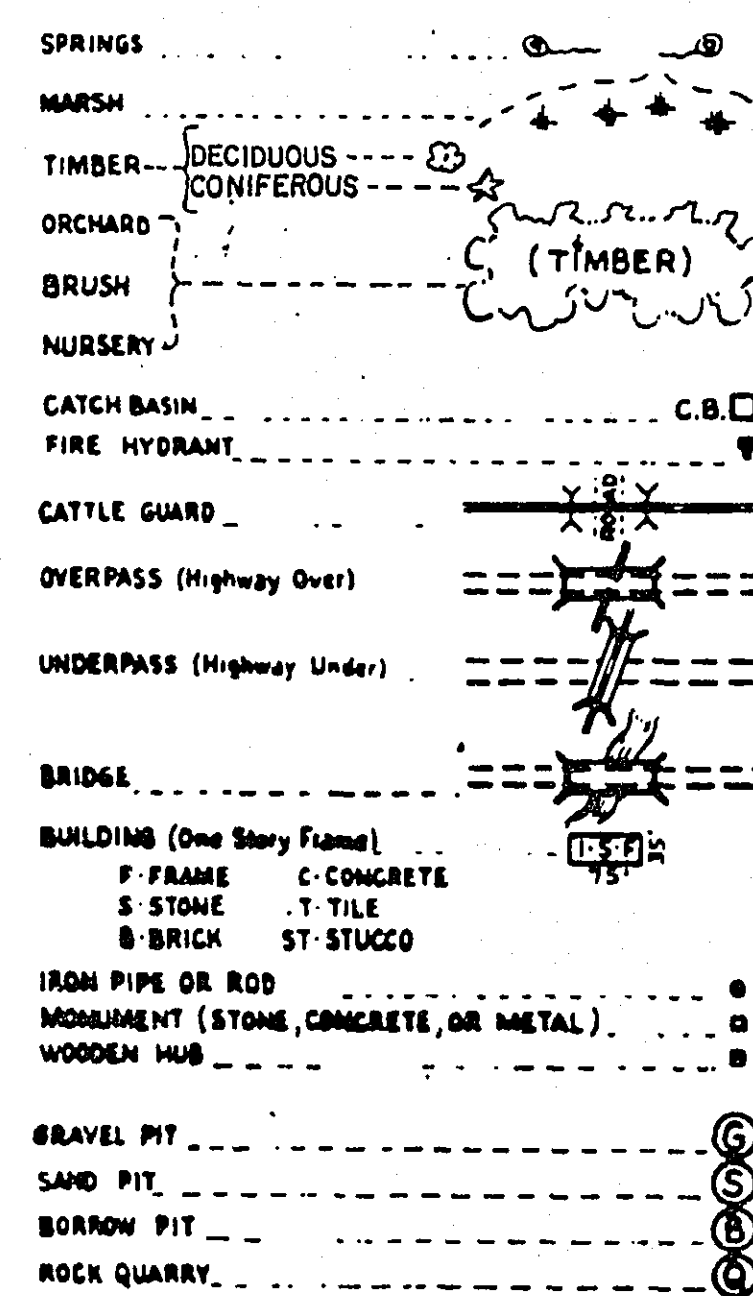
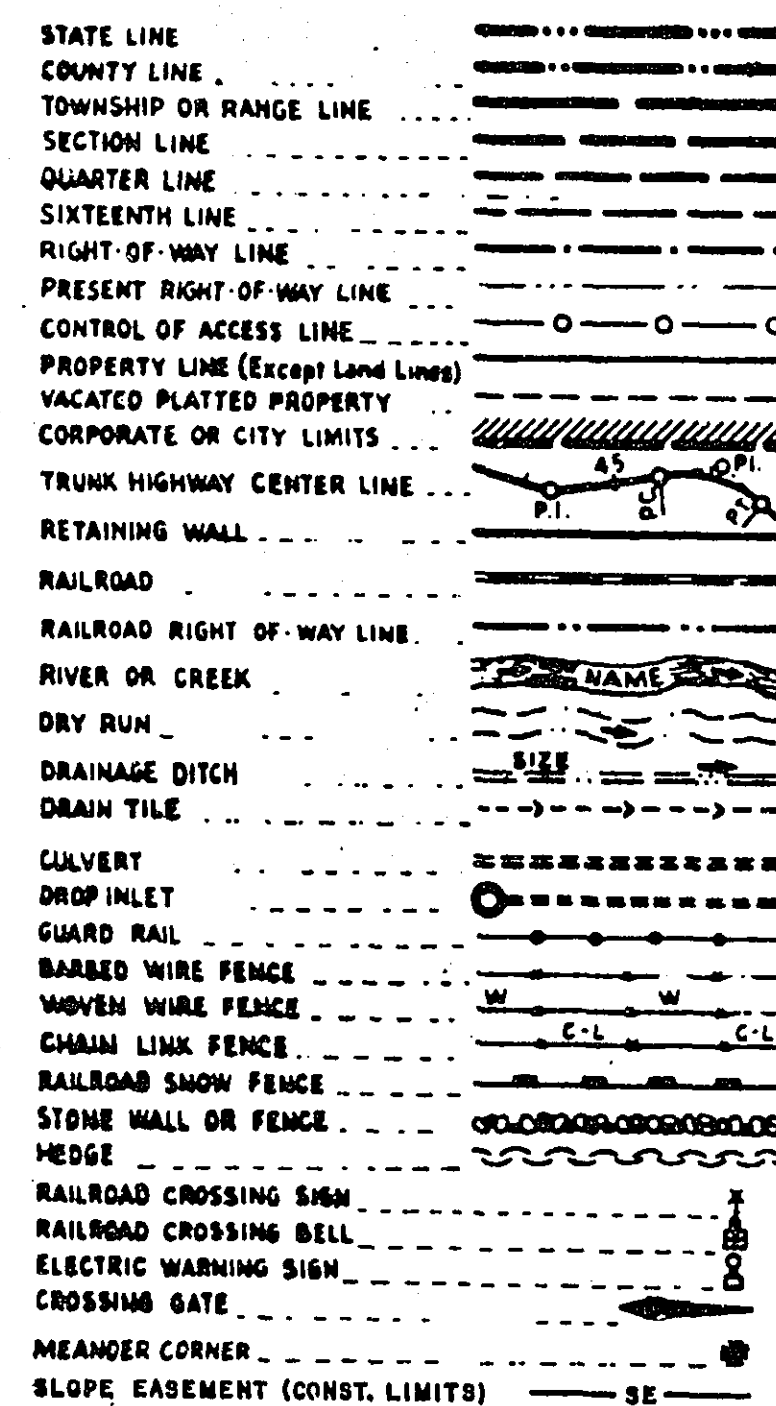
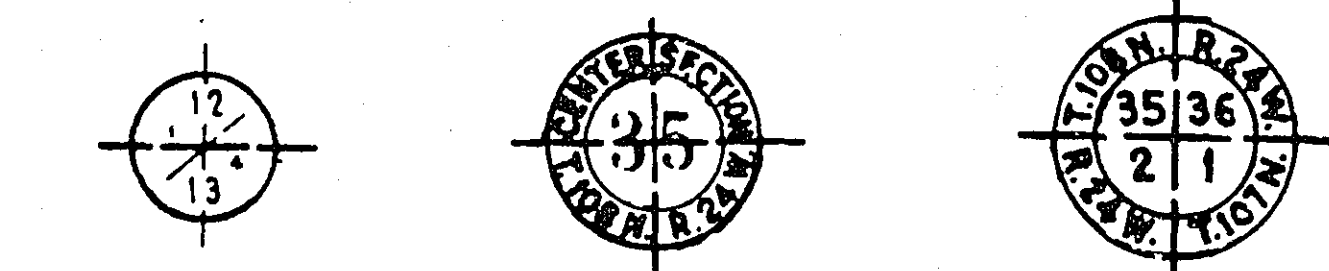
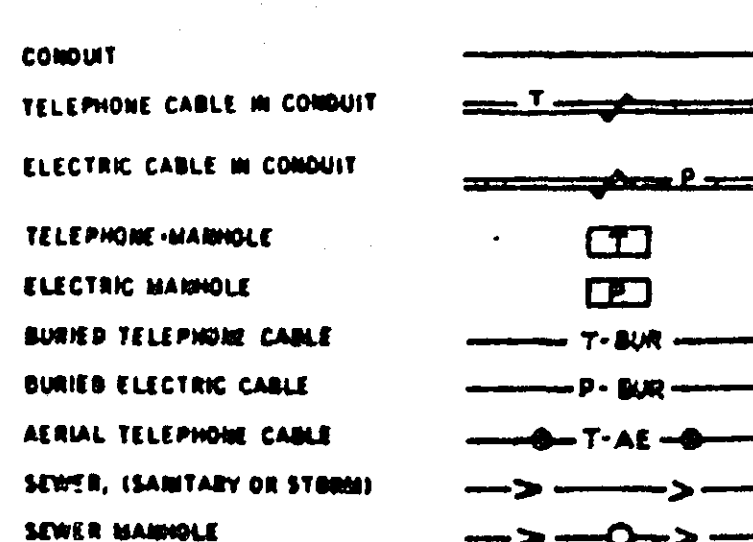
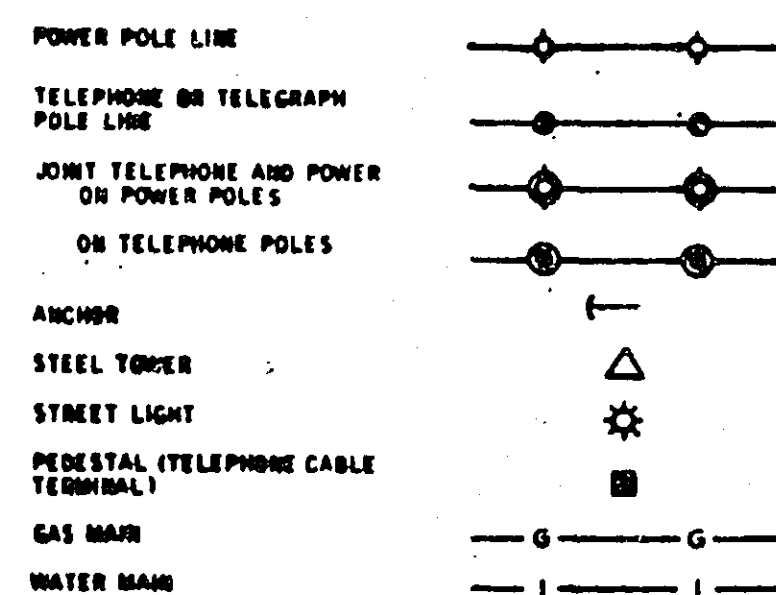


