

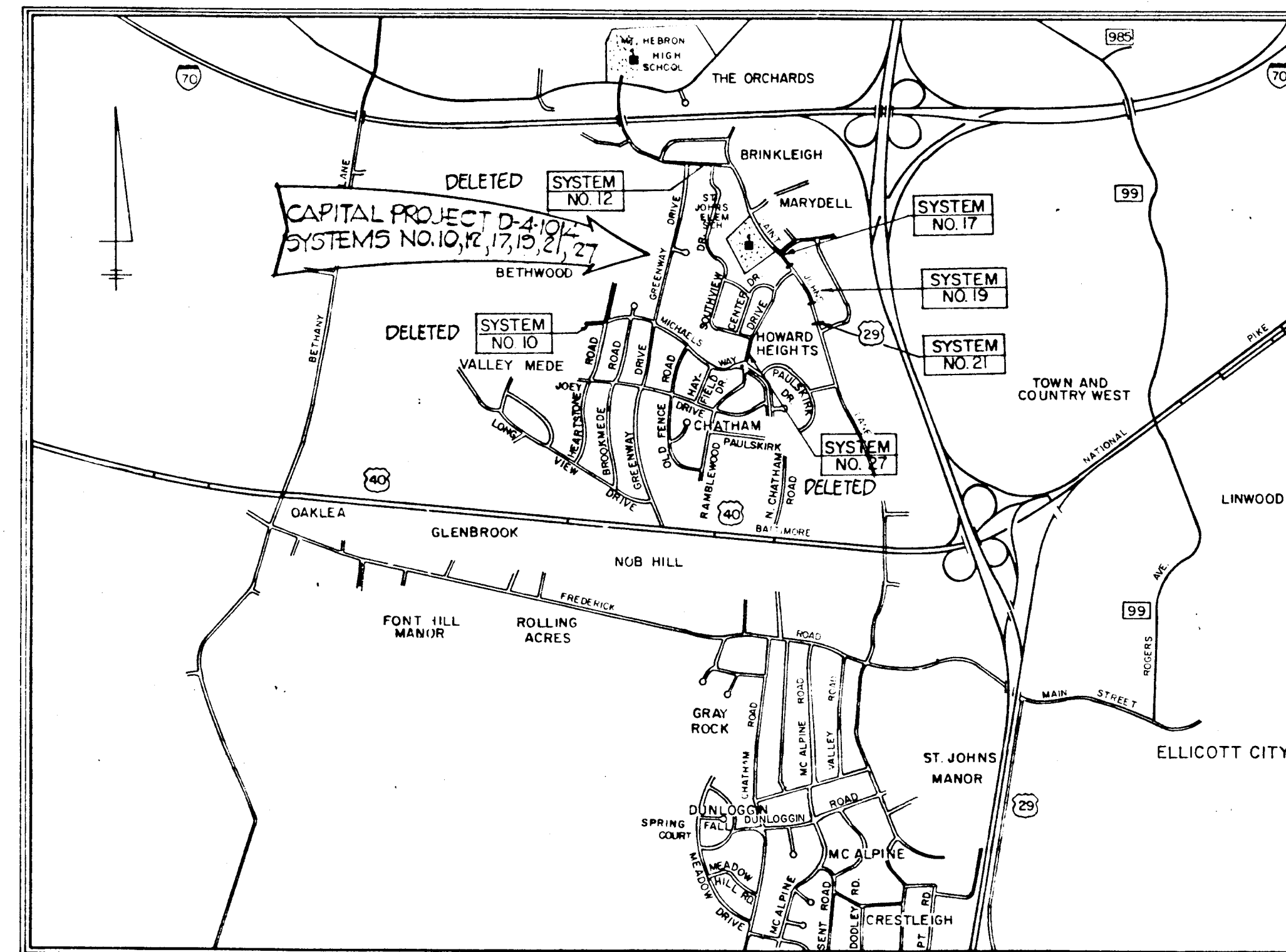
# HOWARD COUNTY MARYLAND

## DEPARTMENT OF PUBLIC WORKS

Reviewed for Howard County S.C.D. and meets technical requirements.  
 Date: 10/21/81  
 U.S. SOIL CONSERVATION SERVICE  
 This development plan is approved for soil erosion and sediment control by The Howard County Soil Conservation District.  
 Approved: [Signature] Date: 10/21/81  
 HOWARD COUNTY S.C.D.

**ENGINEER'S CERTIFICATION**  
 I certify that this plan for erosion & sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard County Soil Conservation District.  
 Date: 10/21/81  
 KIDDE CONSULTANTS, INC.  
 1020 CROWELL BRIDGE ROAD  
 TOWSON, MD. 21284

**DEVELOPER'S CERTIFICATION:**  
 "I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project."  
 BUREAU OF ENGINEERING  
 DEPARTMENT OF PUBLIC WORKS



VICINITY MAP  
 Scale: 1" = 2000'

INDEX OF SHEETS		
SHEET NO.	DESCRIPTION	LOCATION
VALLEY MEDE - CAPITAL PROJECT NO. D-4-1014		
1	TITLE SHEET	
2	STANDARD DETAILS	CAPITAL PROJECT D-4-1014
3	DRAINAGE AREA MAP	VALLEY MEDE
4	SYSTEM NO. 17	ST. JOHN'S LANE & VICTORIA DRIVE
5	SYSTEM NO. 19 AND NO. 21	ST. JOHN'S LANE

# STORM DRAINAGE IMPROVEMENTS PLUMTREE DRAINAGE AREA VALLEY MEDE

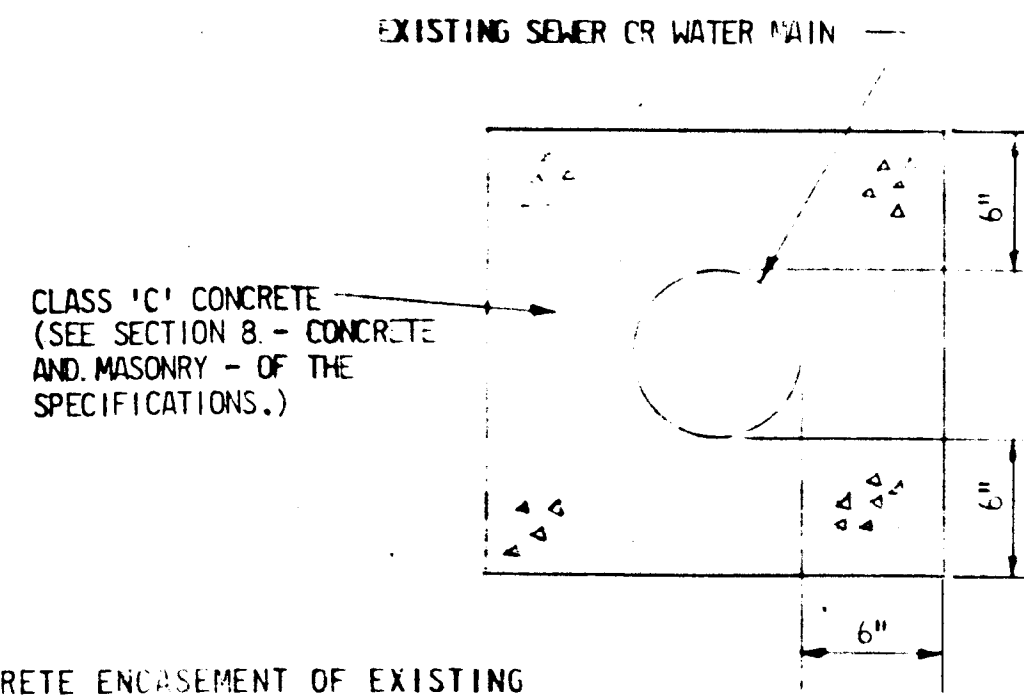
ELECTION DISTRICT : ELLICOTT CITY NO. 2

221760φ1

[Signature]

