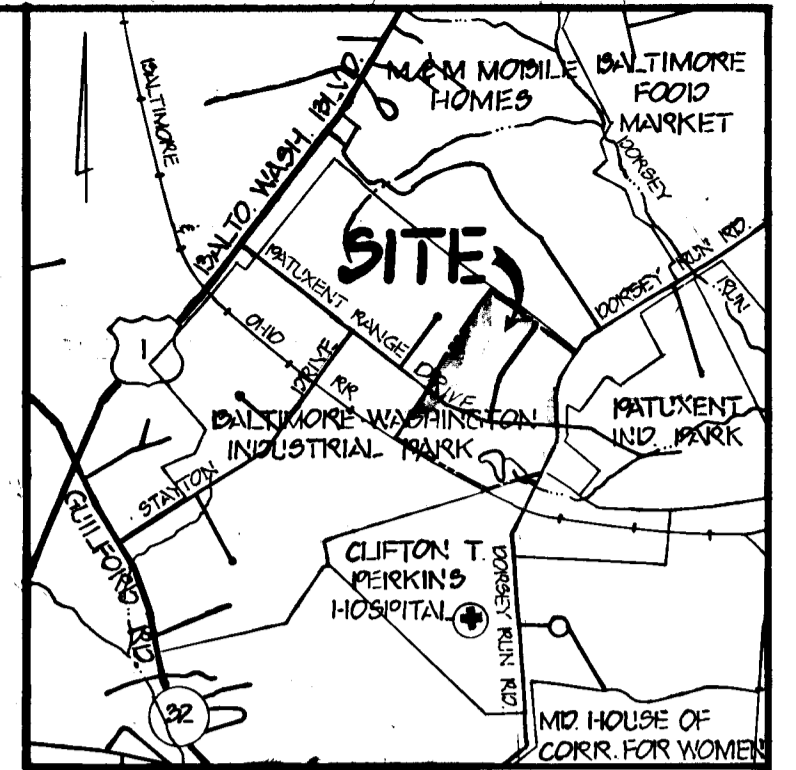


BALTIMORE WASHINGTON INDUSTRIAL PARK

6TH. ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



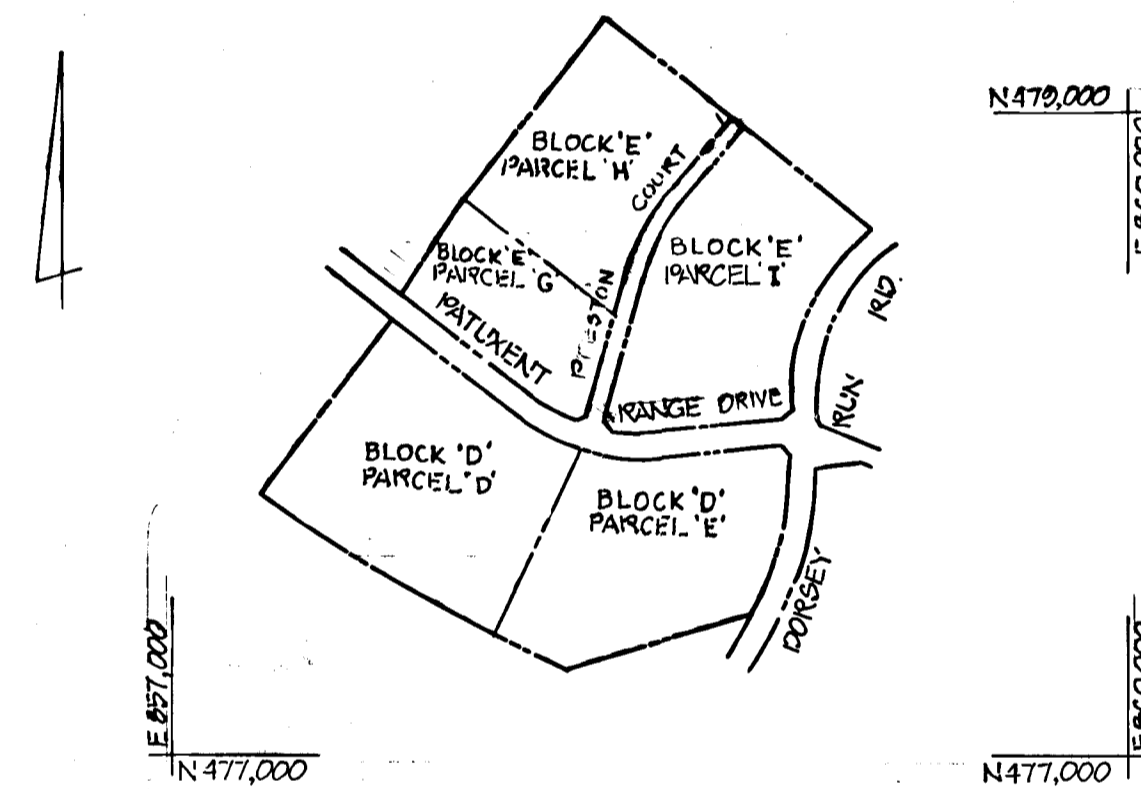
VICINITY MAP
SCALE: 1" = 2000'

BENCH MARKS

- P. & J. B.M. #4 ELEV. 211.740
- R.R. SPIKE SET IN C&P POLE #26, G&E POLE #263656, S. SIDE DORSEY RUN ROAD.
- P. & J. B.M. #7 ELEV. 177.244
- R.R. SPIKE SET IN G&E POLE #263650, S. SIDE DORSEY RUN ROAD.

GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME IV, "STANDARD DETAILS AND SPECIFICATIONS FOR CONSTRUCTION".
2. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
3. THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES, WHERE DIRECTED BY THE ENGINEER, A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
4. CONTRACTOR TO NOTIFY "MISS UTILITY" PHONE (1) 539-0100 AT LEAST THREE (3) DAYS BEFORE STARTING WORK SHOWN ON THIS/THESE DRAWING(S).
5. INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1978 OR LATEST REVISION.
6. DESIGNED TRAFFIC SPEED 4N ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME III STANDARDS. 35 MPH.
7. ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM 1929.
8. ALL COORDINATES BASED ON MARYLAND STATE GRID SYSTEM.
9. PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
10. BRICK BULKHEADS SHALL BE INSTALLED IN ALL STORM DRAIN STUBS.
11. CONTRACTOR TO RESTORE ALL EXISTING PAVING, SIDEWALKS OR LAWNS AFFECTED BY THE CONSTRUCTION SHOWN HEREON TO A CONDITION COMPARABLE TO THAT EXISTING PRIOR TO CONSTRUCTION.
12. REFER TO APPROVED GP 85-76, FOR SEDIMENT CONTROL DEVICES THAT ARE TO BE MAINTAINED DURING CONSTRUCTION OF THIS CONTRACT. SEE DRAWINGS 7 THRU 11 FOR ANY REVISIONS REQUIRED BY THIS WORK.
13. ALL STORM DRAIN BEDDING TO BE CLASS C EXCEPT WHERE OTHERWISE NOTED.

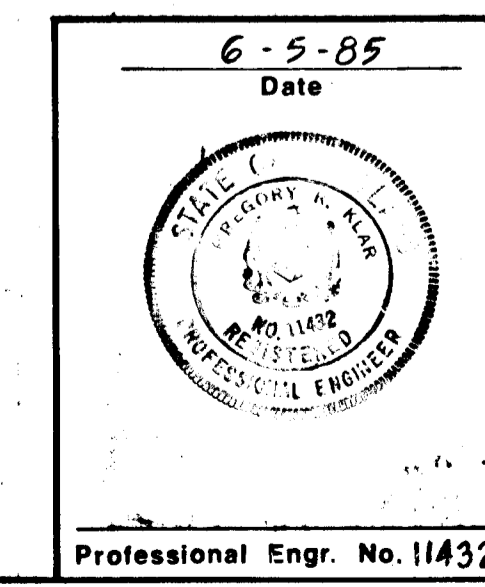


PLAN
SCALE: 1" = 600'

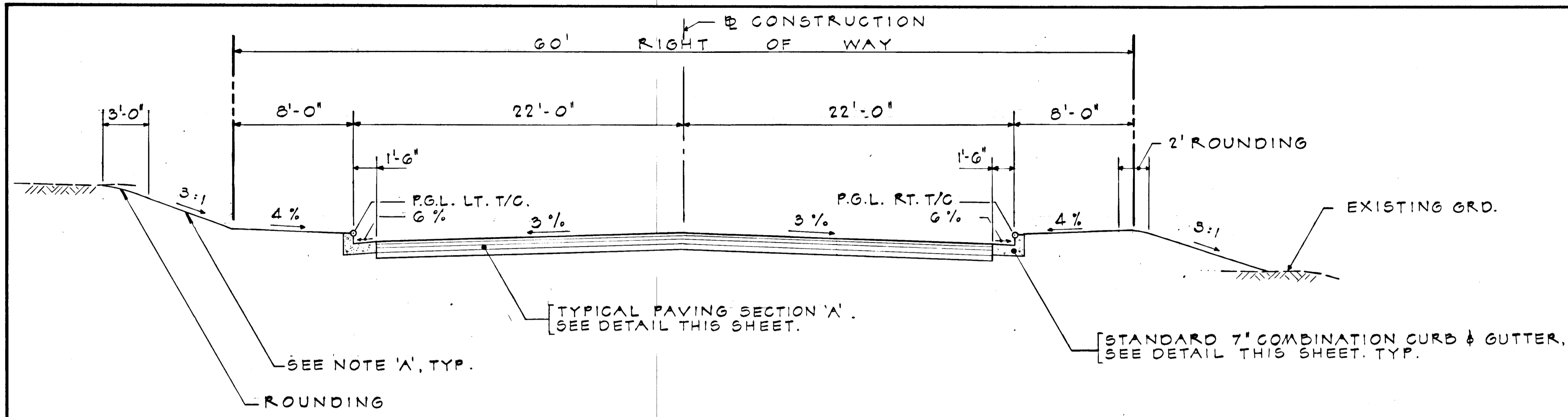
HORIZONTAL & VERTICAL CONTROLS REFERENCED TO "BERKE AZIMUTH MARK - 1964"

DEPARTMENT OF PUBLIC WORKS	
CHIEF, BUREAU OF ENGINEERING <i>[Signature]</i> DATE	
DEPARTMENT OF PLANNING AND ZONING	
CHIEF, DIV. OF LAND DEVELOP. & ZONING ADM. <i>[Signature]</i> DATE 12-7-85	
10/9/85	1 COUNTY COMMENTS
Date	No Revision Description
OWNER AND DEVELOPER	
B. W. I. P. INC. 110 WEST RD. TOWSON, MARYLAND 21204	
CENTURY ENGINEERING, INC.	
CONSULTING ENGINEERS • PLANNERS 32 WEST ROAD TOWSON, MARYLAND 21204	
AREA BALTIMORE WASHINGTON INDUSTRIAL PARK PARCELS D, E, G, H & I TAX MAP 48 6TH ELECTION DISTRICT HOWARD CO., MD.	
TITLE ROAD AND STORM DRAIN CONSTRUCTION PLANS AND DETAILS FOR PRESTON COURT & DORSEY RUN ROAD	
Des By	Scale AS SHOWN Proj No 84-1400
Drn By A.E.S.	Date JUNE 85 Drawing No.
Chk By	Approved 1 OF 10

AS-BUILT SURVEY CERTIFIED BY
C. ROBERT SHINHAM, MD. REG.
P.E. No. 877



NO.	INDEX OF SHEETS
1	TITLE SHEET
2	TYPICAL SECTIONS AND MISCELLANEOUS DETAILS
3	ROADWAY PLAN AND PROFILE: DORSEY RUN ROAD STA. 94+00 TO 98+30
4	ROADWAY PLAN AND PROFILE: STA. 101+58 TO 106+78.87
5	ROADWAY PLAN AND PROFILE: PRESTON COURT
6	STORM DRAIN PROFILES
7	DRAINAGE AREA MAP, SEDIMENT CONTROL AND GRADING PLAN PARCEL E
8	DRAINAGE AREA MAP, SEDIMENT CONTROL AND GRADING PLAN PARCEL G
9	DRAINAGE AREA MAP, SEDIMENT CONTROL AND GRADING PLAN PARCEL H
10	DRAINAGE AREA MAP, SEDIMENT CONTROL AND GRADING PLAN PARCEL I
	SEDIMENT CONTROL DETAILS

