

| NO | TITLE SHEET                        |
|----|------------------------------------|
| 1  | TITLE SHEET                        |
| 2  | SITE DEVELOPMENT PLAN              |
| 3  | DRAINAGE AREA AND SOILS MAP        |
| 4  | DETAILS AND PROFILES               |
| 5  | GRADING AND SEDIMENT CONTROL PLAN  |
| 6  | SEDIMENT CONTROL NOTES AND DETAILS |
| 7  | LANDSCAPE PLAN                     |

**GENERAL NOTES**

- ALL WATER LINES SHALL BE CONSTRUCTED A MINIMUM OF 42" COVER BELOW FINISHED GRADE.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, 11-1, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1989 EDITION.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FROM BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TO VERIFY THEIR LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF LOCATION OF UTILITIES IS OTHER THAN SHOWN.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:
 

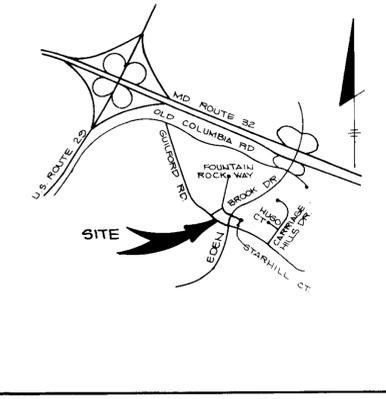
|  |                |
|--|----------------|
| MISS UTILITY   | 1-800-257-7777 |
| CAP TELEPHONE COMPANY  | 725-9976       |
| HOWARD COUNTY BUREAU OF UTILITIES  | 50-4000        |
| AT&T CABLE LOCATION DIVISION   | 393-3553       |
| BALTIMORE GAS & ELECTRIC COMPANY   | 685-0123       |
| STATE HIGHWAY ADMINISTRATION   | 531-5533       |
| HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK) | 792-7272       |
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.
- TOPO TAKEN FROM FIELD RUN SURVEY DATED SEPT. 88 BY RIEMER MUEGGE & ASSOCIATES, INC.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL STORM DRAIN PIPE BEDDING SHALL BE AS SHOWN IN DETAIL 02.01 (TRENCH IN ROCK OR TRENCH IN EARTH AS DETERMINED BY FIELD CONDITIONS) IN VOL. IV OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS.
- THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
- THE OWNER SHALL PROVIDE A SEPARATE AND INDEPENDENT SEWER CONNECTION FOR EACH TENANT OR OCCUPANT OF ANY BUILDING SHOWN ON THIS SITE DEVELOPMENT PLAN, WHO WILL DISCHARGE NON-DOMESTIC WASTE TO THE PUBLIC SEWERAGE SYSTEM IF THIS WASTE IS REGULATED UNDER SECTION 18.122A OF THE HOWARD COUNTY CODE. EACH SEPARATE AND INDEPENDENT SEWER CONNECTION SHALL INCLUDE A STANDARD MANHOLE AND OTHER WASTE PRE-TREATMENT DEVICES AS REQUIRED AND APPROVED BY HOWARD COUNTY. WASTE LINES ON THE INTERIOR OF THE BUILDING SHALL BE DESIGNED, CONSTRUCTED OR MODIFIED SUCH THAT NON-DOMESTIC WASTE WILL BE DISCHARGED TO THE SEPARATE AND INDEPENDENT SEWER CONNECTION. NO TENANT OR OCCUPANT OF ANY BUILDING SHOWN ON THIS SITE DEVELOPMENT PLAN SHALL DISCHARGE REGULATED NON-DOMESTIC WASTE TO THE PUBLIC SEWERAGE SYSTEM PRIOR TO INSTALLATION OF THE SEPARATE AND INDEPENDENT SEWER CONNECTION AND RELATED INTERIOR WASTE LINES. THE ABOVE REQUIREMENTS SHALL APPLY TO ALL INITIAL AND FUTURE OCCUPANTS OR TENANTS.
- ALL EXTERIOR LIGHTING SHALL BE DIRECTLY REFLECTED AWAY FROM ADJACENT RESIDENTIALLY ZONED PROPERTIES AND PUBLIC STREET RIGHT-OF-WAYS.
- PROPERTY SUBJECT TO:
  - BA-89-12E SECTION 12.6 F.41 REQUESTING SPECIAL EXCEPTION FOR RELIGIOUS AND COMMUNITY ACTIVITIES IN A R-8C DISTRICT, APPROVED ON AUGUST 31, 1990.
  - W.P.-90-52 SECTION 16.113 F.7 WAIVER TO ALLOW FOR DIRECT DRIVEWAY ACCESS TO GUILFORD ROAD, A MAJOR COLLECTOR, APPROVED ON JANUARY 5, 1990.
- PER A FIELD INVESTIGATION BY RIEMER MUEGGE & ASSOCIATES, INC. THERE ARE NO ON-SITE WETLANDS. HELICE, A U.S. ARMY CORPS OF ENGINEERS PERMIT 404 AND THE MARYLAND DEPARTMENT OF ENVIRONMENTAL PERMIT 401 ARE NOT REQUIRED.
- STORM WATER MANAGEMENT FOR THIS DEVELOPMENT IS PROVIDED FOR UNDER F-85-103.
- THE PAVEMENT DETAILS SHOWN ON SHEET 4 OF 7 REFLECT THE HOWARD COUNTY MINIMUM PAVEMENT SECTIONS AND ARE NOT BASED ON SITE SPECIFIC CONDITIONS. PRIOR TO PAVING, THE FINAL PAVEMENT SECTIONS SHALL BE DETERMINED BY A QUALIFIED GEOTECHNICAL ENGINEER BASED ON ON-SITE TESTING OF THE FINISHED SUBGRADE.
- THIS SDP IS SUBJECT TO BA-97-42E.

# SITE DEVELOPMENT PLAN

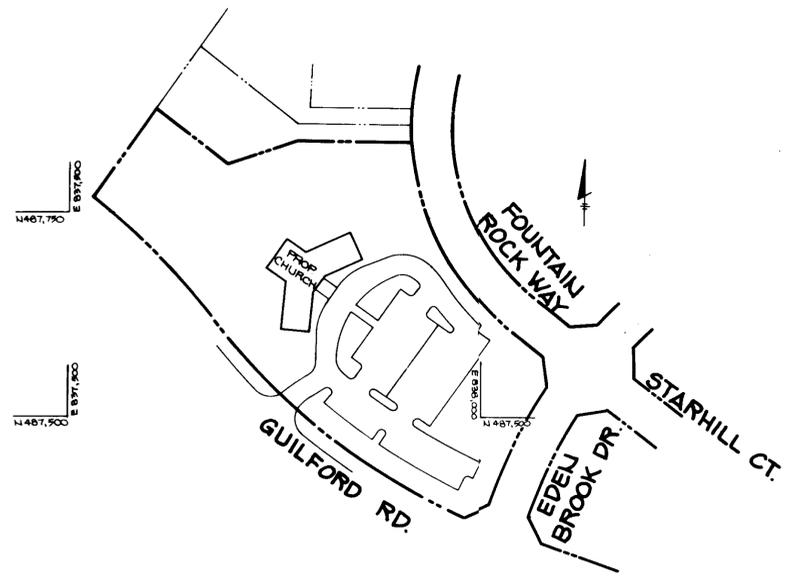
## NEW HOPE LUTHERAN CHURCH

### 6th ELECTION DISTRICT

## HOWARD COUNTY MARYLAND



VICINITY MAP  
SCALE: 1"=200'