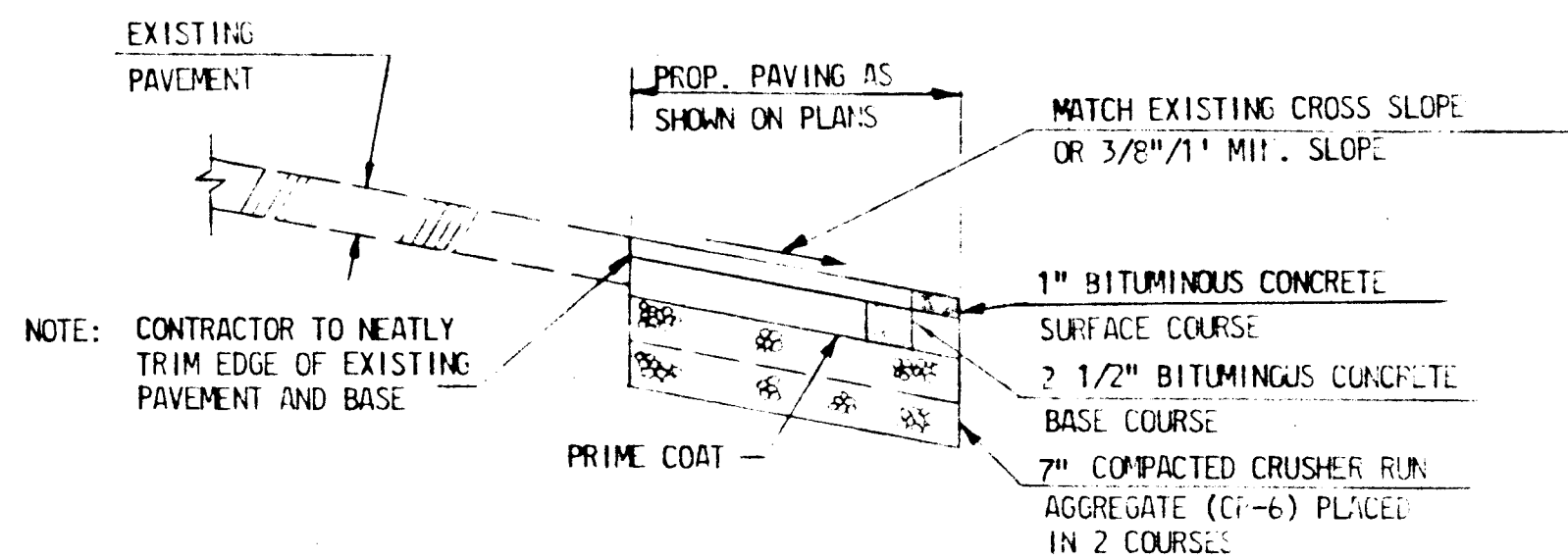
<b>KIDDE CONSULTANTS, INC.</b> ENGINEERS • ARCHITECTS • PLANNERS BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR, DEPARTMENT OF PUBLIC WORKS DATE _____ CHIEF, BUREAU OF ENGINEERING DATE _____	[Signature] 10/21/81 CHIEF, DIVISION OF ROADS, BRIDGES, AND STORM DRAINAGE	CAPITAL PROJECT NO. D-4-1014	STORM DRAINAGE IMPROVEMENTS FOR THE PLUMTREE DRAINAGE AREA	DRAWING NO. 1 OF 5	SCALE 1" = 2,000'	DES: PWZ DWN: PWZ CHKD: DEH

NOTE: ENCASUREMENT TO EXTEND 5'-0" ON EACH SIDE OF THE CENTERLINE TO FORM DRAIN CROSSING.

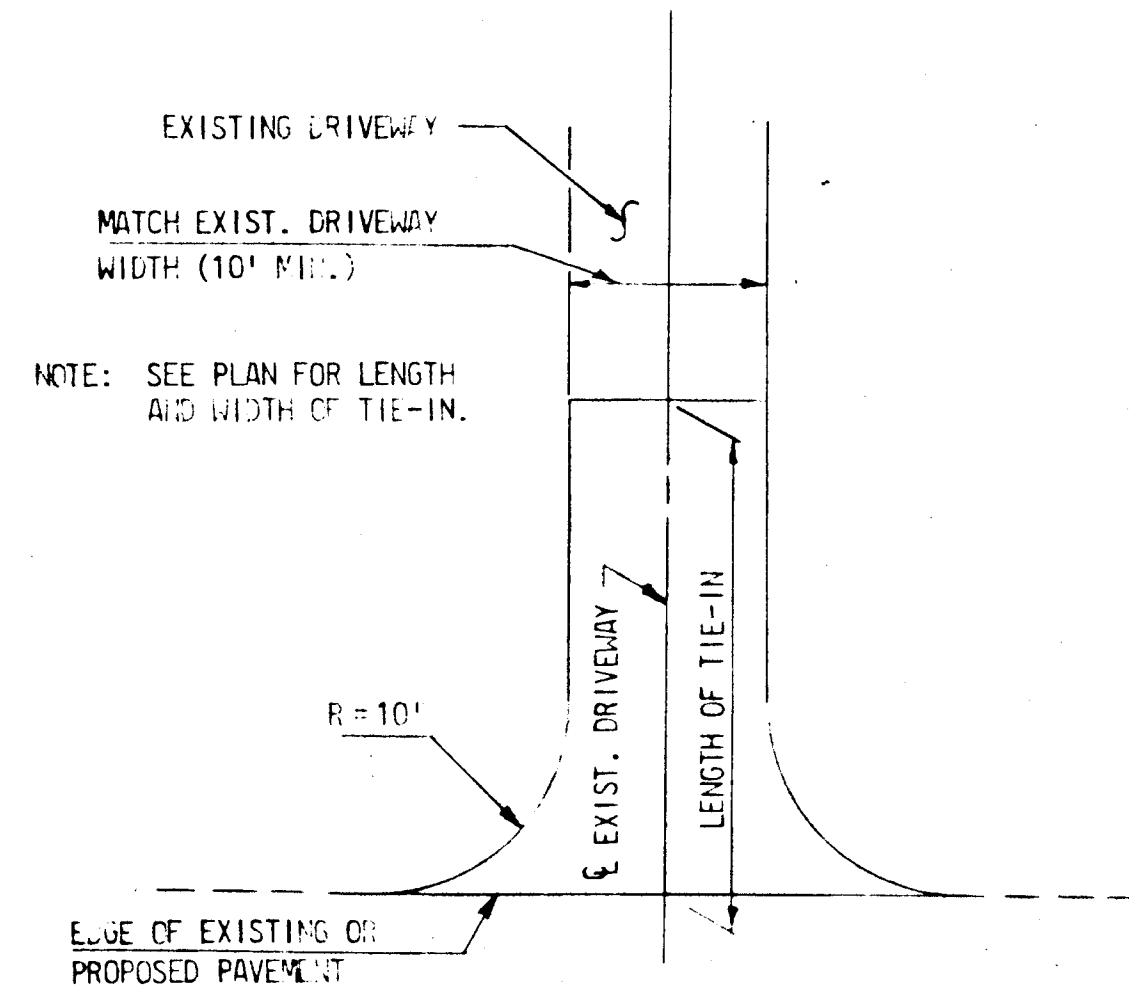


NOTE: CONCRETE ENCASUREMENT OF EXISTING UTILITIES WILL BE PERFORMED ONLY WHERE DIRECTED IN WRITING BY THE ENGINEER IN THE FIELD. PAYMENT FOR CONCRETE ENCASUREMENT WILL BE MADE IN ACCORDANCE WITH THE UNIT PRICE PER CUBIC YARD STIPULATED IN THE BID PROPOSAL FORM.

