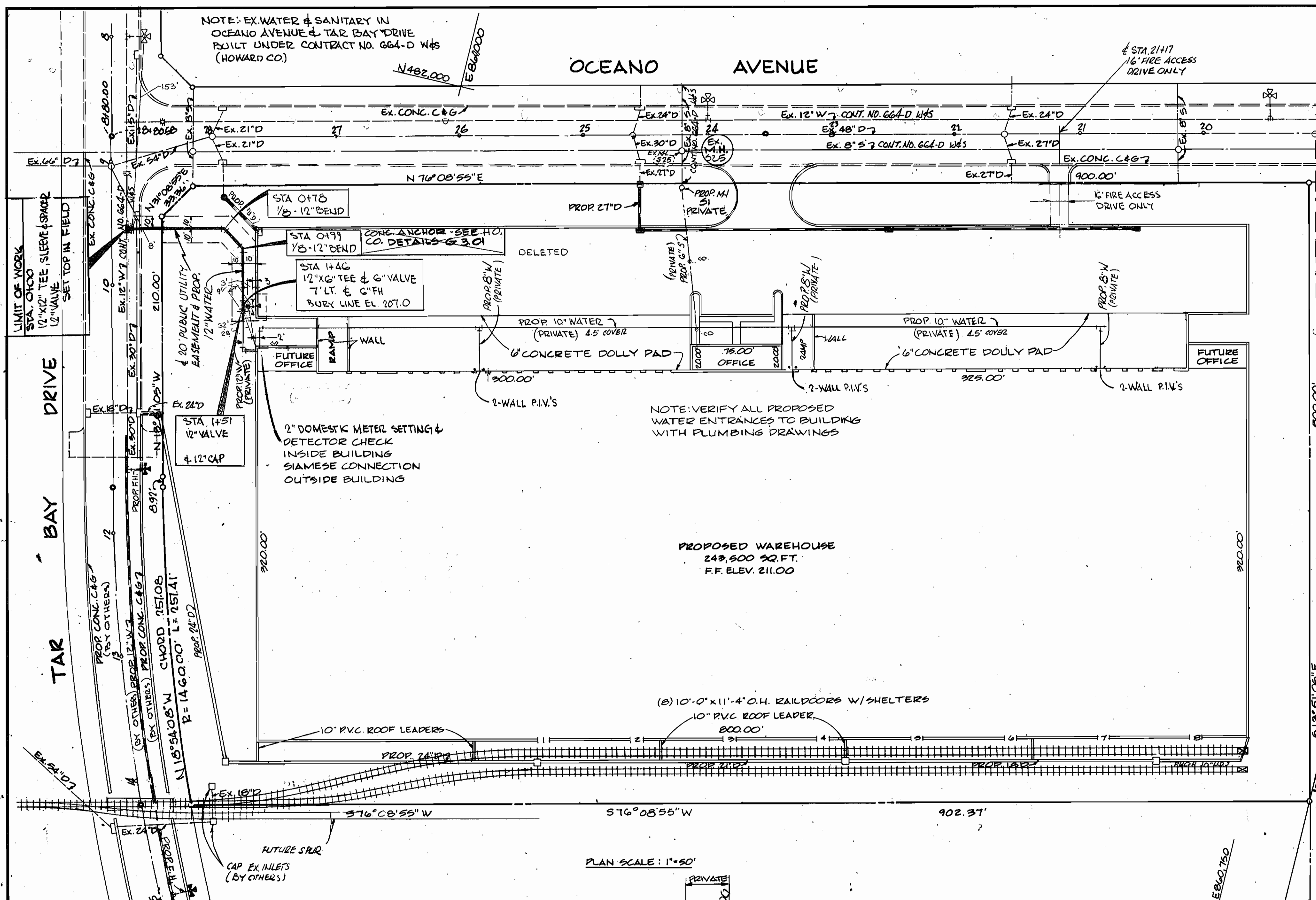
