STREET IMPROVEMENTS FOR

MEMORY LANE TWIN HOMES ADDITION

MEMORY LANE

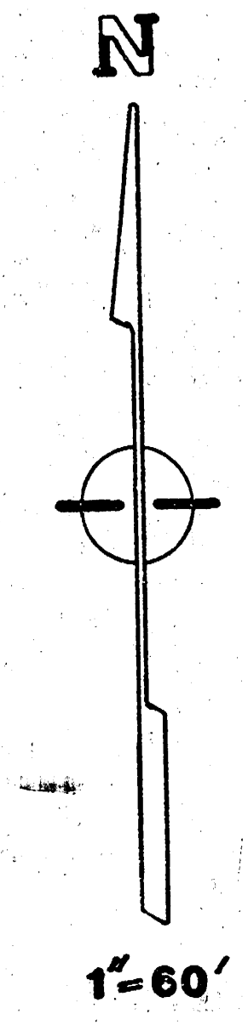
FROM THE EAST LINE OF SMITH TO AND INCLUDING CUL-DE-SAC

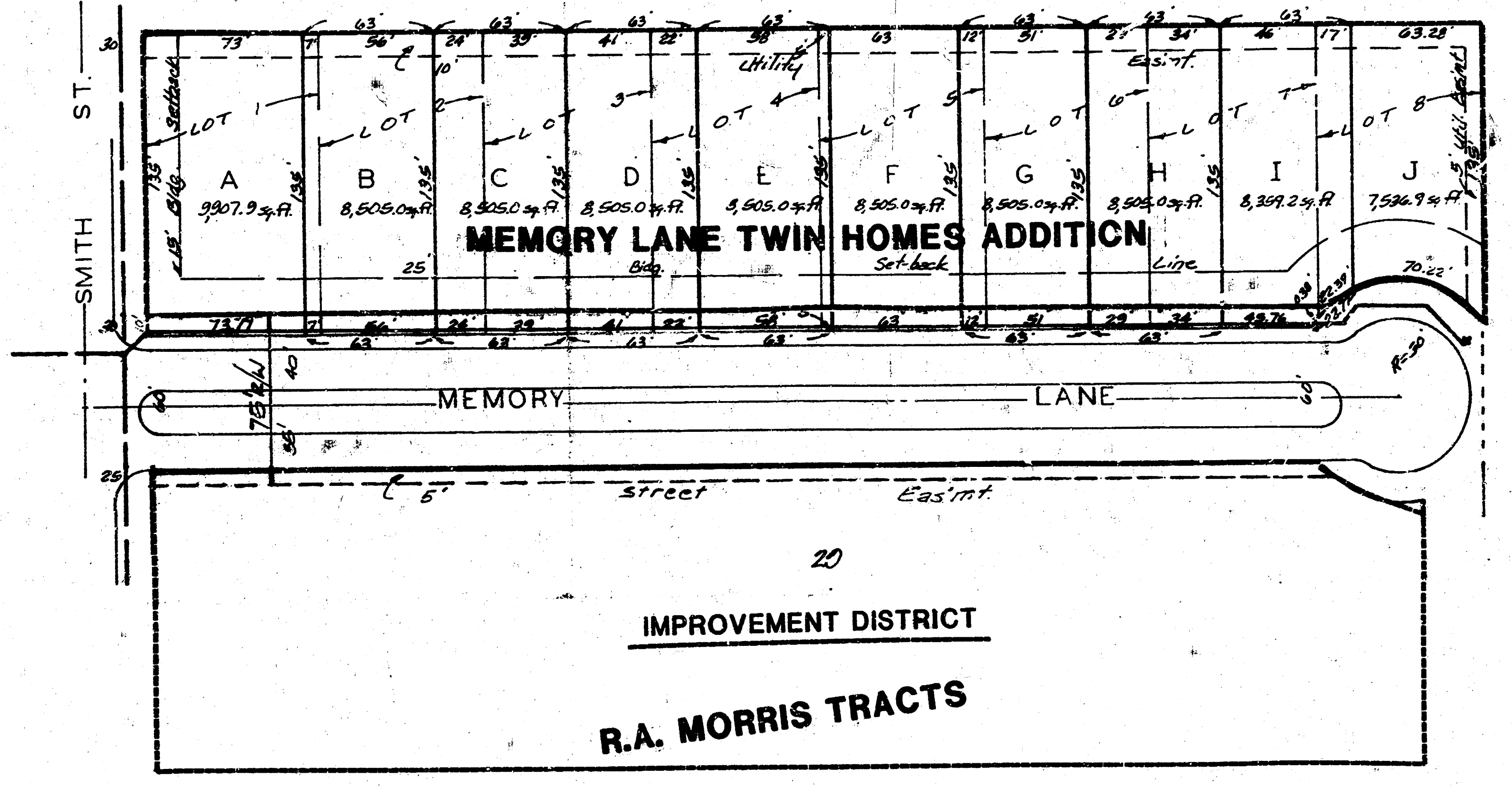
PROJECT NO.

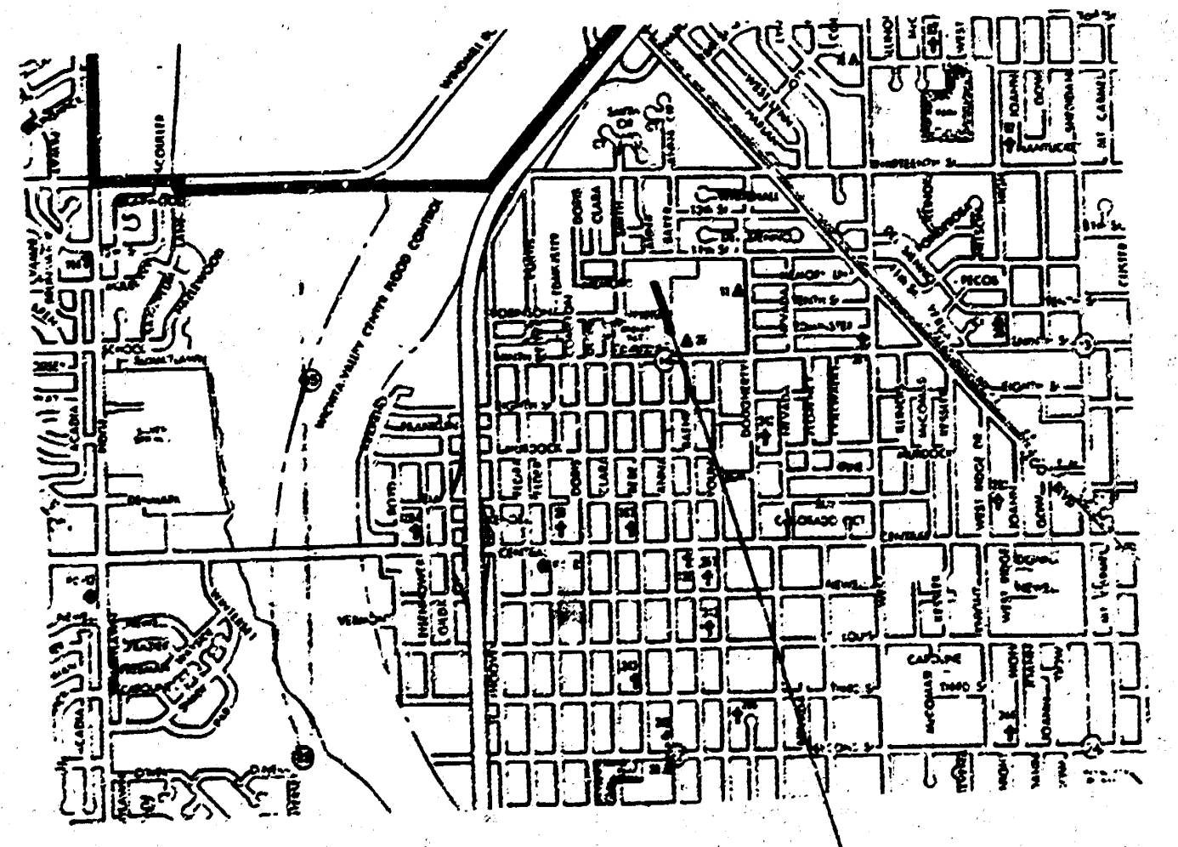
472-76-245-81363 000-000-001

CITY OF WICHITA, KS.

