

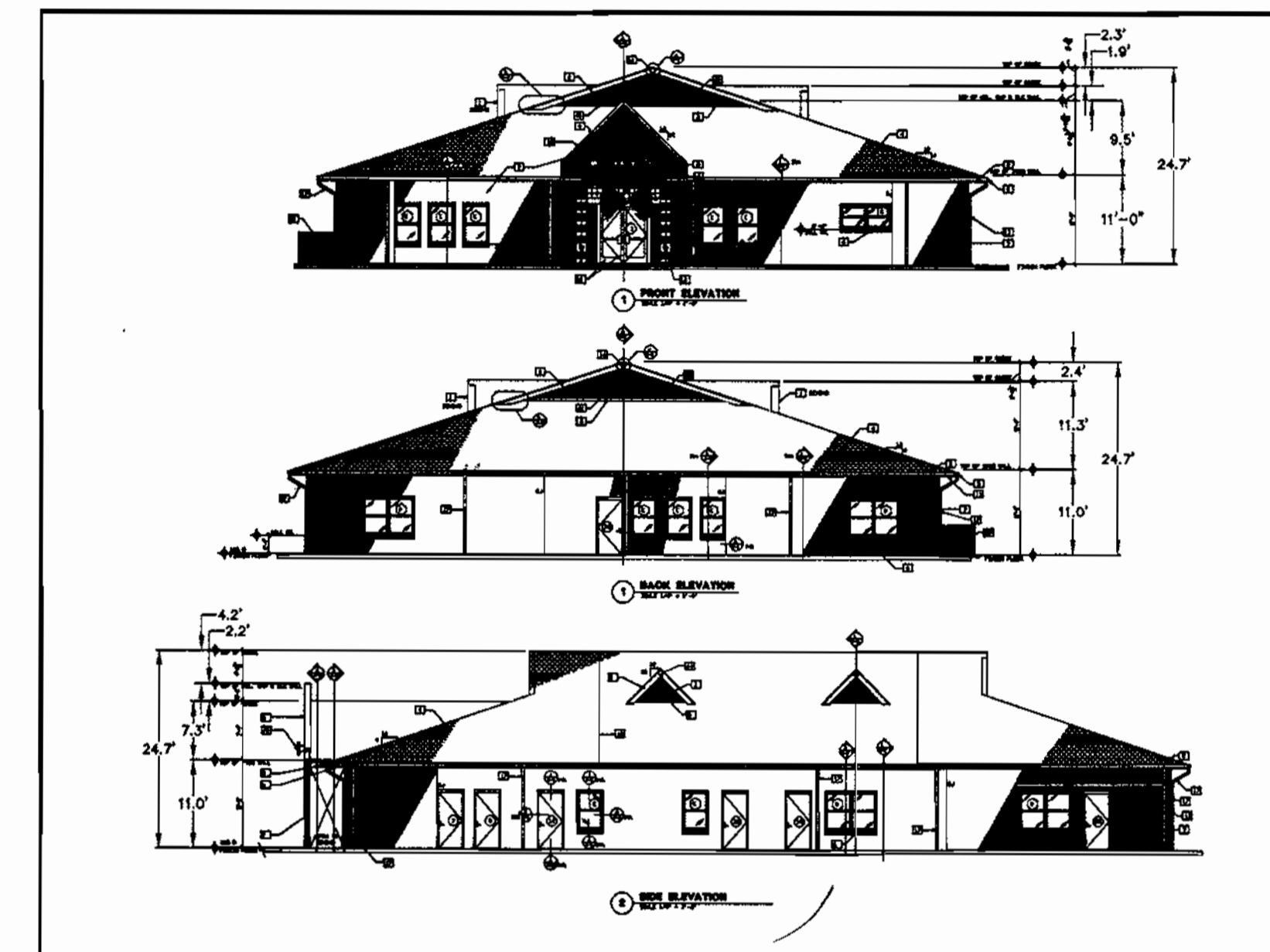
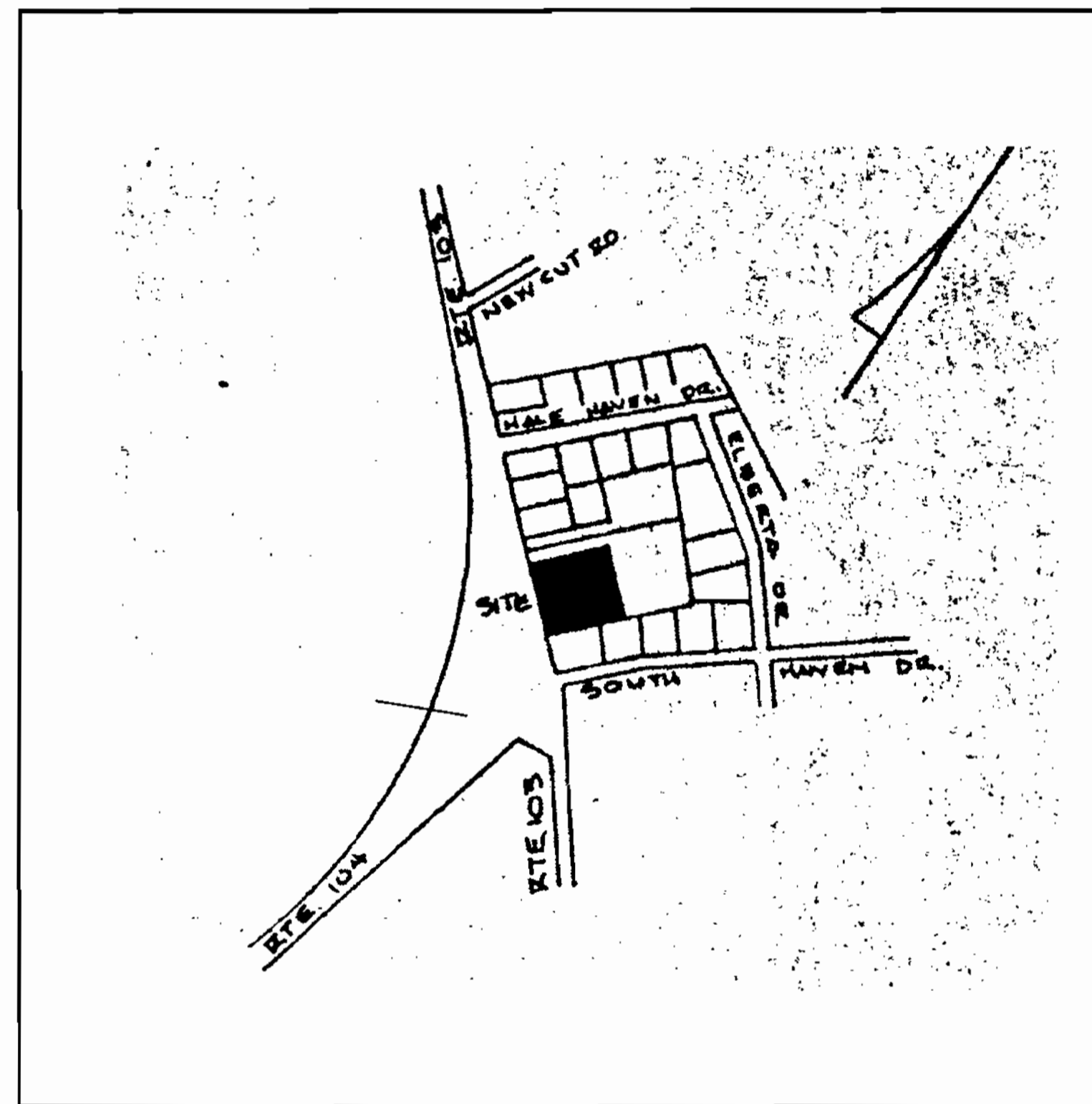
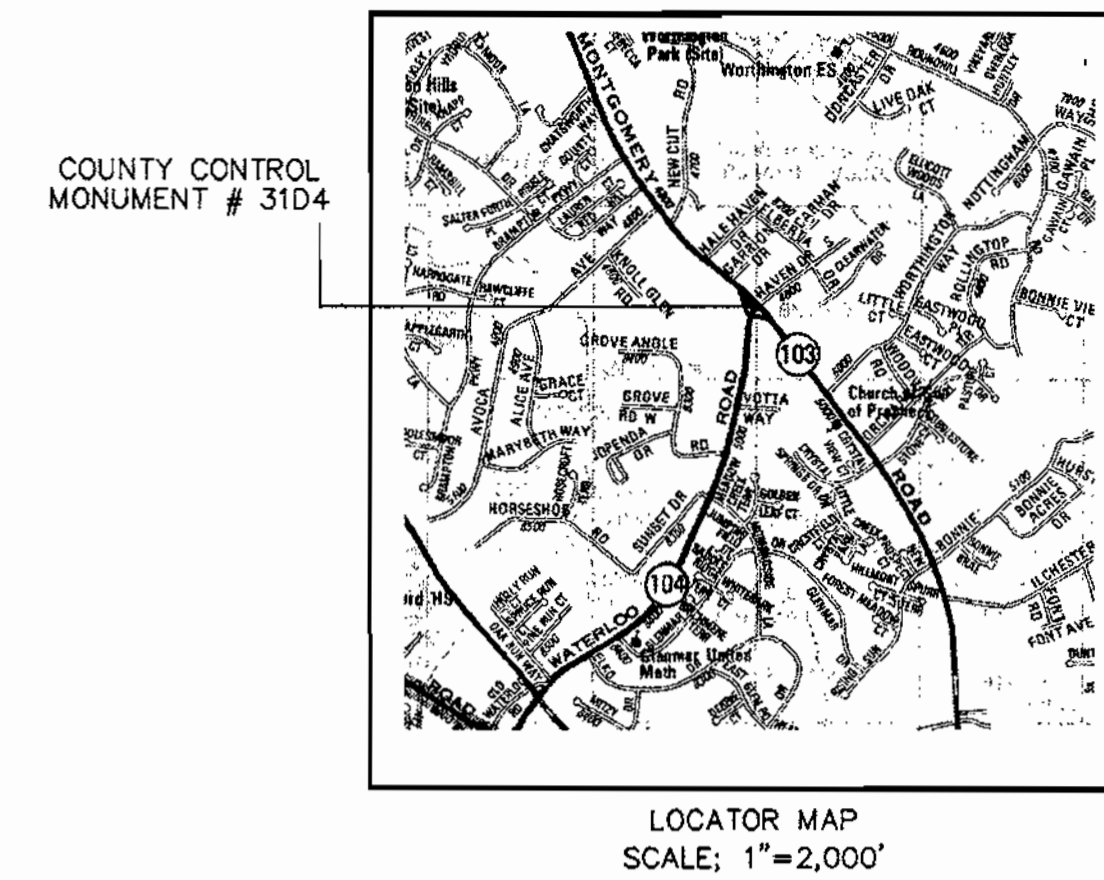
GENERAL NOTES

- ALL CONSTRUCTION PLANS SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1 (800) 257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
 MISS UTILITY.....1 (800) 257-7777
 BELL ATLANTIC.....1 (800) 954-6254
 HOWARD COUNTY BUREAU OF UTILITIES.....(410) 313-2366
 AT&T CABLE LOCATION DIVISION.....(202) 393-3553
 B.G.&E. CO. CONTRACTOR SERVICES.....(410) 850-4620
 B.G.&E. CO. UNDERGROUND DAMAGE CONTROL.....(410) 787-4620
 STATE HIGHWAY ADMINISTRATION.....(410) 531-5533
- SITE ANALYSIS:
 AREA OF PARCEL = 1.76 ACRES
 PRESENT ZONING = R-20
 USE OF STRUCTURE:
 DAYCARE CENTER = ONE STORY - (8,373 S.F.)
 BUILDING COVERAGE ON SITE = 0.19 AC. OR 11% OF GROSS AREA
 PAVED PARKING LOT/AREA ON SITE = 0.26 AC OR 14.8% OF GROSS AREA
 AREA OF LANDSCAPE ISLAND = 0.016 AC (711 S.F.)
- PROJECT BACKGROUND:
 LOCATION = ELLICOTT CITY, MARYLAND TAX MAP 31, PARCEL 753, LOT 4
 ZONING = R-20; SPECIAL EXCEPTION GRANTED BZA#_VP-78-69(03/99) RECORDED PLAT# 14348 ; FILE F-01-06
 SITE AREA = 1.76 ACRES
 DPZ REFERENCES = SPECIAL EXCEPTION BA 98-61E, APPROVED 6/8/99
 SEE SHEET 19 FOR RELATED SPECIAL EXCEPTION CASE AND FOREST CONSERVATION NOTATIONS.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK.
- ANY DAMAGE TO PUBLIC RIGHTS-OF-WAY, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS, FIELD SURVEYS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- ALL REINFORCED CONCRETE FOR STORM DRAIN STRUCTURES SHALL HAVE A MINIMUM OF 28 DAYS STRENGTH OF 3,500 PSI.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
- SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOILS TEST.
- ALL STORM DRAIN PIPE BEDDING TO BE CLASS 'C' AS SHOWN IN VOLUME I OF THE HOWARD COUNTY DESIGN MANUAL.
- UNDERGROUND STORMWATER MANAGEMENT PROVIDED WITH THIS PLAN IS OWNED AND MAINTAINED BY CHILDTIME INC.
- COORDINATES AND ELEVATIONS ARE BASED ON HOWARD COUNTY MONUMENTS 31D4 AND 31D5 (NAD 83).
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- EXISTING TOPOGRAPHY IS FROM A TOPOGRAPHIC SURVEY PERFORMED BY WEST CONSULTING GROUP IN JUNE, 1999.
- WATER FOR THIS PROJECT IS PUBLIC AND WILL BE CONNECTED TO EXISTING 8" WATERMAIN HC CONTRACT #64-W ALONG ROUTE 103.
- SEWER FOR THIS PROJECT IS PUBLIC AND WILL BE CONNECTED TO EXISTING 8" SANITARY SEWER MAIN HC CONTRACT # 419-S ALONG ROUTE 103.
- ALL PAVING TO BE AS SPECIFIED BY THE GEOTECHNICAL ENGINEER (SEE DETAILS ON SHEET 4).
- ALL CURB AND GUTTER TO BE HOWARD COUNTY STANDARD CONCRETE OR BITUMINOUS (SEE DETAIL, SHEET 4), LIMITS AS SHOWN ON PLAN.
- PROPOSED PAVING SECTIONS TO BE CONFIRMED BY PROJECT GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.
- PROJECT GEOTECHNICAL ENGINEER TO MONITOR WALL CONSTRUCTION, BACKFILL AND COMPACTION.
- PROJECT GEOTECHNICAL ENGINEER TO APPROVE PAVING SUBBASE PRIOR TO INSTALLATION OF PAVING SECTION AND SWM CONTROL STRUCTURE.
- ALL OUTDOOR LIGHTING TO CONFORM TO SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
- CONTRACTOR RESPONSIBLE TO CONSTRUCT ALL HANDICAP PARKING AND HANDICAP ACCESS ROUTES IN ACCORDANCE WITH CURRENT ADA REQUIREMENTS.
- WHERE DRAINAGE FLOWS AWAY FROM CURB, CONTRACTOR TO REVERSE THE GUTTER PAN.
- ANY EXISTING STREET TREES DAMAGED OR DESTROYED DURING CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR.
- ALL 3:1 SLOPES TO BE STABILIZED WITH PEGGED SOD. SLOPES FLATTER THAN 3:1 TO BE STABILIZED WITH SEED AND MULCH.
- THERE ARE NO KNOWN CEMETARIES LOCATED ON THIS SITE.
- WP-00-69 - TO WAIVE SECTION 16.119(1)(3) TO PERMIT TWO DRIVEWAY ACCESS POINTS ON A RESTRICTED ACCESS ROAD, MONTGOMERY ROAD, MD. RTE.103 APPROVED ON MARCH 8, 2000.
- METS AND BOUNDS, ADJACENT PROPERTY INFORMATION PER RECORD PLAT PREPARED BY VOGEL AND ASSOCIATES, DATED JUNE 2, 2000 AND RECORDED AS PLAT # 14348 ; FILE # F-01-06.

CHILDTIME CHILDCARE CENTER

SITE DEVELOPMENT PLANS

HOWARD COUNTY, MARYLAND



BUILDING ELEVATIONS
(NOT TO SCALE)

SHEET INDEX

SHT. NO.	CONTENTS
1.	COVER SHEET
2.	DEMOLITION PLAN
3.	SITE LAYOUT PLAN
4.	SITE DETAILS AND SECTIONS
5.	SITE GRADING PLAN
6.	STORM DRAIN AND SEWER PROFILES
7.	MISCELLANEOUS UTILITY PROFILES
8.	MISCELLANEOUS UTILITY PROFILES
9.	STORMWATER MANAGEMENT DETAILS
10.	SOILS AND DRAINAGE AREA MAP
11.	SEDIMENT AND EROSION CONTROL PLAN
12.	SEDIMENT AND EROSION CONTROL NOTES AND DETAILS
13.	LANDSCAPE PLAN
14.	LANDSCAPE NOTES AND DETAILS
15.	RETAINING WALL DETAILS
16.	STRIPING PLAN
17.	MISCELLANEOUS NOTES AND DETAILS
18.	MISCELLANEOUS NOTES AND DETAILS
19.	MISCELLANEOUS NOTES AND DETAILS
20.	SOIL BORING LOGS

OWNER:
 VIRGIL L. AND IDOLINE L. LOUGH
 12635 EMORY FARM LANE
 SYKESVILLE, MARYLAND 21784
 (D.B. 470 @ F. 274)

PARKING TABULATION:
 DAYCARE CENTER: 8,373 G.S.F.
 PARKING REQUIRED: 3 SPACES/1,000 G.S.F. = 26 SPACES
 PARKING PROVIDED: 34 SPACES

TRI-TEK ENGINEERING
 CIVIL ▲ ENVIRONMENTAL ▲ LAND PLANNING ▲ SURVEYING
 a professional corporation
 690 Center Street, Suite 300
 Herndon, Virginia 20170-5018 (703) 481-5900

OWNER:
 VIRGIL L. AND IDOLINE L. LOUGH
 12635 EMORY FARM LANE
 SYKESVILLE, MARYLAND 21784
 (D.B. 470 @ F. 274)

NO	REVISION	DATE

DEVELOPER:
 CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 4201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Director: *Angela S. Smith* 11/2/00
 DATE: 11/1/00
 Chief, Division of Land Development: *Cindy Hamilton* 11/1/00
 DATE: 10/25/00
 Chief, Development Engineering Division: *Mike Deamus* 10/25/00
 DATE: 10/25/00

ADDRESS CHART

PARCEL NO.	STREET ADDRESS
753/LOT 4	4895 MONTGOMERY ROAD

ADDRESS CHART

SUBDIVISION NAME	SECTION	AREA	PARCEL NUMBER
GARRIAN ACRES	N/A		LOT 4/P. 753
PLAT/LOT/BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST. CENSUS TR.
14348	R-20	31	2ND 6027
WATER CODE: 001			SEWER CODE: 8750671

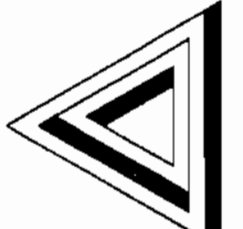
COVER SHEET FOR CHILDTIME CHILDCARE CENTER SITE DEVELOPMENT PLAN

TAX MAP #31
 PARCEL 753 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DESIGN BY: V.A.A.
 DRAWN BY: ALLEN
 CHECKED BY: K.E.M.
 DATE: 05.25.00
 SCALE: AS SHOWN
 W.O. NO.: 1144

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 No. 21892

SHEET 1 OF 20



TRI-TEK ENGINEERING
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 690 Center Street, Suite 300
 Herndon, Virginia 20170-3018 (703) 481-5900

**CHILDTIME CHILDCARE CENTER
 TAX MAP 31 - PARCEL 753**
 HOWARD COUNTY, MARYLAND
 SECOND ELECTION DISTRICT

SITE DEMOLITION PLAN

SCALE: 1"=20'
 DATE: 05-25-00
 DRN: ALLEN
 CKD: KEM
 SHEET 2 OF 20



Lot 3
 X EXISTING ITEMS TO BE DEMOLISHED

METES AND BOUNDS, ADJACENT PROPERTY
 INFORMATION PER RECORD PLAT PREPARED BY
 VOGEL & ASSOCIATES DATED 6/2/00, AND REC-
 ORDED AS PLAT No. 14,944, FILE # E-01-06

LIMITS OF CLEARING
 AND GRADING (TYP.)



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OWNER:
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 12635 EMORY FARM LANE
 SYKESVILLE, MARYLAND 21784
 (D.B. 470 @ F. 274)

NO	REVISION	DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Director: *Janet Smith* 11/2/00
 Chief, Division of Land Development: *Cindy Hamilton* 11/1/00
 Chief, Development Engineering Division: *William Dammann* 10/25/00

DEVELOPER:
 CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 4201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151

ADDRESS CHART

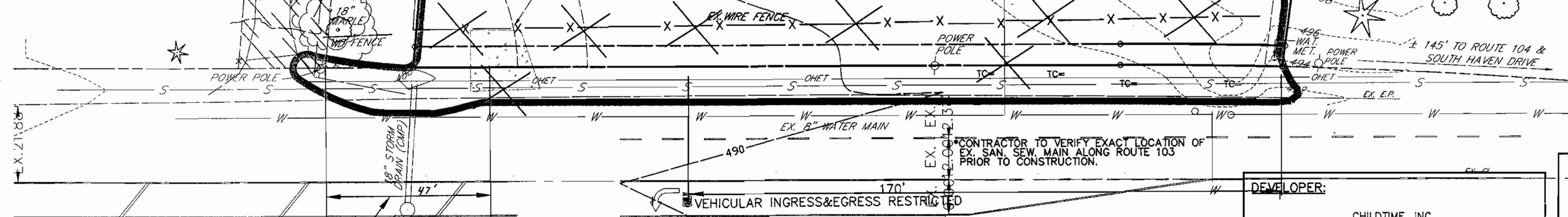
PARCEL NO.	STREET ADDRESS
753	4895 MONTGOMERY ROAD

SUBDIVISION NAME	SECTION	AREA	PARCEL NUMBER
GARRIAN ACRES	N/A		LOT 4 / P. 753
PLAT NO./BLOCK NO.	ZONE	TAX ZONE	ELECT. DIST. CENSUS TR.
14348	B	R-20	31 2ND 6027
WATER COOP. GR.			SEWER CODE: 5750871

MONTGOMERY ROAD - MARYLAND ROUTE 103
 PUBLIC ROAD (MAJOR ARTERIAL, R/W VARIES)
 SRC PLAT # 11128

VEHICULAR INGRESS & EGRESS RESTRICTED

CONTRACTOR TO VERIFY EXACT LOCATION OF EX. SAN, SEW. MAIN ALONG ROUTE 103 PRIOR TO CONSTRUCTION.



VEHICULAR INGRESS & EGRESS RESTRICTED
 MANHOLE

20' INGRESS & EGRESS FOR 15' (TO BE RECALLED)

EX. WIRE FENCE

EX. WATER METER TO BE REMOVED

EX. WATER MAIN

EX. SAN. SEW. MAIN

EX. STORM DRAIN (CAMP)

EX. WIRE FENCE

EX. WATER METER TO BE REMOVED

EX. WATER MAIN

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EX. SAN. SEW. MAIN

EX. STORM DRAIN (CAMP)

EX. WIRE FENCE

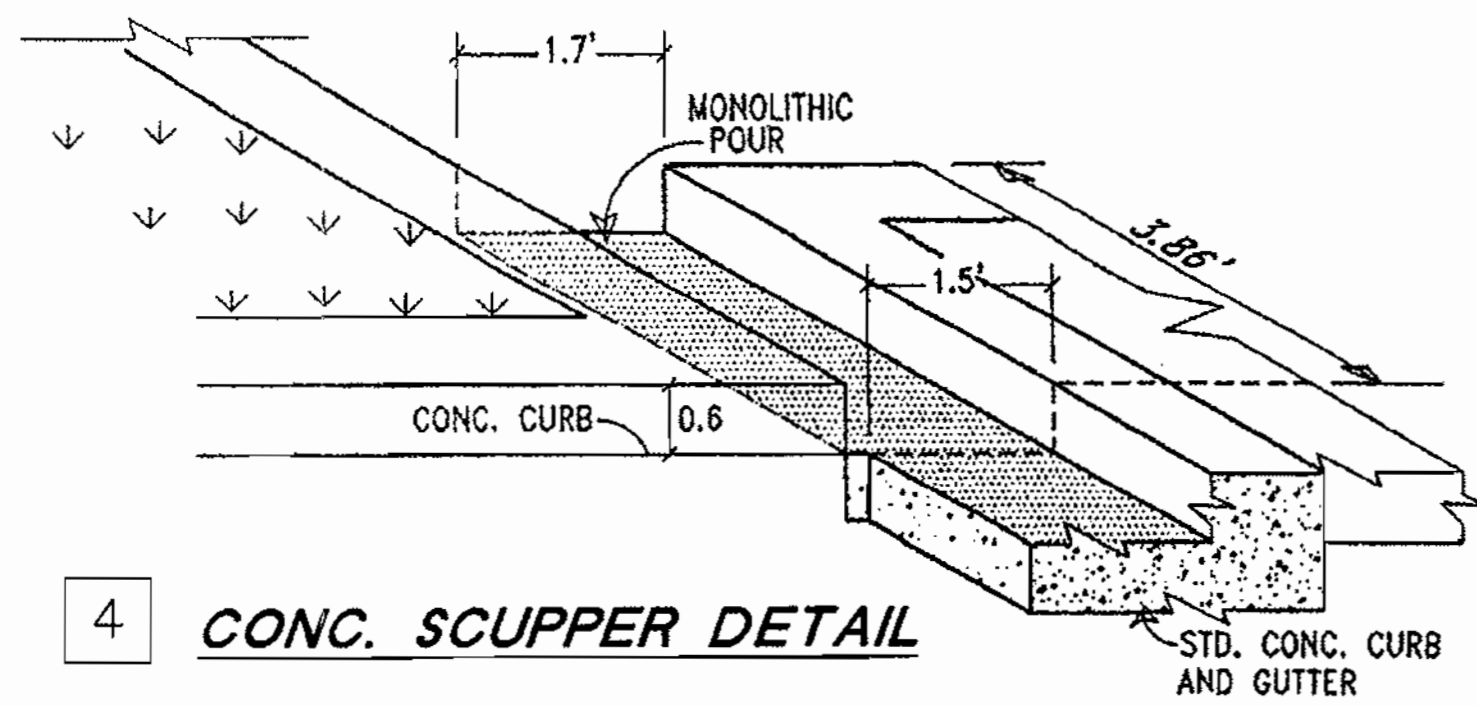
EX. WATER METER TO BE REMOVED

EX. WATER MAIN

EX. SAN. SEW. MAIN

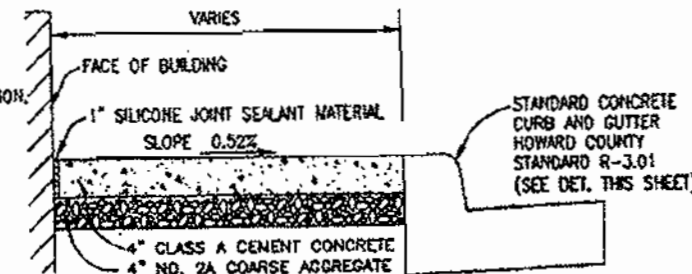
EX. STORM DRAIN (CAMP)

EX. WIRE

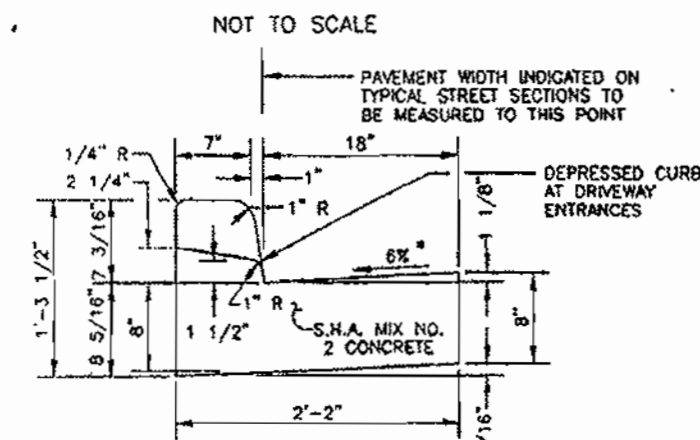


4 **CONC. SCUPPER DETAIL**

NOTE:
 1. SIDEWALK TO HAVE MEDIUM BROOM FINISH PERPENDICULAR TO DIRECTION OF FUTURE TRAFFIC.
 2. CONSIDER IN ACCORDANCE WITH PROJECT SPECIFICATION.
 3. SEE SITE PLAN FOR SIDEWALK LOCATION.
 4. PROVIDE ACCESSIBLE/BLIND TRAMP IN ACCORDANCE WITH STANDARD R-3.01.
 5. PLACE 6X6-W2.0 IRW IN CENTER OF SUB.
 6. PLACE EXPANSION JOINT @ 20' MAX.
 7. PLACE CONTROL JOINTS AT 4' TO 10' MAX.



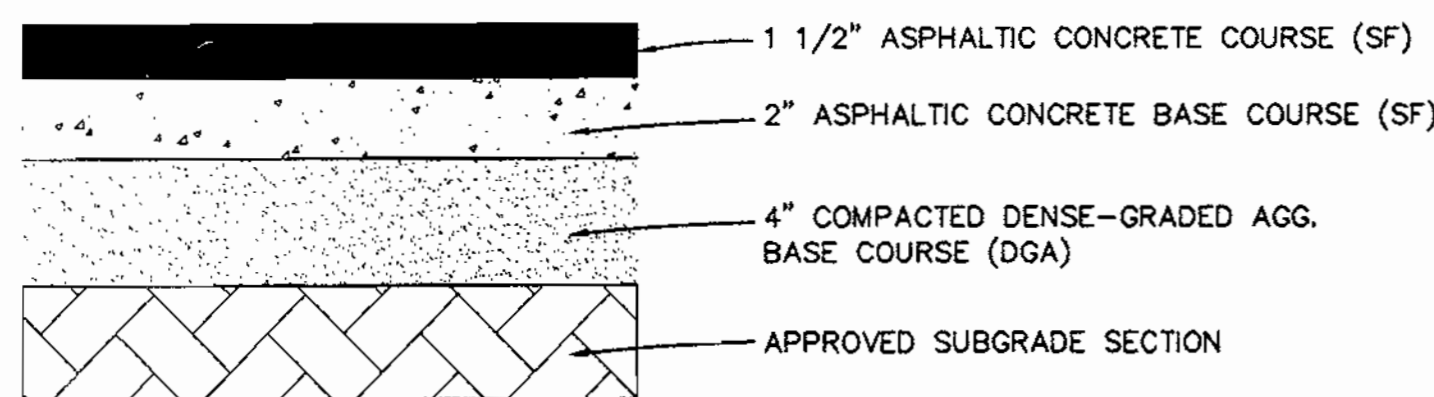
19 **TYPICAL SIDEWALK DETAIL**
NOT TO SCALE



* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIAL ON THE HIGH SIDE OF SUPERELEVATED SECTION SHALL BE SLOVED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHICH CURB IS LOCATED ON THE LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB AND GUTTER.

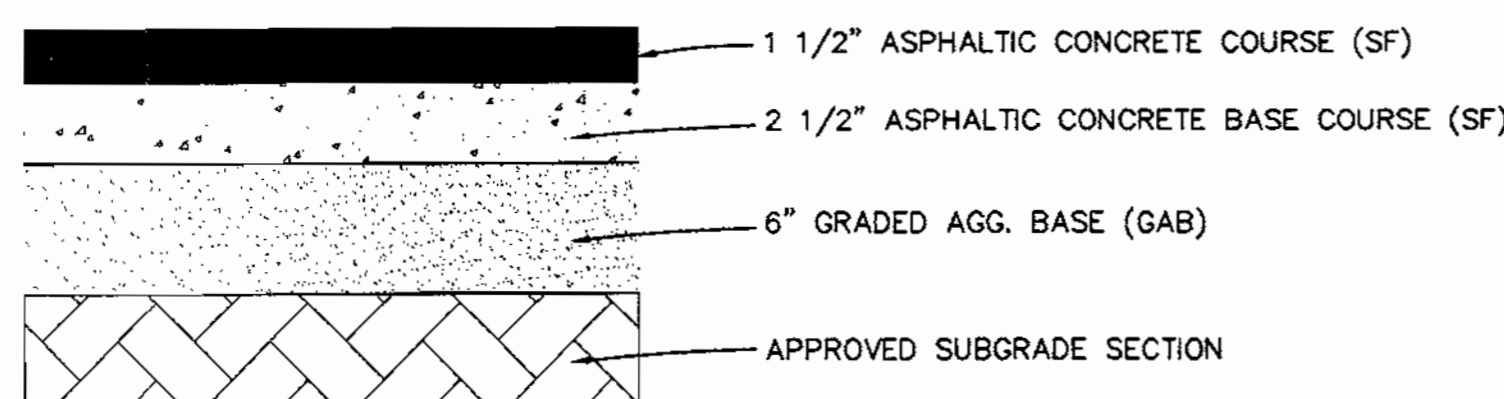
6 **STANDARD COMBINATION CURB & GUTTER**

HOWARD COUNTY STANDARD R-3.01
NOT TO SCALE



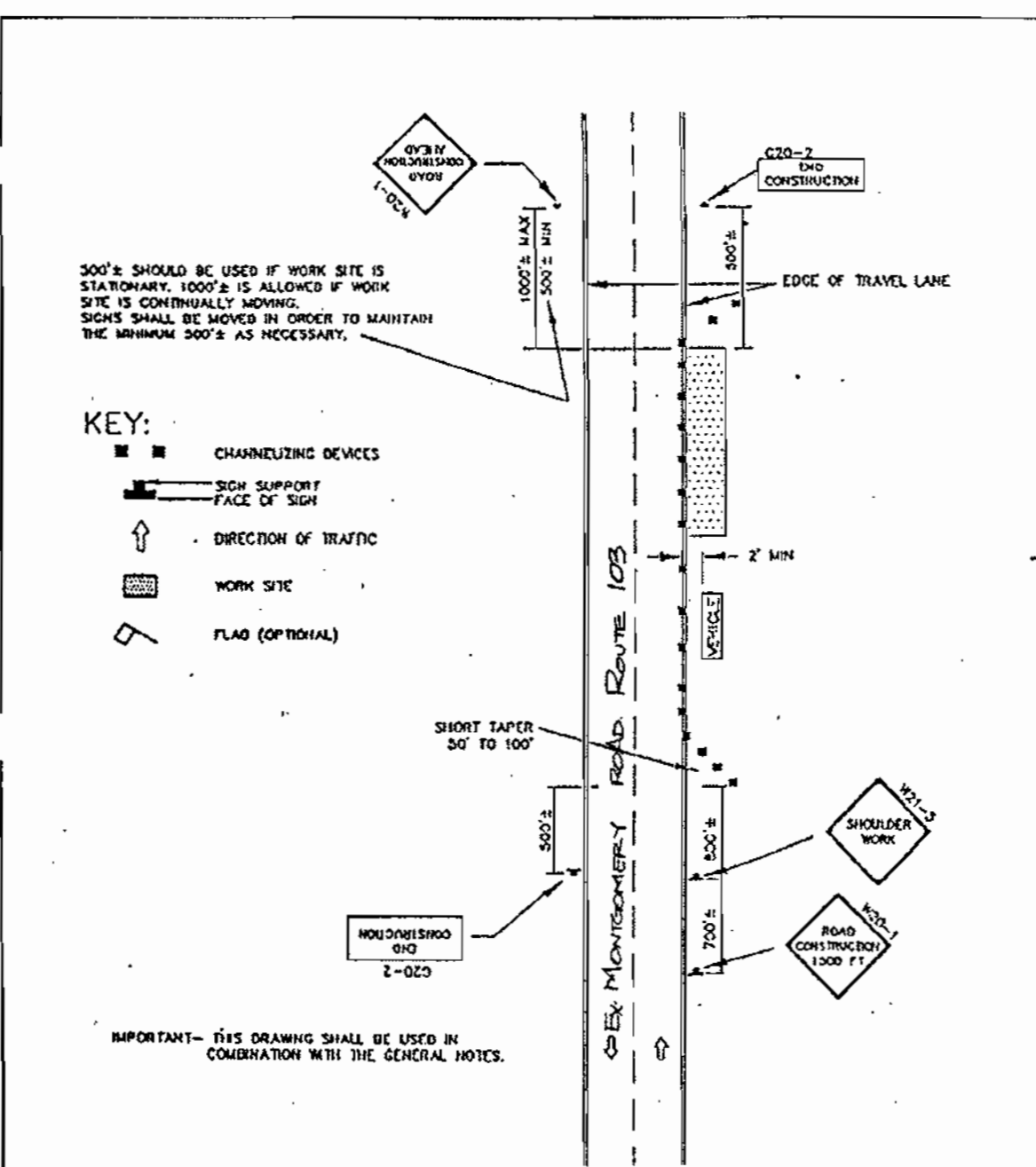
(AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER)