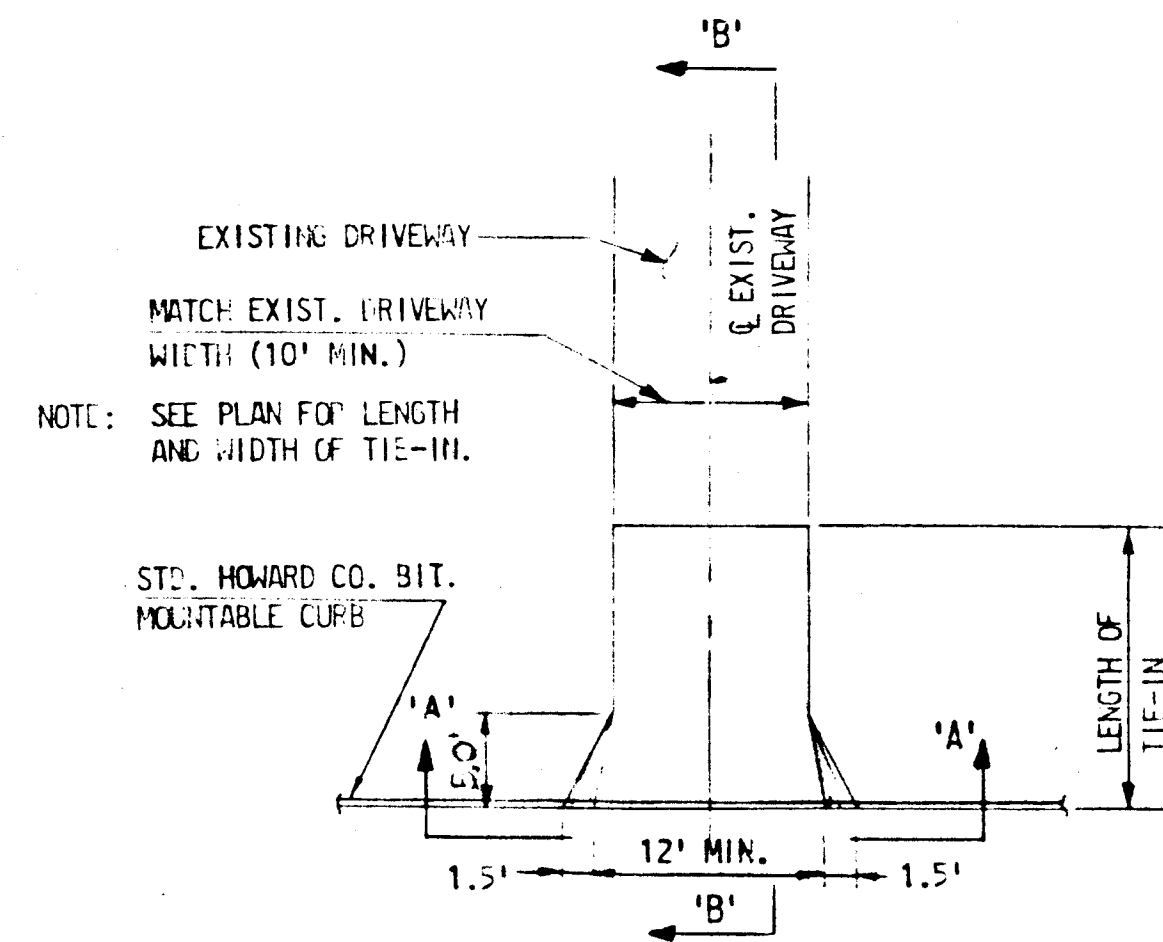
CONCRETE ENCASEMENT DETAIL  
NOT TO SCALE



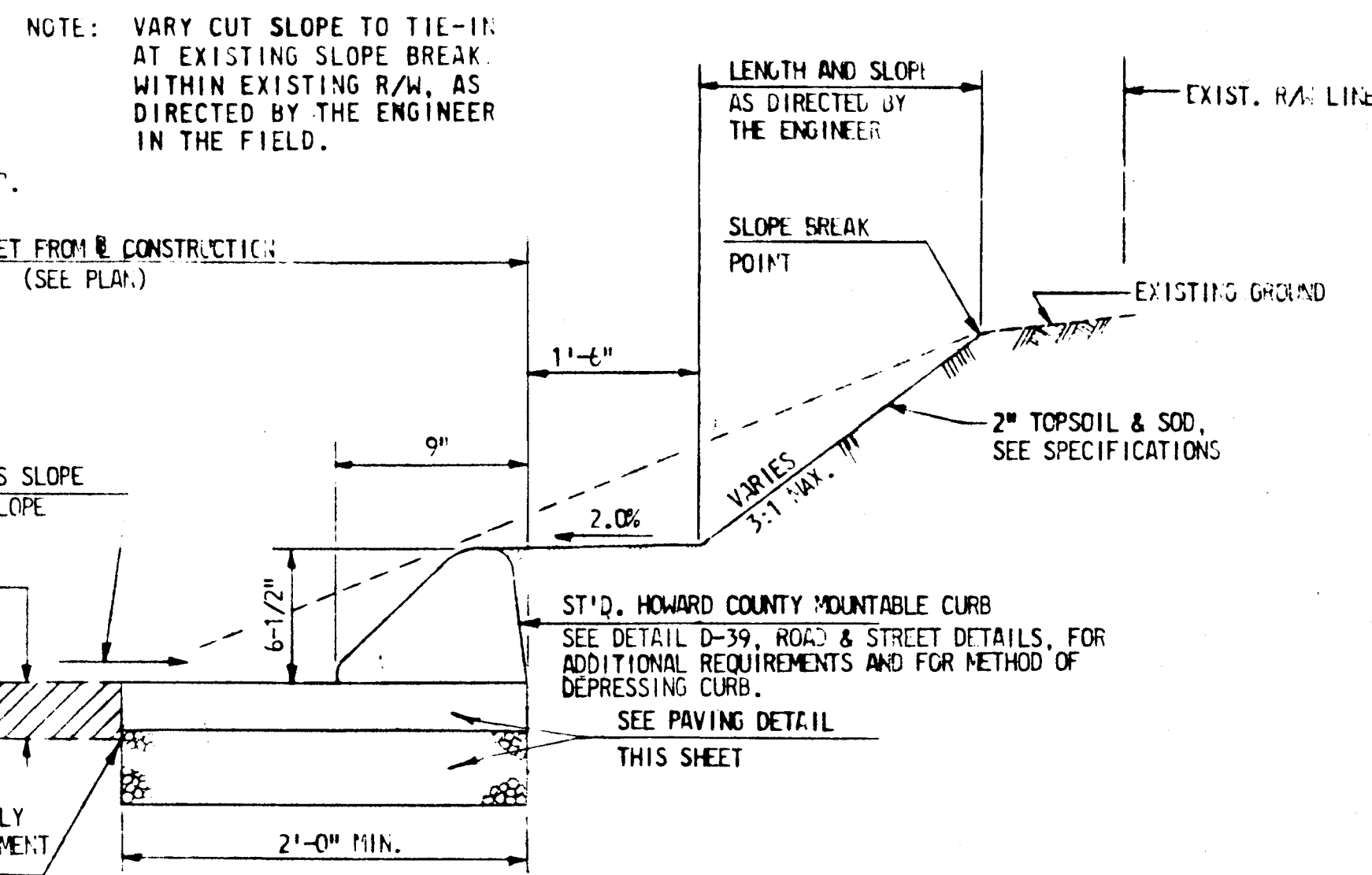
PAVING SECTION AND PAVING EXTENSION DETAIL  
NOT TO SCALE



TYPICAL TYPE 'A' DRIVEWAY DETAIL  
NOT TO SCALE

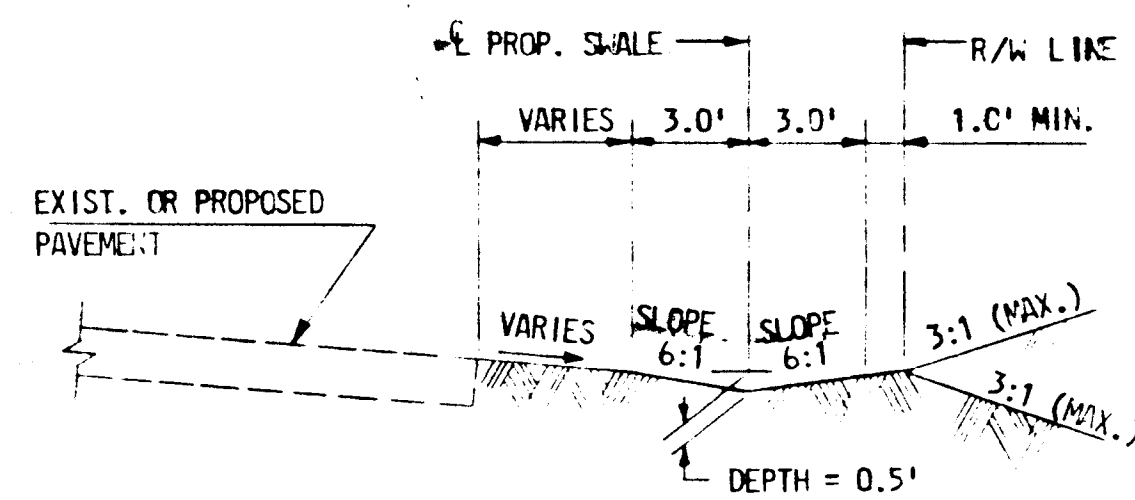


TYPICAL TYPE 'B' DRIVEWAY DETAIL  
NOT TO SCALE



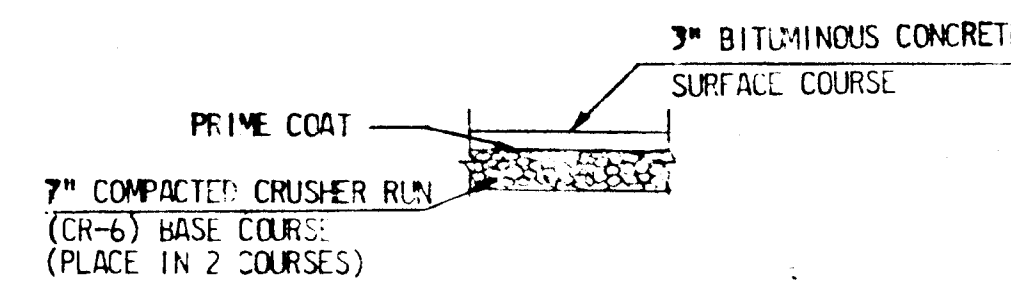
NOTE: CONTRACTOR TO NEATLY TRIM EXISTING PAVEMENT AND BASE

