Stormwater Division

MEMORANDUM

DATE: March 13, 2010

TO: Michael J. Gillis, Virginia Correctional Enterprises Document Management Services

FROM: Jo Anna Ripley, Stormwater

PO: 270712

RE: Files Approved for Scanning

General File ID or BMP ID: YC005

PIN: 23202D0004

Subdivision, Tract, Business or Owner Name (if known): Riverside Healthcare

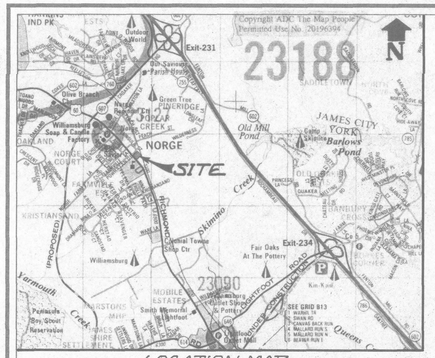
Property Description: Medical Office

Site Address: 7364 Richmond Road

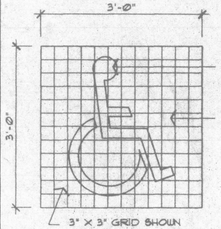
(For internal use only) **Box** 24 **Drawer:** 9

Agreements: (in file as of scan date) **N** **Book or Doc#:** **Page:**

Comments

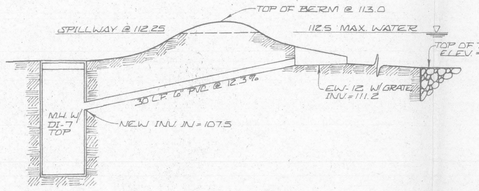


LOCATION MAP
1" = 4000'



H.C. PAVEMENT SIGN
N.T.S.

NOTE: THE INFILTRATION TRENCHES WILL NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED.



SECTION THROUGH BERM
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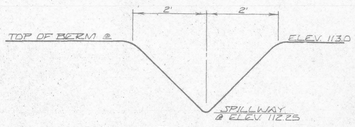

SECTION THROUGH SPILLWAY
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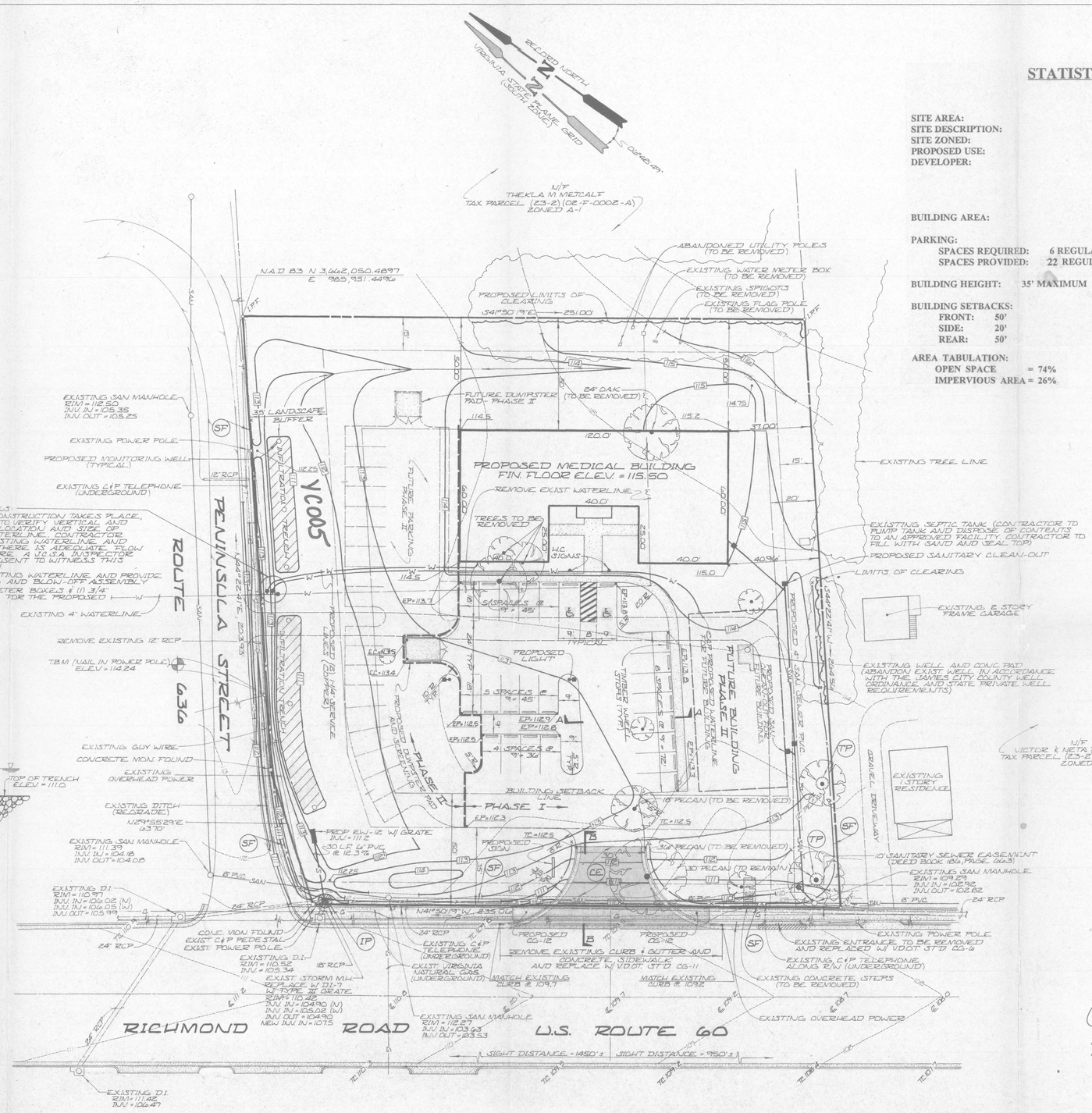
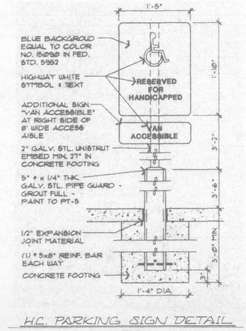




H.C. PARKING SIGN DETAIL
N.T.S.

STATISTICAL DATA

SITE AREA:	65,776 S.F. OR 1.51 ACRES
SITE DESCRIPTION:	TAX PARCEL (23-2)(02-D-0004)
SITE ZONED:	B-1
PROPOSED USE:	ONE STORY MEDICAL OFFICE BUILDING
DEVELOPER:	C. RICHARD DOBSON BUILDERS, INC. 739 THIMBLE SHOALS BOULEVARD SUITE 105 NEWPORT NEWS, VA 23606
BUILDING AREA:	6,200 S.F.

PARKING:

SPACES REQUIRED:	6 REGULAR + 1 HANDICAPPED	=	7 SPACES
SPACES PROVIDED:	22 REGULAR + 2 HANDICAPPED	=	24 SPACES

BUILDING HEIGHT: 35' MAXIMUM

BUILDING SETBACKS:
FRONT: 50'
SIDE: 20'
REAR: 50'

AREA TABULATION:
OPEN SPACE = 74%
IMPERVIOUS AREA = 26%

NOTES:
1. THE PROPOSED SIGN SHALL BE IN ACCORDANCE WITH ARTICLE II DIVISION 3 OF THE JAMES CITY COUNTY ZONING ORDINANCE.
2. THE SIDEWALK ALONG RICHMOND ROAD IS TO BE UPGRADED TO VDOT STANDARDS
3. ALL UTILITIES ARE TO BE UNDERGROUND.

GRAPHIC SCALE IN FEET
1"=25'

COUNTY OF JAMES CITY FINAL SITE PLAN APPROVALS

		DATE
Engineering		
Fire Dept.		
Health Dept.		
Planning Dir.		
Planning Comm.		
Pub. Works Dir.		
Board of Supervisors		
JCSA		
Environ.		
Other		

CONFIDENCE IN EXPERIENCE
8-7-96
STEPHEN A. TOMKO
No. 1440-B
LAND SURVEYOR

Langley and McDonald, P.C.
Engineers • Surveyors • Planners
Landscape Architects • Environmental Consultants
VIRGINIA BEACH WILLIAMSBURG

DES.	GSW
DWN.	GSW
CHK.	SAR
DATE	AUG. 12, 1996

SITE PLAN
RIVERSIDE MEDICAL CENTER
AT NORGE
FOR
C. RICHARD DOBSON BUILDERS, INC.
JAMES CITY COUNTY, VIRGINIA

RECEIVED PLANNING DEPARTMENT SEP 1996

YC005

SP-66-96

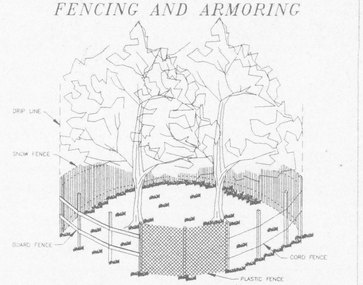
(23-2)(02-D-0004-)
7364 RICHMOND RD. 23188

PROJ. NO.	85040-92
SCALE:	1" = 25'
	1 OF 2
DWG.	6091W

REVISED: 9/12/96 PER COUNTY COMMENTS

1992 3.38

FENCING AND ARMORING



CORRECT METHODS OF TREE FENCING

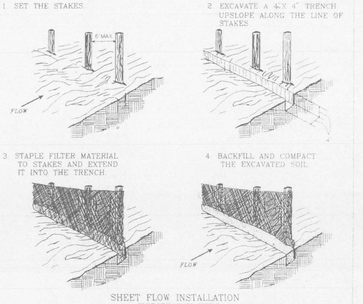
CORRECT TRUNK ARMORING

TRIANGULAR BOARD FENCE

Source: Va. DSWC Plate 3.38-2

1992 3.05

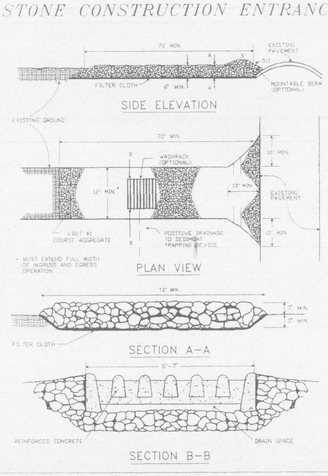
CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)



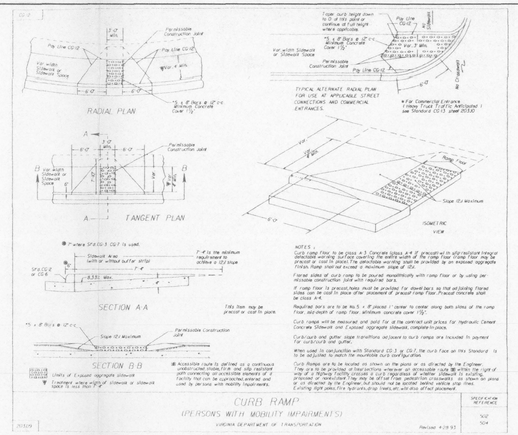
Source: Adapted from Installation of Straw and Fabric Filter Barriers for Sediment Control, Sherwood and Wyant Plate 3.05-2

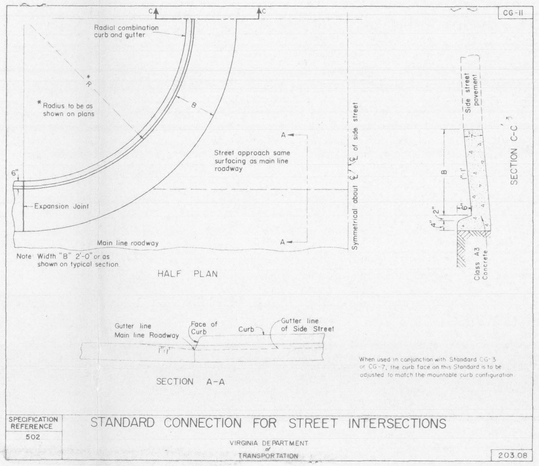
1992 3.02

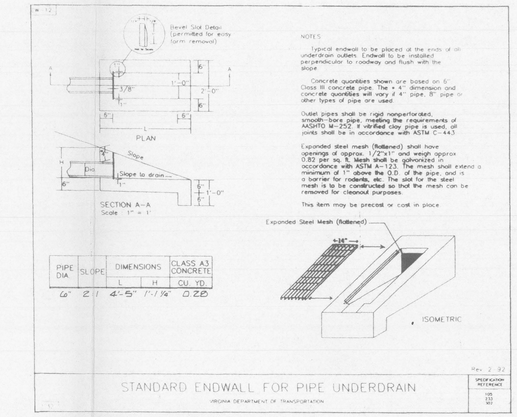
STONE CONSTRUCTION ENTRANCE

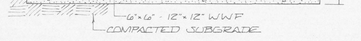


Source: Adapted from 1983 Maryland Standards for Soil Erosion and Sediment Control, and Va. DSWC Plate 3.02-1

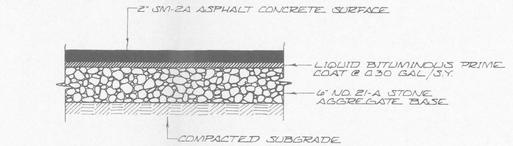






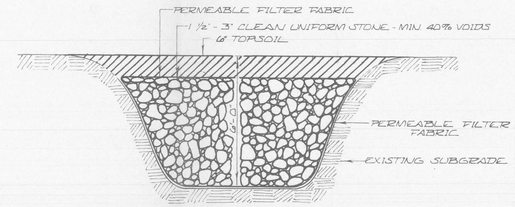


DUMPSTER PAD DETAIL

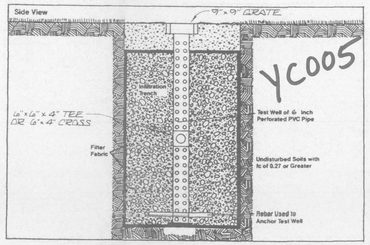


NOTE: PAVEMENT DESIGN IS BASED ON THE SUBGRADE HAVING A MINIMUM CBR 10. SHOULD SOFT ZONES OF SILT OR CLAY BE ENCOUNTERED UNDERCUT AS REQ'D AND REPLACE WITH SUITABLE MATERIAL. SUBGRADE SHALL BE PROOF ROLLED WITH LOADED TANDEM DUMP TRUCK IN THE PRESENCE OF THE ENGINEER PRIOR TO ACCEPTANCE.

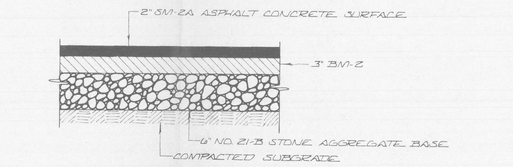
PAVEMENT SECTION
SECTION A-A
N.T.S.



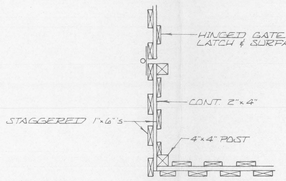
INFILTRATION TRENCH
N.T.S.



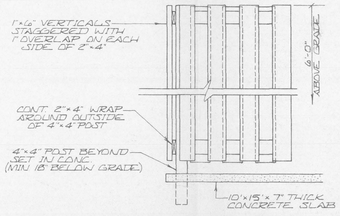
MONITORING WELL DETAIL
N.T.S.



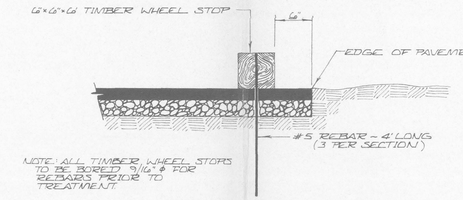
PAVEMENT SECTION
SECTION B-B
N.T.S.



*NOTE: ALL MATERIAL PRESSURE TREATED

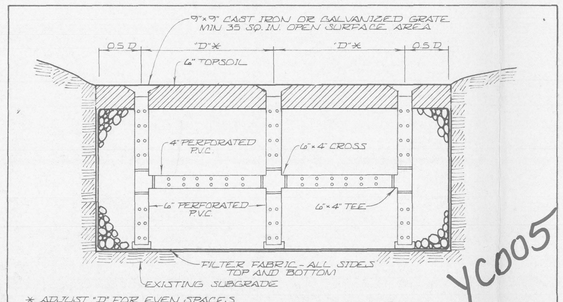


DUMPSTER SCREEN DETAIL



NOTE: ALL TIMBER WHEEL STOPS TO BE BORED 9/16" ϕ FOR REBARS PRIOR TO TREATMENT.

TIMBER WHEEL STOP
N.T.S.



* ADJUST "D" FOR EVEN SPACES

INFILTRATION TRENCH PIPING SYSTEM

JAMES CITY COUNTY
EROSION AND SEDIMENT CONTROL NOTES

REVISED 2/3/95

THE PURPOSE OF THE EROSION CONTROL MEASURES SHOWN ON THESE PLANS SHALL BE TO PRECLUDE THE TRANSPORT OF ALL WATERBORNE SEDIMENTS RESULTING FROM CONSTRUCTION ACTIVITIES FROM ENTERING ONTO ADJACENT PROPERTIES OR STATE WATERS. IF FIELD INSPECTION REVEALS THE INADEQUACY OF THE PLAN TO CONFINE SEDIMENT TO THE PROJECT SITE, APPROPRIATE MODIFICATIONS WILL BE MADE TO CORRECT ANY PLAN DEFICIENCIES. IN ADDITION TO THESE NOTES, ALL PROVISIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS SHALL APPLY TO THIS PROJECT.

