STREET IMPROVEMENTS

FOR

NORTHWEST PARKWAY

From the Westerly Line of Northwest Parkwey Ct. and the Easterly corner of Lot 23, Blk. 13, to the Westerly Line of Holland Ln.

HOLLAND LANE

From the North Line of 17th Street No. to the Southerly corner of Lot 19, Block 13, Westwood Heights Second Addn. and the Southerly Line of Emerson.

NORTHWEST PARKWAY COURT

From the Northerly Line of Northwest Parkway to and including Cul de sac; serving lots 11 through 21 inclusive, Blk. 11 Westwood Heights Second Addn.

PROJECT NUMBER

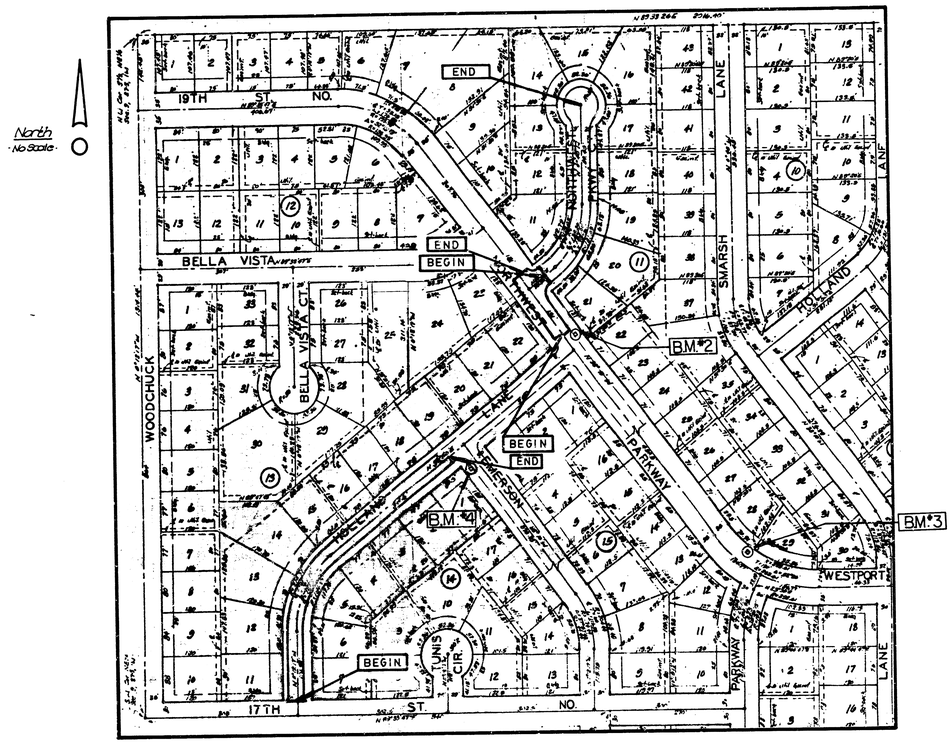
472·76·245·81640·000·000·001

GENERAL NOTES

1. 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 or, a licensed professional engineer in accordance with state laws.
2. No more than 5 drives 20 feet in width, or the equivalent combinations thereof, are to be constructed with this project.
3. Roll type combined curb & gutter is to be constructed on Northwest Parkway Court.
4. Ditching is to be performed on Northwest Parkway to drain the streets to existing inlets. Cost of the ditching is to be incidental to the project.
5. Contractor shall contact the utility companies for location of any underground lines in the area prior to beginning construction of the streets.

BENCHMARKS

1. City Disc. 42'no. and 38.5'east of N.sec. cor.; intersection of Ridge Road & 17th Street No.
   Elev. = 142.81 city datum
2. 'a' Cut in Top of curb, east side 22' north of intersection Holland Ln. & Northwest Parkway; on Northwest Parkway.
   Elev. = 156.47 city datum
3. 'b' cut in top of cb. approx. 30' West of E. Westport & Northwest Parkway intersection on North side of street.
   Elev. = 164.82 city datum
4. 'd' cut in top cb. at end of return West side Emerson; Intersection Emerson & Holland Lane.
   Elev. = 156.84 city datum.



WESTWOOD HEIGHTS SECOND ADDITION

☐ BENEFIT DISTRICT

CITY of WICHITA, KANSAS

MICHAEL E. LINDEBAK
CITY ENGINEER

INDEX of SHEETS

TITLE SHEET

W. BRENT WOOTEN LICENSED 8470 KANSAS PROFESSIONAL ENGINEER

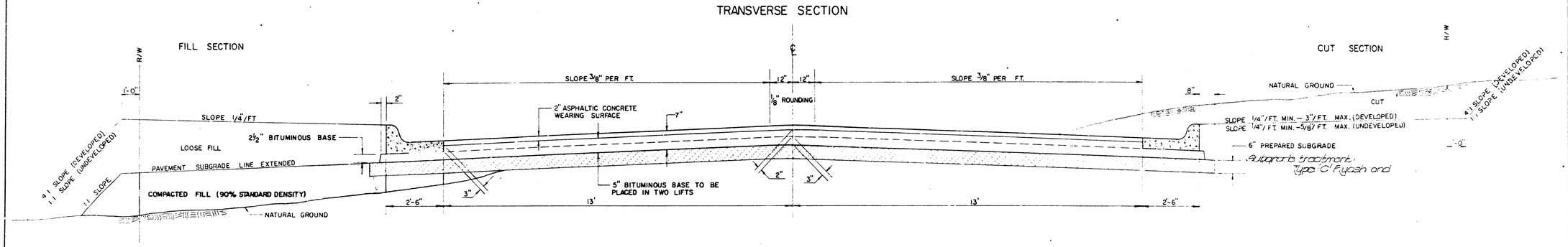
BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

Design	Drawn	Approved	Date	Scale	Sheet	of
N.B. Wooten	Staff		April, 87		1	14

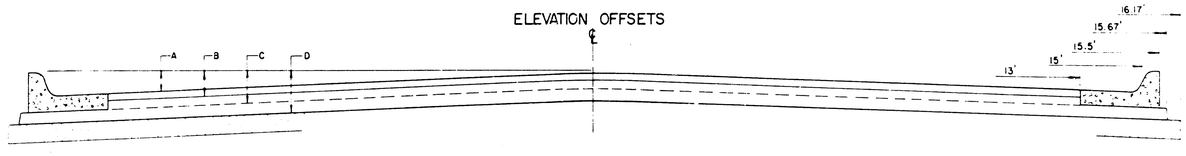
1/14

TYPICAL 31' PAVEMENT DETAILS

TRANSVERSE SECTION

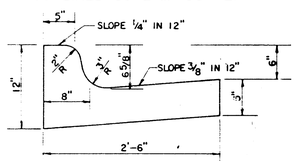


ELEVATION OFFSETS

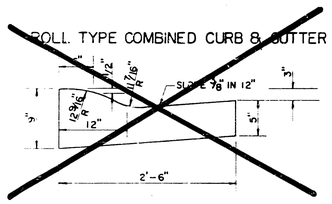


	DISTANCE FROM CENTERLINE (LT. & RT.)											
	0'	2'	4'	6'	7.5'	10'	12'	13'	15'	15.5'	15.67'	16.17'
A: TOP OF CURBS TO TOP OF SURFACE LIFT	0.10	0.14	0.21	0.27	0.32	0.39	0.46	0.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	0.27	0.31	0.38	0.44	0.49	0.56	0.63	0.66	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	0.44	0.49	0.57	0.64	0.70	0.79	0.87	0.90	0.98	1.00	1.00	—
D: TOP OF CURBS TO TOP OF SUBGRADE	0.69	0.73	0.80	0.87	0.93	1.01	1.08	1.12	1.19	1.21	1.21	1.23

COMBINED CURB & GUTTER



ROLL. TYPE COMBINED CURB & GUTTER



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.

