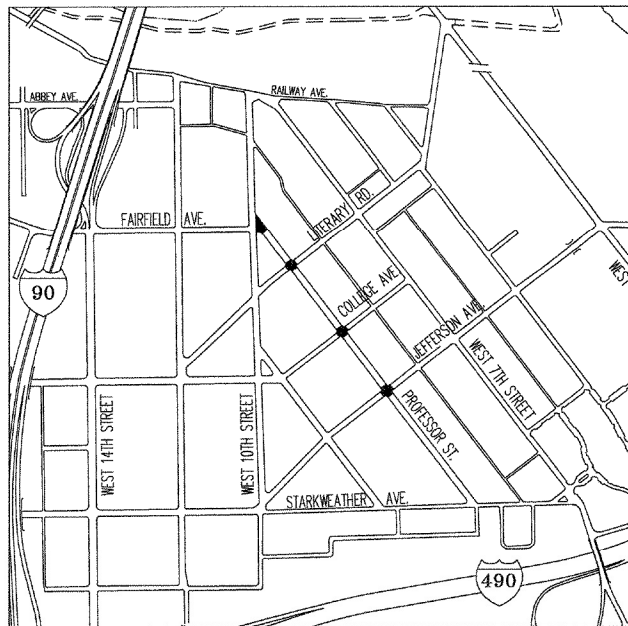


CITY OF CLEVELAND  
MAYOR'S OFFICE OF CAPITAL PROJECTS  
DIVISION OF ENGINEERING AND CONSTRUCTION

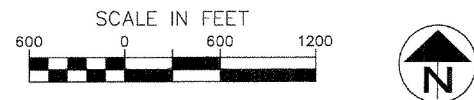
**CUY-PROFESSOR STREET INTERSECTIONS (PART 2)**

FOR PART 1, SEE CUY-WEST SIXTH STREET STREETScape

FRANK G. JACKSON, MAYOR  
MARTIN J. SWEENEY, PRESIDENT OF COUNCIL  
JOE CIMPERMAN, COUNCILMAN, WARD 3  
JOMARIE WASIK, P.S., DIRECTOR OF MAYOR'S OFFICE OF CAPITAL PROJECTS  
BARRY A. WITHERS, DIRECTOR OF PUBLIC UTILITIES



LOCATION MAP  
LATITUDE: 41°30'00" LONGITUDE: 81°42'00"



PORTION TO BE IMPROVED \_\_\_\_\_  
INTERSTATE ROUTE \_\_\_\_\_  
LOCAL ROADS \_\_\_\_\_

DESIGN DESIGNATION

CURRENT ADT (2011)	1350
DESIGN YEAR ADT (2031)	1350
DESIGN SPEED	25 MPH
LEGAL SPEED	25 MPH
DESIGN FUNCTIONAL CLASSIFICATION	URBAN LOCAL
NHS PROJECT	NO

DESIGN EXCEPTIONS

DESIGN FEATURE	APPROVAL DATE	SHEET NUMBER
HORIZONTAL ALIGNMENT	8/24/2012	2

INDEX OF SHEETS:

TITLE SHEET	1
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TYPICAL SECTION	3-5
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CALCULATIONS AND SUBSUMMARIES	13-15
STORM WATER POLLUTION PREVENTION PLAN	16
PLAN AND PROFILE	17-18
CROSS SECTIONS	19-22
INTERSECTION DETAILS	23-26
DRAINAGE DETAILS	27-29
MISCELLANEOUS DETAILS	30-31
SIGNING AND PAVEMENT MARKING	32-34
STREETScape PLAN AND DETAILS	35-36
LANDSCAPING PLANS	37-40

PROJECT DESCRIPTION

THE ENHANCEMENT OF PROFESSOR STREET AT THE INTERSECTIONS OF WEST 10TH STREET, LITERARY AVENUE, COLLEGE AVENUE, AND JEFFERSON AVENUE, INCLUDING ASPHALT OVERLAY, CURB BUMP-OUTS, DECORATIVE CROSSWALKS, AND ASSOCIATED LANDSCAPING.

2010 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THE PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND SPECIFICATIONS.

APPROVED \_\_\_\_\_  
DATE 8/15/12 RICHARD J. SWITALSKI, P.E.  
ADMINISTRATION BUREAU MANAGER  
DIVISION OF ENGINEERING AND CONSTRUCTION

APPROVED \_\_\_\_\_  
DATE 9/22/12 ALEX MARCEVICIUS  
ACTING COMMISSIONER, DIVISION OF WATER

APPROVED \_\_\_\_\_  
DATE 8-24-12 ROBERT MAVEC  
COMMISSIONER, DIVISION OF  
TRAFFIC ENGINEERING

APPROVED \_\_\_\_\_  
DATE 8/23/12 RACHID ZOGHAIB, P.E.  
COMMISSIONER, DIVISION OF WATER  
POLLUTION CONTROL

APPROVED \_\_\_\_\_  
DATE \_\_\_\_\_ GREG ESBER, P.S.  
CHIEF SURVEYOR, DIVISION OF ENGINEERING  
AND CONSTRUCTION

APPROVED \_\_\_\_\_  
DATE 8/27/12 KHALIL EWAI, P.E.  
CONSTRUCTION SECTION CHIEF, DIVISION  
OF ENGINEERING AND CONSTRUCTION

APPROVED \_\_\_\_\_  
DATE 8/24/12 THOMAS P. BOYER, P.E.  
DESIGN SECTION CHIEF, DIVISION  
OF ENGINEERING AND CONSTRUCTION

APPROVED \_\_\_\_\_  
DATE 8/24/12 MARTIN REESE, P.E., MPA, CONSULTING ENGINEER  
DIVISION OF ENGINEERING AND CONSTRUCTION



PLANS PREPARED BY



LANDSCAPING PLANS PREPARED BY



STANDARD CONSTRUCTION DRAWINGS  
CITY OF CLEVELAND

NUMBER	DATE
SEE PART 1	

UNDERGROUND UTILITIES	
2 WORKING DAYS BEFORE YOU DIG	
Call... 800-362-2764 (Toll Free)	
OHIO UTILITIES PROTECTION SERVICE	
NON-MEMBERS MUST BE CALLED DIRECTLY	
Call... 800-925-0988 (Toll Free)	
OIL AND GAS PRODUCERS UNDERGROUND PROTECTION SERVICE	

STANDARD CONSTRUCTION DRAWINGS - O.D.O.T.

NUMBER	DATE	NUMBER	DATE	NUMBER	DATE	NUMBER	DATE
SEE PART 1							

ENGINEER'S SEAL:  
FOR SHEETS 1 TO 36

**ROGER CLEVELAND NEWBERRY**  
E-46079  
REGISTERED PROFESSIONAL ENGINEER

SIGNED: [Signature]  
DATE: 8/13/12

LANDSCAPE ARCHITECT'S SEAL:  
FOR SHEETS 37 TO 40

**DALE JAMES BURRIER**  
E-561  
REGISTERED LANDSCAPE ARCHITECT

SIGNED: [Signature]  
DATE: 8/13/12

FEDERAL PROJECT NO.  
E110(579)

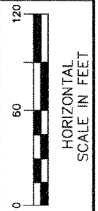
PID NO.  
90218

CITY PROJECT NO.  
M-1092

RAILROAD INVOLVEMENT  
NONE

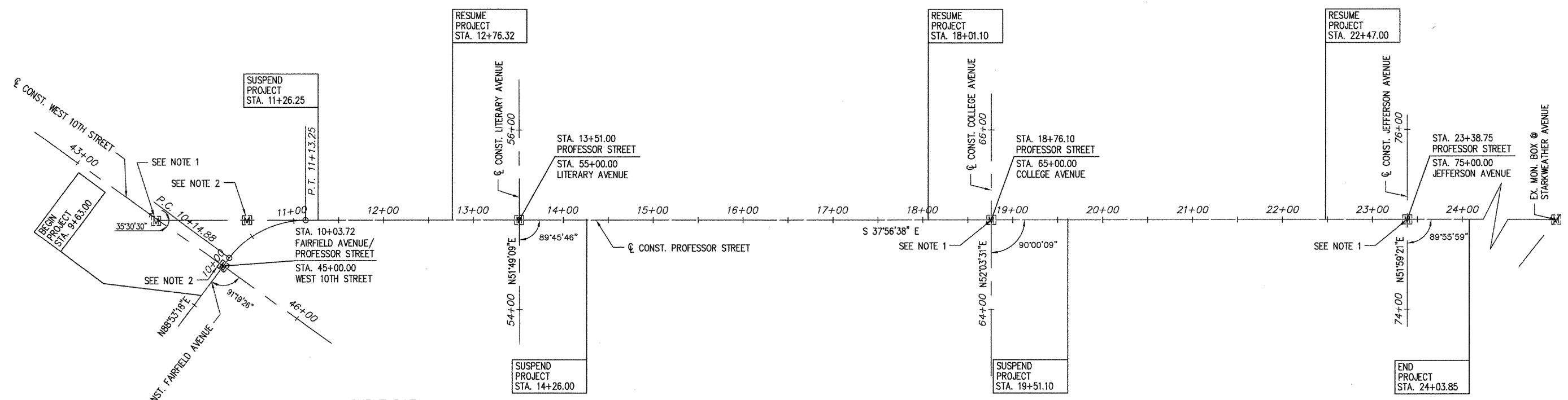
CUY-PROFESSOR STREET INTERSECTIONS

1  
40

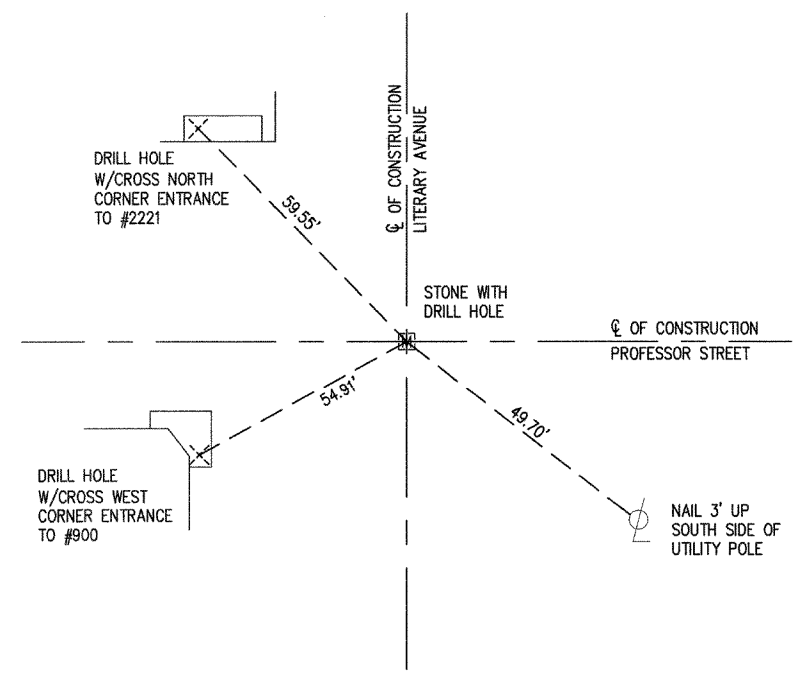


SCHEMATIC PLAN

CUY-PROFESSOR STREET INTERSECTIONS



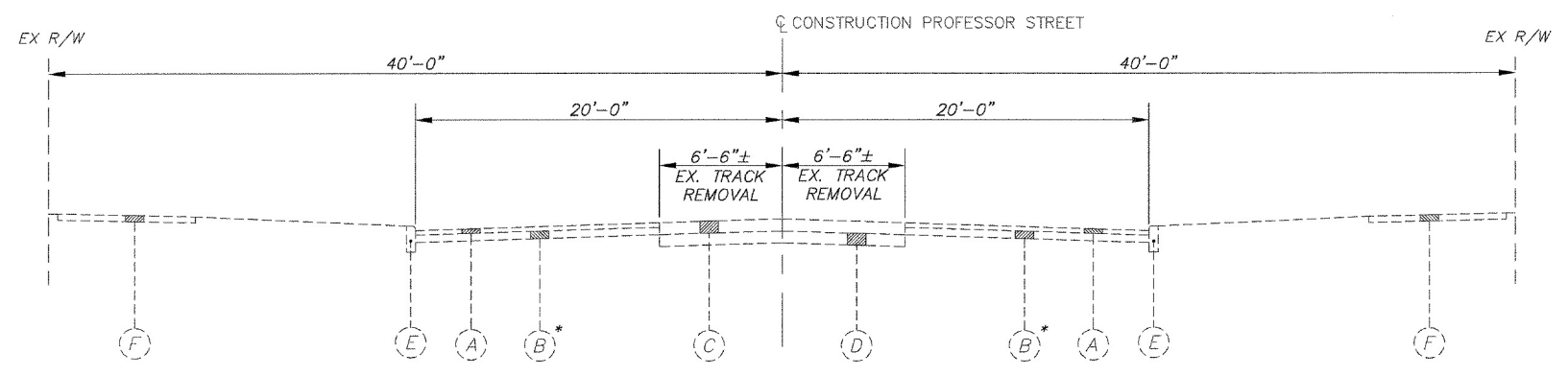
**CURVE DATA**  
 STA. 10+67.92,  $\phi$  CONSTR. PROFESSOR STREET  
 $\Delta = 53^{\circ}10'04"$  (RT.)  
 $D_c = 54^{\circ}03'12"$  (NDC=37'00")  
 $R = 106.00'$   
 $T = 53.04'$   
 $L = 98.37'$   
 $E = 12.53'$   
 $e_{max} = NC$



- NOTES:
1. CONTRACTOR IS TO FURNISH AND SET NEW MONUMENT BOX ASSEMBLIES (AS PER DETAILED SPECIFICATION D-40) WHERE EMPTY MONUMENT BOXES ARE LOCATED. REMOVAL AND DISPOSAL OF THE EXISTING BOX SHALL ALSO BE INCLUDED IN THIS ITEM.
  2. CONTRACTOR IS TO FURNISH AND SET A NEW MONUMENT BOX ASSEMBLY (AS PER DETAILED SPECIFICATION D-40) AT THE P.I. OF THE CURVE BETWEEN FAIRFIELD AVENUE AND PROFESSOR STREET AND AT THE INTERSECTION OF WEST 10TH STREET AND FAIRFIELD AVENUE.
  3. A QUANTITY OF 5 EACH OF ITEM 604, MONUMENT BOX ASSEMBLY, AS PER D-40 HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS WORK.

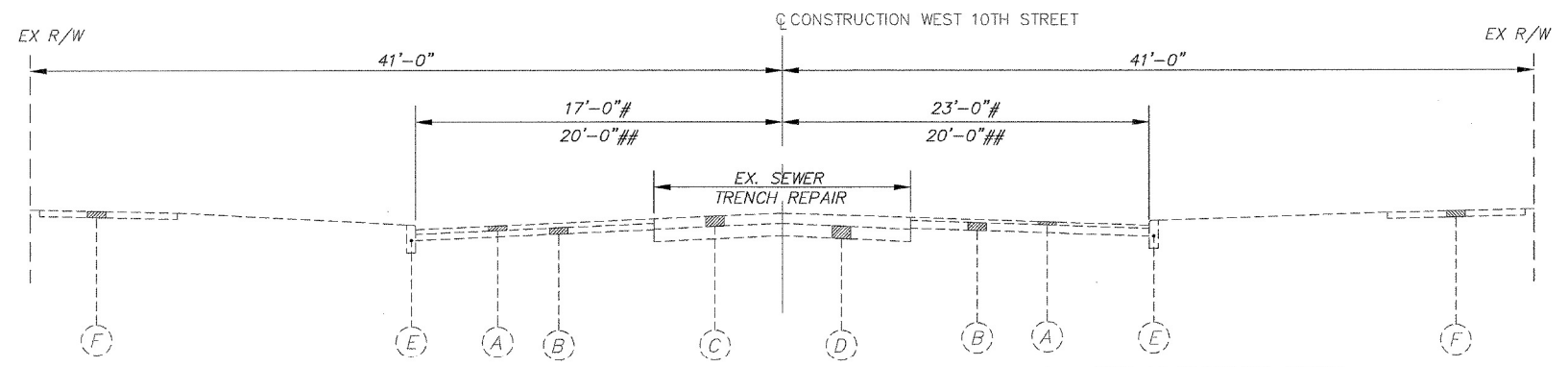
- EXISTING LEGEND**
- (A) ASPHALT CONCRETE
  - (B) BRICK  
(SEE TABLE BELOW FOR ASPHALT AND BRICK LAYER THICKNESS BY STREET)
  - (C) 5 3/4" - 9 1/4" ASPHALT CONCRETE
  - (D) 7 3/4" - 9" CONCRETE
  - (E) CONCRETE OR STONE CURB
  - (F) CONCRETE OR STONE WALK
  - (G) 4 1/2" - 7 1/2" CONCRETE

SEE SHEET NO. 4 FOR EXISTING BURIED TRACK REMOVAL DETAIL.



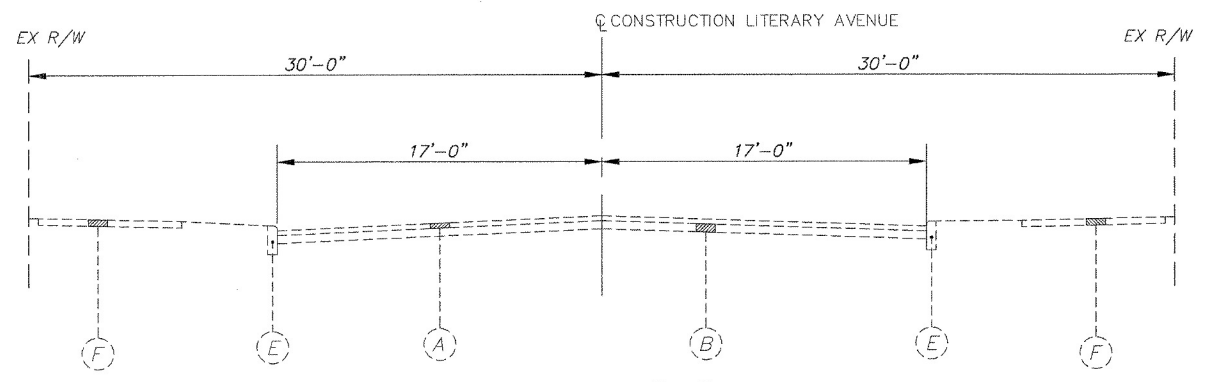
**PROFESSOR STREET**  
EXISTING TYPICAL SECTION

\* = CORES TAKEN 20 FEET AND 75 FEET SOUTH OF LITERARY AVENUE INDICATE 6 3/4" - 8" CONCRETE BASE IN LIEU OF BRICK.

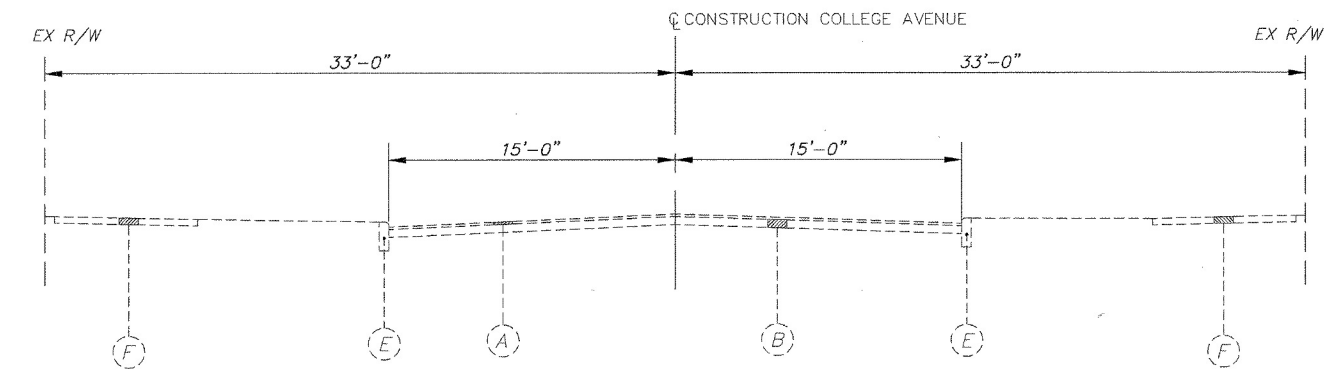


**WEST 10TH STREET**  
EXISTING TYPICAL SECTION

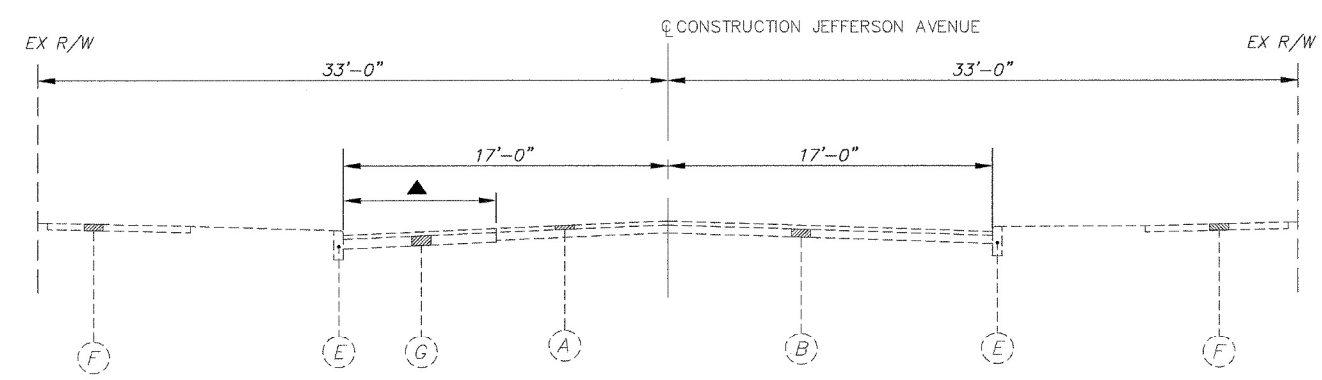
# = NORTH OF PROFESSOR STREET  
## = SOUTH OF PROFESSOR STREET



**LITERARY AVENUE**  
EXISTING TYPICAL SECTION



**COLLEGE AVENUE**  
EXISTING TYPICAL SECTION

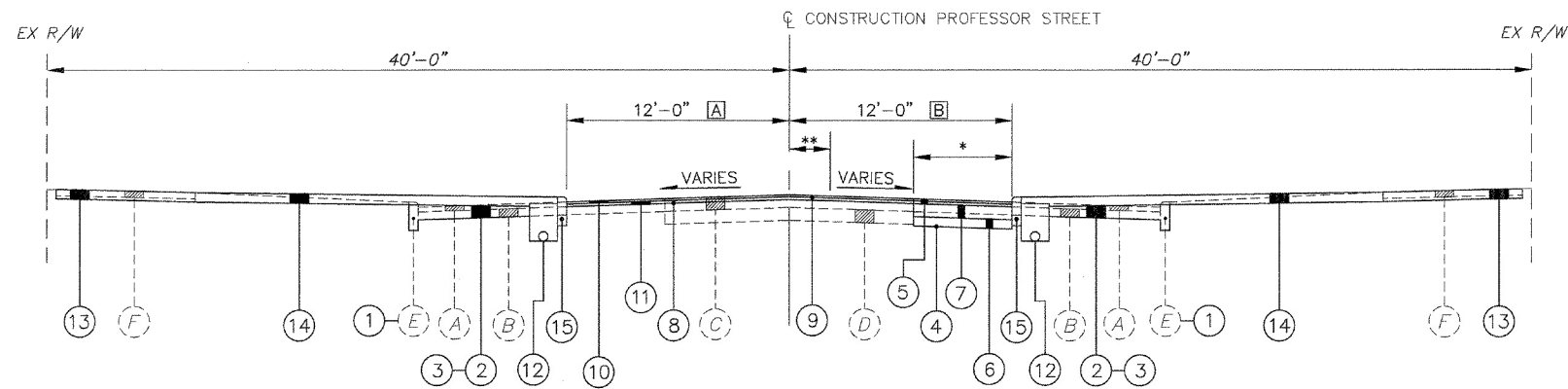


**JEFFERSON AVENUE**  
EXISTING TYPICAL SECTION

▲ = WIDTH OF CONCRETE BASE IS UNKNOWN

**ASPHALT AND BRICK THICKNESS (BY STREET)**

STREET	ASPHALT CONCRETE	BRICK
PROFESSOR STREET	3" - 3 1/2"	4 1/2" - 5"
WEST 10TH STREET	1" - 3"	4" - 5"
LITERARY AVENUE	2" - 3 7/8"	4 1/2" - 5 1/4"
COLLEGE AVENUE	1/2" - 2 1/4"	4" - 5 1/4"
JEFFERSON AVENUE	2 1/4" - 2 1/2"	5"



**PROFESSOR STREET TYPICAL SECTION**

STATION TO STATION	A	STATION TO STATION	B
10+03.72 TO 11+13.25	12'-0"	10+03.72 TO 11+13.25	12'-0"
11+13.25 TO 11+21.25	12'-0" TO 20'-0"	11+13.25 TO 11+21.25	12'-0" TO 20'-0"
11+21.25 TO 11+26.25	20'-0"	11+21.25 TO 11+26.25	20'-0"
12+76.32 TO 12+81.32	20'-0"	12+76.32 TO 12+81.32	20'-0"
12+81.32 TO 12+89.32	20'-0" TO 12'-0"	12+81.32 TO 12+89.32	20'-0" TO 12'-0"
12+89.32 TO 14+13.00	12'-0"	12+89.32 TO 14+13.00	12'-0"
14+13.00 TO 14+21.00	12'-0" TO 20'-0"	14+13.00 TO 14+21.00	12'-0" TO 20'-0"
14+21.00 TO 14+26.00	20'-0"	14+21.00 TO 14+26.00	20'-0"
18+01.10 TO 18+06.10	20'-0"	18+01.10 TO 18+06.10	20'-0"
18+06.10 TO 18+14.10	20'-0" TO 12'-0"	18+06.10 TO 18+14.10	20'-0" TO 12'-0"
18+14.10 TO 18+76.10	12'-0"	18+14.10 TO 18+76.10	12'-0"
18+76.10 TO 19+51.10	20'-0"	18+76.10 TO 19+51.10	20'-0"
22+47.00 TO 22+65.00	20'-0"	22+47.00 TO 22+65.00	20'-0"
22+65.00 TO 22+73.00	20'-0" TO 12'-0"	22+65.00 TO 22+73.00	20'-0" TO 12'-0"
22+73.00 TO 23+90.85	12'-0"	22+73.00 TO 23+90.85	12'-0"
23+90.85 TO 23+98.85	12'-0" TO 20'-0"	23+90.85 TO 23+98.85	12'-0" TO 20'-0"
23+98.85 TO 24+03.85	20'-0"	23+98.85 TO 24+03.85	20'-0"

**PROPOSED LEGEND**

- 1 ITEM 202, CURB REMOVED
- 2 ITEM 202, PAVEMENT REMOVED (BRICK BASE)
- 3 ITEM 203, EMBANKMENT
- 4 ITEM 204, SUBGRADE COMPACTION
- 5 ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE, AS PER DS-11 (SEE GENERAL NOTES)
- 6 ITEM 304, 6" AGGREGATE BASE
- 7 ITEM 305, 9" (MIN.) CONCRETE BASE, AS PER D-23
- 8 ITEM 407, TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE, AS PER DS-12, @ 0.10 GAL/SY
- 9 ITEM 407, TACK COAT, TRACKLESS TACK, SURFACE COURSE, AS PER DS-12, @ 0.05 GAL/SY
- 10 ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 AS PER D-29
- 11 ITEM 448, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64.22, AS PER D-29
- 12 ITEM 605, 6" UNCLASSIFIED PIPE UNDERDRAINS WITH FABRIC SOCK, AS PER DS-10 (WHERE DIRECTED BY ENGINEER - SEE GENERAL NOTES)
- 13 ITEM 608, 6" CONCRETE WALK, AS PER D-23 AND DS-7
- 14 ITEM 608, 6" CONCRETE WALK AS PER D-23 AND DS-7 OR ITEM SPECIAL, BIORETENTION CELL AS PER DS-6 OR ITEM 653, TOPSOIL FURNISHED AND PLACED (T=4") AND ITEM 660, SODDING, UNSTAKED
- 15 ITEM 609, CURB, TYPE 6, AS PER D-23

FOR EXISTING LEGEND SEE SHEET NO. 3

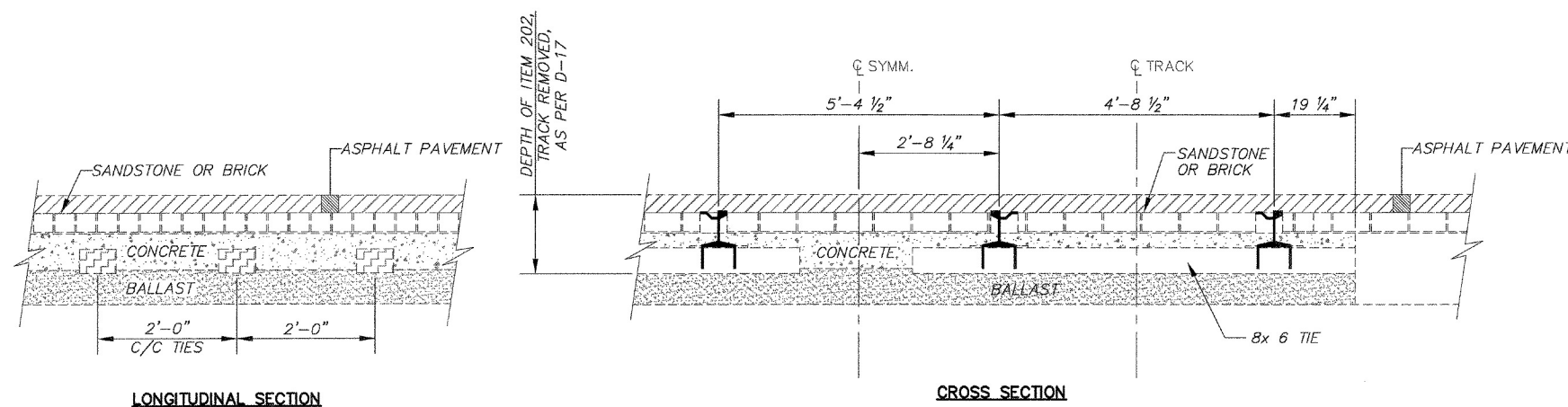
\* = REMOVE EXISTING BRICK BASE AND REPLACE WITH ITEM 305 WHERE INDICATED ON THE DRAWINGS OR WHERE DIRECTED BY THE ENGINEER.

\*\* = PROFESSOR STREET PAVEMENT CROWN IS AT THE CENTERLINE CONSTRUCTION EXCEPT FOR THE FOLLOWING LOCATIONS:

FROM STATION 22+47.00 TO STATION 23+01.79, THE PAVEMENT CROWN IS 1.7' RT.

FROM STATION 23+01.79 TO STATION 24+03.85, THE PAVEMENT CROWN TAPERS FROM 1.7' RT, TO 0.7' RT.

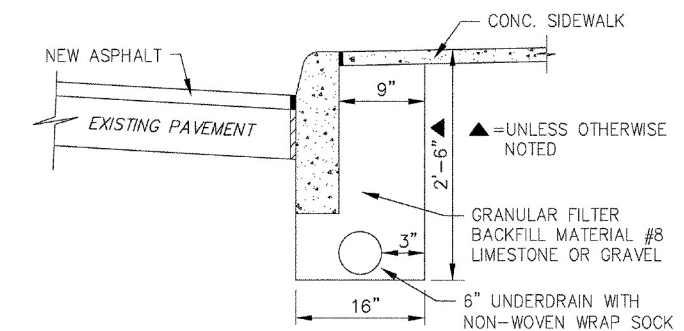
# = FULL DEPTH SAW CUT EXISTING PAVEMENT ALONG THE FACE OF THE PROPOSED CURB LOCATION (EXCEPT FOR AREAS WHERE THE ENTIRE PAVEMENT IS BEING REMOVED). SAW CUTTING IS INCIDENTAL TO THE UNIT PRICE BID FOR ITEM 202, PAVEMENT REMOVED (BRICK BASE). CONTRACTOR IS TO USE CARE DURING SAWCUTTING OF THE BASE AND NOT DAMAGE ANY BRICK INTENDED TO REMAIN IN PLACE.



**EXISTING BURIED TRACK REMOVAL DETAIL**  
(SEE NOTE 1)

**NOTES:**

- 1. PAVEMENT CORES INDICATE THAT STREETCAR TRACKS NO LONGER EXIST WITHIN THE PROJECT LIMITS.
- 2. THE EXISTING TRACK INFORMATION SHOWN ON THIS DETAIL IS REPRESENTATIVE OF TRACKS THAT WERE INSTALLED WITHIN THE VICINITY OF THIS PROJECT AND IS NOT GUARANTEED.



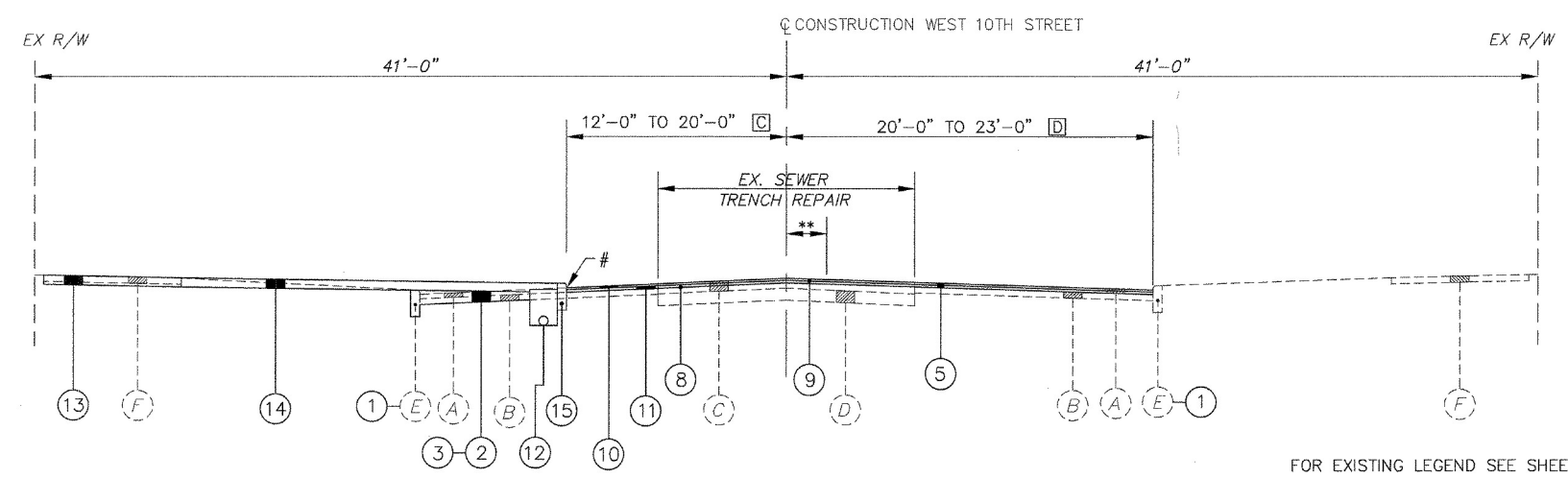
**ITEM 605, 6" SHALLOW PIPE UNDERDRAIN, AS PER PLAN**

PROPOSED TYPICAL SECTIONS

CUR-PROFESSOR STREET INTERSECTIONS

**PROPOSED LEGEND**

- ① ITEM 202, CURB REMOVED
- ② ITEM 202, PAVEMENT REMOVED (BRICK BASE)
- ③ ITEM 203, EMBANKMENT
- ④ ITEM 204, SUBGRADE COMPACTION
- ⑤ ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE, AS PER DS-11 (SEE GENERAL NOTES)
- ⑥ ITEM 304, 6" AGGREGATE BASE
- ⑦ ITEM 305, 9" (MIN.) CONCRETE BASE, AS PER D-23
- ⑧ ITEM 407, TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE, AS PER DS-12, @ 0.10 GAL/SY
- ⑨ ITEM 407, TACK COAT, TRACKLESS TACK, SURFACE COURSE, AS PER DS-12, @ 0.05 GAL/SY
- ⑩ ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 AS PER D-29
- ⑪ ITEM 448, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22, AS PER D-29
- ⑫ ITEM 605, 6" UNCLASSIFIED PIPE UNDERDRAINS WITH FABRIC SOCK, AS PER DS-10 (WHERE DIRECTED BY ENGINEER - SEE GENERAL NOTES)
- ⑬ ITEM 608, 6" CONCRETE WALK, AS PER D-23 AND DS-7
- ⑭ ITEM 608, 6" CONCRETE WALK AS PER D-23 AND DS-7 OR ITEM SPECIAL, BIORETENTION CELL AS PER DS-6 OR ITEM 653, TOPSOIL FURNISHED AND PLACED (T=4") AND ITEM 660, SODDING, UNSTAKED
- ⑮ ITEM 609, CURB, TYPE 6, AS PER D-23



**WEST 10TH STREET TYPICAL SECTION**

STATION TO STATION	C	D
43+92.00 TO 44+12.00	17'-0"	23'-0"
44+12.00 TO 44+17.00	17'-0" TO 12'-0"	23'-0"
44+17.00 TO 45+00.00	12'-0"	23'-0"
45+00.00 TO 45+51.00	12'-0"	20'-0"
45+51.00 TO 45+59.00	12'-0" TO 20'-0"	20'-0"
45+59.00 TO 45+64.00	20'-0"	20'-0"

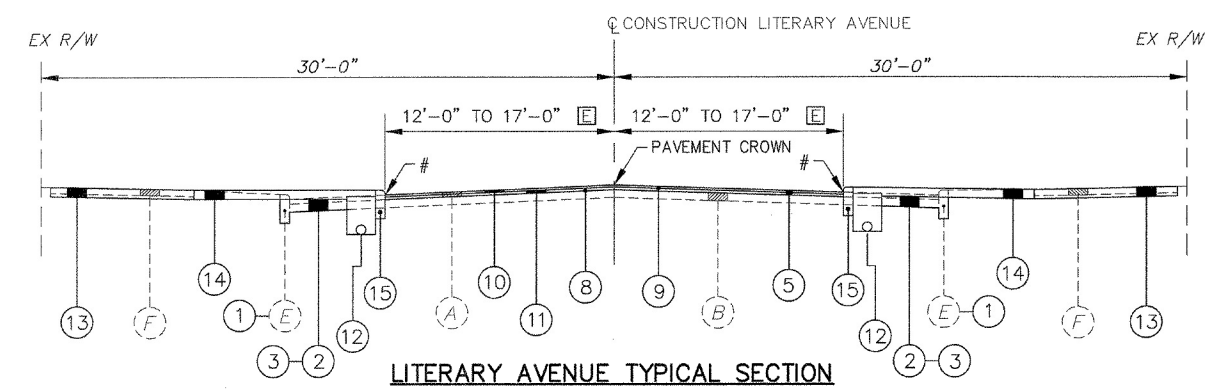
FOR EXISTING LEGEND SEE SHEET NO. 3

\*\* = WEST TENTH STREET PAVEMENT CROWN SHALL VARY AS FOLLOWS:

FROM STATION 43+92.00 TO STATION 44+54.00, THE PAVEMENT CROWN VARIES FROM 5' RT. TO 7' LT.

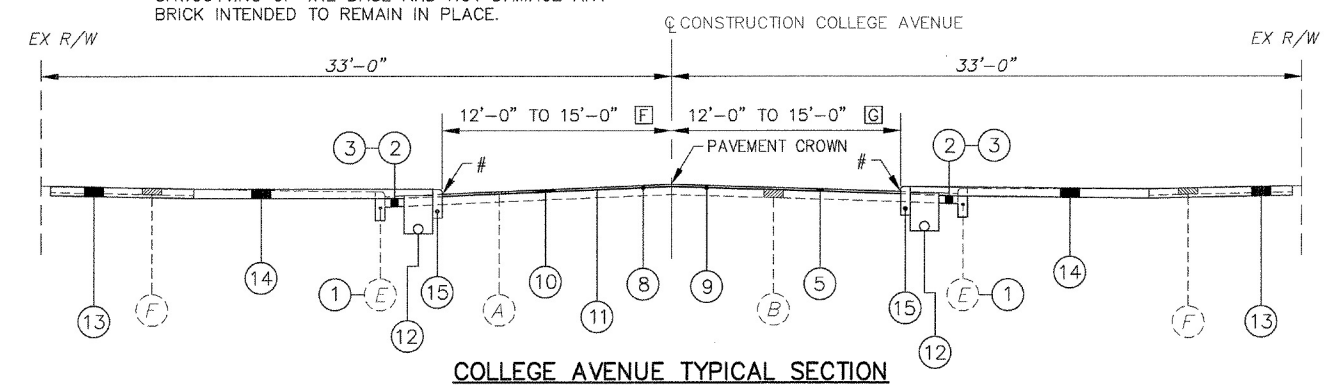
FROM STATION 44+54.00 TO STATION 45+64.00, THE PAVEMENT CROWN IS 7' LT.

# = FULL DEPTH SAW CUT EXISTING PAVEMENT ALONG THE FACE OF THE PROPOSED CURB LOCATION (EXCEPT FOR AREAS WHERE THE ENTIRE PAVEMENT IS BEING REMOVED). SAW CUTTING IS INCIDENTAL TO THE UNIT PRICE BID FOR ITEM 202, PAVEMENT REMOVED (BRICK BASE). CONTRACTOR IS TO USE CARE DURING SAWCUTTING OF THE BASE AND NOT DAMAGE ANY BRICK INTENDED TO REMAIN IN PLACE.