MICHAEL E. LINDEBAK CITY ENGINEER







PROJECT VICINITY

INDEX

1. Title and Location Map
2. Typical Sections
3-4. Street Plans
5-7. Earthwork Sections

ENGINEER CB
[illegible] SPF / FILE
[illegible] TR [illegible] 7-15-86

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. Utility service lines, poles, valve boxes, meters, and et cetera are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the contractor. 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. A saw cut of at least one-half the depth of existing surface courses or one-fourth the depth of the existing total pavement thickness shall be provided at locations where proposed construction abuts an existing surface course or pavement for which partial removal of that surface or pavement is required. Sawed joint to facilitate removal within three (3) feet of existing joints will not be permitted and for such instances the limits of removal shall extend to the existing joint. Such saw cuts will not be paid for directly and this cost shall be considered as subsidiary to the removal of the surface or pavement.

4. No more than 10 drives 20 feet in width, or equivalent combinations thereof, are to be constructed with this project.

5. The contractor shall adjust Water Valve Boxes and Fire Hydrants as directed by the Engineer at the price bid for said adjustments. The Water Department shall field locate water valves one time during construction when requested by the contractor. It shall be the contractor's responsibility to preserve such field locations during the construction process. Water valves, water valve boxes or fire hydrants damaged during construction shall be repaired by the contractor at his own expense.

6. Contractor shall coordinate paving operations with water main extension, project no. 448-76-245-88111-000-000-001.

7. All trees within right-of-way shall be removed, except those noted on the plans to be saved.

BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316-262-7271 • 330 LAURA • WICHITA, KANSAS 67211

1/7

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.

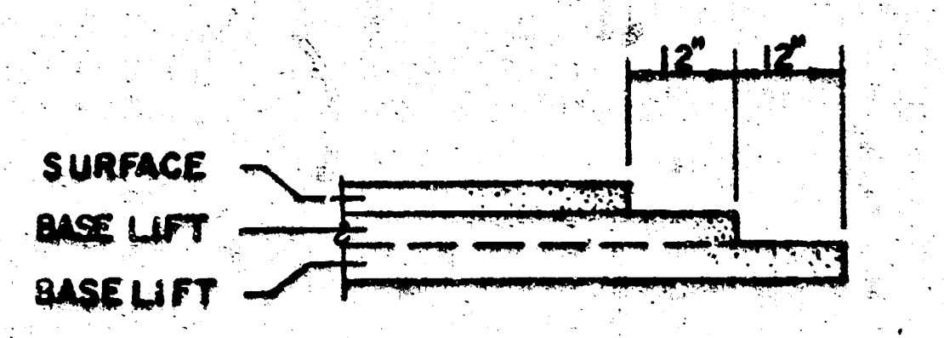
3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.

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

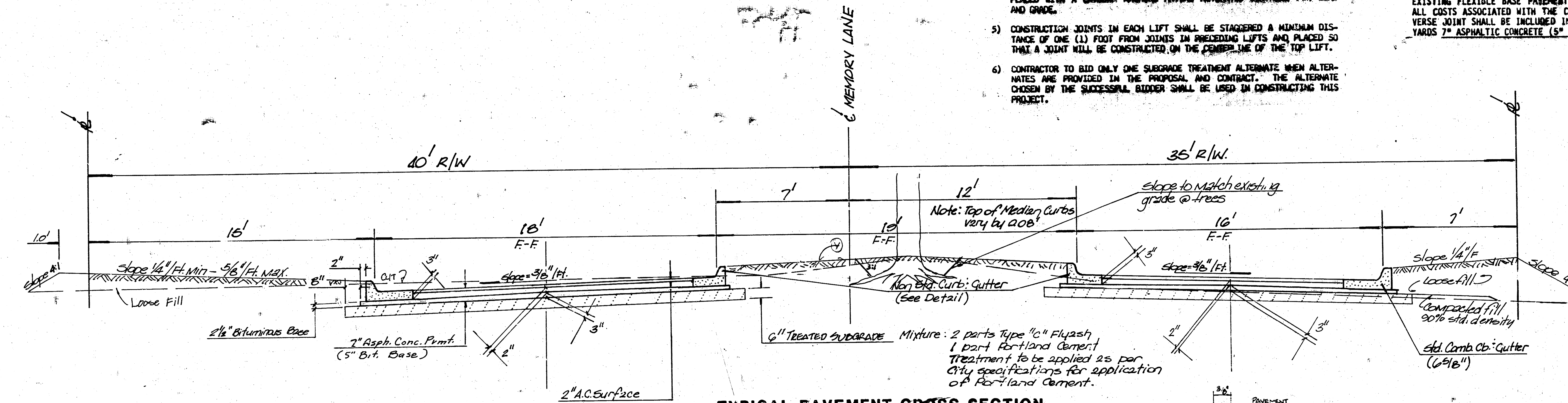
5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.

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

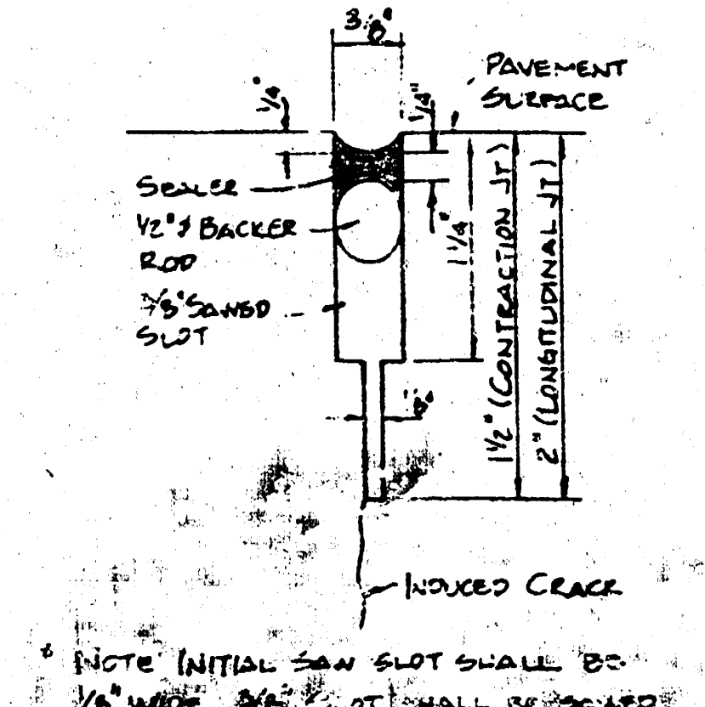


TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE DETAIL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TRANSVERSE JOINT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 7" ASPHALTIC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



