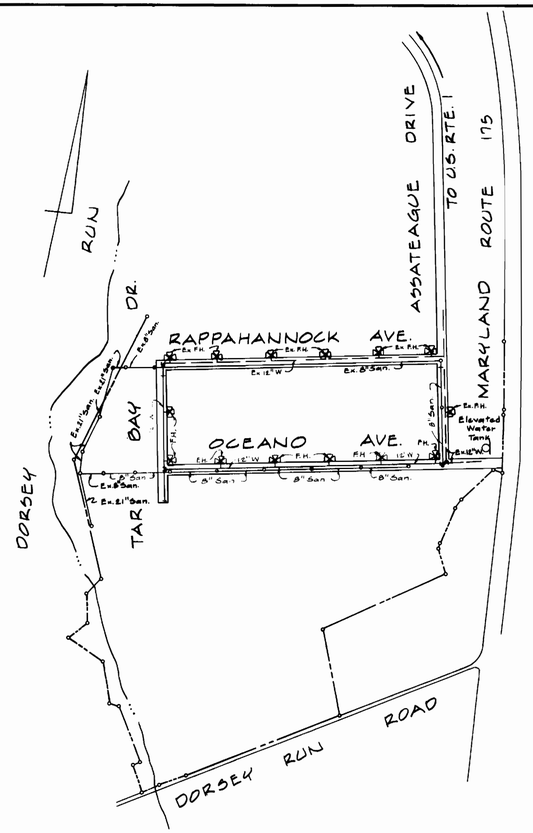


LOCATION MAP
Scale: 1" = 600'

Benchmark: 203 Reset Elev. 253.34
S.R.C. Brass Marker Set In Concrete East Side Md. Route 175, 45' From Edge Of Existing Concrete Paving, And 30' From The South Curb Of The North Entrance To Patuxent Institute.

GENERAL NOTES

1) Contractor Shall Locate Existing Utilities In Advance Of Construction Operations In The Vicinity Of Proposed Utilities.

2) Approximate Locations 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.

3) All Horizontal Controls Are Based On Maryland State Coordinates.
203 - Reset N 484092.65
E 862115.14
"111 - A" N 485589.54
E 862301.02

4) All Pipe Elevations Shown Are Invert Elevations, Unless Otherwise Noted.

5) Minimum Vertical Clearance Between Water & Sanitary Sewers Shall Be 1.0'. Minimum Vertical Clearance Between Water & Other Utilities Shall Be 0.5'

6) All Structures Shall Be Constructed In Accordance With Howard County Standard Details, Unless Otherwise Noted.

7) Contractor Shall Notify The Following Utilities Or Agencies At Least Five (5) Days Before Starting Work Shown On These Plans.
   a) Baltimore Gas And Electric Company - Underground Electric Distribution Engineering - "Damage Control" 234-5691.
   b) Baltimore Gas And Electric Company - Underground Gas Distribution Engineering - 559-0100.

8) All Water Mains To Be C.I.P. Or D.I.P. Unless Otherwise Noted.

9) Top Of All Water Mains To Have A Minimum Of 4.0' Cover Unless Otherwise Noted.

10) All Valves Shall Be Strapped To Tees In Accordance With Standard Details.

11) All Fittings Shall Be Blocked With Concrete, In Accordance With Standard Details.

12) All Sewer Mains Shall Be V.C.P.X., Or A.C.P. Class 3300, Unless Otherwise Noted.

13) The Contractor Shall Provide A Joint In All Sewer Mains Within 2'-0" Of Exterior Manhole Wall.

14) All Manholes Shall Be 4'-0" Inside Diameter, Unless Otherwise Noted, And Shall Have Standard Heavy Traffic Frame & Cover.

15) All Construction Shall Be Accomplished In Accordance With Howard County, Md., Department Of Public Works, Standard Specifications And Details For Water Mains And Sanitary Sewers Unless Otherwise Noted On The Plans Or In The Contract Specifications.

STATE OF MARYLAND — CHARLES E. FIRE — REGISTERED PROFESSIONAL ENGINEER

Reg. No. 5048 — Date 9/24/75

Revision	By	Date

DEPARTMENT OF GENERAL SERVICES
OFFICE OF DESIGN & CONSTRUCTION
APPROVED
PRINCIPAL ENG. — PRINCIPAL S. PLNR. — PRINCIPAL ARCH.
S. E. — M. E. — E. E. — S. PLNR. — ARCH.
DATE 11/6/75

Dwg. No. 1 Of 6

Project No. FMA-751-A
Date: Jan. 7, 1976

GEORGE W. STEPHENS JR. & ASSOC. INC.
CONSULTING ENGINEERS
303 ALLEGHENY AVE. TOWSON, MD. 21204

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS - DATE — CHIEF BUREAU OF ENGINEERING - DATE 12-31-75