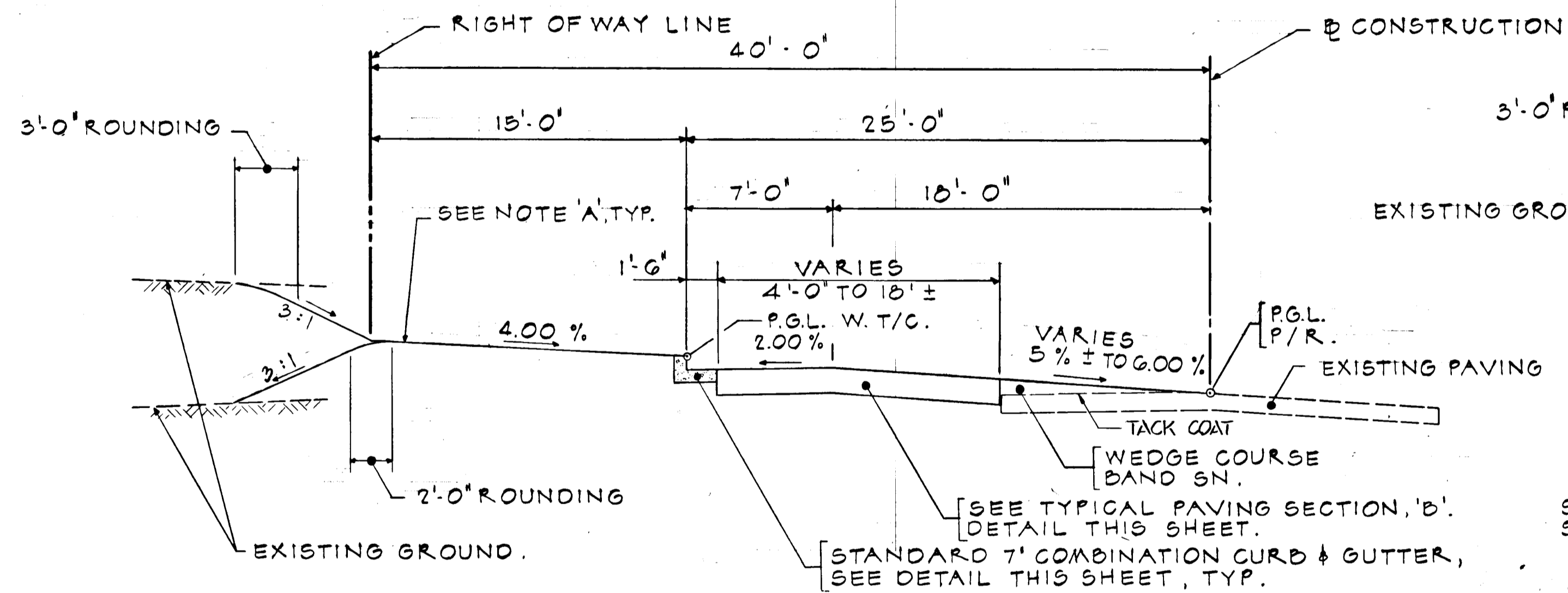


NOTE 'A':
DISTURBED AREAS TO BE STABILIZED WITH
2" TOPSOIL, SEED AND MULCH.

TYPICAL SECTION ~ PRESTON COURT

STA. 0+57 TO STA. 6+36.51

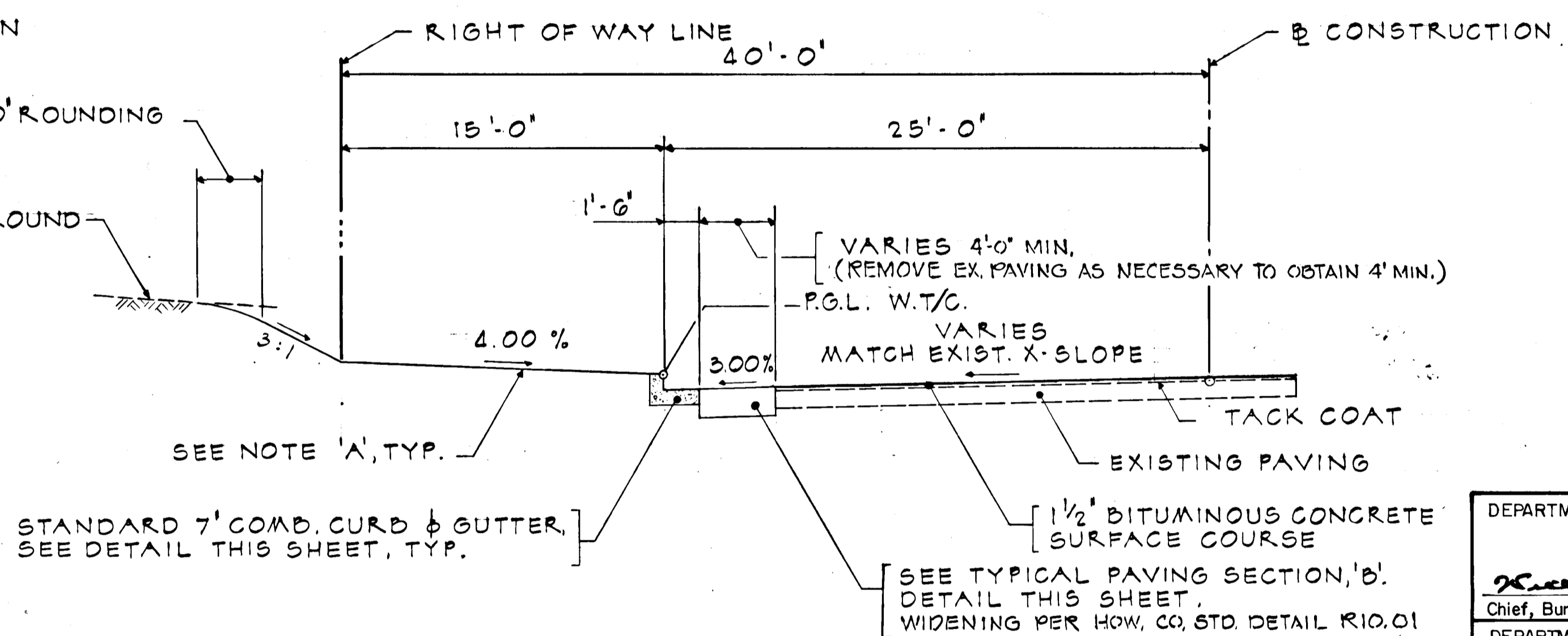
SCALE: 1" = 5'-0"



TYPICAL HALF SECTION ~ DORSEY RUN ROAD

STA. 101+58 TO STA. 106+25

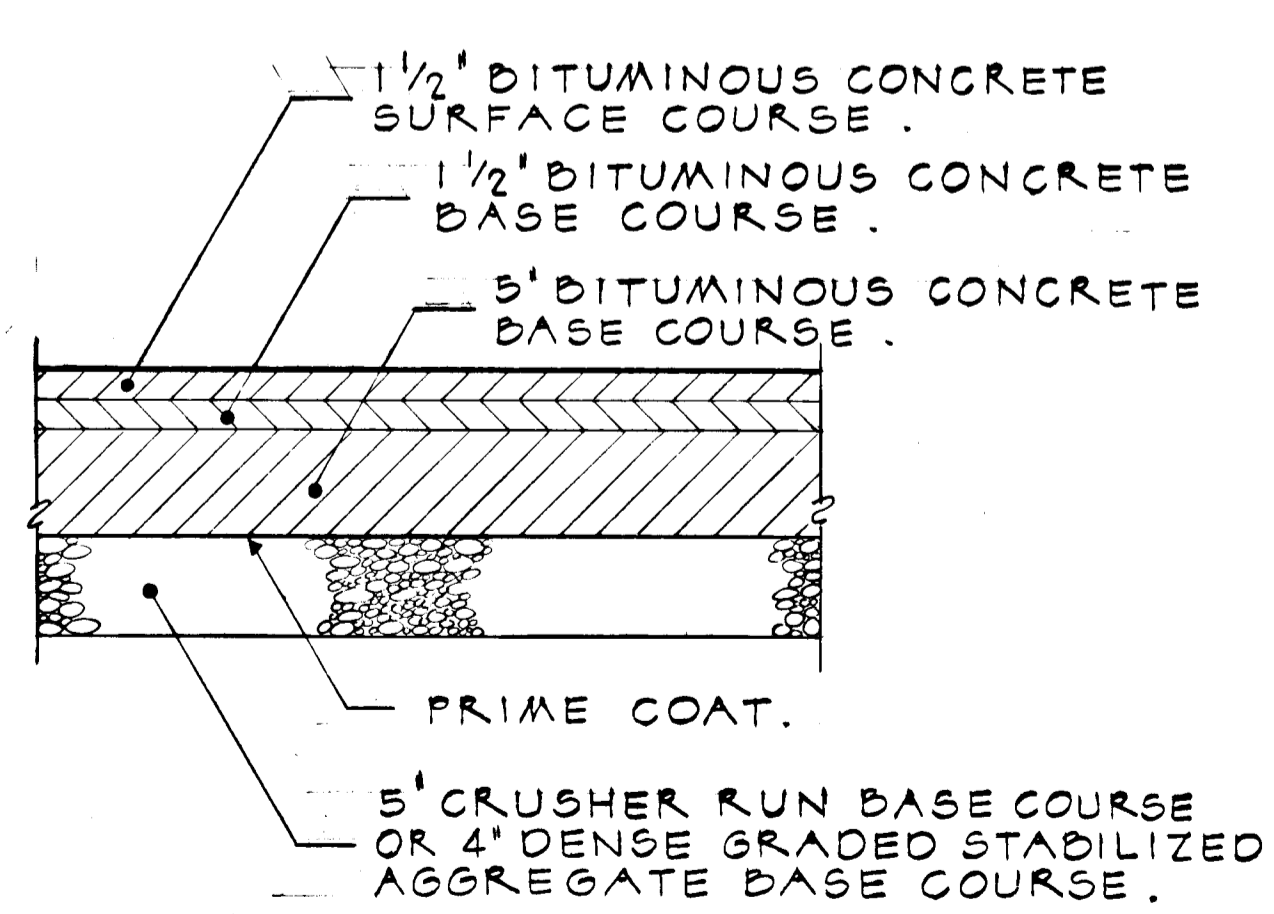
SCALE: 1" = 5'-0"



TYPICAL HALF SECTION ~ DORSEY RUN ROAD

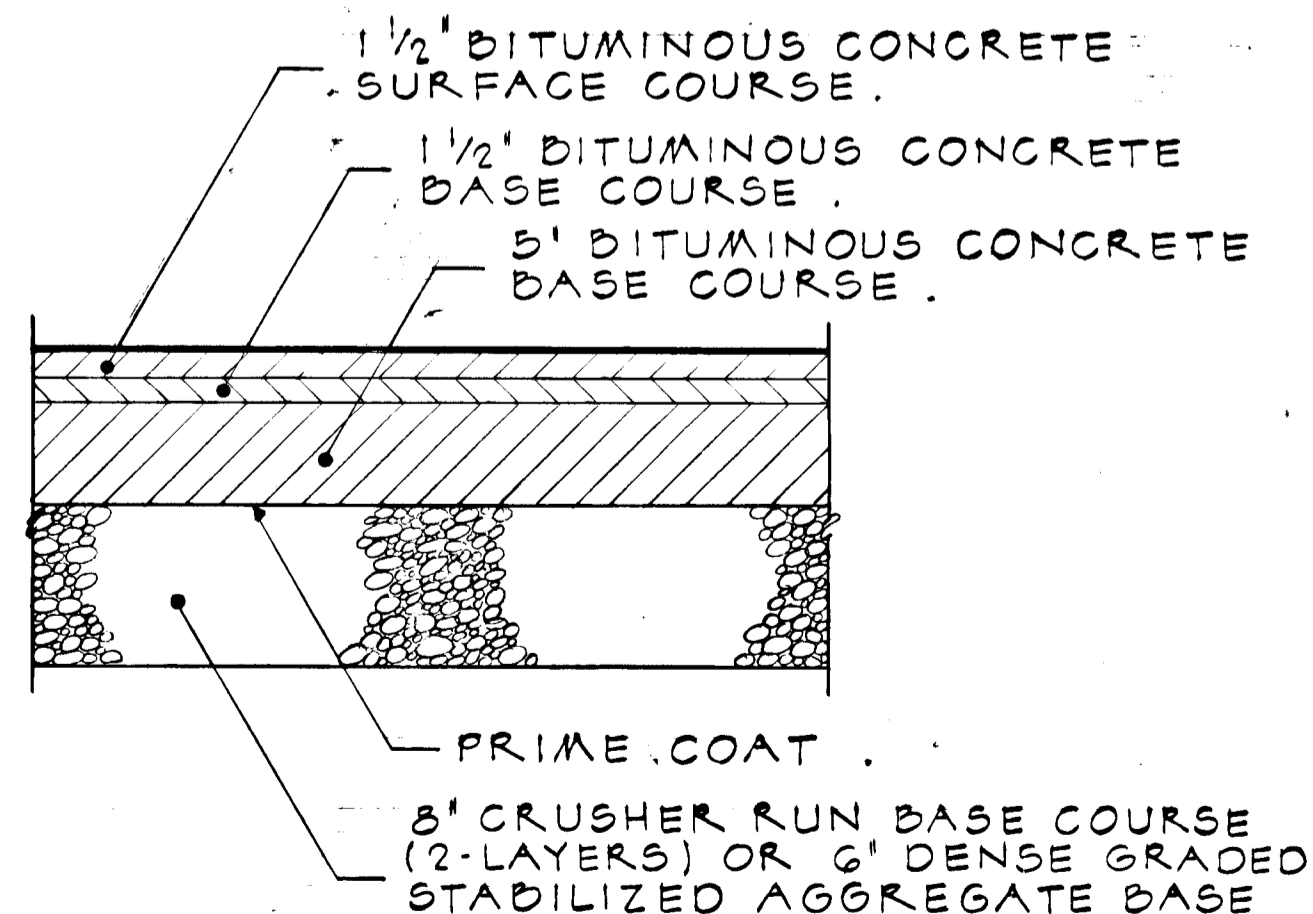
STA. 94+00 TO STA. 98+30

SCALE: 1" = 5'-0"



