

STAKEOUT TABLE DESC NORTHING EASTING TRAV 1 1279524.14 TRAV 2 591731.86 1279636.64 BORING B-01 1279574.50 503.26 591981.46 BORING B-02 591990.76 1279600.91 503.84 NW CORNER ASPHALT PULLOFF 502.36 592007.89 1279536.65 NE CORNER ASPHALT PULLOFF 592002.54 1279551.32 502.00 SW CORNER ASPHALT PULLOFF 591936.98 502.00 1279561.84 SE CORNER ASPHALT PULLOFF 591950.79 1279569.94 501.75 S CORNER DRIVEWAY APRON 591960.46 1279575.62 501.75 SE CORNER DRIVEWAY 591976.17 1279619.26 501.75 NE CORNER DRIVEWAY 591987.46 1279615.20 501.75 N CORNER DRIVEWAY APRON 591971.76 1279571.56 501.75 N END POINT DRIVEWAY APRON 591975.60 1279561.02 501.75 NW CORNER CONCRETE SLAB 591986.04 1279575.46 503.17 NE CORNER CONCRETE SLAB 1279594.32 503.17 591992.68 SW CORNER CONCRETE SLAB 1279578.12 503.17 SE CORNER CONCRETE SLAB 591985.14 1279596.98 503.17 CENTER OF TANK MANWAY 591985.25 1279585.27 503.17 NORTH END RCP STORM DRAIN 592005.89 1279548.03 500.17 SOUTH END RCP STORM DRAIN 591945.78 1279569.32 499.21 STORM DRAIN INLET 591951.44 1279567.30 503.20

SITE ANALYSIS: TOTAL AREA OF	CITE	0.141	ACRES		
AREA DISTURBED		0.141	ACRES		
AREA TO BE ROC		D			0.02
AREA TO BE VEG	ATATIVELY ST	ABILIZED			0.121
TOTAL CUT		4	51 C	J. YDS.	
TOTAL FILL		4	51	J. YDS.	

QUANTITIES

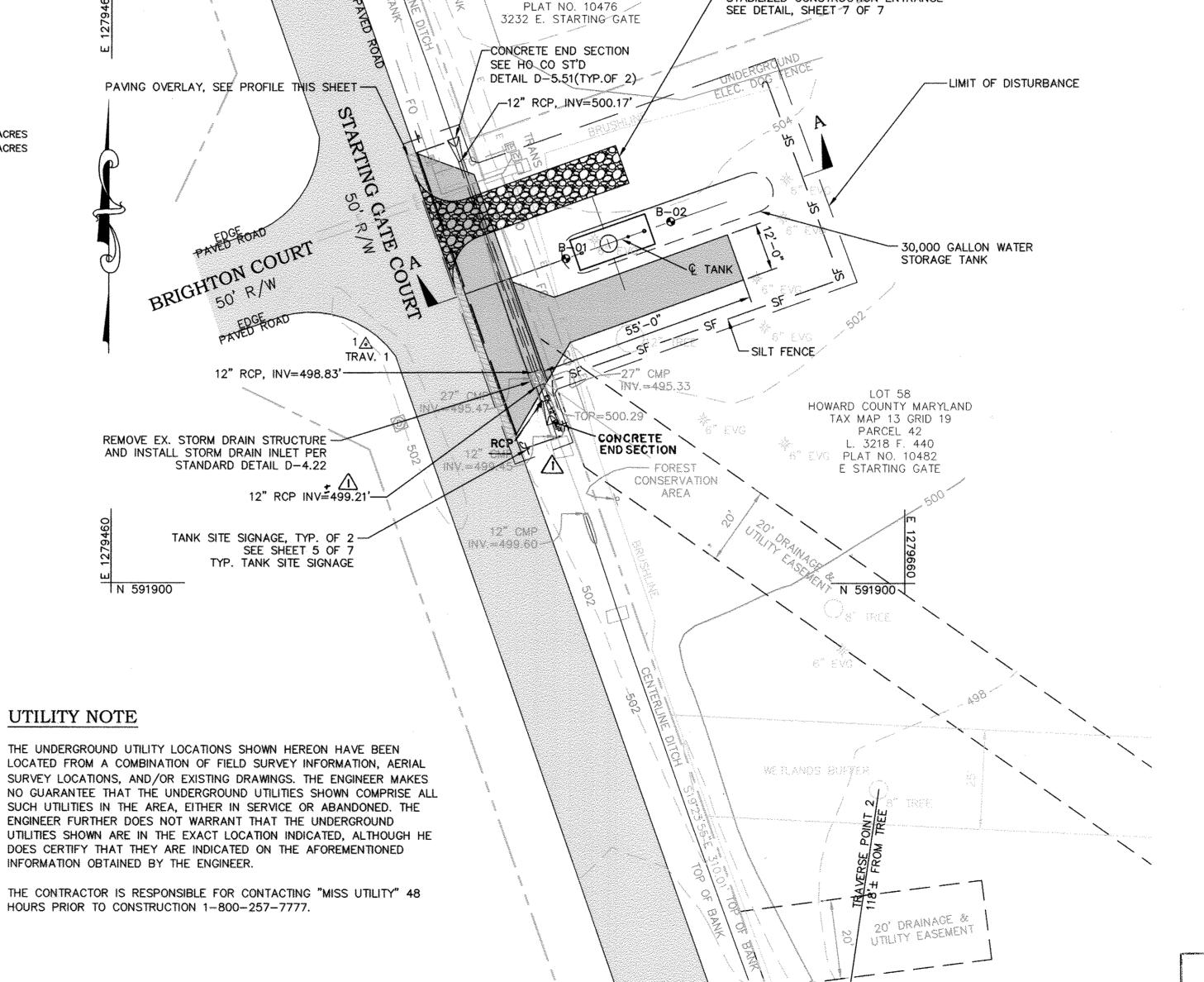
ITEM	UNIT	ESTIMATE	AS-BUILT	MANUFACTURER	
MOBILIZATION / DEMOBILIZATION	LS	1 .	ı	TANK DIRECT	
30,000 GALLON END DRAFT WATER STORAGE TANK, COMPLETE IN PLACE, WITH PIPING CONNECTIONS PER TABLE 1, SHEET 5 OF 7	EA	1		XERXES COMPANY	
ASPHALT PAVING (FULL DEPTH), P-6	SF	790	790	AS PARROTT/H.T.I. CONTRA	CT
ASPHALT PAVING (MILL AND OVERLAY)	SF	150	150	AGPARROTT/H.T.I. CONTRA	CTO
CONCRETE SLAB	SF	160	160	J M V CONCRETE	
CLEARING AND GRUBBING	LS	1	ege "s". See a se	TANK DIRECT	
SIGN, SITE IDENTIFICATION	EA	2	2	NA.	
SIGN, ADVANCE	EA	1	ı	NA.	
SILT FENCE	LF	160	160	SMC ENVIRONMENTAL	4
SITE RESTORATION	SF	6142	6142	H.T.I. CONTRACTORS	
12" REINFORCED CONCRETE PIPE	LF	64.	64	CONCRETE PIPE & PRECAS	T
PRECAST STORMDRAIN INLET, COMPLETE IN PLACE, WITH FRAME AND INLET GRATE PER STANDARD DETAIL D-4.22	EA	1	1	GILLESPIE PRECAST	
CONCRETE END SECTION, COMPLETE IN PLACE PER STANDARD DETAIL D-5.51	EA	2	2	CONCRETE PIPE & PRECAST	
TRAFFIC CONTROL	LS	1	1	TANK DIRECT	
NAME OF UTILITY CONTRACTOR: H.	T.I. CONT	TRACTORS			
			CHECKBOX		
			AS-BUILT DATE		
			 		

