

LITTLE PATUXENT PARKWAY CAPITAL PROJECT NO. J-4106A

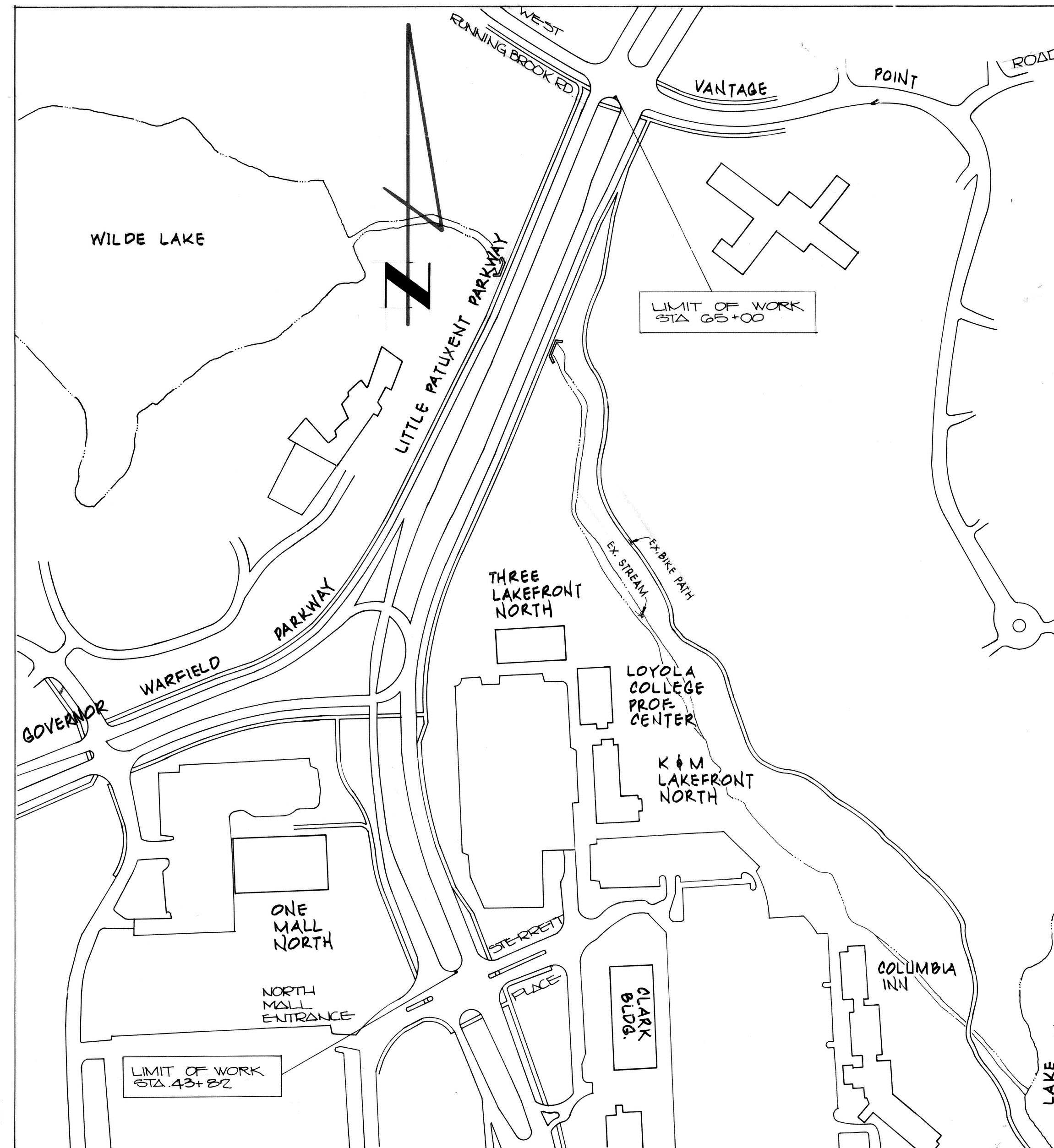
INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN VIEW & SITE DETAILS
3	PLAN VIEW & SEDIMENT CONTROL NOTES
4	TRAFFIC CONTROL PLAN
5	LANDSCAPING PLAN
6	LANDSCAPING PLAN

GENERAL NOTES

- Existing private sidewalks disturbed by the work shall be reconstructed. Steps shall be provided where necessary as a result of grading.
- All slopes and/or disturbed areas shall receive solid sodding on lawn areas and seeding and mulching for areas around trees and bushes except where otherwise indicated on the plans or as directed by the Engineer.
- The Contractor shall install and maintain all temporary Sediment Control Measures as shown on the drawings. However, any Sediment Control Measures not specifically indicated in the Contract Documents, but required as a result of the Contractor's excavation of activities shall not be cause for extra payment.
- Approximate location of existing utilities are shown. The Contractor shall take all necessary precautions to protect existing utilities and to maintain uninterrupted service. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer by the Contractor at the Contractor's expense. The Contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in vicinity of utilities. Costs for locating existing utilities and for adjusting utility appurtenances to meet finished grades will be included in other items of the Contract.
- Contractor shall notify the following utilities or agencies at least five (5) days before starting work shown on these plans.
Miss Utility (Collect) 1-800-257-7777
BG & E Co. - Underground Electric Distribution Engineering "Damage Control" 234-6313
BG & E Co. - Underground Gas Distribution Engineering 234-5533
Chesapeake and Potomac Telephone Company 597-8505
Howard County Bureau of Utilities 313-4900
Howard Cable TV 461-1156
Howard County Division of Traffic Engineering 313-2420
- Standard Details for the Contract shall be the Howard County Standard Details as supplemented by the Maryland State Highway Administration Standard Details 1994, Maryland State Standards & Specifications, for Soil Erosion & Sediment Control and Manual on Uniform Traffic Control Devices of the U.S. Department of Transportation.
- Trees and shrubbery are to be protected from damage to the maximum extent.
- 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.
- Top Elevations of structures shall be adjusted in the field to meeting existing conditions as directed by the Engineer.
- Grading shall be done in such a manner so as to insure positive drainage to the proposed Inlet Structures.
- Horizontal and Vertical controls are based on the Maryland State Grid Coordinate System, as shown on ORIGINAL ROAD AS-BUILT PLANS B-3-0-67328 FOR LITTLE PATUXENT PARKWAY DATED APRIL 1966.
- EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON HOWARD COUNTY AERIAL TOPOGRAPHY DATE SEPTEMBER, 1985.

LEGEND

	EXIST. CURB & GUTTER TO REMAIN
	EXIST. CURB & GUTTER TO BE REPLACED
	EXIST. CURB & GUTTER TO REMAIN SPLASHBLOCK TO BE INSTALLED
	PROP. CURB & GUTTER WITH SPLASH BLOCK
	PROP. CURB & GUTTER
	PROP. SIDEWALK/WALKWAY PAVING
	LIMIT OF DISTURBANCE (L.O.D.)
	INLET PROTECTION
	EX. DETECTOR LOOP
	PROP. DETECTOR LOOPS
	PROP. HANDBOX

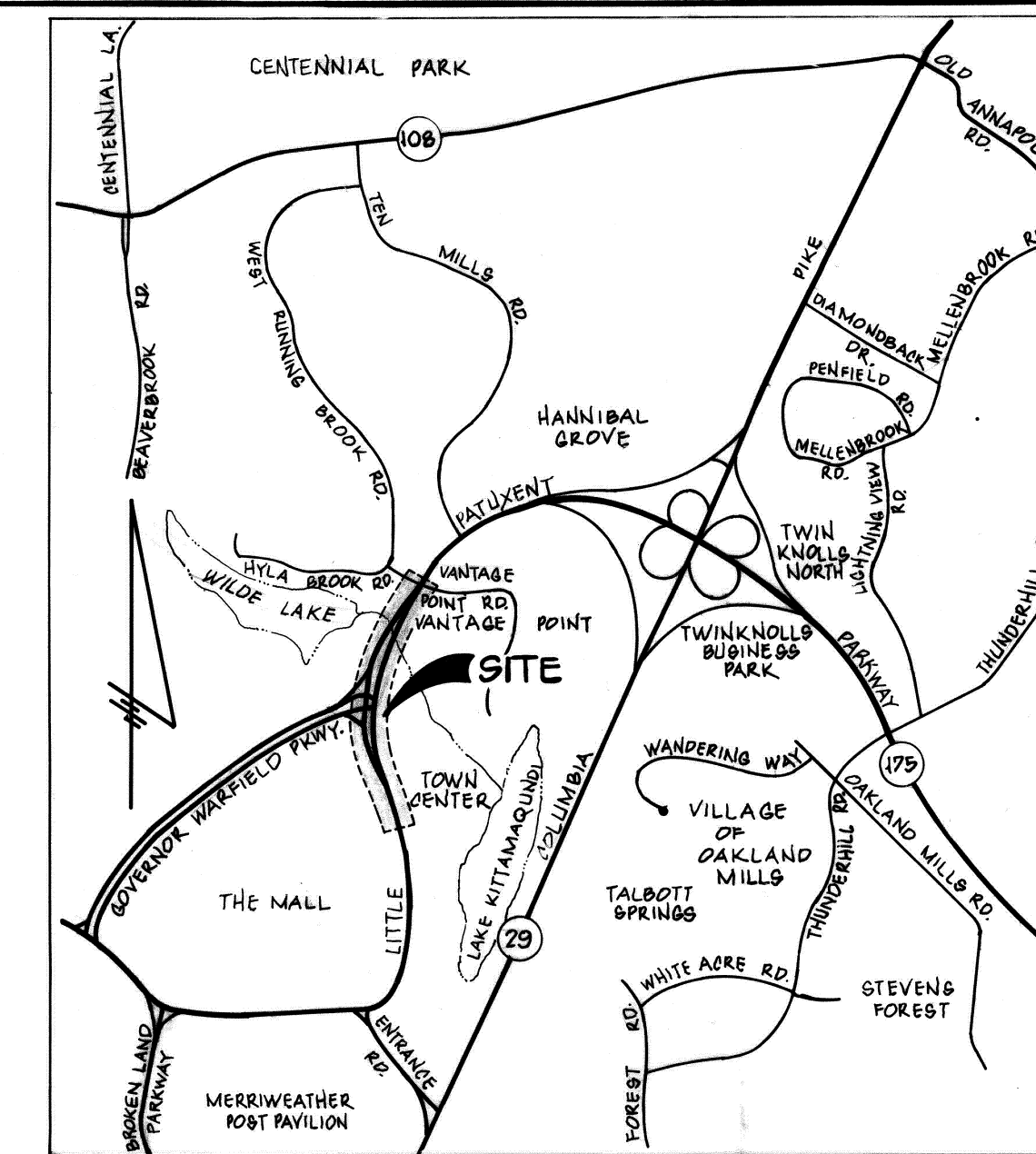


LOCATION PLAN

SCALE: 1" = 200'

LOOP DETECTOR NOTES

- EX. LOOP DETECTOR TO BE ABANDONED.
- NEW LOOP DETECTOR TO BE INSTALLED IN EXISTING PAVEMENT PRIOR TO NEW PAVEMENT OVERLAY. CONTRACTOR TO PREMARK LOOP DETECTOR LOCATION AND VERIFY WITH HOWARD COUNTY, TRAFFIC ENGINEERING DIVISION PRIOR TO INSTALLATION. PROVIDE NEW CONDUIT SLEEVE AND SPLICE CONNECTION AT EXISTING HANDBOX.
- FURNISH AND INSTALL NEW 8' x 30' QUADRUPOLE LOOP FOR ADVANCE DETECTION, SEE HOWARD COUNTY STANDARD DETAIL TE-2.
- FURNISH AND INSTALL NEW 8' x 30' QUADRUPOLE LOOP FOR PRESENCE DETECTION, SEE HOWARD COUNTY STANDARD DETAIL TE-2.
- CONTRACTOR TO EXERCISE CAUTION WHILE REMOVING EXISTING CURB AND GUTTER NOT TO DAMAGE EXISTING CONDUIT FOR FOR TRAFFIC SIGNAL CABLE AND/OR LOOPS. IF DAMAGE OCCURS, THE CONTRACTOR SHALL REPLACE / REPAIR EXISTING CONDUIT AND PULL NEW CONDUCTORS OF THE SAME WIRE GAUGE AND SPLICE AT HANDBOXES.
- FURNISH AND INSTALL NEW HANDBOX AND 2" PVC ELECTRICAL CONDUIT. PULL NEW CONDUCTORS FROM NEW HANDBOX TO EXISTING HANDBOX. PROVIDE DIGITALE FOR FUTURE CONNECTION TO CONTROLLER IN HANDBOX (MAKE NO SPLICE CONNECTION).
- FURNISH AND INSTALL NEW 8' x 6' (3 TURN) LOOP FOR ADVANCE DETECTION SEE HOWARD COUNTY STANDARD AND DETAIL TE-2.



VICINITY MAP

SCALE: 1" = 2000'

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 COUNTY SOIL CONSERVATION DISTRICT."

SIGNATURE - DEVELOPMENT FACILITATORS, INC. DATE 6-20-95

CERTIFICATION BY THE DEVELOPER

"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 THE ENVIRONMENT 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."

SIGNATURE OF DEVELOPER (PRINT NAME BELOW) Ronald G. Lepson DATE 4/23/96

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

DATE 7/26/96
HOWARD S.C.D.

REVIEWED FOR HOWARD S&D AND MEETS TECHNICAL REQUIREMENTS.

