANTILEVER ACTION OF WALLS IS ELIMINATED.
 WHERE FOUNDATION IS OVER EXCAVATED, REMOVE ALL DISTURBED FOUNDATION SOIL AND REPLACE WITH LEAN CONCRETE OR WELL COMPACTED GRANULAR FILL.
 OVER EXCAVATE UNSUITABLE FOUNDATION SOIL WHERE REQUIRED BY THE ENGINEER AND REPLACE WITH WELL COMPACTED GRANULAR FILL OR LEAN CONCRETE. SEE SPECIFICATIONS.
 SPECIAL MEASURES SHALL BE TAKEN WHEN USING HEAVY EQUIPMENT TO BACKFILL AND COMPACT CLOSE TO STRUCTURE TO AVOID HIGH LATERAL EARTH PRESSURE ON WALLS. ANY DAMAGE SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER. EXCAVATION AND BACKFILL IS NOT PAID FOR DIRECTLY BUT IS SUBSIDIARY TO THE ROCK ROAD PUMP STATION

RAILING & LADDER: SEE SPECIFICATIONS AND TYPICAL DETAILS.

GRATING: SEE SPECIFICATIONS.

SEE MECHANICAL, ELECTRICAL AND BUILDING DRAWINGS FOR OPENINGS, ANCHORS, ETC. NOT SHOWN IN THESE DRAWINGS.

THE WETWELL AND BUILDING SLAB DESIGN WAS PREPARED USING THE FOLLOWING DATA:
 (A) DESIGN LIVE LOADS
 BUILDING SLAB 5.7 kPa
 HORIZONTAL FLUID PRESSURE 4.8 kPa
 (B) DESIGN STRESSES
 CONCRETE (GRADE 30)(AE) $f'_c = 30$ MPA
 REINFORCING $f_y = 420$ MPA

REINFORCING STEEL: ALL DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING STEEL ARE TO CENTERLINE OF BARS UNLESS OTHERWISE NOTED. ALL REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615M-96, GRADE 420. ALL BAR HOOKS ARE STANDARD. UNLESS OTHERWISE NOTED, LAPS FOR REINFORCING SPLICES SHALL BE 40 BAR DIAMETERS OR 510 mm, WHICHEVER IS GREATER. MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 50 mm, UNLESS OTHERWISE SHOWN.

CONSTRUCTION JOINTS: INSTALL 10 X 230 mm PVC WATERSTOPS AT ALL JOINT LOCATIONS SHOWN. ALL CONSTRUCTION JOINTS NOT SHOWN ON THE DRAWINGS ARE SUBJECT TO THE WRITTEN APPROVAL OF THE ENGINEER. ALL CONSTRUCTION JOINTS SHALL BE ROUGHENED. THE JOINT SHALL BE ROUGHENED TO A FULL AMPLITUDE OF APPROXIMATELY 8 mm.

GEOLOGY: THE CONTRACTOR SHALL READ THE SUBSURFACE EXPLORATION AND GEOTECHNICAL REPORT BY GEOSYSTEMS AND FOLLOW THE INSTRUCTIONS GIVEN THEREIN.

MECHINAL/ELECTRICAL SLAB PENETRATIONS: FOR LOCATIONS OF HOLES, SLEEVES, ANCHOR BOLTS, PIPE, CONDUIT, ETC. COORDINATE WITH ALL PUMP STATION DRAWINGS AND APPROVED MANUFACTURER'S SHOP DRAWINGS. CORING OF CONCRETE SLAB, WALLS, FOOTINGS, ETC., IS UNACCEPTABLE

/PUMP-STATION/DETAILS 1:50 (Plot 1:05)