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK", CURRENT EDITION. THE CONTRACTOR SHALL BE THOROUGHLY FAMILIAR WITH ALL APPLICABLE MEASURES CONTAINED THEREIN WHICH MAY BE PERTINENT TO THIS PROJECT.
2. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS SHALL BE PROTECTED BY A TEMPORARY CONSTRUCTION ENTRANCE TO PREVENT TRACKING OF MUD ONTO PUBLIC RIGHT-OF-WAYS. AN ENTRANCE PERMIT FROM VDOT IS REQUIRED PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN STATE RIGHT-OF-WAYS. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE THOROUGHLY CLEANED AT THE END OF EACH DAY.
3. A PRECONSTRUCTION MEETING SHALL BE HELD ON-SITE BETWEEN THE COUNTY, THE DEVELOPER, THE PROJECT ENGINEER, AND THE CONTRACTOR PRIOR TO ISSUANCE OF THE LAND DISTURBING PERMIT. THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION TO THE COUNTY FOR APPROVAL PRIOR TO THE PRECONSTRUCTION MEETING. THE CONTRACTOR WILL SUPPLY CODE COMPLIANCE WITH THE NAME OF THE INDIVIDUAL WHO WILL BE RESPONSIBLE FOR ENSURING MAINTENANCE OF INSTALLED MEASURES ON A DAILY BASIS.
4. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT ON-SITE MUST BE CONSTRUCTED AS A FIRST STEP IN GRADING AND BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE. EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER INSTALLATION. PERIODIC INSPECTIONS OF THE EROSION CONTROL MEASURES SHALL BE MADE TO ASSESS THEIR CONDITION. ANY NECESSARY MAINTENANCE OF THE MEASURES SHALL BE ACCOMPLISHED IMMEDIATELY UPON NOTIFICATION BY THE COUNTY AND SHALL INCLUDE THE REPAIR OF MEASURES DAMAGED BY ANY SUBCONTRACTOR INCLUDING THOSE OF THE PUBLIC UTILITY COMPANIES.
5. SURFACE FLOWS OVER CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER REDIRECTING FLOWS FROM TRANSVERSING THE SLOPES OR BY MECHANICAL DEVICES TO SAFELY LOWER WATER DOWNSLOPE WITHOUT CAUSING EROSION. A TEMPORARY FILL DIVERSION (STD. & SPEC. 3.10) SHALL BE INSTALLED PRIOR TO THE END OF EACH WORKING DAY.
6. SEDIMENT CONTROL MEASURES MAY REQUIRE MINOR FIELD ADJUSTMENTS AT TIME OF CONSTRUCTION TO INSURE THEIR INTENDED PURPOSE IS ACCOMPLISHED. DIVISION OF CODE COMPLIANCE APPROVAL WILL BE REQUIRED FOR OTHER DEVIATIONS FROM THE APPROVED PLANS.
7. THE CONTRACTOR SHALL PLACE SOIL STOCKPILES AT THE LOCATIONS SHOWN ON THIS PLAN OR AS DIRECTED BY THE ENGINEER. SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. OFF-SITE WASTE OR BORROW AREAS SHALL BE APPROVED BY THE DIVISION OF CODE COMPLIANCE PRIOR TO THE IMPORT OF ANY BORROW OR EXPORT OF ANY WASTE TO OR FROM THE PROJECT SITE.
8. THE CONTRACTOR SHALL COMPLETE DRAINAGE FACILITIES WITHIN 30 DAYS FOLLOWING COMPLETION OF ROUGH GRADING AT ANY POINT WITHIN THE PROJECT. THE INSTALLATION OF DRAINAGE FACILITIES SHALL TAKE PRECEDENCE OVER ALL UNDERGROUND UTILITIES. OUTFALL DITCHES FROM DRAINAGE STRUCTURES SHALL BE STABILIZED IMMEDIATELY AFTER CONSTRUCTION OF SAME. THIS INCLUDES INSTALLATION OF EROSION CONTROL STONE OR PAVED DITCHES WHERE REQUIRED. ANY DRAINAGE OUTFALLS REQUIRED FOR A STREET MUST BE COMPLETED BEFORE STREET GRADING OR UTILITY INSTALLATION BEGINS.
9. PERMANENT OR TEMPORARY SOIL STABILIZATION MUST BE APPLIED TO ALL DENUDED AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION MUST ALSO BE APPLIED TO DENUDED AREAS WHICH MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 30 DAYS. SOIL STABILIZATION MEASURES INCLUDE VEGETATIVE ESTABLISHMENT, MULCHING AND THE EARLY APPLICATION OF GRAVEL BASE MATERIAL ON AREAS TO BE PAVED.
10. NO MORE THAN 300 FEET OF SANITARY SEWER, STORM SEWER, WATERLINES, OR UNDERGROUND UTILITY LINES ARE TO BE OPEN AT ONE TIME. FOLLOWING INSTALLATION OF ANY PORTION OF THESE ITEMS, ALL DISTURBED AREAS ARE TO BE IMMEDIATELY STABILIZED (I.E., THE SAME DAY).
11. IF DISTURBED AREA STABILIZATION IS TO BE ACCOMPLISHED DURING THE MONTHS OF DECEMBER, JANUARY, OR FEBRUARY, STABILIZATION SHALL CONSIST OF MULCHING IN ACCORDANCE WITH SPECIFICATION 3.35. SEEDING WILL THEN TAKE PLACE AS SOON AS THE SEASON PERMITS.
12. THE TERM SEEDING, FINAL VEGETATIVE COVER OR STABILIZATION, ON THIS PLAN SHALL MEAN THE SUCCESSFUL GERMINATION AND ESTABLISHMENT OF A STABLE GRASS COVER FROM A PROPERLY PREPARED SEEDBED CONTAINING THE SPECIFIED AMOUNTS OF SEED, LIME, AND FERTILIZER IN ACCORDANCE WITH SPECIFICATION 3.32, PERMANENT SEEDING. IRRIGATION SHALL BE REQUIRED AS NECESSARY TO ENSURE ESTABLISHMENT OF GRASS COVER.
13. ALL SLOPES STEEPER THAN 3:1 SHALL REQUIRE THE USE OF EROSION CONTROL BLANKETS SUCH AS EXCELSIOR BLANKETS TO AID IN THE ESTABLISHMENT OF A VEGETATIVE COVER. INSTALLATION SHALL BE IN ACCORDANCE WITH SPECIFICATION 3.35, MULCHING AND MANUFACTURER'S INSTRUCTIONS. NO SLOPES SHALL BE CREATED STEEPER THAN 2:1.
14. INLET PROTECTION IN ACCORDANCE WITH SPECIFICATION 3.07 SHALL BE PROVIDED FOR ALL STORM DRAIN INLETS AS SOON AS PRACTICAL FOLLOWING CONSTRUCTION OF SAME.
15. TEMPORARY LINERS, SUCH AS POLYETHYLENE SHEETS, SHALL BE PROVIDED FOR ALL PAVED DITCHES UNTIL THE PERMANENT CONCRETE LINER IS INSTALLED.
16. PAVED DITCHES SHALL BE REQUIRED WHEREVER EROSION IS EVIDENT. PARTICULAR ATTENTION SHALL BE PAID TO THOSE AREAS WHERE GRADES EXCEED 3 PERCENT.
17. TEMPORARY EROSION CONTROL MEASURES ARE NOT TO BE REMOVED UNTIL ALL DISTURBED AREAS ARE STABILIZED. AFTER STABILIZATION IS COMPLETE, ALL MEASURES SHALL BE REMOVED WITHIN 30 DAYS. TRAPPED SEDIMENT SHALL BE SPREAD AND SEEDED.
18. AS-BUILT DRAWINGS MUST BE PROVIDED FOR ALL DETENTION/BMP FACILITIES. ALSO UPON COMPLETION, THE CONSTRUCTION OF ALL DETENTION/BMP FACILITIES SHALL BE CERTIFIED BY A PROFESSIONAL ENGINEER WHO INSPECTED THE STRUCTURE DURING CONSTRUCTION. THE CERTIFICATION SHALL STATE THAT TO THE BEST OF HIS/HER JUDGEMENT, KNOWLEDGE, AND BELIEF THE STRUCTURE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVAL PLANS AND SPECIFICATIONS.

GENERAL NOTES

1. ALL WORK TO BE IN ACCORDANCE WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION, "ROAD AND BRIDGE SPECIFICATIONS", DATED 1994, THE VIRGINIA DEPARTMENT OF TRANSPORTATION, "ROAD AND BRIDGE STANDARDS", 1993, VIRGINIA DEPARTMENT OF TRANSPORTATION AGGREGATE COMPACTION MANUAL, 1993-4, THE CURRENT EDITION OF THE VIRGINIA WORK AREA PROTECTION MANUAL, AND JCSA WATER AND SEWER STANDARDS AND SPECIFICATIONS, JULY 1, 1992, UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL MAINTAIN COPIES OF SAID DOCUMENTS AT THE JOB SITE.
2. VDOT IS TO RECEIVE WRITTEN NOTIFICATION 48 HOURS PRIOR TO THE START OF ANY WORK.
3. THE CONTRACTOR SHALL NOTIFY MISS UTILITY 72 HOURS IN ADVANCE OF ANY CONSTRUCTION.
4. THE CONTRACTOR SHALL SUBMIT ANY CHANGES TO THE APPROVED PLANS TO THE ENGINEER AND VDOT FOR REVIEW AND APPROVAL.
5. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO COMMENCEMENT OF ANY WORK.
6. THE CONTRACTOR SHALL PROTECT ALL TREES AND THEIR ROOT SYSTEMS WHICH ARE OUTSIDE THE CLEARING LIMITS.
7. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS OF ALL POINTS OF CONNECTION OF PROPOSED WORK TO EXISTING PAVEMENT, SANITARY LINES, WATER LINES, ETC., PRIOR TO CONSTRUCTION.
8. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL PRECAST DRAINAGE STRUCTURES. FIELD VERIFY THAT ALL PRECAST STRUCTURES ARE IN ACCORDANCE WITH THE APPROVED SHOP DRAWINGS AND SET ALL STRUCTURES AT THE ELEVATIONS AND LOCATIONS SHOWN ON THE APPROVED PLANS.
9. ALL STORM SEWER PIPE SHALL BE REINFORCED, TONGUE AND GROOVE CONCRETE PIPE IN ACCORDANCE WITH ASTM-C-76. PIPE SHALL BE A MINIMUM CL-III OR GREATER IN ACCORDANCE WITH VDOT STANDARDS AND SPECIFICATIONS.
10. THE CONTRACTOR SHALL PROVIDE TEMPORARY DRAINAGE DURING CONSTRUCTION TO RELIEVE AREAS THAT MAY CAUSE DAMAGE TO ROADWAYS OR ADJACENT PROPERTY.
11. ALL PIPE LENGTHS INCLUDE STANDARD ES-1 FLARED END SECTIONS WHERE NOTED.
12. ALL LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY OWNERS OF ALL UTILITIES, WHETHER OR NOT SHOWN ON PLANS, OF PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND SAFEGUARD SAME PRIOR TO COMMENCING CONSTRUCTION. VERIFICATION SHALL CONSIST OF EXPOSING THE UTILITY BY EXCAVATION AND ESTABLISHING THE EXACT HORIZONTAL AND VERTICAL LOCATION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITIES AT HIS OWN EXPENSE. THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ALL CONDITIONS, CONFLICTS IN UTILITY LOCATIONS, OR INCONSISTENCIES IN ORDER THAT THEY MAY BE RESOLVED, COORDINATED AND RECORDED.
13. THE CONTRACTOR SHALL REPLACE, WITH MATCHING MATERIALS, ANY EXISTING WORK DAMAGED DURING CONSTRUCTION.
14. THE CONTRACTOR SHALL ANNOTATE ONE SET OF REPRODUCIBLE DRAWINGS, PROVIDED BY THE ENGINEER, SHOWING THE AS-BUILT LOCATIONS OF STORM SEWERS, SANITARY SEWERS AND WATER LINES, LOCATIONS WHERE UNSUITABLE MATERIALS OR CONDITIONS WERE ENCOUNTERED, THE AMOUNT AND LIMITS OF UNSUITABLE MATERIALS OR CONDITIONS AND ANY UNDERCUT OR BACKFILLING REQUIRED.
15. THE CONTRACTOR SHALL ENSURE THAT TRUCKS LEAVING SITE ARE CLEANED SUFFICIENTLY SO AS NOT TO CREATE A ROADWAY NUISANCE OR HAZARD.
16. THE CONTRACTOR SHALL REMOVE FROM THE SITE, ALL EXCESS MATERIAL AND ALL MATERIAL CONSIDERED UNSATISFACTORY FOR BACKFILL AND DISPOSE OF PROPERLY, UNLESS OTHERWISE DIRECTED OR APPROVED BY THE OWNER AND AT NO ADDITIONAL COST TO THE OWNER.
17. THE CONTRACTOR SHALL CLEAN ALL ROADS, EMBANKMENTS AND OTHER WORK AREAS AND LEAVE SITE IN A CLEAN ORDERLY FINISHED CONDITION.
18. CONTRACTOR FURNISH TO ENGINEER COMPACTION TEST RESULTS, BY A CERTIFIED MATERIALS TESTING COMPANY FOR EACH CLASS OF WORK AS FOLLOWS WITH ALL TESTS CLEARLY ANNOTATED AND CROSS REFERENCED ON A SITE PLAN, CLEARLY INDICATING THE LOCATION AT EACH TEST.
    - ON ROADWAYS WITHOUT PARKING: PROVIDE CBR TESTS ON ROADWAY SUBGRADE AT INTERVALS NOT TO EXCEED 500 FT.
    - IN PARKING LOTS, PROVIDE TESTS AT THE RATE OF 1 TEST FOR EACH 30 SPACES, WITH 1/3 OF TEST LOCATED IN THE TRAVEL LANE AND 2/3 IN PARKING SPACES.
    - PROVIDE COMPACTION TEST FOR UTILITY AND STORMDRAIN TRENCH FILLS EVERY 4 FEET VERTICALLY AND AT EVERY 100 FEET HORIZONTALLY.
    - PROVIDE COMPACTION TESTS FOR FILL EMBANKMENTS EVERY 4 FEET VERTICALLY AND AT HORIZONTAL INTERVALS NOT TO EXCEED 50 FEET.
    - ON ROADWAYS WITHOUT PARKING, PROVIDE ROADWAY SUBGRADE AND AGGREGATE BASE COMPACTION TESTS EVERY 500 FEET HORIZONTALLY AT CENTER OF ALTERNATING LANES.
    - CONTRACTOR CERTIFY TO ENGINEER ON THE FINAL COMPOSITE TEST REPORT AND ANNOTATED SITE PLAN THAT THE COMPLETED WORK AS TESTED MEETS OR EXCEEDS ALL THE REQUIREMENTS AND SPECIFICATIONS.
    - ANY OFF-SITE FILL MATERIAL REQUIRED TO COMPLETE THE PROJECT MUST BE TESTED AND APPROVED BY THE OWNER OR ENGINEER PRIOR TO DELIVERY TO SITE.
19. THE SUBGRADE MUST BE APPROVED BY THE OWNER PRIOR TO PLACEMENT OF BASE.
20. BASE MUST BE APPROVED BY THE OWNER FOR DEPTH, TEMPLATE, AND COMPACTION BEFORE SURFACE IS APPLIED.
21. THE CONTRACTOR SHALL CERTIFY TO THE OWNER WITH THE FINAL COMPOSITE TEST REPORT AND ANNOTATED PLAN, THAT THE COMPLETED WORK, INCLUDING CERTIFICATION AND SOURCE OF MATERIALS, AS TESTED MEETS OR EXCEEDS ALL THE REQUIREMENTS AND SPECIFICATIONS.
22. ANY OFF-SITE FILL MATERIAL REQUIRED TO COMPLETE THE PROJECT MUST BE TESTED AND APPROVED BY THE OWNER PRIOR TO DELIVERY TO SITE.
23. THE CONTRACTOR SHALL REPORT ANY CONFLICTS OR DISCREPANCIES ON THIS PLAN TO THE ENGINEER FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.
24. ALL STORM SEWER PIPES, DROP INLETS, AND CURB INLETS SHALL BE CLEANED OF DEBRIS AND ERODED MATERIAL DURING LAST STAGES OF CONSTRUCTION.
25. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL TRAFFIC CONTROL SIGNAGE, STRIPING AND MARKINGS IN ACCORDANCE WITH VDOT STANDARDS AND SPECIFICATIONS.
26. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND UTILITIES PRIOR TO PLACEMENT OF BASE MATERIAL.
27. THE CONTRACTOR IS INVITED TO WALK THE SITE, VERIFY ALL EXISTING CONDITIONS, TAKE SOIL BORINGS AND PERFORM GEOTECHNICAL EVALUATIONS AS HE IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH COMPLETING THE PROJECT. NO FUTURE ADJUSTMENT TO THE CONTRACT PRICE FOR UNFORESEEN CONDITIONS WILL BE MADE. THE CONTRACTOR SHALL PROVIDE ANY AND ALL ADDITIONAL FILL MATERIAL AT HIS EXPENSE.
28. A GEOTECHNICAL ENGINEERING REPORT HAS BEEN PREPARED FOR THIS PROJECT BY HERBERT AND ASSOCIATES AND IS AVAILABLE FOR REVIEW FROM THE OWNER.
29. CONTRACTOR SHALL PERFORM TESTING OF WATER AND SEWER IN ACCORDANCE WITH JCSA REQUIREMENTS.

COMMONWEALTH OF VIRGINIA
8-7-96
STEPHEN A. POMEO
No. 1440-B
LAND SURVEYOR

Langley and McDonald, P.C.
Engineers • Surveyors • Planners
Landscape Architects • Environmental Consultants
WILLIAMSBURG VIRGINIA BEACH

DES.	
DWN.	SAR
CHK.	SAR
DATE	AUG. 12, 1996

NOTES AND DETAILS
RIVERSIDE MEDICAL CENTER
AT NORGE
FOR
C. RICHARD DOBSON BUILDERS, INC.
JAMES CITY COUNTY, VIRGINIA

PROJ. NO.	85040-92
SCALE:	
SHEET	2 OF 2
DWG.	6090W

REVISED: 9/12/96 PER COUNTY COMMENTS

As Builts -

Riverside Med Cntr.

(None found?)