DATE 8/24/96
N.R.C.S. - NATURAL RESOURCES CONSERVATION SERVICE

THE LOCATIONS OF UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION AND GUIDANCE ONLY. NO GUARANTEE IS MADE AS TO THE ACCURACY OF SAID LOCATIONS.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

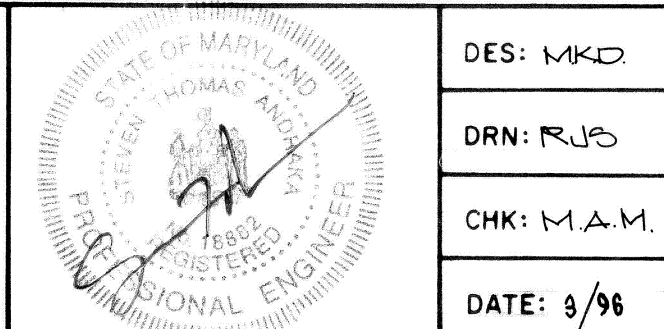
DIRECTOR OF PUBLIC WORKS DATE 4/23/96

CHIEF, BUREAU OF ENGINEERING DATE 4/23/96

CHIEF, TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DATE 4/23/96



CONSULTING ENGINEERS, SURVEYORS
AND LAND PLANNERS
504 BALTIMORE/ANNAPOLIS BLVD.
SEVERNA PARK, MD 21146 647-2727



DES:	BY:	DATE:	REVISION
MKD	M.F.I.	3/96	REVISED CURB, ADDED DETECTOR LOOPS, ADDED PAVEMENT OVERLAY
RJS			
M.A.M.			
3/96			

TITLE SHEET

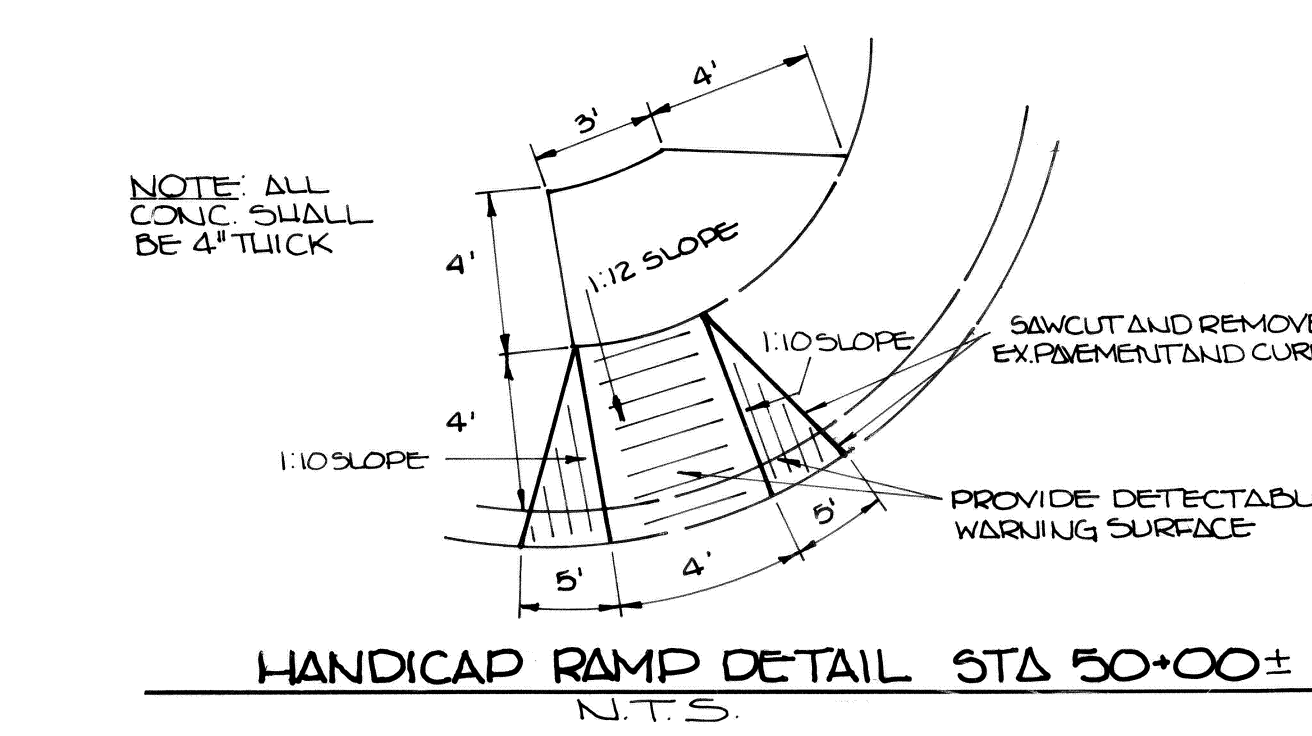
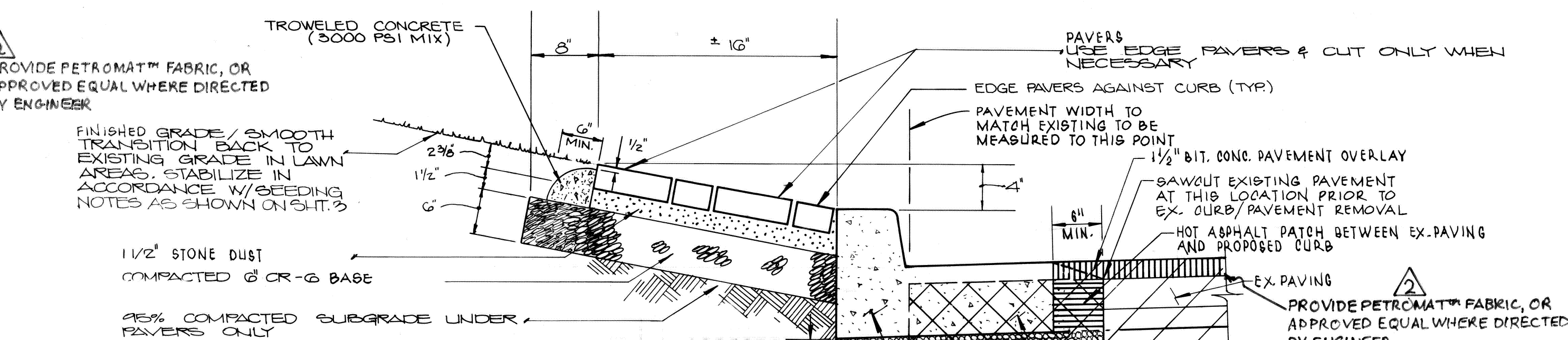
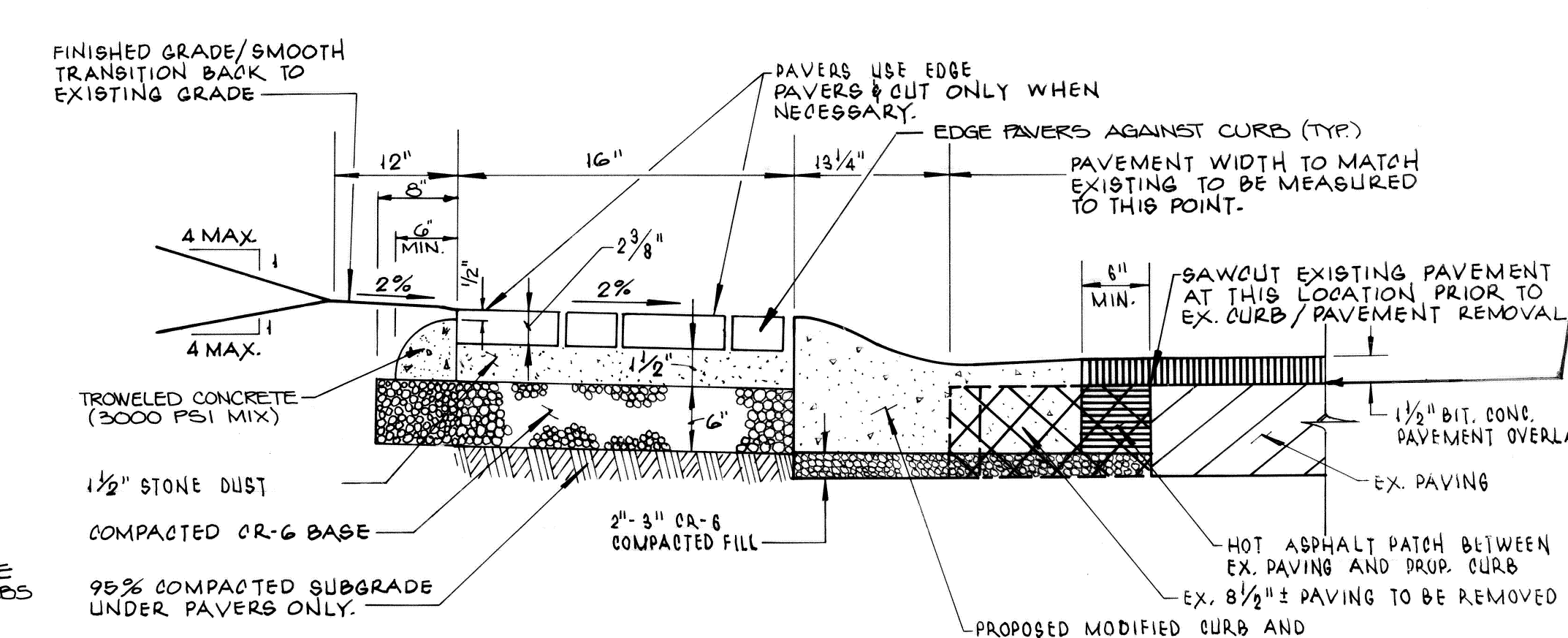
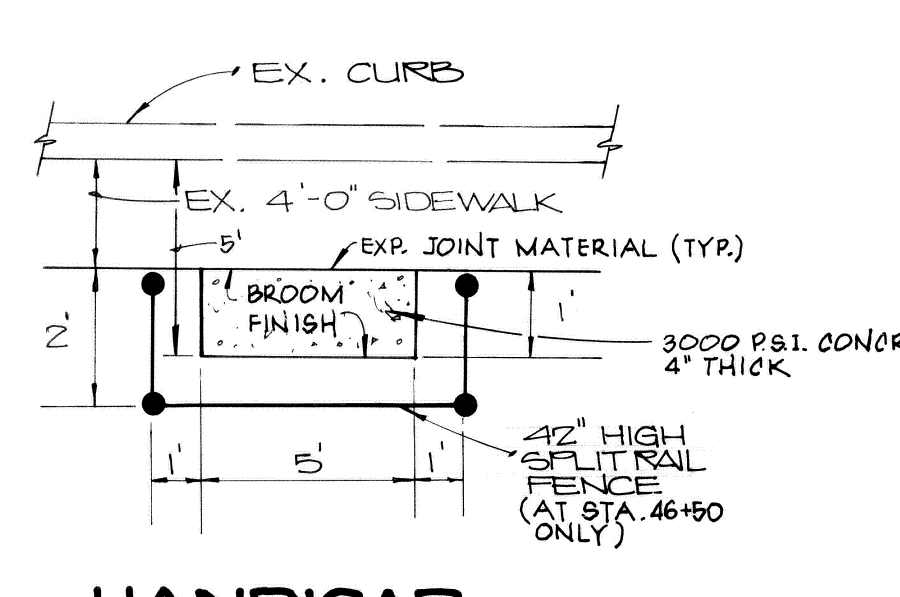
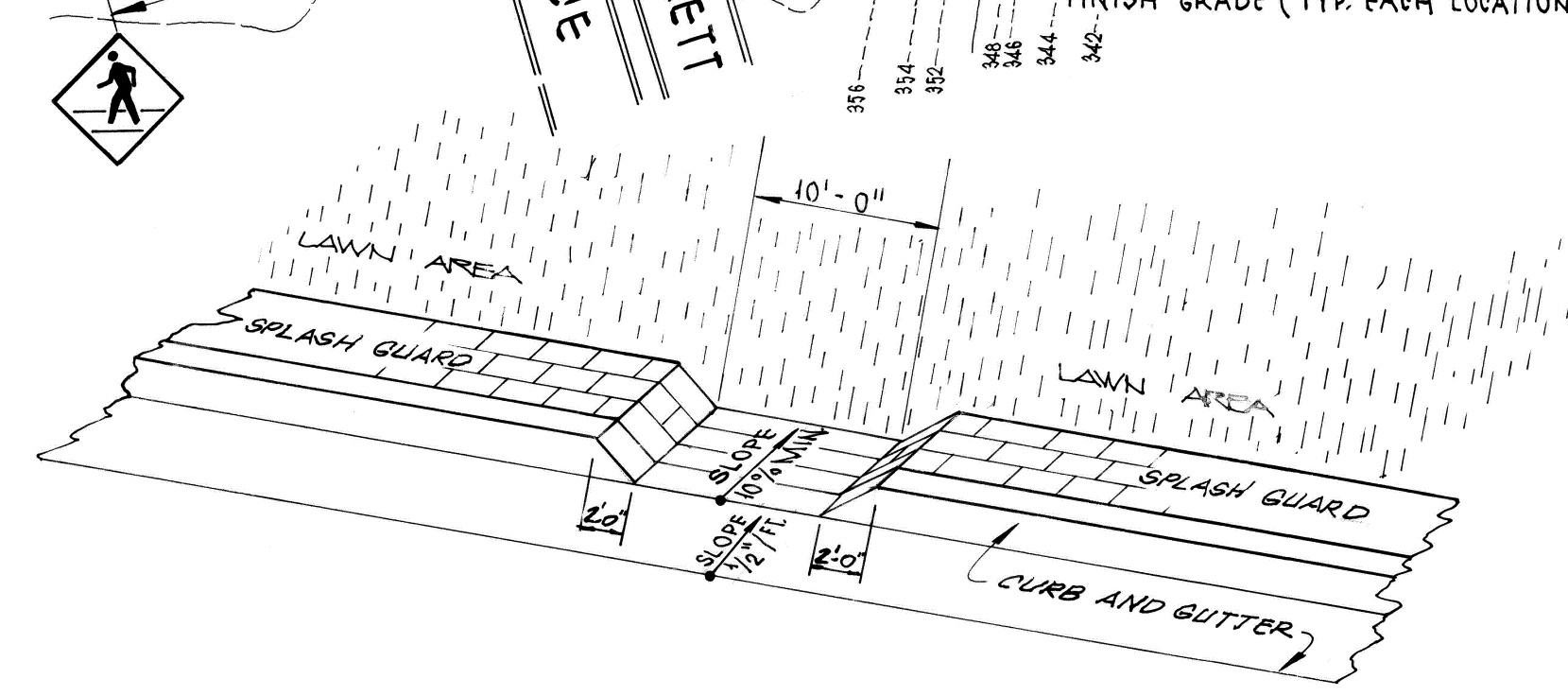
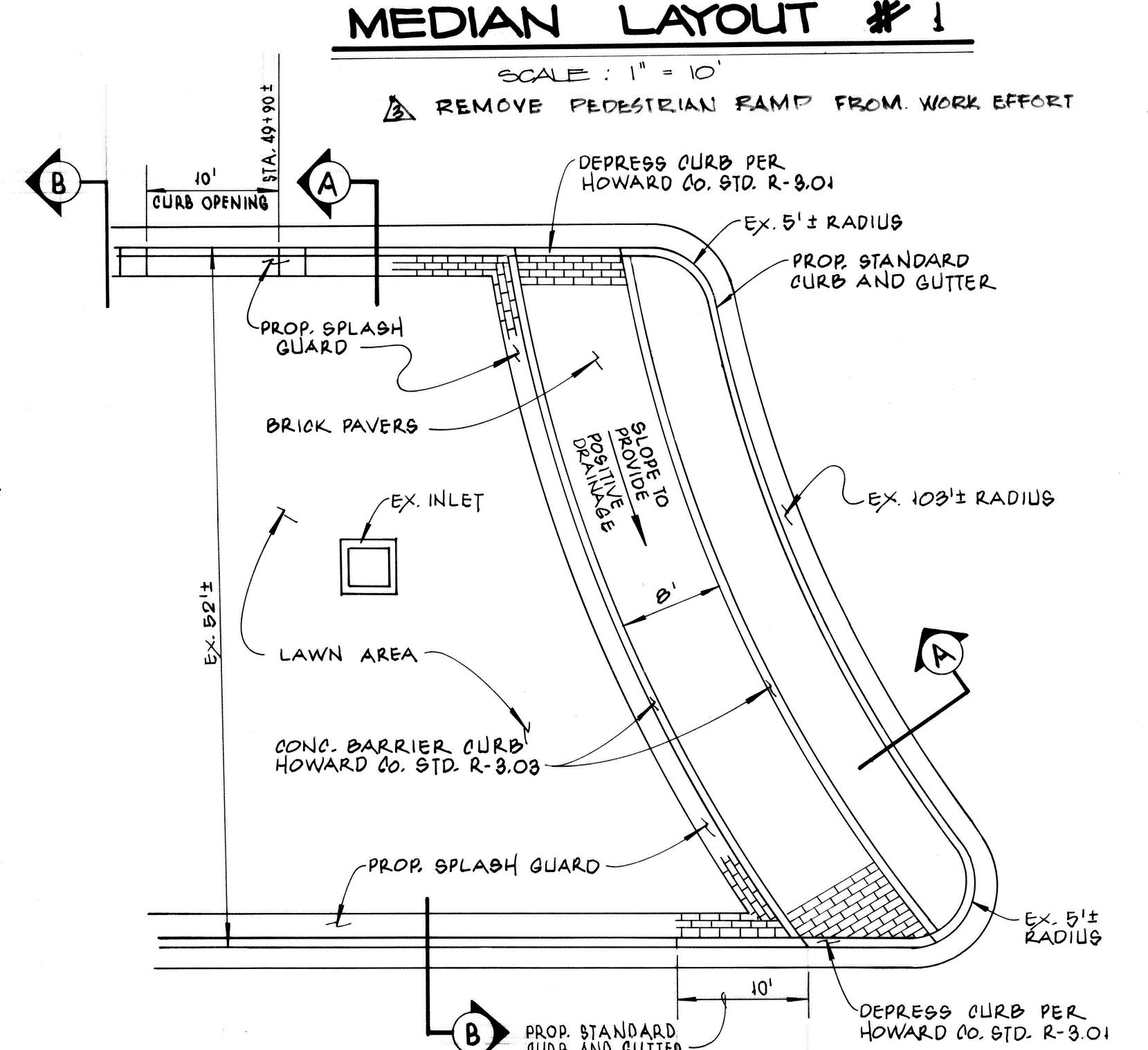
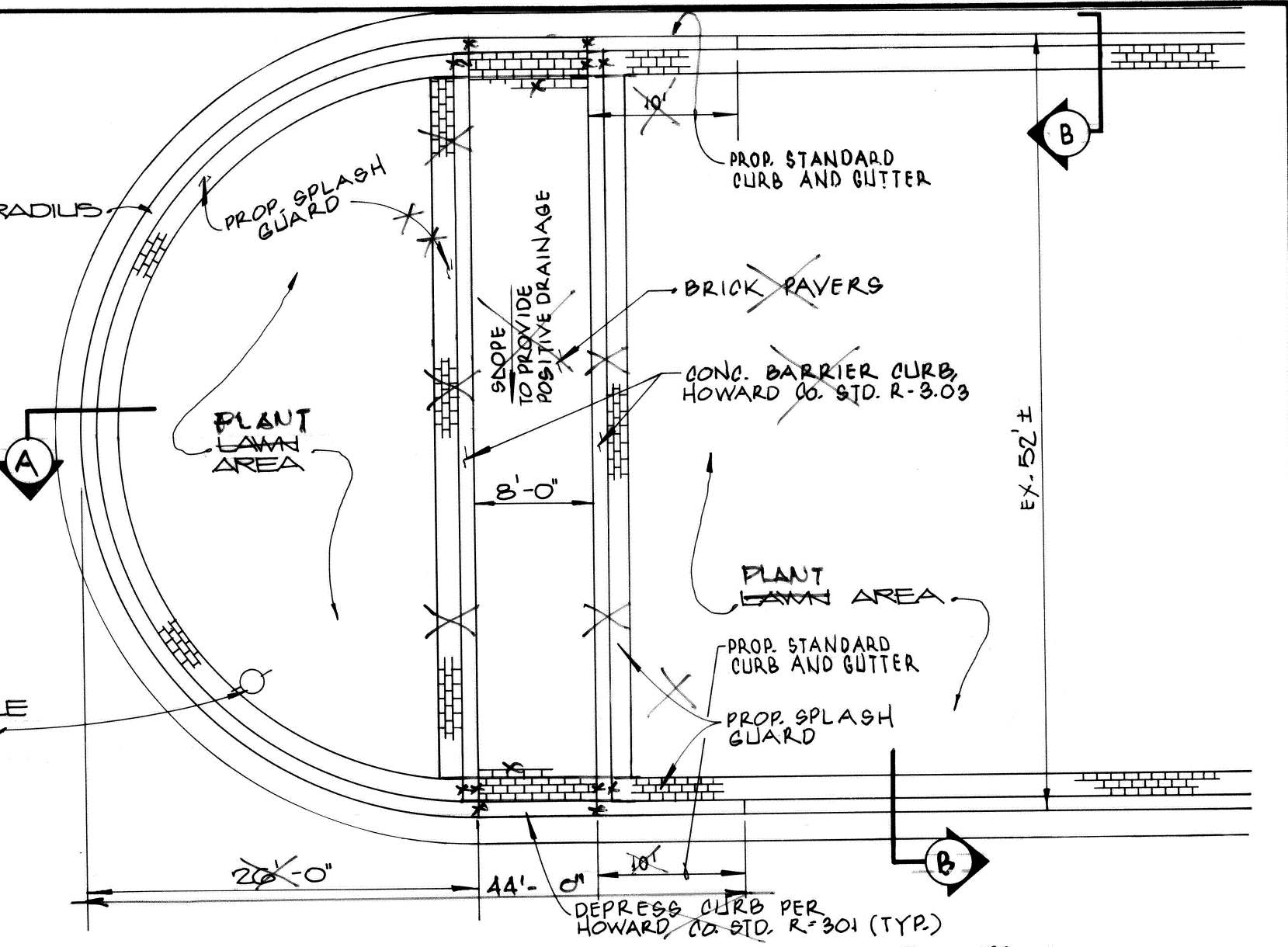
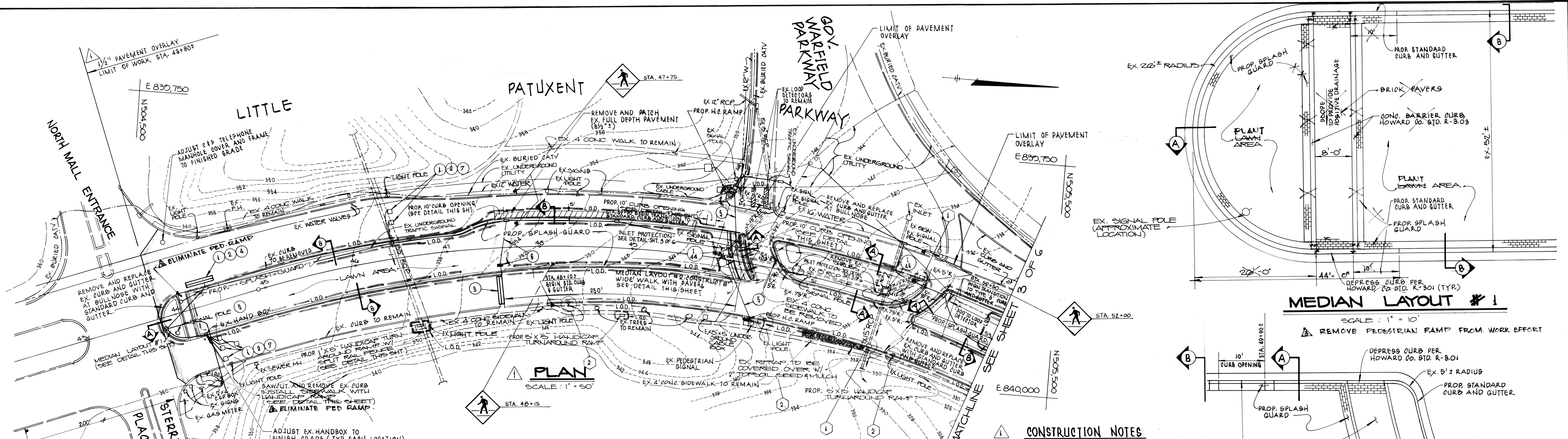
LITTLE PATUXENT PARKWAY
SAFETY IMPROVEMENTS