PAVING EXTENSION WITH MOUNTABLE CURB DETAIL  
NOT TO SCALE

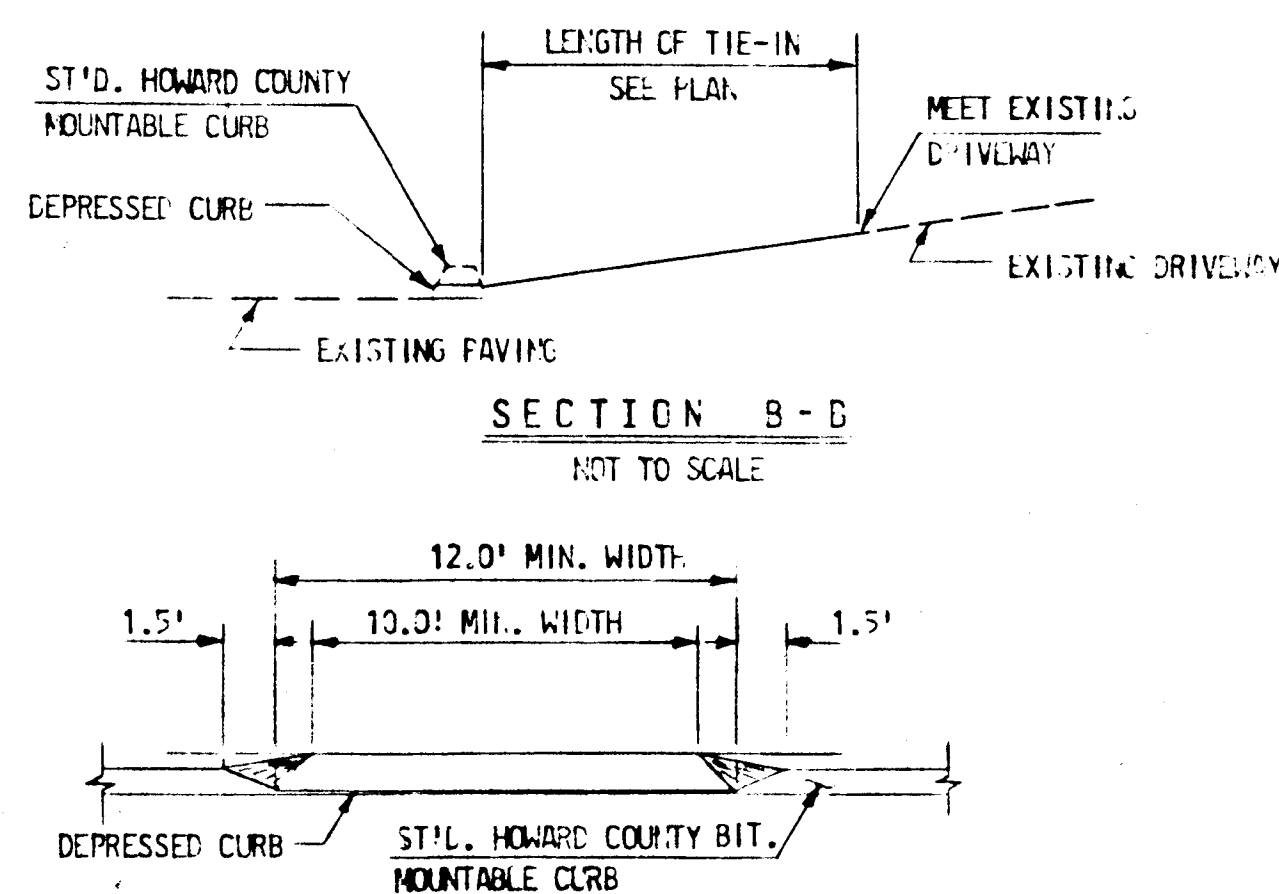


SWALE DETAIL  
NOT TO SCALE

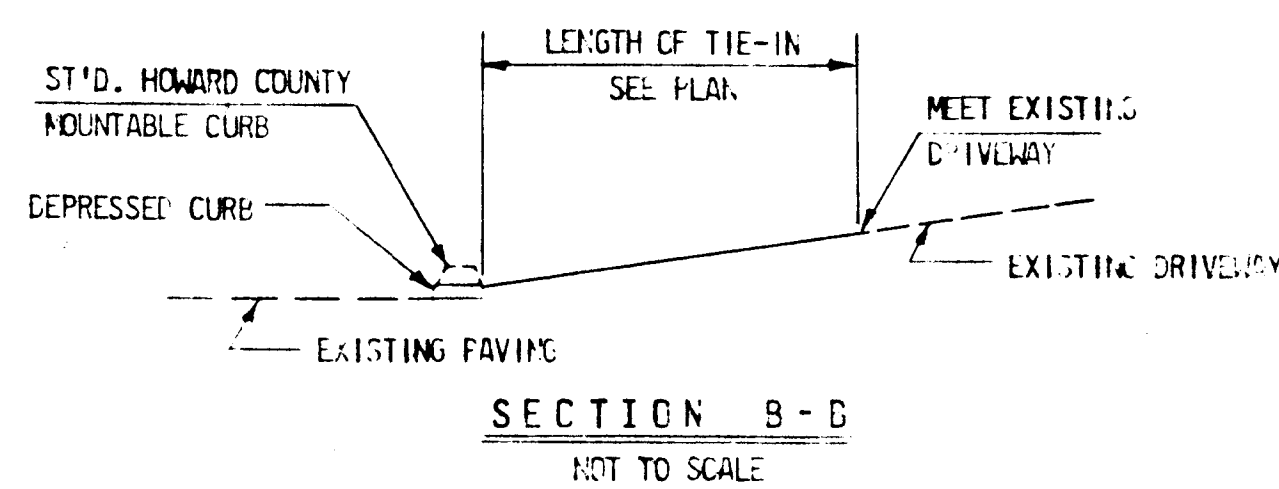
NOTE: EXACT LOCATION OF PROPOSED SWALE TO BE AT THE DIRECTION OF THE ENGINEER.