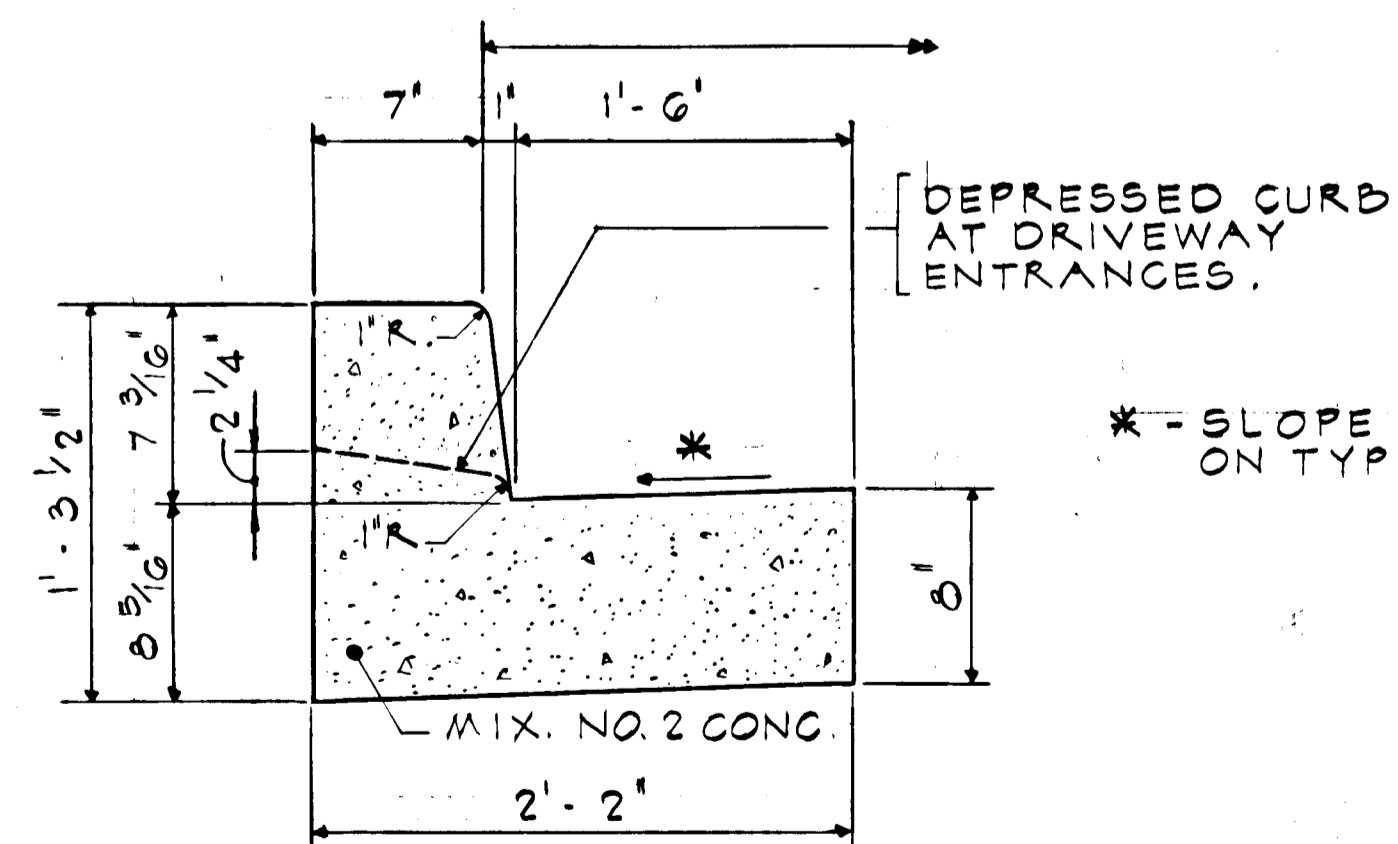
TYPICAL PAVING SECTION 'A'

NOT TO SCALE



TYPICAL PAVING SECTION 'B'

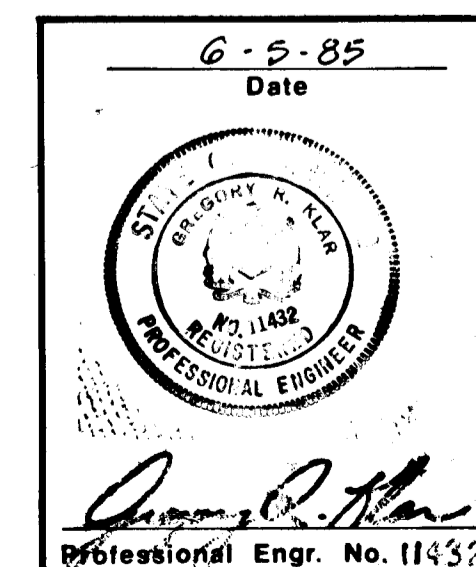
NOT TO SCALE



7' COMBINATION CURB & GUTTER

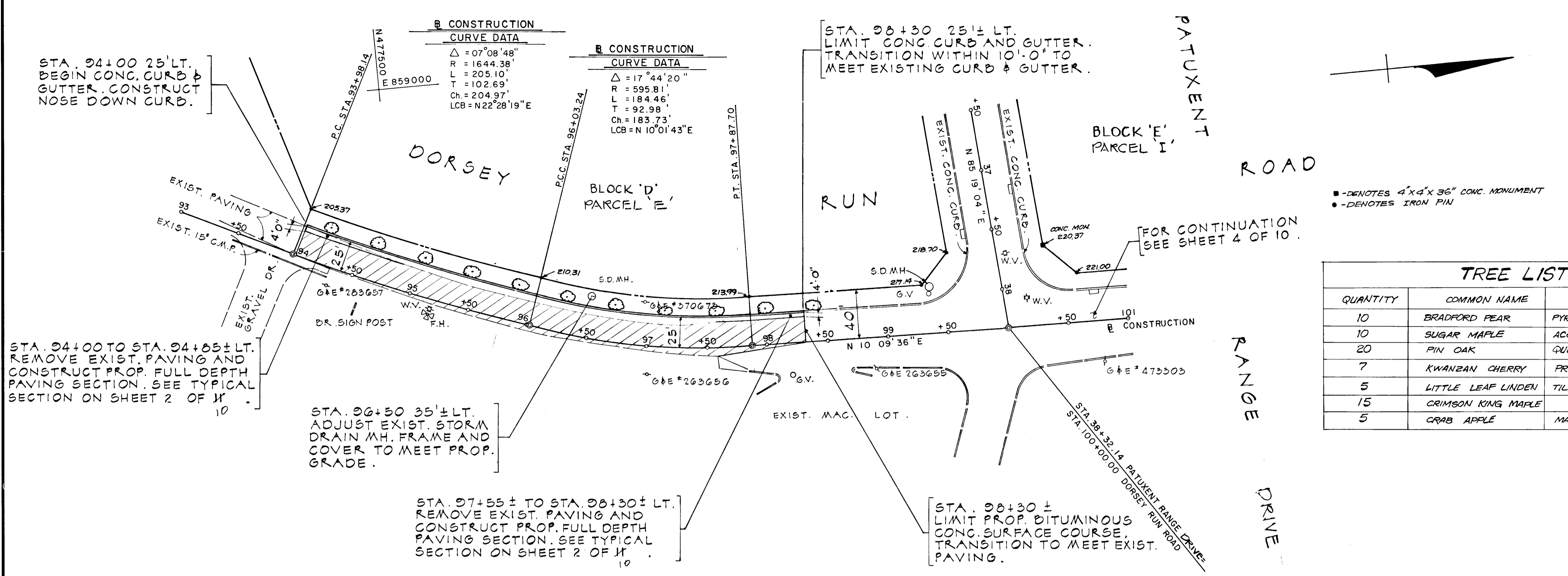
NOT TO SCALE

DEPARTMENT OF PUBLIC WORKS		
Chief, Bureau of Engineering <i>[Signature]</i> 12-2-85 Date		
DEPARTMENT OF PLANNING AND ZONING		
Chief, Div. of Land Development and Zoning Adm. Date <i>[Signature]</i> 12-2-85		
10-8-89	1	COUNTY COMMENTS
Date	No	Revision Description
DEVELOPER AND OWNER B.W.I.P. INC. 110 WEST ROAD BALTIMORE, MARYLAND 21204 301-296-6400		
CENTURY ENGINEERING, INC. CONSULTING ENGINEERS • PLANNERS TOWSON, MARYLAND 21204		
AREA	BALTIMORE WASHINGTON INDUSTRIAL PARK PARCELS D,E,G,H,I TAX MAP 48 6TH ELECTION DISTRICT HOWARD CO., MD.	
TITLE	TYPICAL SECTIONS AND MISCELLANEOUS DETAILS	
Des By P.D.C.	Scale AS SHOWN	Proj No 84-1400
Drn By P.D.C.	Date JUNE 85	Drawing No.
Chk By G.K.	Approved	2 OF 17



DATE	
BY	
NO.	
NO.	
NO.	
NO.	
NO.	
NO.	
NO.	
NO.	

DATE	
BY	
NO.	
NO.	
NO.	
NO.	
NO.	
NO.	
NO.	
NO.	



TREE LIST				
QUANTITY	COMMON NAME	BOTANICAL NAME	CALIPER	HEIGHT
72	RED MAPLE	ACER RUBRUM	2 1/2" MIN.	12' - 14'

■ DENOTES 4"x4"x36" CONC. MONUMENT
● DENOTES IRON PIN

TREE LIST		
QUANTITY	COMMON NAME	
10	BRADFORD PEAR	PYRUS CALLERYANA 'BRADFORD'
10	SUGAR MAPLE	ACER SACCHARUM
20	PIN OAK	QUERCUS PALUSTRIS
7	KWANZAN CHERRY	PRUNUS SERRULATA 'KWANZAN'
5	LITTLE LEAF LINDEN	TILIA CORDATA
15	CRIMSON KING MAPLE	
5	CRAB APPLE	MALUS 'PINK PERFECTION'

DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Engineering
DEPARTMENT OF PLANNING AND ZONING
Chief, Div. of Land Development and Zoning Adm. Date

10/8/85
Date No. COUNTY COMMENTS
Revision Description

10/8/85	1	COUNTY COMMENTS
Date	No.	Revision Description

DEVELOPER AND OWNER
B.W.I.P. INC.
110 WEST ROAD
BALTIMORE, MARYLAND 21204
301 - 296 - 6400

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS - PLANNERS
TOWSON, MARYLAND 21204

AREA BALTIMORE WASHINGTON INDUSTRIAL PARK
PARCELS D, E, G, H & I TAX MAP 48
6TH ELECTION DISTRICT HOWARD CO., MD.

TITLE
**DORSEY RUN ROAD
ROADWAY PLAN AND PROFILE**

Des By P.D.C.	Scale AS SHOWN	Proj No 84-1400
Drn By P.D.C.	Date JUNE 85	
Chk By G.K.	Approved	

Date

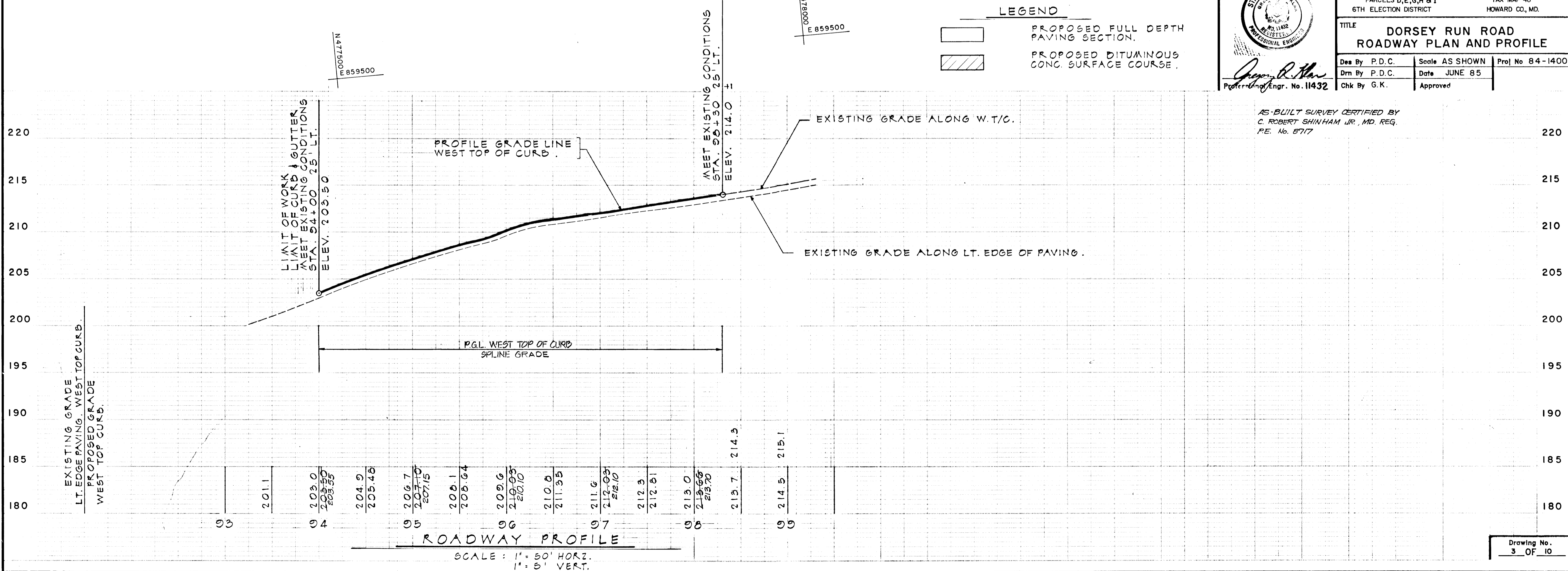
Professional Engr. No. 11432

AS-BUILT SURVEY CERTIFIED BY
C. ROBERT SHINHAM JR., MD. REG.
P.E. No. 8717

LEGEND

□ PROPOSED FULL DEPTH PAVING SECTION.