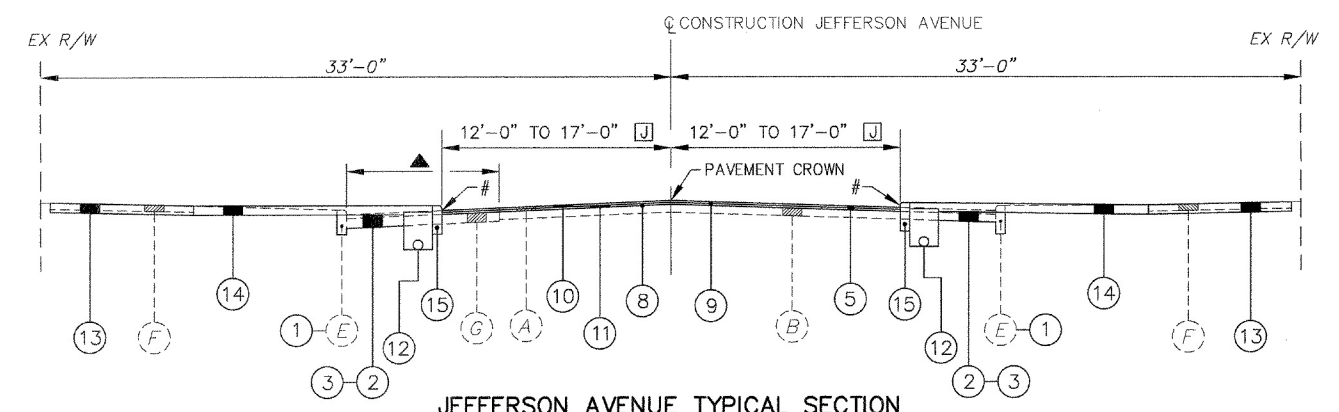
**LITERARY AVENUE TYPICAL SECTION**

STATION TO STATION	E
54+33.00 TO 54+38.00	17'-0"
54+38.00 TO 54+43.00	17'-0" TO 12'-0"
54+43.00 TO 55+64.61	12'-0"
55+64.61 TO 55+59.61	12'-0" TO 17'-0"
55+59.61 TO 55+64.61	17'-0"



**COLLEGE AVENUE TYPICAL SECTION**

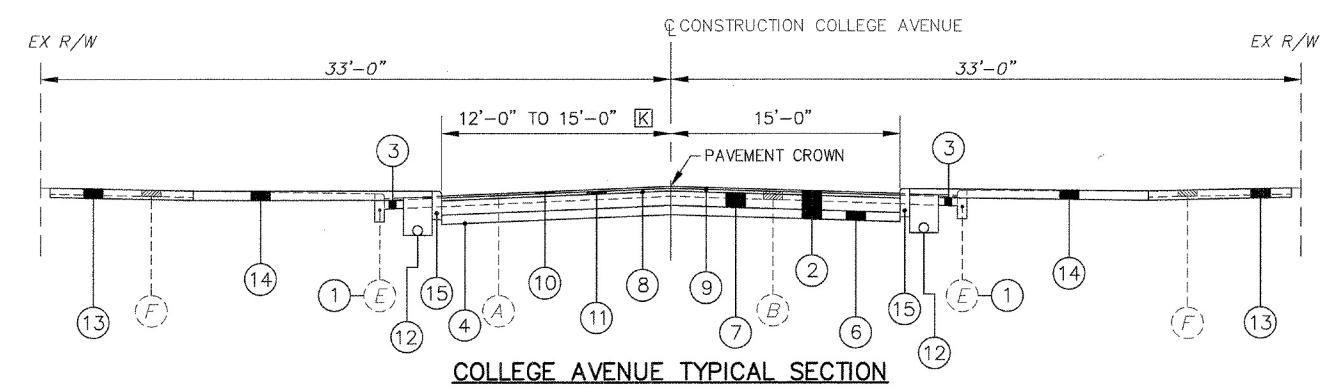
STATION TO STATION	F	G
64+25.00 TO 64+30.00	15'-0"	15'-0"
64+30.00 TO 64+33.00	15'-0" TO 12'-0"	15'-0" TO 12'-0"
64+33.00 TO 65+52.55	12'-0"	12'-0"
64+25.00 TO 64+30.00		15'-0"
64+30.00 TO 64+33.00		15'-0" TO 12'-0"
64+33.00 TO 65+49.55		12'-0"
65+49.55 TO 65+52.55		12'-0" TO 15'-0"



**JEFFERSON AVENUE TYPICAL SECTION**

STATION TO STATION	J
74+38.00 TO 74+43.00	17'-0"
74+43.00 TO 74+48.00	17'-0" TO 12'-0"
74+48.00 TO 75+52.00	12'-0"
75+52.00 TO 75+57.00	12'-0" TO 17'-0"
75+57.00 TO 75+62.00	17'-0"

▲ = WIDTH OF CONCRETE BASE IS UNKNOWN



**COLLEGE AVENUE TYPICAL SECTION**

STATION TO STATION	K
65+52.55 TO 65+66.00	12'-0"
65+66.00 TO 65+69.00	12'-0" TO 15'-0"
65+69.00 TO 65+74.00	15'-0"

PROPOSED TYPICAL SECTIONS

CITY-PROFESSOR STREET INTERSECTIONS

**UTILITIES**

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

AT&T  
13630 LORAIN AVENUE - 2ND FLOOR  
CLEVELAND, OHIO 44111  
ATTN.: JAMES JANIS  
DESIGN MANAGER  
PHONE: (216) 476-6142  
FAX: (216) 476-6013

DOMINION EAST OHIO GAS COMPANY  
320 SPRINGSDRIVE  
FAIRLAWN, OHIO 44333  
ATTN.: ED GOUBEAUX  
PROJECT MANAGER  
PHONE: (330) 664-2494  
FAX: (330) 604-7482  
E-MAIL: edward.t.goubeaux@dom.com

CITY OF CLEVELAND  
DIVISION OF PUBLIC POWER  
1300 LAKESIDE AVENUE  
CLEVELAND, OHIO 44114  
ATTN.: CHRIS HIRZEL  
PHONE: (216) 664-3922, EXT. 115  
PHONE: (216) 664-2972

ILLUMINATING COMPANY  
6896 MILLER ROAD  
BRECKSVILLE, OHIO 44141  
ATTN.: MARK ROBINSON  
CONTRACT SPECIALIST  
PUBLIC WORKS COORDINATOR  
PHONE: (440) 717-6845  
CELL PHONE: (440) 550-9001  
FAX: (440) 546-8780  
E-MAIL: robinsonme@firstenergycorp.com

CITY OF CLEVELAND  
DIVISION OF WATER POLLUTION CONTROL  
12302 KIRBY ROAD  
CLEVELAND, OHIO 44108  
ATTN.: RACHID ZOGHAIB  
PHONE: (216) 664-3785

NORTHEAST OHIO REGIONAL SEWER DISTRICT  
3900 EUCLID AVENUE  
CLEVELAND, OHIO 44115-2504  
ATTN.: GARY HOFFMAN  
PHONE: (216) 881-6600  
FAX: (216) 881-2738

CITY OF CLEVELAND  
DIVISION OF WATER  
1201 LAKESIDE AVENUE  
CLEVELAND, OHIO 44114  
ATTN.: GUY SINGER  
PHONE: (216) 664-2444, EXT. 5555  
FAX: (216) 664-2378

TIME WARNER CABLE  
8179 DOW CIRCLE  
STRONGSVILLE, OHIO 44136  
ATTN.: PAUL SILVESTRO  
PHONE: (216) 575-8012, EXT. 5034  
FAX: (440) 826-2940

CALL OHIO UTILITIES PROTECTION SERVICE  
TWO (2) WORKING DAYS BEFORE YOU DIG  
TOLL FREE NO. 1-800-362-2764  
(NON-MEMBERS MUST BE CALLED DIRECTLY)

CALL OHIO OIL & GAS PRODUCERS  
UNDERGROUND PROTECTION SERVICE  
(OGPUPS) TOLL FREE NO. 1-800-925-0988

**UNDERGROUND UTILITIES**

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC.

**ELEVATION DATUM**

ELEVATIONS SHOWN ARE BASED ON CLEVELAND REGIONAL GEODETIC SURVEY (C.R.G.S.) DATA. MONUMENTS ARE DESCRIBED IN THE PLANS.

**CONTINGENCY QUANTITIES**

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL SUBSIDIARY AGREEMENT GOVERNING COMPLETION OF THIS PROJECT.

**WORK HOURS AND NOISE CONTROL**

THE CONTRACTOR SHALL RESTRICT HIS WORKING HOURS TO THOSE PERMITTED BY LOCAL ORDINANCES OR ANY OTHER APPLICABLE ORDINANCES, LAWS, OR REGULATIONS, EXCEPT AS HE MAY OBTAIN WRITTEN VARIANCES FROM SUCH ORDINANCES, LAWS, OR REGULATIONS FROM THE APPROPRIATE GOVERNING AUTHORITIES.

THE NOISE LEVEL RESULTING FROM THE CONSTRUCTION SHALL BE WITHIN THE LIMITS SPECIFIED IN OSHA REGULATIONS AND ALL LOCAL ORDINANCES.

**STATIONING AND LOCATIONS**

STATIONING AND LOCATIONS INDICATED ON THESE PLANS ARE APPROXIMATE. ALL LOCATIONS AND ITEMS CALLED OUT BY STATION ARE SUBJECT TO ADJUSTMENT IN THE FIELD "AS DIRECTED BY THE ENGINEER" AT NO ADDITIONAL COST.

**WORK LIMITS**

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

**EXISTING TYPICAL SECTIONS**

EXISTING TYPICAL SECTIONS HAVE BEEN DEVELOPED FROM SITE MEASUREMENTS, PAVEMENT CORES AND RECORD PLANS AND ARE BELIEVED TO REPRESENT THE WIDTH AND COMPOSITION OF THE EXISTING PAVEMENT, BUT THE CITY DOES NOT GUARANTEE THE ACCURACY OF SAME.

**PROJECT SIGNS**

THE FURNISHING AND ERECTION OF PROJECT SIGNS AS PER SUPPLEMENTAL GENERAL CONDITION C-11 OF THE BID DOCUMENTS IS REMOVED FOR THIS PROJECT.

**TESTING OF CONSTRUCTION MATERIALS**

THE CONTRACTOR SHALL PERFORM TESTING OF CONSTRUCTION MATERIALS. THIS WORK SHALL CONFORM TO DETAILED SPECIFICATION D-73 OF THE BID DOCUMENTS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM SPECIAL, CONCRETE COMPRESSION, SLUMP, AIR CONTENT, AND TEMPERATURE CHECK TEST (FIELD), AS PER D-73	2 SET
ITEM SPECIAL, CONCRETE COMPRESSION, SLUMP, AIR CONTENT, AND TEMPERATURE CHECK TEST(LAB), AS PER D-73	2 EACH
ITEM SPECIAL, CONCRETE CORE SAMPLES FOR THE DETERMINATION OF CONCRETE COMPRESSIVE STRENGTH, AS PER D-73	1 EACH
ITEM SPECIAL, TECHNICIAN WITH NUCLEAR DENSITY METER, AS PER D-73	80 HOUR
ITEM SPECIAL, ASPHALT DENSITY TEST, AS PER D-73	5 EACH
ITEM SPECIAL, ASPHALT EXTRACTION TEST, AS PER D-73	5 EACH
ITEM SPECIAL, THICKNESS OF COMPACTED ASPHALT TEST, AS PER D-73	5 EACH

**FIELD OFFICE, COMPUTER EQUIPMENT, AND MOBILE PHONE**

THESE ITEMS SHALL BE PROVIDED AS PER THE DESCRIPTIONS CONTAINED IN THE BID DOCUMENTS.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 619, FIELD OFFICE, TYPE B, AS PER DS-33	6 MONTH
ITEM SPECIAL, MOBILE PHONE (NEXTEL), AS PER D-45	6 MONTH
ITEM SPECIAL, COMPUTER EQUIPMENT REMAINING CONTRACTORS, AS PER DS-34	6 MONTH

**WATER SUPPLY**

WATER WILL BE SUPPLIED TO THE CONTRACTOR AT THE NEAREST HYDRANT. THE COST OF THE WATER SUPPLY SHALL BE BORNE BY THE CONTRACTOR. THE CONTRACTOR SHALL OBTAIN THE NECESSARY PERMIT FROM THE CITY OF CLEVELAND WATER DEPARTMENT.

THE CONTRACTOR WILL BE REQUIRED TO PROVIDE APPROVED STANDARD TIGHT HOSE AND FITTINGS WITH WHICH TO MAKE CONNECTIONS TO HYDRANTS AND OUTLETS. NO IMPROPER, WASTEFUL, OR UNDUE USE OF WATER WILL BE PERMITTED.

**ROADWAY****CLEARING AND GRUBBING**

THE DRAWINGS INDICATE ALL TREES TO BE REMOVED AS A PART OF THIS PROJECT. TREE REMOVAL SHALL CONFORM TO DETAILED SPECIFICATION D-70 AND BE PAID FOR AT THE UNIT PRICES BID FOR ITEM 201, TREE REMOVED, BY SIZE.

UNLESS OTHERWISE INDICATED ON THE DRAWINGS, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL SURFACE OBJECTS (SUCH AS RAILROAD TIES) WITHIN THE PROPOSED CONSTRUCTION LIMITS. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

**REMOVAL OF EXISTING STREETCAR TRACKS**

RECORD DRAWINGS INDICATE THAT STREETCAR TRACKS AT ONE TIME EXISTED ON PROFESSOR STREET WITHIN THE PROJECT LIMITS. HOWEVER, PAVEMENT CORES AND PREVIOUS SEWER IMPROVEMENT PROJECTS INDICATE THAT THESE TRACKS MAY HAVE BEEN REMOVED AND NO LONGER EXIST. SHOULD STREETCAR TRACKS BE ENCOUNTERED DURING THE PLANING AND RESURFACING OF PROFESSOR STREET THEY SHALL BE REMOVED AND REPLACED AS PER DETAILED SPECIFICATION D-17.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 202, REMOVAL, MISC.: TRACK REMOVED, AS PER D-17	200 SQ YD
ITEM 204, SUBGRADE COMPACTION FOR TRACK REMOVAL	200 SQ YD
ITEM 304, 6" MIN. AGGREGATE BASE FOR TRACK REMOVAL	35 CU YD
ITEM 305, 9" MIN. CONCRETE BASE FOR TRACK REMOVAL, AS PER D-23	85 CU YD

**ITEMS REMOVED BY OTHERS**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE REMOVAL BY OTHERS OF VARIOUS OBJECTS WITHIN THE RIGHT OF WAY, INCLUDING (BUT NOT LIMITED TO) MAIL COLLECTION BOXES, PAPER DISTRIBUTION BOXES, AND PRIVATELY-OWNED ART PIECES. AT LEAST TWO (2) WEEKS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THIS WORK WITH THE FOLLOWING:

NEWSPAPER VENDING BOXES: CLEVELAND BUREAU OF SIDEWALKS  
(STA. 22+98, RT.) ATTN.: JOHN PETKAC  
PHONE: 216-664-2474

USPS COLLECTION STATION:  
(STA. 13+92, RT.;  
STA. 22+82, LT.)

US POST OFFICE  
PHONE: 216-443-4046

ART PIECES:  
(STA. 10+71, LT.;  
STA. 23+93, LT.; STA. 64+42, RT.)

TREMONT WEST DEVELOPMENT CORPORATION  
PHONE: 216-575-0920

ALL WORK PERFORMED BY THE CONTRACTOR FOR THIS COORDINATION SHALL BE CONSIDERED INCIDENTAL TO ITEM 201, CLEARING AND GRUBBING, AND THE CONTRACTOR SHALL BE DUE NO ADDITIONAL COMPENSATION FOR THIS WORK.

**ITEM 202 - PAVEMENT REMOVED**

PAVEMENT SAW CUTTING REQUIRED TO REMOVE EXISTING PAVEMENT AS NOTED IN THE PLANS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 202, PAVEMENT REMOVED, AS PER D-15.

**EROSION CONTROL****SODDING**

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO PROMOTE GROWTH AND CARE OF THE PERMANENT SODDED AREAS:

ITEM 659, COMMERCIAL FERTILIZER, AS PER D-68	0.2 TON
ITEM 659, LIME	0.3 ACRE
ITEM 659, WATER, AS PER D-67	4 M GAL

**DRAINAGE****REVIEW OF DRAINAGE FACILITIES**

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE CITY, REPRESENTATIVES OF THE CITY AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE CITY.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE CITY.

ALL EXISTING SEWERS THAT ARE TO REMAIN SHALL BE FREE-FLOWING AND FREE OF FOREIGN MATTER IN THE VICINITY OF THE PROJECT AREA. THE CONTRACTOR SHALL GIVE A 48 HOUR NOTICE TO THE DIVISION OF WATER POLLUTION CONTROL TO REQUEST REPAIRS AND CLEANING AS NECESSARY TO ACCOMPLISH THE CONTRACTOR'S WORK. ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THIS PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE CITY.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION OR AFTER CITY SEWER REPAIRS AND CLEANING ARE COMPLETED. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 AND/OR 604 ITEMS.

**UNDERDRAINS**

RECORD DRAWINGS AND FIELD SURVEY INDICATE THAT UNDERDRAINS DO NOT EXIST WITHIN THE PROJECT LIMITS. IF, DURING PAVEMENT AND CURB REMOVAL AND REPLACEMENT WORK EXISTING UNDERDRAINS ARE ENCOUNTERED, THEY SHALL BE REPLACED AS DIRECTED BY THE ENGINEER.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 605, 6" UNCLASSIFIED PIPE UNDERDRAIN, 706.08, 707.32, OR 707041, AS PER D-42 AND DS-10	1000 FT
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**ITEM SPECIAL, MISCELLANEOUS METAL**

THE CONTRACTOR SHALL REPLACE MISSING, DAMAGED, OR BROKEN CITY OF CLEVELAND CASTINGS AS DETERMINED BY THE ENGINEER. THIS WORK SHALL CONFORM TO DETAILED SPECIFICATION D-72 OF THE BID DOCUMENTS.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM SPECIAL, MISCELLANEOUS METAL, AS PER D-72	5000 LBS
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GENERAL NOTES

CUY-PROFESSOR STREET INTERSECTIONS

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**PAVEMENT**

**ASPHALT CONCRETE SURFACE COURSE SEALING REQUIREMENTS**

IN ADDITION TO THE GUTTER SEALING REQUIREMENTS SPECIFIED IN SCD BP-3.1 AND IN 401.15, AFTER COMPLETION OF THE SURFACE COURSE, THE CONTRACTOR SHALL SEAL THE FOLLOWING LOCATIONS WITH A CERTIFIED PG BINDER:

- ALL CASTINGS INCLUDING, BUT NOT LIMITED TO, MONUMENTS, WATER VALVES, CATCH BASINS, CURB INLETS.
- BUTT JOINTS AND FEATHER JOINTS.
- ALL LONGITUDINAL AND TRANSVERSE COLD JOINTS (SEALING SHALL OCCUR PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS). COLD JOINTS INCLUDE ALL JOINTS EXCEPT THOSE CONSTRUCTED WITH TWO PAVERS OPERATING IN CONTIGUOUS LANES ONE JUST AHEAD OF THE OTHER SO THAT THE DISTANCE BETWEEN PAVERS DOES NOT EXCEED THE DISTANCE THAT A NORMAL SIZED LOAD OF MIXTURE WILL COVER (I.E. A HOT JOINT PER 401.17).

THE MATERIAL USED SHALL BE A CERTIFIED 702.01 PG BINDER. THE WIDTH OF THE SEALER SHALL BE 2 INCHES.

ANY ADDITIONAL COSTS ASSOCIATED WITH THE WORK IDENTIFIED IN THIS NOTE SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, AS PER D-29.

**ITEM 254. PAVEMENT PLANING. ASPHALT CONCRETE**

**ITEM 448. ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22, PER D-27**

THE CONTRACTOR SHALL PLANE PROFESSOR STREET AND THE ADJACENT SIDE STREETS TO THREE INCHES (3") FROM THE PROPOSED FINISHED SURFACE, OR TO THE TOP OF THE BRICK OR CONCRETE BASE, WHICHEVER OCCURS FIRST.

- IF THE TOP OF THE EXISTING BRICK BASE IS WITHIN 1 ¼" OF THE PROPOSED FINISHED SURFACE, OR IF THE PLANING OPERATION DISLODGES OR DAMAGES THE BRICK, THE CONTRACTOR SHALL REMOVE THE BRICK BASE. THE BASE SHALL BE REPLACED WITH 9" CONCRETE BASE AS PER THE DETAIL IN THE DRAWINGS.
- IF THE TOP OF THE EXISTING BRICK OR CONCRETE BASE IS BETWEEN 1 ½" AND 3" BELOW THE PROPOSED FINISHED SURFACE, AND THE PLANING OPERATION HAS NOT DISLODGED OR DAMAGED THE BRICK, THEN THE THICKNESS OF THE ASPHALT CONCRETE INTERMEDIATE COURSE SHALL VARY SO THAT THE TOP OF THE INTERMEDIATE COURSE IS 1 ¼" BELOW THE PROPOSED FINISHED SURFACE. THE INTERMEDIATE COURSE WILL BE PAID FOR UNDER THE CUBIC YARD PRICE BID FOR ITEM 448, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22, PER D-29.
- IF THE TOP OF THE EXISTING BRICK OR CONCRETE BASE IS GREATER THAN THREE INCHES (3") BELOW THE PROPOSED FINISHED SURFACE, THE THICKNESS OF THE INTERMEDIATE COURSE SHALL BE 1 ¾" AND BE PAID FOR UNDER THE CUBIC YARD PRICE BID FOR ITEM 448, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22, PER D-29.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 202, PAVEMENT REMOVED (BRICK BASE), AS PER D-15	300 SQ YDS
ITEM 203, EXCAVATION	100 CU YDS
ITEM 204, SUBGRADE COMPACTION	300 SQ YDS
ITEM 304, 6" MIN. AGGREGATE BASE	50 CU YDS
ITEM 305, 9" MIN. CONCRETE BASE, AS PER D-23	125 CU YDS
ITEM 448, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22, PER D-29	10 CU YDS

**SURCHARGE FOR CLASS MS CONCRETE**

DURING CONSTRUCTION OF CONCRETE BASE (ITEM 305), NON-REINFORCED CONCRETE PAVEMENT (ITEM 452), AND/OR CONCRETE SIDEWALK (ITEM 608). THE CITY MAY DIRECT THE CONTRACTOR TO USE CLASS MS CONCRETE MIX, AS PER DETAILED SPECIFICATION D-25 IN LIEU OF THE STANDARD CONCRETE MIX DESIGN SPECIFIED IN DETAILED SPECIFICATION D-24.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A UNIT PRICE FOR THIS ITEM FOR ALL ADDITIONAL COSTS INCURRED FOR THAT ITEM ABOVE THE COST OF THE STANDARD MIX DESIGN CONCRETE.

ITEM SPECIAL, SURCHARGE FOR CLASS MS CONCRETE, AS PER D-25	100 CU YDS
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**PAVEMENT RESTORATION FOR PIPE INSTALLATIONS**

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF PIPES UNDER ITEM 603:

ITEM 304, 6" MIN. AGGREGATE BASE FOR PAVEMENT RESTORATION	30 CU YDS
ITEM 305, 9" MIN. CONCRETE BASE FOR PAVEMENT RESTORATION, AS PER D-23	75 CU YDS
ITEM 448, (MIN.) ASPHALT CONCRETE INTERMEDIATE COURSE, FOR PAVEMENT RESTORATION, TYPE 1, PG64-22, PER D-29	5 CU YDS

THE ABOVE QUANTITIES ARE BASED ON A PAVEMENT RESTORATION WIDTH OF THE TRENCH WIDTH PLUS TWO FEET ON EITHER SIDE OF THE TRENCH, AS PER THE DETAIL SHOWN ON SHEET NO. 30.

AS PER CITY OF CLEVELAND CONSTRUCTION DRAWING 445M, THE COST OF REMOVING THE EXISTING PAVEMENT, SAW CUTTING, AND DOWELING IS INCLUDED IN THE UNIT PRICE BID FOR THE CONCRETE BASE.

**WATER WORK**

**ITEM SPECIAL. MISCELLANEOUS METAL (WATER)**

THE CONTRACTOR SHALL REPLACE MISSING, DAMAGED, OR BROKEN CITY OF CLEVELAND WATER DEPARTMENT MANHOLE/VAULT CASTINGS, VALVE BOXES, AND SIMILAR METAL ITEMS AS DETERMINED BY THE ENGINEER. THIS WORK SHALL CONFORM TO DETAILED SPECIFICATION E-8 OF THE BID DOCUMENTS.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM SPECIAL, MISCELLANEOUS METAL, AS PER E-8	500 LBS
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**ITEM SPECIAL. RECONSTRUCT EXISTING VAULT/MANHOLE FRAME AND COVER TO GRADE**

THIS ITEM SHALL BE PERFORMED AS PER THE DESCRIPTION CONTAINED IN THE BID DOCUMENTS.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM SPECIAL, RECONSTRUCT EXISTING VAULT/MANHOLE FRAME AND COVER TO GRADE, AS PER DS-16	2 EACH
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GENERAL NOTES

CUY-PROFESSOR STREET INTERSECTIONS

**ITEM 614 - MAINTAINING TRAFFIC**

THROUGH TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON PROFESSOR STREET AND ALL SIDE STREETS IN ACCORDANCE WITH SECTION 614. THE LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE KEPT TO A MINIMUM CONSISTENT WITH THE SPECIFICATION REQUIREMENTS FOR PROTECTION OF COMPLETED PAVEMENT COURSES, AND SHALL BE AT THE APPROVAL OF THE ENGINEER.

THE MAKING OF THIS IMPROVEMENT REQUIRES THAT THE ROAD BE CLOSED TO THROUGH TRAFFIC. DETOURS SHALL BE AS SHOWN ON SHEET NO. 9.

THE CONTRACTOR SHALL MAINTAIN SAFE AND SATISFACTORY ACCESS TO ABUTTING PROPERTY. THE CONTRACTOR SHALL MAINTAIN ADEQUATE PEDESTRIAN WALKS AT ALL INTERSECTIONS, INCLUDING ASPHALT CONCRETE WALKS, WHERE DIRECTED BY THE ENGINEER.

ALL CONSTRUCTION TRAFFIC CONTROL DEVICES USED FOR THIS PROJECT SHALL CONFORM TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR, EXCEPT AS NOTED BELOW.

THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY SAFEGUARDS, SUCH AS TYPE III BARRICADES, LIGHTING, FLAGGERS, AND SUCH OTHER TRAFFIC CONTROL DEVICES AS PROVIDED IN ITEM 614, MAINTAINING TRAFFIC, SO AS TO AVOID DAMAGE AND/OR INJURY TO VEHICLES AND PERSONS USING THE ROADWAY DURING CONSTRUCTION.

EXISTING TRAFFIC CONTROL DEVICES (SIGNS AND/OR TRAFFIC SIGNALS), LOCATED WITHIN THE WORK AREA, WHICH ARE REQUIRED FOR INTERIM OR PERMANENT TRAFFIC CONTROL, SHALL BE RELOCATED TO POINTS APPROVED BY THE ENGINEER. APPROPRIATE TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED, IN COMPLIANCE WITH THE MANUAL, AT ALL TIMES WHILE TRAFFIC IS MAINTAINED. THE COST OF RELOCATION, IF REQUIRED, SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC.

THE LENGTH AND DURATION OF LANE CLOSURES AND/OR TRAFFIC RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. THE INTENT IS TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR 614 - MAINTAINING TRAFFIC, OR 614 - MAINTENANCE OF PEDESTRIAN TRAFFIC, AS PER DS-23, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

**ESTIMATED QUANTITIES FOR MAINTAINING TRAFFIC**

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC:

ITEM 410, TRAFFIC COMPACTED SURFACE TYPE A OR B	10 CU. YD.
ITEM 608, 2" ASPHALT CONCRETE WALK	1000 SQ. FT.
ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	20 CU. YD.
ITEM 616, WATER	1 M GAL.

**NOTIFICATION**

THE CONTRACTOR SHALL NOTIFY IN WRITING THE FOLLOWING AGENCIES AT LEAST 72 HOURS BEFORE IMPLEMENTING ANY SUBSTANTIAL CHANGE IN TRAFFIC PATTERN OR CLOSING ANY STREET TO TRAFFIC:

- THE GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
- THE UNITED STATES POSTAL SERVICE
- THE CITY OF CLEVELAND BOARD OF EDUCATION
- THE CITY OF CLEVELAND:
  - COMMISSIONER OF TRAFFIC ENGINEERING
  - COMMISSIONER OF ENGINEERING AND CONSTRUCTION
  - COMMISSIONER OF EMERGENCY MEDICAL SERVICES
  - POLICE TRAFFIC COMMISSIONER
  - FIRE CHIEF
- TREMONT WEST DEVELOPMENT CORPORATION
- OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 12, PUBLIC INFORMATION OFFICE

**CONSTRUCTION TRAFFIC**

ALL CONSTRUCTION TRAFFIC SHALL USE ACCEPTABLE TRUCK ROUTES TO ACCESS THE CONSTRUCTION AREA. USE OF LOCAL RESIDENTIAL STREETS IS STRICTLY PROHIBITED UNLESS ALLOWED IN WRITING BY THE CITY OF CLEVELAND COMMISSIONER OF ENGINEERING AND CONSTRUCTION.

**ITEM 614. LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS**

WORK UNDER THIS ITEM SHALL CONFORM TO THE DESCRIPTION CONTAINED IN THE BID DOCUMENTS.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS, AS PER DS-22	15 HOURS
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**TEMPORARY RAMPING OF VERTICAL SURFACES**

IN ORDER TO PROVIDE FOR LOCAL ACCESS, LONGITUDINAL VERTICAL FACES ABUTTING DRIVES SHALL BE TEMPORARILY RAMPED. TRANSVERSE VERTICAL FACES SHALL BE TEMPORARILY RAMPED A MINIMUM OF TEN (10) FEET IN LENGTH AND TRAFFIC SHALL BE WARNED WITH W8-1 "BUMP" SIGNS IN ADVANCE OF THE RAMPED AREAS.

ALL CASTINGS ENCOUNTERED SHALL BE SET TO GRADE AND PAID FOR UNDER VARIOUS ITEMS DESCRIBED ELSEWHERE IN THE GENERAL NOTES OR SPECIFICATIONS. THE CASTING ELEVATION DIFFERENTIAL SHALL NOT BE GREATER THAN 1½ INCHES WHEN EXPOSED TO TRAFFIC. ALL TEMPORARY RAMPING SHALL BE INSTALLED, AT THE DIRECTION OF THE ENGINEER, USING ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

**CONSTRUCTION ADJACENT TO DRIVES**

ACCESS TO ALL PROPERTIES SHALL BE MAINTAINED AT ALL TIMES. THE PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED TO MAINTAIN ACCESS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR "ITEM 614 - MAINTAINING TRAFFIC"; EXCEPT FOR THE SEPARATELY ESTIMATED ITEMS/QUANTITIES ADDITIONALLY PROVIDED IN THE PLANS FOR MAINTAINING TRAFFIC (ACCESS).

NO MORE THAN TWO WORKING DAYS AFTER THE NOTICE TO PROCEED HAS BEEN ISSUED, THE CONTRACTOR SHALL SUBMIT A PLAN FOR THE APPROVAL OF THE ENGINEER WHICH OUTLINES HIS STRATEGY FOR THE MAINTENANCE OF SAFE ACCESS WITHIN THE PROJECT LIMITS WHEN ACCESS IS NOT POSSIBLE. EXCEPT AS NOTED ABOVE, ALL ASSOCIATED COSTS SHALL BE INCLUDED UNDER "ITEM 614 - MAINTAINING TRAFFIC".

**CONSTRUCTION SEQUENCE**

THE IMPROVEMENT OF PROFESSOR STREET WITHIN THE LIMITS OF THIS PROJECT SHALL BE ACCOMPLISHED AS OUTLINED BELOW:

- PLANING OF THE EXISTING PAVEMENT AT ALL INTERSECTIONS. TRAFFIC SHALL BE MAINTAINED USING FLAGGERS ON ACCORDANCE WITH ODOT STANDARD CONSTRUCTION DRAWING MT-97.11. SHOULD ANY BRICKS BECOME DISLODGED DURING PLANING OPERATIONS, THE RESULTING VOID WILL BE TEMPORARILY FILLED WITH ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE A OR B. TEMPORARY RAMPS SHALL BE INSTALLED AT THE ENDS OF THE PLANING LIMITS, AT DRIVEWAYS, AND AT CASTINGS (AS NECESSARY).
- CONSTRUCTION OF CURBS, SIDEWALKS, DRAINAGE, ADJUSTMENT OF CASTINGS, AND PAVEMENT (INCLUDING INSTALLATION OF REPLACEMENT BASE AND ALL ASPHALT CONCRETE COURSES) IMPROVEMENTS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL PERFORM THIS WORK IN SECTIONS, AS FOLLOWS:

- SECTION I: THE INTERSECTION OF PROFESSOR STREET, WEST 10TH STREET, AND FAIRFIELD AVENUE.
- SECTION II: THE INTERSECTION OF PROFESSOR STREET AND LITERARY AVENUE.
- SECTION III: THE INTERSECTION OF PROFESSOR STREET AND COLLEGE AVENUE.
- SECTION IV: THE INTERSECTION OF PROFESSOR STREET AND JEFFERSON AVENUE.

DURING WORK WITHIN SECTION I, THE CONTRACTOR SHALL CLOSE PROFESSOR STREET SOUTHEAST OF WEST 10TH STREET AND PROVIDE A DETOUR AS INDICATED ON SHEET NO. 9. DURING WORK WITHIN THE OTHER SECTIONS (II THROUGH IV), THE CONTRACTOR SHALL CLOSE THE ENTIRE INTERSECTION TO VEHICULAR TRAFFIC AND PROVIDE DETOURS AS INDICATED ON SHEET NO. 9.

DURING CONSTRUCTION WITHIN THE PAVEMENT AREA OF WEST 10TH STREET AND FAIRFIELD AVENUE (OUTSIDE OF THE AREA TO BE CLOSED TO VEHICULAR TRAFFIC), TWO-WAY TRAFFIC SHALL BE MAINTAINED USING FLAGGERS IN ACCORDANCE WITH ODOT STANDARD CONSTRUCTION DRAWING MT-97.10 (FOR STATIONARY OPERATION) OR MT-97.11 (FOR PAVING OPERATIONS) AND THE DETAIL SHOWN ON SHEET NO. 9.

THE CONTRACTOR SHALL COMPLETE ALL WORK, EXCEPT FOR LANDSCAPING AND STREETSCAPING WORK, IN A GIVEN CONSTRUCTION SECTION BEFORE PROCEEDING TO WORK IN THE NEXT SECTION AND PLACING THE DETOUR IN SERVICE FOR THAT SECTION, SUBJECT TO THE APPROVAL OF THE ENGINEER. NOTE THAT ALL LANDSCAPE AND STREETSCAPE WORK IN SECTION I MUST BE COMPLETED AND ACCEPTED ON OR BEFORE JULY 19, 2013. NORMAL VEHICULAR TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BEYOND THE WORK LIMITS OF THE SECTION CURRENTLY UNDER CONSTRUCTION.

THE CONTRACTOR MUST BEGIN WORK IN SECTION I. DURING SECTION I WORK, HE MAY ALSO PERFORM THE WORK INDICATED IN SECTION IV. AFTER SECTION I WORK IS COMPLETED, THE CONTRACTOR HAS THE OPTION TO PROCEED WITH THE REMAINING SECTIONS IN ANY ORDER. EXCEPT FOR SECTIONS I AND IV, THE CONTRACTOR MAY NOT CLOSE MORE THAN ONE INTERSECTION AT THE SAME TIME.

- INSTALLATION OF THE LANDSCAPE AND STREETSCAPE WORK (INCLUDING, BUT NOT LIMITED TO, BIORETENTION CELLS, PLANTINGS, AND THE PUBLIC ART PIECE) IN SECTION I. THIS WORK MAY BE PERFORMED AT THE SAME TIME THAT WORK IS BEING PERFORMED IN ANOTHER SECTION.

ALL OF THE WORK LISTED ABOVE MUST BE SUBSTANTIALLY COMPLETED AND ACCEPTED BY THE CITY OF CLEVELAND NO LATER THAN 12:00 PM (NOON) ON JULY 19, 2013.

THE CONTRACTOR SHALL SUSPEND ALL WORK ON PROFESSOR STREET AT NOON ON ON JULY 19, AND MAY RESUME WORK ON JULY 22, 2013, IN ORDER TO COMPLETE THE REMAINING ITEMS OF THE PROJECT, SUCH AS INSTALLATION OF THE BIORETENTION CELLS AND FURNISHING AND INSTALLATION OF THE LANDSCAPING ITEMS IN SECTIONS II THROUGH IV.

**TEMPORARY MAINTENANCE OF EXISTING TRAFFIC SIGNALS**

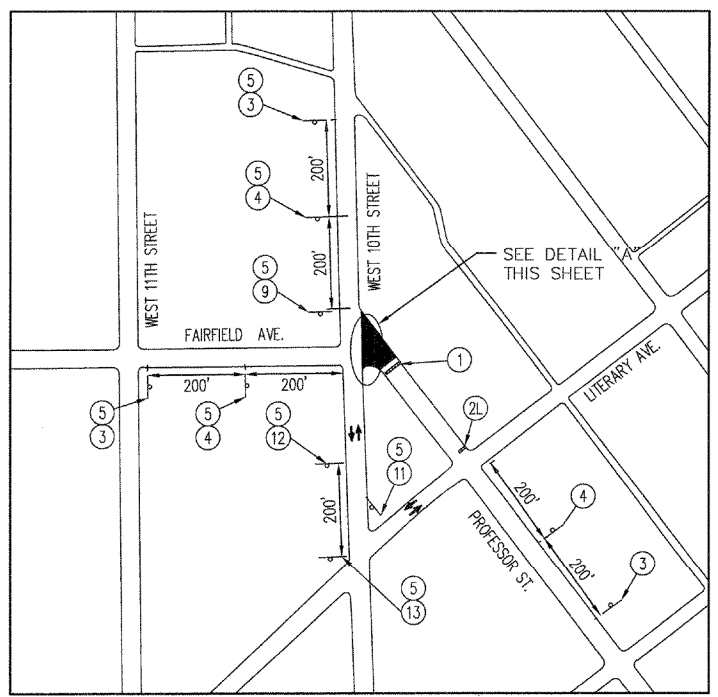
INCIDENTAL TO THE REQUIREMENTS FOR MAINTAINING TRAFFIC IN ACCORDANCE WITH 614.03, THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF PROFESSOR STREET AND JEFFERSON AVENUE SHALL BE TEMPORARILY OPERATED UNTIL THE PROJECT IS COMPLETE AND THE EXISTING OPERATION CAN BE RESTORED. DURING CONSTRUCTION SECTION IV, THE TRAFFIC SIGNAL SHALL BE TURNED OFF DURING THE TIME THAT THE INTERSECTION IS CLOSED. THIS WORK SHALL BE COORDINATED THROUGH THE CITY OF CLEVELAND DIVISION OF TRAFFIC ENGINEERING.

CALCULATED  
DRP  
CHECKED  
RCN

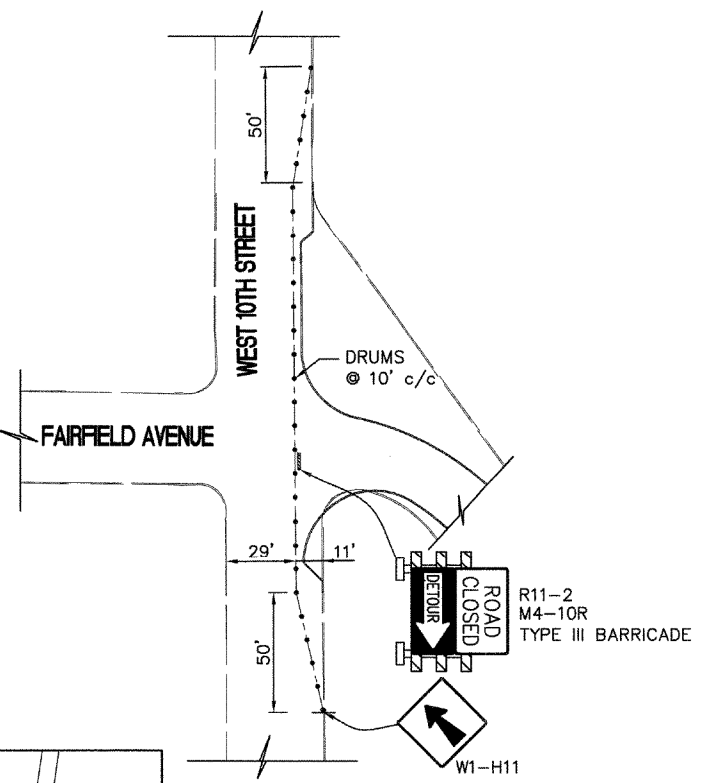
MAINTENANCE OF TRAFFIC GENERAL NOTES

CUY-PROFESSOR STREET INTERSECTIONS

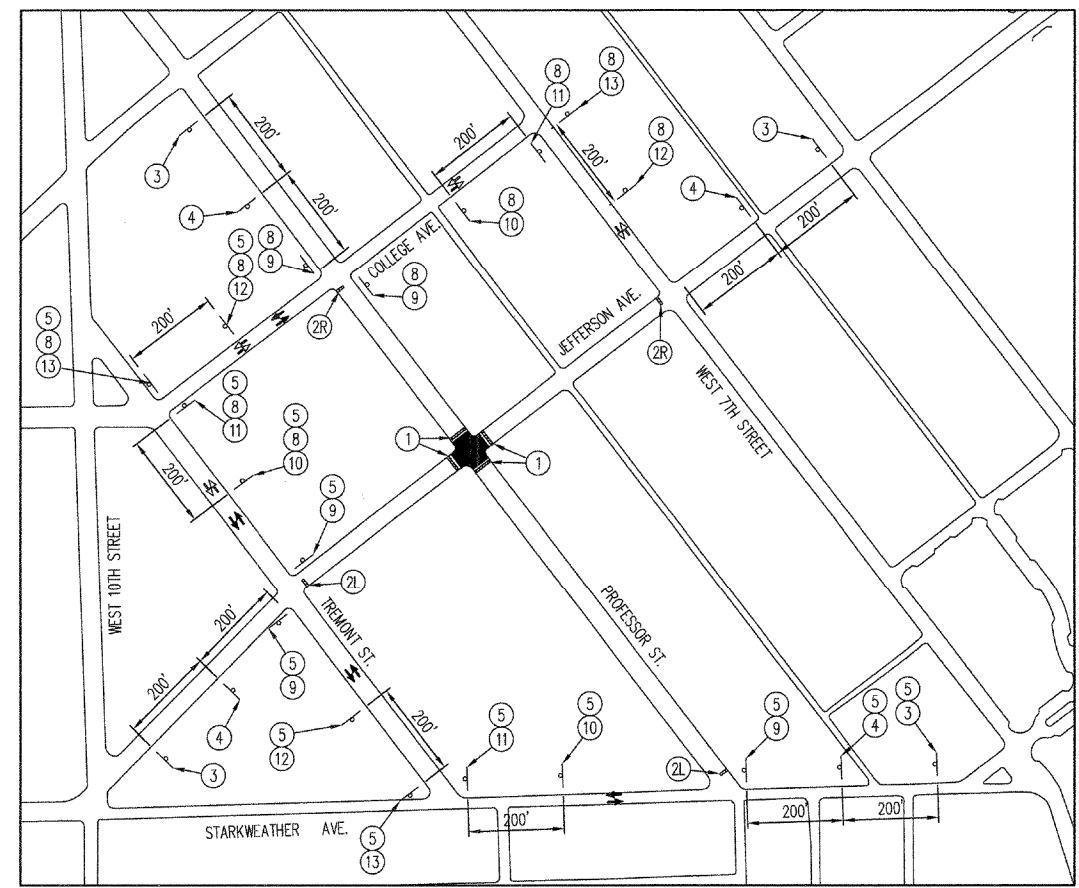




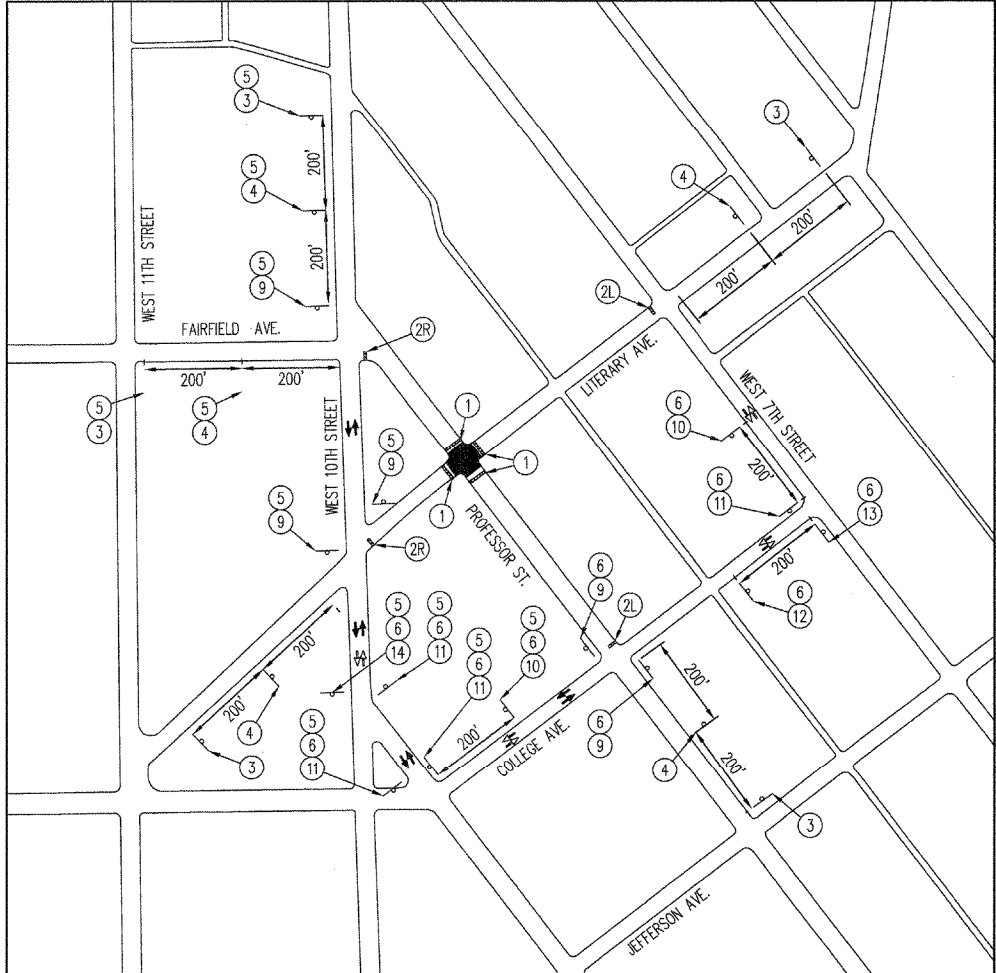
**CONSTRUCTION SECTION I**



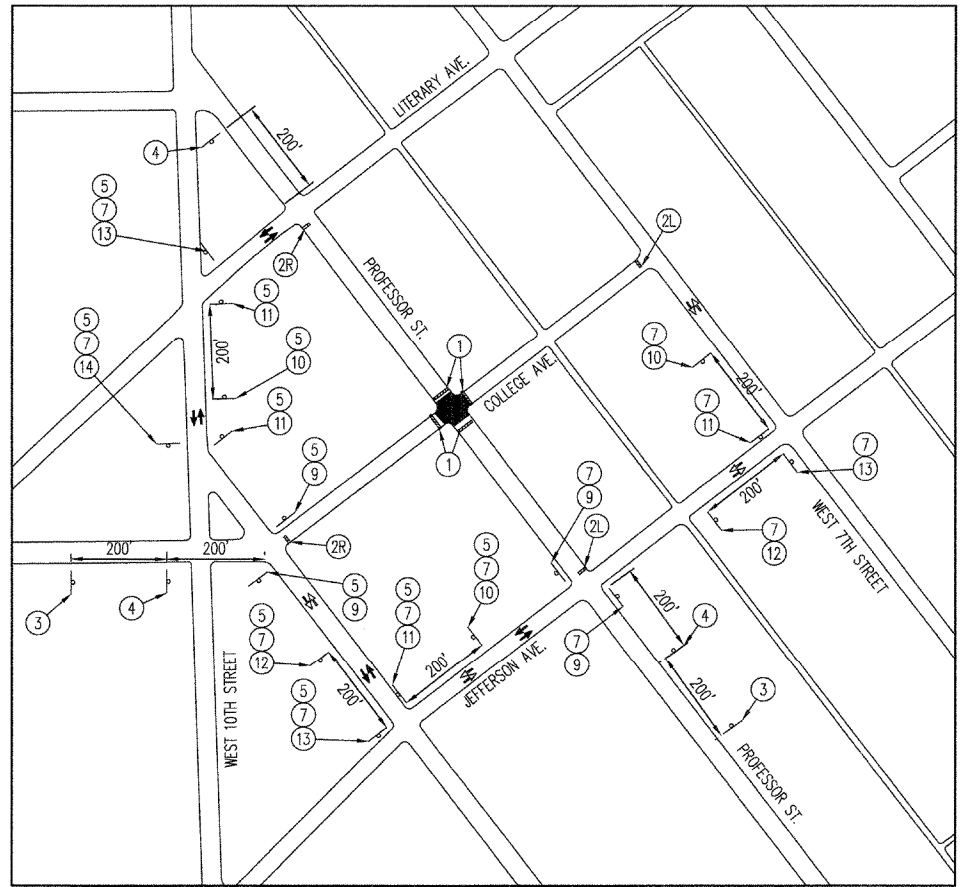
**DETAIL 'A'**



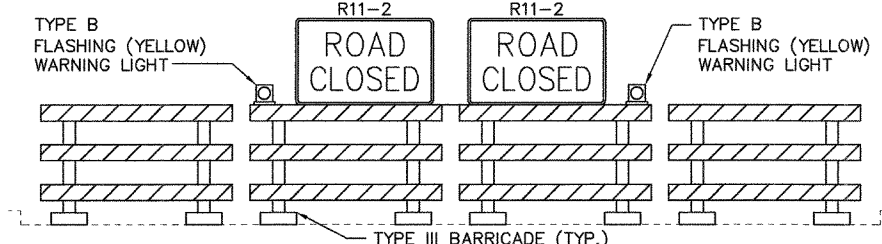
**CONSTRUCTION SECTION IV**



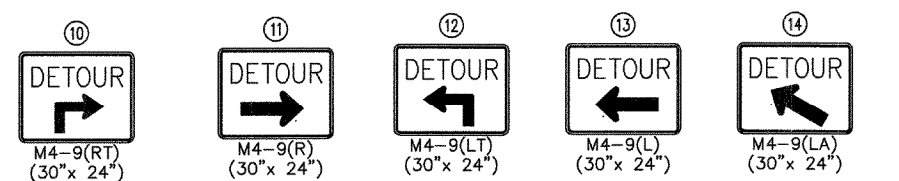
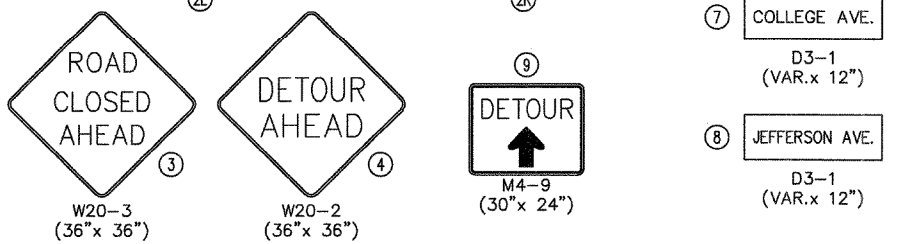
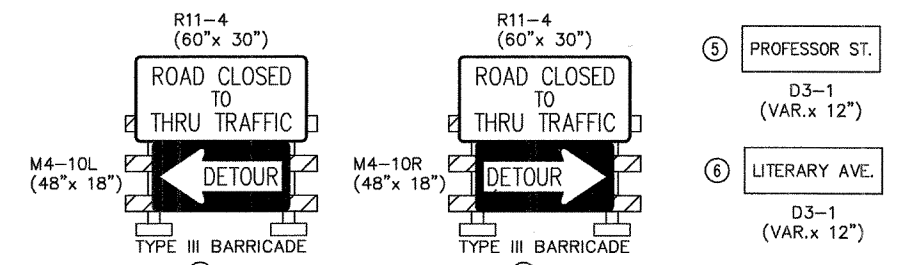
**CONSTRUCTION SECTION II**