LOCATION PLAN  
SCALE: 1"=100'

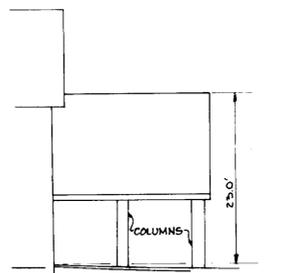
**SITE TABULATION**

|                                 |                                       |
|---------------------------------|---------------------------------------|
| 1. TOTAL AREA OF SITE           | = 3.137 AC                            |
| 2. EXISTING ZONING              | = R-8C (BA-89-12E)                    |
| 3. PROPOSED USE                 | = RELIGIOUS FACILITY                  |
| 4. BUILDING COVERAGE PROPOSED   | = 6,391 SQ. FT. (5%)                  |
| 5. BUILDING COVERAGE ALLOWED    | = 34,102 SQ. FT. (29%)                |
| 6. PARKING REQUIRED:            |                                       |
| 150 SEATS FOR WORSHIP           |                                       |
| CHOIR AND CLERGY                |                                       |
| 50 SEATS FOR OVERFLOW           |                                       |
| 200 TOTAL SEATS                 |                                       |
| 16 SPACE PER 3 SEATS            | = 67 SPACES REQUIRED                  |
| 7. PARKING PROVIDED             | = 68 SPACES (INCLUDING 3 HANDICAPPED) |
| 8. OPEN SPACE REQUIRED          | = 27,443 SQ. FT. (20%)                |
| 9. OPEN SPACE PROVIDED          | = 80,826 SQ. FT. (63%)                |
| 10. AREA OF PARKING             | = 42,102 SQ. FT.                      |
| 11. LANDSCAPED ISLANDS REQUIRED | = 2,105 SQ. FT. (5%)                  |
| 12. LANDSCAPED ISLANDS PROVIDED | = 5,382 SQ. FT. (19%)                 |

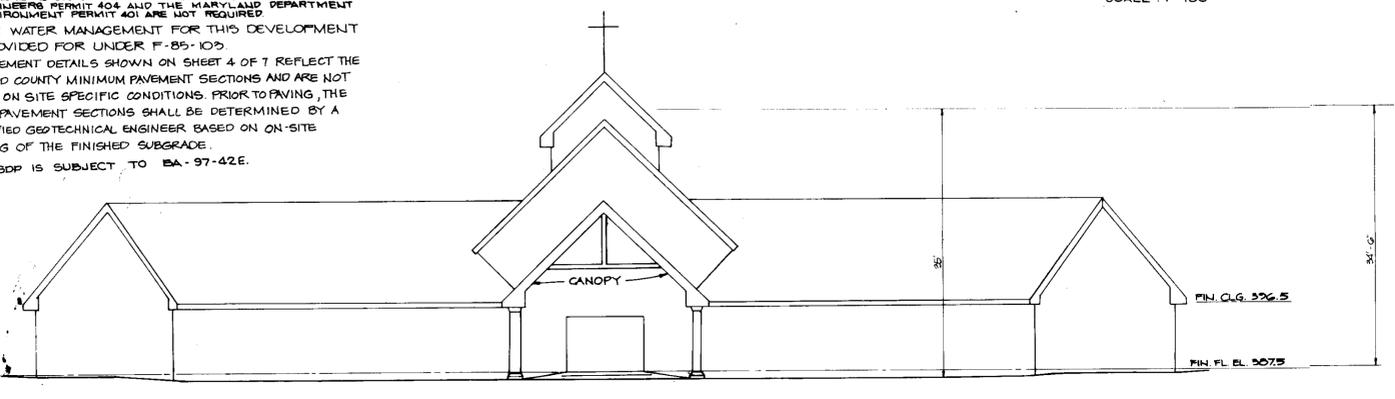
**CONDITIONS OF DECISION AND ORDER OF BA 89-12E \***

- PETITIONER SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND COUNTY LAND AND REGULATIONS.
- ALL OUTDOOR LIGHTING SHALL BE DIRECTED INWARD AND DOWNWARD SO AS NOT TO SHINE OR REFLECT ONTO ADJACENT RESIDENTIAL PROPERTY, AND SHALL BE THE MINIMUM NECESSARY FOR DIRECTIONAL LIGHTING AND SECURITY.
- PETITIONER SHALL APPLY FOR A WAIVER FROM THE COUNTY TO ALLOW INGRESS AND EGRESS ONTO THE SITE VIA GUILFORD ROAD; HOWEVER, IF A WAIVER CANNOT BE OBTAINED, PETITIONER MAY REQUEST RECONSIDERATION FROM THE BOARD ON THE GROUNDS OF CHANGED CIRCUMSTANCES.
- PETITIONER SHALL PROVIDE ADEQUATE LANDSCAPING TO SCREEN ALL STRUCTURES AND PARKING FROM ADJACENT PROPERTIES, AND SHALL ENDEAVOR TO RETAIN AS MANY OF THE EXISTING TREES AS POSSIBLE. TREES SHALL BE EVERGREEN TREES WITH A MINIMUM HEIGHT OF 4 FEET WHEN PLANTED. TREES SHALL BE MAINTAINED FOR THE LIFE OF THE SPECIAL EXCEPTION.
- ANY AIR CONDITIONERS, FANS OR OUTSIDE APPLIANCES SHALL BE ADEQUATELY SCREENED AND BUFFERED FOR BOTH SITE AND NEIGHBOR FROM ADJACENT PROPERTIES.

\* ALSO SEE GENERAL NOTE 21



CANOPY ELEVATION  
NO SCALE



FRONT ELEVATION  
NO SCALE



AS-BUILT STORM DRAIN  
MADE BY ENGINEER AND  
SURVEYORS, INC. 11/2/91  
DATE OF SURVEY  
1-2-92  
1-6-92  
1-15-92

| ADDRESS CHART |                    |
|---------------|--------------------|
| LOT NUMBER    | STREET ADDRESS     |
| 100           | 8575 GUILFORD ROAD |

| SUBDIVISION NAME | SECT./AREA | LOT/PARCEL # |
|------------------|------------|--------------|
| KINGS MEADE      | 1          | LOT 100      |
| PLAT # OR L/F    | BLOCK #    | TAX/ZONE MAP |
| 9022             | 7          | R-8C         |
| WATER CODE       | E-1G       | SEWER CODE   |
|                  |            | 5290000      |

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
*James M. Borden* 7/24/91  
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*Joseph A. Smith* 7/24/91  
DIRECTOR DATE  
*Mark J. Smith* 7/24/91  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*James G. Linn* 7/16/91  
DIRECTOR DATE  
*Gregory S. Kelly* 7-8-91  
CHIEF, BUREAU OF ENGINEERING DATE