# PLANS SYMBOLS



# UTILITIES SYMBOLS



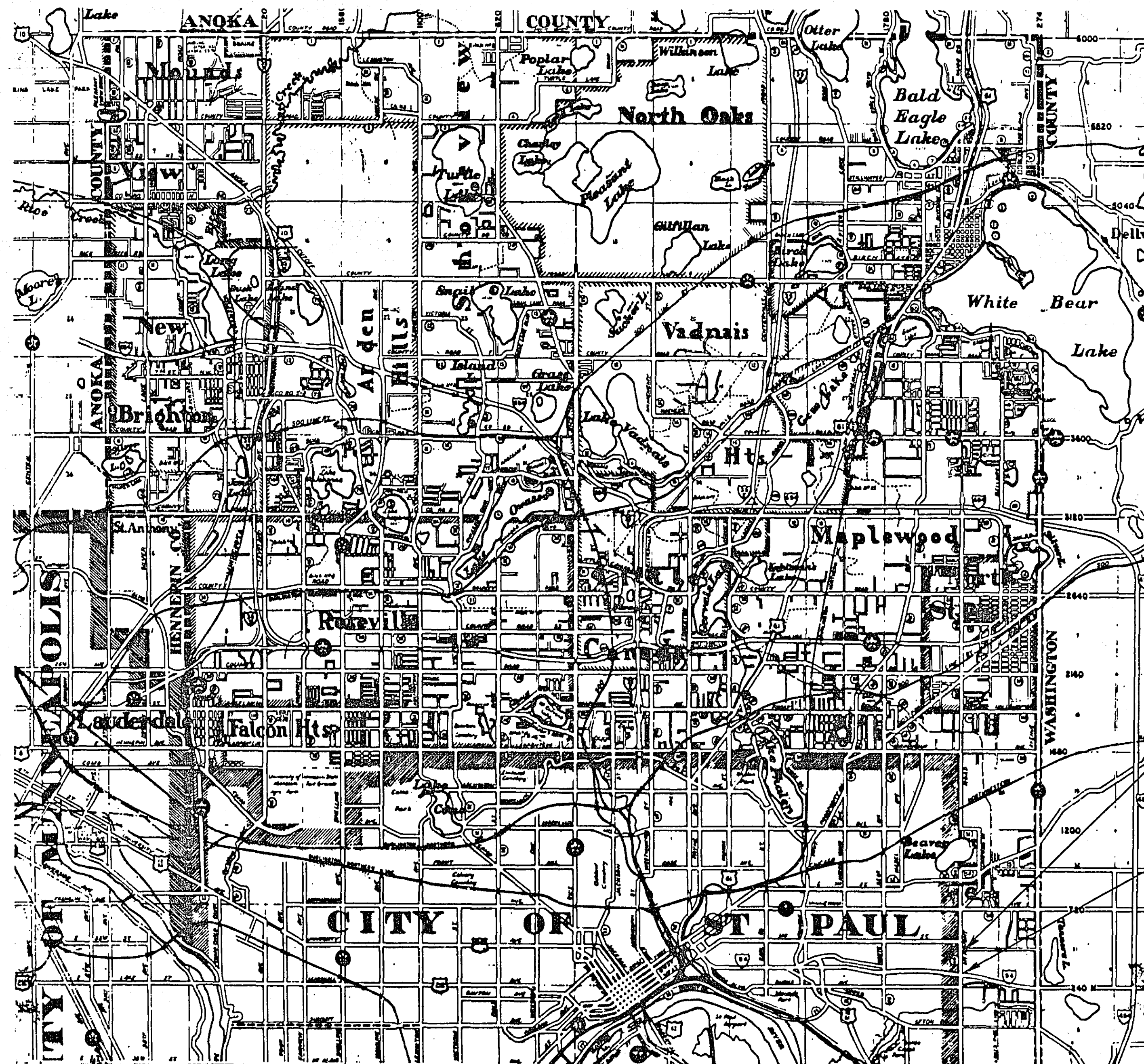
NOTE SECTION NUMBERS READ FROM THE SOUTH