Langley and McDonald, P.C.
ENGINEERS • SURVEYORS • PLANNERS
LANDSCAPE ARCHITECTS • ENVIRONMENTAL CONSULTANTS
VIRGINIA BEACH • WILLIAMSBURG, VIRGINIA

Subject RIVERSIDE MEDICAL CENTER - SWM CALCS
Computed By DSL Checked By _____

Project No. 8504092
Client RIVERSIDE/DOBSON
Date 8-1-96 Sheet No. _____

PREDEVELOPMENT CONDITIONS

SITE AREA = 1.51 AC ABANDONED SF HOMESITE
C = 0.25

OFFSITE DRAINAGE THROUGH SITE -
NORTH OF SITE = 0.9 AC, C = 0.25
EAST OF SITE = 0.5 AC, C = 0.25

TIME OF CONCENTRATION
80' OVERLAND FLOW ~1% slope
HIGH GRASS 17 min
245' OVERLAND ~2.9% SLOPE
HIGH GRASS 22 MIN
270' FLAT ROADSIDE SWALE 5 MIN
44 MIN

PREDEVELOPMENT RUNOFF TOTAL SITE & ALL OFFSITE
2 YEAR
$Q_p = CIA = (0.25)(2.0)(1.5+0.5+0.9)$
$= 1.45$ cfs

PREDEVELOPMENT RUNOFF FROM AREA DRAINED THROUGH BMP

2 YEAR
$Q_{P_{2PRE}} = (0.25)(2.0)(1.12+0.9)$
$= 1.01$ cfs
10 YEAR
$Q_{P10PRE} = (0.25)(2.8)(2.02) = 1.41$ cfs

RECEIVING STORM SYSTEM IS NOT WELL DOCUMENTED
INTENSIVE FIELD WORK REQUIRED TO DETERMINE
UPSTREAM FLOWS & AVAILABLE CAPACITY IN PIPES
THEREFORE DETAILED POST DEVELOPMENT Q < PREDEV

RIVERSIDE MEDICAL
ENORGE
REVISED LAYOUT
AUG 1, 1996
L&M 8504092
JCC SP-66-96

TABLE 3

WORKSHEET FOR BMP POINT SYSTEM

A. STRUCTURAL BMP POINT ALLOCATION

BMP	BMP Points		Fraction of Site Served by BMP		Weighted BMP Points
0.5 INCH RUNOFF INFILTRATION TRENCH	9	x	(1.12+0.9) 1.51	=	12.0
		x		=	
		x		=	
		x		=	

TOTAL WEIGHTED STRUCTURAL BMP POINTS: _____

B. NATURAL OPEN SPACE CREDIT

Fraction of Site		Natural Open Space Credit		Points for Natural Open Space
	x	(0.1 per 1%)	=	

C. TOTAL WEIGHTED POINTS

12	+	0	=	12 >10 ok
Structural BMP Points		Natural Open Space Points		TOTAL

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LANDSCAPE ARCHITECTS • ENVIRONMENTAL CONSULTANTS
VIRGINIA BEACH • WILLIAMSBURG, VIRGINIA

Subject TRENCH SIZING

Computed By DSL Checked By

Project No. 85040-92
Client RIVERSIDE/DOBSON
Date 8-1-96 Sheet No.

9-POINT BMP INFILTRATION TRENCH -
VOLUME REQUIRED = 0.5 INCH RUNOFF OVER
~~ENTIRE DRAINAGE AREA~~
imp area

DRAINAGE AREA = 2.02 AC

VOL. REQ'D = 2.02 AC × 0.5 IN. RUNOFF ÷ 12 ÷ 40% VOIDS
= 0.21 AC-FT = ~~9166~~ CF
5500 "

IF 6' DEEP - REQUIRED SURFACE AREA
= 10' × 153
OR 20 × 76
OR 15 × 102 6' × 15' × 61'
or
6' × 10' × 92'

MINIMUM WIDTH AVAILABLE TO MAINTAIN
20' BUFFER STRIP
∴ USE 10 × 153 × 6' DEEP

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LANDSCAPE ARCHITECTS • ENVIRONMENTAL CONSULTANTS
VIRGINIA BEACH • WILLIAMSBURG, VIRGINIA

Subject SPILT TRENCH

Computed By DSL Checked By _____

Project No. 85-040-92
RIVERSIDE
Client DOBSON

Date 8-5-96 Sheet No. _____

153 FOOT LONG TRENCH CROSSES WATER LINE
⇒ NEED TO DIVIDE

DRAINAGE AREA NE OF WL = 0.9 + 0.29 + 0.21
= 1.40 AC

VOL NEEDED NE OF WL = 1.40 AC × 0.5 in runoff ÷ 40%
= 0.15 AC-FT = 6353 CF
= 6 × 10 × 106' LONG

DRAINGE AREA SW OF WL = 0.62 AC
- CONTAINS MAJORITY OF IMPERVIOUS SURFACES

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:07:29
Watershed file: --> a:NORGE2 .WSD
Hydrograph file: --> a:NORGE2 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
2 YEAR STORM

>>>> Input Parameters Used to Compute Hydrograph <<<<

Subarea Description	AREA (acres)	CN	Tc (hrs)	* Tt (hrs)	Precip. (in)	Runoff (in)	Ia/p input	Ia/p used
THROUGH INF TR	2.02	83.0	0.75	0.00	3.37	1.75	.12	.10

* Travel time from subarea outfall to composite watershed outfall point.
Total area = 2.02 acres or 0.00316 sq.mi
Peak discharge = 2 cfs

>>>> Computer Modifications of Input Parameters <<<<<

Subarea Description	Input Values Tc (hr)	Input Values * Tt (hr)	Rounded Values Tc (hr)	Rounded Values * Tt (hr)	Ia/p Interpolated (Yes/No)	Ia/p Messages
HROUGH INF TR	0.75	0.00	**	**	No	--

* Travel time from subarea outfall to composite watershed outfall point.
(Tc & Tt are available in the hydrograph tables.

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:07:29
Watershed file: --> a:NORGE2 .WSD
Hydrograph file: --> a:NORGE2 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
2 YEAR STORM

)))) Summary of Subarea Times to Peak ((((

Subarea	Peak Discharge at Composite Outfall (cfs)	Time to Peak at Composite Outfall (hrs)
THROUGH INF TR	2	12.4
Composite Watershed	2	12.4

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:07:29
Watershed file: --> a:NORGE2 .WSD
Hydrograph file: --> a:NORGE2 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
2 YEAR STORM

Composite Hydrograph Summary (cfs)

Subarea Description	11.0 hr	11.3 hr	11.6 hr	11.9 hr	12.0 hr	12.1 hr	12.2 hr	12.3 hr	12.4 hr
HROUGH INF TR	0	0	0	0	0	0	1	1	2
otal (cfs)	0	0	0	0	0	0	1	1	2

Subarea Description	12.5 hr	12.6 hr	12.7 hr	12.8 hr	13.0 hr	13.2 hr	13.4 hr	13.6 hr	13.8 hr
HROUGH INF TR	2	2	2	2	1	1	1	1	0
otal (cfs)	2	2	2	2	1	1	1	1	0

Subarea Description	14.0 hr	14.3 hr	14.6 hr	15.0 hr	15.5 hr	16.0 hr	16.5 hr	17.0 hr	17.5 hr
HROUGH INF TR	0	0	0	0	0	0	0	0	0
otal (cfs)	0	0	0	0	0	0	0	0	0

Subarea Description	18.0 hr	19.0 hr	20.0 hr	22.0 hr	26.0 hr
HROUGH INF TR	0	0	0	0	0
otal (cfs)	0	0	0	0	0

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:07:29
Watershed file: --> a:NORGE2 .WSD
Hydrograph file: --> a:NORGE2 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
2 YEAR STORM

Time (hrs)	Flow (cfs)	Time (hrs)	Flow (cfs)
11.0	0	14.8	0
11.1	0	14.9	0
11.2	0	15.0	0
11.3	0	15.1	0
11.4	0	15.2	0
11.5	0	15.3	0
11.6	0	15.4	0
11.7	0	15.5	0
11.8	0	15.6	0
11.9	0	15.7	0
12.0	0	15.8	0
12.1	0	15.9	0
12.2	1	16.0	0
12.3	1	16.1	0
12.4	2	16.2	0
12.5	2	16.3	0
12.6	2	16.4	0
12.7	2	16.5	0
12.8	2	16.6	0
12.9	2	16.7	0
13.0	1	16.8	0
13.1	1	16.9	0
13.2	1	17.0	0
13.3	1	17.1	0
13.4	1	17.2	0
13.5	1	17.3	0
13.6	1	17.4	0
13.7	0	17.5	0
13.8	0	17.6	0
13.9	0	17.7	0
14.0	0	17.8	0
14.1	0	17.9	0
14.2	0	18.0	0
14.3	0	18.1	0
14.4	0	18.2	0
14.5	0	18.3	0
14.6	0	18.4	0
14.7	0	18.5	0

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:07:29
Watershed file: --> a:NORGE2 .WSD
Hydrograph file: --> a:NORGE2 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
2 YEAR STORM

Time (hrs)	Flow (cfs)	Time (hrs)	Flow (cfs)
18.6	0	22.4	0
18.7	0	22.5	0
18.8	0	22.6	0
18.9	0	22.7	0
19.0	0	22.8	0
19.1	0	22.9	0
19.2	0	23.0	0
19.3	0	23.1	0
19.4	0	23.2	0
19.5	0	23.3	0
19.6	0	23.4	0
19.7	0	23.5	0
19.8	0	23.6	0
19.9	0	23.7	0
20.0	0	23.8	0
20.1	0	23.9	0
20.2	0	24.0	0
20.3	0	24.1	0
20.4	0	24.2	0
20.5	0	24.3	0
20.6	0	24.4	0
20.7	0	24.5	0
20.8	0	24.6	0
20.9	0	24.7	0
21.0	0	24.8	0
21.1	0	24.9	0
21.2	0	25.0	0
21.3	0	25.1	0
21.4	0	25.2	0
21.5	0	25.3	0
21.6	0	25.4	0
21.7	0	25.5	0
21.8	0	25.6	0
21.9	0	25.7	0
22.0	0	25.8	0
22.1	0	25.9	0
22.2	0		
22.3	0		

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:09:37
Watershed file: --> a:NORGE10 .WSD
Hydrograph file: --> a:NORGE10 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
10-YEAR STORM

)))) Input Parameters Used to Compute Hydrograph ((((

Subarea Description	AREA (acres)	CN	Tc (hrs)	* Tt (hrs)	Precip. (in)	Runoff (in)	Ia/p input	Ia/p used
THROUGH INF TR	2.02	83.0	0.75	0.00	5.04	3.21	.08	.10

* Travel time from subarea outfall to composite watershed outfall point.
Total area = 2.02 acres or 0.00316 sq.mi
Peak discharge = 4 cfs

)))) Computer Modifications of Input Parameters (((((

Subarea Description	Input Values Tc (hr)	Input Values * Tt (hr)	Rounded Values Tc (hr)	Rounded Values * Tt (hr)	Ia/p Interpolated (Yes/No)	Ia/p Messages
HROUGH INF TR	0.75	0.00	**	**	No	Computed Ia/p (.1

* Travel time from subarea outfall to composite watershed outfall point.
* Tc & Tt are available in the hydrograph tables.

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:09:37
Watershed file: --> a:NORGE10 .WSD
Hydrograph file: --> a:NORGE10 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
10-YEAR STORM

>>>> Summary of Subarea Times to Peak <<<<

Subarea	Peak Discharge at Composite Outfall (cfs)	Time to Peak at Composite Outfall (hrs)
THROUGH INF TR	4	12.5
Composite Watershed	4	12.5

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:09:37
Watershed file: --> a:NORGE10 .WSD
Hydrograph file: --> a:NORGE10 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
10-YEAR STORM

Composite Hydrograph Summary (cfs)

Subarea Description	11.0 hr	11.3 hr	11.6 hr	11.9 hr	12.0 hr	12.1 hr	12.2 hr	12.3 hr	12.4 hr
HROUGH INF TR	0	0	0	0	0	1	1	2	3
otal (cfs)	0	0	0	0	0	1	1	2	3

Subarea Description	12.5 hr	12.6 hr	12.7 hr	12.8 hr	13.0 hr	13.2 hr	13.4 hr	13.6 hr	13.8 hr
HROUGH INF TR	4	4	4	4	3	2	1	1	1
otal (cfs)	4	4	4	4	3	2	1	1	1

Subarea Description	14.0 hr	14.3 hr	14.6 hr	15.0 hr	15.5 hr	16.0 hr	16.5 hr	17.0 hr	17.5 hr
HROUGH INF TR	1	0	0	0	0	0	0	0	0
otal (cfs)	1	0	0	0	0	0	0	0	0

Subarea Description	18.0 hr	19.0 hr	20.0 hr	22.0 hr	26.0 hr
HROUGH INF TR	0	0	0	0	0
otal (cfs)	0	0	0	0	0

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:09:37
Watershed file: --> a:NORGE10 .WSD
Hydrograph file: --> a:NORGE10 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
10-YEAR STORM

Time (hrs)	Flow (cfs)	Time (hrs)	Flow (cfs)
11.0	0	14.8	0
11.1	0	14.9	0
11.2	0	15.0	0
11.3	0	15.1	0
11.4	0	15.2	0
11.5	0	15.3	0
11.6	0	15.4	0
11.7	0	15.5	0
11.8	0	15.6	0
11.9	0	15.7	0
12.0	0	15.8	0
12.1	1	15.9	0
12.2	1	16.0	0
12.3	2	16.1	0
12.4	3	16.2	0
12.5	4	16.3	0
12.6	4	16.4	0
12.7	4	16.5	0
12.8	4	16.6	0
12.9	4	16.7	0
13.0	3	16.8	0
13.1	2	16.9	0
13.2	2	17.0	0
13.3	2	17.1	0
13.4	1	17.2	0
13.5	1	17.3	0
13.6	1	17.4	0
13.7	1	17.5	0
13.8	1	17.6	0
13.9	1	17.7	0
14.0	1	17.8	0
14.1	1	17.9	0
14.2	0	18.0	0
14.3	0	18.1	0
14.4	0	18.2	0
14.5	0	18.3	0
14.6	0	18.4	0
14.7	0	18.5	0

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:09:37
Watershed file: --> a:NORGE10 .WSD
Hydrograph file: --> a:NORGE10 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
10-YEAR STORM

Time (hrs)	Flow (cfs)	Time (hrs)	Flow (cfs)
18.6	0	22.4	0
18.7	0	22.5	0
18.8	0	22.6	0
18.9	0	22.7	0
19.0	0	22.8	0
19.1	0	22.9	0
19.2	0	23.0	0
19.3	0	23.1	0
19.4	0	23.2	0
19.5	0	23.3	0
19.6	0	23.4	0
19.7	0	23.5	0
19.8	0	23.6	0
19.9	0	23.7	0
20.0	0	23.8	0
20.1	0	23.9	0
20.2	0	24.0	0
20.3	0	24.1	0
20.4	0	24.2	0
20.5	0	24.3	0
20.6	0	24.4	0
20.7	0	24.5	0
20.8	0	24.6	0
20.9	0	24.7	0
21.0	0	24.8	0
21.1	0	24.9	0
21.2	0	25.0	0
21.3	0	25.1	0
21.4	0	25.2	0
21.5	0	25.3	0
21.6	0	25.4	0
21.7	0	25.5	0
21.8	0	25.6	0
21.9	0	25.7	0
22.0	0	25.8	0
22.1	0	25.9	0
22.2	0		
22.3	0		

POND-2 Version: 5.20 S/N:
EXECUTED: 09-12-1996 11:11:32

```
*************************************
*                                   *
*   RIVERSIDE MEDICAL CENTER AT NORGE *
*     INFILTRATION TRENCH OVERFLOW    *
*              2 YEAR STORM           *
*                                   *
*                                   *
*************************************
```

Inflow Hydrograph: A:NORGE2 .HYD
Rating Table file: A:NORGE2 .PND

----INITIAL CONDITIONS----
Elevation = 108.60 ft
Outflow = 0.00 cfs
Storage = 0.00 ac-ft

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS		
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (ac-ft)		2S/t (cfs)	2S/t + O (cfs)
108.60	0.0	0.000		0.0	0.0
108.85	0.0	0.009		2.1	2.1
109.10	0.0	0.017		4.2	4.2
109.35	0.0	0.026		6.3	6.3
109.60	0.0	0.034		8.3	8.3
109.85	0.0	0.043		10.4	10.4
110.10	0.0	0.052		12.5	12.5
110.35	0.0	0.060		14.6	14.6
110.60	0.0	0.069		16.7	16.7
110.85	0.0	0.077		18.8	18.8
111.10	0.0	0.086		20.9	20.9
111.20	0.0	0.091		22.0	22.0
111.35	0.1	0.099		24.0	24.1
111.60	0.3	0.117		28.3	28.6
111.80	0.5	0.136		32.9	33.4
111.85	0.6	0.141		34.2	34.8
111.90	0.6	0.147		35.6	36.2
112.10	0.8	0.173		41.9	42.7
112.35	0.9	0.213		51.7	52.6
112.50	1.2	0.240		58.0	59.2
112.60	1.4	0.259		62.7	64.1
112.85	2.7	0.317		76.8	79.5

Time increment (t) = 0.100 hrs.

