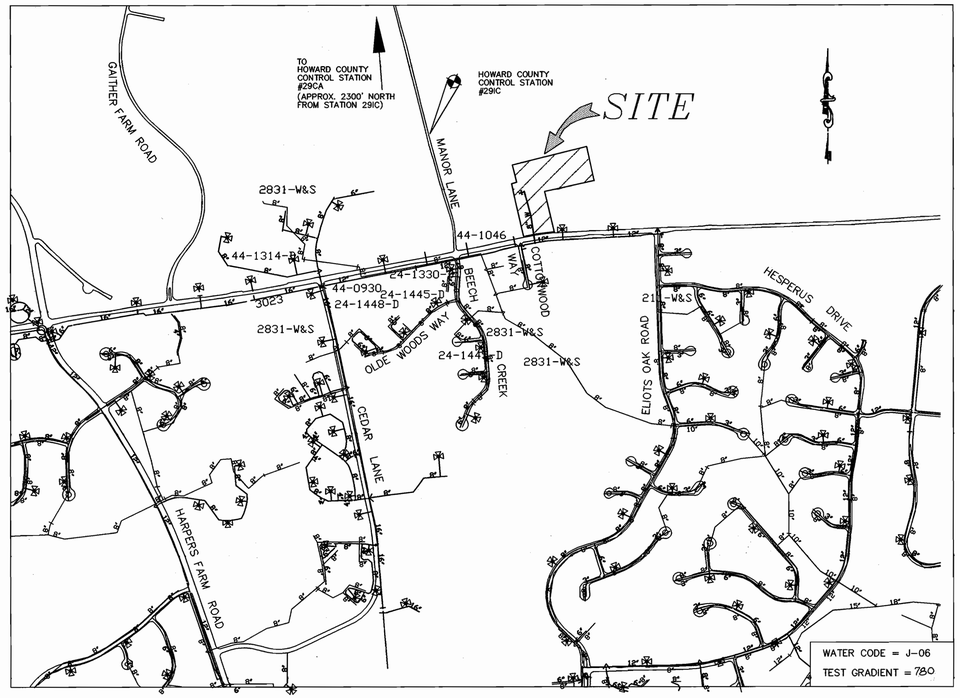
QUANTITY TABLE

ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" WATER MAIN	350 L.F.			
8" WATER MAIN (MECHANICAL JOINT)	125 L.F.			
6" WATER MAIN	18 L.F.			
4" WATER HOUSE CONNECTION	61 L.F.			
# 4" WHC	1			
8" x 8" T.S & V.	1			
8" x 6" F.H.T.	1			
6" V	1			
8"X4" REDUCER	1			
4" VALVE	1			
F.H.	1			
	1			
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE				



VICINITY MAP

SCALE: 1" = 600'

GENERAL NOTES

1. APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
2. ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.(NAD 83)
3. ALL VERTICAL CONTROLS ARE BASED ON AN ASSUMED DATUM.
4. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON MARYLAND STATE PLANE COORDINATE SYSTEM. STATIONS No. 29CA AND 29IC
   STA. No. 29CA N 574,526.1048 E 1,343,533.7490
   STA. No. 29IC N 572,323.5403 E 1,344,112.2704
5. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
6. CLEAR ALL UTILITIES BY A MINIMUM OF 12". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
7. FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAIL FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
8. WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
9. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

STATE HIGHWAY ADMINISTRATION	(410) 531-5533
BG & E CO. CONTRACTOR SERVICES	(410) 850-4620
BG & E CO. UNDERGROUND DAMAGE CONTROL	(410) 787-9068
MISS UTILITY	1-800-257-7777
COLONIAL PIPELINE CO.	(410) 795-1390
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES	(410) 313-4900
BELL ATLANTIC	(800) 446-5266

10. TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED OUTSIDE THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
11. CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
12. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)313-2450 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROASS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPRROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF HOWARD COUNTY CODE.
13. ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
14. TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3-1/2' COVER UNLESS OTHERWISE NOTED.
15. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
16. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
17. FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
18. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
19. ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
20. FOR SPRINKLER SYSTEM FOR ALL TOWNHOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1" CONNECTION WITH A 3/4" METER.
21. STATIONING SHOWN IS WATER MAIN AND CENTER LINE STATIONING.
22. CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PROIR TO COMMENCING CONSTRUCTION.
23. SEDIMENT CONTROL TO BE PROVIDED BY SDP-02-04
24. COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.

EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER SDP-02-04

TYPE OF BUILDING	COMMERCIAL
No. OF UNITS	1
No. OF WATER HOUSE CONNECTION	1
No. OF SEWER HOUSE CONNECTIONS	0
DRAINAGE AREA	LITTLE PATUXENT
TREATMENT PLANT	LITTLE PATUXENT WATER RECLAMATION PLANT

CONTRACT NO.: 44-4097-D

DAR AL-TAQWA/PHASE II

WATER MAIN EXTENSION
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Sayed Hassan 2/4/03
DEVELOPER'S SIGNATURE DATE
Sayed Hassan
DEVELOPER'S NAME

I HEREBY 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.

1/28/03
ENGINEER'S SIGNATURE DATE
R. JACOB HIKMAT
ENGINEER'S NAME

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

Jim Myers 3/13/03
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John R. Robertson 3/13/03
HOWARD SCD DATE

PLAN REFERENCE NUMBERS:
SDP-02-04

INDEX OF DRAWINGS

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER PLAN AND PROFILE

OWNER/DEVELOPER
DAR AL TAQWA, INC.
10740 ROUTE 108
ELLICOTT CITY, MD 21042
(410) 997-5711

F:\96098\DWG\MS\96098-COVER.DWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
3-5-03
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
3/20/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Balt. (301) 621-5521 Wash. (410) 997-0298 Fax.