**CONSTRUCTION SECTION III**



① ROAD CLOSURE USING BARRICADES



**SIGN LEGEND**

- LEGEND:**
- AREA TO BE CLOSED
  - ⇄ PROFESSOR STREET DETOUR ROUTE
  - ⇄ SIDE STREET DETOUR ROUTE
  - Ⓝ SIGN (#=SEE SIGN LEGEND, THIS SHEET)

**DETOUR PLANS**

SHEET NUMBER																ITEM	GRAND TOTAL	UNIT	DESCRIPTION
2	6	7	8	13	14	15	19	20	21	22	32	36	37-40						
																			ROADWAY
																201	LUMP		CLEARING AND GRUBBING
					17											201	17	EACH	TREE REMOVED, 9-INCH, AS PER D-70
					2											201	2	EACH	TREE REMOVED, 15-INCH, AS PER D-70
		475			67	1092										202	1634	SQ YD	PAVEMENT REMOVED (BRICK BASE), AS PER D-15
					106											202	106	SQ YD	PAVEMENT REMOVED (DRIVEWAYS), AS PER D-15
					16593											202	16593	SQ FT	WALK REMOVED
					1590											202	1590	FT	CURB REMOVED
						9										202	9	EACH	CATCH BASIN REMOVED
					6											202	6	EACH	REMOVAL, MISC.: TREE PIT FRAME AND GRATE, AS PER DS-3
					11											202	11	EACH	REMOVAL, MISC.: CURBED TREE PIT, AS PER DS-4
					1											202	1	EACH	REMOVAL, MISC.: BENCH, AS PER DS-5
					1											202	1	EACH	REMOVAL, MISC.: TRASH CAN, AS PER DS-5
					2											202	2	EACH	REMOVAL, MISC.: BIKE RACK, AS PER DS-5
	200															202	200	SQ YD	REMOVAL, MISC.: TRACK REMOVED, AS PER D-17
		100					53	11	64	39						203	267	CU YD	EXCAVATION
							176	124	90	97						203	487	CU YD	EMBANKMENT
		300			67	214										204	581	SQ YD	SUBGRADE COMPACTION
	200															204	200	SQ YD	SUBGRADE COMPACTION FOR TRACK REMOVAL
5						1										604	5	EACH	MONUMENT ASSEMBLY, AS PER D-40
																604	1	EACH	MONUMENT BOX ADJUSTED TO GRADE, AS PER D-41
						9420										608	9420	SQ FT	6" CONCRETE WALK, AS PER D-23 AND DS-7
						6780										608	6780	SQ FT	6" CONCRETE WALK, SCORING PATTERN PER PLAN, AS PER D-23 AND DS-7
						16										SPECIAL	16	CORNER	CURB RAMP WITH TILE, INCLUDING LAYOUT, AS PER D-23, D-27, AND DS-8
						220										SPECIAL	220	SQ YD	BIORETENTION CELL, AS PER DS-6
																			EROSION CONTROL
						103										653	103	CU YD	TOPSOIL FURNISHED AND PLACED
	0.2															659	0.2	TON	COMMERCIAL FERTILIZER, AS PER D-68
	0.3															659	0.3	ACRE	LIME
	4															659	4	M GAL	WATER, AS PER D-67
						877										660	877	SQ YD	SODDING, UNSTAKED
																832	LUMP		EROSION CONTROL
																			DRAINAGE
						523										603	523	FT	12" CONDUIT, TYPE B, 706.08 (ES)
						28										603	28	FT	15" CONDUIT, TYPE B, 706.08 (ES)
						1										604	1	EACH	2-2B CATCH BASIN WITH SUMP, AS PER D-34
						12										604	12	EACH	2-2B CATCH BASIN WITH SUMP AND TRAP, AS PER D-34 AND DS-9
						3										604	3	EACH	CATCH BASIN, CITY OF CLEVELAND NO. 1, AS PER D-34
						2										604	2	EACH	INLET BASIN WITH SUMP, AS PER D-34
						1										604	1	EACH	MANHOLE, CITY OF CLEVELAND NO. 1
						5										604	5	EACH	MANHOLE ADJUSTED TO GRADE, AS PER D-39
	5000															SPECIAL	5000	LB	MISCELLANEOUS METAL, AS PER D-72
	1000															605	1000	FT	6" UNCLASSIFIED PIPE UNDERDRAIN, 706.08, 707.32, OR 707.41, AS PER D-42 AND DS-10

CALCULATED  
 DRP  
 CHECKED  
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**GENERAL SUMMARY**  
**CITY-PROFESSOR STREET INTERSECTIONS**

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SHEET NUMBER																		ITEM	GRAND TOTAL	UNIT	DESCRIPTION
2	6	7	8	13	14	15	19	20	21	22	32	36	37-40								
																					PAVEMENT
						3598												254	3598	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER DS-5
		50			12													304	62	CU YD	6" MIN. AGGREGATE BASE
		35																304	35	CU YD	6" MIN. AGGREGATE BASE FOR TRACK REMOVAL
		30																304	30	CU YD	6" MIN. AGGREGATE BASE FOR PAVEMENT RESTORATION
																		305	142	CU YD	9" MIN. CONCRETE BASE, AS PER D-23
		85																305	85	CU YD	9" MIN. CONCRETE BASE FOR TRACK REMOVAL, AS PER D-23
		75																305	75	CU YD	9" MIN. CONCRETE BASE FOR PAVEMENT RESTORATION, AS PER D-23
																		407	367	GALLON	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE, AS PER DS-12
																		407	184	GALLON	TACK COAT, TRACKLESS TACK, SURFACE COURSE, AS PER DS-12
																		448	3665	SQ YD	1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, AS PER D-29
																		448	189	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22, AS PER D-29
																		448	5	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE FOR PAVEMENT RESTORATION, TYPE 1, PG64-22, AS PER D-29
																		452	70	SQ YD	6" NON-REINFORCED CONCRETE PAVEMENT, AS PER D-23
																		452	144	SQ YD	8" NON-REINFORCED CONCRETE PAVEMENT, AS PER D-23
																		SPECIAL	100	CU YD	SURCHARGE FOR CLASS MS CONCRETE, AS PER D-25
																		609	1753	FT	CURB TYPE 6, AS PER D-23
																					WATER WORK
																		SPECIAL	500	LB	MISCELLANEOUS METAL WORK, AS PER E-8
																		SPECIAL	3	EACH	LOWER/RAISE EXISTING HYDRANT BRANCH AND ADJUST HYDRANT TO GRADE, AS PER E-12A4
																		SPECIAL	21	EACH	ADJUST EXISTING VALVE BOX TO GRADE, AS PER E-12C1
																		SPECIAL	7	EACH	ADJUST EXISTING CURB SHUT-OFF BOX TO GRADE, AS PER E-12C2
																		SPECIAL	5	EACH	ADJUST EXISTING VAULT/MANHOLE FRAME AND COVER TO GRADE, AS PER E-12C3
																		SPECIAL	5	EACH	GENERAL SUPPLY CONNECTION RAISED/LOWERED AND/OR EXTENDED OR REPLACED, AS PER E-13A1-3
																		SPECIAL	2	EACH	RECONSTRUCT EXISTING VAULT/MANHOLE FRAME AND COVER TO GRADE, AS PER DS-16
																					TRAFFIC CONTROL
																		630	505.0	FT	GROUND MOUNTED SUPPORT, NO. 3 POST
																		630	14	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED
																		630	78.75	SQ FT	SIGN, FLAT SHEET
																		630	52.50	SQ FT	SIGN, FLAT SHEET, AS PER DS-17
																		630	14	EACH	STREET NAME SIGN (12"), AS PER DS-18
																		630	27	EACH	REMOVAL OF GROUND MOUNTED SIGN AND STORAGE
																		630	20	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL
																		630	41	EACH	REMOVAL OF POLE MOUNTED SIGN AND STORAGE
																		644	230	FT	STOP LINE
																		644	958	FT	CROSSWALK LINE
																					STREETSCAPE
																		LUMP	LUMP	SPECIAL	STREETSCAPE, MISC.: FABRICATION AND INSTALLATION OF PUBLIC ART, AS PER DS-28
																					LANDSCAPING
																		LUMP	LUMP	SPECIAL	LANDSCAPING, MISC.: PROFESSOR STREET AND WEST 10TH STREET INTERSECTION LANDSCAPING, AS PER DS-31
																		LUMP	LUMP	SPECIAL	LANDSCAPING, MISC.: PROFESSOR STREET AND LITERARY AVENUE INTERSECTION LANDSCAPING, AS PER DS-31
																		LUMP	LUMP	SPECIAL	LANDSCAPING, MISC.: PROFESSOR STREET AND COLLEGE AVENUE INTERSECTION LANDSCAPING, AS PER DS-31
																		LUMP	LUMP	SPECIAL	LANDSCAPING, MISC.: PROFESSOR STREET AND JEFFERSON AVENUE INTERSECTION LANDSCAPING, AS PER DS-31

CALCULATED: DRP    CHECKED: RCN  
**GENERAL SUMMARY**  
**CUY-PROFESSOR STREET INTERSECTIONS**

SHEET NUMBER																	ITEM	GRAND TOTAL	UNIT	DESCRIPTION
2	6	7	8	13	14	15	19	20	21	22	32	36	37-40							
																	MAINTENANCE OF TRAFFIC			
			10			10											410	10	CU YD	TRAFFIC COMPACTED SURFACE TYPE A OR B
			1000														608	1000	SQ FT	2" ASPHALT CONCRETE WALK
			20														614	20	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
			15														614	15	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS, AS PER DS-22
			1														616	1	M GAL	WATER
																	MISCELLANEOUS			
			LUMP														614	LUMP		MAINTAINING TRAFFIC
			LUMP														614	LUMP		MAINTAINING TRAFFIC, MISC.: MAINTENANCE OF PEDESTRIAN TRAFFIC, AS PER DS-23
																	SPECIAL	LUMP		PRECONSTRUCTION VIDEO PHOTOGRAPHY, AS PER D-36
																	SPECIAL	LUMP		RECORD DRAWINGS, AS PER DS-35
	6																619	6	MONTH	FIELD OFFICE, TYPE B, AS PER D-45 AND DS-33
	6																SPECIAL	6	MONTH	MOBILE PHONE, AS PER D-45
	6																SPECIAL	6	MONTH	COMPUTER EQUIPMENT REMAINING CONTRACTORS, AS PER DS-34
																	623	LUMP		CONSTRUCTION LAYOUT STAKES, AS PER D-47
																	624	LUMP		MOBILIZATION
	2																SPECIAL	2	SET	CONCRETE COMPRESSION, SLUMP, AIR CONTENT, AND TEMPERATURE CHECK TEST (FIELD), AS PER D-73
	2																SPECIAL	2	EACH	CONCRETE COMPRESSION, SLUMP, AIR CONTENT, AND TEMPERATURE CHECK TEST (LAB), AS PER D-73
	1																SPECIAL	1	EACH	CONCRETE CORE SAMPLE FOR THE DETERMINATION OF CONCRETE COMPRESSIVE STRENGTH, AS PER D-73
	80																SPECIAL	80	HOUR	TECHNICIAN WITH NUCLEAR DENSITY METER, AS PER D-73
	5																SPECIAL	5	EACH	ASPHALT DENSITY TEST, AS PER D-73
	5																SPECIAL	5	EACH	ASPHALT EXTRACTION TEST, AS PER D-73
	5																SPECIAL	5	EACH	THICKNESS OF COMPACTED ASPHALT TEST, AS PER D-73
																	<b>PART 2, ALTERNATE 1 BID</b>			
																	<i>ADD ITEMS:</i>			
						7450											608	7450	SQ FT	SIDEWALK, MISC.: INTEGRALLY COLORED AND STAMPED CONCRETE SIDEWALK, AS PER DS-24
						3490											608	3490	SQ FT	6" CONCRETE WALK WITH RADIAL SCORING PATTERN, AS PER D-23 AND DS-7
						5260											608	5260	SQ FT	6" CONCRETE WALK AS PER D-23 AND DS-7
																	<i>DEDUCT ITEMS:</i>			
						(-9420)											608	(-9420)	SQ FT	6" CONCRETE WALK AS PER D-23 AND DS-7
						(-6780)											608	(-6780)	SQ FT	6" CONCRETE WALK, SCORING PATTERN PER PLAN, AS PER D-23 AND DS-7
																	<b>PART 2, ALTERNATE 2 BID</b>			
													2176				SPECIAL	2176	SQ FT	STREETSCAPE, MISC.: PATTERNED CROSSWALK, AS PER DS-33

CALCULATED DRP CHECKED RCN

**GENERAL SUMMARY**

CUY-PROFESSOR STREET INTERSECTIONS

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PAVEMENT CALCULATIONS

STATION		LENGTH	ASPHALT WIDTH	ASPHALT AREA "A"	FULL-DEPTH REPLACE. WIDTH	REPLACE. AREA "R"
FROM	TO	FEET	FEET	SQ FT	FEET	SQ FT
<b>WEST 10TH STREET</b>						
43+92.00	44+12.00	20.00	40.00	800.00		
44+12.00	44+17.00	5.00	(40.00+35.00)/2	187.50		
44+17.00	45+00.00	83.00	35.00	2905.00		
45+00.00	45+51.00	51.00	32.00	1632.00		
45+51.00	45+59.00	8.00	(32.00+40.00)/2	288.00		
45+59.00	45+64.00	5.00	40.00	200.00		
ADD EXTRA AREA - (2) 3' R CURB TURNOUTS				9.66		
ADD EXTRA AREA - NE INTERSECTION TURNOUT				129.80*		
ADD EXTRA AREA - SE INTERSECTION TURNOUT				424.23*		
<b>FAIRFIELD AVENUE INTERSECTION</b>						
9+63	9+83.72			784.33*		
<b>PROFESSOR STREET</b>						
10+15.72	11+13.25	97.53	24.00	2340.72		
11+13.25	11+21.25	8.00	(24.00+40.00)/2	256.00		
11+21.25	11+26.25	5.00	40.00	200.00		
ADD EXTRA AREA - (2) 3' R CURB TURNOUTS				9.66		
12+76.32	12+81.32	5.00	40.00	200.00		
12+81.32	12+89.32	8.00	(40.00+24.00)/2	256.00		
12+89.32	14+13.00	123.68	24.00	2968.32		
14+13.00	14+21.00	8.00	(24.00+40.00)/2	256.00		
14+21.00	14+26.00	5.00	40.00	200.00		
ADD EXTRA AREA - (4) 3' R CURB TURNOUTS				19.32		
18+01.10	18+06.10	5.00	40.00	200.00		
18+06.10	18+14.10	8.00	(40.00+32.00)/2	288.00		
18+14.10	18+44.09	29.99	32.00	959.68		
18+44.09	19+08.14	64.05	32.00	2049.60		
19+08.14	19+38.10	29.96	32.00	958.72		
19+38.10	19+46.10	8.00	(32.00+40.00)/2	288.00		
19+46.10	19+51.10	5.00	40.00	200.00		
ADD EXTRA AREA - (2) 3' R CURB TURNOUTS				9.66		
22+47.00	22+52.00	5.00	40.00	200.00		
22+52.00	22+60.00	8.00	(40.00+32.00)/2	288.00		
22+60.00	22+65.00	5.00	32.00	160.00		
22+65.00	22+73.00	8.00	(32.00+24.00)/2	224.00		
22+73.00	23+90.85	117.85	24.00	2828.40		
23+90.85	23+98.85	8.00	(24.00+40.00)/2	256.00		
23+98.85	24+03.85	5.00	40.00	200.00		
ADD EXTRA AREA - (4) 3' R CURB TURNOUTS				19.32		
<b>LITERARY AVENUE</b>						
54+33.00	54+38.00	5.00	34.00	170.00		
54+38.00	54+43.00	5.00	(34.00+24.00)/2	145.00		
54+43.00	54+88.00	45.00	24.00	1080.00		
55+12.00	55+54.61	42.61	24.00	1022.64		
55+54.61	55+59.61	5.00	(34.00+24.00)/2	145.00		
55+59.61	55+64.61	5.00	34.00	170.00		
ADD EXTRA AREA - (4) 3' R CURB TURNOUTS				19.32		
ADD EXTRA AREA - NE INTERSECTION TURNOUT				135.43*		
ADD EXTRA AREA - NW INTERSECTION TURNOUT				132.84*		
ADD EXTRA AREA - SE INTERSECTION TURNOUT				132.84*		
ADD EXTRA AREA - SW INTERSECTION TURNOUT				135.43*		
<b>SUBTOTALS "A"</b>				<b>26484.42</b>	<b>0</b>	

\* = CAD MEASURED AREA.

STATION		LENGTH	ASPHALT WIDTH	ASPHALT AREA "A"	FULL-DEPTH REPLACE. WIDTH	REPLACE. AREA "R"
FROM	TO	FEET	FEET	SQ FT	FEET	SQ FT
<b>COLLEGE AVENUE</b>						
64+25.00	64+30.00	5.00	30.00	150.00		
64+30.00	64+33.00	3.00	(30.00+24.00)/2	81.00		
64+33.00	64+80.00	47.00	24.00	1128.00		
64+80.00	64+88.00	8.00	12.00	96.00		
65+12.00	65+20.00	8.00	12.00	96.00		
65+20.00	65+49.55	29.55	24.00	709.20		
65+49.55	65+52.55	3.00	(24.00+27.00)/2	76.50		
65+52.55	65+66.00	13.45	27.00	363.15	27.00	363.15
65+66.00	65+69.00	3.00	(27.00+30.00)/2	85.50	(27.00+30.00)/2	85.50
65+69.00	65+74.00	5.00	30.00	150.00	30.00	150.00
ADD EXTRA AREA - (4) 3' R CURB TURNOUTS				19.32		4.83
ADD EXTRA AREA - NE INTERSECTION TURNOUT				134.11*		
ADD EXTRA AREA - NW INTERSECTION TURNOUT				85.84*		
ADD EXTRA AREA - SE INTERSECTION TURNOUT				85.84*		
ADD EXTRA AREA - SW INTERSECTION TURNOUT				134.11*		
<b>JEFFERSON AVENUE</b>						
74+38.00	74+43.00	5.00	34.00	170.00		
74+43.00	74+48.00	5.00	(34.00+24.00)/2	145.00		
74+48.00	74+88.00	40.00	24.00	960.00		
75+12.00	75+52.00	40.00	24.00	960.00		
75+52.00	75+57.00	5.00	(24.00+34.00)/2	145.00		
75+57.00	75+62.00	5.00	34.00	170.00		
ADD EXTRA AREA - (4) 3' R CURB TURNOUTS				19.32		
ADD EXTRA AREA - NE INTERSECTION TURNOUT				134.49*		
ADD EXTRA AREA - NW INTERSECTION TURNOUT				133.76*		
ADD EXTRA AREA - SE INTERSECTION TURNOUT				133.76*		
ADD EXTRA AREA - SW INTERSECTION TURNOUT				134.49*		
<b>SUBTOTALS "B"</b>				<b>6500.39</b>	<b>603.48</b>	
<b>SUBTOTALS "A"</b>				<b>26484.42</b>	<b>0</b>	
<b>TOTALS TO QUANTITY CALCULATIONS</b>				<b>32984.81</b>	<b>603.48</b>	

\* = CAD MEASURED AREA.

PAVEMENT QUANTITY CALCULATIONS

ASPHALT AREA "A"	REPLACE. AREA "R"	202	204	254	304	305	407	407	448	448
		PAVEMENT REMOVED (BRICK BASE)	SUBGRADE COMPACTION	PAVEMENT PLANING, ASPHALT CONCRETE	6" (MIN.) AGGREGATE BASE	9" (MIN.) CONCRETE BASE	TACK COAT, TRACKLESS TACK, INT. COURSE	TACK COAT, TRACKLESS TACK, SUR. COURSE	1 1/4" ASPH. CONC. SURFACE COURSE	ASPH. CONC. INTERMEDIATE COURSE
SQ FT	SQ FT	"R"*1/9 SQ YD	"R"*1/9 SQ YD	("A"-R)*1/9 SQ YD	"R"*6/12* 1/27 CU YD	"R"*9/12*1/27 CU YD	"A"*1/9*0.10 GALLON	"A"*1/9*0.05 GALLON	"A"*1/9 SQ YD	"A"*1.75/12*1/27 CU YD
32984.81	603.48	67.05	67.05	3597.93	11.18	16.76	366.50	183.25	3664.98	178.16
<b>QUANTITIES CARRIED TO GENERAL SUMMARY</b>		<b>67</b>	<b>67</b>	<b>3598</b>	<b>12</b>	<b>17</b>	<b>367</b>	<b>184</b>	<b>3665</b>	<b>179</b>

CALCULATED  
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CALCULATIONS

CUR-PROFESSOR STREET INTERSECTIONS

13  
40



**DRAINAGE SUBSUMMARY**

SHEET NO.	REF. NO.	STATION		SIDE	202	603	603	604	604	604	604	604
		FROM	TO		CATCH BASIN REMOVED	12" CONDUIT, TYPE B (VCP)	15" CONDUIT, TYPE B (VCP)	2-2B CATCH BASIN W/SUMP	2-2B CATCH BASIN W/SUMP & TRAP	CB-1 CATCH BASIN	INLET BASIN W/SUMP	MH-1 MANHOLE
					EACH	FT	FT	EACH	EACH	EACH	EACH	EACH
17	1-D	44+14	44+16	LT		35			1			
	2-D	45+49		LT	1	29			1			
	3-D	10+67		LT		8			1			
	4-D	10+71		RT	1	12			1			
	5-D	13+48	54+48.5	RT	1	59				1		
	6-D	54+40.5		LT/RT		29				1		
	7-D	13+88	13+93	LT	1	22			1			
	8-D	13+48	13+92	RT		48			1			
18	9-D	64+49		LT/RT	1	37		1				
	10-D	18+76	64+49	RT	1	40			1			
	11-D	19+24		LT	1	14			1			
	12-D	19+16		RT		8			1			
	13-D	22+55	22+96	RT		41				1		
	14-D	22+96		RT			8				1	
	15-D	22+96	74+45	LT/RT	1	45			1			
	16-D	74+45		LT/RT	1	30				1		
	17-D	22+95		LT		8			1			
	18-D	23+87		LT		8			1			
	19-D	23+82		RT			10		1			
+ CONTINGENCY=						50	10					
<b>TOTALS TO GENERAL SUMMARY</b>					<b>9</b>	<b>523</b>	<b>28</b>	<b>1</b>	<b>12</b>	<b>3</b>	<b>2</b>	<b>1</b>

**ADJUSTMENT AND WATER WORK SUBSUMMARY**

SHEET NO.	REF. NO.	STATION	SIDE	604	604	SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL
				MANHOLE ADJUSTED TO GRADE	MONUMENT BOX ADJUSTED TO GRADE	ADJUST HYDRANT TO GRADE	ADJUST EXISTING VALVE BOX TO GRADE	ADJUST EXISTING CURB VALVE BOX TO GRADE	ADJUST WATER MANHOLE COVER TO GRADE	EXTEND WATER SERVICE CONNECT.
				EACH	EACH	EACH	EACH	EACH	EACH	EACH
17	1-A	44+14	RT	1						
	2-A	44+65	RT				1			
	3-A	45+07	RT				1			
	4-A	45+32	RT				1			
	5-A	43+98	LT					1		
	6-A	10+47	LT						1	
	1-W	10+81	LT							1
	7-A	13+15	RT			1	1			
	8-A	13+20	RT				1			
	9-A	13+31	RT				1			
	10-A	13+48	RT	1						
	11-A	13+51	RT		1					
	12-A	13+80	CL				1			
	13-A	54+58	RT				1			
	14-A	55+40	RT				1			
	15-A	55+41	LT				1			
	16-A	55+62	LT						1	
	2-W	14+11	RT						1	1
18	17-A	18+41	RT			1	1			
	18-A	18+44	RT				1			
	19-A	18+67	LT	1						
	20-A	18+76	RT	1						
	21-A	18+98	LT				1			
	22-A	19+11	RT				1			
	23-A	64-57	LT				1			
	24-A	65+41	LT				1			
	25-A	65+61	LT					1		
	3-W	19+39	RT							1
	26-A	22+74	RT					1	1	
	27-A	22+88	LT						1	
	28-A	23+04	RT					1		
	29-A	23+27	RT	1						
	30-A	23+71	RT				1			
	31-A	75+40	LT				1			
	32-A	75+43	LT			1	1			
	33-A	75+52	RT					1		
+ CONTINGENCY=							2	2		2
<b>TOTALS TO GENERAL SUMMARY</b>				<b>5</b>	<b>1</b>	<b>3</b>	<b>21</b>	<b>7</b>	<b>5</b>	<b>5</b>

**SIDEWALK, DRIVEWAY, AND SODDING INSTALLATION QUANTITIES**

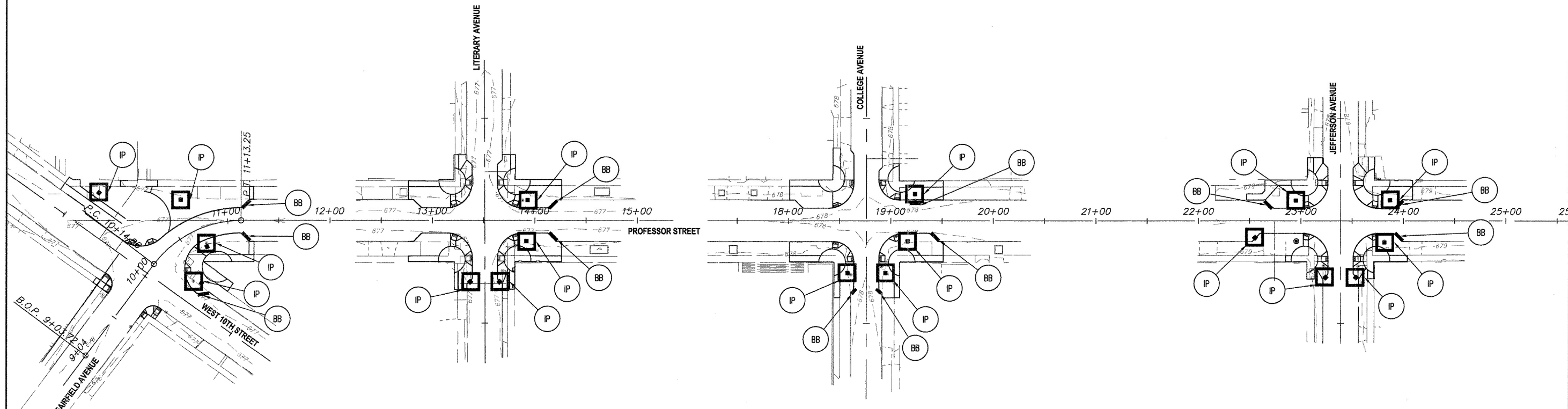
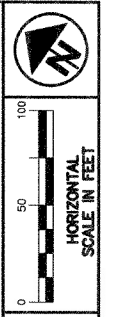
**PART 2, ALTERNATE 1 ADD ITEMS**

LOCATION	SPECIAL	204	452	452	608	608	608	653	660	608	608	608												
	BIO-RETENTION CELL	SUBGRADE COMPACTION	6" NON-REINFORCED CONCRETE PAVEMENT	8" NON-REINFORCED CONCRETE PAVEMENT	6" CONCRETE WALK SCORING PATTERN PER PLAN*	6" CONCRETE WALK*	CURB RAMP WITH TILE, INCLUDING LAYOUT	TOPSOIL FURNISHED AND PLACED	SODDING UNSTAKED	6" CONCRETE WALK	INTEGRALLY COLORED & STAMPED CONCRETE	6" CONCRETE WALK RADIAL SCORING PATTERN												
													SQ YD	SQ YD	SQ YD	SQ YD	SQ FT	SQ FT	CORNER	CU YD	SQ YD	SQ FT	SQ FT	SQ FT
<b>FAIRFIELD/W. 10TH/PROFESSOR</b>																								
						185	1			185														
						159	1			159														
	41	121		121	1735	560	1	25	221	560	956	779												
	32				434	617	1	2	15	299	401	351												
<b>PROFESSOR/LITERARY</b>																								
					400	646	1	10	90	344	507	195												
					397	783	1	10	85	278	699	203												
	20				401	752	1	2	14	291	662	200												
	16				395	660	1	3	24	362	498	195												
<b>PROFESSOR/COLLEGE</b>																								
					362	648	1	15	130	369	457	184												
	13				368	509	1	7	59	403	276	198												
	17	23		23	339	412	1	3	24	271	304	176												
	34				354	632	1	2	15	386	422	178												
<b>PROFESSOR/JEFFERSON</b>																								
	17				403	915	1	3	20	525	580	213												
		70	70		402	579	1	8	69	199	527	255												
	14				399	723	1	2	17	366	561	195												
	16				391	640	1	2	14	263	600	168												
+ CONTINGENCY =																	9	80						
<b>QUANTITIES CARRIED TO GENERAL SUMMARY</b>													<b>220</b>	<b>214</b>	<b>70</b>	<b>144</b>	<b>6780*</b>	<b>9420*</b>	<b>16</b>	<b>103</b>	<b>877</b>	<b>5260</b>	<b>7450</b>	<b>3490</b>


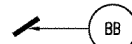
\* = INDICATES ITEM AND QUANTITY TO BE DEDUCTED WITH THE PART 2, ALTERNATE 1 BID ITEMS.

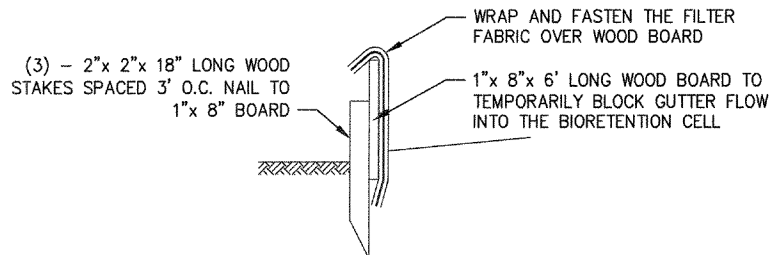
CALCULATIONS

CUI-PROFESSOR STREET INTERSECTIONS



**LEGEND:**

-  INLET PROTECTION AS PER STANDARD CONSTRUCTION DRAWING DM-4.4
-  BIORETENTION TEMPORARY BLOCK AS PER DETAIL THIS SHEET



**TEMPORARY BLOCK AT OPENING**

**NOTES:**

1. THE PURPOSE OF THE TEMPORARY BLOCK IS TO PROTECT THE CELL FROM DAMAGES BY PREVENTING SEDIMENT LADEN RUNOFF AND/OR HIGH FLOWS FROM ENTERING THE CELL WHILE PLANT MATERIALS ARE ESTABLISHING.
2. INSTALL THE BLOCKS IMMEDIATELY FOLLOWING THE INSTALLATION OF THE CURB OPENING. REPLACE THE BOARDS IF THEY BECOME DAMAGED OR DO NOT DIVERT THE FLOW PAST THE CURB OPENING.
3. DO NOT ALLOW SEDIMENT INTO THE BIORETENTION CELL. CURB OPENINGS MUST REMAIN BLOCKED. DO NOT ALLOW RUNOFF FROM PAVEMENT CLEANING OPERATIONS OR RUNOFF FROM EXPOSED SOILS INTO THE CELL.
4. REMOVE THE BOARD AND STAKES AFTER FIELD OBSERVATIONS DETERMINE THE PLANTINGS ARE WELL ESTABLISHED AND THE CELL IS READY TO ACCEPT RUNOFF.

**SITE DESCRIPTION:**

**PROJECT NAME:** PROFESSOR STREET INTERSECTIONS

**PROJECT LOCATION:** CITY OF CLEVELAND, CUYAHOGA COUNTY, OHIO

**CONSTRUCTION ACTIVITY:** PROJECT CONSISTS OF THE IMPROVEMENT OF PROFESSOR STREET AT THE INTERSECTIONS OF WEST 10TH STREET, LITERARY AVENUE, COLLEGE AVENUE, AND JEFFERSON AVENUE. IMPROVEMENTS INCLUDE THE NARROWING OF THE EXISTING PAVEMENT WIDTH, PLANING AND RESURFACING OF THE EXISTING PAVEMENT, INSTALLATION OF NEW SIDEWALKS AND BIOCELLS, AND STREETSCAPING.

**ESTIMATED TOTAL SITE AREA, TOTAL DISTURBED AREA:** THE TOTAL SITE AREA IS 1.5 ACRES. THE AREA OF THE SITE THAT WILL BE DISTURBED BY CONSTRUCTION IS 1.5 ACRES.

- RUNOFF COEFFICIENTS:**
- PRE-CONSTRUCTION: 0.88
  - POST-CONSTRUCTION: 0.75

**IMPERVIOUS AREA CREATED BY CONSTRUCTION ACTIVITY:** NO ADDITIONAL IMPERVIOUS AREA WILL BE CREATED BY CONSTRUCTION OF THIS PROJECT.

- SOIL TYPES:** THE FOLLOWING SOIL TYPE IS LOCATED WITHIN THE PROJECT SITE:
- UeA - URBAN LAND-ELNORA COMPLEX, NEARLY LEVEL.

**SOURCE:** "SOIL SURVEY OF CUYAHOGA COUNTY, OHIO" ISSUED DECEMBER 1980.

**PRIOR LAND USE:** THE PROJECT AREA HAS BEEN URBANIZED LAND FOR THE PREVIOUS CENTURY.

**NAME OF THE RECEIVING WATER:** THE ENTIRE SITE DISCHARGES INTO EXISTING COMBINATION SEWERS OWNED BY THE CITY OF CLEVELAND. THESE SEWERS DISCHARGE TO THE WESTERLY WASTEWATER TREATMENT PLANT, OPERATED BY THE NORTHEAST OHIO REGIONAL SEWER DISTRICT (NEORS).

**IMPLEMENTATION SCHEDULE:**

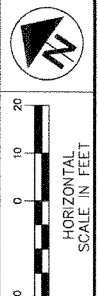
SITE CLEARING AND GRUBBING SHALL NOT COMMENCE UNTIL SUCH TIME THAT THE CONTRACTOR IS PREPARED TO START CONSTRUCTION.

1. INSTALLATION ON THE NEW CATCH BASINS AND SEWER. AFTER INSTALLATION OF THE CATCH BASINS, CONTRACTOR IS TO INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES.
2. PLANING OF THE EXISTING PAVEMENT AND INSTALLATION OF THE NEW PAVEMENT AND SIDEWALK.
3. REMOVAL AND DISPOSAL OF ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES.



