STREET IMPROVEMENTS FOR

HARRY COURT

FROM THE N.L. HARRY STREET TO, AND INCLUDING, CUL-DE-SAC TO SERVE LOTS 1 THROUGH 20 INCLUSIVE, HEDGEWOOD ADDITION.

PROJECT NUMBER

472 76 245 81818 000 000 001

INDEX NO. 602771

GENERAL NOTES

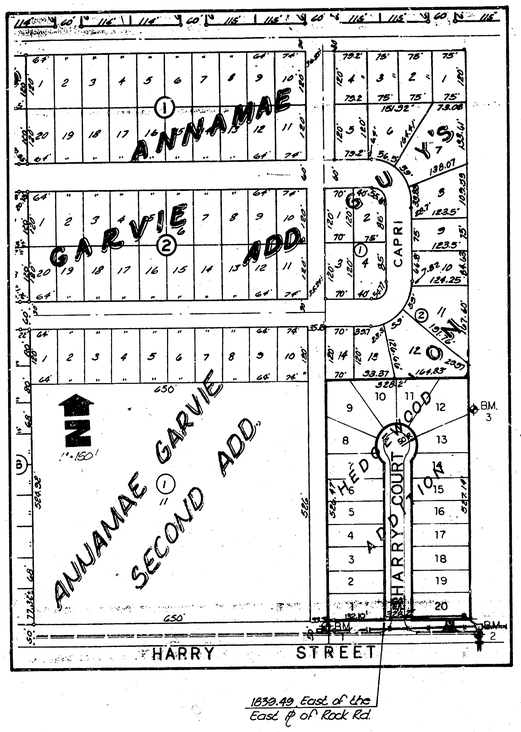
1. Utility service lines, poles, valve boxes, meters, and etcetera are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. 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.

2. This project includes a certain amount of roll type curb construction. Roll Curbs shall be depressed through all driveway openings when such drives are constructed as a part of the project.

3. No more than 5 drives 60' feet in width, or equivalent combinations thereof, are to constructed with this project.

4. Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.

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.



1838.49 East of the East ℄ of Rock Rd.

IMPROVEMENT DISTRICT

CITY of WICHITA, KANSAS

MICHAEL E. LINDEBAK
CITY ENGINEER

INDEX of SHEETS

BENCHMARKS

1. Spike in So. face of Power Pole @ S.W. Cor. Lot 16, Blk. 2, Gulf's Addn. (Lot 1, Hedgewood Addn.). Elev. = 159.23 City datum

2. "□" Cut in Top of Curb 164.1' E. (+) and 24.5' N. @ intersection Harry Court & Harry Street. Elev. = 157.15 City datum

3. R.B. Spike 70.0' So. and 7.8' E. of ½" Iron in N.E. Prop. Corner, Lot 12, Hedgewood Addn. Elev. = 166.51 City datum

N. BRENT WOOTEN LICENSED 8470 KANSAS PROFESSIONAL ENGINEER

BOOKED: 1-10-89 MCG

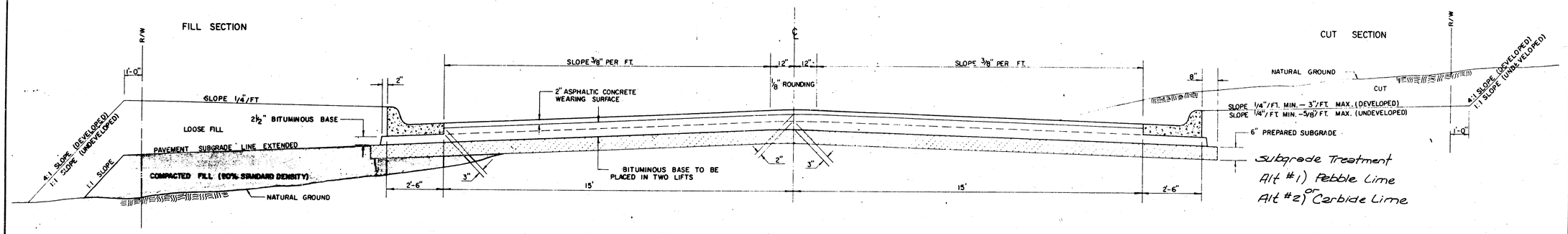
TITLE SHEET

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

Design:	Drawn:	Approved:	Date:	Scale:	Sheet:	of:
B. Wooten	Sonny		Nov. 88	as noted	1	7

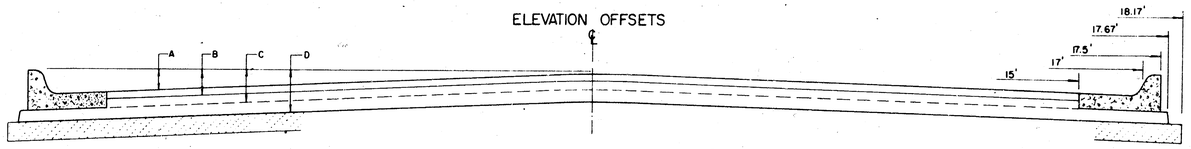
TYPICAL 35' PAVEMENT DETAILS

TRANSVERSE SECTION



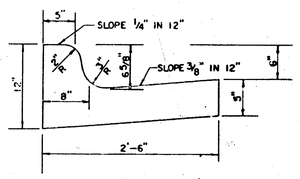
Subgrade Treatment
Alt #1) Pebble Lime
Alt #2) or Carbide Lime