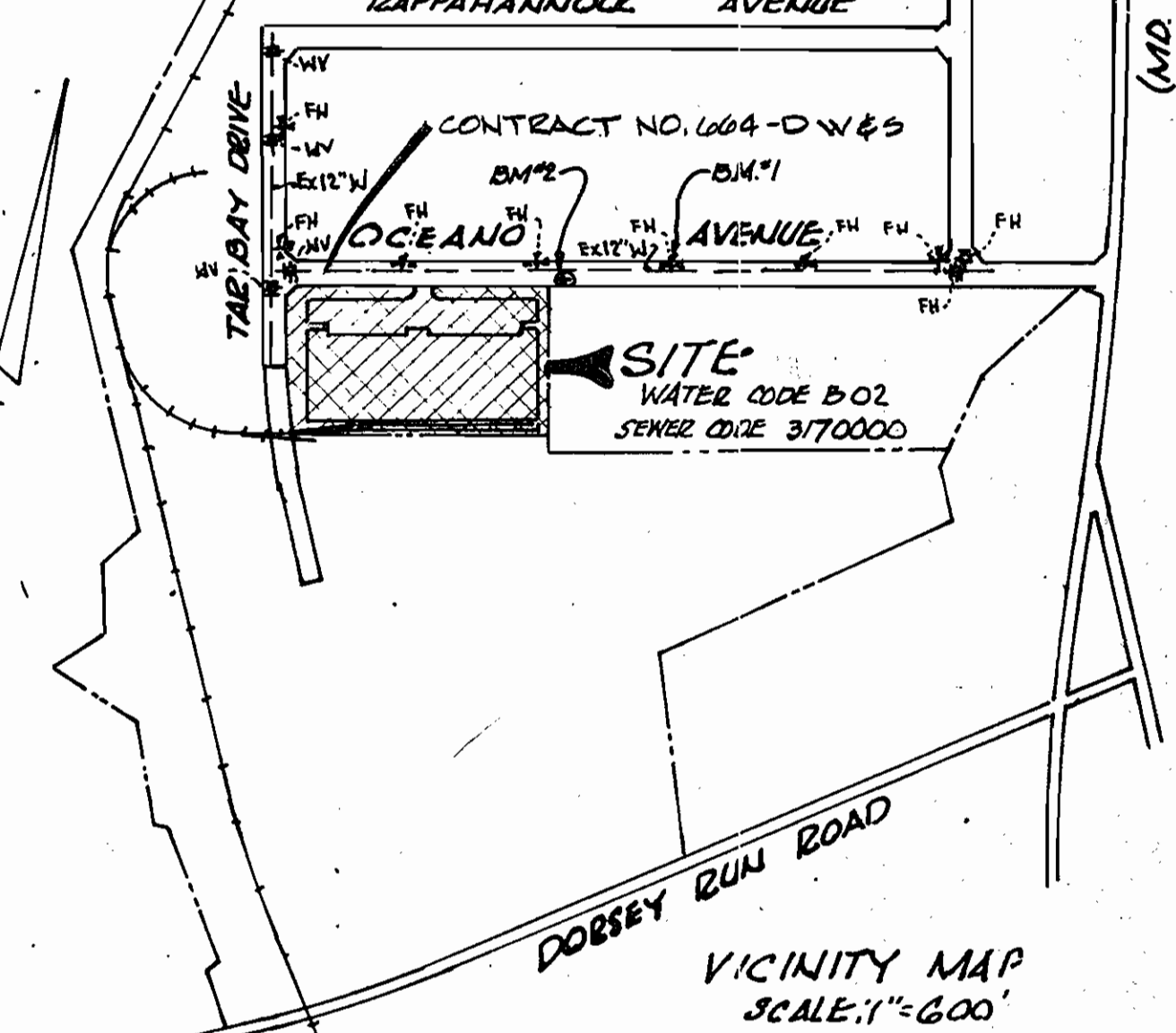


