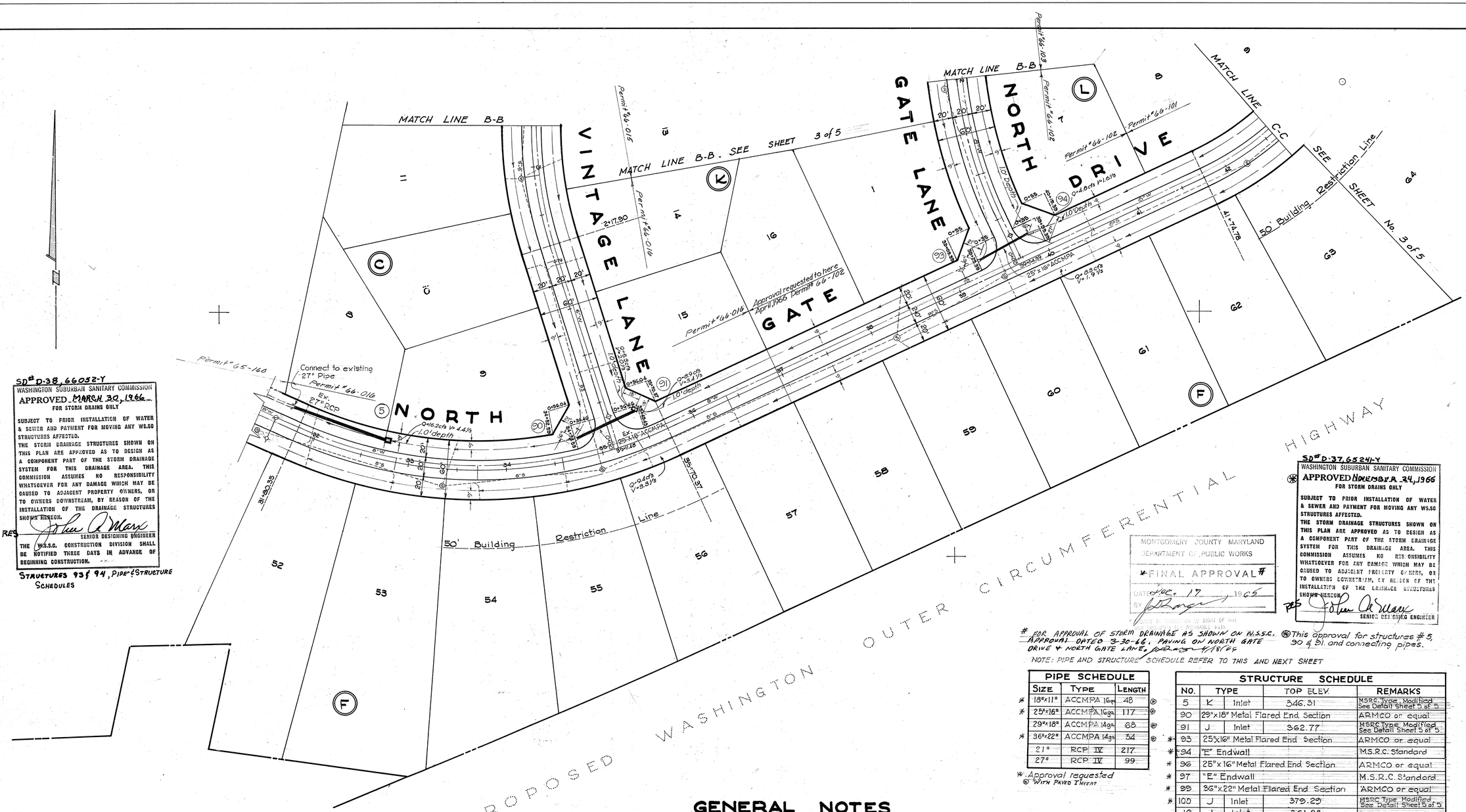


SD# D-38, 66052-Y

WASHINGTON SUBURBAN SANITARY COMMISSION

APPROVED MARCH 30, 1966

FOR STORM DRAINS ONLY

SUBJECT TO PRIOR INSTALLATION OF WATER & SEWER AND PAYMENT FOR MOVING ANY WS.SC STRUCTURES AFFECTED.