ELEVATION OFFSETS

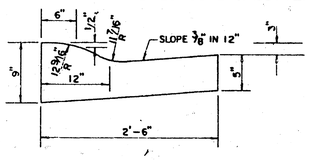


DISTANCE FROM CENTERLINE (LT. & RT.)	0'	2'	4'	6'	8.5'	10'	12'	14'	15'	17'	17.5'	17.67'	18.17'
A: TOP OF CURBS TO TOP OF SURFACE LIFT	0.04	0.08	0.14	0.21	0.29	0.33	0.39	0.46	0.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	0.21	0.25	0.31	0.37	0.45	0.50	0.56	0.62	0.65	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	0.37	0.43	0.50	0.57	0.67	0.72	0.79	0.87	0.90	0.98	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

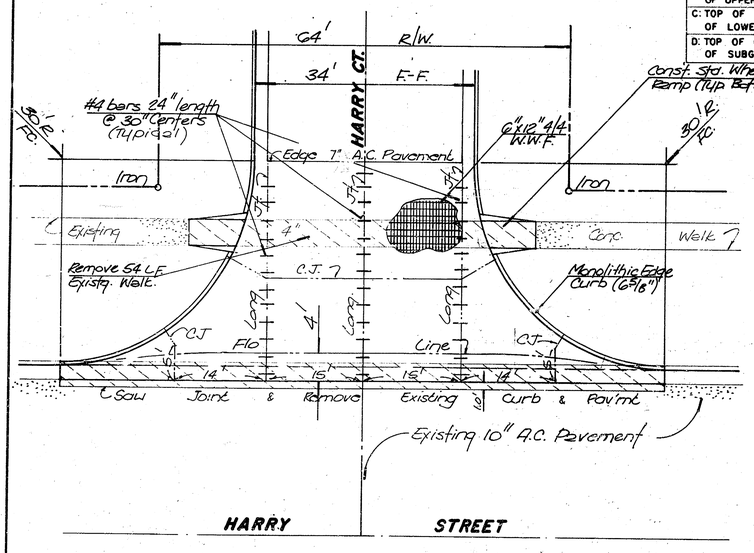
COMBINED CURB & GUTTER



ROLL TYPE COMBINED CURB & GUTTER



VALLEY GUTTER DETAIL



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).

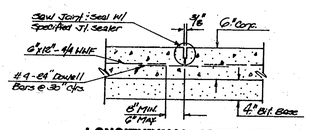
2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 2 1/2" BITUMINOUS BASE.

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.

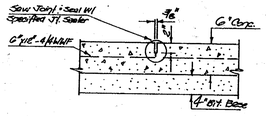
4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.

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.

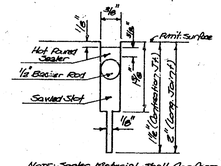
6) CONTRACTOR TO BID ONLY ONE SUBGRADE TREATMENT ALTERNATE WHEN ALTERNATES ARE PROVIDED IN THE PROPOSAL AND CONTRACT. THE ALTERNATE CHOSEN BY THE SUCCESSFUL BIDDER SHALL BE USED IN CONSTRUCTING THIS PROJECT.



LONGITUDINAL JOINT DETAIL FOR VALLEY GUTTER



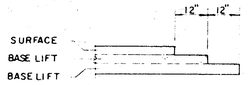
CONTRACTION JOINT FOR VALLEY GUTTER



Note: Sealer Material Shall Conform to ASTM D-3569 or ASTM D-1190

SAW JOINT DETAIL FOR CONT. AND LONG. JOINTS

TRANSVERSE CONSTRUCTION JOINTS



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT ABUTS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE PLANS. 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).