THE 1988 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATIONS "STANDARD SPECIFICATIONS FOR CONSTRUCTION AS AMENDED BY SUPPLEMENTAL SPECIFICATIONS, DATED JANUARY 2, 1991, SHALL GOVERN"

|              |         |       |
|--------------|---------|-------|
|              | FEET    | MILES |
| GROSS LENGTH | 1934.64 | 0.37  |
| NET LENGTH   | 1934.64 | 0.37  |
| EXCEPTION    | 0       | 0     |

RAMSEY COUNTY  
DEPARTMENT OF PUBLIC WORKS  
McKNIGHT ROAD  
BITUMINOUS WALK  
I-94 to CONWAY AVENUE  
ACCOUNT NO. MP-035  
CITY OF MAPLEWOOD  
S.A.P. 138-020-18

| SHEET NO. | INDEX                 |
|-----------|-----------------------|
| 1         | Title Sheet           |
| 2         | Typical Section       |
| 2         | Estimated Quantities  |
| 2         | Details               |
| 3-4       | Plan Sheets           |
| 5-7       | Partial Cross Section |



END PROJECT  
27+32.00

BEGIN PROJECT  
7+97.36

DESIGN SQUAD \_\_\_\_\_ DATE \_\_\_\_\_  
DRAWN BY \_\_\_\_\_ DATE \_\_\_\_\_  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
DATE 11-26-90 REG. NO. 13501 ENGR. Jimmy K. Feldman

# DESIGN DESIGNATION

|                           |                       |
|---------------------------|-----------------------|
| PRESENT ADT (1993)        | 15,200                |
| FUTURE ADT (2013)         | 19,760                |
| FUNCTIONAL CLASSIFICATION | HIGH DENSITY ARTERIAL |
| DESIGN SPEED              | 40 MPH (1)            |
| NUMBER OF TRAFFIC LANES   | 4                     |
| NUMBER OF PARKING LANES   | 0                     |

(1) BASED ON 3.5' HEIGHT OF EYE,  
0.5' HEIGHT OF OBJECT

|                                                           |                                                                |                                                                |
|-----------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|
| RAMSEY COUNTY                                             | RECOMMENDED FOR APPROVAL <i>DES</i> DATE 11/13/90              | RECOMMENDED FOR APPROVAL <i>Keneth E. Welter</i> DATE 12-18-90 |
| TRAFFIC ENGR.                                             | DATE 11/13/90                                                  | COUNTY ENGINEER                                                |
| RECOMMENDED FOR APPROVAL <i>KUR</i> DATE 11/13/90         | APPROVED <i>Barbara H. Vngard</i> DATE 6-23-93                 | CHAIR. OF THE RAMSEY COUNTY BOARD                              |
| ENV. ENGR.                                                | DATE 11/13/90                                                  | CITY OF MAPLEWOOD                                              |
| RECOMMENDED FOR APPROVAL <i>OGJ</i> DATE 11/19/90         | RECOMMENDED FOR APPROVAL <i>Keneth E. Welter</i> DATE 11/11/93 | CITY OF MAPLEWOOD                                              |
| MAINT. ENGR.                                              | DATE 11/19/90                                                  |                                                                |
| RECOMMENDED FOR APPROVAL <i>RHP</i> DATE 11/26/90         | APPROVED _____ DATE _____                                      |                                                                |
| CONTR. ENGR.                                              | DATE 11-26-90                                                  | MINNESOTA DEPARTMENT OF TRANSPORTATION                         |
| RECOMMENDED FOR APPROVAL <i>LLP</i> DATE 11-26-90         | RECOMMENDED FOR APPROVAL <i>M. Kelly</i> DATE 6-3-93           | STATE AID PLANS ENGINEER                                       |
| DESIGN ENGR.                                              | DATE 11-26-90                                                  |                                                                |
| RECOMMENDED FOR APPROVAL <i>W. H. H. H.</i> DATE 11-16-90 | RECOMMENDED FOR APPROVAL <i>W. H. H. H.</i> DATE 1/20/93       | METRO-ASSISTANT DIVISION ENGINEER STATE-AID                    |
| TRAFFIC ENGR.                                             | DATE 11-16-90                                                  |                                                                |
| RECOM'D <i>W. H. H. H.</i> DATE 11-16-90                  | APPROVED <i>W. H. H. H.</i> DATE 6/4/92                        | STATE AID ENGINEER                                             |
| ASSISTANT CO. ENGINEER                                    | DATE 11-16-90                                                  |                                                                |

| DATE    | SHEET NO.           | BY |
|---------|---------------------|----|
| 1/8/92  | 1, 2, 3, 4, 5, 6, 7 | TL |
| 8/18/92 | 2, 3, 4             | TL |