DEPARTMENT OF PUBLIC WORKS

HOWARD COUNTY, MARYLAND

Hobert Deg

ACT. CHIEF, UTILITY DESIGN DIVISION



SITE LOCATION MAP SCALE: 1" = 600'

"TANK AHEAD" SIGN

TYP. ADVANCE SIGNAGE

SEE SHEET 5 OF 7,

ADC MAP REFERENCE: HOWARD COUNTY MAP 4811 GRID B4

HORIZONTAL & VERTICAL CONTROL

THE HORIZONTAL AND VERTICAL CONTROL SHOWN HEREON IS BASED ON GPS OBSERVATIONS FROM THE FOLLOWING N.G.S. TRAVERSE POINTS:

594658.96

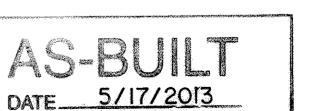
EASTING 1277553.15 1278083.67

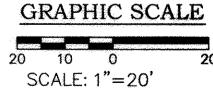
<u>ELEV</u> 590.64 591.46

NAD 1983/91 (HORIZONTAL) NAVD 88 (VERTICAL) DATUM

NOTES:

- 1. FOR GENERAL TANK INSTALLATION, PIPING, SPECIFICATIONS, AND DETAILS REFER TO SHEETS 1-7 OF 7, INCLUSIVE.
- 2. ALL TREES AND PLANTINGS INTERFERING WITH EXCAVATION SHALL BE REMOVED REPLACED WITH VIABLE TREES OF SIMILAR SPECIES. TREES AND PLANTINGS THAT ARE NOT CALLED OUT ON THE PLANS AND NEED TO BE REMOVED FOR CONSTRUCTION SHALL BE IDENTIFIED TO THE HOWARD COUNTY INSPECTOR PRIOR TO REMOVAL.
- 3. THE CONTRACTOR SHALL TAKE ALL REASONABLE MEANS POSSIBLE TO PROTECT EXISTING TREES AND PLANTINGS WITHIN THE CONSTRUCTION AREA, AND SHALL REPLACE IN KIND THOSE DAMAGED OR REMOVED DURING CONSTRUCTION.
- 4. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME IV, DATED MAY 7, 2007.
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- 6. THERE SHALL BE NO STOCKPILING OF EXCAVATED MATERIAL ON THE WORK SITE.
- 7. ALL SURVEY STAKEOUT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 8. ALL TANK EXCAVATIONS MUST MEET OSHA REQUIREMENTS.
- 9. THE CONTRACTOR SHALL USE JERSEY BARRIERS TO PROTECT THE EXCAVATION. (SEE DETAIL MD 104.01-23B)(11:1 MAX
- 10. USE MD 104.06-18 FOR WORKZONE SIGNING.
- 11. USE MD 104.01-71 FOR CRASH CUSHION DETAIL. USE 30mph AS DESIGN SPEED.
- 12. ROAD WORK 1500ft. SIGN CAN BE ELIMINATED WHEN THE LENGTH OF ROAD IS LESS THAN 1500ft.
- 13. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SCHEDULE A MEETING WITH HOWARD COUNTY TRAFFIC CONTROL MANAGER FOR THE APPROVAL OF MOT PLANS.





PROFESSIONAL CERTIFICATION. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State Of Maryland, License No. 31363, Expiration Date 01/16/2014.

ACT. CHIEF! BUREAU OF ENGINEERING

SURVEY AND DRAFTING DIVISION

SCIENTISTS Construction managers

TECHNOLOGIES

Engineers PLANNERS 936 Ridgebrook Road Sparks, MD 21152 PHONE: (410) 316-7800 Fax: (410) 316-7817

www.kci.com



	DES: ED)K						w/ 4/2000 com or					······································	· · · · · · · · · · · · · · · · · · ·	···, , ····· · · · · · · · ·
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										O I		1 1147	JUM	E COOKI	
	CHK: GV	N													
1	DATE 40 /	(0044	LFN	\triangle	AS BUILT	5	17:13								
,	DATE: 12/	2011	BY	NO.	REVISION		DATE	600' S	SCALE	MAP	NO.	1	3	BLOCK NO	
												***************************************	<u> 1866 - 1864 - 1866 - 1866 - 1866 - 1866 - 1866 - 1866 - 1866 - 1866 - 1866 - 1866 - 1866 - 1866 - 1866 - 1866</u>		

PLAN

SCALE: 1" = 20'

UNDERGROUND WATER STORAGE TANKS FOR FIRE SUPPRESSION

> CAPITAL PROJECT No. F-5972 CONTRACT No. 65-4733

HOWARD COUNTY, MARYLAND **ELECTION DISTRICT NO. 4**

SHEET

SCALE

AS SHOWN

DIRECTOR OF PUBLIC WORKS

QUANTITIES

CONCRETE SLAB

SIGN, SITE ADVANCE

SITE RESTORATION

TRAFFIC CONTROL

SILT FENCE

CLEARING AND GRUBBING

SIGN. SITE IDENTIFICATION

NOTES:

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- SHALL BE REMOVED REPLACED WITH VIABLE TREES OF SIMILAR SPECIES. TREES AND PLANTINGS THAT ARE NOT CALLED OUT ON THE PLANS AND NEED TO BE REMOVED FOR CONSTRUCTION SHALL BE IDENTIFIED TO THE HOWARD COUNTY INSPECTOR PRIOR TO REMOVAL.
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- 8. ALL TANK EXCAVATIONS MUST MEET OSHA REQUIREMENTS.
- 9. THE CONTRACTOR SHALL USE JERSEY BARRIERS TO PROTECT THE EXCAVATION. (SEE DETAIL MD 104.01-23B)(11:1 MAX
- 10. USE MD 104.06-18 FOR WORKZONE SIGNING.

ITEM

STORAGE TANK, COMPLETE IN PLACE, WITH

PIPING CONNECTIONS PER TABLE 1, SHEET

NAME OF UTILITY CONTRACTOR: H.T.I. CONTRACTORS.

ASPHALT PAVING (MILL AND OVERLAY)

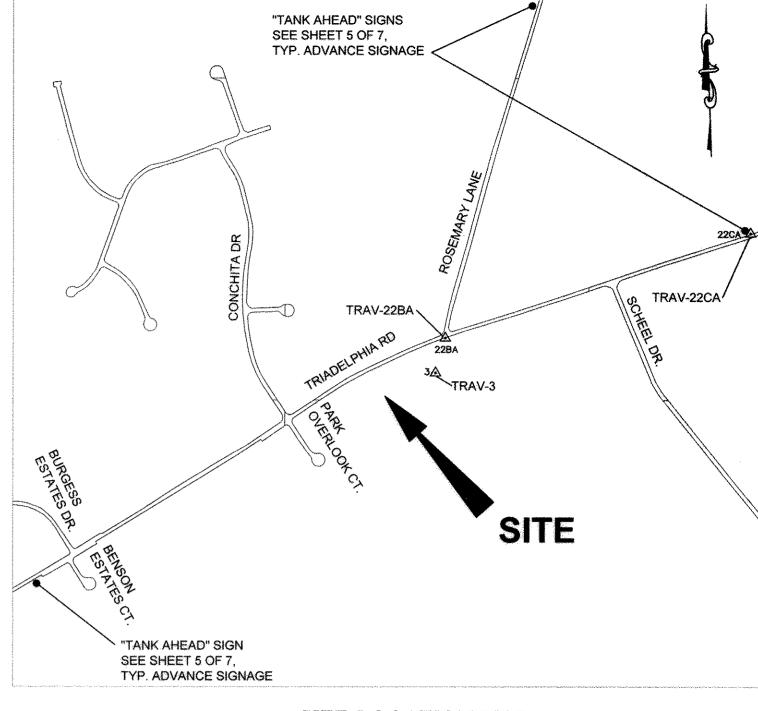
MOBILIZATION / DEMOBILIZATION

ASPHALT PAVING (FULL DEPTH)

30,000 GALLON END DRAFT WATER

- 11. USE MD 104.01-71 FOR CRASH CUSHION DETAIL. USE 30mph AS DESIGN SPEED.
- 12. ROAD WORK 1500ft. SIGN CAN BE ELIMINATED WHEN THE LENGTH OF ROAD IS LESS THAN 1500ft.
- 13. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SCHEDULE A MEETING WITH HOWARD COUNTY TRAFFIC CONTROL MANAGER FOR THE APPROVAL OF MOT PLANS.