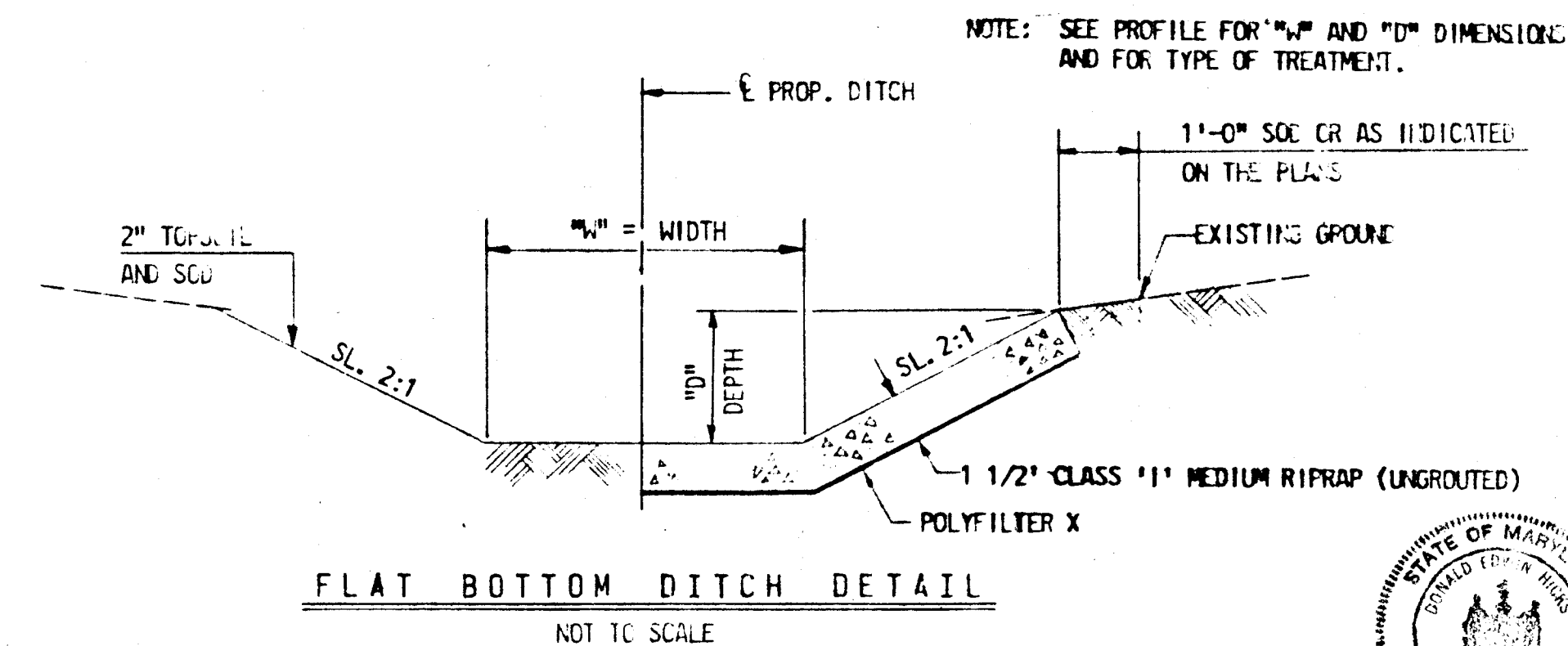
TYPICAL DRIVEWAY PAVING SECTION  
NOT TO SCALE



SECTION A-A  
NOT TO SCALE



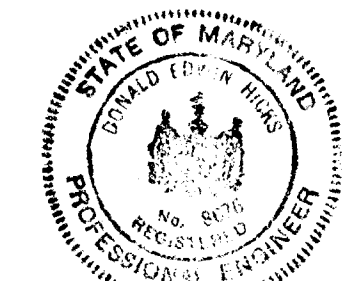
SECTION B-B  
NOT TO SCALE



FLAT BOTTOM DITCH DETAIL  
NOT TO SCALE

GENERAL NOTES

- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-559-0100 FOR UNDERGROUND UTILITY LOCATIONS, AT LEAST FIVE DAYS PRIOR TO COMMENCING WORK SHOWN ON THE PLANS.
- ALL TOP ELEVATIONS FOR THE PROPOSED INLETS AND MANHOLES ARE APPROXIMATE, AND ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR AND THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ALL EXISTING DRIVEWAYS DAMAGED DURING CONSTRUCTION. SEE MEASUREMENT & PAYMENT IN SPECIAL PROVISIONS.
  - EXISTING BITUMINOUS CONCRETE DRIVEWAYS SHALL BE RESTORED AS FOLLOWS:
    - 7 INCHES OF COMPACTED CRUSHER RUN (CR-6), PLACE IN 2 COURSES.
    - A PRIME COAT OF BITUMINOUS MATERIAL
    - A 3-INCH DEPTH OF BITUMINOUS CONCRETE SURFACE COURSE.
  - EXISTING CONCRETE DRIVEWAY SHALL BE RESTORED USING 7" PLAIN CEMENT CONCRETE PAVING, USING 6x6x12, 9x9, OR 12x12, PARALLEL TO C DRIVEWAY & #3012 PERPENDICULAR TO C DRIVEWAY.
  - EXISTING GRAVEL DRIVEWAYS SHALL BE RESTORED USING 6 INCHES CRUSHER RUN AGGREGATE (CR-6) INSTALLED IN 2 COURSES.
- TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR TO GRADE AROUND THE TOP OF THE PROPOSED INLETS IN ORDER TO PROVIDE POSITIVE DRAINAGE TO THE INLETS. LINING SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- COORDINATES ARE BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM, 1957 DATUM, PROJECTED BY THE PLANNING AND ZONING COMMISSION OF HOWARD COUNTY, MD.
- THE EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ON THE PLANS ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION BEFORE STARTING CONSTRUCTION. NEITHER THE ENGINEER NOR THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS WARRANT OR GUARANTEE THE COMPLETENESS OR CORRECTNESS OF THE INFORMATION SHOWN.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN VICINITY OF UTILITIES. COST SHALL BE INCLUDED IN THE UNIT PRICES BID FOR EXCAVATION AND BACKFILL FOR MAINS.
- SEE THE SPECIAL PROVISIONS OF THE SPECIFICATIONS FOR INSTRUCTIONS RELATIVE TO EXCESS EARTH DISPOSAL, SEDIMENT CONTROL AND COMPLIANCE WITH HOWARD COUNTY SOIL CONSERVATION DISTRICT REQUIREMENTS.
- CLEAR ALL UTILITIES BY 6". CLEAR ALL POLES BY 2'-0" OR THE PROPOSED STORM DRAIN SHALL BE PLACED BY TUNNELING. COST OF TUNNELING OR BRACING AT POLES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EXCAVATION AND BACKFILL FOR PROPOSED STORM DRAINS.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S DATUM OF 1929.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR FURNISHING AND LAYING PIPE STORM DRAINS.
- PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
- EXISTING WATER HOUSE SERVICES, THAT ARE IN CONFLICT WITH THE PROPOSED STORM DRAINAGE FACILITIES, SHALL BE ADJUSTED BY THE CONTRACTOR AS DISCUSSED IN THE CONTRACT SPECIAL PROVISIONS.
- SOIL BORING LOCATIONS.



Donald E. Hickey

**KIDDE CONSULTANTS, INC.**

ENGINEERS • ARCHITECTS • PLANNERS  
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DIRECTOR, DEPARTMENT OF PUBLIC WORKS DATE CHIEF, BUREAU OF ENGINEERING DATE