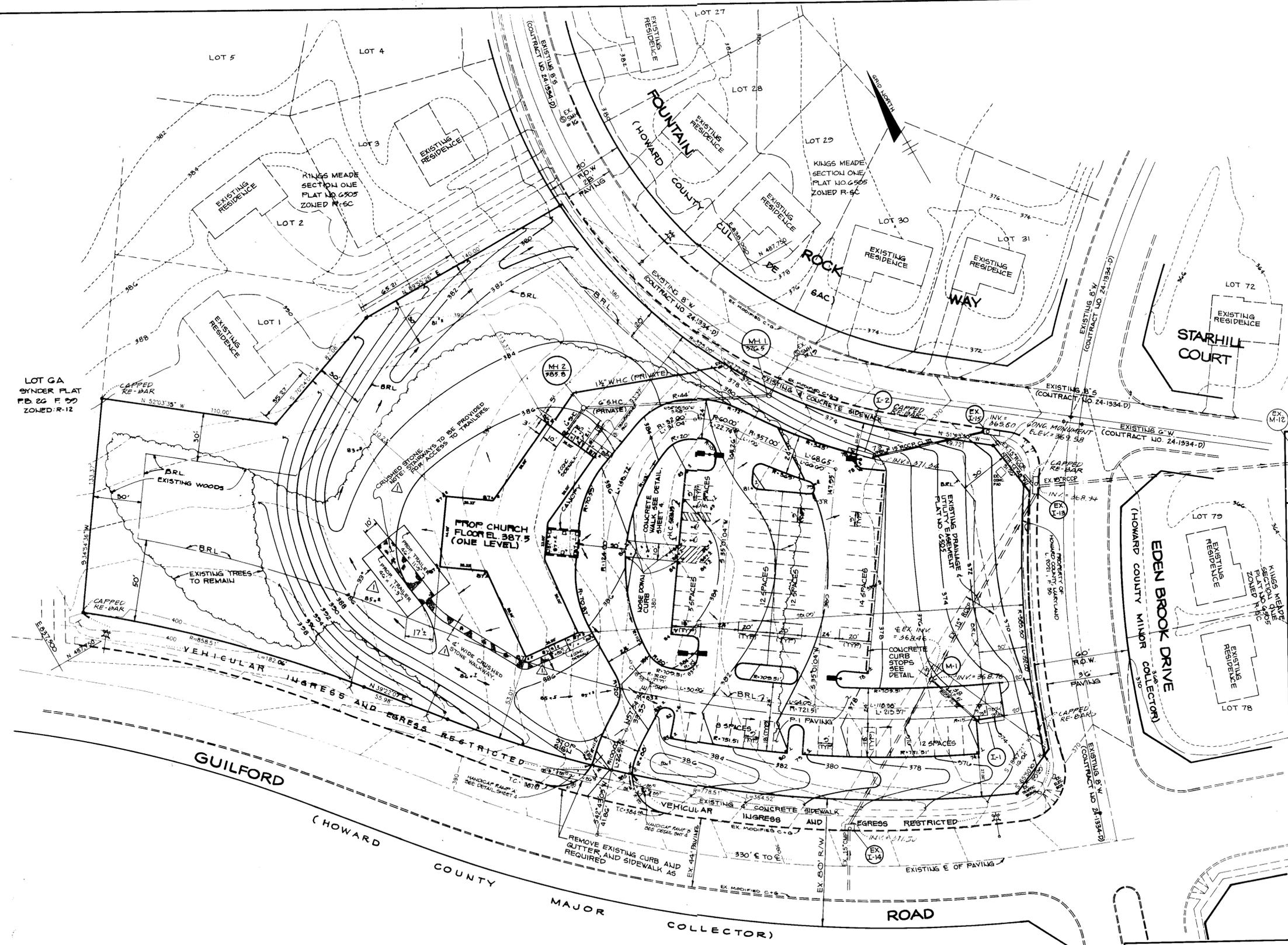
| DATE     | NO | REVISION        |
|----------|----|-----------------|
| 12-15-97 | 1  | ADDED NOTE # 21 |

OWNER/DEVELOPER  
NEW HOPE LUTHERAN CHURCH  
% STAN FLEMING  
10273 BURLEIGH COTTAGE LANE  
ELLCOTT CITY, MD 21043

PROJECT:  
**NEW HOPE LUTHERAN CHURCH**  
A RELIGIOUS FACILITY  
AREA: KINGS MEADE SECTION 1, LOT 100  
TAX MAP 42 ZONED R-8C TAX MAP PARCEL NO. 303  
6th ELECTION DISTRICT HOWARD COUNTY, MD  
TITLE: TITLE SHEET

RIEMER MUEGGE & ASSOCIATES, INC.  
A Land Planning, Engineering and Consulting Firm  
3105 North Ridge Road Ellicott City, Maryland 21043  
301-461-2690 FAX: 301-750-3176

| DATE       | DESIGNED BY |
|------------|-------------|
| 6-26-91    | J.J.B.      |
| DATE       | DRAWN BY    |
|            | G.D.H.      |
| DATE       | PROJECT NO. |
| JUNE, 1991 | 55401       |
| DATE       | SCALE       |
|            | AS SHOWN    |
| DATE       | DRAWING NO. |
|            | 1 OF 7      |



LOT GA  
SYNDER PLAT  
FD 26 F 22  
ZONED R-12

VEHICULAR INGRESS AND EGRESS RESTRICTED

GUILFORD COUNTY MAJOR COLLECTOR ROAD

EDEN BROOK DRIVE  
(HOWARD COUNTY MAJOR COLLECTOR)

- NOTES:**
- OIL AND GRIT SEPARATORS ARE PROVIDED AT I-1 AND I-2
  - STORM WATER MANAGEMENT FOR THIS SITE IS PROVIDED FOR UNDER F-05-103.
  - ALL CURB RADII ARE 5' UNLESS OTHERWISE NOTED.
  - ALL DIMENSIONS TO FACE OF CURB, FACE OF BUILDING, OR CENTERLINE UNLESS OTHERWISE SHOWN.
  - FOR SEQUENCE OF CONSTRUCTION SEE SHEET 4
  - FOR STRUCTURE SCHEDULE SEE SHEET 4

**PLAN**  
SCALE: 1" = 30'

FOR HANDICAPPED ACCESS PROFILE SEE SHEET 4

- LEGEND**
- 372 — TWO FOOT PROPOSED CONTOURS
  - 370 — TEN FOOT PROPOSED CONTOURS
  - ● — PROPOSED LIGHT POLE
  - B.R.L. — BUILDING RESTRICTION LINE
  - — FLOW ARROWS

NOTE: REFER TO LANDSCAPE PLAN FOR TREES DESIGNATED TO REMAIN.



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

*Joyce M. Braddock* 7/18/91  
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*James S. Smith* 7/24/91  
DIRECTOR DATE

*Mark L. J. ...* 7/24/91  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*James ...* 7/24/91  
DIRECTOR DATE

*William ...* 7-24-91  
CHIEF, BUREAU OF ENGINEERING DATE

|          |   |
|----------|---|
| 12-15-97 | ADDED 2 PROP. TRAILERS (8'46" x 11'9" EA) & CRUSHED STONE, 4' WALKWAY |
| DATE     | NO REVISION   |

OWNER/DEVELOPER  
NEW HOPE LUTHERAN CHURCH  
% STAN FLEMING  
10273 BURLIEGH COTTAGE LANE  
ELLCOTT CITY, MD 21043

PROJECT:  
**NEW HOPE LUTHERAN CHURCH  
A RELIGIOUS FACILITY**

AREA: KINGS MEADE SECTION I, LOT 108  
TAX MAP: 42 ZONED: R-9C TAX MAP PARCEL NO: 303  
6TH ELECTION DISTRICT HOWARD COUNTY, MD

TITLE:  
SITE DEVELOPMENT PLAN

**RIEMER MUEGGE & ASSOCIATES, INC.**  
A Land Planning, Engineering and Consulting Firm  
3105 North Ridge Road Ellicott City, Maryland 21043  
301-461-2690 FAX: 301-750-3176

DATE: 6-26-91  
COUNTY FILE NO: F-85-108-04-001-002  
W/P 10-97, F-20-150, F-21-151

DESIGNED BY: J.J.B.