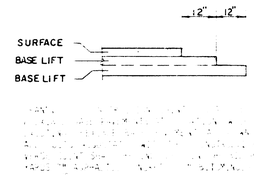
3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.

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



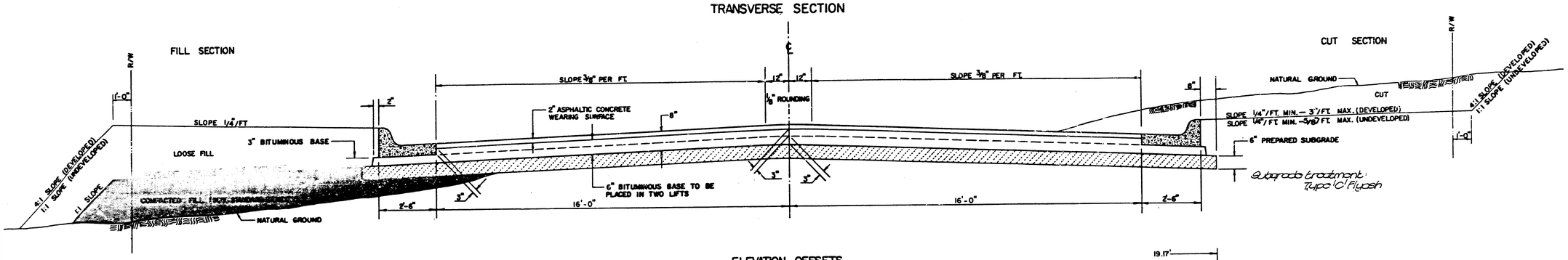
SHEET 8 OF 14

7 INCH RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH 5 INCH BITUMINOUS BASE
CITY OF WICHITA, KANSAS
PROJECT A.N. LP
472-76-245-81640-000-000-001

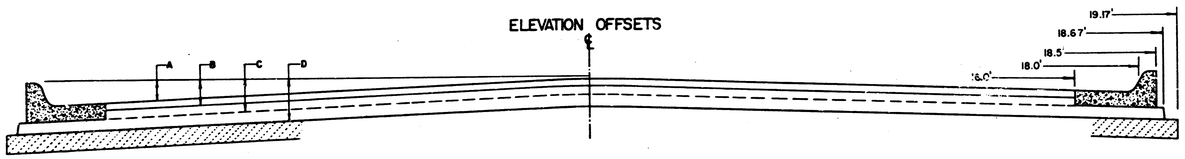
HOLLAND LANE 2/14

TYPICAL 37' PAVEMENT DETAILS

TRANSVERSE SECTION

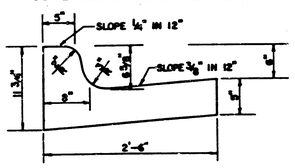


ELEVATION OFFSETS

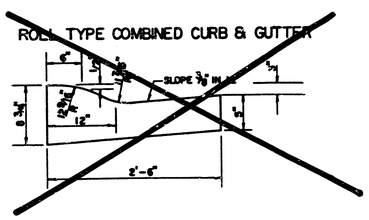


	DISTANCE FROM CENTERLINE (LT. & RT.)												
	0	2	4	6	8	10	12	14	16	18	18.5	18.67	19.17
A: TOP OF CURBS TO TOP OF SURFACE LIFT	.01	.05	.11	.18	.24	.30	.36	.43	.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	.17	.22	.28	.34	.40	.47	.53	.59	.65	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	.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



ROLL TYPE COMBINED CURB & GUTTER



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.

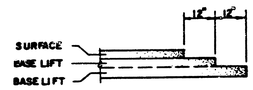
3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.

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.

TRANSVERSE CONSTRUCTION JOINTS



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).

SHEET 3 OF 14

8 INCH RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH 6 INCH BITUMINOUS BASE

CITY OF WICHITA, KANSAS

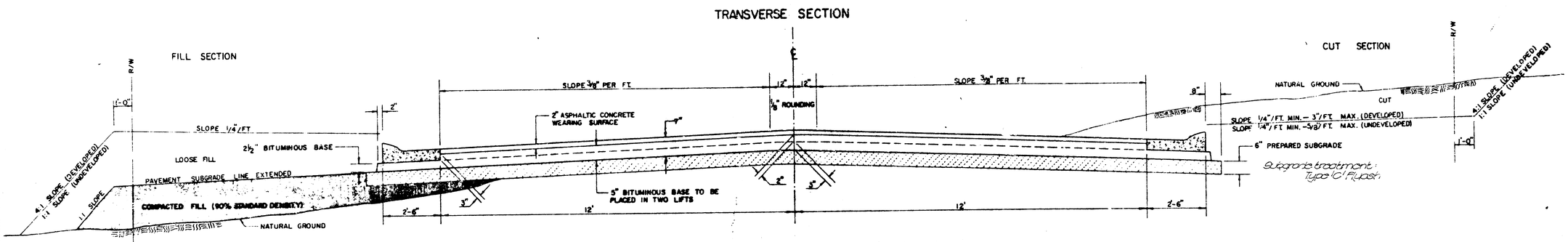
PROJECT NUMBER

472-76-245-81640-000-000-001

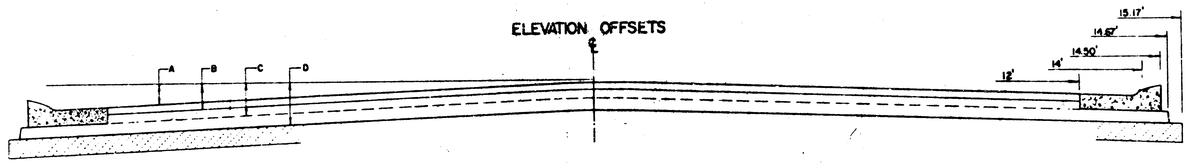
NORTHWEST PARKWAY

TYPICAL 29' PAVEMENT DETAILS

TRANSVERSE SECTION

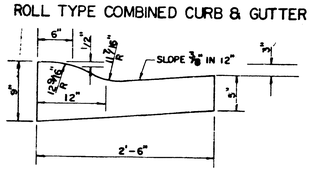


ELEVATION OFFSETS



	DISTANCE FROM CENTERLINE (LT. & RT.)											
	0'	2'	4'	6'	7'	8'	10'	12'	14'	14.5'	14.67'	15.17'
A: TOP OF CURBS TO TOP OF SURFACE LIFT	0.13	0.18	0.24	0.30	0.33	0.36	0.43	0.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	0.30	0.35	0.41	0.47	0.50	0.53	0.60	0.66	--	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	0.47	0.52	0.60	0.68	0.71	0.75	0.83	0.90	0.98	1.00	1.01	—
D: TOP OF CURBS TO TOP OF SUBGRADE	0.72	0.77	0.84	0.91	0.94	0.98	1.05	1.12	1.19	1.21	1.21	1.23

ROLL TYPE COMBINED CURB & GUTTER



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.