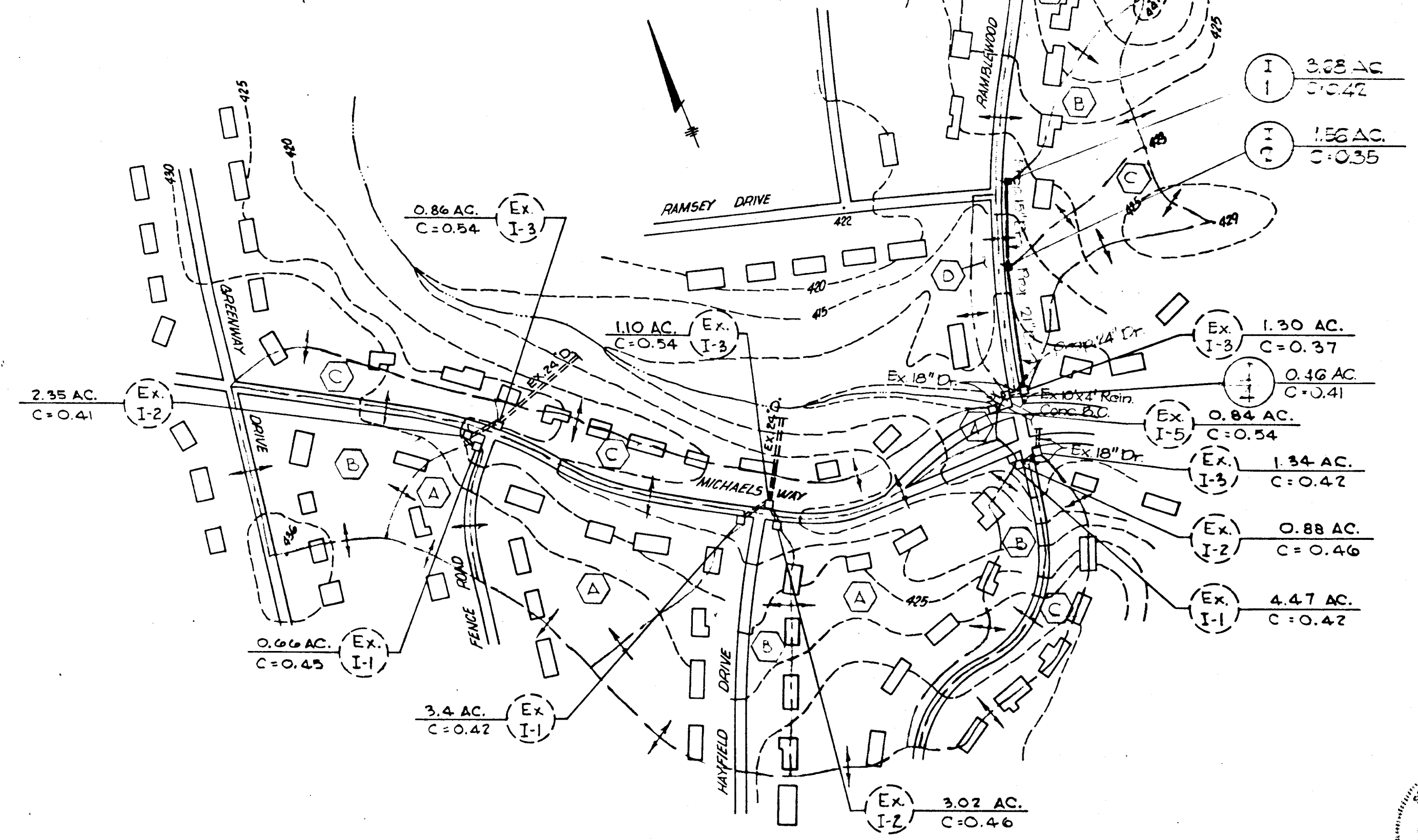
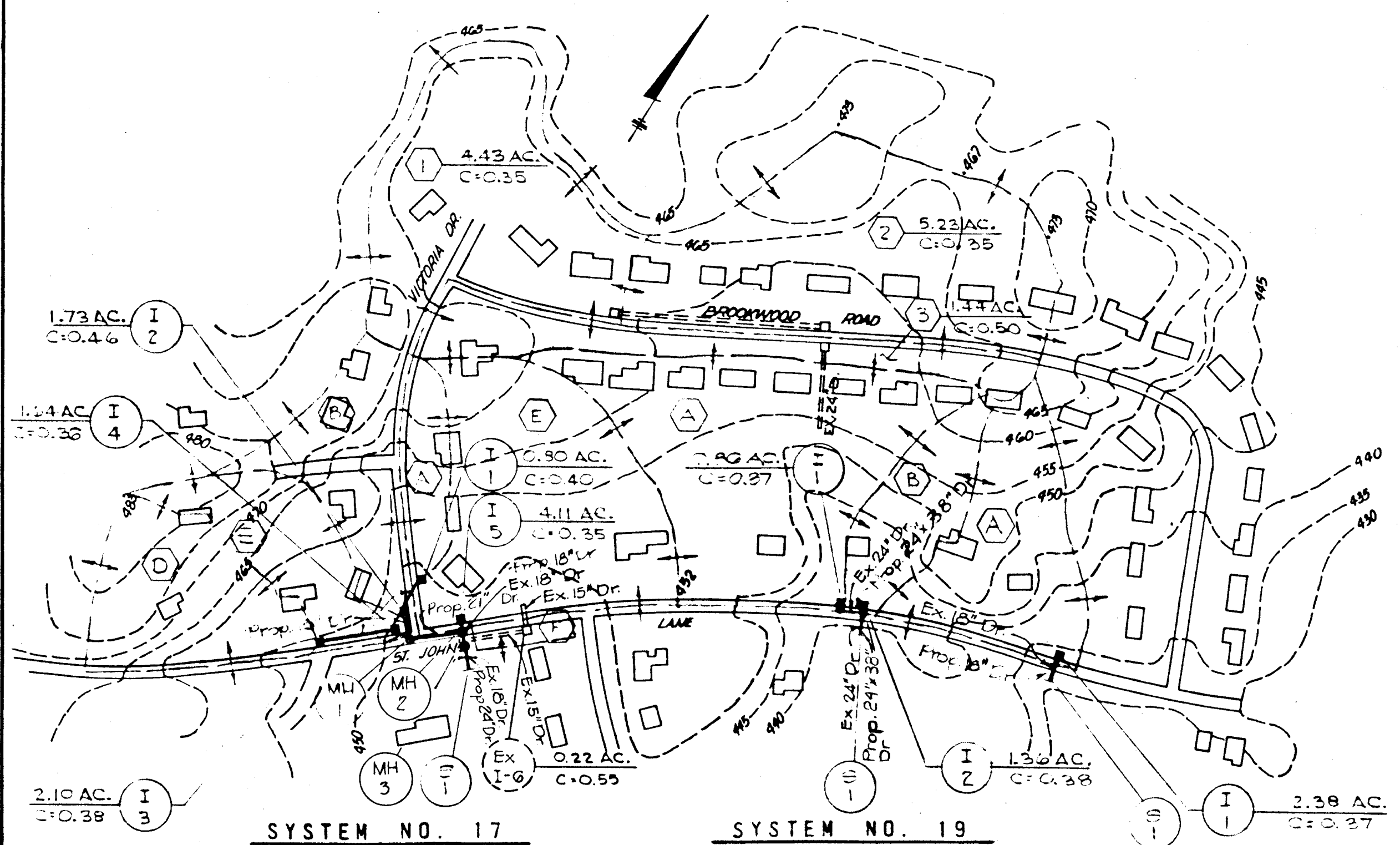
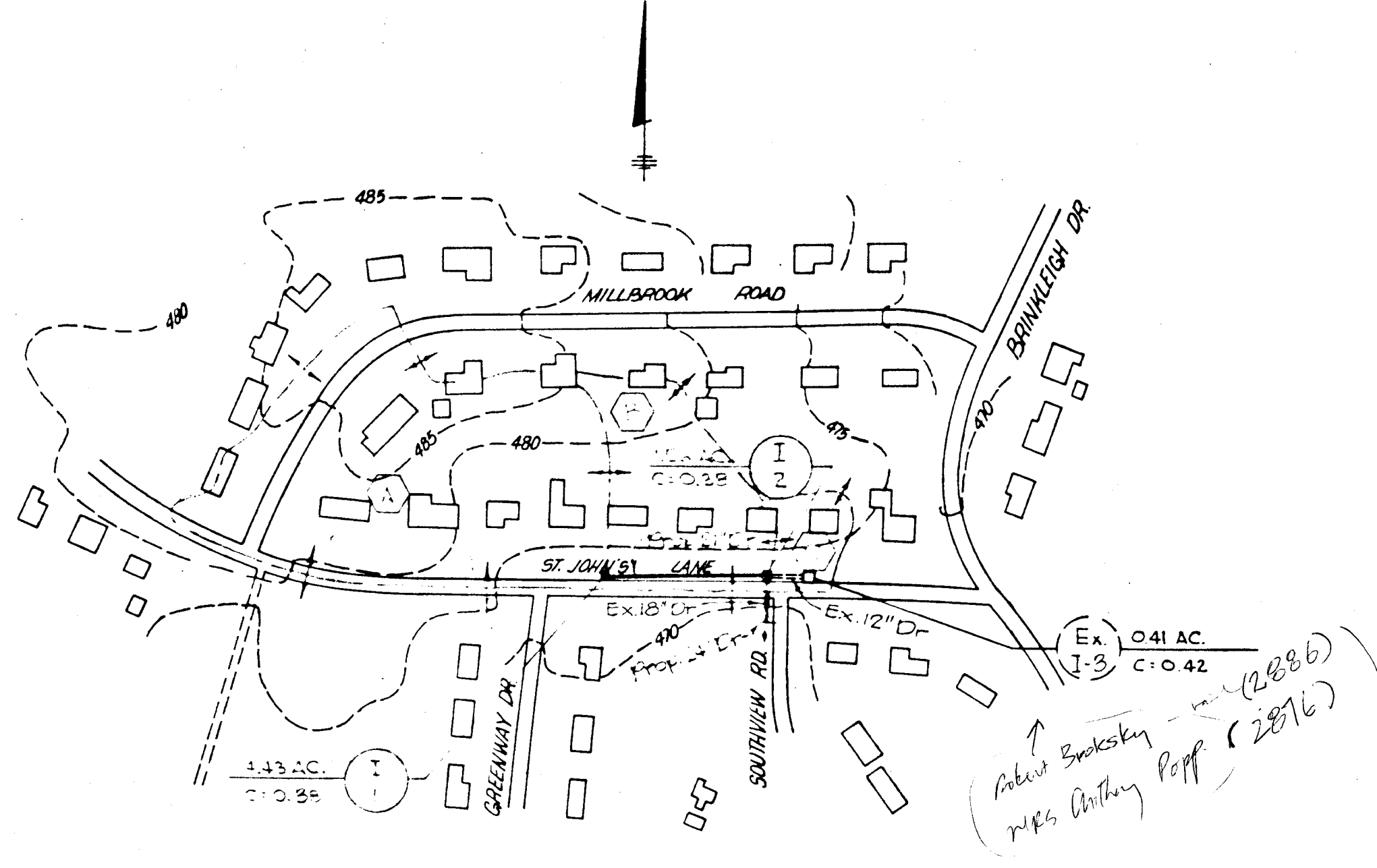
