STREET IMPROVEMENTS FOR

FOURTH ADDITION TO CEDAR RIDGE

MT. VERNON – FROM THE WEST LINE LOT 10, BLOCK 3, FOURTH ADDITION TO CEDAR RIDGE AND THE WEST LINE LOT 8, BLOCK 1, HEDGECLIFF 3RD ADDITION TO THE WEST LINE WEBB ROAD.

STACEY – FROM THE NORTH LINE MT. VERNON TO THE SOUTH LINE SKINNER

INDEX NO. 602177

CITY OF WICHITA, KANSAS

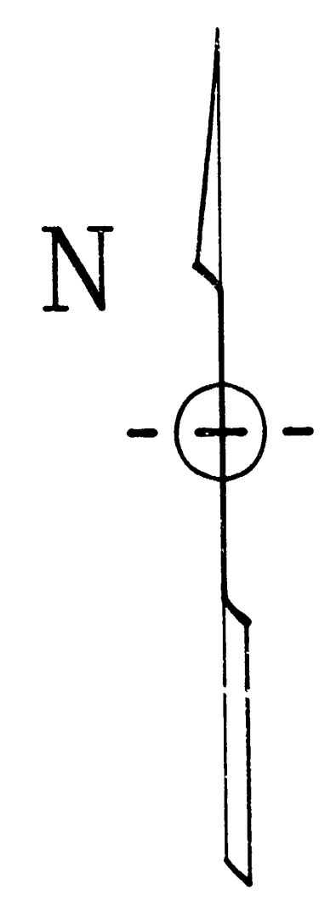
MIKE E. LINDEBAK CITY ENGINEER

PROJECT NO.

472-76-245-81351-000-000-001

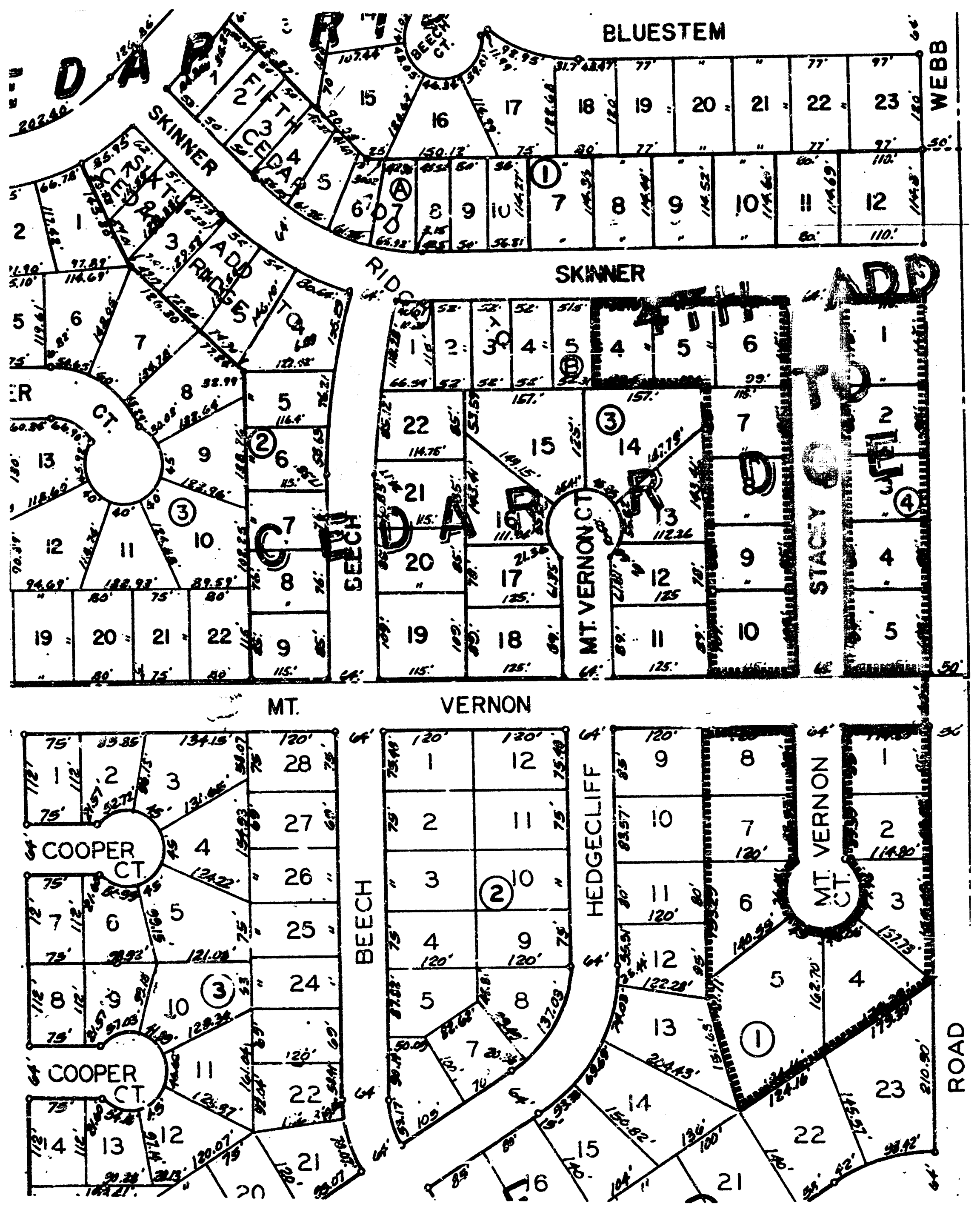
INDEX

Cover Sheet	1
37' Pavement Detail	2
35' Pavement Detail	3
Mt. Vernon	4
Stacey	5
Storm W. Sewer Extension Plan	6
Non - Standard Ditch Inlet Detail	7
Modified Shallow Type 'B' Manhole Detail	8
Earthwork Cross Sections	9–10



BENCH MARK – Elevation 182.48. City Standard Disc located 47' West and 44' North of 1/4 Section Corner at Webb Road and Mt. Vernon

BENCH MARK – Elevation 173.50. "□" Cut in Top of Curb ● End of Return of Valley Gutter, East Side of Skinner & Beech,



BENEFIT DISTRICT ▬▬▬▬

GENERAL NOTES

1. The Contractor shall notify pipeline companies at least 24 hours in advance of any work being performed over and/or adjacent to pipelines.
2. Utility service lines, poles, valve boxes, meters, and etcetera are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
3. No more than 3 drives 20 feet in width, or equivalent combinations thereof, are to constructed with this project.
4. The Contractor will be permitted to bid only one of the alternate types of subgrade treatment. The type bid by the successful bidder will be the type of subgrade treatment used to construct the project.
5. The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.
6. The Contactor shall contact Cliff Nies of Nies Construction for verification and location of the drives to be constructed with this project.
7. The Contractor shall coordinate construction of this project with Project number 472-76-245-81352-000-000-001, the paving to the west so that the construction of both projects occurs simultaneously

N. BRENT WOOTEN
8470

BOOKED: 1-11-89 MCG

AUG. 4, 1988

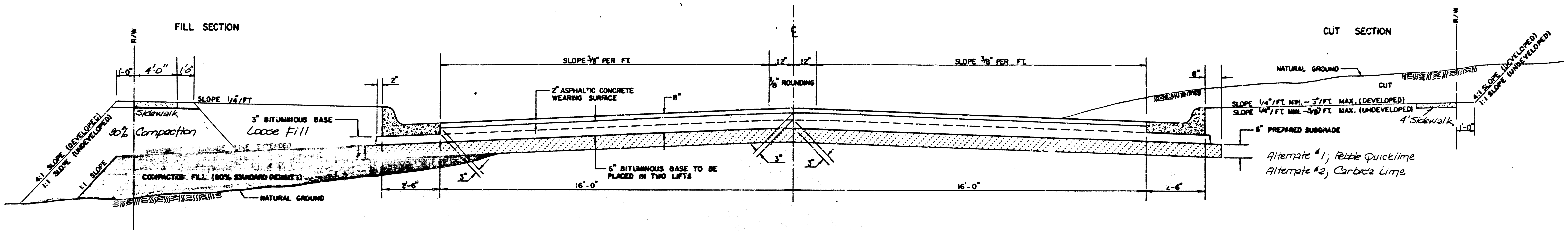
BAUGHMAN COMPANY P. A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

1/10

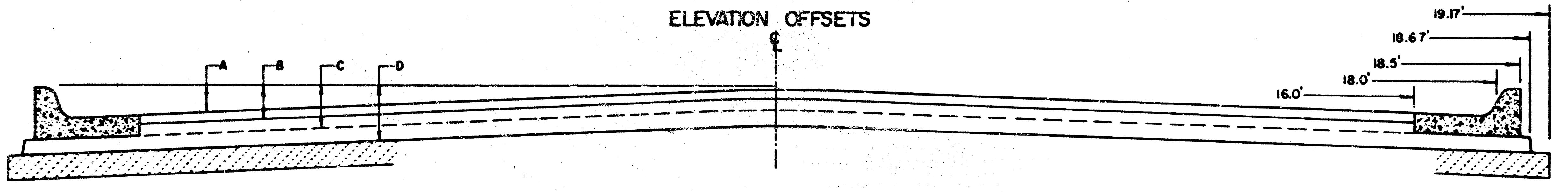
TYPICAL 37' PAVEMENT DETAILS

MT. VERNON

TRANSVERSE SECTION

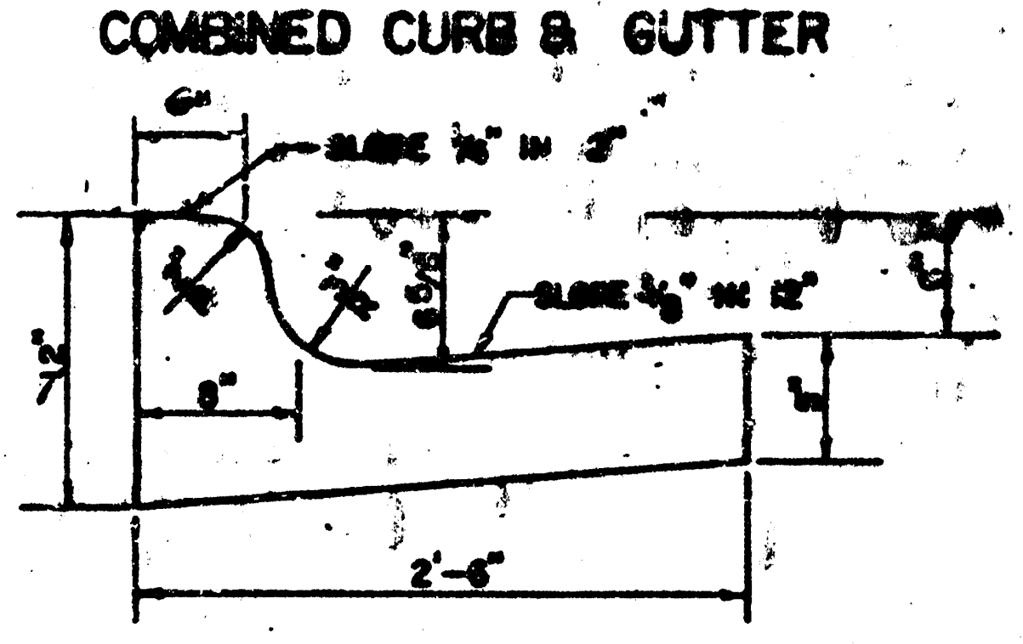

FILL SECTION
R/W
1'-0"
4'-0"
1'-0"
SLOPE 1/4"/FT
Sidewalk
90% Compaction
3" BITUMINOUS BASE
Loose Fill
4:1 SLOPE (DEVELOPED)
1:1 SLOPE (UNDEVELOPED)
1:1 SLOPE
PAVEMENT SUBGRADE LINE EXTENDED
COMPACTED FILL (90% STANDARD DENSITY)
NATURAL GROUND
2"
2'-6"
SLOPE 3/8" PER FT.
2" ASPHALTIC CONCRETE WEARING SURFACE
8"
6" BITUMINOUS BASE TO BE PLACED IN TWO LIFTS
3"
16'-0"
℄
12"
12"
1/8" ROUNDING
SLOPE 3/8" PER FT.
16'-0"
2'-6"
8"
CUT SECTION
NATURAL GROUND
CUT
R/W
SLOPE 1/4"/FT. MIN. – 3"/FT. MAX. (DEVELOPED)
SLOPE 1/4"/FT. MIN. – 3/8"/FT. MAX. (UNDEVELOPED)
4' Sidewalk
1'-0"
4:1 SLOPE (DEVELOPED)
1:1 SLOPE (UNDEVELOPED)
6" PREPARED SUBGRADE
Alternate #1; Pebble Quicklime
Alternate #2; Carbide Lime

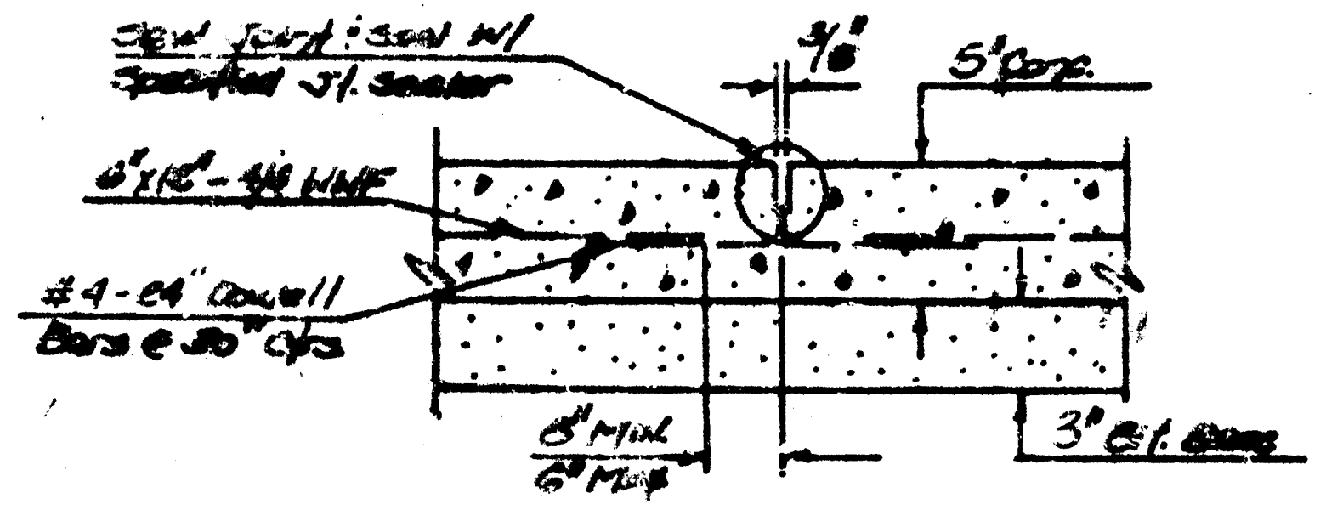
ELEVATION OFFSETS


℄
A
B
C
D
16.0'
18.0'
18.5'
18.67'
19.17'