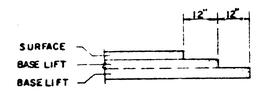
3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.

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



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT TEMPORARILY ENDS AS SHOWN BY THE DETAIL. THE COST OF CONSTRUCTION JOINTS SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

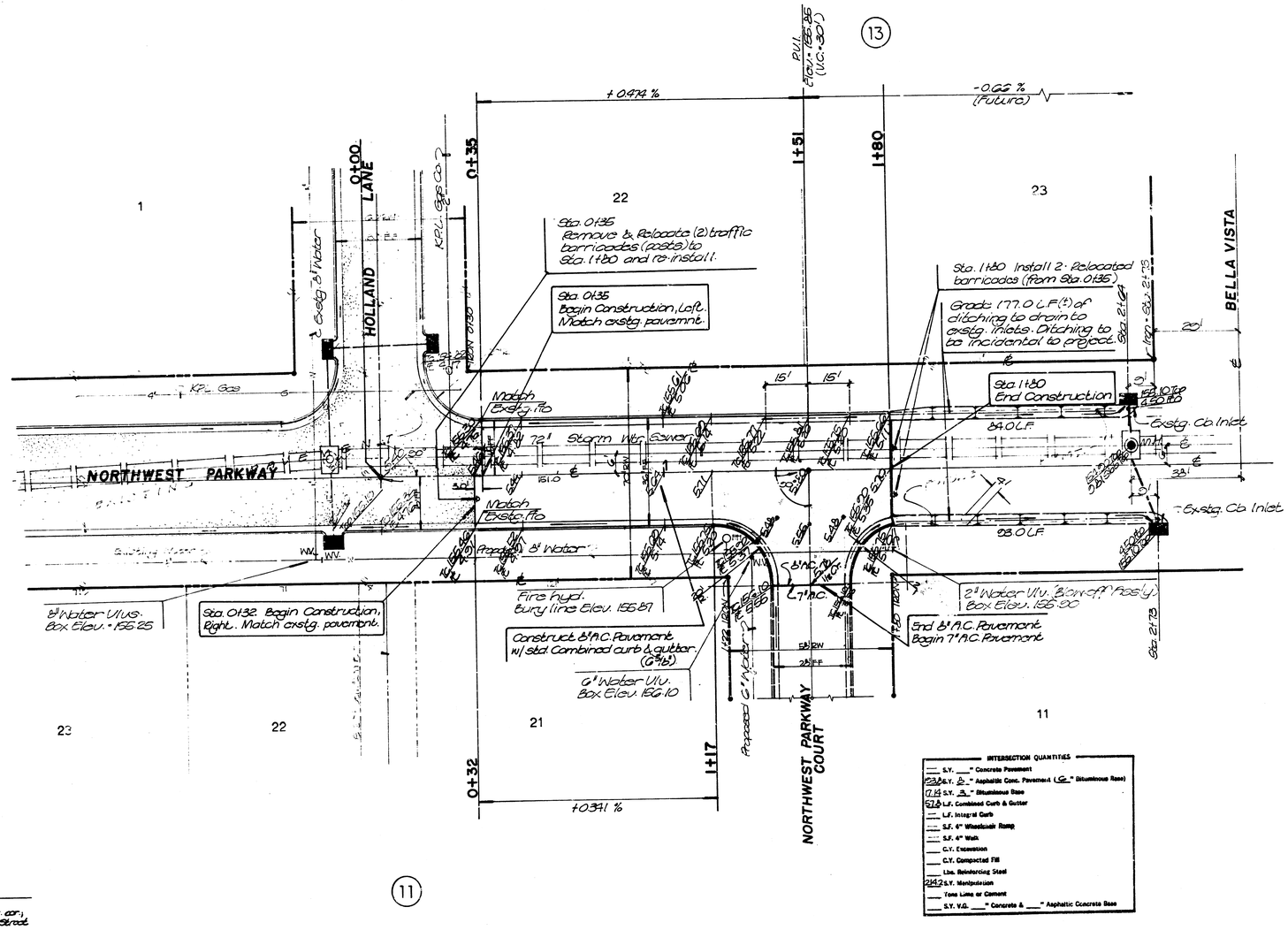
SHEET 4 OF 14

7 INCH RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH 5 INCH BITUMINOUS BASE

472-76-245-81640-000-000-001

NORTHWEST PARKWAY COURT

WESTWOOD HEIGHTS SECOND ADDITION



INTERSECTION QUANTITIES

- ___ S.Y. ___" Concrete Pavement
- 238 S.Y. 6 " Asphaltic Conc. Pavement (G " Bituminous Base)
- 17.4 S.Y. 8 " Bituminous Base
- 57.0 L.F. Combined Curb & Gutter
- ___ L.F. Integral Curb
- ___ S.F. 6" Wheelchair Ramp
- ___ S.F. 6" Walk
- ___ C.Y. Excavation
- ___ C.Y. Compacted Fill
- ___ Lbs. Reinforcing Steel
- 214 S.Y. Manipulation
- ___ Tons Lime or Cement
- ___ S.Y. V.G. ___" Concrete & ___" Asphaltic Concrete Base

Benchmarks:

1. City Desc. 42' no. and 33.5' east of horiz. cor., intersection of Ridge Road at 17th Street. No. Elev. = 142.81 city datum
2. 'x' Cut in Top of curb, east side 22' north of intersection Holland Ln. at Northwest Parkway, on Northwest Parkway. Elev. = 155.97 city datum
3. 'x' cut in top of cb. approx. 30' West of N. Westport & Northwest Parkway on North side of street. Elev. = 159.82 city datum
4. 'x' cut in top cb at end of return N/st. side Emerson, Intersection Emerson at Holland Lane. Elev. = 156.64 city datum.