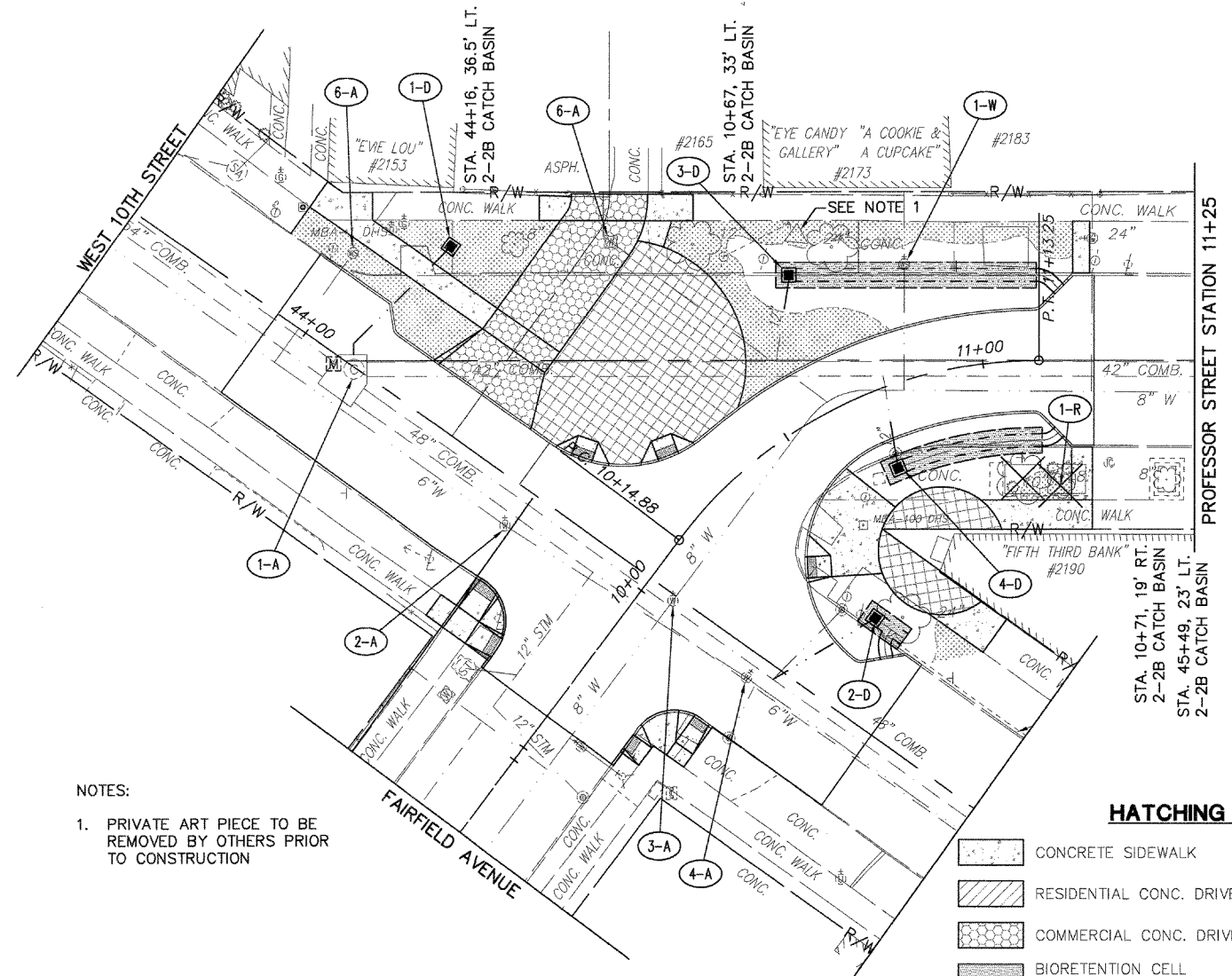
**SHEET REFERENCES**

DESCRIPTION	SHEET NO.
DRAINAGE DETAILS	27-28
INTERSECTION DETAILS	23-24
REMOVAL QUANTITIES	14
WALK, DRIVE, & SODDING QUANTITIES	15
DRAINAGE & ADJUSTMENT QUANTITIES	15
LANDSCAPE PLAN	37-38
STREETSCAPE PLAN	35



**BENCH MARK:**  
 MBA-1 DRILL HOLE SET AT  
 STATION 10+21.25, 118.42' LT.  
 ELEV.=676.32

MBA-2 DRILL HOLE SET AT  
 STATION 13+80.43, 34.29' LT.  
 ELEV.=677.08

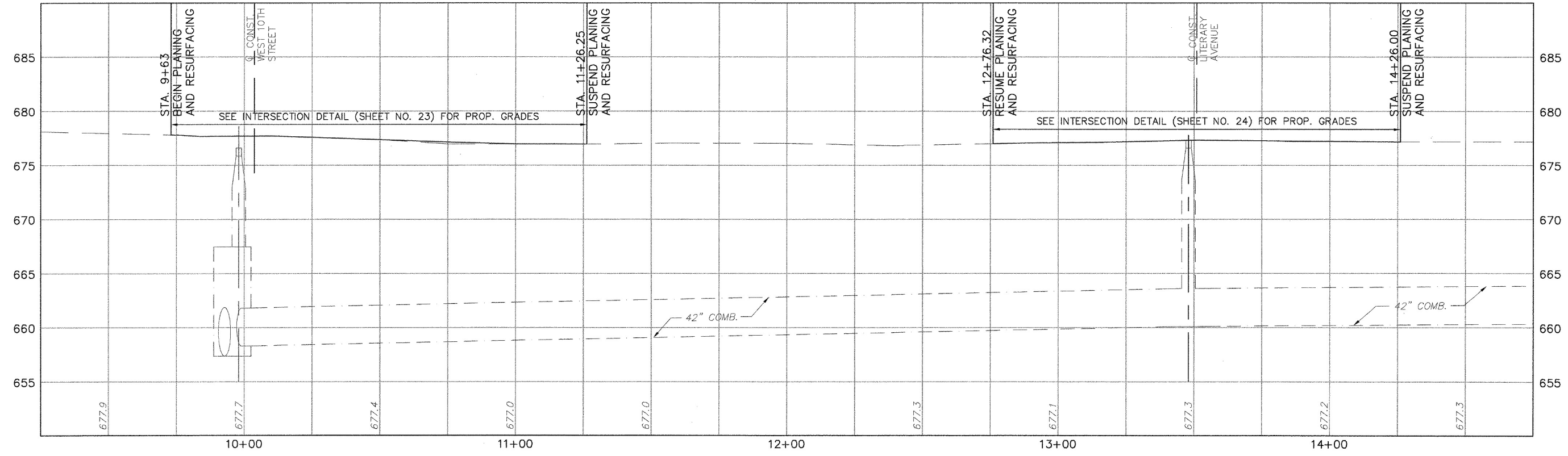
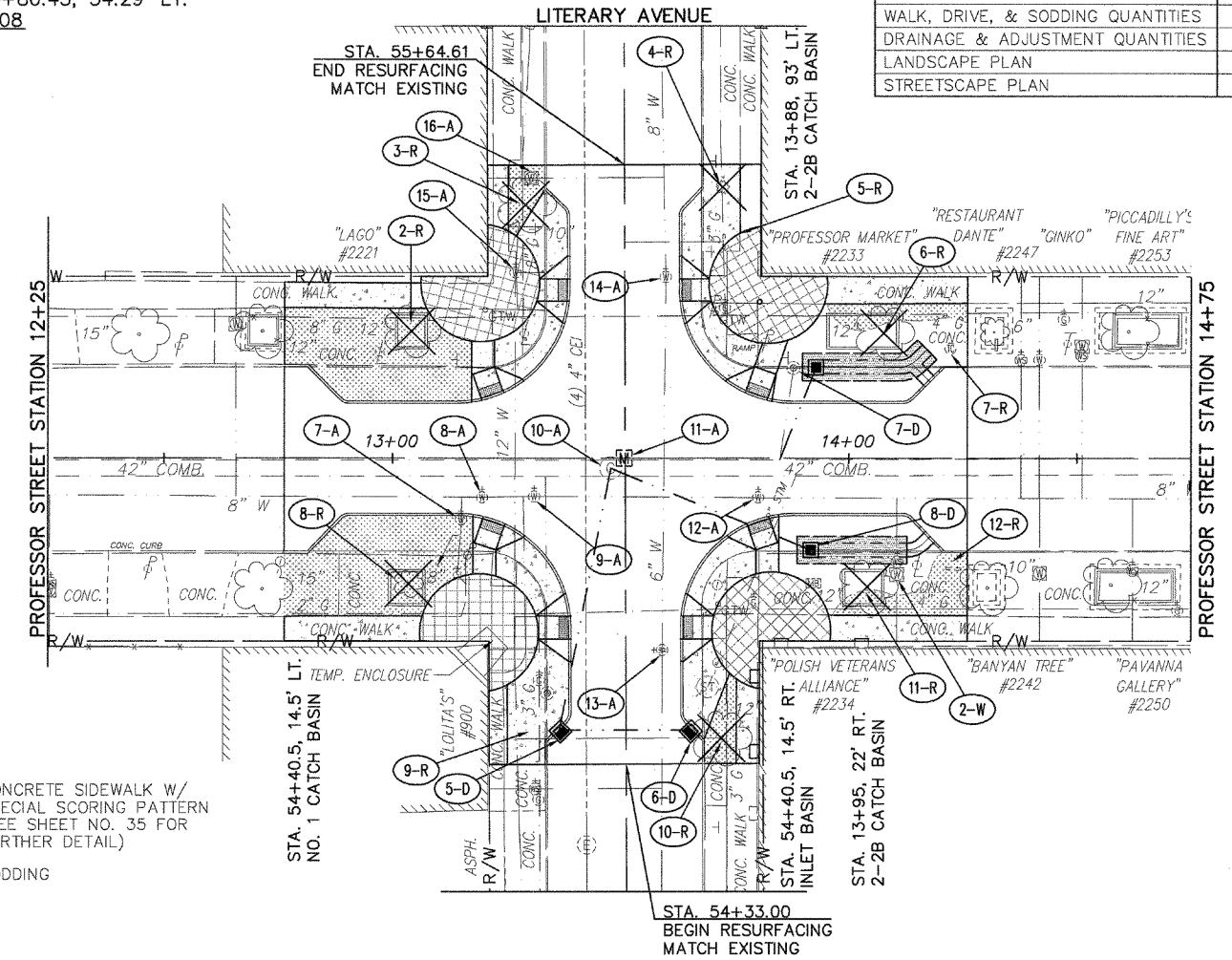


**NOTES:**

- PRIVATE ART PIECE TO BE REMOVED BY OTHERS PRIOR TO CONSTRUCTION

**HATCHING LEGEND:**

- CONCRETE SIDEWALK
- RESIDENTIAL CONC. DRIVE
- COMMERCIAL CONC. DRIVE
- BIORETENTION CELL (SEE DETAIL SHEET NO. 30)
- CONCRETE SIDEWALK W/ SPECIAL SCORING PATTERN (SEE SHEET NO. 35 FOR FURTHER DETAIL)
- SODDING

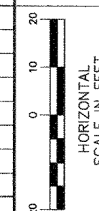


**PLAN AND PROFILE - PROFESSOR STREET STATION 10+00 TO STATION 14+75**

**CUY-PROFESSOR STREET INTERSECTIONS**

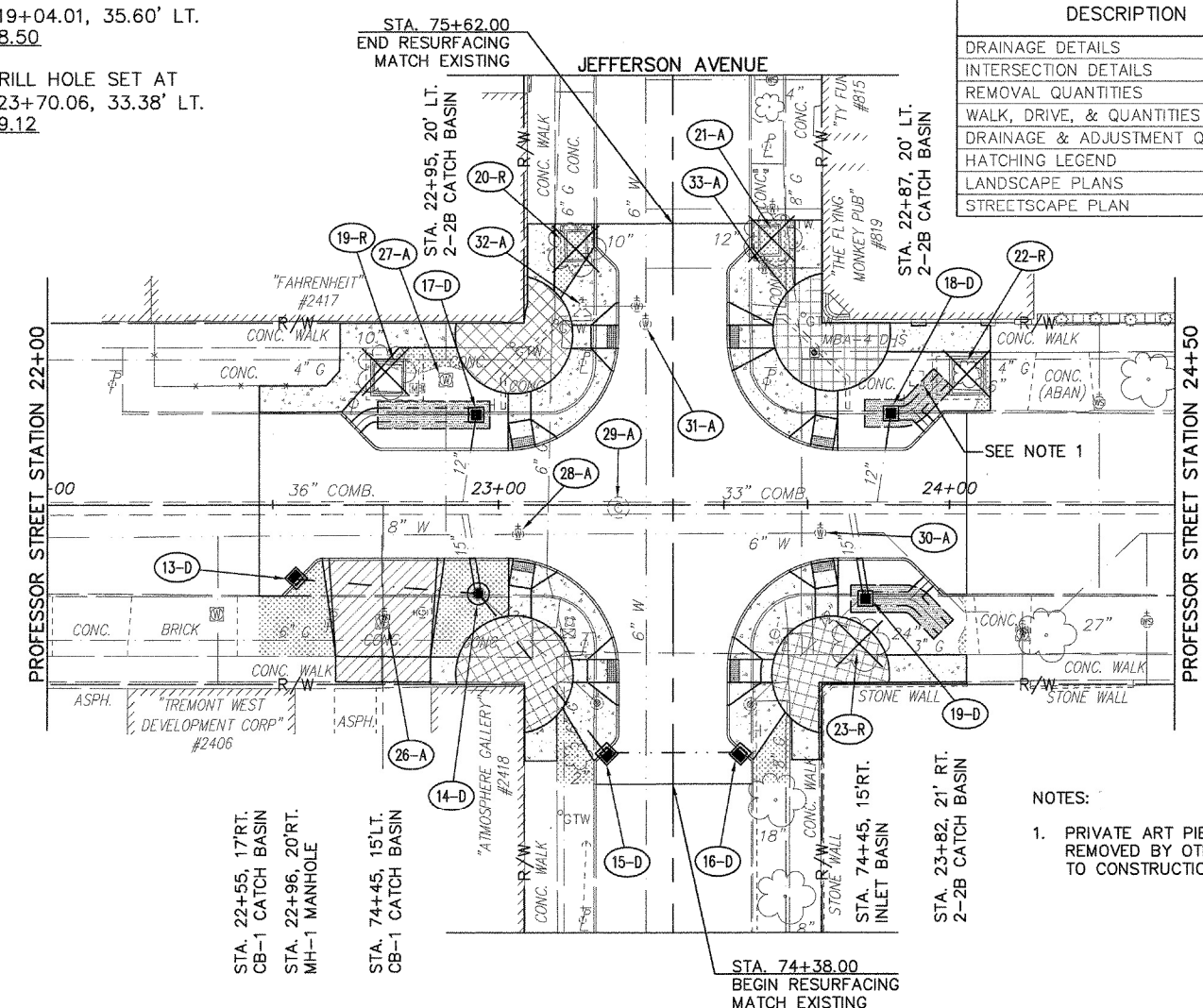
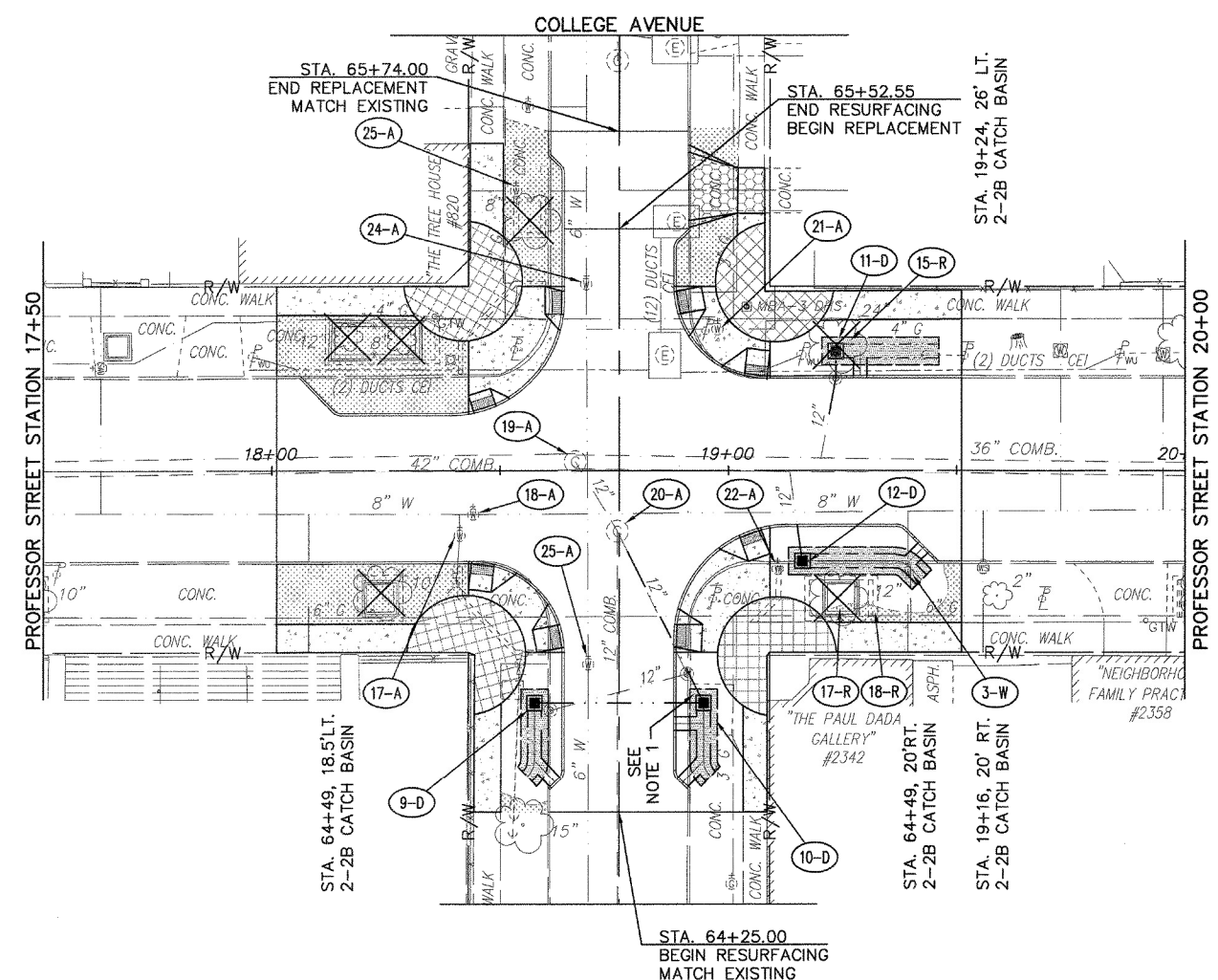
**SHEET REFERENCES**

DESCRIPTION	SHEET NO.
DRAINAGE DETAILS	28-29
INTERSECTION DETAILS	25-26
REMOVAL QUANTITIES	14
WALK, DRIVE, & QUANTITIES	15
DRAINAGE & ADJUSTMENT QUANTITIES	15
HATCHING LEGEND	17
LANDSCAPE PLANS	39-40
STREETSCAPE PLAN	35

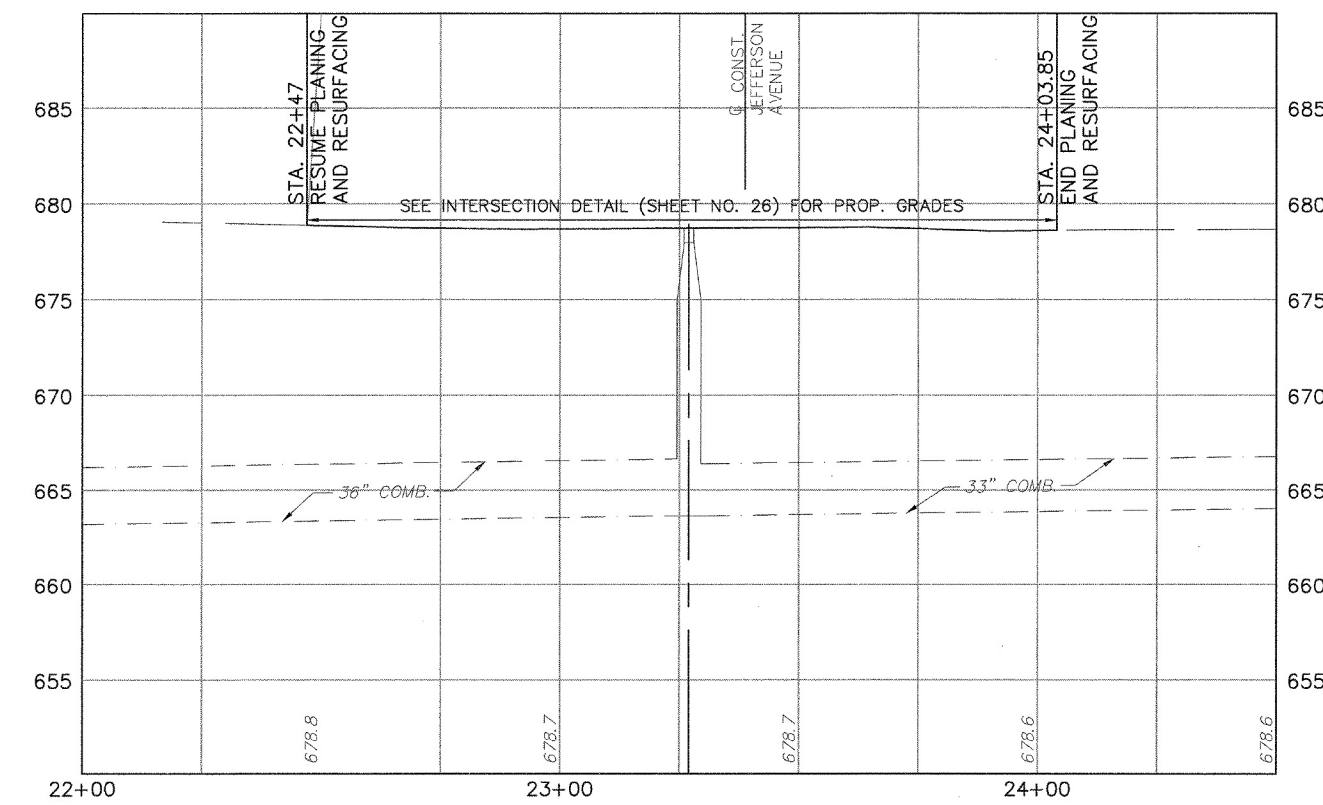
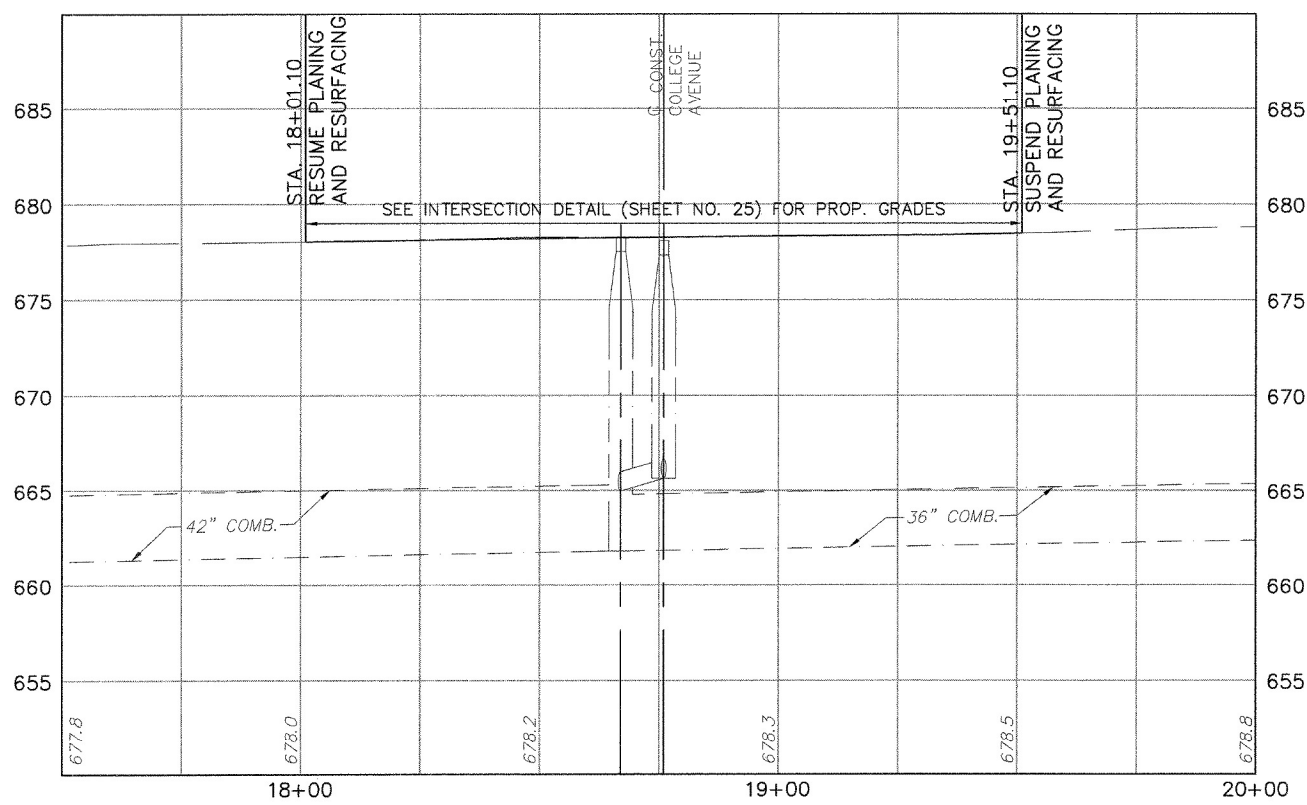


**BENCH MARK:**  
MBA-3 DRILL HOLE SET AT  
STATION 19+04.01, 35.60' LT.  
ELEV.=678.50

MBA-4 DRILL HOLE SET AT  
STATION 23+70.06, 33.38' LT.  
ELEV.=679.12

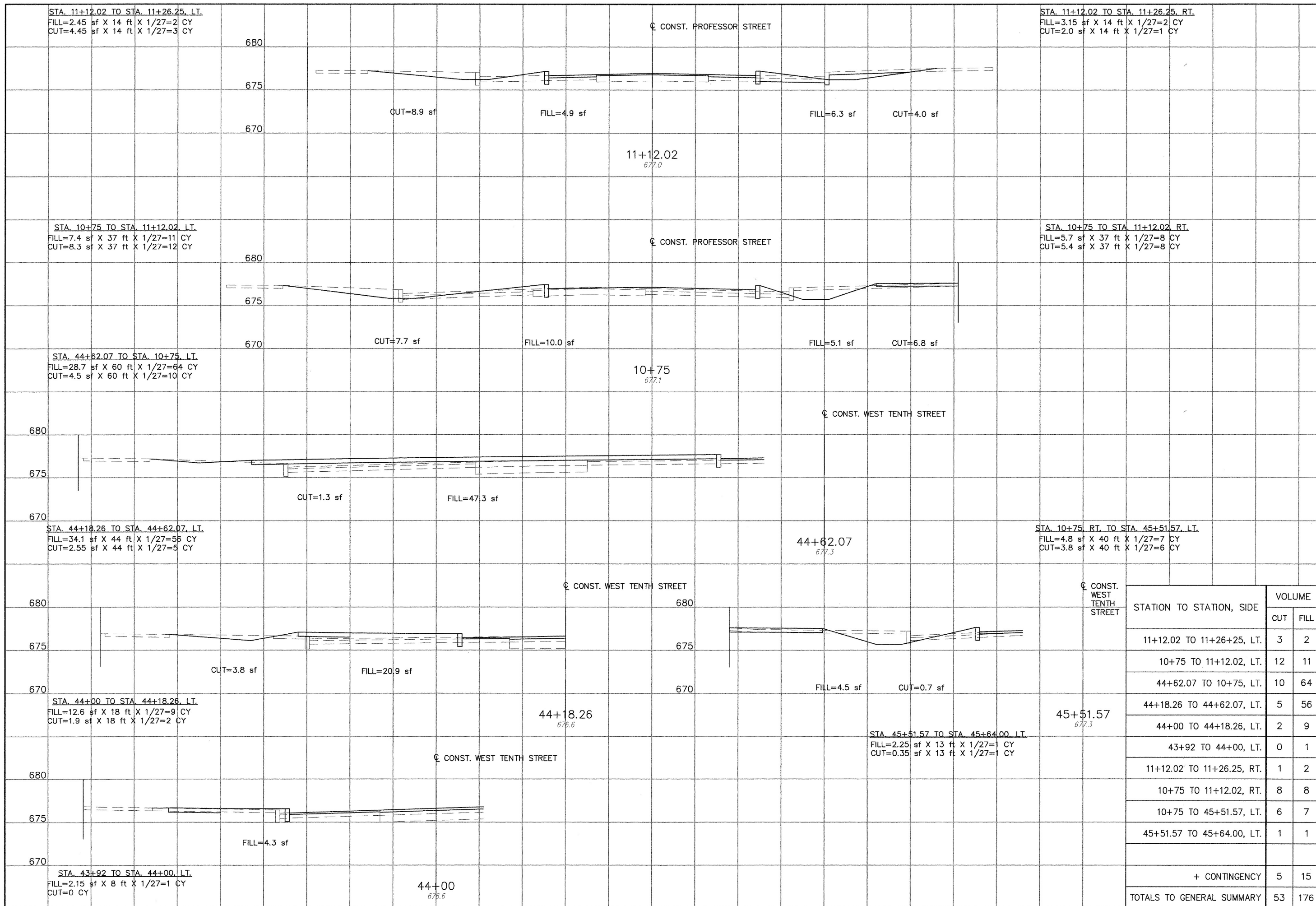


NOTES:  
1. PRIVATE ART PIECE TO BE REMOVED BY OTHERS PRIOR TO CONSTRUCTION



**PLAN AND PROFILE - PROFESSOR STREET  
STATION 17+50 TO STATION 24+50**

**CUY-PROFESSOR STREET INTERSECTIONS**

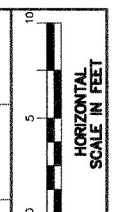


STA. 11+12.02 TO STA. 11+26.25, RT.  
 FILL=3.15 sf X 14 ft X 1/27=2 CY  
 CUT=2.0 sf X 14 ft X 1/27=1 CY

STA. 10+75 TO STA. 11+12.02, RT.  
 FILL=5.7 sf X 37 ft X 1/27=8 CY  
 CUT=5.4 sf X 37 ft X 1/27=8 CY

STA. 10+75, RT. TO STA. 45+51.57, LT.  
 FILL=4.8 sf X 40 ft X 1/27=7 CY  
 CUT=3.8 sf X 40 ft X 1/27=6 CY

STATION TO STATION, SIDE	VOLUME	
	CUT	FILL
11+12.02 TO 11+26+25, LT.	3	2
10+75 TO 11+12.02, LT.	12	11
44+62.07 TO 10+75, LT.	10	64
44+18.26 TO 44+62.07, LT.	5	56
44+00 TO 44+18.26, LT.	2	9
43+92 TO 44+00, LT.	0	1
11+12.02 TO 11+26.25, RT.	1	2
10+75 TO 11+12.02, RT.	8	8
10+75 TO 45+51.57, LT.	6	7
45+51.57 TO 45+64.00, LT.	1	1
+ CONTINGENCY	5	15
TOTALS TO GENERAL SUMMARY	53	176

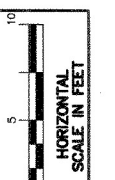


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 RCN

CROSS SECTIONS  
 PROFESSOR STREET AND WEST 10TH STREET

CUT-PROFESSOR STREET INTERSECTIONS

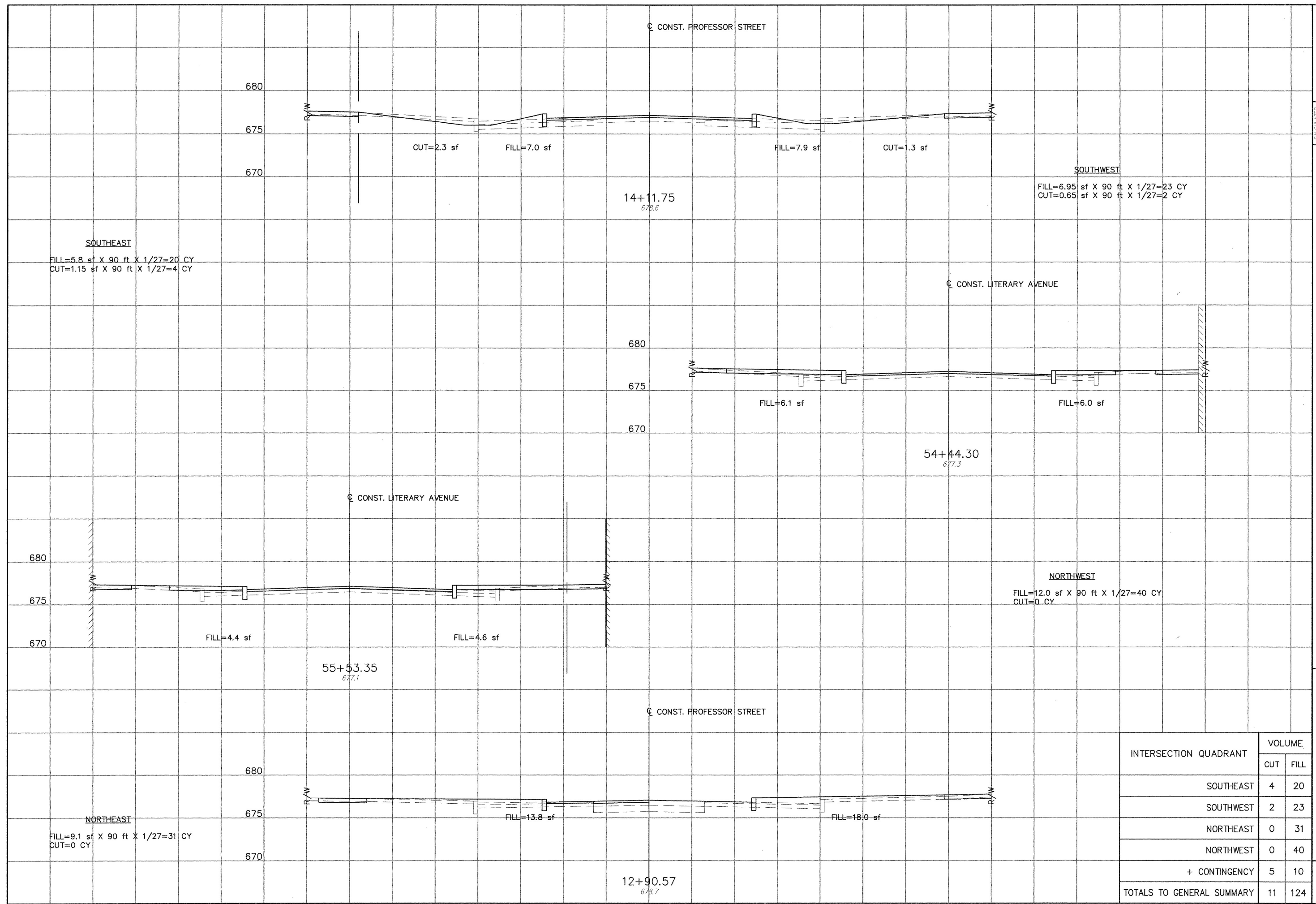
19  
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CALCULATED  
DRP  
CHECKED  
RCN

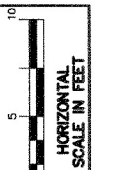
CROSS SECTIONS  
PROFESSOR STREET AND LITERARY AVENUE

CUY-PROFESSOR STREET INTERSECTIONS



INTERSECTION QUADRANT	VOLUME	
	CUT	FILL
SOUTHEAST	4	20
SOUTHWEST	2	23
NORTHEAST	0	31
NORTHWEST	0	40
+ CONTINGENCY	5	10
TOTALS TO GENERAL SUMMARY	11	124

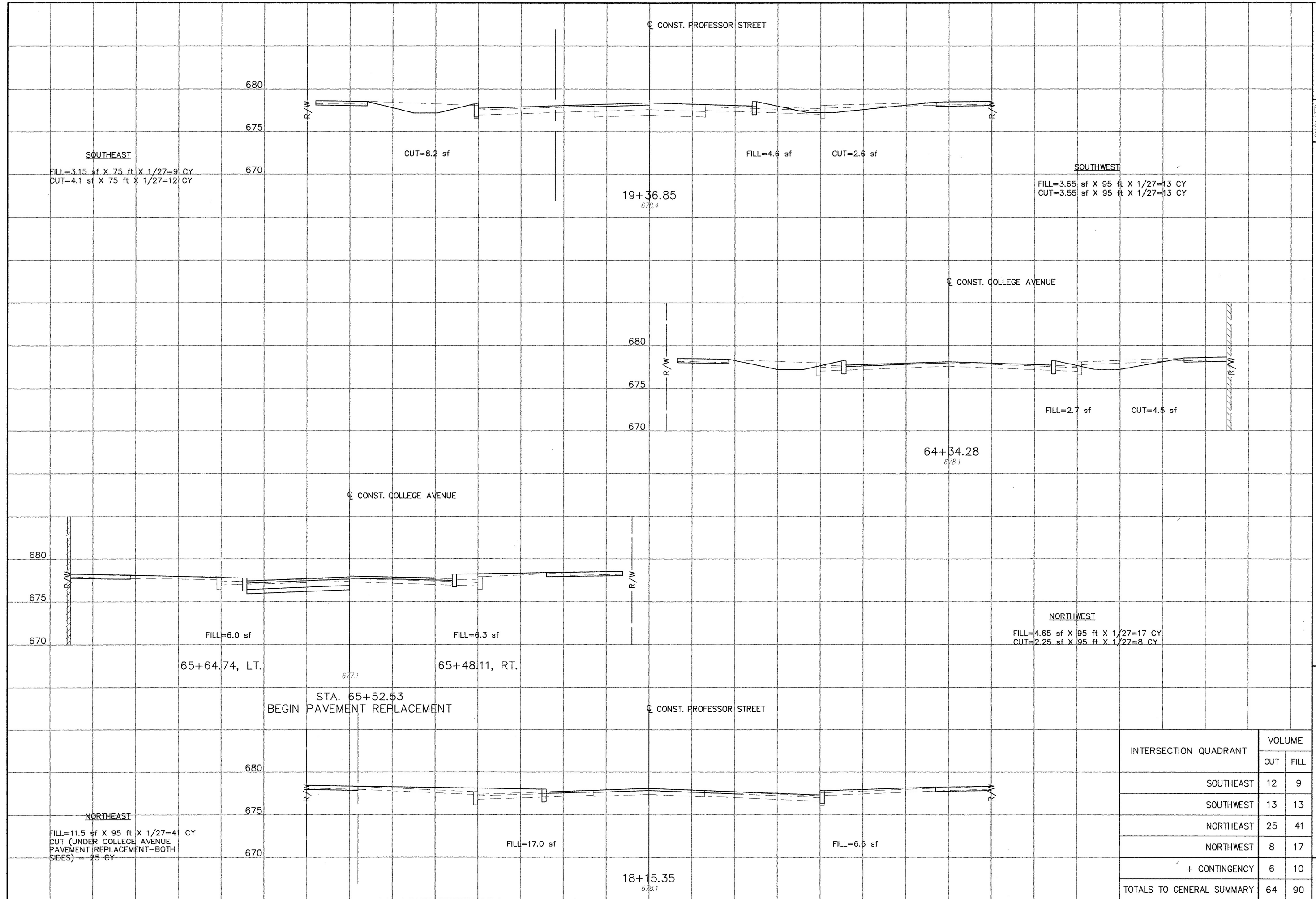
20  
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CALCULATED  
DRP  
CHECKED  
RCN

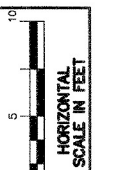
**CROSS SECTIONS  
PROFESSOR STREET AND COLLEGE AVENUE**

**CUT-PROFESSOR STREET INTERSECTIONS**



INTERSECTION QUADRANT	VOLUME	
	CUT	FILL
SOUTHEAST	12	9
SOUTHWEST	13	13
NORTHEAST	25	41
NORTHWEST	8	17
+ CONTINGENCY	6	10
<b>TOTALS TO GENERAL SUMMARY</b>	<b>64</b>	<b>90</b>

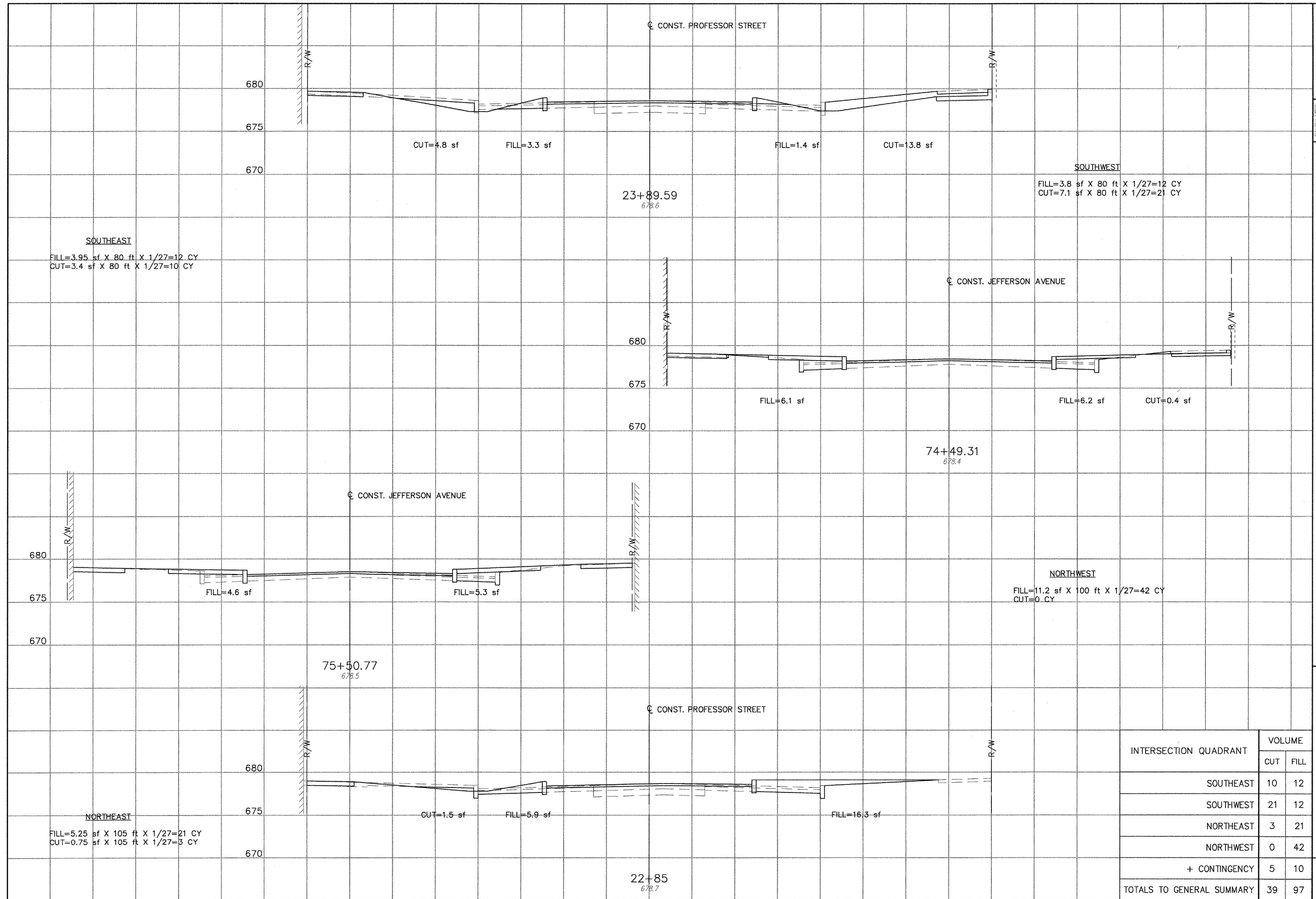
21  
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CALCULATED  
DRP  
CHECKED  
RCN

**CROSS SECTIONS  
PROFESSOR STREET AND JEFFERSON AVENUE**

**CUT-PROFESSOR STREET INTERSECTIONS**



INTERSECTION QUADRANT	VOLUME	
	CUT	FILL
SOUTHEAST	10	12
SOUTHWEST	21	12
NORTHEAST	3	21
NORTHWEST	0	42
+ CONTINGENCY	5	10
<b>TOTALS TO GENERAL SUMMARY</b>	<b>39</b>	<b>97</b>

22  
40

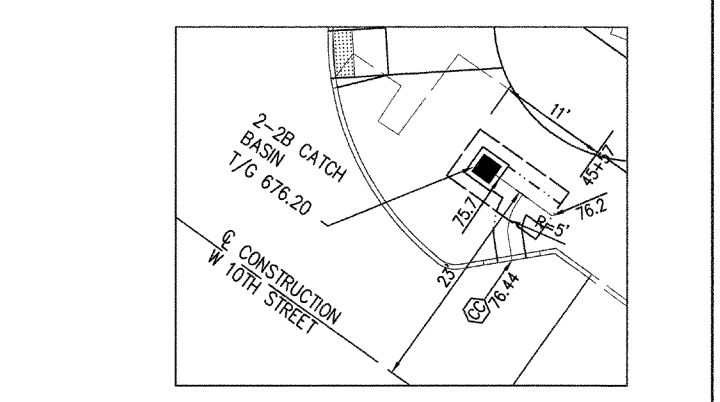
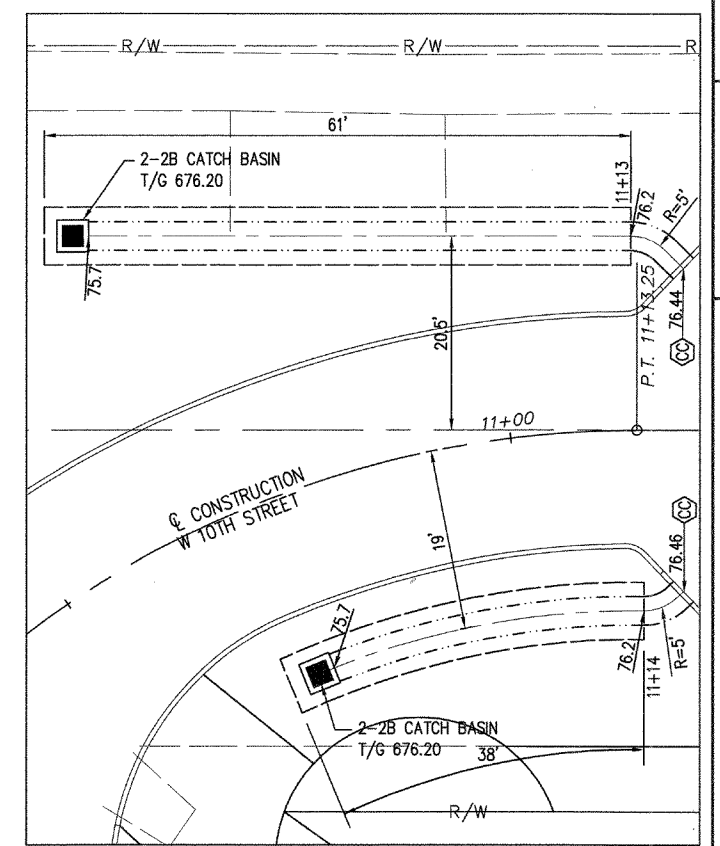
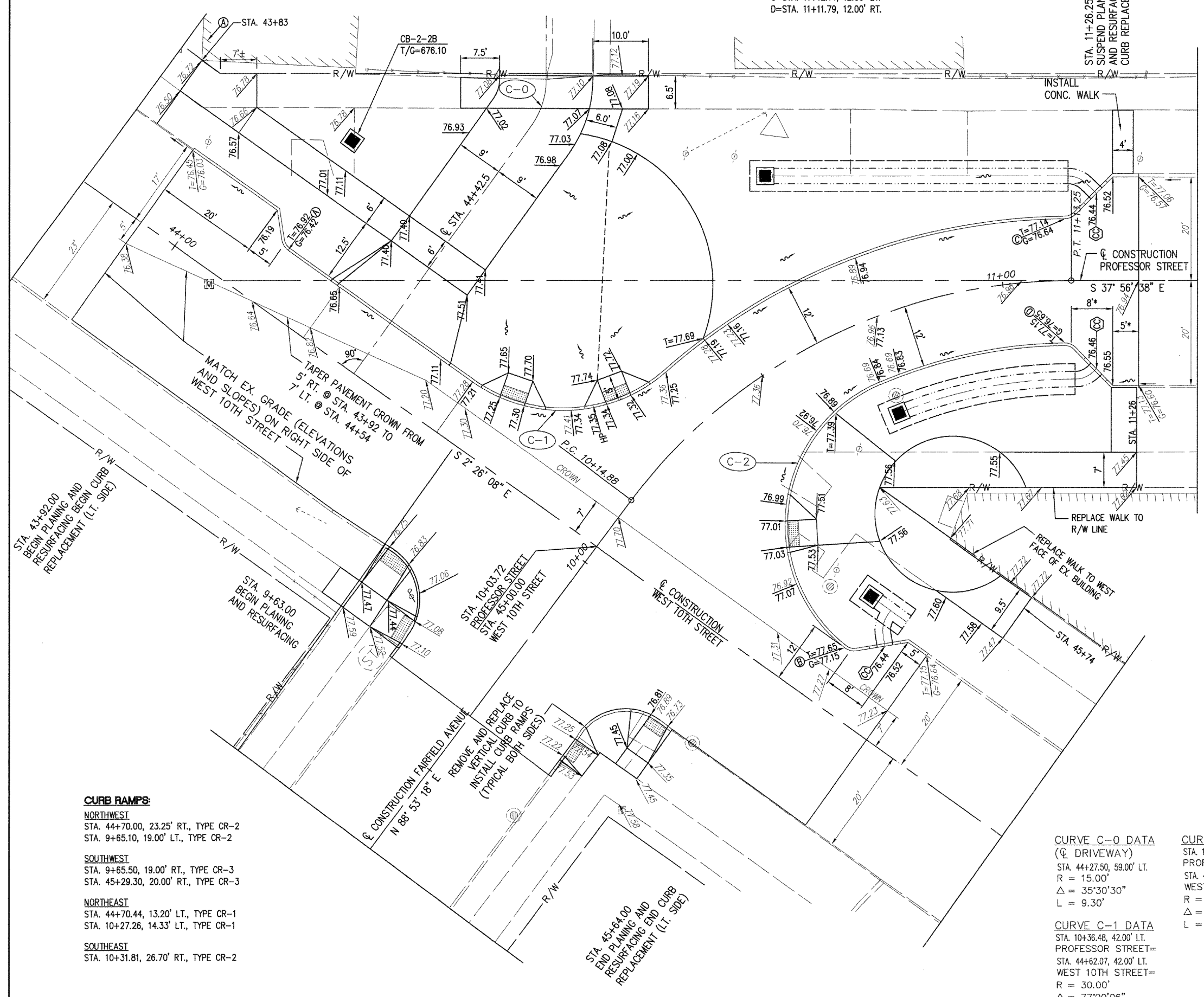


HORIZONTAL SCALE IN FEET

INTERSECTION DETAIL  
PROFESSOR STREET AND WEST 10TH STREET

CURB-PROFESSOR STREET INTERSECTIONS

LOCATIONS  
(P.C. OF 3' CURB RADIUS)  
A=STA. 44+18.24, 12.00' LT.  
B=STA. 45+50.22, 12.00' LT.  
C=STA. 11+12.14, 12.00' LT.  
D=STA. 11+11.79, 12.00' RT.