7 INCH RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH 5 INCH BITUMINOUS BASE

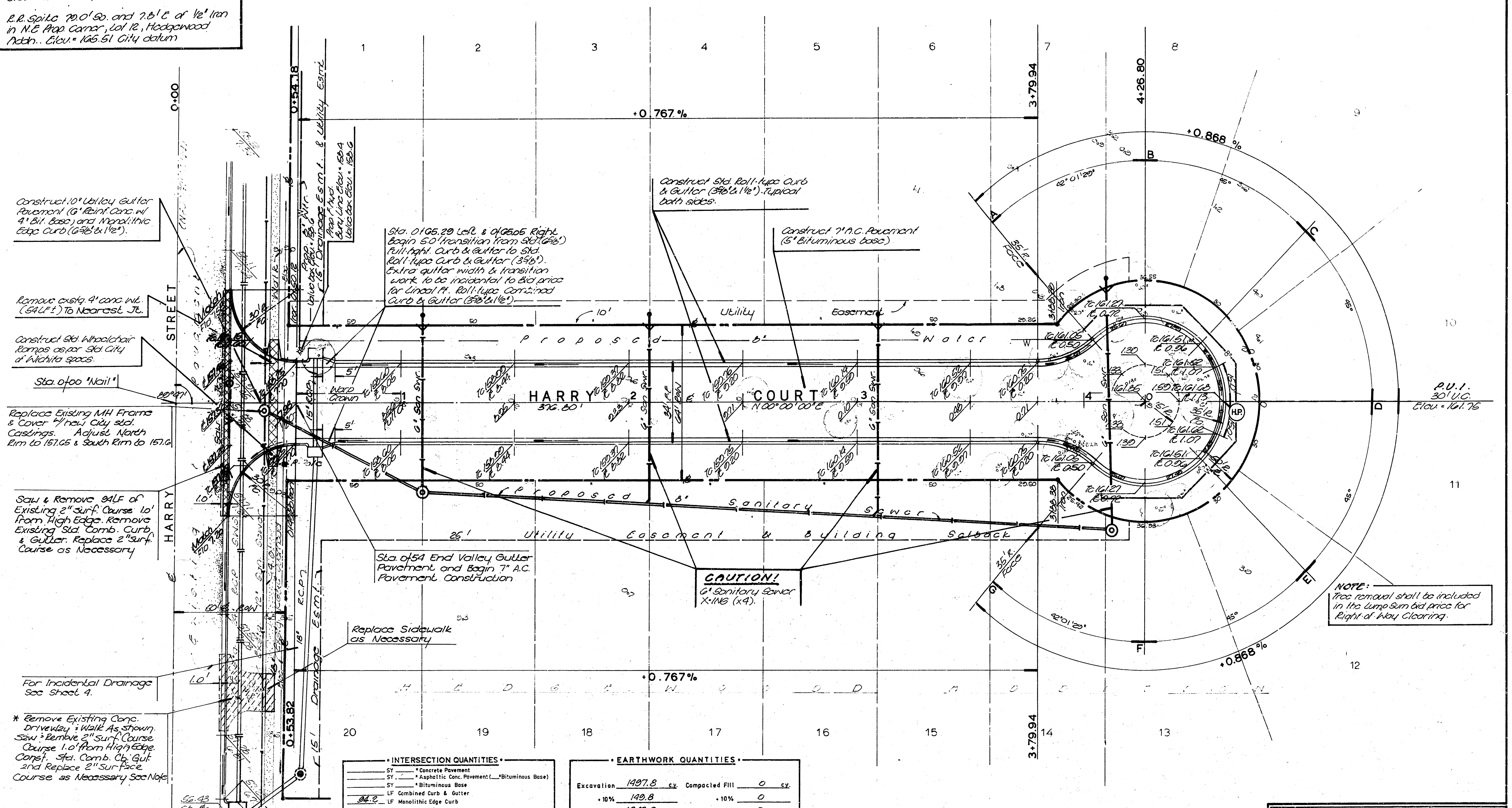
CITY OF WICHITA, KANSAS | 2

PROJECT NUMBER

472-76-245-81818-000-000-001 | 7 2/7

BENCHMARKS

1. Spike in So. Face of Power Pole @ S.W. Cor. Lot 15, Blk. 2, Guy's Addn. (Lot 1, Hedgewood Addn.) Elev. = 159.23 City datum
2. "□" Cut in Top of Curb 164'E(!) and 27.5'N. ℄ intersection Harry Court @ Harry Street. Elev. = 157.15 City datum
3. R.R. Spike 70.0' So. and 7.8'E of 1/2" Iron in N.E Prop. Corner, Lot 12, Hedgewood Addn.. Elev. = 165.51 City datum



N
1" = 20'
Construct 10' Valley Gutter Pavement (6" Reinf. Conc. w/ 4" Bit. Base) and Monolithic Edge Curb (6"/8"x1 1/2").
Remove exstg. 4' conc. wk. (94LF±) To Nearest Jt.
Construct Std. Wheelchair Ramps as per Std. City of Wichita specs.
Sta. 0+00 "Nail"
Replace Existing MH Frame & Cover w/ new City std. Castings. Adjust North Rim to 157.05 & South Rim to 157.6
Saw & Remove 94LF of Existing 2" Surf. Course 1.0' from High Edge. Remove Existing Std. Comb. Curb & Gutter. Replace 2" Surf. Course as Necessary
For Incidental Drainage See Sheet 4.
* Remove Existing Conc. Driveway & Walk As Shown. Saw & Remove 2" Surf. Course Course 1.0' from High Edge. Const. Std. Comb. Cb. & Gut. and Replace 2" Surface Course as Necessary See Note
Sta. 0+05.29 Left & 0+05.05 Right Begin 5.0' transition from Std. (6"/8") Full-hght. Curb & Gutter to Std. Roll-type Curb & Gutter (3"/8"). Extra gutter width & transition work to be incidental to Bid price for Lineal Ft. Roll-type Combined Curb & Gutter (3"/8"x1 1/2")
Construct Std. Roll-type Curb & Gutter (3"/8"x1 1/2"). Typical both sides.
Construct 7" A.C. Pavement (5" Bituminous base).
Sta. 0+54 End Valley Gutter Pavement and Begin 7" A.C. Pavement Construction
Replace Sidewalk as Necessary
CAUTION!
6" Sanitary Sewer X-ING (x4).
NOTE: Tree removal shall be included in the Lump Sum bid price for Right of Way Clearing.
HARRY STREET
HARRY COURT
376.80'
N 00°00'00" E
10' Utility Easement
Proposed 6" Water
Proposed 8" Sanitary Sewer
26' Utility Easement & Building Setback
+0.767 %
+0.868 %
0+00
0+54.18
0+53.82
3+79.94
4+26.80
P.V.I. 30' V.C. Elev. = 161.76

* **NOTE**: This driveway is to be open And Used As A Construction Entrance To The Site Until Harry Court Is Open to Traffic. At this Time, the Drive Shall Be removed, and surface Course And Cb. & Gutter Replaced As Noted.