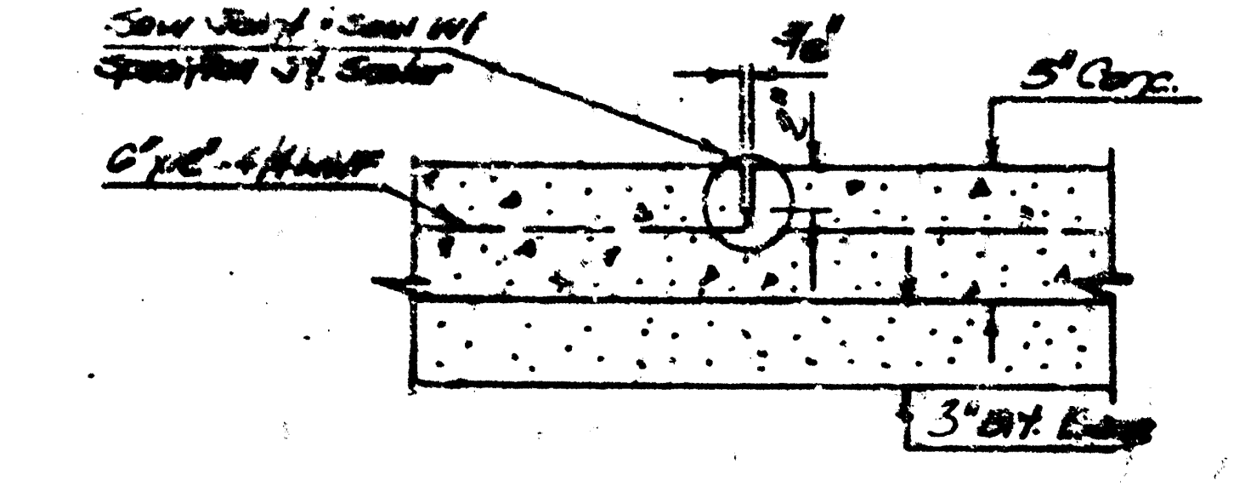
	DISTANCE FROM CENTERLINE (LT. & RT.)												
	0	2	4	6	8	10	12	14	16	18	18.5	18.67	19.17
A: TOP OF CURBS TO TOP OF SURFACE LIFT	.01	.05	.11	.18	.24	.30	.36	.43	.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	.17	.22	.28	.34	.40	.47	.53	.59	.65	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	.42	.47	.53	.59	.65	.72	.78	.84	.90	.97	.98	.99	—
D: TOP OF CURBS TO TOP OF SUBGRADE	.67	.72	.78	.84	.90	.97	1.03	1.09	1.15	1.22	1.23	1.24	1.25

COMBINED CURB & GUTTER


6"
SLOPE 1/2" IN 3"
SLOPE 3/8" IN 12"
8"
2'-6"

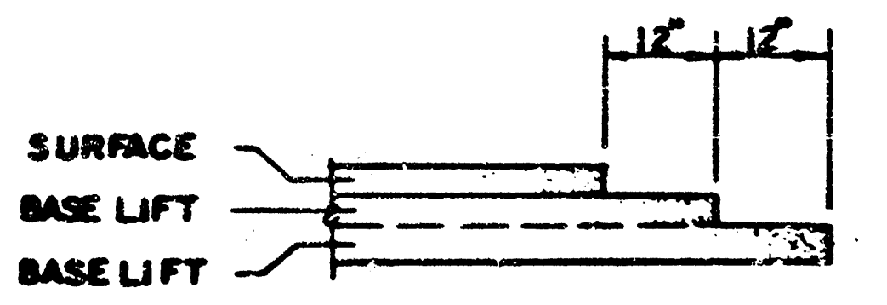

Saw Joint; Seal w/ Specified Jt. Sealer
3/8"
5" Conc.
6"x12" – 4/4 WWF
#4 - 24" Dowell Bars @ 30" Ctrs.
8" Min. 6" Max.
3" Bit. Base

LONGITUDINAL JOINT DETAIL
FOR VALLEY GUTTER

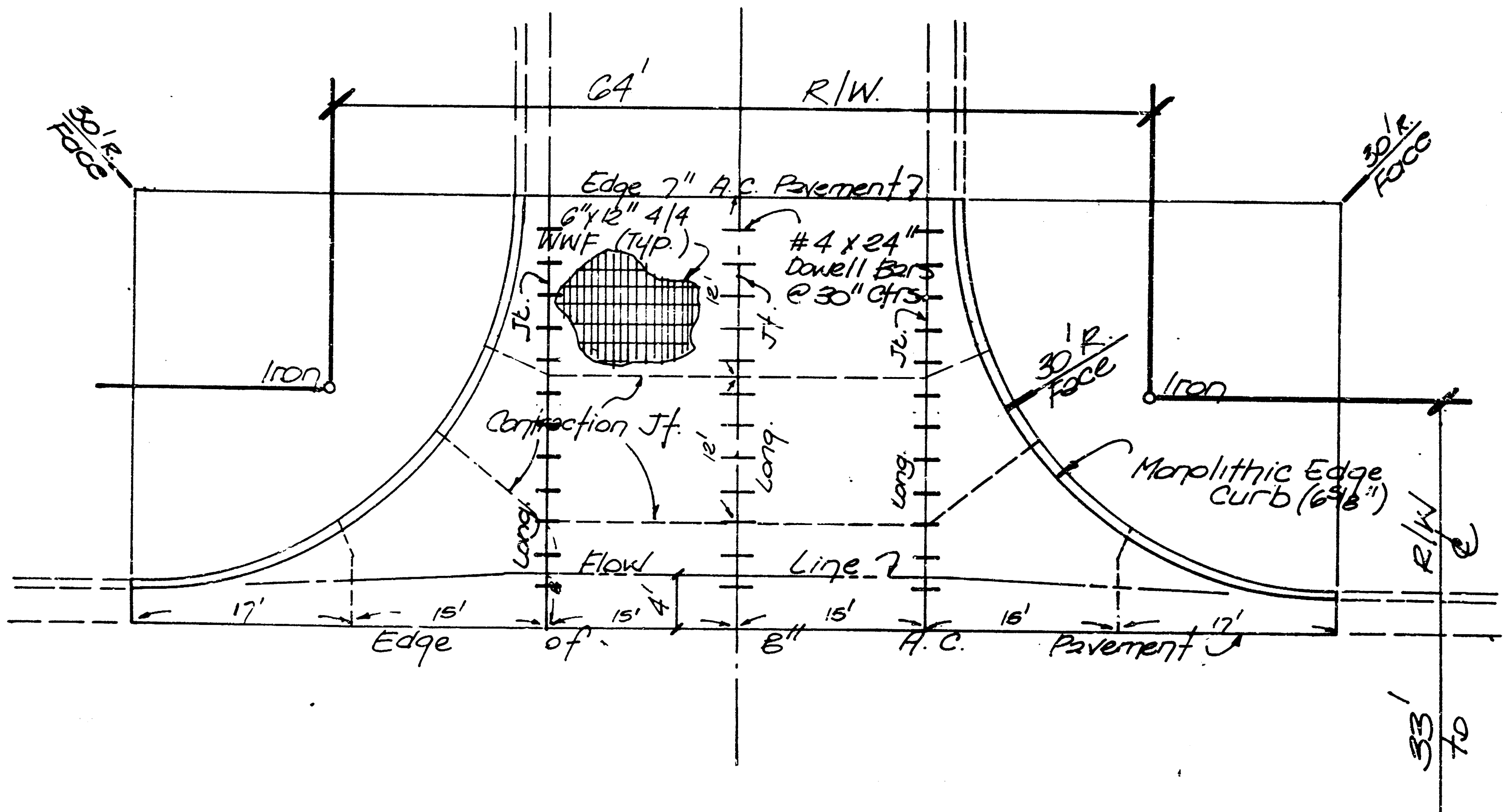

Saw Joint; Seal w/ Specified Jt. Sealer
3/8"
5" Conc.
6"x12" - 4/4 WWF
3" Bit. Base

CONTRACTION JOINT
FOR VALLEY GUTTER

TRANSVERSE CONSTRUCTION JOINTS


12"
12"
SURFACE
BASE LIFT
BASE LIFT

TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE DETAIL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TRANSVERSE JOINT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 8" ASPHALTIC CONCRETE (6" BITUMINOUS BASE).


64' R/W.
30' R. Face
30' R. Face
Edge 7" A.C. Pavement
6"x12" 4/4 WWF (Typ.)
#4 x 24" Dowell Bars @ 30" Ctrs.
Jt.
12'
Iron
Iron
30' R. Face
Contraction Jt.
Long.
Monolithic Edge Curb (6"/8")
Flow Line
4'
17'
15'
15'
15'
16'
17'
Edge of 8" A.C. Pavement
R/W ℄
33' to

VALLEY GUTTER DETAIL

No Scale

GENERAL NOTES

1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 8" ASPHALTIC CONCRETE (6" BITUMINOUS BASE).

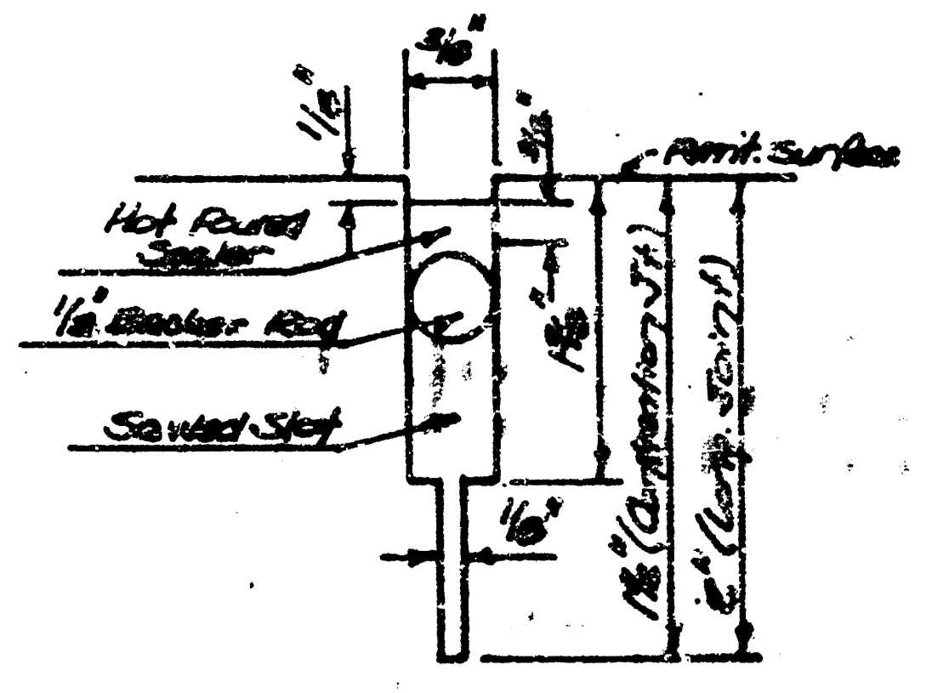
2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 3" BITUMINOUS BASE.

3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.

4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.

5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.

6) CONTRACTOR TO BID ONLY ONE SUBGRADE TREATMENT ALTERNATE WHEN ALTERNATES ARE PROVIDED IN THE PROPOSAL AND CONTRACT. THE ALTERNATE CHOSEN BY THE SUCCESSFUL BIDDER SHALL BE USED IN CONSTRUCTING THIS PROJECT.


3/8"
1/16"
3/8"
Pvmt. Surface
Hot Poured Sealer
1/2" Backer Rod
Sawed Slot
1/8"
1 3/8"
1 3/8" (Contraction Jt.)
2" (Long. Joint)

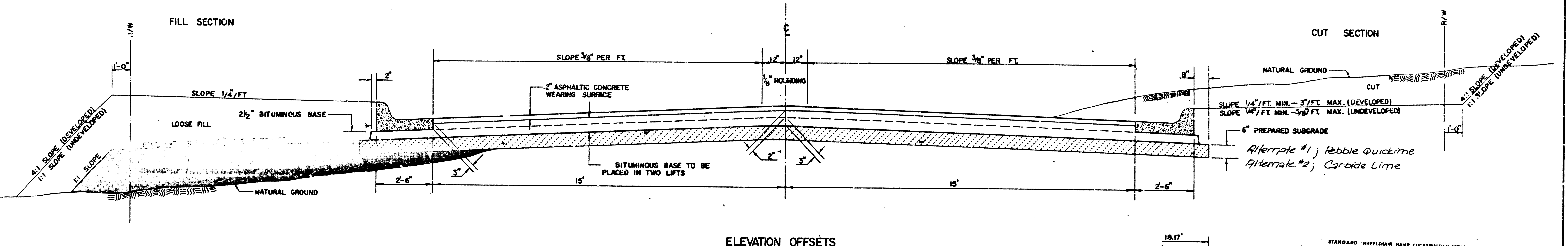
Note; Sealer Material Shall Conform ASTM D-1190

SAW JOINT DETAIL
FOR CONT. AND LONG. JOINTS

8 INCH RESIDENTIAL ASPHALTIC CONCRETE
PAVEMENT WITH 6 INCH BITUMINOUS BASE
CITY OF WICHITA, KANSAS
PROJECT NUMBER
472-73-246-81351-000-000-001

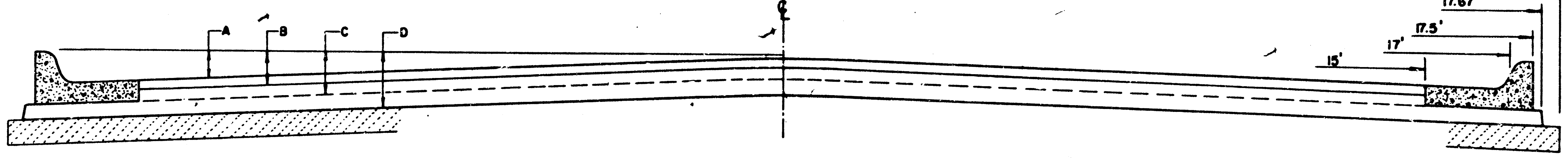
TYPICAL 35' PAVEMENT DETAILS

TRANSVERSE SECTION


FILL SECTION
R/W
1'-0"
SLOPE 1/4"/FT
4:1 SLOPE (DEVELOPED)
1:1 SLOPE (UNDEVELOPED)
LOOSE FILL
1:1 SLOPE
2½" BITUMINOUS BASE
NATURAL GROUND
2"
SLOPE 3/8" PER FT.
2" ASPHALTIC CONCRETE WEARING SURFACE
BITUMINOUS BASE TO BE PLACED IN TWO LIFTS
3"
2'-6"
15'
℄
12"
12"
1/8" ROUNDING
2"
3"
SLOPE 3/8" PER FT.
15'
2'-6"
8"
CUT SECTION
NATURAL GROUND
CUT
R/W
SLOPE 1/4"/FT. MIN.— 3"/FT. MAX. (DEVELOPED)
SLOPE 1/4"/FT. MIN.—5/8"/FT. MAX. (UNDEVELOPED)
4:1 SLOPE (DEVELOPED)
1:1 SLOPE (UNDEVELOPED)
1'-0"
6" PREPARED SUBGRADE

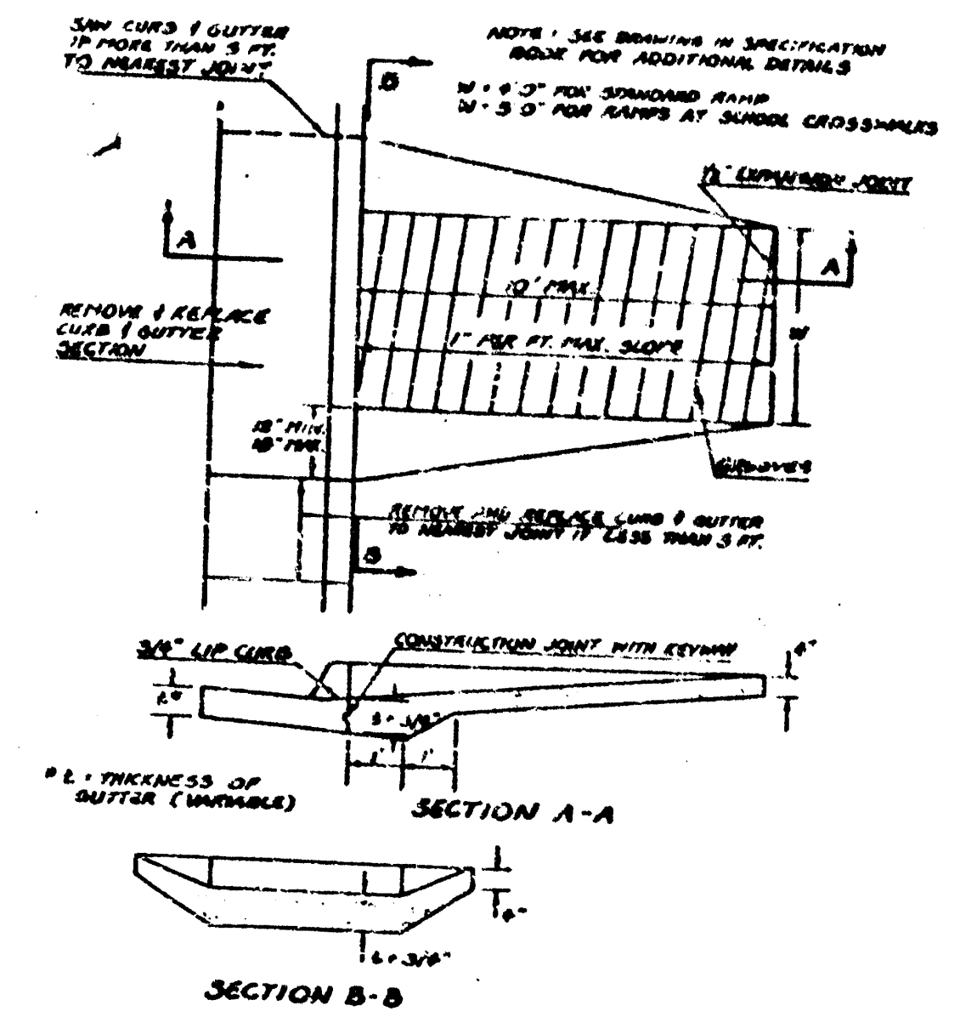
Alternate #1 ; Pebble Quickime
Alternate #2 ; Carbide Lime