NOTE: EX. WATER & SANITARY IN OCEANO AVENUE & TAR BAY DRIVE BUILT UNDER CONTRACT NO. 664-D W&S (HOWARD CO.)



ITEM	QUANTITIES		MATERIAL/SUPPLIES
	ESTIMATED	AS-BUILT	
12" D.I.P.	151	151	OTF CL-52 GRIFFIN
6" D.I.P.	7	7	"
12" x 12" TEE	7	1	UNION FOUNDRY M/3
12" SLEEVE SPACER	1	1	UNION FOUNDRY M/3
1/8-12" BEND	8	3	"
12" x 6" TEE	1	1	"
12" VALVE	2	2	MUELLER AWWA C-509
6" VALVE	1	1	"
6" FIRE HYDRANT	1	1	MUELLER A-423
12" CAP	1	-	NOT USED

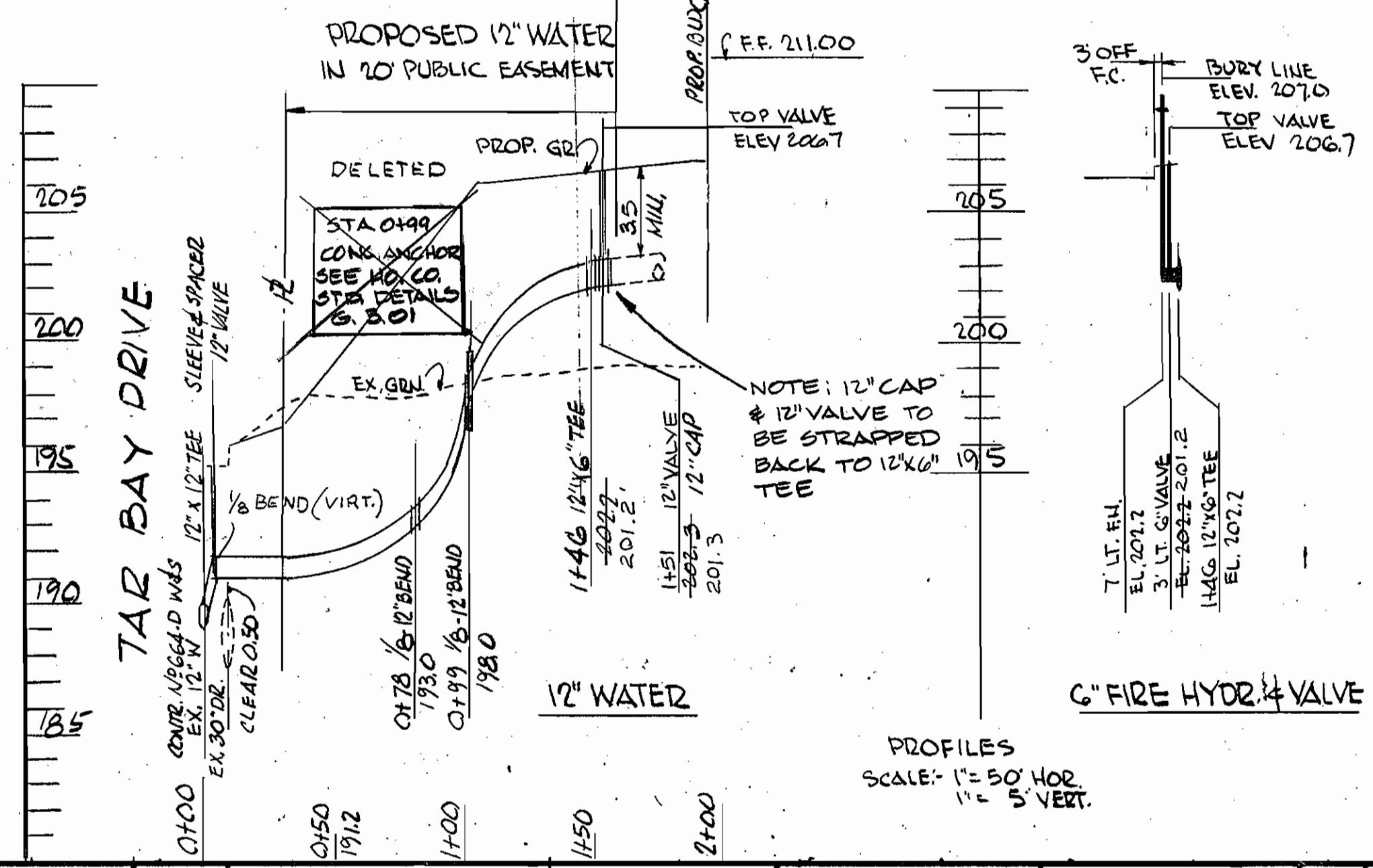
- GENERAL NOTES**
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES. UNWARRANTED UNNECESSARY DAMAGE INCURRED SHALL BE REPAIR IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
  - ALL HORIZONTAL CONTROL ARE BASED ON MASTHEAD SIGHT COORDINATES.
  - ALL VERTICAL CONTROL SHALL BE MASTHEAD SIGHTS.
  - CLEAR ALL UTILITIES BY A MINIMUM 1' CLEARANCE. ALL UTILITIES BY 1'-0" MINIMUM OR TUNNEL AS REQUIRED. ANY COST INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT JOBS, SHALL BE INCLUDED IN THE UNIT PRICES BID FOR CONSTRUCTION OF THE MAIN.
  - 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. THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
  - CONTRACTOR SHALL LOCATE EXISTING UTILITIES. A MINIMUM OF TWO LINES IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES AT HIS OWN EXPENSE.
  - CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE EXISTING WORK ON THESE LINES: STATE HIGHWAY ADMINISTRATION (301-2653); DISTRICT OF ELECTRIC COMPANY; CO-OP ELECTRIC (301-2585); BALTIMORE GAS & ELECTRIC COMPANY; UNDERGROUND DAMAGE CONTROL (206-5621); BALTIMORE GAS & ELECTRIC COMPANY; TROUBLE SHOOTING (301-9913); FIRE UTILITY (1-800-610-0100); DISTRICT OF PUBLIC WORKS (301-2366); BUREAU OF UTILITIES; HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS (301-2366).
  - TELES AND SERVICES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TELES AND SERVICES LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