• INTERSECTION QUANTITIES •

	SY	___ " Concrete Pavement
	SY	___ " Asphaltic Conc. Pavement (___ " Bituminous Base)
	SY	___ " Bituminous Base
	LF	Combined Curb & Gutter
94.2	LF	Monolithic Edge Curb
	SF	4" Wheelchair Ramp
	SF	4" Walk
	CY	Excavation
	CY	Compacted Fill
	Lbs.	Reinforcing Steel
189.3	SY	Manipulation
	Tons	Lime or Cement
182.3	SY	Valley Gttr. 6 " Concrete & 4 " Asphaltic Conc. Base

• EARTHWORK QUANTITIES •

Excavation	1497.8 cy.	Compacted Fill	0 cy.
+ 10%	149.8	+ 10%	0
Total	1647.6 cy.	Total	0 cy.

Subgrade Manipulation 2020 sy.

Borrow Material 0 cy.

N. BRENT WOOTEN LICENSED 8470 KANSAS PROFESSIONAL ENGINEER

HARRY COURT

N.L. HARRY STREET TO, AND INCLUDING, CUL DE-SAC, HEDGEWOOD ADDITION. 3/7

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

Design:	Drawn:	Approved:	Date:	Scale:	Sheet: 3 of: 7
B. Wooten	Sonny	[illegible]	May 88	1" = 20'	

Project Number: 472-76-245-81818-000-000-001

BENCHMARKS

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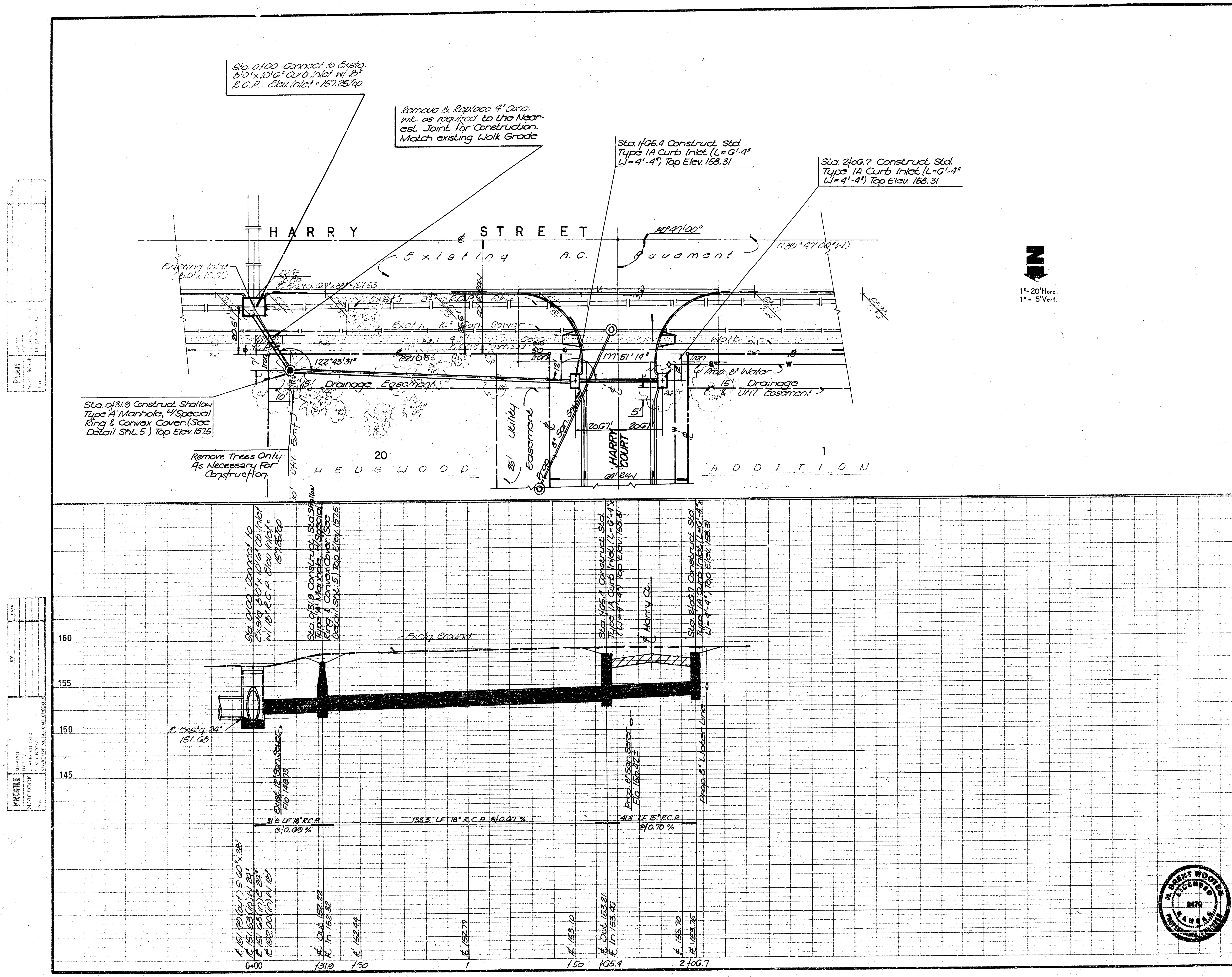
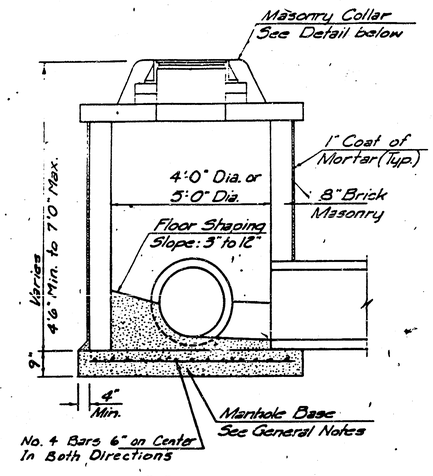