THE STORM DRAINAGE STRUCTURES SHOWN ON THIS PLAN ARE APPROVED AS TO DESIGN AS A COMPONENT PART OF THE STORM DRAINAGE SYSTEM FOR THIS DRAINAGE AREA. THIS COMMISSION ASSUMES NO RESPONSIBILITY WHATSOEVER FOR ANY DAMAGE WHICH MAY BE CAUSED TO ADJACENT PROPERTY OWNERS, OR TO OWNERS DOWNSTREAM, BY REASON OF THE INSTALLATION OF THE DRAINAGE STRUCTURES SHOWN HEREON.

RES _____ SENIOR DESIGNING ENGINEER

THE W.S.S.C. CONSTRUCTION DIVISION SHALL BE NOTIFIED THREE DAYS IN ADVANCE OF BEGINNING CONSTRUCTION.

STRUCTURES 93 & 94, PIPE & STRUCTURE SCHEDULES

SD# D-37, 65241-Y

WASHINGTON SUBURBAN SANITARY COMMISSION

APPROVED NOVEMBER 24, 1965

FOR STORM DRAINS ONLY

SUBJECT TO PRIOR INSTALLATION OF WATER & SEWER AND PAYMENT FOR MOVING ANY WS.SC STRUCTURES AFFECTED.

THE STORM DRAINAGE STRUCTURES SHOWN ON THIS PLAN ARE APPROVED AS TO DESIGN AS A COMPONENT PART OF THE STORM DRAINAGE SYSTEM FOR THIS DRAINAGE AREA. THIS COMMISSION ASSUMES NO RESPONSIBILITY WHATSOEVER FOR ANY DAMAGE WHICH MAY BE CAUSED TO ADJACENT PROPERTY OWNERS, OR TO OWNERS DOWNSTREAM, BY REASON OF THE INSTALLATION OF THE DRAINAGE STRUCTURES SHOWN HEREON.

RES _____ SENIOR DESIGNING ENGINEER

* This approval for structures # 5, 90 & 91 and connecting pipes.

MONTGOMERY COUNTY MARYLAND
DEPARTMENT OF PUBLIC WORKS
FINAL APPROVAL #
DATE: DEC. 17, 1965
BY: _____

FOR APPROVAL OF STORM DRAINAGE AS SHOWN ON W.S.S.C. APPROVAL DATED 3-30-66. PAVING ON NORTH GATE DRIVE & NORTH GATE LANE, approved 4/18/66

NOTE: PIPE AND STRUCTURE SCHEDULE REFER TO THIS AND NEXT SHEET

PIPE SCHEDULE

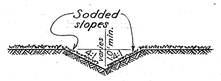
	SIZE	TYPE	LENGTH	
*	18"x11"	ACCMPA 16ga	48	@
*	25"x16"	ACCMPA 16ga	117	@
	29"x18"	ACCMPA 14ga	68	@
*	36"x22"	ACCMPA 14ga	54	@
	21"	RCP IV	217	
	27"	RCP IV	99	

* Approval requested
@ WITH PAVED INVERT

STRUCTURE SCHEDULE

NO.	TYPE		TOP ELEV.	REMARKS
5	K	Inlet	346.31	MSRC Type Modified See Detail Sheet 5 of 5
90	29"x18" Metal Flared End Section			ARMCO or equal
91	J	Inlet	362.77	MSRC Type Modified See Detail Sheet 5 of 5
* 93	25"x16" Metal Flared End Section			ARMCO or equal
* 94	"E" Endwall			M.S.R.C. Standard
* 96	25"x16" Metal Flared End Section			ARMCO or equal
* 97	"E" Endwall			M.S.R.C. Standard
* 99	36"x22" Metal Flared End Section			ARMCO or equal
* 100	J	Inlet	379.29	MSRC Type Modified See Detail Sheet 5 of 5
19	J	Inlet	361.28	" "
* 105	22"x13" Metal Flared End Section			ARMCO or equal
* 106	"E" Endwall			M.S.R.C. Standard

* Approval requested.