  - CONTRACTOR SHALL REMOVE TELES, STRAPS AND BODS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICES BID FOR CONSTRUCTION OF THE MAIN.
  - ALL WATER MAINS TO BE 3" OR LARGER UNLESS OTHERWISE NOTED.
  - TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3' COVER UNLESS OTHERWISE NOTED.
  - VALVE ADJUSTMENT TOES SHALL BE STRAPPED TO TEES.
  - ALL FITTINGS SHALL BE BUTTERFLY OR APPROVED WITH COUPLERS IN ACCORDANCE WITH THE STANDARD DESIGN MANUAL OTHERWISE PROVIDED ON THE DRAWINGS.
  - FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS TO BE SET 3' (THREE) ABOVE FINISHED FACE OF CURB UNLESS NOTED OTHERWISE. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTERFLY WITH POLYESTER IN ACCORDANCE WITH STANDARD DESIGN MANUAL. ALL BUTTERFLY SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 1003 OF THE STANDARD SPECIFICATIONS.
  - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEMS.
  - ALL WATER HOUSE CONNECTIONS, INSIDE METER SETTINGS UNLESS OTHERWISE SHOWN, SHALL COMPLY WITH HOWARD COUNTY STANDARD 3.21 AS SHOWN ON SECTION 30 SPECIAL PROVISIONS.
  - MINIMUM COVER DEPTH WILL BE AS SPECIFIED BY PIPE MANUFACTURER.
  - PLACE REGULATION VALVE WORKING AND MARKING TAGS AS REQUIRED TO COMPLY WITH THE BALTIMORE STATE HIGHWAY ADMINISTRATION'S MANUAL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
  - ALL SIGNPOSTS SHALL BE C.S.P.C., E.C.S.P., V.C.R.P., A.C.P. CLASS 2400 OR P.V.C. UNLESS OTHERWISE NOTED.
  - THE CONTRACTOR SHALL PROVIDE JOINT IN A SWEET MAIN WITHIN 20' OF EXTERIOR MANHOLE WALL.
  - ALL MANHOLES SHALL BE 24" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
  - MANHOLES SHOWN WITH 12" AND 16" WALLS ARE BICE MANHOLES BICE.
  - MANHOLES DESIGNATED W.T. IN THE PLAN AND PEOPLE SHALL HAVE WATER TIGHT FRAME AND COVERS. STANDARD DESIGN G-551 WATER TIGHT MANHOLE FRAME AND COVER IS USED. SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
  - HOUSE (S) WITH THE SYMBOL "C.I.S." INDICATES THAT CELLAR CANNOT BE SERVED.
  - SERVICE CLAMPS TO HAVE STAINLESS STEEL 3 TREAT.