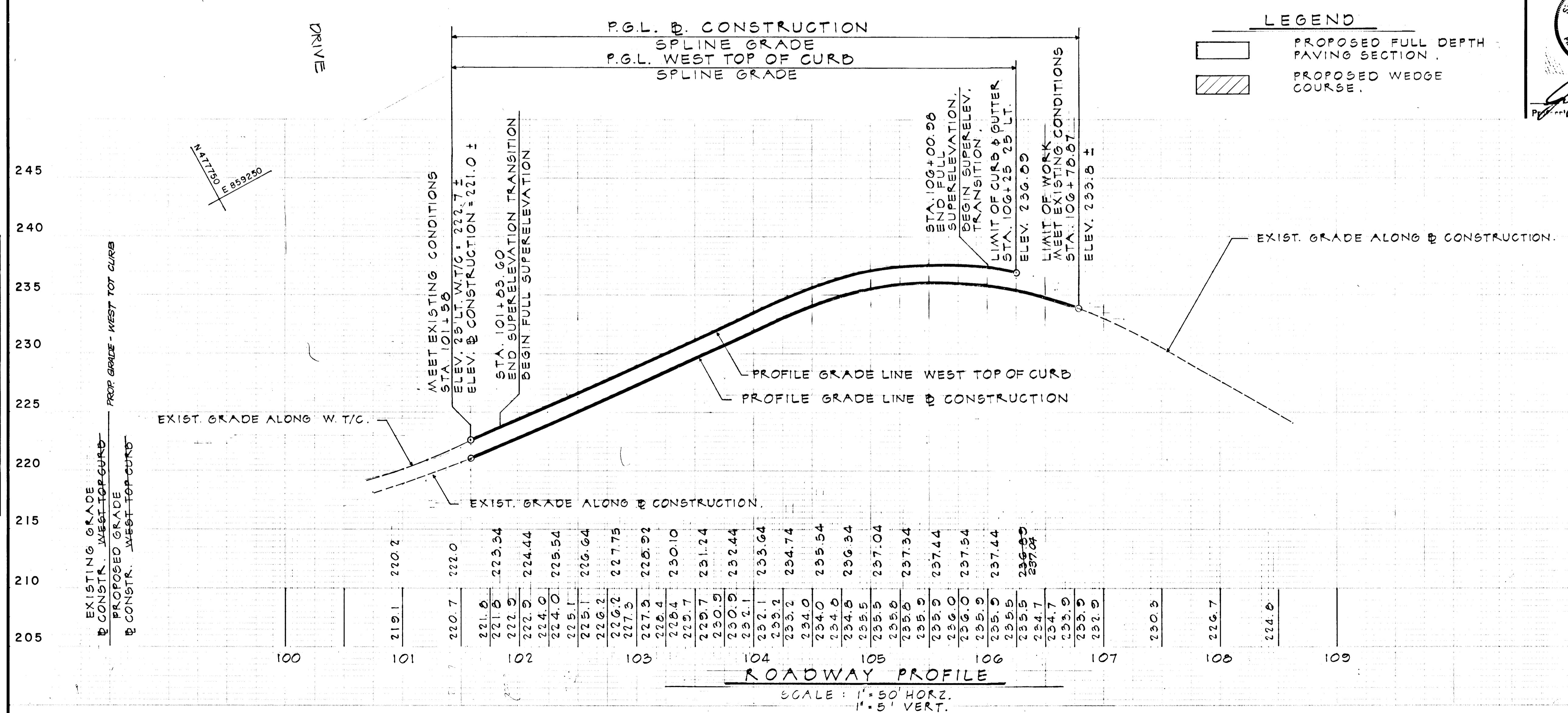
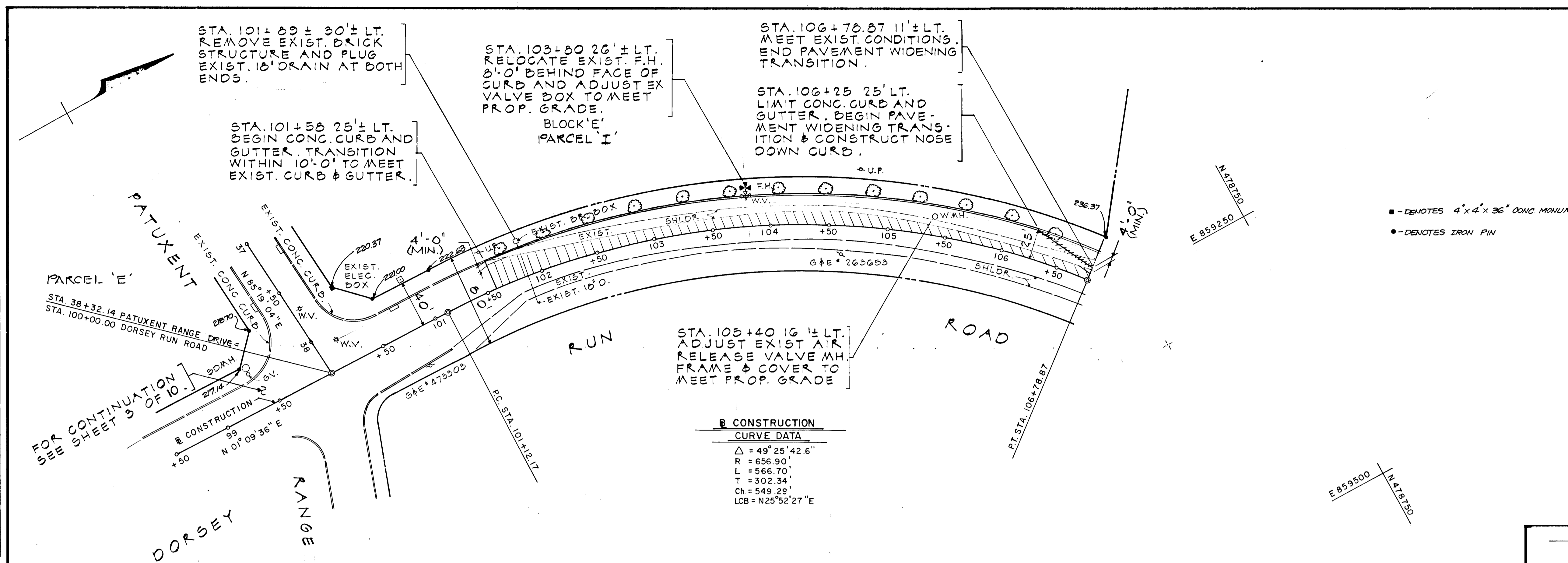
▨ PROPOSED BITUMINOUS CONC. SURFACE COURSE.



Drawing No. 3 OF 10

PLAN
 SURVEYED
 NOTE BOOK
 ALIGNMENT CHECKED
 REF. OF WAY CHECKED
 NO.

PROFILE
 SURVEYED
 NOTE BOOK
 GRADES CHECKED
 STRUCTURE ROTATIONS CHECKED
 NO.



■ -- DENOTES 4" x 4" x 36" CONC. MONUMENT
 ● -- DENOTES IRON PIN

LEGEND

[Hatched Box] PROPOSED FULL DEPTH PAVING SECTION.

[Solid Box] PROPOSED WEDGE COURSE.

6-5-85
 Date

C. Robert Shinham, Jr.
 Professional Engineer
 No. 11432

AS-BUILT SURVEY CERTIFIED BY
 C. ROBERT SHINHAM, JR. MD. REG.
 P.E. No. 8717

DEPARTMENT OF PUBLIC WORKS

C. Robert Shinham, Jr. 12-2-85
 Chief, Bureau of Engineering Date

DEPARTMENT OF PLANNING AND ZONING

John W. Munnahan 12-7-85
 Chief, Div. of Land Development and Zoning Adm. Date

Date	No.	Revision Description
10/8/85	1	COUNTY COMMENTS

DEVELOPER AND OWNER
B. W. I. P. INC.
 110 WEST ROAD
 BALTIMORE, MARYLAND 21204
 301 - 296 - 6400

CENTURY ENGINEERING, INC.
 CONSULTING ENGINEERS - PLANNERS
 TOWSON, MARYLAND 21204

AREA BALTIMORE WASHINGTON INDUSTRIAL PARK
 PARCELS D,E,G,H & I TAX MAP 48
 6TH ELECTION DISTRICT HOWARD CO., MD.

TITLE **DORSEY RUN ROAD ROADWAY PLAN AND PROFILE**

Des. By P.D.C.	Scale AS SHOWN	Proj. No. 84-1400
Drn. By P.D.C.	Date JUNE 85	
Chk. By G.K.	Approved	

BY	DATE

BY	DATE

BY	DATE

BY	DATE

STRUCTURE SCHEDULE					
STRUCT. NO.	STATION	OFFSET	TYPE	TOP ELEVATION	REMARKS
I-1	0+70	24' RT	A-10	242.67	HOW. CO. DETAIL - SD 4.02
I-2	0+70	24' LT	A-5 w/DEFLECT.	242.67	HOW. CO. DETAIL - SD 4.01 & 4.83
I-3	4+30	24' LT	A-5 w/DEFLECT.	242.53	HOW. CO. DETAIL - SD 4.01 & 4.83
I-4	10+70	24' LT	A-5 w/DEFLECT.	241.57	HOW. CO. DETAIL - SD 4.01 & 4.83
I-5	10+71	24' RT	A-5 w/DEFLECT.	242.59	HOW. CO. DETAIL - SD 4.01 & 4.83
M-1	32+50	40' LT	STW	238.48	HOW. CO. DETAIL - G.501
ES-1	10+72	40' LT	STW	-	HOW. CO. DETAIL - SD 5.51

DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Engineering *Wm. J. B. Date*
 DEPARTMENT OF PLANNING AND ZONING
 Chief, Div. of Land Development and Zoning Adm. Date *12-7-85*
 COUNTY COMMENTS
 Date No Revision Description

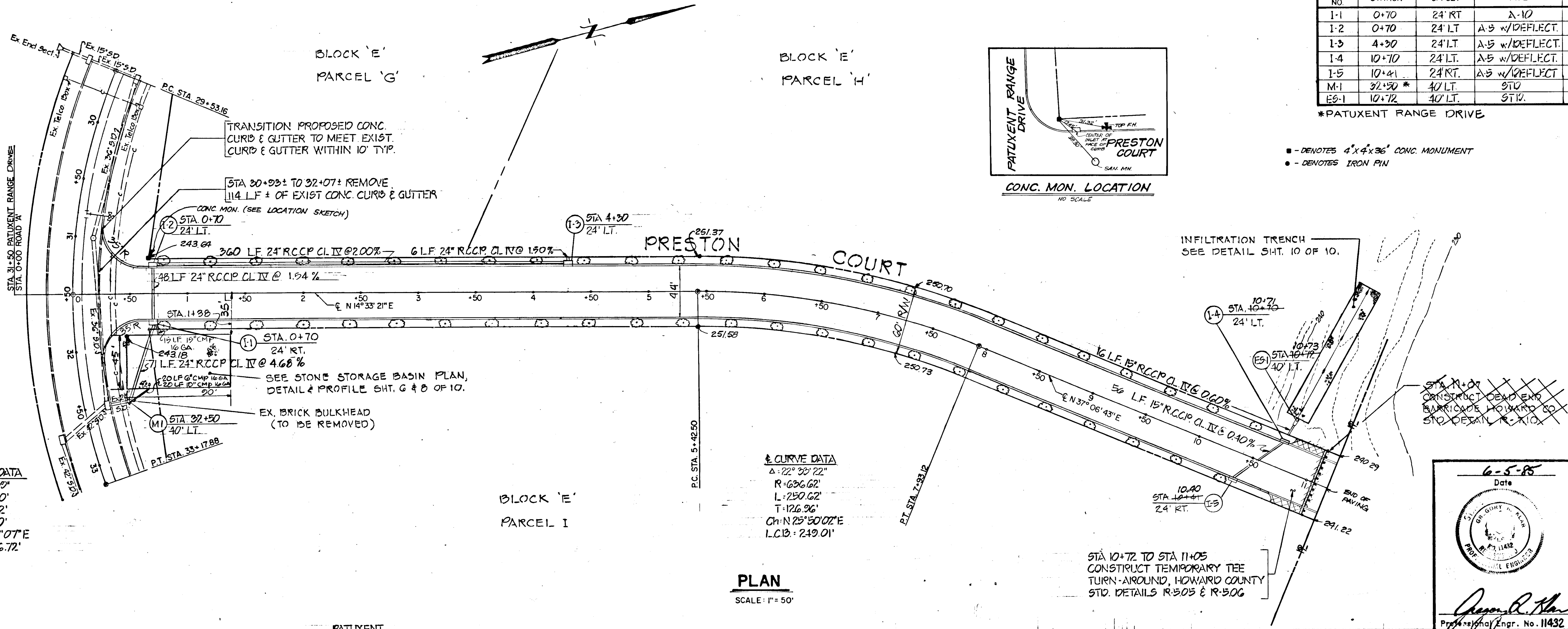
OWNER AND DEVELOPER
 B.W.P. INC.
 110 WEST ROAD
 TOWSON, MARYLAND 21204
 301-296-6400
 CENTURY ENGINEERING, INC.
 CONSULTING ENGINEERS - PLANNERS
 TOWSON, MARYLAND 21204