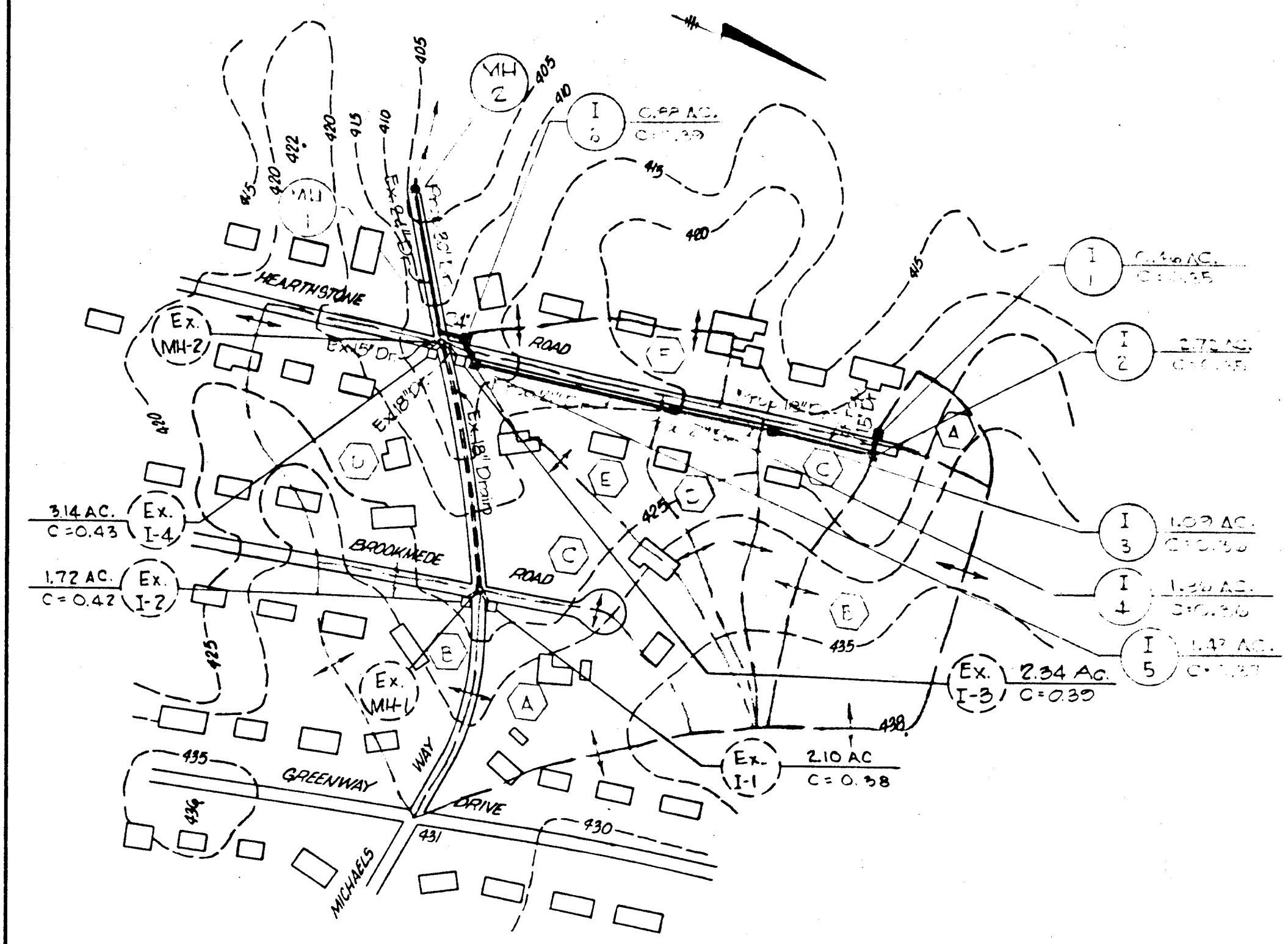
Elizabeth Anderson-Polva 10/21/21  
CHIEF, DIVISION OF ROADS, BRIDGES, AND STORM DRAINAGE DATE