EXECUTED: 09-12-1996 11:11:32

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE2 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH — ROUTING COMPUTATIONS

TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
11.000	0.00	-----	0.0	0.0	0.00	108.60
11.100	0.00	0.0	0.0	0.0	0.00	108.60
11.200	0.00	0.0	0.0	0.0	0.00	108.60
11.300	0.00	0.0	0.0	0.0	0.00	108.60
11.400	0.00	0.0	0.0	0.0	0.00	108.60
11.500	0.00	0.0	0.0	0.0	0.00	108.60
11.600	0.00	0.0	0.0	0.0	0.00	108.60
11.700	0.00	0.0	0.0	0.0	0.00	108.60
11.800	0.00	0.0	0.0	0.0	0.00	108.60
11.900	0.00	0.0	0.0	0.0	0.00	108.60
12.000	0.00	0.0	0.0	0.0	0.00	108.60
12.100	0.00	0.0	0.0	0.0	0.00	108.60
12.200	1.00	1.0	1.0	1.0	0.00	108.72
12.300	1.00	2.0	3.0	3.0	0.00	108.96
12.400	2.00	3.0	6.0	6.0	0.00	109.32
12.500	2.00	4.0	10.0	10.0	0.00	109.80
12.600	2.00	4.0	14.0	14.0	0.00	110.28
12.700	2.00	4.0	18.0	18.0	0.00	110.76
12.800	2.00	4.0	22.0	22.0	0.00	111.20
12.900	2.00	4.0	25.6	26.0	0.18	111.46
13.000	1.00	3.0	28.0	28.6	0.30	111.60
13.100	1.00	2.0	29.3	30.0	0.36	111.66
13.200	1.00	2.0	30.5	31.3	0.41	111.71
13.300	1.00	2.0	31.6	32.5	0.46	111.76
13.400	1.00	2.0	32.5	33.6	0.51	111.81
13.500	1.00	2.0	33.4	34.5	0.58	111.84
13.600	1.00	2.0	34.2	35.4	0.60	111.87
13.700	0.00	1.0	34.0	35.2	0.60	111.86
13.800	0.00	0.0	32.9	34.0	0.54	111.82
13.900	0.00	0.0	31.9	32.9	0.48	111.78
14.000	0.00	0.0	31.1	31.9	0.44	111.74
14.100	0.00	0.0	30.3	31.1	0.40	111.70
14.200	0.00	0.0	29.5	30.3	0.37	111.67
14.300	0.00	0.0	28.9	29.5	0.34	111.64
14.400	0.00	0.0	28.2	28.9	0.31	111.61
14.500	0.00	0.0	27.7	28.2	0.28	111.58
14.600	0.00	0.0	27.2	27.7	0.26	111.55
14.700	0.00	0.0	26.7	27.2	0.24	111.52
14.800	0.00	0.0	26.3	26.7	0.21	111.49
14.900	0.00	0.0	25.9	26.3	0.20	111.47
15.000	0.00	0.0	25.5	25.9	0.18	111.45
15.100	0.00	0.0	25.2	25.5	0.16	111.43
15.200	0.00	0.0	24.9	25.2	0.15	111.41
15.300	0.00	0.0	24.6	24.9	0.14	111.39
15.400	0.00	0.0	24.4	24.6	0.12	111.38

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE2 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
15.500	0.00	0.0	24.1	24.4	0.11	111.37
15.600	0.00	0.0	23.9	24.1	0.10	111.35
15.700	0.00	0.0	23.7	23.9	0.09	111.34
15.800	0.00	0.0	23.6	23.7	0.08	111.33
15.900	0.00	0.0	23.4	23.6	0.08	111.31
16.000	0.00	0.0	23.3	23.4	0.07	111.30
16.100	0.00	0.0	23.2	23.3	0.06	111.29
16.200	0.00	0.0	23.1	23.2	0.06	111.28
16.300	0.00	0.0	23.0	23.1	0.05	111.28
16.400	0.00	0.0	22.9	23.0	0.05	111.27
16.500	0.00	0.0	22.8	22.9	0.04	111.26
16.600	0.00	0.0	22.7	22.8	0.04	111.26
16.700	0.00	0.0	22.6	22.7	0.03	111.25
16.800	0.00	0.0	22.6	22.6	0.03	111.25
16.900	0.00	0.0	22.5	22.6	0.03	111.24
17.000	0.00	0.0	22.5	22.5	0.03	111.24
17.100	0.00	0.0	22.4	22.5	0.02	111.23
17.200	0.00	0.0	22.4	22.4	0.02	111.23
17.300	0.00	0.0	22.3	22.4	0.02	111.23
17.400	0.00	0.0	22.3	22.3	0.02	111.23
17.500	0.00	0.0	22.3	22.3	0.02	111.22
17.600	0.00	0.0	22.3	22.3	0.01	111.22
17.700	0.00	0.0	22.2	22.3	0.01	111.22
17.800	0.00	0.0	22.2	22.2	0.01	111.22
17.900	0.00	0.0	22.2	22.2	0.01	111.22
18.000	0.00	0.0	22.2	22.2	0.01	111.21
18.100	0.00	0.0	22.2	22.2	0.01	111.21
18.200	0.00	0.0	22.1	22.2	0.01	111.21
18.300	0.00	0.0	22.1	22.1	0.01	111.21
18.400	0.00	0.0	22.1	22.1	0.01	111.21
18.500	0.00	0.0	22.1	22.1	0.01	111.21
18.600	0.00	0.0	22.1	22.1	0.00	111.21
18.700	0.00	0.0	22.1	22.1	0.00	111.21
18.800	0.00	0.0	22.1	22.1	0.00	111.21
18.900	0.00	0.0	22.1	22.1	0.00	111.21
19.000	0.00	0.0	22.1	22.1	0.00	111.20
19.100	0.00	0.0	22.1	22.1	0.00	111.20
19.200	0.00	0.0	22.0	22.1	0.00	111.20
19.300	0.00	0.0	22.0	22.0	0.00	111.20
19.400	0.00	0.0	22.0	22.0	0.00	111.20
19.500	0.00	0.0	22.0	22.0	0.00	111.20
19.600	0.00	0.0	22.0	22.0	0.00	111.20
19.700	0.00	0.0	22.0	22.0	0.00	111.20
19.800	0.00	0.0	22.0	22.0	0.00	111.20
19.900	0.00	0.0	22.0	22.0	0.00	111.20
20.000	0.00	0.0	22.0	22.0	0.00	111.20

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE2 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH — ROUTING COMPUTATIONS

TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
20.100	0.001	0.0	22.0	22.01	0.00	111.20
20.200	0.001	0.0	22.0	22.01	0.00	111.20
20.300	0.001	0.0	22.0	22.01	0.00	111.20
20.400	0.001	0.0	22.0	22.01	0.00	111.20
20.500	0.001	0.0	22.0	22.01	0.00	111.20
20.600	0.001	0.0	22.0	22.01	0.00	111.20
20.700	0.001	0.0	22.0	22.01	0.00	111.20
20.800	0.001	0.0	22.0	22.01	0.00	111.20
20.900	0.001	0.0	22.0	22.01	0.00	111.20
21.000	0.001	0.0	22.0	22.01	0.00	111.20
21.100	0.001	0.0	22.0	22.01	0.00	111.20
21.200	0.001	0.0	22.0	22.01	0.00	111.20
21.300	0.001	0.0	22.0	22.01	0.00	111.20
21.400	0.001	0.0	22.0	22.01	0.00	111.20
21.500	0.001	0.0	22.0	22.01	0.00	111.20
21.600	0.001	0.0	22.0	22.01	0.00	111.20
21.700	0.001	0.0	22.0	22.01	0.00	111.20
21.800	0.001	0.0	22.0	22.01	0.00	111.20
21.900	0.001	0.0	22.0	22.01	0.00	111.20
22.000	0.001	0.0	22.0	22.01	0.00	111.20
22.100	0.001	0.0	22.0	22.01	0.00	111.20
22.200	0.001	0.0	22.0	22.01	0.00	111.20
22.300	0.001	0.0	22.0	22.01	0.00	111.20
22.400	0.001	0.0	22.0	22.01	0.00	111.20
22.500	0.001	0.0	22.0	22.01	0.00	111.20
22.600	0.001	0.0	22.0	22.01	0.00	111.20
22.700	0.001	0.0	22.0	22.01	0.00	111.20
22.800	0.001	0.0	22.0	22.01	0.00	111.20
22.900	0.001	0.0	22.0	22.01	0.00	111.20
23.000	0.001	0.0	22.0	22.01	0.00	111.20
23.100	0.001	0.0	22.0	22.01	0.00	111.20
23.200	0.001	0.0	22.0	22.01	0.00	111.20
23.300	0.001	0.0	22.0	22.01	0.00	111.20
23.400	0.001	0.0	22.0	22.01	0.00	111.20
23.500	0.001	0.0	22.0	22.01	0.00	111.20
23.600	0.001	0.0	22.0	22.01	0.00	111.20
23.700	0.001	0.0	22.0	22.01	0.00	111.20
23.800	0.001	0.0	22.0	22.01	0.00	111.20
23.900	0.001	0.0	22.0	22.01	0.00	111.20
24.000	0.001	0.0	22.0	22.01	0.00	111.20
24.100	0.001	0.0	22.0	22.01	0.00	111.20
24.200	0.001	0.0	22.0	22.01	0.00	111.20
24.300	0.001	0.0	22.0	22.01	0.00	111.20
24.400	0.001	0.0	22.0	22.01	0.00	111.20
24.500	0.001	0.0	22.0	22.01	0.00	111.20
24.600	0.001	0.0	22.0	22.01	0.00	111.20

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE2 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
24.700	0.001	0.0	22.0	22.01	0.00	111.20
24.800	0.001	0.0	22.0	22.01	0.00	111.20
24.900	0.001	0.0	22.0	22.01	0.00	111.20
25.000	0.001	0.0	22.0	22.01	0.00	111.20
25.100	0.001	0.0	22.0	22.01	0.00	111.20
25.200	0.001	0.0	22.0	22.01	0.00	111.20
25.300	0.001	0.0	22.0	22.01	0.00	111.20
25.400	0.001	0.0	22.0	22.01	0.00	111.20
25.500	0.001	0.0	22.0	22.01	0.00	111.20
25.600	0.001	0.0	22.0	22.01	0.00	111.20
25.700	0.001	0.0	22.0	22.01	0.00	111.20
25.800	0.001	0.0	22.0	22.01	0.00	111.20
25.900	0.001	0.0	22.0	22.01	0.00	111.20

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE2 .HYD
Outflow Hydrograph: A:OUT .HYD

Starting Pond W.S. Elevation = 108.60 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow = 2.00 cfs
Peak Outflow = 0.60 cfs
Peak Elevation = 111.87 ft

2-year

***** Summary of Approximate Peak Storage *****

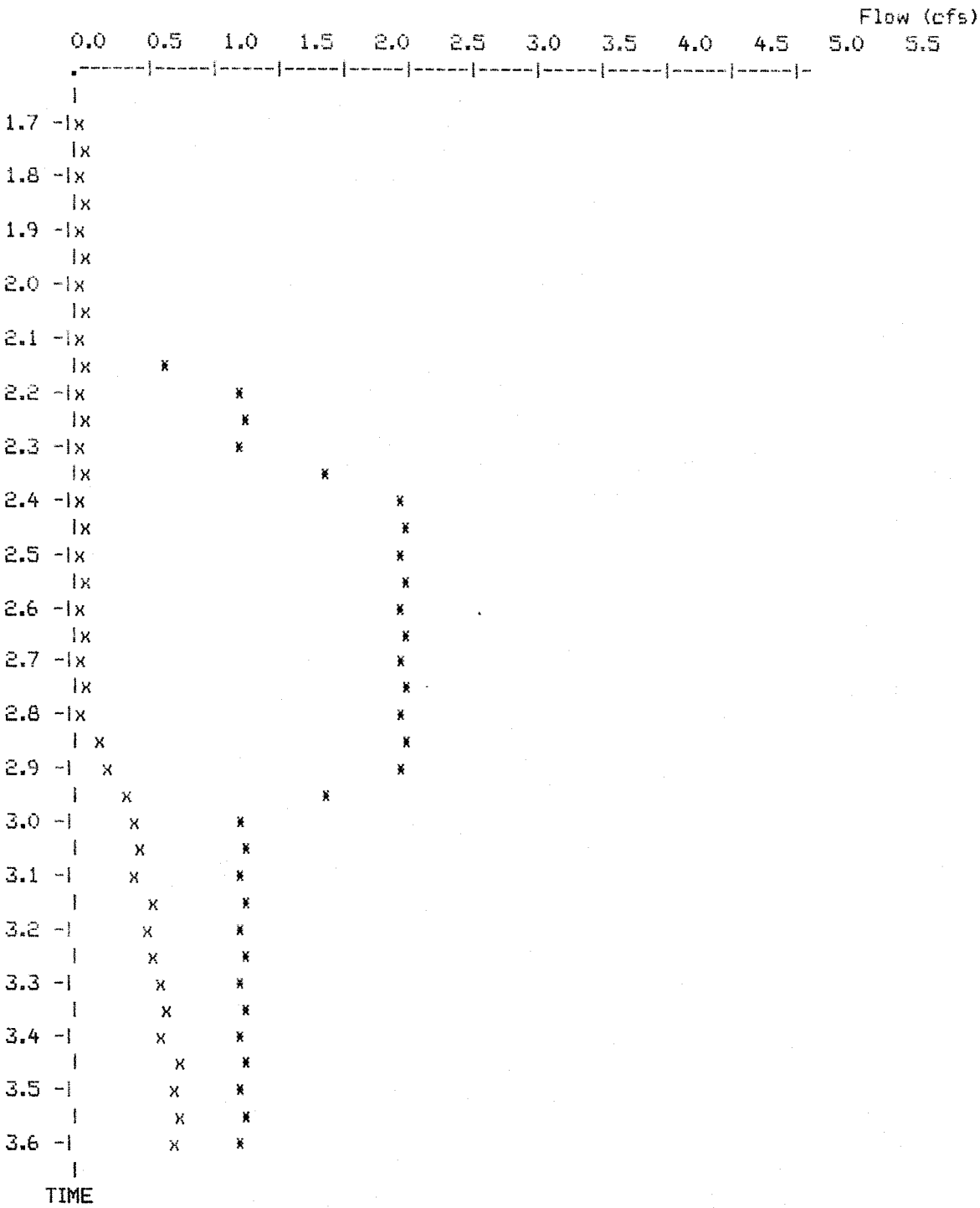
Initial Storage = 0.00 ac-ft
Peak Storage From Storm = 0.14 ac-ft

Total Storage in Pond = 0.14 ac-ft

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE2 .HYD
Outflow Hydrograph: A:OUT .HYD