INCIDENTAL STORM WATER DRAINAGE FOR HARRY COURT PAVING PROJECT HEDGEWOOD ADDN.

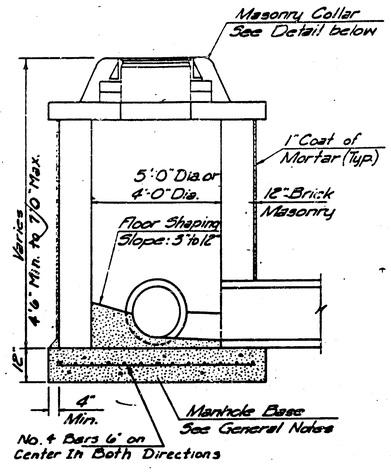
BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

Design:	Drawn:	Approved:	Date:	Scale:	Sheet
B. Wooten	Sonny	Bill	May 82	as noted	4 of 7

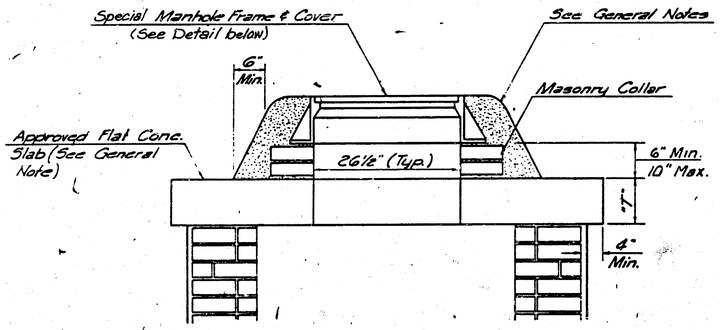
Purch. Proj. No. 472-76-245-81818-000-000-001 4/7



SHALLOW TYPE "A" MANHOLE



SHALLOW TYPE "B" MANHOLE



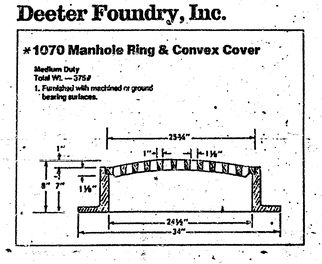
MASONRY COLLAR DETAIL

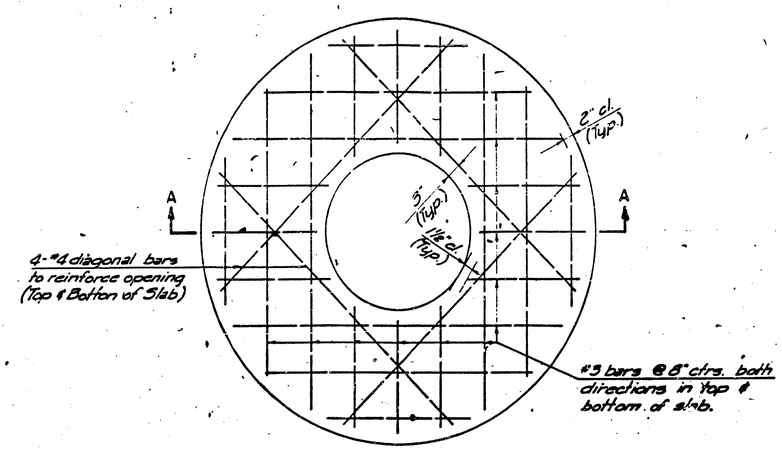
* NOTE: Taper the 8" Brick Masonry to 24½" to match the Deeter Foundry Manhole Ring & Convex Cover, (#1070) shown below.

Deeter Foundry, Inc.

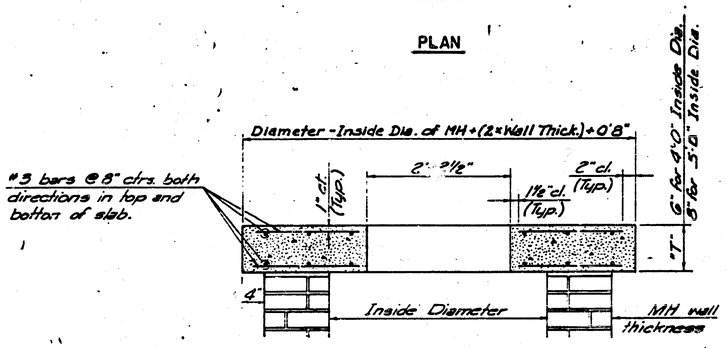
***1070 Manhole Ring & Convex Cover**

Medium Duty
Total Wt. — 575#
1. Furnished with machined or ground bearing surfaces.