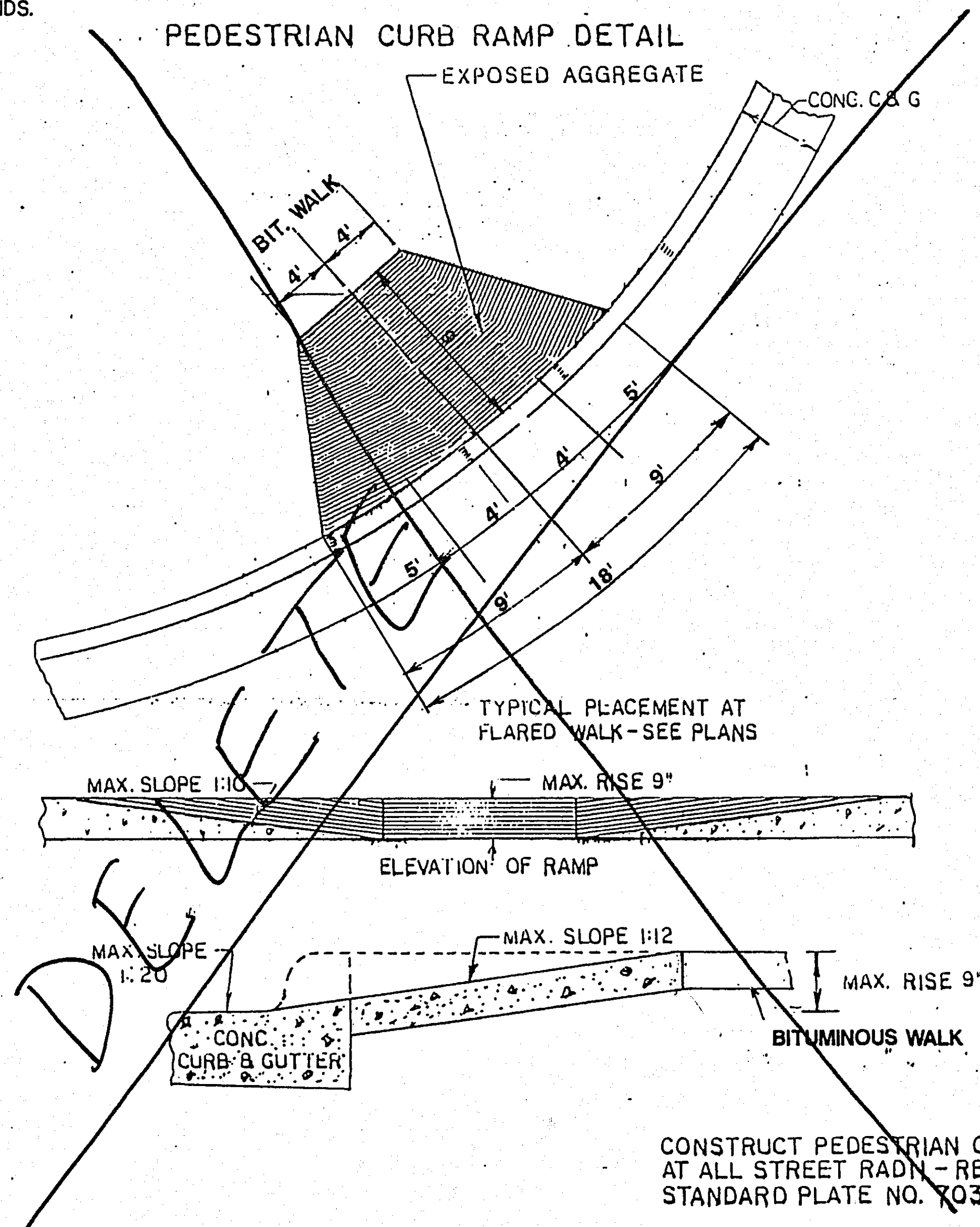
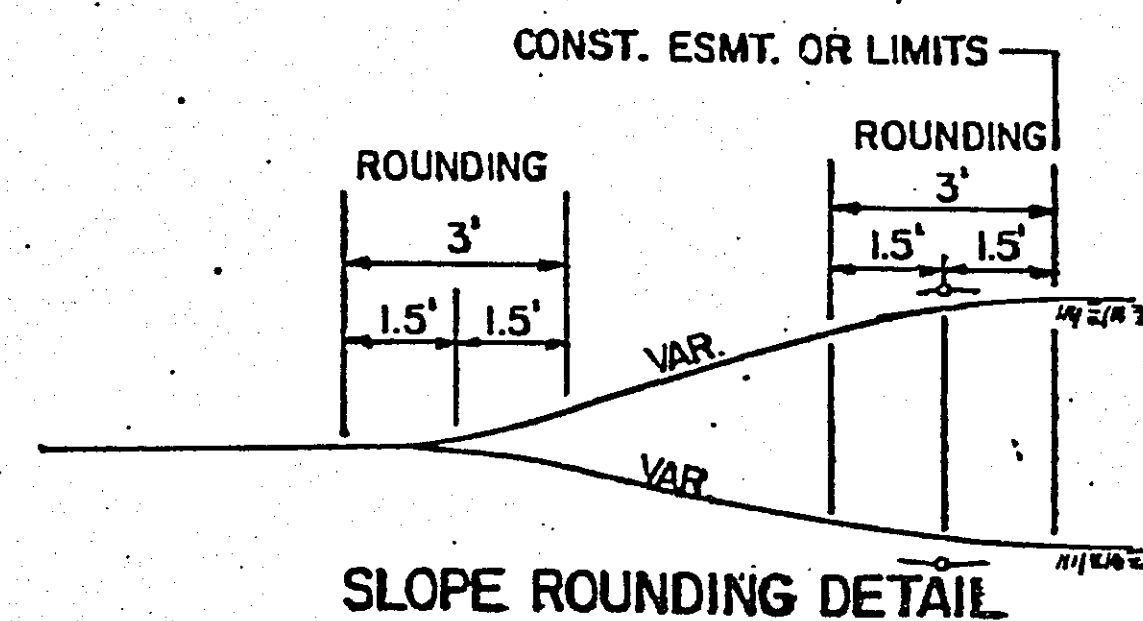
S.A.P. 138-020-18