CAPITAL PROJECT # J-4106A

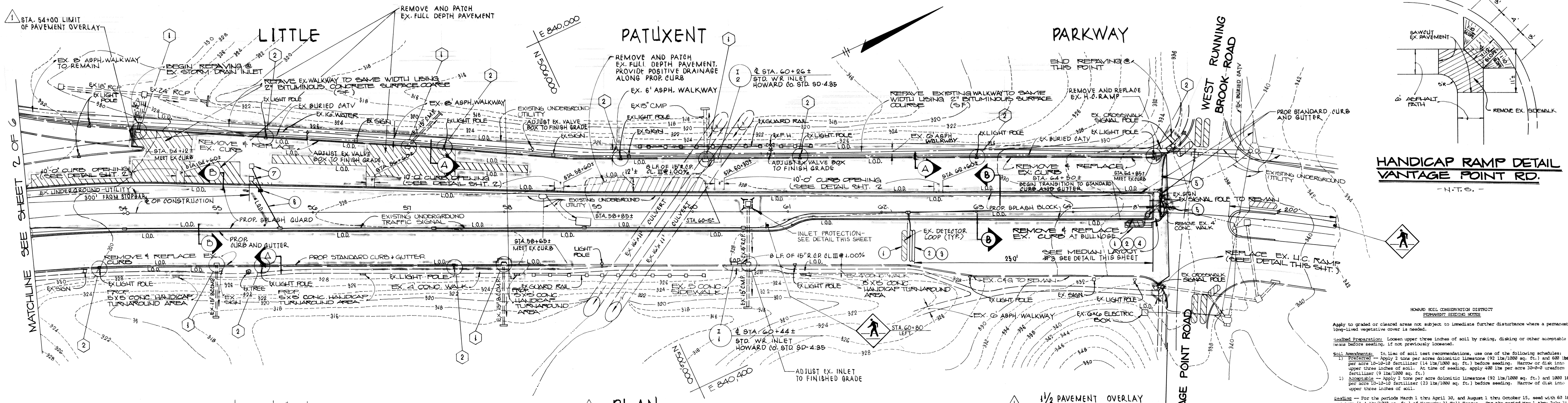
SCALE
AS
SHOWN

SHEET
1 OF 6

EP-95-27



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: [Signature] 4/23/26 Chief, Bureau of Engineering: [Signature] 4/23/26 Chief, Bureau of Highways: [Signature] 4-23-26 Chief Transportation Projects: [Signature] 4/23/26 Chief Watershed Management: [Signature] 4/23/26	DES: MKD DRN: RJS CHK: MAM DATE: 3/96	D.F.I. [Signature] REVISED CURBS, ADDED DETECTOR LOOPS ADDED PAVEMENT OVERLAY, OMITTED SIDEWALKS AND PAVEMENTS MARKINGS 3/96 ADD PETROMAT™ NOTE 4/96 ELIMINATE PEDESTRIAN RAMP - MEDIAN #1 5/16/96	SCALE AS SHOWN SHEET 2 OF 6



PLAN
SCALE: 1" = 50'

1/2 PAVEMENT OVERLAY
LIMIT OF WORK STA. 65+00 ±

CONSTRUCTION NOTES

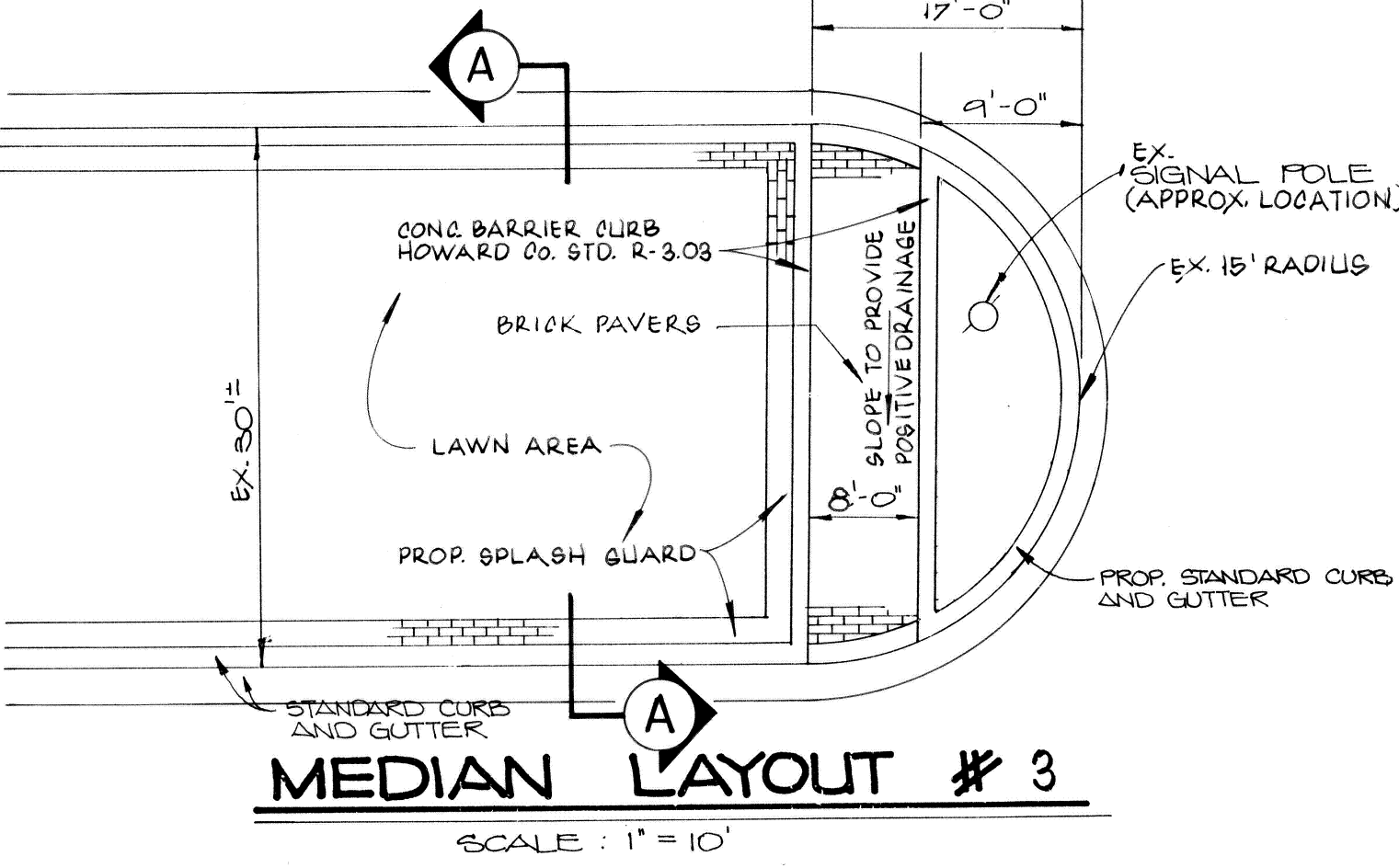
- ADJUST EXISTING INLETS FRAME AND GRATES TO FINISHED GRADE.
- BOX-OUT AROUND EXISTING LIGHT POLE BASE, SEE DETAIL THIS SHEET
- DETECTOR LOOP NOTES, SEE SHEET 10.