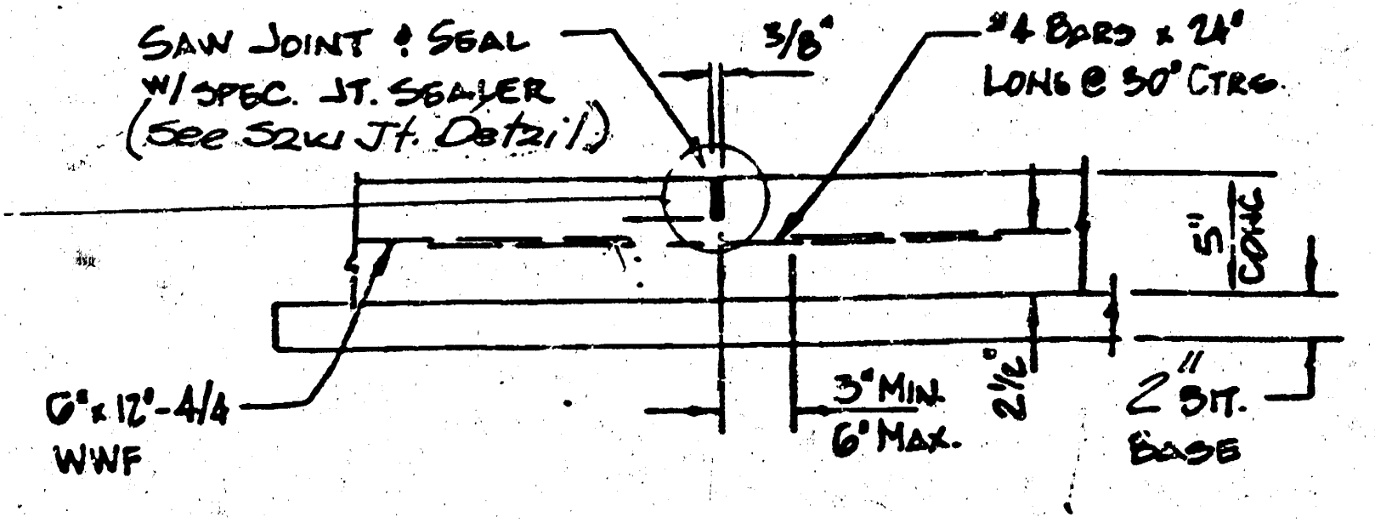
Mixture: 2 parts Type "C" Flyash
1 part Portland Cement
Treatment to be applied as per City specifications for application of Portland Cement.

TYPICAL PAVEMENT CROSS SECTION



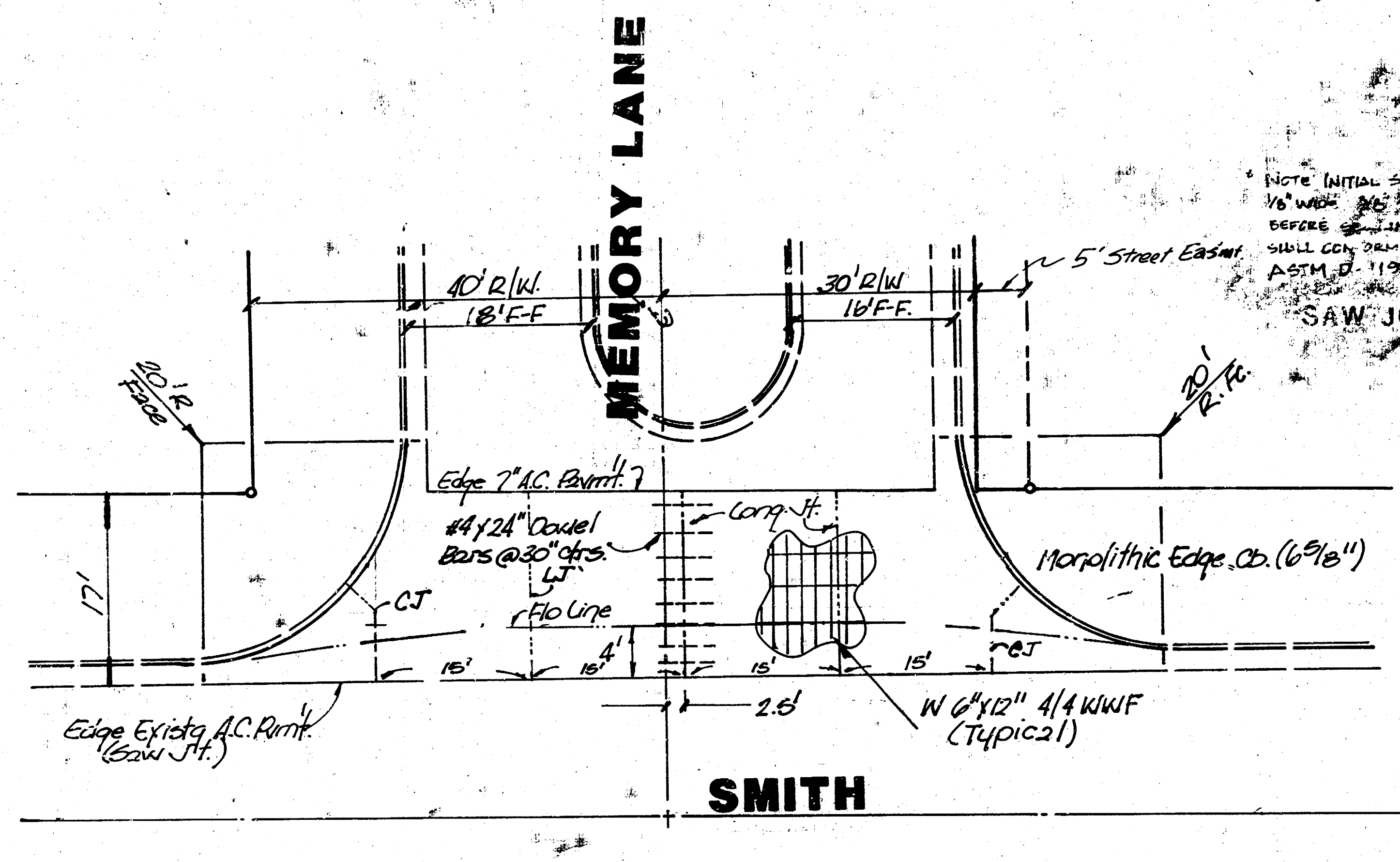
NOTE INITIAL SAW SLOT SHALL BE 1/8" WIDE. 3/8" SLOT SHALL BE SAWED BEFORE [illegible] SEALER MATERIAL SHALL CONFORM TO ASTM [illegible] OR ASTM D-119[illegible]

SAW JOINT DETAIL


SAW JOINT & SEAL W/ SPEC. JT. SEALER (SEE SAW JT. DETAIL)
3/8"
#4 BARS x 24" LONG @ 30" CTRS.
5" CONC.
6" x 12" - 4/4 WWF
3" MIN. 6" MAX.
2 1/2"
2" BIT. BASE