EXECUTED: 09-12-1996
11:11:32

Peak Inflow = 2.00 cfs
Peak Outflow = 0.60 cfs
Peak Elevation = 111.87 ft



* File: A:NORGE2 .HYD Qmax = 2.0 cfs
x File: A:OUT .HYD Qmax = 0.6 cfs

```
*************************************
*                                   *
*   RIVERSIDE MEDICAL CENTER AT NORGE *
*     INFILTRATION TRENCH OVERFLOW    *
*              10 YAER STORM          *
*                                     *
*                                     *
*************************************
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Inflow Hydrograph: A:NORGE10 .HYD
Rating Table file: A:NORGE2 .PND

----INITIAL CONDITIONS----
Elevation = 108.60 ft
Outflow = 0.00 cfs
Storage = 0.00 ac-ft

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS	
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (ac-ft)	2S/t (cfs)	2S/t + O (cfs)
108.60	0.0	0.000	0.0	0.0
108.85	0.0	0.009	2.1	2.1
109.10	0.0	0.017	4.2	4.2
109.35	0.0	0.026	6.3	6.3
109.60	0.0	0.034	8.3	8.3
109.85	0.0	0.043	10.4	10.4
110.10	0.0	0.052	12.5	12.5
110.35	0.0	0.060	14.6	14.6
110.60	0.0	0.069	16.7	16.7
110.85	0.0	0.077	18.8	18.8
111.10	0.0	0.086	20.9	20.9
111.20	0.0	0.091	22.0	22.0
111.35	0.1	0.099	24.0	24.1
111.60	0.3	0.117	28.3	28.6
111.80	0.5	0.136	32.9	33.4
111.85	0.6	0.141	34.2	34.8
111.90	0.6	0.147	35.6	36.2
112.10	0.8	0.173	41.9	42.7
112.35	0.9	0.213	51.7	52.6
112.50	1.2	0.240	58.0	59.2
112.60	1.4	0.259	62.7	64.1
112.85	2.7	0.317	76.8	79.5

Time increment (t) = 0.100 hrs.

EXECUTED: 09-12-1996 11:12:57

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE10 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
11.000	0.00	-----	0.0	0.0	0.00	108.60
11.100	0.00	0.0	0.0	0.0	0.00	108.60
11.200	0.00	0.0	0.0	0.0	0.00	108.60
11.300	0.00	0.0	0.0	0.0	0.00	108.60
11.400	0.00	0.0	0.0	0.0	0.00	108.60
11.500	0.00	0.0	0.0	0.0	0.00	108.60
11.600	0.00	0.0	0.0	0.0	0.00	108.60
11.700	0.00	0.0	0.0	0.0	0.00	108.60
11.800	0.00	0.0	0.0	0.0	0.00	108.60
11.900	0.00	0.0	0.0	0.0	0.00	108.60
12.000	0.00	0.0	0.0	0.0	0.00	108.60
12.100	1.00	1.0	1.0	1.0	0.00	108.72
12.200	1.00	2.0	3.0	3.0	0.00	108.96
12.300	2.00	3.0	6.0	6.0	0.00	109.32
12.400	3.00	5.0	11.0	11.0	0.00	109.92
12.500	4.00	7.0	18.0	18.0	0.00	110.76
12.600	4.00	8.0	25.6	26.0	0.18	111.46
12.700	4.00	8.0	32.6	33.6	0.52	111.81
12.800	4.00	8.0	39.1	40.6	0.74	112.04
12.900	4.00	8.0	45.4	47.1	0.85	112.21
13.000	3.00	7.0	50.6	52.4	0.90	112.35
13.100	2.00	5.0	53.6	55.6	1.04	112.42
13.200	2.00	4.0	55.3	57.6	1.12	112.46
13.300	2.00	4.0	56.9	59.3	1.20	112.50
13.400	1.00	3.0	57.5	59.9	1.23	112.51
13.500	1.00	2.0	57.0	59.5	1.21	112.50
13.600	1.00	2.0	56.7	59.0	1.19	112.50
13.700	1.00	2.0	56.3	58.7	1.17	112.49
13.800	1.00	2.0	56.0	58.3	1.16	112.48
13.900	1.00	2.0	55.7	58.0	1.14	112.47
14.000	1.00	2.0	55.4	57.7	1.13	112.47
14.100	1.00	2.0	55.2	57.4	1.12	112.46
14.200	0.00	1.0	54.1	56.2	1.06	112.43
14.300	0.00	0.0	52.1	54.1	0.97	112.38
14.400	0.00	0.0	50.3	52.1	0.90	112.34
14.500	0.00	0.0	48.6	50.3	0.88	112.29
14.600	0.00	0.0	46.9	48.6	0.86	112.25
14.700	0.00	0.0	45.2	46.9	0.84	112.21
14.800	0.00	0.0	43.5	45.2	0.83	112.16
14.900	0.00	0.0	41.9	43.5	0.81	112.12
15.000	0.00	0.0	40.4	41.9	0.78	112.08
15.100	0.00	0.0	38.9	40.4	0.73	112.03
15.200	0.00	0.0	37.5	38.9	0.68	111.98
15.300	0.00	0.0	36.3	37.5	0.64	111.94
15.400	0.00	0.0	35.1	36.3	0.60	111.90

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE10 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
15.500	0.001	0.0	33.9	35.1	0.60	111.86
15.600	0.001	0.0	32.8	33.9	0.53	111.82
15.700	0.001	0.0	31.8	32.8	0.47	111.77
15.800	0.001	0.0	31.0	31.8	0.43	111.73
15.900	0.001	0.0	30.2	31.0	0.40	111.70
16.000	0.001	0.0	29.4	30.2	0.36	111.66
16.100	0.001	0.0	28.8	29.4	0.33	111.63
16.200	0.001	0.0	28.2	28.8	0.31	111.61
16.300	0.001	0.0	27.6	28.2	0.28	111.57
16.400	0.001	0.0	27.1	27.6	0.25	111.54
16.500	0.001	0.0	26.6	27.1	0.23	111.52
16.600	0.001	0.0	26.2	26.6	0.21	111.49
16.700	0.001	0.0	25.8	26.2	0.19	111.47
16.800	0.001	0.0	25.5	25.8	0.18	111.45
16.900	0.001	0.0	25.1	25.5	0.16	111.43
17.000	0.001	0.0	24.9	25.1	0.15	111.41
17.100	0.001	0.0	24.6	24.9	0.13	111.39
17.200	0.001	0.0	24.3	24.6	0.12	111.38
17.300	0.001	0.0	24.1	24.3	0.11	111.36
17.400	0.001	0.0	23.9	24.1	0.10	111.35
17.500	0.001	0.0	23.7	23.9	0.09	111.34
17.600	0.001	0.0	23.6	23.7	0.08	111.32
17.700	0.001	0.0	23.4	23.6	0.08	111.31
17.800	0.001	0.0	23.3	23.4	0.07	111.30
17.900	0.001	0.0	23.2	23.3	0.06	111.29
18.000	0.001	0.0	23.0	23.2	0.06	111.28
18.100	0.001	0.0	22.9	23.0	0.05	111.28
18.200	0.001	0.0	22.9	22.9	0.05	111.27
18.300	0.001	0.0	22.8	22.9	0.04	111.26
18.400	0.001	0.0	22.7	22.8	0.04	111.26
18.500	0.001	0.0	22.6	22.7	0.03	111.25
18.600	0.001	0.0	22.6	22.6	0.03	111.25
18.700	0.001	0.0	22.5	22.6	0.03	111.24
18.800	0.001	0.0	22.5	22.5	0.02	111.24
18.900	0.001	0.0	22.4	22.5	0.02	111.23
19.000	0.001	0.0	22.4	22.4	0.02	111.23
19.100	0.001	0.0	22.3	22.4	0.02	111.23
19.200	0.001	0.0	22.3	22.3	0.02	111.22
19.300	0.001	0.0	22.3	22.3	0.01	111.22
19.400	0.001	0.0	22.3	22.3	0.01	111.22
19.500	0.001	0.0	22.2	22.3	0.01	111.22
19.600	0.001	0.0	22.2	22.2	0.01	111.22
19.700	0.001	0.0	22.2	22.2	0.01	111.21
19.800	0.001	0.0	22.2	22.2	0.01	111.21
19.900	0.001	0.0	22.2	22.2	0.01	111.21
20.000	0.001	0.0	22.1	22.2	0.01	111.21

EXECUTED: 09-12-1996 11:12:57

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE10 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
20.100	0.001	0.0	22.1	22.1	0.01	111.21
20.200	0.001	0.0	22.1	22.1	0.01	111.21
20.300	0.001	0.0	22.1	22.1	0.01	111.21
20.400	0.001	0.0	22.1	22.1	0.00	111.21
20.500	0.001	0.0	22.1	22.1	0.00	111.21
20.600	0.001	0.0	22.1	22.1	0.00	111.21
20.700	0.001	0.0	22.1	22.1	0.00	111.21
20.800	0.001	0.0	22.1	22.1	0.00	111.20
20.900	0.001	0.0	22.1	22.1	0.00	111.20
21.000	0.001	0.0	22.0	22.1	0.00	111.20
21.100	0.001	0.0	22.0	22.0	0.00	111.20
21.200	0.001	0.0	22.0	22.0	0.00	111.20
21.300	0.001	0.0	22.0	22.0	0.00	111.20
21.400	0.001	0.0	22.0	22.0	0.00	111.20
21.500	0.001	0.0	22.0	22.0	0.00	111.20
21.600	0.001	0.0	22.0	22.0	0.00	111.20
21.700	0.001	0.0	22.0	22.0	0.00	111.20
21.800	0.001	0.0	22.0	22.0	0.00	111.20
21.900	0.001	0.0	22.0	22.0	0.00	111.20
22.000	0.001	0.0	22.0	22.0	0.00	111.20
22.100	0.001	0.0	22.0	22.0	0.00	111.20
22.200	0.001	0.0	22.0	22.0	0.00	111.20
22.300	0.001	0.0	22.0	22.0	0.00	111.20
22.400	0.001	0.0	22.0	22.0	0.00	111.20
22.500	0.001	0.0	22.0	22.0	0.00	111.20
22.600	0.001	0.0	22.0	22.0	0.00	111.20
22.700	0.001	0.0	22.0	22.0	0.00	111.20
22.800	0.001	0.0	22.0	22.0	0.00	111.20
22.900	0.001	0.0	22.0	22.0	0.00	111.20
23.000	0.001	0.0	22.0	22.0	0.00	111.20
23.100	0.001	0.0	22.0	22.0	0.00	111.20
23.200	0.001	0.0	22.0	22.0	0.00	111.20
23.300	0.001	0.0	22.0	22.0	0.00	111.20
23.400	0.001	0.0	22.0	22.0	0.00	111.20
23.500	0.001	0.0	22.0	22.0	0.00	111.20
23.600	0.001	0.0	22.0	22.0	0.00	111.20
23.700	0.001	0.0	22.0	22.0	0.00	111.20
23.800	0.001	0.0	22.0	22.0	0.00	111.20
23.900	0.001	0.0	22.0	22.0	0.00	111.20
24.000	0.001	0.0	22.0	22.0	0.00	111.20
24.100	0.001	0.0	22.0	22.0	0.00	111.20
24.200	0.001	0.0	22.0	22.0	0.00	111.20
24.300	0.001	0.0	22.0	22.0	0.00	111.20
24.400	0.001	0.0	22.0	22.0	0.00	111.20
24.500	0.001	0.0	22.0	22.0	0.00	111.20
24.600	0.001	0.0	22.0	22.0	0.00	111.20

EXECUTED: 09-12-1996 11:12:57

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE10 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
24.700	0.00	0.0	22.0	22.0	0.00	111.20
24.800	0.00	0.0	22.0	22.0	0.00	111.20
24.900	0.00	0.0	22.0	22.0	0.00	111.20
25.000	0.00	0.0	22.0	22.0	0.00	111.20
25.100	0.00	0.0	22.0	22.0	0.00	111.20
25.200	0.00	0.0	22.0	22.0	0.00	111.20
25.300	0.00	0.0	22.0	22.0	0.00	111.20
25.400	0.00	0.0	22.0	22.0	0.00	111.20
25.500	0.00	0.0	22.0	22.0	0.00	111.20
25.600	0.00	0.0	22.0	22.0	0.00	111.20
25.700	0.00	0.0	22.0	22.0	0.00	111.20
25.800	0.00	0.0	22.0	22.0	0.00	111.20
25.900	0.00	0.0	22.0	22.0	0.00	111.20

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE10 .HYD
Outflow Hydrograph: A:OUT .HYD

Starting Pond W.S. Elevation = 108.60 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow = 4.00 cfs
Peak Outflow = 1.23 cfs
Peak Elevation = 112.51 ft

***** Summary of Approximate Peak Storage *****

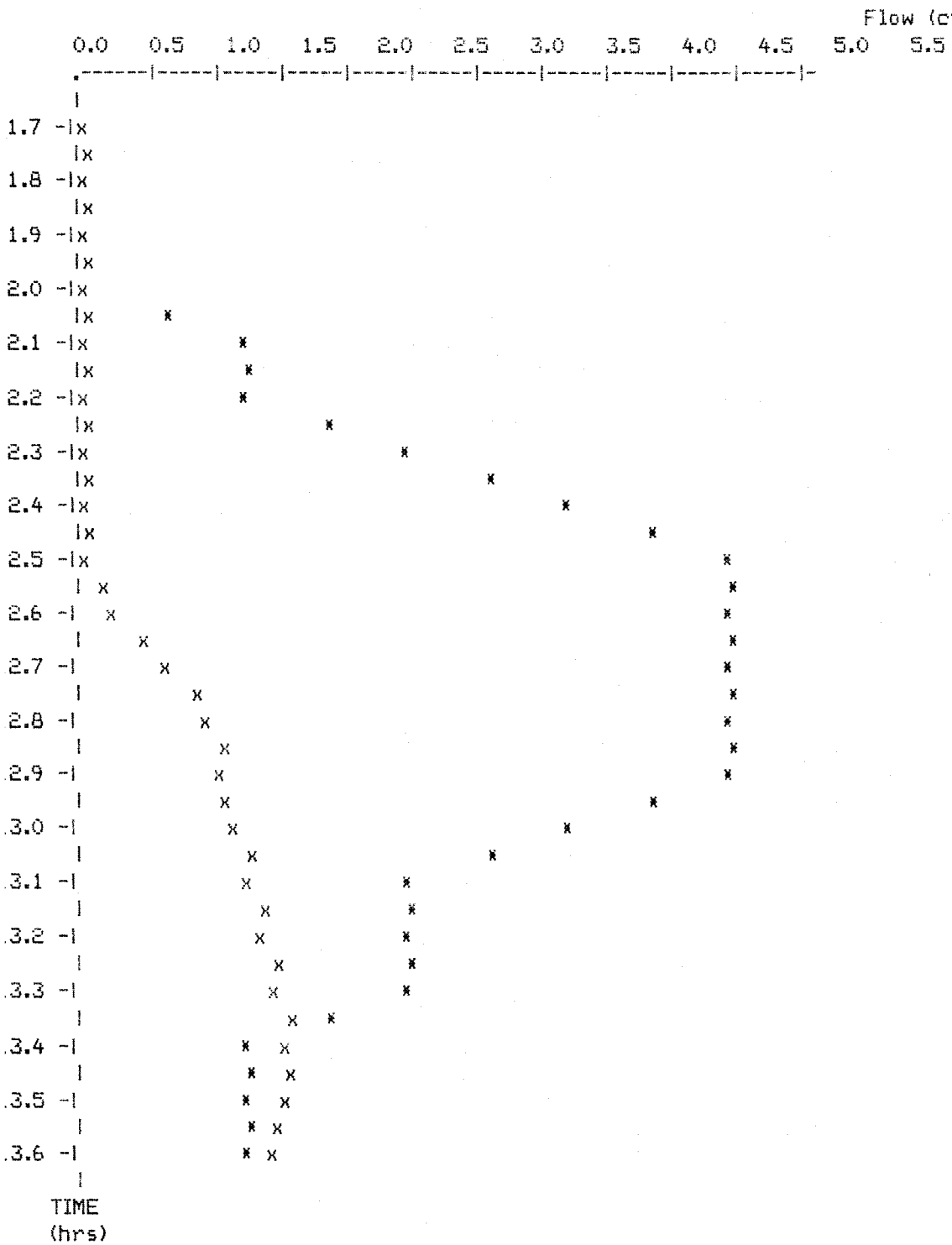
Initial Storage = 0.00 ac-ft
Peak Storage From Storm = 0.24 ac-ft

Total Storage in Pond = 0.24 ac-ft

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE10 .HYD
Outflow Hydrograph: A:OUT .HYD

EXECUTED: 09-12-1996
11:12:57

Peak Inflow = 4.00 cfs
Peak Outflow = 1.23 cfs
Peak Elevation = 112.51 ft



* File: A:NORGE10 .HYD Qmax = 4.0 cfs
x File: A:OUT .HYD Qmax = 1.2 cfs

As Builts -
Riverside Med Cntr.
(None found?)

Langley and McDonald, P.C.
ENGINEERS • SURVEYORS • PLANNERS
LANDSCAPE ARCHITECTS • ENVIRONMENTAL CONSULTANTS
VIRGINIA BEACH • WILLIAMSBURG, VIRGINIA

Subject RIVERSIDE MEDICAL CENTER - SWM CALCS
Computed By DSL Checked By _____

Project No. 8504092
Client RIVERSIDE/DOBSON
Date 8-1-96 Sheet No. _____

PREDEVELOPMENT CONDITIONS

SITE AREA = 1.51 AC ABANDONED SF HOMESITE
C = 0.25

OFFSITE DRAINAGE THROUGH SITE -
NORTH OF SITE = 0.9 AC, C = 0.25
EAST OF SITE = 0.5 AC, C = 0.25

TIME OF CONCENTRATION
80' OVERLAND FLOW ~1% slope
HIGH GRASS 17 min
245' OVERLAND ~2.9% SLOPE
HIGH GRASS 22 MIN
270' FLAT ROADSIDE SWALE 5 MIN
44 MIN

PREDEVELOPMENT RUNOFF TOTAL SITE & ALL OFFSITE
2 YEAR
$Q_p = CIA = (0.25)(2.0)(1.5+0.5+0.9)$
$= 1.45$ cfs

PREDEVELOPMENT RUNOFF FROM AREA DRAINED THROUGH BMP

2 YEAR
$Q_{P_{2PRE}} = (0.25)(2.0)(1.12+0.9)$
$= 1.01$ cfs
10 YEAR
$Q_{P10PRE} = (0.25)(2.8)(2.02) = 1.41$ cfs

RECEIVING STORM SYSTEM IS NOT WELL DOCUMENTED
INTENSIVE FIELD WORK REQUIRED TO DETERMINE
UPSTREAM FLOWS & AVAILABLE CAPACITY IN PIPES
THEREFORE DETAILED POST DEVELOPMENT Q < PREDEV

RIVERSIDE MEDICAL
ENORGE
REVISED LAYOUT
AUG 1, 1996
L&M 8504092
JCC SP-666-96

TABLE 3

WORKSHEET FOR BMP POINT SYSTEM

A. STRUCTURAL BMP POINT ALLOCATION

BMP	BMP Points		Fraction of Site Served by BMP		Weighted BMP Points
0.5 INCH RUNOFF INFILTRATION TRENCH	9	x	(1.12+0.9) 1.51	=	12.0
		x		=	
		x		=	
		x		=	

TOTAL WEIGHTED STRUCTURAL BMP POINTS: _____

B. NATURAL OPEN SPACE CREDIT

Fraction of Site		Natural Open Space Credit		Points for Natural Open Space
	x	(0.1 per 1%)	=	

C. TOTAL WEIGHTED POINTS

12	+	0	=	12 >10 ok
Structural BMP Points		Natural Open Space Points		TOTAL

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Subject TRENCH SIZING

Computed By DSL Checked By _____

Project No. 85040-92
Client RIVERSIDE / DOBSON
Date 8-1-96 Sheet No. _____

9-POINT BMP INFILITRATION TRENCH -
VOLUME REQUIRED = 0.5 INCH RUNOFF OVER
~~ENTIRE DRAINAGE AREA~~

DRAINAGE AREA = 2.02 AC

VOL. REQ'D = 2.02 AC × 0.5 IN. RUNOFF ÷ 12 ÷ 40% VOIDS
= 0.21 AC-FT = ~~9166~~ CF
5500

IF 6' DEEP - REQUIRED SURFACE AREA
= 10' × 153
OR 20 × 76
OR 15 × 102

6 × 10 / 13

MINIMUM WIDTH AVAILABLE TO MAINTAIN
20' BUFFER STRIP
∴ USE 10 × 153 × 6' DEEP

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VIRGINIA BEACH • WILLIAMSBURG, VIRGINIA

Subject SPILT TRENCH

Computed By DSL Checked By

Project No. 85-040-92
RIVERSIDE
Client DOBSON

Date 8-5-96 Sheet No.

153 FOOT LONG TRENCH CROSSES WATER LINE
⇒ NEED TO DIVIDE

DRAINAGE AREA NE OF WL = 0.9 + 0.29 + 0.21
= 1.40 Ac

VOL NEEDED NE OF WL = 1.40 Ac × 0.5 in runoff ÷ 40%
= 0.15 AC-FT = 6353 CF
= 6 × 10 × 106' LONG

DRAINGE AREA SW OF WL = 0.62 Ac
- CONTAINS MAJORITY OF IMPERVIOUS SURFACES

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:07:29
Watershed file: --> a:NORGE2 .WSD
Hydrograph file: --> a:NORGE2 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
2 YEAR STORM

>>>> Input Parameters Used to Compute Hydrograph <<<<

Subarea Description	AREA (acres)	CN	Tc (hrs)	* Tt (hrs)	Precip. (in)	Runoff (in)	Ia/p input	Ia/p used
THROUGH INF TR	2.02	83.0	0.75	0.00	3.37	1.75	.12	.10

* Travel time from subarea outfall to composite watershed outfall point.
Total area = 2.02 acres or 0.00316 sq.mi
Peak discharge = 2 cfs

>>>> Computer Modifications of Input Parameters <<<<<

Subarea Description	Input Values Tc (hr)	Input Values * Tt (hr)	Rounded Values Tc (hr)	Rounded Values * Tt (hr)	Ia/p Interpolated (Yes/No)	Ia/p Messages
THROUGH INF TR	0.75	0.00	**	**	No	--

* Travel time from subarea outfall to composite watershed outfall point.
** Tc & Tt are available in the hydrograph tables.

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:07:29
Watershed file: --> a:NORGE2 .WSD
Hydrograph file: --> a:NORGE2 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
2 YEAR STORM

>>>> Summary of Subarea Times to Peak <<<<

Subarea	Peak Discharge at Composite Outfall (cfs)	Time to Peak at Composite Outfall (hrs)
THROUGH INF TR	2	12.4
Composite Watershed	2	12.4

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:07:29
Watershed file: --> a:NORGE2 .WSD
Hydrograph file: --> a:NORGE2 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
2 YEAR STORM

Composite Hydrograph Summary (cfs)

Subarea Description	11.0 hr	11.3 hr	11.6 hr	11.9 hr	12.0 hr	12.1 hr	12.2 hr	12.3 hr	12.4 hr
THROUGH INF TR	0	0	0	0	0	0	1	1	2
Total (cfs)	0	0	0	0	0	0	1	1	2

Subarea Description	12.5 hr	12.6 hr	12.7 hr	12.8 hr	13.0 hr	13.2 hr	13.4 hr	13.6 hr	13.8 hr
THROUGH INF TR	2	2	2	2	1	1	1	1	0
Total (cfs)	2	2	2	2	1	1	1	1	0

Subarea Description	14.0 hr	14.3 hr	14.6 hr	15.0 hr	15.5 hr	16.0 hr	16.5 hr	17.0 hr	17.5 hr
THROUGH INF TR	0	0	0	0	0	0	0	0	0
Total (cfs)	0	0	0	0	0	0	0	0	0

Subarea Description	18.0 hr	19.0 hr	20.0 hr	22.0 hr	26.0 hr
THROUGH INF TR	0	0	0	0	0
Total (cfs)	0	0	0	0	0

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:07:29
Watershed file: --> a:NORGE2 .WSD
Hydrograph file: --> a:NORGE2 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
2 YEAR STORM

Time (hrs)	Flow (cfs)	Time (hrs)	Flow (cfs)
11.0	0	14.8	0
11.1	0	14.9	0
11.2	0	15.0	0
11.3	0	15.1	0
11.4	0	15.2	0
11.5	0	15.3	0
11.6	0	15.4	0
11.7	0	15.5	0
11.8	0	15.6	0
11.9	0	15.7	0
12.0	0	15.8	0
12.1	0	15.9	0
12.2	1	16.0	0
12.3	1	16.1	0
12.4	2	16.2	0
12.5	2	16.3	0
12.6	2	16.4	0
12.7	2	16.5	0
12.8	2	16.6	0
12.9	2	16.7	0
13.0	1	16.8	0
13.1	1	16.9	0
13.2	1	17.0	0
13.3	1	17.1	0
13.4	1	17.2	0
13.5	1	17.3	0
13.6	1	17.4	0
13.7	0	17.5	0
13.8	0	17.6	0
13.9	0	17.7	0
14.0	0	17.8	0
14.1	0	17.9	0
14.2	0	18.0	0
14.3	0	18.1	0
14.4	0	18.2	0
14.5	0	18.3	0
14.6	0	18.4	0
14.7	0	18.5	0

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:07:29
Watershed file: --> a:NORGE2 .WSD
Hydrograph file: --> a:NORGE2 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
2 YEAR STORM

Time (hrs)	Flow (cfs)	Time (hrs)	Flow (cfs)
18.6	0	22.4	0
18.7	0	22.5	0
18.8	0	22.6	0
18.9	0	22.7	0
19.0	0	22.8	0
19.1	0	22.9	0
19.2	0	23.0	0
19.3	0	23.1	0
19.4	0	23.2	0
19.5	0	23.3	0
19.6	0	23.4	0
19.7	0	23.5	0
19.8	0	23.6	0
19.9	0	23.7	0
20.0	0	23.8	0
20.1	0	23.9	0
20.2	0	24.0	0
20.3	0	24.1	0
20.4	0	24.2	0
20.5	0	24.3	0
20.6	0	24.4	0
20.7	0	24.5	0
20.8	0	24.6	0
20.9	0	24.7	0
21.0	0	24.8	0
21.1	0	24.9	0
21.2	0	25.0	0
21.3	0	25.1	0
21.4	0	25.2	0
21.5	0	25.3	0
21.6	0	25.4	0
21.7	0	25.5	0
21.8	0	25.6	0
21.9	0	25.7	0
22.0	0	25.8	0
22.1	0	25.9	0
22.2	0		
22.3	0		

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:09:37
Watershed file: --> a:NORGE10 .WSD
Hydrograph file: --> a:NORGE10 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
10-YEAR STORM

>>>> Input Parameters Used to Compute Hydrograph <<<<

Subarea Description	AREA (acres)	CN	Tc (hrs)	* Tt (hrs)	Precip. (in)	Runoff (in)	Ia/p input/used	
THROUGH INF TR	2.02	83.0	0.75	0.00	5.04	3.21	.08	.10

* Travel time from subarea outfall to composite watershed outfall point.
Total area = 2.02 acres or 0.00316 sq.mi
Peak discharge = 4 cfs

>>>> Computer Modifications of Input Parameters <<<<<

Subarea Description	Input Values Tc (hr)	Input Values * Tt (hr)	Rounded Values Tc (hr)	Rounded Values * Tt (hr)	Ia/p Interpolated (Yes/No)	Ia/p Messages
THROUGH INF TR	0.75	0.00	**	**	No	Computed Ia/p < .1

* Travel time from subarea outfall to composite watershed outfall point.
** Tc & Tt are available in the hydrograph tables.

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:09:37
Watershed file: --> a:NORGE10 .WSD
Hydrograph file: --> a:NORGE10 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
10-YEAR STORM

>>>> Summary of Subarea Times to Peak <<<<

Subarea	Peak Discharge at Composite Outfall (cfs)	Time to Peak at Composite Outfall (hrs)
THROUGH INF TR	4	12.5
Composite Watershed	4	12.5

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:09:37
Watershed file: --> a:NORGE10 .WSD
Hydrograph file: --> a:NORGE10 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
10-YEAR STORM

Composite Hydrograph Summary (cfs)

Subarea Description	11.0 hr	11.3 hr	11.6 hr	11.9 hr	12.0 hr	12.1 hr	12.2 hr	12.3 hr	12.4 hr
THROUGH INF TR	0	0	0	0	0	1	1	2	3
Total (cfs)	0	0	0	0	0	1	1	2	3

Subarea Description	12.5 hr	12.6 hr	12.7 hr	12.8 hr	13.0 hr	13.2 hr	13.4 hr	13.6 hr	13.8 hr
THROUGH INF TR	4	4	4	4	3	2	1	1	1
Total (cfs)	4	4	4	4	3	2	1	1	1

Subarea Description	14.0 hr	14.3 hr	14.6 hr	15.0 hr	15.5 hr	16.0 hr	16.5 hr	17.0 hr	17.5 hr
THROUGH INF TR	1	0	0	0	0	0	0	0	0
Total (cfs)	1	0	0	0	0	0	0	0	0

Subarea Description	18.0 hr	19.0 hr	20.0 hr	22.0 hr	26.0 hr
THROUGH INF TR	0	0	0	0	0
Total (cfs)	0	0	0	0	0

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:09:37
Watershed file: --> a:NORGE10 .WSD
Hydrograph file: --> a:NORGE10 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
10-YEAR STORM

Time (hrs)	Flow (cfs)	Time (hrs)	Flow (cfs)
11.0	0	14.8	0
11.1	0	14.9	0
11.2	0	15.0	0
11.3	0	15.1	0
11.4	0	15.2	0
11.5	0	15.3	0
11.6	0	15.4	0
11.7	0	15.5	0
11.8	0	15.6	0
11.9	0	15.7	0
12.0	0	15.8	0
12.1	1	15.9	0
12.2	1	16.0	0
12.3	2	16.1	0
12.4	3	16.2	0
12.5	4	16.3	0
12.6	4	16.4	0
12.7	4	16.5	0
12.8	4	16.6	0
12.9	4	16.7	0
13.0	3	16.8	0
13.1	2	16.9	0
13.2	2	17.0	0
13.3	2	17.1	0
13.4	1	17.2	0
13.5	1	17.3	0
13.6	1	17.4	0
13.7	1	17.5	0
13.8	1	17.6	0
13.9	1	17.7	0
14.0	1	17.8	0
14.1	1	17.9	0
14.2	0	18.0	0
14.3	0	18.1	0
14.4	0	18.2	0
14.5	0	18.3	0
14.6	0	18.4	0
14.7	0	18.5	0

TR-55 TABULAR HYDROGRAPH METHOD
Type II Distribution
(24 hr. Duration Storm)

Executed: 09-12-1996 11:09:37
Watershed file: --> a:NORGE10 .WSD
Hydrograph file: --> a:NORGE10 .HYD

RIVERSIDE MEDICAL AT NORGE
POST DEVELOPMENT
10-YEAR STORM

Time (hrs)	Flow (cfs)	Time (hrs)	Flow (cfs)
18.6	0	22.4	0
18.7	0	22.5	0
18.8	0	22.6	0
18.9	0	22.7	0
19.0	0	22.8	0
19.1	0	22.9	0
19.2	0	23.0	0
19.3	0	23.1	0
19.4	0	23.2	0
19.5	0	23.3	0
19.6	0	23.4	0
19.7	0	23.5	0
19.8	0	23.6	0
19.9	0	23.7	0
20.0	0	23.8	0
20.1	0	23.9	0
20.2	0	24.0	0
20.3	0	24.1	0
20.4	0	24.2	0
20.5	0	24.3	0
20.6	0	24.4	0
20.7	0	24.5	0
20.8	0	24.6	0
20.9	0	24.7	0
21.0	0	24.8	0
21.1	0	24.9	0
21.2	0	25.0	0
21.3	0	25.1	0
21.4	0	25.2	0
21.5	0	25.3	0
21.6	0	25.4	0
21.7	0	25.5	0
21.8	0	25.6	0
21.9	0	25.7	0
22.0	0	25.8	0
22.1	0	25.9	0
22.2	0		
22.3	0		