BIORETENTION CELL LAYOUT DETAILS

- LEGEND:**
- XX.XX— EXISTING ELEVATION (SEE NOTE 5)
  - XX.XX PROPOSED ELEVATION
  - ~ SURFACE FLOW
  - \* TYPICAL FOR BOTH SIDES OF PAVEMENT
  - CC CURB CUT (SEE DETAIL SHEET NO. 30)
  - T= TOP OF CURB ELEVATION
  - G= GUTTER ELEVATION
  - HP HIGH POINT
- NOTES:**
1. UNLESS NOTED, ALL ELEVATIONS ALONG THE CURB ARE GUTTER (BOTTOM OF CURB) ELEVATIONS.
  2. UNLESS NOTED, ALL DIMENSIONS ALONG THE CURB ARE TO THE FACE OF CURB.
  3. ADD 600 TO THE ELEVATION SHOWN FOR ACTUAL ELEVATION.
  4. FOR DRIVEWAY DETAILS, SEE SHEET NO. 30.
  5. THE CONTRACTOR SHALL VERIFY ALL EXISTING ELEVATIONS AND CONTACT THE ENGINEER IF THE ACTUAL ELEVATION VARIES ENOUGH THAT THE PROPOSED SIDEWALKS AND/OR CURB RAMPS AS SHOWN WILL NOT BE COMPLIANT.
  6. FOR SIDEWALK LAYOUTS, SEE SHEET NO. 35 (BASE BID) AND SHEET NO. 36 (ALTERNATE 1 BID)

**CURVE C-0 DATA**  
(@ DRIVEWAY)  
STA. 44+27.50, 59.00' LT.  
R = 15.00'  
Δ = 35°30'30"  
L = 9.30'

**CURVE C-1 DATA**  
STA. 10+36.48, 42.00' LT.  
PROFESSOR STREET=  
STA. 44+62.07, 42.00' LT.  
WEST 10TH STREET=  
R = 30.00'  
Δ = 77°00'06"  
L = 40.32'

**CURVE C-2 DATA**  
STA. 10+70.41, 42.00' RT.  
PROFESSOR STREET=  
STA. 45+51.57, 42.00' LT.  
WEST 10TH STREET=  
R = 30.00'  
Δ = 118°46'05"  
L = 62.19'

**CURB RAMPS:**

- NORTHWEST**  
STA. 44+70.00, 23.25' RT., TYPE CR-2  
STA. 9+65.10, 19.00' LT., TYPE CR-2
- SOUTHWEST**  
STA. 9+65.50, 19.00' RT., TYPE CR-3  
STA. 45+29.30, 20.00' RT., TYPE CR-3
- NORTHEAST**  
STA. 44+70.44, 13.20' LT., TYPE CR-1  
STA. 10+27.26, 14.33' LT., TYPE CR-1
- SOUTHEAST**  
STA. 10+31.81, 26.70' RT., TYPE CR-2

MATCH EX. GRADE (ELEVATIONS AND SLOPES) ON RIGHT SIDE OF WEST 10TH STREET

TAPER PAVEMENT CROWN FROM 5' RT. @ STA. 43+92 TO 7' LT. @ STA. 44+54

STA. 43+92.00  
BEGIN PLANNING AND RESURFACING BEGIN CURB REPLACEMENT (LT. SIDE)

STA. 9+63.00  
BEGIN PLANNING AND RESURFACING

STA. 10+03.72  
PROFESSOR STREET  
STA. 45+00.00  
WEST 10TH STREET

REMOVE AND REPLACE VERTICAL CURB TO INSTALL CURB RAMPS (TYPICAL BOTH SIDES)

STA. 45+84.00  
END PLANNING AND RESURFACING END CURB REPLACEMENT (LT. SIDE)

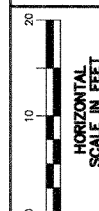
STA. 11+26.25  
SUSPEND PLANNING AND RESURFACING CURB REPLACEMENT

INSTALL CONC. WALK

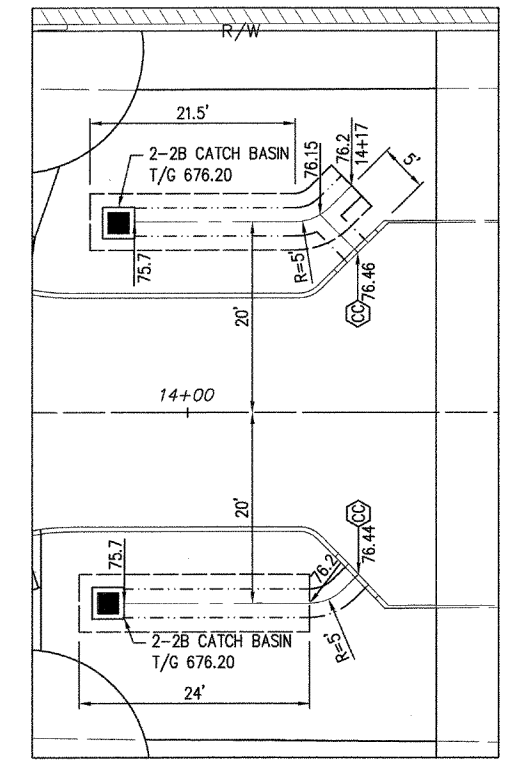
CONSTRUCTION PROFESSOR STREET

REPLACE WALK TO R/W LINE

REPLACE WALK TO WEST FACE OF EX. BUILDING



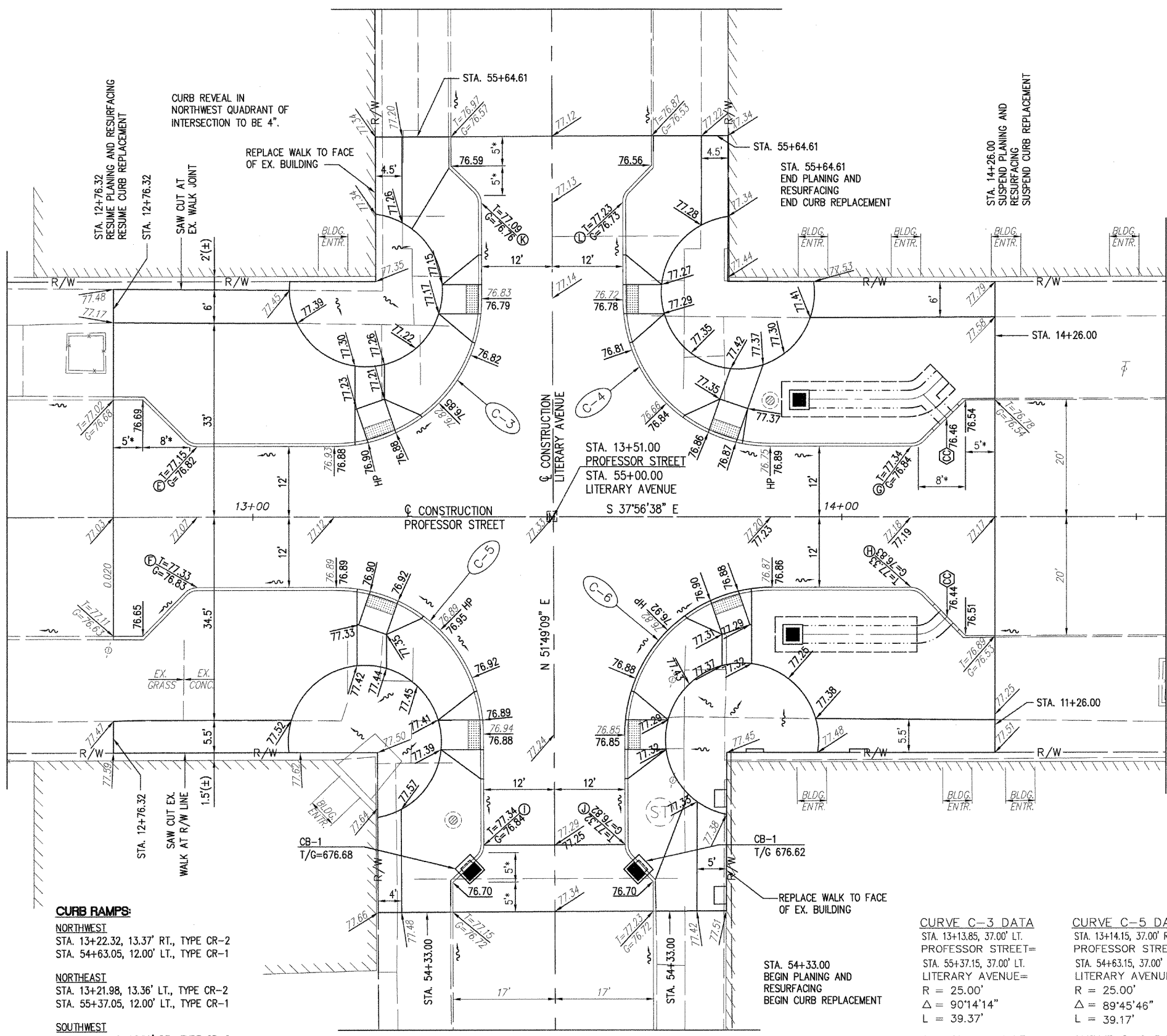
- LOCATIONS  
(P.C. OF 3' CURB RADIUS)  
E=STA. 12+90.56, 12.00' LT.  
F=STA. 12+90.56, 12.00' RT.  
G=STA. 14+11.76, 12.00' LT.  
H=STA. 14+11.76, 12.00' RT.  
I=STA. 54+44.24, 12.00' LT.  
J=STA. 54+44.24, 12.00' RT.  
K=STA. 55+53.37, 12.00' LT.  
L=STA. 55+53.37, 12.00' RT.



BIORETENTION CELL LAYOUT DETAILS

- LEGEND:**
- XX.XX EXISTING ELEVATION (SEE NOTE 5)
  - XX.XX PROPOSED ELEVATION
  - ~ SURFACE FLOW
  - \* TYPICAL FOR BOTH SIDES OF PAVEMENT
  - ⊙ CURB CUT (SEE DETAIL SHEET NO. 30)
  - T= TOP OF CURB ELEVATION
  - G= GUTTER ELEVATION
  - HP HIGH POINT

- NOTES:**
1. UNLESS NOTED, ALL ELEVATIONS ALONG THE CURB ARE GUTTER (BOTTOM OF CURB) ELEVATIONS.
  2. UNLESS NOTED, ALL DIMENSIONS ALONG THE CURB ARE TO THE FACE OF CURB.
  3. ADD 600 TO THE ELEVATION SHOWN FOR ACTUAL ELEVATION.
  4. FOR DRIVEWAY DETAILS, SEE SHEET NO. 30.
  5. THE CONTRACTOR SHALL VERIFY ALL EXISTING ELEVATIONS AND CONTACT THE ENGINEER IF THE ACTUAL ELEVATION VARIES ENOUGH THAT THE PROPOSED SIDEWALKS AND/OR CURB RAMPAS AS SHOWN WILL NOT BE COMPLIANT.
  6. FOR SIDEWALK LAYOUTS, SEE SHEET NO. 35 (BASE BID) AND SHEET NO. 36 (ALTERNATE 1 BID).



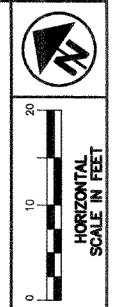
- CURB RAMPS:**
- NORTHWEST**  
STA. 13+22.32, 13.37' RT., TYPE CR-2  
STA. 54+63.05, 12.00' LT., TYPE CR-1
- NORTHEAST**  
STA. 13+21.98, 13.36' LT., TYPE CR-2  
STA. 55+37.05, 12.00' LT., TYPE CR-1
- SOUTHWEST**  
STA. 13+80.02, 13.36' RT., TYPE CR-2  
STA. 54+62.95, 12.00' RT., TYPE CR-1
- SOUTHEAST**  
STA. 13+79.64, 13.38' LT., TYPE CR-2  
STA. 55+36.95, 12.00' RT., TYPE CR-1

- CURVE C-3 DATA**  
STA. 13+13.85, 37.00' LT.  
PROFESSOR STREET=  
STA. 55+37.15, 37.00' LT.  
LITERARY AVENUE=  
R = 25.00'  
Δ = 90°14'14"  
L = 39.37'
- CURVE C-5 DATA**  
STA. 13+14.15, 37.00' RT.  
PROFESSOR STREET=  
STA. 54+63.15, 37.00' LT.  
LITERARY AVENUE=  
R = 25.00'  
Δ = 89°45'46"  
L = 39.17'
- CURVE C-4 DATA**  
STA. 13+87.85, 37.00' LT.  
PROFESSOR STREET=  
STA. 55+36.85, 37.00' RT.  
LITERARY AVENUE=  
R = 25.00'  
Δ = 89°45'46"  
L = 39.17'
- CURVE C-6 DATA**  
STA. 13+88.15, 37.00' RT.  
PROFESSOR STREET=  
STA. 54+62.85, 37.00' RT.  
LITERARY AVENUE=  
R = 25.00'  
Δ = 90°14'14"  
L = 39.37'

INTERSECTION DETAIL  
PROFESSOR STREET AND LITERARY AVENUE

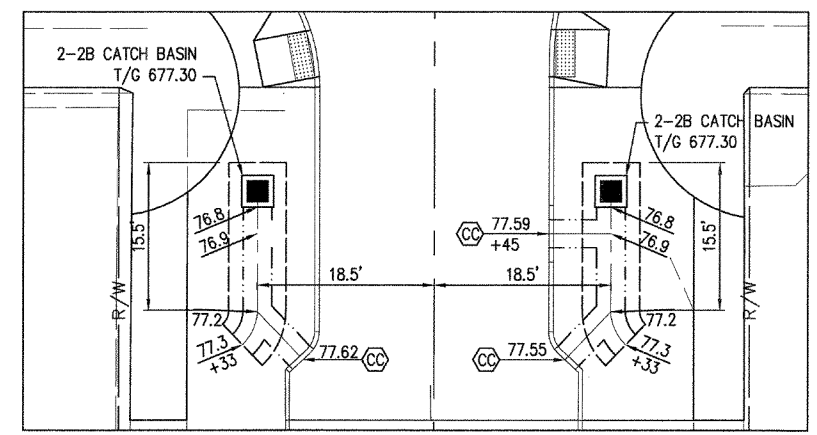
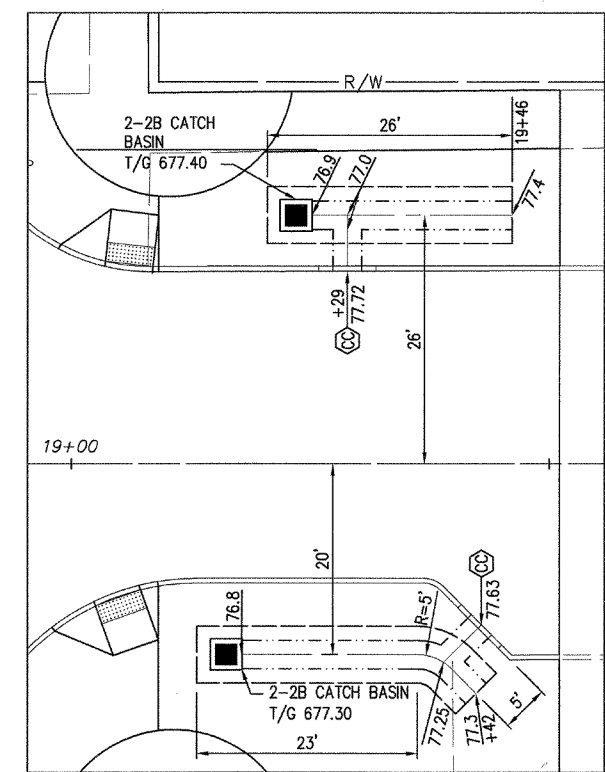
CURB-PROFESSOR STREET INTERSECTIONS



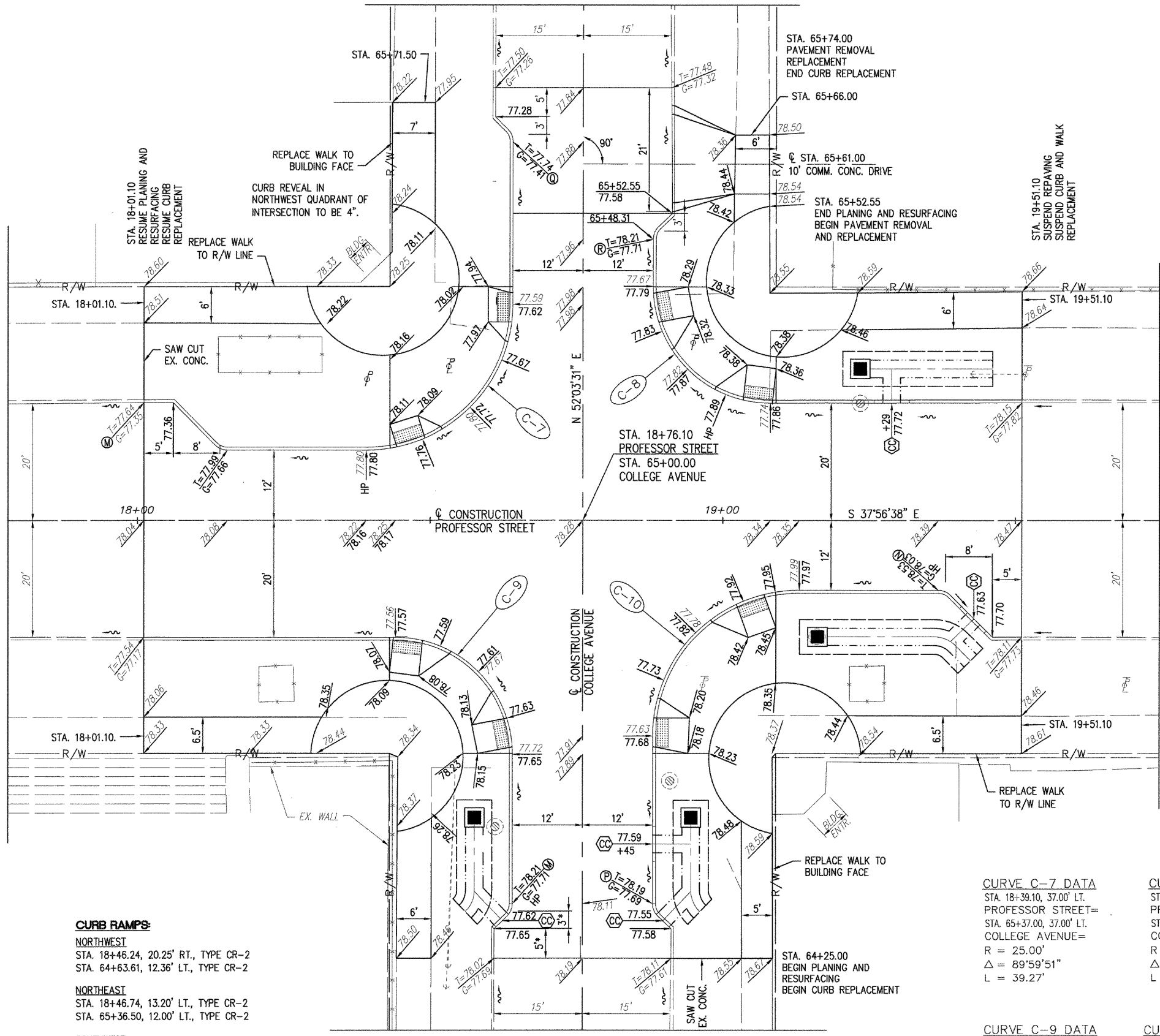


**INTERSECTION DETAIL  
PROFESSOR STREET AND COLLEGE AVENUE**

**CUY-PROFESSOR STREET INTERSECTIONS**



**BIORETENTION CELL LAYOUT DETAILS**



**CURB RAMPS:**

- NORTHWEST**  
 STA. 18+46.24, 20.25' RT., TYPE CR-2  
 STA. 64+63.61, 12.36' LT., TYPE CR-2
- NORTHEAST**  
 STA. 18+46.74, 13.20' LT., TYPE CR-2  
 STA. 65+36.50, 12.00' LT., TYPE CR-2
- SOUTHWEST**  
 STA. 19+04.67, 13.46' RT., TYPE CR-2  
 STA. 64+63.63, 12.00' RT., TYPE CR-2
- SOUTHEAST**  
 STA. 19+05.95, 20.19' LT., TYPE CR-2  
 STA. 65+36.42, 12.34' RT., TYPE CR-2

**LOCATIONS**

- (P.C. OF 3' CURB RADIUS)  
 M=STA. 18+15.34, 12.00' LT.  
 N=STA. 19+36.86, 12.00' RT.  
 O=STA. 64+34.24, 12.00' LT.  
 P=STA. 64+34.24, 12.00' RT.  
 Q=STA. 65+64.76, 12.00' LT.  
 R=STA. 65+48.31, 12.00' RT.

**CURVE C-7 DATA**  
 STA. 18+39.10, 37.00' LT.  
 PROFESSOR STREET=  
 STA. 65+37.00, 37.00' LT.  
 COLLEGE AVENUE=  
 R = 25.00'  
 $\Delta = 89^{\circ}59'51''$   
 L = 39.27'

**CURVE C-8 DATA**  
 STA. 19+08.10, 40.00' LT.  
 PROFESSOR STREET=  
 STA. 65+40.07, 32.00' RT.  
 COLLEGE AVENUE=  
 R = 20.00'  
 $\Delta = 90^{\circ}09'09''$   
 L = 31.42'

**CURVE C-9 DATA**  
 STA. 18+44.09, 37.00' RT.  
 PROFESSOR STREET=  
 STA. 64+59.86, 32.00' LT.  
 COLLEGE AVENUE=  
 R = 20.00'  
 $\Delta = 90^{\circ}00'09''$   
 L = 31.42'

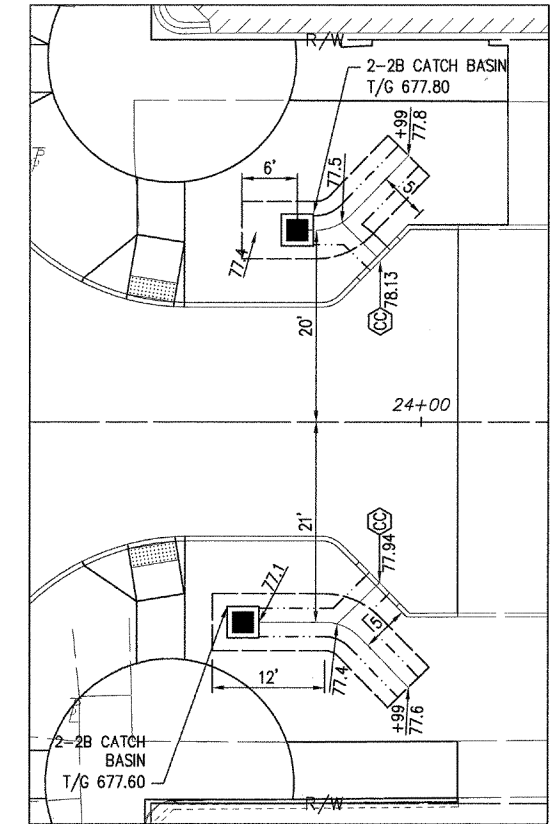
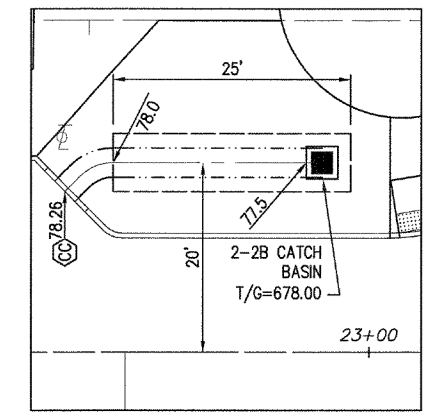
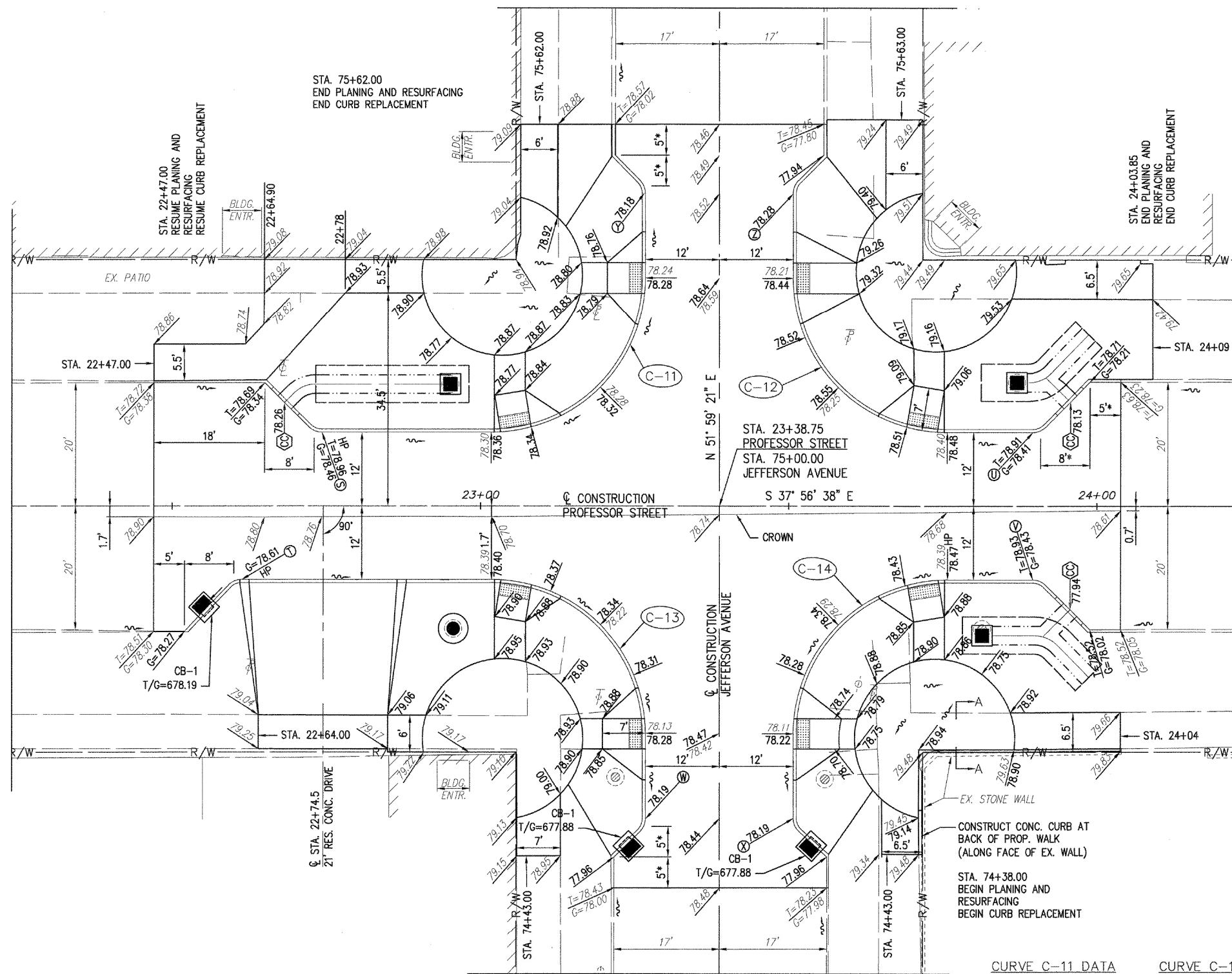
**CURVE C-10 DATA**  
 STA. 19+13.09, 37.00' RT.  
 PROFESSOR STREET=  
 STA. 64+63.00, 37.00' RT.  
 COLLEGE AVENUE=  
 R = 20.00'  
 $\Delta = 89^{\circ}59'51''$   
 L = 39.27'

**LEGEND:**

- XX.XX— EXISTING ELEVATION (SEE NOTE 5)
- XX.XX PROPOSED ELEVATION
- ~ SURFACE FLOW
- \* TYPICAL FOR BOTH SIDES OF PAVEMENT
- CC CURB CUT (SEE DETAIL SHEET NO. 30)
- T= TOP OF CURB ELEVATION
- G= GUTTER ELEVATION
- HP HIGH POINT

**NOTES:**

1. UNLESS NOTED, ALL ELEVATIONS ALONG THE CURB ARE GUTTER (BOTTOM OF CURB) ELEVATIONS.
2. UNLESS NOTED, ALL DIMENSIONS ALONG THE CURB ARE TO THE FACE OF CURB.
3. ADD 600 TO THE ELEVATION SHOWN FOR ACTUAL ELEVATION.
4. FOR DRIVEWAY DETAILS, SEE SHEET NO. 30.
5. THE CONTRACTOR SHALL VERIFY ALL EXISTING ELEVATIONS AND CONTACT THE ENGINEER IF THE ACTUAL ELEVATION VARIES ENOUGH THAT THE PROPOSED SIDEWALKS AND/OR CURB RAMPS AS SHOWN WILL NOT BE COMPLIANT.
6. FOR SIDEWALK LAYOUTS, SEE SHEET NO. 35 (BASE BID) AND SHEET NO. 36 (ALTERNATE 1 BID)



**BIORETENTION CELL LAYOUT DETAILS**

**LEGEND:**

- XX.XX EXISTING ELEVATION (SEE NOTE 5)
- XX.XX PROPOSED ELEVATION
- ~ SURFACE FLOW
- \* TYPICAL FOR BOTH SIDES OF PAVEMENT
- ⊗ CURB CUT (SEE DETAIL SHEET NO. 30)
- T= TOP OF CURB ELEVATION
- G= GUTTER ELEVATION
- HP HIGH POINT

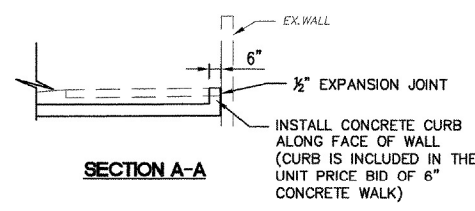
**NOTES:**

1. UNLESS NOTED, ALL ELEVATIONS ALONG THE CURB ARE GUTTER (BOTTOM OF CURB) ELEVATIONS.
2. UNLESS NOTED, ALL DIMENSIONS ALONG THE CURB ARE TO THE FACE OF CURB.
3. ADD 600 TO THE ELEVATION SHOWN FOR ACTUAL ELEVATION.
4. FOR DRIVEWAY DETAILS, SEE SHEET NO. 30.
5. THE CONTRACTOR SHALL VERIFY ALL EXISTING ELEVATIONS AND CONTACT THE ENGINEER IF THE ACTUAL ELEVATION VARIES ENOUGH THAT THE PROPOSED SIDEWALKS AND/OR CURB RAMP AS SHOWN WILL NOT BE COMPLIANT.
6. FOR SIDEWALK LAYOUTS, SEE SHEET NO. 35 (BASE BID) AND SHEET NO. 36 (ALTERNATE 1 BID)

**CURB RAMPS:**

- NORTHWEST**  
STA. 23+03.83, 12.33' RT., TYPE CR-2  
STA. 74+63.02, 12.00' LT., TYPE CR-1
- NORTHEAST**  
STA. 23+05.73, 12.33' LT., TYPE CR-2  
STA. 75+37.02, 12.00' LT., TYPE CR-1
- SOUTHWEST**  
STA. 23+71.76, 12.33' RT., TYPE CR-2  
STA. 74+62.99, 12.00' RT., TYPE CR-1
- SOUTHEAST**  
STA. 23+71.58, 12.34' LT., TYPE CR-2  
STA. 75+36.98, 12.00' RT., TYPE CR-1

- LOCATIONS**  
(P.C. OF 3' CURB RADIUS)  
S=STA. 22+74.24, 12.00' LT.  
T=STA. 22+61.24, 12.00' RT.  
U=STA. 23+89.61, 12.00' LT.  
V=STA. 23+89.61, 12.00' RT.  
W=STA. 74+49.24, 12.00' LT.  
X=STA. 74+49.24, 12.00' RT.  
Y=STA. 75+50.76, 12.00' LT.  
Z=STA. 75+50.76, 12.00' RT.



**CURVE C-11 DATA**  
STA. 23+01.70, 37.00' LT.  
PROFESSOR STREET=  
STA. 75+75.04, 37.00' LT.  
JEFFERSON STREET=  
R = 25.00'  
Δ = 90°04'01"  
L = 39.30'

**CURVE C-12 DATA**  
STA. 23+75.70, 37.00' LT.  
PROFESSOR STREET=  
STA. 75+36.96, 37.00' RT.  
JEFFERSON STREET=  
R = 25.00'  
Δ = 89°55'59"  
L = 39.24'

**CURVE C-13 DATA**  
STA. 23+01.79, 37.00' RT.  
PROFESSOR STREET=  
STA. 74+63.04, 37.00' LT.  
JEFFERSON STREET=  
R = 25.00'  
Δ = 89°55'59"  
L = 39.24'

**CURVE C-14 DATA**  
STA. 23+75.79, 37.00' RT.  
PROFESSOR STREET=  
STA. 74+62.96, 37.00' RT.  
JEFFERSON STREET=  
R = 25.00'  
Δ = 90°04'01"  
L = 39.30'

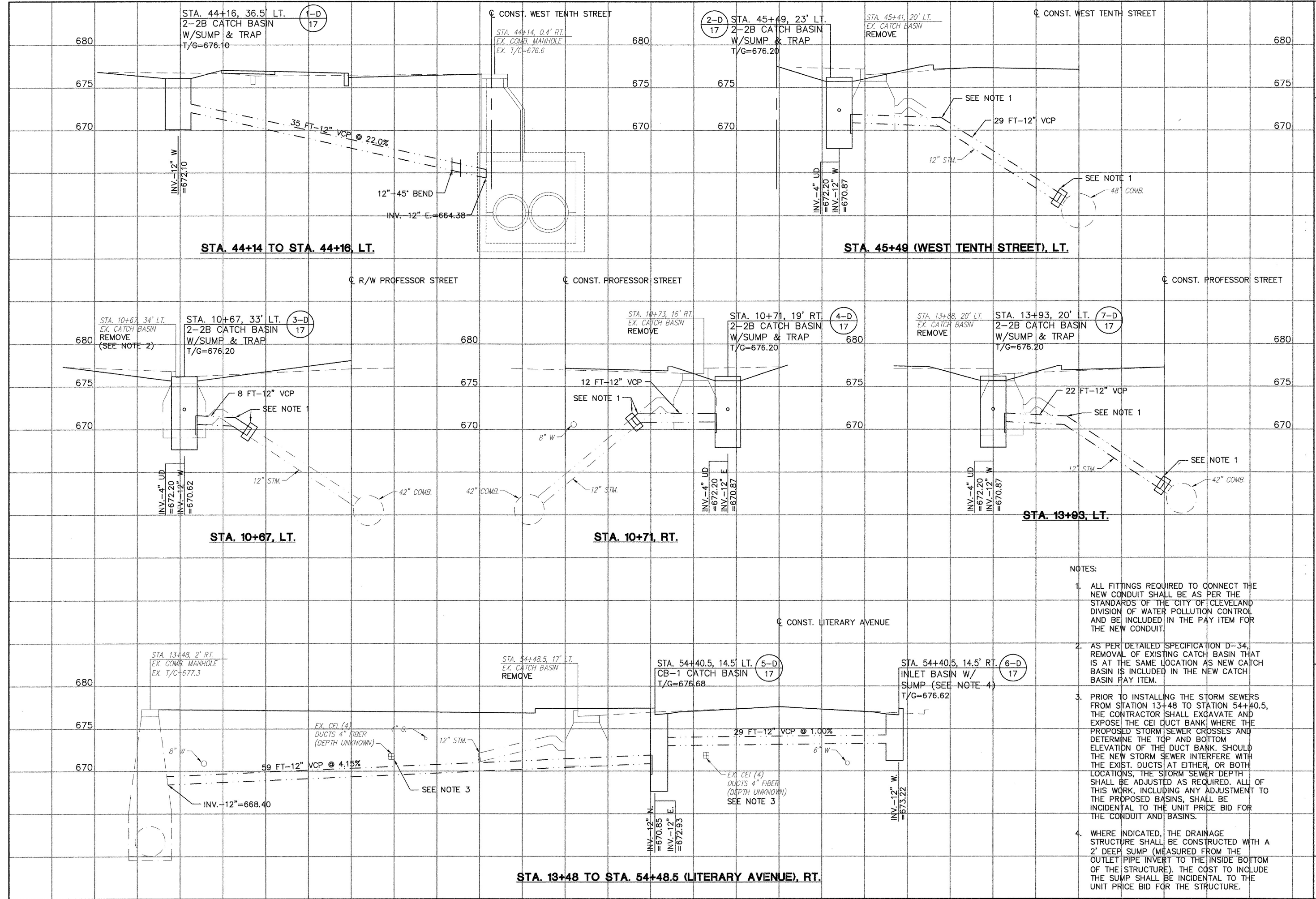
CONSTRUCT CONC. CURB AT BACK OF PROP. WALK (ALONG FACE OF EX. WALL)

STA. 74+38.00  
BEGIN PLANING AND RESURFACING  
BEGIN CURB REPLACEMENT

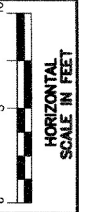


**DRAINAGE DETAILS**

**CUY-PROFESSOR STREET INTERSECTIONS**



- NOTES:**
1. ALL FITTINGS REQUIRED TO CONNECT THE NEW CONDUIT SHALL BE AS PER THE STANDARDS OF THE CITY OF CLEVELAND DIVISION OF WATER POLLUTION CONTROL AND BE INCLUDED IN THE PAY ITEM FOR THE NEW CONDUIT.
  2. AS PER DETAILED SPECIFICATION D-34, REMOVAL OF EXISTING CATCH BASIN THAT IS AT THE SAME LOCATION AS NEW CATCH BASIN IS INCLUDED IN THE NEW CATCH BASIN PAY ITEM.
  3. PRIOR TO INSTALLING THE STORM SEWERS FROM STATION 13+48 TO STATION 54+40.5, THE CONTRACTOR SHALL EXCAVATE AND EXPOSE THE CEI DUCT BANK WHERE THE PROPOSED STORM SEWER CROSSES AND DETERMINE THE TOP AND BOTTOM ELEVATION OF THE DUCT BANK. SHOULD THE NEW STORM SEWER INTERFERE WITH THE EXIST. DUCTS AT EITHER, OR BOTH LOCATIONS, THE STORM SEWER DEPTH SHALL BE ADJUSTED AS REQUIRED. ALL OF THIS WORK, INCLUDING ANY ADJUSTMENT TO THE PROPOSED BASINS, SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE CONDUIT AND BASINS.
  4. WHERE INDICATED, THE DRAINAGE STRUCTURE SHALL BE CONSTRUCTED WITH A 2' DEEP SUMP (MEASURED FROM THE OUTLET PIPE INVERT TO THE INSIDE BOTTOM OF THE STRUCTURE). THE COST TO INCLUDE THE SUMP SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE STRUCTURE.