(11)

NORTHWEST PARKWAY
472-76-245-81640-000-000-001

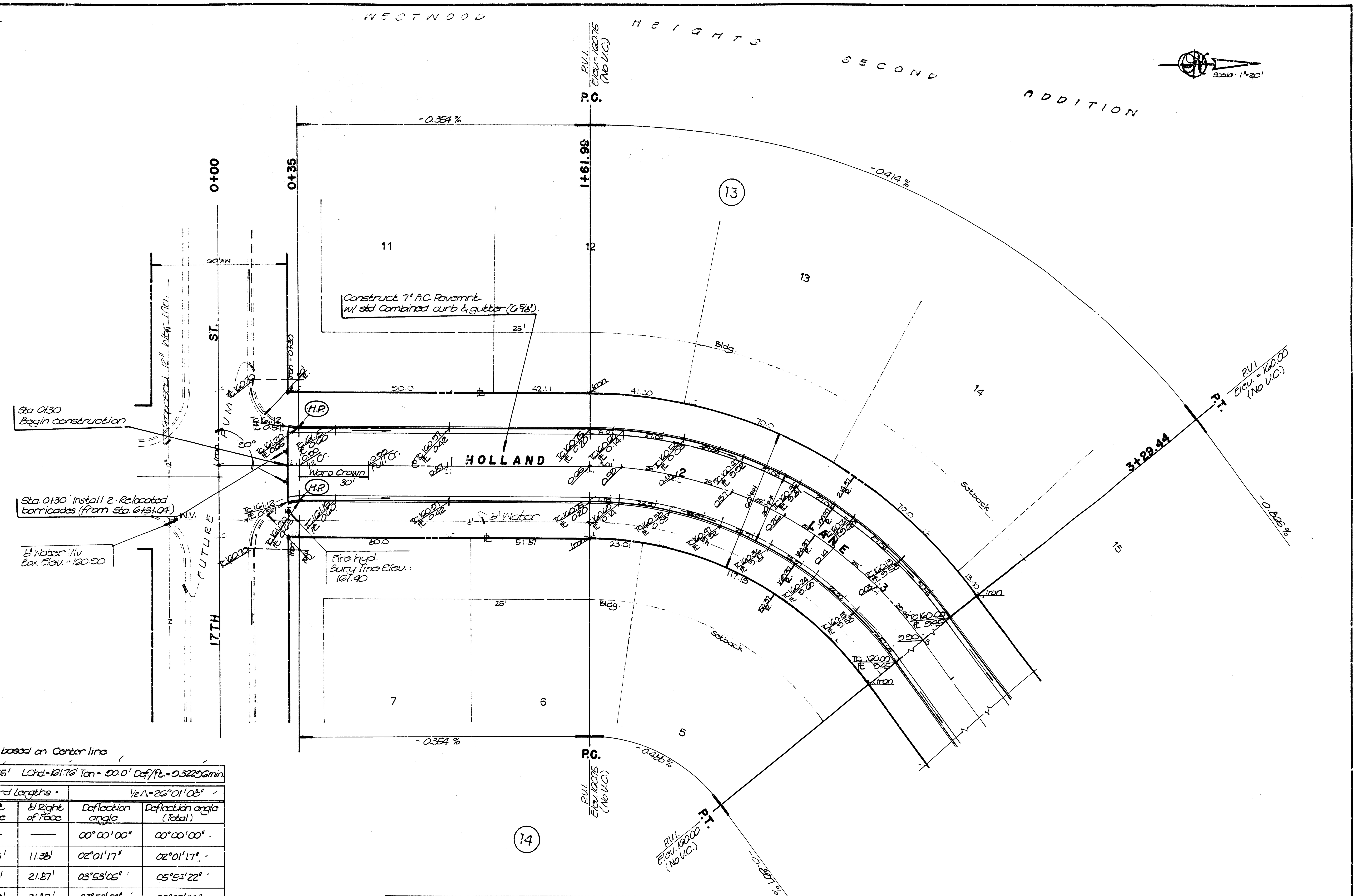
BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

Design	Drawn	Approved	Date	Scale
M.B.Watson	Seal's		April, 82	1"=20'

Rev. | Sheet 5 of 19

Benchmarks:

1. City Disc 42' no and 33.5' east of [illegible] cor; intersection of Ridge Road at 17th Street No.
   Elev = 142.81 city datum
2. '□' Cut in top of curb, east side 22' north of intersection Holland Ln. at Northwest Parkway; on Northwest Parkway.
   Elev. = 155.47 city datum
3. '□' cut in top of cb. approx 30' West of ℄ Westport & Northwest Parkway on North side of street.
   Elev = 154.82 city datum
4. '□' cut in top cb at end of return West side Emerson; Intersection Emerson at Holland Lane.
   Elev = 156.84 city datum



Curve data based on Center line

R = 184.37' Δ = 52°02'17" L = 167.45' L.Chd. = 161.76' Tan = 90.0' Def./ft. = 0.32296 min.

		• Chord Lengths •		½Δ = 26°01'08"	
Station	Arc Length	8' Left of Face	8' Right of Face	Deflection angle	Deflection angle (Total)
1+61.99 (P.C.)	0	——	——	00°00'00"	00°00'00"
1+75	13.01'	14.63'	11.38'	02°01'17"	02°01'17"
2+00	25.0'	28.10'	21.87'	03°53'05"	05°54'22"
2+25	25.0'	28.10'	21.87'	03°53'04"	09°47'26"
2+50	25.0'	28.10'	21.87'	03°53'04"	13°40'30"
2+75	25.0'	28.10'	21.87'	03°53'05"	17°33'35"
3+00	25.0'	28.10'	21.87'	03°53'04"	21°26'39"
3+29.44 (P.T.)	29.44'	33.08'	25.74'	04°34'29"	26°01'08"