Sheet No. 1 of 7 Sheets

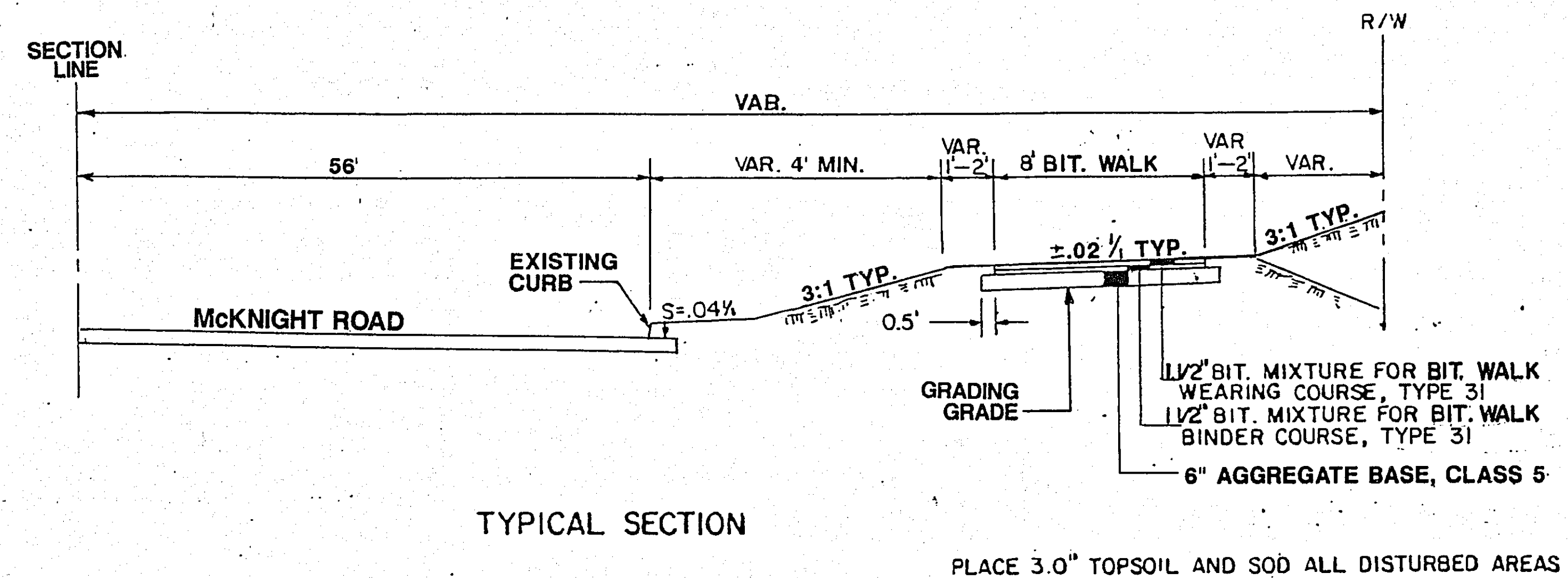
| STATEMENT OF ESTIMATED QUANTITIES |                                  |      |                            |                        |                      |                  |
|-----------------------------------|----------------------------------|------|----------------------------|------------------------|----------------------|------------------|
| ITEM NO.                          | CONTRACT ITEM                    | UNIT | TOTAL ESTIMATED QUANTITIES | TOTAL FINAL QUANTITIES | ESTIMATED QUANTITIES | FINAL QUANTITIES |
| 2101.502                          | CLEARING                         | TREE | 7                          |                        | 7                    | 1                |
| 2101.507                          | GRUBBING                         | TREE | 7                          |                        | 7                    | 1                |
| 2104.501                          | REMOVE CURB & GUTTER             | LF   | 263                        |                        | 263                  | 267              |
| 2104.511                          | SAWING CONCRETE PAVEMENT         | LF   | 36                         |                        | 36                   | 64               |
| 2104.513                          | SAWING BITUMINOUS PAVEMENT       | LF   | 48                         |                        | 48                   | 95               |
| 2105.501                          | COMMON EXCAVATION                | CY   | 407(P)                     |                        | 407(P)               | 407              |
| (3) 2211.503                      | AGGREGATE BASE CL. 5 - PLACED    | CY   | 305(P)                     |                        | 305(P)               | 305              |
| (3) 2340.508                      | TYPE 31 WEARING COURSE MIXTURE   | TON  | 143                        |                        | 143                  | 133              |
| (3) 2340.510                      | TYPE 31 BINDER COURSE MIXTURE    | TON  | 143                        |                        | 143                  | 133              |
| (1)(3) 2357.502                   | BITUMINOUS MAT. FOR TACK COAT    | GAL  | 82                         |                        | 82                   | -                |
| 0531.602                          | PEDESTRIAN CURB RAMP             | EACH | 17                         |                        | 17                   | 16               |
| 2575.505                          | SODDING-TYPE LAWN                | SY   | 1622                       |                        | 1622                 | 1274             |
| (2) 2575.531                      | COMM. FERT. ANALYSIS 12-12-12    | TON  | 0.06                       |                        | 0.06                 | -                |
| 2104.503                          | REMOVE CONCRETE SIDEWALK         | SF   | 416                        |                        | 416                  | 475              |
| 0565.602                          | ADJUST HANDHOLE                  | EACH | 4                          |                        | 4                    | 4                |
| 2521.501                          | CONCRETE CURB & GUTTER DES. B824 | LF   | 241                        |                        | 241                  | 267              |
| 2521.501                          | 4" CONCRETE WALK                 | SF   | 960                        |                        | 960                  | 1168             |

- (1) 2357.502 - BITUMINOUS MATERIAL FOR TACK COAT ESTIMATED AT 0.05 GAL. PER SQUARE YARD.  
 (2) 2575.531 - COMMERCIAL FERTILIZER ANALYSIS 12-12-12 ESTIMATED AT 350 LBS. PER ACRE.  
 (3) ITEMS TO BE SPLIT 62.5% M.S.A.P. 138-020-18, 37.5% MAPLEWOOD LOCAL FUNDS.

| THE FOLLOWING STANDARD PLATES, ADPPROVED BY THE DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT. |                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| PLATE NO.                                                                                                                                  | DESCRIPTION                                |
| 0005A                                                                                                                                      | SPECIFICATION REFERENCE TO STANDARD PLATES |
| 7036D                                                                                                                                      | PEDESTRIAN CURB RAMP DETAIL                |
| 7100F                                                                                                                                      | CONCRETE CURB & GUTTER                     |
| 80001                                                                                                                                      | STANDARD BARRICADES                        |
| 7035J                                                                                                                                      | CONCRETE WALK & CURB RETURNS AT ENT.       |
| 8117F                                                                                                                                      | PRECAST CONCRETE HANDHOLE                  |