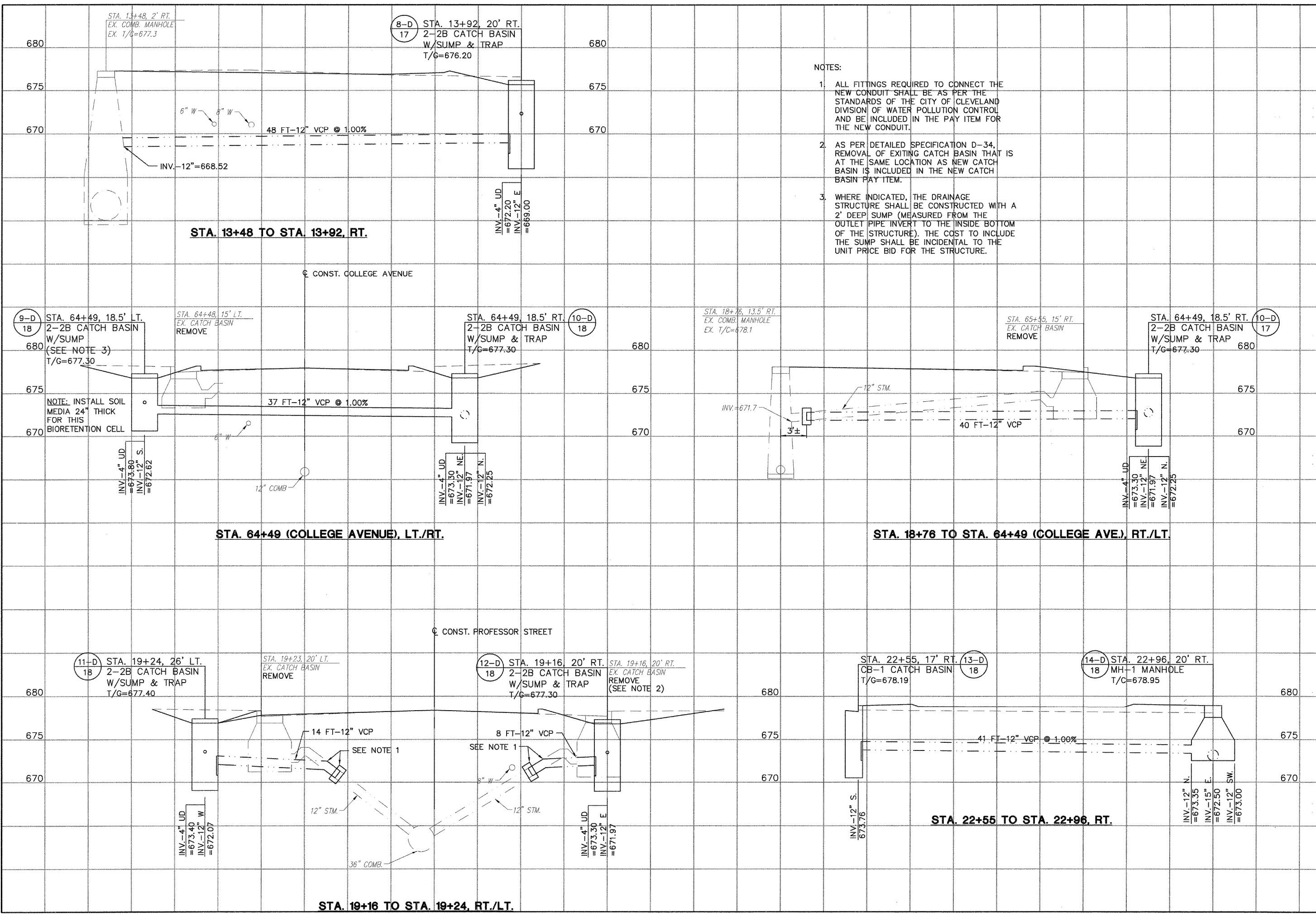


**DRAINAGE DETAILS**

**CUY-PROFESSOR STREET INTERSECTIONS**

**NOTES:**

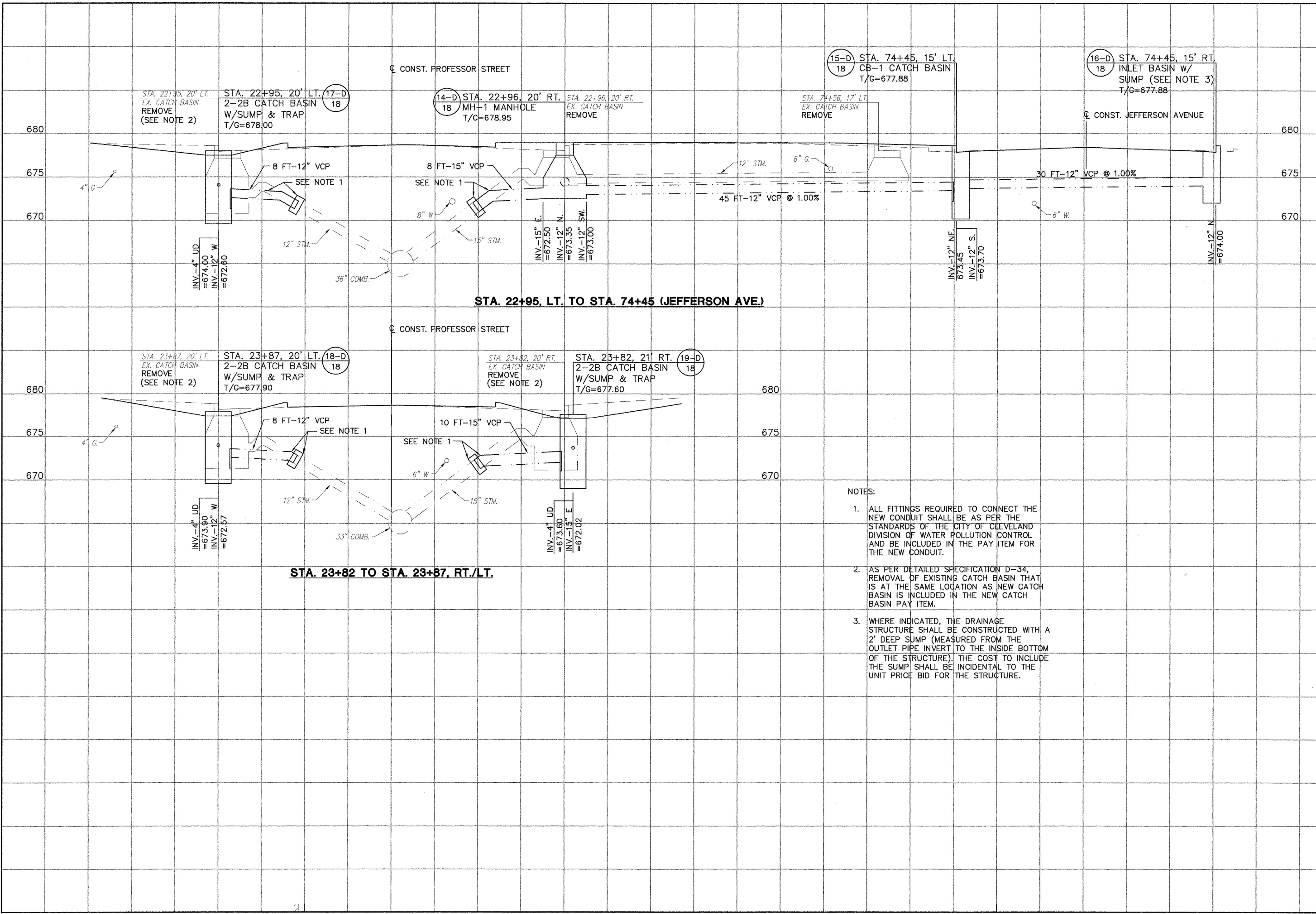
1. ALL FITTINGS REQUIRED TO CONNECT THE NEW CONDUIT SHALL BE AS PER THE STANDARDS OF THE CITY OF CLEVELAND DIVISION OF WATER POLLUTION CONTROL AND BE INCLUDED IN THE PAY ITEM FOR THE NEW CONDUIT.
2. AS PER DETAILED SPECIFICATION D-34, REMOVAL OF EXISTING CATCH BASIN THAT IS AT THE SAME LOCATION AS NEW CATCH BASIN IS INCLUDED IN THE NEW CATCH BASIN PAY ITEM.
3. WHERE INDICATED, THE DRAINAGE STRUCTURE SHALL BE CONSTRUCTED WITH A 2' DEEP SUMP (MEASURED FROM THE OUTLET PIPE INVERT TO THE INSIDE BOTTOM OF THE STRUCTURE). THE COST TO INCLUDE THE SUMP SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE STRUCTURE.



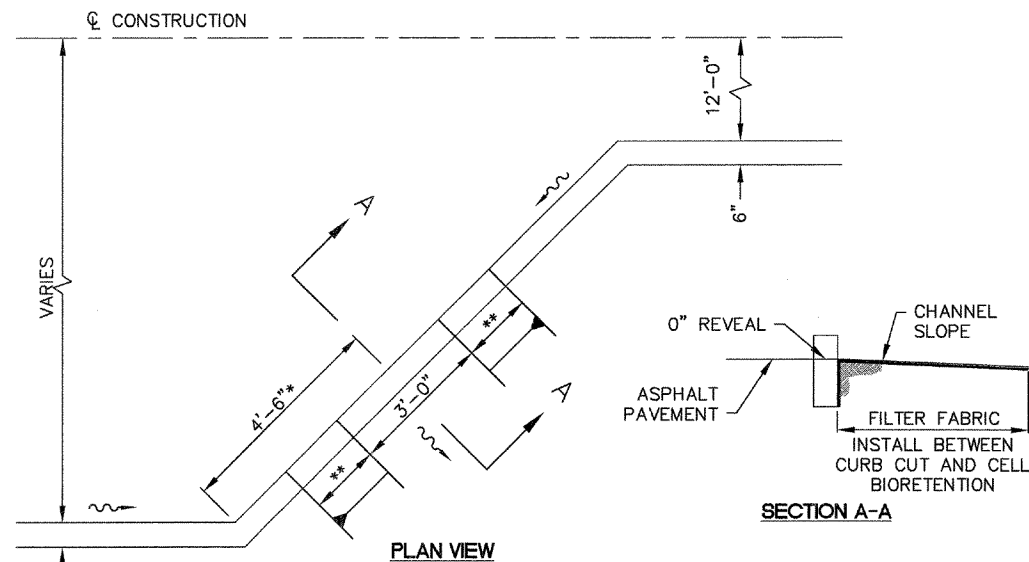


**DRAINAGE DETAILS**

**CUY-PROFESSOR STREET INTERSECTIONS**

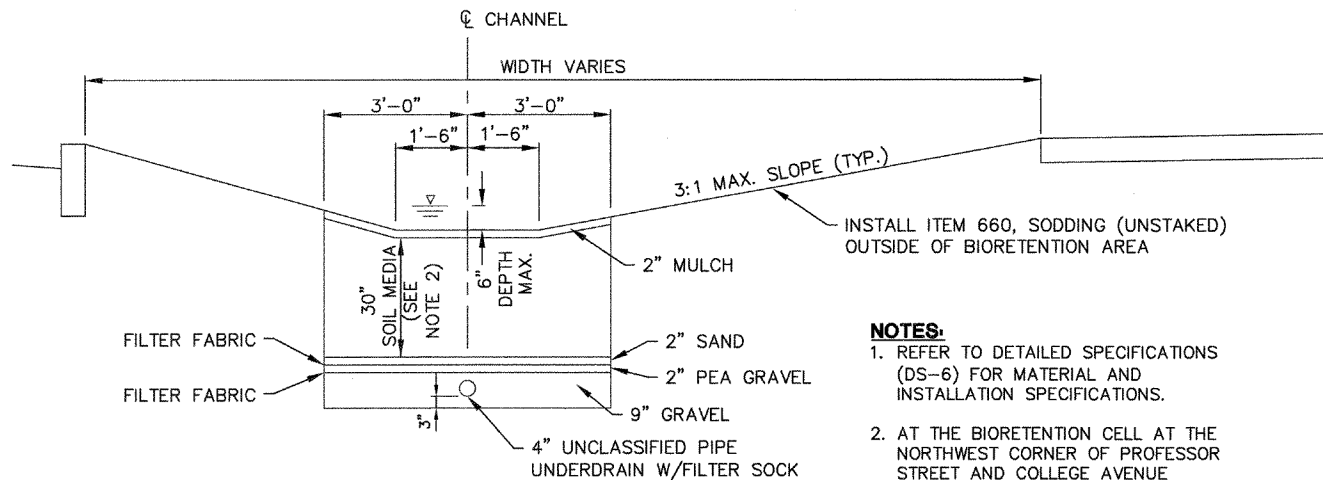


- NOTES:**
1. ALL FITTINGS REQUIRED TO CONNECT THE NEW CONDUIT SHALL BE AS PER THE STANDARDS OF THE CITY OF CLEVELAND DIVISION OF WATER POLLUTION CONTROL AND BE INCLUDED IN THE PAY ITEM FOR THE NEW CONDUIT.
  2. AS PER DETAILED SPECIFICATION D-34, REMOVAL OF EXISTING CATCH BASIN THAT IS AT THE SAME LOCATION AS NEW CATCH BASIN IS INCLUDED IN THE NEW CATCH BASIN PAY ITEM.
  3. WHERE INDICATED, THE DRAINAGE STRUCTURE SHALL BE CONSTRUCTED WITH A 2' DEEP SUMP (MEASURED FROM THE OUTLET PIPE INVERT TO THE INSIDE BOTTOM OF THE STRUCTURE). THE COST TO INCLUDE THE SUMP SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE STRUCTURE.



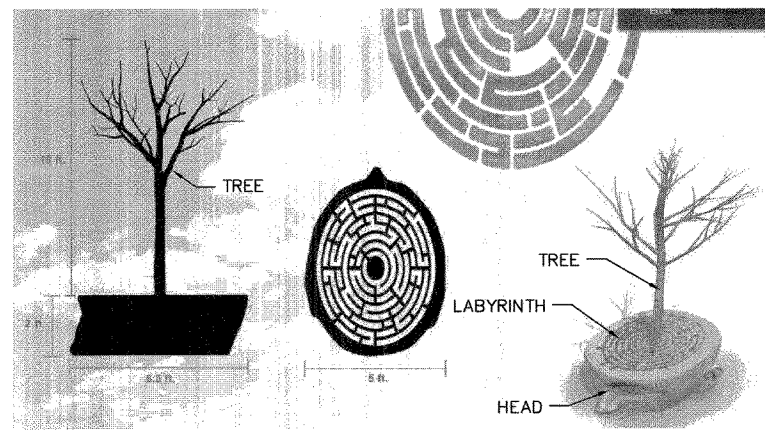
**BIORETENTION CELL CURB CUT DETAIL**

\* = UNLESS NOTED ON THE INTERSECTION DETAILS, SHEET NO. 23-26.  
 \*\* = TAPER CURB REVEAL 6" TO 0" IN 1'-6"

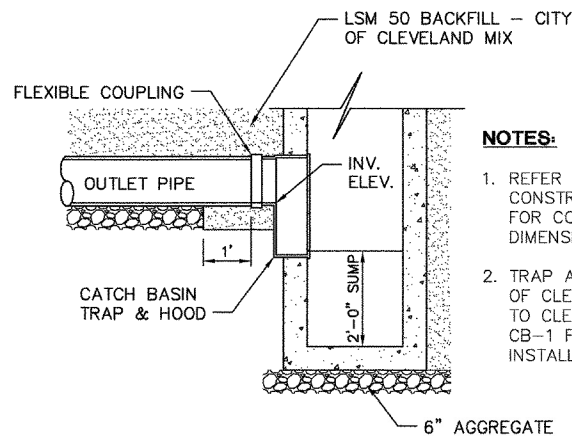


**TYPICAL BIORETENTION CELL SECTION**

- NOTES:**
- REFER TO DETAILED SPECIFICATIONS (DS-6) FOR MATERIAL AND INSTALLATION SPECIFICATIONS.
  - AT THE BIORETENTION CELL AT THE NORTHWEST CORNER OF PROFESSOR STREET AND COLLEGE AVENUE (DISCHARGING TO STA. 64+49, LT.), INSTALL THE SOIL MEDIA AT 24" DEPTH.
  - THE INVERT OF THE 4" UNDERDRAIN IS TO BE AT LEAST 4" ABOVE THE CROWN OF THE 2-2B OUTLET PIPE.

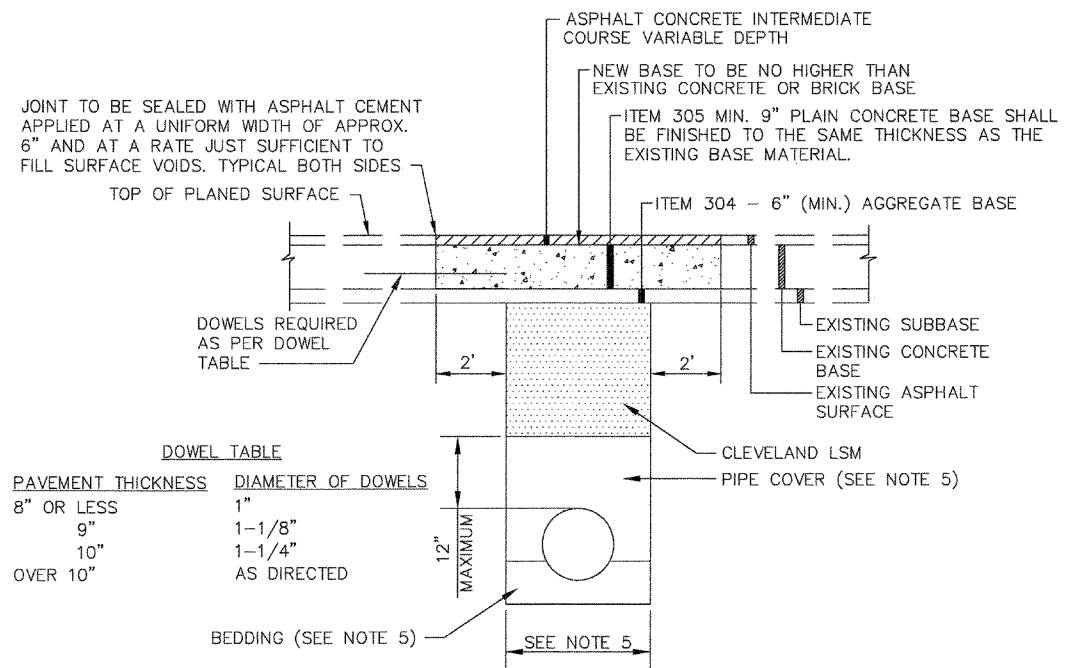


**PUBLIC ART**  
 REFER TO DETAILED SPECIFICATION DS-28 FOR PUBLIC ART FABRICATION AND INSTALLATION SPECIFICATIONS



**ITEM 604 - 2-2B CATCH BASIN WITH SUMP AND TRAP DETAIL**

- NOTES:**
- REFER TO ODOT STANDARD CONSTRUCTION DRAWING CB-1.1 FOR COMPLETE 2-2B CATCH BASIN DIMENSIONS AND NOTES.
  - TRAP AND HOOD SHALL BE CITY OF CLEVELAND STANDARD. REFER TO CLEVELAND STANDARD DRAWING CB-1 FOR TRAP AND HOOD INSTALLATION DETAILS.

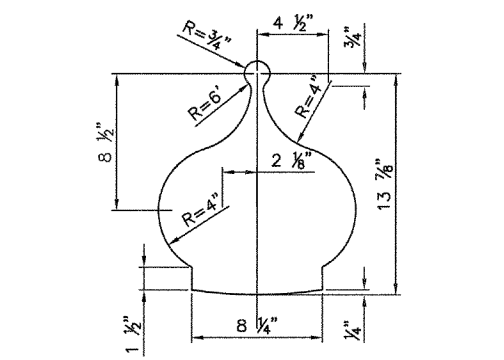


**DOWEL TABLE**

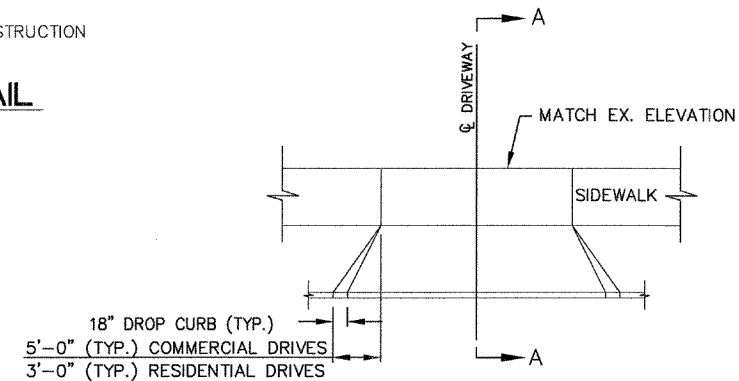
PAVEMENT THICKNESS	DIAMETER OF DOWELS
8" OR LESS	1"
9"	1-1/8"
10"	1-1/4"
OVER 10"	AS DIRECTED

- NOTES:**
- ALL PAVEMENT OPENINGS SHALL BE SAWED FULL DEPTH AND HAVE SMOOTH VERTICAL FACES, DOWELS SHALL BE REQUIRED, AS PER DOWEL TABLE.
  - EXTEND OVERCUT IN LONGITUDINAL DIRECTION TWO FEET (2') ONTO UNDISTURBED SUBGRADE.
  - ALL BACKFILL MATERIALS USED UNDER ANY PAVEMENTS SHALL BE CLEVELAND LSM PLACED FROM THE INITIAL ONE FOOT OVER THE TOP OF UTILITIES, TO THE SUBGRADE.
  - TO PREVENT FLOTATION AND ENTRY OF FLOWABLE FILL INTO ANY OTHER AREAS, COVER ALL JOINTS IN CLAY PIPE IN THE TRENCH AREA WITH POLYETHYLENE MATERIAL BEFORE POURING FLOWABLE FILL. REPAIR TECHNIQUES SHALL BE IN ACCORDANCE WITH THE UTILITY COMPANY'S STANDARD REPAIR PROCEDURES.
  - FOR TRENCH DIMENSION, BEDDING, AND BACKFILL REQUIREMENTS, REFER TO THE FOLLOWING:  
 A. FOR WATER MAIN TRENCHES, REFER TO THE DETAIL ON SHEET NO. 31.  
 B. FOR SEWER TRENCHES, REFER TO CITY OF CLEVELAND STANDARD CONSTRUCTION DRAWING NO. 146-ME.

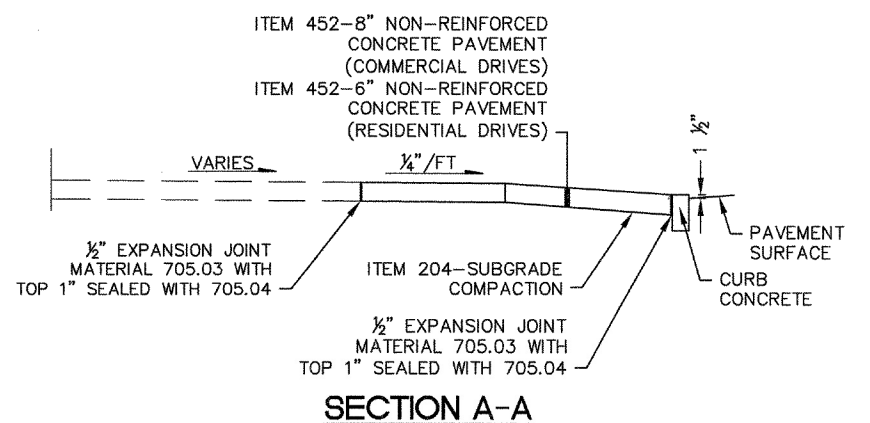
**SEWER TRENCH PAVEMENT REPAIR DETAIL**



**CROSSWALK PATTERN DETAIL**  
 (PART 2, ALTERNATE 2 BID)



**PLAN VIEW**



**SECTION A-A**

**DETAILS**

**CITY-PROFESSOR STREET INTERSECTIONS**

**CLEVELAND DIVISION OF WATER NOTES FOR NEW WATER MAIN INSTALLATION**

CONTRACTOR IS TO ABIDE BY THE MOST CURRENT VERSION OF THE CLEVELAND DIVISION OF WATER NOTES AND DETAILS. THE MOST UP-TO-DATE VERSION CAN BE FOUND AT WWW.CLEVELANDWATER.COM.

**GENERAL:**

- ALL WATER WORK REQUIRED, WHETHER SHOWN ON THE PLANS OR AS DIRECTED BY THE CLEVELAND DIVISION OF WATER, SHALL BE AT THE EXPENSE OF THE PROJECT.
- THE INFORMATION SHOWN ON THE CLEVELAND DIVISION OF WATER'S SUMMARY OF WORK/CHARGE LETTER AND STRIP MAPS ARE TAKEN FROM EXISTING AVAILABLE RECORDS, AND THEIR ACCURACY IS NOT GUARANTEED.
- CALL THE INSPECTION AND ENFORCEMENT UNIT AT 216-664-2342 TO SCHEDULE A PRECONSTRUCTION MEETING. THE OPERATION OF ANY VALVE OR ALTERATION OF ANY PART OF THE WATER SYSTEM BY CONTRACTORS OR THEIR EMPLOYEES IS PROHIBITED WITHOUT THE SUPERVISION OF THE CLEVELAND DIVISION OF WATER INSPECTOR.
- THE MUNICIPALITY SHALL REQUIRE THAT THE PROJECT'S PROFESSIONAL ENGINEER OBTAIN ACTUAL FIELD MEASUREMENTS OF THE MAIN DURING INSTALLATION AND SHALL FURNISH THE CWD INSPECTOR WITH RECORD PRINTS IN A FORM ACCEPTABLE TO THE DIVISION OF WATER. THE CLEVELAND DIVISION OF WATER WILL REQUIRE THE DELIVERY AND ACCEPTANCE OF TWO COPIES OF RECORD (AS BUILT) PRINTS BEFORE THE PRESSURE TEST AND CHLORINATION OF THE MAIN.
- FOR THE PURPOSES OF CHLORINATION AND BACTERIOLOGICAL TESTING OF THE WATER MAINS THE CONTRACTOR SHALL PROVIDE AND INSTALL, AT EACH OF THE CHLORINATION PIT LOCATIONS SHOWN AND AT OTHER LOCATIONS DETERMINED BY THE DIVISION OF WATER, FLUSHING/SAMPLING TAPS OF SIZES TO BE DETERMINED BY THE DIVISION OF WATER. CHLORINATION PITS SHALL BE SIX (6) FOOT SQUARE MEETING OSHA STANDARDS.
- A TWO YEAR WARRANTY, COMMENCING FROM THE DATE OF ACCEPTANCE OF THE FINAL CHLORINATION OF THE WATER MAIN INSTALLATION, SHALL BE PROVIDED BY THE BUILDER/DEVELOPER AND/OR CONTRACTOR FOR ALL WATER MAINS AND SERVICE CONNECTION WORK PERFORMED BY THE CONTRACTOR, INCLUDING RETAPS, SHOULD ANY LEAKS OCCUR AND REPAIRS BE REQUIRED DUE TO DEFECTIVE MATERIAL OR POOR WORKMANSHIP.
- USE BACKFILL MATERIAL AS SPECIFIED AND COMPACT SUFFICIENTLY IN THOSE AREAS WHERE EXISTING MAINS AND WATER SERVICE CONNECTIONS ARE EXPOSED. (SEE DIVISION OF WATER STANDARD DETAIL STD-001).
- ALL MATERIALS, INCLUDING BUT NOT LIMITED TO, WATER MAINS, FIRE HYDRANTS, VALVES, CONNECTION MATERIALS AND OTHER WATER APPURTENANCES, SHALL BE NEW AND UNUSED AND SHALL CONFORM TO THE MOST CURRENT DIVISION OF WATER SPECIFICATIONS. ALL MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION OF WATER'S STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING WATER MAINS AND APPURTENANCES THEREOF WHEN CONNECTING THE NEW WATER MAIN FOR THE HYDROSTATIC TEST. ALL REPAIRS TO DAMAGED EXISTING FACILITIES SHALL BE MADE BY THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE DIVISION OF WATER. (REFER TO THE ALTERNATE TEST DETAIL STD-002 AS NEEDED).
- ALL HYDROSTATIC PRESSURE TESTING SHALL BE DONE BY THE CONTRACTOR IN THE PRESENCE OF THE DIVISION OF WATER'S INSPECTOR. THE HYDROSTATIC TEST PRESSURE SHALL BE 75 PSI ABOVE THE STATIC PRESSURE PREVAILING AT THE SITE, BUT IN NO CASE LESS THAN 150 PSI. THE PRESSURE TEST SHALL BE FOR A DURATION OF TWO (2) HOURS WITH THE PRESSURE BEING MAINTAINED WITHIN 5 PSI OF THE REQUIRED TEST PRESSURE. SHOULD THE PRESSURE TEST FAIL THE CONTRACTOR SHALL FIND AND CORRECT THE DEFICIENCY(IES) TO THE SATISFACTION OF THE DIVISION OF WATER AND REPEAT THE TWO (2) HOUR PRESSURE TEST.

**WATER MAINS:**

- ALL PIPE, UNLESS OTHERWISE CALLED FOR, SHALL BE DUCTILE IRON, MINIMUM CLASS 52, CEMENT LINED HAVING PUSH-ON JOINTS WITH RADIALLY COMPRESSED RUBBER RING GASKET AND INSTALLED AS PER THE MOST CURRENT REVISION OF AWWA C600.
- ALL FITTINGS, UNLESS OTHERWISE CALLED FOR, SHALL BE APPROVED DUCTILE IRON, CLASS 350, CEMENT LINED, OR FUSION BONDED EPOXY COATED. ALL FITTINGS AND PIPE CONNECTED TO FITTINGS SHALL BE RESTRAINED USING A "RETAINED" MECHANICAL JOINT CONFORMING TO THE MATERIAL AND PERFORMANCE REQUIREMENTS OF ANSI/AWWA C-110/A21.10 AND ANSI/AWWA C-111/A21.11, OR "COMPACT" FITTINGS IN ACCORDANCE WITH ANSI/AWWA C-153/A21.53. EXCEPT FOR ANCHOR TEES, REDUCERS OR OTHER SPECIAL CIRCUMSTANCES WHEN DIRECTED BY CLEVELAND DIVISION OF WATER, ALL FITTINGS ARE TO HAVE BELL ENDS.
- ALL BOLTS AND NUTS ON ALL "RETAINED" MECHANICAL JOINTS SHALL HAVE FIELD APPLIED ONE (1) COAT OF BITUMASTIC PAINTING FOLLOWED BY AN ENCASEMENT OF POLYETHYLENE WRAPPING IN ACCORDANCE WITH ANSI/AWWA C-105/A21.5-88, CLASS "C", METHOD "B".
- WHERE SHOWN ON THE PLANS, OR WHEN OTHERWISE CALLED FOR, PIPE AND FITTINGS SHALL HAVE AN APPROVED "TYPE I" OR "TYPE II" BOLTLESS RESTRAINED PUSH-ON JOINTS TO THE LIMITS SHOWN ON THE DRAWINGS.
- AT THE END OF EACH WORKDAY, THE CONTRACTOR SHALL PLUG ALL OPEN PIPE ENDS WITH WATER TIGHT PLUGS AS PER THE "PREVENTATIVE AND CORRECTIVE MEASURES DURING CONSTRUCTION" SECTION OF THE MOST CURRENT REVISION OF AWWA C-851 AS TO PREVENT THE INFILTRATION OR INTRUSION OF ANY FOREIGN OBJECTS OR MATERIALS. DATE STAMPED DIGITAL PHOTOS SHALL BE PROVIDED FOR EACH WORKDAY DEMONSTRATING THAT PROPER AWWA C-850 METHODS WERE USED TO PLUG ALL OPEN WATER MAIN ENDS. EACH PHOTO SHALL CLEARLY IDENTIFY THE STATION AT WHICH THE PIPE IS PLUGGED. THE STATIONING SHALL BE SHOWN BY USE OF A STATION MARKER PLACED AT THE PLUGGED PIPE END.  
  
PHOTOS SHALL BE SUBMITTED ON A DAILY BASIS UNLESS OTHERWISE DEFINED BY CWD INSPECTOR OR ENGINEER. ALL PHOTOS TAKEN OVER THE COURSE OF THE PROJECT SHALL BE SUBMITTED BY THE CONTRACTOR AS PART OF THE AS-BUILT SUBMITTAL. AS-BUILTS SHALL BE CONSIDERED INCOMPLETE WITHOUT SAID COLLECTION OF DIGITAL PHOTOS.

**HYDRANTS:**

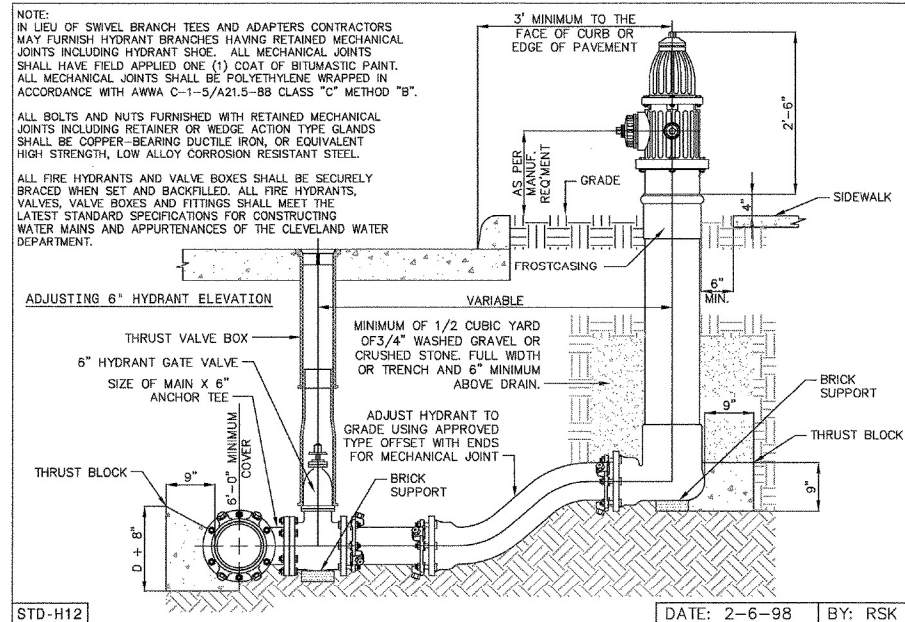
- IN ALL HYDRANT INSTALLATIONS THE CONTRACTOR SHALL FACE ALL HYDRANT'S 4" (STEAMER) NOZZLE TOWARD THE PAVEMENT PRIOR TO TESTING AND CHLORINATION OF WATER MAINS. CONTRACTOR SHALL CONSULT WITH THE LOCAL MUNICIPALITY'S ENGINEERING OR SERVICE DEPARTMENT TO OBTAIN HYDRANT MODEL AND NOZZLE THREAD REQUIREMENTS IF NOT INDICATED ON THE APPROVED PLANS.
- ALL VALVES SHALL BE AN APPROVED MODEL RESILIENT SEATED GATE VALVES AS PER THE MOST CURRENT VERSION OF AWWA C509 OR C515.

**CONNECTIONS:**

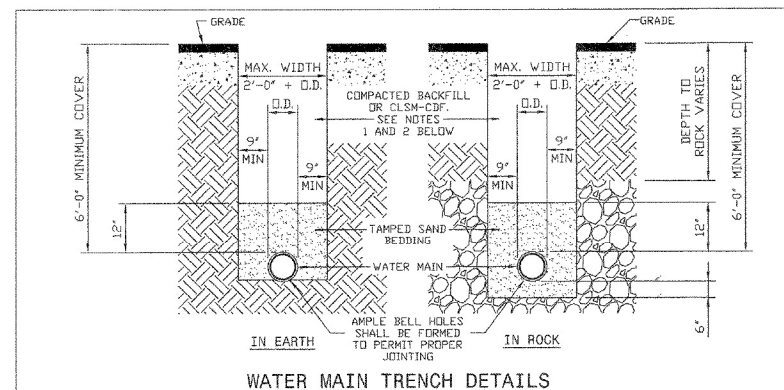
- WATER CONNECTIONS SHOWN ON THESE DRAWINGS ARE FOR REFERENCE ONLY AND ARE NOT PART OF THE WATER MAIN APPROVAL. ADDITIONAL PERMITS FOR SERVICE CONNECTIONS MUST BE OBTAINED FROM THE DIVISION OF WATER PRIOR TO INSTALLATION OF ANY PORTION OF THE SERVICE CONNECTION(S). IT IS THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR ALL PERMITS FOR ALL SIZE WATER SERVICE CONNECTIONS BEFORE PERFORMING ANY WORK. THE AMOUNT OF CHARGES CAN BE OBTAINED FROM THE DIVISION OF WATER, PERMITS AND SALES SECTION AT 216-664-2444 EXT. 5203.
- PEAK FLOW DEMANDS DO NOT EXCEED 25 GPM FOR AN INDIVIDUAL HOME/UNIT, INCLUSIVE OF ALL USAGE (FIRE, DOMESTIC AND/OR IRRIGATION) AND
- LENGTH OF ONE INCH CONNECTION DOES NOT EXCEED 75 FEET AS MEASURED FROM THE MAIN TO THE POINT OF ENTRY INTO THE PROPOSED HOME/UNIT.
- ANY SERVICE REQUESTS DIFFERING FROM THE STATED CRITERIA SHALL REQUIRE THE SUBMITTAL OF A COMPLETE WATER SERVICE APPLICATION. PEAK DEMANDS ARE TO BE ASSESSED ON APPLICATION AND SETBACKS ARE TO BE SHOWN ON A ACCOMPANYING SITE PLAN. SITE PLANS SHALL SHOW WATER METER VAULTS IN THE RIGHT OF WAY OR IN AN EASEMENT CONTIGUOUS TO THE RIGHT OF WAY FOR ANY HOMES/UNITS WITH SETBACKS GREATER THAN 150 FEET. EASEMENTS ARE TO BE PROVIDED WITH THE SERVICE CONNECTION APPLICATION SUBMITTAL.
- ALL WATER MAIN CURB VALVE BOXES & METER VAULTS WILL BE INSTALL IN GRASS AREAS WHEN POSSIBLE.

**EMERGENCIES:**

- IF A WATER MAIN OR SERVICE CONNECTION BREAK OCCURS DURING CONSTRUCTION AND EMERGENCY ASSISTANCE IS REQUIRED, PLEASE NOTIFY THE DIVISION OF WATER AT 216-664-3060.



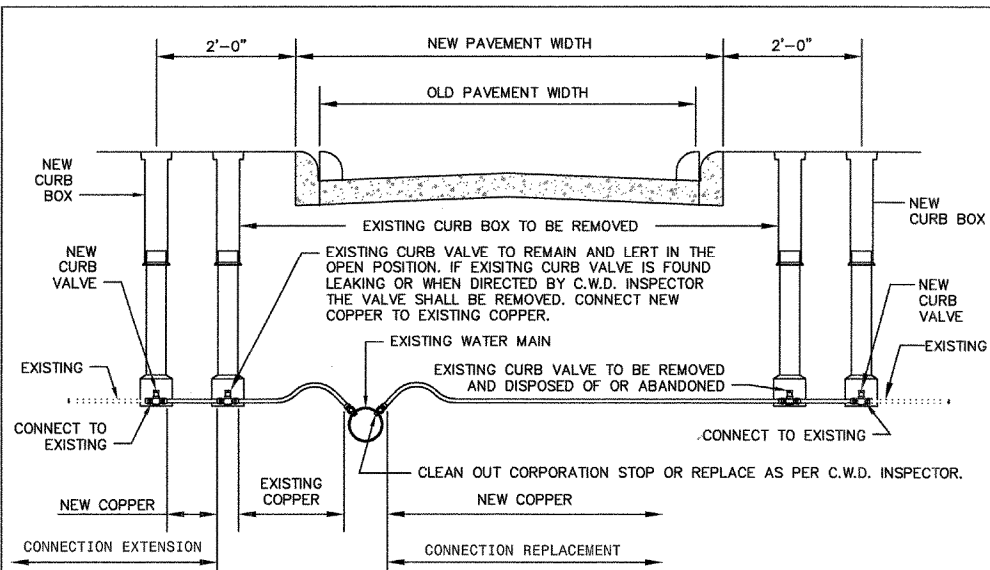
STD-H12 DATE: 2-6-98 BY: RSK



WATER MAIN TRENCH DETAILS - NOT TO SCALE -

NOTES:  
 1) PREMIUM BACKFILL CONSISTING OF CONTROLLED LOW STRENGTH MATERIAL - CONTROLLED DENSITY FILL (CLSM-CDF) "FLOWABLE FILL" IS REQUIRED.  
 2) UNDER ALL EXISTING OR FUTURE PAVEMENTS, SIDEWALKS AND DRIVES WITHIN THE CITY OF CLEVELAND CORPORATION LIMITS AS SPECIFIED IN LOCAL MUNICIPALITIES SERVED BY CWD (SEE LOCAL REQUIREMENTS).  
 3) WHEN PREMIUM BACKFILL IS REQUIRED BY THE LOCAL MUNICIPALITY FOR CASES OTHER THAN THOSE LISTED IN NOTE 1 ABOVE, IT SHALL BE LIMESTONE GRADED PER ODOT 30402 OR ODOT 411. NO SLAG IS PERMITTED.  
 4) CONTRACTOR SHALL USE SPECIAL CARE IN PLACING THE SAND BEDDING, SO AS TO AVOID SCRAPING OF THE EXTERIOR COATING, INJURING THE PIPE, DISTORTING OR MOVING THE PIPE WHEN COMPACTING THE SAND. THE SAND BEDDING SHALL BE TAMPED IN SIX (6) INCH LAYERS, SIMULTANEOUSLY ON EACH SIDE OF THE PIPE, AND THOROUGHLY COMPACTED SO AS TO PROVIDE A SOLID BACKING AGAINST THE EXTERNAL SURFACE OF THE PIPE.  
 5) MINIMUM COMPACTION FOR ALL SAND BEDDING, BACKFILL AND PREMIUM BACKFILL SHALL BE 95% STANDARD PROCTOR.  
 6) PAVEMENT, SIDEWALK OR DRIVES TO BE INSTALLED IN ACCORDANCE WITH LOCAL MUNICIPALITY'S SPECIFICATIONS.

STD-001 DATE: 2-2-2012



WATER SERVICE CONNECTION EXTENSION OR REPLACEMENT FOR 1" & SMALLER - NOT TO SCALE -

STD-C01 DATE: 10-1-97 BY: RSK

DETAILS

CITY-PROFESSOR STREET INTERSECTIONS

CLEVELAND DIVISION OF WATER NOTES FOR NEW WATER MAIN INSTALLATION

CONTRACTOR IS TO ABIDE BY THE MOST CURRENT VERSION OF THE CLEVELAND DIVISION OF WATER NOTES AND DETAILS. THE MOST UP-TO-DATE VERSION CAN BE FOUND AT WWW.CLEVELANDWATER.COM.