DRAWN BY: S.R.H.

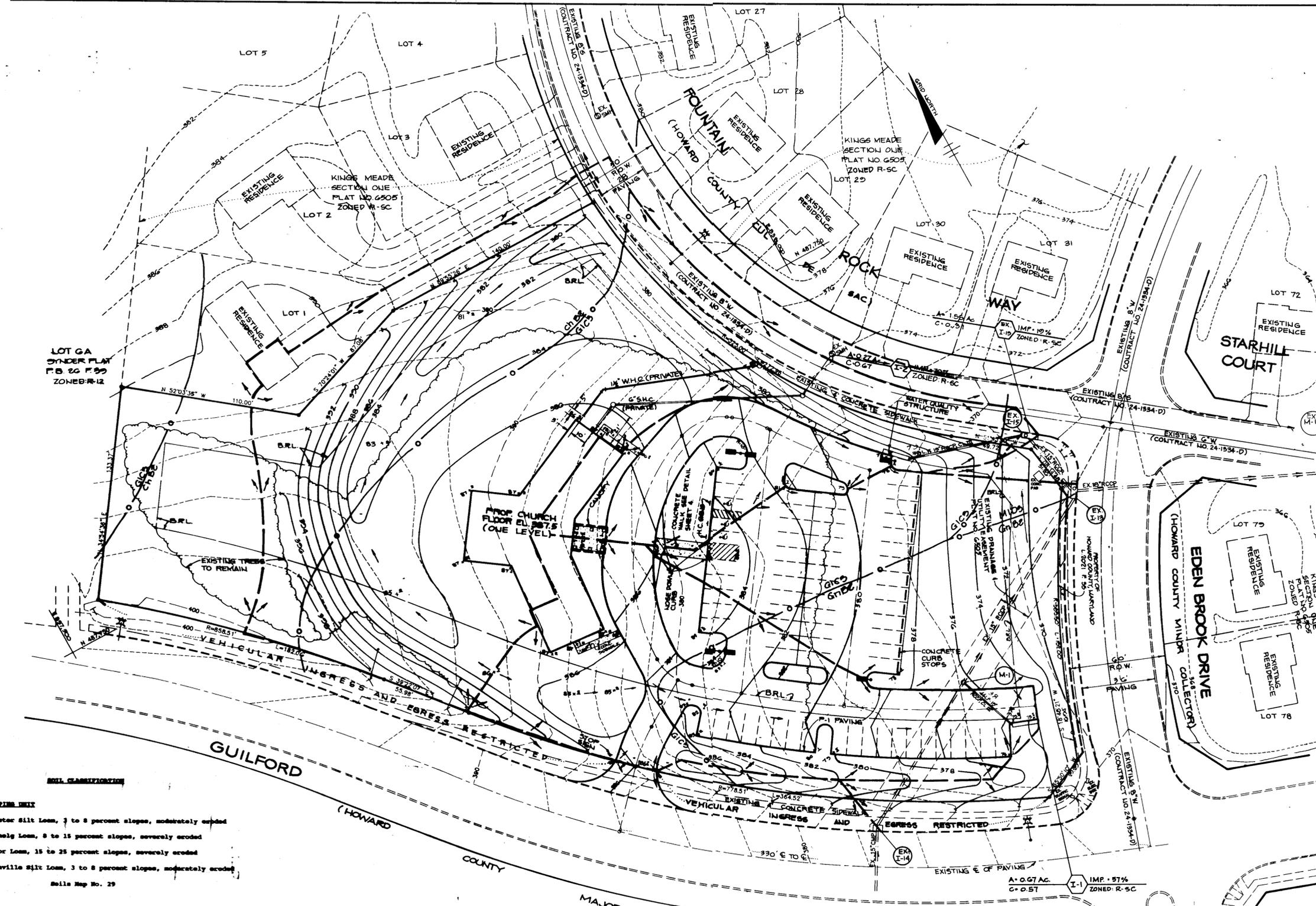
PROJECT NO: 55401

DATE: JUNE, 1991

SCALE: AS SHOWN

DRAWING NO. 2 OF 7

SDP-90-18Q



LOT GA  
OWNER PLAT  
P.B. 26 P. 29  
ZONED R-12

PROF CHURCH  
FLOOR EL. 287.5  
(ONE LEVEL)

EDEN BROOK DRIVE  
(HOWARD COUNTY MINOR COLLECTOR)

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
*Joyce M. Boyd* 7/18/91  
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*Joyce M. Boyd* 7/24/91  
 DIRECTOR DATE

APPROVED: DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT  
*Mark S. Taylor* 7/24/91  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*James M. Taylor* 7/16/91  
 DIRECTOR DATE

*Deborah S. Reed* 7-8-91  
 CHIEF, BUREAU OF ENGINEERING DATE

| DATE  | NO. | REVISION |
|---|-----|----------|
|   |     |          |
| OWNER/DEVELOPER   |     |          |
| NEW HOPE LUTHERAN CHURCH<br>5% STAN FLEMING<br>10273 BURLINGHAM COTTAGE LAKE<br>ELLCOTT CITY, MD 21043                                      |     |          |
| PROJECT:  |     |          |
| NEW HOPE LUTHERAN CHURCH<br>A RELIGIOUS FACILITY  |     |          |
| AREA: KINGS MEADE SECTION 1 LOT 188<br>TAX MAP 42, ZONED R-SC, TAX MAP PARCEL NO. 303<br>6TH ELECTION DISTRICT, COLUMBIA, HOWARD COUNTY, MD |     |          |
| TITLE:  |     |          |
| DRAINAGE AREA AND SOILS MAP   |     |          |

RIEMER MUEGGE & ASSOCIATES, INC.  
 A Land Planning, Engineering and Consulting Firm  
 3105 North Ridge Road Ellicott City, Maryland 21043  
 301-461-2690 FAX: 301-750-3176

DATE: 6-26-91

DESIGNED BY: J.J.B., S.R.H.  
 DRAWN BY: S.R.H.  
 PROJECT NO: 55401  
 DATE: JUNE, 1991  
 SCALE: AS SHOWN  
 DRAWING NO. 3 OF 7

ARTHUR E. MUEGGE # 8107

**SOIL CLASSIFICATION**

| MAP SYMBOL | MAPPING UNIT   |
|------------|--|
| CH2        | Chester Silt Loam, 3 to 8 percent slopes, moderately eroded    |
| ClC3       | clayey Loam, 8 to 15 percent slopes, severely eroded           |
| H1A        | hamor Loam, 15 to 25 percent slopes, severely eroded           |
| CH2        | Glensville Silt Loam, 3 to 8 percent slopes, moderately eroded |

Soils Map No. 29

**LEGEND**

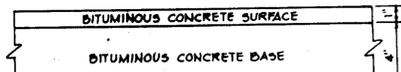
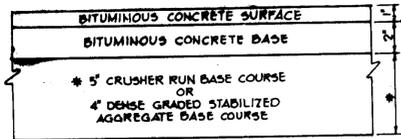
- 972 — TWO FOOT CONTOUR
- 970 — TEN FOOT CONTOUR
- — SOILS LINE
- — DRAINAGE AREA LINE

**NOTES**

- OIL AND GRIT SEPARATORS ARE PROVIDED AT I-1 AND I-2.
- STORM WATER MANAGEMENT FOR THIS SITE IS PROVIDED FOR UNDER F-85-103.
- FOR STRUCTURE SCHEDULE SEE SHEET 4.