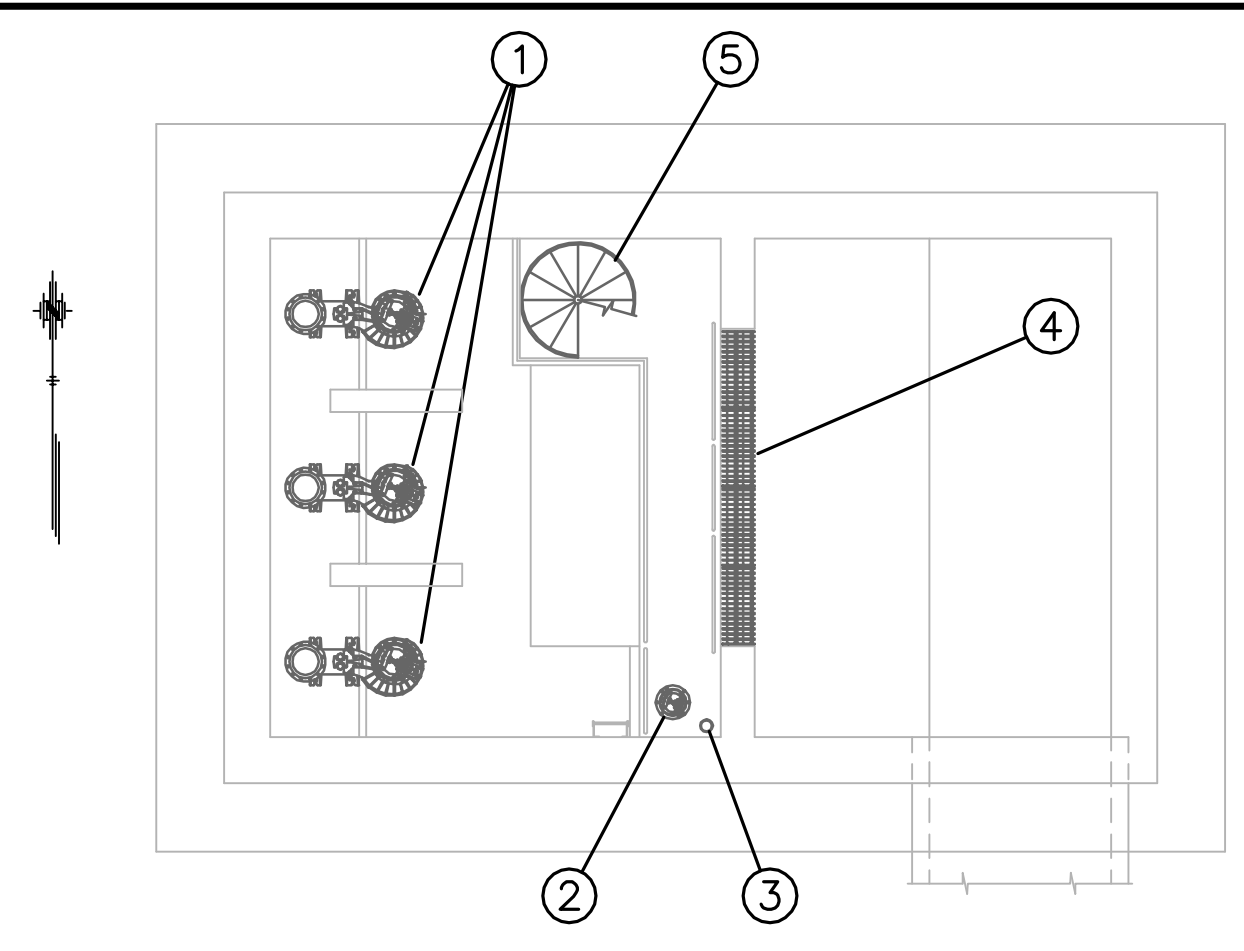
KANSAS DEPARTMENT OF TRANSPORTATION

**ROCK ROAD PUMP STATION
WETWELL DETAILS**