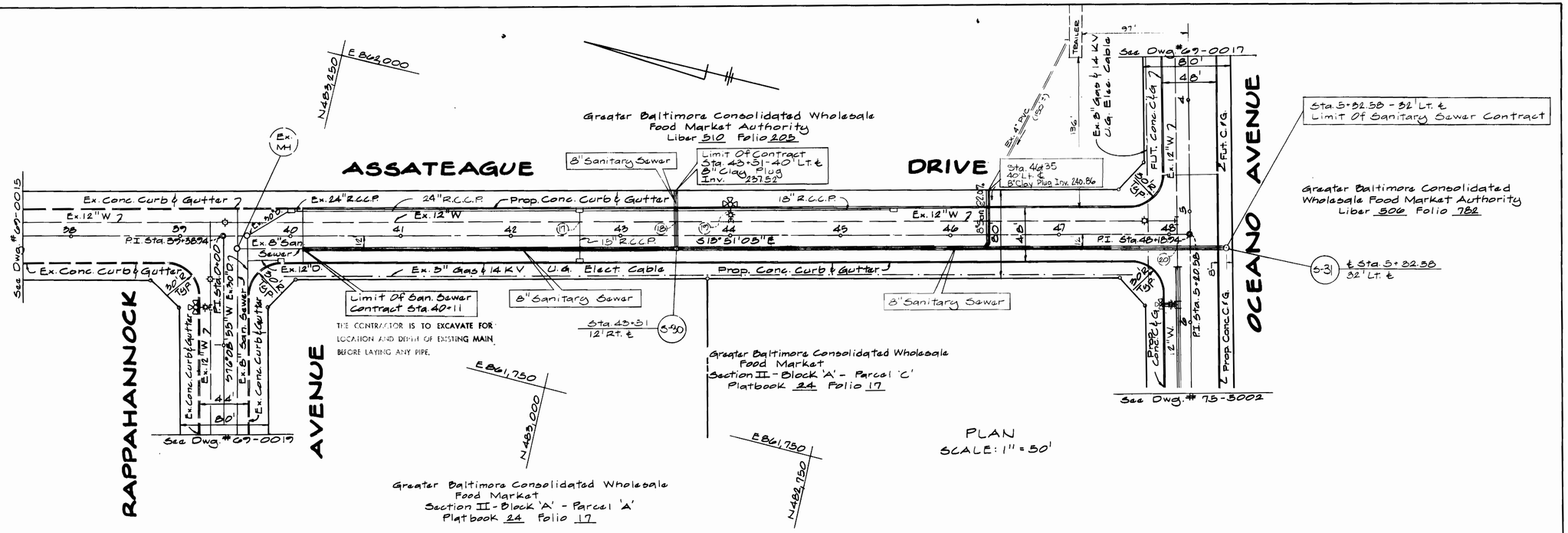
Contract No.
664 - D - W&S (Howard County)

GREATER BALTIMORE CONSOLIDATED WHOLESALE FOOD MARKET
HOWARD CO., MD. — EL. DIST. NO. 6

Drawing No. 75-5000
Sheet No. 1 Of 6

Scale: As Shown

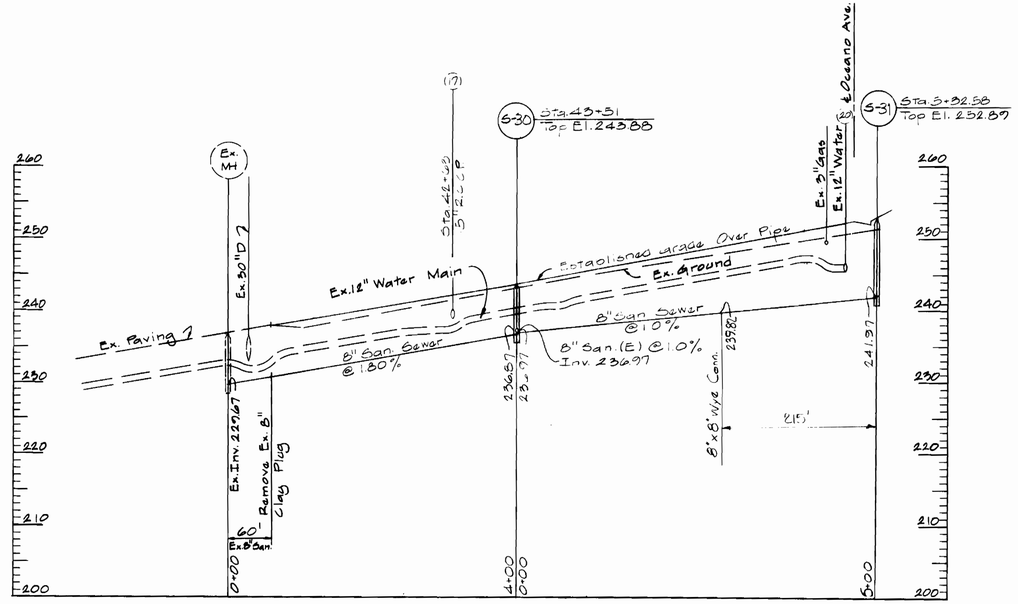
Designed By: R.A.P.
Drawn By: G.R.G.
Checked By: H.F.S.



PLAN
SCALE: 1" = 50'

REFERENCE DRAWINGS

Assateague Drive - Road & Drain Plan See Dwg. # 75-5007
Storm Drain Profiles - See Dwg. # 75-5018
EXIST. 12" WATER - SEE DWG. # 69-0016



SCALE: HOR. 1" = 100'
VERT. 1" = 10'

WATER CROSSINGS

Crossing #18		Crossing #20	
Est. Grade	243.88	Est. Grade	252.21
Bott. Ex. 12" Water	239.21	Bott. Ex. 12" Water	245.81
Top 8" San.	237.97	Top 8" San.	242.29
Clear	1.24'	Clear	3.52'
Cover	3.58'	Cover	5.31'

Note: Water Crossings Denoted Thus ——— (20) In Plan & Profile.

STATE OF MARYLAND CHARLES E. FICK REGISTERED PROFESSIONAL ENGINEER

Charles E. Fick 4/4/85
Reg. No. 5048 Date

Revision	By	Date

DEPARTMENT OF GENERAL SERVICES OFFICE OF DESIGN & CONSTRUCTION APPROVED
PRINC. PA. ENG. | PRINCIPAL S. PLNR | PRINCIPAL CH. H
S. E. | M. E. | E. E. | C. E. | S. P. ENG.
DATE 11/6/78 Keith A. Kelly

DWG. No. 2 OF 6
PROJECT No. FMA-751-A
DATE: Jan. 7, 1976

GEORGE W. STEPHENS JR. & ASSOC. INC.
CONSULTING ENGINEERS
303 ALLEGHENY AVE. TOWSON, MD. 21204

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
William A. Altman 1/7/76 DIRECTOR OF PUBLIC WORKS DATE
CHIEF-BUREAU OF ENGINEERING DATE 12-31-75