GENERAL:

- ALL WATER WORK REQUIRED, WHETHER SHOWN ON THE PLANS OR AS DIRECTED BY THE CLEVELAND DIVISION OF WATER, SHALL BE AT THE EXPENSE OF THE PROJECT.
- THE INFORMATION SHOWN ON THE CLEVELAND DIVISION OF WATER'S SUMMARY OF WORK/CHARGE LETTER AND STRIP MAPS ARE TAKEN FROM EXISTING AVAILABLE RECORDS, AND THEIR ACCURACY IS NOT GUARANTEED.
- CALL THE INSPECTION AND ENFORCEMENT UNIT AT 216-664-2342 TO SCHEDULE A PRECONSTRUCTION MEETING. THE OPERATION OF ANY VALVE OR ALTERATION OF ANY PART OF THE WATER SYSTEM BY CONTRACTORS OR THEIR EMPLOYEES IS PROHIBITED WITHOUT THE SUPERVISION OF THE CLEVELAND DIVISION OF WATER INSPECTOR.
- THE MUNICIPALITY SHALL REQUIRE THAT THE PROJECT'S PROFESSIONAL ENGINEER OBTAIN ACTUAL FIELD MEASUREMENTS OF THE MAIN DURING INSTALLATION AND SHALL FURNISH THE CWD INSPECTOR WITH RECORD PRINTS IN A FORM ACCEPTABLE TO THE DIVISION OF WATER. THE CLEVELAND DIVISION OF WATER WILL REQUIRE THE DELIVERY AND ACCEPTANCE OF TWO COPIES OF RECORD (AS BUILT) PRINTS BEFORE THE PRESSURE TEST AND CHLORINATION OF THE MAIN.
- FOR THE PURPOSES OF CHLORINATION AND BACTERIOLOGICAL TESTING OF THE WATER MAINS THE CONTRACTOR SHALL PROVIDE AND INSTALL, AT EACH OF THE CHLORINATION PIT LOCATIONS SHOWN AND AT OTHER LOCATIONS DETERMINED BY THE DIVISION OF WATER, FLUSHING/SAMPLING TAPS OF SIZES TO BE DETERMINED BY THE DIVISION OF WATER. CHLORINATION PITS SHALL BE SIX (6) FOOT SQUARE MEETING OSHA STANDARDS.
- A TWO YEAR WARRANTY, COMMENCING FROM THE DATE OF ACCEPTANCE OF THE FINAL CHLORINATION OF THE WATER MAIN INSTALLATION, SHALL BE PROVIDED BY THE BUILDER/DEVELOPER AND/OR CONTRACTOR FOR ALL WATER MAINS AND SERVICE CONNECTION WORK PERFORMED BY THE CONTRACTOR, INCLUDING RETAPS, SHOULD ANY LEAKS OCCUR AND REPAIRS BE REQUIRED DUE TO DEFECTIVE MATERIAL OR POOR WORKMANSHIP.
- USE BACKFILL MATERIAL AS SPECIFIED AND COMPACT SUFFICIENTLY IN THOSE AREAS WHERE EXISTING MAINS AND WATER SERVICE CONNECTIONS ARE EXPOSED. (SEE DIVISION OF WATER STANDARD DETAIL STD-001).
- ALL MATERIALS, INCLUDING BUT NOT LIMITED TO, WATER MAINS, FIRE HYDRANTS, VALVES, CONNECTION MATERIALS AND OTHER WATER APPURTENANCES, SHALL BE NEW AND UNUSED AND SHALL CONFORM TO THE MOST CURRENT DIVISION OF WATER SPECIFICATIONS. ALL MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION OF WATER'S STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING WATER MAINS AND APPURTENANCES THEREOF WHEN CONNECTING THE NEW WATER MAIN FOR THE HYDROSTATIC TEST. ALL REPAIRS TO DAMAGED EXISTING FACILITIES SHALL BE MADE BY THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE DIVISION OF WATER. (REFER TO THE ALTERNATE TEST DETAIL STD-002 AS NEEDED).
- ALL HYDROSTATIC PRESSURE TESTING SHALL BE DONE BY THE CONTRACTOR IN THE PRESENCE OF THE DIVISION OF WATER'S INSPECTOR. THE HYDROSTATIC TEST PRESSURE SHALL BE 75 PSI ABOVE THE STATIC PRESSURE PREVAILING AT THE SITE, BUT IN NO CASE LESS THAN 150 PSI. THE PRESSURE TEST SHALL BE FOR A DURATION OF TWO (2) HOURS WITH THE PRESSURE BEING MAINTAINED WITHIN 5 PSI OF THE REQUIRED TEST PRESSURE. SHOULD THE PRESSURE TEST FAIL THE CONTRACTOR SHALL FIND AND CORRECT THE DEFICIENCY(IES) TO THE SATISFACTION OF THE DIVISION OF WATER AND REPEAT THE TWO (2) HOUR PRESSURE TEST.

WATER MAINS:

- ALL PIPE, UNLESS OTHERWISE CALLED FOR, SHALL BE DUCTILE IRON, MINIMUM CLASS 52, CEMENT LINED HAVING PUSH-ON JOINTS WITH RADIALLY COMPRESSED RUBBER RING GASKET AND INSTALLED AS PER THE MOST CURRENT REVISION OF AWWA C600.
- ALL FITTINGS, UNLESS OTHERWISE CALLED FOR, SHALL BE APPROVED DUCTILE IRON, CLASS 350, CEMENT LINED, OR FUSION BONDED EPOXY COATED. ALL FITTINGS AND PIPE CONNECTED TO FITTINGS SHALL BE RESTRAINED USING A "RETAINED" MECHANICAL JOINT CONFORMING TO THE MATERIAL AND PERFORMANCE REQUIREMENTS OF ANSI/AWWA C-110/A21.10 AND ANSI/AWWA C-111/A21.11, OR "COMPACT" FITTINGS IN ACCORDANCE WITH ANSI/AWWA C-153/A21.53. EXCEPT FOR ANCHOR TEES, REDUCERS OR OTHER SPECIAL CIRCUMSTANCES WHEN DIRECTED BY CLEVELAND DIVISION OF WATER, ALL FITTINGS ARE TO HAVE BELL ENDS.
- ALL BOLTS AND NUTS ON ALL "RETAINED" MECHANICAL JOINTS SHALL HAVE FIELD APPLIED ONE (1) COAT OF BITUMASTIC PAINTING FOLLOWED BY AN ENCASEMENT OF POLYETHYLENE WRAPPING IN ACCORDANCE WITH ANSI/AWWA C-105/A21.5-88, CLASS "C", METHOD "B".
- WHERE SHOWN ON THE PLANS, OR WHEN OTHERWISE CALLED FOR, PIPE AND FITTINGS SHALL HAVE AN APPROVED "TYPE I" OR "TYPE II" BOLTLESS RESTRAINED PUSH-ON JOINTS TO THE LIMITS SHOWN ON THE DRAWINGS.
- AT THE END OF EACH WORKDAY, THE CONTRACTOR SHALL PLUG ALL OPEN PIPE ENDS WITH WATER TIGHT PLUGS AS PER THE "PREVENTATIVE AND CORRECTIVE MEASURES DURING CONSTRUCTION" SECTION OF THE MOST CURRENT REVISION OF AWWA C-651 AS TO PREVENT THE INFILTRATION OR INTRUSION OF ANY FOREIGN OBJECTS OR MATERIALS. DATE STAMPED DIGITAL PHOTOS SHALL BE PROVIDED FOR EACH WORKDAY DEMONSTRATING THAT PROPER AWWA C-650 METHODS WERE USED TO PLUG ALL OPEN WATER MAIN ENDS. EACH PHOTO SHALL CLEARLY IDENTIFY THE STATION AT WHICH THE PIPE IS PLUGGED. THE STATIONING SHALL BE SHOWN BY USE OF A STATION MARKER PLACED AT THE PLUGGED PIPE END.

PHOTOS SHALL BE SUBMITTED ON A DAILY BASIS UNLESS OTHERWISE DEFINED BY CWD INSPECTOR OR ENGINEER. ALL PHOTOS TAKEN OVER THE COURSE OF THE PROJECT SHALL BE SUBMITTED BY THE CONTRACTOR AS PART OF THE AS-BUILT SUBMITTAL. AS-BUILTS SHALL BE CONSIDERED INCOMPLETE WITHOUT SAID COLLECTION OF DIGITAL PHOTOS.

HYDRANTS:

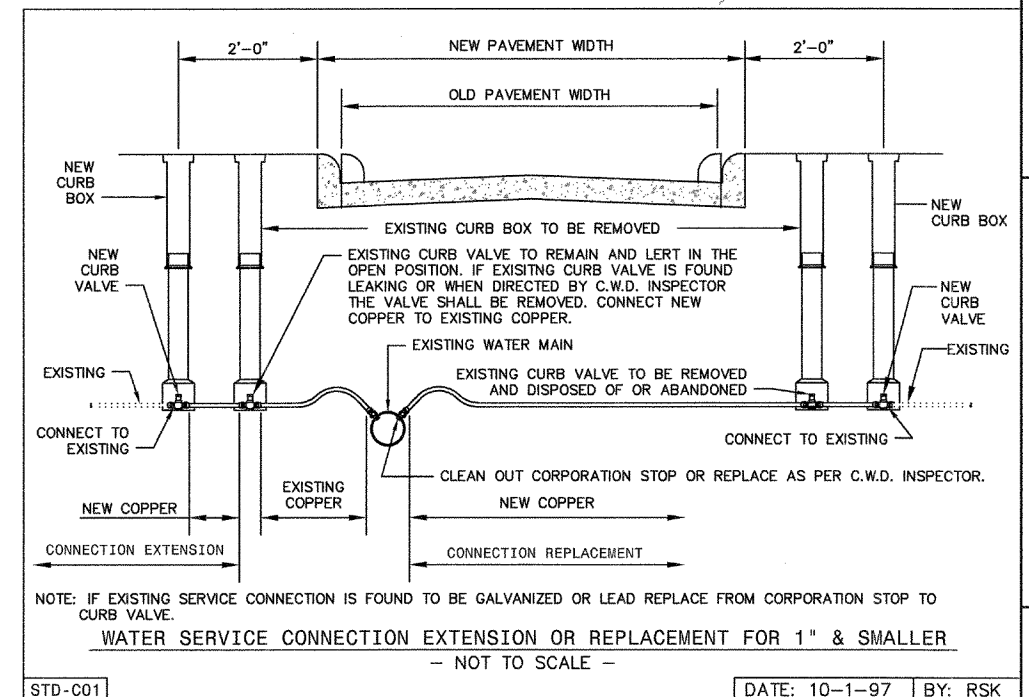
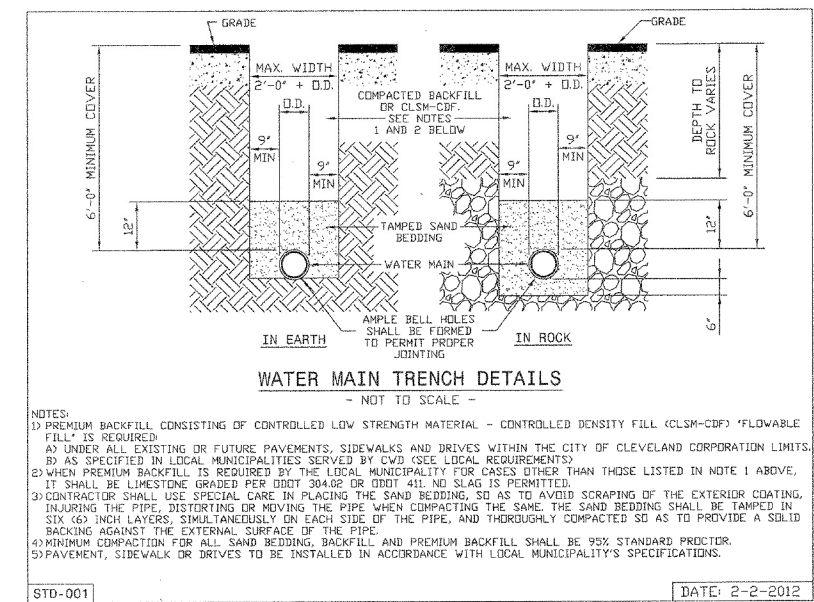
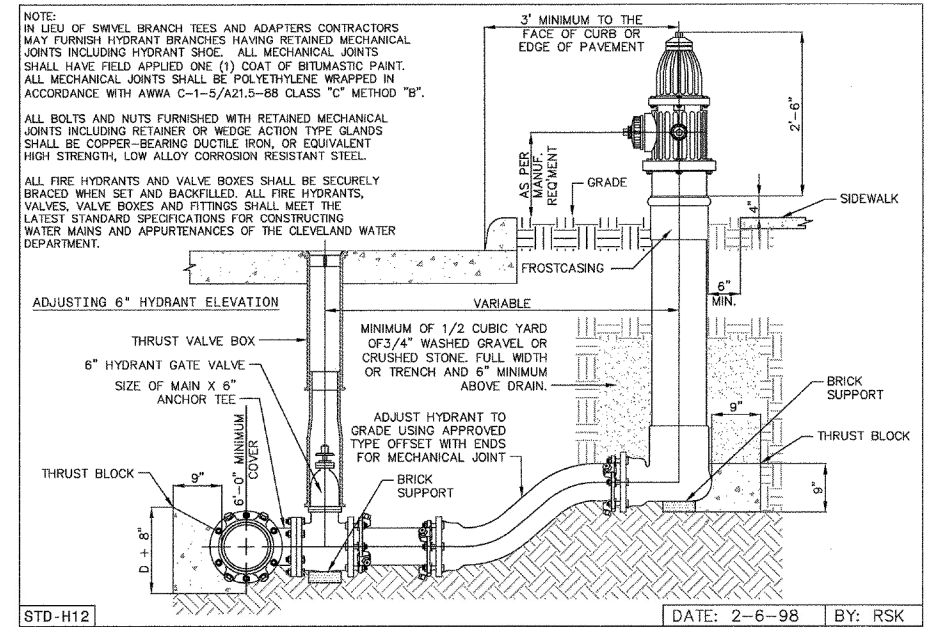
- IN ALL HYDRANT INSTALLATIONS THE CONTRACTOR SHALL FACE ALL HYDRANT'S 4" (STEAMER) NOZZLE TOWARD THE PAVEMENT PRIOR TO TESTING AND CHLORINATION OF WATER MAINS. CONTRACTOR SHALL CONSULT WITH THE LOCAL MUNICIPALITY'S ENGINEERING OR SERVICE DEPARTMENT TO OBTAIN HYDRANT MODEL AND NOZZLE THREAD REQUIREMENTS IF NOT INDICATED ON THE APPROVED PLANS.
- ALL VALVES SHALL BE AN APPROVED MODEL RESILIENT SEATED GATE VALVES AS PER THE MOST CURRENT VERSION OF AWWA C509 OR C515.

CONNECTIONS:

- WATER CONNECTIONS SHOWN ON THESE DRAWINGS ARE FOR REFERENCE ONLY AND ARE NOT PART OF THE WATER MAIN APPROVAL. ADDITIONAL PERMITS FOR SERVICE CONNECTIONS MUST BE OBTAINED FROM THE DIVISION OF WATER PRIOR TO INSTALLATION OF ANY PORTION OF THE SERVICE CONNECTION(S). IT IS THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR ALL PERMITS FOR ALL SIZE WATER SERVICE CONNECTIONS BEFORE PERFORMING ANY WORK. THE AMOUNT OF CHARGES CAN BE OBTAINED FROM THE DIVISION OF WATER, PERMITS AND SALES SECTION AT 216-664-2444 EXT. 5203.
- PEAK FLOW DEMANDS DO NOT EXCEED 25 GPM FOR AN INDIVIDUAL HOME/UNIT, INCLUSIVE OF ALL USAGE (FIRE, DOMESTIC AND/OR IRRIGATION) AND
- LENGTH OF ONE INCH CONNECTION DOES NOT EXCEED 75 FEET AS MEASURED FROM THE MAIN TO THE POINT OF ENTRY INTO THE PROPOSED HOME/UNIT.
- ANY SERVICE REQUESTS DIFFERING FROM THE STATED CRITERIA SHALL REQUIRE THE SUBMITTAL OF A COMPLETE WATER SERVICE APPLICATION. PEAK DEMANDS ARE TO BE ASSESSED ON APPLICATION AND SETBACKS ARE TO BE SHOWN ON A ACCOMPANYING SITE PLAN. SITE PLANS SHALL SHOW WATER METER VAULTS IN THE RIGHT OF WAY OR IN AN EASEMENT CONTIGUOUS TO THE RIGHT OF WAY FOR ANY HOMES/UNITS WITH SETBACKS GREATER THAN 150 FEET. EASEMENTS ARE TO BE PROVIDED WITH THE SERVICE CONNECTION APPLICATION SUBMITTAL.
- ALL WATER MAIN CURB VALVE BOXES & METER VAULTS WILL BE INSTALL IN GRASS AREAS WHEN POSSIBLE.

EMERGENCIES:

- IF A WATER MAIN OR SERVICE CONNECTION BREAK OCCURS DURING CONSTRUCTION AND EMERGENCY ASSISTANCE IS REQUIRED, PLEASE NOTIFY THE DIVISION OF WATER AT 216-664-3060.



DETAILS

CURB-PROFESSOR STREET INTERSECTIONS



REF. NO.	STATION	OFFSET	SIGN		630							
			CODE	SIZE (W x H)	GROUND MOUNTED SUPPORT, NO. 3 POST	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN, FLAT SHEET	SIGN, FLAT SHEET, AS PER DS-17	STREET NAME SIGN, (12"), AS PER DS-18	REMOVAL OF GROUND MOUNTED SIGN AND STORAGE	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF POLE MOUNTED SIGN AND STORAGE
					FT	EACH	SQ FT	SQ FT	EACH	EACH	EACH	EACH
1	43+93	LT										1
2	44+30	19' LT	R7-1R	12X18	12.0			1.50				
3	10+39	15.5' LT	R1-1	30X30	13.0		6.25					
4	10+62	LT									3	
5	10+75	LT							1	1		
6	10+74	LT							1	1		
7	11+21	22' LT	R7-1L	12X18	12.0			1.50				
8	45+72	LT							2	1		
9	45+60	22' LT	R7-1L R7-5R	12X18 12X18	13.5			1.50 1.50				
10	45+45	22' LT	(2) SNS	VARx12		2					2	
11	45+39	18' LT	R1-1	30X30	13.0		6.25		2			
12	10+55	RT									1	
13	11+09	RT							2	1		
14	11+21	22' RT	R7-1R R7-5L	12X18 12X18	13.5			1.50 1.50				
20	12+35	23' LT	W3-1	30X30	13.0		6.25					
21	12+83	22' LT	R7-1R RT-SPEC	12X18 12X18	13.5			1.50 1.50				
22	12+95	15' LT	R2-1	24X30	13.0		5.00					
23	12+97	LT									1	
24	13+14	LT							1	1		
25	13+29	27.5' LT	(2) SNS	VARx12		2			2		4	
26	55+47	15.5' LT	R1-1	30X30	13.0		6.25					
27	55+51	LT							1	1		
28	55+57	19' LT	R7-1L	12X18	12.0			1.50				
29	55+65	RT							1	1		
30	55+57	19' RT	R7-1R	12X18	12.0			1.50				
31	55+45	RT							2	1		
32	13+82	LT									1	
33	13+87	LT							2	1		
34	13+90	15.5' LT	R1-1	30X30	13.0		6.25					
35	14+08	LT							2	1		
36	14+19	22' LT	R7-1L R7-SPEC	12X18 12X18	13.5			1.50 1.50				
37	12+75	RT									2	
38	12+83	RT	R7-107L (MOD) R7-5R	12X18 12X18	13.5			1.50 1.50				
39	13+12	15.5' RT	R1-1	30X30	13.0		6.25					
40	13+16	RT									2	
41	54+58	LT							1	1		
42	54+40	19' LT	R7-1R	12X18	12.0			1.50				
43	54+19	RT							2	1		
44	54+40	19' RT	R7-1L R7-5R	12X18 12X18	13.5			1.50 1.50				
45	54+53	15.5' RT	R1-1	30X30	13.0		6.25					
46	54+72	RT									2	
47	13+71	28' RT	(2) SNS	VARx12		2			2		2	
48	14+15	RT									2	
49	14+19	22' RT	R7-1R R7-5L	12X18 12X18	13.5			1.50 1.50				
<b>SUBTOTALS 'A'</b>					258.5	6	48.75	28.50	6	18	12	23

REF. NO.	STATION	OFFSET	SIGN		630							
			CODE	SIZE (W x H)	GROUND MOUNTED SUPPORT, NO. 3 POST	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN, FLAT SHEET	SIGN, FLAT SHEET, AS PER DS-17	STREET NAME SIGN, (12"), AS PER DS-18	REMOVAL OF GROUND MOUNTED SIGN AND STORAGE	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF POLE MOUNTED SIGN AND STORAGE
					FT	EACH	SQ FT	SQ FT	EACH	EACH	EACH	EACH
60	18+08	22' LT	R7-1R	12X18	12.0			1.50				
61	18+39	LT									1	
62	18+53	26' LT	(2) SNS	VARx16		2				2		2
63	65+45	LT									1	
64	65+46	15.5' LT	R1-1	30X30	13.0		6.25				1	
65	65+67	LT									1	
66	65+67	17' LT	R7-1L	12X18	12.0			1.50				
67	65+50	17' RT	R7-1L	12X18	12.0			1.50				
68	19+16	LT									1	
69	19+18	23.5' LT	R1-1	30X30	13.0		6.25					
70	18+03	22' RT	R7-107L (MOD)	12X18	12.0			1.50				
71	18+29	RT									1	
72	18+37	23.5' RT	R1-1	30X30	13.0		6.25					
73	18+40	RT									2	
74	64+32	17' LT	R7-1R	12X18	12.0			1.50				
75	64+32	17' RT	R7-1L	12X18	12.0			1.50				
76	64+42	RT									1	
77	64+53	15.5 RT	R1-1	30X30	13.0		6.25				1	
78	18+97	28' RT	(2) SNS	VARx12		2				2		4
79	19+19	15' RT	S5-2	24X30	13.0		5.00					
80	19+44	22' RT	R7-1R	12X18	12.0			1.50				
90	22+67	22' LT	R7-1R	12X18	12.0			1.50				
91	22+99	LT									1	
92	23+19	LT									1	
93	75+55	19' LT	R7-1L	12X18	12.0			1.50				
94	75+79	RT									1	
95	75+55	19' RT	R7-1R R7-5L	12X18 12X18	13.5			1.50 1.50				
96	23+60	27' LT	(2) SNS	VARx12		2				2		3
97	23+90	LT									1	
98	23+97	22' LT	R7-1L	12X18	12.0			1.50			1	
99	22+54	22' RT	R7-1L	12X18	12.0			1.50				
100	22+62	RT									1	
101	23+16	26' RT	(2) SNS	VARx12		2				2		1
102	23+19	RT									3	
103	74+45	19' LT	R7-1R	12X18	12.0			1.50				
104	74+45	19' RT	R7-1L	12X18	12.0			1.50				
105	74+50	RT									1	
106	23+97	22' RT	R7-1R	12X18	12.0			1.50			1	
<b>SUBTOTALS-THIS TABLE</b>					246.5	8	30.00	24.00	8	9	8	18
<b>SUBTOTALS 'A'</b>					258.5	6	48.75	28.50	6	18	12	23
<b>TOTAL QUANTITIES CARRIED TO GENERAL SUMMARY</b>					<b>505.0</b>	<b>14</b>	<b>78.75</b>	<b>52.50</b>	<b>14</b>	<b>27</b>	<b>20</b>	<b>41</b>

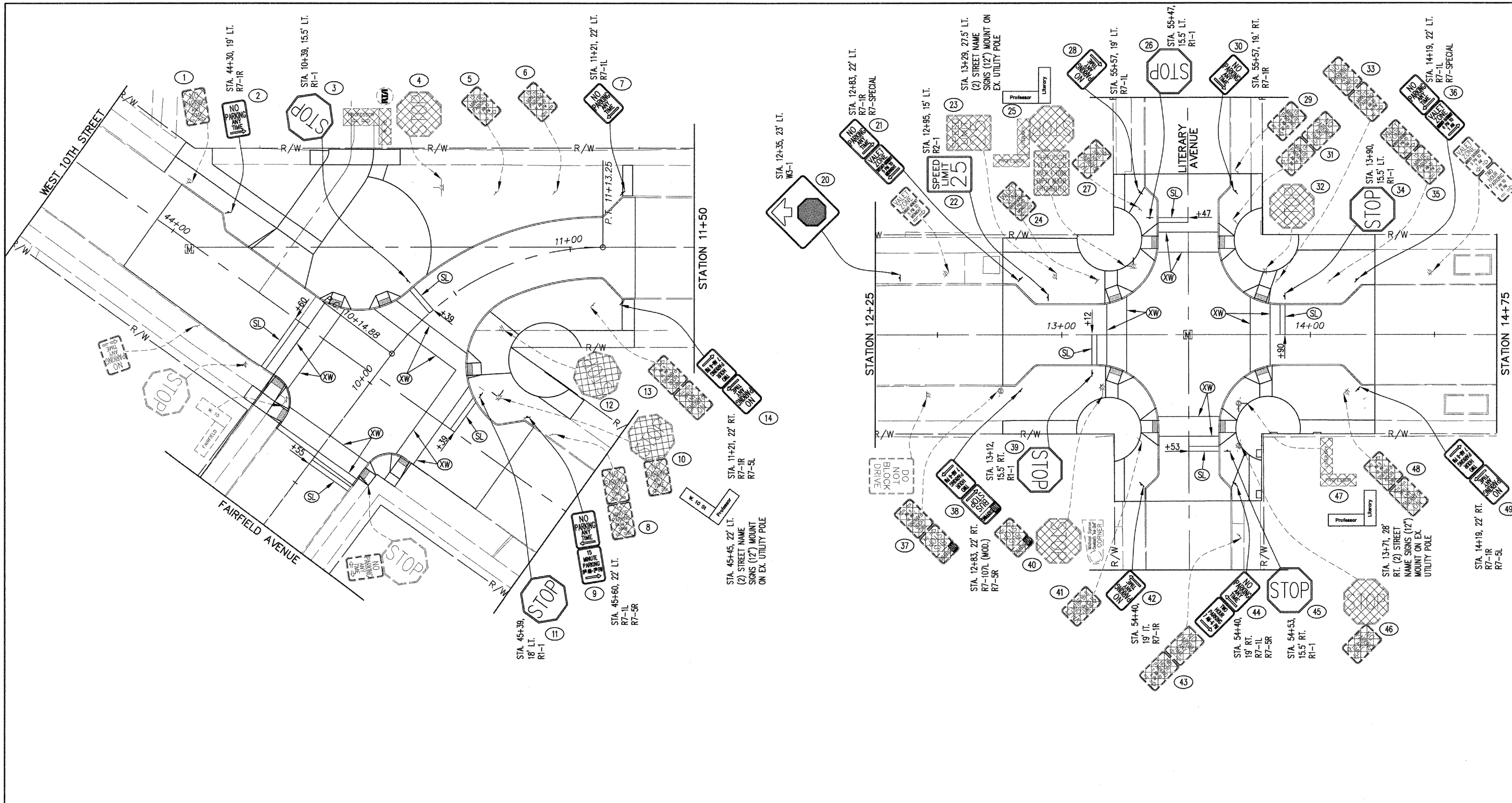
INTERSECTION	644	
	STOP LINE	CROSSWALK LINE
	FEET	FEET
PROFESSOR/WEST 10TH	70	311
PROFESSOR/LITERARY	48	208
PROFESSOR/COLLEGE	64	238
PROFESSOR/JEFFERSON	48	199
<b>QUANTITIES CARRIED TO GENERAL SUMMARY</b>	<b>230</b>	<b>956</b>

**SIGNING NOTES:**

- ALL SIGNS DESIGNATED FOR REMOVAL SHALL BE DELIVERED TO THE CITY OF CLEVELAND SIGN SHOP, 4150 EAST 49TH STREET, BUILDING #4 (216-420-8282). TWO WEEKS ADVANCE NOTICE MUST BE GIVEN TO THE CITY SHOP OF DELIVERY.
- R7 SERIES SIGNS LABELED AS (MOD.) SHALL BE MODIFIED BY SUBSTITUTING "STOPPING" FOR "PARKING."
- R7 SERIES SIGNS LABELED AS "SPECIAL" SHALL MATCH THE SIZE AND VERBIAGE OF THE SIGN THEY ARE REPLACING.

SIGNING AND PAVEMENT MARKING SUBSUMMARY

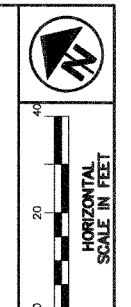
CITY-PROFESSOR STREET INTERSECTIONS



- NOTES:
1. FOR PAVEMENT MARKING SUBSUMMARY SEE SHEET NO. 32
  2. FOR SIGNING SUBSUMMARY SEE SHEET NO. 32
  3. ALL PAVEMENT MARKINGS ARE TO BE ITEM 644 - THERMOPLASTIC
  4. REFERENCE NO. 16 TO 24 NOT USED.

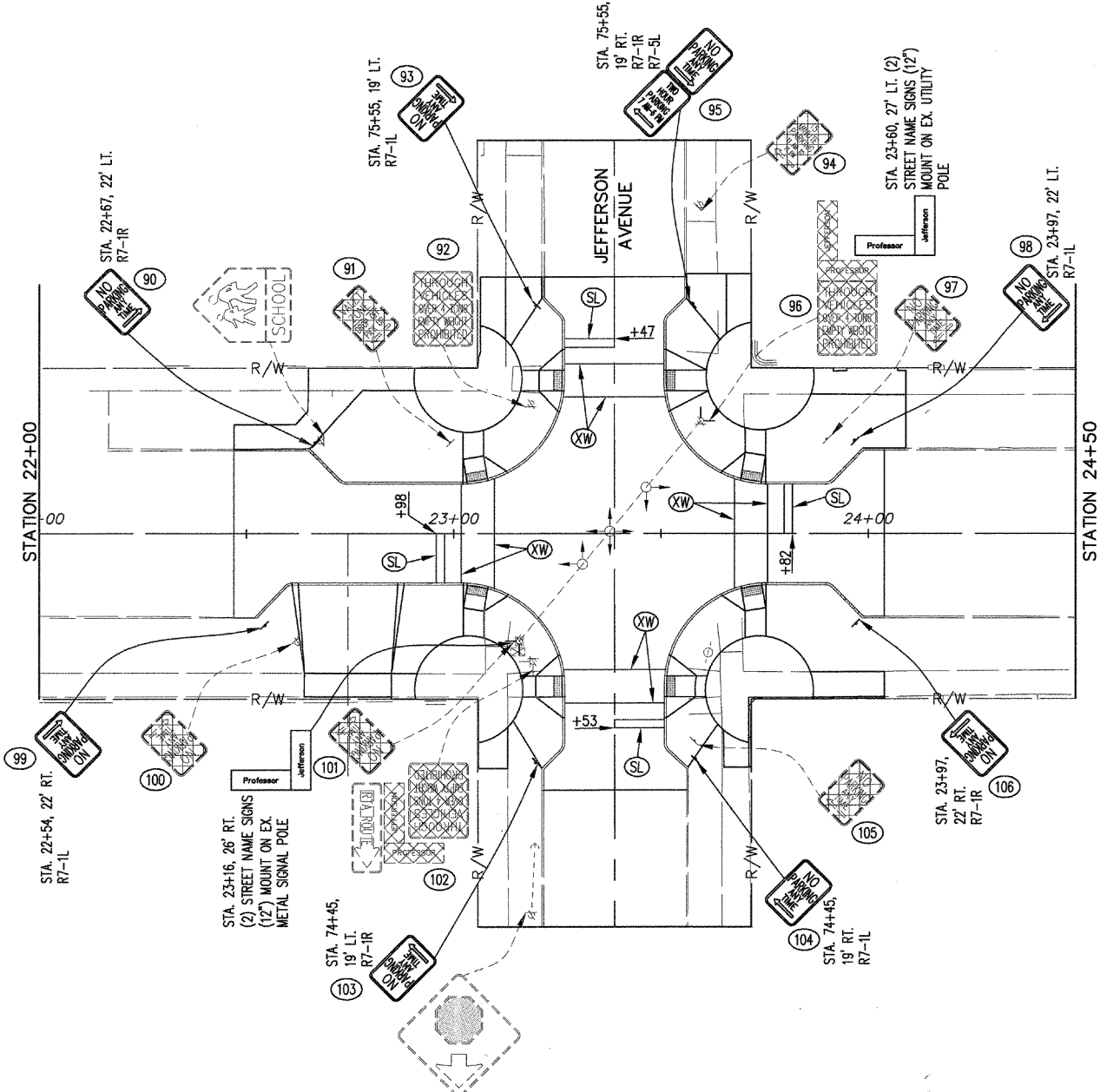
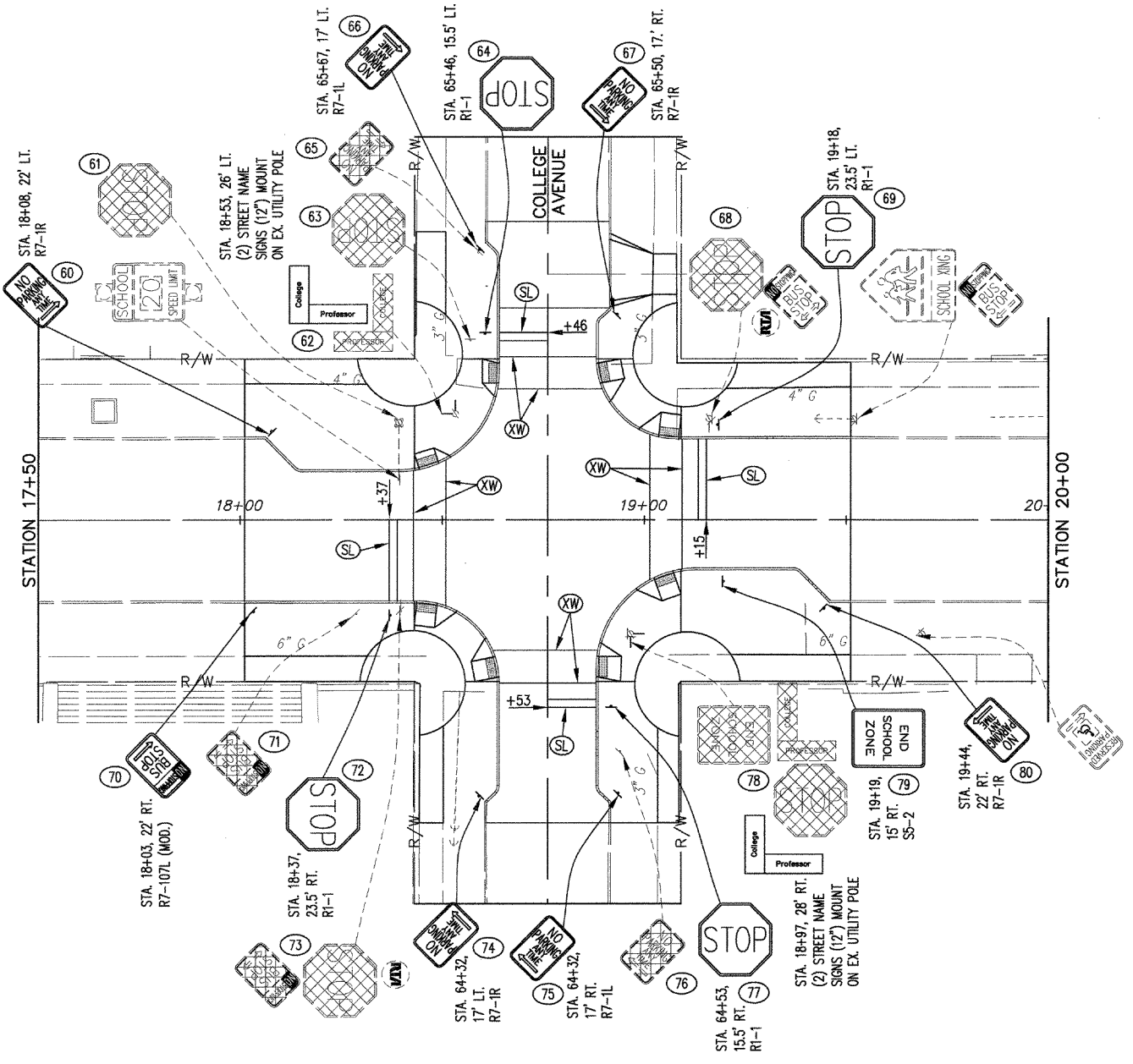
**PAVEMENT MARKING LEGEND**

(XW) = CROSSWALK LINE  
 (SL) = STOP LINE



**SIGNING AND PAVEMENT MARKING PLAN  
 PROFESSOR AVENUE**

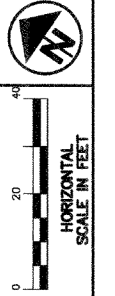
**CUY-PROFESSOR STREET INTERSECTIONS**



- NOTES:
1. FOR PAVEMENT MARKING SUBSUMMARY SEE SHEET NO. 32
  2. FOR SIGNING SUBSUMMARY SEE SHEET NO. 32
  3. ALL PAVEMENT MARKINGS ARE TO BE ITEM 644 - THERMOPLASTIC
  4. REFERENCE NO. 50 TO 59 AND 81 TO 89 NOT USED.

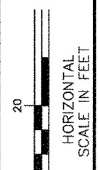
**PAVEMENT MARKING LEGEND**

(XW) = CROSSWALK LINE  
 (SL) = STOP LINE



**SIGNING AND PAVEMENT MARKING PLAN**  
**PROFESSOR AVENUE**

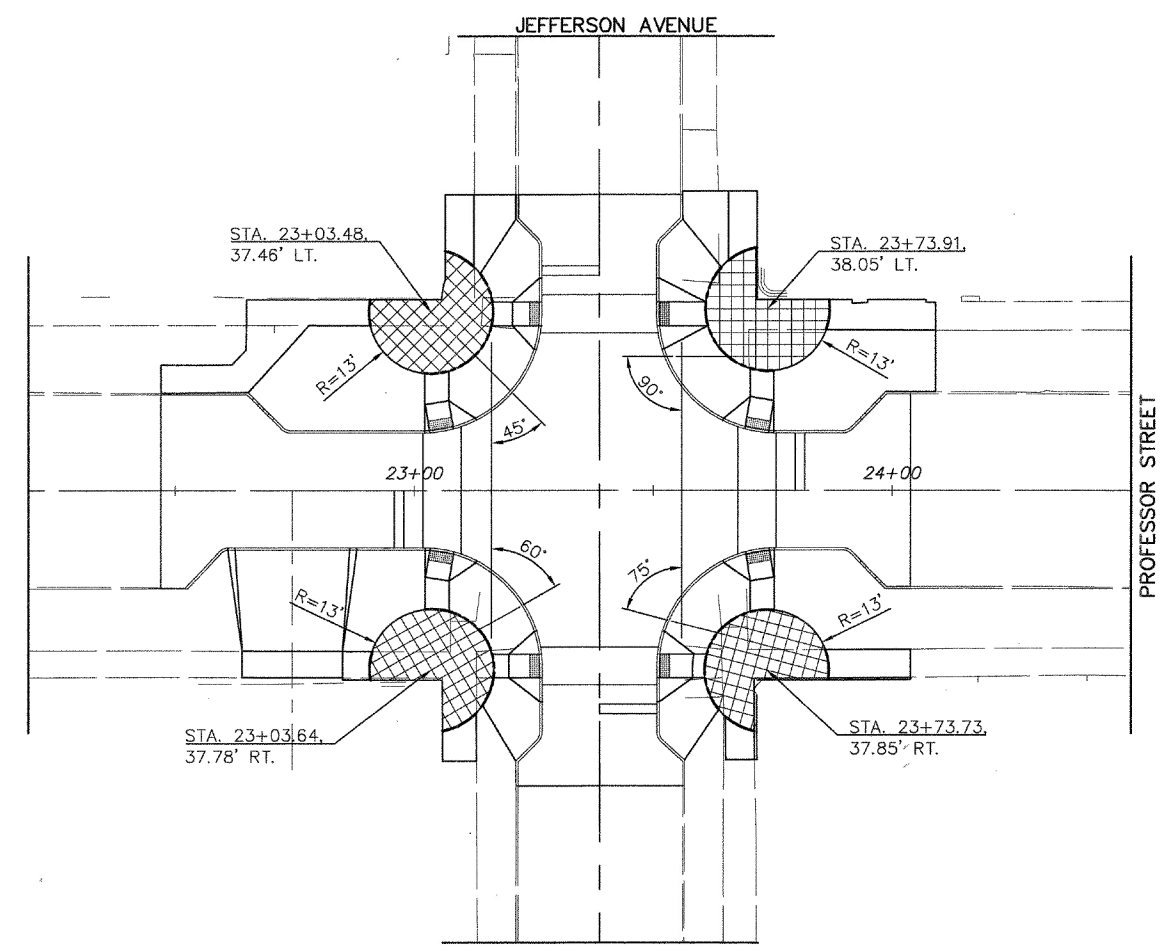
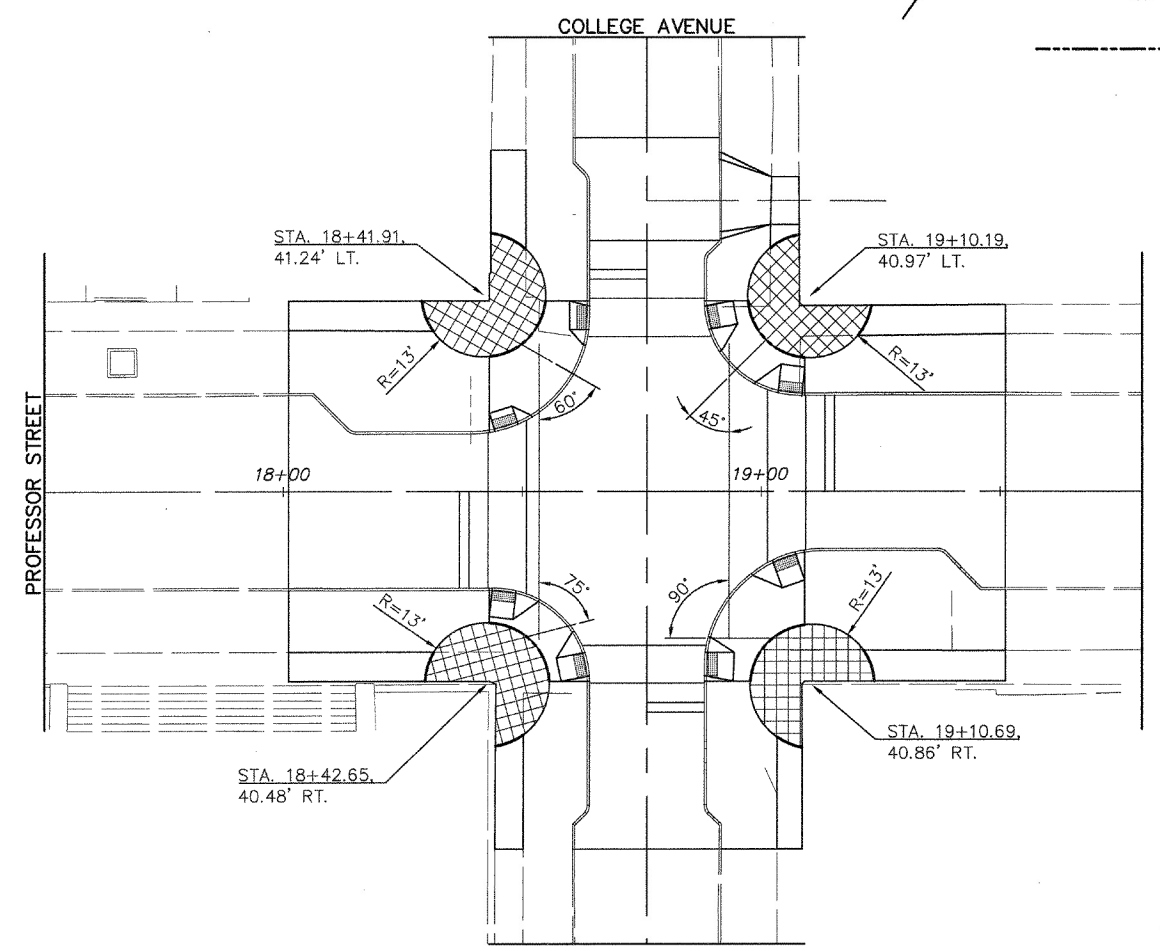
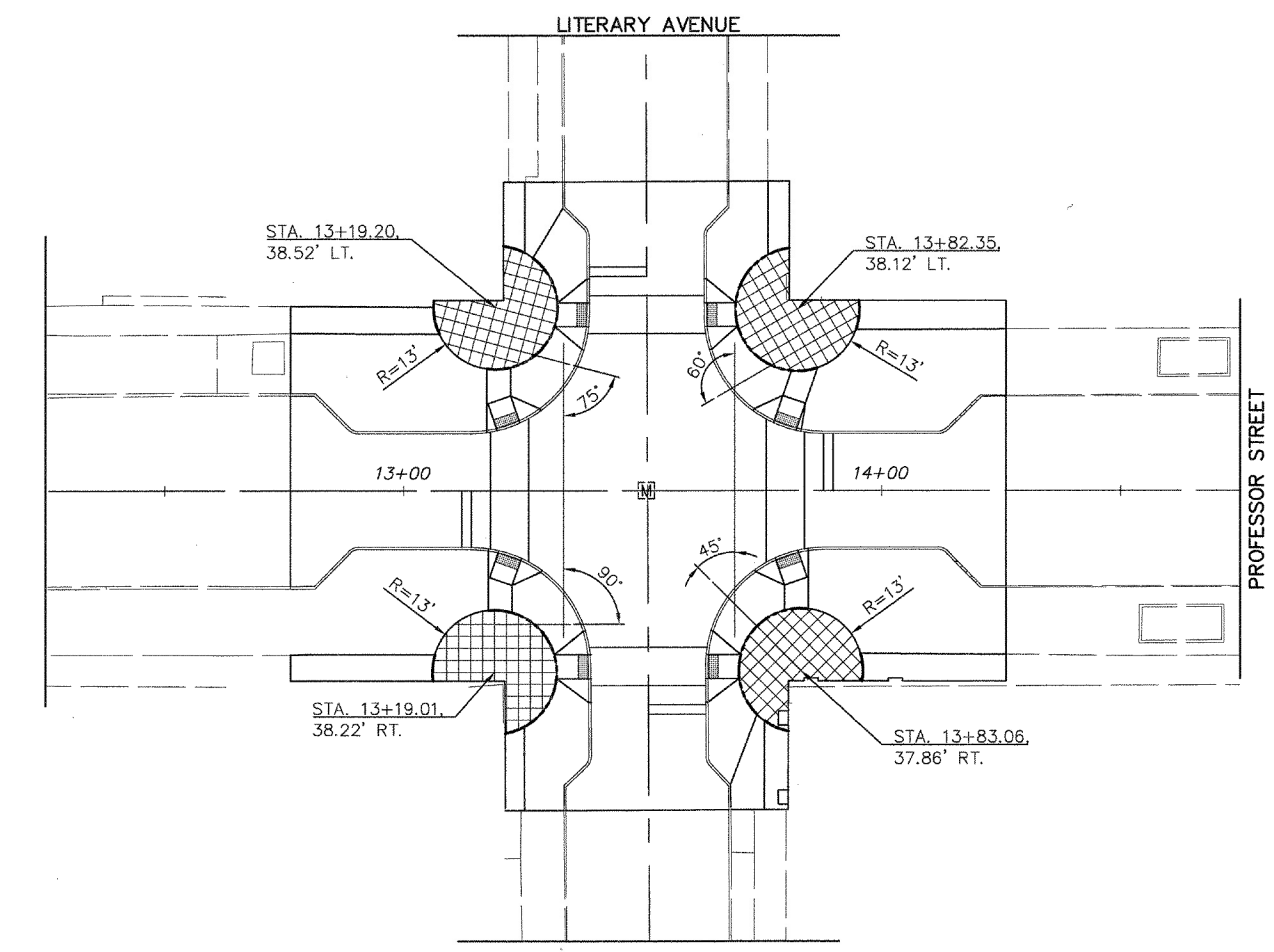
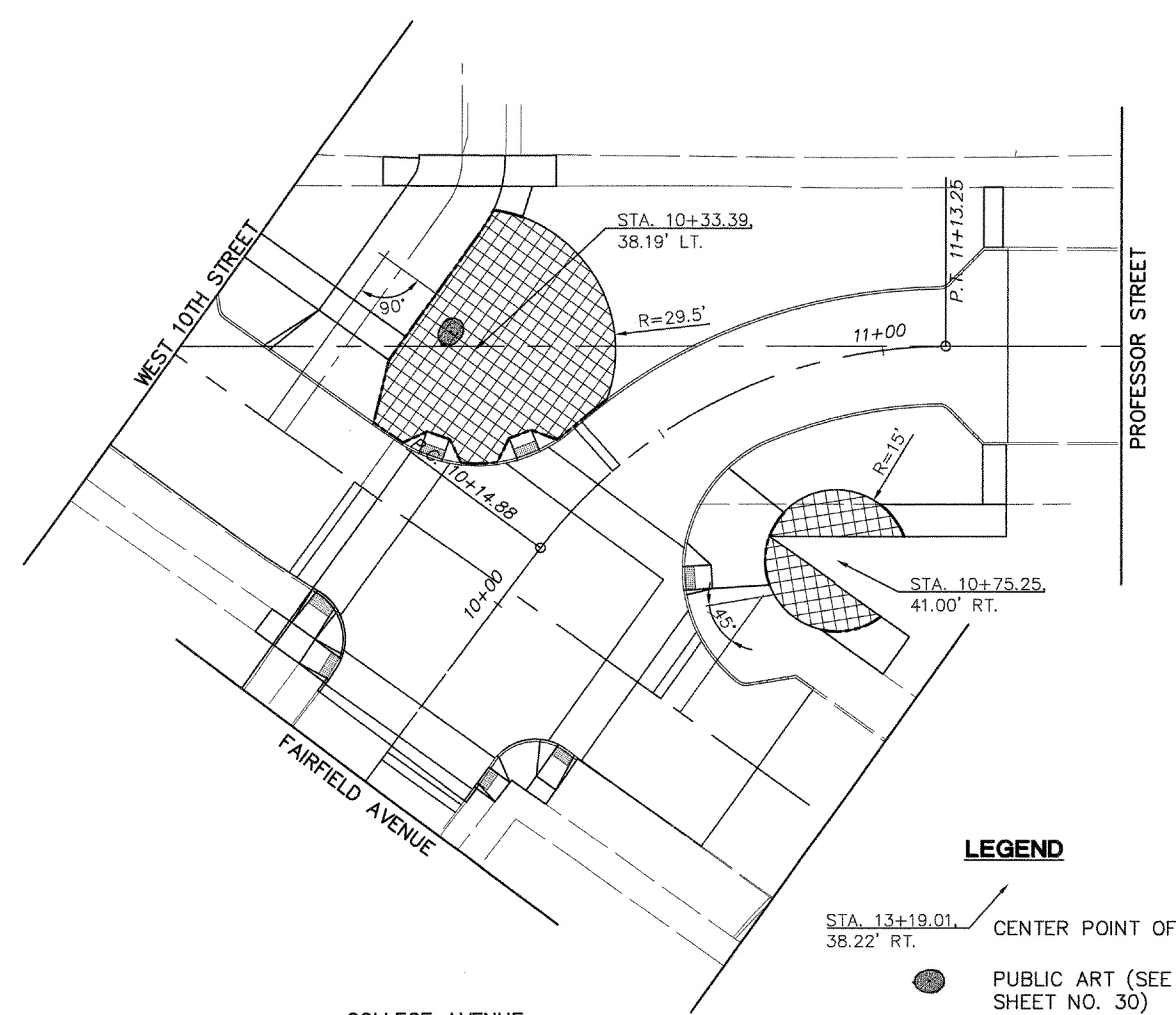
**CUY-PROFESSOR STREET INTERSECTIONS**