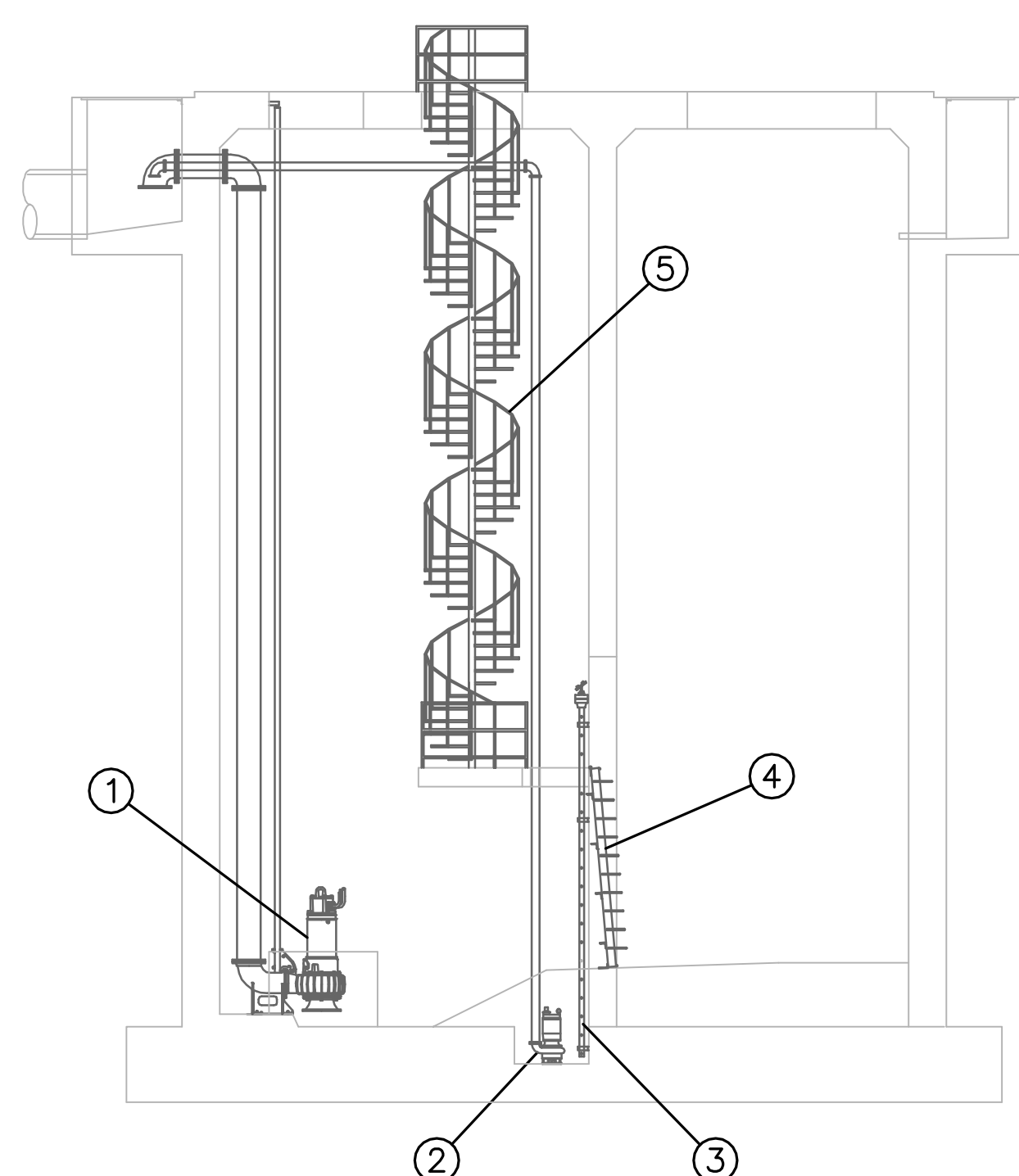
Proj. No. 54-87 K-8258-03 SEDGWICK COUNTY

Cook, Flatt & Strobel
ENGINEERS, P.A.