TYPICAL SECTION, CURB RAMP DETAIL

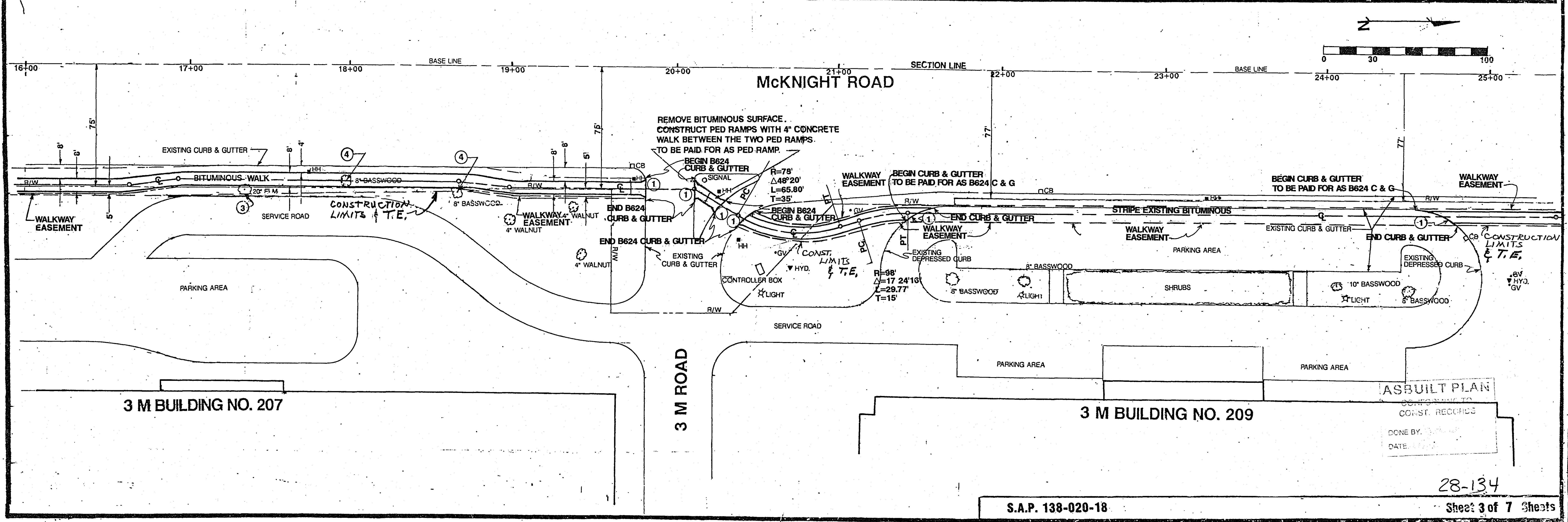
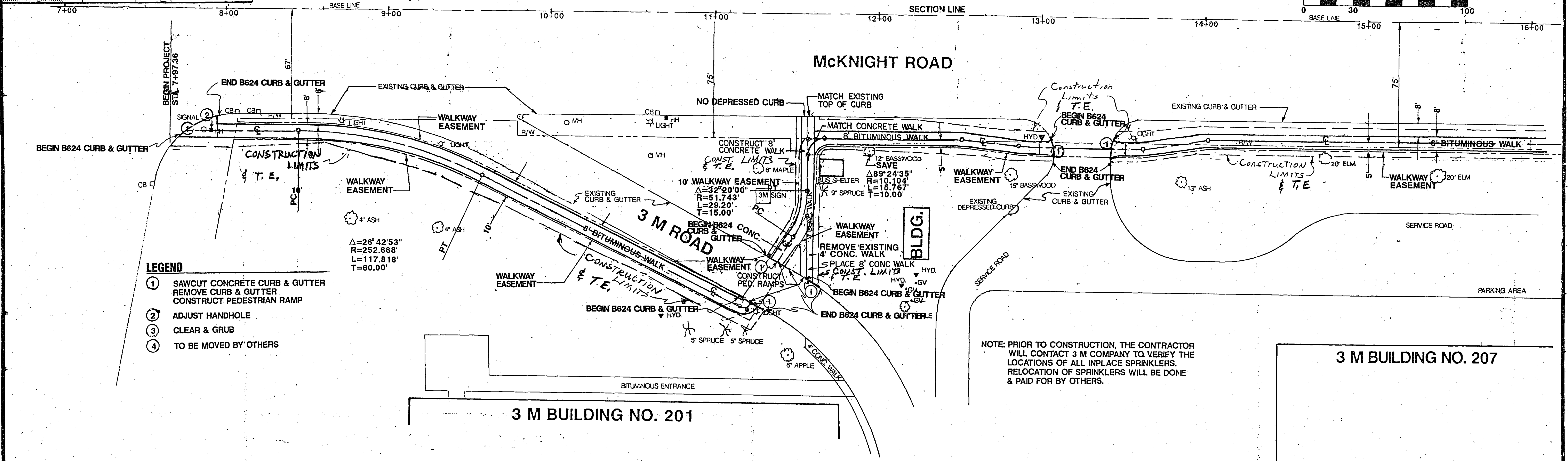


PLACE 3.0" TOPSOIL AND SOD ALL DISTURBED AREAS

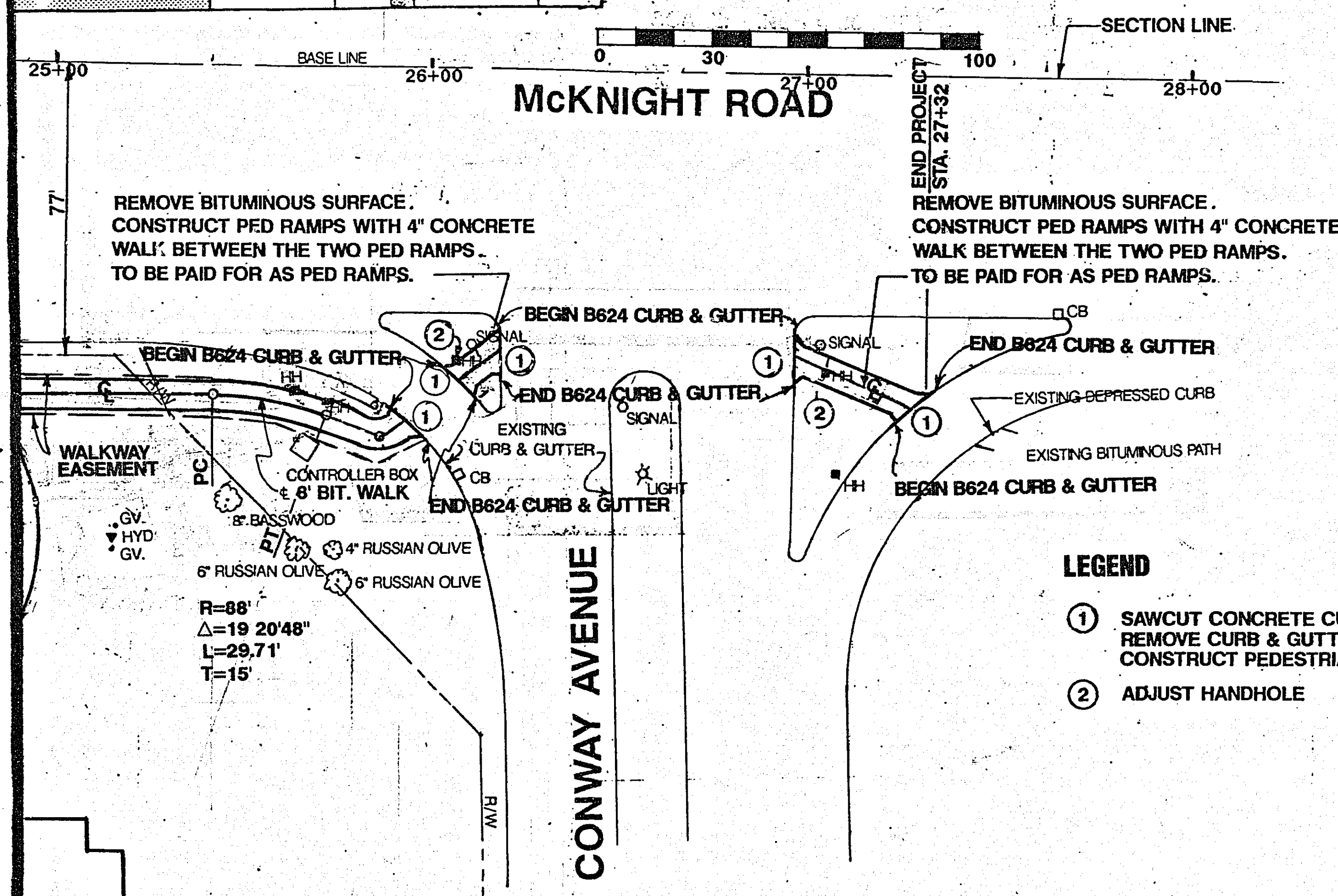
ASBUILT PLAN  
 CONFORMING TO  
 CONST. RECORDS  
 DONE BY: [Signature]  
 DATE: 8/1/87