CAPITAL PROJECT NO. D-4-1014

STORM DRAINAGE IMPROVEMENTS  
VALLEY MEDE  
STANDARD DETAILS  
ELECTION DISTRICT: ELLICOTT CITY NO. 2

DRAWING NO. 2 OF 5	SCALE AS SHOWN	DES.
		DR.
		CK.



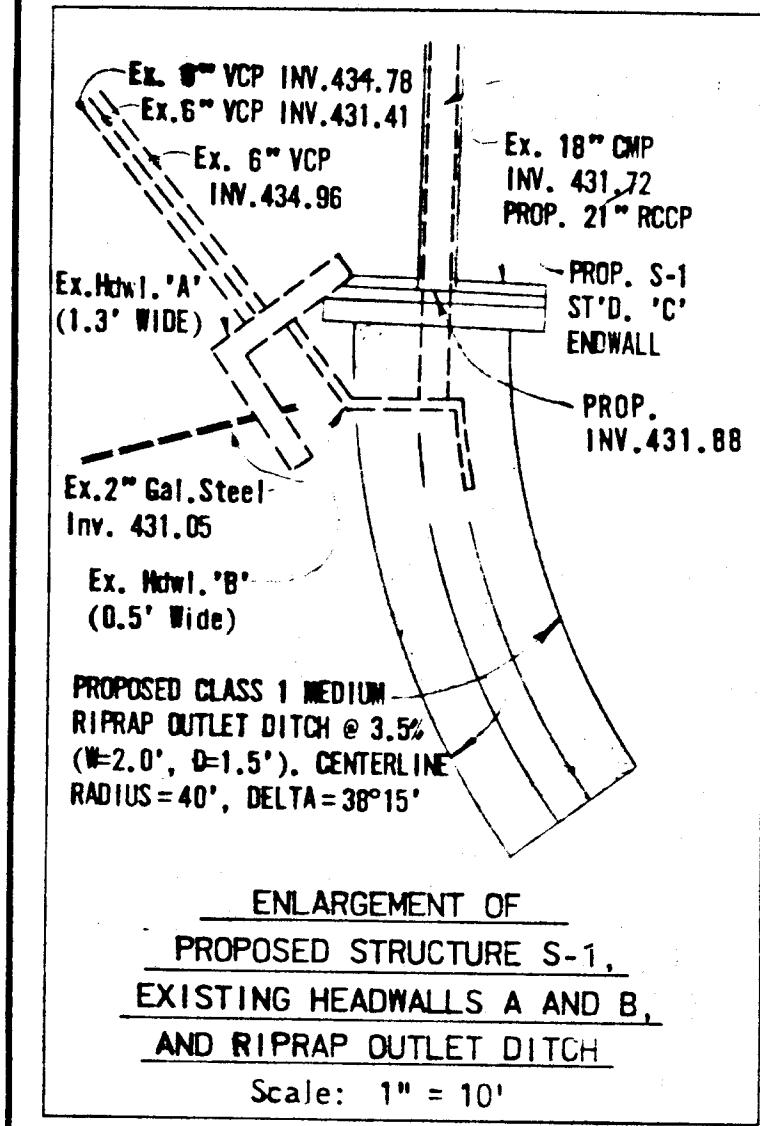


*Donald B. Hicks*

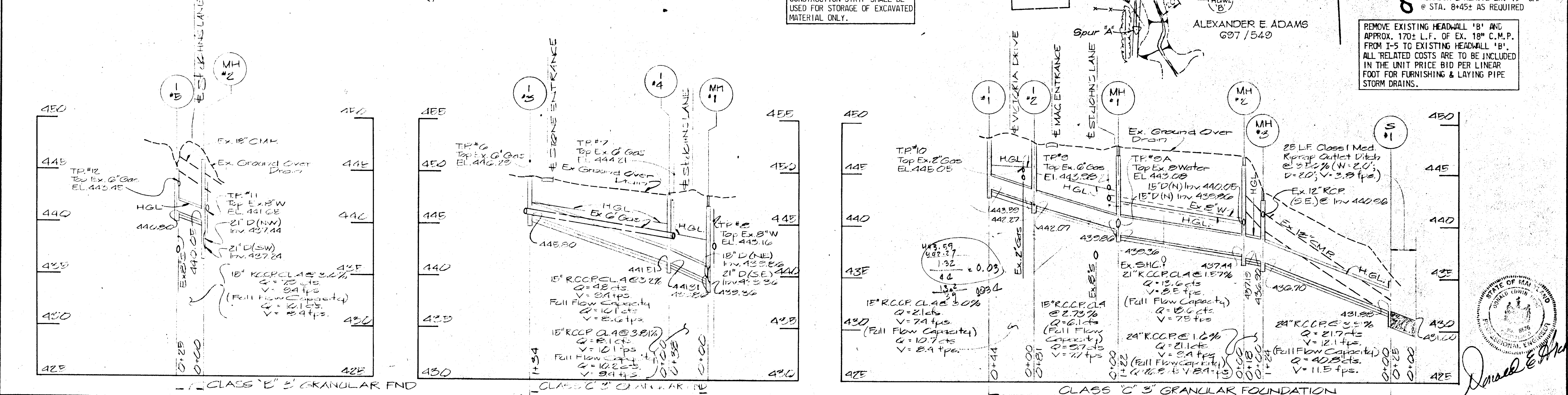
<b>KIDDE CONSULTANTS, INC.</b> ENGINEERS • ARCHITECTS • PLANNERS BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR, DEPARTMENT OF PUBLIC WORKS DATE _____ CHIEF, BUREAU OF ENGINEERING DATE _____	Elizabeth Anderson Calia 10/21/21 CHIEF, DIVISION OF ROADS, BRIDGES, AND STORM DRAINAGE	CAPITAL PROJECT D-4-1014	STORM DRAINAGE IMPROVEMENTS VALLEY MEDE DRAINAGE AREA MAP ELECTION DISTRICT: ELLICOTT CITY NO. 2		DES. DR. TJA CK.
				DRAWING NO. 3 OF 5	SCALE 1"=200'	KC1 J.O. NO. 1-77022 - VALLEY MEDE



STRUCTURE SCHEDULE						
NO.	TYPE	LOCATION	INV. IN	INV. OUT	TOP EL.	REMARKS
I-1	STD. "K" INLET	STA. 1+20'-23' RT.	-	443.59	448.3	H.C. DRWG. D-93 & D-95
I-2	STD. "K" INLET	STA. 0+90'-9' LT.	442.27	442.07	447.9	H.C. DRWG. D-93 & D-95
I-3	STD. "A-10"	STA. 4+45'-18" LT.	-	445.80	449.72	OFFSET DIST. TO F.C. H.C. DRWG. 64-A
I-4	STD. "K" INLET	STA. 5+78'-26" LT.	441.51	441.31	447.7	H.C. DRWG. D-93 & D-95
I-5	STD. "K" INLET	STA. 7+31'-35" LT.	-	440.80	445.0	H.C. DRWG. D-93 & D-95
MH-1	STD. TYPE "B"	STA. 6+12'-10" LT.	439.86	439.36	447.7	FIG. 3.03
MH-2	STD. TYPE "B"	STA. 7+12'-10" LT.	437.44	437.19	447.7	FIG. 3.03
MH-3	STD. TYPE "B"	STA. 7+34'-8" RT.	436.90	436.70	443.4	FIG. 3.03
S-1	STD. "C" ENDWALL			431.88	434.38	H.C. DRWG. D-52



DRIVEWAY SCHEDULE					
LOCATION	TYPE	WIDTH	LENGTH	REMARKS	
STA. 2+21'-LT.	B	12'	16'	ST. JOHN'S LANE	
STA. 4+22'-LT.	A	10'	16'	ST. JOHN'S LANE	
STA. 0+76'-LT.	A	10'	16'	VICTORIA DRIVE	



ALL EXISTING SHRUBBERY, BUSHES, ETC. THAT INTERFERE WITH THE PIPE LAYING OPERATIONS SHALL BE REMOVED AND REPLANTED OR REPLACED, TO THE SATISFACTION OF THE ENGINEER.

STA. 1+23+ TO STA. 1+46+  
VICTORIA DRIVE  
TRIM EXISTING SWALE TO MEET INLET I-1  
SOD ALL DISTURBED AREAS

STA. 5+70+ LT. ST. JOHN'S LANE  
EXISTING G&E POLE #145209  
TO BE BRACED, SEE SPECIFICATIONS

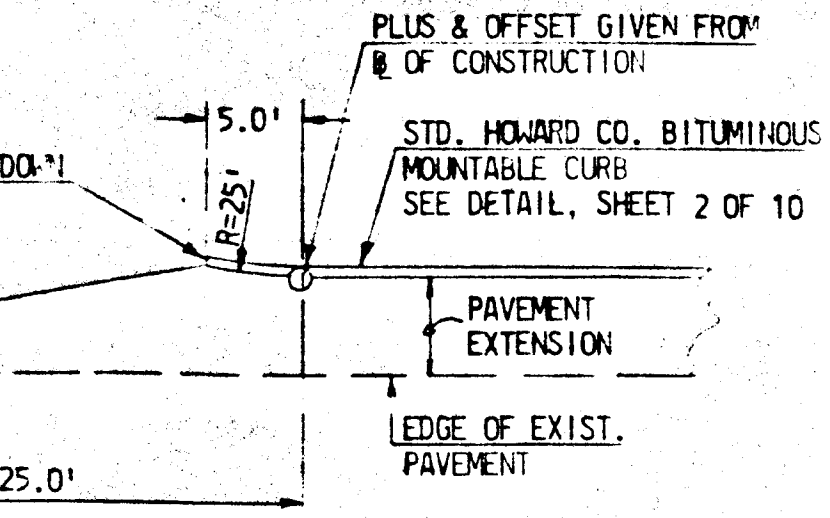
STA. 0+93+ TO STA. 1+18+ LT.  
VICTORIA DRIVE  
TRIM EXISTING SWALE TO MEET  
I-2  
SOD ALL DISTURBED AREAS.

STA. 4+75+ LT. ST. JOHN'S LANE  
TO INLET I-4  
STA. 0+70+ LT. VICTORIA DRIVE  
TO INLET I-4  
CONSTRUCT 170± L.F. SOD SWALE FOR  
POSITIVE DRAINAGE TO INLET I-4

STA. 1+18+ TO STA. 4+40 - LT.  
CONSTRUCT 325± L.F. STD. HOWARD  
CO. BITUMINOUS MOUNTABLE CURB  
(SEE DETAIL ON SHEET 2)

PLAN  
Scale: 1" = 50'

CONTRACTOR SHALL PROTECT ALL  
EXISTING TREES IN VICINITY OF  
20" RCCP. 5' WIDE TEMPORARY  
CONSTRUCTION STRIP SHALL BE  
USED FOR STORAGE OF EXCAVATED  
MATERIAL ONLY.



EXISTING INLET NO. I-6  
PRIOR TO CONNECTING EXISTING 12" C.B.  
PIPE TO MANHOLE MH 2 CLEAN EXISTING  
INLET (I-6) OF ALL DEBRIS AND FLUSH  
EXISTING PIPES.

STA. 0+95+ RT. VICTORIA DR. TO  
STA. 7+30+ LT. ST. JOHN'S LANE  
CONSTRUCT 130 L.F. SOD SWALE FOR  
POSITIVE DRAINAGE TO INLET I-5.

STA. 7+34 - 8' RT.  
MH-2 REPLACES EXISTING MH  
WITH STEEL PLATE.

STA. 7+30± TO STA. 8+55±  
ST. JOHN'S LANE  
CONSTRUCT 125 L.F. SOD DITCH  
@ 1% TO DRAIN TO INLET I-5.  
ABANDON & REMOVE EX. 15" CMP  
@ STA. 8+45± AS REQUIRED

REMOVE EXISTING HEADWALL "B" AND  
APPROX. 170± L.F. OF EX. 18" C.M.P.  
FROM I-5 TO EXISTING HEADWALL "B".  
ALL RELATED COSTS ARE TO BE INCLUDED  
IN THE UNIT PRICE BID PER LINEAR  
FOOT FOR FURNISHING & LAYING PIPE  
STORM DRAINS.