DESIGNED	R.S.C.	SCALE	Varies
DETAILED	D.E.G.	DATE	
QUANTITIES	D.E.G.	SHEET	4 OF 5



PLAN VIEW OF WETWELL



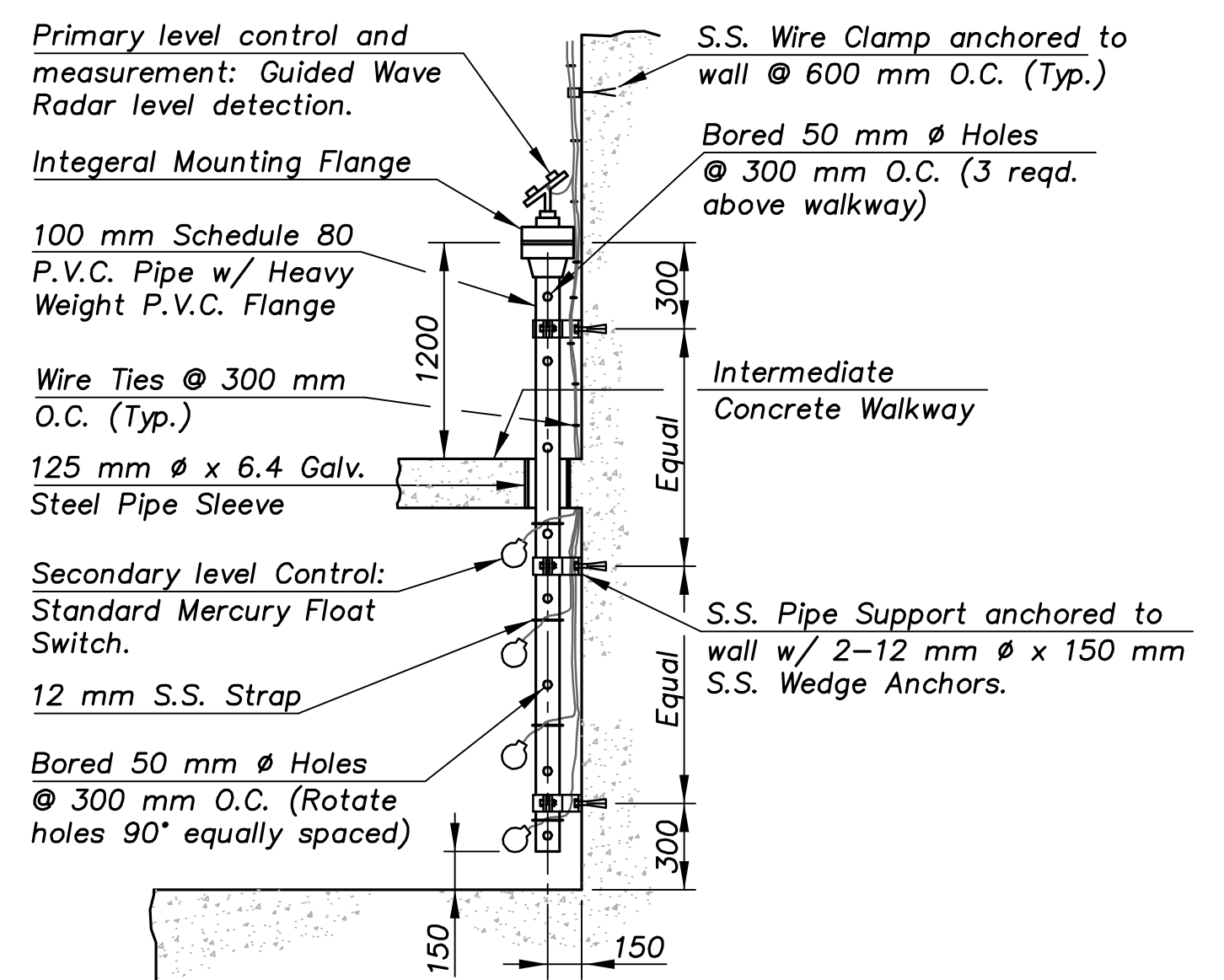
ELEVATION OF WETWELL

EQUIPMENT SCHEDULE	
Item	Description
①	Primary Pumps: 300 mm (12") Discharge Shut Off Head: 24.38 m (80 feet) Design Flow: 189.4 l/s @ 13.7 m (3,000 gpm @ 45 ft.) Free Flow: 302.8 l/s @ 3.0 m (4,800 gpm @ 10 ft.)
②	Sump Pump: S.S. Trash/Sand/Slurry Pump with Agitator and 100 mm (4") Discharge, 7.5 hp. Shut Off Head: 28.0 m (92 feet) Design Flow: 26.5 l/s @ 12.2 m (420 gpm @ 40 ft.) Maximum Flow: 49.2 l/s @ 2.0 m (760 gpm @ 7 ft.)
③	Level Control: Primary: Guided Wave Radar in 100 mm (4") PVC Tube Liquid Level Transmitter, Explosion and Waterproof construction. Furnish with integral installation flange for mounting to PVC Pipe. Secondary: Direct Acting Float Switch, Body designed for high suspended solids contact. Heavy duty purpose.