**BENCH MARKS:**  
 B.M.#1 X-CUT IN HYDRANT HOLD DOWN BOAT 15400 OCEANO AVE. EL. 232.53  
 B.M.#2 X-CUT 2425' LT 19400 OCEANO AVE. EL. 218.73

TYPE OF BUILDING: 1 OFFICE/WAREHOUSE  
 NUMBER OF LOTS: 1  
 NUMBER OF WATER HC: 1  
 NUMBER OF SEWER HC: 1  
 DRAINAGE AREA: DORSEY RUN

NOTE:  
 DUE TO EX. 12" WATER BEING LOW (EL. 188.90), 12" x 12" TEE WAS ANGLED UP APPROX 45° TO CLEAR 30" DR. BY 5' 1/8 VERT. BEND STRAPPED TO TEE AND ANCHORED AS PER HO. CO SPEC.



THE DEVELOPMENT PLAN 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

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 119 OF THE STANDARD SPECIFICATION & S.D.P. 87-01

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

Director of Public Works: *W. F. Newman* 11-18-86  
 Chief, Bureau of Utilities: *Robert M. Swinger* 11-18-86  
 Chief, Bureau of Engineering: *Raymond M. White* 11-18-86  
 Chief, Land Development: *William L. H. H. H.* 11-18-86

ENGINEER  
 GEORGE WILLIAM STEPHENS, JR.  
 AND ASSOCIATES, INC.  
 303 ALLEGHENY AVE.  
 TOWSON, MARYLAND 21284  
 825-8120

DESIGNED: J.W.  
 DRAWN: P.M.D.  
 CHECKED: P.N. 5515

BY	NO.	REVISION	DATE
J.W.		REDUCE LENGTH PUBLIC WATER & ADD CONTR. NO. IN V.C. MAP	11/13/86
J.W.		CONC. ANCHOR 0199	10/10/86
J.W.		COMPLETE REVISION OF WATER LINE	9/11/86
J.W.		COUNTY COMMENTS	8/11/86
G.Y.		RELOCATION (BLDG)	8/6/86

PLAN FOR PROPOSED WATER MAIN  
 CONTRACT NO. 44-1554-D  
 600' SCALE MAP NO. \_\_\_\_\_ BLOCK NO. \_\_\_\_\_

PROPOSED OFFICE & WAREHOUSE FOR J-MARK COMPANY  
 SECTION 3 BLOCK A PARCEL C PLAT #6096  
 MARYLAND WAREHOUSE CENTER  
 HOWARD COUNTY, MD. ELECT. DIST. #6  
 SCALE: 1" = 50' JULY 1, 1986

SCALE AS SHOWN  
 SHEET NO. 1 OF 1  
 PN 5515