28-134

|            |                 |                 |
|------------|-----------------|-----------------|
| TOPOGRAPHY | PLOTTED BY DATE | CHECKED BY DATE |
| UTILITIES  | PLOTTED BY DATE | CHECKED BY DATE |
| PROFILE    | PLOTTED BY DATE | CHECKED BY DATE |



|            |            |      |            |      |
|------------|------------|------|------------|------|
| TOPOGRAPHY | PLOTTED BY | DATE | CHECKED BY | DATE |
| UTILITIES  | PLOTTED BY | DATE | CHECKED BY | DATE |
| PROFILE    | PLOTTED BY | DATE | CHECKED BY | DATE |



#### LEGEND

- ① SAWCUT CONCRETE CURB & GUTTER  
REMOVE CURB & GUTTER  
CONSTRUCT PEDESTRIAN RAMP
- ② ADJUST HANDHOLE

#### CONSTRUCTION NOTES

THE CONTRACTOR SHALL OBTAIN FROM THE UTILITY COMPANIES THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES WHICH MAY EXIST WITHIN, OR ADJACENT TO, THE CONSTRUCTION AREA.

PEDESTRIAN CURB RAMPS SHALL BE INSTALLED AT ALL STREET RADII. THE EXACT LOCATION SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

TOP OF "GRADING GRADE" IS DEFINED AS THE TOP OF THE EMBANKMENT MATERIAL OR THE BOTTOM OF THE AGGREGATE BASE COURSE.

STRIP TOPSOIL FROM ALL AREAS TO BE DISTURBED BY CONSTRUCTION AND STOCKPILE (IF PRACTICAL) FOR REPLACEMENT LATER AS SLOPE DRESSING.

THE CONTRACTOR SHALL DISPOSE OF THE CONCRETE CURB AND GUTTER, CONCRETE SIDEWALK AND BITUMINOUS PAVEMENT IN ACCORDANCE WITH THE REQUIREMENTS OF 2104.3C3

THE ORDINARY COMPACTION METHOD SHALL BE USED ON THIS PROJECT.

PROVIDE DRAINAGE OUTLETS FOR ALL SUBCUTS DURING CONSTRUCTION. DITCHES SHOULD BE DEEPER THAN SUBCUT TO PROVIDE OUTLET DRAINAGE.

PROVIDE A TACK COAT, SPEC. 2357.2A, BETWEEN BITUMINOUS COURSES.

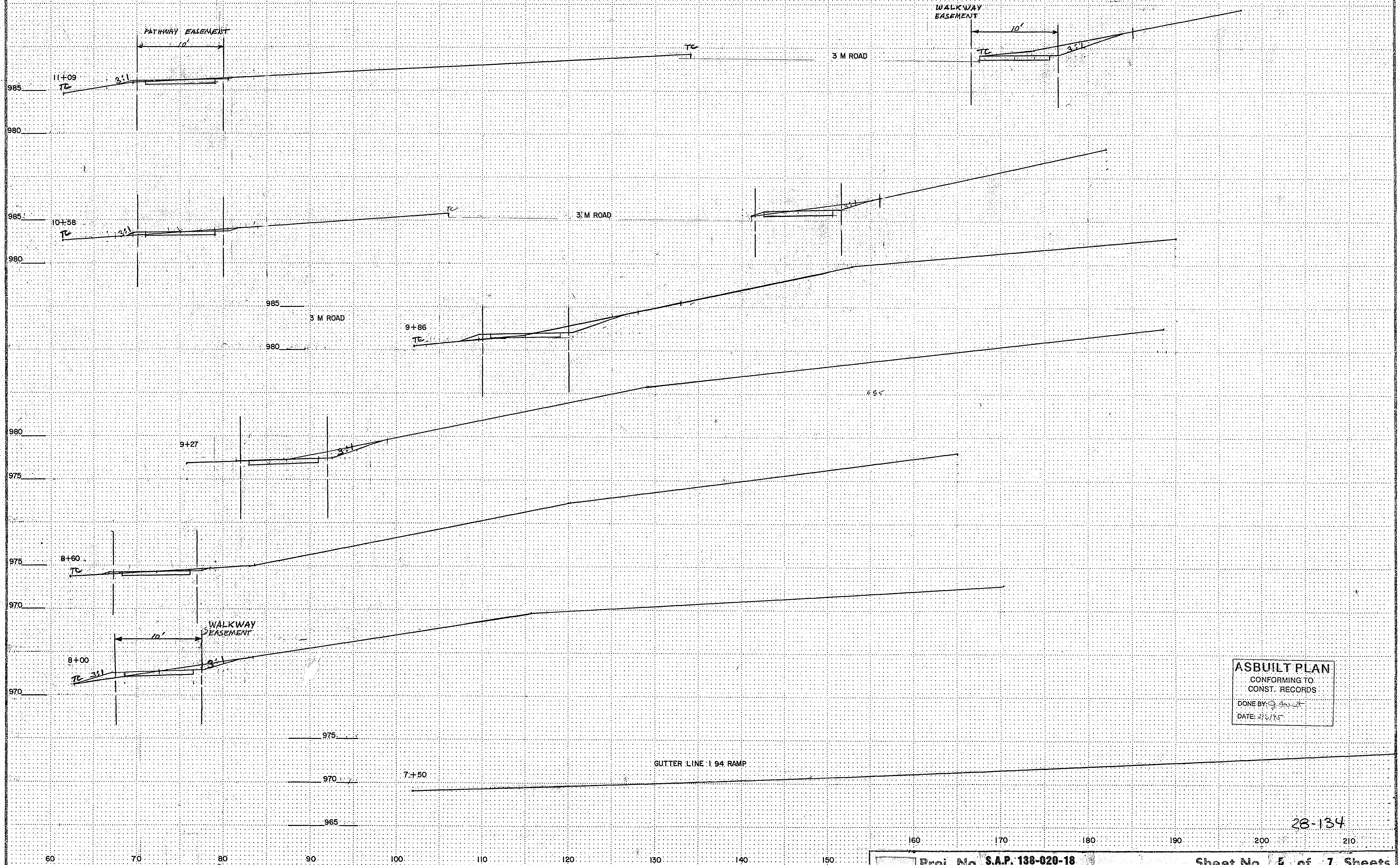
UNSUITABLE GRADING MATERIAL SHALL CONSIST OF TOPSOIL, OTHER ORGANIC SOIL, AND DEBRIS.