TYPICAL DITCH SECTION
(No Scale)

BENCH MARKS

D.T.P. Elev. = 387.570
B.M. Traverse Station # 1006 in
Lot 1 Block L

D.T.P. Elev. = 369.345
B.M. Traverse Station # 202 in
lot 57 Block F

GENERAL NOTES

FOR STORM DRAIN CONSTRUCTION

1. All Storm Drains shall be constructed in accordance with the latest Edition of the General Specifications of the W.S.S.C
2. Types of structures refer to the Standard Storm Drainage Details of the W.S.S.C., unless otherwise noted.
3. Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location and elevation of the mains by digging test pits by hand at all utility crossings, well in advance of trenching. If clearances are less than shown on this plan or six (6) inches, whichever is less, contact the Storm Drain Section of the Washington Suburban Sanitary Commission before proceeding with construction.
4. All storm drain construction shown on this plan to be maintained by Montgomery County Dept. of Public Works

STATE OF MARYLAND
ALDEN E. IMUS, JR.
No. 2043
REGISTERED
PROFESSIONAL ENGINEER

Alden E. Imus Jr.

DATE	REVISION

DRAFTING: J.F. & S.B.
CHECK: P.A.H.
DESIGN: J.F.
CHECK: P.A.H.

DEVELOPER
SI-CO, INC.
1400 Layhill Road
Silver Spring - Md.
622 - 2800

CIVIL ENGINEERS ■ LAND PLANNERS ■ LAND SURVEYORS
THOMAS G. OYSTER AND ASSOCIATES INC.
2419 REEDIE DRIVE ■ WHEATON ■ MARYLAND ■ 949-2011

PAVING AND STORM DRAIN

NORTH GATE DRIVE
NORTH GATE TERRACE
VINTAGE LANE
NORTH GATE LANE
MONTGOMERY COUNTY MARYLAND

Layhill Village

DATE	JOB No.
March, 1965	1787 A-4
SCALE	SHEET No.
1" = 50'	1 of 5

CE487-929-1

SD FILE NO. 946

SD# D-38, 66052-Y

WASHINGTON SUBURBAN SANITARY COMMISSION

APPROVED MARCH 30, 1966

FOR STORM DRAINS ONLY

SUBJECT TO PRIOR INSTALLATION OF WATER & SEWER AND PAYMENT FOR MOVING ANY WS.SC STRUCTURES AFFECTED.

THE STORM DRAINAGE STRUCTURES SHOWN ON THIS PLAN ARE APPROVED AS TO DESIGN AS A COMPONENT PART OF THE STORM DRAINAGE SYSTEM FOR THIS DRAINAGE AREA. THIS COMMISSION ASSUMES NO RESPONSIBILITY WHATSOEVER FOR ANY DAMAGE WHICH MAY BE CAUSED TO ADJACENT PROPERTY OWNERS, OR TO OWNERS LOWNSTREAM, BY REASON OF THE INSTALLATION OF THE DRAINAGE STRUCTURES SHOWN HEREON.

John Q. Mark

SENIOR DESIGNING ENGINEER

THE W.S.S.C. CONSTRUCTION DIVISION SHALL BE NOTIFIED THREE DAYS IN ADVANCE OF BEGINNING CONSTRUCTION.

*STRUCTURES 96, 97, 99, 100, 105 & 106 & CONNECTING PIPES

MONTGOMERY COUNTY MARYLAND
DEPARTMENT OF PUBLIC WORKS
FINAL APPROVAL#
DATE Dec. 17, 1965
BY J. Strange
* SUBJECT TO DEDICATION BY PLAT OF WAY ENGRAVING AND PERFORMANCE BOND

#STORM DRAINAGE AS SHOWN ON W.S.S.C. APPROVAL DATED 3-30-66. PAVING ON NORTH GATE DRIVE, NORTH GATE LANE, NORTH GATE TERRACE & POST LANE, JJC 4/6/66

SD# D-37, 65241-Y

WASHINGTON SUBURBAN SANITARY COMMISSION

APPROVED NOVEMBER 24, 1965

FOR STORM DRAINS ONLY

SUBJECT TO PRIOR INSTALLATION OF WATER & SEWER AND PAYMENT FOR MOVING ANY WS.SC STRUCTURES AFFECTED.

THE STORM DRAINAGE STRUCTURES SHOWN ON THIS PLAN ARE APPROVED AS TO DESIGN AS A COMPONENT PART OF THE STORM DRAINAGE SYSTEM FOR THIS DRAINAGE AREA. THIS COMMISSION ASSUMES NO RESPONSIBILITY WHATSOEVER FOR ANY DAMAGE WHICH MAY BE CAUSED TO ADJACENT PROPERTY OWNERS, OR TO OWNERS LOWNSTREAM, BY REASON OF THE INSTALLATION OF THE DRAINAGE STRUCTURES SHOWN HEREON.