SEQUENCE OF CONSTRUCTION

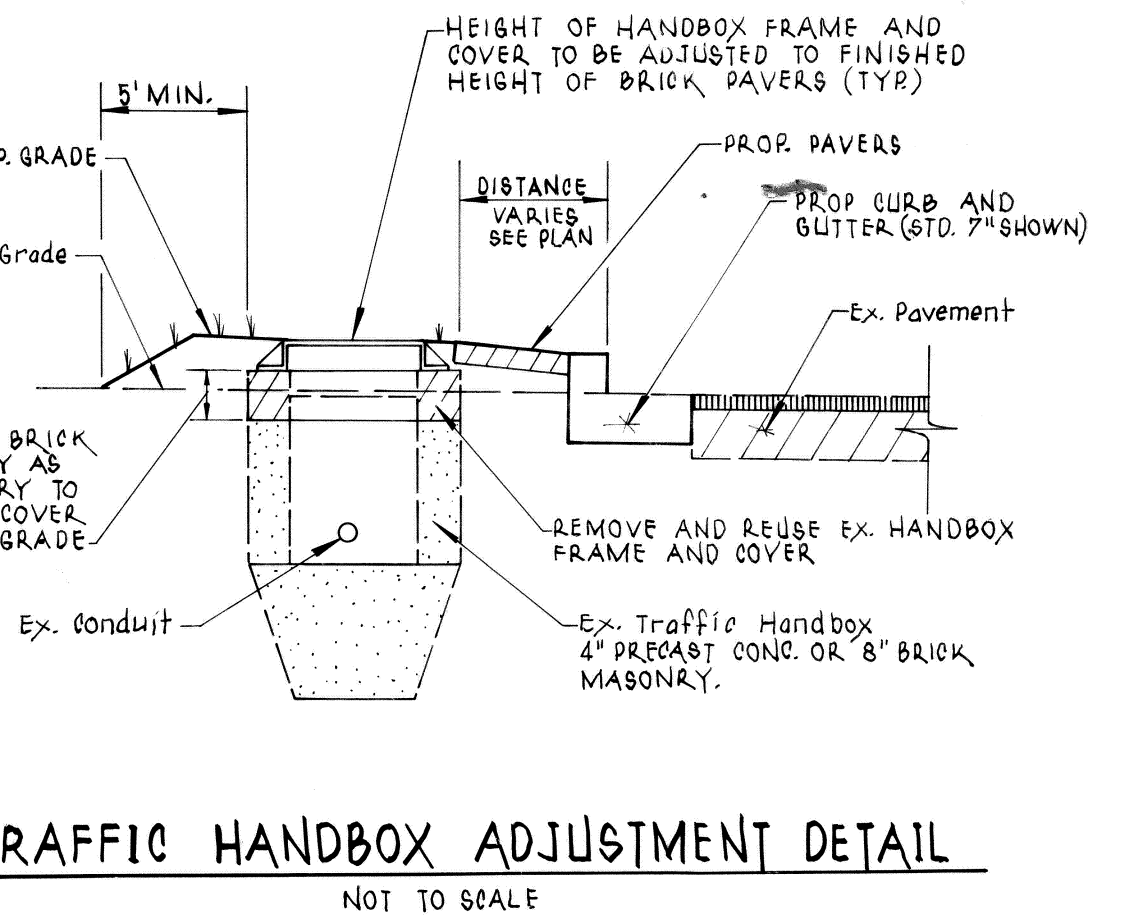
- NOTIFY THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS AT (410) 318-2187 AT LEAST 24 HOURS PRIOR TO START OF CONSTRUCTION.
- INSTALL INLET PROTECTION - 2 DAYS
- REMOVE EX. PAVEMENT, CURB & GUTTER, AND SIDEWALK AND INSTALL NEW PAVEMENT, CURB & GUTTER AND SIDEWALK WITHIN SEVEN WORKING DAYS FOLLOWING REMOVAL - 1 MONTH
- INSTALL NEW BRICK PAVERS - 1 MONTH
- STABILIZE REMAINING DISTURBED AREAS WITH SEED & MULCH AND LANDSCAPE - 3 WEEKS
- WITH INSPECTOR'S APPROVAL, REMOVE SEDIMENT CONTROLS AND STABILIZE ANY AREAS THAT REMAIN. 2 DAYS

*** ONLY DISTURB/REMOVE IN PHASES, EACH OF WHICH MUST BE STABILIZED IN SEVEN DAYS.**

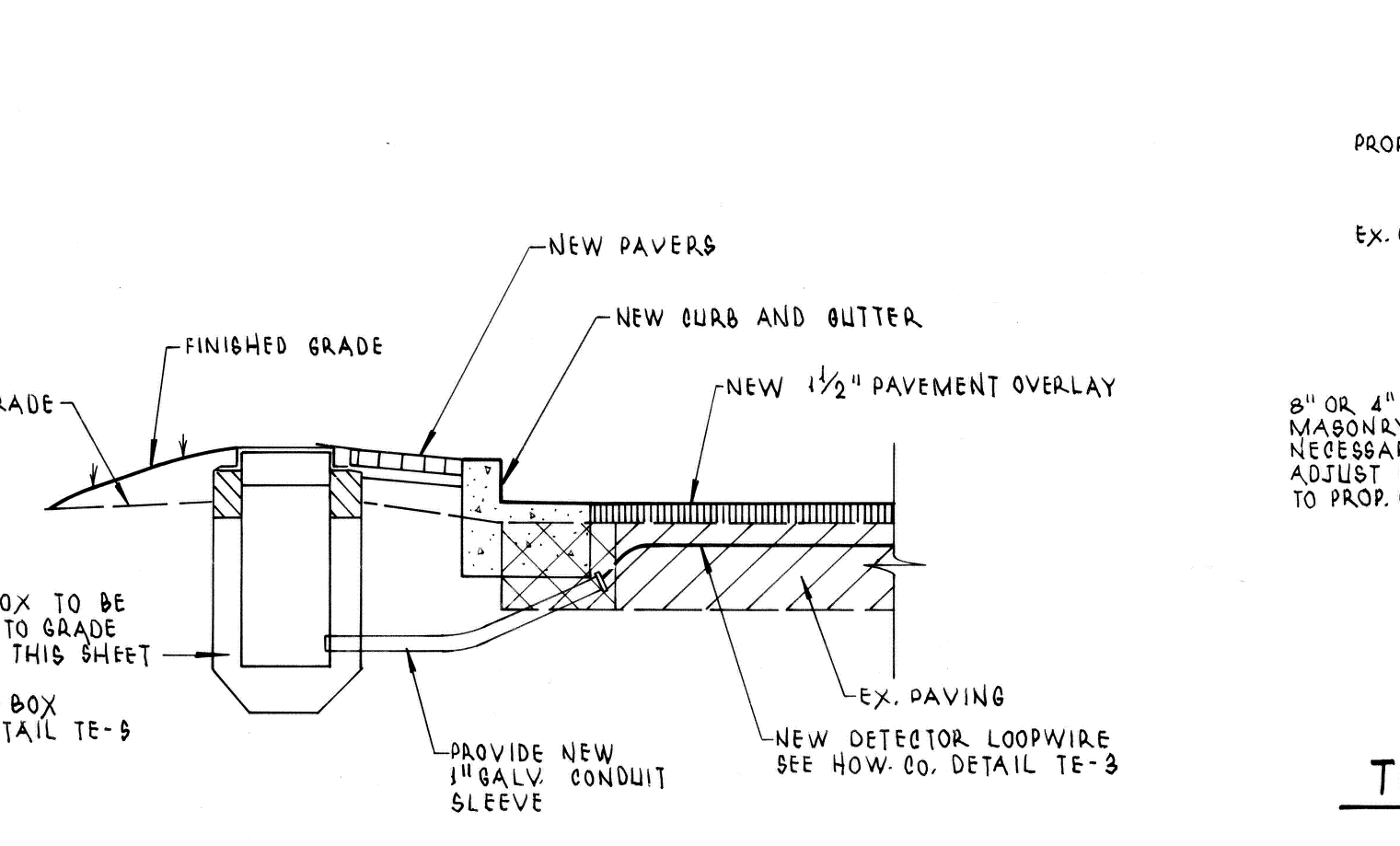
PAVEMENT HEEL-IN DETAIL
NOT TO SCALE



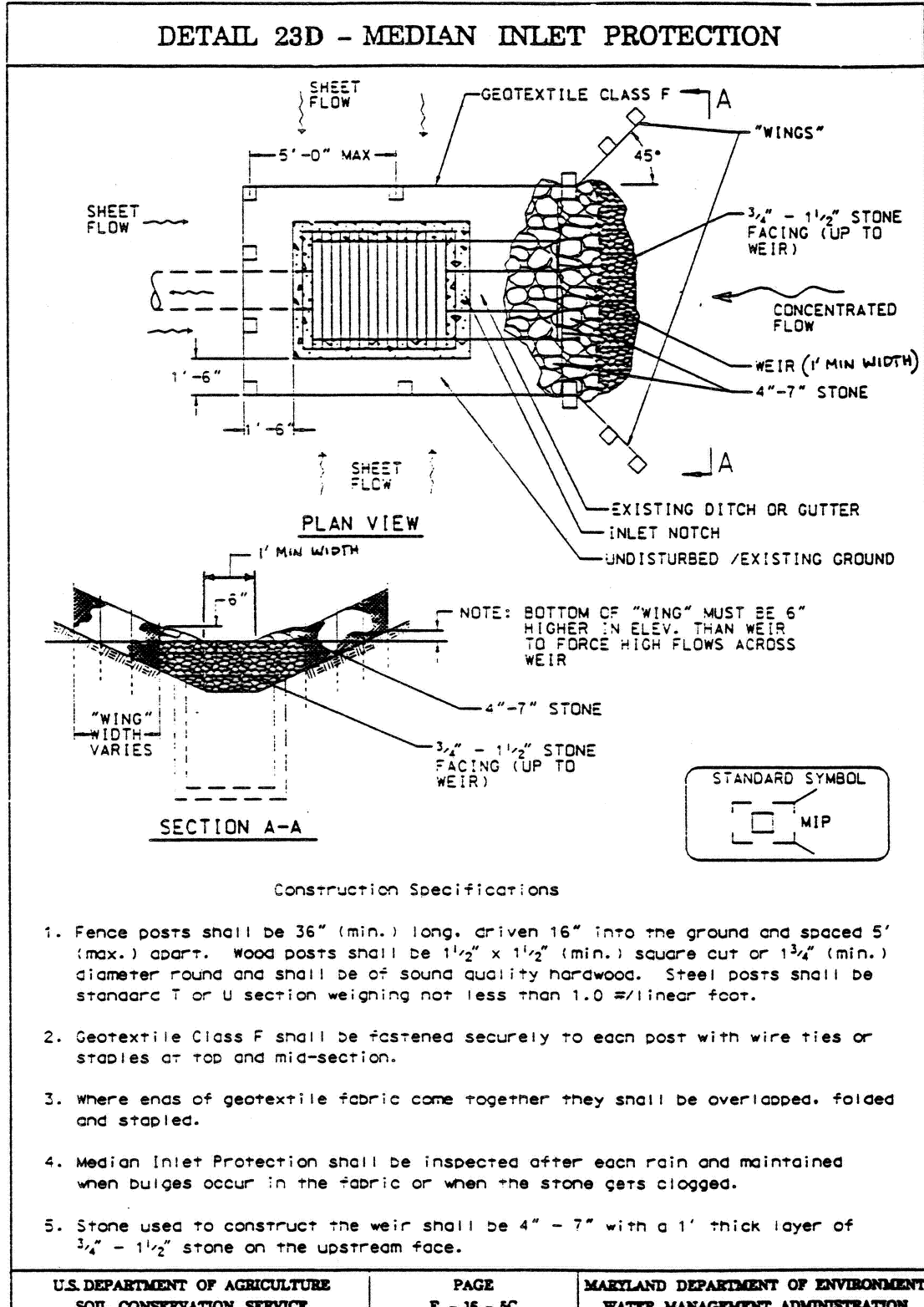
MEDIAN LAYOUT #3
SCALE: 1" = 10'