EARTHWORK QUANTITIES

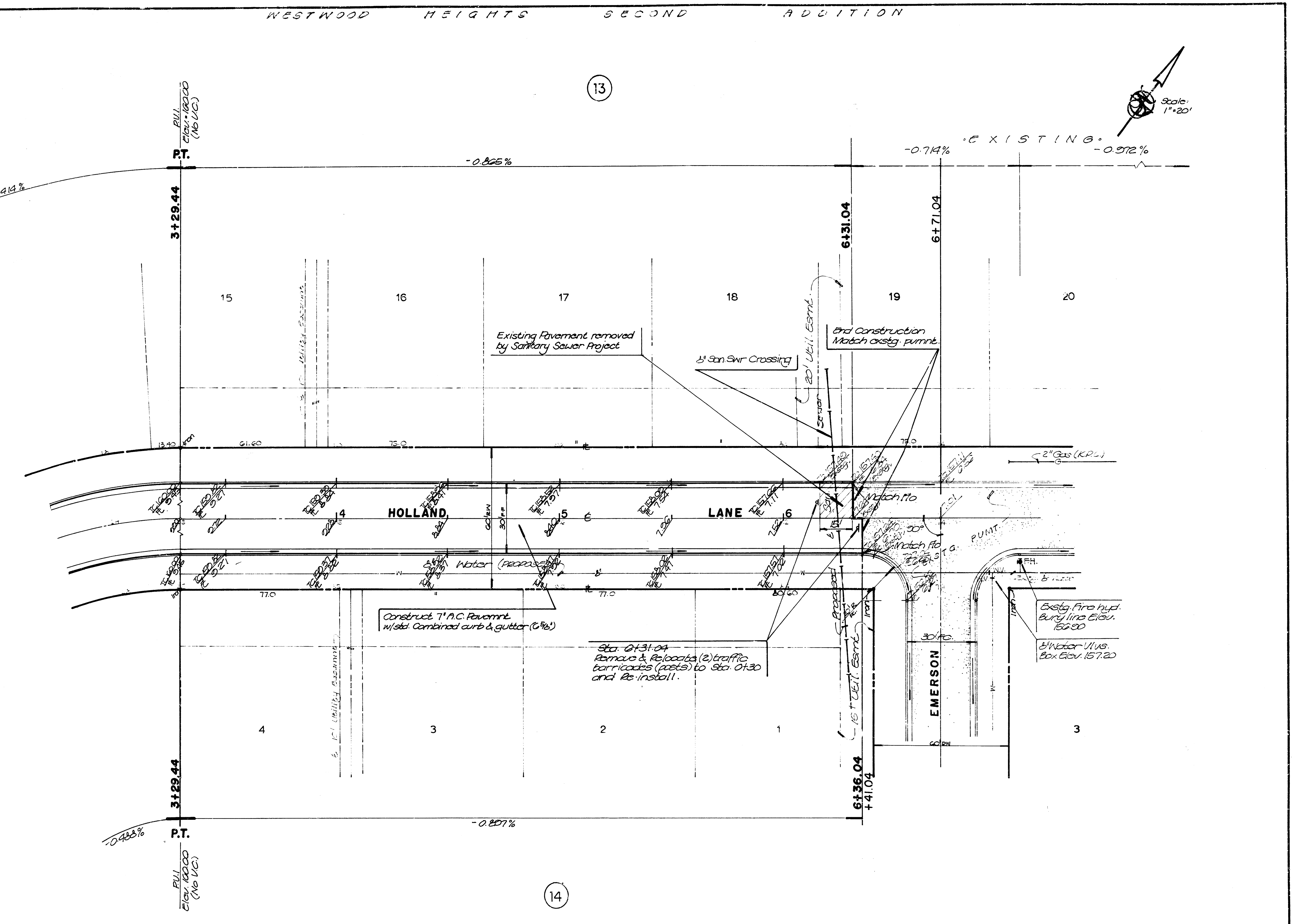
Excavation	= 2831.4 C.Y.	Compacted Fill	= 1197.0 C.Y.
+ 10%	= 283.1	+ 10%	= 119.7
Total	= 3114.5 C.Y.	Total	= 1316.7 C.Y.

Subgrade Manipulation = 1438.0 S.Y.
Borrow Mat'l. = 439.0 C.Y.
+ 10% = 43.90 C.Y.
Total = 482.9 C.Y.

HOLLAND LANE
472·76·245·81640·000·000·001

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

Design	Drawn	Approved	Date	Scale	Rev	Sheet
N.B. Wooton	Seal, Jr.		April, 87	1"=20'	5-15-87	6 of 14



Benchmarks:

1. City Disc. 42' no. and 30.5' east of N.E. cor.; intersection of Ridge Road at 11th Street No.
   Elev. = 142.61 city datum

2. '□' Cut in Top of curb, east side 22' north of intersection Holland Ln. at Northwest Parkway; on Northwest Parkway.
   Elev. = 156.47 city datum

3. '□' cut in top of cb. approx. 30' West of ℄ Westport & Northwest Parkway on North side of street.
   Elev. = 154.82 city datum

4. '□' cut in top cb at end of return West side Emerson; Intersection Emerson at Holland Lane.
   Elev. = 156.84 city datum.

HOLLAND LANE
472·76·245·81640·000·000·001

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

Design	Drawn	Approved	Date	Scale	Sheet
N.B. Watson	Sealy jr.		April, 81	1"=20'	7 / 14

Rev

Benchmarks:

1. Mfg Disc. 42'no and 35.5'east of brass cap intersection of Ridge Road at 17th Street No.
Elev. = 142.81 city datum

2. 'a' cut in top of curb, east side 12' north of intersection Holland Ln. at Northwest Parkway; on Northwest Parkway.
Elev. = 156.97 city datum

3. 'b' cut in top of cb approx. 35' west of E. ½ expansion & Northwest Parkway on north side of street.
Elev. = 154.82 city datum

4. 'd' cut in top cb at end of return West Side Emerson) intersection Emerson at Holland Lane
Elev. = 156.64 city datum

WESTWOOD HEIGHTS SECOND ADDITION

NORTHWEST PARKWAY

NORTHWEST PARKWAY COURT

P.C. +0.352%

P.T. 2+14.86

0+38

0+75.50

Construct 7" P.C. pavement w/ std. Roll-type combined curb & gutter

2" Wtr. Vlv. (Elon off assy.) Box Elev. 155.90

End 8" P.C. pvmt. Begin 7" P.C. pvmt.

STA. 0+00 N.W. PKWY. CT.

(See Sht. 7 for intersection quantities.)

6" Water Vlv. Box Elev. 156.10

Fire Hydrant Bury line Elev. 155.87

Construct 5.0' transition from full-height cb. to Roll-type Combined curb & gutter. To be paid as L.F. of Std. 20 Combined Cb. & Gtr.

+0.324%

P.C.

P.T. 2+14.86

HOLLAND LANE

Note: Std. Roll type curb & gutter to be constructed on Northwest Parkway Court.

Scale 1"=20'

Curve data based on Center line

R=152.00' Δ=52°30'00" L=139.36 LChd=134.54 Tan.=75.0' Def/Ft.=11.30'@5min.

Station	Arc Length	Chord Lengths @ Left of Face	Chord Lengths @ Right of Face	½ Δ = 26°15'00" Deflection angle	½ Δ = 26°15'00" deflection angle (Total)
0+75.50 (P.C.)	0	——	——	00°00'00"	00°00'00"
1+00	24.50'	20.23'	23.01'	04°36'53"	14°36'53"
1+25	25.0'	21.36'	23.55'	04°42'33"	09°19'26"
1+50	25.0'	21.36'	23.55'	04°42'33"	14°01'59"
1+75	25.0'	21.36'	23.55'	04°42'32"	18°44'31"
2+00	25.0'	21.36'	23.55'	04°42'33"	23°27'04"
2+14.86	14.86	12.70'	17.00'	02°47'56"	26°15'00"

NORTHWEST PARKWAY COURT
472-76-245-81640-000-000-001

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

Design	Drawn	Approved	Date	Scale
N.B. Klaton	Sea(jr.		April, 87	1"=20'

Key
Sheet 8 of 14
8/14

FILMED FROM THE BEST AVAILABLE COPY....