ELEVATION OFFSETS


A
B
C
D
℄
15'
17'
17.5'
17.67'
18.17'

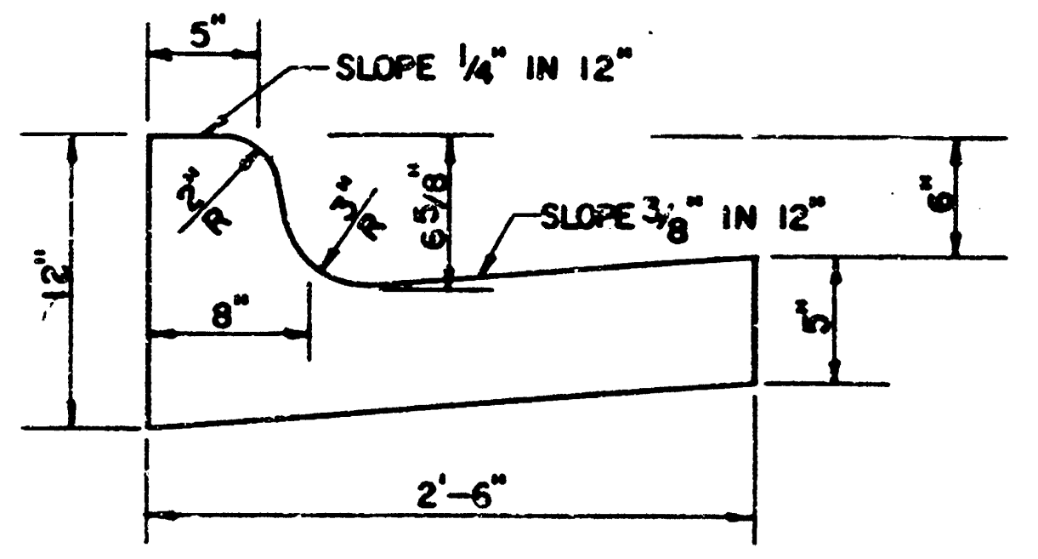
	DISTANCE FROM CENTERLINE (LT. & RT.)												
	0'	2'	4'	6'	8.5'	10'	12'	14'	15'	17'	17.5'	17.67'	18.17'
A: TOP OF CURBS TO TOP OF SURFACE LIFT	0.04	0.08	0.14	0.21	0.29	0.33	0.39	0.46	0.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	0.21	0.25	0.31	0.37	0.45	0.50	0.56	0.62	0.65	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	0.37	0.43	0.50	0.57	0.67	0.72	0.79	0.87	0.90	0.96	1.00	1.00	—
D: TOP OF CURBS TO TOP OF SUBGRADE	0.62	0.67	0.74	0.81	0.90	0.95	1.02	1.08	1.12	1.19	1.21	1.21	1.23

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER

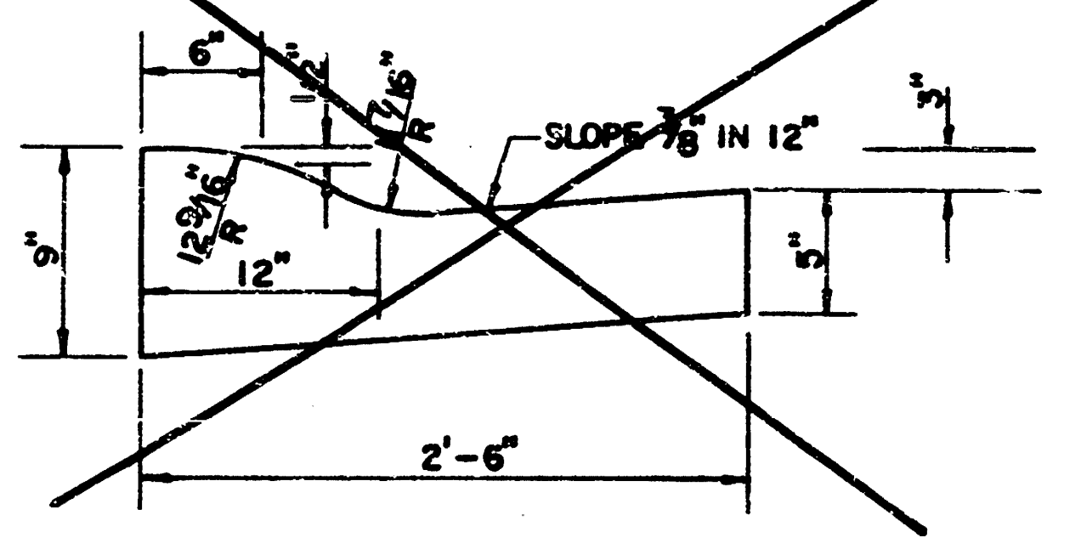

SAW CURB & GUTTER IF MORE THAN 3 FT. TO NEAREST JOINT
NOTE: SEE DRAWING IN SPECIFICATION BOOK FOR ADDITIONAL DETAILS
W = 6'-0" FOR STANDARD RAMP
W = 5'-0" FOR RAMPS AT SCHOOL CROSSWALKS
B
A
½" EXPANSION JOINT
10' MAX.
1" PER FT. MAX. SLOPE
W
REMOVE & REPLACE CURB & GUTTER SECTION
18" MIN.
18" MAX.
GROOVES
REMOVE AND REPLACE CURB & GUTTER TO NEAREST JOINT IF LESS THAN 3 FT.
3/4" LIP CURB
CONSTRUCTION JOINT WITH KEYWAY
6"
t
t + 3/4"
1'
1'
* t = THICKNESS OF GUTTER (VARIABLE)
SECTION A-A
6"
t + 3/4"
SECTION B-B

NOTE: The cost of all work indicated on this sheet shall be included in the unit price bid for wheel chair ramp which price shall include all costs of removing and reconstructing existing combined curb and gutter, compaction of subgrade and necessary area grading.

COMBINED CURB & GUTTER


5"
SLOPE 1/4" IN 12"
2" R
3" R
6 5/8"
SLOPE 3/8" IN 12"
6"
12"
8"
5"
2'-6"

~~ROLL TYPE COMBINED CURB & GUTTER~~


6"
2"
7/16" R
SLOPE 3/8" IN 12"
3"
12 9/16" R
9"
12"
5"
2'-6"

GENERAL NOTES

1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 2 1/2" BITUMINOUS BASE.

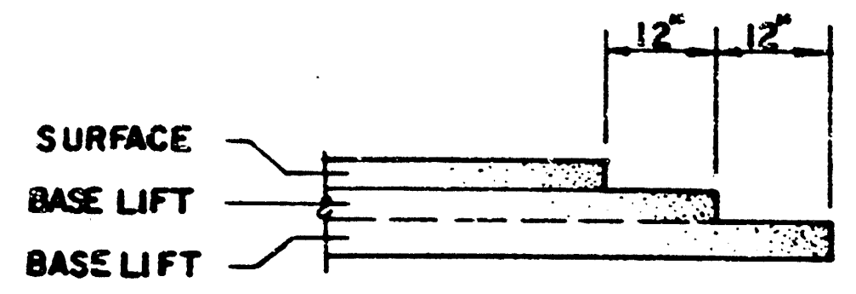
3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.

4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.

5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.

6) CONTRACTOR TO BID ONLY ONE SUBGRADE TREATMENT ALTERNATE WHEN ALTERNATES ARE PROVIDED IN THE PROPOSAL AND CONTRACT. THE ALTERNATE CHOSEN BY THE SUCCESSFUL BIDDER SHALL BE USED IN CONSTRUCTING THIS PROJECT.

TRANSVERSE CONSTRUCTION JOINTS


12"
12"
SURFACE
BASE LIFT
BASE LIFT

TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE DETAIL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TRANSVERSE JOINT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

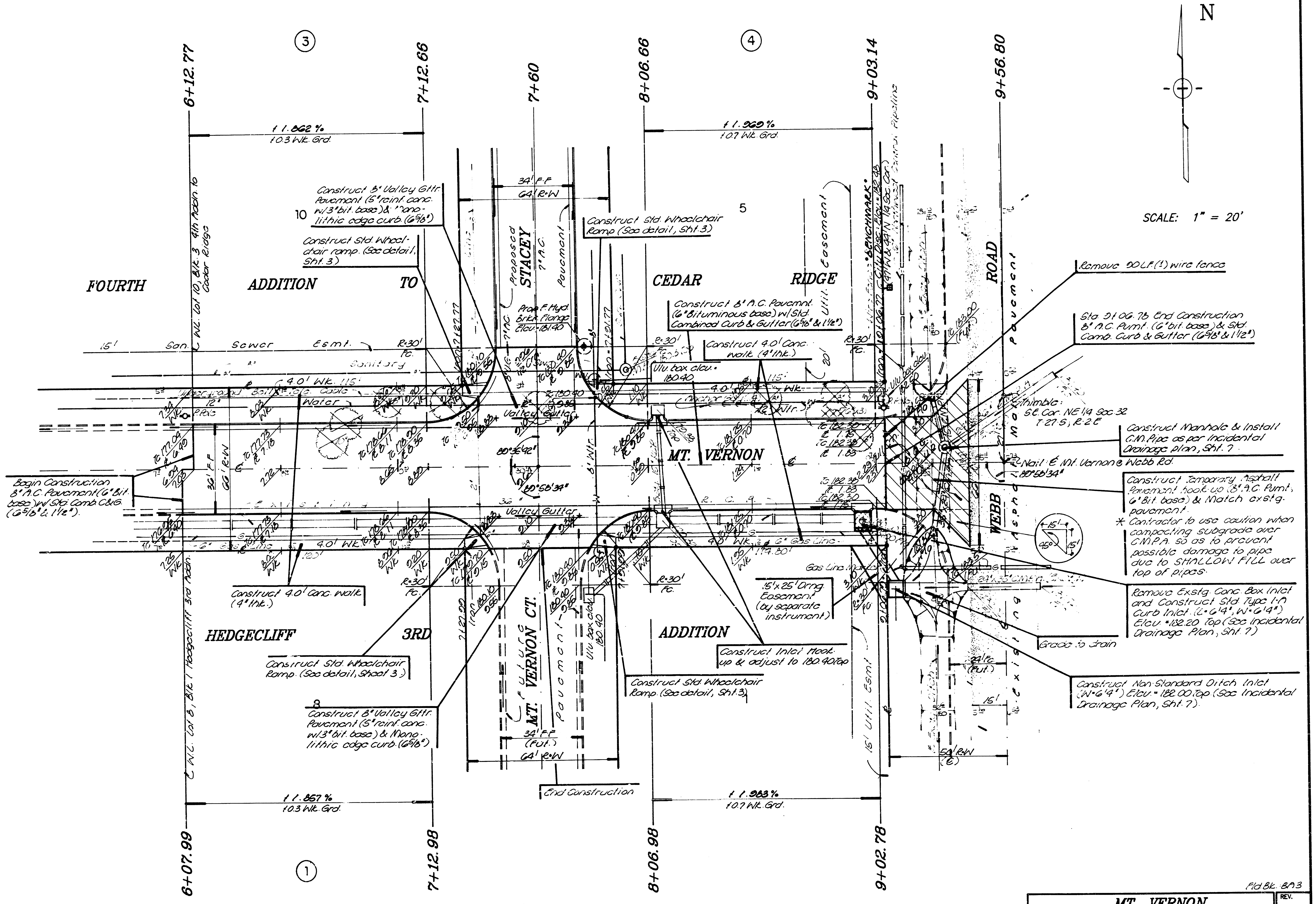
3/10

Sheet: 3 of: 10

7 INCH RESIDENTIAL ASPHALTIC CONCRETE
PAVEMENT WITH 5 INCH BITUMINOUS BASE
CITY OF WICHITA, KANSAS
PROJECT NUMBER
472-76-245-81351-000-000-001

BENCHMARK:
City Disc: Webb Rd. & Mt. Vernon.
47' W., 44' N. of 1/4 Sec. Cor.
Elev. = 182.46

BENCHMARK: 'o' Cut in Top of Curb
in Southeast Return @ Mt. Vernon & Beech
Elev. = 173.76 City Datum


N
SCALE: 1" = 20'
③
④
①
6+12.77
7+12.66
7+60
8+06.66
9+03.14
9+56.80
6+07.99
7+12.98
8+06.98
9+02.78
+1.862 %
10.3 Wk. Grd.
+1.969 %
10.7 Wk. Grd.
+1.857 %
10.3 Wk. Grd.
+1.983 %
10.7 Wk. Grd.
FOURTH ADDITION TO CEDAR RIDGE
HEDGECLIFF 3RD ADDITION
10
5
8
Proposed STACEY 7" A.C. Pavement
34' F-F
64' R-W
MT. VERNON
WEBB ROAD
Future MT. VERNON CT. Pavement
34' F-F (Fut.)
64' R-W
Construct 8' Valley Gttr. Pavement (5" reinf. conc. w/3" bit. base) & Mono-lithic edge curb (6 5/8")
Construct Std. Wheelchair ramp. (See detail, Sht. 3)
Construct Std. Wheelchair Ramp (See detail, Sht. 3)
Prop. F. Hyd. Brkr. Flange Elev. = 181.40
Construct 8' A.C. Pavemnt. (6" Bituminous base) w/Std. Combined Curb & Gutter (6 5/8" & 1 1/2")
Construct 4.0' Conc. walk (4" thk.)
Util. box elev. = 180.40
Util. Easement
15' San. Sewer Esmt.
Sanitary
4.0' Wk. 1.15'
Water
P. Pole
12"
36' F-F
66' R-W
Valley Gutter
R=30' F.C.
Begin Construction 8" A.C. Pavement (6" Bit. base) w/ Std. Comb. C&G. (6 5/8" & 1 1/2")
Construct 4.0' Conc. walk (4" thk.)
Construct Std. Wheelchair Ramp. (See detail, Sheet 3.)
Construct 8" Valley Gttr. Pavement (5" reinf. conc. w/3" bit. base) & Mono-lithic edge curb (6 5/8")
End Construction
Construct Inlet Hook-up & adjust to 180.40 Top
Construct Std. Wheelchair Ramp. (See detail, Sht. 3)
15' x 25' Drng. Easement (by separate instrument)
6" Gas Line
Gas Line Marker
15' Util. Esmt.
¢ W.L. Lot 10, Blk. 3 4th Addn. to Cedar Ridge
¢ W.L. Lot 8, Blk. 1 Hedgecliff 3rd Addn.
BENCHMARK
Remove 90 L.F. (4) wire fence
Sta. 91 06.78 End Construction 8" A.C. Pvmt. (6" bit. base) & Std. Comb. Curb & Gutter (6 5/8" & 1 1/2")
Thimble: S.E. Cor. NE 1/4 Sec. 32 T-27-S, R-2-E
Construct Manhole & Install C.M. Pipe as per Incidental Drainage Plan, Sht. 7.
Nail ¢ Mt. Vernon @ Webb Rd.
89°58'34"
Construct Temporary Asphalt Pavement hook-up (8" A.C. Pvmt., 6" Bit. base) & Match exstg. pavement.
* Contractor to use caution when compacting subgrade over C.M.P.A. so as to prevent possible damage to pipe due to SHALLOW FILL over top of pipes.
15'
45°
Remove Exstg. Conc. Box Inlet and Construct Std. Type I-A Curb Inlet. (L=6'4", W=6'4") Elev. = 182.20 Top (See Incidental Drainage Plan, Sht. 7)
Grade to drain
Construct Non-Standard Ditch Inlet (W=6'4") Elev. = 182.00 Top (See Incidental Drainage Plan, Sht. 7)
50' R-W (E)
Existing Asphalt Pavement

• INTERSECTION QUANTITIES •

334.2 SY 8 " Asphaltic Conc. Pavement (6 " Bituminous Base)

SY ____ " Concrete Pavement
SY ____ " Bituminous Base
LF Combined Curb & Gutter
157.1 LF Monolithic Edge Curb
SF 4" Wheelchair Ramp
SF 4" Walk
CY Excavation
CY Compacted Fill
Lbs. Reinforcing Steel
648.0 SY Manipulation
Tons Lime or Cement
301.9 SY Valley Gttr. 5 " Concrete & 3 " Asphaltic Conc. Base

• EARTHWORK QUANTITIES •

Excavation 1132.7 c.y.
+10% 113.3
Total 1246.0 c.y.