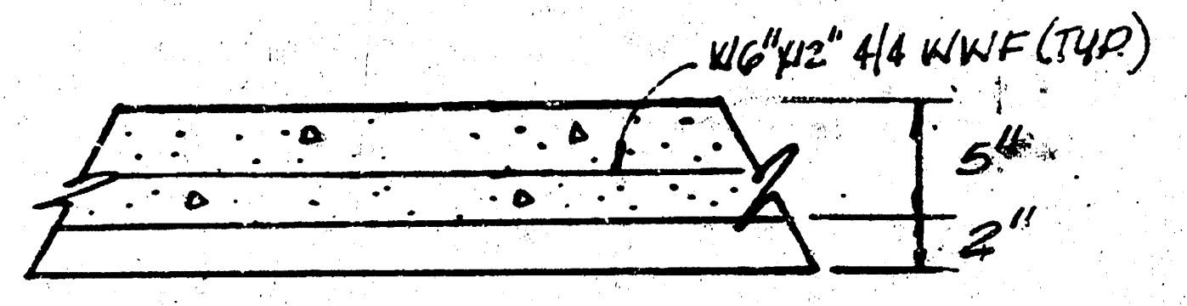
LONGITUDINAL SAWED JOINT

FOR CONCRETE VALLEY GUTTER



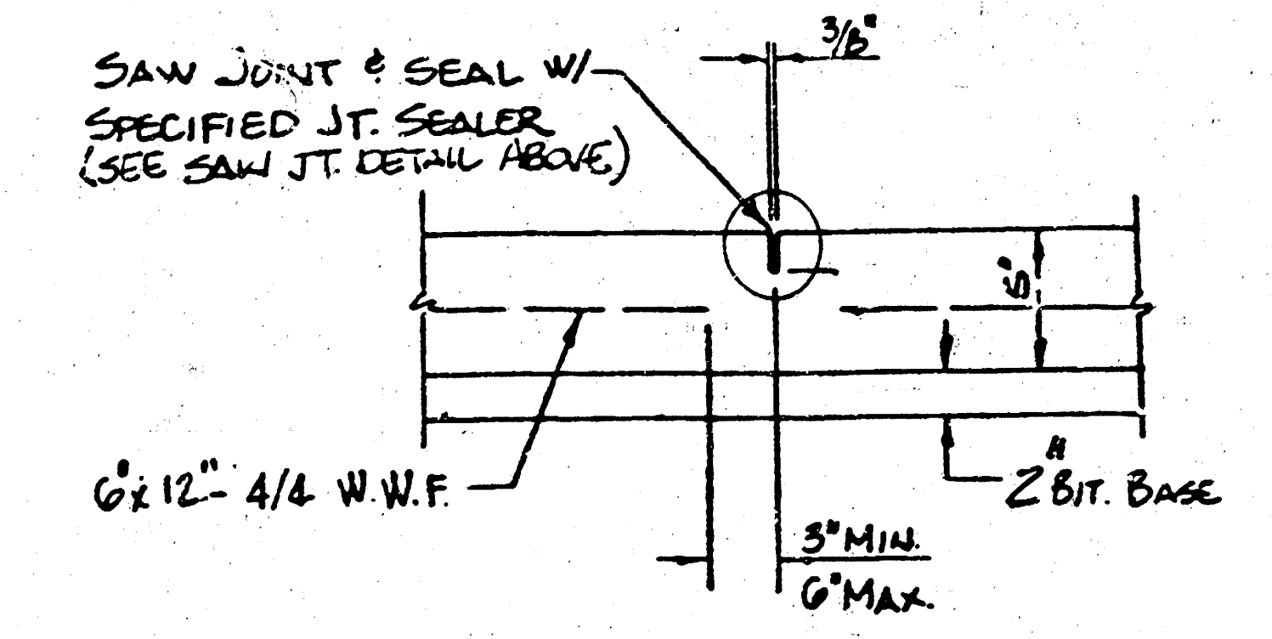
VALLEY GUTTER DETAIL

(No Scale)



7" REINFORCED VALLEY GUTTER PAVEMENT

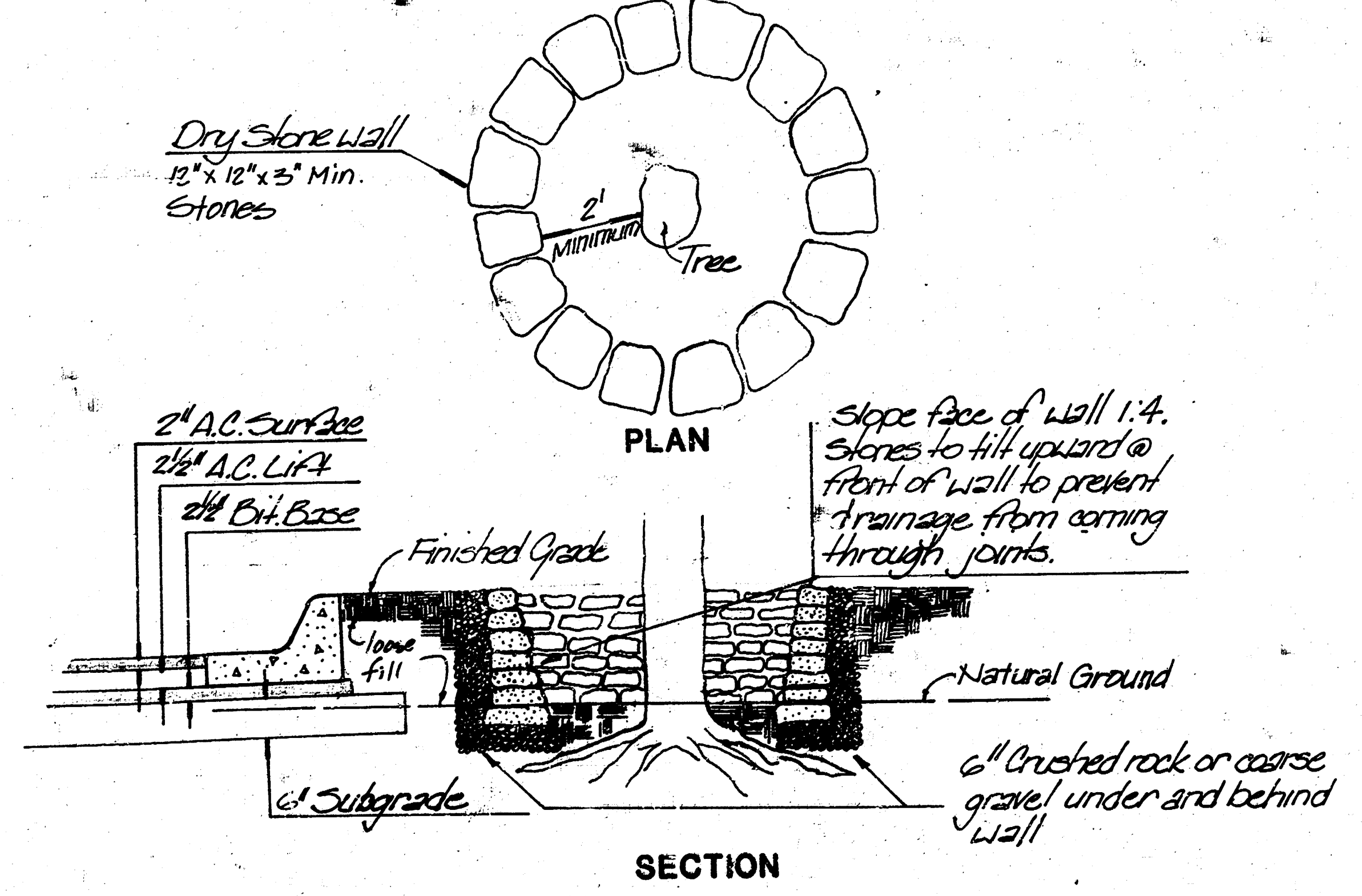
5" REINFORCED CONCRETE W/ 2" BIT. BASE


SAW JOINT & SEAL W/ SPECIFIED JT. SEALER (SEE SAW JT. DETAIL ABOVE)
3/8"
5"
6" x 12" - 4/4 W.W.F.
2" BIT. BASE
3" MIN.
6" MAX.