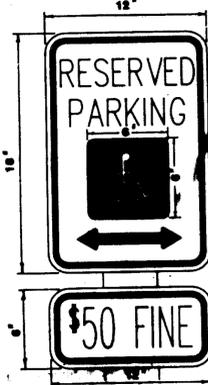
**PLAN**  
 SCALE: 1" = 30'





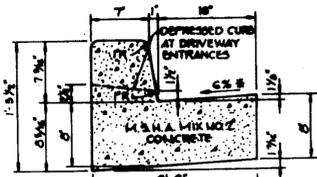
HOWARD COUNTY DESIGN MANUAL VOLUME III - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-201)

**P-1 PAVING**  
NO SCALE



LEGEND AND SYMBOLS - CHECK DATE SYMBOLS ON BLUE BACKGROUND BACKGROUND - BLUE

**HANDICAP SIGN DETAIL**  
NO SCALE

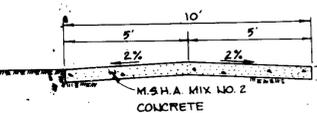


HOWARD COUNTY DESIGN MANUAL VOLUME III - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-201)

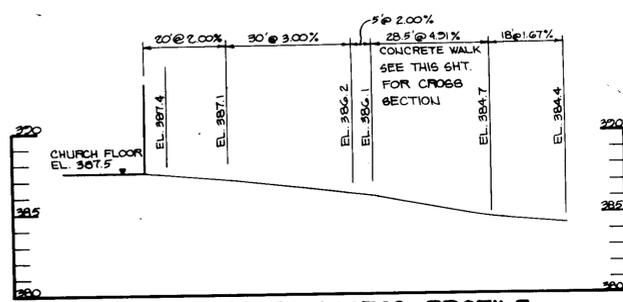
**7\"/>**



**7\"/>**



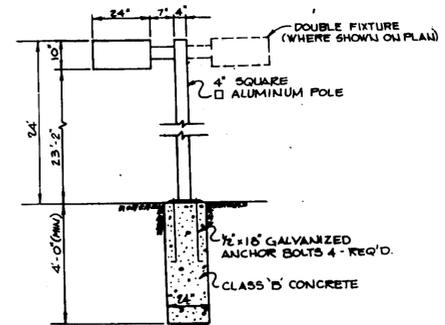
**CONCRETE WALK DETAIL**  
NO SCALE



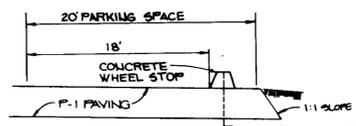
**HANDICAPPED ACCESS PROFILE**

SCALE: HORIZ. 1"=20' VERT. 1"=5'

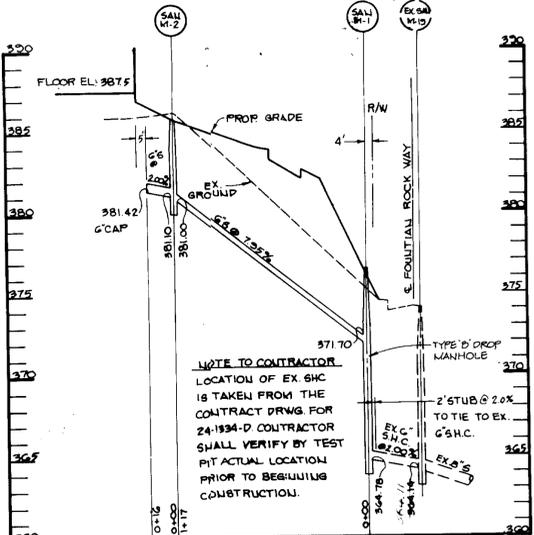
1. ALL LIGHT FIXTURES TO BE SINGLE LUMINAIRE 400 WATT MERCURY TYPE WITH METAL POLES AND DIRECTED DOWNWARD.
2. LOCATIONS OF LIGHT FIXTURES ARE ON THE PLAN AND ARE SHOWN THUS: [Symbol] FOR SINGLE FIXTURE AND [Symbol] FOR DOUBLE FIXTURE.
3. LIGHTS TO BE MODULE II TYPE AS MANUFACTURED BY MOLDCAST OR APPROVED EQUAL.
4. POLE AND FIXTURE TO HAVE BLACK POLYESTER ENAMEL FINISH.
5. POLE TO BE LOCATED 5' BACK FROM BACK OF CURB.



**LIGHT POLE**  
NO SCALE



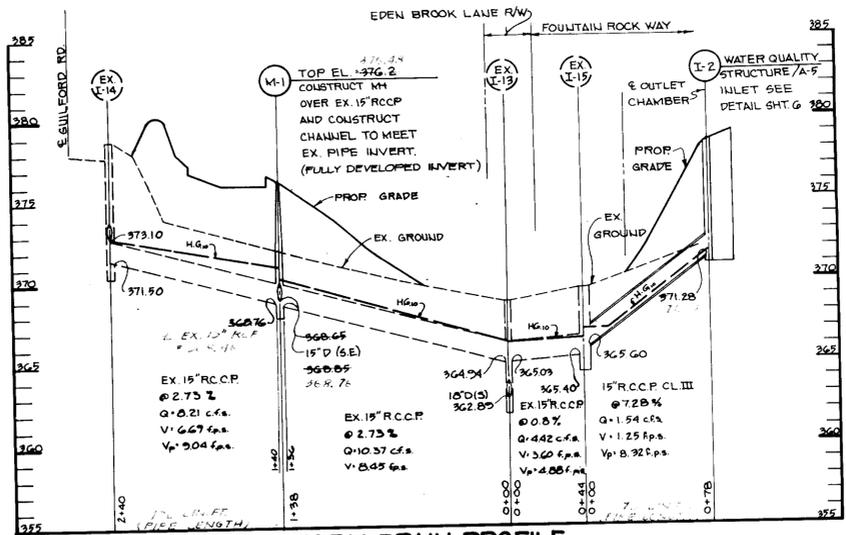
**CONCRETE WHEEL STOP LOCATION PLAN**  
NO SCALE



**SEWER HOUSE CONNECTION PROFILE**

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

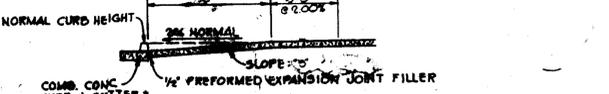
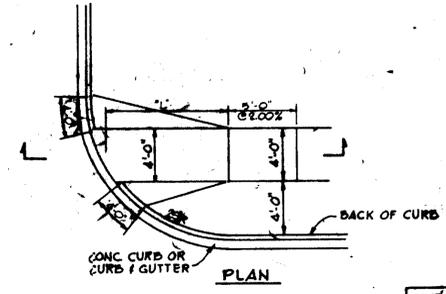
| NO. | TYPE                         | INV. IN.                   | INV. OUT. | TOP. ELEV. | REMARKS   |
|-----|------------------------------|----------------------------|-----------|------------|---|
| I-1 | A-5/Water Quality Structure# | ---                        | 369.08'   | See Detail | See Ho. Co. Std. Details SD 4.01 & Detail Sheet 6 |
| I-2 | A-5/Water Quality Structure# | ---                        | 371.28'   | See Detail | See Ho. Co. Std. Details SD 4.01 & Detail Sheet 6 |
| M-1 | 4'-0" Diameter Brick Manhole | 368.76 (SW)<br>368.85 (SE) | 368.65    | 376.2'     | See Ho. Co. Std. Detail G5.01                     |