Benchmarks:

1. City Disc. 42' no. and 33.5' east of N.sec. cor.; intersection of Ridge Road at 17th Street No.
Elev. - 142.61 city datum

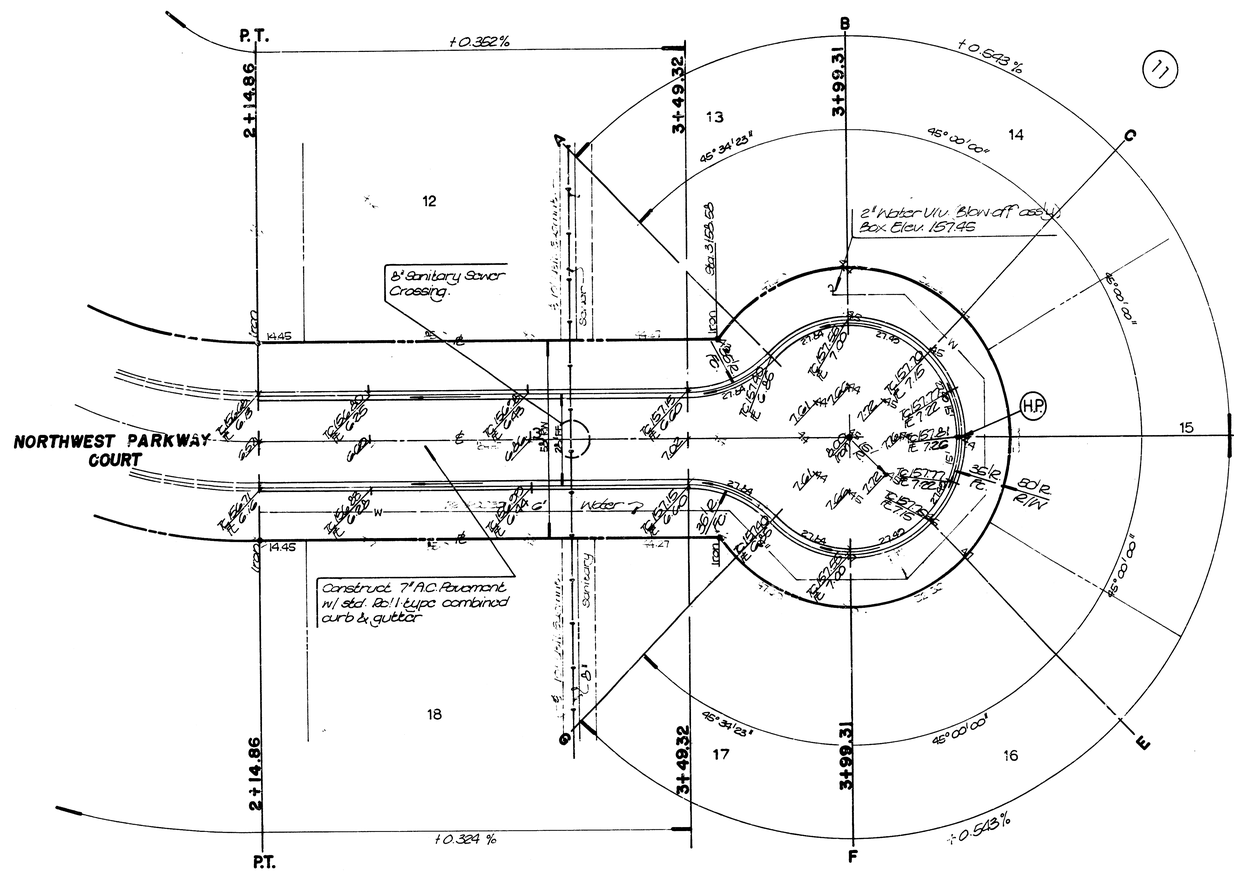
2. 'a' Cut in Top of curb, east side 12' north of intersection Holland Ln. at Northwest Parkway, on Northwest Parkway.
Elev. - 155.97 city datum

3. 'b' cut in top of cb. approx. 30' west of E. Westport & Northwest Parkway on North side of street.
Elev. - 154.62 city datum

4. 'c' cut in top cb at end of return West side Emerson; Intersection Emerson at Holland Lane.
Elev. - 156.64 city datum.

WESTWOOD HEIGHTS SECOND ADDITION

(11)



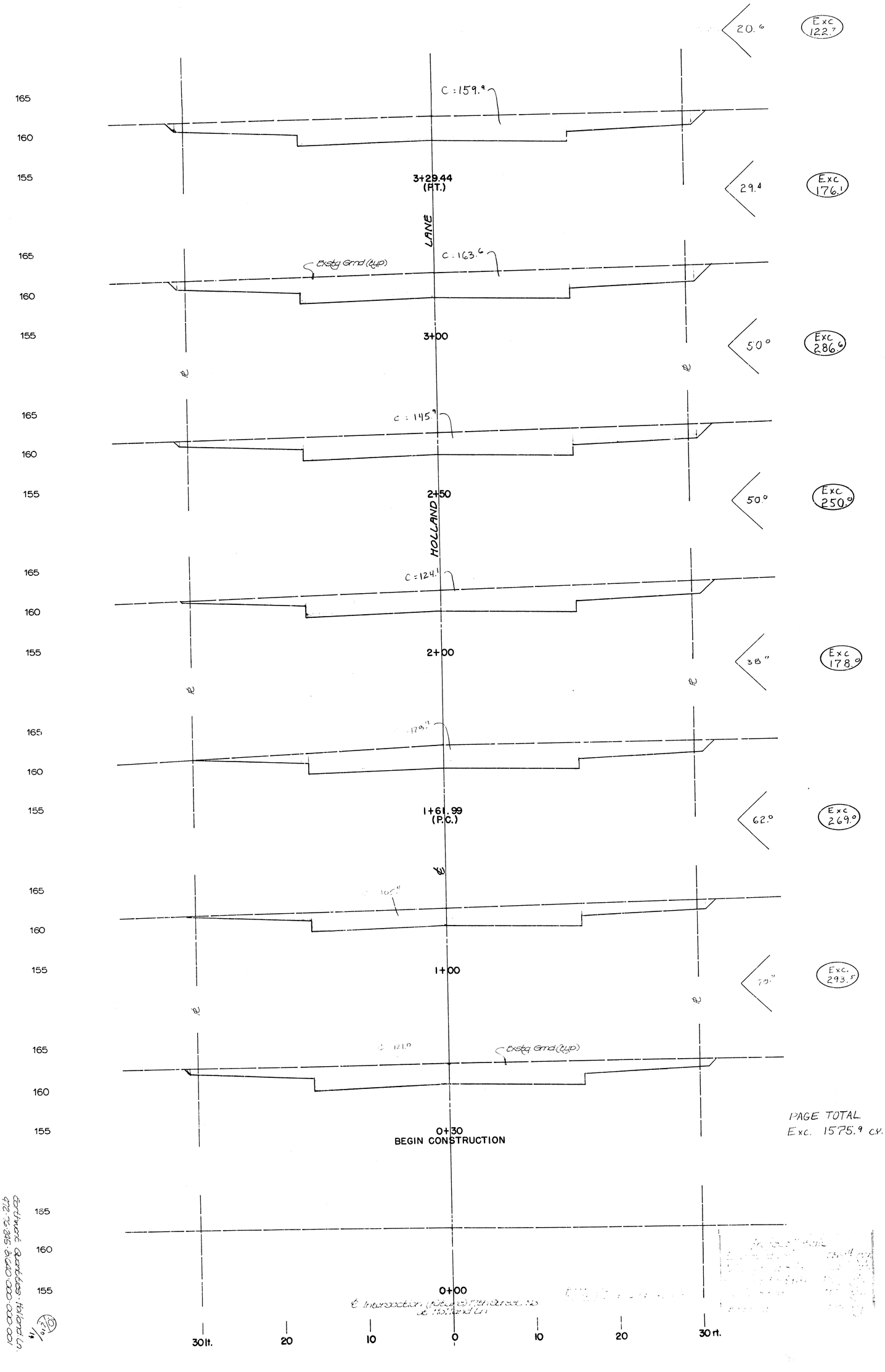
Scale: 1"=20'

Note: Std. Rd 11 type curb & gutter to be constructed on Northwest Parkway Court.