④	Trash Rack
⑤	Spiral Stair: 1524 mm (60") diameter Galvanized Steel with Serrated Steel Tread and Integral Landing. Risers 203 mm (8") @ 22 1/2 deg. Ht. as reqd. Fabricated and shipped as single complete unit with landing.
⑥	(Not Shown): 0.75 cm (1 c.y.) Crane Dumping Bucket, Self dumping, righting, locking, maximum bucket height 710 mm (28"). Maximum overall height 1168 mm (46").
⑦	(Not Shown): 6803 kg (7.5 ton) Class D Single Girder Crane with Column Support.

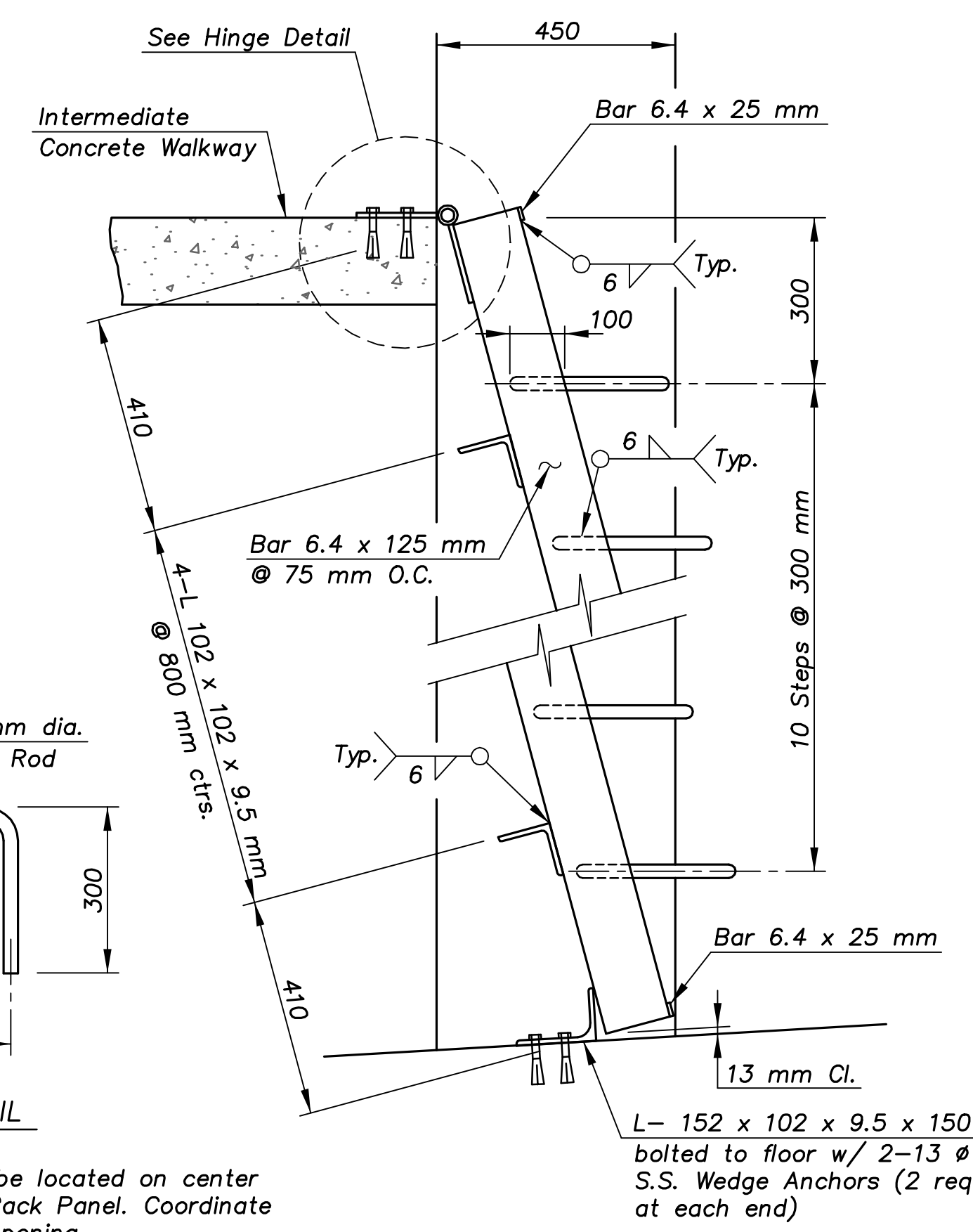
NOTE: Sump Pump to discharge to Primary Pump discharge sump. Match centerline Elevation and installed inwall sleeve similar to 300 mm (12") discharge line for Primary Pump.