```
*************************************
*                                   *
*   RIVERSIDE MEDICAL CENTER AT NORGE *
*     INFILTRATION TRENCH OVERFLOW    *
*             2 YEAR STORM            *
*                                     *
*                                     *
*************************************
```

Inflow Hydrograph: A:NORGE2 .HYD
Rating Table file: A:NORGE2 .PND

----INITIAL CONDITIONS----
Elevation = 108.60 ft
Outflow = 0.00 cfs
Storage = 0.00 ac-ft

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS	
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (ac-ft)	2S/t (cfs)	2S/t + O (cfs)
108.60	0.0	0.000	0.0	0.0
108.85	0.0	0.009	2.1	2.1
109.10	0.0	0.017	4.2	4.2
109.35	0.0	0.026	6.3	6.3
109.60	0.0	0.034	8.3	8.3
109.85	0.0	0.043	10.4	10.4
110.10	0.0	0.052	12.5	12.5
110.35	0.0	0.060	14.6	14.6
110.60	0.0	0.069	16.7	16.7
110.85	0.0	0.077	18.8	18.8
111.10	0.0	0.086	20.9	20.9
111.20	0.0	0.091	22.0	22.0
111.35	0.1	0.099	24.0	24.1
111.60	0.3	0.117	28.3	28.6
111.80	0.5	0.136	32.9	33.4
111.85	0.6	0.141	34.2	34.8
111.90	0.6	0.147	35.6	36.2
112.10	0.8	0.173	41.9	42.7
112.35	0.9	0.213	51.7	52.6
112.50	1.2	0.240	58.0	59.2
112.60	1.4	0.259	62.7	64.1
112.85	2.7	0.317	76.8	79.5

Time increment (t) = 0.100 hrs.

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Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE2 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
11.000	0.001	-----	0.0	0.01	0.00	108.60
11.100	0.001	0.0	0.0	0.01	0.00	108.60
11.200	0.001	0.0	0.0	0.01	0.00	108.60
11.300	0.001	0.0	0.0	0.01	0.00	108.60
11.400	0.001	0.0	0.0	0.01	0.00	108.60
11.500	0.001	0.0	0.0	0.01	0.00	108.60
11.600	0.001	0.0	0.0	0.01	0.00	108.60
11.700	0.001	0.0	0.0	0.01	0.00	108.60
11.800	0.001	0.0	0.0	0.01	0.00	108.60
11.900	0.001	0.0	0.0	0.01	0.00	108.60
12.000	0.001	0.0	0.0	0.01	0.00	108.60
12.100	0.001	0.0	0.0	0.01	0.00	108.60
12.200	1.001	1.0	1.0	1.01	0.00	108.72
12.300	1.001	2.0	3.0	3.01	0.00	108.96
12.400	2.001	3.0	6.0	6.01	0.00	109.32
12.500	2.001	4.0	10.0	10.01	0.00	109.80
12.600	2.001	4.0	14.0	14.01	0.00	110.28
12.700	2.001	4.0	18.0	18.01	0.00	110.76
12.800	2.001	4.0	22.0	22.01	0.00	111.20
12.900	2.001	4.0	25.6	26.01	0.18	111.46
13.000	1.001	3.0	28.0	28.61	0.30	111.60
13.100	1.001	2.0	29.3	30.01	0.36	111.66
13.200	1.001	2.0	30.5	31.31	0.41	111.71
13.300	1.001	2.0	31.6	32.51	0.46	111.76
13.400	1.001	2.0	32.5	33.61	0.51	111.81
13.500	1.001	2.0	33.4	34.51	0.58	111.84
13.600	1.001	2.0	34.2	35.41	0.60	111.87
13.700	0.001	1.0	34.0	35.21	0.60	111.86
13.800	0.001	0.0	32.9	34.01	0.54	111.82
13.900	0.001	0.0	31.9	32.91	0.48	111.78
14.000	0.001	0.0	31.1	31.91	0.44	111.74
14.100	0.001	0.0	30.3	31.11	0.40	111.70
14.200	0.001	0.0	29.5	30.31	0.37	111.67
14.300	0.001	0.0	28.9	29.51	0.34	111.64
14.400	0.001	0.0	28.2	28.91	0.31	111.61
14.500	0.001	0.0	27.7	28.21	0.28	111.58
14.600	0.001	0.0	27.2	27.71	0.26	111.55
14.700	0.001	0.0	26.7	27.21	0.24	111.52
14.800	0.001	0.0	26.3	26.71	0.21	111.49
14.900	0.001	0.0	25.9	26.31	0.20	111.47
15.000	0.001	0.0	25.5	25.91	0.18	111.45
15.100	0.001	0.0	25.2	25.51	0.16	111.43
15.200	0.001	0.0	24.9	25.21	0.15	111.41
15.300	0.001	0.0	24.6	24.91	0.14	111.39
15.400	0.001	0.0	24.4	24.61	0.12	111.38

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Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE2 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH ROUTING COMPUTATIONS

TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
15.500	0.001	0.0	24.1	24.4	0.11	111.37
15.600	0.001	0.0	23.9	24.1	0.10	111.35
15.700	0.001	0.0	23.7	23.9	0.09	111.34
15.800	0.001	0.0	23.6	23.7	0.08	111.33
15.900	0.001	0.0	23.4	23.6	0.08	111.31
16.000	0.001	0.0	23.3	23.4	0.07	111.30
16.100	0.001	0.0	23.2	23.3	0.06	111.29
16.200	0.001	0.0	23.1	23.2	0.06	111.28
16.300	0.001	0.0	23.0	23.1	0.05	111.28
16.400	0.001	0.0	22.9	23.0	0.05	111.27
16.500	0.001	0.0	22.8	22.9	0.04	111.26
16.600	0.001	0.0	22.7	22.8	0.04	111.26
16.700	0.001	0.0	22.6	22.7	0.03	111.25
16.800	0.001	0.0	22.6	22.6	0.03	111.25
16.900	0.001	0.0	22.5	22.6	0.03	111.24
17.000	0.001	0.0	22.5	22.5	0.03	111.24
17.100	0.001	0.0	22.4	22.5	0.02	111.23
17.200	0.001	0.0	22.4	22.4	0.02	111.23
17.300	0.001	0.0	22.3	22.4	0.02	111.23
17.400	0.001	0.0	22.3	22.3	0.02	111.23
17.500	0.001	0.0	22.3	22.3	0.02	111.22
17.600	0.001	0.0	22.3	22.3	0.01	111.22
17.700	0.001	0.0	22.2	22.3	0.01	111.22
17.800	0.001	0.0	22.2	22.2	0.01	111.22
17.900	0.001	0.0	22.2	22.2	0.01	111.22
18.000	0.001	0.0	22.2	22.2	0.01	111.21
18.100	0.001	0.0	22.2	22.2	0.01	111.21
18.200	0.001	0.0	22.1	22.2	0.01	111.21
18.300	0.001	0.0	22.1	22.1	0.01	111.21
18.400	0.001	0.0	22.1	22.1	0.01	111.21
18.500	0.001	0.0	22.1	22.1	0.01	111.21
18.600	0.001	0.0	22.1	22.1	0.00	111.21
18.700	0.001	0.0	22.1	22.1	0.00	111.21
18.800	0.001	0.0	22.1	22.1	0.00	111.21
18.900	0.001	0.0	22.1	22.1	0.00	111.21
19.000	0.001	0.0	22.1	22.1	0.00	111.20
19.100	0.001	0.0	22.1	22.1	0.00	111.20
19.200	0.001	0.0	22.0	22.1	0.00	111.20
19.300	0.001	0.0	22.0	22.0	0.00	111.20
19.400	0.001	0.0	22.0	22.0	0.00	111.20
19.500	0.001	0.0	22.0	22.0	0.00	111.20
19.600	0.001	0.0	22.0	22.0	0.00	111.20
19.700	0.001	0.0	22.0	22.0	0.00	111.20
19.800	0.001	0.0	22.0	22.0	0.00	111.20
19.900	0.001	0.0	22.0	22.0	0.00	111.20
20.000	0.001	0.0	22.0	22.0	0.00	111.20

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE2 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
20.100	0.001	0.0	22.0	22.01	0.00	111.20
20.200	0.001	0.0	22.0	22.01	0.00	111.20
20.300	0.001	0.0	22.0	22.01	0.00	111.20
20.400	0.001	0.0	22.0	22.01	0.00	111.20
20.500	0.001	0.0	22.0	22.01	0.00	111.20
20.600	0.001	0.0	22.0	22.01	0.00	111.20
20.700	0.001	0.0	22.0	22.01	0.00	111.20
20.800	0.001	0.0	22.0	22.01	0.00	111.20
20.900	0.001	0.0	22.0	22.01	0.00	111.20
21.000	0.001	0.0	22.0	22.01	0.00	111.20
21.100	0.001	0.0	22.0	22.01	0.00	111.20
21.200	0.001	0.0	22.0	22.01	0.00	111.20
21.300	0.001	0.0	22.0	22.01	0.00	111.20
21.400	0.001	0.0	22.0	22.01	0.00	111.20
21.500	0.001	0.0	22.0	22.01	0.00	111.20
21.600	0.001	0.0	22.0	22.01	0.00	111.20
21.700	0.001	0.0	22.0	22.01	0.00	111.20
21.800	0.001	0.0	22.0	22.01	0.00	111.20
21.900	0.001	0.0	22.0	22.01	0.00	111.20
22.000	0.001	0.0	22.0	22.01	0.00	111.20
22.100	0.001	0.0	22.0	22.01	0.00	111.20
22.200	0.001	0.0	22.0	22.01	0.00	111.20
22.300	0.001	0.0	22.0	22.01	0.00	111.20
22.400	0.001	0.0	22.0	22.01	0.00	111.20
22.500	0.001	0.0	22.0	22.01	0.00	111.20
22.600	0.001	0.0	22.0	22.01	0.00	111.20
22.700	0.001	0.0	22.0	22.01	0.00	111.20
22.800	0.001	0.0	22.0	22.01	0.00	111.20
22.900	0.001	0.0	22.0	22.01	0.00	111.20
23.000	0.001	0.0	22.0	22.01	0.00	111.20
23.100	0.001	0.0	22.0	22.01	0.00	111.20
23.200	0.001	0.0	22.0	22.01	0.00	111.20
23.300	0.001	0.0	22.0	22.01	0.00	111.20
23.400	0.001	0.0	22.0	22.01	0.00	111.20
23.500	0.001	0.0	22.0	22.01	0.00	111.20
23.600	0.001	0.0	22.0	22.01	0.00	111.20
23.700	0.001	0.0	22.0	22.01	0.00	111.20
23.800	0.001	0.0	22.0	22.01	0.00	111.20
23.900	0.001	0.0	22.0	22.01	0.00	111.20
24.000	0.001	0.0	22.0	22.01	0.00	111.20
24.100	0.001	0.0	22.0	22.01	0.00	111.20
24.200	0.001	0.0	22.0	22.01	0.00	111.20
24.300	0.001	0.0	22.0	22.01	0.00	111.20
24.400	0.001	0.0	22.0	22.01	0.00	111.20
24.500	0.001	0.0	22.0	22.01	0.00	111.20
24.600	0.001	0.0	22.0	22.01	0.00	111.20

POND-2 Version: 5.20 S/N:
EXECUTED: 09-12-1996 11:11:32

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE2 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
24.700	0.001	0.0	22.0	22.01	0.00	111.20
24.800	0.001	0.0	22.0	22.01	0.00	111.20
24.900	0.001	0.0	22.0	22.01	0.00	111.20
25.000	0.001	0.0	22.0	22.01	0.00	111.20
25.100	0.001	0.0	22.0	22.01	0.00	111.20
25.200	0.001	0.0	22.0	22.01	0.00	111.20
25.300	0.001	0.0	22.0	22.01	0.00	111.20
25.400	0.001	0.0	22.0	22.01	0.00	111.20
25.500	0.001	0.0	22.0	22.01	0.00	111.20
25.600	0.001	0.0	22.0	22.01	0.00	111.20
25.700	0.001	0.0	22.0	22.01	0.00	111.20
25.800	0.001	0.0	22.0	22.01	0.00	111.20
25.900	0.001	0.0	22.0	22.01	0.00	111.20

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE2 .HYD
Outflow Hydrograph: A:OUT .HYD

Starting Pond W.S. Elevation = 108.60 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow = 2.00 cfs
Peak Outflow = 0.60 cfs
Peak Elevation = 111.87 ft

2-year

***** Summary of Approximate Peak Storage *****

Initial Storage = 0.00 ac-ft
Peak Storage From Storm = 0.14 ac-ft

Total Storage in Pond = 0.14 ac-ft

POND-2 Version: 5.20 S/N:

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE2 .HYD
Outflow Hydrograph: A:OUT .HYD

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11:11:32

Peak Inflow = 2.00 cfs
Peak Outflow = 0.60 cfs
Peak Elevation = 111.87 ft

* File: A:NORGE2 .HYD Qmax = 2.0 cfs
x File: A:OUT .HYD Qmax = 0.6 cfs