CALCULATED  
DRP  
CHECKED  
RCN

**STREETSCAPE PLAN - BASE BID**

**CITY-PROFESSOR STREET INTERSECTIONS**



**LEGEND**

- CENTER POINT OF CURVE
- PUBLIC ART (SEE DETAIL SHEET NO. 30)
- EXPANSION JOINT

**NOTES:**

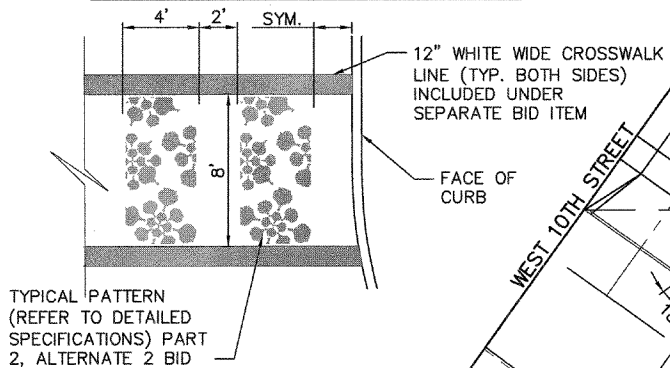
1. ALL STATIONS AND OFFSETS PROVIDED ARE FROM THE  $\bar{C}$  CONSTRUCTION OF PROFESSOR STREET.
2. CONTRACTOR IS TO BEGIN THE 30"x 30" SCORING PATTERN FROM THE CENTER POINT OF THE CURVE.
3. FOR PART 2, ALTERNATE 1 BID STREETSCAPING WORK SEE SHEET NO. 36.
4. SCORING OF THE SIDEWALK IS INCLUDED IN THE UNIT PRICE BID FOR "ITEM 608, 6" CONCRETE WALK, SCORING PATTERN PER PLAN."

CURVE	STATION*	OFFSET*	RADIUS
1A	10+32.64	44.21' LT.	4'
1B	10+32.64	41.84' LT.	10'
1C	10+32.64	41.84' LT.	15'
1D	10+33.39	38.19' LT.	22'
1E	10+33.39	38.19' LT.	29.5'

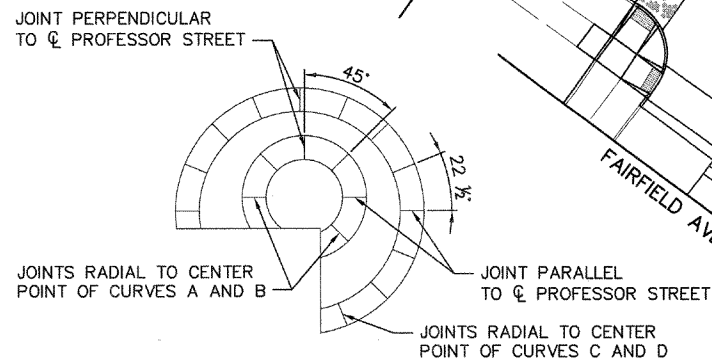
CURVE	STATION*	OFFSET*	RADIUS
2A	10+75.25	41.00' RT.	10'
2B	10+75.25	41.00' RT.	15'
2C	10+70.41	42.00' RT.	22'
2D	10+70.41	42.00' RT.	27'

CURVE	STATION*	OFFSET*	RADIUS
3A	13+21.71	38.28' LT.	3'
3B	13+21.71	38.28' LT.	5.5'
3C	13+19.20	38.52' LT.	10.5'
3D	13+19.20	38.52' LT.	13'

CURVE	STATION*	OFFSET*	RADIUS
4A	13+80.64	36.30' LT.	3'
4B	13+80.64	36.30' LT.	5.5'
4C	13+82.35	38.12' LT.	10.5'
4D	13+82.35	38.12' LT.	13'



**PATTERNED CROSSWALK DETAIL**



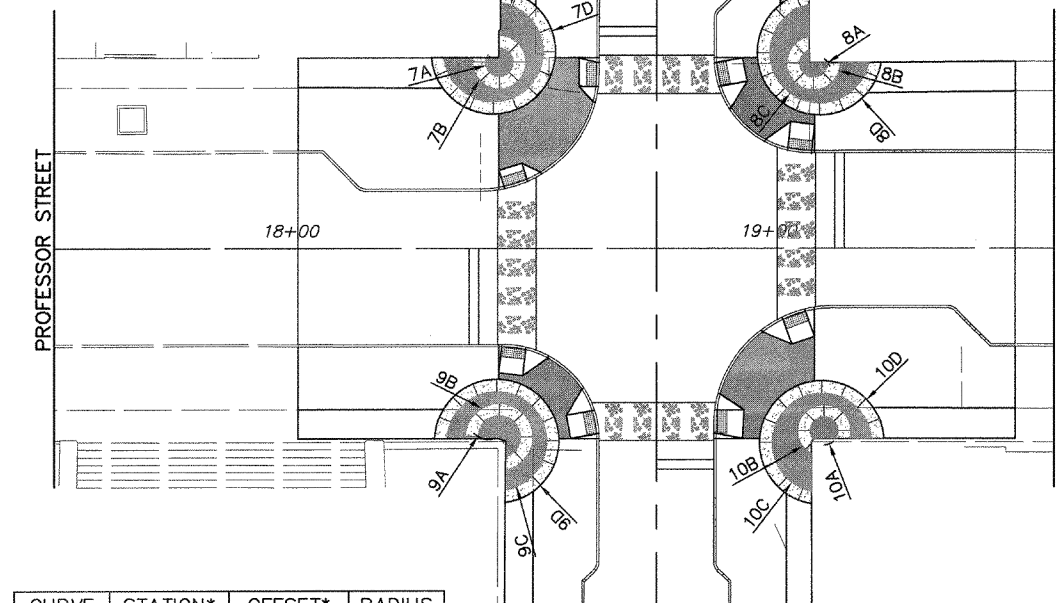
**CONCRETE WALK RADIAL SCORING PLAN**

FOR WALKS AT THE INTERSECTIONS OF LITERARY AVENUE, COLLEGE AVENUE, AND JEFFERSON AVENUE.

**COLLEGE AVENUE**

CURVE	STATION*	OFFSET*	RADIUS
7A	18+43.17	39.08' LT.	3'
7B	18+43.17	39.08' LT.	5.5'
7C	18+41.91	41.24' LT.	10.5'
7D	18+41.91	41.24' LT.	13'

CURVE	STATION*	OFFSET*	RADIUS
8A	19+08.90	38.84' LT.	3'
8B	19+08.90	38.84' LT.	5.5'
8C	19+10.19	40.97' LT.	10.5'
8D	19+10.19	40.97' LT.	13'



CURVE	STATION*	OFFSET*	RADIUS
9A	18+43.17	39.62' RT.	4.5'
9B	18+43.17	39.62' RT.	7'
9C	18+42.65	40.48' RT.	10.5'
9D	18+42.65	40.48' RT.	13'

CURVE	STATION*	OFFSET*	RADIUS
10A	19+11.15	38.40' RT.	3'
10B	19+11.15	38.40' RT.	5.5'
10C	19+10.69	40.86' RT.	10.5'
10D	19+10.69	40.86' RT.	13'

**LEGEND**

- INTEGRALLY COLORED AND STAMPED CONCRETE WALK (PART 2, ALTERNATE 1 BID)
- RADIAL SCORED 6" CONCRETE WALK (PART 2, ALTERNATE 1 BID)
- PUBLIC ART (SEE DETAIL SHEET NO. 30)

**NOTES:**

- PATTERNED CROSSWALK QUANTITY IS BASED ON NUMBER OF 4' X 8' SECTIONS \* 32 SQUARE FEET.
- FOR PART 2, ALTERNATE 1 QUANTITIES SEE SHEET NO. 15.
- RADIAL SCORING OF THE SIDEWALK IS INCLUDED IN THE UNIT PRICE BID FOR "ITEM 608, 6" CONCRETE WALK WITH RADIAL SCORING PATTERN, AS PER D-23 AND DS-7."
- REFER TO DETAILED SPECIFICATION DS-24 FOR INTEGRALLY COLORED AND STAMPED CONCRETE SIDEWALK SPECIFICATIONS, INCLUDING COLOR AND STAMP PATTERN.
- FOR BASE BID STREETSCAPE WORK SEE SHEET NO. 35.
- FOR PATTERN SYMBOL DIMENSIONS, SEE DETAIL SHEET NO. 30.

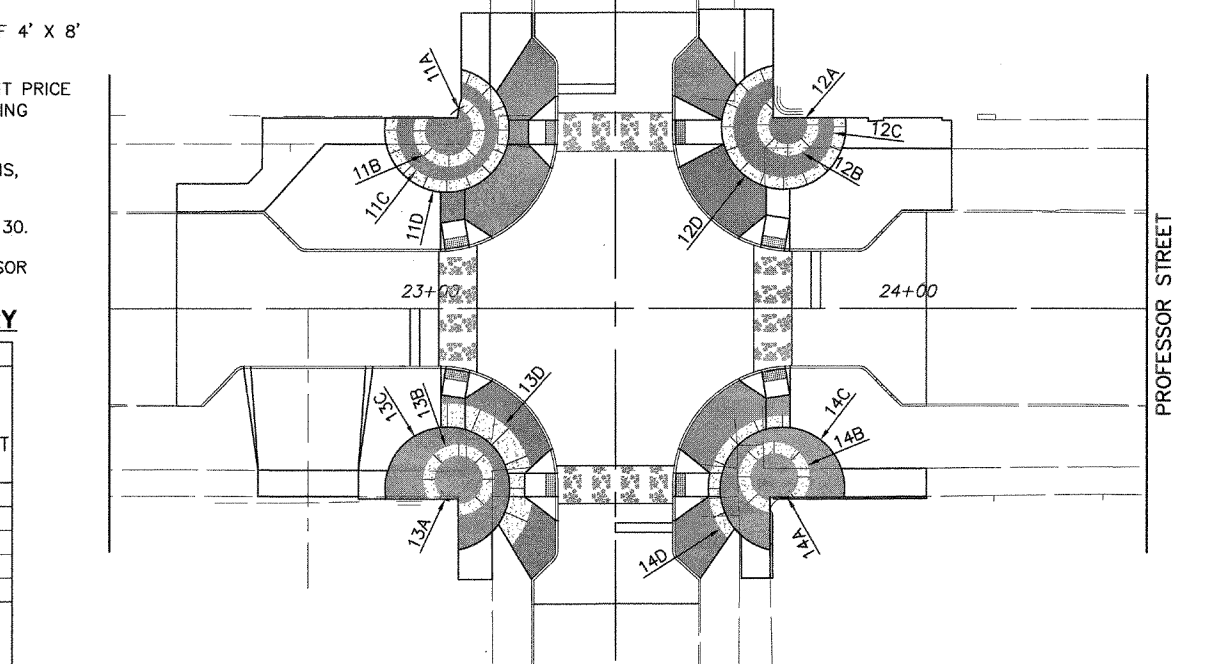
\*= STATION AND OFFSET ARE FROM @ CONSTRUCTION PROFESSOR STREET AND IS THE CENTER POINT OF THE CURVE.

**PATTERNED CROSSWALK SUBSUMMARY**

INTERSECTION	SPECIAL PATTERNED CROSSWALK AS PER DS-33 (PART 2, ALT. 2) SQ FT
PROFESSOR/WEST 10TH	576
PROFESSOR/LITERARY	512
PROFESSOR/COLLEGE	576
PROFESSOR/JEFFERSON	512
<b>QUANTITY CARRIED TO GENERAL SUMMARY</b>	<b>2176</b>

CURVE	STATION*	OFFSET*	RADIUS
11A	23+03.95	37.28' LT.	5'
11B	23+03.95	37.28' LT.	7.5'
11C	23+03.48	37.46' LT.	10.5'
11D	23+03.48	37.46' LT.	13'

CURVE	STATION*	OFFSET*	RADIUS
12A	23+74.80	38.50' LT.	4'
12B	23+74.80	38.50' LT.	6.5'
12C	23+73.91	38.05' LT.	10.5'
12D	23+73.91	38.05' LT.	13'



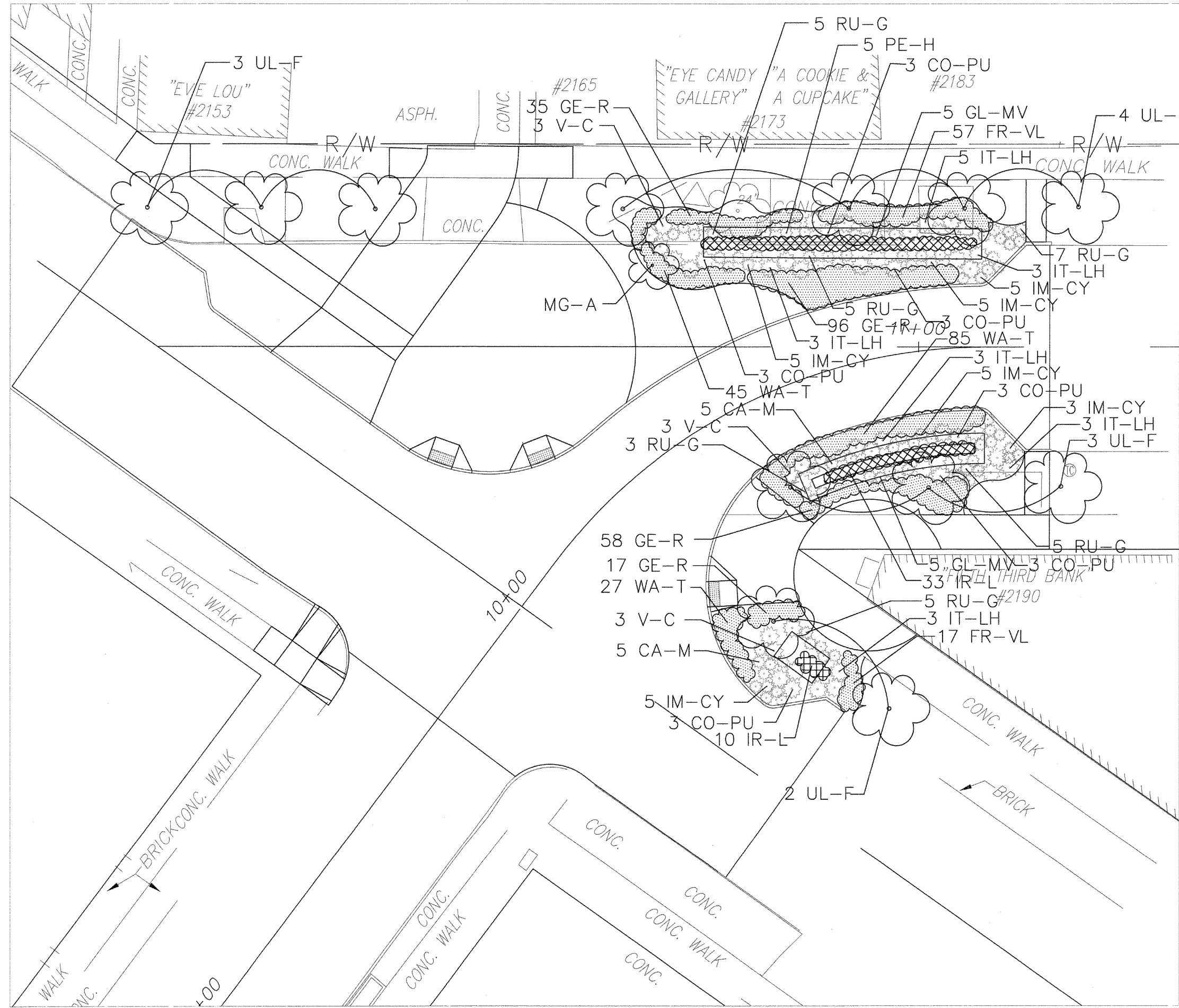
CURVE	STATION*	OFFSET*	RADIUS
13A	23+05.98	35.88' RT.	5'
13B	23+05.98	35.88' RT.	7.5'
13C	23+03.64	37.78' RT.	13'
13D	23+03.64	37.78' RT.	18'

CURVE	STATION*	OFFSET*	RADIUS
14A	23+72.00	35.40' RT.	5'
14B	23+72.00	35.40' RT.	7.5'
14C	23+73.73	37.85' RT.	13'
14D	23+73.73	37.85' RT.	15.5'



STREETSCAPE PLAN - PART 2, ALTERNATE 1 + 2 BIDS

CUY-PROFESSOR STREET INTERSECTIONS



NOTES:

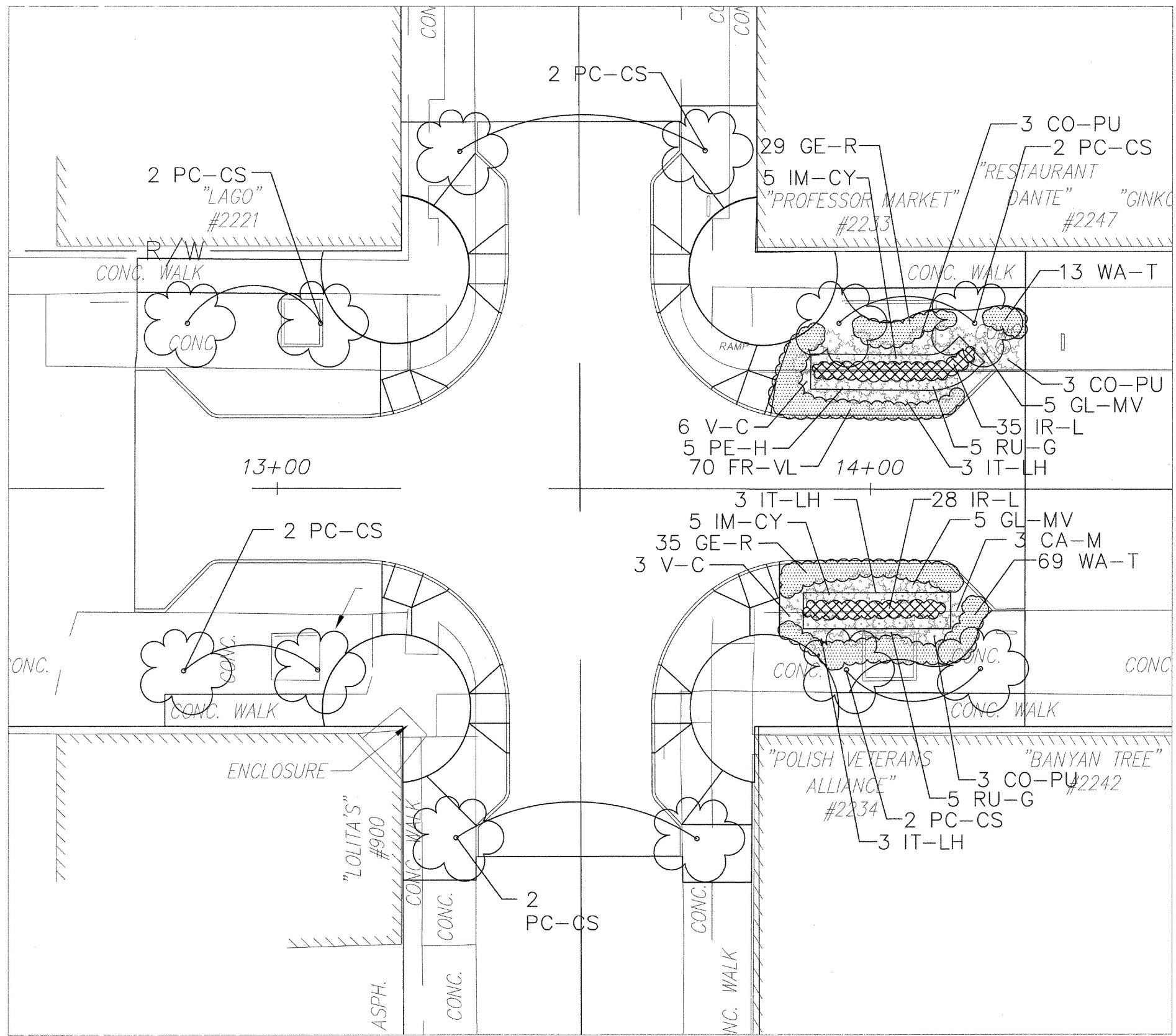
FURNISHING AND INSTALLATION OF ALL ITEMS INDICATED ON THIS DRAWING ARE INCLUDED IN THE LUMP SUM PRICE BID FOR "ITEM SPECIAL - LANDSCAPING, MISC.: PROFESSOR STREET AND WEST TENTH STREET INTERSECTION LANDSCAPING, AS PER DS-31".



ITEM	KEY	DESCRIPTION:	BOTANICAL NAME-COMMON NAME	SIZE	COND.	QTY.
1	CA-M	CAREX MUSKINGUMENSIS - PALM SEDGE		#2 CONT	CLUMP	10
2	CO-PU	CORNUS PUMILA - DWARF DOGWOOD		18"	B&B	18
3	FR-VL	FRAGARIA VESCA 'LIPSTICK' - LIPSTICK STRAWBERRY		#1 CONT	CLUMP	74
4	GE-R	GERANIUM X. 'ROZ - ROZANNE GERANIUMMANNE'		#2 CONT	CLUMP	206
5	GL-MV	GLYCERIA MAXIMA 'VARIEGATA' - VARIEGATED MANNA GRASS		#2 CONT	CLUMP	10
6	IM-CY	IMPERATA CYLINDRICA 'RED BARON' - JAPANESE BLOOD GRASS		#8 SQUAT	CLUMP	28
7	IR-L	IRIS X. LOUISIANA HYBRIDS - LOUISIANA IRIS		#2 CONT	CLUMP	43
8	IT-LH	ITEA VIRGINICA 'LITTLE HENRY' - LITTLE HENRY DWF. SWEETSPIRE		18"	#3 CONT.	20
9	MG-A	MAGNOLIA X. 'ANN' - ANN MAGNOLIA		6'	B&B	1
10	PE-H	PENNISETUM ALOPECUROIDES 'HAMELN' - DWARF FOUNTAIN GRASS		#2 CONT	CLUMP	5
11	RU-G	RUDBECKIA F. V. 'GOLDSTURM' - GOLDSTURM BLACKE EYED SUSAN		#2 CONT	CLUMP	30
12	UL-F	ULMUS X. 'FRONTIER' - FRONTIER ELM		2-1/2" CAL.	B&B	12
13	V-C	VIBURNUM CARLESII - KOREAN SPICE VIBURNUM		24"	B&B	9
14	WA-T	WALDSTEINIA TERNATA - BARREN STRAWBERRY		#2 CONT	CLUMP	157

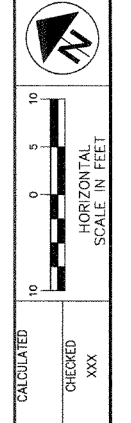
LANDSCAPING PLAN  
PROFESSOR STREET AT WEST 10TH STREET

CUY-PROFESSOR STREET INTERSECTIONS



NOTES:

FURNISHING AND INSTALLATION OF ALL ITEMS INDICATED ON THIS DRAWING ARE INCLUDED IN THE LUMP SUM PRICE BID FOR "ITEM SPECIAL - LANDSCAPING, MISC.: PROFESSOR STREET AND LITERARY AVENUE INTERSECTION LANDSCAPING, AS PER DS-31".

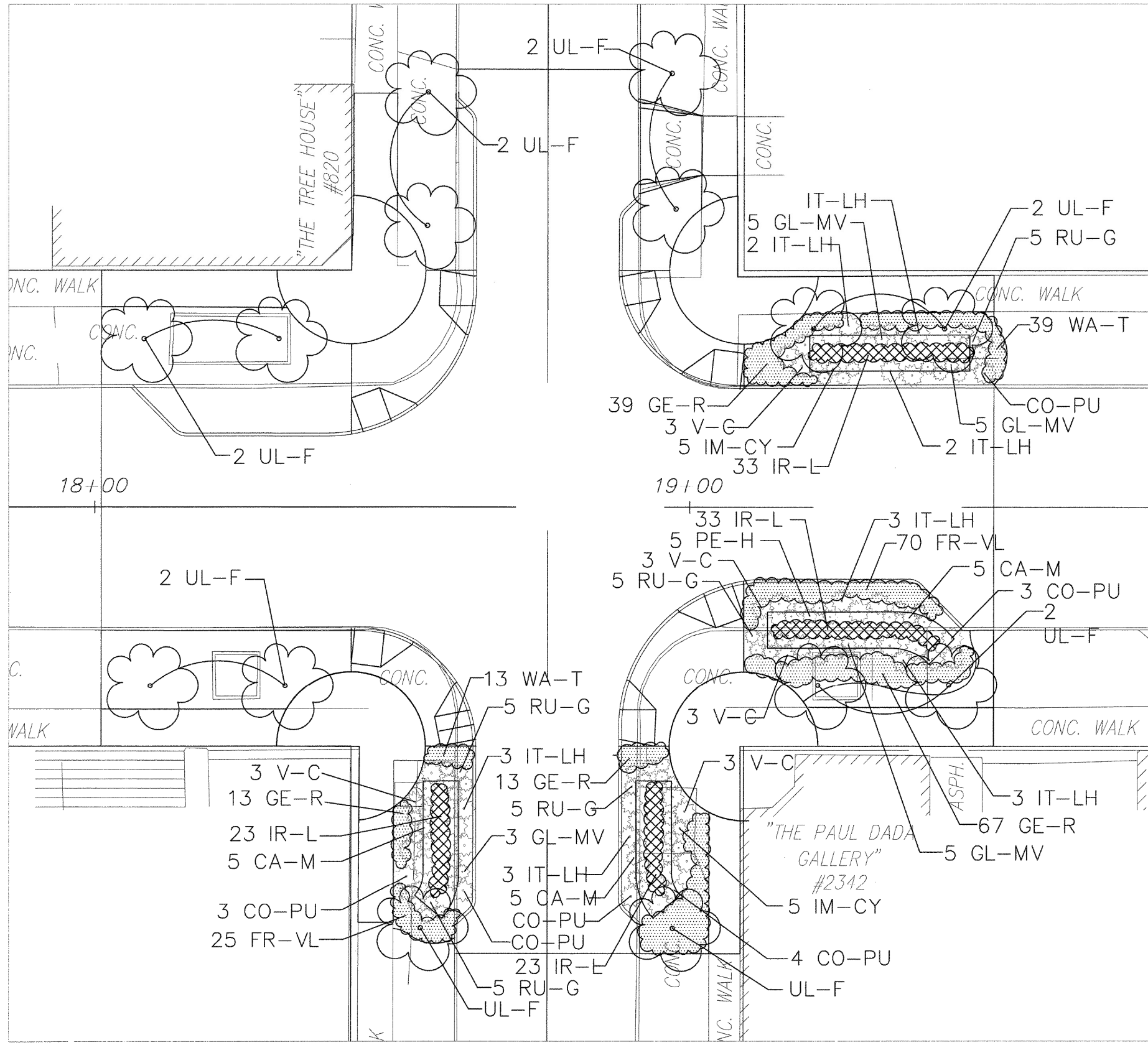


CALCULATED  
CHECKED  
XXX

ITEM	KEY	DESCRIPTION:	BOTANICAL NAME - COMMON NAME	SIZE	COND.	QTY.
1	CA-M	CAREX MUSKINGUMENSIS - PALM SEDGE	#2 CONT	CLUMP	3	
2	CO-PU	CORNUS PUMILA - DWARF DOGWOOD	18"	B&B	9	
3	FR-VL	FRAGERIA VESCA 'LIPSTICK' - LIPSTICK STRAWBERRY	#1 CONT	CLUMP	70	
4	GE-R	GERANIUM X. 'ROZ - ROZANNE GERANIUMMANNE'	#2 CONT	CLUMP	64	
5	GL-MV	GLYCERIA MAXIMA 'VAREGATA' - VAREGATED MANNA GRASS	#2 CONT	CLUMP	10	
6	IM-CY	IMPERATA CYLINDRICA 'RED BARON' - JAPANESE BLOOD GRASS	#8 SQUAT	CLUMP	10	
7	IR-L	IRIS X. LOUISIANA HYBRIDS - LOUISIANA IRIS	#2 CONT	CLUMP	63	
8	IT-LH	ITEA VIRGINICA 'LITTLE HENRY' - LITTLE HENRY DMF. SWEETSPIRE	18"	#3 CONT.	9	
9	PC-CS	PYRUS CALL. 'CLEVELAND SELECT' - CLEVELAND SELECT PEAR	2-1/2" CAL	B&B	12	
10	PE-H	PENNISETUM ALOPECUROIDES 'HAMEL' - DWARF FOUNTAIN GRASS	#2 CONT	CLUMP	5	
11	RU-G	RUDBECKIA F. V. 'GOLDSTURM' - GOLDSTURM BLACKE EYED SUSAN	#2 CONT	CLUMP	10	
12	V-C	VIBURNUM CARLESII - KOREAN SPICE VIBURNUM	24"	B&B	9	
13	WA-T	WALDSTEINIA TERNATA - BARREN STRAWBERRY	#2 CONT	CLUMP	82	

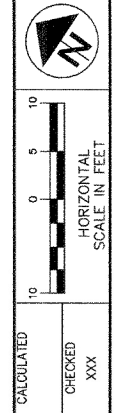
LANDSCAPING PLAN  
PROFESSOR STREET AT LITERARY AVENUE

CUY-PROFESSOR STREET INTERSECTIONS



NOTES:

FURNISHING AND INSTALLATION OF ALL ITEMS INDICATED ON THIS DRAWING ARE INCLUDED IN THE LUMP SUM PRICE BID FOR "ITEM SPECIAL - LANDSCAPING, MISC.: PROFESSOR STREET AND COLLEGE AVENUE INTERSECTION LANDSCAPING, AS PER DS-31".



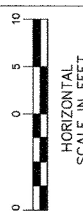
CALCULATED  
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ITEM	KEY	DESCRIPTION:	BOTANICAL NAME - COMMON NAME	SIZE	COND.	QTY.
1	CA-M	CAREX MUSKINGUMENSIS - PALM SEDGE		#2 CONT	CLUMP	15
2	CO-PU	CORNUS PUMILA - DWARF DOGWOOD		18"	B&B	13
3	FR-VL	FRAGERIA VESCA 'LIPSTICK' - LIPSTICK STRAWBERRY		#1 CONT	CLUMP	95
4	GE-R	GERANIUM X. 'ROZ - ROZANNE GERANIUMMANNE'		#2 CONT	CLUMP	132
5	GL-MV	GLYCERIA MAXIMA 'VARIEGATA' - VARIEGATED MANNA GRASS		#2 CONT	CLUMP	18
6	IM-CY	IMPERATA CYLINDRICA 'RED BARON' - JAPANESE BLOOD GRASS		#8 SQUAT	CLUMP	10
7	IR-L	IRIS X. LOUISIANA HYBRIDS - LOUISIANA IRIS		#2 CONT	CLUMP	112
8	IT-LH	ITEA VIRGINICA 'LITTLE HENRY' - LITTLE HENRY DMF. SWEETSPIRE		18"	#3 CONT.	19
9	PE-H	PENNISETUM ALOPECUROIDES 'HAMELN' - DWARF FOUNTAIN GRASS		#2 CONT	CLUMP	5
10	RU-G	RUDBECKIA F. V. 'GOLDSTURM' - GOLDSTURM BLACKE EYED SUSAN		#2 CONT	CLUMP	25
11	UL-F	ULMUS X. 'FRONTIER' - FRONTIER ELM		2-1/2" CAL.	B&B	14
12	V-C	VIBURNUM CARLESII - KOREAN SPICE VIBURNUM		24"	B&B	9
13	WA-T	WALDSTEINIA TERNATA - BARREN STRAWBERRY		#2 CONT	CLUMP	52

LANDSCAPING PLAN  
PROFESSOR STREET AT COLLEGE STREET

CUY-PROFESSOR STREET INTERSECTIONS

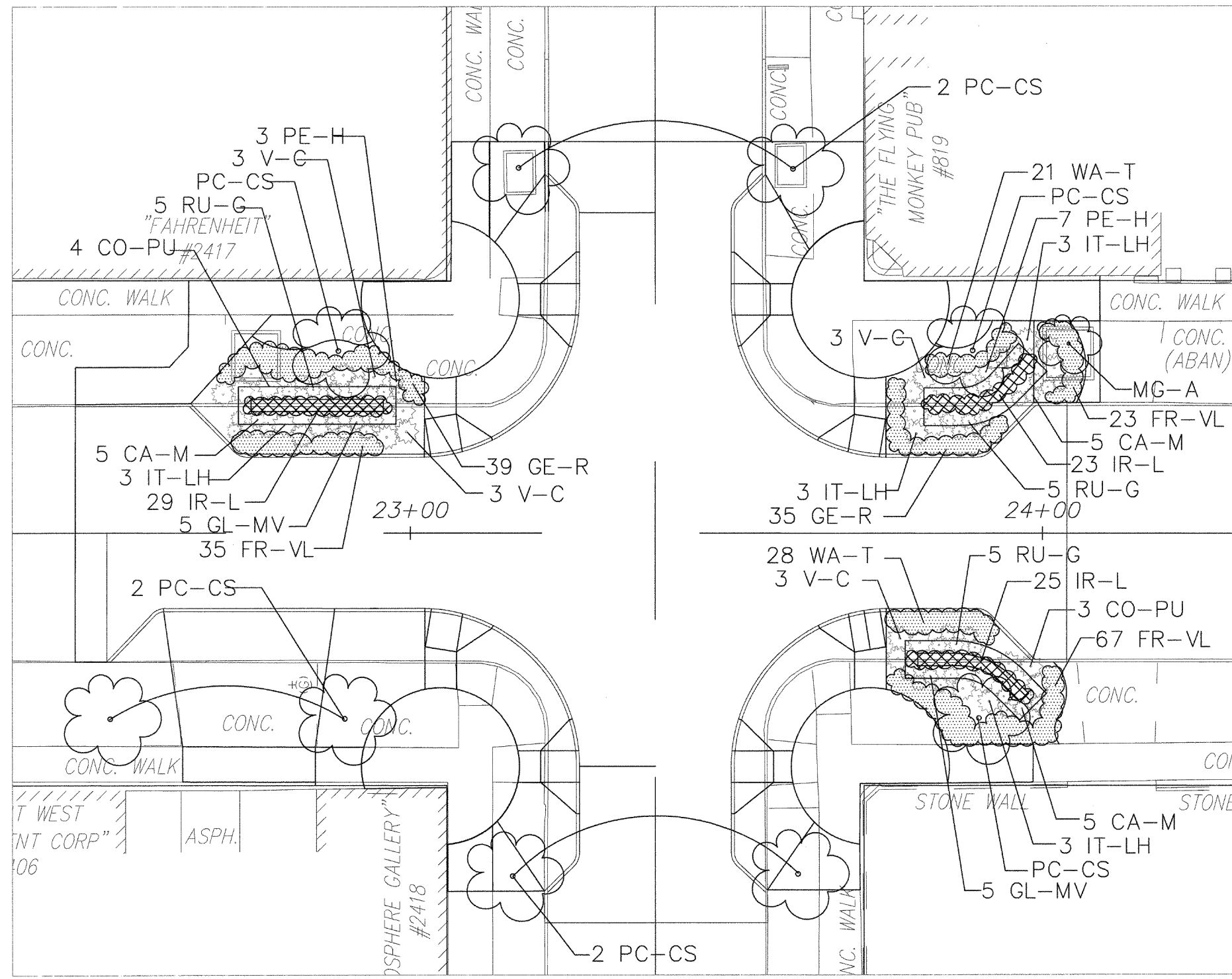




CALCULATED  
CHECKED  
XXX

NOTES:

FURNISHING AND INSTALLATION OF ALL ITEMS INDICATED ON THIS DRAWING ARE INCLUDED IN THE LUMP SUM PRICE BID FOR "ITEM SPECIAL - LANDSCAPING, MISC.: PROFESSOR STREET AND JEFFERSON AVENUE INTERSECTION LANDSCAPING, AS PER DS-31".



ITEM	KEY	DESCRIPTION:	BOTANICAL NAME - COMMON NAME	SIZE	COND.	QTY.
1	CA-M	CAREX MUSKINGUMENSIS - PALM SEDGE		#2 CONT	CLUMP	15
2	CO-PU	CORNUS PUMILA - DWARF DOGWOOD		18"	B&B	7
3	FR-VL	FRAGARIA VESCA 'LIPSTICK' - LIPSTICK STRAWBERRY		#1 CONT	CLUMP	125
4	GE-R	GERANIUM X 'ROZ - ROZANNE GERANIUMMANE'		#2 CONT	CLUMP	74
5	GL-MV	GLYCERIA MAXIMA 'VARIEGATA' - VARIEGATED MANNA GRASS		#2 CONT	CLUMP	10
6	IR-L	IRIS X. LOUISIANA HYBRIDS - LOUISIANA IRIS		#2 CONT	CLUMP	75
7	IT-LH	ITEA VIRGINICA 'LITTLE HENRY' - LITTLE HENRY DWF. SWEETSPIRE		18"	#3 CONT.	12
8	MG-A	MAGNOLIA X. 'ANN' - ANN MAGNOLIA		6'	B&B	1
9	PC-CS	PYRUS CALL. 'CLEVELAND SELECT' - CLEVELAND SELECT PEAR		2-1/2" CAL.	B&B	9
10	PE-H	PENNISETUM ALOPECUROIDES 'HAMELN' - DWARF FOUNTAIN GRASS		#2 CONT	CLUMP	10
11	RU-G	RUDBECKIA F. V. 'GOLDSTURM' - GOLDSTURM BLACK EYED SUSAN		#2 CONT	CLUMP	15
12	V-C	VIBURNUM CARLESII - KOREAN SPICE VIBURNUM		24"	B&B	9
13	WA-T	WALDSTEINIA TERNATA - BARREN STRAWBERRY		#2 CONT	CLUMP	49
14						
15						

LANDSCAPING PLAN  
PROFESSOR STREET AT JEFFERSON AVENUE

CUY-PROFESSOR STREET INTERSECTIONS