PUMP OPERATION SEQUENCE			
Pump	on Elev.	off Elev.	
1	400.202	398.968	
2	401.726	400.507	
3	402.031	401.117	
Sump	1 Hr. Delay After 1 off	397.930	
High Level Alarm	402.946		

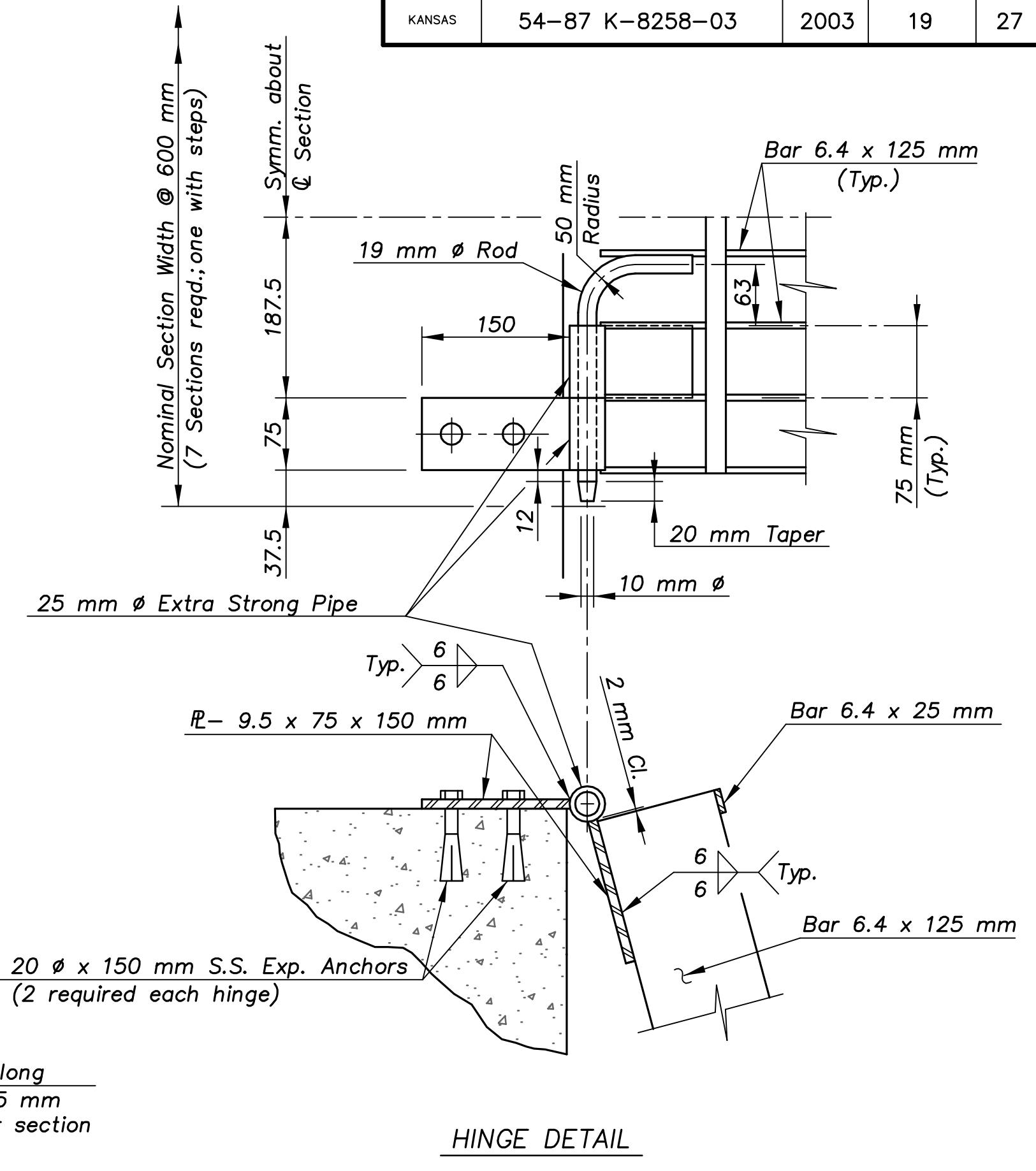
Pumps 1, 2, and 3 to alternate on at each start after last pump off. Pumps 2 and 3 to alternate on at each start after pump 2 off. Delay function for sump to be variable for 0-4 hours. Provides secondary float switches as required.