RES John Q. Mark

SENIOR DESIGNING ENGINEER

* This approval for structure #19. and connecting pipe

U N D E V E L O P E D

NORTH GATE TERRACE

NORTH GATE LANE

NORTH GATE DRIVE

POST ROAD

VINTAGE LANE

LAYHILL

Proposed future sodded swale

20' Storm Drain Easement

Approval requested to here April 1966 Permit # 66-104

Permit # 66-015

Permit # 66-103

Permit # 66-102

Permit # 66-101

Permit # 66-105

15' Slope Easement

10' Slope Easement

Ex. 21" RCP

Remove ex. 24" RCP stub and connect new 21" RCP to inlet # 18

Q=0.8 cfs V=2.3 ft/s

Q=17.0 cfs V=9.7 ft/s

Q=4.7 cfs V=2.1 ft/s

Q=9.7 cfs V=1.6 ft/s

Q=4.9 cfs V=2.6 ft/s

Q=0.1 cfs V=1.7 ft/s

36"x 2-24" ACCMPA

25"x 16" ACCMPA

18"x 11" ACCMPA

1.0' depth

1.3' depth

1.1' depth

Construct 160' of sodded ditch. See section 5h.1 of 5

MATCH LINE B-B

MATCH LINE B-B - SEE SHEET 2 of 5

MATCH LINE C-C - SEE SHEET 2 of 5

50' Building Restriction Line

Existing

STATE OF MARYLAND
ALDEN E. IMUS, JR.
No. 2047
REGISTERED
PROFESSIONAL ENGINEER

Alden E. Imus Jr.

DATE	REVISION

DRAFTING: J.F. & S.B.
CHECK: P.A.H.
DESIGN: J.F.
CHECK: P.A.H.

DEVELOPER
SI-CO, INC.
1400 Layhill Road
Silver Spring - Md.
682 - 2800

CIVIL ENGINEERS ■ LAND PLANNERS ■ LAND SURVEYORS
THOMAS G. OYSTER AND ASSOCIATES INC.
2419 REEDIE DRIVE ■ WHEATON ■ MARYLAND ■ 949-2011

PAVING AND STORM DRAIN

NORTH GATE DRIVE
NORTH GATE TERRACE
VINTAGE LANE
NORTH GATE LANE

Layhill Village

MONTGOMERY COUNTY MARYLAND

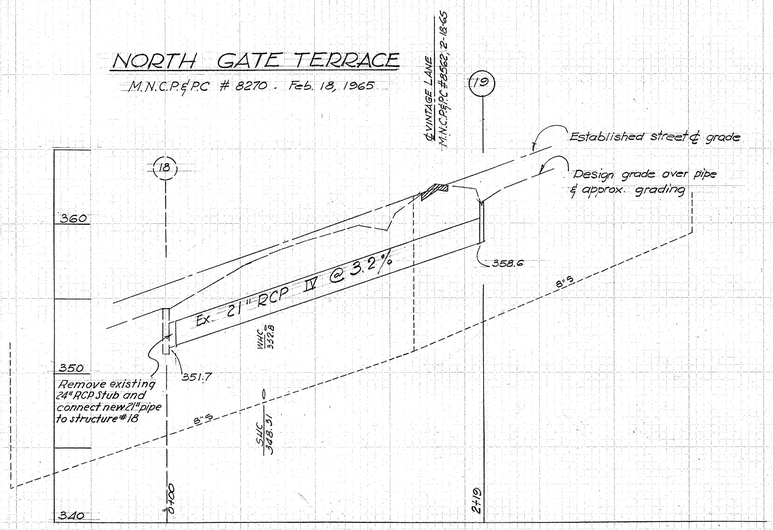
DATE	JOB No.
January, 1965	1787 A-4
SCALE 1"=50'	SHEET No. 2 of 5