CONTRACT No. 664-D-W&S (Howard County)

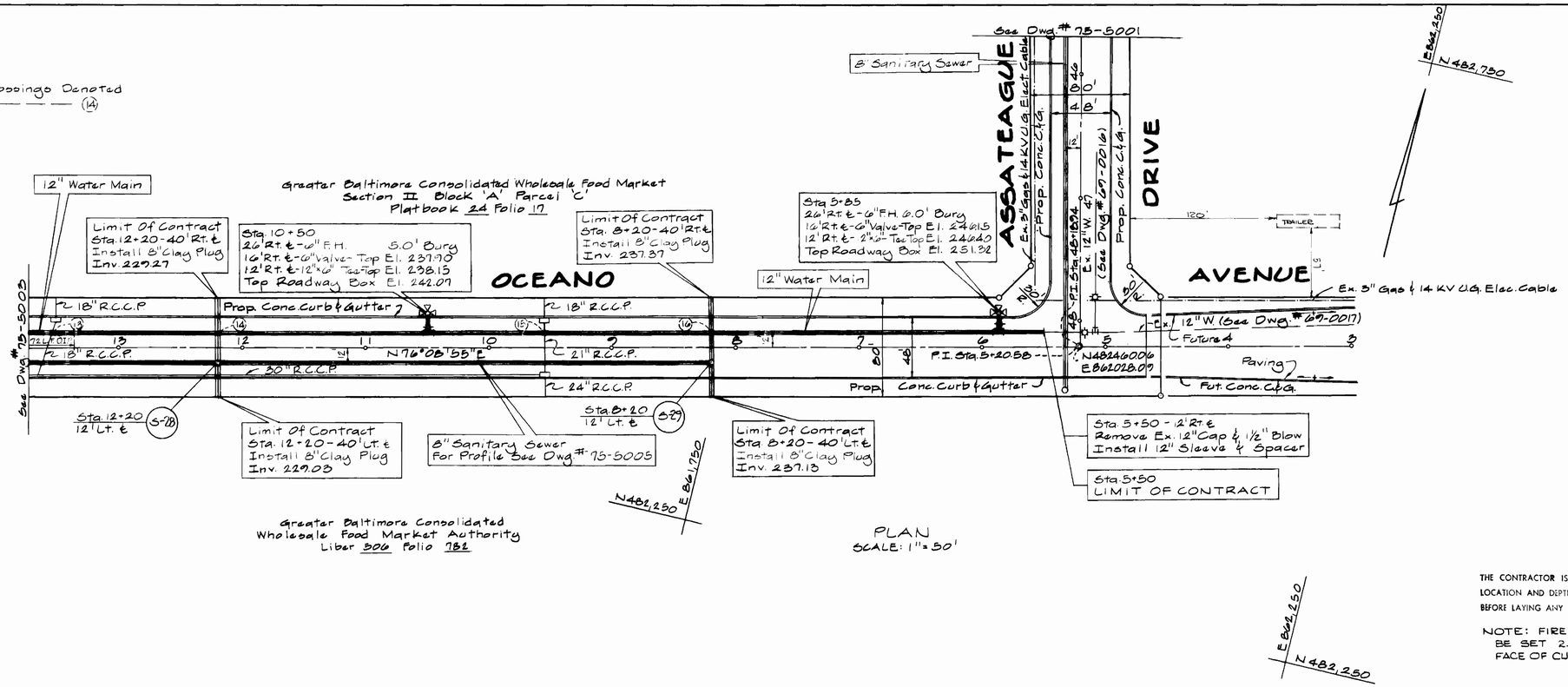
GREATER BALTIMORE CONSOLIDATED WHOLESALE FOOD MARKET
HOWARD CO., MD. EL. DIST. NO. 6

DRAWING No. 75-5001
SHEET No. 2 OF 6

SCALE AS SHOWN

DESIGNED BY: R.A.P.
DRAWN BY: G.R.G.
CHECKED BY: R.A.P.

Note: Water Crossings Denoted Thusly: — — — (14)



Greater Baltimore Consolidated Wholesale Food Market Authority
Liber 506 Folio 782

PLAN
SCALE: 1" = 50'

WATER CROSSINGS

Crossing # 13		Crossing # 14	
Est. Grade	234.89	Est. Grade	238.57
Bott. 18" Drain	228.15	Bott. 12" Water	233.48
Top 12" Water	227.65	Top 8" San.	229.72
Clear	0.50'	Clear	3.76
Cover	7.24'	Cover	4.0'

Crossing # 15		Crossing # 16	
Est. Grade	244.05	Est. Grade	246.75
Bott. 21" Drain	239.04	Bott. 12" Water	241.66
Top 12" Water	238.54	Top 8" San.	237.82
Clear	0.50'	Clear	3.84
Cover	5.51'	Cover	4.0'

MAIN TO HAVE 40 FEET COVER BASED ON ESTABLISHED GRADE.

NORMAL OPERATING PRESSURE _____
TEST PRESSURE See Specs.

CAST IRON FITTINGS
12" & 6" CLASS D CLASS 250
_____ CLASS B CLASS 150

CAST IRON PIPE
12" CLASS 23 THICKNESS 0.52"
6" CLASS 22 THICKNESS 0.38"
_____ CLASS _____ THICKNESS _____

DUCTILE IRON PIPE
12" CLASS 2 THICKNESS 0.37
_____ CLASS _____ THICKNESS _____

THE CONTRACTOR IS TO EXCAVATE FOR LOCATION AND DEPTH OF EXISTING MAIN BEFORE LAYING ANY PIPE.

NOTE: FIRE HYDRANTS TO BE SET 2.0 FEET BEHIND FACE OF CURB.