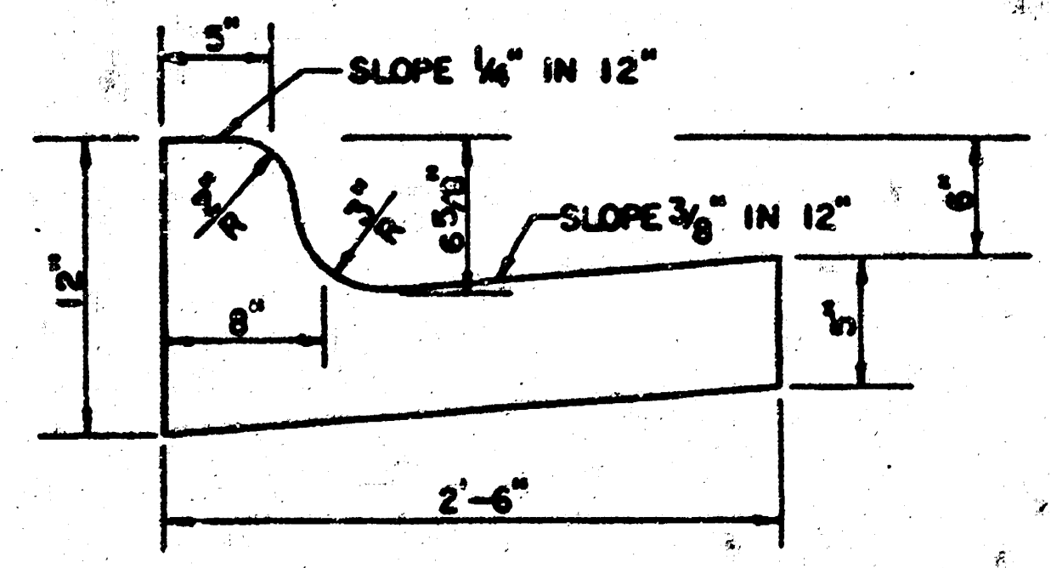
CONTRACTION JOINT

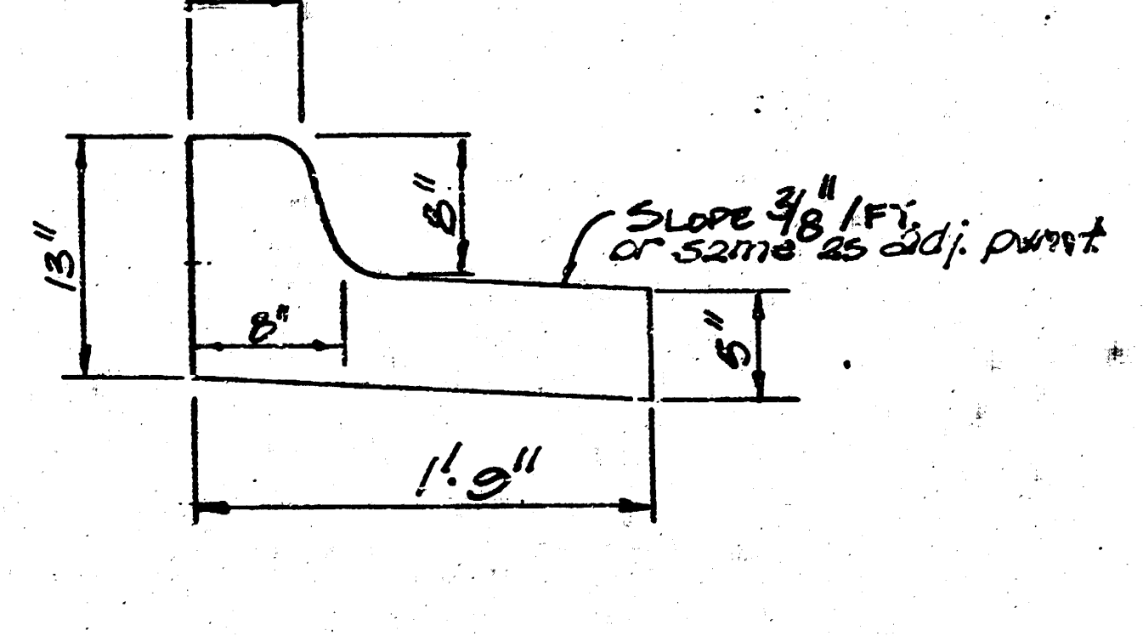
FOR CONCRETE VALLEY GUTTER

FULL TREE WELL DETAIL
(TO BE CONSTRUCTED BY OTHERS)


Dry Stone Wall
12" x 12" x 3" Min. Stones
2' Minimum
Tree
PLAN
2" A.C. Surface
2 1/2" A.C. Lift
2 1/2" Bit. Base
Finished Grade
loose fill
Slope face of wall 1:4. Stones to tilt upward @ front of wall to prevent drainage from coming through joints.
Natural Ground
6" Subgrade
6" Crushed rock or coarse gravel under and behind wall
SECTION

COMBINED CURB & GUTTER





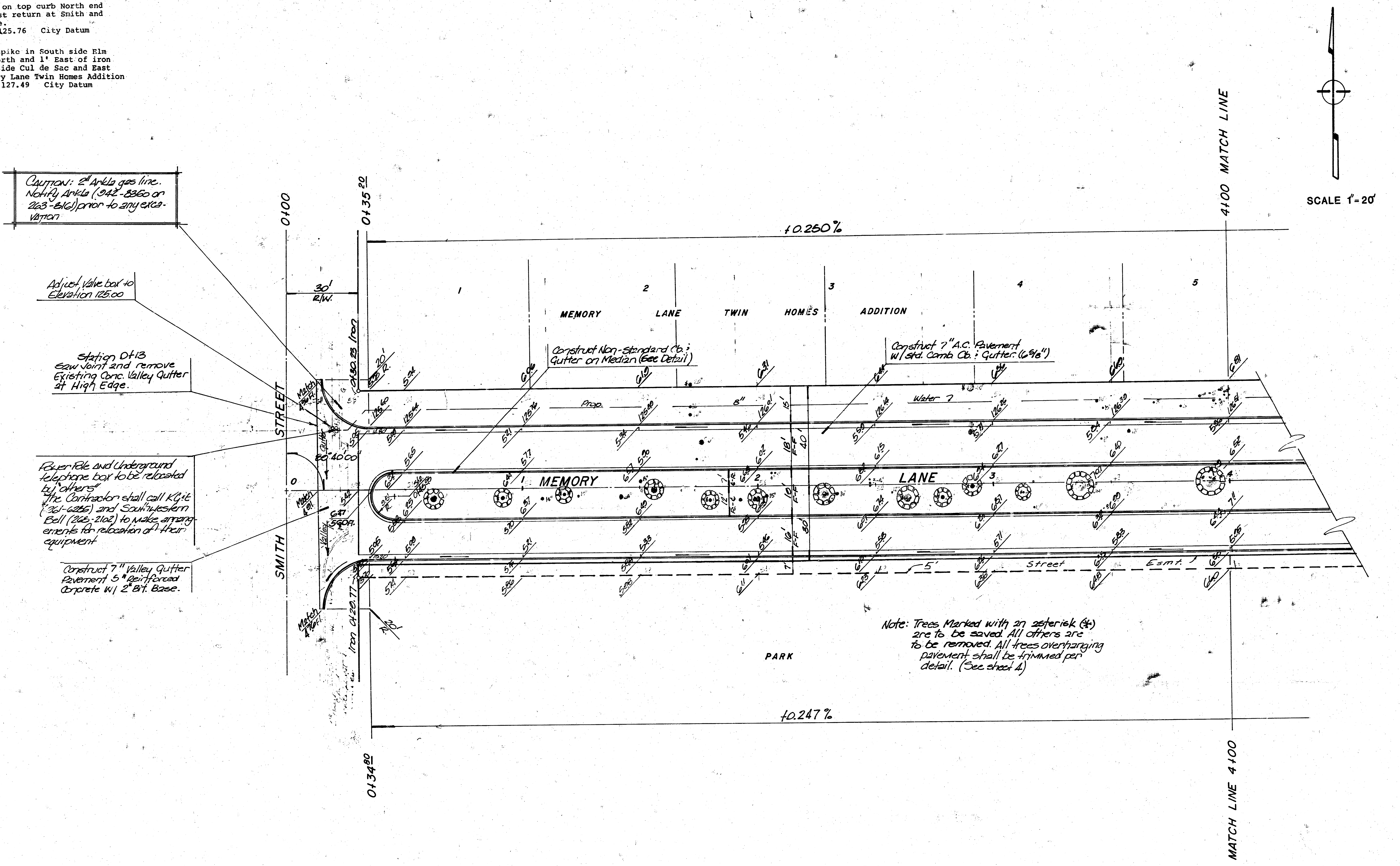
NON-STANDARD CURB AND GUTTER

MEMORY LANE

472-76-245-81363-000-000-001

BENCH MARK: Square cut on top curb North end of Northwest return at Smith and Memory Lane.
Elevation 125.76 City Datum

BENCH MARK: Railroad spike in South side Elm Tree 1' North and 1' East of iron at South side Cul de Sac and East line Memory Lane Twin Homes Addition
Elevation 127.49 City Datum



CAUTION: 2" Arkla gas line. Notify Arkla (942-8360 or 263-8161) prior to any excavation

Adjust Valve box to Elevation 125.00

Station 0+13
Saw Joint and remove Existing Conc. Valley Gutter at High Edge.

Power Pole and Underground telephone box to be relocated by "others"
The Contractor shall call KG&E (261-6285) and Southwestern Bell (268-2102) to make arrangements for relocation of their equipment

Construct 7" Valley Gutter Pavement 5" Reinforced Concrete W/ 2" Bit. Base.