LEVEL CONTROL DETAIL (Not to Scale)

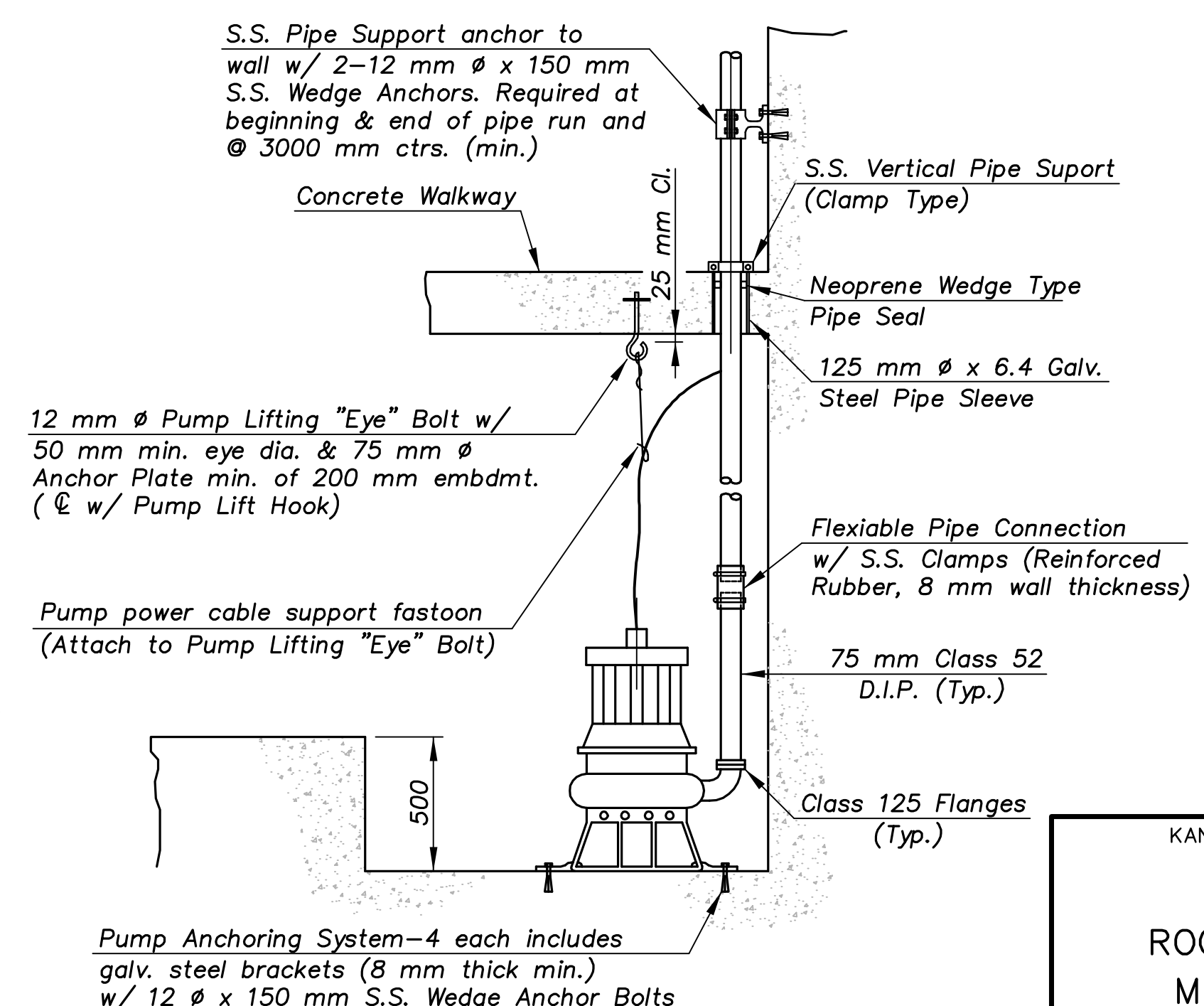


PARTIAL SECTION

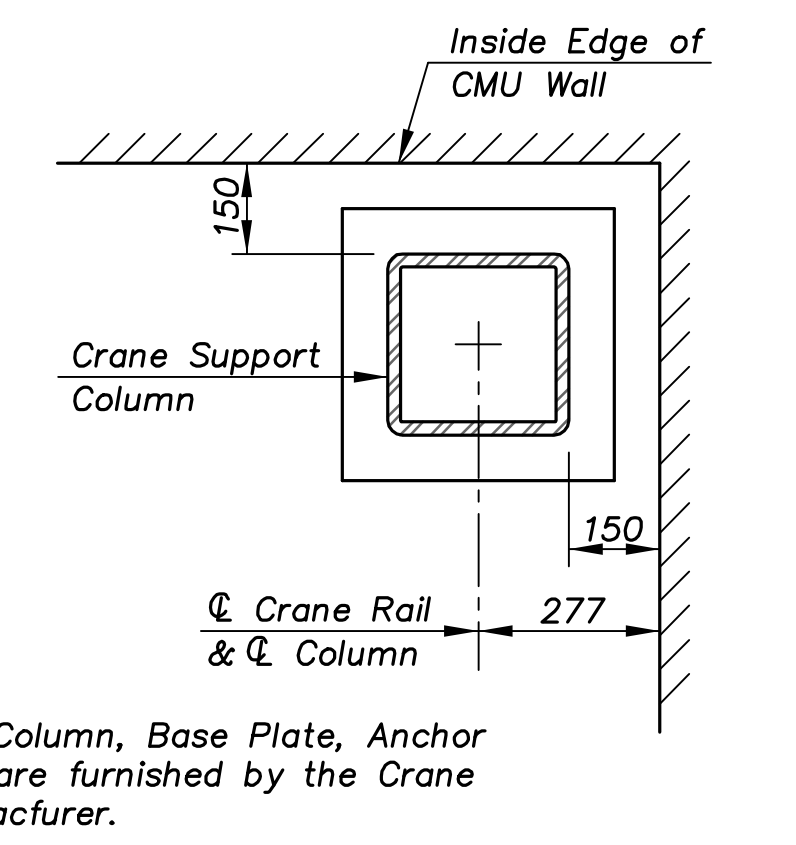


HINGE DETAIL

TRASH RACK DETAILS (Not to Scale)



SUMP PUMP DETAIL (Not to Scale)



CRANE COLUMN DETAIL (NOTE: Bridge Crane to run with short axis of building.)

PUMP-STATION\MISCELLANEOUS 1:100

KANSAS DEPARTMENT OF TRANSPORTATION

ROCK ROAD PUMP STATION MISCELLANEOUS DETAILS

DESIGNED: SCALE: Varies
 DETAILED: DATE: _____
 QUANTITIES: SHEET 1 OF 1

Proj. No. 54-87 K-8258-03 SEDGWICK COUNTY