**STORM DRAIN PROFILE**

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

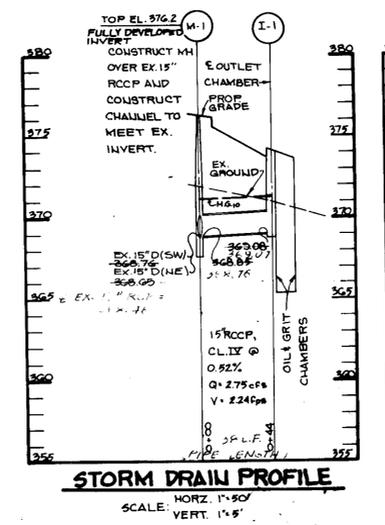
- SEQUENCE OF CONSTRUCTION
1. OBTAIN GRADING PERMIT.
  2. INSTALL STABILIZED CONSTRUCTION ENTRANCE, TRAPS NO. 1 AND 2, BARGE DIKES, SILT FENCE AND STORM FILTER INLET PROTECTION AT EXISTING INLETS, CLEAR AND GRUB ONLY THOSE AREAS REQUIRED FOR INSTALLATION OF SEDIMENT CONTROL PRACTICES. STABILIZE DISTURBED AREAS IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.....4 DAYS
  3. CLEAR AND GRUB REMAINDER OF SITE AND ROUGH GRADE. STABILIZE DISTURBED AREAS IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.....5 DAYS
  4. INSTALL UTILITIES, BLOCK INLETS 1 AND 8, WHEN CONSTRUCTING STORM DRAIN FROM I-2 TO EXISTING I-15 REPAIR EARTH DIKE AS SOON AS POSSIBLE ONCE STORM DRAIN IS IN PLACE. STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH TEMPORARY SEEDING NOTES. BEGIN BUILDING CONSTRUCTION.....10 DAYS
  5. INSTALL CURB AND GUTTER AND PAVE.....3 WEEKS
  6. FINISH REMAINING BUILDING CONSTRUCTION. FINE GRADE. STABILIZE IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
  7. WITH APPROVAL OF THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS SEDIMENT CONTROL INSPECTOR REMOVE SEDIMENT CONTROL MEASURES. STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.



SURFACE TEXTURE OF CONCRETE RAMP SHALL BE SQUARE BRODDING OR OTHER NON-SKID TYPE FINISH. \*STANDARD 7\"/>

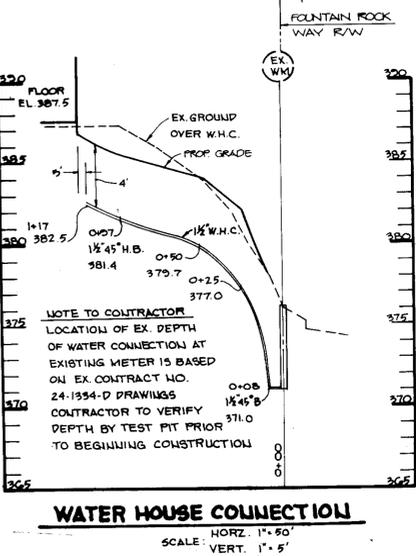
**SECTION**

**SIDWALK RAMP (FOR INFORMATION WITH ONE SIDEWALK)**  
NO SCALE



**STORM DRAIN PROFILE**

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



**WATER HOUSE CONNECTION**

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

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
*Joyce M. Boyd* COUNTY HEALTH OFFICER 7/18/91 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*Joyce M. Boyd* DIRECTOR 7/22/91 DATE  
*David L. Smith* CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT CD 7/22/91 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*James H. ...* DIRECTOR 7/16/91 DATE  
*M. ...* CHIEF, BUREAU OF ENGINEERING CD 7/14/91 DATE

| DATE | NO. | REVISION |
|------|-----|----------|
|      |     |          |

OWNER/DEVELOPER  
NEW HOPE LUTHERAN CHURCH  
% STAN FLEMING  
10273 BURLINGHAM COTTAGE LANE  
ELlicott CITY, MD 21043

PROJECT  
**NEW HOPE LUTHERAN CHURCH**  
A RELIGIOUS FACILITY

AREA: KINGS MEADE, SECTION 11, LOT 100  
TAX MAP: 42 ZONED: R-9C PARCEL NO: 303  
CD: ELECTION DISTRICT COLUMBIA HOWARD COUNTY, MD

TITLE: DETAILS AND PROFILES

RIEMER MUEGGE & ASSOCIATES, INC.  
A Land Planning, Engineering and Consulting Firm  
3105 North Ridge Road Ellicott City, Maryland 21043  
301-461-2690 FAX: 301-750-3176

DATE: 6/26/91  
DESIGNED BY: J.J.B.  
DRAWN BY: G.D.H.  
PROJECT NO: 55401  
DATE: JUNE, 1991  
SCALE: AS SHOWN  
DRAWING NO: 4 OF 7