PLAN

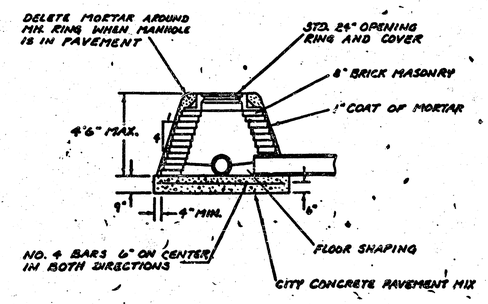


SECTION A-A

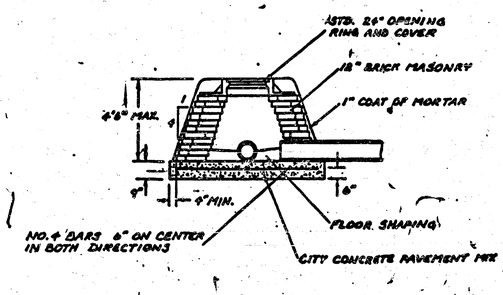
FLAT CONCRETE SLAB DETAILS.

GENERAL NOTES

1. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 6 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.
2. 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.
3. 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 ALL 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 2 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 HEAT 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.
4. 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.
5. 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.
6. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
7. 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.



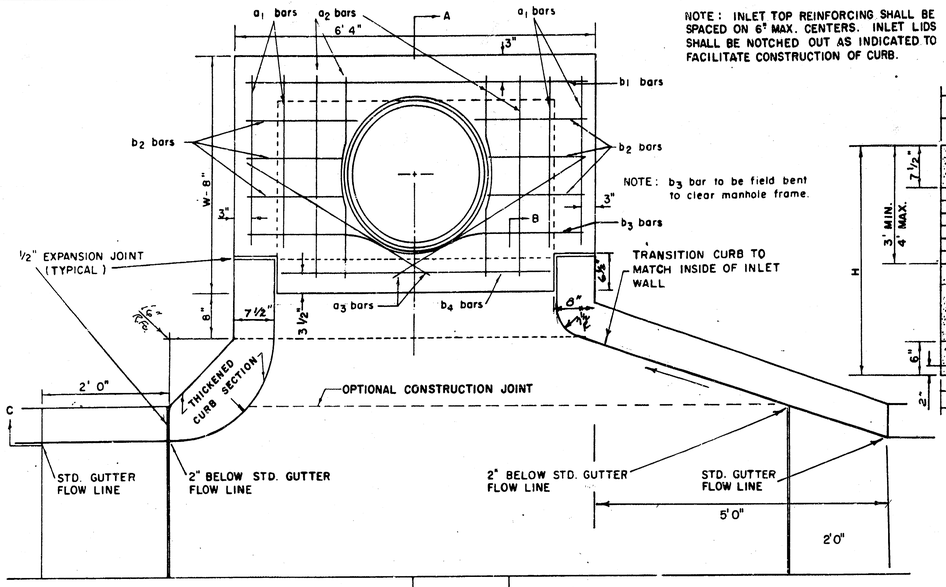
SPECIAL SHALLOW TYPE 'A' MANHOLE



SPECIAL SHALLOW TYPE 'B' MANHOLE

CITY OF WICHITA, KANSAS
STANDARD SHALLOW MANHOLES
TYPE 'A' AND TYPE 'B'
472-76-245-81818-010-010-01

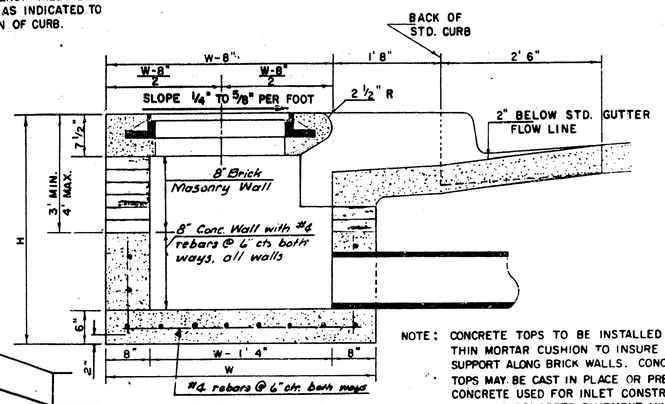
Designed by		Checked by	5/7
Drawn by		Date	Job No.



NOTE: EXPANSION JOINT ONLY IN CURB AREA WITH CONC. PAVEMENT.

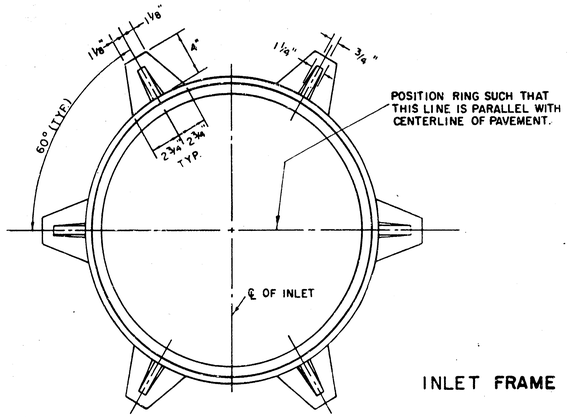
PLAN

NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.