CE487-929-2

SD FILE NO. 946

NORTH GATE TERRACE

M.N.C.P.&P.C # 8270 - Feb. 18, 1965



SD# D-38, 66052-Y

WASHINGTON SUBURBAN SANITARY COMMISSION
APPROVED MARCH 30, 1966
FOR STORM DRAINS ONLY

SUBJECT TO PRIOR INSTALLATION OF WATER & SEWER AND PAYMENT FOR MOVING ANY W.S.S.C STRUCTURES AFFECTED.
THE STORM DRAINAGE STRUCTURES SHOWN ON THIS PLAN ARE APPROVED AS TO DESIGN AS A COMPONENT PART OF THE STORM DRAINAGE SYSTEM FOR THIS DRAINAGE AREA. THIS COMMISSION ASSUMES NO RESPONSIBILITY WHATSOEVER FOR ANY DAMAGE WHICH MAY BE CAUSED TO ADJACENT PROPERTY OWNERS, OR TO OWNERS DOWNSTREAM, BY REASON OF THE INSTALLATION OF THE DRAINAGE STRUCTURES SHOWN HEREON.

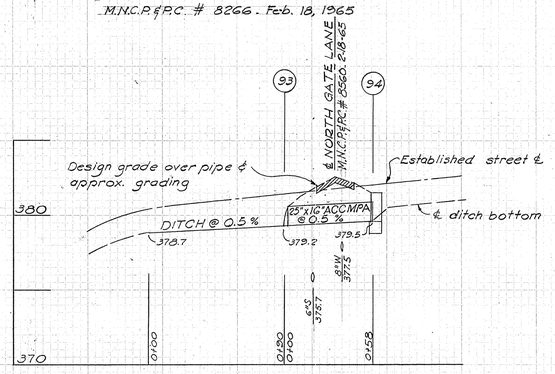
John A. Mark
SENIOR DESIGNING ENGINEER

THE W.S.S.C. CONSTRUCTION DIVISION SHALL BE NOTIFIED THREE DAYS IN ADVANCE OF BEGINNING CONSTRUCTION.

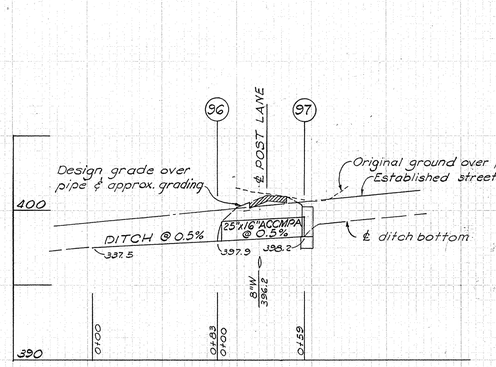
LINES 93-94, 96-97, 99-100 & 105-106

NORTH GATE DRIVE

M.N.C.P.&P.C. # 8266 - Feb. 18, 1965

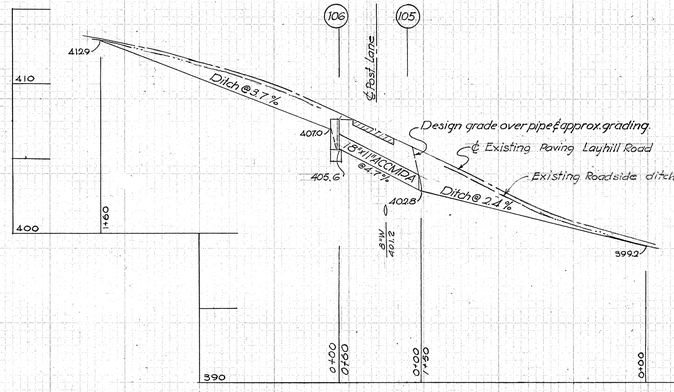


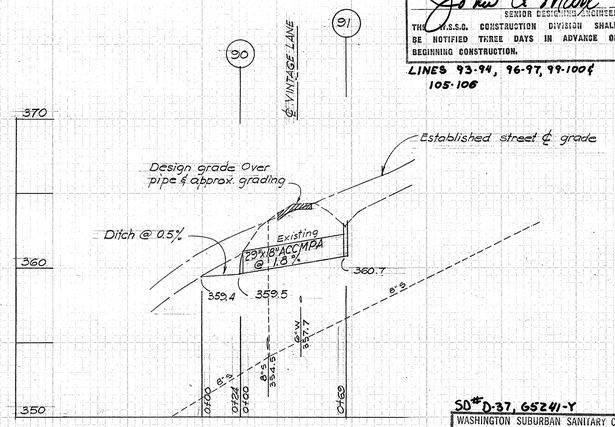
NORTH GATE DRIVE



NOTE: Existing ground above design grade except where shown.