16 **LIGHT DUTY PAVING (P-1)**
NTS PER HOWARD COUNTY STANDARD R2.01

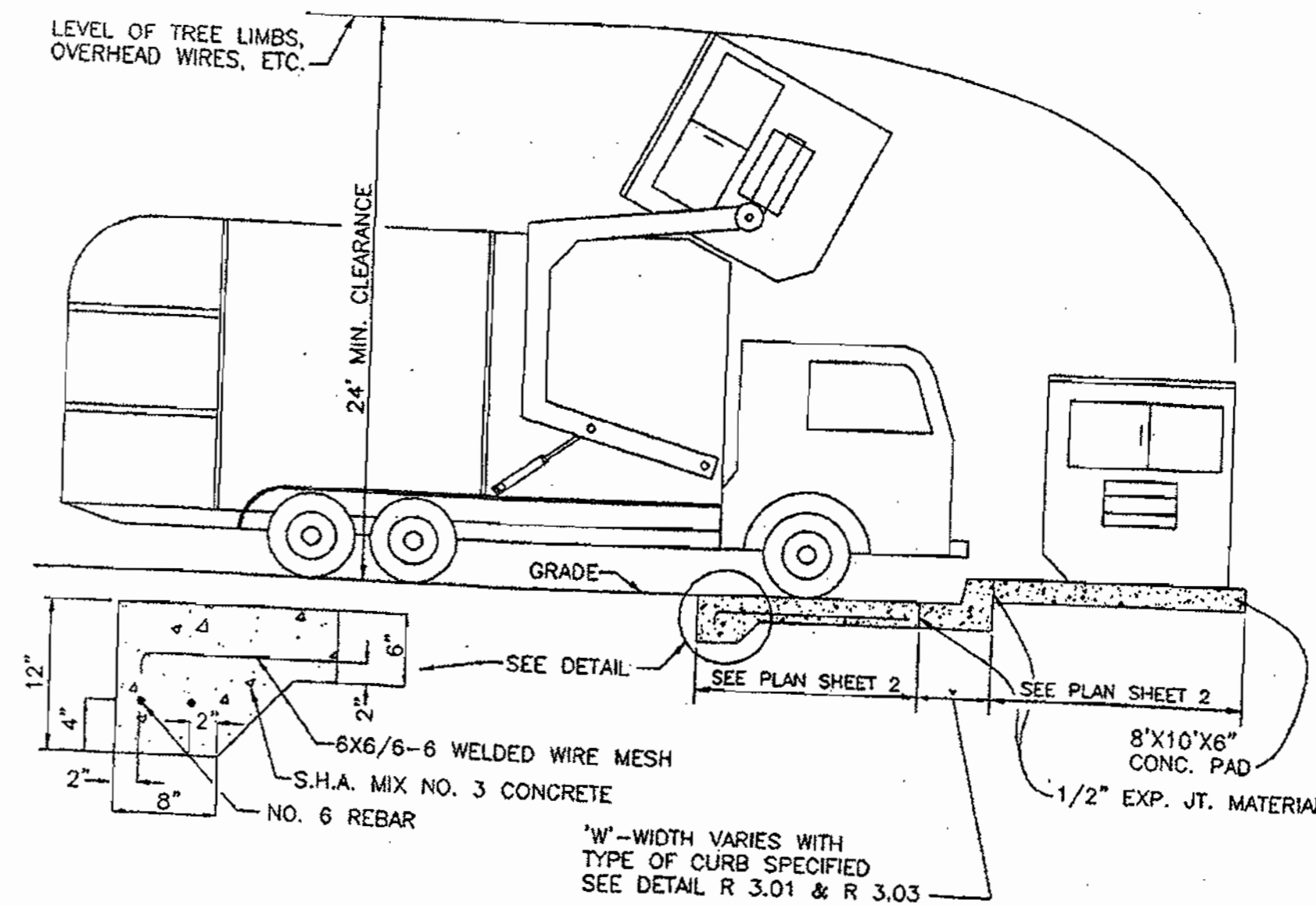


(AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER)

1 **HEAVY DUTY PAVING (P-2)**
NTS PER HOWARD COUNTY STANDARD R2.01

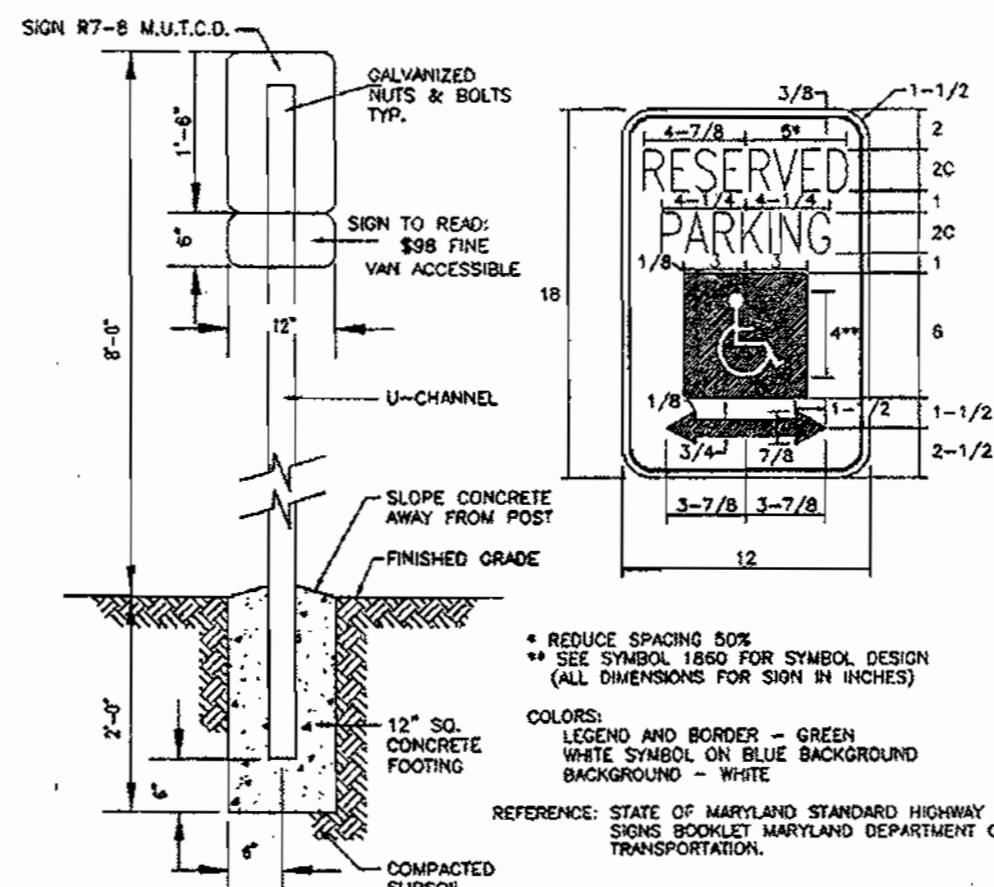


HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
WORK ZONE
TRAFFIC CONTROL PLAN
Approved: [Signature] Chief - Bureau of Engineering

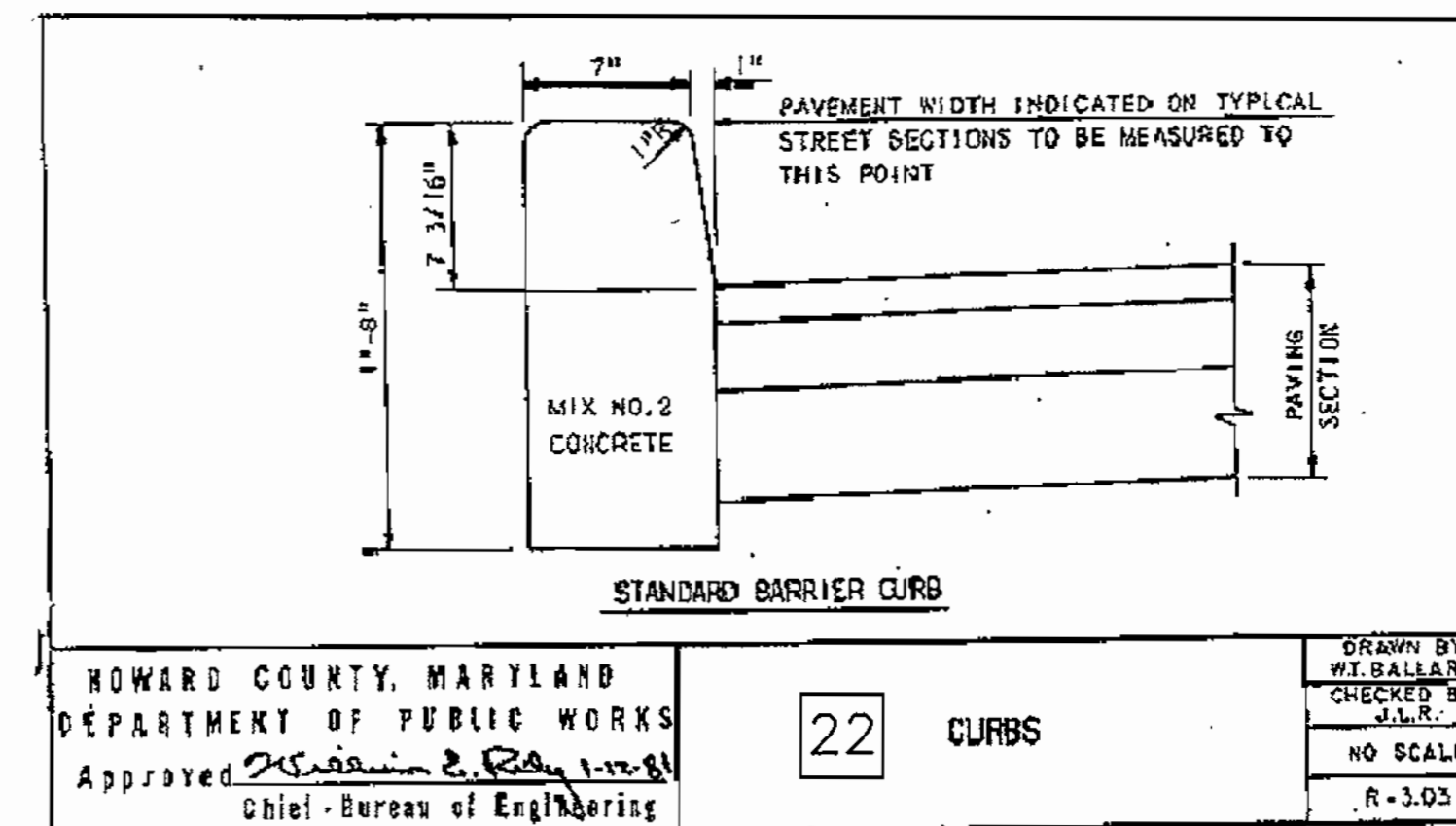


21 **SOLID WASTE SERVICE PAD**

HOWARD COUNTY STD. R 11.01
NOT TO SCALE



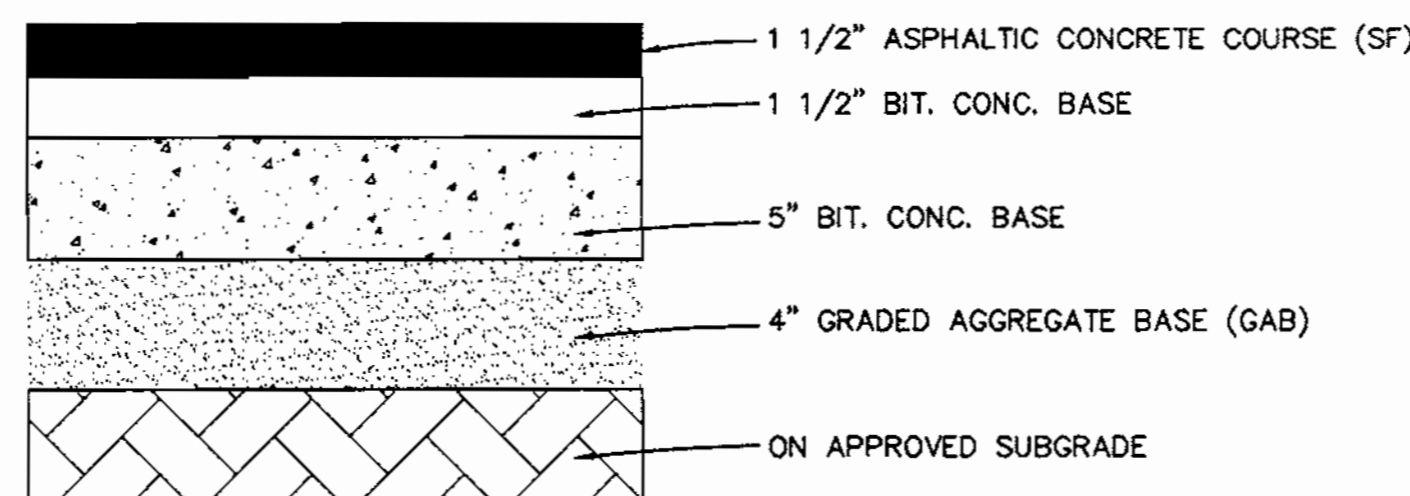
14 **HANDICAP SIGN**
NOT TO SCALE



HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved: [Signature] Chief - Bureau of Engineering

22 **CURBS**

DRAWN BY: W.J. BALLARD
CHECKED BY: J.L.R.
NO SCALE
R-3.03



15 **RIGHT TURN LANE PAVING SECTION**
NTS PER HOWARD COUNTY STANDARD R2.01

DEVELOPER:
 CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 4201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151

OWNER:
 VIRGIL L. AND IDOLINE L. LOUGH
 12635 EMORY FARM LANE
 SYKESVILLE, MARYLAND 21784
 (D.B. 470 @ F. 274)

APPROVED: [Signatures] HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 DIRECTOR DATE 11/2/00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE 11/10/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 10/25/00

NO	REVISION	DATE

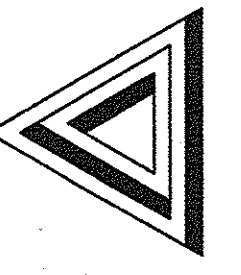
ADDRESS CHART				
PARCEL NO.	STREET ADDRESS			
753	4895 MONTGOMERY ROAD			
SUBDIVISION NAME				
SECTION	AREA	PARCEL NUMBER		
GARRIAN ACRES		LOT 4/P. 753		
PLAT NO./BLOCK NO.	ZONE	TAX ZONE	ELECT. DIST.	CENSUS TR.
14348	8	R-20	31	2ND 6027
WATER CODE		SEWER CODE		
		5750671		

SCALE: AS SHOWN
 DATE: 05.25.00
 DRN: GMC
 CKD: KEM
 SHEET 4 OF 20

SITE DETAILS
AND SECTIONS

CHILDTIME CHILDCARE CENTER
TAX MAP 31 - PARCEL 753
SECOND ELECTION DISTRICT

TRI-TEK ENGINEERING
CIVIL & ENVIRONMENTAL & LAND PLANNING & SURVEYING
a professional corporation
690 Center Street, Suite 300
Herndon, Virginia 20170-5018 (703) 481-5900



TRI-TEK ENGINEERING
 CIVIL & ENVIRONMENTAL & LAND PLANNING & SURVEYING
 a professional corporation
 690 Center Street, Suite 300
 Herndon, Virginia 20170-5018 (703) 481-5900

CHILDTIME CHILDCARE CENTER
 TAX MAP 31 - PARCEL 753
 SECOND ELECTION DISTRICT

SITE GRADING PLAN

SCALE: 1"=20'
 DATE: 05.25.00
 DRN: ALLEN
 CKD: KEM
 SHEET 5 OF 20

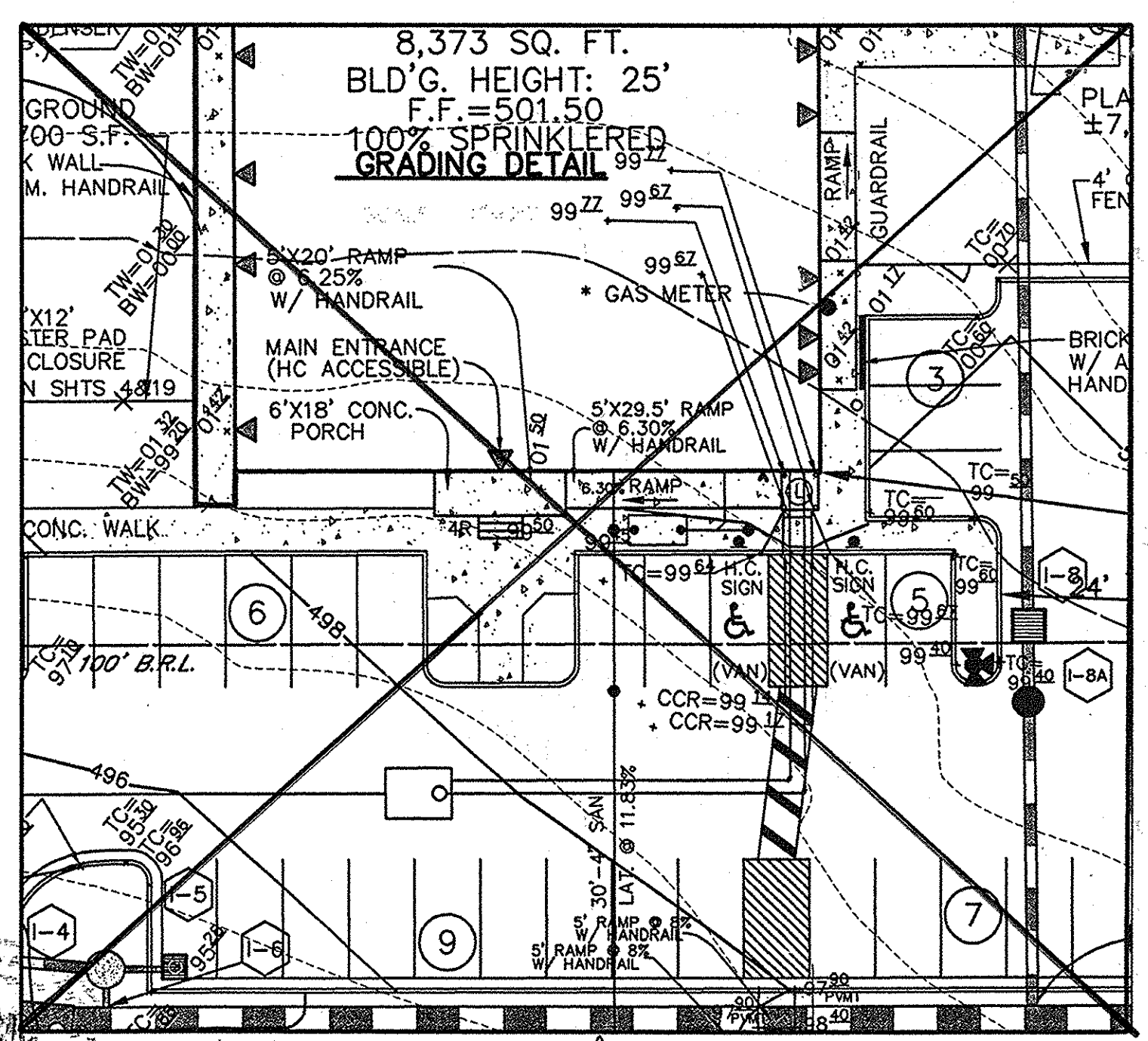
SUMMARY TABLE
SITE DESIGN PARAMETERS

SITE AREA = 1.76AC.
SITE AREA TO POND = 1.46AC.
SITE AREA NOT TO SWM FACILITY = 0.30AC.
OFFSITE AREA TO SWM FACILITY = 0.45AC.
10YR INFLOW TO SWM FACILITY = 170CFS
10YR OUTFLOW TO SWM FACILITY = 6 CFS
10YR STORAGE PROVIDED = 12,920 CF
10YR STORAGE REQUIRED = 10,700 CF
PLEASE REFER TO THE ENGINEERING DESIGN BOOKLET FOR DETAILS

- ALL RADII ARE 3' UNLESS OTHERWISE NOTED.
- * ---> CRITICAL SLOPE AREA (3:1) REQUIRES STAKED SODDING TRENCH DRAIN MAY PRESENT MAINTENANCE CONCERNS DUE TO DEBRIS WASHED DOWN FROM ADJACENT SLOPE AREA. HENCE OVERLAND RELIEF IS PROVIDED VIA CONCRETE TRENCH DRAIN TO PREVENT FLOODING OF THE BUILDING.

LEGEND

444	EX. GROUND
466	PROP. GRADE
W	EX. W/L
	PROP. W/L
	EX. EDGE OF PAVEMENT
	PROP. CURB AND GUTTER PER HO. CO. SPEC. R3.01
	PROP. STORM SEWER
	PROP. CONC. WALK PER HO. CO. SPEC. 3.05
	PROP. HEAVY DUTY PAVEMENT PER HO. CO. SPEC. R2.01-P-2
	PROP. LIGHT DUTY PAVEMENT PER HO. CO. SPEC. R2.01-P-1
	EX. PROPERTY LINE
	PROP. CLEARING LIMITS
	PROP. PARKING AREA LIGHT



- ADDED BY TRI-TEK ENGINEERING, INC.
- ADDED BY TRI-TEK ENGINEERING, INC.
- ADDED BY JERRY FOSTER, FOSTER ENGINEERING

OWNER:
 VIRGIL L. AND IDOLINE L. LOUGH
 12635 EMORY FARM LANE
 SYKESVILLE, MARYLAND 21784
 (D.B. 470 @ F. 274)

NO	REVISION	DATE
1	ADD MAINS, S.H.C. @ 12" W.	12/1/00
2	ADD DS RD + GRADE CHGS	05/24/00
3	EXTEND PAVED CONC W/L	9/12/05
	ADD CANOPY STRUCTURE, 4'x4' SLAB	9/12/05

ADDRESS CHART

PARCEL NO.	STREET ADDRESS
753	4895 MONTGOMERY ROAD

SUBDIVISION NAME	SECTION	AREA	PARCEL NUMBER
GARRIAN ACRES	N/A		LOT 4/P. 753
PLAT NO. BLOCK NO.	ZONE	TAX ZONE	ELECT. DIST. CENSUS TR.
14348	R-20	31	2ND 6027
WATER CODE	grt	SEWER CODE	5720042

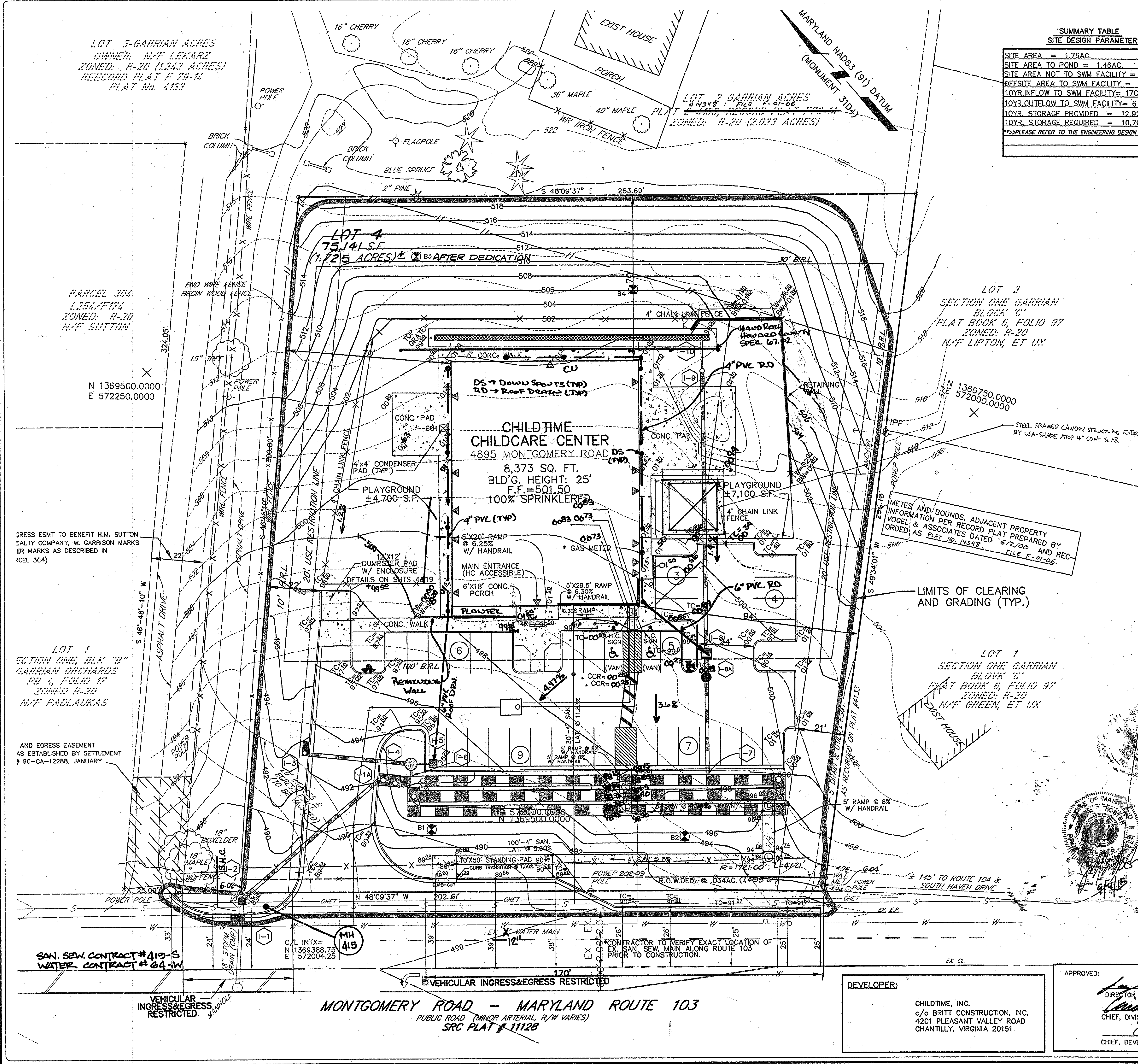
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 11/2/00
 DIRECTOR DATE

[Signature] 11/1/00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

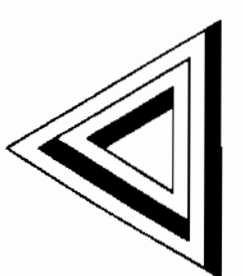
[Signature] 10/25/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DEVELOPER:
 CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 4201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151



MONTGOMERY ROAD - MARYLAND ROUTE 103
 PUBLIC ROAD (MINOR ARTERIAL, R/W VARIES)
 SRC PLAT # 11128

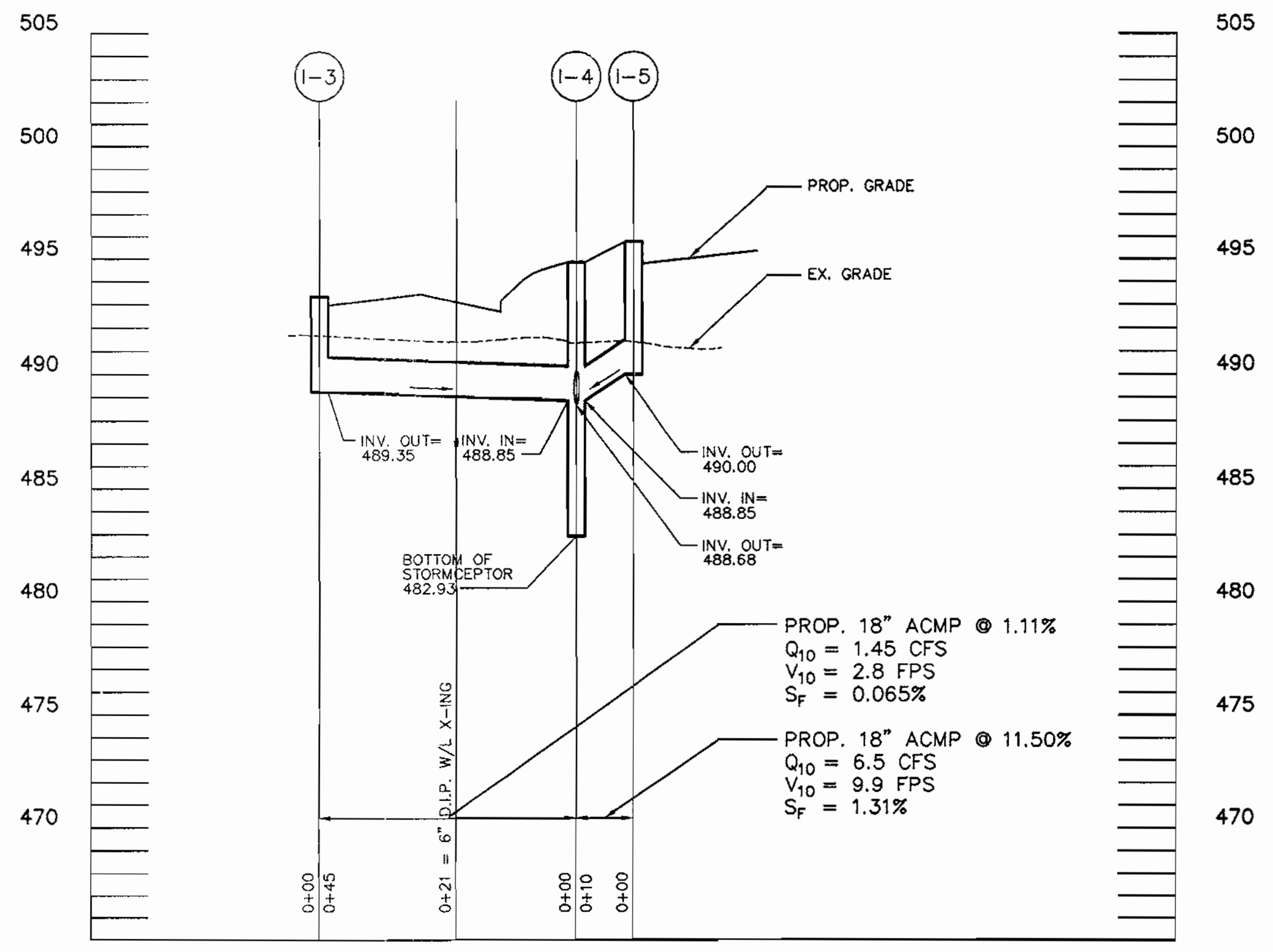
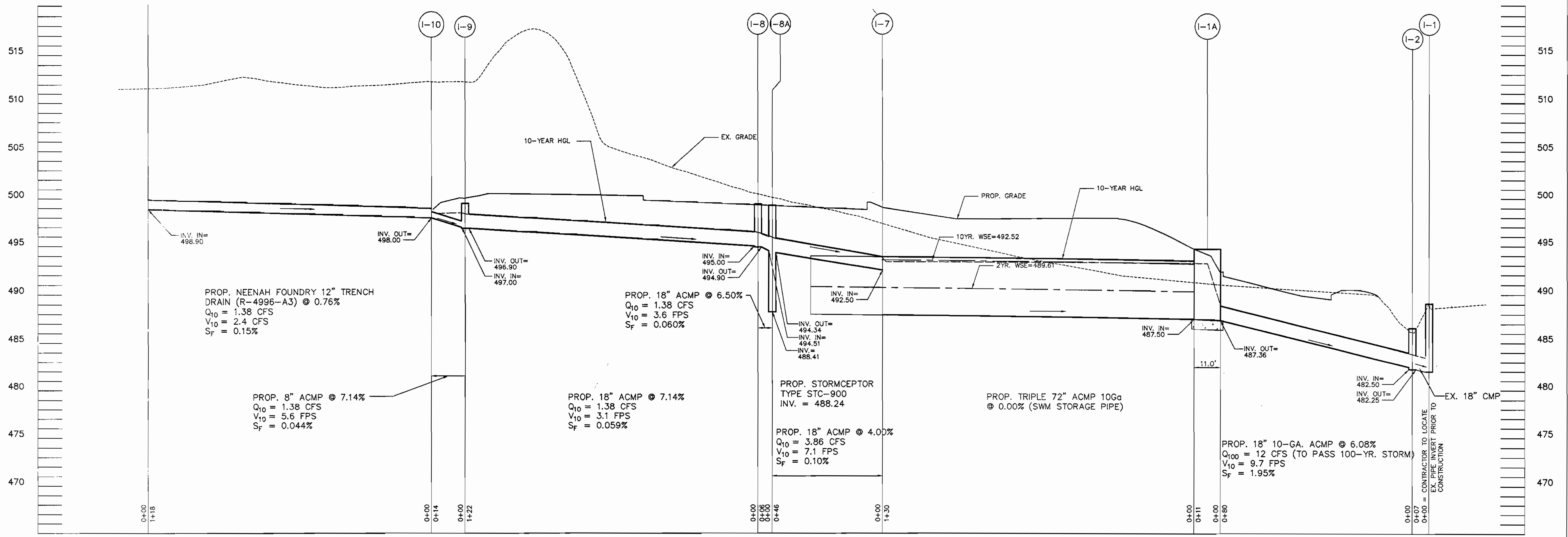
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TRI-TEK ENGINEERING
 CIVIL & ENVIRONMENTAL & LAND PLANNING & SURVEYING
 a professional corporation
 690 Center Street, Suite 300
 Herndon, Virginia 20170-5018 (703) 481-9900

CHILDTIME CHILDCARE CENTER
TAX MAP 31 - PARCEL 753
 HOWARD COUNTY, MARYLAND
 SECOND ELECTION DISTRICT

STORM DRAIN AND SEWER PROFILES



STRUCTURE SCHEDULE

NO.	TYPE	TOP	INV. IN	INV. OUT	LOCATION	REMARKS
I-1A	SWM STRUCTURE	494.70	487.50	487.36	N. 1369459.31, E. 572049.74	SWM CONTROL STRUCTURE
I-1	STD. MD DBL. WR	489.10	SEE	PROFILE	N. 1369372.34, E. 572408.65	SD-4.35
I-2	STD. MD SGL. WR	486.58	482.50	482.25	N. 1369377.56, E. 572053.87	SD-4.37
I-3	STD. MD A-10	493.35	-	489.37	N. 1369440.18, E. 572083.20	SD-4.02
I-4	STC-900	494.86	488.85	488.68	N. 1369470.40, E. 572048.87	STORM-CEPTOR
I-5	STD. MD SGL. WR	495.78	-	490.00	N. 1369477.36, E. 572043.00	SD-4.37
I-6	FIELD CONN.	-	488.60	-	N. 1369467.14, E. 572045.39	see sht 9
I-7	FIELD CONN.	-	491.50	-	N. 1369561.83, E. 571960.73	see sht 9
I-8	STD. MD SGL. WR	499.40	495.00	494.90	N. 1369596.22, E. 572000.64	SD-4.37
I-9	STD. MANHOLE	499.50	497.00	496.90	N. 1369676.23, E. 572091.46	G-5.12
I-8A	STC-900	499.40	494.51	494.51	N. 1369589.26, E. 571992.38	STORM-CEPTOR

NOTE:
 FOR STORMCEPTOR ORDER FORM, PLEASE REFER TO SHEET 8 OF 20.

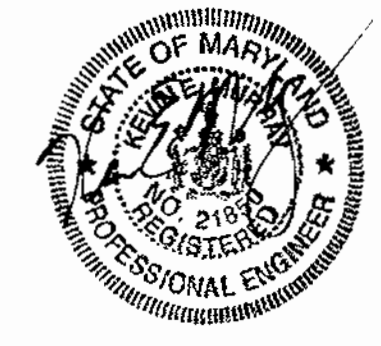
STORM DRAIN PIPE SCHEDULE

PIPE DESCRIPTION		LENGTH (L.F.)
DIAMETER	TYPE	
8"	ACMP	14
18"	ACMP	314
72"	ACMP	480

RCP = REINFORCED CONCRETE PIPE
 ACMP = ALUMINIZED CORRUGATED METAL PIPE



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 Herndon, Virginia 20170-5018 (703) 481-9900



OWNER:
 VIRGIL L. AND IDOLINE L. LOUGH
 12635 EMORY FARM LANE
 SYKESVILLE, MARYLAND 21784
 (D.B. 470 @ F. 274)

NO.	REVISION	DATE

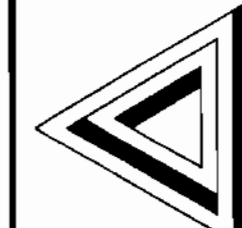
APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Director: *[Signature]* DATE: 11/2/00
 Chief, Division of Land Development: *[Signature]* DATE: 11/1/00
 Chief, Development Engineering Division: *[Signature]* DATE: 10/25/00

ADDRESS CHART

PARCEL NO.	STREET ADDRESS
753	4895 MONTGOMERY ROAD

GARRIAN ACRES N/A LOT 4/P. 753
 PLAT NO./BLOCK NO. 14348/8 ZONE R-20 TAX/ZONE ELEC. DIST. CENSUS TR. 31 6027
 WATER CODE: 001 SEWER CODE: 5750671

H: 1"=20'
 SCALE: V: 1"=5'
 DATE: 05.25.00
 DRN: ALLEN
 CKD: KEM
 SHEET 6 OF 20

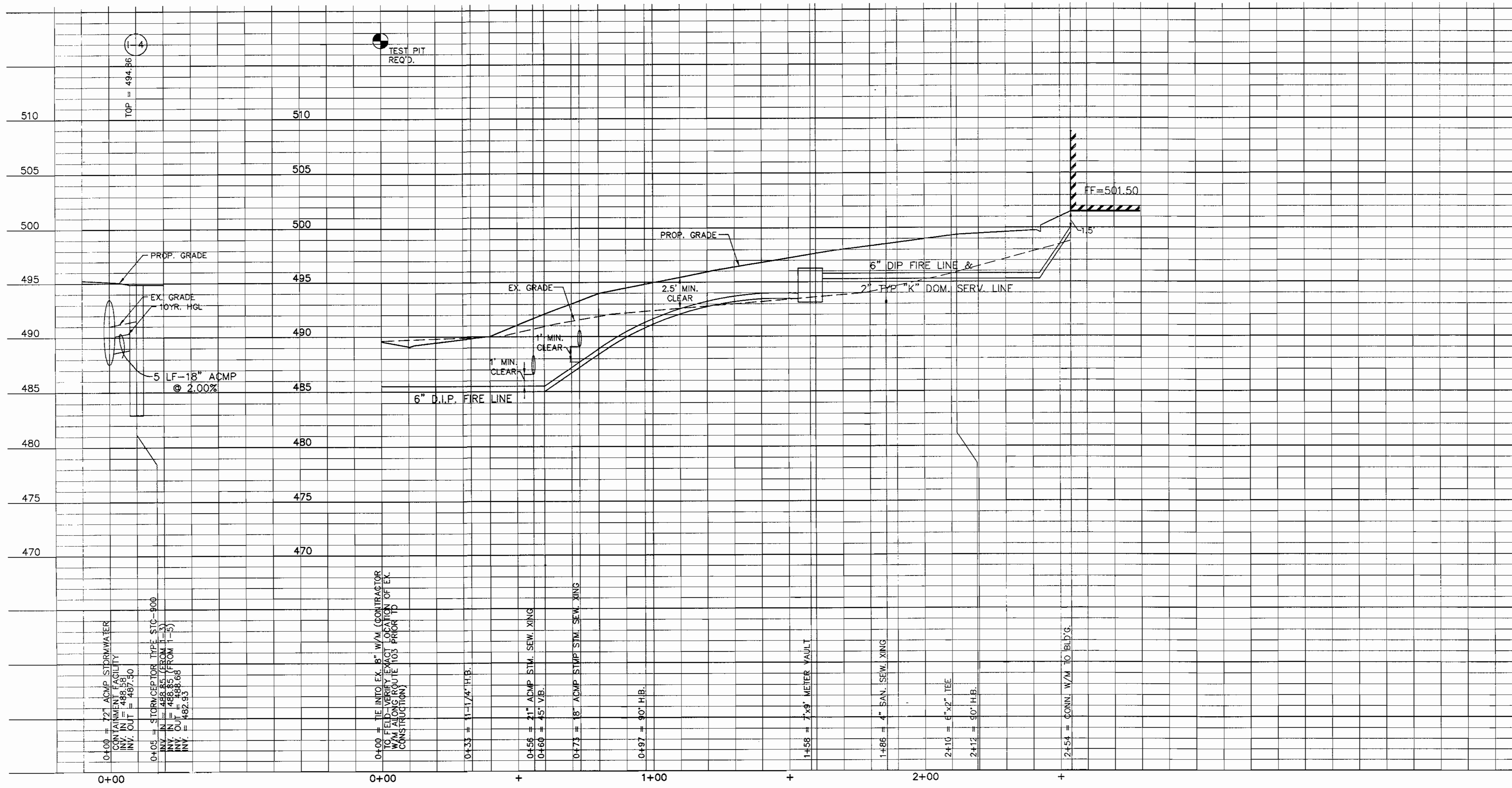


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 a professional corporation
 690 Center Street, Suite 300
 Herndon, Virginia 20170-5018 (703) 481-5900

CHILDTIME CHILDCARE CENTER
TAX MAP 31 - PARCEL 753
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

MISCELLANEOUS UTILITY PROFILES

SCALE: AS SHOWN
 DATE: 05.25.00
 DRN: GMC
 CKD: KEM
 SHEET 7 OF 20



STORM SEWER
 SCALE: 1"=20' (H)
 1"=5' (V)

WATER MAIN
 SCALE: 1"=20' (H)
 1"=5' (V)

WATER MAIN
 SCALE: 1"=20' (H)
 1"=5' (V)



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 Herndon, Virginia 20170-5018 (703) 481-5900



OWNER:
 VIRGIL L. AND IDOLINE L. LOUGH
 12635 EMORY FARM LANE
 SYKESVILLE, MARYLAND 21784
 (D.B. 470 @ F. 274)

NO	REVISION	DATE

DEVELOPER:
 CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 4201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Director: *[Signature]* 11/2/00
 Chief, Division of Land Development: *[Signature]* 11/1/00
 Chief, Development Engineering Division: *[Signature]* 10/25/00

ADDRESS CHART

PARCEL NO.	STREET ADDRESS	
753	4895 MONTGOMERY ROAD	
SUBDIVISION NAME	SECTION AREA	PARCEL NUMBER
GARRIAN ACRES	N/A	LOT 4/P. 753
PLAT NO./BLOCK NO./ZONE	TAX ZONE/ELECT. DIST./CENSUS TR.	
14348	8 R-20 31	2ND 6027
WATER CODE: 601	SEWER CODE: 5750671	

Concrete Stormceptor Order Request Form*

Official Use Only
Order # _____
Date _____
Internal Sale _____

Contractor Information

Name: BRITT CONSTRUCTION INC.
Address: 4201 PLEASANT VALLEY ROAD
City: CHANTILLY
State: VIRGINIA
Zip Code: 20151
Contact: BRIAN McCLOSKEY
Phone: 703-802-3701
Fax: 703-802-3707

You can specify the angle of the discharge pipe coming out of the Stormceptor.
Alignment Layout Schematic Missing From Order Form.
Please Add To Your Form.
See Hard Copy At End Of Technical Manual For An Example.