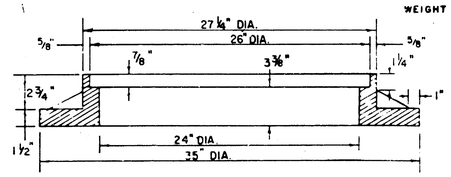
SECTION A-A

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.

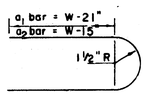


INLET FRAME

WEIGHT = 180 LBS.



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



BENDING DIAGRAM

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 SHAPED WITH B 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.

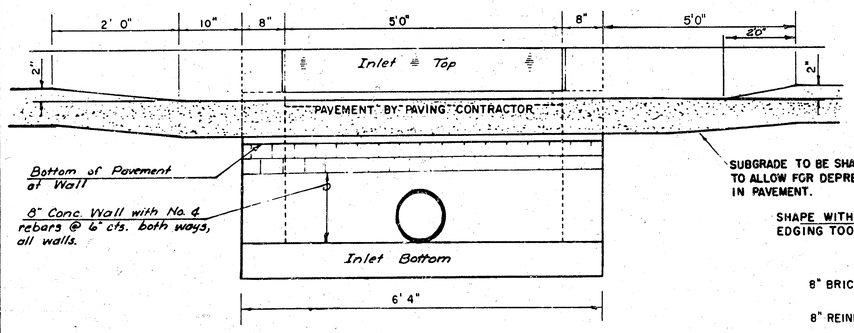
THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

STEEL SCHEDULE

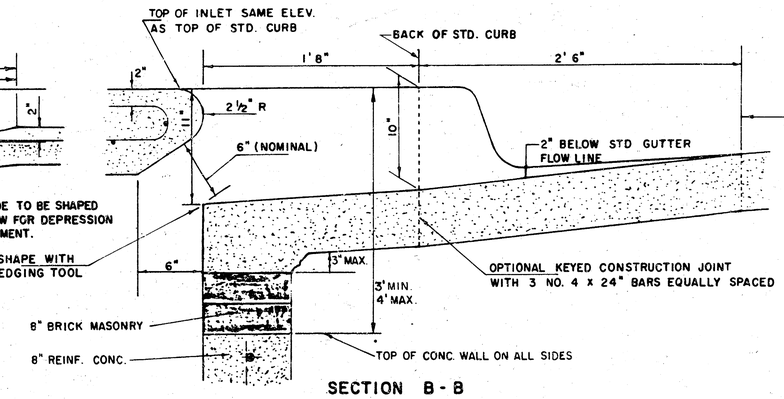
BAR	a_1	a_2	a_3*	b_1 W=4'4"	b_1 W=5'4"	b_1 W=6'4"	b_1 W=7'4"	b_1 W=8'4"	b_2	b_3	b_4	WT. LBS.
NUMBER	4	4	2	1	3	5	7	9	6	1	1	
SIZE	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
LENGTH W=4'4"	5'7"	6'7"	4'0"	6' 1"	–	–	–	–	1' 9"	6'2"	4'8"	60±
LENGTH W=5'4"	7'7"	8'7"	5'0"	–	6' 1"	–	–	–	1' 9"	6'2"	4'8"	81±
LENGTH W=6'4"	9'7"	10'7"	6'0"	–	–	6' 1"	–	–	1' 9"	6'2"	4'8"	101±
LENGTH W=7'4"	11'7"	12'7"	7'0"	–	–	–	6' 1"	–	1' 9"	6'2"	4'8"	121±
LENGTH W=8'4"	13'7"	14'7"	8'0"	–	–	–	–	6' 1"	1' 9"	6'2"	4'8"	141±

* NOTE: a_3 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"	3'8"x 6'4" x7 1/2"	21" & SMALLER	0.38 ±
5' 4"	4'8"x 6'4" x7 1/2"	24" & 30"	0.51 ±
6' 4"	5'8"x 6'4" x7 1/2"	36" & 42"	0.64 ±
7' 4"	6'8"x 6'4" x7 1/2"	48" & 54"	0.77 ±
8' 4"	7'8"x 6'4" x7 1/2"	60" & 66"	0.90 ±



SECTION C - C



SECTION B - B

REVISED 12-21-1984

DETAIL STANDARD TYPE IA CURB INLET

CITY OF WICHITA, KANSAS

INLET OPENING = 6" x 5' 0"