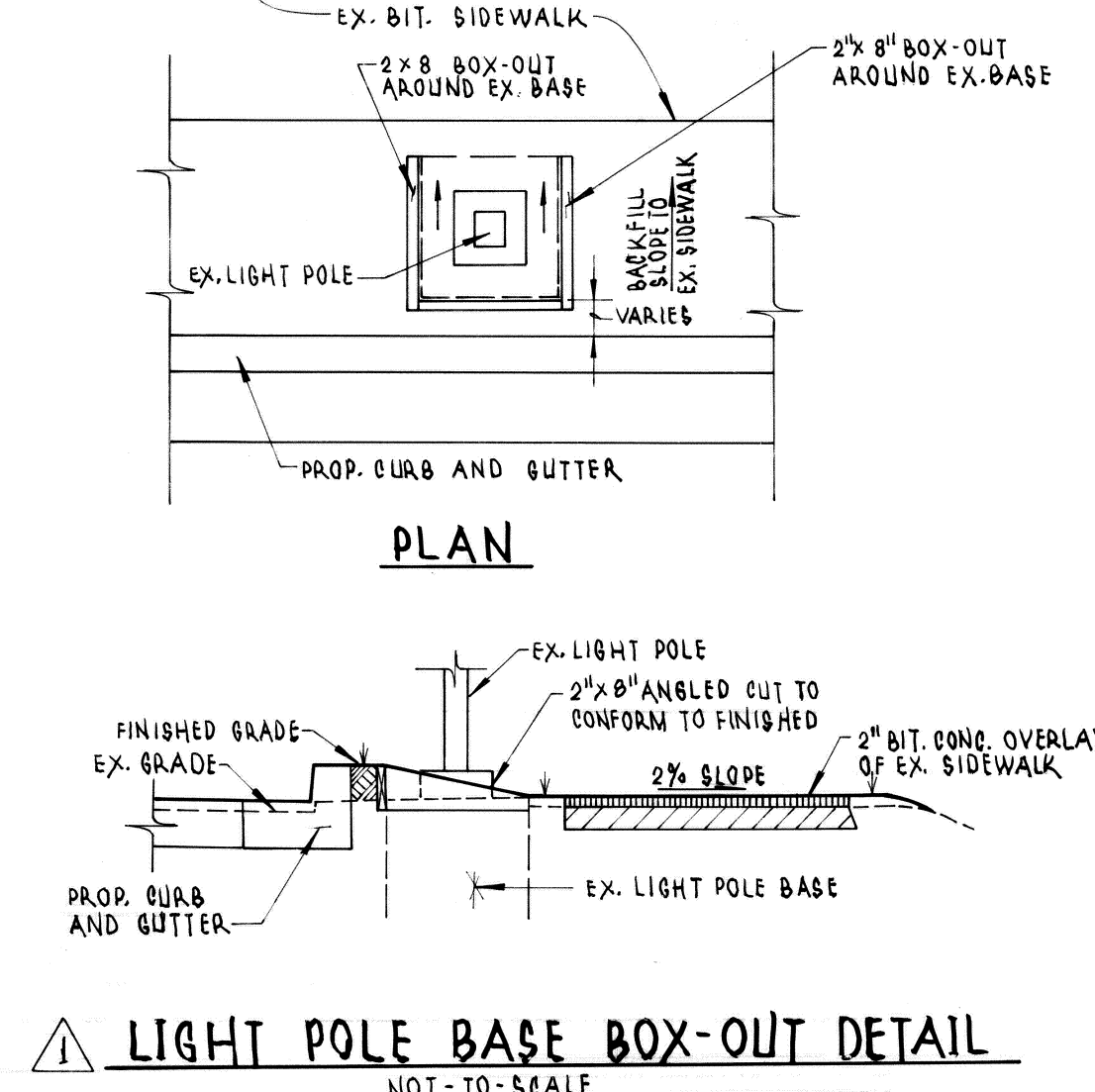
TRAFFIC HANDBOX ADJUSTMENT DETAIL
NOT TO SCALE



LOOP DETECTOR DETAIL
NOT TO SCALE



DETAIL 23D - MEDIAN INLET PROTECTION



LIGHT POLE BASE BOX-OUT DETAIL
NOT TO SCALE

- HOWARD SOIL CONSERVATION DISTRICT
STANDARD SEDIMENT CONTROL NOTES
- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction. (317-1850).
 - All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current "MARKLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", and revisions thereto.
 - Following initial soil disturbance or redistribution, 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.
 - All sediment traps/basins 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.
 - All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARKLAND STANDARDS AND SPECIFICATIONS FOR SOIL PROTECTION AND SEDIMENT CONTROL for permanent seeding (Sec. 51), and (Sec. 54), temporary seeding (Sec. 55) 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.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:
 - Total Area of Site: 5.0 Acres
 - Area Disturbed: 4.8 Acres
 - Area to be roofed or paved: 2.8 Acres
 - Area to be vegetatively stabilized: 1.7 Acres
 - Total Cut: 5238 Cu. Yds.
 - Total Fill: 7188 Cu. Yds.
 - Off-site waste/borrow area location: TO BE DETERMINED
 - Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
 - Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
 - On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
 - Trenches for the construction of utilities is limited to three pipe lengths or sizes which can be back filled and stabilized within one working day, whichever is shorter.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *James J. ...* 4/23/96
 Chief, Bureau of Engineering: *Paul ...* 4/23/96
 Chief, Bureau of Highways: *Charles M. ...* 4-23-96
 Chief Transportation Projects and Watershed Management: *Edward ...* 4/23/96

CONSULTING ENGINEERS, SURVEYORS AND LAND PLANNERS

dfi

504 BALTIMORE/ANNAPOLIS BLVD.
SEVERNA PARK, MD 21146 647-2727

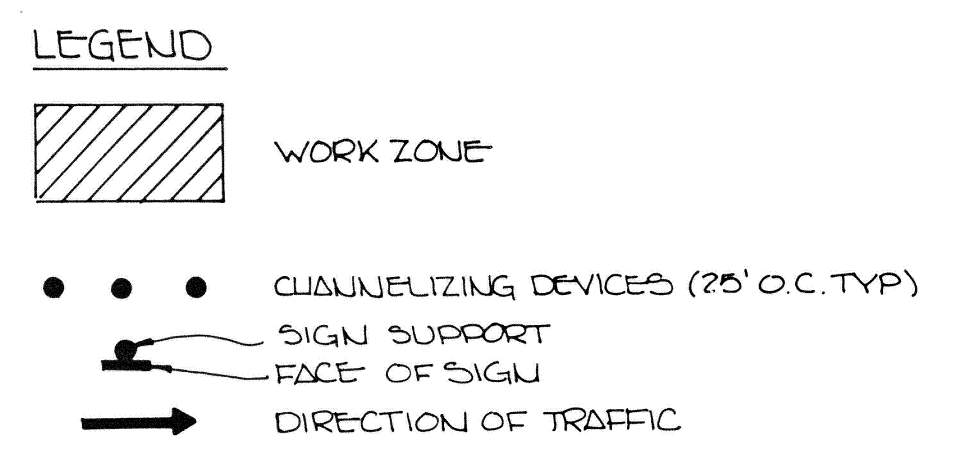
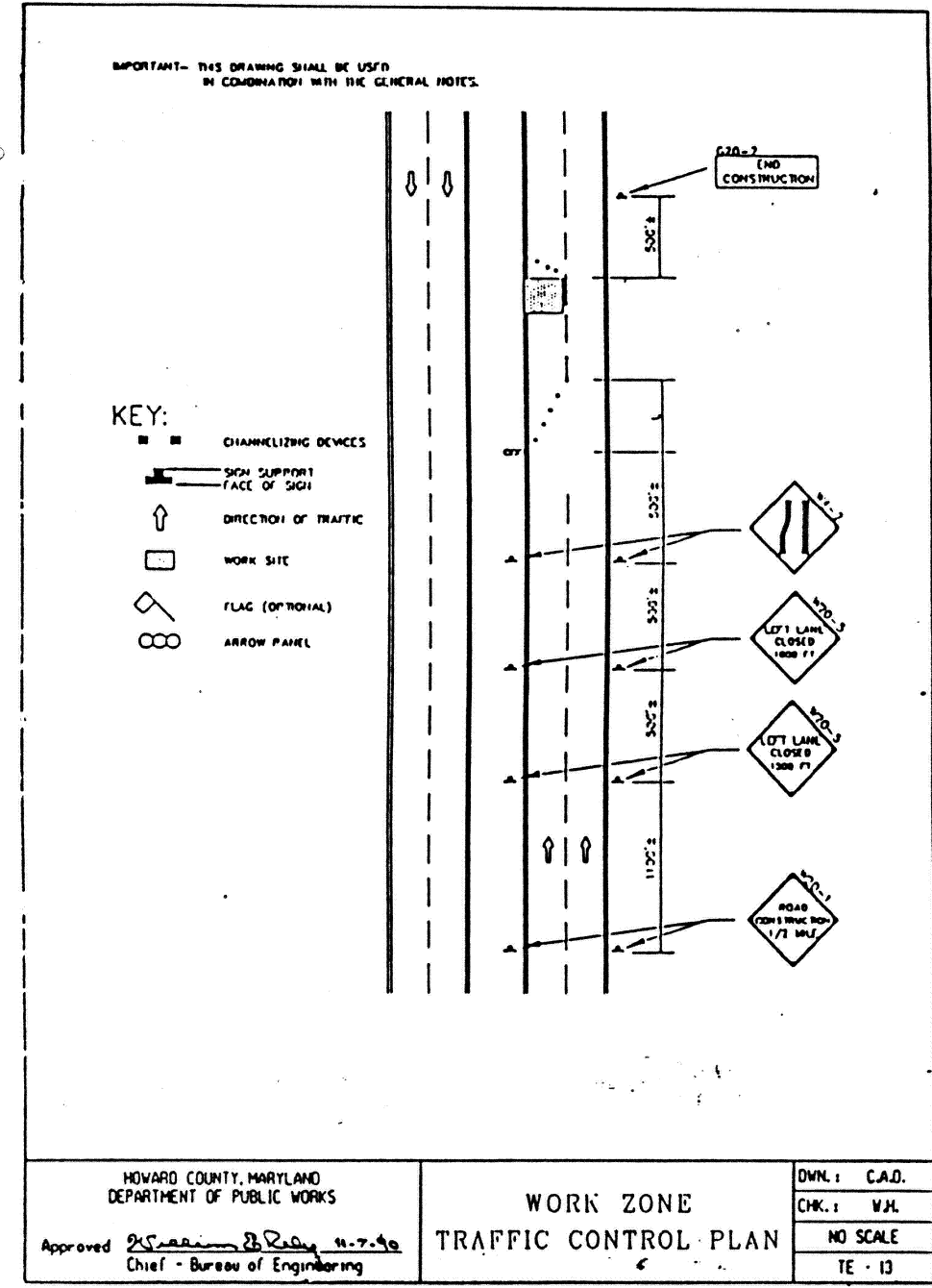
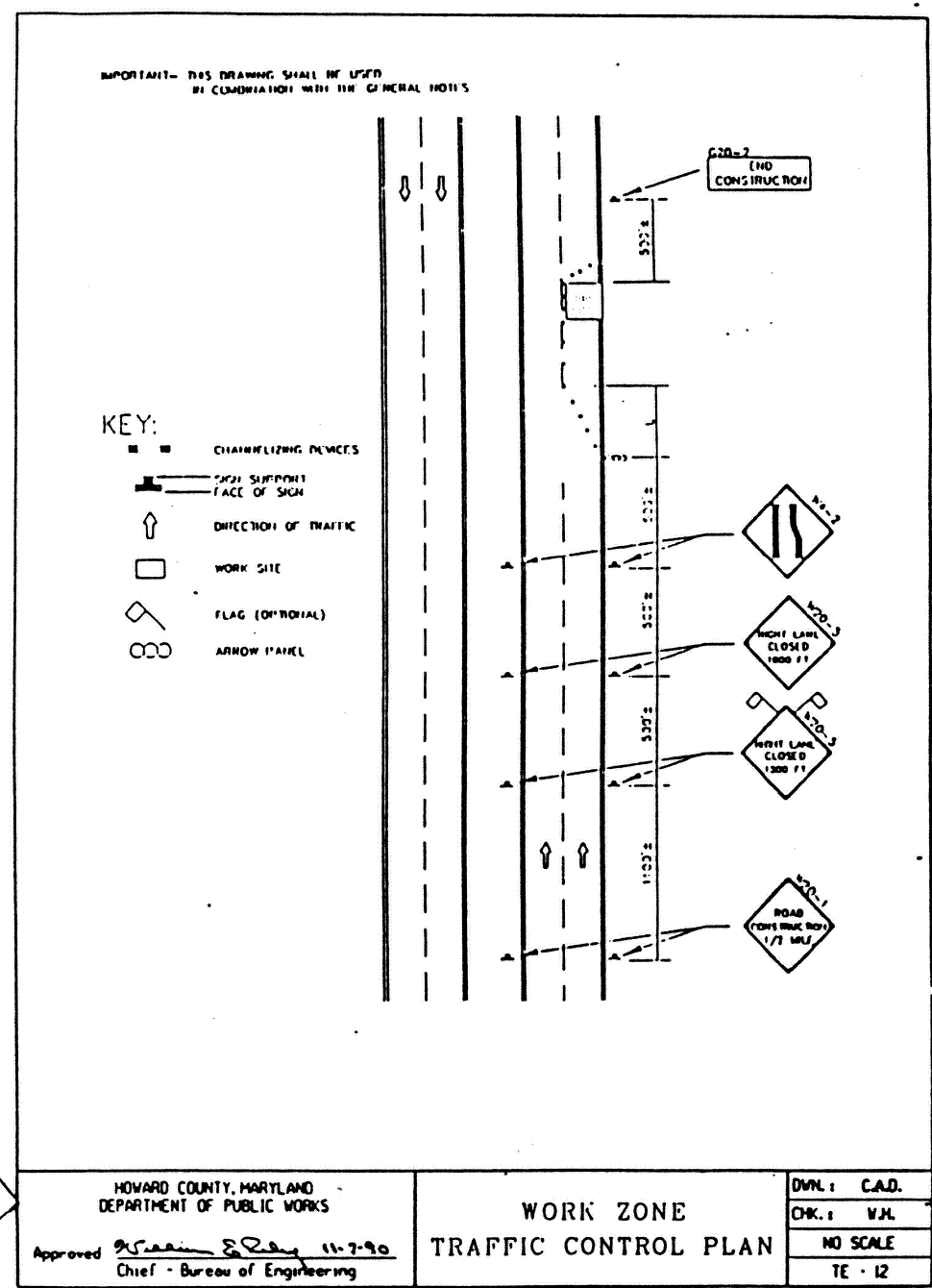
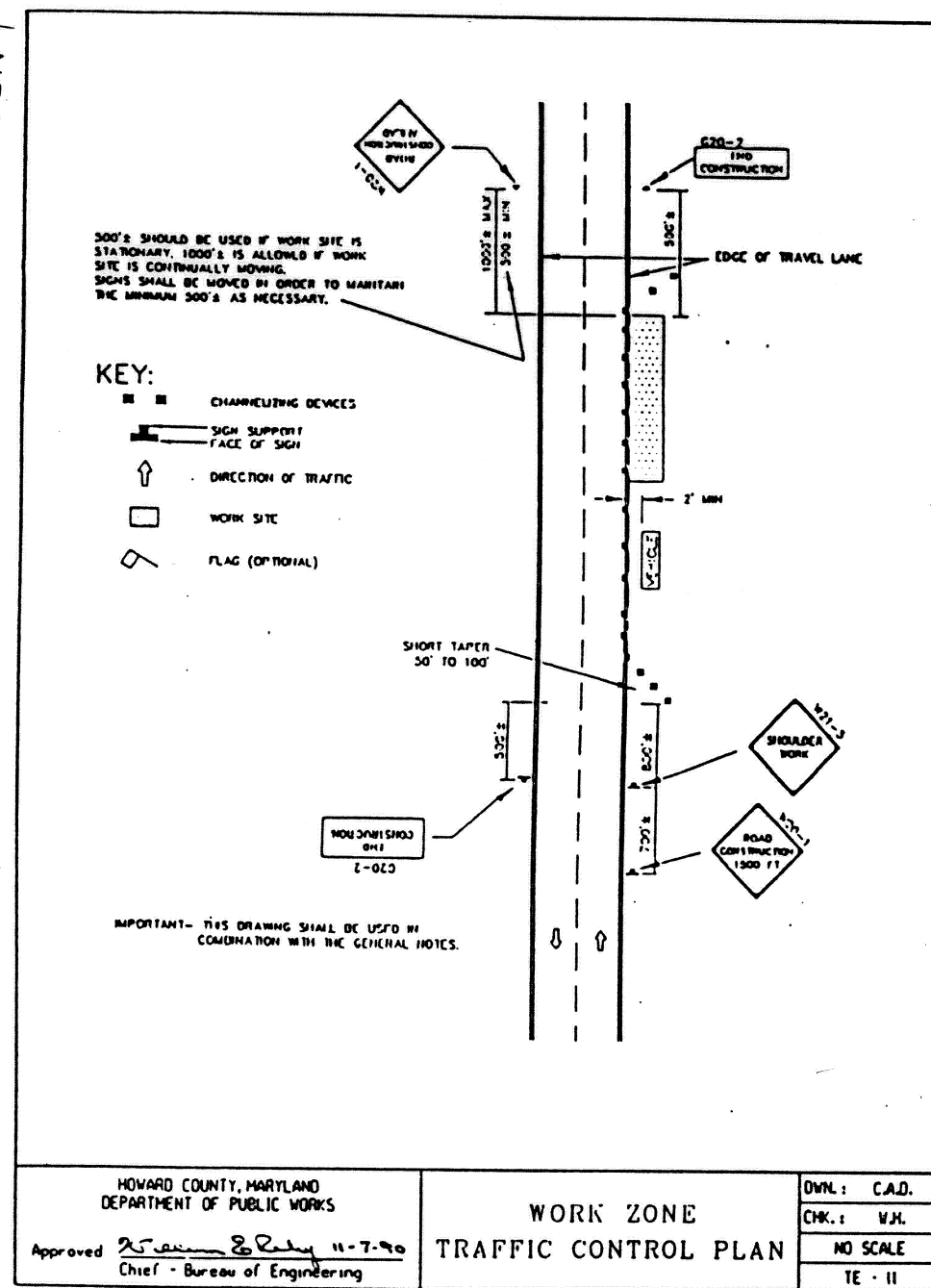
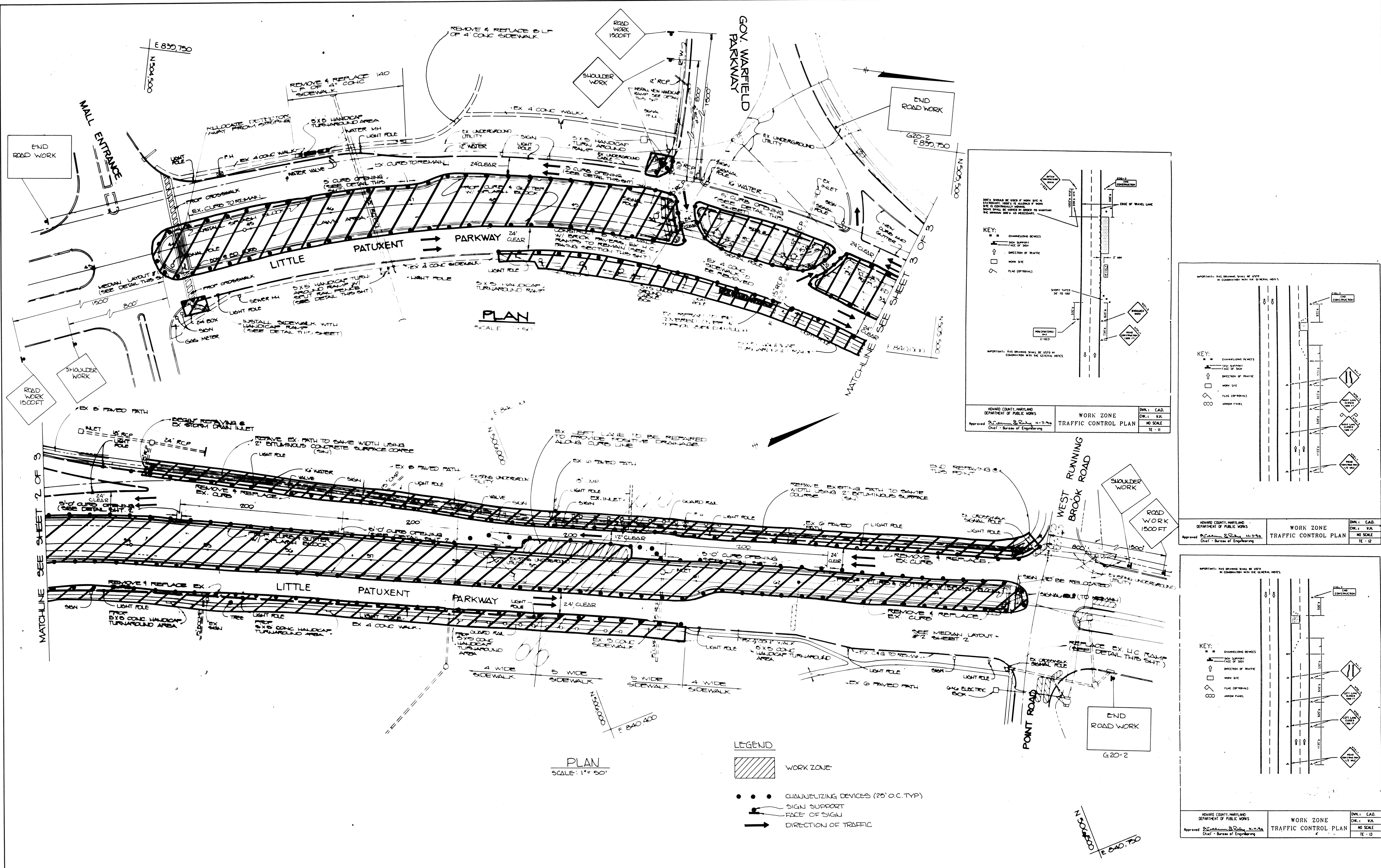
DES:	MKD	D.E.I.	REVISED CURBS, ADDED DETECTOR LOOPS ADDED PAVEMENT OVERLAY, OMITTED PAVEMENT MARKINGS.	8/96
DRN:	RJS			
CHK:	MAM			
DATE:	3/96			
BY:	NO.	REVISION		DATE