```
****************************************
*                                      *
*   RIVERSIDE MEDICAL CENTER AT NORGE  *
*     INFILTRATION TRENCH OVERFLOW     *
*              10 YAER STORM           *
*                                      *
*                                      *
****************************************
```

Inflow Hydrograph: A:NORGE10 .HYD
Rating Table file: A:NORGE2 .PND

----INITIAL CONDITIONS----
Elevation = 108.60 ft
Outflow = 0.00 cfs
Storage = 0.00 ac-ft

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS	
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (ac-ft)	2S/t (cfs)	2S/t + O (cfs)
108.60	0.0	0.000	0.0	0.0
108.85	0.0	0.009	2.1	2.1
109.10	0.0	0.017	4.2	4.2
109.35	0.0	0.026	6.3	6.3
109.60	0.0	0.034	8.3	8.3
109.85	0.0	0.043	10.4	10.4
110.10	0.0	0.052	12.5	12.5
110.35	0.0	0.060	14.6	14.6
110.60	0.0	0.069	16.7	16.7
110.85	0.0	0.077	18.8	18.8
111.10	0.0	0.086	20.9	20.9
111.20	0.0	0.091	22.0	22.0
111.35	0.1	0.099	24.0	24.1
111.60	0.3	0.117	28.3	28.6
111.80	0.5	0.136	32.9	33.4
111.85	0.6	0.141	34.2	34.8
111.90	0.6	0.147	35.6	36.2
112.10	0.8	0.173	41.9	42.7
112.35	0.9	0.213	51.7	52.6
112.50	1.2	0.240	58.0	59.2
112.60	1.4	0.259	62.7	64.1
112.85	2.7	0.317	76.8	79.5

Time increment (t) = 0.100 hrs.

POND-2 Version: 5.20 S/N:

EXECUTED: 09-12-1996 11:12:57

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE10 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
11.000	0.001	-----	0.0	0.01	0.00	108.60
11.100	0.001	0.0	0.0	0.01	0.00	108.60
11.200	0.001	0.0	0.0	0.01	0.00	108.60
11.300	0.001	0.0	0.0	0.01	0.00	108.60
11.400	0.001	0.0	0.0	0.01	0.00	108.60
11.500	0.001	0.0	0.0	0.01	0.00	108.60
11.600	0.001	0.0	0.0	0.01	0.00	108.60
11.700	0.001	0.0	0.0	0.01	0.00	108.60
11.800	0.001	0.0	0.0	0.01	0.00	108.60
11.900	0.001	0.0	0.0	0.01	0.00	108.60
12.000	0.001	0.0	0.0	0.01	0.00	108.60
12.100	1.001	1.0	1.0	1.01	0.00	108.72
12.200	1.001	2.0	3.0	3.01	0.00	108.96
12.300	2.001	3.0	6.0	6.01	0.00	109.32
12.400	3.001	5.0	11.0	11.01	0.00	109.92
12.500	4.001	7.0	18.0	18.01	0.00	110.76
12.600	4.001	8.0	25.6	26.01	0.18	111.46
12.700	4.001	8.0	32.6	33.61	0.52	111.81
12.800	4.001	8.0	39.1	40.61	0.74	112.04
12.900	4.001	8.0	45.4	47.11	0.85	112.21
13.000	3.001	7.0	50.6	52.41	0.90	112.35
13.100	2.001	5.0	53.6	55.61	1.04	112.42
13.200	2.001	4.0	55.3	57.61	1.12	112.46
13.300	2.001	4.0	56.9	59.31	1.20	112.50
13.400	1.001	3.0	57.5	59.91	1.23	112.51
13.500	1.001	2.0	57.0	59.51	1.21	112.50
13.600	1.001	2.0	56.7	59.01	1.19	112.50
13.700	1.001	2.0	56.3	58.71	1.17	112.49
13.800	1.001	2.0	56.0	58.31	1.16	112.48
13.900	1.001	2.0	55.7	58.01	1.14	112.47
14.000	1.001	2.0	55.4	57.71	1.13	112.47
14.100	1.001	2.0	55.2	57.41	1.12	112.46
14.200	0.001	1.0	54.1	56.21	1.06	112.43
14.300	0.001	0.0	52.1	54.11	0.97	112.38
14.400	0.001	0.0	50.3	52.11	0.90	112.34
14.500	0.001	0.0	48.6	50.31	0.88	112.29
14.600	0.001	0.0	46.9	48.61	0.86	112.25
14.700	0.001	0.0	45.2	46.91	0.84	112.21
14.800	0.001	0.0	43.5	45.21	0.83	112.16
14.900	0.001	0.0	41.9	43.51	0.81	112.12
15.000	0.001	0.0	40.4	41.91	0.78	112.08
15.100	0.001	0.0	38.9	40.41	0.73	112.03
15.200	0.001	0.0	37.5	38.91	0.68	111.98
15.300	0.001	0.0	36.3	37.51	0.64	111.94
15.400	0.001	0.0	35.1	36.31	0.60	111.90

POND-2 Version: 5.20 S/N:
EXECUTED: 09-12-1996 11:12:57

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE10 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
15.500	0.001	0.0	33.9	35.1	0.60	111.86
15.600	0.001	0.0	32.8	33.9	0.53	111.82
15.700	0.001	0.0	31.8	32.8	0.47	111.77
15.800	0.001	0.0	31.0	31.8	0.43	111.73
15.900	0.001	0.0	30.2	31.0	0.40	111.70
16.000	0.001	0.0	29.4	30.2	0.36	111.66
16.100	0.001	0.0	28.8	29.4	0.33	111.63
16.200	0.001	0.0	28.2	28.8	0.31	111.61
16.300	0.001	0.0	27.6	28.2	0.28	111.57
16.400	0.001	0.0	27.1	27.6	0.25	111.54
16.500	0.001	0.0	26.6	27.1	0.23	111.52
16.600	0.001	0.0	26.2	26.6	0.21	111.49
16.700	0.001	0.0	25.8	26.2	0.19	111.47
16.800	0.001	0.0	25.5	25.8	0.18	111.45
16.900	0.001	0.0	25.1	25.5	0.16	111.43
17.000	0.001	0.0	24.9	25.1	0.15	111.41
17.100	0.001	0.0	24.6	24.9	0.13	111.39
17.200	0.001	0.0	24.3	24.6	0.12	111.38
17.300	0.001	0.0	24.1	24.3	0.11	111.36
17.400	0.001	0.0	23.9	24.1	0.10	111.35
17.500	0.001	0.0	23.7	23.9	0.09	111.34
17.600	0.001	0.0	23.6	23.7	0.08	111.32
17.700	0.001	0.0	23.4	23.6	0.08	111.31
17.800	0.001	0.0	23.3	23.4	0.07	111.30
17.900	0.001	0.0	23.2	23.3	0.06	111.29
18.000	0.001	0.0	23.0	23.2	0.06	111.28
18.100	0.001	0.0	22.9	23.0	0.05	111.28
18.200	0.001	0.0	22.9	22.9	0.05	111.27
18.300	0.001	0.0	22.8	22.9	0.04	111.26
18.400	0.001	0.0	22.7	22.8	0.04	111.26
18.500	0.001	0.0	22.6	22.7	0.03	111.25
18.600	0.001	0.0	22.6	22.6	0.03	111.25
18.700	0.001	0.0	22.5	22.6	0.03	111.24
18.800	0.001	0.0	22.5	22.5	0.02	111.24
18.900	0.001	0.0	22.4	22.5	0.02	111.23
19.000	0.001	0.0	22.4	22.4	0.02	111.23
19.100	0.001	0.0	22.3	22.4	0.02	111.23
19.200	0.001	0.0	22.3	22.3	0.02	111.22
19.300	0.001	0.0	22.3	22.3	0.01	111.22
19.400	0.001	0.0	22.3	22.3	0.01	111.22
19.500	0.001	0.0	22.2	22.3	0.01	111.22
19.600	0.001	0.0	22.2	22.2	0.01	111.22
19.700	0.001	0.0	22.2	22.2	0.01	111.21
19.800	0.001	0.0	22.2	22.2	0.01	111.21
19.900	0.001	0.0	22.2	22.2	0.01	111.21
20.000	0.001	0.0	22.1	22.2	0.01	111.21

POND-2 Version: 5.20 S/N:
EXECUTED: 09-12-1996 11:12:57

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE10 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
20.100	0.001	0.0	22.1	22.11	0.01	111.21
20.200	0.001	0.0	22.1	22.11	0.01	111.21
20.300	0.001	0.0	22.1	22.11	0.01	111.21
20.400	0.001	0.0	22.1	22.11	0.00	111.21
20.500	0.001	0.0	22.1	22.11	0.00	111.21
20.600	0.001	0.0	22.1	22.11	0.00	111.21
20.700	0.001	0.0	22.1	22.11	0.00	111.21
20.800	0.001	0.0	22.1	22.11	0.00	111.20
20.900	0.001	0.0	22.1	22.11	0.00	111.20
21.000	0.001	0.0	22.0	22.11	0.00	111.20
21.100	0.001	0.0	22.0	22.01	0.00	111.20
21.200	0.001	0.0	22.0	22.01	0.00	111.20
21.300	0.001	0.0	22.0	22.01	0.00	111.20
21.400	0.001	0.0	22.0	22.01	0.00	111.20
21.500	0.001	0.0	22.0	22.01	0.00	111.20
21.600	0.001	0.0	22.0	22.01	0.00	111.20
21.700	0.001	0.0	22.0	22.01	0.00	111.20
21.800	0.001	0.0	22.0	22.01	0.00	111.20
21.900	0.001	0.0	22.0	22.01	0.00	111.20
22.000	0.001	0.0	22.0	22.01	0.00	111.20
22.100	0.001	0.0	22.0	22.01	0.00	111.20
22.200	0.001	0.0	22.0	22.01	0.00	111.20
22.300	0.001	0.0	22.0	22.01	0.00	111.20
22.400	0.001	0.0	22.0	22.01	0.00	111.20
22.500	0.001	0.0	22.0	22.01	0.00	111.20
22.600	0.001	0.0	22.0	22.01	0.00	111.20
22.700	0.001	0.0	22.0	22.01	0.00	111.20
22.800	0.001	0.0	22.0	22.01	0.00	111.20
22.900	0.001	0.0	22.0	22.01	0.00	111.20
23.000	0.001	0.0	22.0	22.01	0.00	111.20
23.100	0.001	0.0	22.0	22.01	0.00	111.20
23.200	0.001	0.0	22.0	22.01	0.00	111.20
23.300	0.001	0.0	22.0	22.01	0.00	111.20
23.400	0.001	0.0	22.0	22.01	0.00	111.20
23.500	0.001	0.0	22.0	22.01	0.00	111.20
23.600	0.001	0.0	22.0	22.01	0.00	111.20
23.700	0.001	0.0	22.0	22.01	0.00	111.20
23.800	0.001	0.0	22.0	22.01	0.00	111.20
23.900	0.001	0.0	22.0	22.01	0.00	111.20
24.000	0.001	0.0	22.0	22.01	0.00	111.20
24.100	0.001	0.0	22.0	22.01	0.00	111.20
24.200	0.001	0.0	22.0	22.01	0.00	111.20
24.300	0.001	0.0	22.0	22.01	0.00	111.20
24.400	0.001	0.0	22.0	22.01	0.00	111.20
24.500	0.001	0.0	22.0	22.01	0.00	111.20
24.600	0.001	0.0	22.0	22.01	0.00	111.20

EXECUTED: 09-12-1996 11:12:57

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE10 .HYD