REFERENCE DRAWINGS

Oceano Avenue - Water & Sewer Profiles - See Dwg. # 75-5005
Oceano Avenue - Road & Drain Plan - See Dwg. # 75-5008
Storm Drain Profiles - See Dwg. # 75-5012

STATE OF MARYLAND — CHARLES E. FICK — No. 5048 — REGISTERED PROFESSIONAL ENGINEER

Charles E. Fick 9/4/75
Reg. No. 5048 Date

Revision	By	Date

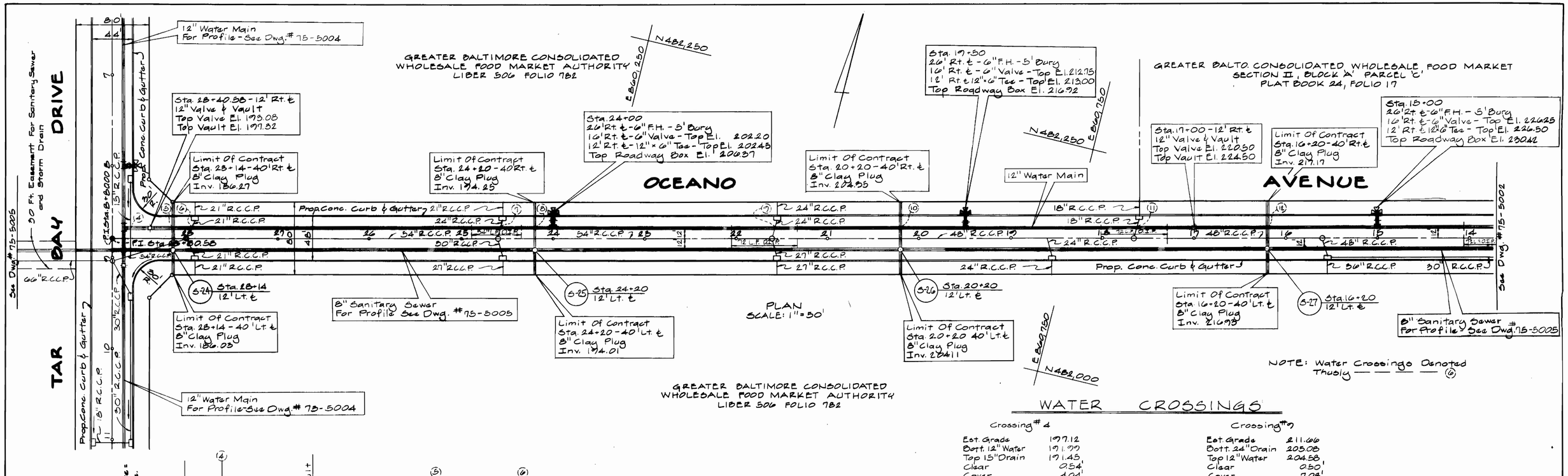
DEPARTMENT OF GENERAL SERVICES
OFFICE OF DESIGN & CONSTRUCTION
APPROVED
PRINCIPAL ENG. — PRINCIPAL S. PLNR. — PRINCIPAL ARCH.
S.E. — M.E. — E.E. — C.E. — S.PLNR. — ARCH.
DATE 11/6/75

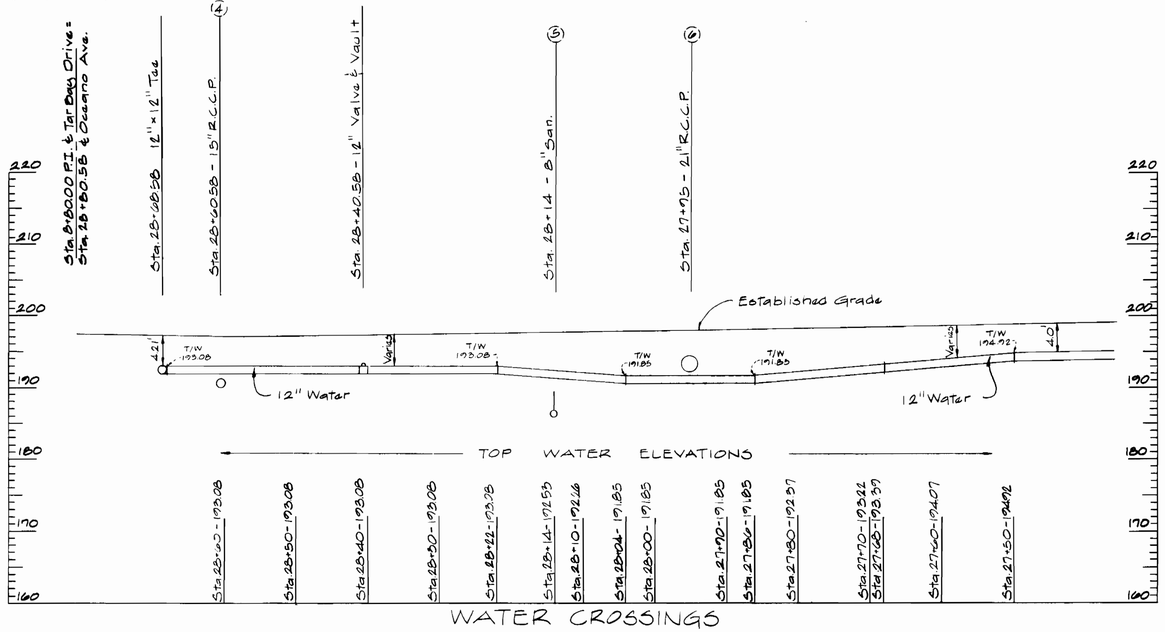
Dwg. No. 3 Of 6

Project No. FMA-751-A
Date: Jan 7, 1976

George W. Stephens Jr. & Assoc. Inc. Consulting Engineers 303 Allegheny Ave. Towson, Md. 21204	Department of Public Works Howard County, Maryland — William A. Altman 1/7/76 — Director of Public Works Date — Chief-Bureau of Engineering Date	Contract No. 664-D-W&S (Howard County)	Greater Baltimore Consolidated Wholesale Food Market — Howard Co., Md. — El. Dist. No. 6	Drawing No. 75-5002 Sheet No. 3 Of 6	Scale As Shown

Designed By: R.A.P.
Drawn By: G.R.G.
Checked By: H.F.S.





WATER CROSSINGS

SCALE: HOR. 1" = 10' VERT. 1" = 10'

WATER CROSSINGS

Crossing # 4

Est. Grade	197.12
Bott. 12" Water	191.99
Top 15" Drain	191.45
Clear	0.54'
Cover	4.04'

Crossing # 5

Est. Grade	197.61
Bott. 12" Water	191.44
Top 8" San.	188.72
Clear	4.72'
Cover	5.08'

Crossing # 6

Est. Grade	197.96
Bott. 21" Drain	192.35
Top 12" Water	191.85
Clear	0.50'
Cover	6.11'

Crossing # 7

Est. Grade	205.21
Bott. 24" Drain	199.08
Top 12" Water	198.58
Clear	0.50'
Cover	6.63'

Crossing # 8

Est. Grade	206.02'
Bott. 12" Water	200.93
Top 8" San.	194.70
Clear	6.23'
Cover	4.0'

Crossing # 9

Est. Grade	211.66
Bott. 24" Drain	205.08
Top 12" Water	204.58
Clear	0.50'
Cover	7.08'

Crossing # 10

Est. Grade	215.00
Bott. 12" Water	209.91
Top 8" San.	204.80
Clear	5.11'
Cover	4.0'

Crossing # 11

Est. Grade	222.62
Bott. 18" Drain	216.56
Top 12" Water	216.06
Clear	0.50'
Cover	6.56'

Crossing # 12

Est. Grade	226.90
Bott. 12" Water	221.81
Top 8" San.	217.62
Clear	4.19
Cover	4.00'

MAIN TO HAVE 4.0 FEET COVER BASED ON ESTABLISHED GRADE.

NORMAL OPERATING PRESSURE _____

TEST PRESSURE See Specs.

CAST IRON FITTINGS

12" & 6" CLASS D CLASS 350

_____ CLASS B CLASS 150

CAST IRON PIPE

12" CLASS 23 THICKNESS 0.34"

6" CLASS 22 THICKNESS 0.32"

_____ CLASS _____ THICKNESS _____

12" CLASS 2 THICKNESS 0.37

_____ CLASS _____ THICKNESS _____

Note: Fire Hydrant To Be Set 2.0' Behind Face Of Curb.

TOP WATER ELEVATIONS

Sta. 28+00 - 193.08
Sta. 28+50 - 193.08
Sta. 28+40 - 193.08
Sta. 28+50 - 193.08
Sta. 28+22 - 193.08
Sta. 28+14 - 192.55
Sta. 28+10 - 192.46
Sta. 28+04 - 191.85
Sta. 28+00 - 191.85
Sta. 27+70 - 191.85
Sta. 27+55 - 191.85
Sta. 27+50 - 192.57
Sta. 27+30 - 192.32
Sta. 27+28 - 192.39
Sta. 27+20 - 194.07
Sta. 27+50 - 194.92

REFERENCE DRAWINGS

Road Plan Oceano Ave. - See Dwg. # 75-5009
Drain Profile - See Dwg. # 75-5012
Water & Sewer Profile & Bill Of Materials - See Dwg. # 75-5005

STATE OF MARYLAND — CHARLES S. FIELD — REGISTERED PROFESSIONAL ENGINEER

Charles S. Field
Reg. No. 5048

9/14/75
Date

Revision	By	Date

DEPARTMENT OF GENERAL SERVICES
OFFICE OF DESIGN & CONSTRUCTION
APPROVED
PRINCIPAL ENG. | PRINCIPAL ENGR. | ARCHITECTURAL ARCH.
S.E. | M.E. | C.E. | E.E. | S.PLNG. | ARCH.
DATE 11/6/17

Dwg. No. 4 Of 6

Project No. FMA-751-A

Date: Jan. 7, 1976

GEORGE W. STEPHENS JR. & ASSOC. INC.
CONSULTING ENGINEERS
303 ALLEGHENY AVE. TOWSON, MD. 21204

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS — DATE — CHIEF BUREAU OF ENGINEERING — DATE

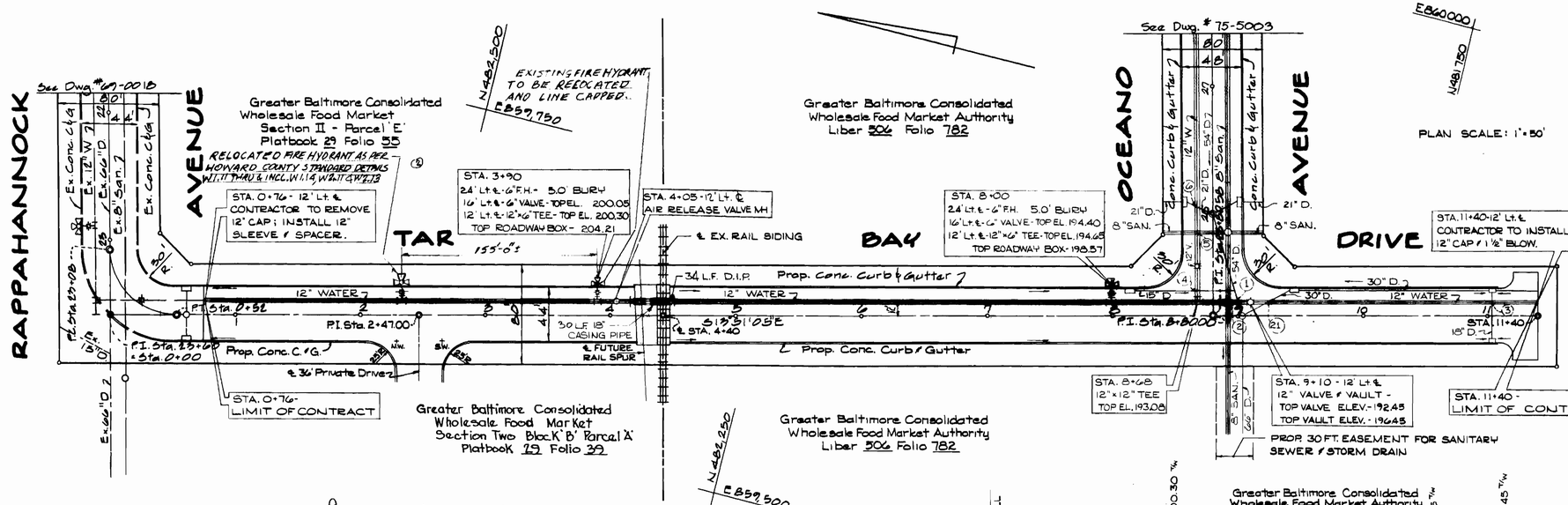
CONTRACT NO.
664 - D - W&S (Howard County)

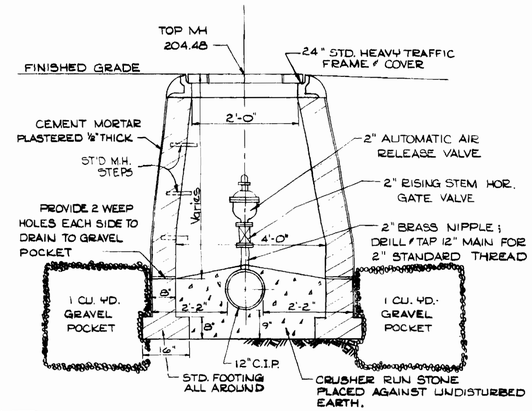
GREATER BALTIMORE CONSOLIDATED WHOLESALE FOOD MARKET
HOWARD CO., MD. — EL. DIST. NO. 6

DRAWING NO. 75-5008
SHEET NO. 4 OF 6

SCALE AS SHOWN

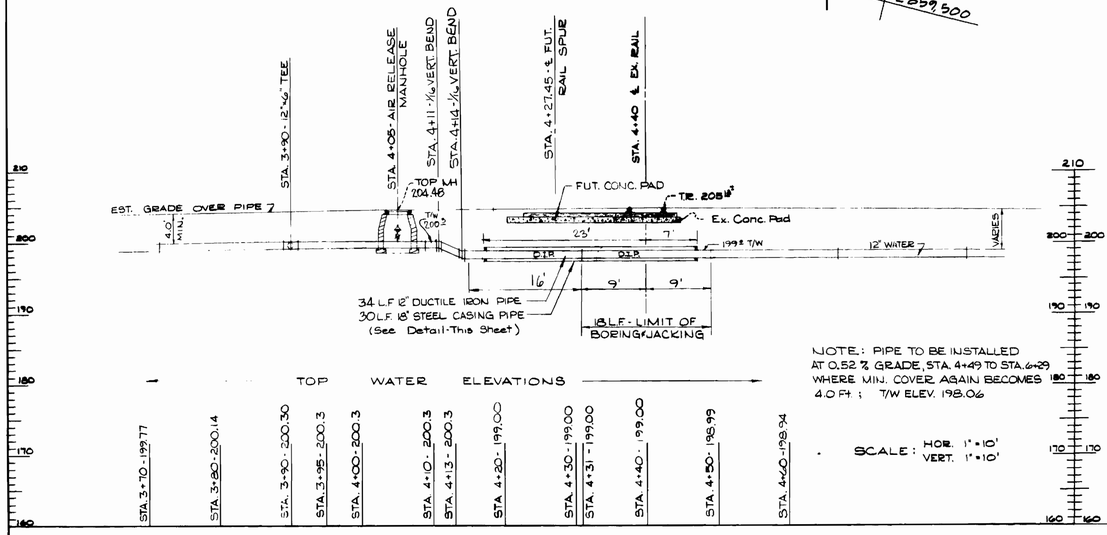
DESIGNED BY: R.A.P.
DRAWN BY: G.R.G.
CHECKED BY: H.F.S.

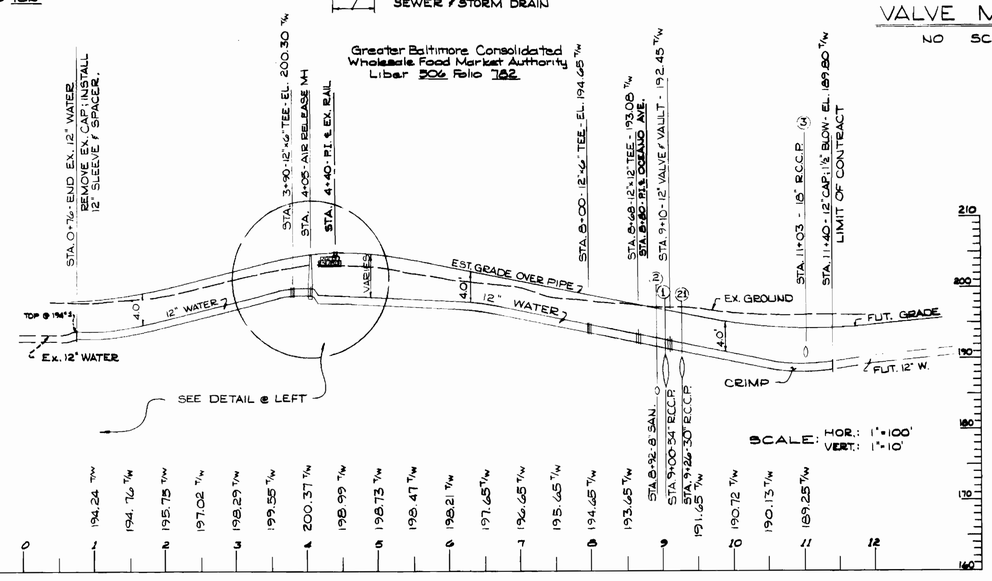




AUTOMATIC AIR RELEASE VALVE MANHOLE

NO SCALE





BILL OF MATERIALS		
No.	Description	Size
1034'	CAST IRON PIPE	12"
30'	DUCTILE IRON PIPE	12"
24'	CAST IRON PIPE	6"
1	VALVE & VAULT	12"
1	TEE	12"×12"
2	TEE	12"×6"
2	VALVE & ROADWAY BOX	6"
2	F.H. (5.0' BURY)	6"
1	SLEEVE & SPACER	12"
1	CAP	12"
1	BLOW	1½"
36'	STEEL CASING PIPE	18"
1	AUTO. AIR RELEASE VALVE MANHOLE INSTALLATION COMPLETE	24"
2	1/16 - VERTICAL BEND	12"

WATER CROSSINGS

CROSSING # 1

EST. GRADE	196.65
BOTT. 12" W.	191.56
TOP 54" R.C.C.P.	190.49
CLEAR.	1.07'
COVER	4.0'

CROSSING # 2

EST. GRADE	196.81
BOTT. 12" W.	191.72
TOP 8" SAN.	185.15
CLEAR.	6.57'
COVER	4.0'

CROSSING # 3

EST. GRADE	193.92
BOTT. 18" R.C.C.P.	189.75
TOP. 12" W.	189.25
CLEAR.	0.50'
COVER	4.67'

NOTE: CRIMP 12" W. UNDER 18" D.

CROSSING # 4

EST. GRADE	197.12
BOTT. 12" W	191.99
TOP 15" R.C.C.P.	191.45
CLEAR.	0.54'
COVER	4.04'

CROSSING # 21

EST. GRADE	196.13
BOTT. 12" W.	191.04
TOP 30" R.C.C.P.	189.97
CLEAR.	1.07'
COVER	4.0'

NOTE: WATER CROSSINGS DENOTED THUSLY: (3) IN PLAN & PROFILE.

REFERENCE DRAWINGS

TAR BAY DRIVE ROAD PLAN	# 75-5010
TAR BAY DRIVE - STORM DRAIN PROFILES	# 75-5013
OCEANO AVENUE - 12" WATER & 8" SAN.	# 75-5003
8" SANITARY OUTFALL	# 75-5005

CAST IRON PIPE

12"	CLASS 23	THICKNESS 0.52"	
6"	CLASS 22	THICKNESS 0.38"	
	CLASS	THICKNESS	

CAST IRON FITTINGS

12" & 6"	CLASS D	CLASS 250
	CLASS B	CLASS 150

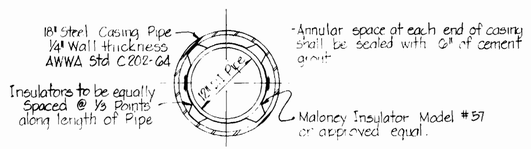
DUCTILE IRON PIPE

12" CLASS 2 THICKNESS 0.37

CLASS THICKNESS

NORMAL PRESSURE

TEST PRESSURE See Specs.



TYPICAL SECTION - STEEL LINER

NO SCALE

Charles E. Fick 9/11/75

REG. NO. 5048 DATE

MAIN TO HAVE 4.0 FEET COVER BASED ON ESTABLISHED GRADE, UNLESS OTHERWISE NOTED.

FIRE HYDRANTS TO BE SET 2.0 FEET BEHIND FACE OF CURB.

Revision	By	Date
① Water Crossing under Railroad Revised	H.F.S.	5/28/76
② RELOCATE FIRE HYD.	PRA	10/27/76

DEPARTMENT OF GENERAL SERVICES OFFICE OF DESIGN & CONSTRUCTION APPROVED

PRINCIPAL ENG. — PRINCIPAL ELEC. — PRINCIPAL ARCH. — S.E. — M.E. — E.E. — CHIEF, DIV. OF CONST.

DATE 11/6/77

DWG. No. 5 OF 6

PROJECT No. FMA-751-A

DATE: Jan. 7, 1976

GEORGE W. STEPHENS JR. & ASSOC. INC. CONSULTING ENGINEERS 303 ALLEGHENY AVE. TOWSON, MD. 21204

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY MARYLAND

William D. Otto 1/7/76 — DIRECTOR OF PUBLIC WORKS - DATE

W. Ostdiek 12-31-75 — CHIEF - BUREAU OF ENGINEERING - DATE

CONTRACT No. 664-D-W&S (Howard County)

GREATER BALTIMORE CONSOLIDATED WHOLESALE FOOD MARKET

HOWARD CO., MD. EL. DIST. NO. 6

DRAWING No. 75-5004

SHEET No. 5 OF 6

SCALE AS SHOWN

DESIGNED BY: R.A.P.

DRAWN BY: R.A.P.

CHECKED BY: H.F.S.

BILL OF MATERIALS

No.	Description	Size
1031 L.F.	Cast Iron Pipe	12"
288 L.F.	Ductile Iron Pipe	12"
70 L.F.	Cast Iron Pipe	6"
2	Valve & Vault	12"
5	Tee	12"x6"
5	Valve & Roadway Box	6"
5	F.H.	6"
1	Sleeve & Spacer	12"

THE CONTRACTOR IS TO EXCAVATE FOR LOCATION AND DEPTH OF EXISTING MAIN BEFORE LAYING ANY PIPE.

F.H. To Be Set 2.0' Behind Face Of Curb.

MAIN TO HAVE 4.0 FEET COVER BASED ON ESTABLISHED GRADE.

NORMAL OPERATING PRESSURE _____

TEST PRESSURE See Specs.

CAST IRON FITTINGS

12" & 6" CLASS D CLASS 250

_____ CLASS B CLASS 150

CAST IRON PIPE

12" CLASS 23 THICKNESS 0.52"

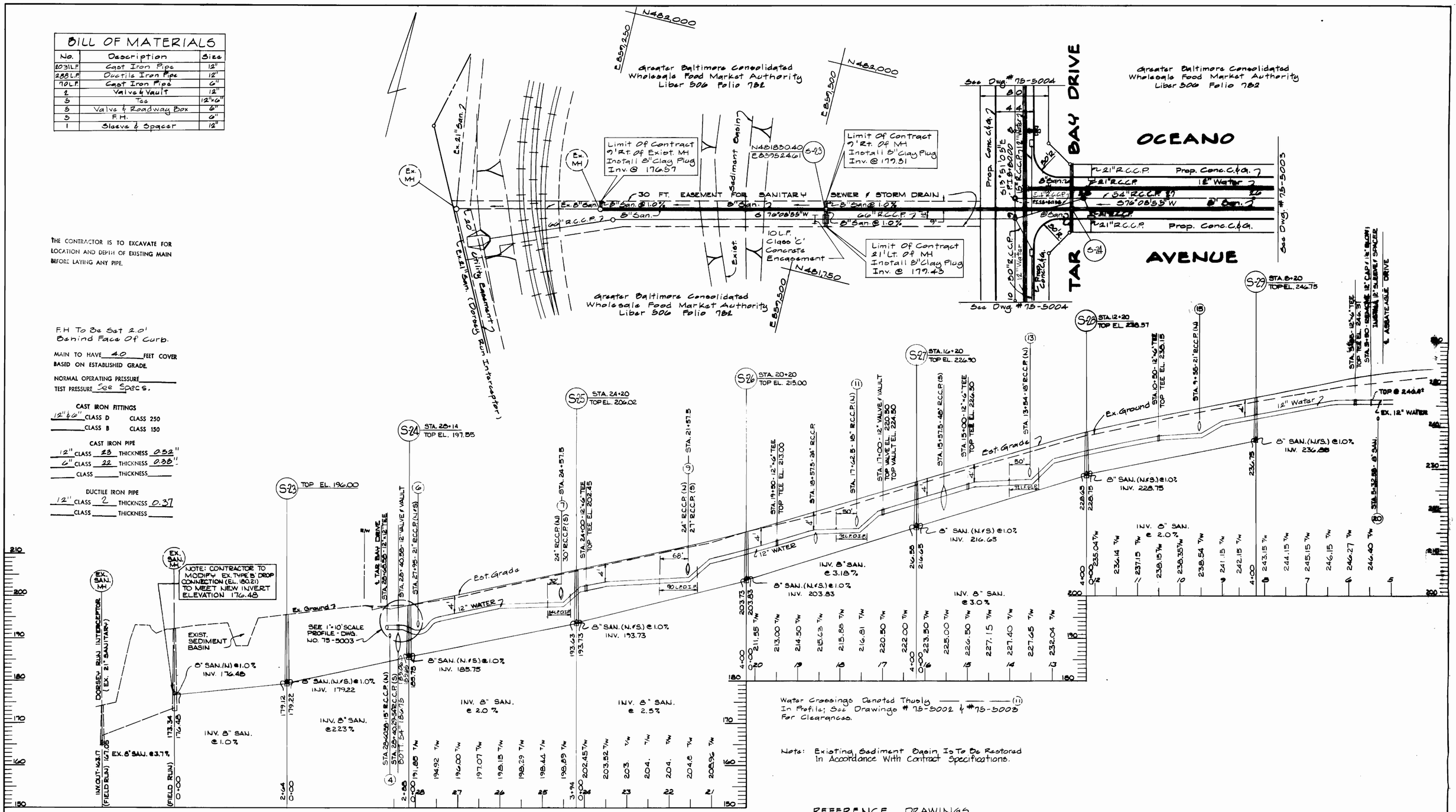
6" CLASS 22 THICKNESS 0.38"

_____ CLASS _____ THICKNESS _____

DUCTILE IRON PIPE

12" CLASS 2 THICKNESS 0.37

_____ CLASS _____ THICKNESS _____



REFERENCE DRAWINGS

Ocean Avenue - Water & Sewer Plan	- Dwg. #	75-5003
Tar Bay Drive - 12" Water	- Dwg. #	75-5004
Tar Bay Drive - Road Plan	- Dwg. #	75-5010
Ocean Avenue - Road Plan	- Dwg. #	75-5009
Storm Drain Outfall	- Dwg. #	75-5011

Revision	By	Date

DEPARTMENT OF GENERAL SERVICES OFFICE OF DESIGN & CONSTRUCTION APPROVED

PRINCIPAL ENG. — PRINCIPAL S. ENG. — PRINCIPAL ARCH.

DATE 11/6/75

Dwg. No. 6 Of 6

PROJECT No. FMA-751-A

DATE: Jan. 7, 1976

STATE OF MARYLAND — CHARLES E. FICK — No. 8048 — REGISTERED PROFESSIONAL ENGINEER

Charles E. Fick 9/11/75

ENGINEER - REG. # 8048 DATE

GEORGE W. STEPHENS JR. & ASSOC. INC.
CONSULTING ENGINEERS
303 ALLEGHENY AVE. TOWSON, MD. 21204

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE — CHIEF - BUREAU OF ENGINEERING - DATE

CONTRACT No.
664-D-W&S (Howard County)

GREATER BALTIMORE CONSOLIDATED WHOLESALE FOOD MARKET

HOWARD CO., MD. EL. DIST. NO. 6

DRAWING No. 75-5005
SHEET No. 6 OF 6

SCALE
PLAN: 1" = 50'
PROFILE: HOR.: 1" = 100' VERT.: 1" = 10'

DESIGNED BY: R.A.P.
DRAWN BY: G.R.G., R.A.P.
CHECKED BY: H.F.B.