Owner Information

Name: CHILDTIME CHILD CARE, INC. c/o BRITT CONSTRUCTION
Phone: 703-802-3701
Fax: 703-802-3707

Please draw orientation of inlet and outlet pipes on drawing along with pipe inside diameter (in.) and invert elevation (ft.). Clearly mark inlet pipes with an I and outlet pipes with an O and provide the inlet/outlet pipe angle in degrees.

Stormceptor Model	Insert Size	Data
900 1 3600	22" ✓	Manhole/Structure Number <u>I-4</u>
1200 4800	32"	Top Elevation (ft) <u>444.86</u>
1800 6000	44"	Inlet Pipe Invert (ft) <u>488.85</u>
2400 7200	Disc	Outlet Pipe Invert (ft) <u>488.86</u>
	Custom	Pipe Type <u>ACMP</u>
		Pipe Inside Diameter (in) [ID] <u>18"</u>
		Pipe Outside Diameter (in) [OD] <u>23"</u>

Project Name: CHILDTIME CHILD CARE CENTER
Approximate time frame until required delivery (weeks): UNKNOWN
Exact Delivery Address: Street 4895 MONTGOMERY ROAD
City ELICOTT State MARYLAND Zip Code 21785
Designer Company: TRI-TEK ENGINEERING, INC.
Designer Contact: VICTOR A AMOLE Phone 703-481-5900 Fax 703-481-5901

Please fax this sheet to Stormceptor Corporation at (301) 762-4190

For Technical Information Please Call Stormceptor Corporation at (301) 762-8361 or Toll Free at 1-800-762-4703

Concrete Stormceptor Order Request Form*

Official Use Only
Order # _____
Date _____
Internal Sale _____

Contractor Information UNKNOWN AT THIS TIME

Name: BRITT CONSTRUCTION INC.
Address: 4201 PLEASANT VALLEY RD.
City: CHANTILLY
State: VA.
Zip Code: 20151
Contact: BRIAN McCLOSKEY
Phone: 703-802-3701
Fax: 703-802-3707

You can specify the angle of the discharge pipe coming out of the Stormceptor.
Alignment Layout Schematic Missing From Order Form.
Please Add To Your Form.
See Hard Copy At End Of Technical Manual For An Example.

Owner Information c/o BRITT CONST. INC.

Name: CHILDTIME CHILD CARE, INC.
Phone: 703-802-3701
Fax: 703-802-3707

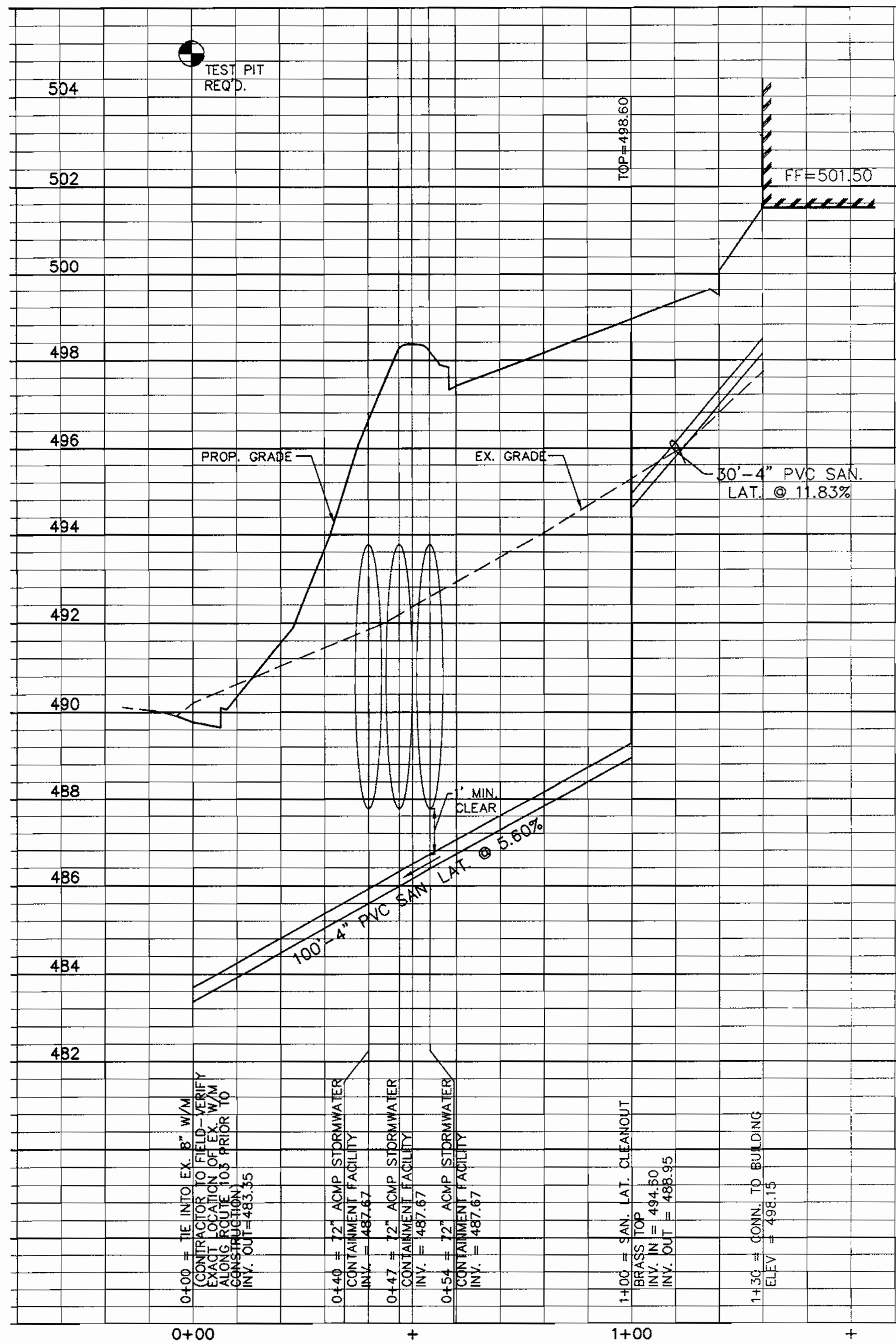
Please draw orientation of inlet and outlet pipes on drawing along with pipe inside diameter (in.) and invert elevation (ft.). Clearly mark inlet pipes with an I and outlet pipes with an O and provide the inlet/outlet pipe angle in degrees.

Stormceptor Model	Insert Size	Data
900 1 3600	22" ✓	Manhole/Structure Number <u>I-8A</u>
1200 4800	32"	Top Elevation (ft) <u>499.40</u>
1800 6000	44"	Inlet Pipe Invert (ft)
2400 7200	Disc	Outlet Pipe Invert (ft)
	Custom	Pipe Type <u>ACMP</u>
		Pipe Inside Diameter (in) [ID] <u>18"</u>
		Pipe Outside Diameter (in) [OD] <u>23"</u>

Project Name: CHILDTIME CHILD CARE CENTER
Approximate time frame until required delivery (weeks): UNKNOWN
Exact Delivery Address: Street 4895 MONTGOMERY ROAD RT. 103
City ELICOTT State MARYLAND Zip Code 21785
Designer Company: TRI-TEK ENGINEERING, INC.
Designer Contact: VICTOR A AMOLE Phone 703-481-5900 Fax 703-481-5901

Please fax this sheet to Stormceptor Corporation at (301) 762-4190

For Technical Information Please Call Stormceptor Corporation at (301) 762-8361 or Toll Free at 1-800-762-4703



SANITARY SEWER
SCALE: 1"=20' (H)
1"=2' (V)



TRI-TEK ENGINEERING

CIVIL • ENVIRONMENTAL • LAND PLANNING • SURVEYING
a professional corporation

690 Center Street, Suite 300
Herndon, Virginia 20170-5018 (703) 481-5900



OWNER:
VIRGIL L. AND IDOLINE L. LOUGH
12635 EMORY FARM LANE
SYKESVILLE, MARYLAND 21784
(D.B. 470 • F. 274)

NO	REVISION	DATE

DEVELOPER:
CHILDTIME, INC.
c/o BRITT CONSTRUCTION, INC.
4201 PLEASANT VALLEY ROAD
CHANTILLY, VIRGINIA 20151

APPROVED: [Signature] 11/2/00
DIRECTOR DATE
[Signature] 11/1/00
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
[Signature] 10/25/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

ADDRESS CHART

PARCEL NO.	STREET ADDRESS
753	4895 MONTGOMERY ROAD

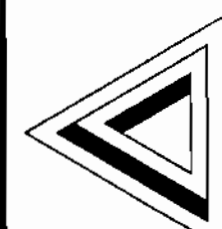
SUBDIVISION NAME	SECTION	AREA	PARCEL NUMBER
GARRIAN ACRES	N/A		LOT 4/P. 753

PLAY NOT BLOCK NO. 14348
WATER CODE 8
SEWER CODE 5750671

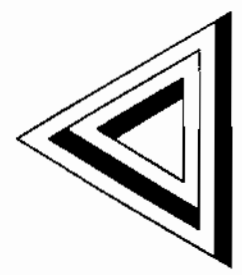
MISCELLANEOUS UTILITY PROFILES

CHILD TIME CHILD CARE CENTER
TAX MAP 31 - PARCEL 753

TRI-TEK ENGINEERING
CIVIL • ENVIRONMENTAL • LAND PLANNING • SURVEYING
a professional corporation
690 Center Street, Suite 300
Herndon, Virginia 20170-5018 (703) 481-5900



SCALE: AS SHOWN
DATE: 05.25.00
DRN: GMC
CKD: KEM
SHEET 8 OF 20

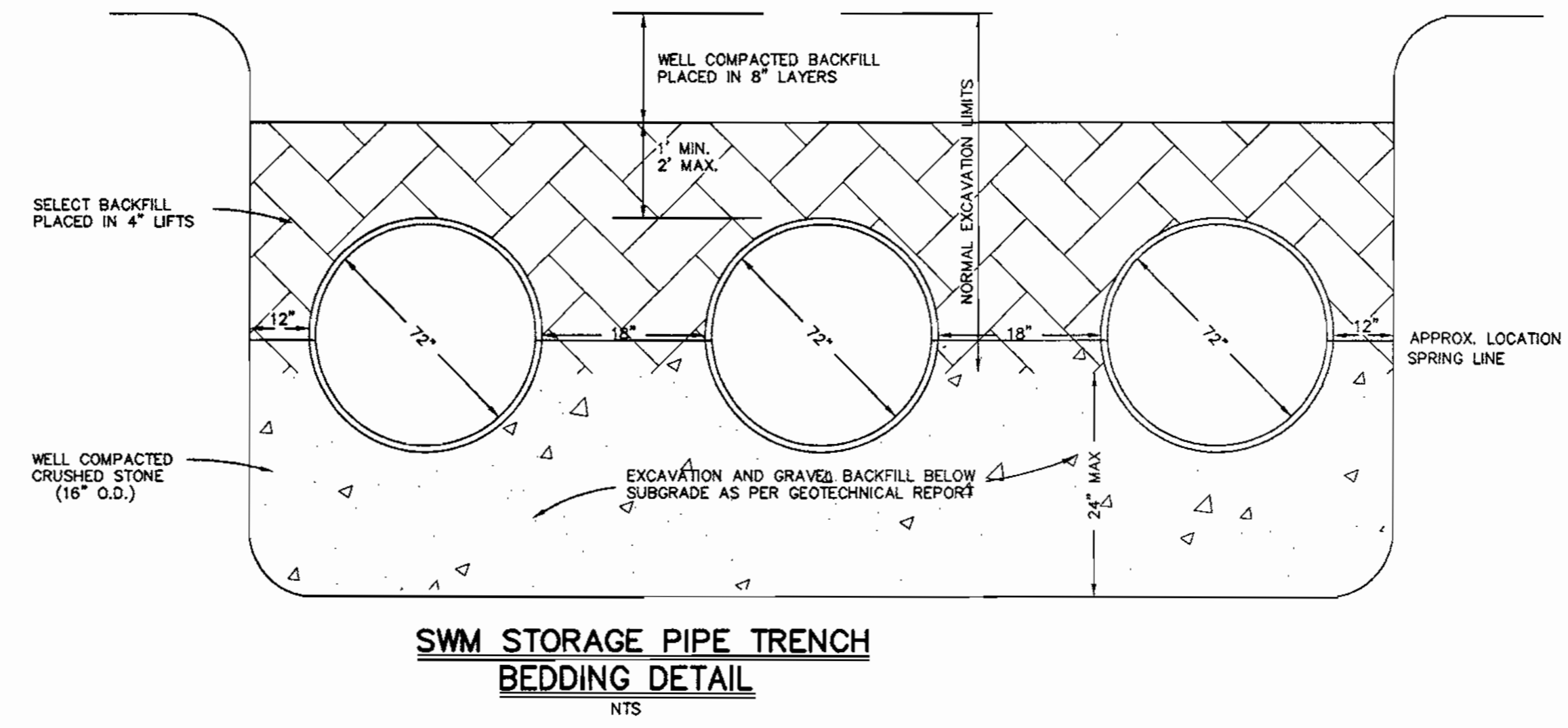
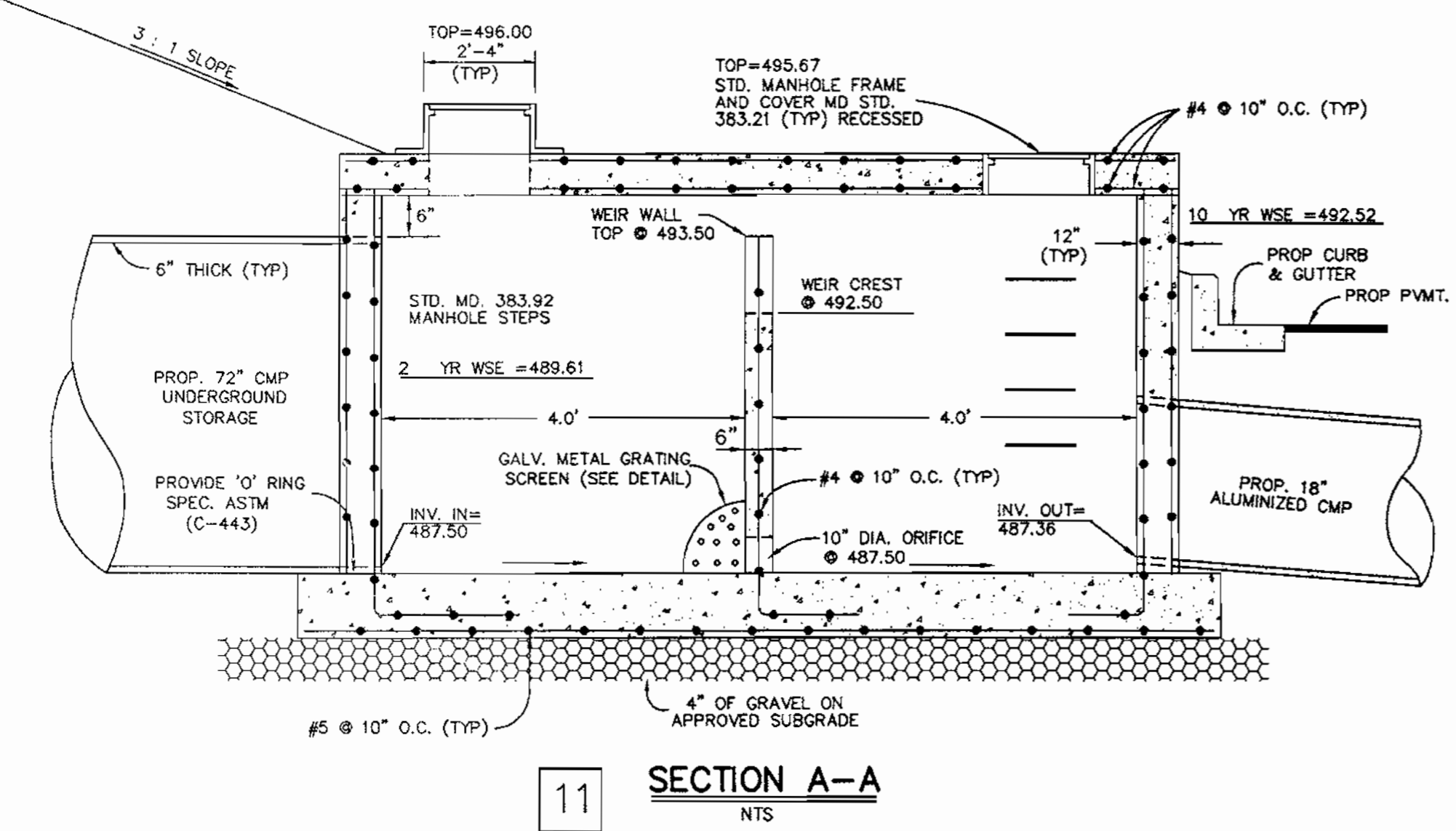
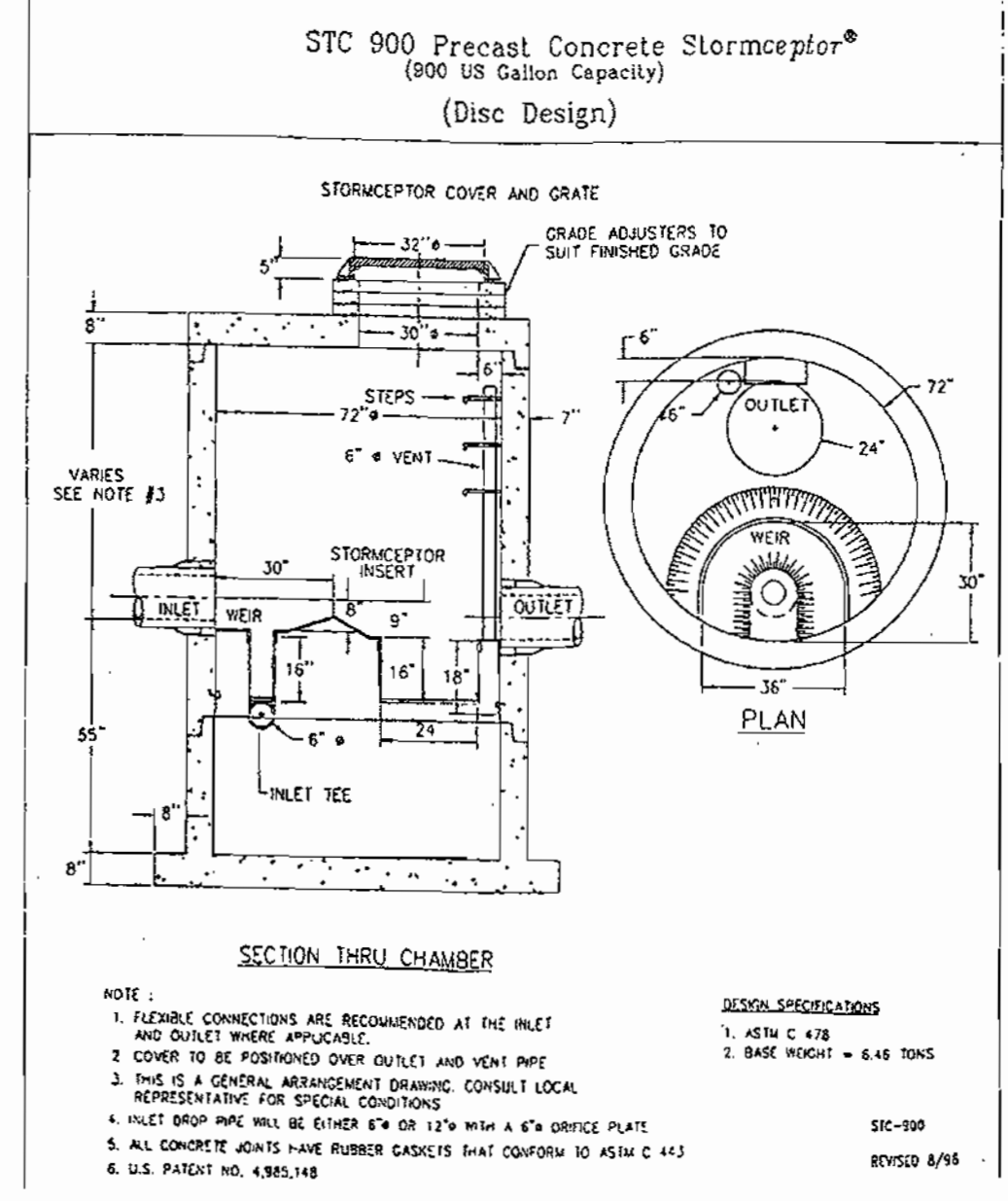
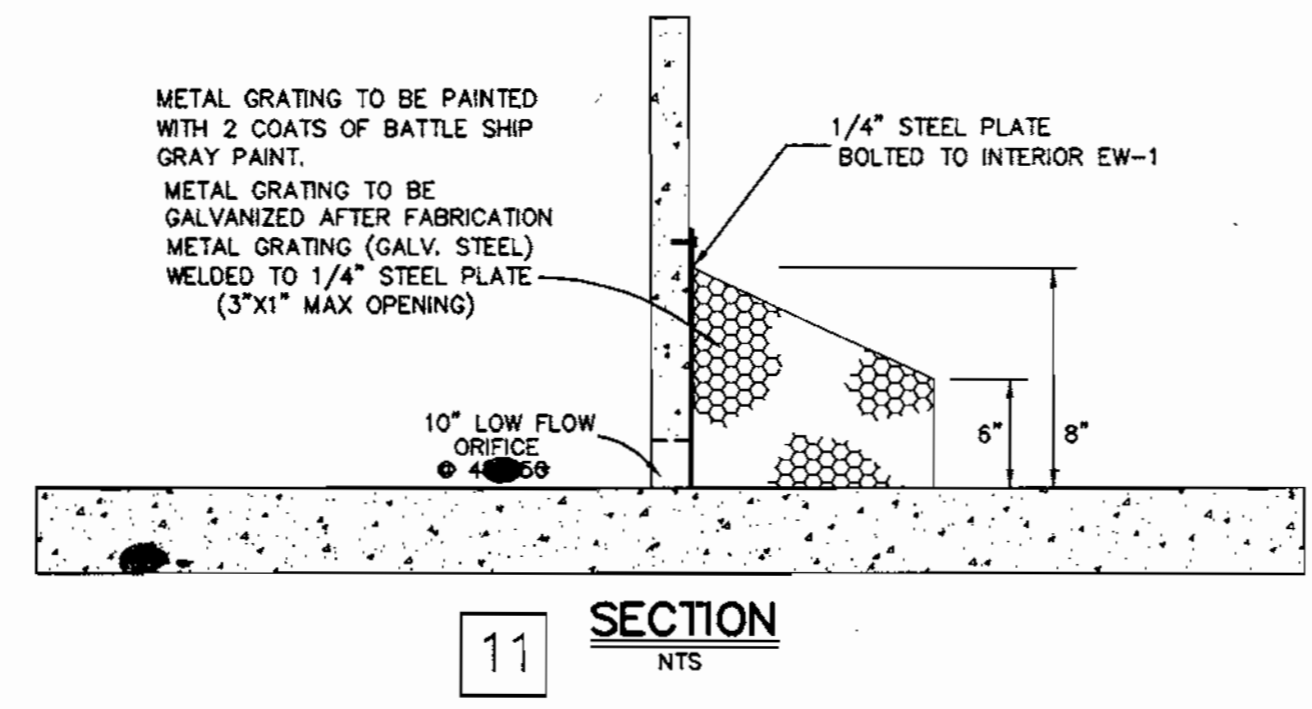
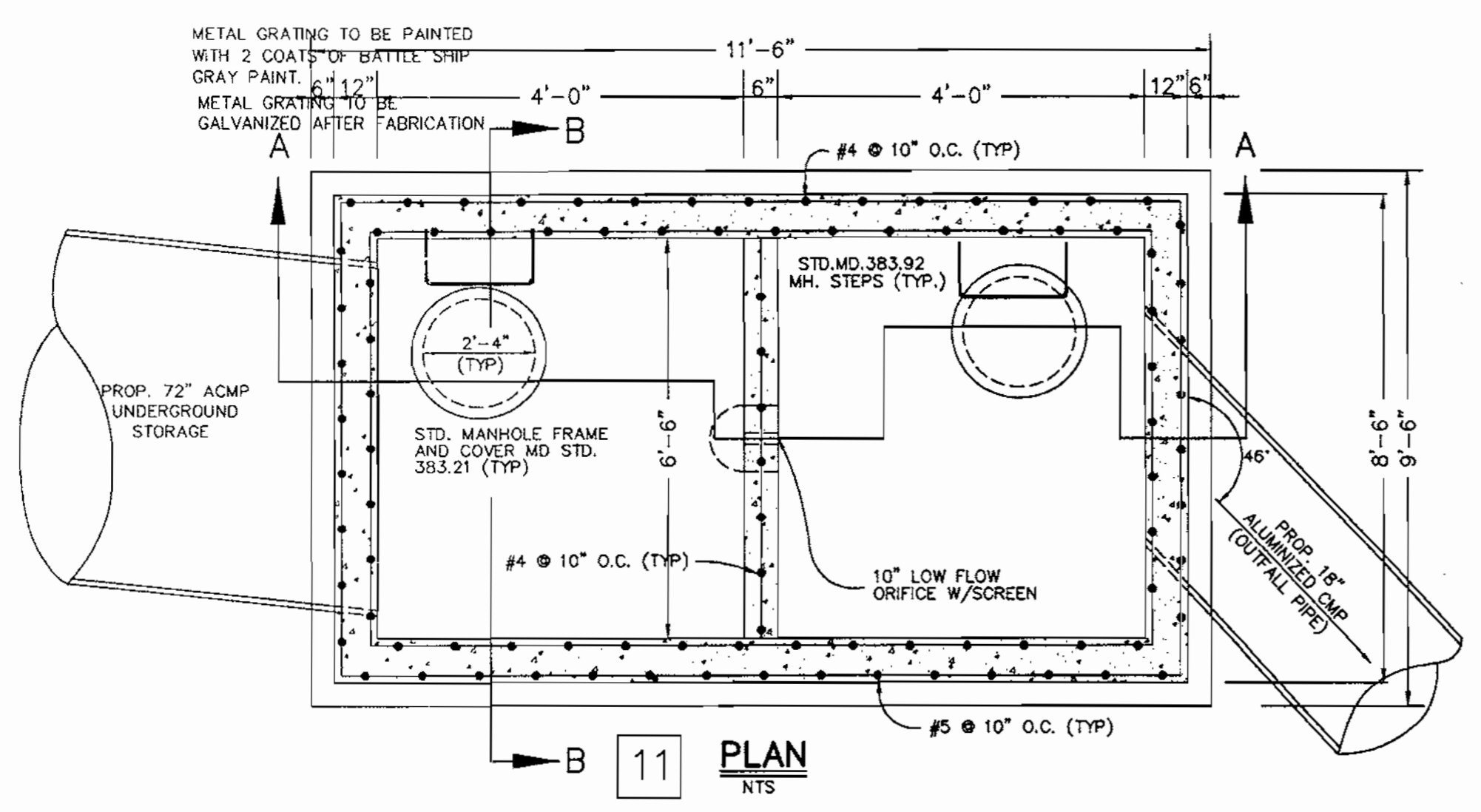


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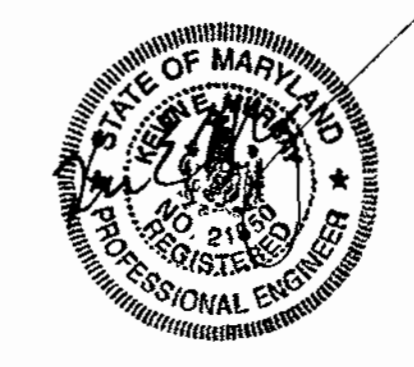
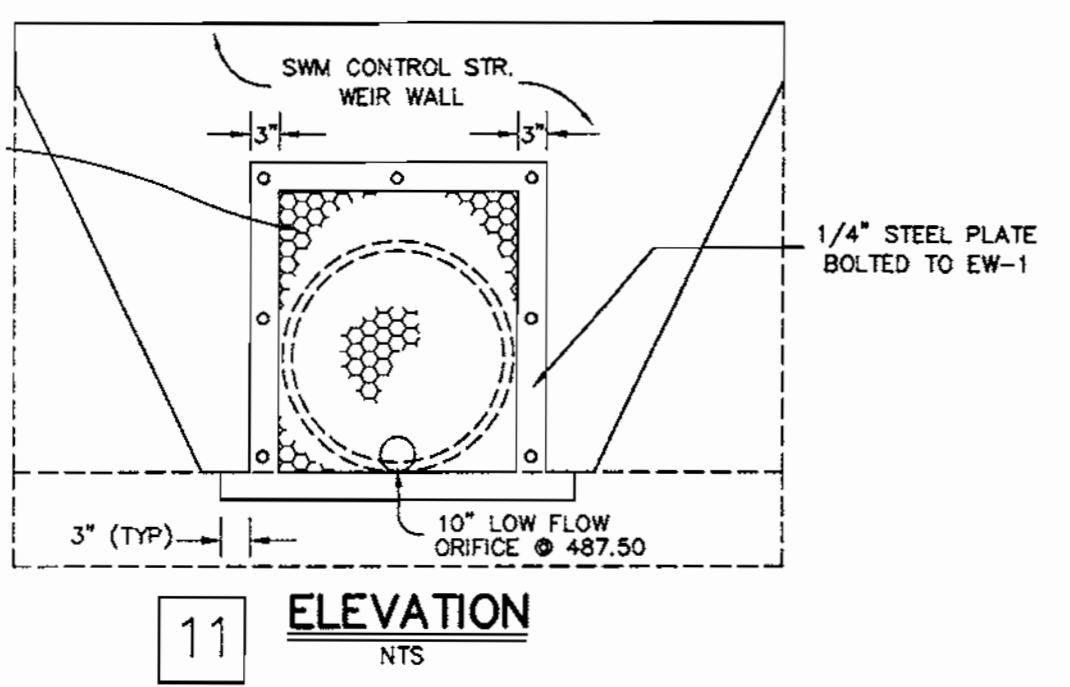
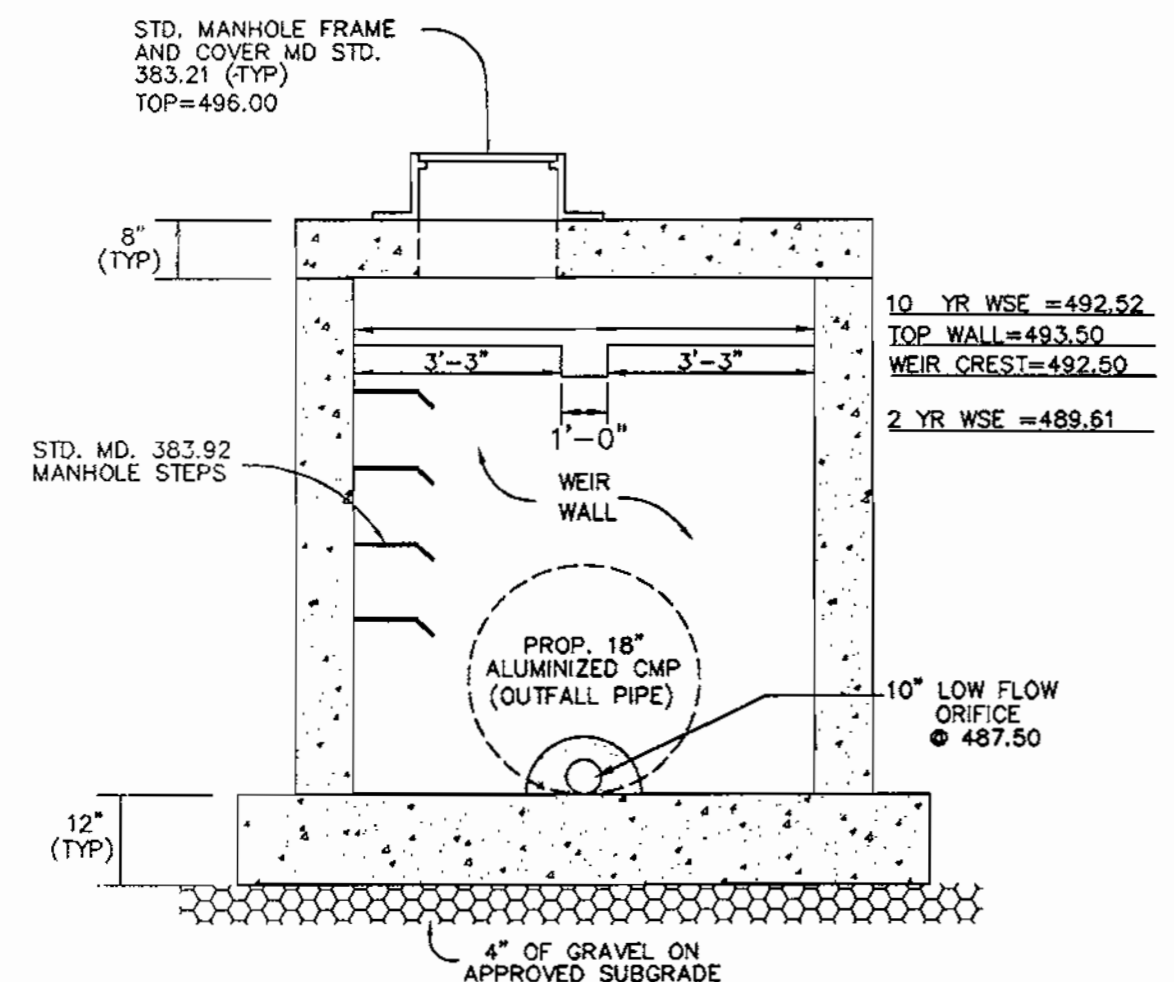
CHILD TIME CHILDCARE CENTER
TAX MAP 31 - PARCEL 753
 HOWARD COUNTY, MARYLAND
 SECOND ELECTION DISTRICT

STORMWATER MANAGEMENT
DETAILS

SCALE: AS SHOWN
 DATE: 05.25.00
 DRN: GMC
 CKD: KEM
 SHEET 9 OF 20



DEBRIS IS TO BE KEPT OUT OF THE PROPOSED SWM FACILITY DURING AND AFTER CONSTRUCTION.