Outflow Hydrograph: A:OUT .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (hrs)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
24.700	0.001	0.0	22.0	22.01	0.00	111.20
24.800	0.001	0.0	22.0	22.01	0.00	111.20
24.900	0.001	0.0	22.0	22.01	0.00	111.20
25.000	0.001	0.0	22.0	22.01	0.00	111.20
25.100	0.001	0.0	22.0	22.01	0.00	111.20
25.200	0.001	0.0	22.0	22.01	0.00	111.20
25.300	0.001	0.0	22.0	22.01	0.00	111.20
25.400	0.001	0.0	22.0	22.01	0.00	111.20
25.500	0.001	0.0	22.0	22.01	0.00	111.20
25.600	0.001	0.0	22.0	22.01	0.00	111.20
25.700	0.001	0.0	22.0	22.01	0.00	111.20
25.800	0.001	0.0	22.0	22.01	0.00	111.20
25.900	0.001	0.0	22.0	22.01	0.00	111.20

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE10 .HYD
Outflow Hydrograph: A:OUT .HYD

Starting Pond W.S. Elevation = 108.60 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow = 4.00 cfs
Peak Outflow = 1.23 cfs
Peak Elevation = 112.51 ft

***** Summary of Approximate Peak Storage *****

Initial Storage = 0.00 ac-ft
Peak Storage From Storm = 0.24 ac-ft

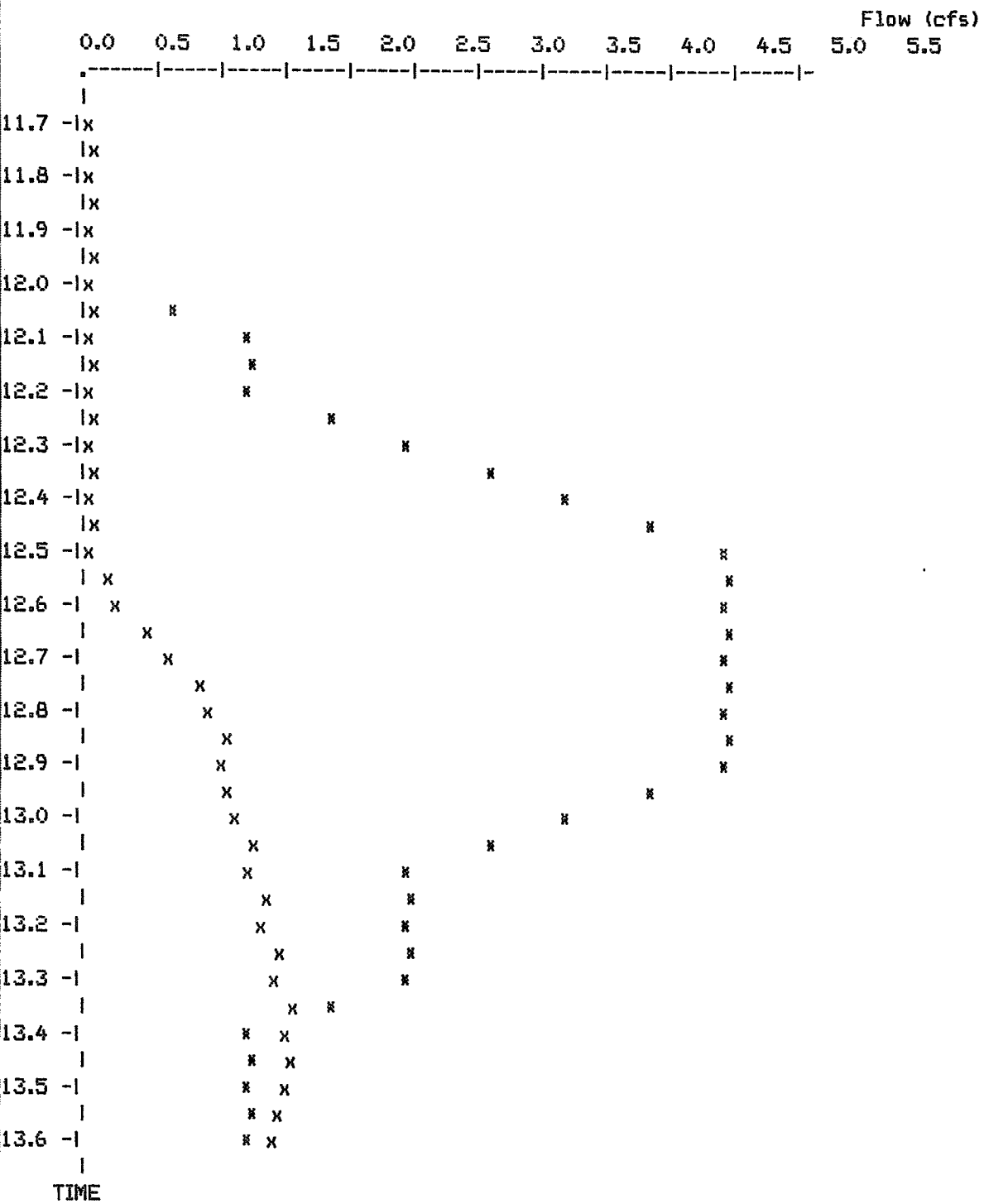
Total Storage in Pond = 0.24 ac-ft

POND-2 Version: 5.20 S/N:

Pond File: A:NORGE2 .PND
Inflow Hydrograph: A:NORGE10 .HYD
Outflow Hydrograph: A:OUT .HYD

EXECUTED: 09-12-1996
11:12:57

Peak Inflow = 4.00 cfs
Peak Outflow = 1.23 cfs
Peak Elevation = 112.51 ft



* File: A:NORGE10 .HYD Qmax = 4.0 cfs
x File: A:OUT .HYD Qmax = 1.2 cfs

File - Riverside Med. @ Norge

Langley and McDonald, P.C.

Engineers
Surveyors
Planners
Landscape Architects
Environmental Consultants

GEORGE E. LANGLEY
Consultant
T. JOSEPH McDONALD
1906-1982

FAX TRANSMITTAL COVER SHEET

PLEASE DELIVER THE FOLLOWING MATERIAL AS SOON AS POSSIBLE

TO: Darryl Cooke TELECOPIER NUMBER: 253-6663

FROM: Greg Warren NUMBER OF PAGES: 2 (INCLUDING COVER SHEET)

IF NOT RECEIVED PROPERLY PLEASE NOTIFY US IMMEDIATELY BY CALLING : (804) 253-2975

JOB NUMBER: 85040 DATE SENT: Jan. 23, 1997

IF YOU WISH TO RESPOND BY FAX, OUR FAX NUMBER IS: (804) 229-0049

SPECIAL MESSAGE:

Darryl,

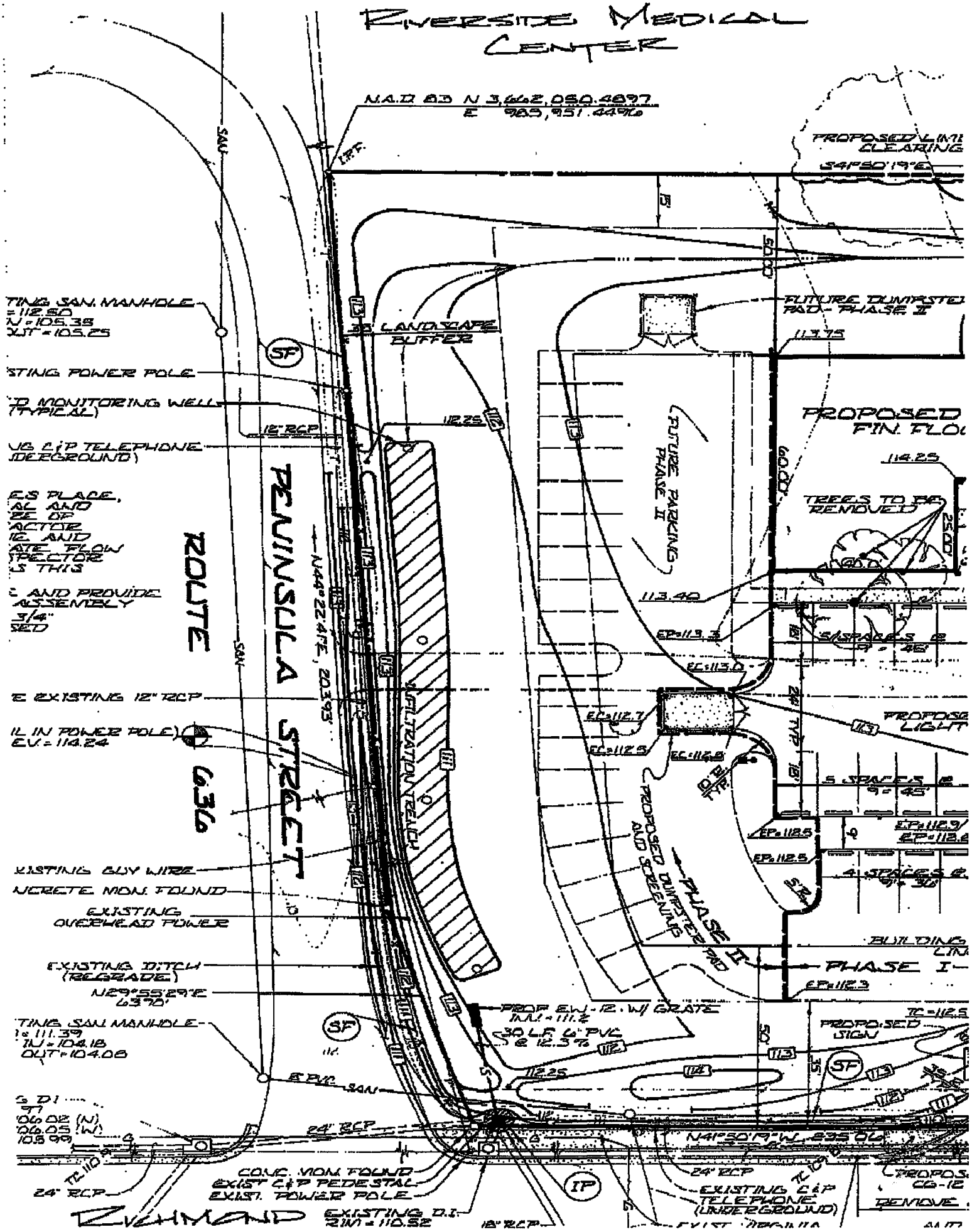
The infiltration trench at @ Riverside Medical Center in Norge was revised to incorporate the two trenches into one. The original design called for the two trenches because we were led to believe that there was a 4" waterline running through the middle. Come to find out (after field verification) that there is no waterline in that area. With that in mind, I felt that the logical thing to do would be to join the trenches together. If this poses a problem please feel free to give me a call. I will forward over a couple of sets of the revised plans. I'm sorry for the delay in letting you know what our intentions were.

Thanks,
Greg Warren

MAIN OFFICE
5544 Greenwich Road
Virginia Beach, VA 23462
(804) 473-2000
FAX: (804) 497-7933

201 Packets Court
Williamsburg, VA 23185
(804) 253-2975
FAX: (804) 229-0049

RIVERSIDE MEDICAL CENTER



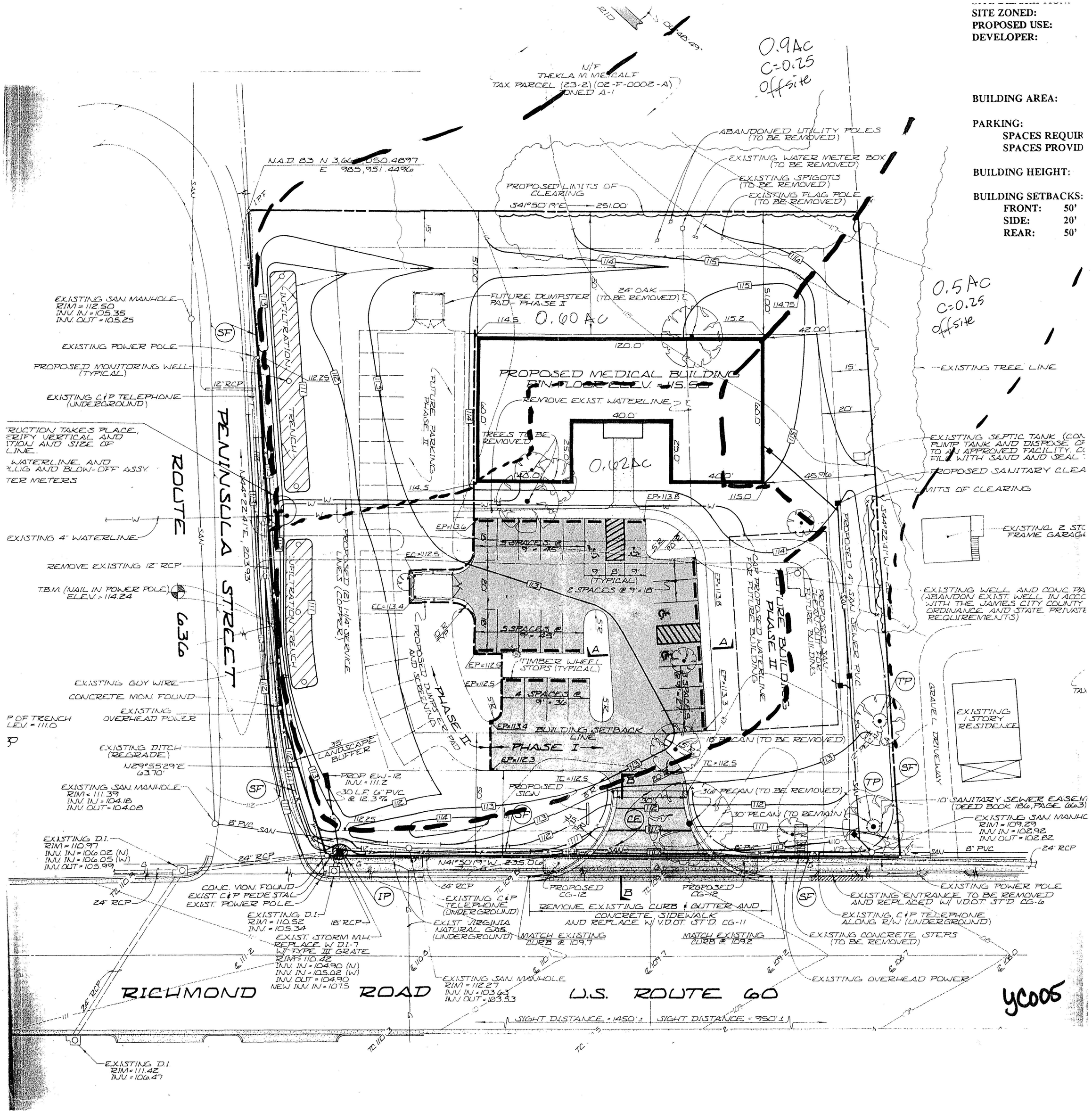
SITE ZONED:
PROPOSED USE:
DEVELOPER:

BUILDING AREA:

PARKING:
SPACES REQUIR
SPACES PROVID

BUILDING HEIGHT:

BUILDING SETBACKS:
FRONT: 50'
SIDE: 20'
REAR: 50'



Peninsula St.
YC005
Site
Richmond Road

WATERSHED	YC	MAINTENANCE PLAN	No	CTRL STRUC DESC	EW-12 Head
BMP ID NO	005	SITE AREA acre	1.51	CTRL STRUC SIZE inches	6
PLAN NO	SP-66-96	LAND USE	Gen Business	OTLT BARRL DESC	PVC Pipe
TAX PARCEL	(23-02)(02-04)	old BMP TYP	Infil Trench	OTLT BARRL SIZE inch	6
PIN NO	2320200004	JCC BMP CODE			
CONSTRUCTION DATE	1/1/1997	POINT VALUE	9	EMERG SPILLWAY	No
PROJECT NAME	Riverside Medical Center (Norge)			DESIGN HW ELEV	112.5
FACILITY LOCATION	7364 Richmond Road (at Penisula Street)			PERM POOL ELE	na
CITY-STATE	Williamsburg, Va. 23188	SVC DRAIN AREA acres	2.9	2-YR OUTFLOW cfs	0.60
CURRENT OWNER	Riverside Health Care Associates, Inc.			10-YR OUTFLOW cfs	1.23
OWNER ADDRESS	606 Denbigh Blvd.			REC DRAWING	No
OWNER ADDRESS 2	Suite 800	SERVICE AREA DESCRI	Building, Parking & Offsite area		
CITY-STATE-ZIP CODE	Newport News, Va. 23608	IMPERV AREA acres	2.02	CONSTR CERTI	No
OWNER PHONE		RECV STREAM	UT of Yarmouth Creek		
MAINT AGREEMENT	Yes	EXT DET-WQ-CTRL	Yes	LAST INSP DATE	
		WTR QUAL VOL acre-ft	0.126	INTERNAL RATING	
EMERG ACTION PLAN	No	CHAN PROT CTRL	No	MISC/COMMENTS	
		CHAN PROT VOL acre-ft	0	North side US 60 at Penisula St. 2 cell infil trench with 6" overflow.	
		SW/FLOOD CONTROL	Yes		
		GEOTECH REPORT	No		

Get Last BMP No

Return to Menu

Date Record Created: [redacted]

Created By: [redacted]

WS_BMPNO: YC005

Print Form

PRINTED ON:
Saturday, March 13, 2010
3:16:27 PM

WATERSHED	YC
BMP ID NO	005
PLAN NO	SP-66-96
TAX PARCEL	(23-2)(2-04)
PIN NO	2320200004
CONSTRUCTION DATE	1/1/1997
PROJECT NAME	Riverside Medical Center (Norge)
FACILITY LOCATION	7364 Richmond Road (at Penisula Street)
CITY-STATE	Williamsburg, Va. 23188
CURRENT OWNER	Riverside Health Care Associates, Inc.
OWNER ADDRESS	606 Denbigh Blvd.
OWNER ADDRESS 2	Suite 800
CITY-STATE-ZIP CODE	Newport News, Va. 23608
OWNER PHONE	
MAINT AGREEMENT	Yes
EMERG ACTION PLAN	No

Get Last BMP No

Return to Menu

MAINTENANCE PLAN	No	CTRL STRUC DESC	EW-12 Head
SITE AREA acre	1.51	CTRL STRUC SIZE inches	6
LAND USE	Gen Business	OTLT BARRL DESC	PVC Pipe
old BMP TYP	Infil Trench	OTLT BARRL SIZE inch	6
JCC BMP CODE	C1 Infiltration Trench .5		
POINT VALUE	9	EMERG SPILLWAY	No
		DESIGN HW ELEV	112.5
		PERM POOL ELEV	na
SVC DRAIN AREA acres	2.9	2-YR OUTFLOW cfs	0.60
		10-YR OUTFLOW cfs	1.23
		REC DRAWING	No
SERVICE AREA DESCRI	Building, Parking & Offsite area		
IMPERV AREA acres	2.02	CONSTR CERTIF	No
RECV STREAM	UT of Yarmouth Creek		
EXT DET-WQ-CTRL	Yes	LAST INSP DATE	3/26/2002
WTR QUAL VOL acre-ft	0.126	INTERNAL RATING	4
CHAN PROT CTRL	No		
CHAN PROT VOL acre-ft	0	MISC/COMMENTS	
SW/FLOOD CONTROL	Yes	North side US 60 at Penisula St. 2 cell infil trench with 6" overflow.	
GEOTECH REPORT	No		

Inspected by: [redacted]

Additional Comments: [redacted]

Date Record Created:

Created By:

WS_BMPNO: YC005

Print Form

PRINTED ON:
Saturday, March 13, 2010
3:16:27 PM

WATERSHED	YC
BMP ID NO	005
PLAN NO	SP-66-96
TAX PARCEL	(23-2)(2-04)
PIN NO	2320200004
CONSTRUCTION DATE	1/1/1997
PROJECT NAME	Riverside Medical Center (Norge)
FACILITY LOCATION	7364 Richmond Road (at Penisula Street)
CITY-STATE	Williamsburg, Va. 23188
CURRENT OWNER	Riverside Health Care Associates, Inc.
OWNER ADDRESS	606 Denbigh Blvd.
OWNER ADDRESS 2	Suite 800
CITY-STATE-ZIP CODE	Newport News, Va. 23608
OWNER PHONE	
MAINT AGREEMENT	Yes
EMERG ACTION PLAN	No

Get Last BMP No

Return to Menu

MAINTENANCE PLAN	No
SITE AREA acre	1.51
LAND USE	Gen Business
old BMP TYP	Infil Trench
JCC BMP CODE	C1 Infiltration Trench .5
POINT VALUE	9
SVC DRAIN AREA acres	2.9
SERVICE AREA DESCRI	Building, Parking & Offsite area
IMPERV AREA acres	2.02
RECV STREAM	UT of Yarmouth Creek
EXT DET-WQ-CTRL	Yes
WTR QUAL VOL acre-ft	0.126
CHAN PROT CTRL	No
CHAN PROT VOL acre-ft	0
SW/FLOOD CONTROL	Yes
GEOTECH REPORT	No

CTRL STRUC DESC	EW-12 Head
CTRL STRUC SIZE inches	6
OTLT BARRL DESC	PVC Pipe
OTLT BARRL SIZE inch	6
EMERG SPILLWAY	No
DESIGN HW ELEV	112.5
PERM POOL ELEV	na
2-YR OUTFLOW cfs	0.60
10-YR OUTFLOW cfs	1.23
REC DRAWING	No
CONSTR CERTIF	No

LAST INSP DATE 3/26/2002 Inspected by:

INTERNAL RATING 4

MISC/COMMENTS

North side US 60 at Penisula St. 2 cell infil trench with 6" overflow.

Additional Comments: