


FINAL WATER AND SEWER PLAN

GENERAL NOTES

PART I

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON AN AERIAL SURVEY BY VRM DATED AUGUST 2004.
- HORIZONTAL AND VERTICAL SURVEY CONTROLS:
THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD 83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 3511 AND 3512.
ALL VERTICAL CONTROLS ARE BASED ON (NAVD' 27). VERTICAL CONTROLS PROVIDED ON DRAWINGS ARE:
GEODETIC SURVEY CONTROL 3511 (N 557110.405/E 1344893.679)
BRASS DISC SET ON TOP OF A CONCRETE MONUMENT, LOCATED AT BETWEEN FREETOWN RD AND GIANT PARKING LOT, E OF CEDAR LANE, AND 41' SW OF CROSS BAT AND 4.3' N OF SIGN.
GEODETIC SURVEY CONTROL 3512 (N 555100.777/E 1342733.051)
BRASS DISC SET ON TOP OF A CONCRETE MONUMENT, LOCATED AT 10.6' W OF CEDAR LANE, AND 31.6' N AND 21.8' S OF DRIVEWAYS WITHIN HOUSE 6618 AND 6636.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON 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 MONIES OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS USE, HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL  AT THE LOCATION OF THE TEST PIT. A NOTES OR NOTES CONTAINING THE RESULTS OF THE TEST PIT 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 OPERATION AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN THESE PLANS:
AT & T 1-800-252-1133
BGE (CONTRACTOR SERVICE) 410-850-4620
BGE (EMERGENCY) 410-685-1400
BUREAU OF UTILITIES 410-313-4900
COLONIAL PIPELINE CO 410-795-1390
MISS UTILITY 1-800-257-7777
STATE HIGHWAY ADMINISTRATION 410-531-5533
VERIZON 1-800-743-0033/410-224-9210
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-7450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(g) OF THE HOWARD COUNTY CODE.

PART II - WATER

- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.

PART III - SEWER

- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL 05.52. WHERE WATERTIGHT MANHOLE FRAME AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH SITE DEVELOPMENT PLAN SDP-06-102.

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

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

John R. Roberts
SOIL CONSERVATION DISTRICT

DATE

Jim Morgan
U.S. SOIL CONSERVATION DISTRICT

6-1-07
DATE

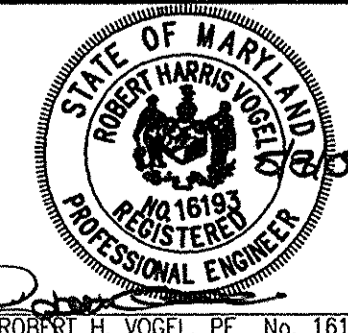
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Robert H. Vogel
CHIEF, BUREAU OF UTILITIES

Robert H. Vogel
CHIEF, DEVELOPMENT ENGINEERING DIVISION

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL: 410.461.7666
ELLCOTT CITY, MD 21043 FAX: 410.461.8961



ROBERT H. VOGEL, PE No. 18193

DES:	DZ				
DRN:	DZ				
CHK:	RHV	RAW	1	SHOW REDUCTION OF FIRE HYDRANT PER ADVANCED DEPOSIT ORDER	12-7-15
DATE:	MAY 2007	BY:	NO.	REVISION	DATE

FINAL WATER AND SEWER PLAN
COVER SHEET

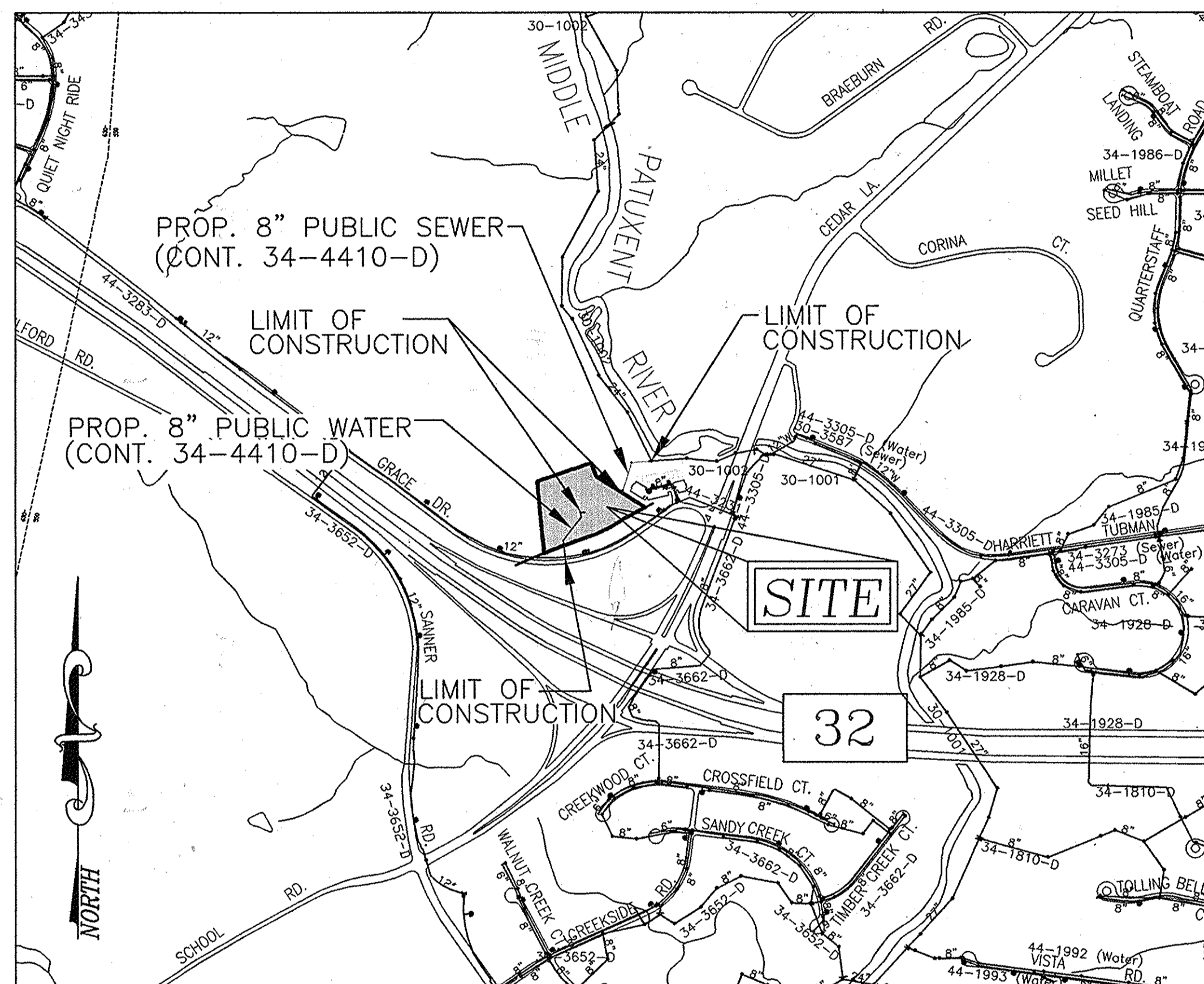
BALTIMORE SEVENTH DAY
ADVENTIST KOREAN CHURCH
CONTRACT NO. 34-4410-D

TAX MAP 35 BLOCK 22
5TH ELECTION DISTRICT

PARCEL 86
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN

SHEET
1 OF 2



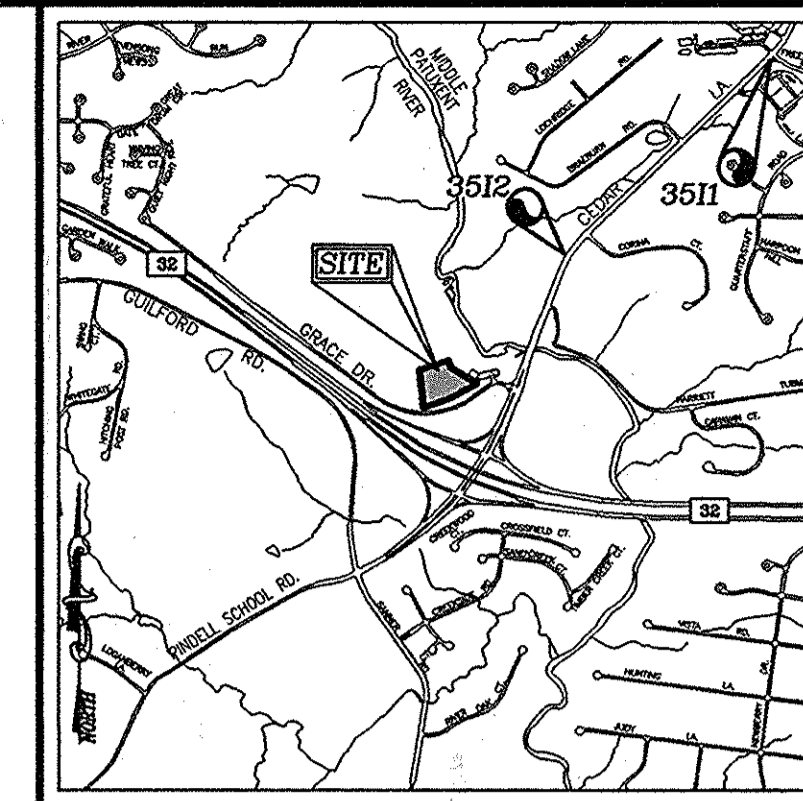
LOCATION MAP
SCALE: 1"=600'

WATER CODE: F24
SEWER CODE: 6580000
TEST GRADIENT: 700

Type of Building :	CHURCH
No. of Lots/Parcels :	1
No. of single Water House Connections :	1
No. of twin Water House Connections :	0
No. of Sewer House Connections :	0
Sewer Shed :	PATAPSCO RIVER LOWER NORTH BRANCH
Treatment Plant :	PATAPSCO RIVER

BENCHMARKS

COORDINATES BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 1361, 242C.
3511 N 557,110.367 E 1,344,893.647 ELEV. 400.068
3512 N 555,100.814 E 1,342,733.092 ELEV. 329.743



VICINITY MAP
SCALE: 1"=2000'

QUANTITIES

NAME OF UTILITY CONTRACTOR :		SURVEY AND DRAFTING DIVISION AS-BUILT DATE :		AS-BUILT	
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER	
WATER					
12" TAPPING SLEEVE	1 EA			Smith Blair / Ferguson	
12" TAPPING SLEEVE	1 EA			" " " "	
8" WATER	293 LF	293		Atlantic State / Ferguson	
8" WATER	37 LF	37		" " " "	
8" X 6" TEE	1 EA			Tyler Union / Ferguson	
8" VALVE	2 EA			" " " "	
8" VALVE	2 EA			Muller Company / Ferguson	
6" FIRE HYDRANT	2 EA			" " " "	
8" 1/8" BEND	2 EA			Tyler Union / Ferguson	
8" CAP AND BUTTRESS	1 EA			" " " "	
SEWER					
8" SEWER	262 LF		PVC 8"	North American / Ferguson	
STD. MANHOLE	1 EA			" " " "	
TYPE 'A' DROP MANHOLE	1 EA			" " " "	
TYPE 'B' DROP MANHOLE	2 EA			" " " "	