NORTHWEST PARKWAY COURT
472-76-245-81640-000-000-001

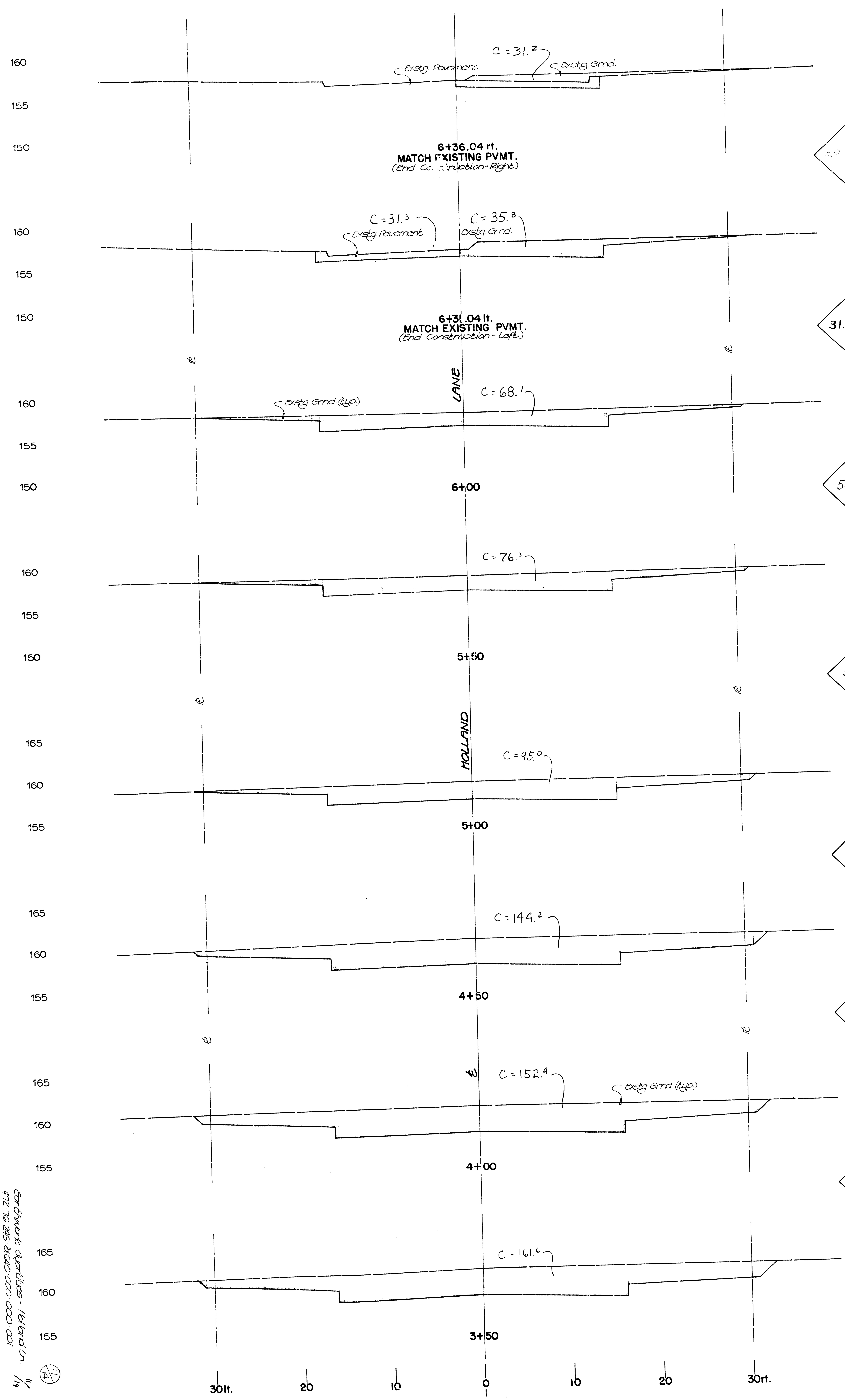
BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

Design	Drawn	Approved	Date	Scale	Sheet
N.B. Hooton	Scal, jr.		April, 81	1"=20'	14 of 19



PAGE TOTAL
Exc. 1575.9 c.y.

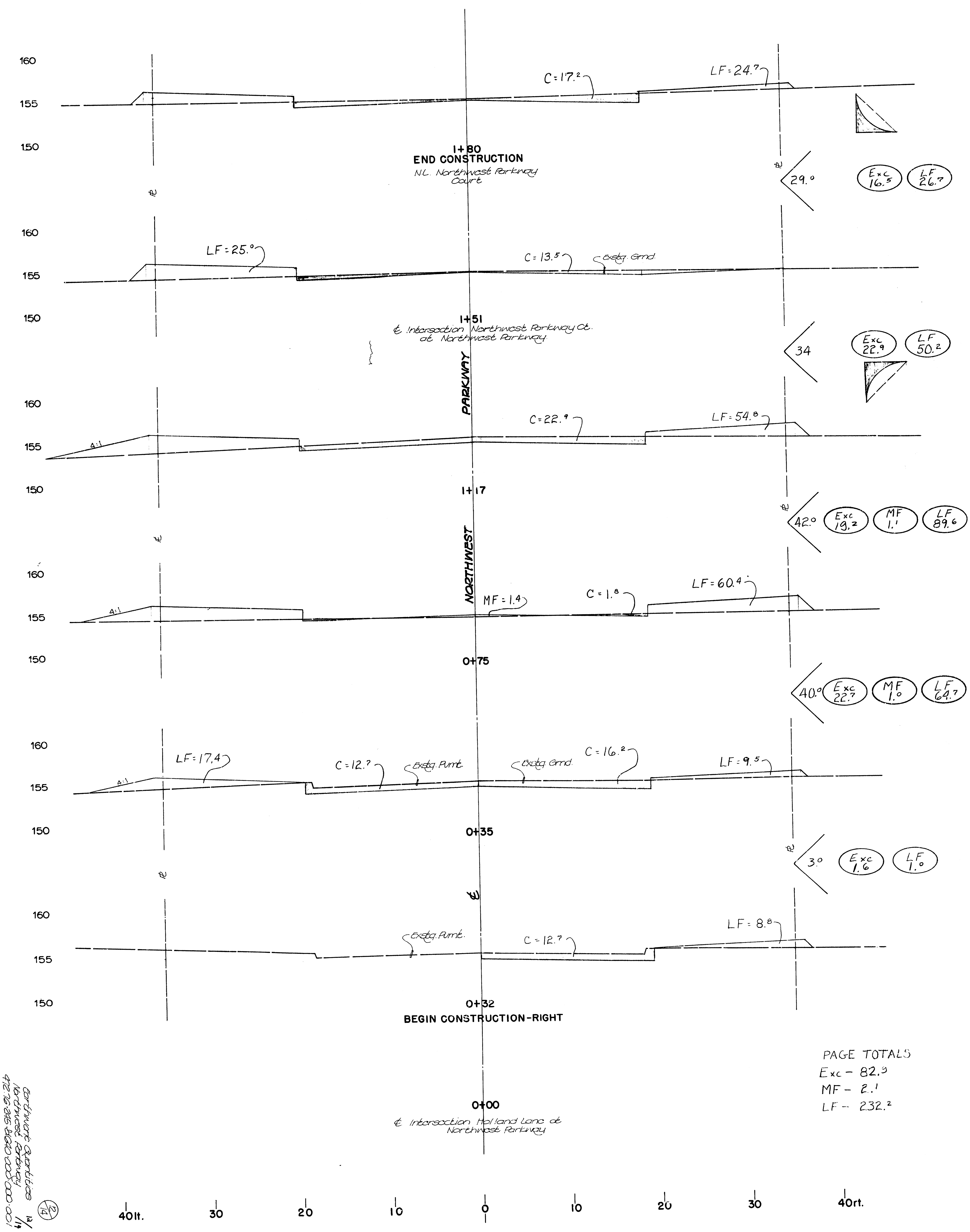
Earthwork Quantities - Holland Ln.
672-13-385 R640-000-000-001