ELEV. 571.54 --ELEV. 571.54 ELEV. 571.91 - PROPOSED GRADE 575-DRAFT ELEV. 571.68 — — EX, GRADE 🕶 -EDGE OF EX. PAVING 6" THICK, MIN. OVERLAY-CUT BACK CUT BACK AND FILL OVERLAY EXISTING PAVING FOR A SMOOTH TRANSITION -ASPHALT PULLOFF, SEE TYPICAL PAVING SECTION ON SHEET 4 OF 7-APPROXIMATE LIMITS OF EXCAVATION AND FILL-30,000 GALLON WATER STORAGE TANK-PROFILE A-A SCALE: HORIZ - 1" = 5'-0"VERT. - 1" = 5'-0"



SITE LOCATION MAP SCALE: 1" = 600'

ADC MAP REFERENCE: HOWARD COUNTY MAP 4813 GRID F7

HORIZONTAL & VERTICAL CONTROL

THE HORIZONTAL AND VERTICAL CONTROL SHOWN HEREON IS BASED ON GPS OBSERVATIONS FROM THE FOLLOWING N.G.S. TRAVERSE POINTS:

	NORTHING	EA
22BA	585134.83	1323
22CA	585783.35	1325
ZZCA	5 0 5/03.35	132

230.61

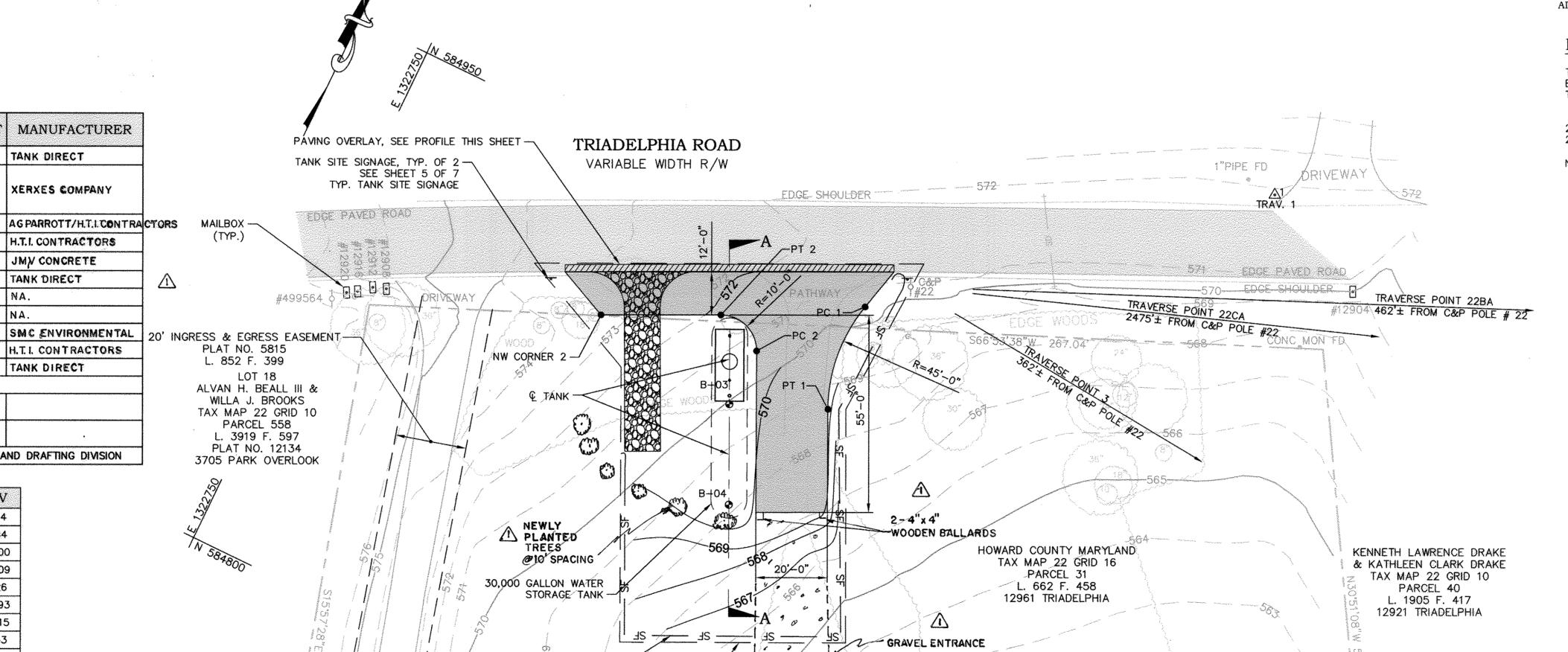
NAD 1983/91 (HORIZONTAL) NAVD 88 (VERTICAL) DATUM

UTILITY NOTE

THE UNDERGROUND UTILITY LOCATIONS SHOWN HEREON HAVE BEEN LOCATED FROM A COMBINATION OF FIELD SURVEY INFORMATION, AERIAL SURVEY LOCATIONS, AND/OR EXISTING DRAWINGS. THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED, THE ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE INDICATED ON THE AFOREMENTIONED INFORMATION OBTAINED BY THE ENGINEER.

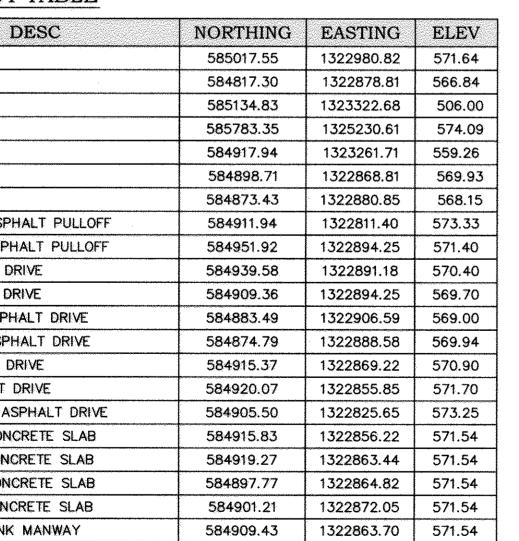
THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "MISS UTILITY" 48 HOURS PRIOR TO CONSTRUCTION 1-800-257-7777.