Compacted Fill 84.0 c.y.
+10% 8.4
Total 92.4 c.y.

Subgrade Manipulation 3555.0 s.y.

Borrow Material 0 c.y.

Note:
Trees to be removed marked thus: ⊠

Fld. Bk. 893

MT. VERNON

PROJECT NO. 472-76-245-81351-000-000-001

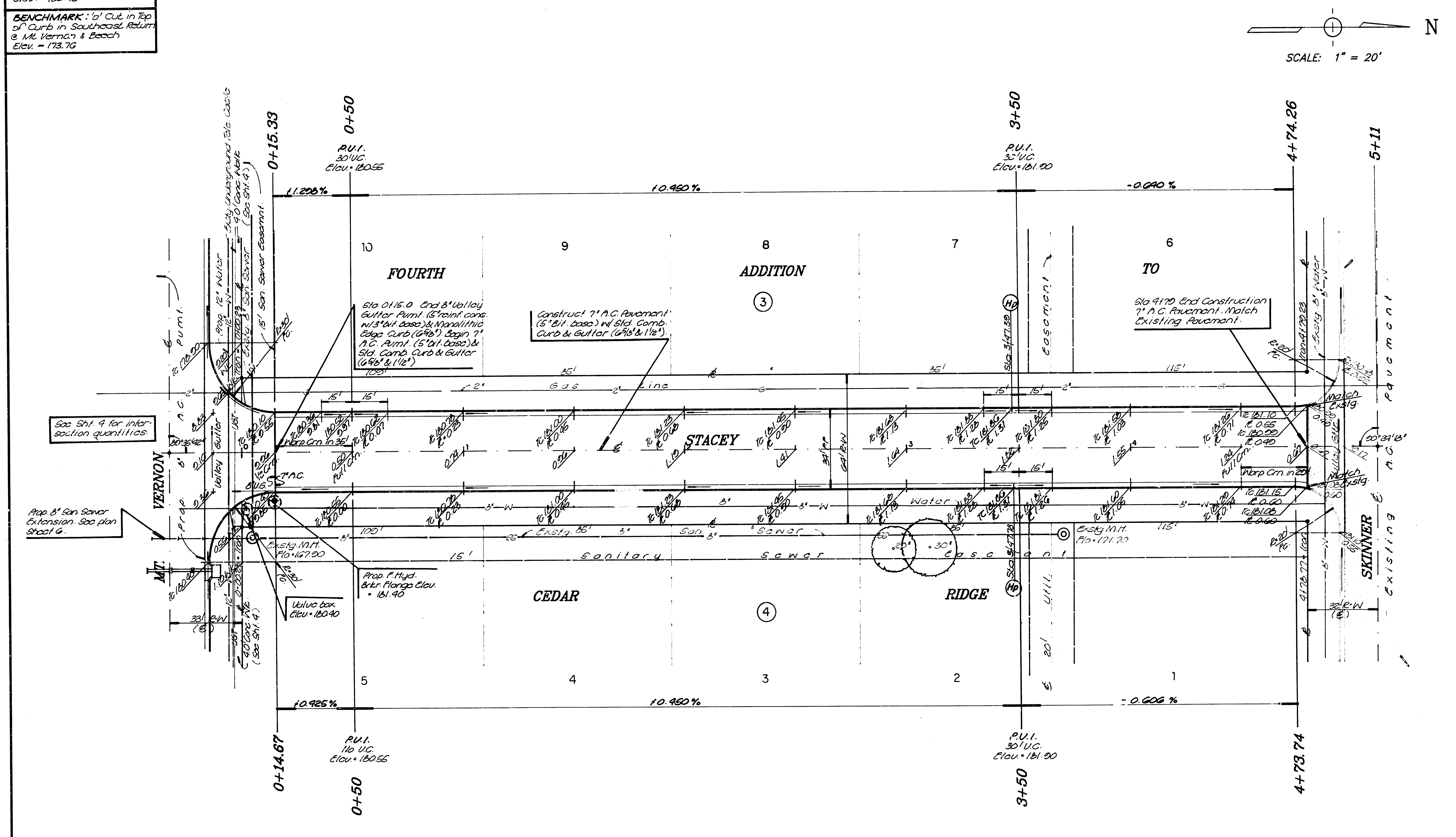
BAUGHMAN COMPANY P. A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

DESIGN	DRAWN	APPROVED	DATE	SCALE	REV.
				1" = 20'	SHEET 4 OF 10

4/10

BENCHMARK: City Disc
Webb Rd. & Mt. Vernon
47' W., 44' N. of 1/4 Sec. Cor.
Elev. = 182.48

BENCHMARK: '□' Cut in Top
of Curb in Southeast Return
@ Mt Vernon & Beech
Elev. = 173.76


N
SCALE: 1" = 20'
0+15.33
0+50
P.V.I.
30' V.C.
Elev. = 180.56
3+50
P.V.I.
30' V.C.
Elev. = 181.90
4+74.26
5+11
1.298 %
0.450 %
-0.690 %
10
9
8
7
6
FOURTH
ADDITION
③
TO
Sta. 0+15.0 End 8" Valley Gutter Pvmt. (5" reinf. conc. w/ 3" bit. base) & Monolithic Edge Curb (6 5/8"). Begin 7" A.C. Pvmt. (5" bit. base) & Std. Comb. Curb & Gutter (6 5/8" & 1 1/2")
Construct 7" A.C. Pavement (5" Bit. base) w/ Std. Comb. Curb & Gutter (6 5/8" & 1 1/2").
Sta. 4+79 End Construction 7" A.C. Pavement. Match Existing Pavement.
Exstg. 6" Water
Easement
Sta. 3+47.59
Hp
100'
85'
115'
2"
Gas
Line
15'
15'
See Sht. 4 for intersection quantities.
Warp Crn. in 35'
0.50 Full Crn.
½ Crn.
Full Crn.
Warp Crn. in 25'
STACEY
32' R.W
7" A.C.
Match Exstg.
80°35'42"
90°34'18"
Valley Gutter
VERNON
MT.
Prop. 8" San. Sewer Extension. See plan Sheet 6.
Exstg. M.H. Flo = 167.90
Prop. F. Hyd. Brkr. Flange Elev. = 181.40
Valve box Elev. = 180.40
Exstg. M.H. Flo = 171.90
8" W
Water
8"
Exstg. 85'
San. Sewer
Sanitary Sewer Easement
R = 30'
R = 20'
33' R/W
4.0' Conc. Wk. (See Sht. 4)
Prop. 12" Water
Exstg. Underground Tele Cable
4.0' Conc. Walk (See Sht. 4)
15' San. Sewer Easement
Util. Easement
20'
CEDAR
RIDGE
④
5
4
3
2
1
SKINNER
Existing A.C. Pavement
32' R-W
0.925 %
0.450 %
-0.606 %
P.V.I.
16 V.C.
Elev. = 180.56
P.V.I.
30' V.C.
Elev. = 181.90
0+14.67
0+50
3+50
4+73.74

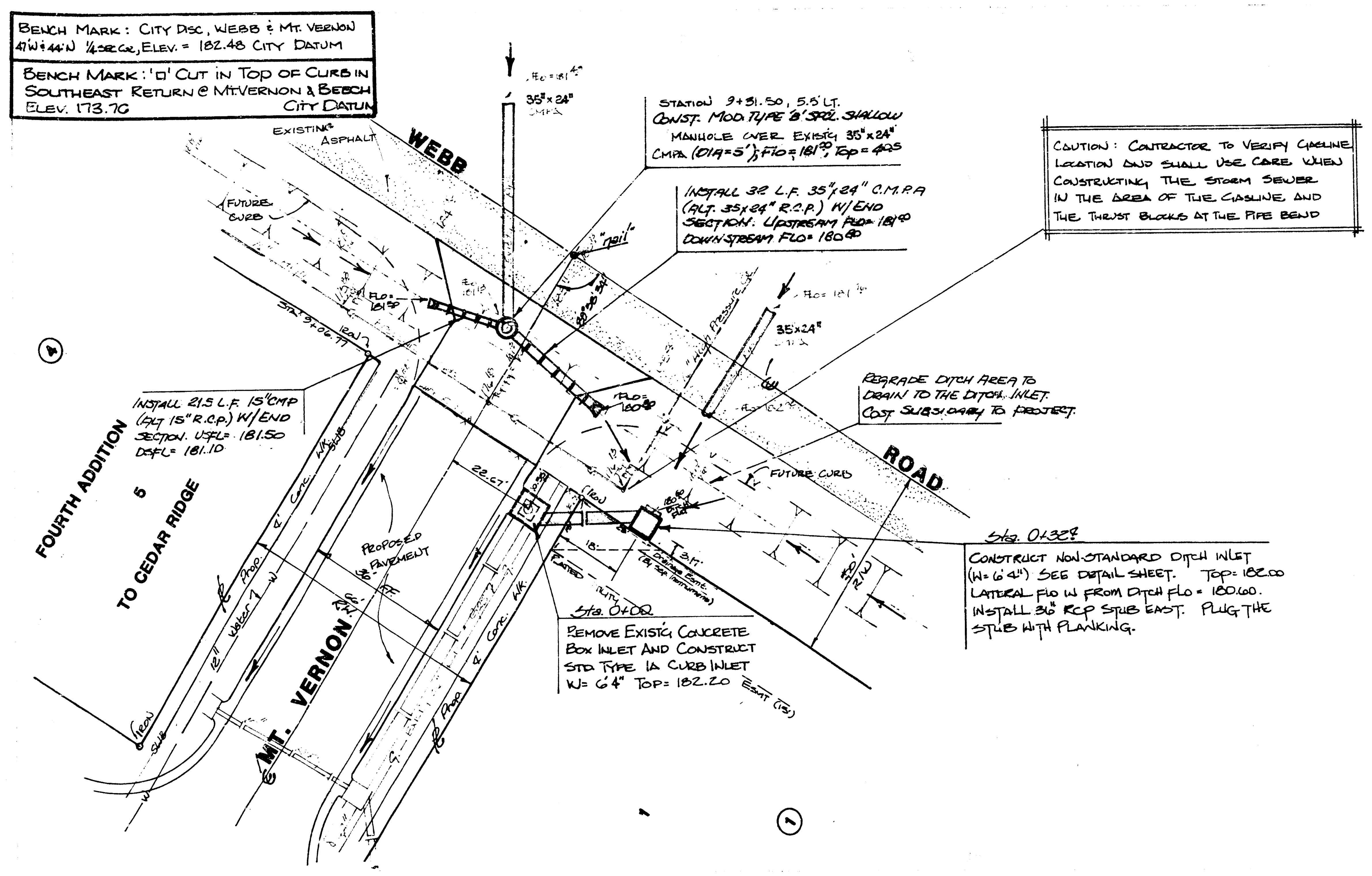
STACEY
PROJECT NO. 472-76-245-81351-000-000-001

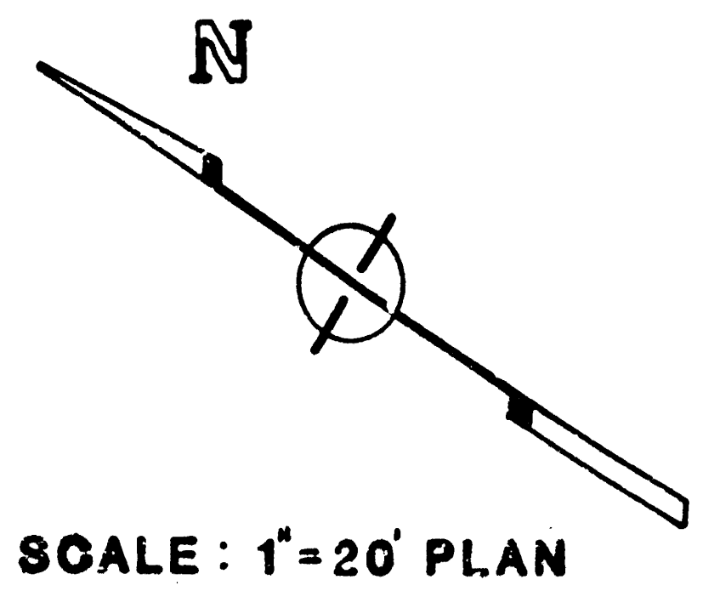
BAUGHMAN COMPANY P. A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

DESIGN	DRAWN	APPROVED	DATE	SCALE	REV.
	D.M.H.			1" = 20'	

SHEET 5 OF 10

5/10


BENCH MARK: CITY DISC, WEBB & MT. VERNON
47W & 44N 1/4 SEC COR, ELEV. = 182.48 CITY DATUM
BENCH MARK: '□' CUT IN TOP OF CURB IN SOUTHEAST RETURN @ MT. VERNON & BEECH
ELEV. 173.76 CITY DATUM
EXISTING ASPHALT
WEBB
ROAD
FUTURE CURB
35"x24"
FLO=181.49
FLO=181.50
STA. 9+06.77
"nail"
89°30'34"
"High Pressure"
STATION 9+31.50, 5.5' LT.
CONST. MOD. TYPE 'B' SPCL. SHALLOW MANHOLE OVER EXISTG 35"x24" CMPA (DIA=5'); FLO=181.00; TOP=4.25
INSTALL 32 L.F. 35"x24" C.M.P.A (ALT. 35x24" R.C.P.) W/END SECTION. UPSTREAM FLO=181.00 DOWNSTREAM FLO=180.80
CAUTION: CONTRACTOR TO VERIFY GASLINE LOCATION AND SHALL USE CARE WHEN CONSTRUCTING THE STORM SEWER IN THE AREA OF THE GASLINE AND THE THRUST BLOCKS AT THE PIPE BEND
35x24"
FLO=181.76
FLO=180.80
REGRADE DITCH AREA TO DRAIN TO THE DITCH INLET. COST SUBSIDIARY TO PROJECT.
FUTURE CURB
INSTALL 21.5 L.F. 15" CMP (ALT 15" R.C.P.) W/END SECTION. USFL=181.50 DSFL=181.10
FOURTH ADDITION
5
TO CEDAR RIDGE
4' Conc. Wk.
PROPOSED PAVEMENT
22.67'
18'
3.17'
Drainage Esmt. (By Sep. Instrument)
PLATTED
UTILITY
Esmt (15')
Sta. 0+32.4
CONSTRUCT NON-STANDARD DITCH INLET (W=6'4") SEE DETAIL SHEET. TOP=182.00
LATERAL FLO IN FROM DITCH FLO=180.60.
INSTALL 36" RCP STUB EAST. PLUG THE STUB WITH PLANKING.
Sta. 0+00
REMOVE EXISTG CONCRETE BOX INLET AND CONSTRUCT STD TYPE 1A CURB INLET W=6'4" TOP=182.20
MT. VERNON
4' Prop.
4
1