AREA BALTIMORE WASHINGTON INDUSTRIAL PARK
 PARCELS D.E.G.H.1 TAX MAP 48
 6TH ELECTION DISTRICT HOWARD CO., MD.
 TITLE ROADWAY
 PLAN AND PROFILE
 Des By A.E.B. Scale AS SHOWN Proj No B4-1400
 Drn By A.E.B. Date JUNE 85
 Chk By G.R.K. Approved

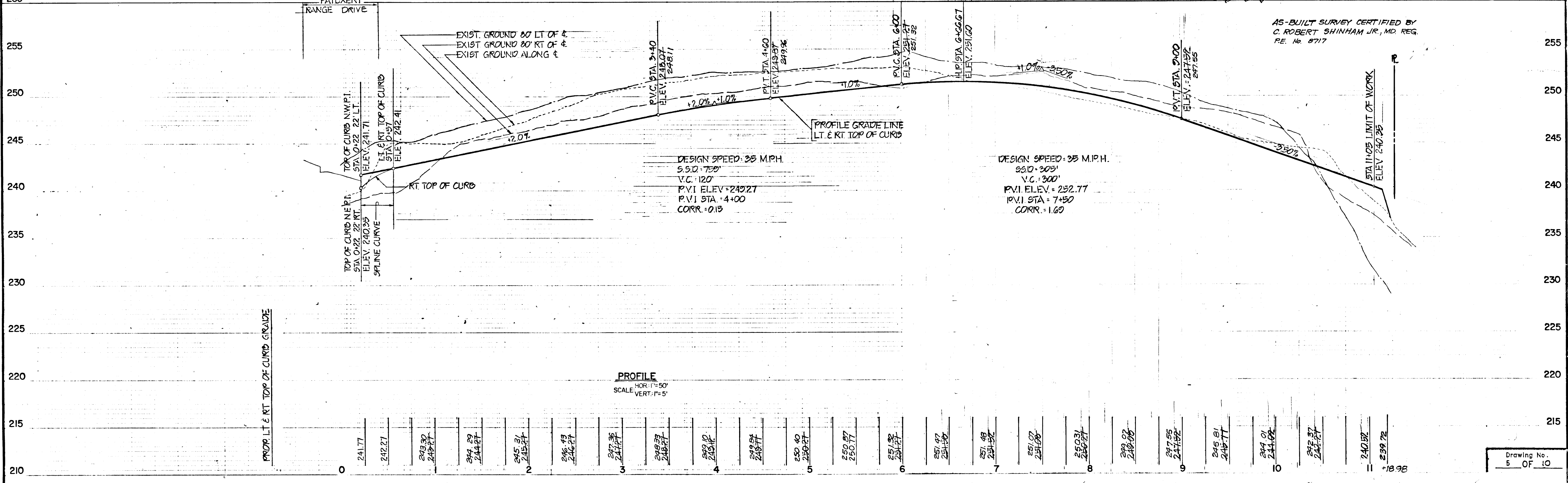
PATUXENT RANGE DRIVE

PATUXENT RANGE DRIVE

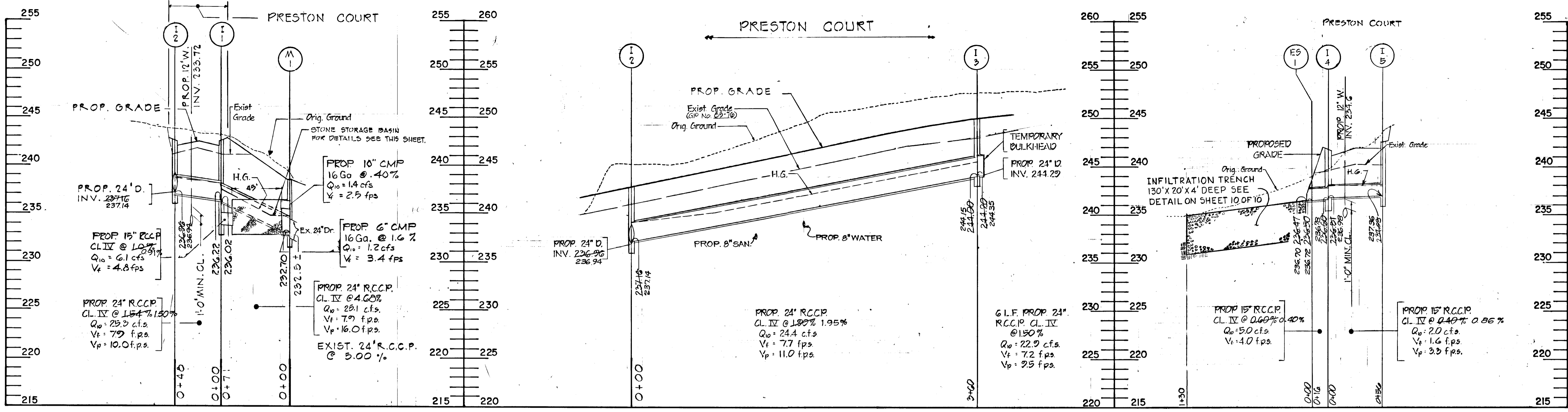
§ CURVE DATA
 Δ = 47° 30'
 R = 500.00'
 L = 364.72'
 T = 190.90'
 Ch = 573.4707'E
 L.C.B. = 356.72'



PLAN
 SCALE: 1" = 50'

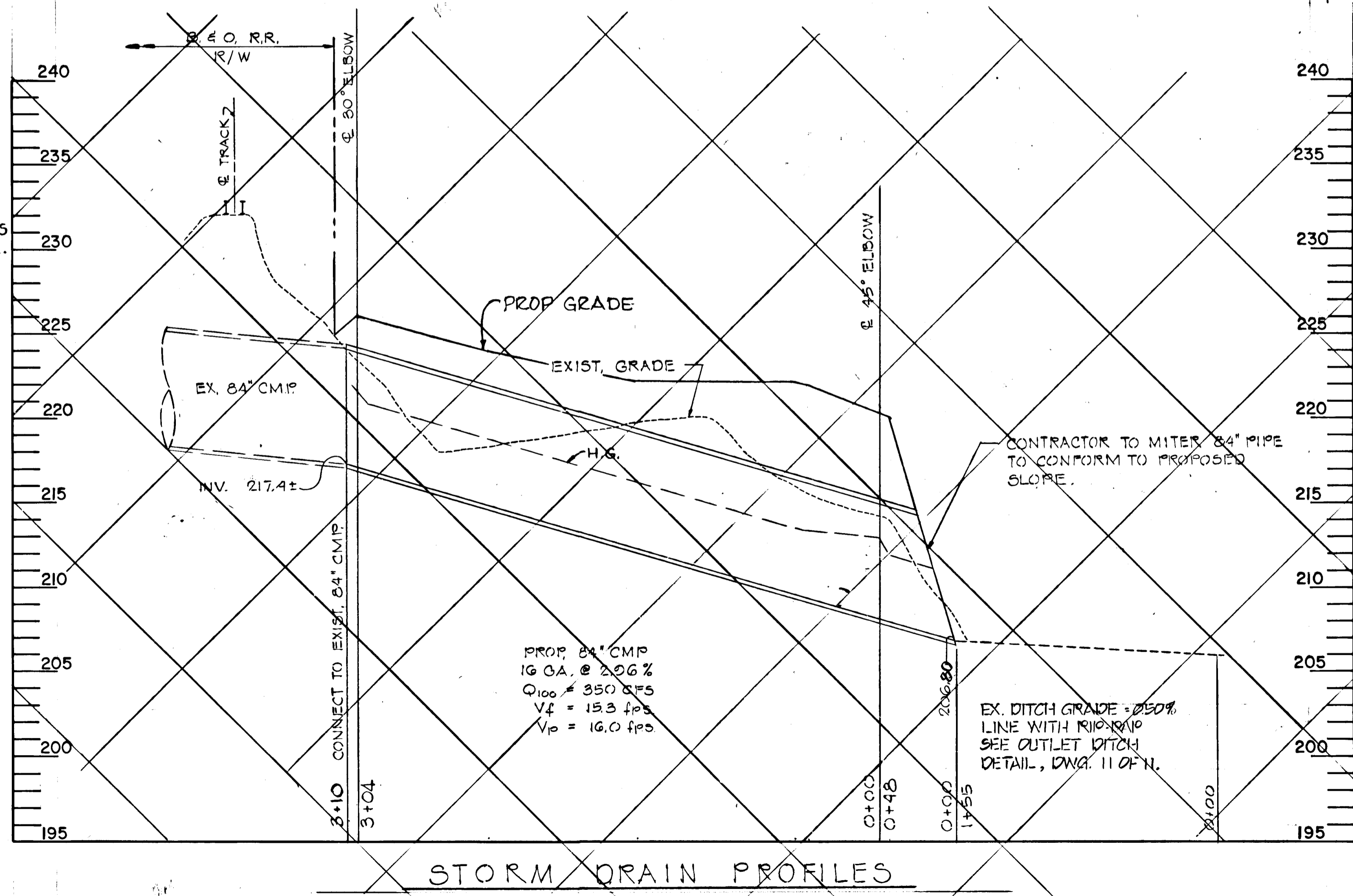
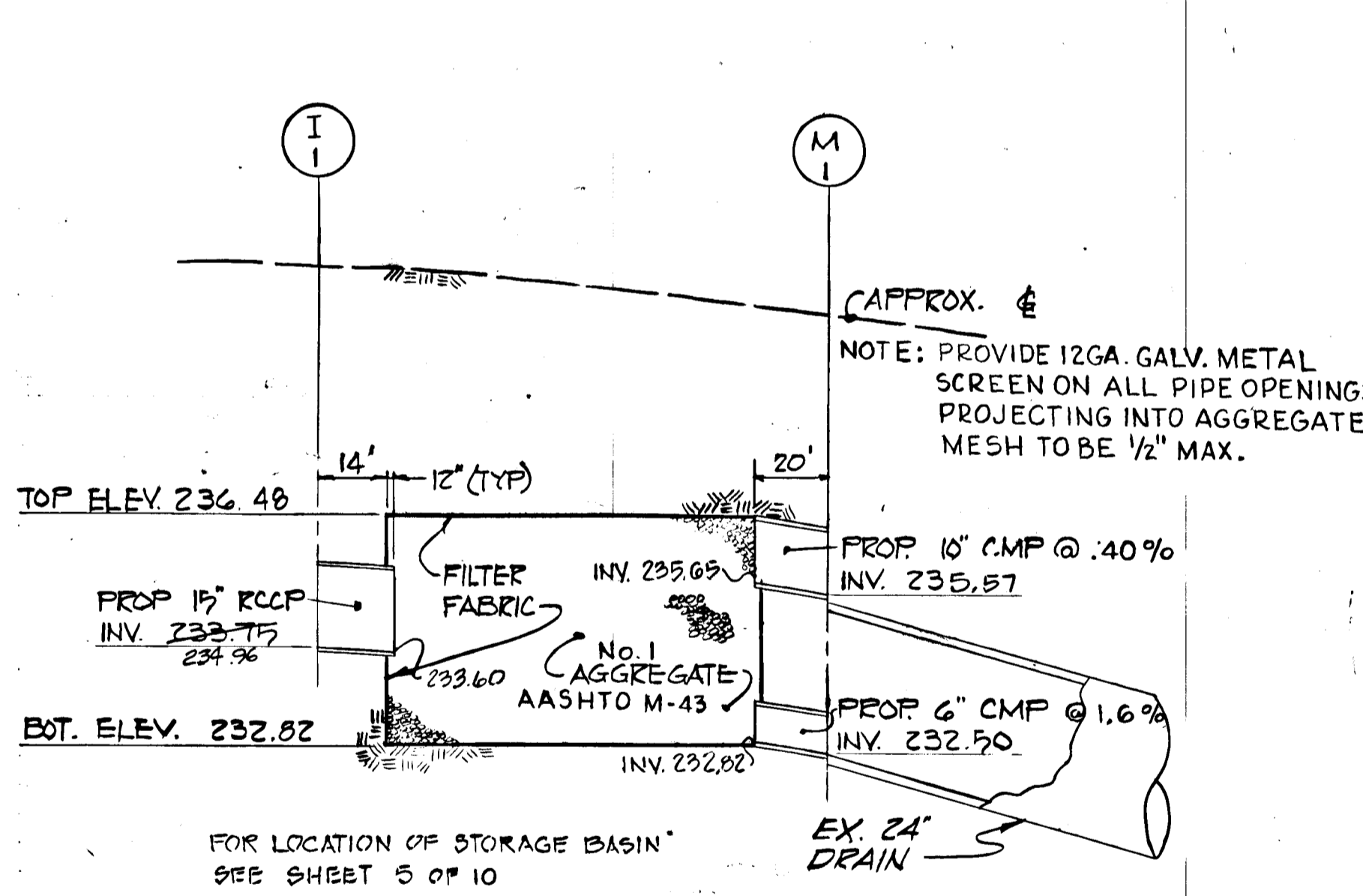


PROFILE
 HOR. 1" = 50'
 SCALE VERT. 1" = 5'



STORM DRAIN PROFILES

SCALE: 1" = 50' HORIZ., 1" = 5' VERT.