Construct Non-Standard Cb. & Gutter on Median (See Detail)

Construct 7" A.C. Pavement W/ Std. Comb. Cb. & Gutter. (6 5/8")

Note: Trees Marked with an asterisk (*) are to be saved. All others are to be removed. All trees overhanging pavement shall be trimmed per detail. (See sheet 4)

▨ Denotes Removal
——W.—— Proposed Water Line
——G.—— Existg. Gas Line
——T.—— Existg. Telephone Line
——W.—— Existg Water Line

INDEX TO SYMBOLS

MEMORY LANE

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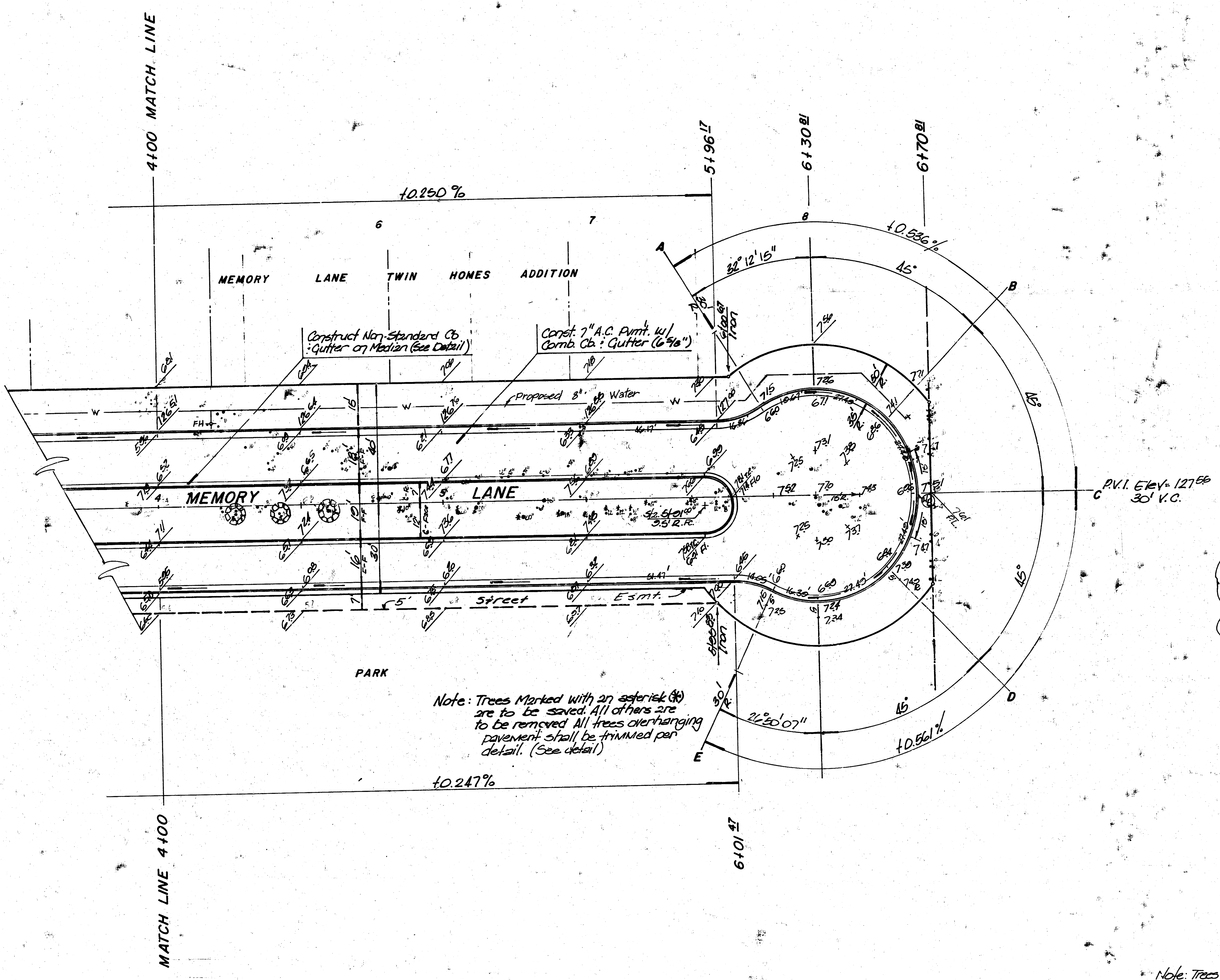
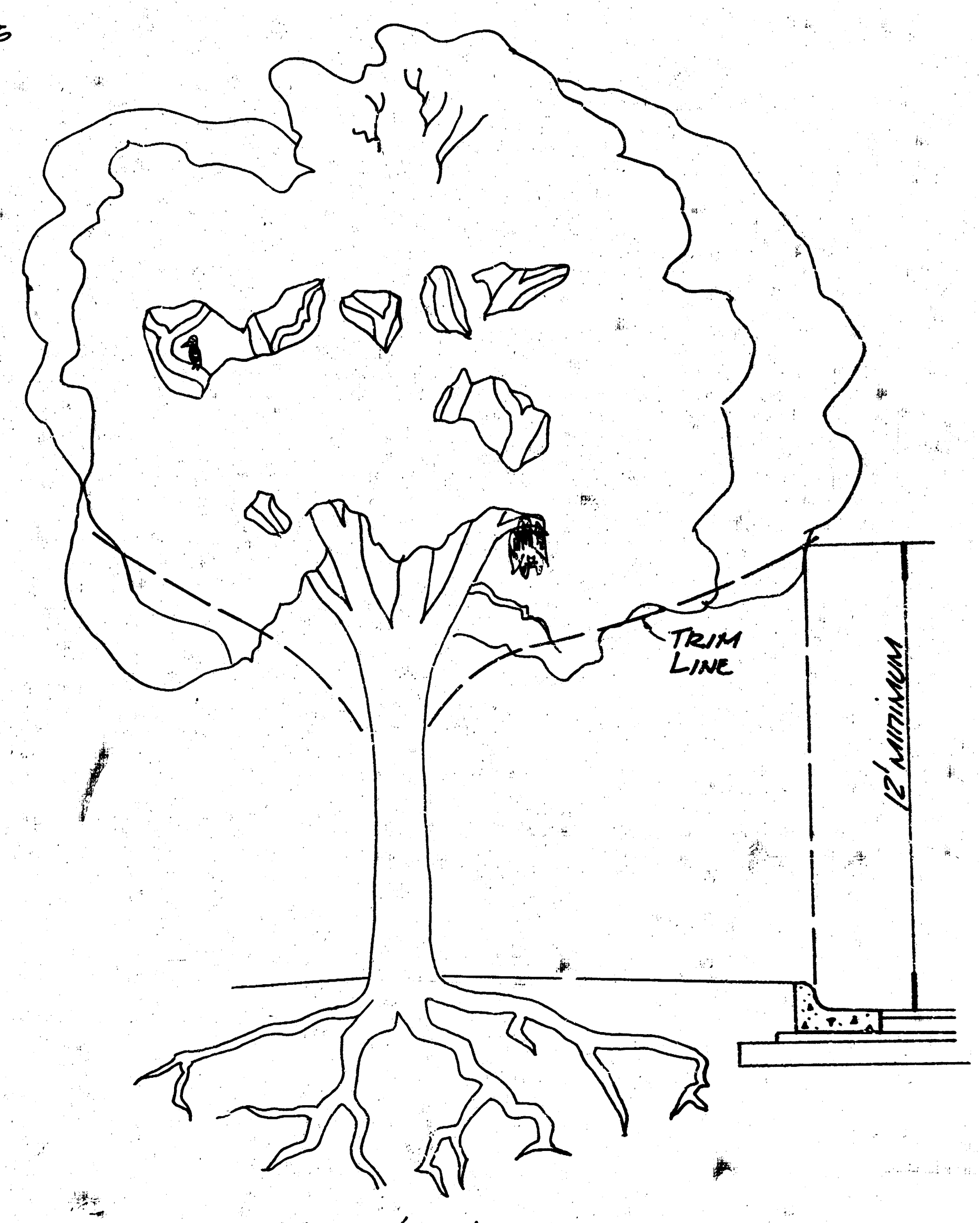


Note: Trees Marked with an asterisk (*) are to be saved. All others are to be removed All trees overhanging pavement shall be trimmed per detail. (See detail)

SCALE 1"=20'



Note: Trees shall be trimmed to a balanced and symmetrical shape No part of the tree overhanging street pavement shall be lower than as shown.