PAGE TOTAL
Exc

Earthwork Quantities - Holland Ln.
472 76 245 81640-000-000-001

11/14



PAGE TOTALS
Exc – 82.3
MF – 2.1
LF – 232.2

160
155
150

CF = 51.8
MF = 15.1
LF = 47.9

3+00

50.0 | MF 28.0 | CF 102.4 | LF 88.3

160
155
150

CF = 58.8
MF = 15.1
LF = 47.5
Existg. Grnd.

2+50

35.1 | MF 19.6 | CF 54.0 | LF 60.2

COVET

160
155
150

MF = 15.1
CF = 24.2
LF = 45.1

2+14.86
(P.T.)

64.9 | MF 35.9 | CF 61.1 | LF 107.0

PKWY.

160
155
150

MF = 14.8
CF = 26.6
LF = 43.9

1+50

50.0 | Exc 1.1 | MF 16.1 | CF 24.6 | LF 71.9

NORTHWEST

160
155
150

C = 1.8
MF = 2.6
LF = 33.7

1+00

24.5 | Exc 3.0 | MF 1.2 | LF 27.4

160
155
150

Existg. Grnd
C = 5.3
LF = 26.8

* Std Roll C&G (typical)

0+75.50
(P.C.)

37.5 | Exc 5.6 | MF 1.3 | LF 42.

160
155
150

MF = 1.8
C = 2.7
LF = 34.9

0+38
BEGIN CONSTRUCTION

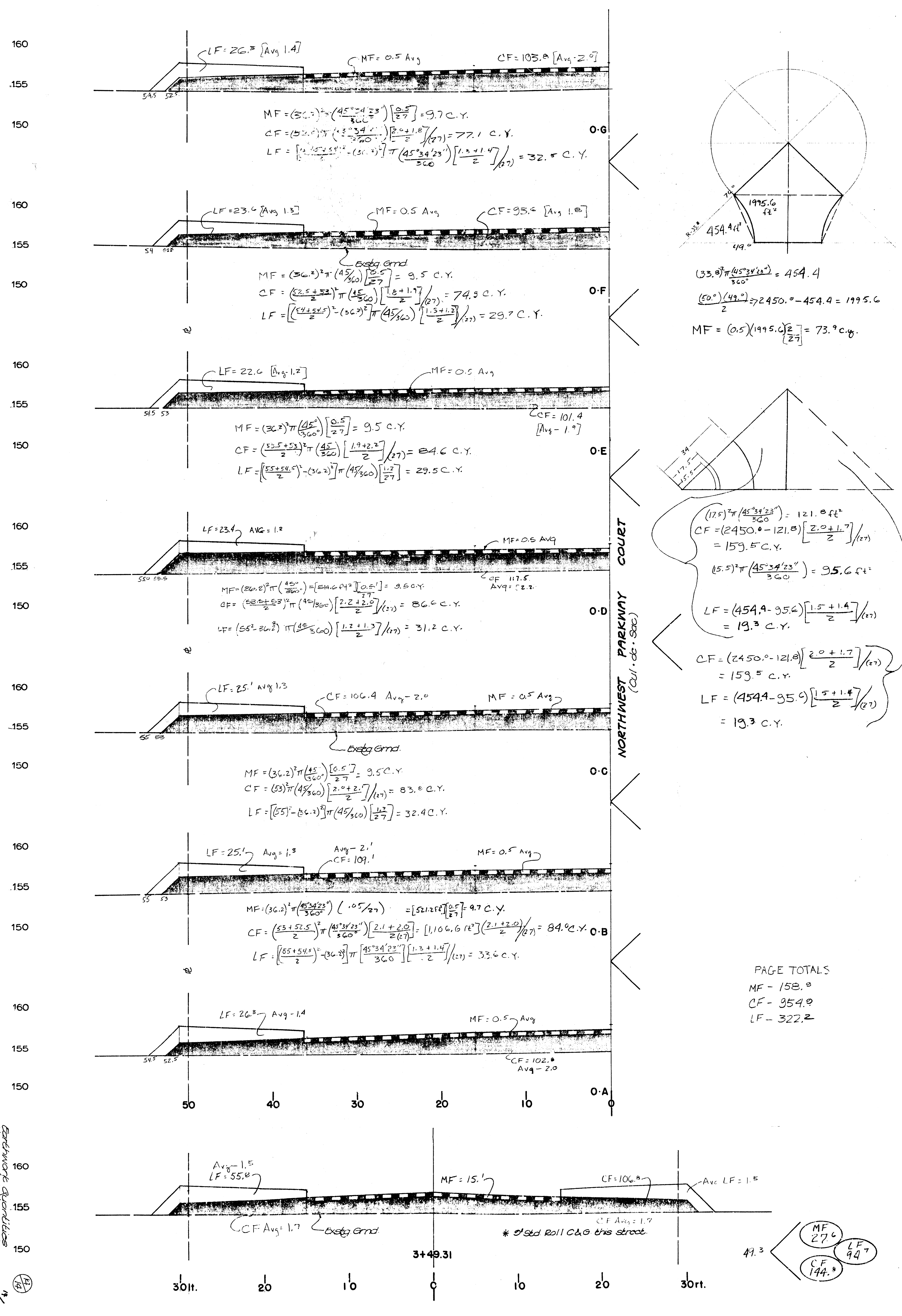
Transition full high Std C&G to Std Roll C&G in 5.0'

PAGE TOTALS
Exc - 9.7
MF - 102.1
CF - 242.1
LF - 392.

160
155
150

0+00
℄ Intersection Northwest Parkway at Northwest Parkway Court.

30 ft. 20 10 0 10 20 30 ft.
1" = 20'



Earthwork Quantities
Northwest Parkway Ct.
472-76-316-81640-000-000-001

14/14