STORM DRAIN PROFILES

SCALE: 1" = 50' HORIZ., 1" = 5' VERT.

AS-BUILT SURVEY CERTIFIED BY
C. ROBERT SHINHAM, MD. REG. P.E.
No. 8717

DEPARTMENT OF PUBLIC WORKS			
Revision 2		12-6-85	
Chief, Bureau of Engineering			
DEPARTMENT OF PLANNING AND ZONING			
Revision 1		12-7-85	
Chief, Div. of Land Development and Zoning Adm.			
Date	No.	Revision Description	
12/20/85	2	REVISE VELOCITY	
10/8/85	1	COUNTY COMMENTS	
6-5-85	3	MOVED IS FROM 0.40% TO 0.36% REVISED PROFILE	

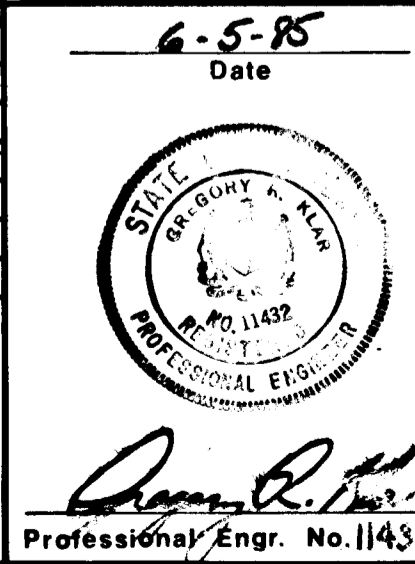
OWNER AND DEVELOPER
B.W.I. INC.
110 WEST ROAD
TOWSON, MARYLAND 21204
301-296-6400

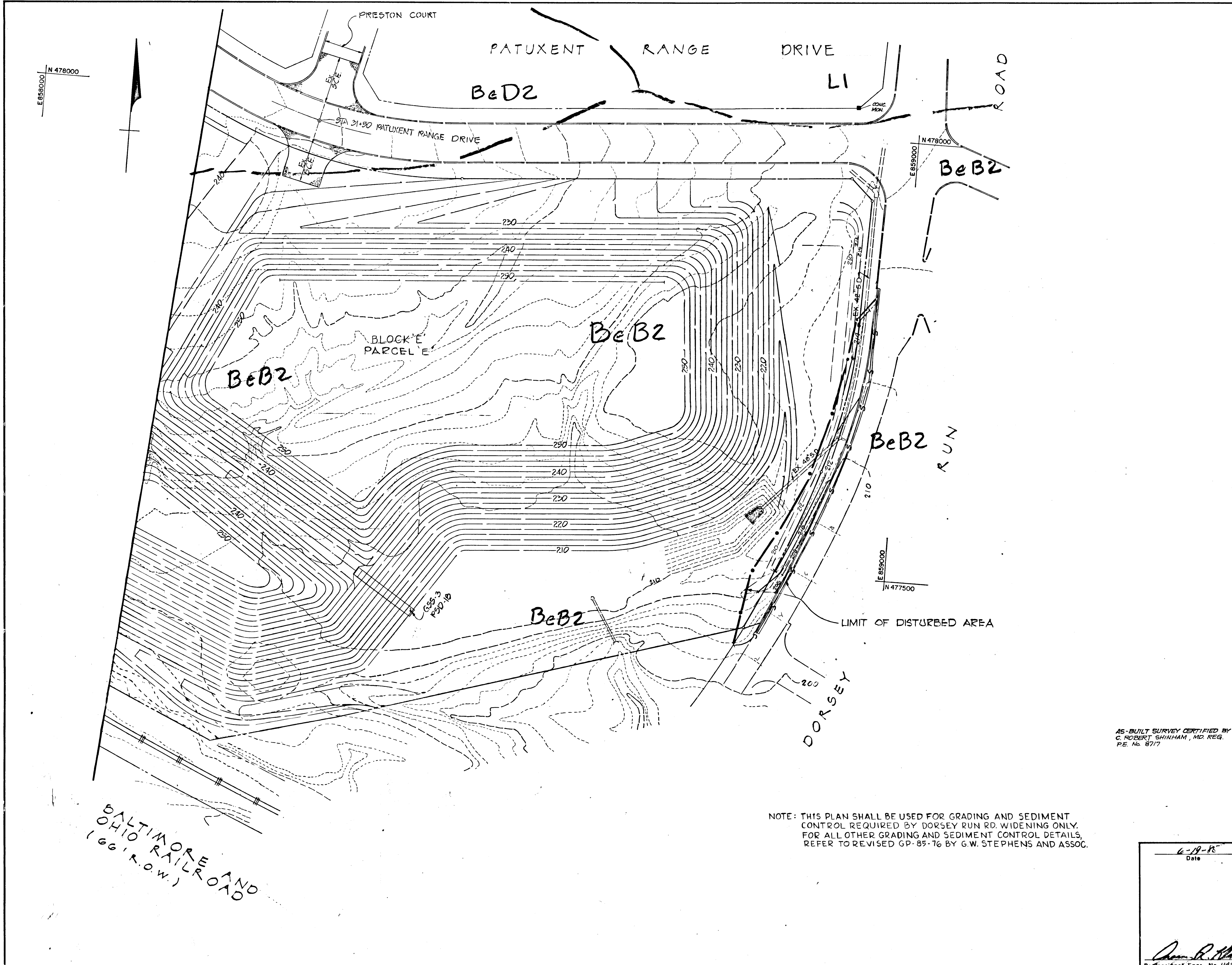
CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS • PLANNERS
TOWSON, MARYLAND 21204

AREA
BALTIMORE WASHINGTON INDUSTRIAL PARK
HOWARD COUNTY, MARYLAND 6TH ELECTION DISTRICT
PARCELS D,E,G,H & I TAX MAP 48

TITLE
STORM DRAIN PROFILES

Des By P.D.C.	Scale AS SHOWN	Proj No 84-1400
Drn By F.D.C.	Date JUNE 85	Drawing No.
Chk By G.R.K.	Approved	6 OF 10





DEPARTMENT OF PLANNING AND ZONING:
John W. Muschman 12-7-85
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

DEPARTMENT OF PUBLIC WORKS:
William B. R... 12-2-85
 CHIEF, BUREAU OF ENGINEERING DATE

CERTIFICATION BY THE DEVELOPER:
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT AND PLANS FOR EROSION AND SEDIMENT CONTROL AND THAT ALL 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. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

David E. Sheffer 6-19-85
 Signature of Developer Date

CERTIFICATION BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR EROSION AND 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 SOIL CONSERVATION DISTRICT.

James R. ... 6-19-85
 Signature of Engineer Date

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

John M. ... 12-5-85
 U.S. Soil Conservation Service Date

THESE PLANS FOR EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED:
Stephen L. Aulon 12-5-85
 Howard Soil Conservation District Date

Date	No	Revision Description
10/8/85	1	COUNTY COMMENTS

OWNER AND DEVELOPER
 B.W.I.P. INC.
 110 WEST ROAD
 TOWSON, MARYLAND 21204
 301-296-6400

CENTURY ENGINEERING, INC.
 CONSULTING ENGINEERS - PLANNERS
 TOWSON, MARYLAND 21204

AREA
 BALTIMORE WASHINGTON INDUSTRIAL PARK
 HOWARD COUNTY, MARYLAND 6TH ELECTION DISTRICT
 PARCELS D, E, G, H & I TAX MAP 48

TITLE
 DRAINAGE AREA MAP,
 SEDIMENT CONTROL
 AND GRADING PLAN

Des By KPM	Scale 1"=50'	Proj No 84-1400
Dwn By P.D.C.B.A.E.B	Date JUNE 85	Drawing No. 7 OF 10
Chk By G.R.K.	Approved	

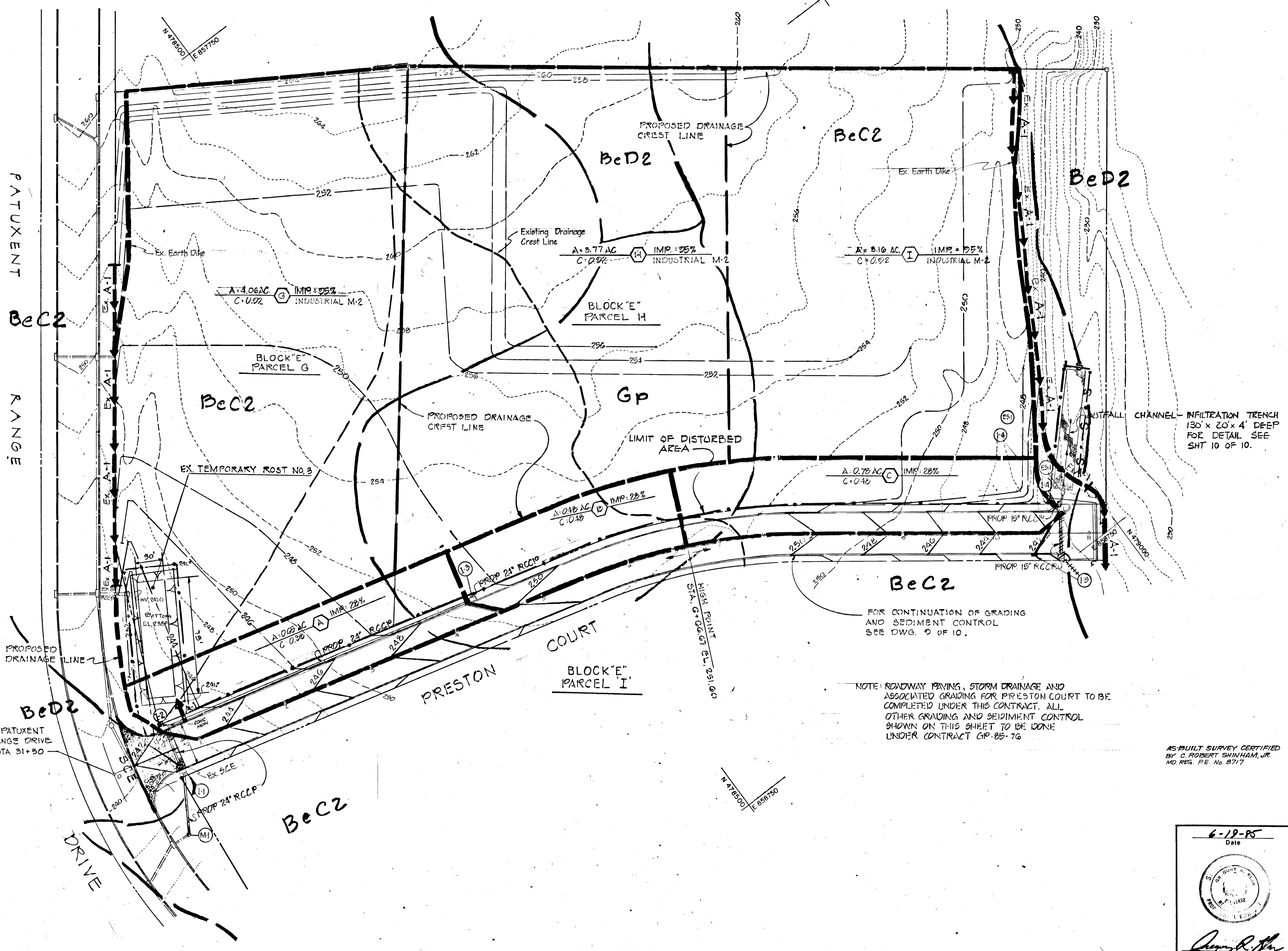
AS-BUILT SURVEY CERTIFIED BY
 C. ROBERT SHINKHAM, MD. REG.
 P.E. No. 8717

NOTE: THIS PLAN SHALL BE USED FOR GRADING AND SEDIMENT CONTROL REQUIRED BY DORSEY RUN RD. WIDENING ONLY. FOR ALL OTHER GRADING AND SEDIMENT CONTROL DETAILS, REFER TO REVISED GP-85-76 BY G.W. STEPHENS AND ASSOC.