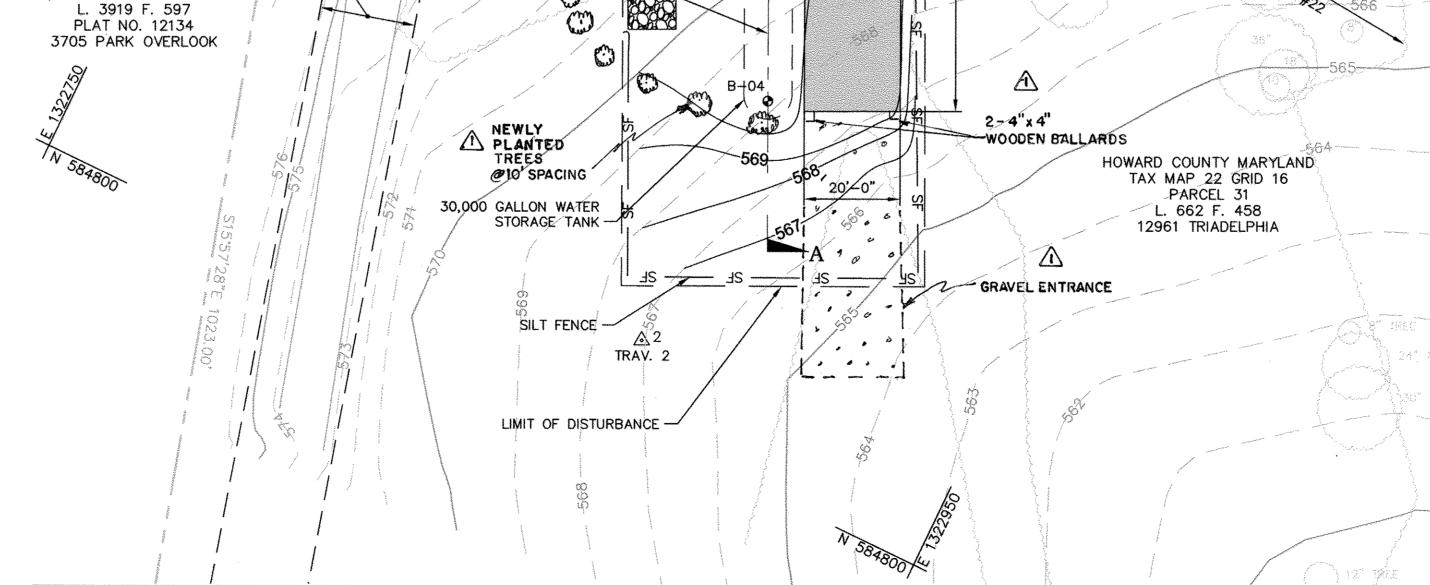
THE CONTRACTOR SHALL BEWARE OF THE OVERHEAD ELECTRIC LINES THAT ARE WITHIN THE SITE SO AS NOT TO COME IN CONTACT WITH SAID LINES WITH ANY EQUIPMENT USED.



STAKEOUT TABLE

DESC	NORTHING	EASTING	ELEV	
TRAV 1	585017.55	1322980.82	571.64	
TRAV 2	584817.30	1322878.81	566.84	
TRAV 22BA	585134.83	1323322.68	506.00	
TRAV 22CA	585783.35	1325230.61	574.09	
TRAV 3	584917.94	1323261.71	559.26	
BORING B-03	584898.71	1322868.81	569.93	
BORING B-04	584873.43	1322880.85	568.15	
NW CORNER ASPHALT PULLOFF	584911.94	1322811.40	573.33	
NE CORNER ASPHALT PULLOFF	584951.92	1322894.25	571.40	
PC 1 ASPHALT DRIVE	584939.58	1322891.18	570.40	
PT 1 ASPHALT DRIVE	584909.36	1322894.25	569.70	
SE CORNER ASPHALT DRIVE	584883.49	1322906.59	569.00	
SW CORNER ASPHALT DRIVE	584874.79	1322888.58	569.94	
PC 2 ASPHALT DRIVE	584915.37	1322869.22	570.90	
PT 2 ASPHALT DRIVE	584920.07	1322855.85	571.70	
NW CORNER 2 ASPHALT DRIVE	584905.50	1322825.65	573.25	
NW CORNER CONCRETE SLAB	584915.83	1322856.22	571.54	
NE CORNER CONCRETE SLAB	584919.27	1322863.44	571.54	
SW CORNER CONCRETE SLAB	584897.77	1322864.82	571.54	
SE CORNER CONCRETE SLAB	584901.21	1322872.05	571.54	
CENTER OF TANK MANWAY	584909.43	1322863.70	571.54	

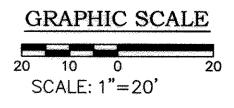




TOTAL AREA OF SITE AREA DISTURBED 0.053 ACRES AREA TO BE ROOFED OR PAVED AREA TO BE VEGATATIVELY STABILIZED 0.117 ACRES TOTAL FILL OFFSITE WASTE/BORROW AREA LOCATION CONTRACTOR COORDINATE



SITE ANALYSIS:



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS

ACT. CHIEF, BUREAU OF ENGINEERING ACT. CHIEF, UTILITY DESIGN DIVISION

UNIT | ESTIMATE | AS-BUILT | MANUFACTURER

185

3

250

7444

CHECKBOX

AS-BUILT

DATE

2177

160

2

3

250

7444

SF

LS

EA

EA

SF

LS

TANK DIRECT

XERXES COMPANY

H.T.I. CONTRACTORS

SMC ENVIRONMENTAL

H.T.I. CONTRACTORS

JMY CONCRETE

TANK DIRECT

TANK DIRECT

SURVEY AND DRAFTING DIVISION

TECHNOLOGIES

ENGINEERS SCIENTISTS CONSTRUCTION MANAGERS Sparks, MD 21152 PHONE: (410) 316-7800

Fax: (410) 316-7817

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PROFESSIONAL CERTIFICATION. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws

of the State Of Maryland, License No. 31363, Expiration Date 01/16/2014.

DES: EDK LFN AS BUILT DATE: 12/2011 BY NO. REVISION DATE 600' SCALE MAP NO. 22

PLAN

SCALE: 1" = 20'

BENSON BRANCH PARK

BLOCK NO. ____10

UNDERGROUND WATER STORAGE TANKS FOR FIRE SUPPRESSION

CAPITAL PROJECT No. F-5972 CONTRACT No. 65-4733

ELECTION DISTRICT NO. 3

HOWARD COUNTY, MARYLAND

SCALE AS SHOW SHEET

STAKEOUT TABLE

NORTHING	EASTING	ELEV
543970.32	1333614.05	417.88
544316.77	1333834.32	432.35
544083.11	1333687.75	420.49
544058.77	1333673.89	419.97
544113.42	1333681.88	421.75
544098.79	1333687.37	421.20
544048.24	1333644.78	419.95
544051.00	1333660.15	419.85
544087.97	1333685.91	421.64
544084.01	1333692.86	421.64
544070.59	1333676.02	421.64
544066.63	1333682.97	421.64
544075.13	1333683.20	421.64
	544316.77 544083.11 544058.77 544113.42 544098.79 544048.24 544051.00 544087.97 544084.01 544070.59 544066.63	543970.32 1333614.05 544316.77 1333834.32 544083.11 1333687.75 544058.77 1333673.89 544113.42 1333681.88 544098.79 1333687.37 544048.24 1333644.78 544051.00 1333660.15 544087.97 1333685.91 544070.59 1333676.02 544066.63 1333682.97

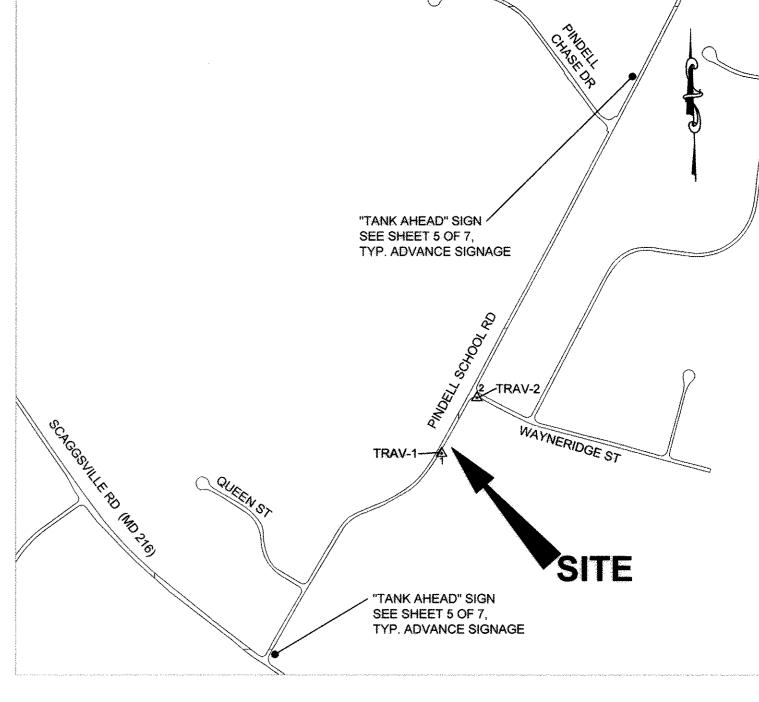
QUANTITIES

ITEM	UNIT	ESTIMATE	AS-BUILT	MANUFACTURER
MOBILIZATION / DEMOBILIZATION	LS	1	ı	TANK DIRECT
30,000 GALLON CENTER DRAFT WATER STORAGE TANK, COMPLETE IN PLACE, WITH PIPING CONNECTIONS PER TABLE 1, SHEET 5 OF 7	EA.	1	į	XERXES COMPANY
ASPHALT PAVING (FULL DEPTH)	SF	780	780	AGPARROTT/H.T.I. CONTRACT
ASPHALT PAVING (MILL AND OVERLAY)	SF	150	150	H.T.I. CONTRACTORS
CONCRETE SLAB	SF	160	160	JMV CONCRETE
SIGN, SITE IDENTIFICATION	EA	2	2	NA.
SIGN, ADVANCE	EA	2	2	NA.
SILT FENCE	LF	280	280	SMC ENVIRONMENTAL
SITE RESTORATION	SF	12200	12,200	H.T.I. CONTRACTORS
TRAFFIC CONTROL	LS	1	1	TANK DIRECT
NAME OF UTILITY CONTRACTOR: #.T.I. C	ONTRAC	TORS		
			CHECKBOX	
			AS-BUILT DATE	
•		~:	SURVEY A	IND DRAFTING DIVISION

NOTES:

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- 11. USE MD 104.01-71 FOR CRASH CUSHION DETAIL. USE 30mph AS DESIGN SPEED.
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430 -ELEV. 421.64 — —ELEV. 421.64 - PROPOSED GRADE PROPOSED GRADE -425 -ELEV. 420.93 /-EX. GRADE ELEV. 421.26 -EDGE OF EX.-PAVING 420 -6" MIN. THICK, OVERLAY-2', MIN. CUT BACK CUT BACK AND OVERLAY EXISTING 415 -PAVING FOR A SMOOTH TRANSITION -ASPHALT PULLOFF, SEE TYPICAL PAVING SECTION ON SHEET 4 OF 7-410 -APPROXIMATE LIMITS OF EXCAVATION AND FILL -30,000 GALLON WATER 405 -STORAGE TANK-



PROFILE A-A SCALE: HORIZ - 1" = 5'-0"VERT. - 1" = 5'-0"- LIMITS OF DISTURBANCE PAVING OVERLAY, SEE PROFILE THIS SHEET--STABILIZED CONSTRUCTION N 544100 ENTRANCE, SEE DETAIL, SHEET 7 OF 7 - 30,000 GALLON WATER STORAGE TANK TANK SITE SIGNAGE, TYP. OF 2 SEE SHEET 5 OF 7 TYP. TANK SITE SIGNAGE 421 DORTHORY C. VOLLMERHAUSEN TRUSTEE TAX MAP 41 GRID 14 PARCEL 279 L. 9417 F. 621 PLAT BOOK 9 PAGE 5 11809 WAYNERIDGE ST SILT FENCE N 544000 N 544000 ___ LIMITS OF DISTURBANCE /BOARD OF COUNTY COMMISSIONERS TAX MAP 41 GRID 20 PARCEL 202 L. 455 F. 260

SITE LOCATION MAP SCALE: 1" = 600'

ADC MAP REFERENCE: HOWARD COUNTY MAP 5052 GRID C5

HORIZONTAL & VERTICAL CONTROL

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546930.86 545635.05 EASTING 1335137.92 1334511.97

NAD 1983/91 (HORIZONTAL) NAVD 88 (VERTICAL) DATUM

SITE ANALYSIS: TOTAL AREA OF SITE AREA DISTURBED AREA TO BE ROOFED OR PAVED AREA TO BE VEGATATIVELY STABILIZED

TOTAL CUT

ELECTION DISTRICT NO. 5

0.02 ACRES 0.26 ACRES

TOTAL FILL OFFSITE WASTE/BORROW AREA LOCATION CONTRACTOR COORDINATE

20 10 0

UTILITY NOTE

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PROFESSIONAL CERTIFICATION. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State Of Maryland, License No. 31363, Expiration Date 01/16/2014.

PLAN SCALE: 1" = 20'

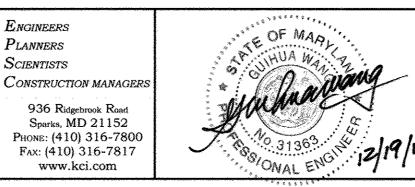
AS-BUILT DATE 5/17/2013

GRAPHIC SCALE SCALE: 1"=20'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

12/22/11 ACT. CHIEF BUREAU OF ENGINEERING PUBLIC WORKS ACT CHIEF, UTILITY DESIGN DIVISION

SCIENTISTS TECHNOLOGIES



DES: EDK					
DRN: KFJ					PINDELL SCHOOL ROAD
CHK: GW					
	LFN		A'S BUILT	5-17-13	
DATE: 12/2011	BY	NO.	REVISION	DATE	600' SCALE MAP NO. 41 BLOCK NO. 14

PINDELL SCHOOL ROAD

UNDERGROUND WATER STORAGE TANKS FOR FIRE SUPPRESSION

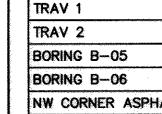
CAPITAL PROJECT No. F-5972 **CONTRACT No. 65-4733**

HOWARD COUNTY, MARYLAND

SHEET

SCALE

AS SHOWN



STAKEOUT TABLE

NORTH END RCP STORM DRAIN

SOUTH END RCP STORM DRAIN

STORM DRAIN INLET

QUANTITIES

CONCRETE SLAB

SIGN, ADVANCE

SITE RESTORATION

TRAFFIC CONTROL

SILT FENCE

MOBILIZATION / DEMOBILIZATION

ASPHALT PAVING (FULL DEPTH)

12" REINFORCED CONCRETE PIPE

STANDARD DETAIL D-4.22

PRECAST STORMDRAIN INLET, COMPLETE IN

CONCRETE END SECTION, COMPLETE IN

PLACE PER STANDARD DETAIL D-5.51

NAME OF UTILITY CONTRACTOR:

PLACE, WITH FRAME AND INLET GRATE PER

SITE ANALYSIS:

TOTAL CUT

TOTAL FILL

TOTAL AREA OF SITE

UTILITY NOTE

AREA TO BE ROOFED OR PAVED

AREA TO BE VEGATATIVELY STABILIZED

AREA DISTURBED

CLEARING AND GRUBBING

SIGN, SITE IDENTIFICATION

30,000 GALLON END DRAFT WATER

STORAGE TANK, COMPLETE IN PLACE, WITH

PIPING CONNECTIONS PER TABLE 1, SHEET

ASPHALT PAVING (MILL AND OVERLAY)

DESC

604600.43 1305547.70 620.98 604386.08 1305492.73 625.42 604601.73 1305606.20 620.62 1305634.13 619.79 604603.75 NW CORNER ASPHALT PULLOFF 604645.36 1305565.07 621.25 NE CORNER ASPHALT PULLOFF 604628.16 1305589.39 621.00 1305573.15 622.00 SW CORNER ASPHALT PULLOFF 604553.22 604573.33 1305593.73 621.80 SE CORNER ASPHALT PULLOFF 621.64 NW CORNER CONCRETE SLAB 604605.24 1305599.35 621.64 NE CORNER CONCRETE SLAB 604606.69 1305619.30 1305599.93 621.64 SW CORNER CONCRETE SLAB 604597.26 604598.71 1305619.87 621.64 SE CORNER CONCRETE SLAB 1305608.61 621.64 CENTER OF TANK MANWAY 604601.90

604640.38

604557.34

604620.72

NORTHING | EASTING |

1305573.32

1305579.58

1305577.91

UNIT | ESTIMATE | AS-BUILT

1470

185

160

2

280

7266

SF

SF

LS

EA

EA

H.T.I. CONTRACTORS

0.166 ACRES

OFFSITE WASTE/BORROW AREA LOCATION CONTRACTOR COORDINATE

ELEV

619.72

620.60

621.20

185

2

CHECKBOX

AS-BUILT

DATE

____________________ACRES

0.129 ACRES

MANUFACTURER

A.G.PARROTT/H.T.I.CONTRACTORS

A.G. PARROTT/H.T.I. CONTRACTORS

CONCRETE PIPE & PRECAS

CONCRETE PIPE & PRECAS

GILLESPIE PRECAST

TANK DIRECT

JMV CONCRETE

TANK DIRECT

280 SMCENVIRONMENTAL

7266 H.T.I. CONTRACTORS

TANK DIRECT

SURVEY AND DRAFTING DIVISION

NA.

NA.

XERXES COMPANY

---630 APPROXIMATE -LOCATION OF EX. 2' ELEV. 621.64 — EDGE OF EX. -PAVING -ELEV. 621.64 APPROXIMATE -LOCATION OF EX. PROPOSED GRADE ELEV. 621.02 ELEV. 621.36-\ ELECTRIC EX. GRADE 6" THICK, MIN. OVERLAY 2', MIN. CUT BACK CUT BACK AND -615 OVERLAY EXISTING PAVING FOR A SMOOTH TRANSITION 12" RCP, INV. 619.26 (N) 12" RCP, INV. 619.08 (S)-EX. 21" RCP INV. 614.26 ONNECT TO NEW STORM INLET REMOVE EX. STORM DRAIN EX. 24" RCP STRUCTURE AND INSTALL INV. 613.59. NEW STORM DRAIN INLET CONENCT TO NEW PER D-4.22, REFLECTED STORMORAIN INLET IN THE BACKGOUND -30,000 GALLON WATER ASPHALT PULLOFF, SEE TYPICAL STORAGE TANK-PAVING SECTION ON SHEET 4 OF 7 -APPROXIMATE LIMITS OF -EXCAVATION AND FILL

PROFILE A-A

SCALE: HORIZ - 1" = 5'-0"

VERT. - 1" = 5'-0"

-CONCRETE END SECTION

D-5.51 (TYP. OF 2)

—12" RCP, INV. 619.72

SEE HO.CO. ST'D DETAIL

NEWLY PLANTED

TREE

-EX. JUNCTION BOX

BGE UTILITY OR OTHERS

- CONCRETE END SECTION

____ G ____

- 12" RCP, INV. 620.60

SCALE: 1" = 20'

PLAN

GARY A. BURRIER &

BETTY S. BURRIER

TAX MAP 8 GRID 16 PARCEL 158

L. 4807 F. 306

LOT 32

14768 CARRIAGE MILL ROAD

30,000 GALLON WATER

HOWARD COUNTY MARYLAND

TAX MAP 8 GRID 16 PARCEL 158

L. 6266 F. 343 ., 5946 F. 694

PLAT NO. 13559

LOT 27-Open Space

LIMIT OF DISTURBANCE

- SILT FENCE

N 604550

STORAGE TANK

CARRIAGE MILL DR. TRAV-1 TRAV-2-"TANK AHEAD" SIGN SEE SHEET 5 OF 7, TYP. ADVANCE SIGNAGE SITE LOCATION MAP

SCALE: 1" = 600'

ADC MAP REFERENCE: HOWARD COUNTY MAP 4692 GRID G8

HORIZONTAL & VERTICAL CONTROL

THE HORIZONTAL AND VERTICAL CONTROL SHOWN HEREON IS BASED ON GPS OBSERVATIONS FROM THE FOLLOWING N.G.S.

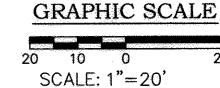
1304300.38 604769.63 1302045.26 620.99

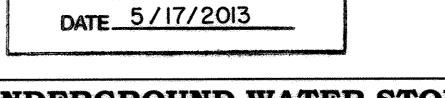
NAD 1983/91 (HORIZONTAL) NAVD 88 (VERTICAL) DATUM

NOTES:

FILL

- 1. FOR GENERAL TANK INSTALLATION, PIPING, SPECIFICATIONS, AND DETAILS REFER TO SHEETS 1-7 OF 7, INCLUSIVE.
- 2. ALL TREES AND PLANTINGS INTERFERING WITH EXCAVATION SHALL BE REMOVED REPLACED WITH VIABLE TREES OF SIMILAR SPECIES. TREES AND PLANTINGS THAT ARE NOT CALLED OUT ON THE PLANS AND NEED TO BE REMOVED FOR CONSTRUCTION SHALL BE IDENTIFIED TO THE HOWARD COUNTY INSPECTOR PRIOR TO REMOVAL.
- 3. THE CONTRACTOR SHALL TAKE ALL REASONABLE MEANS. POSSIBLE TO PROTECT EXISTING TREES AND PLANTINGS WITHIN THE CONSTRUCTION AREA, AND SHALL REPLACE IN KIND THOSE DAMAGED OR REMOVED DURING CONSTRUCTION.
- 4. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME IV. DATED MAY 7, 2007.
- 5. CONTRACTOR IS RESPONSIBLE FOR AQUIRING ALL STAGING AREAS TO BE USED DURING CONSTRUCTION.
- 6. THERE SHALL BE NO STOCKPILING OF EXCAVATED MATERIAL ON THE WORK SITE.
- 7. ALL SURVEY STAKEOUT IS THE RESPONSIBILITY OF THE CONTRACTOR
- 8. ALL TANK EXCAVATIONS MUST MEET OSHA REQUIREMENTS.
- 9. THE CONTRACTOR SHALL USE JERSEY BARRIERS TO PROTECT THE EXCAVATION. (SEE DETAIL MD 104.01-23B)(11:1 MAX
- 10. USE MD 104.06-18 FOR WORKZONE SIGNING.
- 11. USE MD 104.01-71 FOR CRASH CUSHION DETAIL. USE 30mph AS DESIGN SPEED.
- 12. ROAD WORK 1500ft. SIGN CAN BE ELIMINATED WHEN THE LENGTH OF ROAD IS LESS THAN 1500ft.
- 13. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SCHEDULE A MEETING WITH HOWARD COUNTY TRAFFIC CONTROL MANAGER FOR THE APPROVAL OF MOT PLANS.





AS-BUILT

UNDERGROUND WATER STORAGE TANKS FOR FIRE SUPPRESSION

CAPITAL PROJECT No. F-5972 CONTRACT No. 65-4733

HOWARD COUNTY, MARYLAND ACT. CHIEF, BUREAU OF ENGINEERING

 $P_{LANNERS}$ **TECHNOLOGIES**

PROFESSIONAL CERTIFICATION. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws

MAILBOX

TANK SITE SIGNAGE, TYP.

OF 2, SEE SHEET 5 OF 7

TYP. TANK SITE SIGNAGE -

12" RCP, INV. \$619.26

12" RCP, INV. 2619.08

THE CONTRACTOR SHALL

ELECTRIC AND GAS WITHIN THE PROJECT SITE BY TEST

DETERMINE THE EXACT

LOCATION OF THE EX.

PIT IF NECESSARY. -

N 604550

REMOVE EX. MAC DRIVEWAY-

AND EX. 12" CMP

PAVING OVERLAY, SEE-

PROFILE THIS SHEET

DES: EDK DRN: EDK CHK: GW

LFN AS BUILT

STABILIZED CONSTRUCTION

MARK A. PETERS &

MAY M. PETER TAX MAP 8 GRID 16 PARCEL 158

LOT 12

14744 CARRIAGE MILL RD

L. 7849 F. 404

ENTRANCE, SEE DETAIL,

SHEET 7 OF 7

of the State Of Maryland, License No. 31363, Expiration Date 01/16/2014.

622

DATE: 12/2011

REVISION

DEPARTMENT OF PUBLIC WORKS

INFORMATION OBTAINED BY THE ENGINEER.

HOURS PRIOR TO CONSTRUCTION 1-800-257-7777.

THE UNDERGROUND UTILITY LOCATIONS SHOWN HEREON HAVE BEEN

LOCATED FROM A COMBINATION OF FIELD SURVEY INFORMATION, AERIAL

SURVEY LOCATIONS, AND/OR EXISTING DRAWINGS. THE ENGINEER MAKES

SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND

NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL

UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE INDICATED ON THE AFOREMENTIONED

THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "MISS UTILITY" 48

ACT: CHIEF, UTILITY DESIGN DIVISION

SCIENTISTS Fax: (410) 316-7817 www.kci.com

BLOCK NO. 16 DATE 600' SCALE MAP NO. ____8__

ELECTION DISTRICT NO. 4

HOWARD COUNTY, MARYLAND

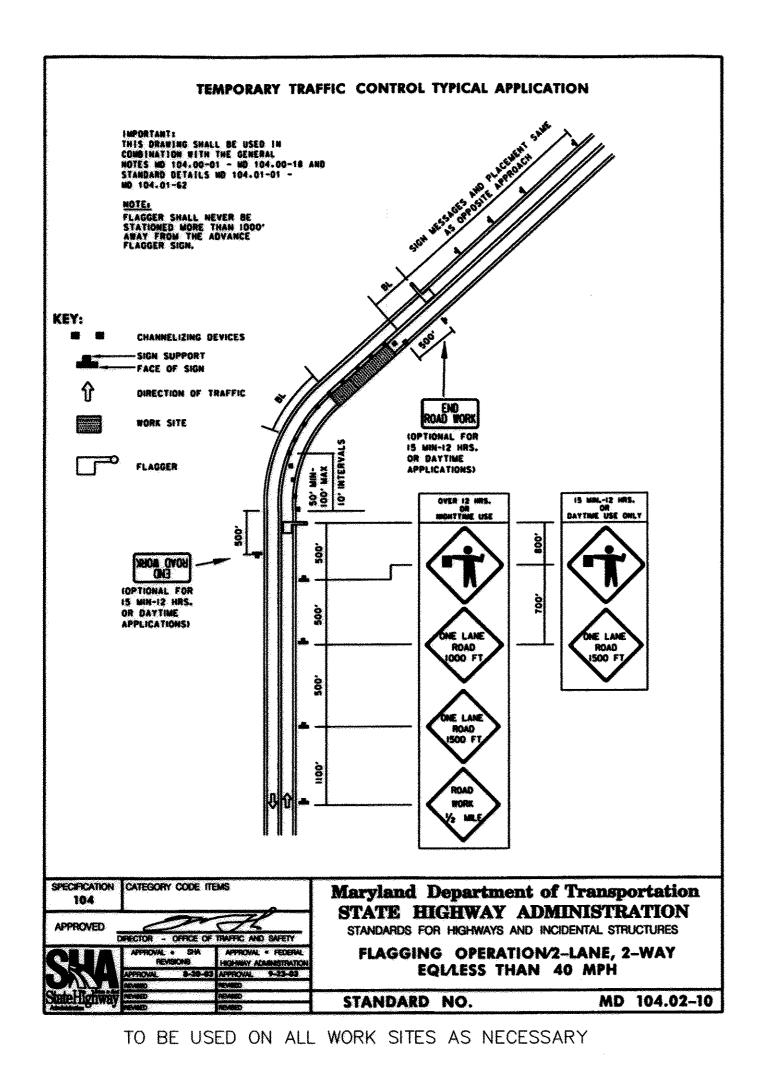
SHEET

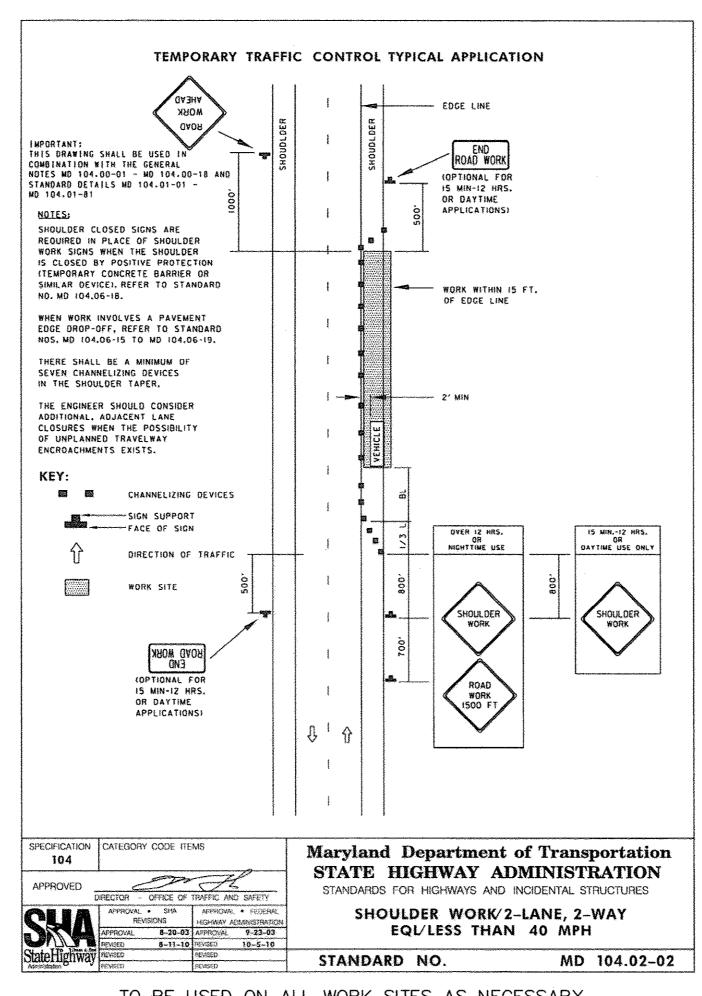
SCALE

AS SHOWN

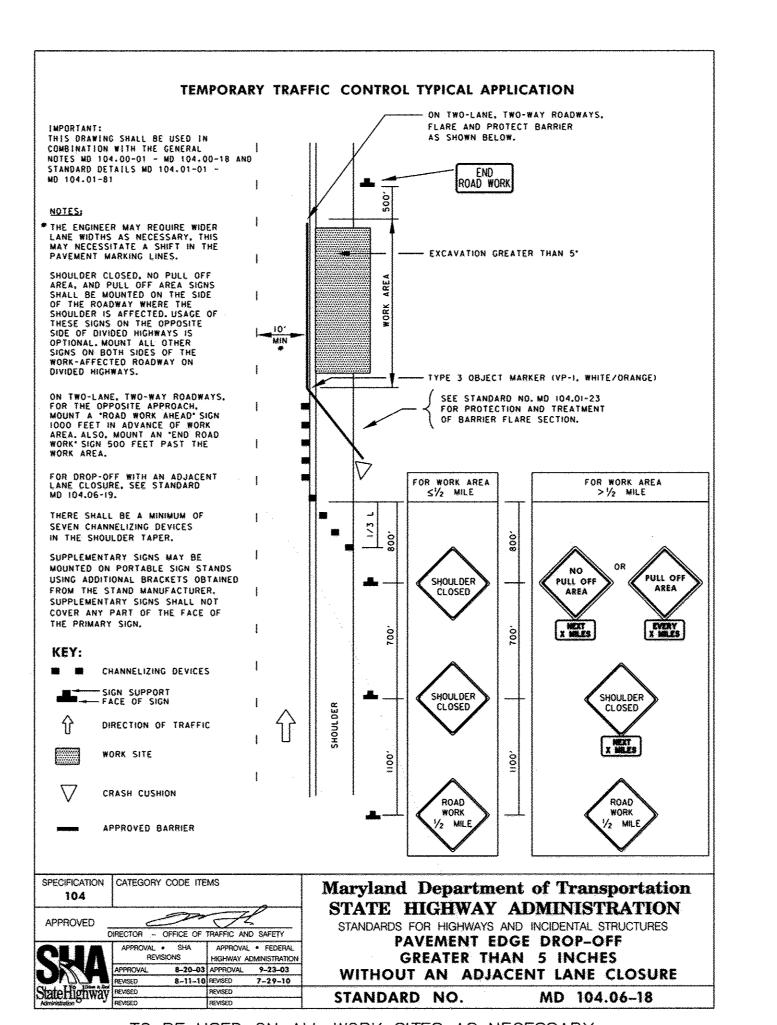
CARRIAGE MILL DRIVE Construction managers 936 Ridgebrook Road Sparks, MD 21152 PHONE: (410) 316-7800



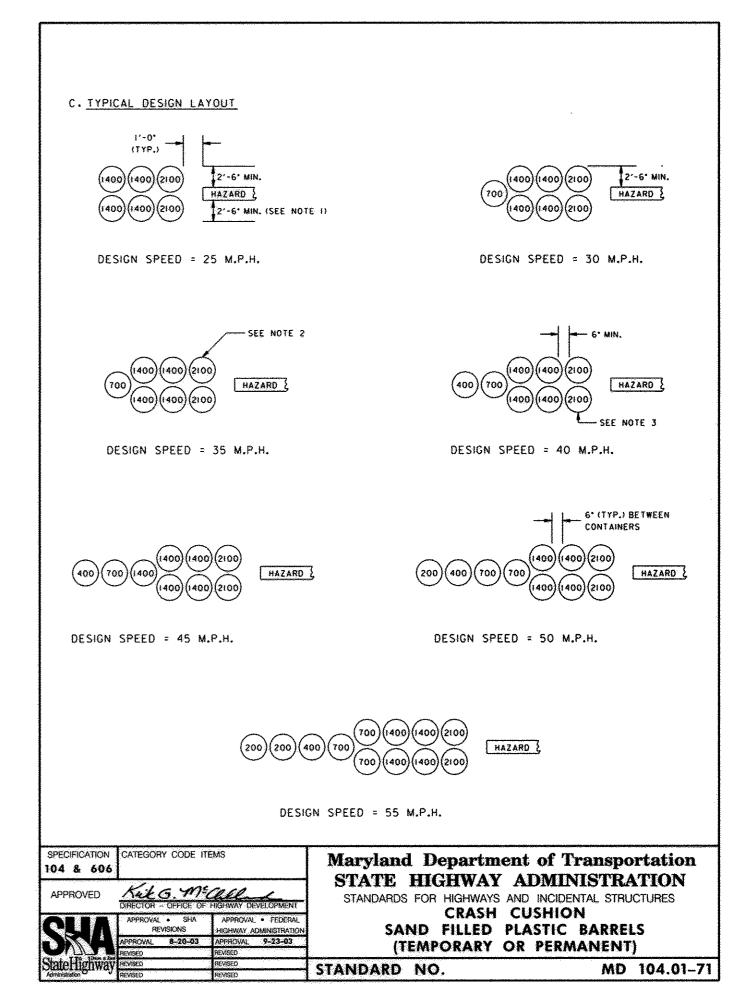




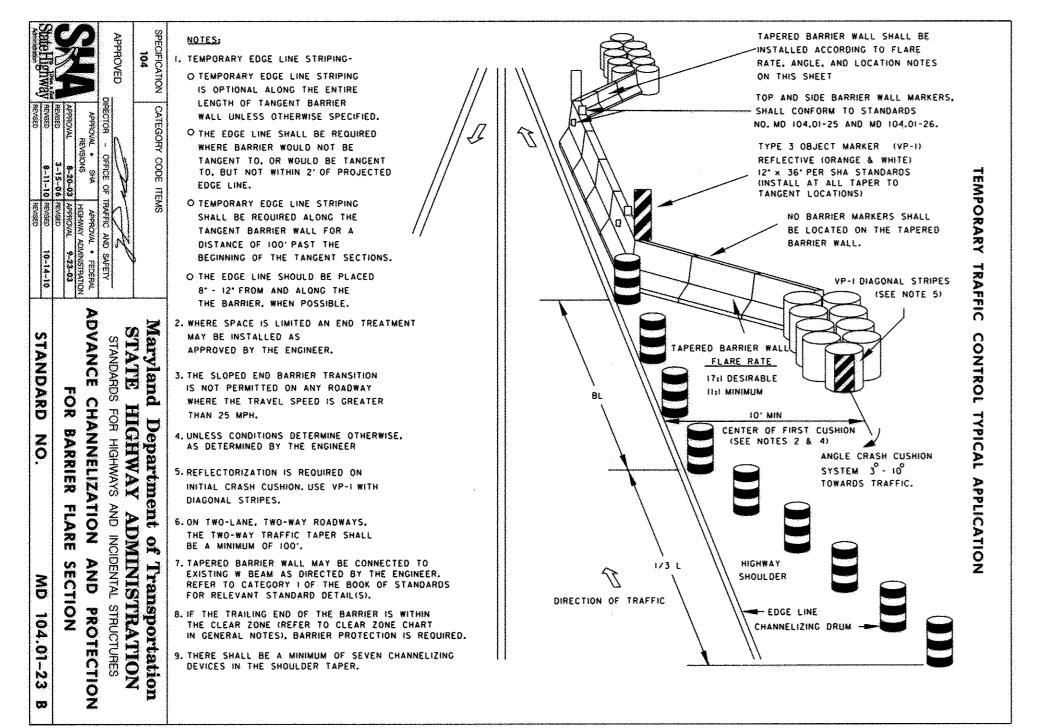
TO BE USED ON ALL WORK SITES AS NECESSARY



TO BE USED ON ALL WORK SITES AS NECESSARY



TO BE USED ON ALL WORK SITES



TO BE USED ON ALL WORK SITES

ACT CHIEF, BUREAU OF ENGINEERING

ACT CHIEF, UTILITY DESIGN DIVISION

DEPARTMENT OF PUBLIC WORKS

HOWARD COUNTY, MARYLAND

PROFESSIONAL CERTIFICATION. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State Of Maryland, License No. 31363 Expiration Date 01/16/2014.

NOTE:

1. THE CONTRACTOR SHALL SUBMIT MAINTENANCE OF TRAFFIC PLANS FOR EACH LOCATION FOR COUNTY APPROVAL BEFORE WORK BEGINS





DES: EDK					
220, 20,					
DRN: KFJ					M.O.T TRAFFIC DETAILS
					W.O.I FRAFFIC DETAILS
CHK: GW					
DATE: 12/2011	BY	NO.	REVISION	DATE	600' SCALE MAP NO. VARIES BLOCK NO. VARIES

UNDERGROUND WATER STORAGE TANKS FOR FIRE SUPPRESSION

CAPITAL PROJECT No. F-5972 **CONTRACT No. 65-4733**

ELECTION DISTRICT NO. VARIES

SHEET

SCALE

AS SHOW

HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS

D.T. - TRAFFIC DETAILS