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 a professional corporation
 690 Center Street, Suite 300
 Herndon, Virginia 20170-5018 (703) 481-5900

OWNER:

VIRGIL L. AND IDOLINE L. LOUGH
 12635 EMORY FARM LANE
 SYKESVILLE, MARYLAND 21784
 (D.B. 470 @ F. 274)

NO	REVISION	DATE

DEVELOPER:

CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 4201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151

APPROVED:

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Luigi S. Smith 11/2/00
 DIRECTOR DATE

Chris Hamilton 11/1/00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chris Hamilton 10/25/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

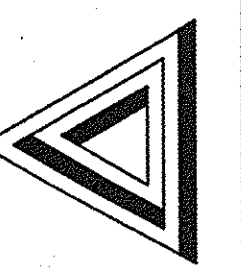
ADDRESS CHART

PARCEL NO.	STREET ADDRESS
753	4895 MONTGOMERY ROAD

SUBDIVISION NAME	SECTION	AREA	PARCEL NUMBER

GARRIAN ACRES	N/A	LOT 4/P. 753
PLAT NO./BLOCK NO.	ZONE	TAX ZONE/ELECT. DIST./CENSUS TR.
14/342	B	R-20 31 2ND 7077
WATER CODE: 801	SEWER CODE: 5750671	

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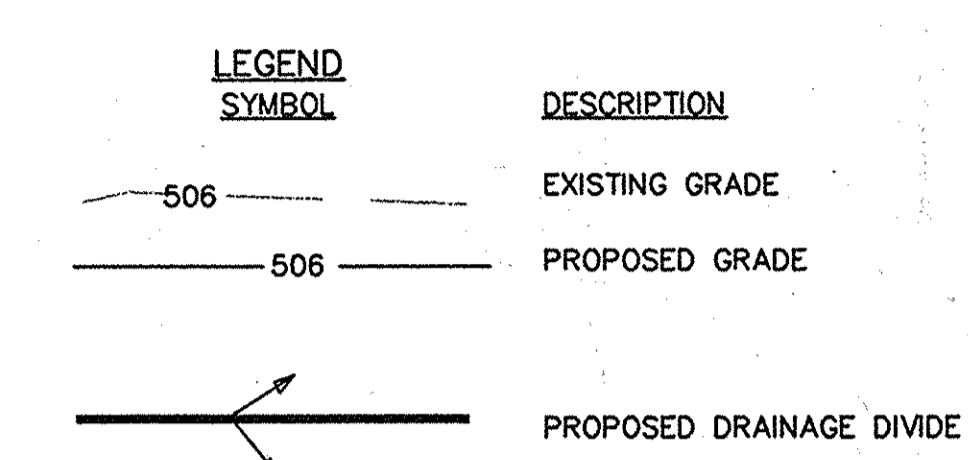
TRI-TEK ENGINEERING
 CIVIL & ENVIRONMENTAL & LAND PLANNING & SURVEYING
 a professional corporation
 690 Center Street, Suite 300
 Herndon, Virginia 20170-5018 (703) 481-5900

**CHILDTIME CHILDCARE CENTER
 TAX MAP 31 - PARCEL 753**

**SOILS AND DRAINAGE
 AREA MAP**

SCALE: 1"=20'
 DATE: 05.25.00
 DRN: ALLEN
 CKD: KEM
 SHEET 10 OF 20

- ALL RADII ARE 3' UNLESS OTHERWISE NOTED.
- * ---> CRITICAL SLOPE AREA (3:1) REQUIRES STAKED SODDING TRENCH DRAIN MAY PRESENT MAINTENANCE CONCERNS DUE TO DEBRIS WASHED DOWN FROM ADJACENT SLOPE AREA. HENCE OVERLAND RELIEF IS PROVIDED VIA CONCRETE TRENCH DRAIN TO PREVENT FLOODING OF THE BUILDING.

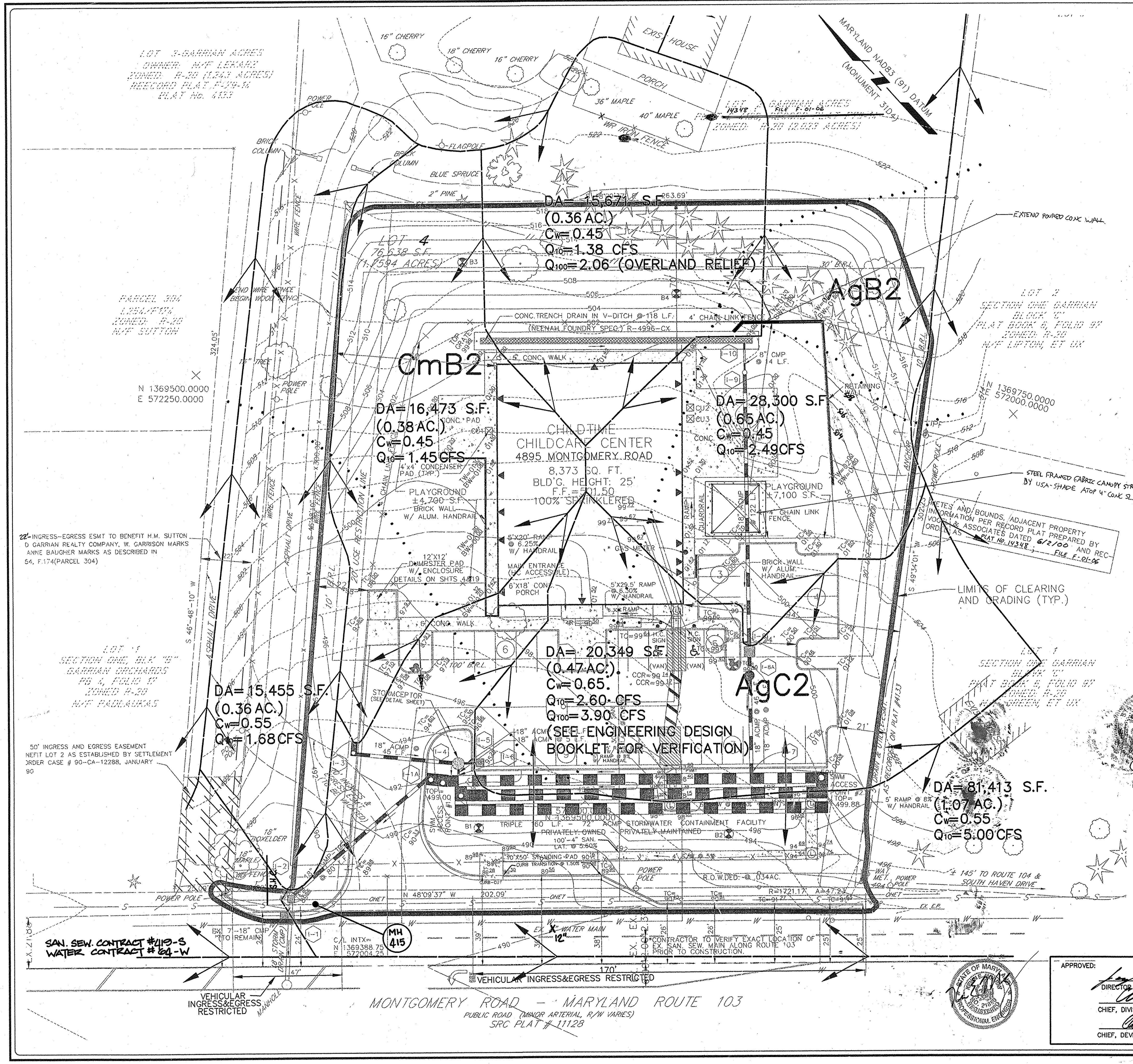


SOILS CHART

SOIL N	SOIL NAME/DESCRIPTION	TYPE
CmB2	COLLINGTON, SANDY LOAM, 5-10% SLOPES, MODERATE EROSION.	B
AgC2	AURA, SILTY LOAM, 2-5% SLOPES, SLIGHT EROSION.	C
AgB2	AURA, SILTY LOAM, 5-10% SLOPES, SLIGHT EROSION.	C

NOTE: THIS SITE DOES NOT INCLUDE SOILS DESIGNATED AS HYDRIC, OR SOILS WITH HYDRIC INCLUSIONS. SOILS ARE NOT CLASSIFIED AS HIGHLY ERODIBLE.

$i_{100} = 12.75$ IN/HR.
 $i_{10} = 8.50$ IN/HR.
 $T_c = 5$ MIN. (MINIMUM)



- ADDED BY TRI-TEK ENGINEERING, INC.
- ADDED BY JERRY POSTER, FOSTER ENGINEERING

DEVELOPER:
 CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 4201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151

OWNER:
 VIRGIL L. AND IDOLINE L. LOUGH
 12635 EMORY FARM LANE
 SYKESVILLE, MARYLAND 21784
 (D.B. 470 @ F. 274)

TRI-TEK ENGINEERING
 CIVIL & ENVIRONMENTAL & LAND PLANNING & SURVEYING
 a professional corporation
 690 Center Street, Suite 300
 Herndon, Virginia 20170-5018 (703) 481-5900

NO	REVISION	DATE
1	ADD MH 415, S.H.C. & 12" W.	12/4/00
3	EXTEND POURED CONC WALL ADD CANOPY STRUCTURE ABOVE 4' x 4' 9/21/05	

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Director: *[Signature]* 11/2/00
 Chief, Division of Land Development: *[Signature]* 11/1/00
 Chief, Development Engineering Division: *[Signature]* 10/25/00

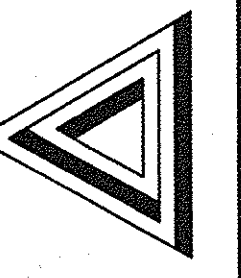
ADDRESS CHART

PARCEL NO.	STREET ADDRESS
753	4895 MONTGOMERY ROAD

SUBDIVISION NAME	SECTION	AREA	PARCEL NUMBER
GARRIAN ACRES	N/A		LOT 4/P. 753

PLAT NO./BLOCK NO.	ZONE	TAX/ZONE/ELECT. DIST.	CENSUS TR.
14348	R-20	31	2ND 6027

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 690 Center Street, Suite 300
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CHILDTIME CHILDCARE CENTER
 TAX MAP 31 - PARCEL 753
 HOWARD COUNTY, MARYLAND
 SECOND ELECTION DISTRICT

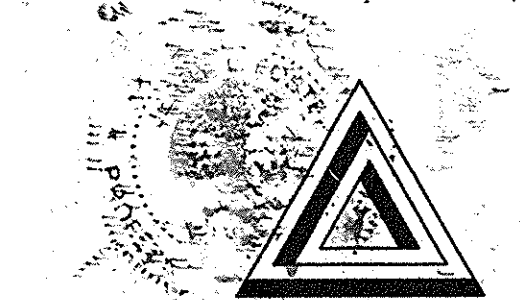
LANDSCAPE PLAN

NOTES :

1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.
2. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS A PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$15,450.
3. FIFOREST CONSERVATION OBLIGATION FOR THIS SITE WAS SATISFIED BY A DECLARATION OF INTENT.(PLEASE REFER TO SHEET 19 OF 20)

1. ADDED BY TRI-TEK ENGINEERING, INC.
2. ADDED BY TRI-TEK ENGINEERING, INC.
3. ADDED BY JEREMY FOSTER, FOSTER ENGINEERING

FOR PLANTING SCHEDULE SEE SHEET 14 OF 20



TRI-TEK ENGINEERING
 CIVIL & ENVIRONMENTAL & LAND PLANNING & SURVEYING
 a professional corporation
 690 Center Street, Suite 300
 Herndon, Virginia 20170-5018 (703) 481-5900

NO.	REVISION	DATE
1	ADD MH 415'S H.C. @ 12" W.	12/4/00
2	ADD REPAIRS (W.R.L. REV 5/7/01)	
3	EXTEND POURED CONC WALL	9/2/05
	ADD CANOPY STRUCTURE AS 4" CONC SLAB	9/2/05

OWNER:
 VIRGIL L. AND IDOLINE L. LOUGH
 12635 EMORY FARM LANE
 SYKESVILLE, MARYLAND 21784
 (D.B. 470 @ F. 274)

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Director: *[Signature]* 11/2/00
 DATE: 11/2/00
 Chief, Division of Land Development: *[Signature]* 10/25/00
 DATE: 10/25/00
 Chief, Development Engineering Division: *[Signature]*

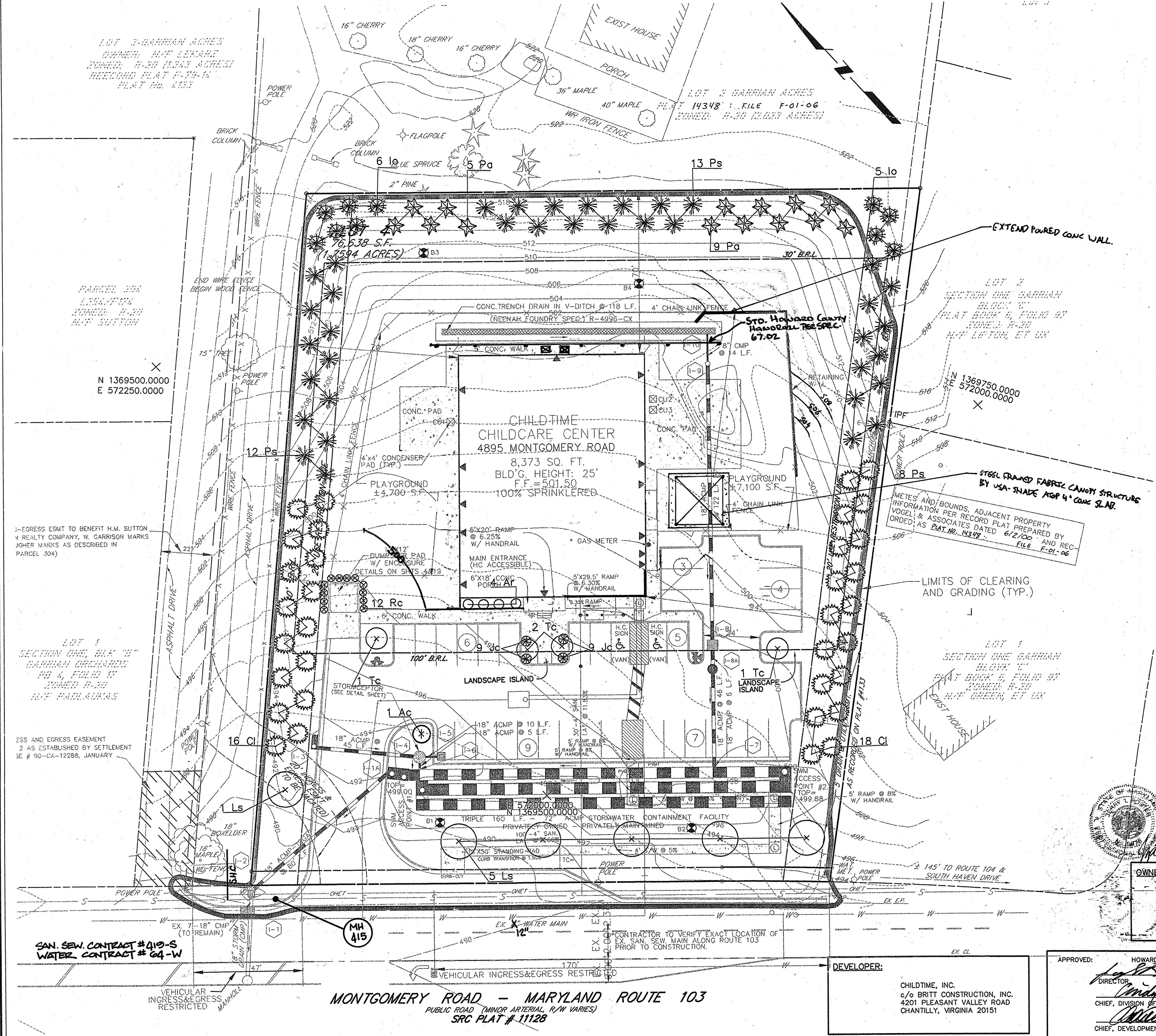
DEVELOPER:
 CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 4201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151

ADDRESS CHART

PARCEL NO.	STREET ADDRESS
753	4895 MONTGOMERY ROAD

SUBDIVISION NAME	SECTION	AREA	PARCEL NUMBER
GARRIAN ACRES	N/A		LOT 4/P. 753
PLAT NO./BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST./CENSUS TR.
14348 / 8	R-20	31	2ND 6027
WATER CODE: 001	SEWER CODE: 5782671		

SCALE: 1"=20'
 DATE: 05.25.00
 DRN: GMC
 CKD: KEM
 SHEET 13 OF 20



MONTGOMERY ROAD - MARYLAND ROUTE 103
 PUBLIC ROAD (MINOR ARTERIAL, R/W VARIES)
 SRC PLAT # 1128

LOT 3 GARRIAN ACRES
 OWNER: H/F LEFARZ
 ZONED: R-20 (2.00 ACRES)
 RECORDED PLAT P-19-14
 PLAT NO. 4102

PARCEL 304
 L. SUTTON
 ZONED: R-20
 MAP SECTION

N 1369500.0000
 E 572250.0000

EGRESS ESMT TO BENEFIT H.M. SUTTON
 & REALTY COMPANY, W. GARRISON MARKS
 JOYER MARKS AS DESCRIBED IN
 PARCEL 304)

LOT 1
 SECTION ONE, BLK "B"
 GARRIAN ORCHARDS
 PG 4, FOLIO 11
 ZONED R-20
 H/F PAOLAUAS

ESS AND EGRESS EASEMENT
 2 AS ESTABLISHED BY SETTLEMENT
 SE # 90-CA-12288, JANUARY

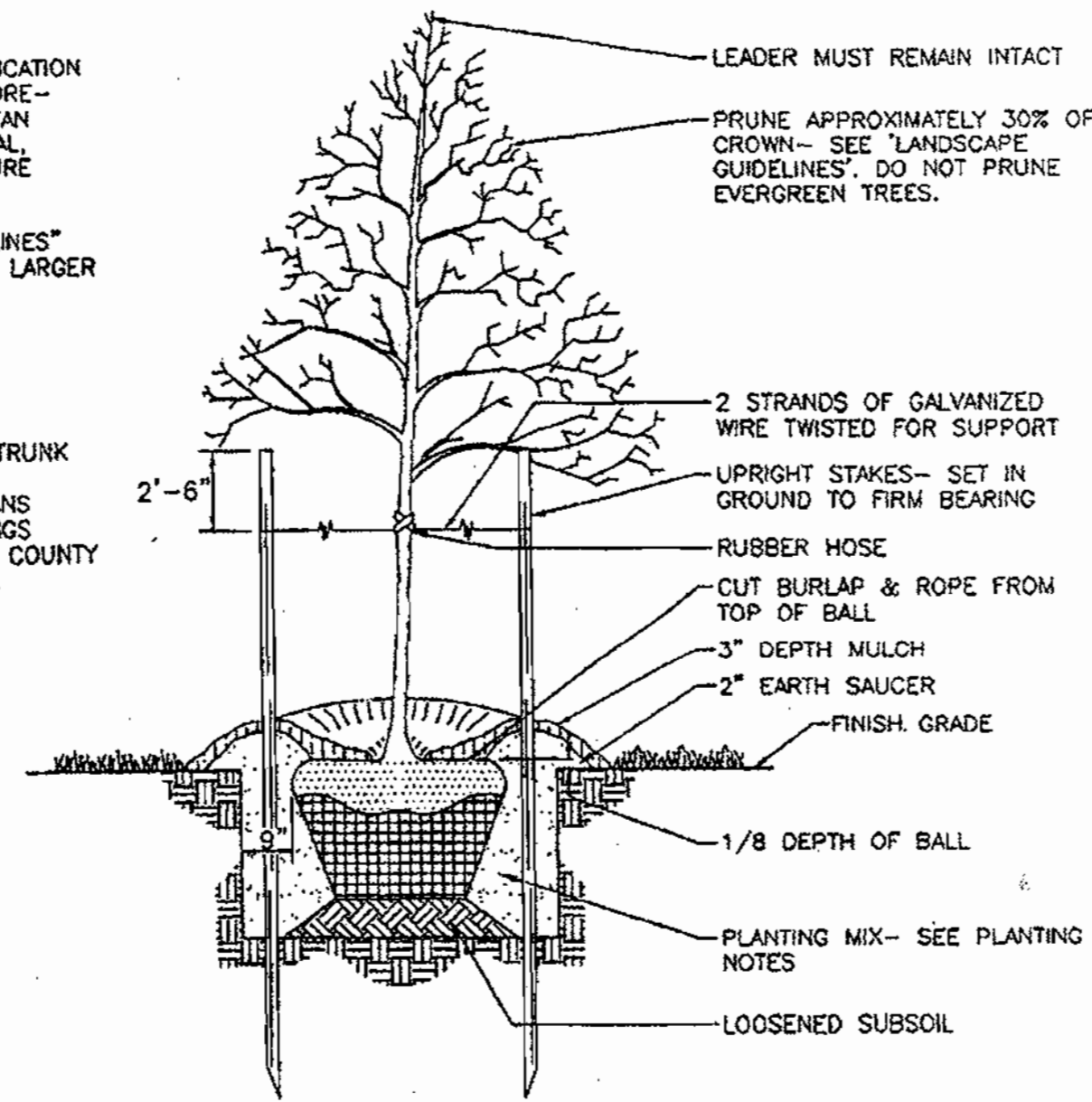
SAN. SEW. CONTRACT # 410-S
 WATER CONTRACT # 64-W

PLANTING NOTES

- PLANTS, RELATED MATERIALS, AND OPERATIONS SHALL MEET THE DETAILED DESCRIPTION AS GIVEN ON THE PLANS AND AS DESCRIBED HEREIN.
 - ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE NURSERY GROWN, UNIFORMLY BRANCHED AND HAVE A VIGOROUS ROOT SYSTEM. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS PLANTS FREE FROM DEFECTS, DECAY, DISFIGURING ROOTS, SUNSCALD INJURIES, ABRASIONS OF THE BARK, PLANT DISEASE, INSECT PEST EGGS, BOXERS AND ALL FORMS OF INFESTATION OR OBJECTIONABLE DISFIGUREMENTS. PLANT MATERIAL THAT IS WEAK OR WHICH HAS BEEN CUT BACK FROM LARGER GRADES TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED. TREES WITH FORKED LEADERS WILL NOT BE ACCEPTED. ALL PLANTS SHALL BE FRESHLY DUG; NO HEELED-IN PLANTS OR PLANTS FROM COLD STORAGE WILL BE ACCEPTED.
 - UNLESS OTHERWISE SPECIFIED, ALL PLANT MATERIAL SHALL CONFORM TO "AMERICAN STANDARD FOR NURSERY STOCK" ANSI Z60.1-1986, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INCLUDING ALL ADDENDA.
 - UNLESS OTHERWISE SPECIFIED, ALL GENERAL CONDITIONS, PLANTING OPERATIONS, DETAILS AND PLANTING SPECIFICATIONS SHALL CONFORM TO "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS", (HEREIN-AFTER "LANDSCAPE GUIDELINES") APPROVED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON AND THE POTOMAC CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS, SEPTEMBER, 1981, INCLUDING ALL ADDENDA.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTILITY COMPANIES, UTILITY CONTRACTORS AND "MISS UTILITY" A MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO UTILITIES AND MAY MAKE MINOR ADJUSTMENTS IN SPACING AND LOCATION OF PLANTING MATERIALS TO AVOID CONFLICTS WITH UTILITIES.
 - PLANTING BED SHALL BE MULCHED WITH 3" OF SHREDDED HARDWOOD BARK MULCH. GROUNDCOVER BEDS SHALL BE MULCHED TO A DEPTH OF 2".
 - ALL AREAS WITHIN THE CONTRACT LIMIT NOT COVERED BY BUILDING, PAVING, PLANTING BEDS OR OTHERWISE DESIGNATED, ON THE PLANS SHALL BE SEEDED AND MULCHED OR SODDED IN ACCORDANCE WITH "1983 MARYLAND STANDARDS AND SPECIFICATIONS (SEE SHEET 6), INCLUDING ALL ADDENDA, AS DIRECTED BY THE OWNER.
 - CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL MATERIALS IN THE PROPER PLANTING SEASON FOR EACH PLANT TYPE.
- PLANTING MIX SHALL BE DONE AS FOLLOWS:
 DECIDUOUS PLANTS - TWO PARTS TOP SOIL, ONE PART WELL-ROTTED COW OR HORSE MANURE, ADD 3 LBS. OF STANDARD 10-10-10 FERTILIZER PER CUBIC YARD OF PLANTING MIX. EVERGREEN PLANTS - TWO PARTS TOPSOIL, ONE PART HUMUS OR OTHER APPROVED ORGANIC MATERIAL. ADD 3 LBS. OF EVERGREEN (ACIDIC) FERTILIZER PER CUBIC YARD OF PLANTING MIX.
- TOPSOIL SHALL CONFORM TO LANDSCAPE GUIDELINES.
 - THIS PLAN IS INTENDED FOR LANDSCAPE PLAN ONLY. SEE OTHER PLAN SHEETS FOR INFORMATION ON GRADING, SEDIMENT CONTROL, LAYOUT, ETC.
 - CONTRACTOR TO ADJUST PLANTINGS AS REQUIRED WITH PRIOR APPROVAL OF THE ENGINEER OR LANDSCAPE ARCHITECT.

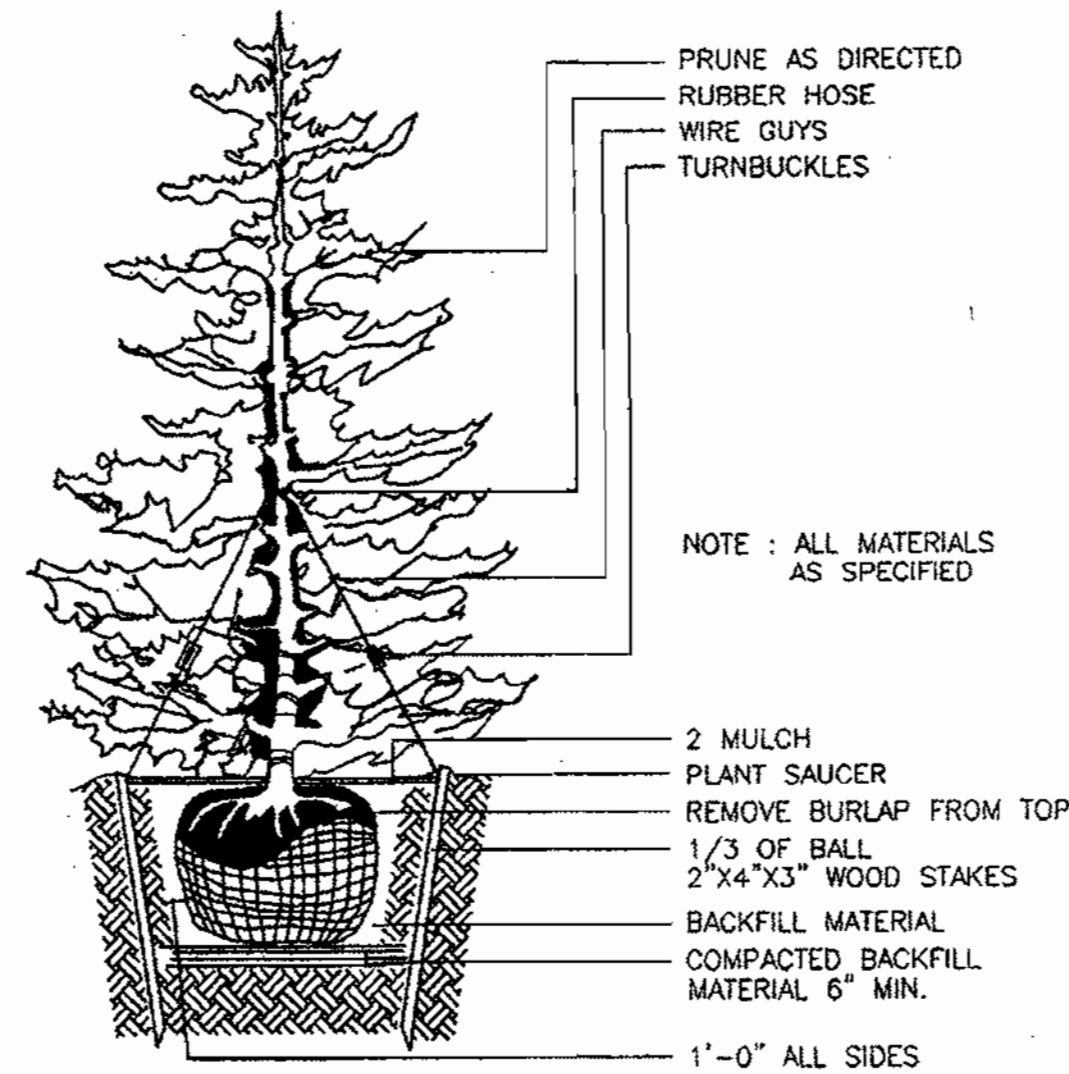
NOTES

- SEE "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS" FOR ALL MATERIAL, PRODUCT, AND PROCEDURE SPECIFICATIONS.
- SEE "LANDSCAPE GUIDELINES" FOR SUPPORTING TREES LARGER THAN 2-1/2" CALIPER.
- PLACE UPRIGHT STAKES PARALLEL TO WALKS & BUILDINGS.
- KEEP MULCH 1" FROM TRUNK
- SEE ARCHITECTURAL PLANS FOR ADDITIONAL PLANTINGS WHICH EXCEED HOWARD COUNTY MINIMUM REQUIREMENTS.
- TREES ARE NOT TO BE PLANTED OVER PRIVATE SEWAGE EASEMENT.



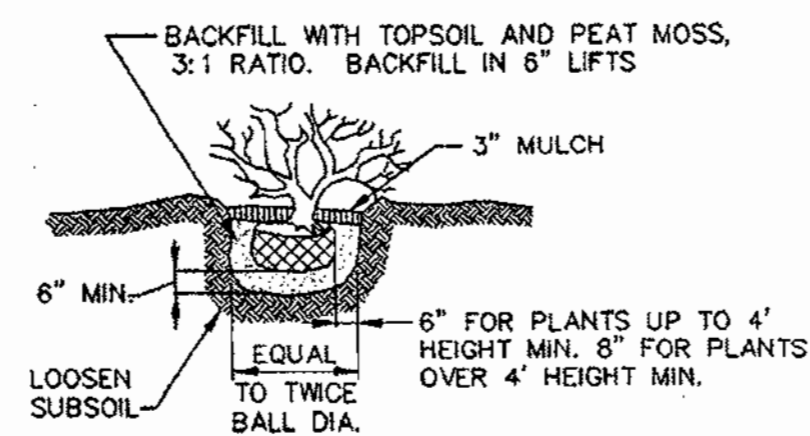
TREE PLANTING AND STAKING

DECIDUOUS TREES UP TO 2-1/2" CALIPER NOT TO SCALE



TYPICAL EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE



SHRUB PLANTING DETAIL

NOT TO SCALE

SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES
Landscape Type	E	C
Linear Feet of Roadway Frontage/Perimeter	249	866
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	NO	NO
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	YES (1)	NO
Number of Plants Required		
Shade Trees	6	22
Evergreen Trees	0	43
Shrubs	62 (1)	0
Number of Plants Provided		
Shade Trees	6	0 (SUBST)
Evergreen Trees	0	89
Other Trees (2:1 substitution)	0	0
Shrubs (10:1 substitution)	0	0
(Describe plant substitution credits below if needed)	(BERM IN LIEU OF SHRUBS) (1)	SEE (2)

(1) FRONTAGE BERM PROPOSED IN LIEU OF SHRUBS REQUIRED FOR TYPE E LANDSCAPE EDGE

Comments (2) ADDITIONAL EVERGREEN TREES PROVIDED IN LIEU OF SHADE TREES

BASED ON 2 : 1 SUBSTITUTION ALLOWANCE.

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING

Number of Parking Spaces	34
Number of Trees Required	2
Number of Trees Provided	
Shade Trees	3
Other Trees (2:1 substitution)	0
NUMBER OF ISLANDS REQUIRED 1 : 20	2
NUMBER OF ISLANDS PROVIDED	2

LANDSCAPE SCHEDULE

KEY	QUANTITY	BOTANICAL NAME/Common Name	SIZE	REMARKS
SHADE TREES				
Tc	4	TILIA CORDATA 'GREENSPIRE'/GREENSPIRE LITTLELEAF LINDEN	2 1/2"-3" CAL	B&B
Ac	1	ACER RUBRUM 'RED SUNSET'/PED SUNSET RED MAPLE	2 1/2"-3" CAL	B&B
LS	6	LIQUIDAMBAR STYRACIFLUA/AMERICAN SWEETGUM	2 1/2"-3" CAL	B&B
EVERGREEN TREES				
Cl	34	CUPRESSOCYPARIS LEYLANDI/LEYLAND CYPRESS	5'-6" HT	B&B
Io	11	ILEX OPACA/AMERICAN HOLLY	6'-8" HT	B&B
Pa	14	PICEA ABIES/NORWAY SPRUCE	6'-8" HT	B&B
Ps	35	PINUS STROBUS/EASTERN WHITE PINE	6'-8" HT	B&B
SHRUBS				
Ar	4	AZALEA 'HERSHET RED'/HERSHEY RED AZALEA	18"-24" SP	3 GAL
Jc	18	JUNIPERUS CHINENSIS /SEA GREEN	18"-24" SP	3 GAL
Rc	12	RHODODENDRON CATAWBIENSE ALBUM/WHITE CATAWBA RHODODENDRON	2'-2 1/2' HT	B&B



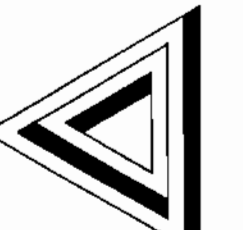
TRI-TEK ENGINEERING
 CIVIL • ENVIRONMENTAL • LAND PLANNING • SURVEYING
 a professional corporation
 690 Center Street, Suite 300
 Herndon, Virginia 20170-5018 (703) 481-5900

OWNER:	NO	REVISION	DATE
VIRGIL L. AND IDOLINE L. LOUGH 12635 EMORY FARM LANE SYKESVILLE, MARYLAND 21784 (D.B. 470 @ F. 274)			

DEVELOPER:
 CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 4201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Director: *[Signature]* 4/2/00 DATE
 Chief, Division of Land Development: *[Signature]* 4/1/00 DATE
 Chief, Development Engineering Division: *[Signature]* 4/25/00 DATE

ADDRESS CHART
PARCEL NO. 753 STREET ADDRESS 4895 MONTGOMERY ROAD
SUBDIVISION NAME SECTION AREA PARCEL NUMBER
GARRIAN ACRES N/A LOT 4 / P. 753
PLAT NO./BLOCK NO. 14348/8 ZONE R-20 TAX ZONE ELECT. DIST. CENSUS TR. 31 2ND 6027
WATER CODE: 601 SEWER CODE: 5750671

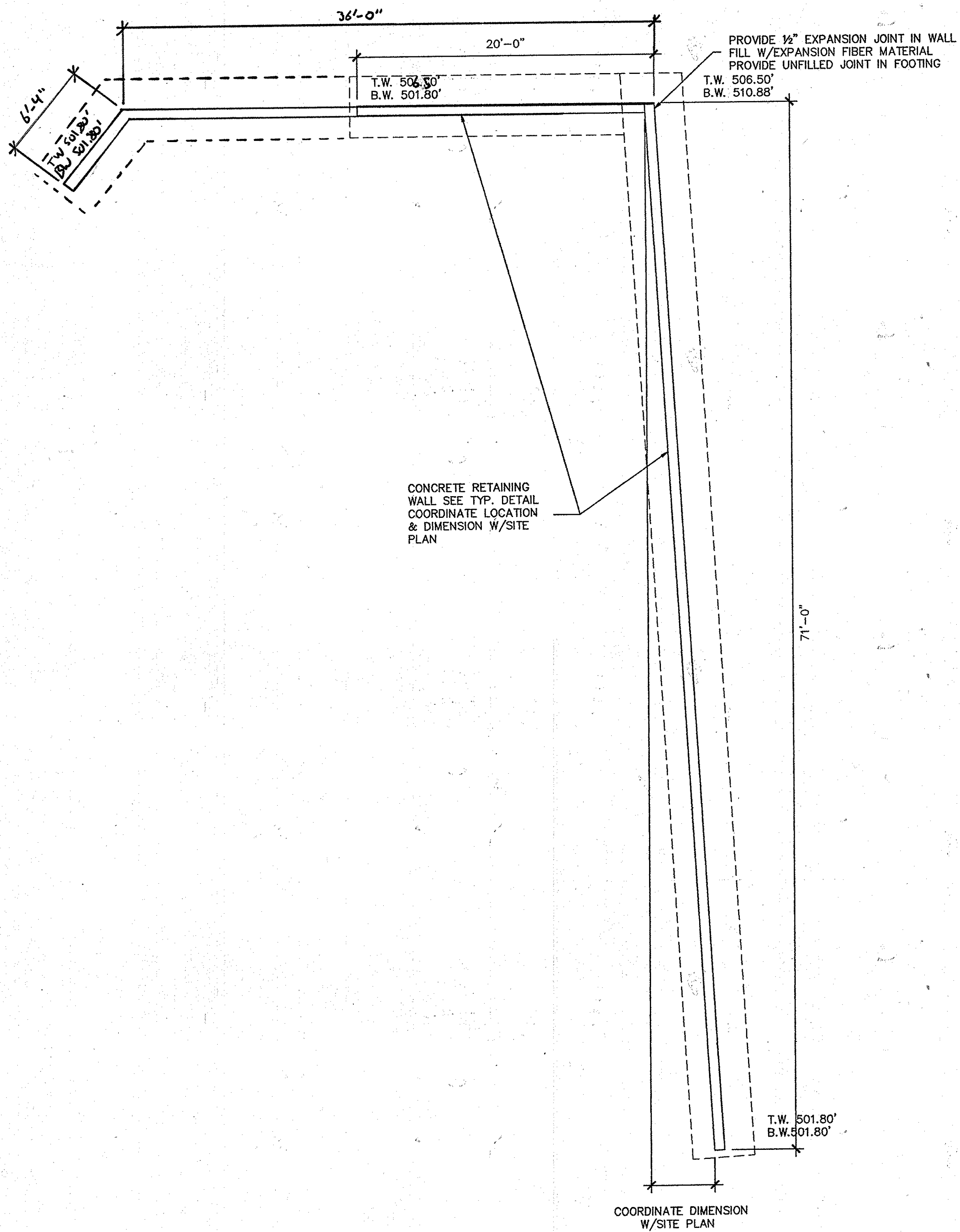


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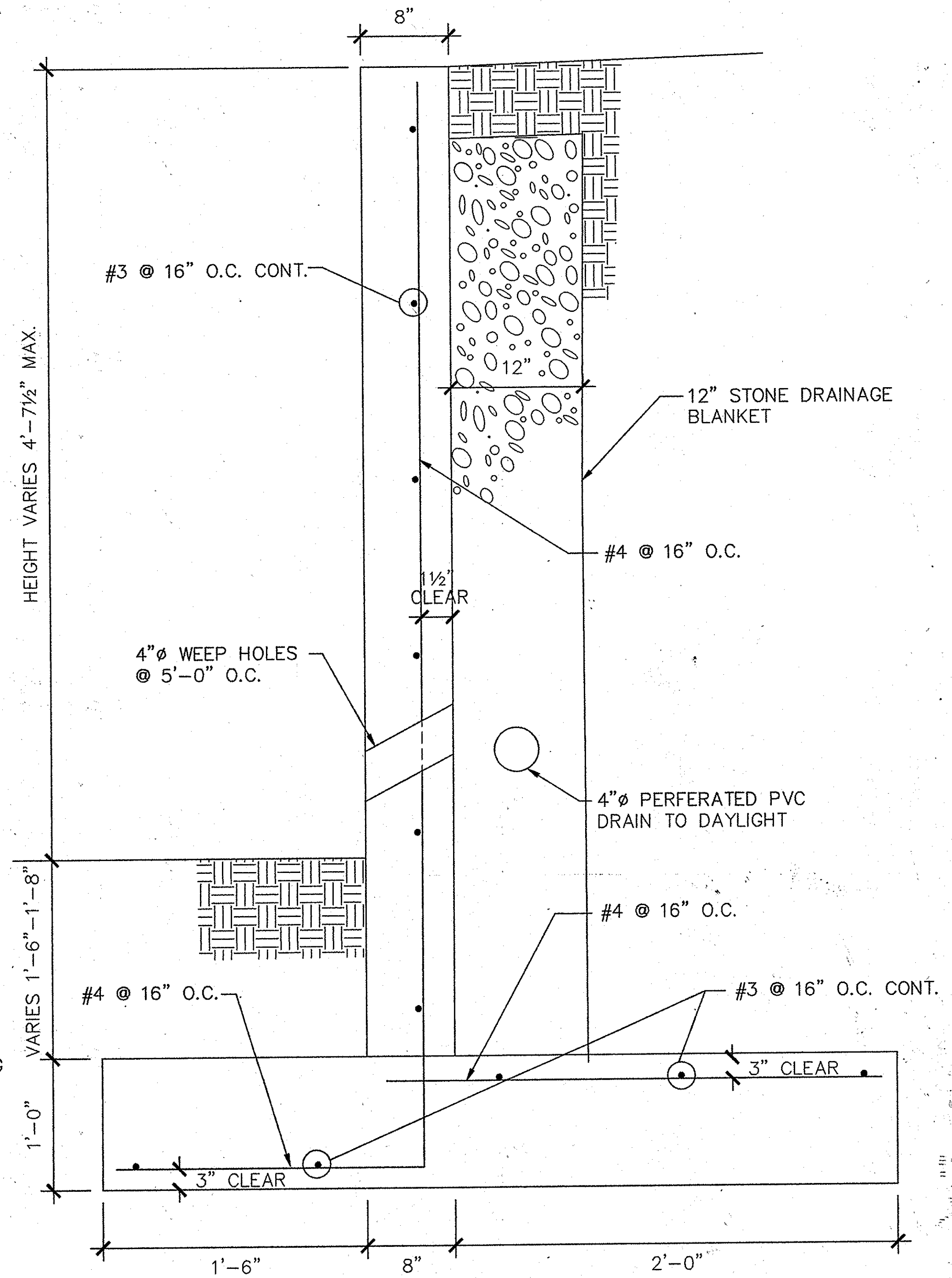
CHILDTIME CHILDCARE CENTER
 TAX MAP 31 - PARCEL 753
 HOWARD COUNTY, MARYLAND
 SECOND ELECTION DISTRICT

LANDSCAPE NOTES AND
 DETAILS

SCALE: AS SHOWN
 DATE: 05.25.00
 DRN: GMC
 CKD: KEM
 SHEET 14 OF 20



RETAINING WALL PLAN
SCALE 3/16"=1'-0"



RETAINING WALL SECTION
NOT TO SCALE

3. ADDED BY JERRY FOSTER, FOSTER ENGINEERING

OWNER:
VIRGIL L. AND IDOLINE L. LOUGH
12635 EMORY FARM LANE
SYKESVILLE, MARYLAND 21784
(D.B. 470 @ F. 274)

NO	REVISION	DATE
3	EXTEND POWER CONC WALL AND CANOPY STRUCTURE 4'-8"	9/2/15

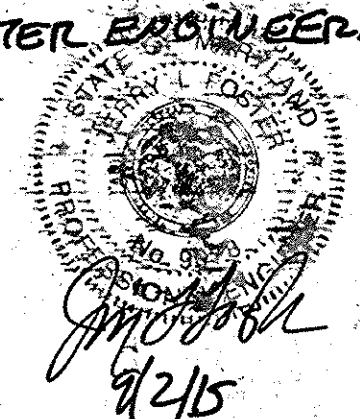
DEVELOPER:
CHILDTIME, INC.
c/o BRITT CONSTRUCTION, INC.
4201 PLEASANT VALLEY ROAD
CHANTILLY, VIRGINIA 20151

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
DATE: 11/2/10
DIRECTOR: [Signature]
DATE: 11/1/10
CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature]
DATE: 10/25/10
CHIEF, DEVELOPMENT ENGINEERING DIVISION: [Signature]

ADDRESS CHART				
PARCEL NO.	STREET ADDRESS			
753	4895 MONTGOMERY ROAD			
SUBDIVISION NAME				
GARRIAN ACRES	N/A			
LOT 4/P. 753				
PLAT NO./BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
14348	8	R-20	31	2ND 6027
WATER CODE: 601		SEWER CODE: 5750871		

- GENERAL NOTES:**
1. Use 28 day concrete strength $f'c=3500$ psi
 2. Use grade 60 reinforcing steel
 3. The foundation soil must be examined by a geotechnical engineer to assure that the actual foundation soil strength meets or exceeds assumed designed strengths

CONSTRUCTION OF ALL RETAINING WALLS SHALL BE PERFORMED UNDER THE OBSERVATION OF A MARYLAND LICENSED PROFESSIONAL ENGINEER



CONSULTING STRUCTURAL ENGINEERS
11110 ELDEN STREET, SUITE 204
HERNDON, VA 20170
703.904.0651 • FAX 703.904.0652

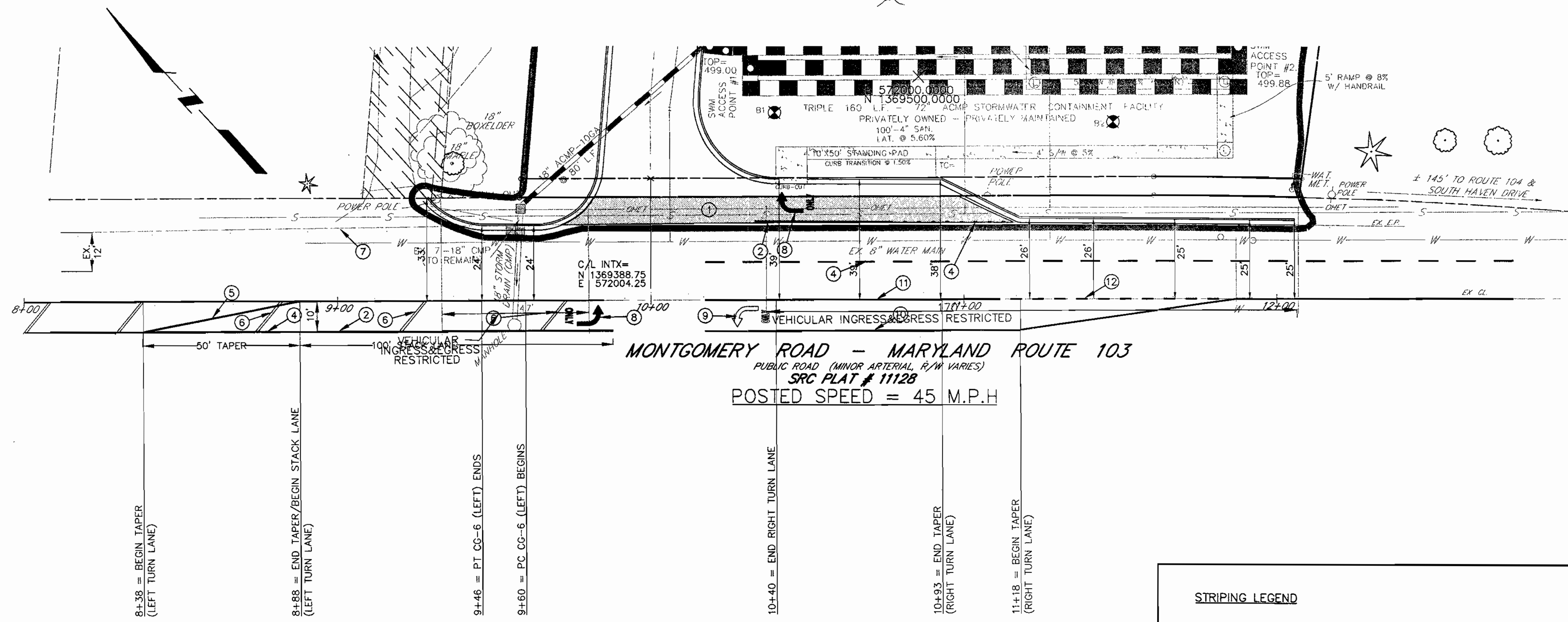
GOUGHNOUR
ENGINEERING, PC

CHILDTIME CHILDCARE CENTER
HOWARD COUNTY, MARYLAND

DRAWING LEGEND
RETAINING WALL SECTION
AND NOTES

SCALE AS SHOWN	DATE 3 APRIL 00	DRAWN BY SDG	CHECKED BY SDG	PROJECT # 00004
----------------	-----------------	--------------	----------------	-----------------





MONTGOMERY ROAD - MARYLAND ROUTE 103
 PUBLIC ROAD (MINOR ARTERIAL, R/W VARIES)
 SRC PLAT # 11128
 POSTED SPEED = 45 M.P.H

STRIPING LEGEND	
	1 PROP. PAVEMENT SECTION IN R/W
	2 PROP. SOLID WHITE STRIPING (4" DOUBLE LINES)
	3 PROP. "PUPPY TRACK" WHITE STRIP (4" (NOT APPLICABLE))
	4 PROP. DASHED WHITE STRIPING (4" DOUBLE LINES)
	5 PROP. YELLOW TAPER CONNECTION (4")
	6 EX. YELLOW MEDIAN STRIPING (4") - TO BE REMOVED
	7 EX. WHITE E.P. STRIPING (4")
	8 PROP. DIRECTIONAL ARROW
	9 EX. DIRECTIONAL ARROW
	10 EX. YELLOW SOLID STRIPING (4" DOUBLE LINES)
	11 EX. WHITE SOLID LINE STRIPING (4")
	12 EX. WHITE DASHED STRIP (4")

TAPER LENGTH NOTE (LEFT TURN LANE):

PER THE M.U.T.C.D. TAPER LENGTH (L) REQUIRED FOR TRAVELWAY (W) = 10', POSTED SPEED (S) = 45 M.P.H.:

$L = W \times S = 10 \times (45 \times 0.85)$
 $L = 380'$, NOT AVAILABLE @ SITE FRONTAGE.

SINCE ANTICIPATED TRAFFIC VOLUME TO DAYCARE CENTER IS LESS THAN TRAFFIC VOLUME TO SHOPPING CENTER ACROSS THE STREET, USE SAME TAPER AND STACK LENGTH AS SHOWN FOR THE EXISTING RIGHT TURN LANE:

LTAPER = 50'
 LSTACK = 100'

PAVING STRIPING NOTES

- DESCRIPTION:
 - PAVEMENT MARKINGS AND LINE STRIPING SHALL CONSIST OF PAINT APPLICATION. SEE EXCEPTIONS ON NOTE #4(A).
- CONSTRUCTION DETAILS:
 - STRIPING
 - GENERAL
 - ALL FINAL, INTERIM AND TEMPORARY MARKINGS AND PATTERNS SHALL BE PLACED AS SHOWN ON THE DRAWINGS AND DETAILS, AND PER THE MOST CURRENT M.U.T.C.D.
 - BEFORE ANY FINAL PAVEMENT MARKING WORK IS BEGUN, A SCHEDULE OF OPERATIONS SHALL BE SUBMITTED FOR THE APPROVAL OF THE OWNER'S FIELD REPRESENTATIVE.
 - EXISTING MARKINGS SHALL BE REMOVED BY GRINDING ON CONCRETE OR GRINDING OR SLURRY SEAL COAT ON ASPHALT.
 - THE STRIPING SHALL BE APPLIED ONLY ON THOROUGHLY DRY PAVEMENT SURFACES. WHEN THE ATMOSPHERIC TEMPERATURE IS AT OR ABOVE 60°F FOR PLASTIC STRIPING AND MARKINGS AND 40°F FOR PAINT STRIPING AND MARKINGS, AND WHEN THE WEATHER IS OTHERWISE UNFAVORABLE.
 - APPLICATION OF PAVEMENT MARKINGS
 - PAINTED PAVEMENT MARKINGS SHALL, UNLESS OTHERWISE NOTED HEREIN, BE APPLIED WITH ATOMIZING SPRAY TYPE STRIPING MACHINES. THE EQUIPMENT SHALL BE COMPATIBLE WITH AND SUITABLE FOR THE APPLICATION OF THE TYPE OF PAINT BEING USED AND SHALL HAVE CLEAN-CUT EDGES. TRUE AND SMOOTH ALIGNMENT AND UNIFORM FILM THICKNESS OF 15±1 MILS.
 - NORMAL SPREADING RATES FOR PAVEMENT MARKING PAINTS SHALL BE FROM 100 TO 115 SQUARE FEET PER GALLON SO AS TO OBTAIN A WET FILM THICKNESS OF 15±1 MILS.

3. STRIPING SCHEDULE

(A) REFER TO LEGEND.

4. MATERIALS

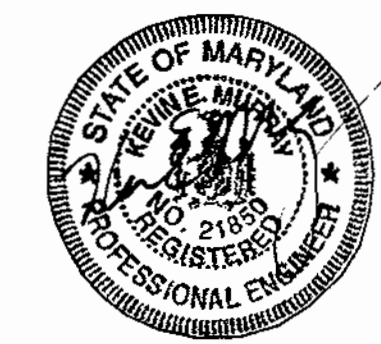
- PLASTIC PAVEMENT MARKINGS AND LEGENDS SHALL BE IN CONFORMANCE WITH MSHA PUBLICATION 480 SECTION 2.3.8.
- PAINT SHALL BE FORMULATED AND MANUFACTURED FROM FIRST-GRADE MATERIALS AND SHALL BE FREE FROM DEFECTS THAT MAY ADVERSELY AFFECT THE SERVICEABILITY OF THE FINISHED PRODUCT. WHEN THE PAINT IS STORED IN ITS CONTAINER, THE PIGMENTED BINDER SHALL NOT LIVER OR SETTLE OUT TO THE EXTENT THAT RE-MIXING IS DIFFICULT BY STANDARD METHODS OR THE APPLICATION IS DETRIMENTALLY AFFECTED.
- ALL PAINT FURNISHED MUST BE SHIPPED IN STRONG, SUBSTANTIAL AND PROPERLY SEALED CONTAINERS. FIVE GALLON STEEL PAILS SHALL HAVE FULL DIAMETER HUB COVER, WIRE BAIL AND HANDLE.
- PAINT SHALL BE SHERWIN-WILLIAMS TRAFFIC MARKING PAINT OR EQUAL AS APPROVED BY THE STATE HIGHWAY ADMINISTRATION AND CONFORMING TO THE MSHA PUBLICATION 480 SECTION 2.3.8.

NOTE:

ALL ROAD CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE HOWARD COUNTY ROADS AND BRIDGES MANUAL, VOLUME 3, AND THE LATEST ADOPTED EDITION OF THE M.S.H.A.

NOTE:

CENTERLINES INTERSECTION PROVIDED WITH ACTUAL COORDINATES, STATIONING IS ARBITRARY.



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OWNER:
VIRGIL L. AND IDOLINE L. LOUGH 12635 EMORY FARM LANE SYKESVILLE, MARYLAND 21784 (D.B. 470 & F. 274)

NO	REVISION	DATE

DEVELOPER:
 CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 4201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Director: *[Signature]* 11/2/00 DATE
 Chief: *[Signature]* 11/1/00 DATE
 Chief: *[Signature]* 10/25/00 DATE

ADDRESS CHART			
PARCEL NO.	STREET ADDRESS		
753	4895 MONTGOMERY ROAD		
SUBDIVISION NAME	SECTION	AREA	PARCEL NUMBER
GARRIAN ACRES	N/A		LOT 4/P. 753
PLAY NO. BLOCK NO. ZONE TAX ZONE ELECT. DIST. CENSUS TR.	14348 8 R-20 31 2ND 6027		
WATER CODE: 00	SCHEM CODE: 6750671		

SCALE: 1"=20'
 DATE: 05.25.00
 DRN: ALLEN
 CKD: KEM
 SHEET 16 OF 20

TRI-TEK ENGINEERING
 CIVIL • ENVIRONMENTAL • LAND PLANNING • SURVEYING
 a professional corporation
 690 Center Street, Suite 300
 Herndon, Virginia 20170-5018 (703) 481-5900

CHILDTIME CHILDCARE CENTER
TAX MAP 31 - PARCEL 753

STRIPING PLAN

**SOIL CONSERVATION SERVICE
MARYLAND
STANDARDS AND SPECIFICATIONS**

**POND
CODE 378
(Repealed by Mo.)**

DEFINITION

A water impoundment made by constructing a dam or an embankment by excavating a pit or dugout.

Ponds constructed by the first method are referred to as embankment ponds, and those constructed by the second method are referred to as excavated ponds. Ponds constructed by both excavation and embankment are classified as embankment ponds if the depth of water impounded against the embankment at principal spillway storm design high water elevation is 3 feet or more.

This 3 feet shall be measured from the low point on the upstream toe of the embankment to the design high water.

SCOPE

This standard establishes the minimum acceptable quality for the design and construction of ponds if:

1. Failure of the dam will not result in loss of life, in damage to homes, commercial or industrial buildings, main highways, or railroads; or interruption of the use or service of public utilities.
2. The product of the storage times the effective height of the dam is less than 3,000. Storage is the volume, in acre-feet, in the reservoir above the elevation of the crest of the emergency spillway. The effective height of the dam is the difference in elevation, in feet, between the emergency spillway crest and the lowest point in the cross section taken along the centerline of the dam. If there is no emergency spillway, the top of the dam becomes the upper limit for determining the storage and the effective height.

Drainage Area - The drainage area above the pond must be protected against erosion to the extent that expected sedimentation will not shorten the planned effective life of the structure.

For ponds whose primary purpose is to trap sediment for water quality, adequate storage should be provided to trap the projected sediment delivery from the drainage area for the life of the pond.

The drainage area for wet ponds should be at least 4 acres for each acre-foot of storage. These recommendations may be reduced if a dependable source of ground water or diverted surface water contributes to the pond. The water quality shall be suitable for its intended use.

Soils Investigation - A soils investigation is required on all ponds. As a minimum it shall include information along the centerline of the proposed dam, in the emergency spillway location, and the planned borrow area. The type of equipment used and the extent of the investigation will vary from site to site. All investigations shall be logged using the Unified Soil Classification System.

Road Embankments - Where road embankments are being designed to impound a specific volume of water, either as a permanent pool or temporary stormwater storage, special design and evaluation criteria may be required as determined by the approving agency.

PLANNING CONSIDERATIONS

Water Quantity - The following items should be considered for water quantity:

1. Effects upon components of the water budget, especially effects on volumes and rates of runoff, infiltration, evaporation, transpiration, deep percolation, and ground water recharge.
2. Variability of effects caused by seasonal or climatic changes.
3. Effects on the downstream flows or aquifers that could affect other water uses or users.
4. Potential for multiple use.
5. Effects on the volume of downstream flow to prohibit undesirable environmental, social or economic effects.

3. For dams in rural areas, the effective height of the dam (as defined above) is 35 feet or less and the dam is hazard class (a). For dams in urban areas, the effective height of the dam is 20 feet or less and the dam is hazard class (a).

PURPOSE

To provide water for livestock, fish and wildlife, recreation, fire control, crop and orchard spraying, and other related uses, and to maintain or improve water quality. This standard also applies to stormwater management ponds.

CONDITIONS WHERE PRACTICE APPLIES

General - This practice applies where it is determined that stormwater management, water supply, or temporary storage is justified and it is feasible and practicable to build a pond which will meet local and state law requirements.

Ponds exceeding the above scope shall be designed and constructed according to the requirements of Technical Release 80.

This standard does not apply to small urban stormwater management quality or quantity class "a" structures where the following exists:

1. Ponds or storm drain outfall structures having less than three (3) feet of embankment at maximum storage. The height of the embankment shall be measured from the lowest point of excavation to the top of dam through a cross section of the dam centerline, or
2. The maximum storage at emergency spillway design high water elevation according to Table 1 does not exceed 10,000 cubic feet, and the height of the embankment is 5 feet or less.

1. Ponds or storm drain outfall structures having less than three (3) feet of embankment at maximum storage. The height of the embankment shall be measured from the lowest point of excavation to the top of dam through a cross section of the dam centerline, or
2. The maximum storage at emergency spillway design high water elevation according to Table 1 does not exceed 10,000 cubic feet, and the height of the embankment is 5 feet or less.

The review and approval of such class "a" structures shall be based on sound engineering judgment assuring a stable outfall for the ten (10) year storm event.

Site Conditions - Site conditions shall be such that runoff from the design storm can be safely passed through: (1) a natural or constructed emergency spillway, (2) a combination of a principal spillway and an emergency spillway, or (3) a principal spillway.

Water Quality - The following items should be considered for water quality:

1. Effects on erosion and the movement of sediment, pathogens, and soluble and sediment attached substances that are carried by runoff.
2. Effects on the visual quality of on site and downstream water resources.
3. Short-term and construction-related effects of this practice on the quality of downstream water courses.
4. Effects of water level control on the temperatures of downstream waters to prevent undesired effects on aquatic and wildlife communities.
5. Effects on wetlands and water-related wildlife habitats.
6. Effects of water levels on soil nutrient processes such as plant nitrogen use or denitrification.
7. Effects of soil water level control on the salinity of soils, soil water, or downstream water.
8. Potential for earth moving to uncover or redistribute toxic materials such as saline soils.

Operation and Maintenance - An operation and maintenance plan will be prepared for all ponds. As a minimum, the dam inspection checklist located in Appendix A shall be included as part of the operation and maintenance plan and performed at least annually.

DESIGN CRITERIA

Embankment Ponds

Structure Classification - Documentation of the classification of dams is required. Documentation is to include but is not limited to location and description of dam, configuration of the valley, description of existing development (houses, utilities, highways, railroads, farm or commercial buildings, and other pertinent improvements), potential for future development, and recommended classification. It is also to include results obtained from breach routings, if breach routings are used as part of the classification process. The class ("a", "b", and "c") as contained in this document is related to the potential hazard to life and property that might result from a sudden major

breach of the earth embankment. Structure classification and land use for runoff determination must take into consideration the anticipated changes in land use throughout the expected life of the structure. The classification of a dam is the responsibility of the designer, and subject to review and concurrence of the approving authority.

The classification of a dam is determined only by the potential hazard from failure, not by the criteria. Classification factors in the National Engineering Manual, as supplemented, are given below:

Class "a" - Structures located in rural, agricultural or urban areas dedicated to remain in flood tolerant usages where failure may damage non-inhabited buildings, agricultural land, floodplains or county roads.

Class "b" - Structures located in rural, agricultural, or urban areas where failure may damage isolated homes, main highways or minor railroads or cause interruption of use or service of relatively important public utilities.

Class "c" - Structures located where failure may cause loss of life or serious damage to homes, industrial and commercial buildings, important public utilities, main highways, or railroads.

"Rural areas" is defined as those areas in which residents live on farms, in unincorporated settlements, or in incorporated villages or small towns; where agriculture, including woodland activities, and extractive industries, including seafood harvesting, provides the primary employment base for residents; and where such enterprises are dependent on local residents for labor.

Non-rural areas shall be classified as urban.

Peak Breach Discharge Criteria - Breach routings are used to help delineate the area potentially impacted by inundation should a dam fail and can be used to aid dam classification. The breach hydrograph is the outflow hydrograph attributed to the sudden release of water in reservoir storage due to a dam breach during non-storm conditions.

Stream routings made of the breach hydrograph are

downstream slope; or (4) if special conditions require drainage to insure a stable dam. The phreatic line shall be drawn on a 4:1 slope starting on the inside slope at the normal pool elevation. For stormwater management ponds, it should start at the 10 year water surface elevation.

Seepage may be controlled by: (1) foundation abutment or embankment drains; (2) reservoir blanketing; or (3) a combination of these measures. Seepage encountered in the cutoff trench during construction may be controlled by foundation drains. These drains must be located downstream of the dam centerline and outside the limits of the proposed cutoff trench.

Hydrology - Principal and emergency spillways will be designed within the limitations shown on TABLE 1. Storm duration used shall be 24 hours except where TR-60 is specified.

Earth Embankment

Top Width - The minimum top width of the dam is shown in Table 2. When the embankment top is to be used as a public road, the minimum width is to be 16 feet for one-way and 26 feet for two-way traffic. If the embankment is to be used for infrequent vehicle crossings, the minimum top width shall be 10 feet. Guardrails or other safety measures are to be used where necessary and are to meet the requirements of the responsible road authority.

Side Slopes - The combined upstream and downstream side slopes of the settled embankment shall not be less than five horizontal to one vertical (5:1) with neither slope steeper than 2:1. Slopes must be designed to be stable in all cases, even if flatter side slopes are required.

Wave Erosion Protection - Where needed to protect the face of the dam, special wave protection measures such as a bench, rock riprap, sand-gravel, soil cement or special vegetation shall be provided. (Reference Technical Releases 56 & 65)

Freeboard - The top elevation of the settled embankment shall be determined in accordance with minimum criteria established in Table 1. The minimum difference in elevation between the crest of the emergency spillway and the settled top of dam shall be 2.0 feet.

Allowance for Settlement - The design height of the dam shall be increased by the amount needed to

be based upon topographic data and hydraulic methodologies mutually consistent in their accuracy and commensurate with the risk being evaluated.

The minimum peak discharge of the breach hydrograph, regardless of the techniques used to analyze the downstream inundation area, is as follows:

$$Q_{max} = 3.2 H_{eff}^{2.33} \text{ where,}$$

$$Q_{max} = \text{the peak breach discharge, cfs.}$$

$$H_{eff} = \text{depth of water at the dam at the time of failure, feet. This is measured to the crest of the emergency spillway or to design high water, if no emergency spillway exists. Use "nonstorm" conditions downstream of the dam.}$$

Where breach analysis has indicated that only overtopping of downstream roads will occur, the following guidelines will be used:

Class	Depth of Flow (d), ft.
"a"	d ≤ 1.5
"b" & "c"	d > 1.5

Use and importance of the roadway shall be considered when making a classification.

Foundation Cutoff - A cutoff trench of relative impervious material shall be provided under the dam. The cutoff trench and impervious core within the embankment shall be located at or upstream from the centerline of the dam, and shall extend up the abutments to the 10 year water surface elevation. The impervious core shall extend from the cutoff trench up to the 10 year water surface elevation throughout the embankment.

The cutoff trench shall have a bottom width adequate to accommodate the equipment used for excavation, backfill and compaction operations, with the minimum width being 4 feet, and shall have side slopes no steeper than one horizontal to one vertical. Minimum depth shall be 4 feet.

Seepage Control - Seepage control is to be included: (1) if pervious layers are not intercepted by the cutoff; (2) if seepage from the abutments may create a wet embankment; (3) if the phreatic line intersects the

insure that the design top of fill elevation will be maintained after all settlement has taken place. This increase shall not be less than 10 percent, except where detailed soil testing and lab analyses indicate a lesser amount is adequate. Where a minimum required density is specified and compaction rollers are used, an increase of 5 percent will be acceptable.

Spillways - The pond shall be designed to safely pass the base flow along with volume and peak rates of runoff from design storms, specified in Table 1. All storm water management ponds shall be designed using urban criteria. This can be done by using principal and emergency spillways. The following shall be used to determine runoff rates and volumes:

1. SCS "Engineering Field Manual" or;
2. SCS, NEH, Section 4, "Hydrology" or;
3. SCS, TR-55, "Urban Hydrology for Small Watersheds" or;
4. SCS, TR-20, "Computer Program for Project Formulation."

If cuts in an existing fill are required for the re-habilitation of an existing pond spillway, the slope of the bonding surfaces between the embankment in place and the fill to be placed shall not be steeper than a ratio of two horizontal to one vertical.

Principal Spillway

Capacity - A conduit, with needed appurtenances, shall be placed under or through the dam, except where a weir type structure is used. The minimum capacity of the principal spillway shall be that required in Table 1.

Crest Elevation of Inlet - The crest elevation of the principal spillway shall be no less than 1.0 foot below the crest of the emergency spillway.

The inlet or riser size for pipe drops shall be such that the flow through the structure goes from weir-flow control to pipe-flow control without going into orifice-flow control in the riser. The inlets and outlets shall be designed and analyzed to function satisfactorily for the full range of flow and hydraulic head anticipated.

The riser shall be analyzed for flotation assuming all orifices and pipes are plugged. The factor of safety against flotation shall be 1.2 or greater.

Pipe Conduits - Pipe conduits under or through the dam shall meet the following requirements:

1. All pipes shall be circular in cross section except for cast-in-place reinforced concrete box culverts.
2. Pipes shall be capable of withstanding the external loading without yielding, buckling, or cracking.
3. Pipe strength is to be not less than those shown on Tables 3, 4 and 5 for corrugated steel, aluminum, and PVC pipes and the applicable ASTM's for other materials.
4. Where inlet or outlet flared sections are used, they shall be made from materials compatible with the pipe.
5. All pipe joints shall be made watertight by the use of flange with gaskets, coupling bands with gaskets, bell and spigot ends with gaskets, or by welding. See Construction Specifications for details.
6. The joints between sections of pipe shall be designed to remain watertight after joint rotation and elongation caused by foundation consolidation.

The capacity of the pipe conduit shall be adequate to discharge long duration, continuous or frequent flows without flow through the emergency spillway. The diameter of the pipe shall be not less than 6 inches.

For dams 20 feet or less in effective height, the following pipe materials are acceptable: cast-iron, steel, corrugated steel or aluminum, concrete with rubber gaskets, plastic, and cast-in-place reinforced concrete box culverts. Plastic pipe that will be exposed to direct sunlight should be made of ultraviolet resistant materials and protected by coating or shading. Connections of pipe to less flexible pipe or structures must be designed to avoid stress concentrations that could rupture the pipe.

For dams over 20 feet in effective height, conduits are to be reinforced concrete pipe, cast-in-place reinforced concrete box culverts, corrugated steel, welded steel or aluminum pipe. The maximum height of fill over any principal spillway steel, aluminum, or plastic pipe must not exceed 25 feet.

Concrete pipe shall have concrete bedding or a concrete cradle for strength considerations. Minimum bedding

collar spacing shall be 5 times the minimum projection.

4. Anti-seep collars should be placed within the saturated zone, in cases where the spacing limit will not allow this, at least one collar will be in the saturated zone.
5. All anti-seep collars and their connections to the conduit shall be watertight and made of material compatible with the conduit.
6. Collar dimensions shall extend a minimum of 2 feet in all directions around the pipe.
7. Anti-seep collars shall be placed a minimum of two feet from pipe joints except where flanged joints are used.

Filter and drainage diaphragms shall be designed in accordance with procedures from SCS TR-60, Earth Dams and Reservoirs, Section 6, Principal Spillways.

Filter and drainage diaphragms are recommended when the following conditions are encountered:

1. The pond requires design according to TR-60.
2. Embankment soils with a high piping potential such as Unified Classes GM, SM, ML.

When a drainage diaphragm is used, the design and inspection will be supervised by a registered professional engineer.

Anti-vortex Devices - Drop inlet spillways are to have adequate anti-vortex devices. An anti-vortex device is not required if weir control is maintained in the riser through all flow stages.

Trash Racks - All pipe and inlet structures shall have a trash rack. Openings for trash racks shall be no larger than 1/2 of the barrel conduit diameter, but in no case less than 6 inches.

Flat grates for trash racks are not acceptable. Inlet structures that have flow over the top shall have a non-clogging trash rack such as a hood-type inlet which allows passage of water from underneath the trash rack into the riser.

For inlet structures with solid covered tops, the bottom

shall extend up the side of the pipe at least 10% of its outside diameter with minimum thickness of 3". Cantilever outlet sections, if used, shall be designed to withstand the cantilever load. Pipe supports shall be provided when needed. Other suitable devices such as plunge basin, stilling basin, impact basin, or rock riprap spreader should be used to provide a safe outlet. Cathodic protection is to be provided for welded steel and corrugated steel pipe where the need and importance of the structure warrant. Cathodic protection should normally be provided for corrugated steel pipe where the saturated soil resistivity is less than 4,000 ohm-cm or the pH is lower than 9. The National Handbook of Conservation Practices, Standard 430-FF provides criteria for cathodic protection of welded steel pipe.

Multiple Conduits - Where multiple conduits are used, there shall be sufficient space between the conduits and the installed anti-seep collars to allow for backfill material to be placed between the conduits by the earth moving equipment and for easy access by hand operated compaction equipment. This distance between conduits shall be equal to or greater than half the pipe diameter but not less than 2 feet.

Conduit Piping and Seepage Control - Seepage along pipe conduit spillways extending through the embankment shall be controlled by use of (1) anti-seep collars, or (2) filter and drainage diaphragm. Seepage control will not be required on pipes less than 6 inches in diameter.

Anti-seep collars shall be installed around all conduits through earth fills according to the following criteria:

1. Sufficient collars shall be placed to increase the seepage length along the conduit by a minimum of 15 percent of the pipe length located within the saturation zone.
2. The assumed normal saturation zone shall be determined by projecting a line at a slope of (4) horizontal to (1) vertical from the point where the normal water meets the upstream slope to a point where this line intersects the invert of the pipe conduit. For Stormwater Management ponds, the phreatic line starting elevation shall be the 10 year water elevation.
3. Maximum collar spacing shall be 14 times the minimum projection above the pipe. The minimum

of the cover slab must be set at an elevation to prevent orifice flow control before pipe flow control governs:

Low stage releases, where the diameter of the pipe is 12 inches or larger, shall have non-clogging trash rack with openings no larger than half the low flow dimension.

Drain Pipe - A pipe with a suitable valve shall be provided to drain the pool area, where needed for proper pond management. The principal spillway conduit may serve as a pond drain, when so located, to accomplish this function.

Water Supply Pipes or Utilities - Such pipes through the dam shall have an inside diameter of not less than 1-1/4 inches and meet all principal spillway requirements.

Emergency Spillway

Emergency spillways are provided to convey large flood flows safely past earth embankments. An emergency spillway must be provided for each dam, unless the principal spillway is large enough to pass the routed design hydrograph peak discharge and any trash without overtopping the dam. The only design that may be utilized without an emergency spillway is a principal spillway with a cross-sectional area of 9 square feet or more; an inlet that will not clog, such as a hood-type inlet which allows passage of water from underneath the trash rack into the riser; and an elbow designed to facilitate the passage of trash.

Capacity - The minimum capacity of emergency spillways shall be that required to pass the peak flow expected from a design storm of the frequency and duration shown in Table 1 less any reduction creditable to conduit discharge and detention storage.

The emergency spillway shall: (1) safely pass the storm design peak or (2) the storm runoff shall be routed through the reservoir. The routing shall start with the water surface at the elevation of the crest of the principal spillway, or at the water surface after 10 days drawdown, whichever is higher. The 10-day drawdown shall be computed from the crest of the emergency spillway or from the elevation that would be attained had the entire design storm been impounded, whichever is lower. Emergency spillways are to provide for passage of the design flow at a non-erosive velocity to point downstream where the dam will not be endangered.

Component Parts - Earth spillways are open channels and usually consist of an inlet channel, level section, and an exit channel.

Crest Section - Excavated earth spillways shall be trapezoidal and shall be located in undisturbed earth. The side slopes to be constructed for the material in which the spillway is to be stable, but not steeper than 2:1. The emergency spillway shall have a bottom width of not less than 8 feet.

The inlet channel may be curved to fit existing topography, however, it should be flared to allow unrestricted flow to the level section. The level section should be located as near the centerline of dam as possible. The level section shall be 25 feet in length, and may be rectangular or square.

Exit channel centerline shall be perpendicular to the level section downstream edge and must be straight for a distance beyond the downstream toe, so that discharges will not reach the earth embankment. The grade of the exit channel shall fall within the range established by discharge requirement and permissible velocities.

The crest of any "token" spillway will be located at or above the 100 year storm elevation in undisturbed earth and have a minimum depth of one foot and bottom width of 8 feet.

Permissible Velocities - Earth spillways shall be designed for non-erosive velocities through the control section and to a point downstream where the dam will not be endangered. The maximum permissible velocity for the grass or grass mixture to be used shall be selected from Table 6. Velocities exceeding these values will require use of linings other than vegetation.

Infiltration Basins - Ponds, either excavated or embankment, that are designed solely for infiltration will have an emergency spillway. The capacity of the spillway will be determined by one of the following procedures:

1. Pass the 10 Year Peak Storm plus one foot of freeboard to the top of dam elevation or;
2. Pass the routed 100 Year Storm to the top of dam elevation. Routing will begin at the emergency spillway crest.

Structural Emergency Spillways

Chutes or drops, when used for principal spillways or principal-emergency or emergency spillways, shall be designed in accordance with the principles set forth in the Engineering Field Manual; National Engineering Handbook, Section 5 "Hydraulics"; Section 11 "Drop Spillways"; and Section 14 "Chute Spillways". The minimum capacity of a structural spillway shall be that required to pass the peak flow expected from a design storm of the frequency and duration shown in Table 1 less any reduction creditable to conduit discharge and detention storage.

Visual Resource Design

The visual design of ponds shall be carefully considered in areas of high public visibility and those associated with recreation. The underlying criterion for all visual design is appropriateness. The shape and form of ponds, excavated material, and plantings are to relate visually to their surroundings and to their functions.

The embankment may be shaped to blend with the natural topography. The edge of the pond should be shaped so that it is generally curvilinear rather than rectangular. Excavated material shall be shaped so that the final form is smooth, flowing, and fitting to the adjacent landscape rather than angular geometric mounds. If feasible, islands may be added for visual interest and to attract wildlife.

Trees and/or shrubs will not be allowed on the embankment.

Safety

Special considerations should be made for safety and access during the design of a pond. Measures to be considered may include fencing, slope benching, access roads, flattened side slopes, etc. When fencing a structure, the fence will be located so it will not interfere with the operation of the emergency spillway.

Reservoir Area

For most ponds, the topography of the site shall permit storage of water at a depth and volume that ensures a dependable supply, considering beneficial use, sedimentation, season of use, and



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OWNER: VIRGIL L. AND IDOLINE L. LOUGH 12635 EMORY FARM LANE SYKESVILLE, MARYLAND 21784 (D.B. 470 • F. 274)	NO	REVISION	DATE

DEVELOPER:

CHILDTIME, INC.
c/o BRITT CONSTRUCTION, INC.
4201 PLEASANT VALLEY ROAD
CHANTILLY, VIRGINIA 20151

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
John S. Smith 11/2/00
DIRECTOR DATE
Chris Hamilton 11/1/00
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
John Deane 10/25/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

ADDRESS CHART	
PARCEL NO. 753	STREET ADDRESS 4895 MONTGOMERY ROAD
SUBDIVISION NAME	SECTION AREA PARCEL NUMBER
GARRIAN ACRES	N/A LOT 4/P. 753
PLAT NO. BLOCK NO.	ZONE TAX ZONE ELECT. DIST. CENSUS TR.
143 48 8	R-20 31 2ND 6027
WATER CODE: 601	SEWER CODE: 5780671



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CHILDTIME CHILDCARE CENTER
TAX MAP 31 - PARCEL 753
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

MISCELLANEOUS NOTES
AND DETAILS

SCALE: AS SHOWN
DATE: 05.25.00
DRN: GMC
SHEET: KEM
CKED: 17. OF 20

evaporation and seepage losses. Soils in the reservoir shall be impervious enough to prevent seepage losses or shall be of a type that sealing is practical.

Excavation and shaping required to permit the reservoir area to suitably serve the planned purpose shall be included in the construction plans.

Reservoirs designed specifically for fish production or wildlife management shall follow design criteria in the standards and specifications for Fish Pond Management (MD-399) and Wildlife Wetland Habitat Management (MD-844), as appropriate.

Excavated Ponds

General - Excavated ponds that create a failure potential through a constructed embankment will be designed as embankment ponds. Excavated ponds that include a pipe or weir outlet control system for urban stormwater management shall be designed using the principal and emergency spillway hydrologic criteria for Embankment Ponds, Table 1.

Side Slopes - Side slopes of excavated ponds shall be such that they will be stable and shall not be steeper than 1 horizontal to 1 vertical. Flatter slopes are to be utilized where safety for children, livestock, watering, etc. is a design factor.

Perimeter Form - Where the structures are used for recreation or are located in high public view, the perimeter or edge should be shaped to a curvilinear form.

Inlet Protection - When the excavated pond is a bypass type and water is being diverted from a stream, the minimum size inlet line shall be a 4 inch diameter pipe. All state laws concerning water use and downstream rights shall be strictly adhered to.

Where surface water enters the pond in a natural or excavated channel, the side slope of the pond shall be protected against erosion.

Placement of Excavated Material - The material excavated from the pond shall be placed in one of the following ways so that its weight will not endanger the stability of the pond side slopes and where it will not be washed back into the pond by rainfall:

1. Uniformly spread to a height not exceeding 3 feet with the top graded to a continuous slope away from the pond;
2. Uniformly placed or shaped reasonably well with side slopes no steeper than 2 or 1. The excavated material will be placed at a distance equal to the depth of the pond, but not less than 12 feet from the edge of the pond;
3. Shaped to a designed form that blends visually with the landscape;
4. Used for low embankment and leveling; or
5. Hauled away.

Reservoir Area

For most ponds, the topography of the site shall permit storage of water at a depth and volume that ensure a dependable supply, considering beneficial use, sedimentation, season of use, and evaporation and seepage losses. Soils in the reservoir shall be impervious enough to prevent seepage losses or shall be of a type that sealing is practical.

Excavation and shaping required to permit the reservoir area to suitably serve the planned purpose shall be included in the construction plans.

Reservoirs designed specifically for fish production or wildlife management shall follow design criteria in the standards and specifications for Fish Pond Management (MD-399) and Wildlife Wetland Habitat Management (MD-844), as appropriate.

TABLE 2

Total Height of Embankment (Feet)	Minimum Top Width (Feet)
10 or less	6
11 - 14	8
15 - 19	10
20 - 24	12
25 - 34	14
35 or more	15

TABLE 3
MINIMUM GAUGES

CORRUGATED STEEL PIPE
2 - 2 1/2 inches X 1/2 inch Corrugations

Fill Height Over Pipe (Feet)	Pipe Diameter in inches				
	24 & Less	30	36	42	48
1 - 15	18	16	14	10	8
16 - 20	18	12	8	*	*
21 - 25	18	10	*	*	*

CORRUGATED STEEL PIPE
3 inch X 1 inch or 3 inch X 1 1/2 inch Corrugations

Fill Height Over Pipe (Feet)	Pipe Diameter (inches)					
	36	42	48	54	60	66
1 - 15	16	16	16	14	12	10
16 - 20	16	14	10	8	*	*
21 - 25	16	14	10	8	*	*

* Not Permitted.
Coatings for corrugated steel shall be as specified by the MD-378 Construction Specifications.

TABLE 4
MINIMUM GAUGES

CORRUGATED ALUMINUM PIPE
2 - 2 1/2 inches X 1/2 inch Corrugations

Fill Height Over Pipe (Feet)	Pipe Diameter in inches			
	21 & Less	24	30	36
1 - 15	18	14	10	8
16 - 20	12	10	*	*
21 - 25	10	*	*	*

CORRUGATED ALUMINUM PIPE
3 inch X 1 inch Corrugations

Fill Height Over Pipe (Feet)	Pipe Diameter in inches					
	30	36	42	48	54	60
1 - 15	18	18	14	10	8	6
16 - 20	16	12	8	*	*	*
21 - 25	12	8	*	*	*	*

* Not Permitted.

Tables 3 and 4 were developed using the modified Spangler equation. Sizes other than those shown above are not permitted.

SPECIFICATIONS

These specifications are appropriate to all ponds within the scope of the Standard for practice MD-378. All references to ASTM and AASHTO specifications apply to the most recent version.

Site Preparation

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 50 foot radius around the inlet structure shall be cleared.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

Earth Fill

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Fill material for the center of the embankment and cut off trench shall conform to Unified Soil Classification G-5, SC, CH, or CL. Consideration may be given to the use of other materials in the embankment if design and construction are supervised by a geotechnical engineer.

Placement - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8 inch thick (before compaction) layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment. The principal spillway must be installed concurrently with fill placement and not excavated into the embankment.

Connection - The movement of the hauling and spreading equipment over the fill shall be controlled

so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble yet not be so wet that water can be squeezed out.

Where a minimum required density is specified, it shall not be less than 95% of maximum dry density with a moisture content within ±2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99.

Cut Off Trench - The cutoff trench shall be excavated into impervious material along or parallel to the crestline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability.

Structure Backfill

Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually operated compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 24" or greater over the structure or pipe.

Pipe Conduits

All pipes shall be circular in cross section.

Corrugated Metal Pipe - All of the following criteria shall apply for corrugated metal pipe:

1. **Materials** - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound. Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. The following coatings or an approved equal may be used: Nexon, Plast-Cote, Blac-Klad, and Beth-Cu-Loy. Coated corrugated steel pipe shall meet the requirements of AASHTO M-245 and M-246.

Materials - (Aluminum Coated Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274 with watertight coupling bands or flanges. Any aluminum coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands or flanges. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be between 4 and 9.

2. **Coupling bands, anti-seep collars, and sections, etc., must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness.**

3. **Connections** - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered to be watertight.

All connections shall use a rubber or neoprene gasket when joining pipe sections. The end of each pipe shall be re-rolled an adequate number of corrugations to accommodate the band width. The following type connections are acceptable for pipes less than 24" in diameter: flanges on both ends of the pipe, a 12" wide standard lap type band with 12" wide by 3/8" thick closed cell circular

neoprene gasket; and a 12" wide huggar type band with O-ring gaskets having a minimum diameter of 1/2" greater than the corrugation depth. Pipes 24" in diameter and larger shall be connected by a 24" long annular corrugated band using rods and lugs. A 12" wide by 3/8" thick closed cell circular neoprene gasket will be installed on the end of each pipe for a total of 24".

Helically corrugated pipe shall have either continuously welded seams or have lock seams with internal caulking or a neoprene bead.

4. **Bedding** - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

5. **Backfilling** shall conform to "Structure Backfill."

6. **Other details** (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Reinforced Concrete Pipe - All of the following criteria shall apply for reinforced concrete pipe:

1. **Materials** - Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM Designation C-361.

2. **Bedding** - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3 inches, or as shown on the drawings.

3. **Laying pipe** - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be located within 2 feet from the riser.

4. **Backfilling** shall conform to "Structure Backfill."

5. **Other details** (anti-seep collars, valves, etc.) shall be as shown on the drawings.

TABLE 1
HYDROLOGIC CRITERIA FOR PONDS

Structure Class	Storage Height Product	Watershed Area (Acres)	Height to Emergency Spwy Crest (Feet)	Normal Surface Area (Acres)	Spillway Capacity ¹				Freeboard ²
					Principal ³		Emergency ⁴		
					Rural	Urban	Rural	Urban	
6" & "b"	Any	Any	Any	Any	TR 60	TR 60	TR 60	TR 60	TR 60
"a"	3,000 or more	Any	Any	Any	TR 60	TR 60	TR 60	TR 60	TR 60
"a"	Less than 3,000	320 and Larger	> 20 - 35	≥ 12	25 YR	TR 60	100 YR	100 YR	2.0' above E.S. Design Storm
			≤ 20	≥ 12	10 YR	25 YR	100 YR	100 YR	
			< 15	< 12	5 YR	10 YR	50 YR	100 YR	
			< 10	< 12	10 YR	TR 60	100 YR	100 YR	2.0' above E.S. Design Storm
"a"	Less than 3,000	100 to 320	> 20 - 35	≥ 12	10 YR	TR 60	100 YR	100 YR	2.0' above E.S. Design Storm
			≤ 20	≥ 12	5 YR	10 YR	50 YR	100 YR	1.0' above E.S. Design Storm
			< 15	< 12	2 YR	5 YR	25 YR	100 YR	1.0' above E.S. Design Storm
			< 10	< 12	10% of 25 YR Peak	5 YR	25 YR	100 YR	1.0' above E.S. Design Storm
"a"	Less than 3,000	100	> 20 - 35	≥ 12	5 YR	TR 60	50 YR	100 YR	1.0' above E.S. Design Storm
			≤ 20	≥ 12	2 YR	5 YR	25 YR	100 YR	
"a"	Less than 3,000	100	> 20 - 35	≥ 12	5 YR	TR 60	50 YR	100 YR	1.0' above E.S. Design Storm
			< 15	< 12	10% of 25 YR Peak	5 YR	25 YR	100 YR	

- NOTES**
- (1) The storage is defined as the original capacity of the reservoir in acre-feet at the elevation of the crest of the emergency spillway. The effective height is the difference in elevation in feet between the emergency spillway crest and the lowest point in the original cross section on the centerline of the dam. If there is no emergency spillway, this height shall be to the top of the dam.
 - (2) Principal - minimum storm to be contained below the crest of the emergency spillway including any combination of temporary storage and principal spillway discharge.
 - (3) Emergency - minimum storm used to proportion the emergency spillway to meet the limitations for shape, size, velocity and exit channel. This storm can be handled by any combination of principal spillway discharge, emergency spillway discharge and storage.
 - (4) For ponds without a separate emergency spillway, the principal spillway functions as the emergency spillway. In this situation, the principal spillway must comply with the emergency spillway hydrologic criteria.
 - (5) All ponds which are being designed to meet local stormwater requirements will be required to use the urban criteria. Storm duration used shall be 24 hours except where TR-60 is specified.
 - (6) For ponds without a functioning open channel emergency spillway, minimum freeboard will be 2 feet.

TABLE 5

ACCEPTABLE PVC PIPE FOR USE IN EARTH DAMS¹

Nominal Pipe Size (inches)	Schedule or Standard Dimension Ratio (SDR)	Maximum Depth of Fill Over
6 - 24	Schedule 40	10
	Schedule 80	15
	SDR 26	10

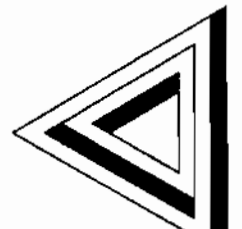
¹Polyvinyl chloride pipe, PVC 1120 or PVC 1220, conforming to ASTM-D-1785 or ASTM-D-2241.

TABLE 6

Permissible Velocities (ft/sec) for Emergency Spillways Lined with Vegetation

Slope of Exit Channel

Type of Cover	0 - 5%	5 - 10%
Bermudagrass	8	5
Reed Canarygrass	5	4
Tall Fescue	5	4
Kentucky Bluegrass	5	4
Grass-legume mixture	4	3



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CHILD CARE CENTER
TAX MAP 31 - PARCEL 753
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

MISCELLANEOUS NOTES AND DETAILS

SCALE: AS SHOWN
DATE: 05.25.00
DRN: VAA
CKD: KEM
SHEET 18 OF 20

Polyvinyl Chloride (PVC) Pipe - All of the following criteria shall apply for polyvinyl chloride (PVC) pipe:

1. **Materials** - PVC pipe shall be PVC-1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241.
2. **Joints and connections** to anti-seep collars shall be completely watertight.
3. **Bedding** - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
4. **Backfilling** shall conform to "Structure Backfill."
5. **Other details** (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Concrete

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 608, Mix No. 3

Rock Riprap

Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 905.

The riprap shall be placed to the required thickness in one operation. The rock shall be delivered and placed in a manner that will insure the riprap in place shall be reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks filling the voids between the larger rocks. Filter cloth shall be placed under all riprap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 919.12.

Care of Water during Construction

All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct

and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from the various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom of required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require draining the water to sumps from which the water shall be pumped.

Stabilization

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Maryland Soil Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

Erosion and Sediment Control

Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.



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OWNER:	NO	REVISION	DATE
VIRGIL L. AND IDOLINE L. LOUGH 12635 EMORY FARM LANE SYKESVILLE, MARYLAND 21784 (D.B. 470 © F. 274)			

DEVELOPER:
CHILD TIME, INC.
c/o BRITT CONSTRUCTION, INC.
4201 PLEASANT VALLEY ROAD
CHANTILLY, VIRGINIA 20151

APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
11/2/00
11/1/00
1/25/01

ADDRESS CHART

PARCEL NO.	STREET ADDRESS
753	4895 MONTGOMERY ROAD

SUBDIVISION NAME	SECTION AREA	PARCEL NUMBER
GARRIAN ACRES	N/A	LOT 4/P. 753
PLAT NO. BLOCK NO. ZONE	TAX ZONE	ELECT. DIST. CENSUS TR.
14348	8	R-20 31 2ND 6027
WATER CODE: 001		SEWER CODE: 1975071

SUPPORTING DATA AND DOCUMENTATION

Field Data and Survey Notes

The following is a list of the minimum data needed:

- Profile along centerline of structure.
- Profile along centerline of principal spillway.
- Profile along centerline of emergency spillway.
- Survey of storage area to develop topography and storage volumes.
- Soil investigation logs and notes.

- Determine pond class and list appropriate spillway design criteria.
- Determine peak runoff from the contributing area for the design storms selected.
- Develop a stage-storage/discharge curve for the site.
- Determine the pipe spillway by storm routing using the procedure in the SWM Pond Design Manual; Chapter 11, EFM; Chapter 6, TR-55; or TR-20.
- Design emergency spillway using EFM 11-61.
- Drawings should show the following as a minimum: profile along centerline of dam; profile along centerline of emergency spillway; cross section through dam at principal spillway; cross section through emergency spillway; plan view; and construction details and soil logs.
- Compute earth fill (if needed).
- Special design feature details: watering, fire hydrants, fish management, irrigation, etc; structural details with design loadings, if applicable, should be shown on the drawings.
- Complete data required on MD-ENG-14.
- Record seeding plan on drawings or MD-CONS-10.

Construction Check Data/As-built

- Record on survey note paper, SCS-ENG-28. Survey data for ponds will be plotted in red. The following is a list of the minimum data needed for As-Built:
- A profile of the top of the dam.
 - A cross-section of the emergency spillway at the control section.
 - A profile along the centerline of the emergency spillway.
 - A profile along the centerline of the principal spillway extending at least 100 feet downstream of the fill.
 - The elevation of the principal spillway crest.
 - The elevation of the principal spillway conduit invert (inlet and outlet).
 - The diameter, length, and type of material for the riser.
 - The diameter, length, and type of material for the conduit.
 - The size and type of anti-vortex and trash rack device and its elevations in relation to the principal spillway crest.
 - The number, size and location of the anti-seep collars.
 - The diameter and size of any low stage orifices or drain pipes.
 - Show the length, width, and depth of contours of the pool area so that design volume can be verified.
 - Notes and measurements to show that any special design features were met.
 - Statement on seeding and fencing.
 - Notes on site clean-up and disposal.
 - Sign and date check notes to include statement that practice meets or exceeds plans and specifications.

REFERENCES

- AWWA Standards, American Water Works Association, Denver, Colorado.
- ASTM Standards, American Society for Testing and Materials, Philadelphia, Pennsylvania.
- Engineering Field Manual, USDA, Soil Conservation Service.
- Handbook of PVC Pipe Design and Construction, First Edition, Uni-Bell Plastic Pipe Association, Dallas, Texas, 1980.
- Handbook of Steel Drainage and Highway Construction Products, Third Edition, American Iron and Steel Institute, Washington, DC, 1983.
- Maryland Dam Safety Manual, Maryland Department of Natural Resources, Water Resources Administration, Annapolis, Maryland, 1988.
- Maryland Technical Guide, Section IV, Standards and Specifications for Fish Pond Management (MD-399), USDA, Soil Conservation Service, September, 1987.
- Maryland Technical Guide, Section IV, Standards and Specifications for Wildlife Wetland Habitat Management (MD-644), USDA, Soil Conservation Service, April, 1986.
- Maryland Technical Guide, Section IV, Standards and Specifications for Critical Area Planting (MD-342), USDA, Soil Conservation Service, December, 1983.
- National Engineering Handbook, Section 4, Hydrology, USDA, Soil Conservation Service, March, 1985.
- National Engineering Handbook, Section 5, Hydraulics, USDA, Soil Conservation Service, August, 1958.
- National Engineering Handbook, Section 11, Drop Spillways, USDA, Soil Conservation Service, April, 1968.
- National Engineering Handbook, Section 14, Chute Spillways, USDA, Soil Conservation Service, October, 1977.
- National Handbook of Conservation Practices, USDA, Soil Conservation Service.
- Standard Specifications for Materials and Methods of Sampling and Testing, Fourteenth Edition, American Association of State Highway and Transportation Officials, Washington, DC, 1986.
- Standard Specifications for Construction Materials, Maryland Department of Transportation, State Highway Administration, Baltimore, Maryland, 1982.
- Supplement to the 1982 Standard Specifications for Construction Materials, Maryland Department of Transportation, State Highway Administration, Baltimore, Maryland, 1988.
- Technical Release No. 20, Computer Programs for Project Formulation Hydrology, USDA, Soil Conservation Service, 1983.
- Technical Release No. 55, Urban Hydrology for Small Watersheds, USDA, Soil Conservation Service, 1986.
- Technical Release No. 56, A Guide for Design and Layout of Vegetative Wave Protection for Earth Dam Embankments, USDA, Soil Conservation Service, 1974.
- Technical Release No. 60, Earth Dams and Reservoirs, USDA, Soil Conservation Service, 1985.
- Technical Release 69, Riprap for Slope Protection Against Wave Action, USDA, Soil Conservation Service, 1983.
- Technical Release No. 77, Design and Installation of Flexible Conduits, USDA, Soil Conservation Service, 1990.

THE DOI NOTE

Note:
This development is exempt from the Forest Conservation Plan provisions of Howard County based on the filing of a Declaration of Intent (DOI) for the construction of the 8373 square foot building, driveway, parking area, and landscaping. The DOI certified a cumulative loss of forest resources less than 40,000 square feet and the Declarant's agreement to comply with the certification and compliance provisions of the County's Forest Conservation Program.

OPERATION AND MAINTENANCE SCHEDULE FOR UNDERGROUND FACILITIES

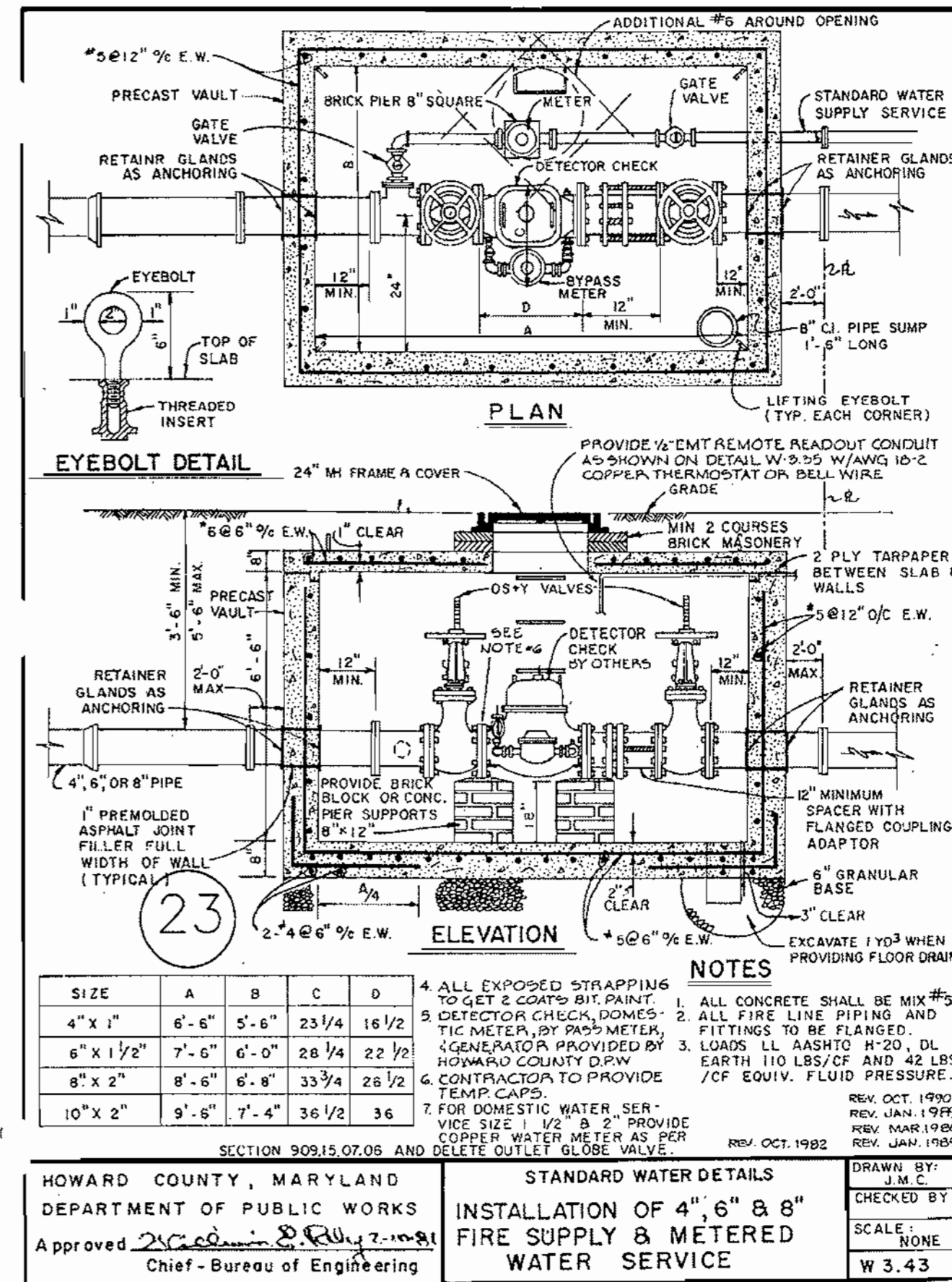
- The underground stormwater management facility is privately owned and it shall be the responsibility of the owner to periodically inspect and clean the facility to maintain its operation and function.
- The underground stormwater management facility shall be inspected yearly at a minimum and after especially severe storm events.
- When sediment accumulation of more than 2" is observed or any debris that might obstruct the outfall is observed, the facility shall be cleaned.
- The facility shall be cleaned immediately after petroleum spills. The owner shall contact the appropriate regulatory agencies notifying them of the spill and cleanup operation.
- The sediment and debris shall be removed from the underground stormwater management facility by vacuum truck or other manual means. The owner shall follow proper cleaning and disposal of the removed material and liquid.
- The inlet and outlet pipes shall be checked for any obstructions at least once every six (6) months. If obstructions are found, the owner shall have them removed and properly disposed of.

SPECIAL NOTE:

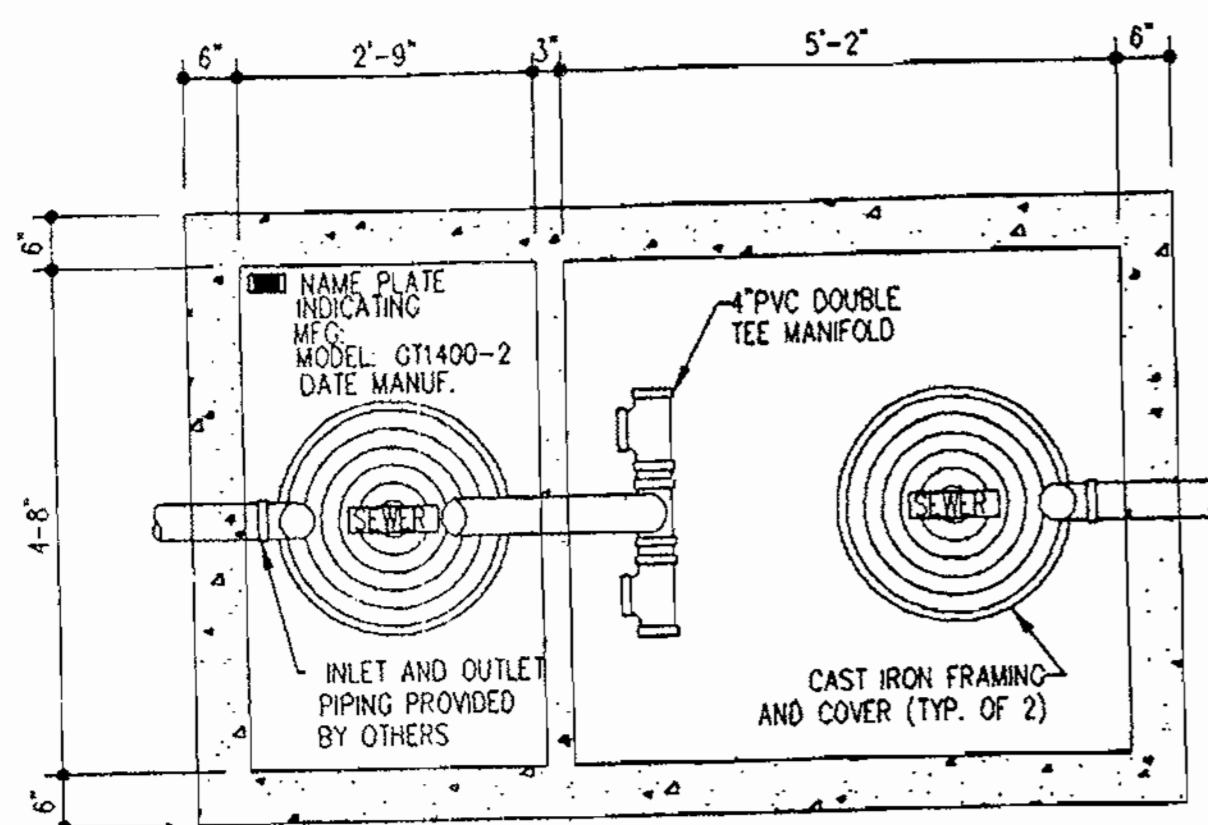
Note:

The subject property was granted Special Exception approval for a child day care center under BA Case 98-61E following a Board of Appeals hearing convened on March 11, 1999 resulting in an Order dated June 8, 1999 with the following Conditions:

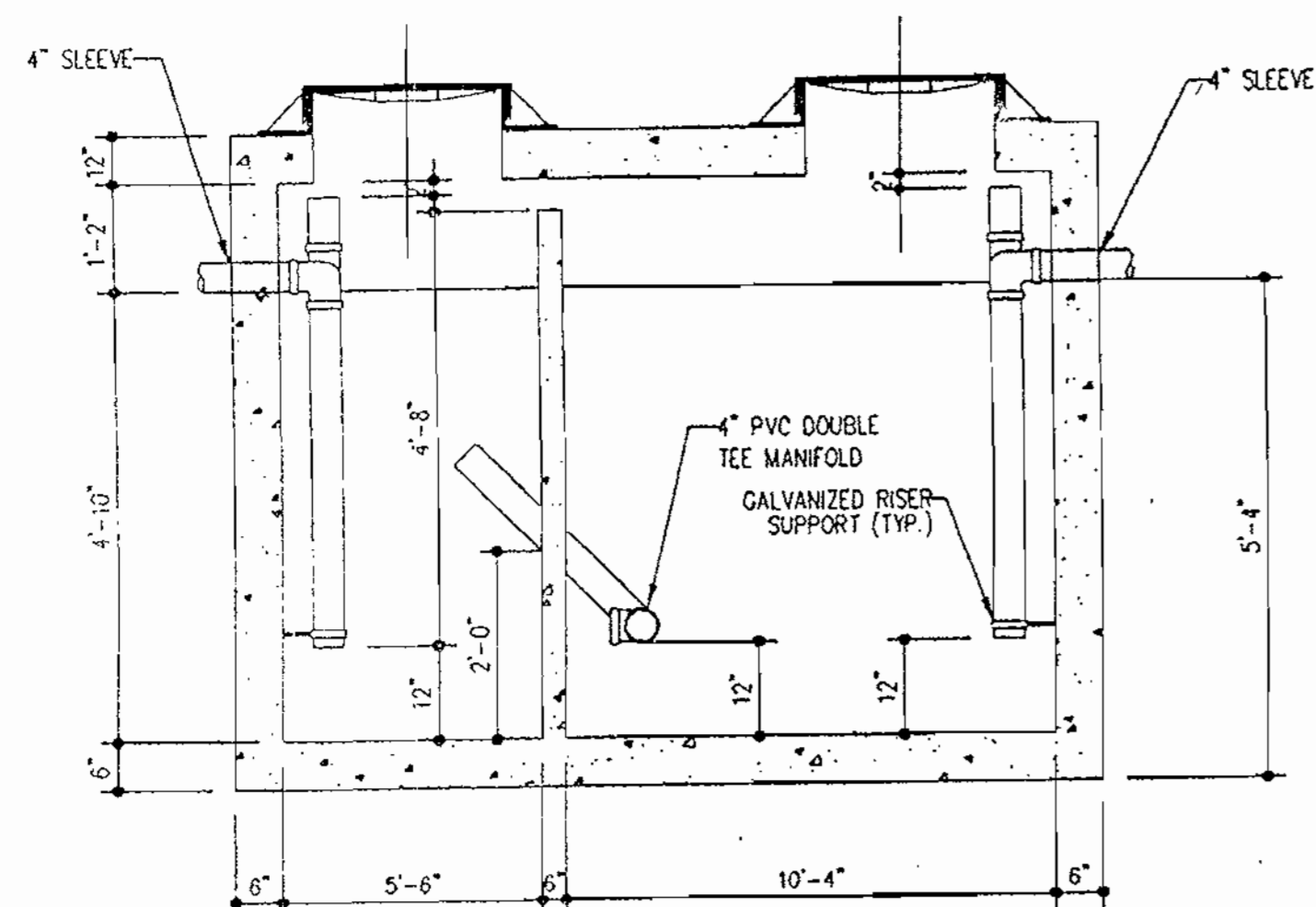
- The special exception shall apply only to the child day care center as described in the petition and plan submitted to the Board on March 11, 1999 as amended, and not to any other activities, uses or structures on the subject property.
- The total enrollment in the day care center shall not exceed 140 children.
- The child day care center hours of operation shall be limited to the hours between 6:30 a.m. and 7:00 p.m., Monday through Friday.
- In conjunction with the Site Development Plan review, the Petitioner shall submit a parking needs study to address the adequacy of on-site parking and adequacy of the turn-around area at the end of the driveway if all parking spaces are occupied.
- The Petitioner shall comply with all applicable Federal, State, and County laws and regulations.



20 GREASE INTERCEPTOR DETAIL



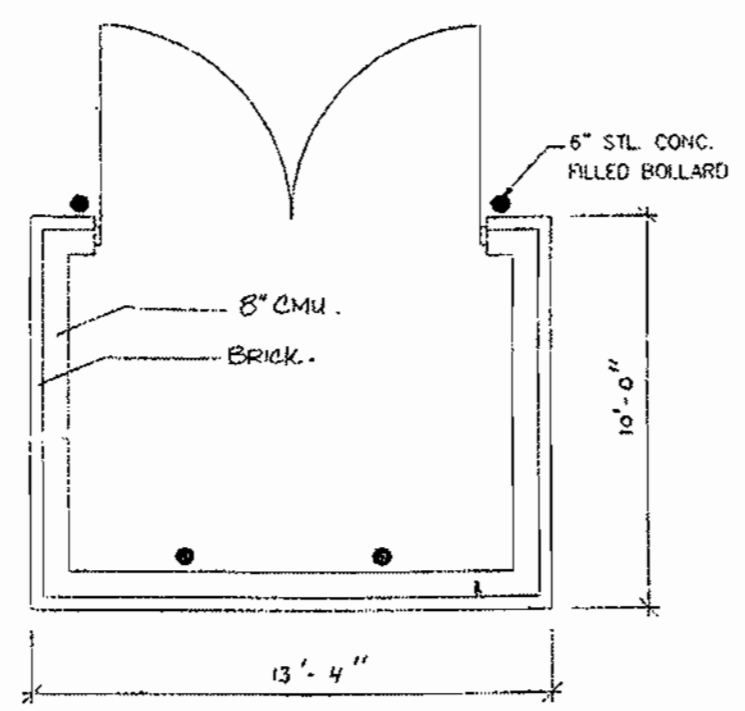
PLAN VIEW



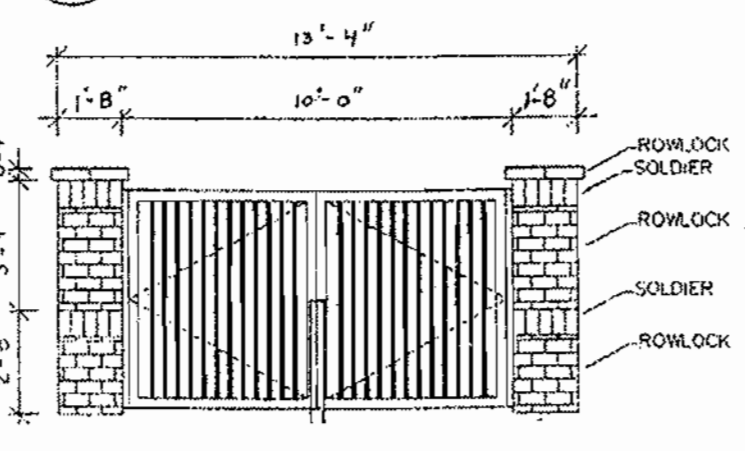
ELEVATION

GREASE INTERCEPTOR					
CALCULATIONS PER APPENDIX "H" OF UNIFORM PLUMBING CODE					
No. of Meals Peak/HR	Waste Flow Rate	Retention Time	Storage Factor	Interceptor Size	
75	X 7	X 2.5	X 1	= 1312.5	

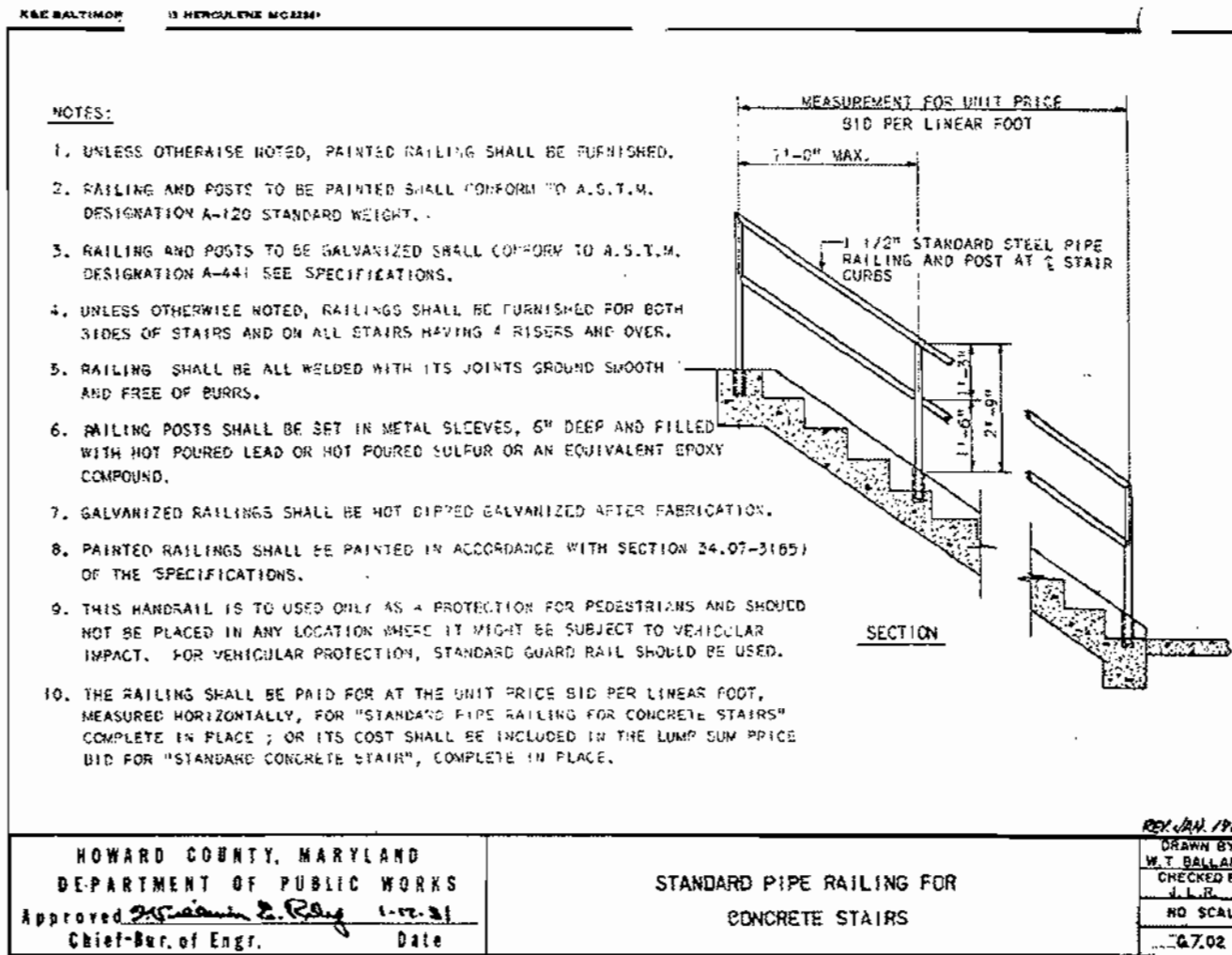
NOTE: KITCHEN PROVIDES ONE FULL MEAL SERVICE IN AN 8 HR. PERIOD.



21 DUMPSTER PLAN SCALE 1/4" = 1'-0"

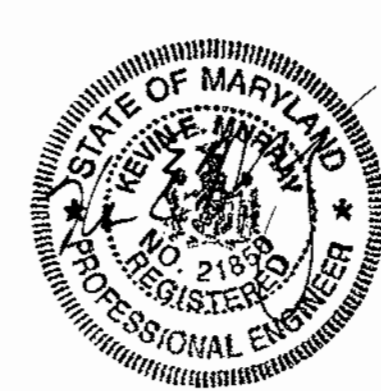


21 DUMPSTER ELEVATION SCALE 1/4" = 1'-0"



HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS
Approved: [Signature] Chief-Bureau of Eng. Date

STANDARD PIPE RAILING FOR CONCRETE STAIRS



DEVELOPER:
CHILDTIME, INC.
c/o BRITT CONSTRUCTION, INC.
4201 PLEASANT VALLEY ROAD
CHANTILLY, VIRGINIA 20151

APPROVED: [Signatures]
HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
DIRECTOR: [Signature] DATE: 11/2/00
CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature] DATE: 11/1/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION: [Signature] DATE: 10/25/00

OWNER:
VIRGIL L. AND IDOLINE L. LOUGH
12635 EMORY FARM LANE
STOKESVILLE, MARYLAND 21784
(D.B. 470 @ F. 274)

NO.	REVISION	DATE

ADDRESS CHART
PARCEL NO. 753 STREET ADDRESS 4895 MONTGOMERY ROAD
SUBDIVISION NAME SECTION AREA PARCEL NUMBER
GARRIAN ACRES N/A LOT 4/P. 753
PLAT NO. BLOCK NO. ZONE TAX ZONE ELECT. DIST. CENSUS TR. 14348 8 R-20 31 2ND 8027
WATER CODE: 001 SEWER CODE: 570671

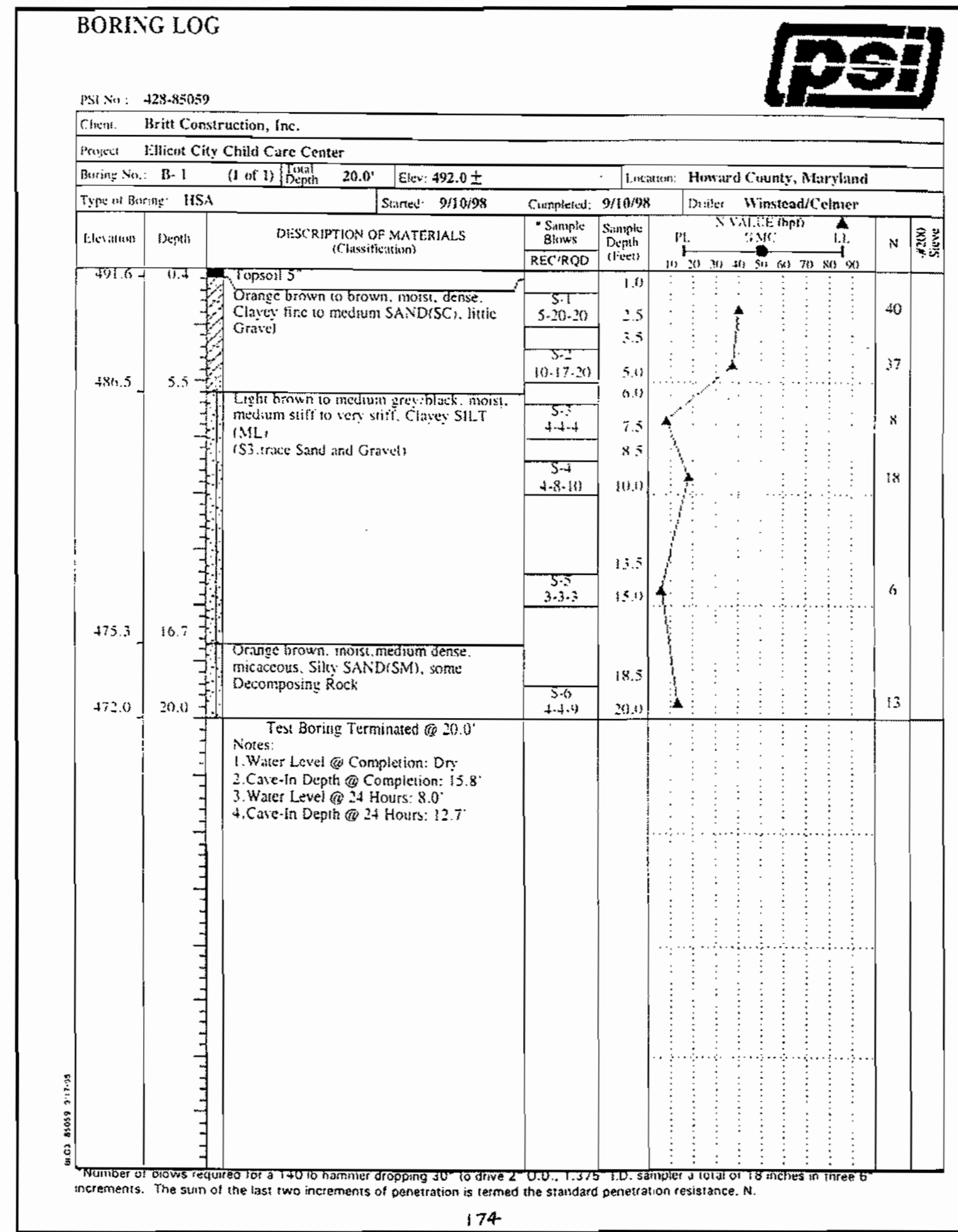
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CHILD TIME CHILDCARE CENTER
TAX MAP 31 - PARCEL 753
SECOND ELECTION DISTRICT

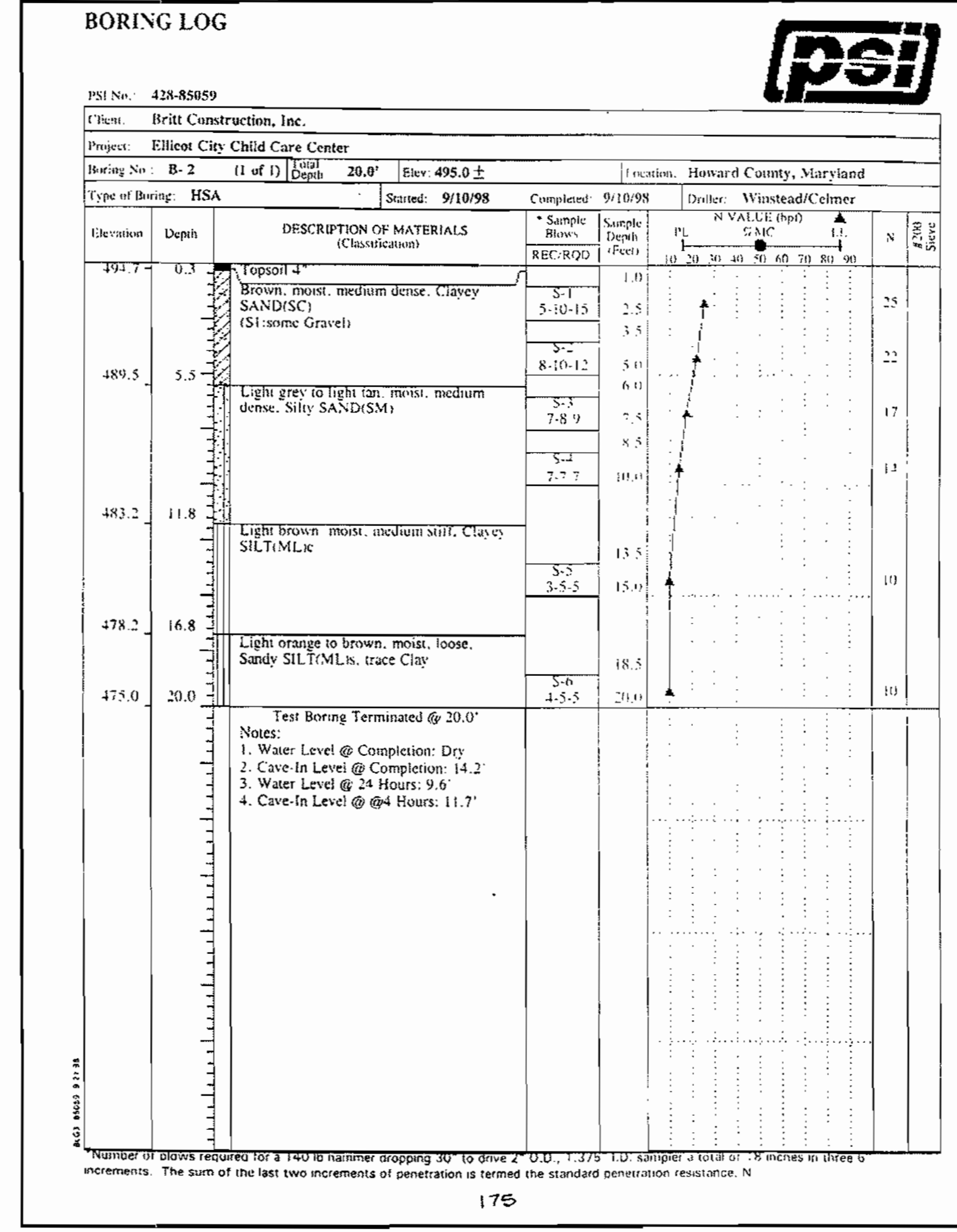
MISCELLANEOUS NOTES
AND DETAILS

SCALE: AS SHOWN
DATE: 05.25.00
DRN: VAA
CKD: KEM
SHEET 19 OF 20

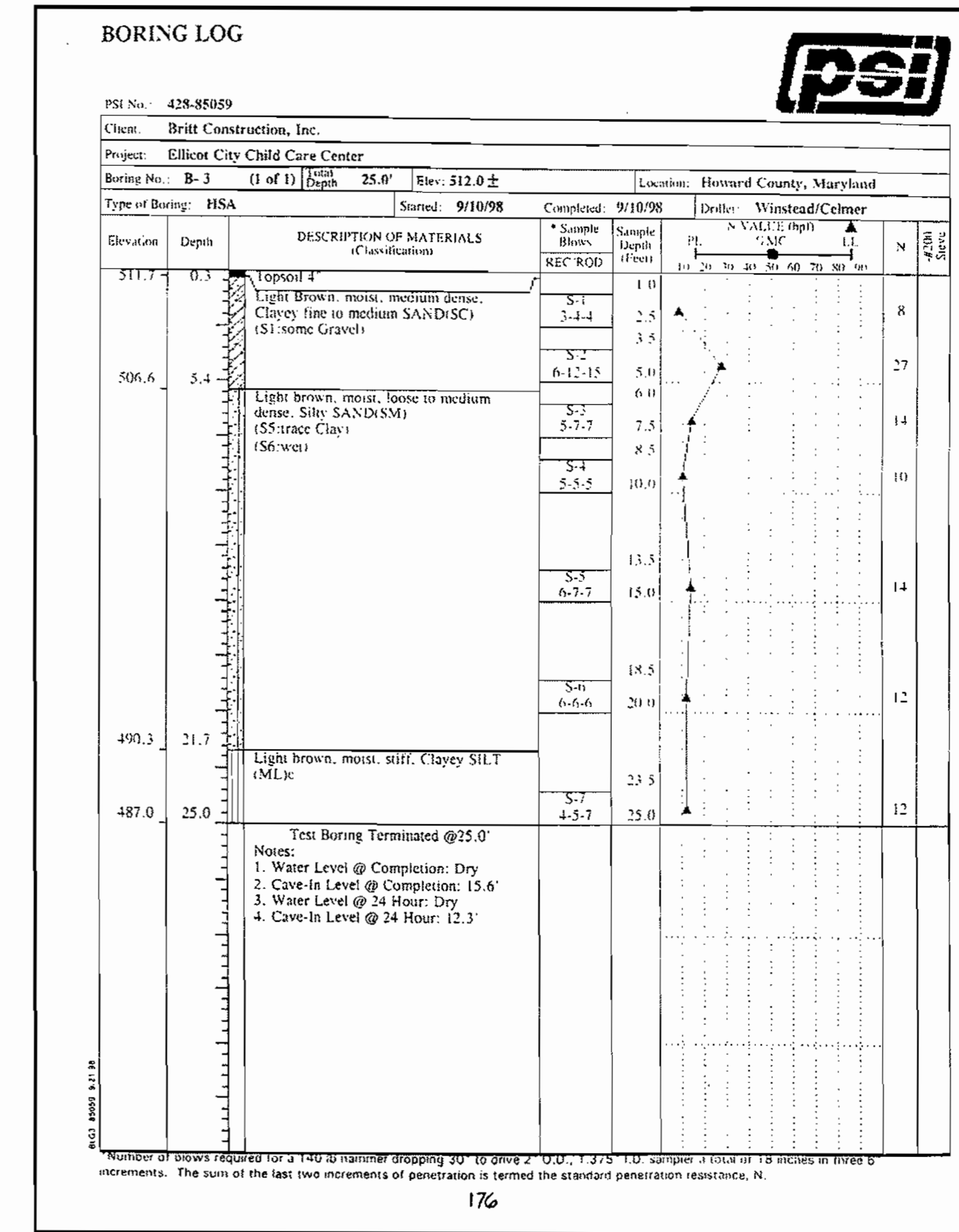
BORING NO B-1



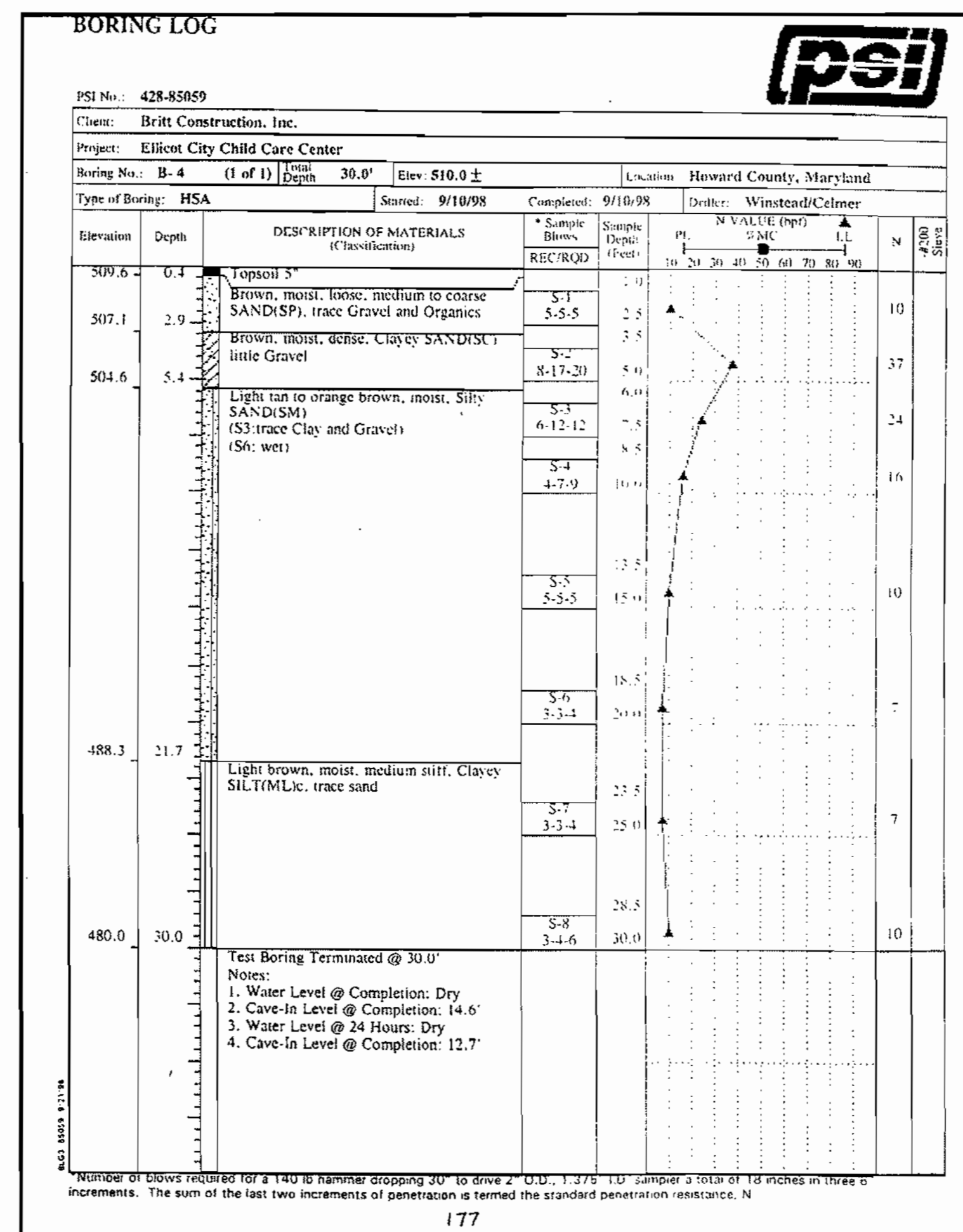
BORING NO B-2



BORING NO B-3



BORING NO B-4



DEVELOPER:

CHILDTIME, INC.
c/o BRITT CONSTRUCTION, INC.
4201 PLEASANT VALLEY ROAD
CHANTILLY, VIRGINIA 20151

OWNER:
VIRGIL L. AND IDOLINE L. LOUGH
12635 EMORY FARM LANE
SYKESVILLE, MARYLAND 21784
(D.B. 470 @ F. 274)

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Director: [Signature] 11/2/00 DATE
 Chief, Division of Land Development: [Signature] 11/16/00 DATE
 Chief, Development Engineering Division: [Signature] 10/25/00 DATE

NO	REVISION	DATE

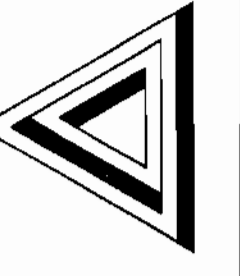
ADDRESS CHART
 PARCEL NO. 753 STREET ADDRESS 4895 MONTGOMERY ROAD
 SUBDIVISION NAME SECTION AREA PARCEL NUMBER
 GARRIAN ACRES N/A LOT 4/P. 753
 PLAT NO. BLOCK NO. ZONE TAX ZONE ELECT. DIST. CENSUS TR.
 14348 8 R-20 31 2ND 7077
 WATER CODE: gni SEWER CODE: 5750671

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CHILDTIME CHILDCARE CENTER
TAX MAP 31 - PARCEL 753
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SOIL BORING LOGS

SCALE: AS SHOWN
DATE: 05.25.00
DRN: GMC
CKD: KEM
SHEET 20 OF 20



TRI-TEK ENGINEERING
 CIVIL & ENVIRONMENTAL & LAND PLANNING & SURVEYING
 a professional corporation
 690 Center Street, Suite 300
 Herndon, Virginia 20170-5018 (703) 481-5900

**CHILDTIME CHILDCARE CENTER
 TAX MAP 31 - PARCEL 753**
 HOWARD COUNTY, MARYLAND
 SECOND ELECTION DISTRICT

SITE DEMOLITION PLAN

SCALE: 1"=20'
 DATE: 05-25-00
 DRN: ALLEN
 CKD: KEM
 SHEET 2 OF 20



Lot 3
 X EXISTING ITEMS TO BE DEMOLISHED

LOT 3-GARRIAN ACRES
 OWNER: N/F LEXARZ
 ZONED: R-20 (1.243 ACRES)
 RECORD PLAT P-19-14
 PLAT No. 4133

LOT 2 GARRIAN ACRES
 #14348, FILE # E-01-98
 #14349, FILE # E-01-98
 ZONED: R-20 (2.023 ACRES)

LOT 4
 76,638 S.F.
 (1.7594 ACRES)

LOT 2
 SECTION ONE GARRIAN
 BLOCK "C"
 PLAT BOOK 6, FOLIO 97
 ZONED: R-20
 N/F LIPTON, ET UX

PARCEL 304
 L254/F104
 ZONED: R-20
 N/F SUTTON

N 1369500.0000
 E 572250.0000

N 1369750.0000
 E 572000.0000

METES AND BOUNDS, ADJACENT PROPERTY
 INFORMATION PER RECORD PLAT PREPARED BY
 VOGEL & ASSOCIATES DATED 6/2/00, AND REC-
 ORDED AS PLAT No. 14348, FILE # E-01-98

LOT 1
 SECTION ONE, BLK "B"
 GARRIAN ORCHARDS
 PG 4, FOLIO 17
 ZONED R-20
 N/F PADLAUKAS

LOT 1
 SECTION ONE GARRIAN
 BLOCK "C"
 PLAT BOOK 6, FOLIO 97
 ZONED: R-20
 N/F GREEN, ET UX

1. ADDED BY TRI-TEK ENGINEERING, INC.



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 CIVIL & ENVIRONMENTAL & LAND PLANNING & SURVEYING
 a professional corporation
 690 Center Street, Suite 300
 Herndon, Virginia 20170-5018 (703) 481-5900

OWNER:
 VIRGIL L. AND IDOLINE L. LOUGH
 12635 EMORY FARM LANE
 STYKESVILLE, MARYLAND 21784
 (D.B. 470 @ F. 274)

NO	REVISION	DATE
1	ADD MH 415, S.H.C. & 12" W.	12/4/00

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Director: *Janet Bull* 11/9/00
 Chief, Division of Land Development: *Cindy Hamilton* 11/11/00
 Chief, Development Engineering Division: *William* 10/25/00

DEVELOPER:
 CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 -201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151

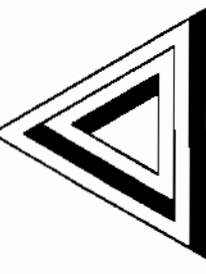
ADDRESS CHART

PARCEL NO.	STREET ADDRESS
753	4895 MONTGOMERY ROAD

GARRIAN ACRES	ZONE	TAX	ZONE ELECT.	DIST.	CENSUS TR.
14348	R-20	31	2ND	6027	

WATER CODE: 001 SEWER CODE: 5750671

MONTGOMERY ROAD - MARYLAND ROUTE 103
 PUBLIC ROAD (MAJOR ARTERIAL, R/W VARIES)
 SRC PLAT # 11128



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**CHILDTIME CHILDCARE CENTER
 TAX MAP 31 - PARCEL 753**
 HOWARD COUNTY, MARYLAND
 SECOND ELECTION DISTRICT

SITE GRADING PLAN

SCALE: 1"=20'
 DATE: 05.25.00
 DRN: ALLEN
 CKD: KEM
 SHEET 5 OF 20

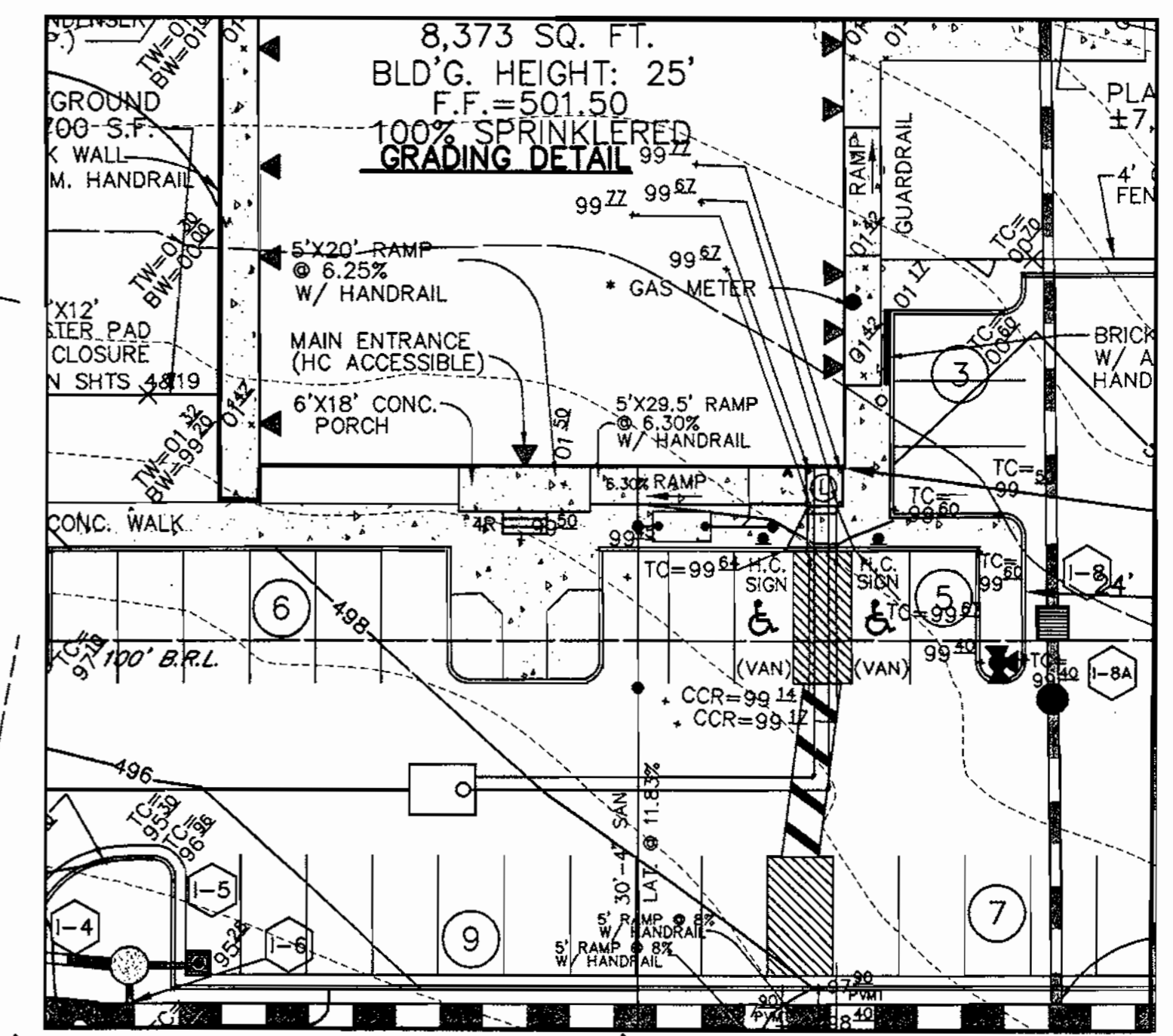
**SUMMARY TABLE
 SITE DESIGN PARAMETERS**

SITE AREA = 1.76AC.
SITE AREA TO POND = 1.46AC.
SITE AREA NOT TO SWM FACILITY = 0.30AC.
OFFSITE AREA TO SWM FACILITY = 0.45AC.
10YR. INFLOW TO SWM FACILITY = 17CFS
10YR. OUTFLOW TO SWM FACILITY = 6 CFS
10YR. STORAGE PROVIDED = 12,920 CF
10YR. STORAGE REQUIRED = 10,700 CF
PLEASE REFER TO THE ENGINEERING DESIGN BOOKLET FOR DETAILS

- ALL RADII ARE 3' UNLESS OTHERWISE NOTED.
- CRITICAL SLOPE AREA (3:1) REQUIRES STAKED SODDING TRENCH DRAIN MAY PRESENT MAINTENANCE CONCERNS DUE TO DEBRIS WASHED DOWN FROM ADJACENT SLOPE AREA. HENCE OVERLAND RELIEF IS PROVIDED VIA CONCRETE TRENCH DRAIN TO PREVENT FLOODING OF THE BUILDING.

LEGEND

444	EX. GROUND
466	PROP. GRADE
W	EX. W/L
---	PROP. W/L
---	EX. EDGE OF PAVEMENT
---	PROP. CURB AND GUTTER PER HO. CO. SPEC. R3.01
	PROP. STORM SEWER
---	PROP. CONC. WALK PER HO. CO. SPEC. 3.05
---	PROP. HEAVY DUTY PAVEMENT PER HO. CO. SPEC. R2.01-P-2
---	PROP. LIGHT DUTY PAVEMENT PER HO. CO. SPEC. R2.01-P-1
---	EX. PROPERTY LINE
---	PROP. CLEARING LIMITS
---	PROP. PARKING AREA LIGHT



ADD'D BY TRI-TEK ENGINEERING, INC.
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 a professional corporation
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 Herndon, Virginia 20170-5018 (703) 481-5900



OWNER:
 VIRGIL L. AND IDOLINE L. LOUGH
 12635 EMORY FARM LANE
 SYKESVILLE, MARYLAND 21784
 (D.B. 470 @ F. 274)

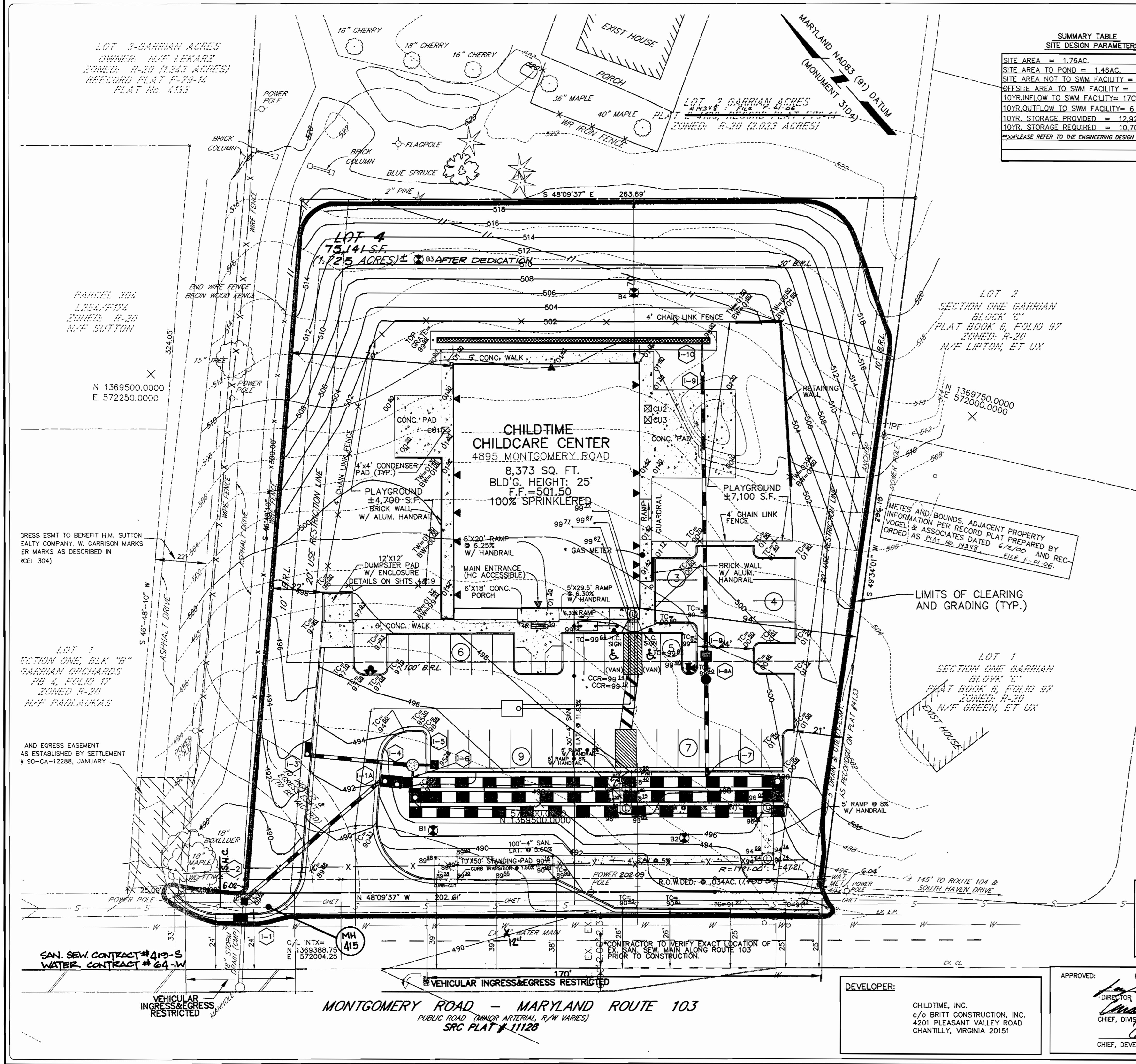
NO	REVISION	DATE
1	ADD MAP, S.H.C. & P.W.	12/1/00

ADDRESS CHART	STREET ADDRESS
PARCEL NO. 753	4895 MONTGOMERY ROAD

SUBDIVISION NAME	SECTION	AREA	PARCEL NUMBER
GARRIAN ACRES	N/A	LOT 4/P. 753	
PLAT NO./BLOCK NO.	ZONE	TAX ZONE/ELECT. DIST.	CENSUS TR.
14348	8	R-20	31
WATER CODE: 001		SEWER CODE: 6750781	6027

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Director: *[Signature]* 11/2/00
 Chief, Division of Land Development: *[Signature]* 11/1/00
 Chief, Development Engineering Division: *[Signature]* 10/25/00

DEVELOPER:
 CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 4201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151



LOT 3-GARRIAN ACRES
 OWNER: M/F LEKARZ
 ZONED: R-20 (1.243 ACRES)
 RECORD PLAT F-29-14
 PLAT No. 4333

PARCEL 304
 L254/F114
 ZONED: R-20
 M/F SUTTON

N 1369500.0000
 E 572250.0000

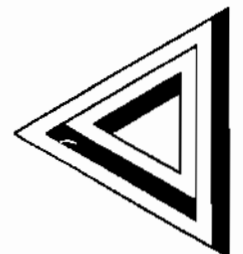
LOT 1
 SECTION ONE GARRIAN
 BLOK "C"
 GARRIAN ORCHARDS
 PG 4, FOLIO 17
 ZONED R-20
 M/F PADLAKAS

AND EGRESS EASEMENT
 AS ESTABLISHED BY SETTLEMENT
 # 90-CA-12288, JANUARY

SAN. SEW. CONTRACT #119-S
 WATER CONTRACT #64-W

VEHICULAR INGRESS/EGRESS RESTRICTED

MONTGOMERY ROAD - MARYLAND ROUTE 103
 PUBLIC ROAD (MINOR ARTERIAL, R/W VARIES)
 SRC PLAT # 11128

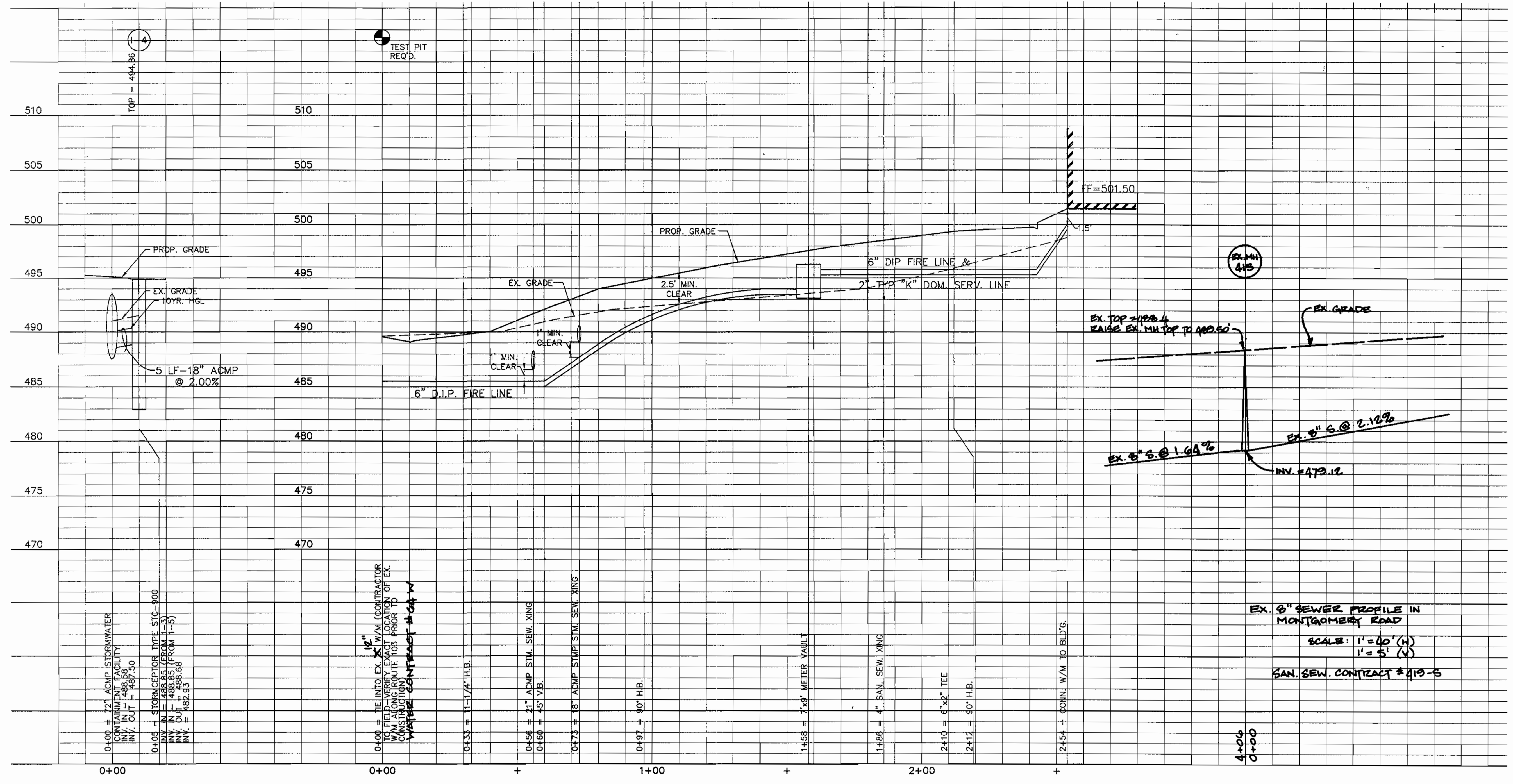


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CHILDTIME CHILDCARE CENTER
TAX MAP 31 - PARCEL 753
 HOWARD COUNTY, MARYLAND
 SECOND ELECTION DISTRICT

MISCELLANEOUS UTILITY
PROFILES

SCALE: AS SHOWN
 DATE: 05.25.00
 DRN: GMC
 CKD: KEM
 SHEET 7 OF 20



STORM SEWER
 SCALE: 1"=20' (H)
 1"=5' (V)

WATER MAIN
 SCALE: 1"=20' (H)
 1"=5' (V)

WATER MAIN
 SCALE: 1"=20' (H)
 1"=5' (V)

0+00 = 721 ACMP STORMWATER
 CONTAINMENT FACILITY
 INV. IN = 488.68
 INV. OUT = 487.30
 0+05 = STORMSEPTOR TYPE S1C-900
 INV. IN = 488.85 (FROM 1-3)
 INV. IN = 488.85 (FROM 1-3)
 INV. OUT = 488.68
 INV. = 482.93

12" W/M TO BE INSTALLED INTO EX. W/M (CONTRACTOR TO FIELD VERIFY EX. W/M LOCATION & W/M ALONG ROUTE PRIOR TO CONSTRUCTION) WATER CONTRACT # 04 W

0+33 = 11-1/4" H.B.

0+56 = 21" ACMP STM. SEW. XING
 0+60 = 45' V.B.

0+73 = 18" ACMP STIMP STM. SEW. XING

0+97 = 30" H.B.

1+58 = 7'x8' METER VAULT

1+86 = 4" SAN. SEW. XING

2+10 = 6"x2" TEE

2+12 = 30" H.B.

2+54 = CONIN. W/M TO BLDG.

EX. 8" SEWER PROFILE IN MONTGOMERY ROAD
 SCALE: 1"=40' (H)
 1"=5' (V)
 SAN. SEW. CONTRACT # 419-5

1. ADDED BY TRI-TEK ENGINEERING, INC.



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OWNER:
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 12635 EMORY FARM LANE
 SYKESVILLE, MARYLAND 21784
 (D.B. 470 @ F. 274)

NO	REVISION	DATE
1	ADD MH 415, S.H.C. & 12" W.	12/4/00

DEVELOPER:
 CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 4201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151

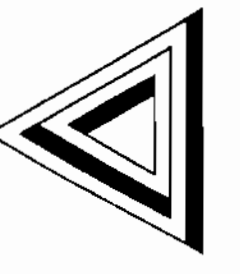
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 DIRECTOR: *[Signature]* 11/2/00
 CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* 11/1/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* 10/25/00

ADDRESS CHART

PARCEL NO.	STREET ADDRESS
753	4895 MONTGOMERY ROAD

SUBDIVISION NAME	SECTION	AREA	PARCEL NUMBER
GARRIAN ACRES	N/A		LOT 4/P. 753
PLAT NO./BLOCK NO.	ZONE	TAX ZONE	ELECT. DIST. CENSUS TR.
1434B	R-20	31	2ND 6027

WATER CODE: 601 SEWER CODE: 15750871



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 Herndon, Virginia 20170-5018 (703) 481-5900

**CHILDTIME CHILDCARE CENTER
 TAX MAP 31 - PARCEL 753**
 SECOND ELECTION DISTRICT

**SOILS AND DRAINAGE
 AREA MAP**

1. ALL RADII ARE 3" UNLESS OTHERWISE NOTED.
2. * ---CRITICAL SLOPE AREA (3:1) REQUIRES STAKED SODDING TRENCH DRAIN MAY PRESENT MAINTENANCE CONCERNS DUE TO DEBRIS WASHED DOWN FROM ADJACENT SLOPE AREA. HENCE OVERLAND RELIEF IS PROVIDED VIA CONCRETE TRENCH DRAIN TO PREVENT FLOODING OF THE BUILDING.

LEGEND

SYMBOL DESCRIPTION

---506 EXISTING GRADE

—506 PROPOSED GRADE

--- PROPOSED DRAINAGE DIVIDE

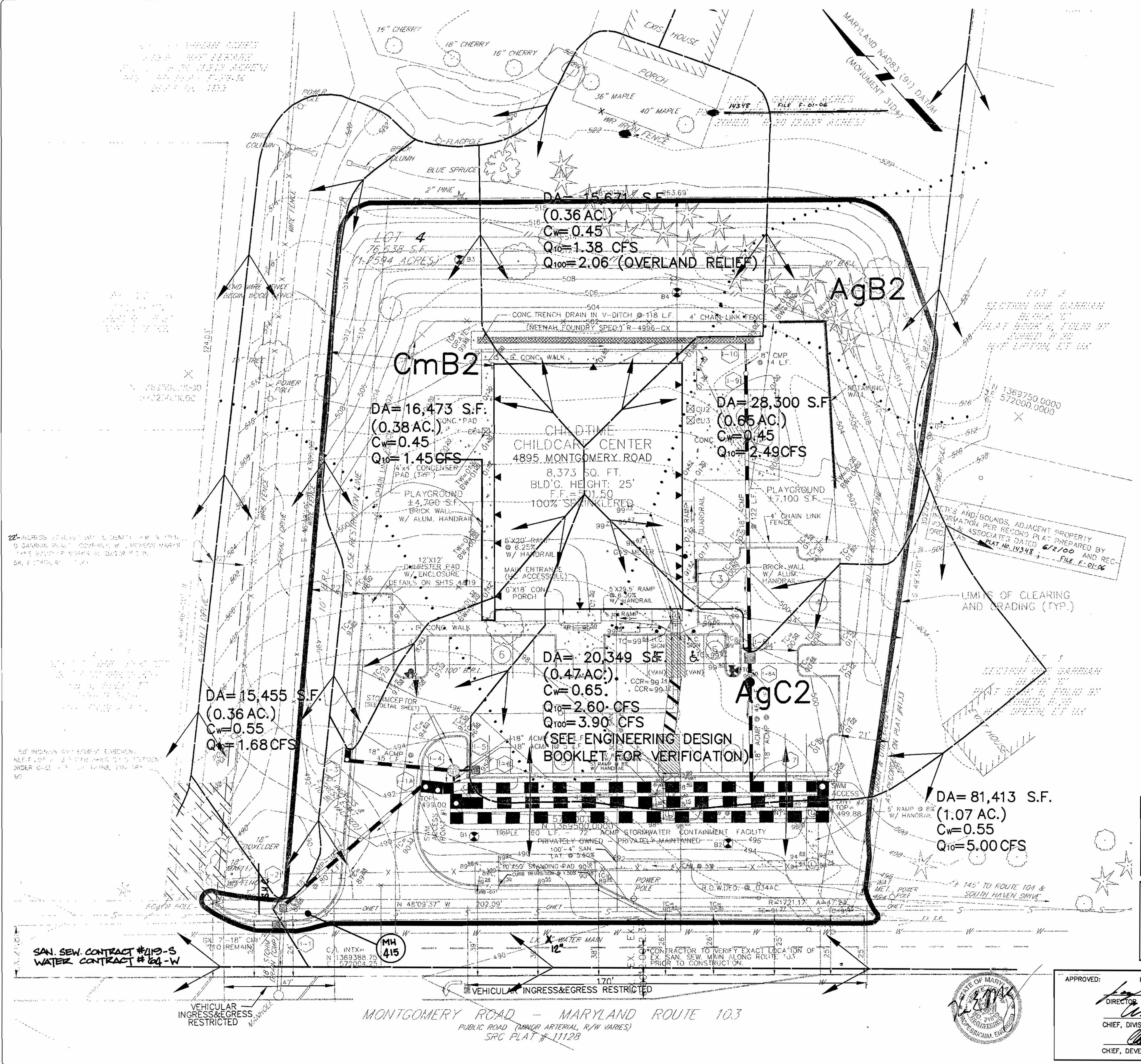
--- LIMITS OF CLEARING AND GRADING

SOILS CHART

SOIL N	SOIL NAME/DESCRIPTION	TYPE
CmB2	COLLINGTON, SANDY LOAM, 5-10% SLOPES, MODERATE EROSION.	B
AgC2	AURA, SILTY LOAM, 2-5% SLOPES, SLIGHT EROSION.	C
AgB2	AURA, SILTY LOAM, 5-10% SLOPES, SLIGHT EROSION.	C

NOTE: THIS SITE DOES NOT INCLUDE SOILS DESIGNATED AS HYDRIC, OR SOILS WITH HYDRIC INCLUSIONS. SOILS ARE NOT CLASSIFIED AS HIGHLY ERODIBLE.

$I_{100} = 12.75$ IN/HR.
 $I_{10} = 8.50$ IN/HR.
 $T_c = 5$ MIN. (MINIMUM)



DEVELOPER:

CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 4201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151

OWNER:

VIRGIL L. AND IDOLINE L. LOUGH
 12635 EMORY FARM LANE
 SYKESVILLE, MARYLAND 21784
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 a professional corporation
 690 Center Street, Suite 300
 Herndon, Virginia 20170-5018 (703) 481-5900

NO	REVISION	DATE
1	ADD MH 415, S.H.C. & 12" W.	12/4/00

ADDRESS CHART
PARCEL NO. 753
STREET ADDRESS 4895 MONTGOMERY ROAD
SUBDIVISION NAME
SECTION N/A
AREA
PARCEL NUMBER LOT 4/P. 753
GARRIAN ACRES 1.9348
PLAT NO. 8
BLOCK NO. 8
ZONE R-20
TAX ZONE ELECT. 31
DIST. 2ND
CENSUS TR. 8027
WATER CODE: 601
SEWER CODE: 6750671

APPROVED:

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR *[Signature]* 11/2/00

DATE 11/1/00

CHIEF, DIVISION OF LAND DEVELOPMENT *[Signature]* 10/25/00

DATE 10/25/00

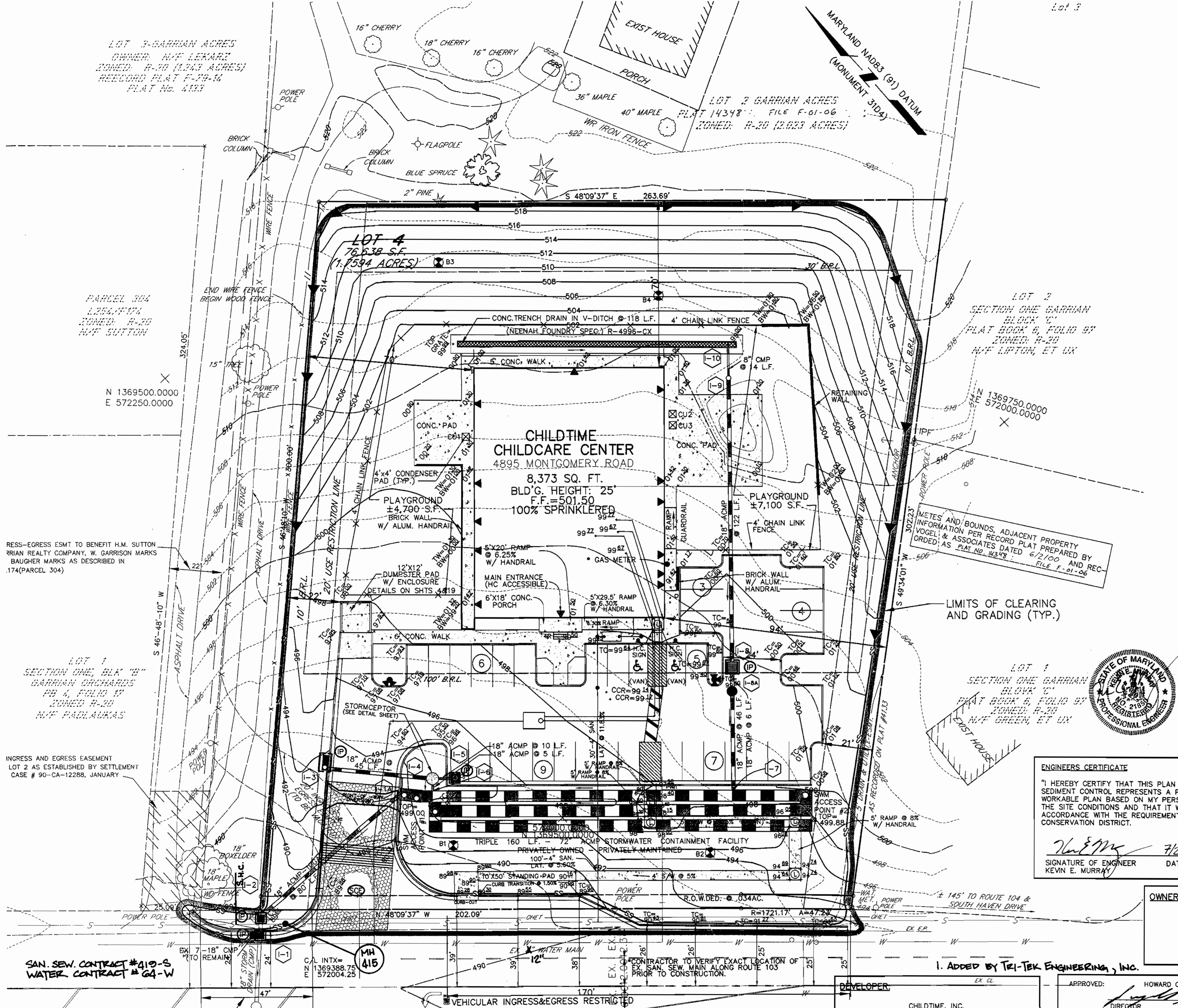
CHIEF, DEVELOPMENT ENGINEERING DIVISION *[Signature]* 10/25/00

DATE 10/25/00



MONTGOMERY ROAD - MARYLAND ROUTE 103
 PUBLIC ROAD (MAJOR ARTERIAL, R/W VARIES)
 SRC PLAT # 1112B

C:\pawing\p1-1531\p1-1531.dwg Fri Jun 23 20:52:10 2000



1. ALL RADII ARE 3' UNLESS OTHERWISE NOTED.
2. * ---> CRITICAL SLOPE AREA (3:1) REQUIRES STAKED SODDING TRENCH DRAIN MAY PRESENT MAINTENANCE CONCERNS DUE TO DEBRIS WASHED DOWN FROM ADJACENT SLOPE AREA. HENCE OVERLAND RELIEF IS PROVIDED VIA CONCRETE TRENCH DRAIN TO PREVENT FLOODING OF THE BUILDING.
- SEQUENCE OF CONSTRUCTION**
1. OBTAINING GRADING PERMIT.
 2. NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (410-313-1880) AT LEAST 24 HOURS BEFORE STARTING ANY WORK.
 3. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE. (1 DAY)
 4. INSTALL SILT FENCE AS PROPOSED BELOW ALONG SOUTH-WEST OF SITE. (1 DAY)
 - 4A. CONSTRUCT THE BERM AT FRONT OF SITE TO INTERCEPT RUNOFF FROM REAR OF SITE.
 5. INSTALL 1P @ PROPOSED LOCATION FOR PROP 1-2 SINCE THERE IS AN EX. 18" RCP STUB-OUT THERE. (1 DAY)
 6. GRADE SITE TO FINAL SUBGRADE AND PREPARE BUILDING PAD. (3 DAYS)
 7. INSTALL SITE UTILITIES AND STORM DRAIN SYSTEM. BEGIN BUILDING CONSTRUCTION. (8 DAYS)
 8. INSTALL INLET PROTECTION. (3 DAYS)
 9. CONSTRUCT CURB AND GUTTER. (2 DAYS)
 10. INSTALL LIGHTING FIXTURES, CONDUITS AND BASE PAVING. (2 DAYS)
 11. INSTALL LANDSCAPING AND SEED AND MULCH ALL REMAINING DISTURBED AREAS. INSTALL FINAL PAVING. (3 DAYS)
 12. DURING GRADING AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL MEASURES SHOWN HEREON.
 13. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - A. 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, SWALES, DITCH PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
 - B. 14 CALENDAR DAYS FOR ALL OTHER DISTURBED AREAS.
 14. UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL STRUCTURES.

LEGEND

EX. GROUND	-----444-----	PROP. STORM DRAIN	-----S-----
PROP. GRADE	-----444-----	PROP. SEWER	-----S-----
EX. WATER	-----W-----	PROP. WATER MAIN	-----W-----
EX. SEWER	-----S-----	STABILIZED CONSTRUCTION ENTRANCE	-----SCE-----
EX. STORM DRAIN	-----S-----	PROP. SILT FENCE	-----S-----
EX. E.P.	-----E.P.-----	PROP. SUPER SILT FENCE	-----SS-----
PROPERTY LINE	-----P.L.-----	PROP. EARTH DIKE	-----E.D.-----
EASEMENT	-----E.-----	TEMP. TREE PROTECTION	-----TP-----
PROP. C&G	-----C&G-----	LIMITS OF CLEARING AND GRADING	-----L.C.G.-----
TEMP. INLET PROTECTION	-----IP-----		

DEVELOPER'S CERTIFICATE

I, Steve Britt, PRESIDENT Britt Construction, DATE 10/18/00

I, WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THIS PLANS, 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 CONTROLS OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

ENGINEERS CERTIFICATE

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.

Kevin E. Murray 7/28/00
SIGNATURE OF ENGINEER DATE
KEVIN E. MURRAY

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

J. A. Waford 10/23/00
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John P. Robertson 10/23/00
HOWARD SOIL CONSERVATION DISTRICT DATE

OWNER:

VIRGIL L. AND IDOLINE L. LOUGH
12635 EMORY FARM LANE
SYKESVILLE, MARYLAND 21784
(D.B. 470 @ F. 274)

NO	REVISION	DATE
1	ADD MH 415, S.H.C. & 12" W.	12/4/00

DEVELOPER:

CHILDTIME, INC.
c/o BRITT CONSTRUCTION, INC.
4201 PLEASANT VALLEY ROAD
CHANTILLY, VIRGINIA 20151

ADDRESS CHART

PARCEL NO.	STREET ADDRESS
753	4895 MONTGOMERY ROAD

ADDRESS CHART

GARRIAN ACRES	N/A	LOT 4/P. 753
PLAT NO./BLOCK NO.	14348/8	TAX/ZONE/ELECT. DIST./CENSUS TR.
WATER CODE	601	SEWER CODE

LOT 3-GARRIAN ACRES
OWNER: M/F LEKARZ
ZONED: R-20 (1.243 ACRES)
RECORD PLAT F-719-14
PLAT No. 4133

PARCEL 304
L254/F004
ZONED: R-20
M/F SUTTON

N 1369500.0000
E 572250.0000

RESS-EGRESS ESMT TO BENEFIT H.M. SUTTON
GARRIAN REALTY COMPANY, W. GARRISON MARKS
BAUGHER MARKS AS DESCRIBED IN
174(PARCEL 304)

LOT 1
SECTION ONE, BLK "B"
GARRIAN ORCHARDS
FB 4, FOLIO 17
ZONED R-20
M/F PADLAURAS

INGRESS AND EGRESS EASEMENT
LOT 2 AS ESTABLISHED BY SETTLEMENT
CASE # 90-CA-12288, JANUARY

SAN. SEW. CONTRACT #419-S
WATER CONTRACT #64-W

VEHICULAR INGRESS & EGRESS RESTRICTED

MONTGOMERY ROAD - MARYLAND ROUTE 103
PUBLIC ROAD (MINOR ARTERIAL, R/W VARIES)
SRC PLAT # 11128

DEVELOPER:

CHILDTIME, INC.
c/o BRITT CONSTRUCTION, INC.
4201 PLEASANT VALLEY ROAD
CHANTILLY, VIRGINIA 20151

APPROVED:

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Scott Suter 11/2/00
DIRECTOR DATE

Andy Handley 11/1/00
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chris Dammann 10/25/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

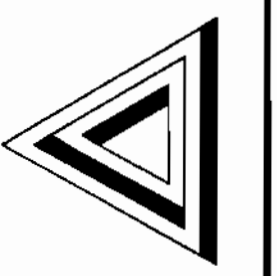
SCALE: 1"=20'
DATE: 05.25.00
DRN: ALLEN
JOB: KEM
SHEET 11 OF 20

TRI-TEK ENGINEERING
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a professional corporation
690 Center Street, Suite 300
Herrndon, Virginia 20179-5018 (703) 461-5900

CHILDTIME CHILD CARE CENTER
TAX MAP 31 - PARCEL 753
SECOND ELECTION DISTRICT

SEDIMENT & EROSION CONTROL PLAN

SDP-00-25 F-1531



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**CHILDTIME CHILDCARE CENTER
 TAX MAP 31 - PARCEL 753**
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

LANDSCAPE PLAN

NOTES :

1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.
2. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS A PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$15,450.
3. FFORST CONSERVATION OBLIGATION FOR THIS SITE WAS SATISFIED BY A DECLARATION OF INTENT.(PLEASE REFER TO SHEET 19 OF 20)

1. ADDED BY TRI-TEK ENGINEERING, INC.

FOR PLANTING SCHEDULE SEE SHEET 14 OF 20



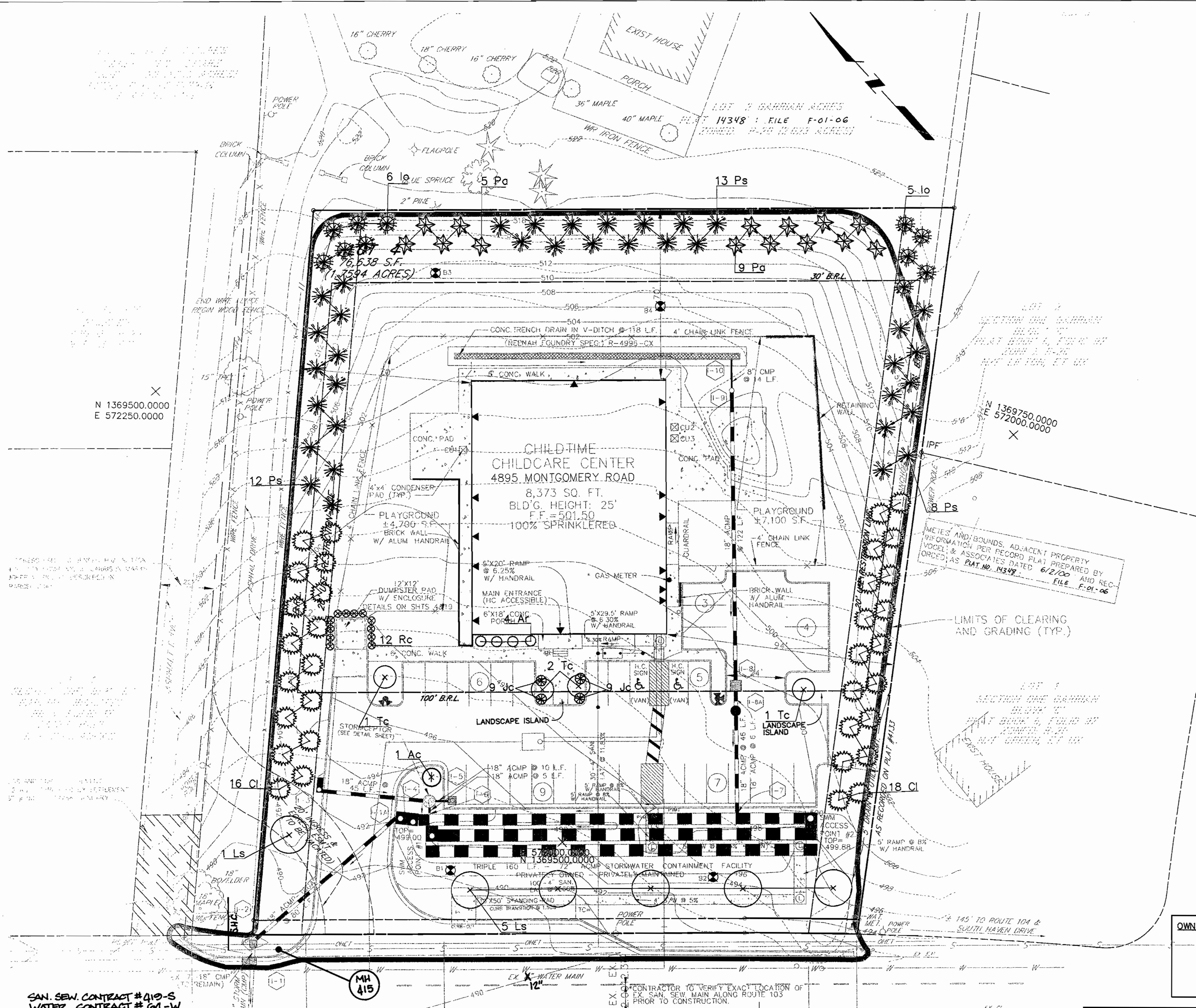
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OWNER:
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 (D.B. 470 @ F. 274)

NO	REVISION	DATE
1	ADD MH 415, S.H.C. & 12" W.	12/4/00

ADDRESS CHART		
PARCEL NO.	STREET ADDRESS	
753	4895 MONTGOMERY ROAD	
SUBDIVISION NAME	SECTION	AREA
GARRIAN ACRES	N/A	LOT 4/P. 753
PLAT NO./BLOCK NO.	ZONE	TAX/ZONE ELECT. DIST. CENSUS TR.
143288	8	R-20 31 2ND 6027
WATER CODE	601	SEWER CODE: 5750671

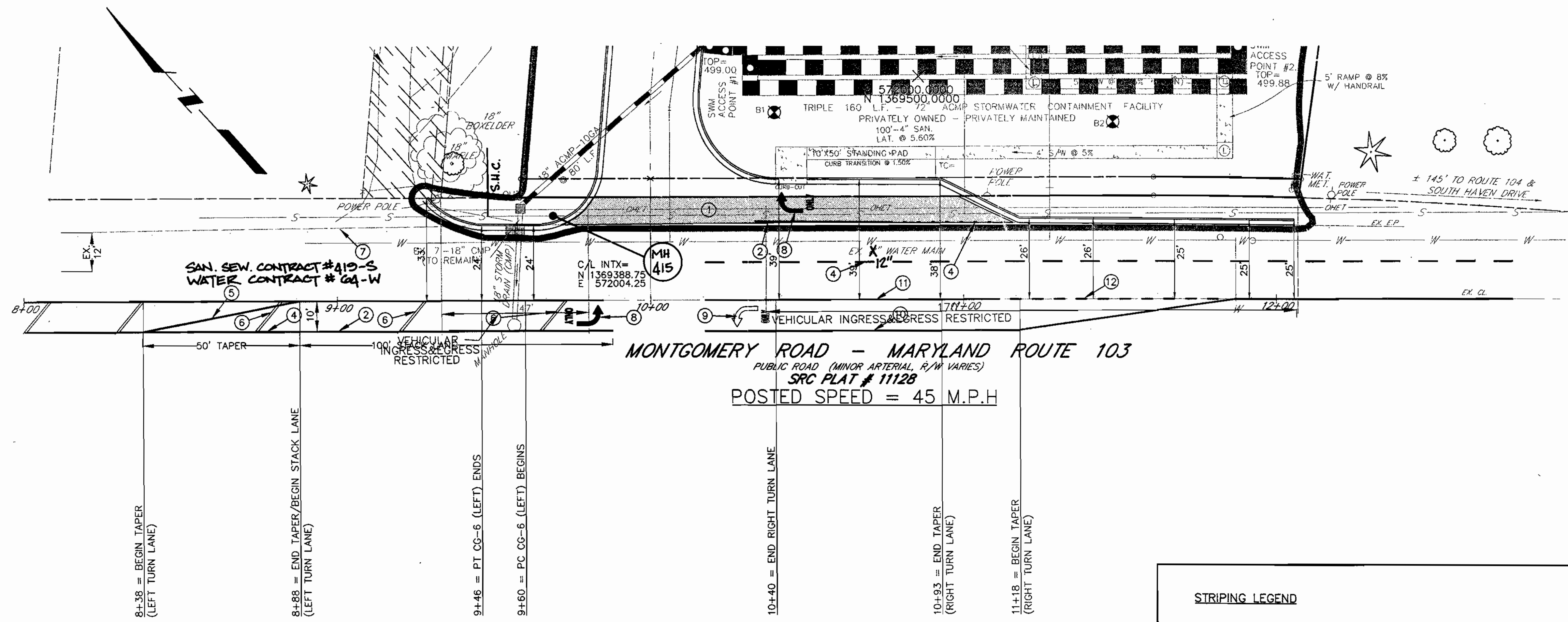
SCALE: 1"=20'
 DATE: 05.25.00
 DRN: GMC
 CKD: KEM
 SHEET 13 OF 20



MONTGOMERY ROAD - MARYLAND ROUTE 103
 PUBLIC ROAD (MINOR ARTERIAL, R/W VARIES)
 SRC PLAT # 11128

DEVELOPER:
 CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 4201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Director: [Signature] DATE: 11/9/00
 Chief, Division of Land Development: [Signature] DATE: 11/1/00
 Chief, Development Engineering Division: [Signature] DATE: 10/25/00



MONTGOMERY ROAD - MARYLAND ROUTE 103
 PUBLIC ROAD (MINOR ARTERIAL, R/W VARIES)
 SRC PLAT # 11128
 POSTED SPEED = 45 M.P.H

STRIPING LEGEND

	1 PROP. PAVEMENT SECTION IN R/W		7 EX. WHITE E.P. STRIPING (4")
	2 PROP. SOLID WHITE STRIPING (4" DOUBLE LINES)		8 PROP. DIRECTIONAL ARROW
	3 PROP. "PUPPY TRACK" WHITE STRIP (4" (NOT APPLICABLE))		9 EX. DIRECTIONAL ARROW
	4 PROP. DASHED WHITE STRIPING (4" DOUBLE LINES)		10 EX. YELLOW SOLID STRIPING (4" DOUBLE LINES)
	5 PROP. YELLOW TAPER CONNECTION (4")		11 EX. WHITE SOLID LINE STRIPING (4")
	6 EX. YELLOW MEDIAN STRIPING (4") - TO BE REMOVED		12 EX. WHITE DASHED STRIP (4")

TAPER LENGTH NOTE (LEFT TURN LANE):
 PER THE M.U.T.C.D. TAPER LENGTH (L) REQUIRED FOR TRAVELWAY (W) = 10', POSTED SPEED (S) = 45 M.P.H.:
 $L = W \times S = 10 \times (45 \times 0.85)$
 $L = 380'$, NOT AVAILABLE @ SITE FRONTAGE.

SINCE ANTICIPATED TRAFFIC VOLUME TO DAYCARE CENTER IS LESS THAN TRAFFIC VOLUME TO SHOPPING CENTER ACROSS THE STREET, USE SAME TAPER AND STACK LENGTH AS SHOWN FOR THE EXISTING RIGHT TURN LANE:

$L_{TAPER} = 50'$
 $L_{STACK} = 100'$

PAVING STRIPING NOTES

- DESCRIPTION:
 - PAVEMENT MARKINGS AND LINE STRIPING SHALL CONSIST OF PAINT APPLICATION. SEE EXCEPTIONS ON NOTE #4(A).
- CONSTRUCTION DETAILS:
 - STRIPING
 - GENERAL
 - ALL FINAL, INTERIM AND TEMPORARY MARKINGS AND PATTERNS SHALL BE PLACED AS SHOWN ON THE DRAWINGS AND DETAILS, AND PER THE MOST CURRENT M.U.T.C.D.
 - BEFORE ANY FINAL PAVEMENT MARKING WORK IS BEGUN, A SCHEDULE OF OPERATIONS SHALL BE SUBMITTED FOR THE APPROVAL OF THE OWNER'S FIELD REPRESENTATIVE.
 - EXISTING MARKINGS SHALL BE REMOVED BY GRINDING ON CONCRETE OR GRINDING OR SLURRY SEAL COAT ON ASPHALT.
 - THE STRIPING SHALL BE APPLIED ONLY ON THOROUGHLY DRY PAVEMENT SURFACES. WHEN THE ATMOSPHERIC TEMPERATURE IS AT OR ABOVE 60°F FOR PLASTIC STRIPING AND MARKINGS AND 40°F FOR PAINT STRIPING AND MARKINGS, AND WHEN THE WEATHER IS OTHERWISE UNFAVORABLE.
 - APPLICATION OF PAVEMENT MARKINGS
 - PAINTED PAVEMENT MARKINGS SHALL, UNLESS OTHERWISE NOTED HEREIN, BE APPLIED WITH ATOMIZING SPRAY TYPE STRIPING MACHINES. THE EQUIPMENT SHALL BE COMPATIBLE WITH AND SUITABLE FOR THE APPLICATION OF THE TYPE OF PAINT BEING USED AND SHALL HAVE CLEAN-CUT EDGES. TRUE AND SMOOTH ALIGNMENT AND UNIFORM FILM THICKNESS OF 15±1 MILS.
 - NORMAL SPREADING RATES FOR PAVEMENT MARKING PAINTS SHALL BE FROM 100 TO 115 SQUARE FEET PER GALLON SO AS TO OBTAIN A WET FILM THICKNESS OF 15±1 MILS.

3. STRIPING SCHEDULE
 (A) REFER TO LEGEND.

4. MATERIALS

- PLASTIC PAVEMENT MARKINGS AND LEGENDS SHALL BE IN CONFORMANCE WITH MSHA PUBLICATION 480 SECTION 2.3.8.
- PAINT SHALL BE FORMULATED AND MANUFACTURED FROM FIRST-GRADE MATERIALS AND SHALL BE FREE FROM DEFECTS THAT MAY ADVERSELY AFFECT THE SERVICEABILITY OF THE FINISHED PRODUCT. WHEN THE PAINT IS STORED IN ITS CONTAINER, THE PIGMENTED BINDER SHALL NOT LIVER OR SETTLE OUT TO THE EXTENT THAT RE-MIXING IS DIFFICULT BY STANDARD METHODS OR THE APPLICATION IS DETRIMENTALLY AFFECTED.
- ALL PAINT FURNISHED MUST BE SHIPPED IN STRONG, SUBSTANTIAL AND PROPERLY SEALED CONTAINERS. FIVE GALLON STEEL PAILS SHALL HAVE FULL DIAMETER HUB COVER, WIRE BAIL AND HANDLE.
- PAINT SHALL BE SHERWIN-WILLIAMS TRAFFIC MARKING PAINT OR EQUAL AS APPROVED BY THE STATE HIGHWAY ADMINISTRATION AND CONFORMING TO THE MSHA PUBLICATION 480 SECTION 2.3.8.

NOTE:
 ALL ROAD CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE HOWARD COUNTY ROADS AND BRIDGES MANUAL, VOLUME 3, AND THE LATEST ADOPTED EDITION OF THE M.S.H.A.

NOTE:
 CENTERLINES INTERSECTION PROVIDED WITH ACTUAL COORDINATES, STATIONING IS ARBITRARY.

I. ADDED BY TRI-TEK ENGINEERING, INC.

DEVELOPER:

CHILDTIME, INC.
 c/o BRITT CONSTRUCTION, INC.
 4201 PLEASANT VALLEY ROAD
 CHANTILLY, VIRGINIA 20151

APPROVED:

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 11/2/00
 DIRECTOR DATE

[Signature] 11/1/00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 10/25/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

NO	REVISION	DATE
1	ADD MH 415, S.H.C. & 12" W.	12/4/00

OWNER:

VIRGIL L. AND IDOLINE L. LOUGH
 12635 EMORY FARM LANE
 SYKESVILLE, MARYLAND 21784
 (D.B. 470 @ F. 274)

ADDRESS CHART

PARCEL NO.	STREET ADDRESS
753	4895 MONTGOMERY ROAD

GARRIAN ACRES

PLAT NO.	BLOCK NO.	ZONE	TAX ZONE	ELECT. DIST.	SENSUS TR.
14348	8	R-20	31	2ND	6027

WATER CODE: 601 SEWER CODE: 13750671

SCALE: 1"=20'
 DATE: 05.25.00
 DRN: ALLEN
 CKD: KEM
 SHEET 16 OF 20

STRIPING PLAN

**CHILD TIME CHILDCARE CENTER
 TAX MAP 31 - PARCEL 753**

TRI-TEK ENGINEERING
 CIVIL • ENVIRONMENTAL • LAND PLANNING • SURVEYING
 a professional corporation
 690 Center Street, Suite 300
 Herndon, Virginia 20170-5018 (703) 481-5900