James R. ... 6-19-85
 Professional Engr. No. 11402
 Date

BALTIMORE AND OHIO RAILROAD
 (66' R.O.W.)

SEDIMENT CONTROL STRUCTURE SCHEDULE										
TRAP NO.	TRAP	TRAP DEPTH	DRAINAGE AREA	DISTURBED AREA	VOLUME (cu ft)	BOTTOM DIMENSION	BOTTOM ELEVATION	CLEANOUT ELEVATION	CREST ELEV.	
3	R.O.S.T.	3'0"	3.60 AC.	3.60 AC.	6480	6750	75'x30'	238.0	239.5	241.0



DEPARTMENT OF PLANNING AND ZONING:

John M. ... 12-7-85
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

DEPARTMENT OF PUBLIC WORKS:

... 12-6-85
 CHIEF, BUREAU OF ENGINEERING DATE

CERTIFICATION BY THE DEVELOPER:

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT AND PLANS FOR EROSION AND SEDIMENT CONTROL AND THAT ALL 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. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

... 6-19-85
 Signature of Developer Date

CERTIFICATION BY THE ENGINEER:

I CERTIFY THAT THIS PLAN FOR EROSION AND 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 SOIL CONSERVATION DISTRICT.

... 6-19-85
 Signature of Engineer Date

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

... 12-5-85
 U.S. Soil Conservation Service Date

THESE PLANS FOR EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED:

Stephen L. Hulm 12-5-85
 Howard Soil Conservation District Date

Date	No	REVISION DESCRIPTION
10/8/85	1	COUNTY COMMENTS

OWNER AND DEVELOPER
 B.W.I.P. INC.
 110 WEST ROAD
 TOWSON, MARYLAND 21204
 301-296-6400

CENTURY ENGINEERING, INC.
 CONSULTING ENGINEERS • PLANNERS
 TOWSON, MARYLAND 21204

AREA
 BALTIMORE WASHINGTON INDUSTRIAL PARK
 HOWARD COUNTY, MARYLAND 6TH ELECTION DISTRICT
 PARCELS D, E, G, H & I TAX MAP 48

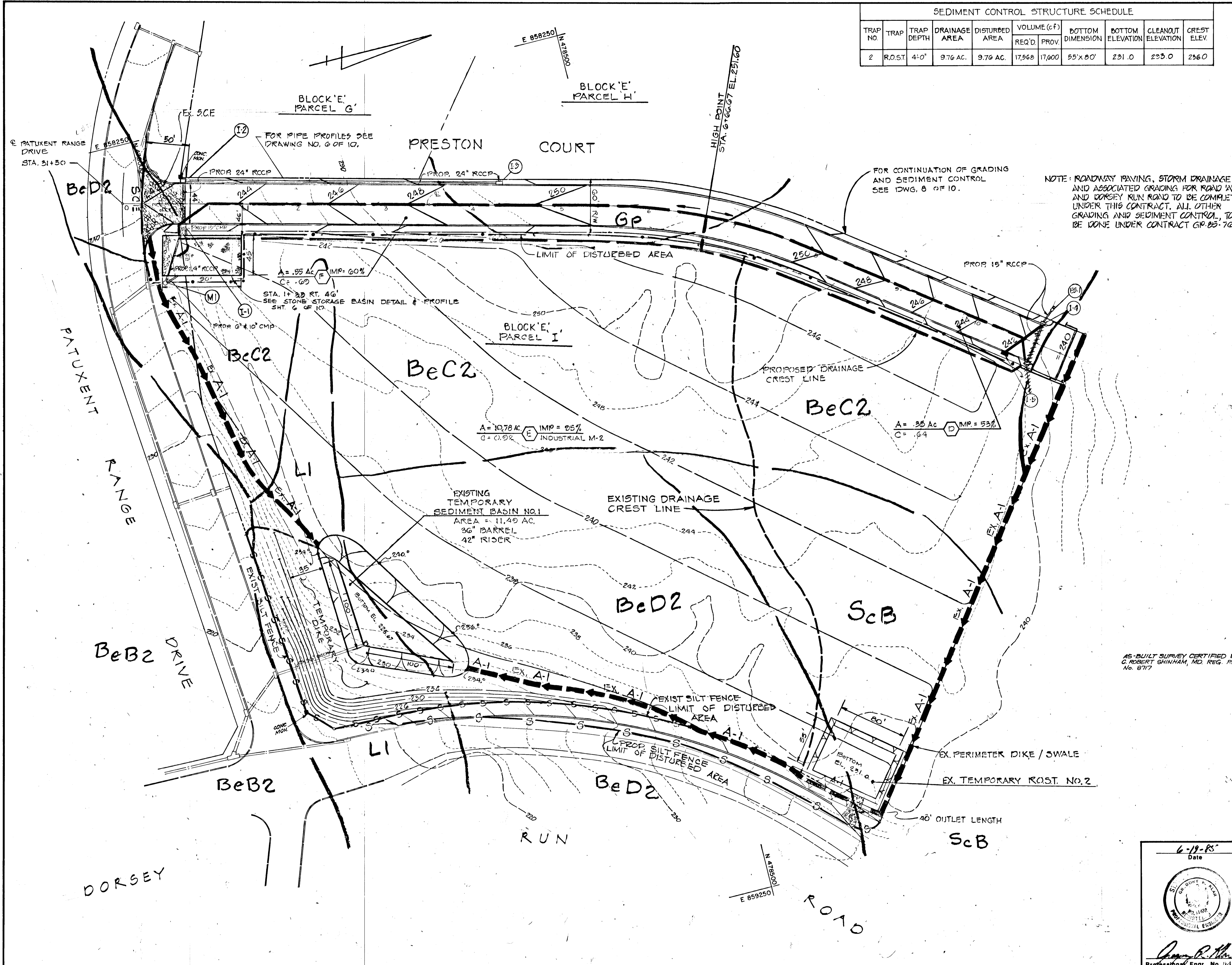
TITLE
 DRAINAGE AREA MAP,
 SEDIMENT CONTROL
 AND GRADING PLAN

Des By G.B.Z. & G.R.K. Scale 1"=50' Proj No B4-1400
 Drn By P.D.C. & A.E.B. Date APRIL 85 Drawing No.
 Chk By G.R.K. Approved _____ 8 OF 10

6-19-85
 Date

AS-BUILT SURVEY CERTIFIED BY C. ROBERT SHINHAM, JR. MD. REG. P.E. No. 8717

SEDIMENT CONTROL STRUCTURE SCHEDULE										
TRAP NO.	TRAP DEPTH	DRAINAGE AREA	DISTURBED AREA	VOLUME (CF)		BOTTOM DIMENSION	BOTTOM ELEVATION	CLEANOUT ELEVATION	CREST ELEV.	
				REQ'D	PROV.					
2	R.O.ST.	4'-0"	9.76 AC.	9.76 AC.	17,968	17,600	55' X 80'	231.0	233.0	236.0



FOR CONTINUATION OF GRADING AND SEDIMENT CONTROL SEE DWG. 8 OF 10.

NOTE: ROADWAY PAVING, STORM DRAINAGE AND ASSOCIATED GRADING FOR ROAD 'A' AND DORSEY RUN ROAD TO BE COMPLETED UNDER THIS CONTRACT. ALL OTHER GRADING AND SEDIMENT CONTROL TO BE DONE UNDER CONTRACT GP 85-76.

DEPARTMENT OF PLANNING AND ZONING:

John Muschman 12-7-85
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

DEPARTMENT OF PUBLIC WORKS:

William B. Ryan 12-8-85
 CHIEF, BUREAU OF ENGINEERING DATE

CERTIFICATION BY THE DEVELOPER:
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT AND PLANS FOR EROSION AND SEDIMENT CONTROL AND THAT ALL 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. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

David M. McLaughlin 6-19-85
 Signature of Developer Date

CERTIFICATION BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR EROSION AND 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 SOIL CONSERVATION DISTRICT.

James R. Miller 6-19-85
 Signature of Engineer Date

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

James M. McLaughlin 12/5/85
 U.S. Soil Conservation Service Date

THESE PLANS FOR EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED:
Stephen L. Huber 12-5-85
 Howard Soil Conservation District Date

Date	No.	Revision Description
10/3/85	1	COUNTY COMMENTS

OWNER AND DEVELOPER
 B.W.I.P. INC.
 110 WEST ROAD
 TOWSON, MARYLAND 21204
 301-296-6400

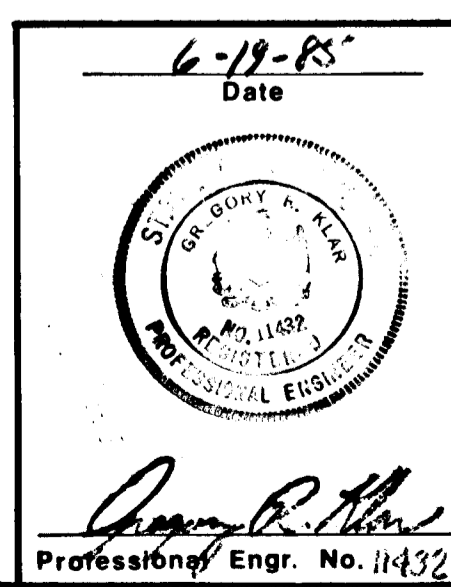
CENTURY ENGINEERING, INC.
 CONSULTING ENGINEERS - PLANNERS
 TOWSON, MARYLAND 21204

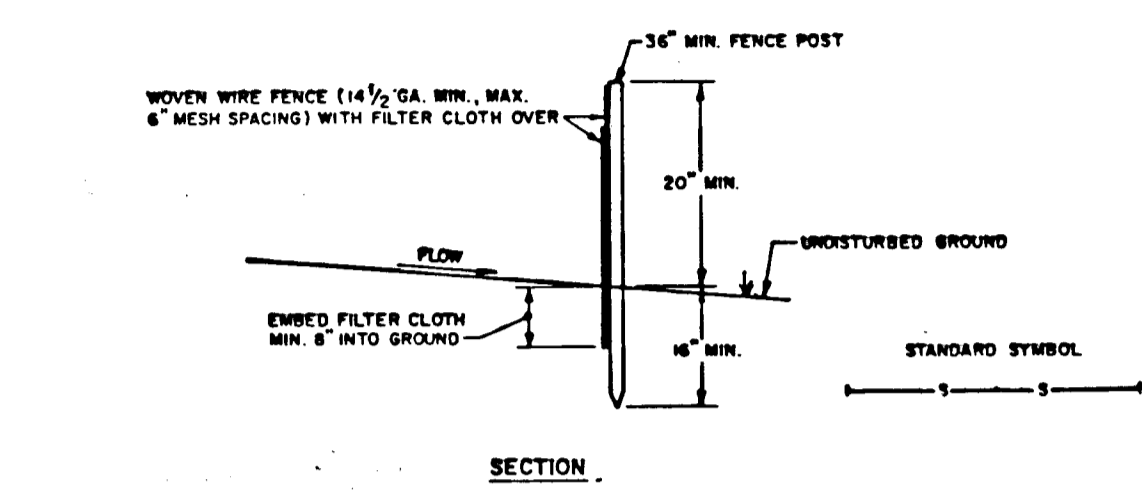
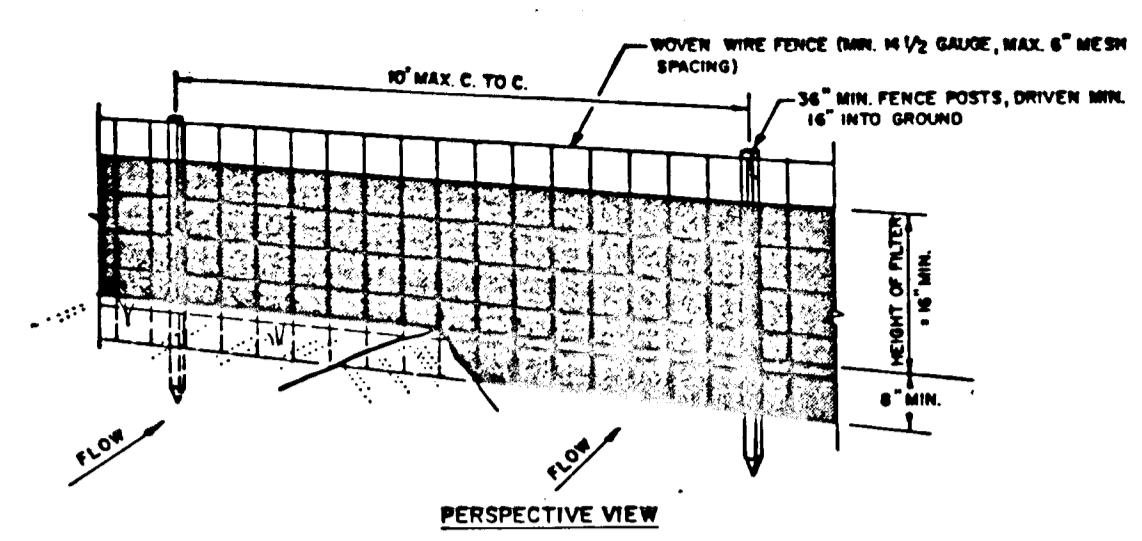
AREA
 BALTIMORE WASHINGTON INDUSTRIAL PARK
 HOWARD COUNTY, MARYLAND 6TH ELECTION DISTRICT
 PARCELS DEGH & I TAX MAP 48

TITLE
 DRAINAGE AREA MAP,
 SEDIMENT CONTROL
 AND GRADING PLAN

Des By G.B.Z. & G.R.K.	Scale 1"=50'	Proj No 84-1400
Drn By P.D.C. & A.B.	Date JUNE 85	Drawing No. 2 OF 12
Chk By G.R.Y.	Approved	

AS-BUILT SURVEY CERTIFIED BY
 C. ROBERT SHINHAM, MD. REG. P.E.
 No. 8717





CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "MOUNDS" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
 FENCE: WOVEN WIRE, 1/4" GA. 6" MAX. MESH OPENING
 FILTER CLOTH: FILTER X, TRAP-LINK, STABIL-LINK, LUNA OR APPROVED EQUAL
 PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

SILT FENCE DETAIL

NO SCALE

TEMPORARY SEEDING

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ. FT.)