PLAN VIEW & SEDIMENT CONTROL NOTES

600' SCALE MAP NO. _____ BLOCK NO. _____

LITTLE PATUXENT PARKWAY
SAFETY IMPROVEMENTS
CAPITAL PROJECT # J-410GA

SCALE AS SHOWN
SHEET 3 OF 6



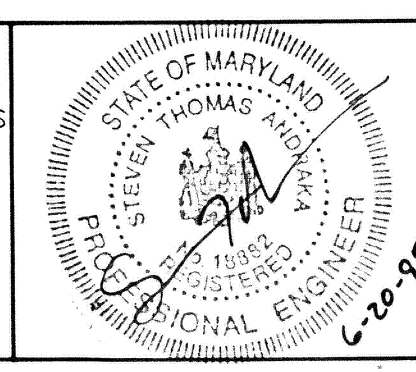
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

4/23/96
DIRECTOR OF PUBLIC WORKS DATE
CHIEF, BUREAU OF HIGHWAYS DATE

10/12/95
CHIEF, BUREAU OF ENGINEERING DATE
CHIEF, DIVISION OF TRANSPORTATION DATE

dfi CONSULTING ENGINEERS, SURVEYORS
AND LAND PLANNERS

504 BALTIMORE/ANNAPOLIS BLVD.
SEVERNA PARK, MD 21146 647-2727



DES: M.K.D.					
DRN: L.R.C.					
CHK: M.G.M.					
DATE: 1/93	BY	NO.	REVISION		

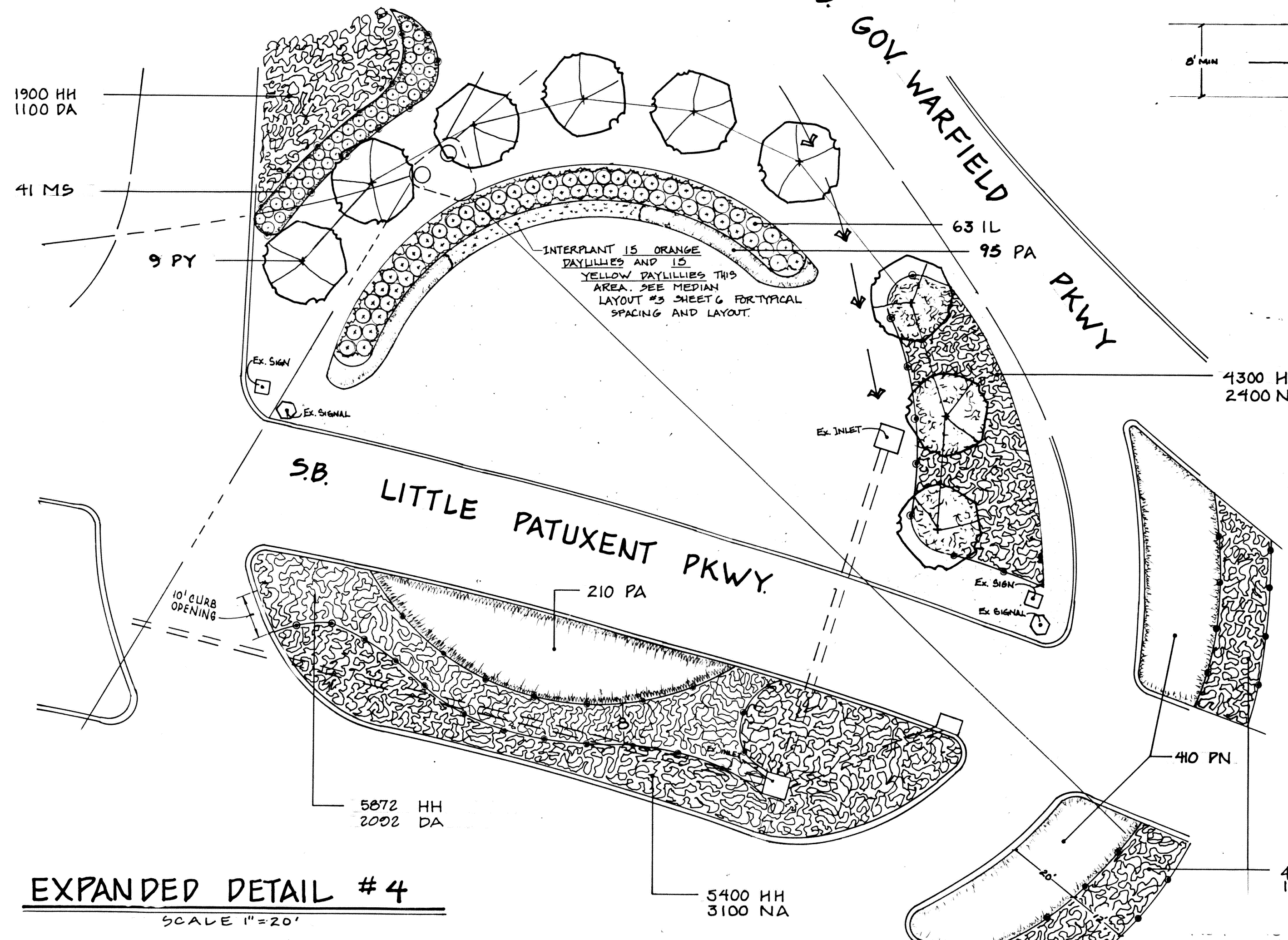
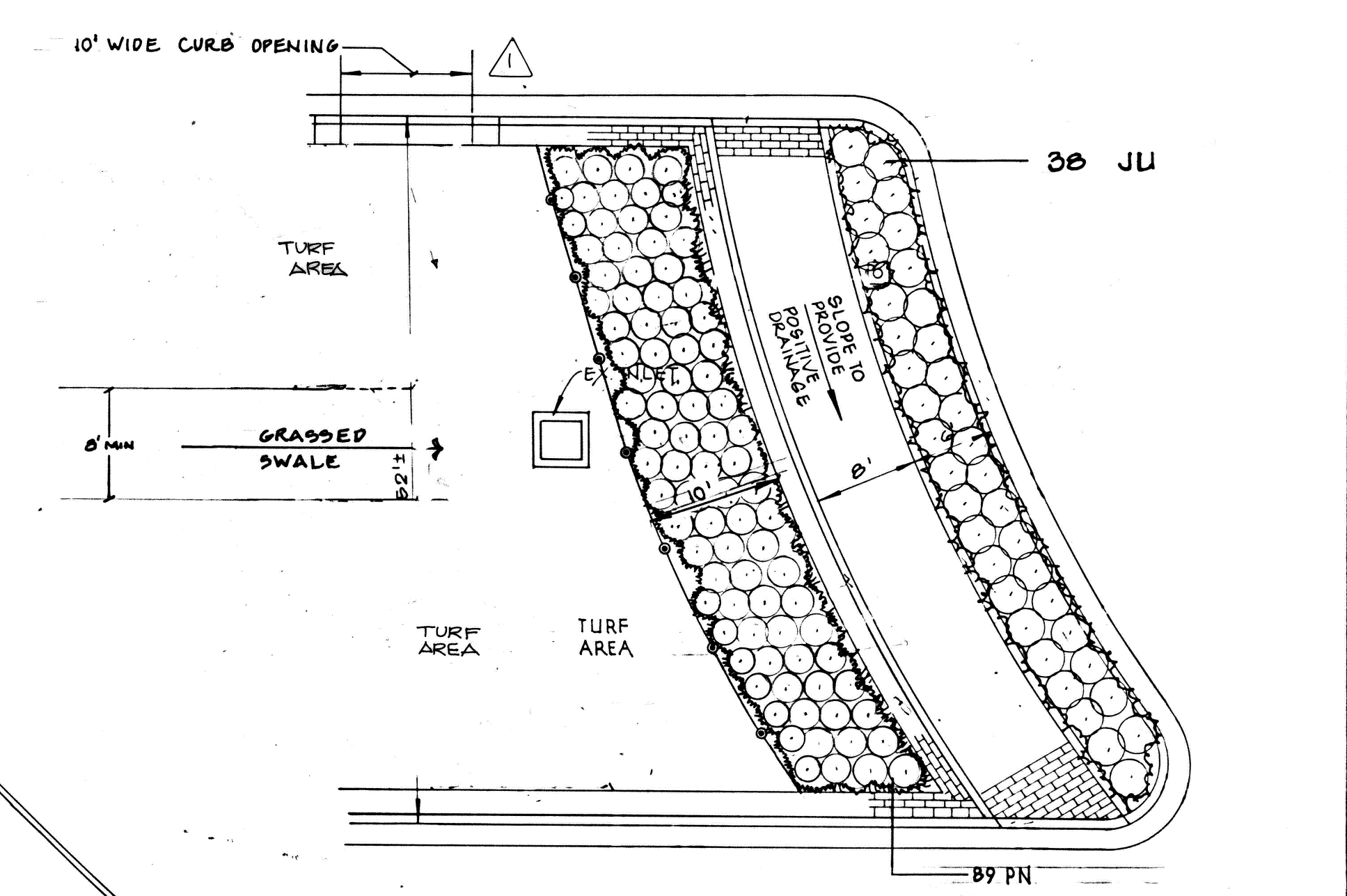
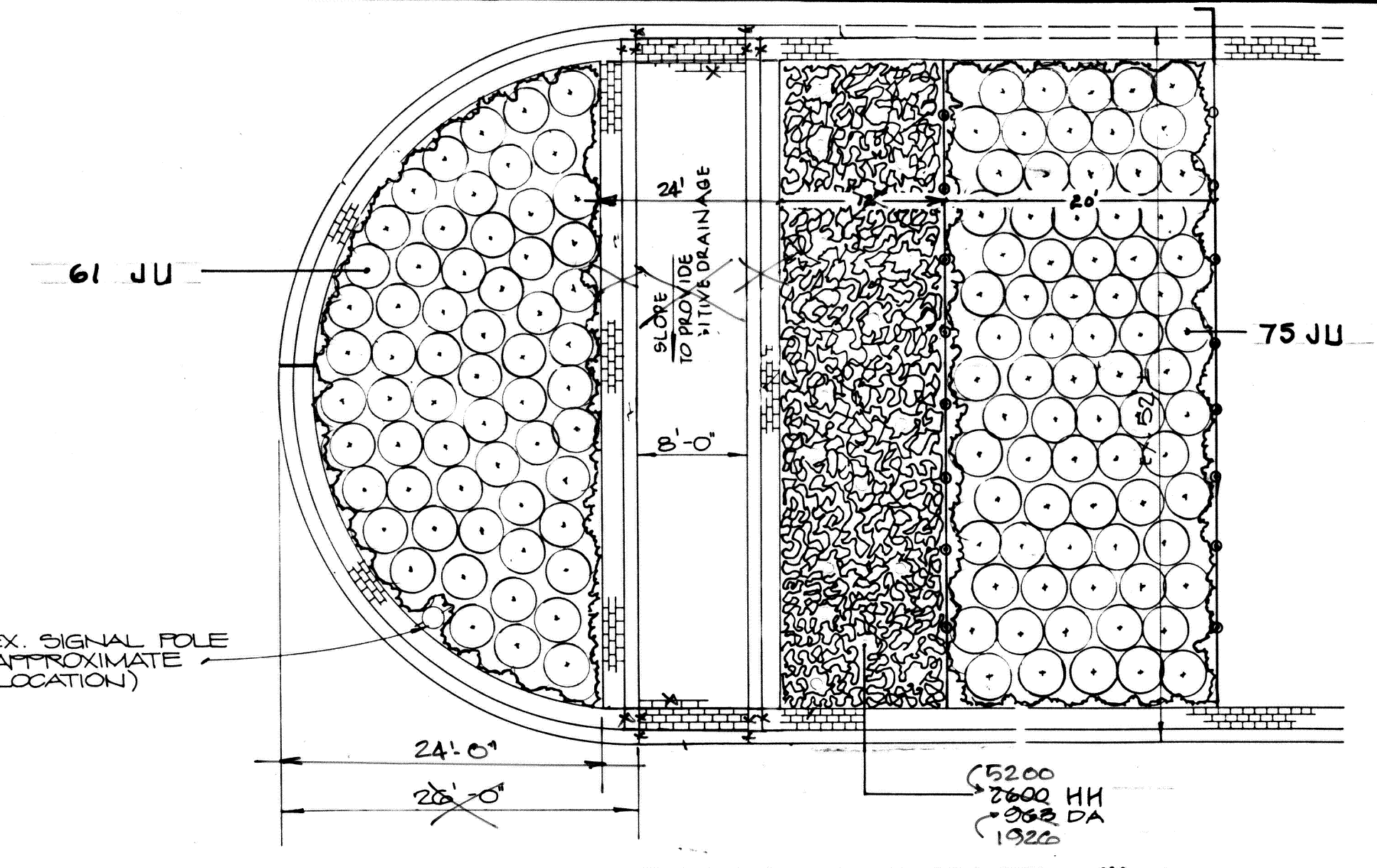
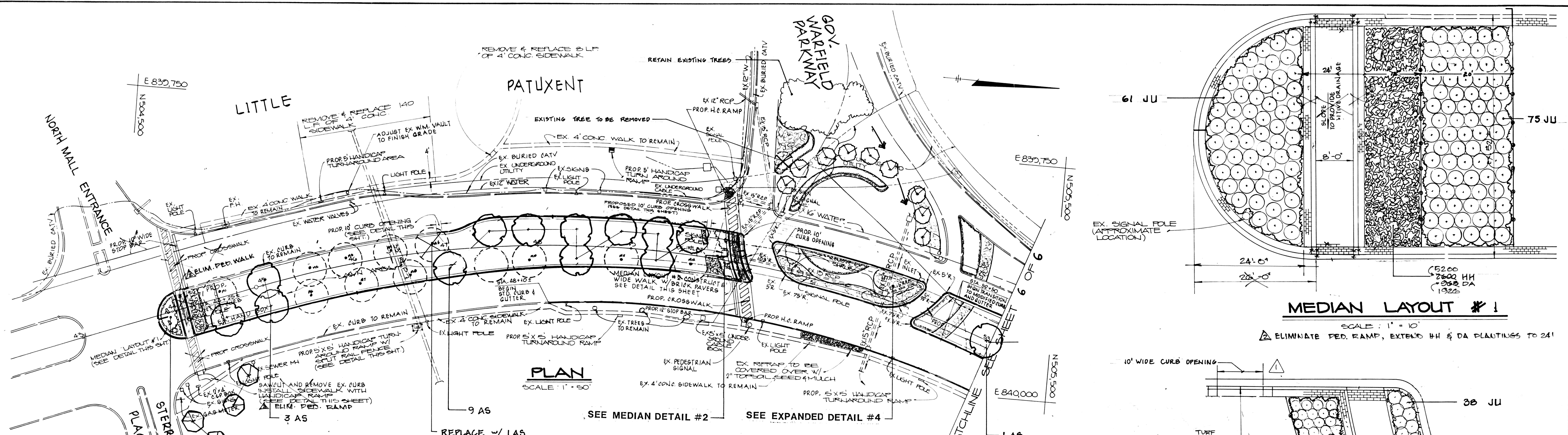
TRAFFIC CONTROL PLAN

600' SCALE MAP NO. _____ BLOCK NO. _____

SCALE AS SHOWN

SHEET 4 OF 6

LITTLE PATUXENT PARKWAY
SAFETY IMPROVEMENTS
CAPITAL PROJECT NO. J-4106A



PLANT LIST

SYM.	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS	SPACING
TREES						
AS	20	Acer saccharum "Legacy"	Sugar Maple "Legacy"	3 - 3.5" cal	B & B	
CP	9	Crataegus phenopyrum	Washington Hawthorne	8-10" hgt	D & D	
FR	10	Fraxinus americana "Autn. Applause"	White Ash "Autumn Applause"	3 - 3.5" cal	B & B	
MA	5	Malus "Indian Magic"	Crabapple "Indian Magic"	1 3/4 - 2" cal	B & B	
PY	9	Pyrus calleryana "Aristocrat"	Ornamental Pear "Aristocrat"	2 - 2.5" cal	B & B	
SHRUBS						
IL	63	Ilex crenata "Chesapeake"	Japanese Holly "Chesapeake"	4"	B & B	3'-6" o.c.
JU	273	Juniperus sargentii glauca	Juniper "Blue Sargent"	18 - 24" spd	cont.	3' o.c.
PERENNIALS						
DO	46	Hemerocallis "Orange"	Daylily "Orange"	1 gal.	cont.	
DS	53	Hemerocallis "Stella De Oro"	Daylily "Stella De Oro"	1 gal.	cont.	
GRASSES						
MS	104	Miscanthus sinensis "Graziella"	"Graziella" Silver Grass	3 gal.	cont.	
PA	210	Pennisetum alopecuroides "Orientale"	Fountain Grass "Orientale"	1 gal.	cont.	2'-6" o.c.
PN	571	Pennisetum alopec. "Ntl. Arboreum"	Fountain Grass "National Arboreum"	1 gal.	cont.	2'-6" o.c.
BULBS						
DA	7203	Dalrodii "Arctic Gold"	Dalrodii "Arctic Gold"	#1 Bulb		12" o.c.
NA	5500	Narcissus "Ice Follies"	Narcissus "Ice Follies"	#1 Bulb		10" o.c.
GROUND COVER						
HH	26800	Hedera helix	English Ivy	3" peat pot		6" o.c.

MEDIAN LAYOUT #2
SCALE: 1" = 10'

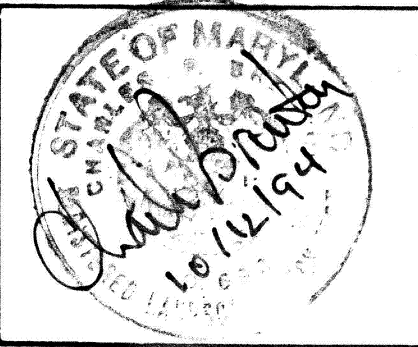
LEGEND

- EXISTING TREE TO BE REMOVED
- EXISTING TREE TO BE RETAINED
- PROPOSED TREE
- GROUND COVER
- STEEL LANDSCAPE EDGING SEE GENERAL NOTES #5

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *James M. ...* 4/23/96
 Chief, Bureau of Engineering: *Rudolph ...* 10/19/95
 Chief, Bureau of Highways: *Robert M. ...* 4-23-96
 Chief, Transportation Projects and Watershed Management: *Joseph ...* 10/19/95

Brenton & Associates,
Landscape Architects, Land Planners
7452 Baltimore & Annapolis Blvd., Ste. 9
Glen Burnie, Maryland, 21061 301/760-1217



DES: CPB	DATE: 10/25/94	BY: NO.	REVISION	DATE
DRN: RPH				
CHK: CPB				
BNC: REVISE MEDIAN #2 / PLAN NOTES / PLANT LIST 10/18/95 ERC: ELIMINATE PED. RAMP - MED. LAYOUT #1 5/16/96				

LANDSCAPE PLAN
NOTE: FOR LANDSCAPING ITEMS ONLY

LITTLE PATUXENT PARKWAY
SAFETY IMPROVEMENTS
CAPITAL PROJECTS # J-4102A

SCALE AS SHOWN
SHEET 5 OF 6

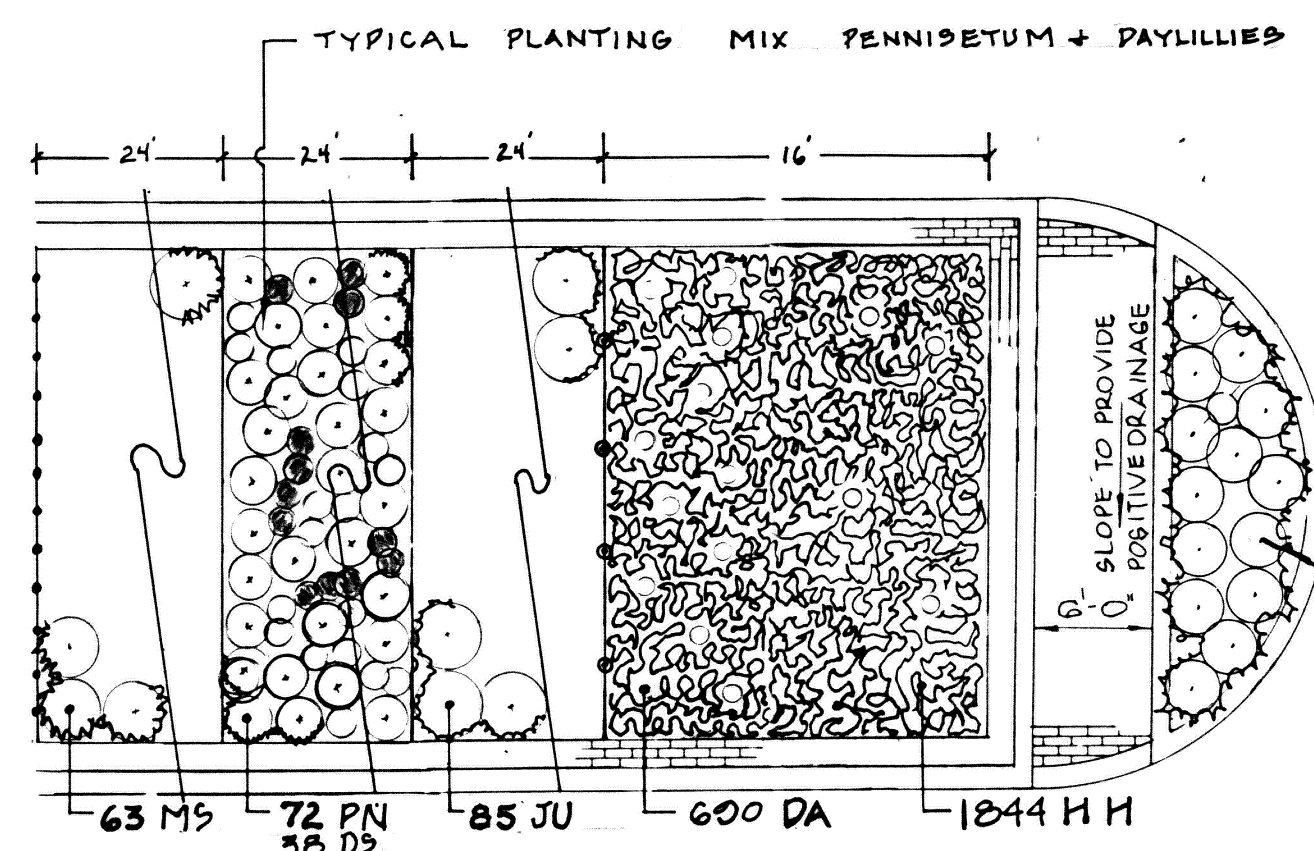
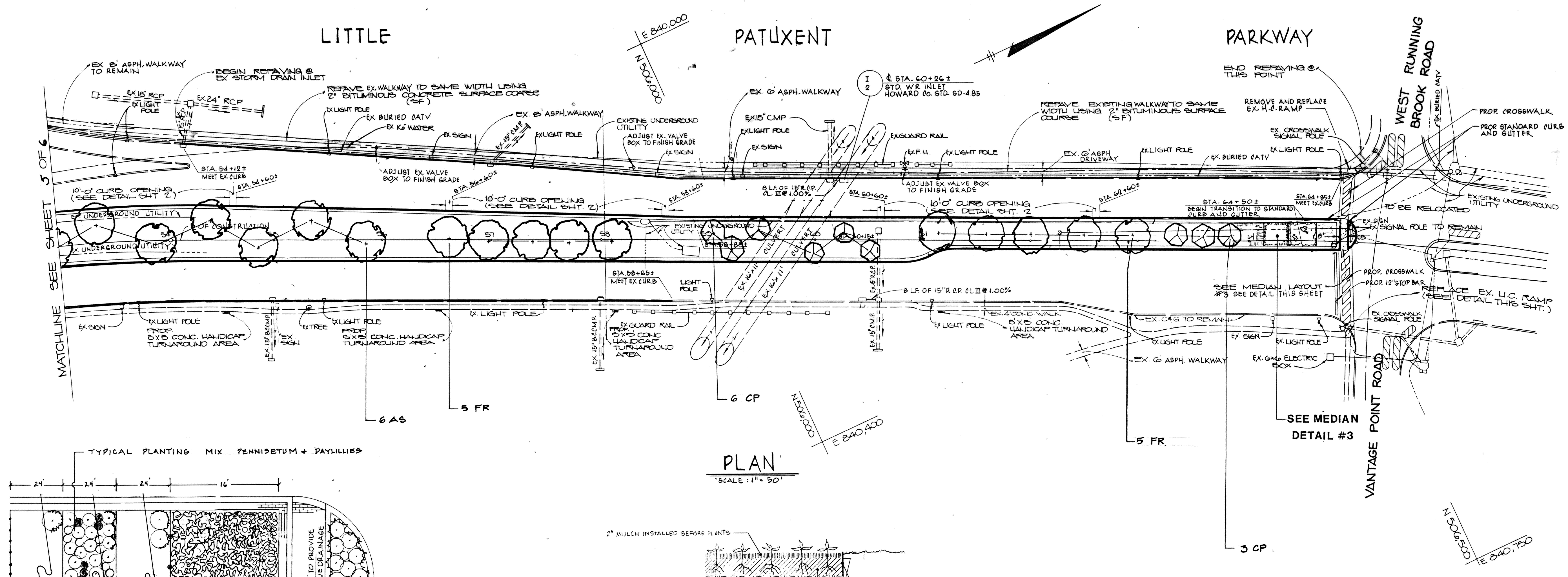
LITTLE

PATUXENT

PARKWAY

WEST BROOK ROAD

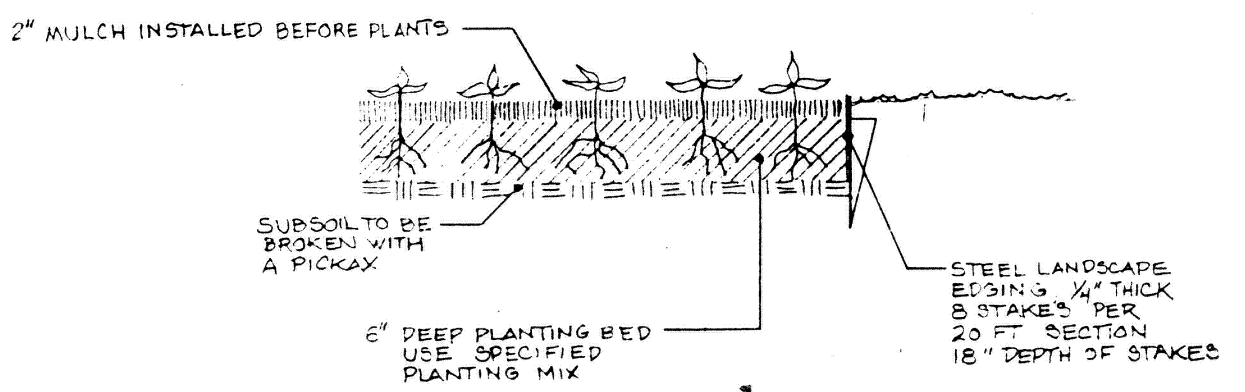
VANTAGE POINT ROAD



MEDIAN LAYOUT #3

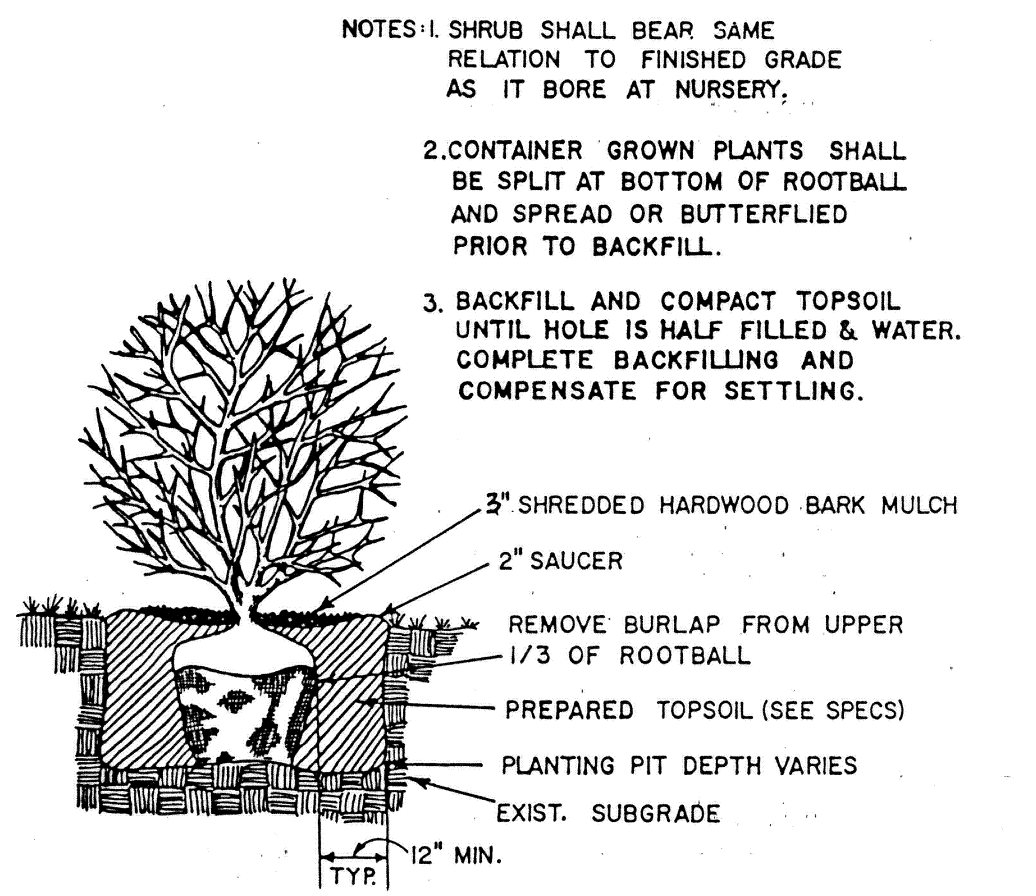
PLAN

SCALE: 1" = 50'



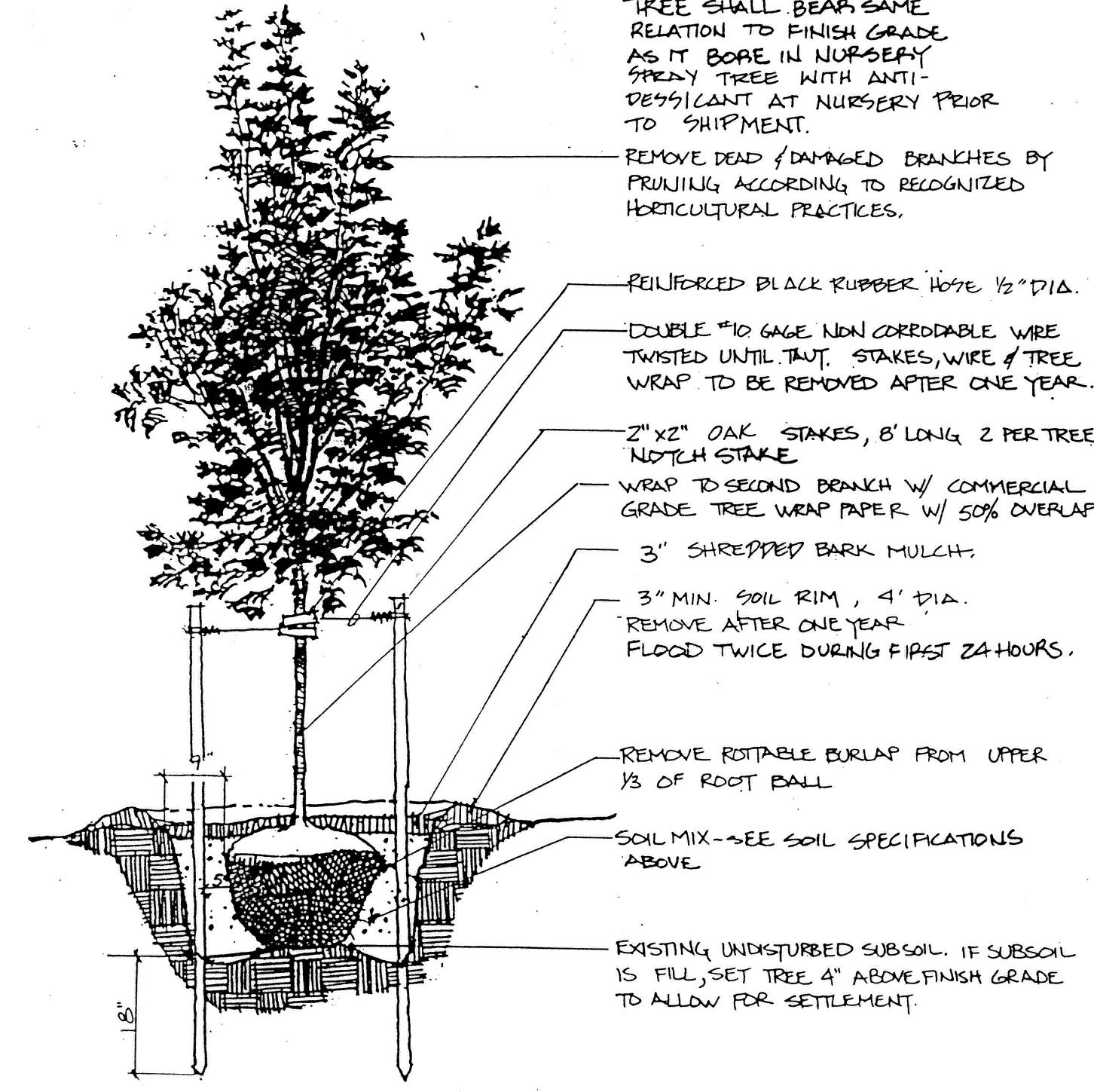
GROUND COVER PLANTING DETAIL

NO SCALE



SHRUB PLANTING DETAIL

NOT TO SCALE



TREE PLANTING DETAIL

NOT TO SCALE

- GENERAL NOTES:**
- Plants and plant material shall meet the detailed description as given on the plans and as described herein.
 - All plant material, unless otherwise specified, shall be nursery grown, of good average, uniformly branched and have a vigorous root system. They shall be healthy, vigorous plants free from defects, decay, disfiguring roots, sun scald injuries, abrasions of the bark, plant disease, insect pest eggs, boxers and all forms of infestations of objectionable disfigurements. Plant materials that are weak or which have been cut back from larger grades to meet certain specified requirements will be rejected. All plants shall be freshly dug; no heeled in plants or plants from cold storage will be accepted.
 - All plant characteristics including, but not limited to; ball diameter, caliper and height measurements, shall be in accordance with the current edition of the "U.S.A. Standard for Nursery Stock", as recommended by the American Association of Nurserymen, Inc.
 - All trees shall be symmetrically balanced according to their normal habit of growth. No forked leader stock will be accepted.
 - Landscape Edging shall be 1/4 inch thick steel. Weight per twenty (20) foot section shall be a minimum of ninety (90) pounds. Eight (8) stakes shall be furnished per twenty (20) foot section. Minimum depth of stakes shall be five (5) inches.
 - The Contractor shall notify all utility companies five (5) days prior to beginning work.
 - Any damage to the existing utilities, buildings, paving, curb, walls and vegetation (not so designated for removal on these plans) shall be repaired to previous condition or replaced by the Contractor at his expense.
 - Protection of Existing Trees and Shrubs: The Contractor shall confine his grading operations to within the limits of disturbance shown on the approved plans. Snow fencing or blaze orange plastic mesh shall be installed prior to the grading operations at the limit of disturbance adjoining areas designated "Existing Vegetation to be Retained" on the approved plans. The Contractor shall extend the same warranty and replacement policy to the indicated existing trees and shrubs as that specified above for new plant material. Replacements shall be of equal size and value as the new specified materials.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

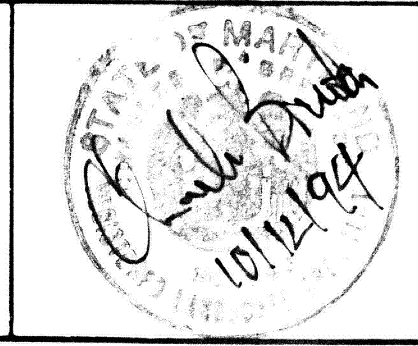
James J. Law 4/23/96
DIRECTOR OF PUBLIC WORKS DATE

Paul J. Seaman 10/10/95
CHIEF BUREAU OF ENGINEERING DATE

Charles M. Daniels 4-23-96
CHIEF BUREAU OF HIGHWAYS DATE

Brenton & Associates,
Landscape Architects, Land Planners

7452 Baltimore & Annapolis Blvd., Ste. 8
Glen Burnie, Maryland, 21061 301/760-1217



DES: CPB	BAC:	REVISE CURB OPENING	10/18/95
DRN: R.F.H.			
CHK: CPB			
DATE: 10/25/95	BY:	NO.	REVISION

LANDSCAPE PLAN

LITTLE PATUXENT PARKWAY
SAFETY IMPROVEMENTS
CAPITAL PROJECT # J-4106A

SCALE AS SHOWN
SHEET 6 OF 6