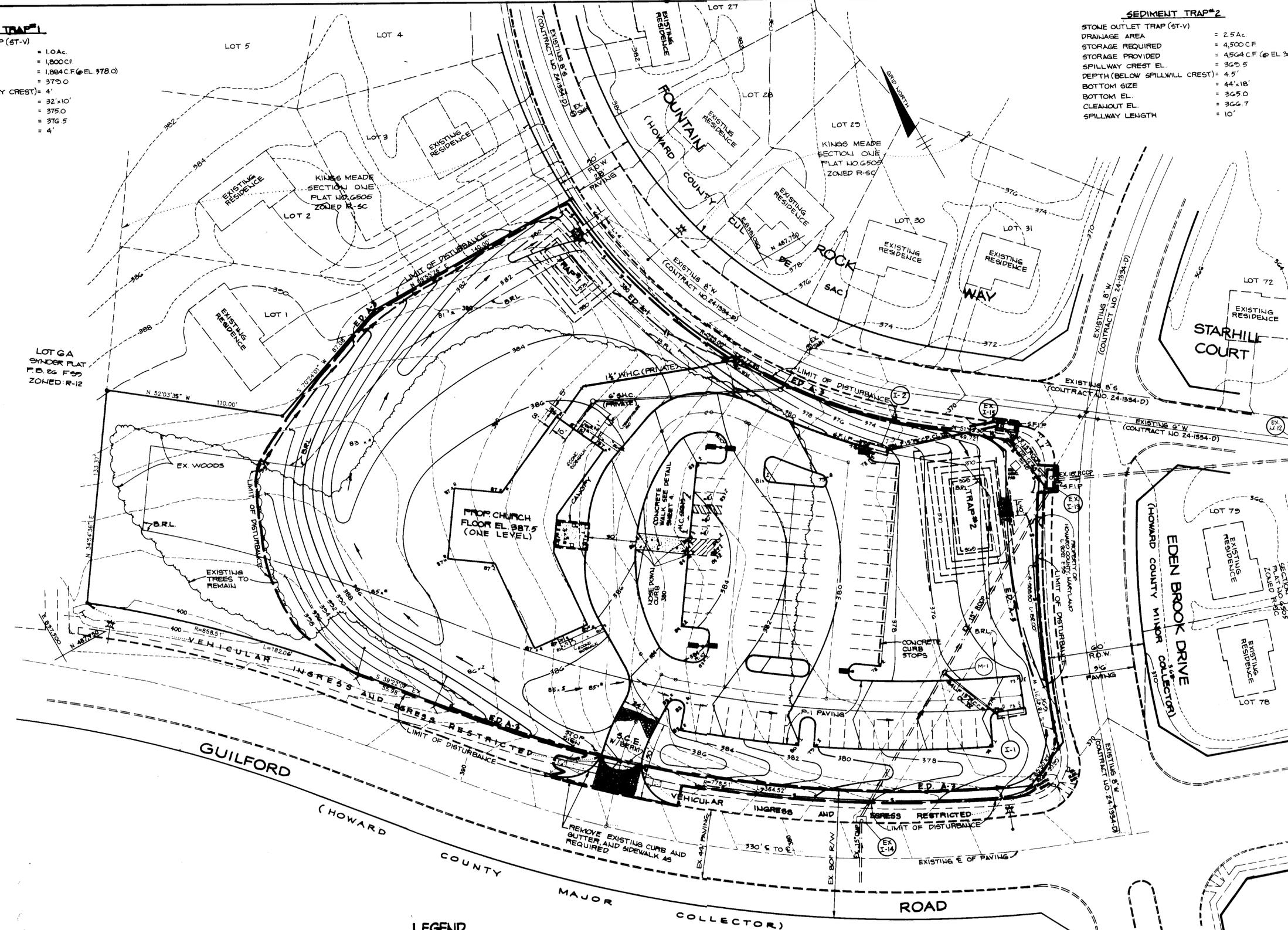
SDP-90-160

**SEDIMENT TRAP #1**

STONE OUTLET TRAP (ST-V) = 1.0 ac.  
 DRAINAGE AREA = 1,800 CF  
 STORAGE REQUIRED = 1,884 CF @ EL. 378.0  
 STORAGE PROVIDED = 375.0  
 SPILLWAY CREST EL. = 375.0  
 DEPTH (BELOW SPILLWAY CREST) = 4'  
 BOTTOM SIZE = 32"x10"  
 BOTTOM EL. = 375.0  
 CLEANOUT EL. = 376.5  
 SPILLWAY LENGTH = 4'

**SEDIMENT TRAP #2**

STONE OUTLET TRAP (ST-V) = 2.5 ac.  
 DRAINAGE AREA = 4,500 CF  
 STORAGE REQUIRED = 4,564 CF @ EL. 368.5  
 STORAGE PROVIDED = 365.5  
 SPILLWAY CREST EL. = 365.5  
 DEPTH (BELOW SPILLWAY CREST) = 4.5'  
 BOTTOM SIZE = 44"x18"  
 BOTTOM EL. = 365.0  
 CLEANOUT EL. = 366.7  
 SPILLWAY LENGTH = 10'



- LEGEND**
- 372 — TWO FOOT PROPOSED CONTOUR
  - 370 — TEN FOOT PROPOSED CONTOUR
  - — — LIMIT OF DISTURBANCE
  - — — STONE FILTER INLET PROTECTION
  - — — PROPOSED LIGHT POLE
  - — — SILT FENCE
  - — — EARTH DIKE

**PLAN**  
 SCALE: 1" = 30'

- NOTES:**
1. OIL AND GRIT SEPARATORS ARE PROVIDED AT I-1 AND I-2.
  2. STORM WATER MANAGEMENT FOR THIS SITE IS PROVIDED FOR UNDER F-05-103.
  3. FOR SEQUENCE OF CONSTRUCTION SEE SHEET 4.
  4. CONTRACTOR TO PROVIDE POSITIVE DRAINAGE ON ALL EARTH DIKES.



BY THE DEVELOPER:  
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."  
*Stanley A. Fleming* 6/24/91  
 DEVELOPER DATE  
 PRESIDENT, CHURCH COUNCIL

BY THE ENGINEER:  
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."  
*Arthur E. Muegge* 6/26/91  
 ENGINEER DATE

REVIEWED FOR HOWARD COUNTY S.C.D. NAME AND TESTS TECHNICAL REQUIREMENTS  
*John M. Stutz* 7/1/91  
 SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*Jeffrey J. Slig* 7/1/91  
 HOWARD S.C.D. DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
*James M. Bruders* 7/18/91  
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*Joseph S. Smith* 7/22/91  
 DIRECTOR DATE  
*David L. Kinsley* 7/22/91  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*James J. Lane* 7/26/91  
 DIRECTOR DATE  
*William B. Ryan* 7-8-91  
 CHIEF, BUREAU OF ENGINEERING DATE

| DATE | NO. | REVISION |
|------|-----|----------|
|      |     |          |

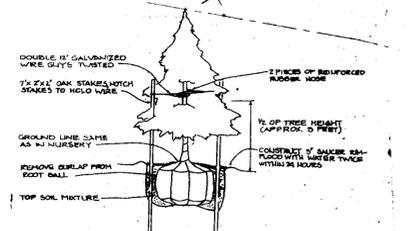
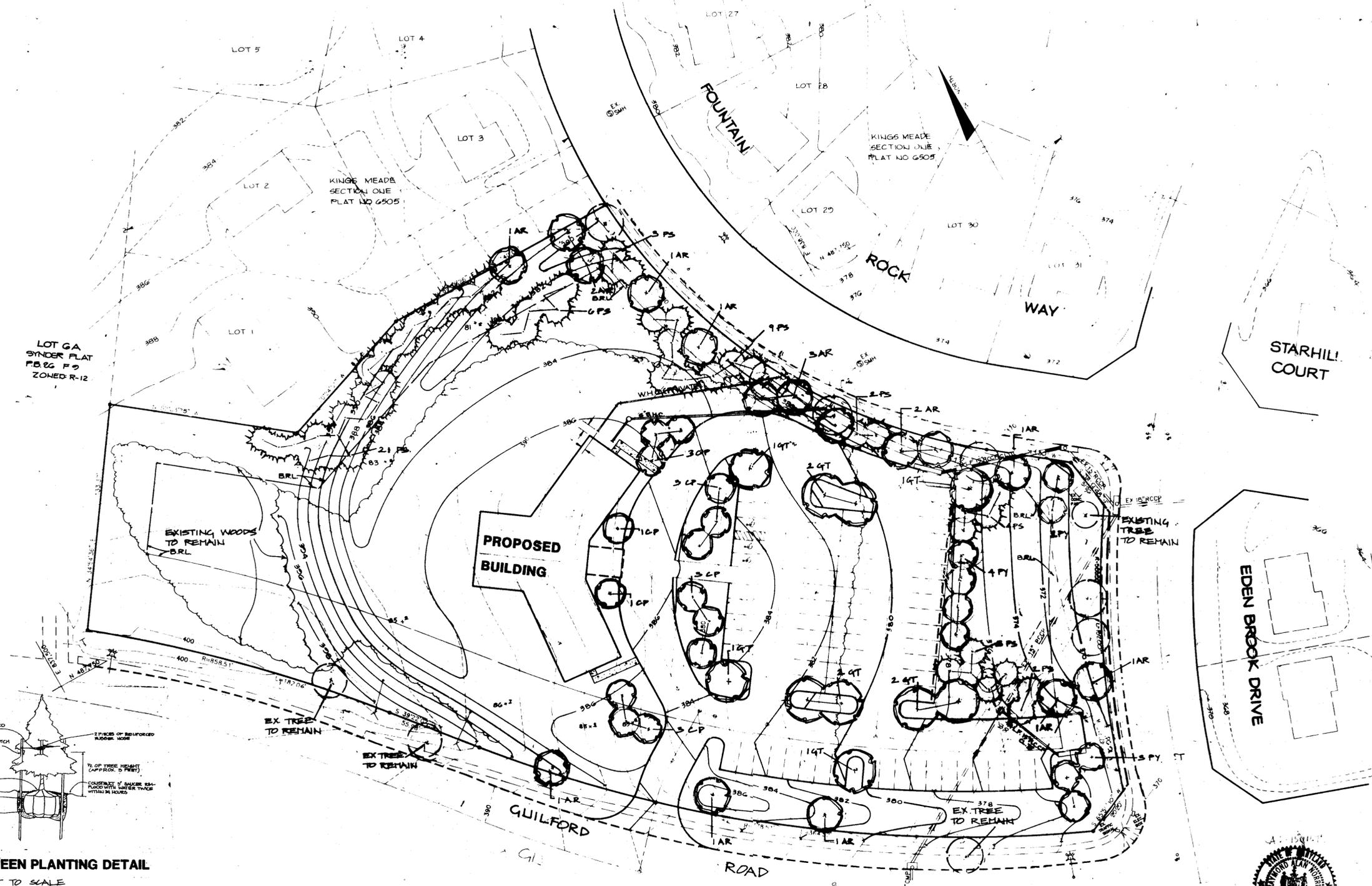
OWNER/DEVELOPER  
 NEW HOPE LUTHERAN CHURCH  
 % STAN FLEMING  
 10273 BURLINGHAM COTTAGE LANE  
 ELLICOTT CITY, MD 21043