SCALE: 1" = 20' PLAN
1" = 5' PROFILE

NOTES

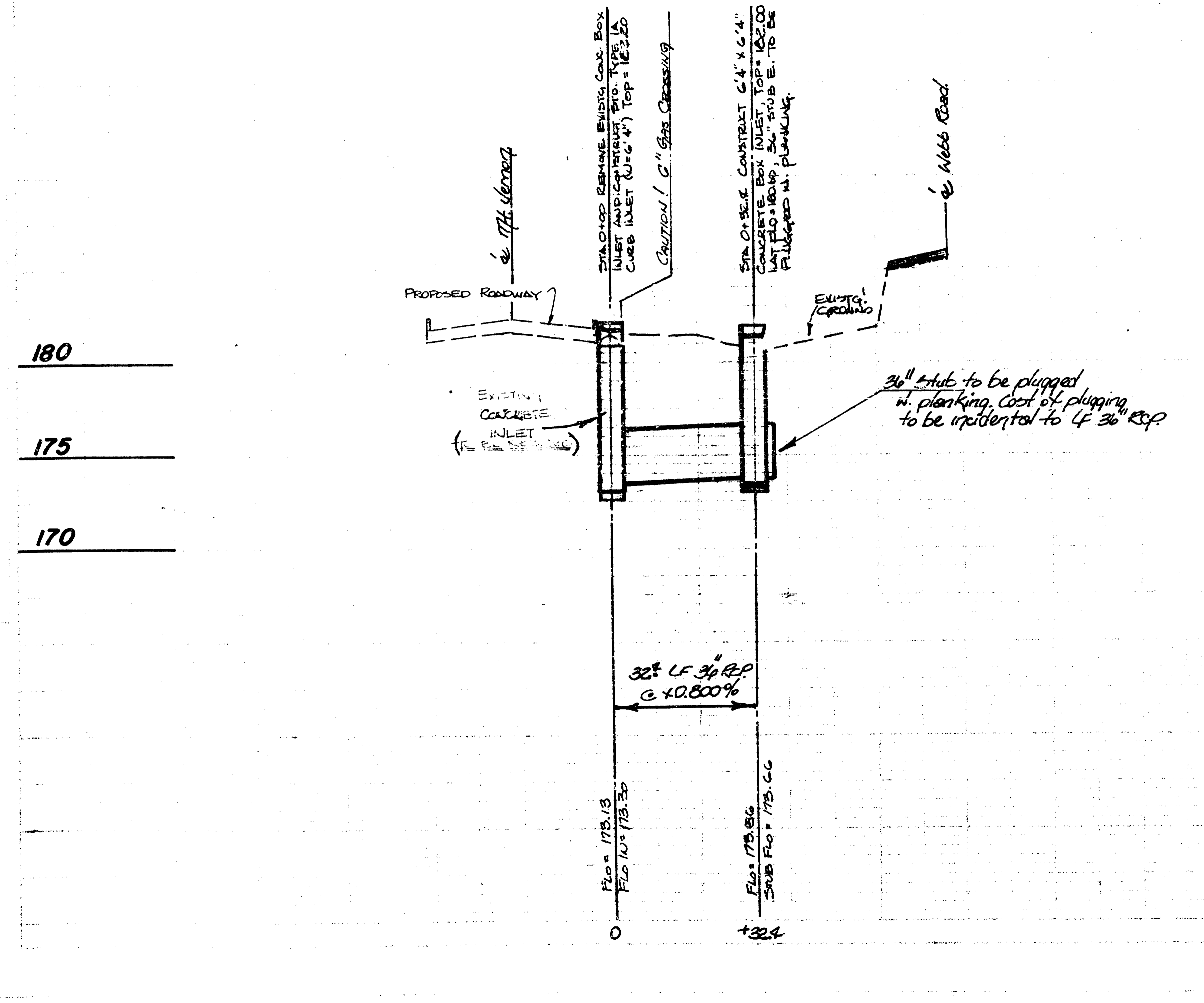
End sections shall be installed and considered as incidental to the bid item for lineal feet Pipe.

The 36 inch R.C.P. stub to the east shall be plugged shut a the present time with the use of planking. The cost of the planking shall be considered as incidental to L.F. 36 inch R.C.P.

The contractor shall regrade thge disturbed areas in the ditch along Webb Road to properly drain and leave the ditch area in good condition. The cost of regrading shall be incidental to the project.

The contractor shall contact Bill Hagemann, Northwest Central Pipeline Company, 524-0491, 48 hours prior to construction in the area around the 16 inch high pressure gas line in Webb Road.

The contractor shall contact the necessary utility companies in order to verify if any underground lines exist within the Webb Road right-of-way area of construction.


℄ Mt. Vernon
STA 0+00 REMOVE EXISTG CONC. BOX INLET AND CONSTRUCT STD. TYPE 1A CURB INLET (W=6'4") TOP=182.20
CAUTION! 6" GAS CROSSING
STA 0+32.4 CONSTRUCT 6'4" x 6'4" CONCRETE BOX INLET, TOP=182.00 LAT FLO=180.60, 36" STUB E. TO BE PLUGGED W. PLANKING.
℄ Webb Road
PROPOSED ROADWAY
EXISTG. GROUND
EXISTING CONCRETE INLET
36" stub to be plugged w. planking. Cost of plugging to be incidental to LF 36" RCP.
180
175
170
32± LF 36" RCP @ +0.800%
FLO=173.13
FLO IN=173.30
FLO=173.56
STUB FLO=173.66
0
+32.4

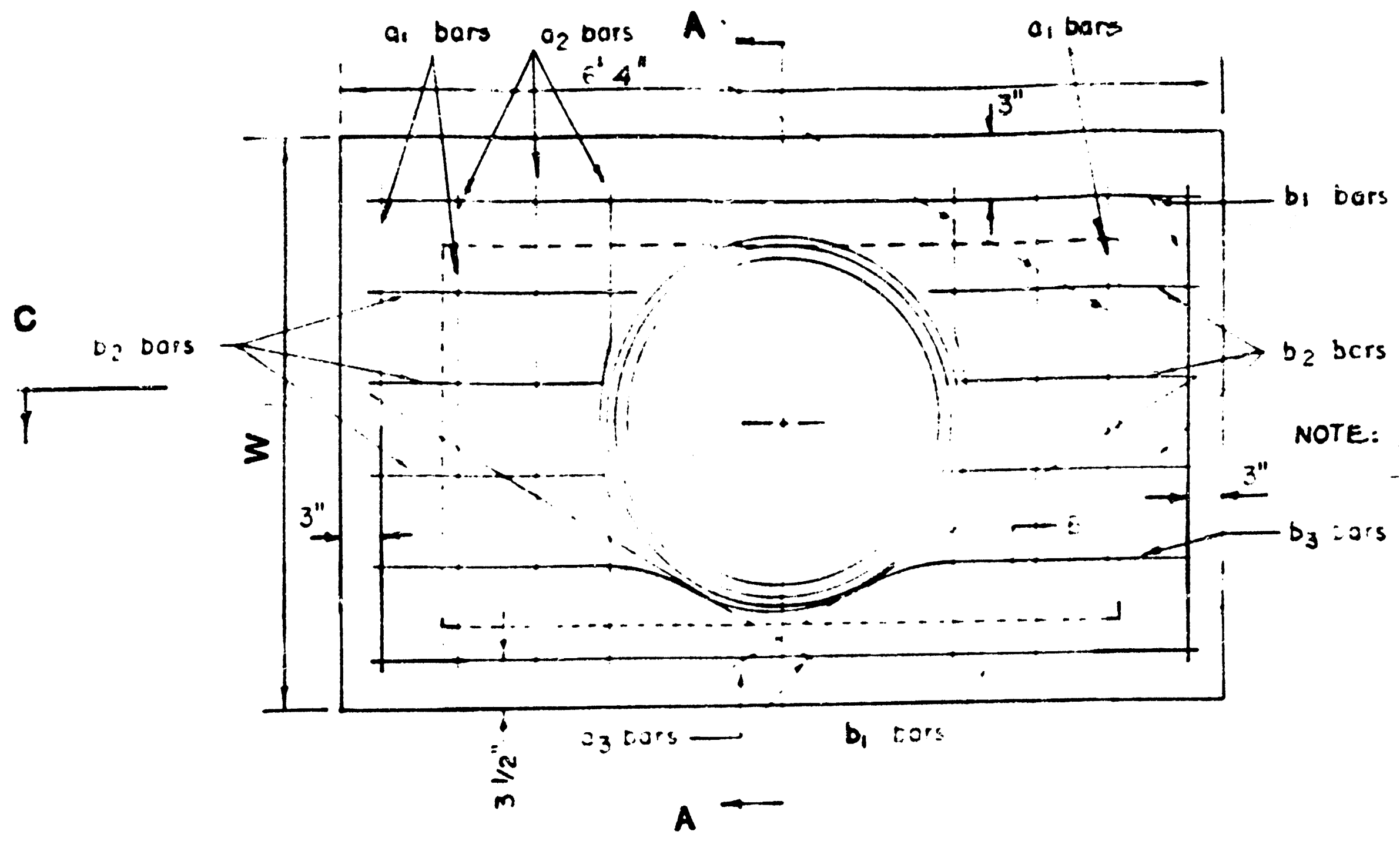
INCIDENTAL DRAINAGE

BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

Design:	Drawn:	Approved:	Date:	Scale:	Sheet: 6 of: 10

6/10

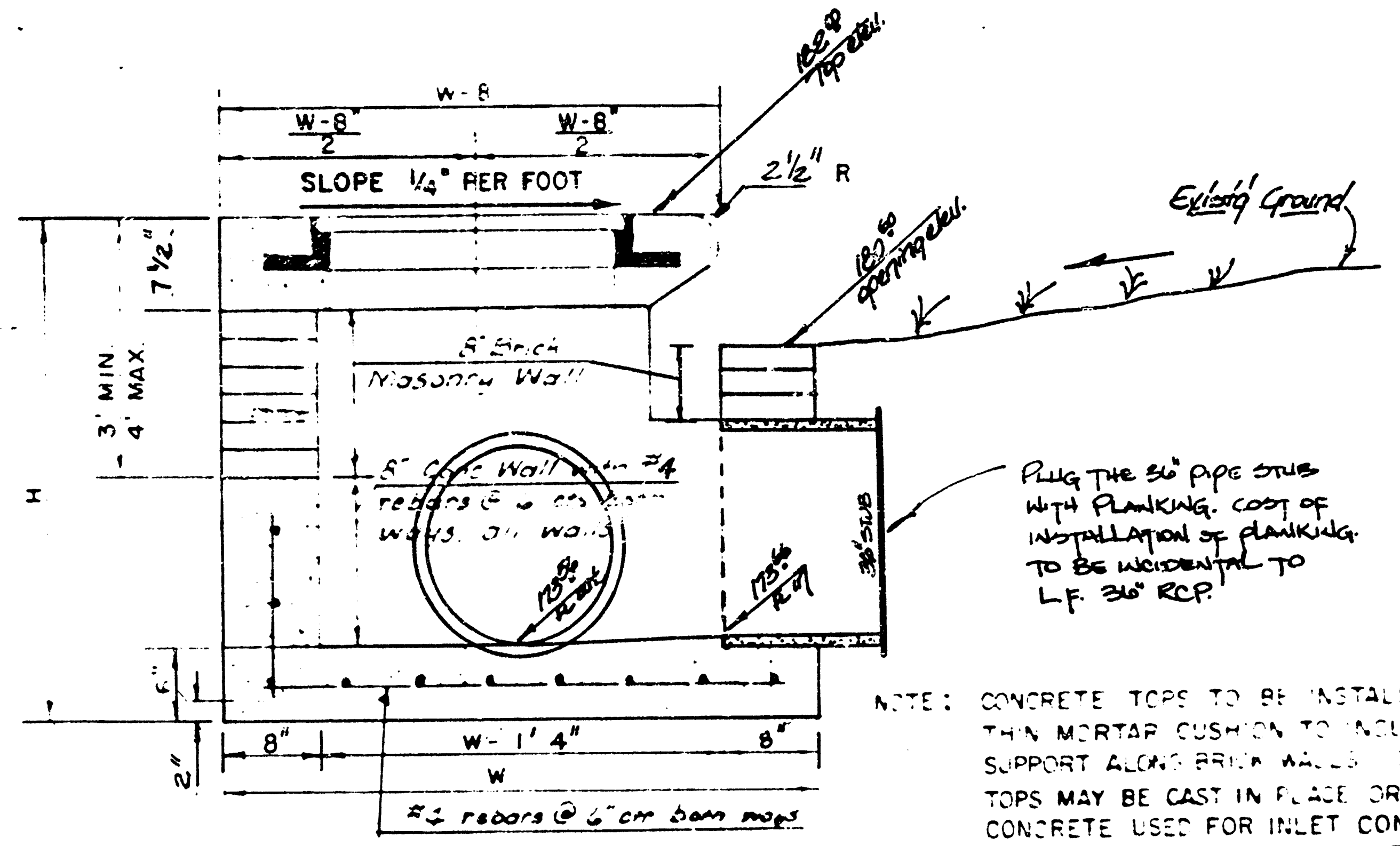
Project Number: 472-76-245-31361-000-000-000


a1 bars
a2 bars
A
6'4"
a1 bars
3"
b1 bars
C
b2 bars
b2 bars
W
3"
3"
b3 bars
3 1/2"
a3 bars
b1 bars
A

NOTE: b3 bar to be field bent to clear manhole frame.

PLAN

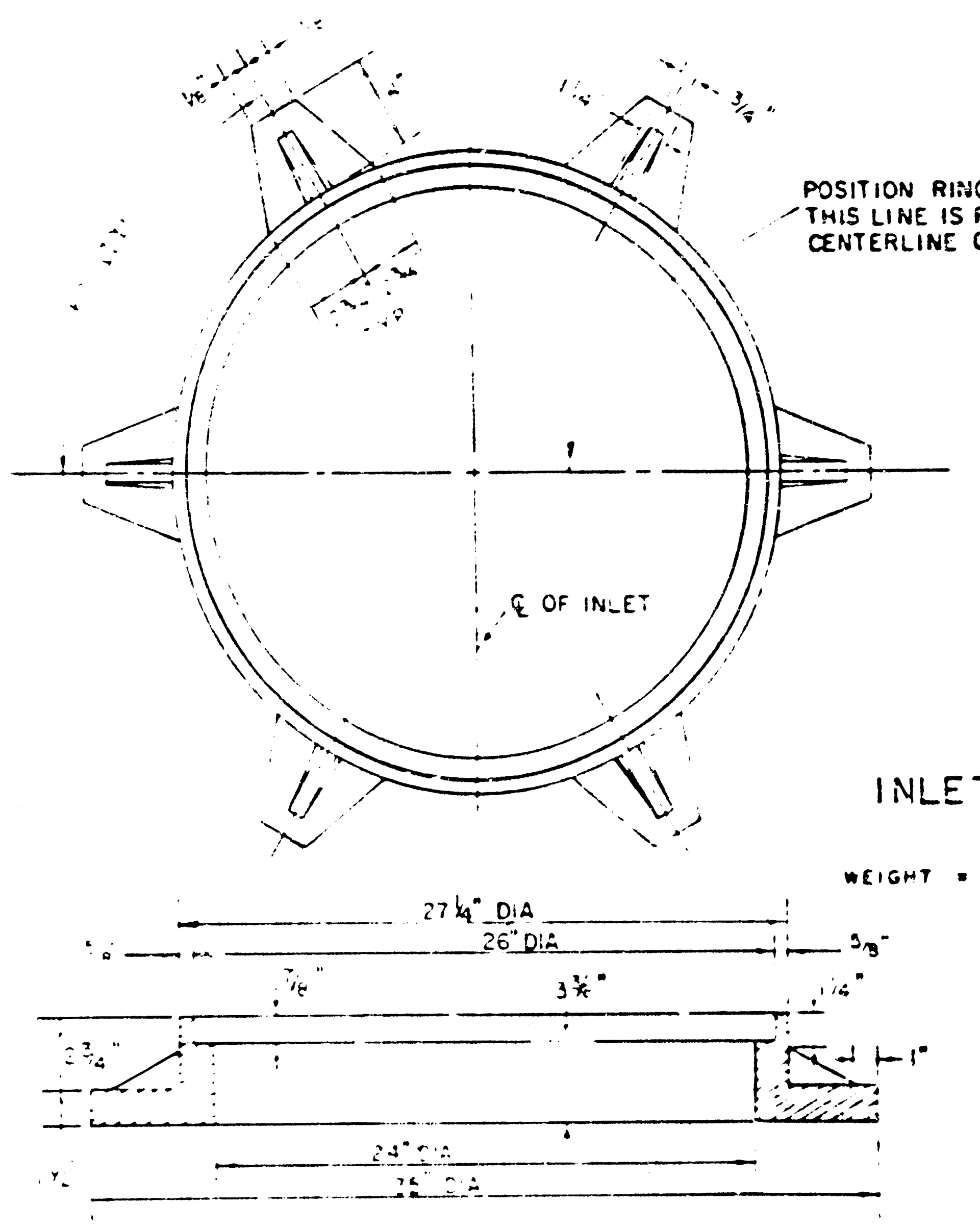
NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS


W - 8
W-8"/2
W-8"/2
SLOPE 1/4" PER FOOT
2 1/2" R
182.80 Top elev.
183.50 opening elev.
Existing Ground
7 1/2"
3' MIN. - 4' MAX.
H
8" Brick Masonry Wall
8" Conc Wall with #4 rebars @ 6" cts both ways, all walls
173.56 FL 30"
173.56 FL
36" STUB
6"
2"
8"
W - 1' 4"
8"
W
#4 rebars @ 6" ctr both ways

PLUG THE 36" PIPE STUB WITH PLANKING. COST OF INSTALLATION OF PLANKING TO BE INCIDENTAL TO L.F. 36" RCP.

SECTION A-A

NOTE: CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX.


1/8"
2"
1 1/4"
3/4"
℄ OF INLET
27 1/4" DIA
26" DIA
5/8"
7/8"
3 3/4"
1/4"
2 3/4"
1"
24" DIA
25" DIA

POSITION RING SUCH THAT THIS LINE IS PARALLEL WITH CENTERLINE OF PAVEMENT.

INLET FRAME

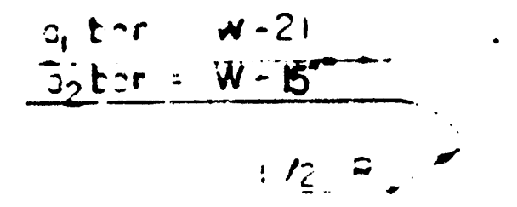
WEIGHT = 180 LBS

SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.

NOTE: CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W = 4'4" AND H = 6'0" OR LESS.

~~ADDITIONAL CURB AND GUTTER CONSTRUCTION NECESSARY TO CONNECT 30' [illegible]~~

INLET INVERT SHALL BE SHAPED 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.


a1 bar W-21
b2 bar = W-15
1/2 R

BENDING DIAGRAM

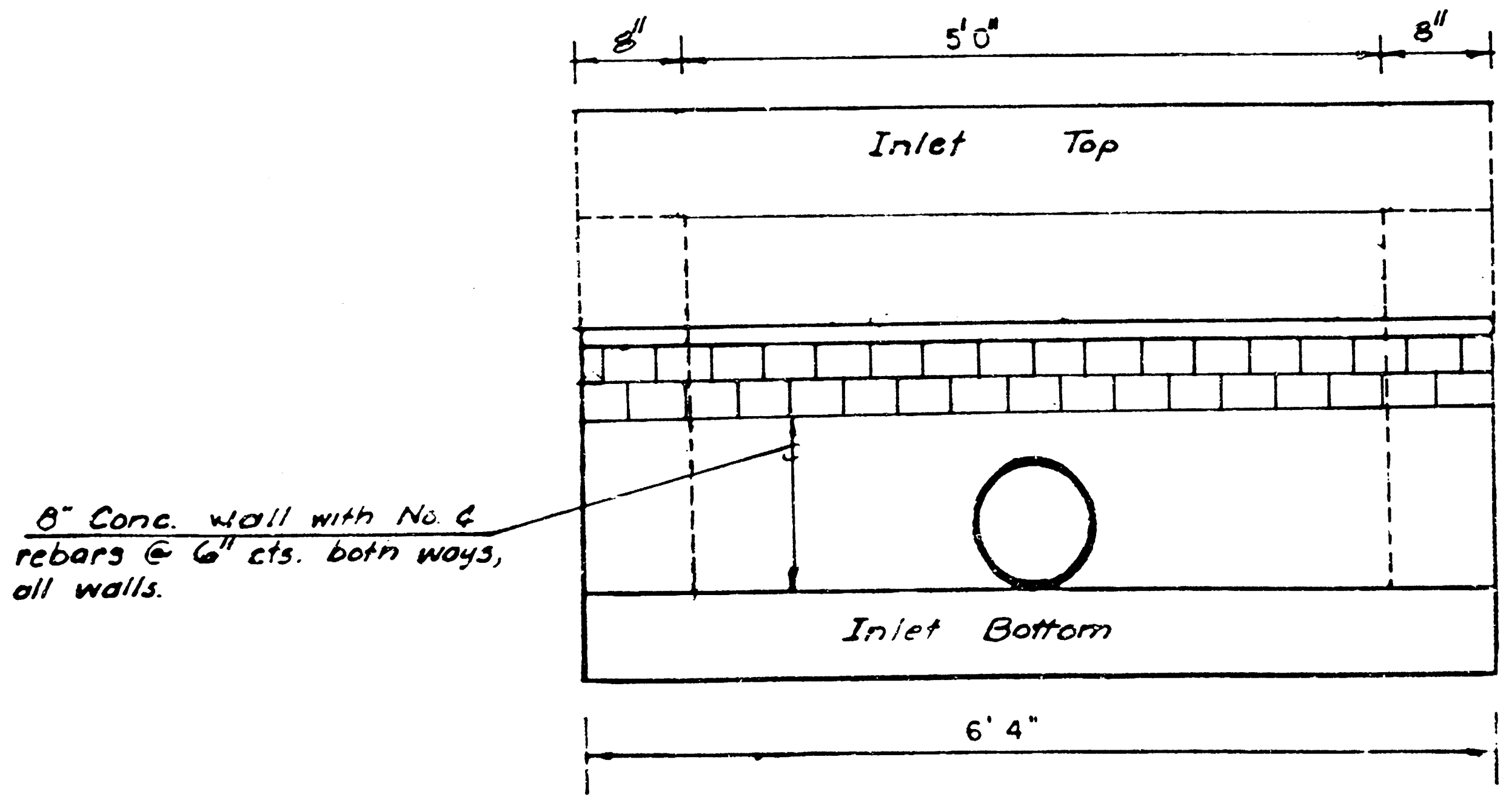
STEEL SCHEDULE

	BAR	a1	a2	a3	b1 W=4'4	b1 W=5'4	b1 W=6'4	b1 W=7'4	b1 W=8'4	b2	b3	b4	WT LBS
	NUMBER	4	4	2	1	3	5	7	9	6	1	1	
	SIZE	#4	#4	#4	4	4	#4	#4	#4	#4	#4	#4	
LENGTH	W=4'4	5'7"	6'7"	4'0"*	6'	-	-	-	-	1'9"*	6'2	4'8	60±
	W=5'4	7'7"	8'7"	5'0"*	-	6'*	-	-	-	1'9"*	6'2	4'8	81±
	W=6'4'	9'7"	10'7"	6'0"*	-	-	6'1"*	-	-	1'9"*	6'2	4'8	101±
	W=7'4"	11'7"	12'7"	7'0"*	-	-	-	6'*	-	1'9"*	6'2'	4'8"	121±
	W=8'4"	13'7"	14'7"	8'0"*	-	-	-	-	6'	1'9	6'2'	4'8	141±

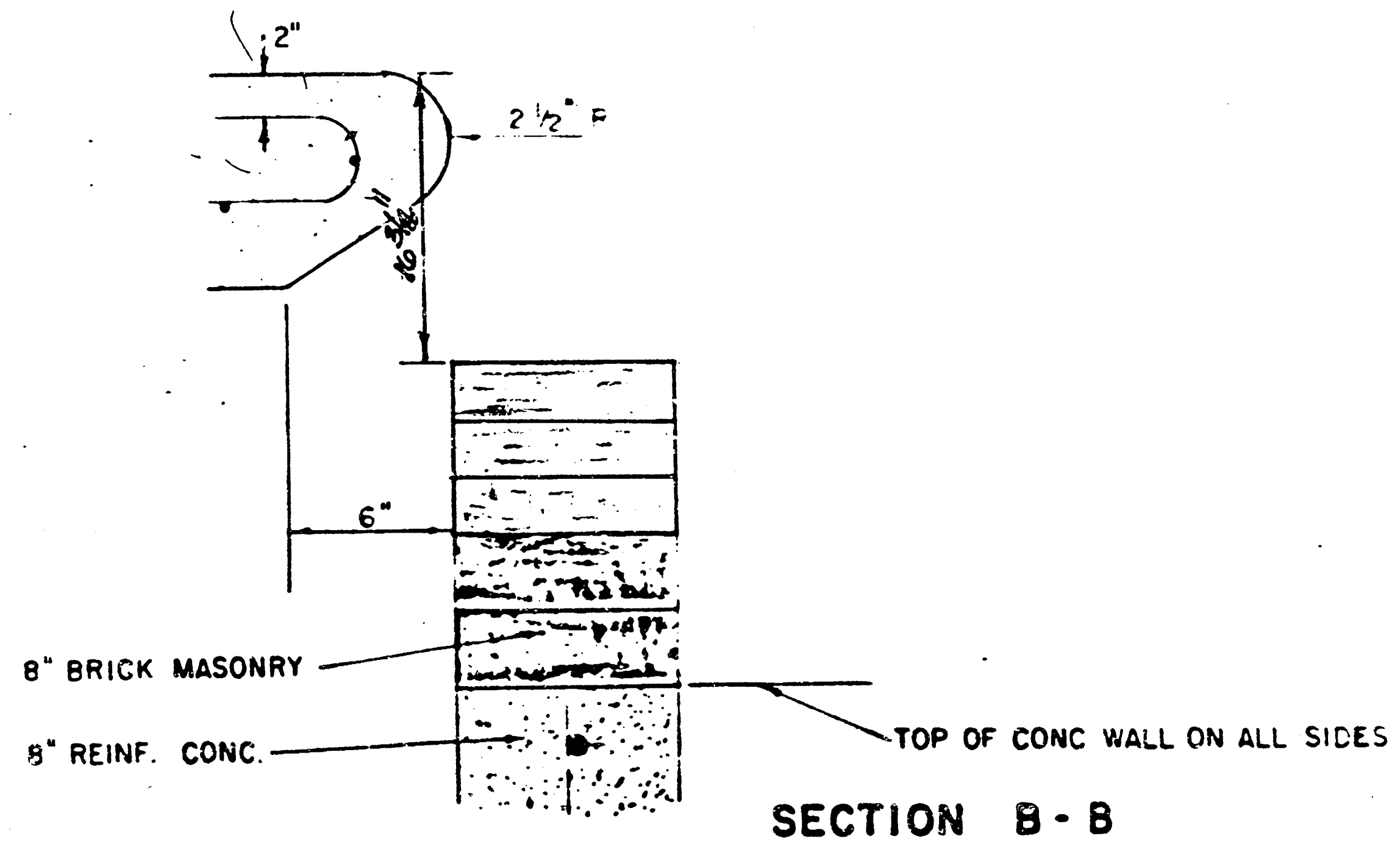
* NOTE: a3 BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

STANDARD CURB INLET PRECAST TOPS

W	PRE-CAST TOP SIZE	PIPE SIZE	CU YD CONC.
4'4"	38 · 6'4" x 7 1/2"	21" & SMALLER	0.38 ±
5'4"	48 · 6'4" x 7 1/2"	24" & 30"	0.51 ±
6'4"	58 · 6'4" x 7 1/2"	36" & 42	0.64 ±
7'4	68 · 6'4" x 7 1/2"	48" & 54"	0.77 ±
8'4"	78 · 6'4" x 7 1/2"	60" & 66"	0.90 ±


8"
5'0"
8"
Inlet Top
8" Conc. wall with No. 6 rebars @ 6" cts. both ways, all walls.
Inlet Bottom
6'4"

SECTION C-C


2"
2 1/2" R
180° bend
6"
8" BRICK MASONRY
8" REINF. CONC.
TOP OF CONC WALL ON ALL SIDES

SECTION B-B

NON-STANDARD DITCH INLET

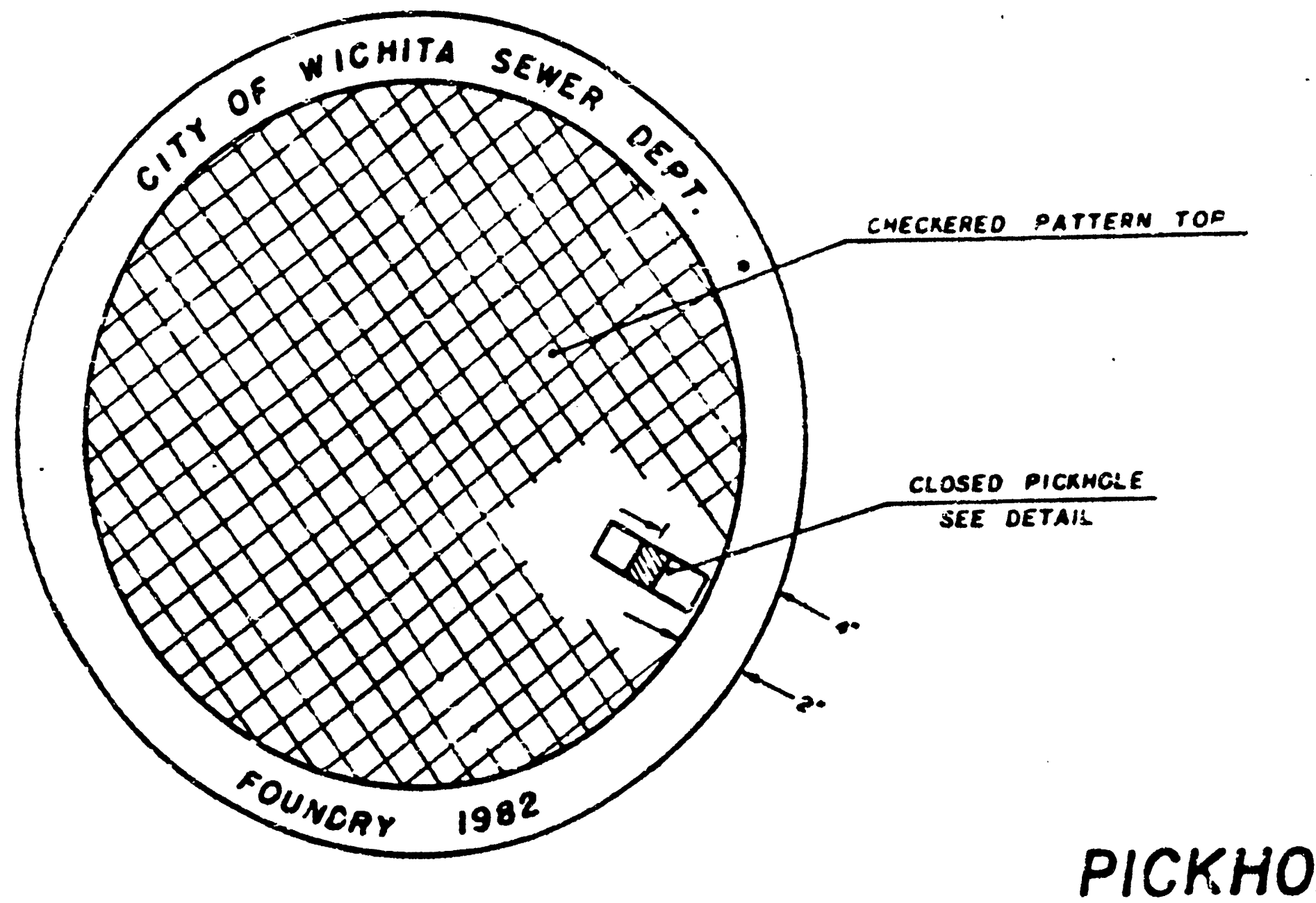
CITY OF WICHITA, KANSAS

Sheet 7 of 10

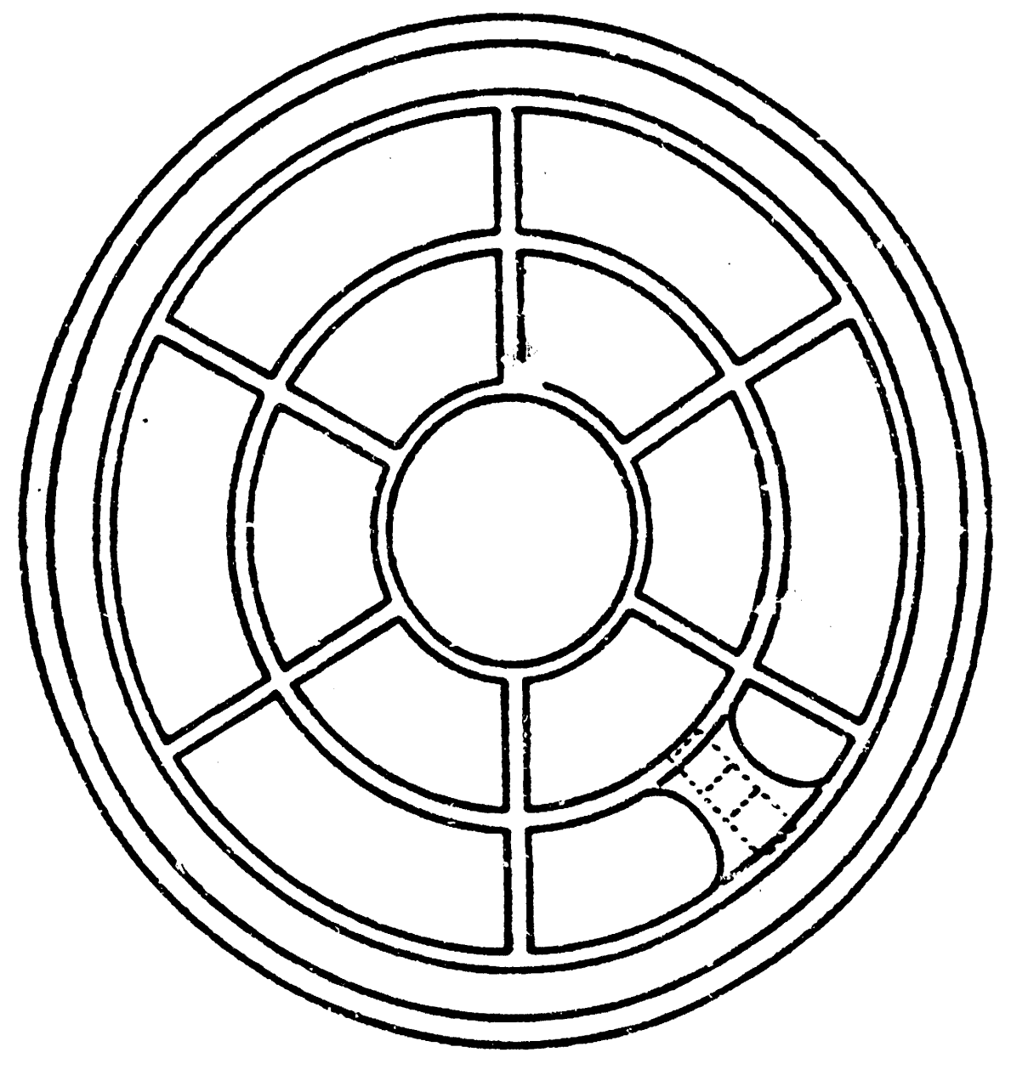
7/10

MANHOLE COVER

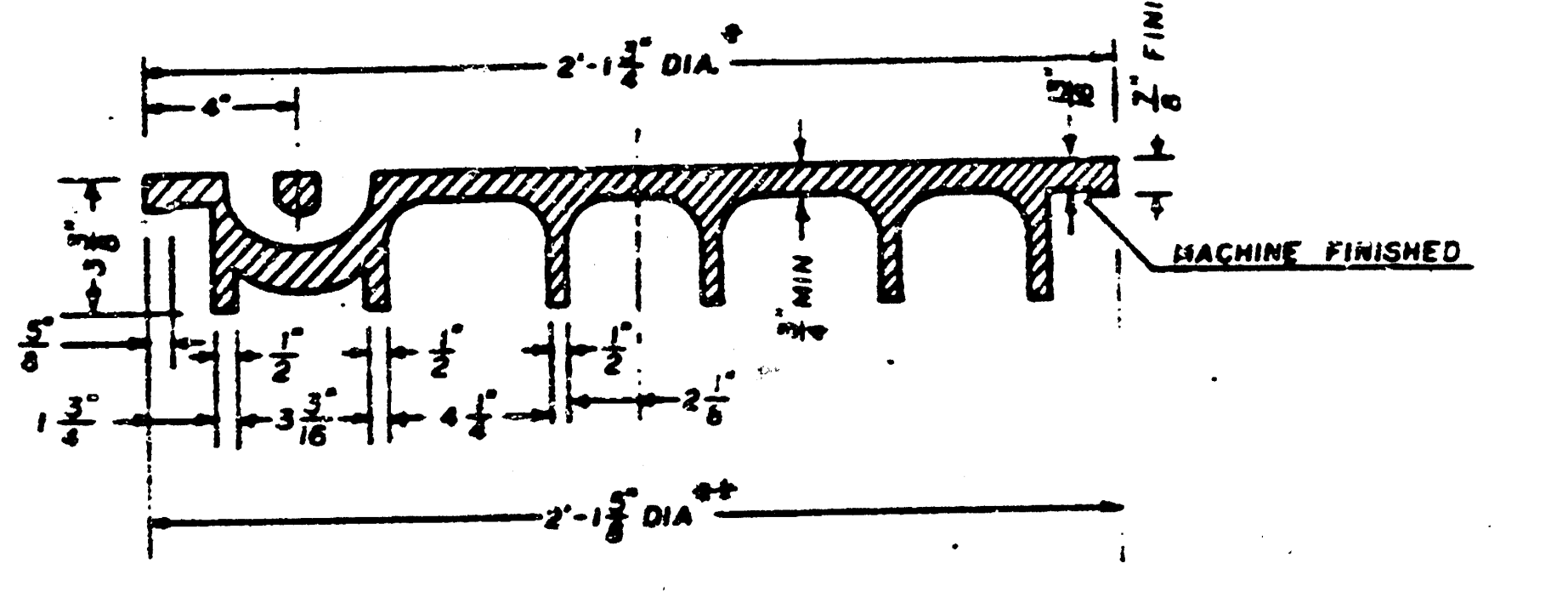
Weight: 180 Lbs.


CITY OF WICHITA SEWER DEPT.
FOUNDRY 1982
CHECKERED PATTERN TOP
CLOSED PICKHOLE SEE DETAIL
4"
2"

TOP VIEW



BOTTOM VIEW

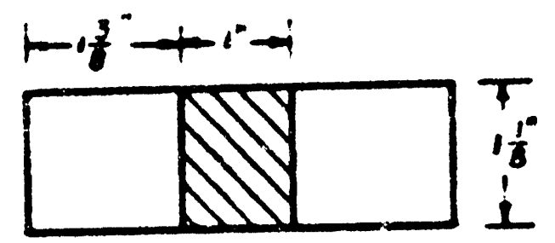

2'-1 3/4" DIA.*
4"
7/8" FINISHED
MACHINE FINISHED
1" MIN
5/8
1 3/4
1/2
3 3/16
4 1/4
2 1/8
2'-1 5/8" DIA.**

SECTION VIEW

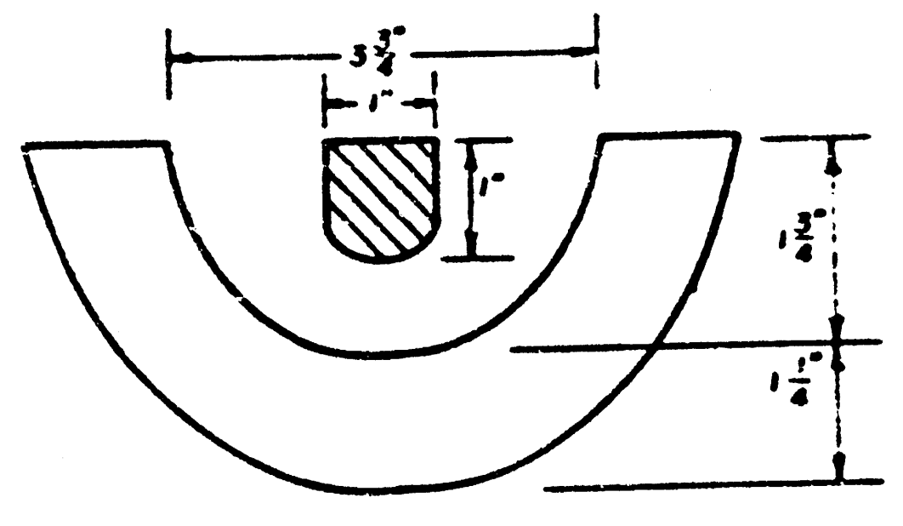
* OUTSIDE DIA. TOP OF COVER

** OUTSIDE DIA. BOTTOM OF COVER

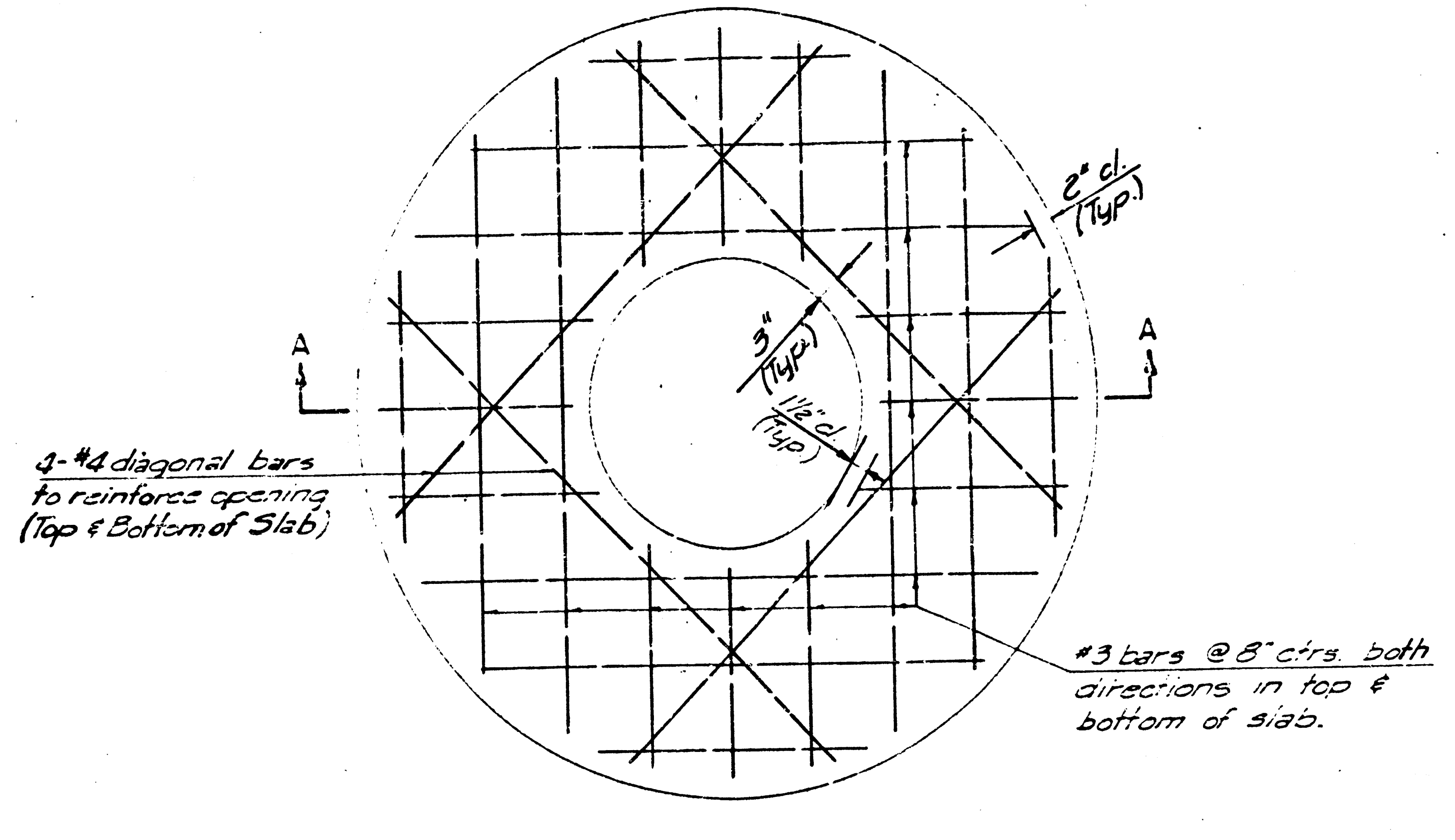
PICKHOLE DETAIL


1 3/8"
1"
1 1/8"
3 3/4"

TOP VIEW


3 3/4"
1"
1"
1 3/4"
1 1/4"

SECTION VIEW


A
A
2" cl. (Typ.)
3" (Typ.)
1 1/2" cl. (Typ.)
4-#4 diagonal bars to reinforce opening (Top & Bottom of Slab)
#3 bars @ 8" ctrs. both directions in top & bottom of slab.

PLAN

GENERAL NOTES

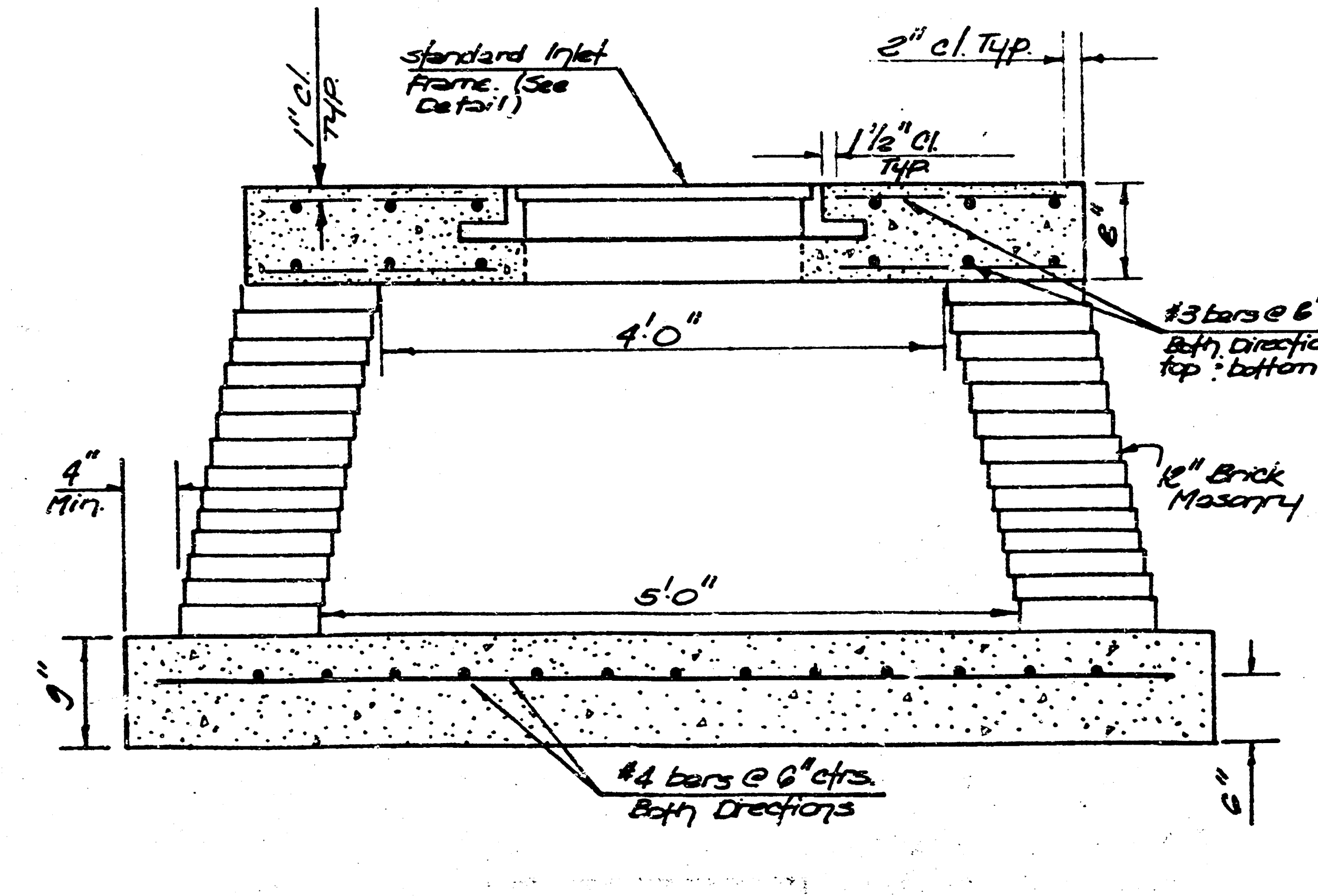
1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.