TREE TRIMMING DETAIL

	Excavation	Comp Fill	Borrow
Cross Sections	360.9 C.Y.	262.8 C.Y.	1618.0 C.Y.
+10 %	37.0 C.Y	26.3 C.Y.	161.8 C.Y.
Totals	397.9 C.Y.	289.1 C.Y.	1779.8 C.Y.

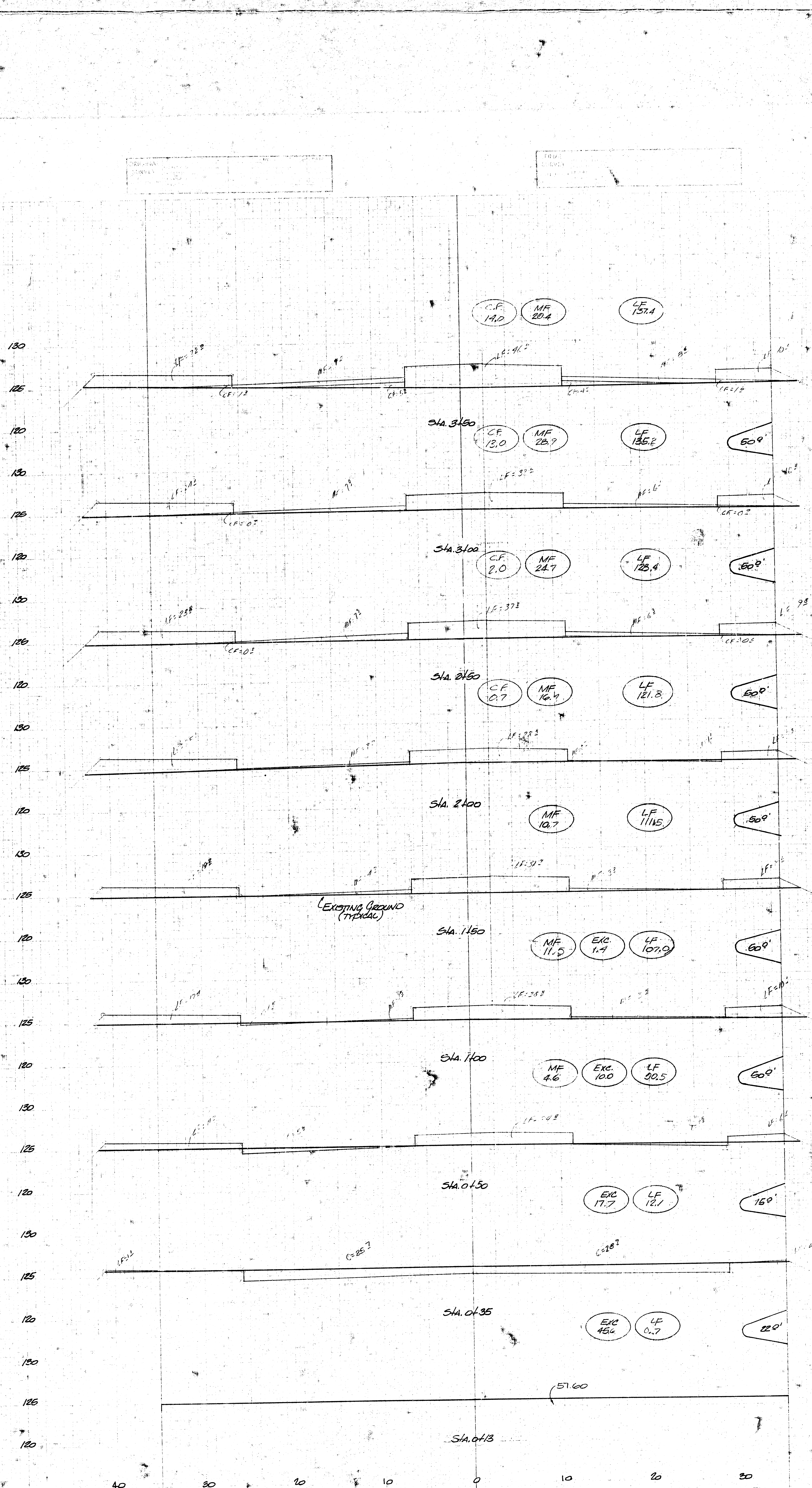
Subgrade Manipulation: 3051 S.Y.

NOTE: MEDIAN TO BE RECROSS-SECTIONED AFTER CONSTRUCTION FOR FINAL PAYMENT PURPOSES

MEMORY LANE

472-76-245-81363-000-000-001

EARTHWORK QUANTITIES
MEMORY LANE



MEMORY LANE
MEMORY LANE TWIN HOMES ADD.

EARTHWORK TOTALS	
EXCAVATION	= 360.9
LOOSE FILL	= 1139.7
MANIPULATED FILL	= 231.8
COMPACTED FILL	= 262.8

BORROW CALCULATION $1.1[1.2(CF+MF)+LF]-0.8EXC = CY$ BORROW

BORROW $= 1.1[1.2(262.8+231.8)+1139.7]-0.8(360.9)$

BORROW = 1618 C.Y.

SHEET TOTALS

MANIPULATED FILL = 126.2 CY
EXCAVATION = 74.7 CY
LOOSE FILL = [illegible] CY
COMPACTED FILL = 29.7 CY

472-76-245-81363-000-000-001 5/7 5/7

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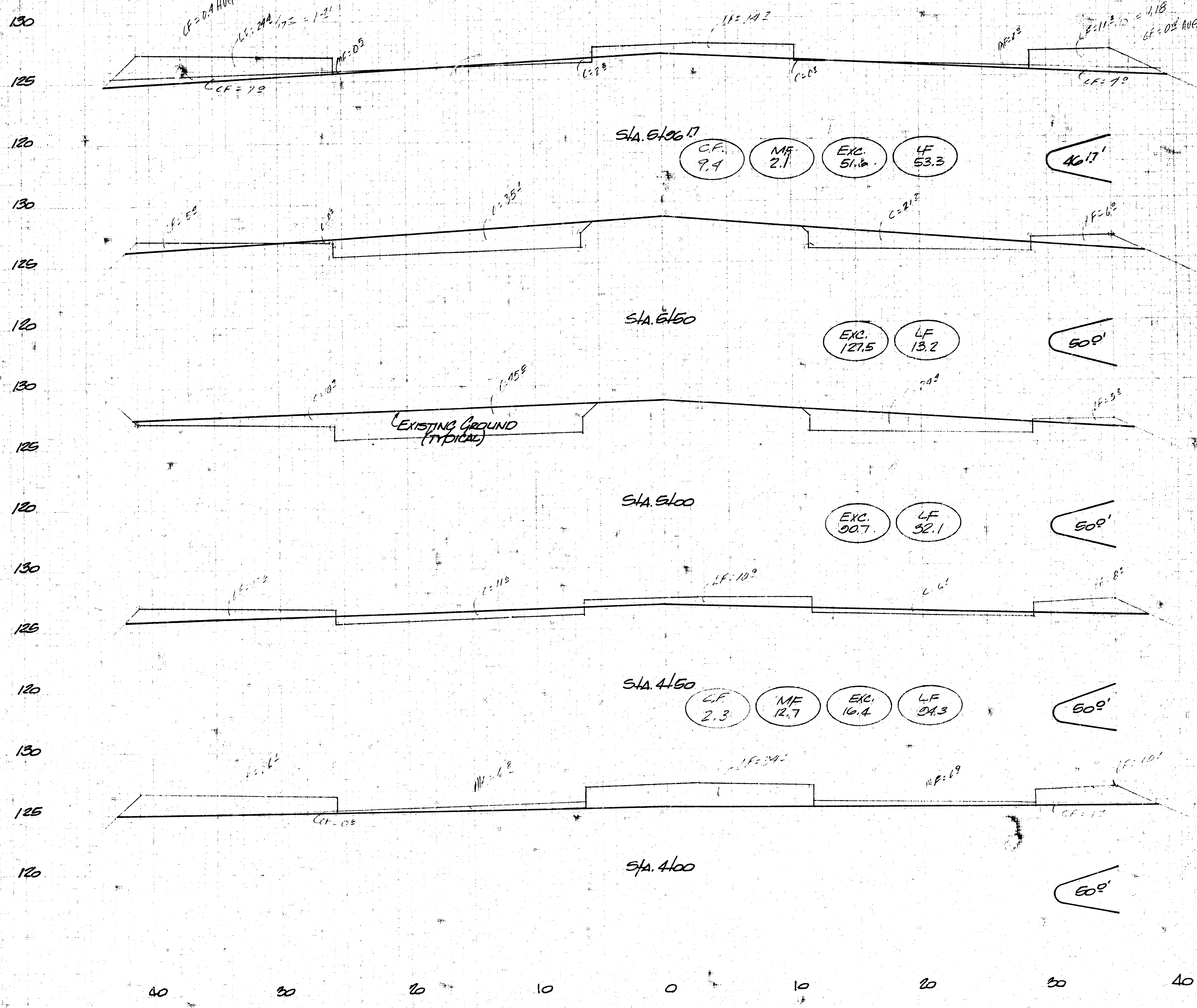
EARTHWORK QUANTITIES