THE CONTRACTOR SHALL CONTACT 3 M COMPANIES LANDSCAPE ARCHITECT FOR VERIFICATION OF TREES BEFORE CLEARING AND GRUBBING, & INPLACE SPRINKLER SYSTEM CHANGES.

ASBUILT PLAN  
CONFORMING TO  
CONST. RECORDS  
DONE BY: J. B. Smith  
DATE: 7/1/85

28-134

Fed. Proj. No.



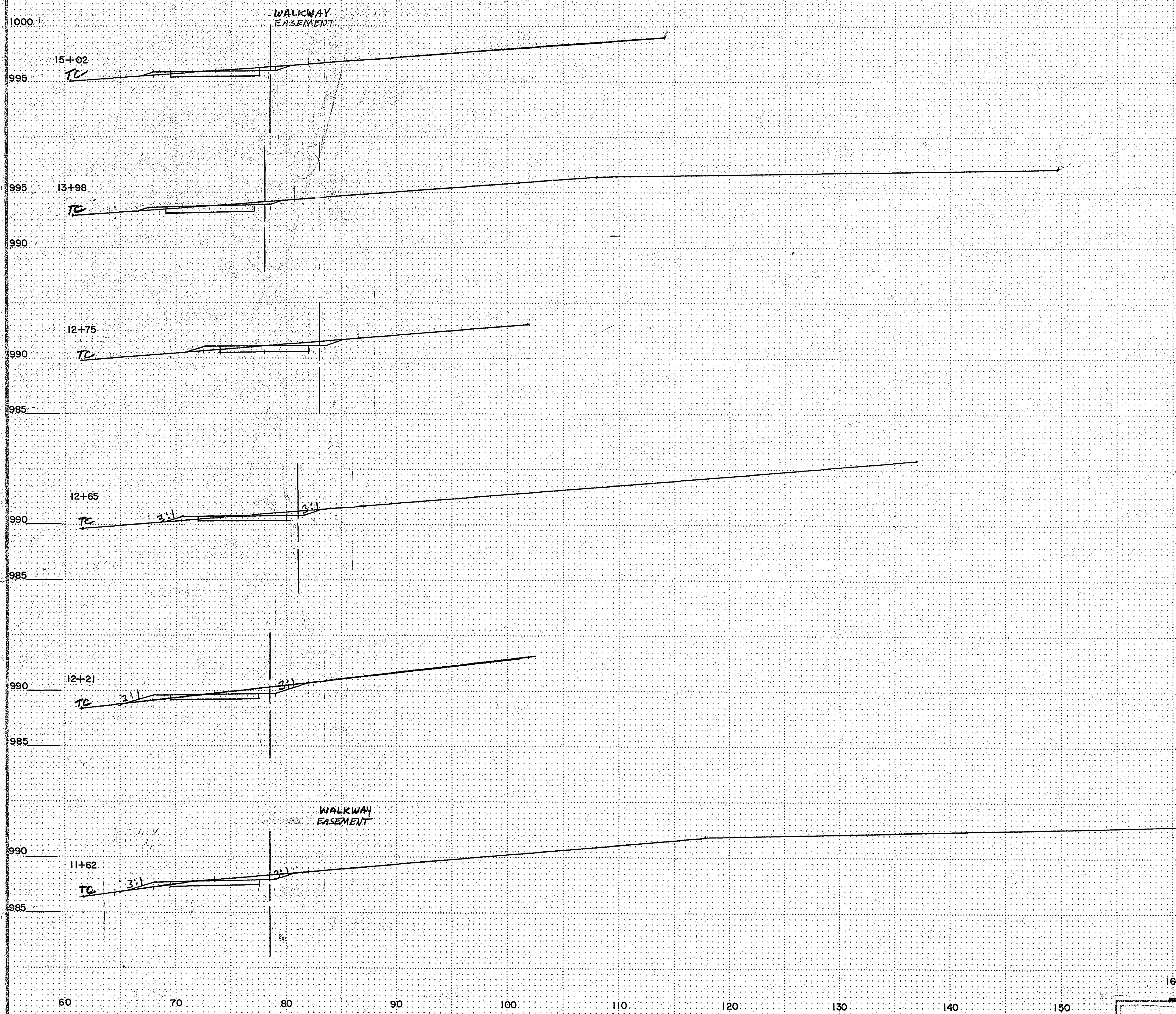
**ASBUILT PLAN**  
CONFORMING TO:  
CONST. RECORDS  
DONE BY: *J. J. J. J.*  
DATE: *12/6/75*

28-134

Proj. No. S.A.P. 138-020-18

Sheet No. 5 of 7 Sheets

Fed. Proj. No.



ASBUILT PLAN  
CONFORMING TO  
CONST. RECORDS  
DONE BY: J. Davis  
DATE: 3/4/75

28-134

Proj. No. S.A.P. 138-020-18

Sheet No. 6 of 7 Sheets

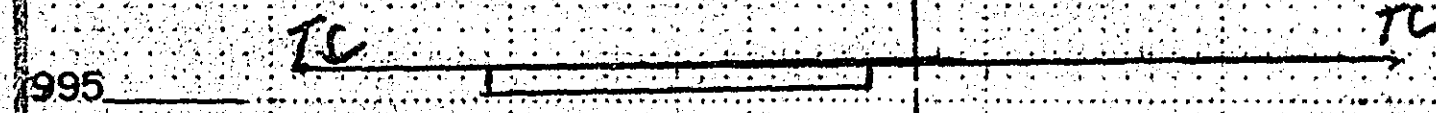
CROSS SECTIONS NOT SHOWN SHALL MATCH EXISTING GRADE

WALKWAY  
EASEMENT

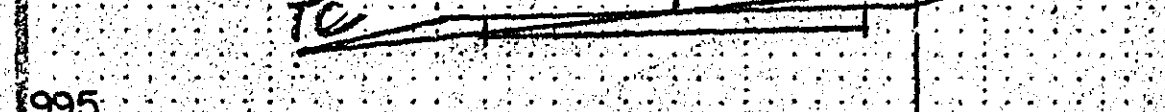
19+21



18+13

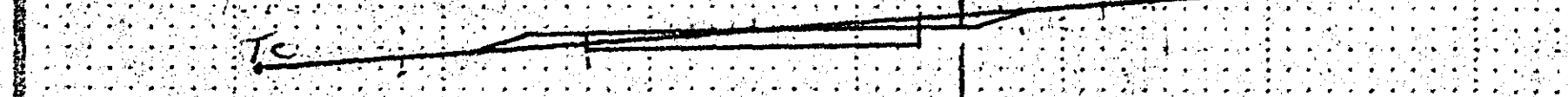


17+16



WALKWAY  
EASEMENT

16+30



ASBUILT PLAN  
CONFORMING TO  
CONST. RECORDS  
DONE BY: J. Smith  
DATE: 7/16/85

28-134