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ. FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (.07 LBS./1000 SQ. FT.) FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL. PER ACRE (5 GAL./1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT. OR HIGHER, USE 348 GAL. PER ACRE (8 GAL./1000 SQ. FT.) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

PERMANENT SEEDING

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

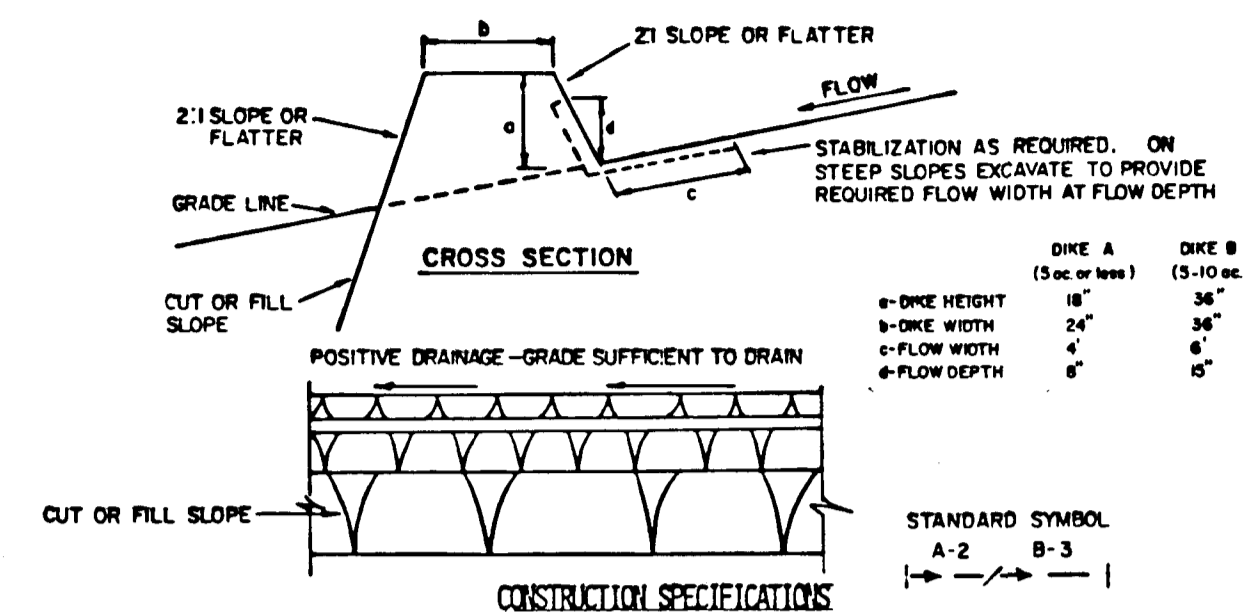
SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

1. PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ. FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ. FT.) BEFORE SEEDING. BARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS./1000 SQ. FT.).
2. ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ. FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ. FT.) BEFORE SEEDING. BARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS./1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (.05 LBS./1000 SQ. FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL./1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE 348 GALS. PER ACRE (8 GAL./1000 SQ. FT.) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.



1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART BELOW.

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELISOR; SOD; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
 B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
 C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
 7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

EARTH DIKE DETAIL

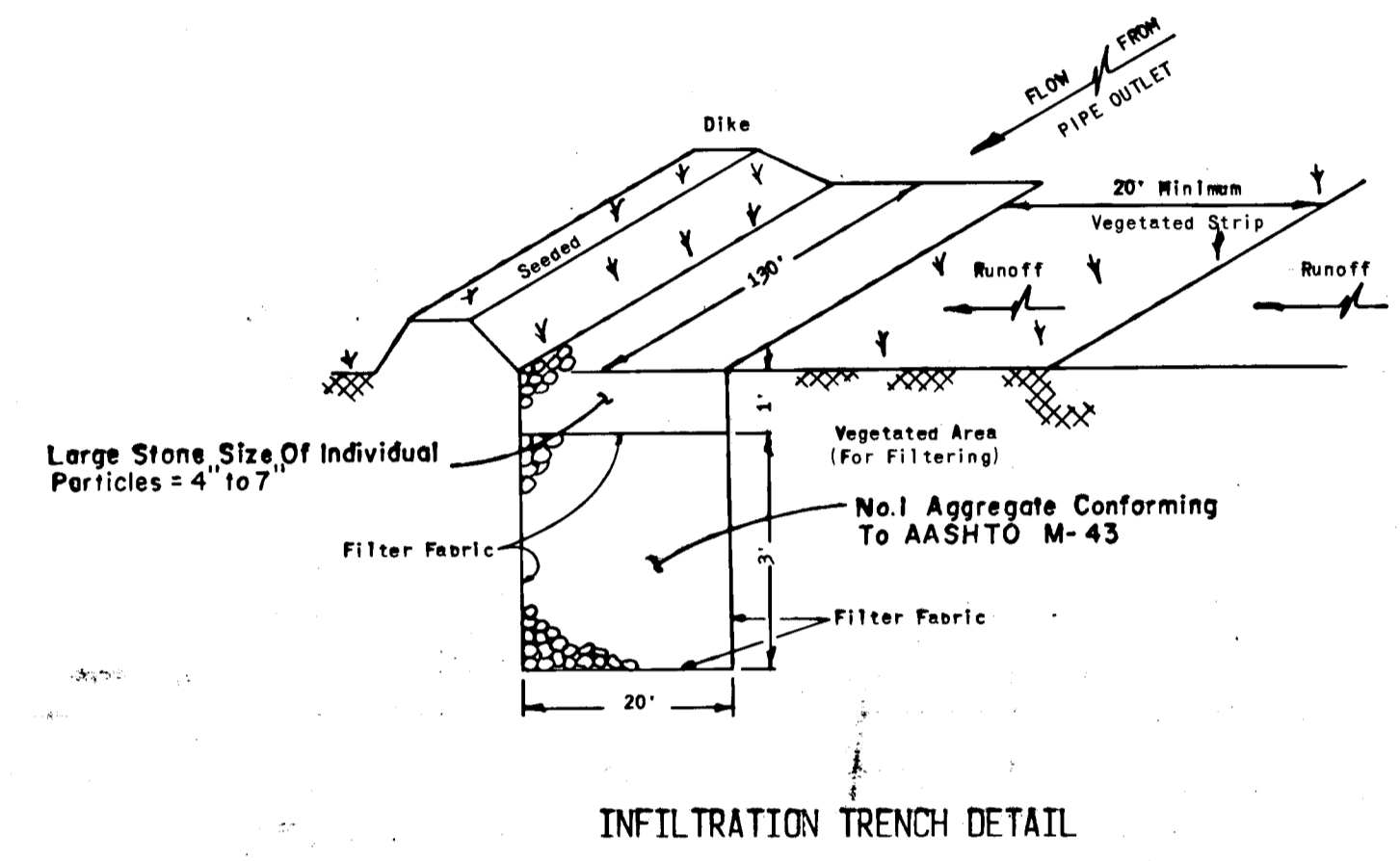
NO SCALE

SEDIMENT CONTROL NOTES

1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (992-2437).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51) SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:

TOTAL AREA OF SITE	2.02 ACRES
AREA DISTURBED	2.02 ACRES
AREA TO BE ROOFED OR PAVED	.06 ACRES
AREA TO BE VEGETATIVELY STABILIZED	1.06 ACRES
TOTAL CUT	1018 CU.YDS.
TOTAL FILL	917 CU.YDS.

 OFFSITE WASTE/BORROW AREA LOCATION
8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPM SEDIMENT CONTROL INSPECTOR.



INFILTRATION TRENCH DETAIL

NO SCALE

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT.
2. NOTIFY THE DPM SEDIMENT CONTROL INSPECTOR FOR HOWARD COUNTY 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION.
3. REFER TO APPROVED GP 85-76, FOR SEDIMENT CONTROL DEVICES THAT ARE TO BE MAINTAINED DURING CONSTRUCTION OF THIS CONTRACT.
4. FOR PROPOSED IMPROVEMENTS ALONG DORSEY RUN ROAD:
 - A. INSTALL SILT FENCE AS INDICATED ON THE PLANS.
 - B. PRIOR TO BEGINNING GRADING OPERATIONS ON DORSEY RUN ROAD BETWEEN STATIONS 101+ AND 106+ THE EARTH DIKE, TEMPORARY R.O.S.T. NO. 2, TEMPORARY SEDIMENT BASIN NO. 1 AND SILT FENCE INDICATED TO BE INSTALLED UNDER CONTRACT GP 85-76 SHALL BE IN PLACE.
 - C. PERFORM GRADING OPERATIONS AND STABILIZE ALL DISTURBED AREAS NOT TO BE PAVED.
 - D. REMOVE SILT FENCE AND CONSTRUCT CURB & GUTTER AND PAVING.
5. FOR PROPOSED IMPROVEMENTS ALONG PRESTON COURT:
 - A. PRIOR TO BEGINNING WORK ON PRESTON COURT, PERIMETER CONTROLS, TRAPS, BASINS AND SILT FENCES FOR PARCELS G, H & I INDICATED TO BE INSTALLED UNDER CONTRACT GP 85-76 SHALL BE IN PLACE.
 - B. INSTALL PROPOSED STORM DRAINAGE. PROTECT PROPOSED INLETS AND PIPES FROM RECEIVING STORMWATER UNTIL PARCEL G, H & PRESTON COURT RIGHT OF WAY IS STABILIZED.
 - C. FINE GRADE, CONSTRUCT CURB & GUTTER AND PAVE ROAD
6. FOR PROPOSED IMPROVEMENTS WITHIN PARCEL 'B':
 - A. REGRADE PROPOSED DITCH AND INSTALL BYPASS. PROVIDE TEMPORARY STREAM DIVERSION DURING CONSTRUCTION.
 - B. INSTALL 24" R.M.P. AT CONNECTION TO EXISTING CULVERT. MAINTAIN TEMPORARY STREAM DIVERSION UNTIL CONNECTION IS COMPLETED.
 - C. INSTALL SILT FENCE.
 - D. GRADE PARCEL 'D' AS SHOWN AND INSTALL EARTH DIKE, FULL TEMP STREAM DIVERSION
7. STABILIZE ALL INACTIVE BUT DISTURBED OR FINISH GRADED AREAS WITHIN 14 DAYS. CONTRACTOR SHALL STABILIZE SUCH AREAS IN ACCORDANCE WITH THE TEMPORARY OR PERMANENT SEEDING NOTES AS APPROPRIATE.
8. UPON STABILIZATION OF ALL DISTURBED AREAS AND AUTHORIZATION BY THE SEDIMENT CONTROL INSPECTOR, REMOVE REMAINING SEDIMENT CONTROL DEVICES.

6-19-85
 Date

George R. Khan
 Professional Engr. No. 11432

DEPARTMENT OF PLANNING AND ZONING:
John W. M... 12-785
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

DEPARTMENT OF PUBLIC WORKS:
William B. R... 12-6-85
 CHIEF, BUREAU OF ENGINEERING DATE

CERTIFICATION BY THE DEVELOPER:
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT AND PLANS FOR EROSION AND SEDIMENT CONTROL AND THAT ALL 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. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.
George R. Khan 6-19-85
 Signature of Developer Date

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George R. Khan 6-19-85
 Signature of Engineer Date

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.
James M. H... 12-5-85
 U.S. Soil Conservation Service Date

THESE PLANS FOR EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED:
Stephen L. Fisher 12-5-85
 Howard Soil Conservation District Date

10/8/85	1	COUNTY COMMENTS
Date	No	Revision Description

OWNER AND DEVELOPER
 B.W.I.P. INC.
 110 WEST ROAD
 TOWSON, MARYLAND 21204
 301-296-6400

CENTURY ENGINEERING, INC.
 CONSULTING ENGINEERS - PLANNERS
 TOWSON, MARYLAND 21204

AREA BALTIMORE WASHINGTON INDUSTRIAL PARK
 HOWARD COUNTY, MARYLAND 6TH ELECTION DISTRICT
 PARCELS D,E,G,H & I TAX MAP 48

TITLE
 SEDIMENT CONTROL DETAILS

Des By G.B.Z.	Scale AS SHOWN	Proj No 84-1400
Drn By A.E.B.	Date JUNE 85	Drawing No. 10 OF 10
Chk By G.R.K.	Approved	