MEMORY LANE



SHEET TOTALS
EXCAVATION 286.2
LOOSE FILL 192.9
MUNIPULATED FILL 14.8
COMPACTED FILL 11.7

MEMORY LANE
MEMORY LANE TWIN HOMES ADD.

172-70-245-81363-000-000-001 ⑥/⑦ 6/7

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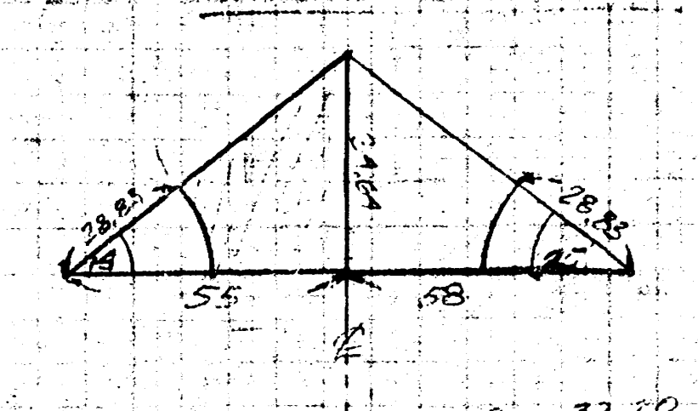
AREA FORMULAS OA-OE

CF = (AVG. RADIUS)^2 · π · $\frac{\Delta}{360}$

MF = (AVG. RADIUS)^2 · π · $\frac{\Delta}{360}$

LF = [(AVG. OUTER RADIUS)^2 - (AVG INNER RADIUS)^2] · π · $\frac{\Delta}{360}$

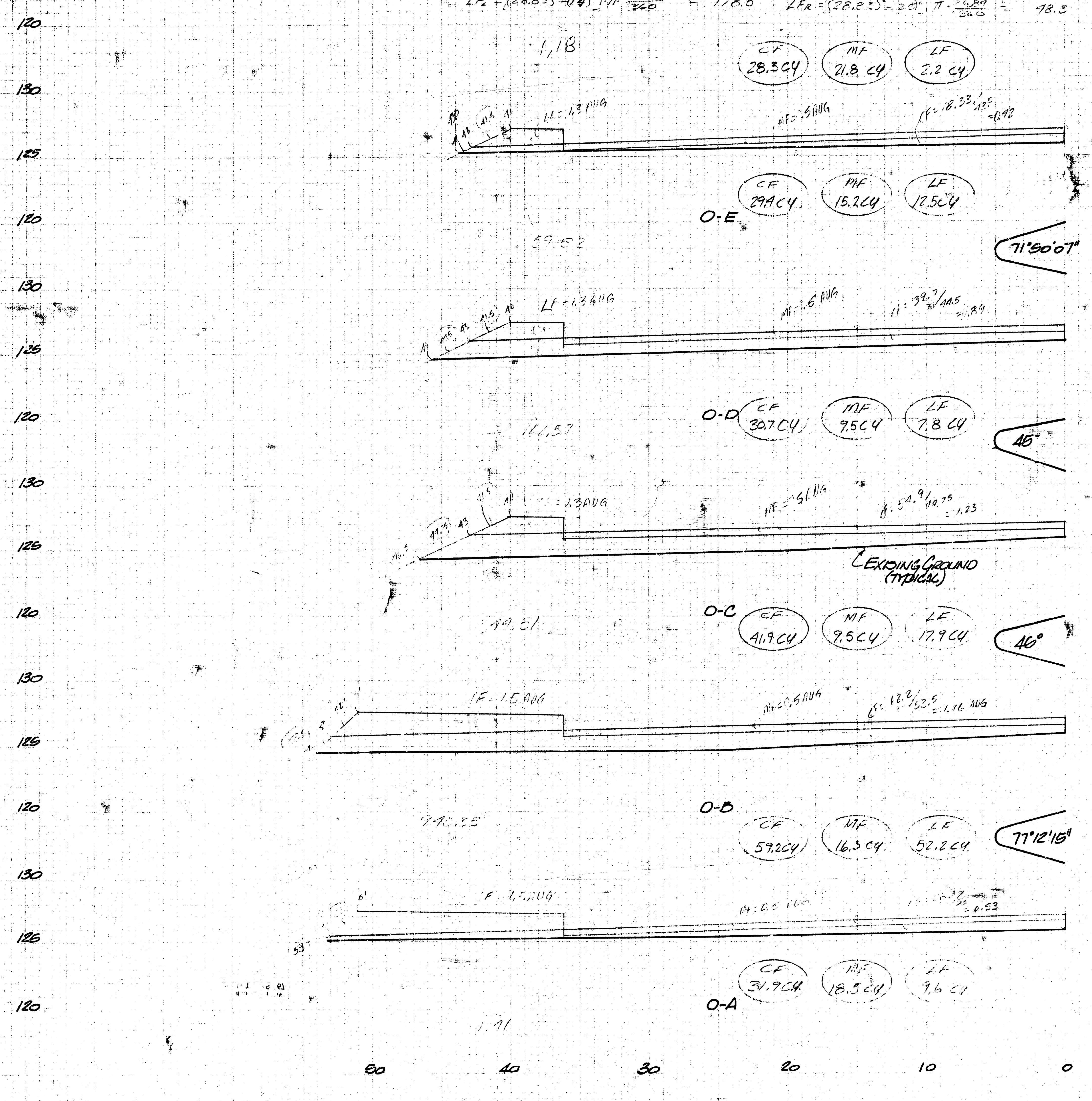
AREA 5+96.17-OA AREA 5+96.17-OE



CF$_L$ = (55)(34.64) - 19^2 π · $\frac{32.20}{360}$ = 1,850.1 CF$_R$ = (58)(34.64) - 25^2 · π · $\frac{26.84}{360}$ = 1862.8

MF$_L$ = (55)(34.64) - (28.83)^2 π $\frac{32.20}{360}$ = 1661.7 MF$_R$ = (58)(34.64) - (28.83)^2 π $\frac{26.84}{360}$ = 1814.5

LF$_L$ = [(28.83)^2 - (19)^2] · π $\frac{32.20}{360}$ = 178.5 LF$_R$ = [(28.83)^2 - 25^2] π · $\frac{26.84}{360}$ = 48.3



MEMORY LANE (CUL-DE-SAC)
MEMORY LANE TWIN HOMES ADD.

SHEET TOTALS
COMPACTED FILL = 221.4 CY.
MANIPULATED FILL = 90.8 CY.
LOOSE FILL 102.2 CY.

EARTHWORK QUANTITIES
MEMORY LANE (CUL-DE-SAC)

462-76-845-81363-000-000-001 (7/7) 7/7

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