STATE OF MARYLAND R. JACOB HIKMAT No. 17841 PROFESSIONAL ENGINEER

engineering	HSP
illustration	HSP
approval	RJH
project	96098
date	JAN 2003

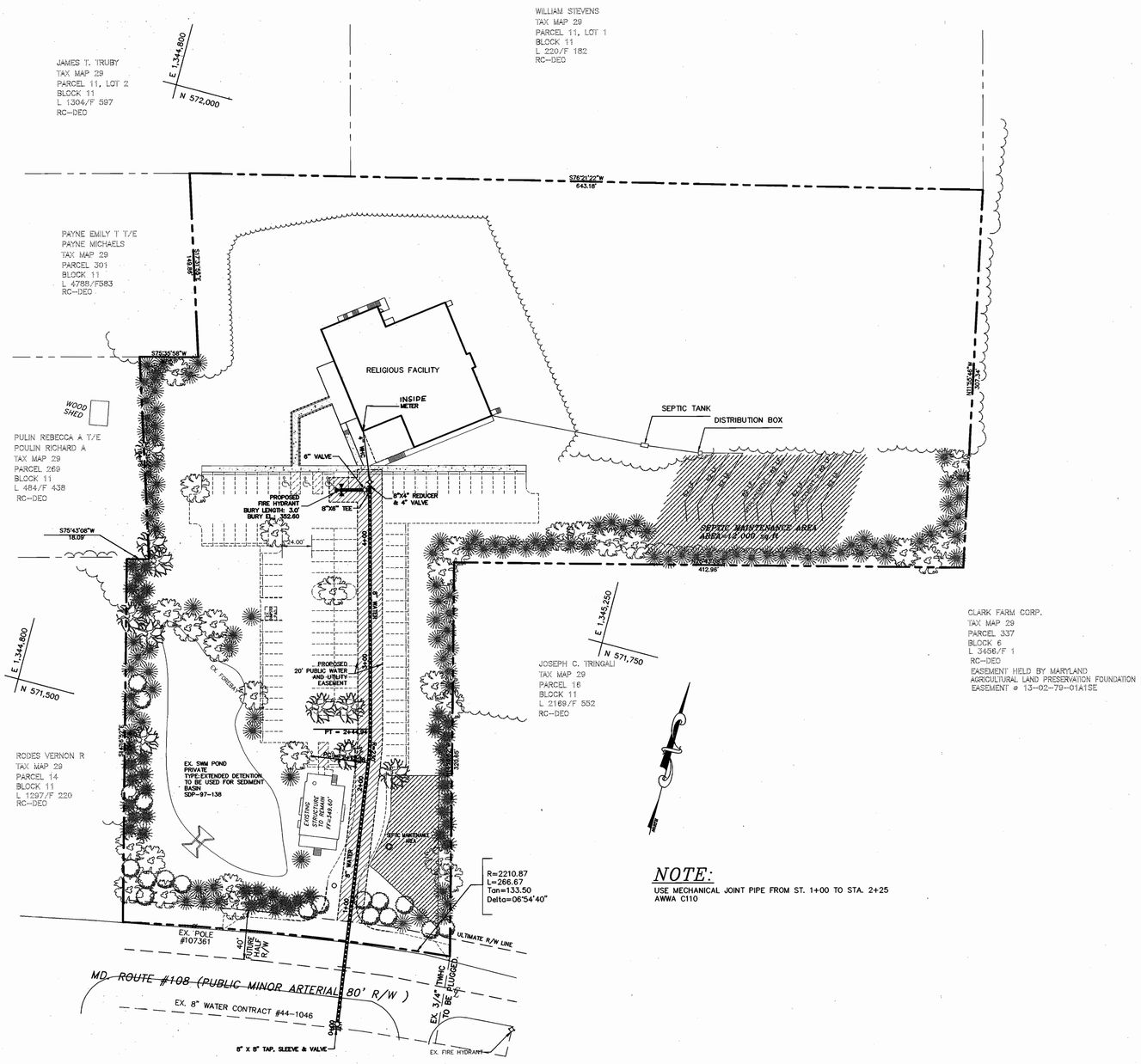
BY	NO.	REVISION	DATE

TITLE SHEET

600' SCALE MAP NO. 29 BLOCK NO. 11

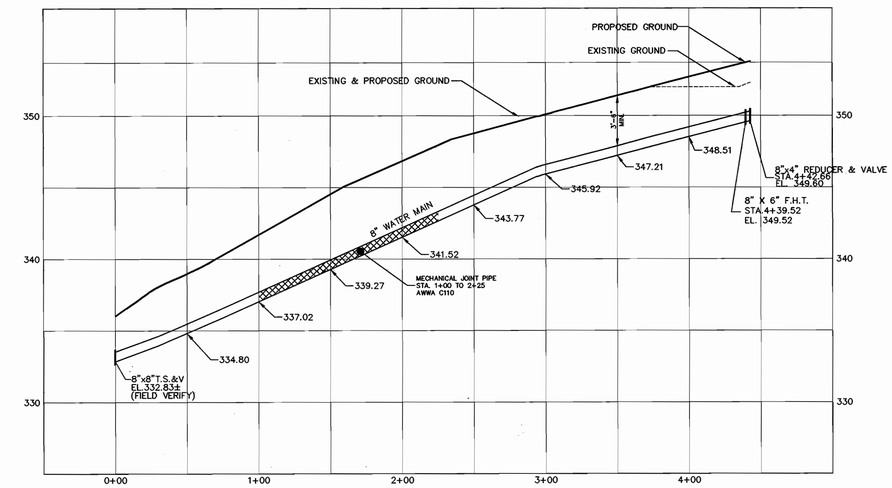
DAR AL-TAQWA/PHASE II
CONTRACT NO.: 44-4097-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale AS SHOWN



PLAN

SCALE: 1" = 50'



WATER MAIN PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'

NOTE:

USE MECHANICAL JOINT PIPE FROM ST. 1+00 TO STA. 2+25
AWWA C110

8" WATER MAIN TABULATION CHART

W.L. ℄ STATION	APPURTENANCE	NORTHING	EASTING
0+00	8" X 8" TS & V	571291.81	1345122.75
1+00		571390.80	1345108.60
4+39.52	8" X 6" FHT	571721.84	1345036.13
4+39.52	6" V.	571720.77	1345032.16
4+39.52	F.H.	571715.90	1345013.98
4+42.66	8"x4" REDUCER AND VALVE	571724.82	1345035.28

OWNER/DEVELOPER
DAR AL TAQWA, INC.
10740 ROUTE 108
ELLICOTT CITY, MD 21042
(410) 997-5711

F:\96098\DWG\WS\96098-FINAL-WSPLAN.DWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
3-5-03
CHIEF, BUREAU OF UTILITIES — DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
3/10/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Balt. (301) 621-5521 Wash. (410) 997-0298 Fax.

STATE OF MARYLAND — ROBERT HUGHES — No. 15656 — PROFESSIONAL ENGINEER

engineering	HSP
illustration	HSP
approval	RJH
project	96098
date	JAN 2003

BY	NO.	REVISION	DATE

WATER PLAN AND PROFILE

600' SCALE MAP NO. 29 BLOCK NO. 11

DAR AL-TAQWA/PHASE II

CONTRACT NO.: 44-4097-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale AS SHOWN

2 OF 2