2. MANHOLE CASTINGS SHALL BE COATED WITH AN ASPHALT PAINT RESULTING IN A SMOOTH, TOUGH AND TENACIOUS COATING WHICH IS NOT BRITTLE OR TACKY.

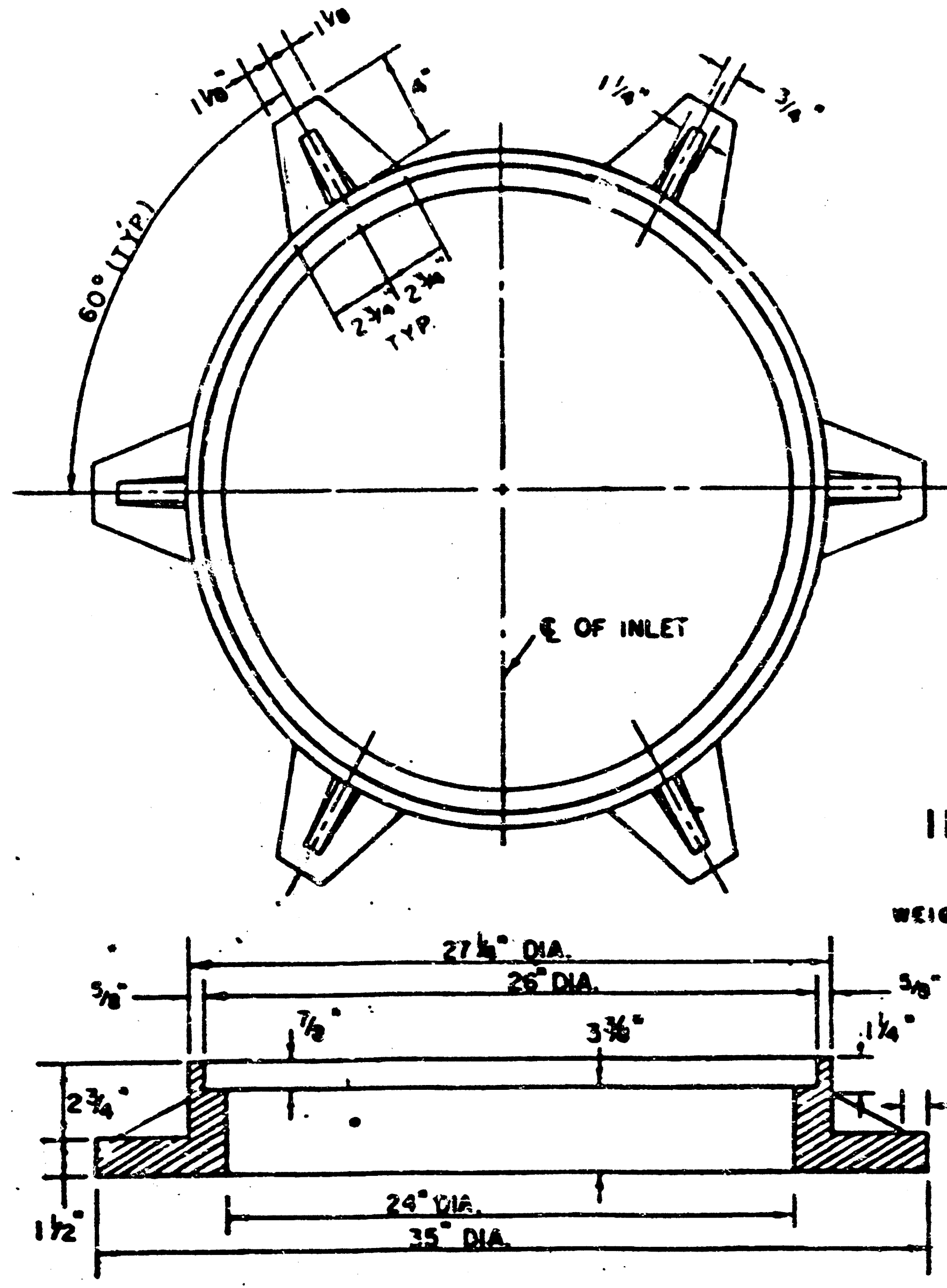
3. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.

4. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.

5. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1" IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SEWER DEPARTMENT". THE WORD DEPARTMENT MAY BE ABBREVIATED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.


1" cl. Typ.
Standard Inlet Frame. (See Detail)
2" cl. Typ.
1 1/2" cl. Typ.
6"
#3 bars @ 6" ctrs. Both Directions in top & bottom of slab
4'0"
12" Brick Masonry
4" Min.
5'0"
9"
6"
#4 bars @ 6" ctrs. Both Directions

SECTION A-A


1 1/8"
1 1/8"
4"
1 1/8"
3/4"
60° (TYP)
2 1/4" 2 1/4" TYP.
℄ OF INLET
27 1/4" DIA.
26" DIA.
5/8"
5/8"
7/8"
3 3/8"
1 1/4"
2 3/4"
1"
1 1/2"
24" DIA.
35" DIA.

INLET FRAME

WEIGHT = 180 LBS.

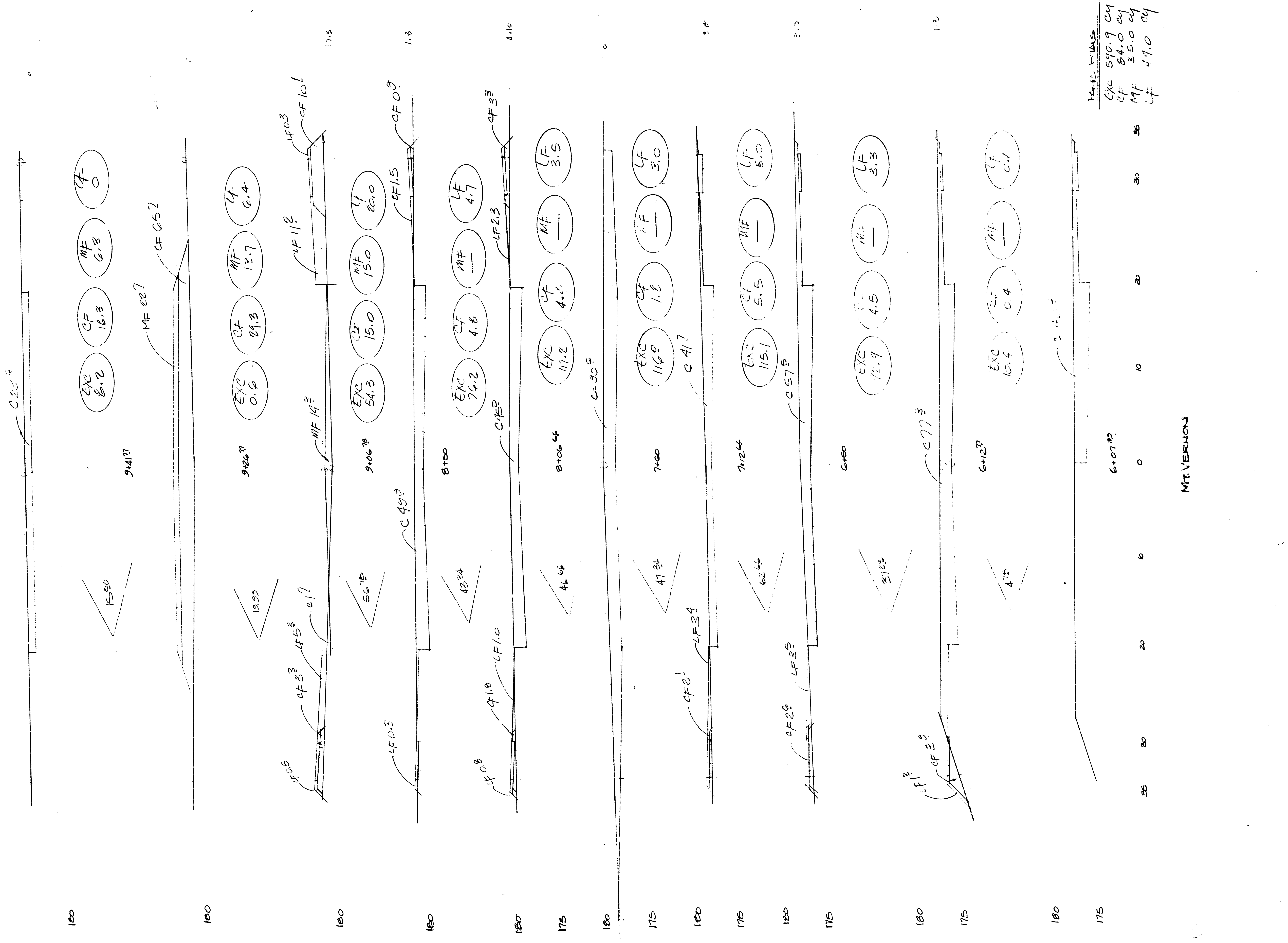
SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.

8/10

MODIFIED TYPE 'B' SPECIAL SHALLOW MANHOLE

Sheet: 8

10



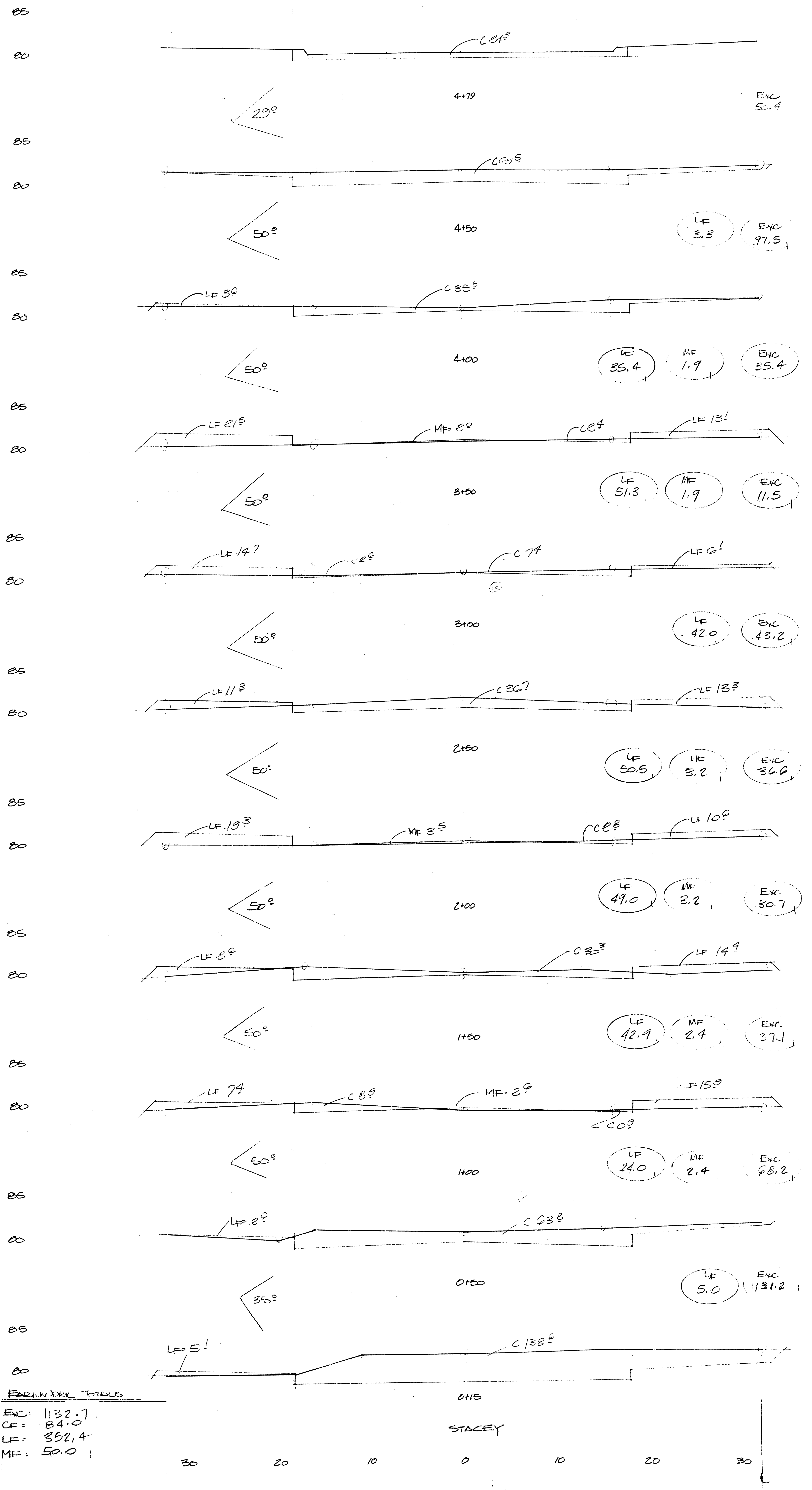
TOTALS
EXC 590.9 CY
CF 84.0 CY
MF 35.0 CY
LF 41.0 CY
MT. VERNON
9+41⁷⁷
EXC 8.2
CF 16.3
MF 6.3
CF 0
9+26⁷⁷
EXC 0.6
CF 29.3
MF 13.7
LF 6.4
9+06⁷⁸
EXC 54.3
CF 15.0
MF 15.0
LF 20.0
8+80
EXC 76.2
CF 4.8
MF —
LF 4.7
8+06⁶⁴
EXC 117.2
CF 4.4
MF —
LF 3.5
7+60
EXC 116.0
CF 1.8
MF —
LF 3.0
7+26⁶⁴
EXC 115.1
CF 5.5
MF —
LF 8.0
6+50
EXC 13.7
CF 4.5
MF —
LF 3.3
6+12⁷⁷
EXC 10.4
CF 0.4
MF —
LF 0.1
6+07⁹⁹
15⁰⁰
19.93
56⁷⁸
43²⁴
46⁶⁶
47³⁴
62⁶⁶
37⁰³
4⁷⁸
180
175

9/10

EARTHWORK SECTIONS
MT. VERNON

Sheet: 9 of: 10

PROJECT NO. 472-76-245-81351-000-000-001


85
80
C 24^{3}
4+79
29°
EXC 50.4
85
80
C 69^{5}
4+50
50°
LF 3.3
EXC 97.5
85
80
LF 3^{6}
C 35^{5}
4+00
50°
LF 35.4
MF 1.9
EXC 35.4
85
80
LF 21^{5}
MF= 2^{0}
C 2^{4}
LF 13^{1}
3+50
50°
LF 51.3
MF 1.9
EXC 11.5
85
80
LF 14^{7}
C 2^{6}
C 74
LF 6^{1}
3+00
50°
LF 42.0
EXC 43.2
85
80
LF 11^{3}
C 36^{7}
LF 13^{3}
2+50
50°
LF 50.5
MF 3.2
EXC 36.6
85
80
LF 19^{3}
MF 3^{5}
C 2^{8}
LF 10^{6}
2+00
50°
LF 49.0
MF 2.2
EXC 30.7
85
80
LF 8^{6}
C 30^{3}
LF 14^{4}
1+50
50°
LF 42.9
MF 2.4
EXC 37.1
85
80
LF 74
C 8^{9}
MF= 2^{6}
LF 15^{9}
C 0^{9}
1+00
50°
LF 24.0
MF 2.4
EXC 68.2
85
80
LF= 2^{6}
C 63^{8}
0+50
35°
LF 5.0
EXC 131.2
85
80
LF= 5^{1}
C 138^{6}
0+15
STACEY
30
20
10
0
10
20
30

PAGE TOTALS
EXC = 541.8 cy
MF = 15.0 cy
LF = 303.4 cy

EARTHWORK TOTALS
EXC: 1132.7
CF: 84.0
LF: 352.4
MF: 50.0

10/10
EARTHWORK SECTIONS
STACEY

Sheet: 10 of: 10

14 2 1 3

PROJECT NO. 472-76-245-81351-000-090-001