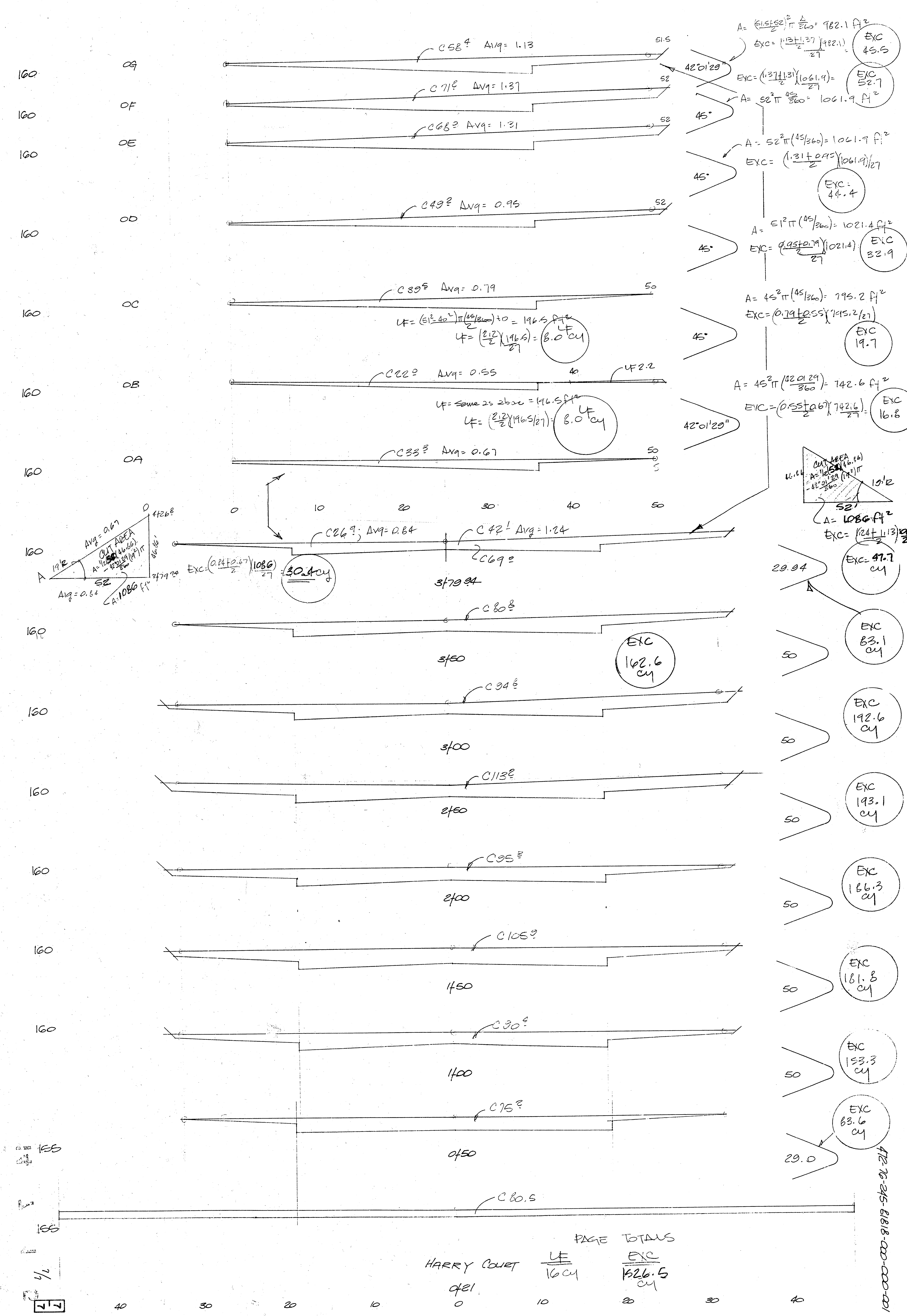
472-76-245-81818-000-000-001

JUNE 1984

6/7

6

7



472-76-245-81818-000-000-001
0G
0F
0E
0D
0C
0B
0A
C58⁴ Avg = 1.13
C71² Avg = 1.37
C68² Avg = 1.31
C49² Avg = 0.95
C39⁵ Avg = 0.79
C22² Avg = 0.55
C33³ Avg = 0.67
C26⁹; Avg = 0.84
C42¹ Avg = 1.24
C69²
C80⁸
C94⁶
C113²
C95³
C105⁹
C30⁴
C75²
C80.5
51.5
52
50
LF 2.2
42°01'29"
45°
29.94
29.0
A = 52²π 45/360 = 1061.9 ft²
A = 52²π(45/360) = 1061.9 ft²
A = 51²π(45/360) = 1021.4 ft²
A = 45²π(45/360) = 795.2 ft²
A = 45²π(42 01 29/360) = 742.6 ft²
EXC 45.5
EXC 52.7
EXC 44.4
EXC 32.9
EXC 19.7
EXC 16.6
LF = 196.5 ft²
LF = (2.2/2)(196.6/27) = 8.0 LF cy
LF = same as above = 196.5 ft²
LF = (2.2/2)(196.5/27) = 8.0 LF cy
CUT AREA
A = 1086 ft²
Avg = 0.67
Avg = 0.84
EXC = ((0.84+0.67)/2)(1086/27) = 30.4 cy
EXC 47.7 cy
EXC 83.1 cy
EXC 192.6 cy
EXC 193.1 cy
EXC 166.3 cy
EXC 181.8 cy
EXC 153.3 cy
EXC 83.6 cy
EXC 162.6 cy
3+79.94
3+50
3+00
2+50
2+00
1+50
1+00
0+50
160
155
PAGE TOTALS
HARRY COURT
0+21
LF 16 cy
EXC 1526.5 cy
7/7