PROJECT:  
**NEW HOPE LUTHERAN CHURCH**  
 A RELIGIOUS FACILITY  
 AREA: KINGS MEADE SECTION ONE, LOT 168  
 TAX MAP: 42, ZONED: R-SC, TAX MAP PARCEL NO.: 903  
 6TH ELECTION DISTRICT, COLUMBIA, HOWARD COUNTY, MD.  
 TITLE:  
 GRADING & SEDIMENT CONTROL PLAN

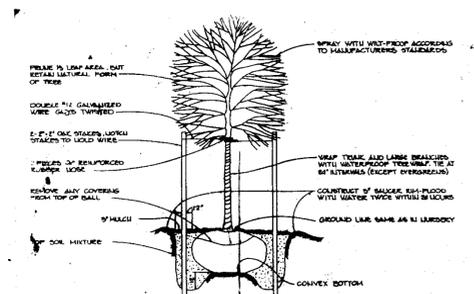
**RIEMER MUEGGE & ASSOCIATES, INC.**  
 A Land Planning, Engineering and Consulting Firm  
 3105 North Ridge Road Ellicott City, Maryland 21043  
 301-461-2690 FAX: 301-750-3176

6/26/91  
  
 COUNTY FILE NO.: F-06-109 DA 00 ICE  
 WF 00 52 P 00 150 P 01 154  
 DESIGNED BY: U.J.B., L.J.G.  
 DRAWN BY: S.R.H.  
 PROJECT NO: 55401  
 DATE: JUNE, 1991  
 SCALE: AS SHOWN  
 DRAWING NO. 5 OF 7





**EVERGREEN PLANTING DETAIL**  
NOT TO SCALE



**TREE PLANTING DETAIL**  
NOT TO SCALE

- LEGEND**
- PROPOSED SHADE TREE
  - PROPOSED FLOWERING TREE
  - PROPOSED EVERGREEN
  - EXISTING TREE

**PLANT LIST**

| QTY | KEY | PLANT NAME   | SIZE                          | REMARKS          |
|-----|-----|--|-------------------------------|------------------|
| 16  | AR  | ACER RUBRUM<br>'OCTOBER GLORY'<br>'OCTOBER GLORY RED MAPLE       | 2 1/2-3' cal.<br>12-14' Ht.   | B&B<br>FULL HEAD |
| 14  | CP  | CRATAEGUS PHAENOPYRUM<br>WASHINGTON HAWTHORNE                    | 2-2 1/2' cal.<br>8-10' Ht.    | B&B              |
| 10  | QT  | GLEDITISIA TRIACANTHOS<br>VAR. INERMIS<br>THORNTLESS HONEYLOCUST | 2 1/2 - 3' cal.<br>12-14' Ht. | B&B<br>FULL HEAD |
| 8   | PS  | PINUS STROBUS<br>WHITE PINE                                      | 2 2 1/2' cal.<br>6-8 Ht.      | B&B<br>NATURAL   |
| 4   | PY  | PRUNUS YEDONENSIS<br>TOBIAGO CHERRY                              | 2-2 1/2' cal.<br>8-10' Ht.    | B&B              |

NOTE: IF EXISTING STREET TREES CAN BE SAVED AND REPLANTED, THE FOLLOWING QUANTITIES WILL CHANGE:  
 ACER RUBRUM, FROM 16 TO 10  
 GLEDITISIA TRIACANTHOS, FROM 10 TO 9  
 PRUNUS YEDONENSIS, FROM 4 TO 1

NOTE: THIS PLAN IS TO BE USED FOR LANDSCAPING ONLY. FOR GRADING & DIMENSIONS SEE SHEET 2.



SCALE: 1"=30'

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
*Joyce M. Bond* 7/18/91  
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*Joseph S. Kettle* 7/24/91  
 DIRECTOR DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.  
*James P. Lewis* 7/24/91  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*James P. Lewis* 7/24/91  
 DIRECTOR DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Melanie Moser* 7/24/91  
 CHIEF, BUREAU OF ENGINEERING DATE

DATE NO REVISION

OWNER/ DEVELOPER  
 NEW HOPE LUTHERAN CHURCH  
 96 STAN FLEMING  
 10273 BURLINGHAM COTTAGE LANE  
 ELLICOTT CITY, MD 21043

PROJECT  
**NEW HOPE LUTHERAN CHURCH  
 A RELIGIOUS FACILITY**

AREA: KINGS MEADE SECTION ONE LOT 100  
 TAX MAP 42 ZONED R-9C, TAX MAP PARCEL NO. 304  
 6TH ELECTION DISTRICT, COLUMBIA, HOWARD COUNTY, MD

TITLE  
**LANDSCAPE PLAN**

RIEMER MUEGGE & ASSOCIATES, INC.  
 A Land Planning, Engineering and Consulting Firm  
 3105 North Ridge Road Ellicott City, Maryland 21043  
 301-461-2690 FAX: 301-750-3176

DATE: 7/24/91  
 COUNTY FILE NO. 88-005-012  
 DESIGNED BY LCS  
 DRAWN BY SRH  
 PROJECT NO. 95401  
 DATE: JUNE, 1991  
 SCALE: AS SHOWN  
 DRAWING NO. 7 OF 7

Melanie Moser  
 MELANIE MOSER #551  
 LANDSCAPE ARCHITECT