NORTH GATE DRIVE



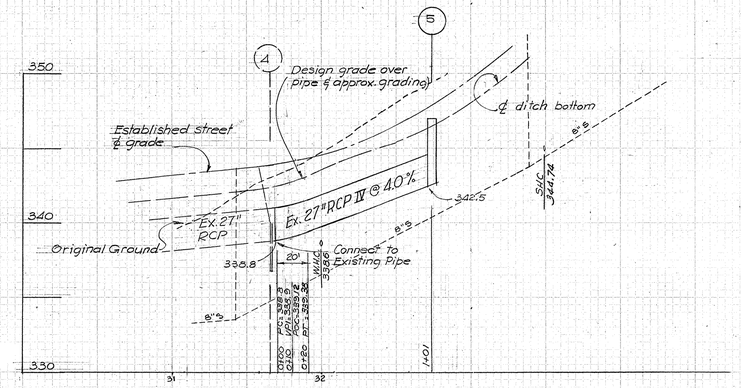


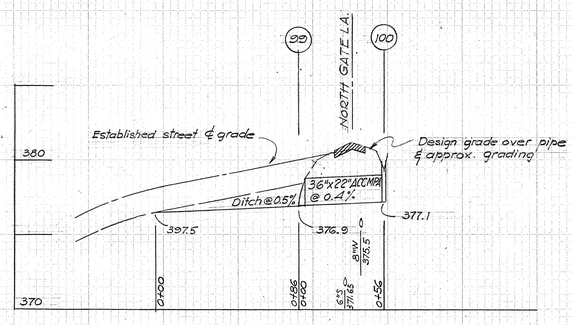
SD# D-37, 65241-Y

WASHINGTON SUBURBAN SANITARY COMMISSION
APPROVED NOVEMBER 24, 1965
FOR STORM DRAINS ONLY

SUBJECT TO PRIOR INSTALLATION OF WATER & SEWER AND PAYMENT FOR MOVING ANY W.S.S.C STRUCTURES AFFECTED.
THE STORM DRAINAGE STRUCTURES SHOWN ON THIS PLAN ARE APPROVED AS TO DESIGN AS A COMPONENT PART OF THE STORM DRAINAGE SYSTEM FOR THIS DRAINAGE AREA. THIS COMMISSION ASSUMES NO RESPONSIBILITY WHATSOEVER FOR ANY DAMAGE WHICH MAY BE CAUSED TO ADJACENT PROPERTY OWNERS, OR TO OWNERS DOWNSTREAM, BY REASON OF THE INSTALLATION OF THE DRAINAGE STRUCTURES SHOWN HEREON.

John A. Mark
SENIOR DESIGNING ENGINEER





MONTGOMERY COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
APPROVED
Dec 17 65
DIRECTOR OF PUBLIC WORKS
AND MEMBER OF THE COMMISSION

FOR APPROVAL OF STORM DRAINAGE AS SHOWN ON W.S.S.C. APPROVAL DATED 3-30-66 4/18/66

PROFILES

Horiz. : 1" = 50'
Vert. : 1" = 5'

STATE OF MARYLAND
ALDEN E. IMUS JR.
No. 2041 REGISTERED
PROFESSIONAL ENGINEER

Alden E. Imus Jr.

DATE	REVISION

DRAFTING: J.F. & S.B.
CHECK: P.A.H.
DESIGN: J.F.
CHECK: P.A.H.

DEVELOPER
SI-CO INC.
1400 Layhill Road
Silver Spring - Md.
622-2800

CIVIL ENGINEERS ■ LAND PLANNERS ■ LAND SURVEYORS
THOMAS G. OYSTER AND ASSOCIATES INC.
2419 REEDIE DRIVE ■ WHEATON ■ MARYLAND ■ 949-2011

PAVING AND STORM DRAIN

NORTH GATE DRIVE
NORTH GATE TERRACE

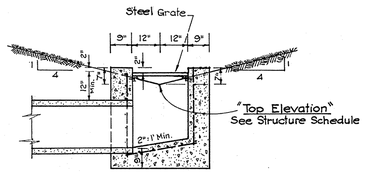
Layhill Village
MONTGOMERY COUNTY MARYLAND

VINTAGE LANE
NORTH GATE LANE

DATE	JOB NO.
March, 1965	1787 A-1
SCALE	SHEET NO.
1" = 50'	3 OF 5

CE487-929-3

SD FILE NO. 946



SECTION A-A

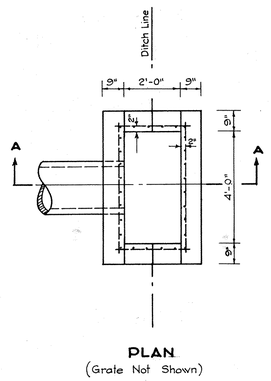
GENERAL NOTES

STEEL: Vert.: ½" ø bars, 6" c.c.
Hor.: ½" ø bars, 6" c.c.
Bott. ½" ø bars, 6" c.c.

* **CONCRETE**: W.S.S.C. Class A Concrete

GRATE: Grate is made of 1"x1" square bars, butt welded, see SRC Detail IL 15. Grating to be fastened to inlet by welding to two 3"x2"x ⅜" Lg-3'-10" long which shall be bolted to inlet walls with ½"x4" expansion bolts @ 9" c.c., (10 bolts required) 1"x1" cross bars shall be spaced 3" c.c.

* Brick may be used in lieu of concrete.

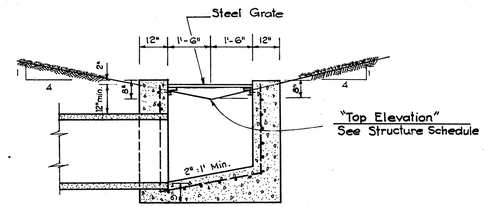


PLAN
(Grate Not Shown)

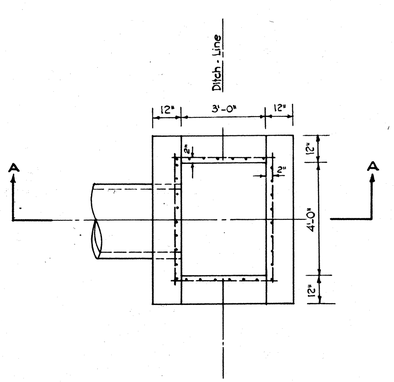
"J" INLET

Scale: 3/8" = 1'-0"

STRUCTURES No. 19.91.100



SECTION A-A



PLAN
(Grate Not Shown)

"K" INLET

Scale: 3/8" = 1'-0"

STRUCTURE No. 5

SD#D-38, 66052-Y
WASHINGTON SUBURBAN SANITARY COMMISSION
APPROVED MARCH 30, 1966
FOR CONSTRUCTION PURPOSES ONLY
SENIOR DESIGNING ENGINEER
STRUCTURE 100

SD#D-37, 65241-Y
WASHINGTON SUBURBAN SANITARY COMMISSION
APPROVED NOVEMBER 24, 1965
FOR CONSTRUCTION PURPOSES ONLY
SENIOR DESIGNING ENGINEER

STATE OF MARYLAND
ALDEN E. SOMERS JR.
No. 2043
REGISTERED
PROFESSIONAL ENGINEER
Alden E. Somers Jr.

DATE	REVISION	DRAFTING: J.F.
		CHECK:
		DESIGN:
		CHECK:

DEVELOPER
SI-CO, INC.
1400 Layhill Road
Silver Spring - Md.
682 - 2800

CIVIL ENGINEERS ■ LAND PLANNERS ■ LAND SURVEYORS
THOMAS G. OYSTER AND ASSOCIATES INC.
2419 REEDIE DRIVE ■ WHEATON ■ MARYLAND ■ 949-2011

MSRC TYPE INLETS MODIFIED

NORTH GATE DRIVE
NORTH GATE TERRACE
Layhill Village
VINTAGE LANE
NORTH GATE LANE
MONTGOMERY COUNTY MARYLAND

DATE	JOB NO.
March, 1965	1767 A-4
SCALE	SHEET NO.
As Shown	5 OF 5

CE487-929-4

SD FILE NO. 9-6