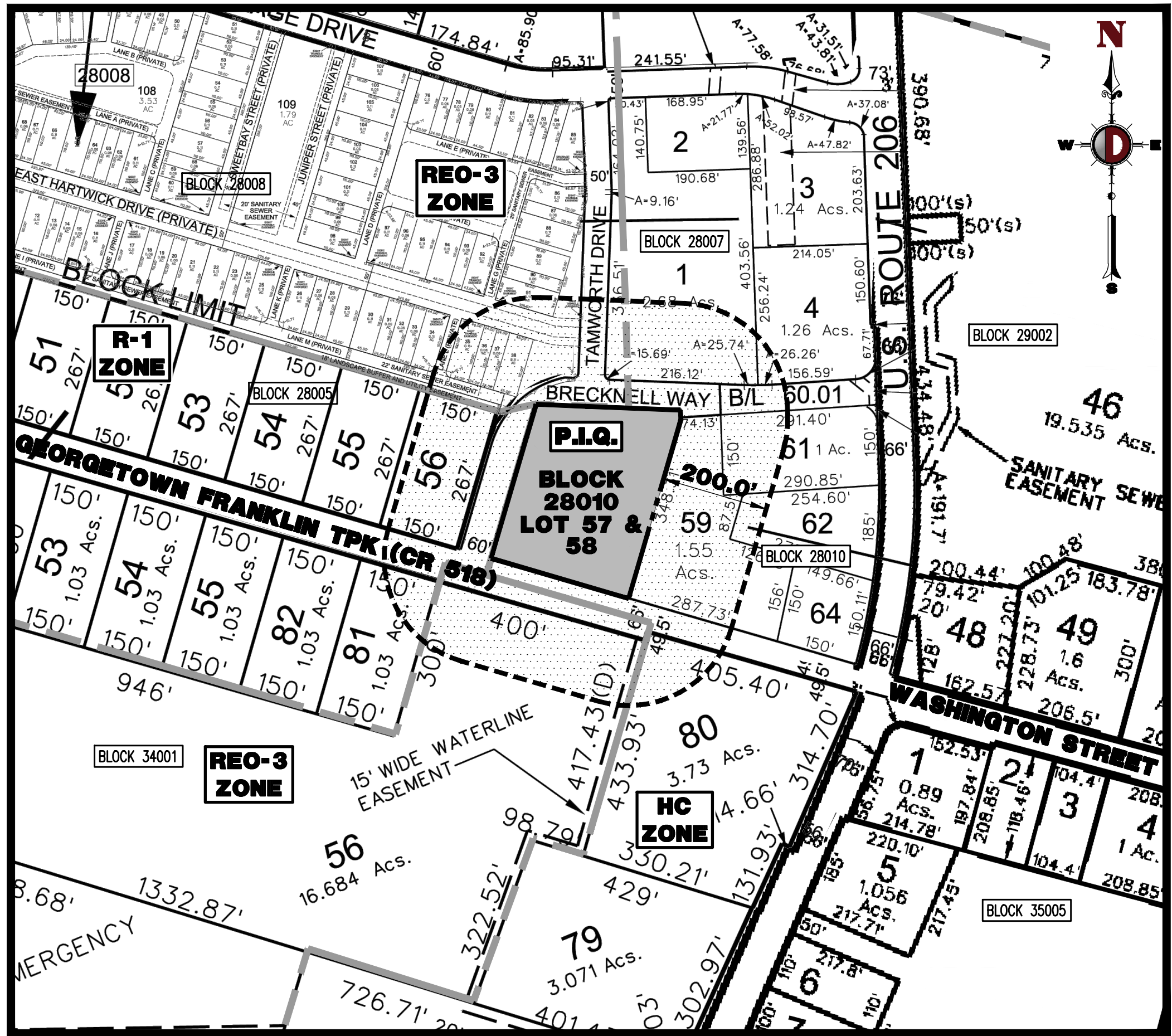


PRELIMINARY AND FINAL MAJOR SITE PLAN
FOR
MALVERN SCHOOL PROPERTIES, LP
PROPOSED DAY SCHOOL

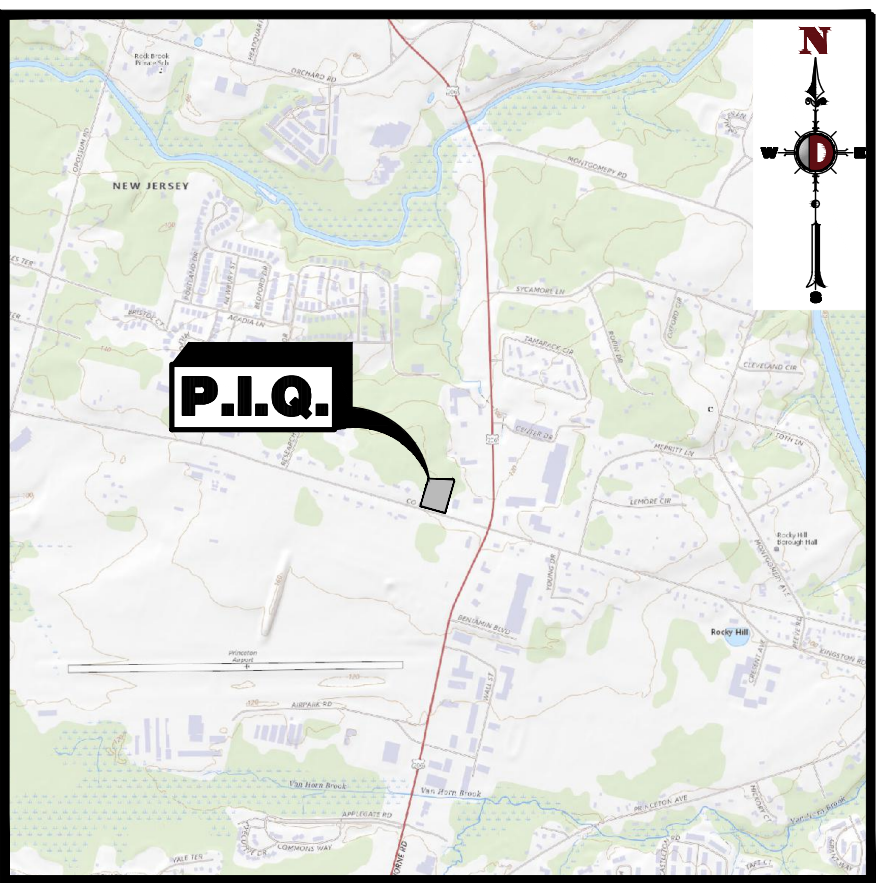
BLOCK 28010, LOT 57 & 58; TAX MAP SHEET #55 - LATEST REV. DATED 2020-2021
982 GEORGETOWN-FRANKLIN TURNPIKE
TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY, NEW JERSEY

200' PROPERTY OWNERS LIST

Table with 4 columns: PROPERTY OWNER, BLOCK, LOT, and ALSO TO BE NOTICED. It lists various property owners and their details for blocks 28003 through 28010.



AREA MAP
1" = 200'



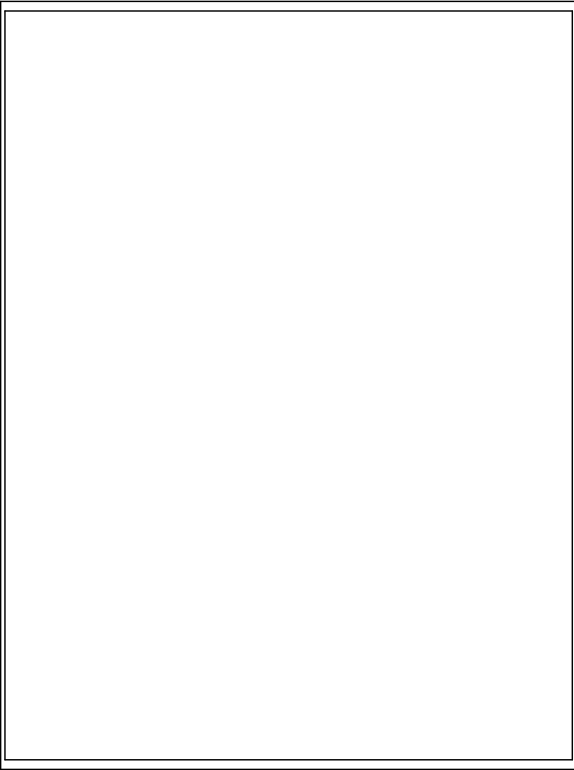
KEY MAP
1" = 2000'

Drawing Index table listing various drawing sheets and their corresponding page numbers, including Cover Sheet, Aerial Map, and various construction details.

PLANNING BOARD APPROVAL

Table for Planning Board Approval with columns for Chairman, Secretary, and Board Engineer, each with a line for a signature and date.

Vertical sidebar containing logos for Dynamic Engineering Consultants, P.C., 811, and Jeffrey Haberman. It also includes a revision table, a project information section, and a title block for the 'COVER SHEET'.



THESE PLANS ARE NOT ACCEPTED FOR CONSTRUCTION UNLESS THIS BLOCK IS STAMPED "ACCEPTED AS SUBMITTED" BY A STAFF MEMBER OF THE SOMERSET COUNTY ENGINEERING DIVISION. BIDS FOR CONSTRUCTION SHOULD NOT BE BASED ON THESE PLANS UNTIL THE PLANS ARE ACCEPTED BY THE COUNTY.
ACCEPTANCE OF THESE PLANS EXPIRES TWO (2) YEARS FROM THE STAMPED DATE.

PREPARED BY
DYNAMIC ENGINEERING CONSULTANTS, P.C.
1904 MAIN STREET
LAKE COMO, NJ 07719
WWW.DYNAMICEC.COM

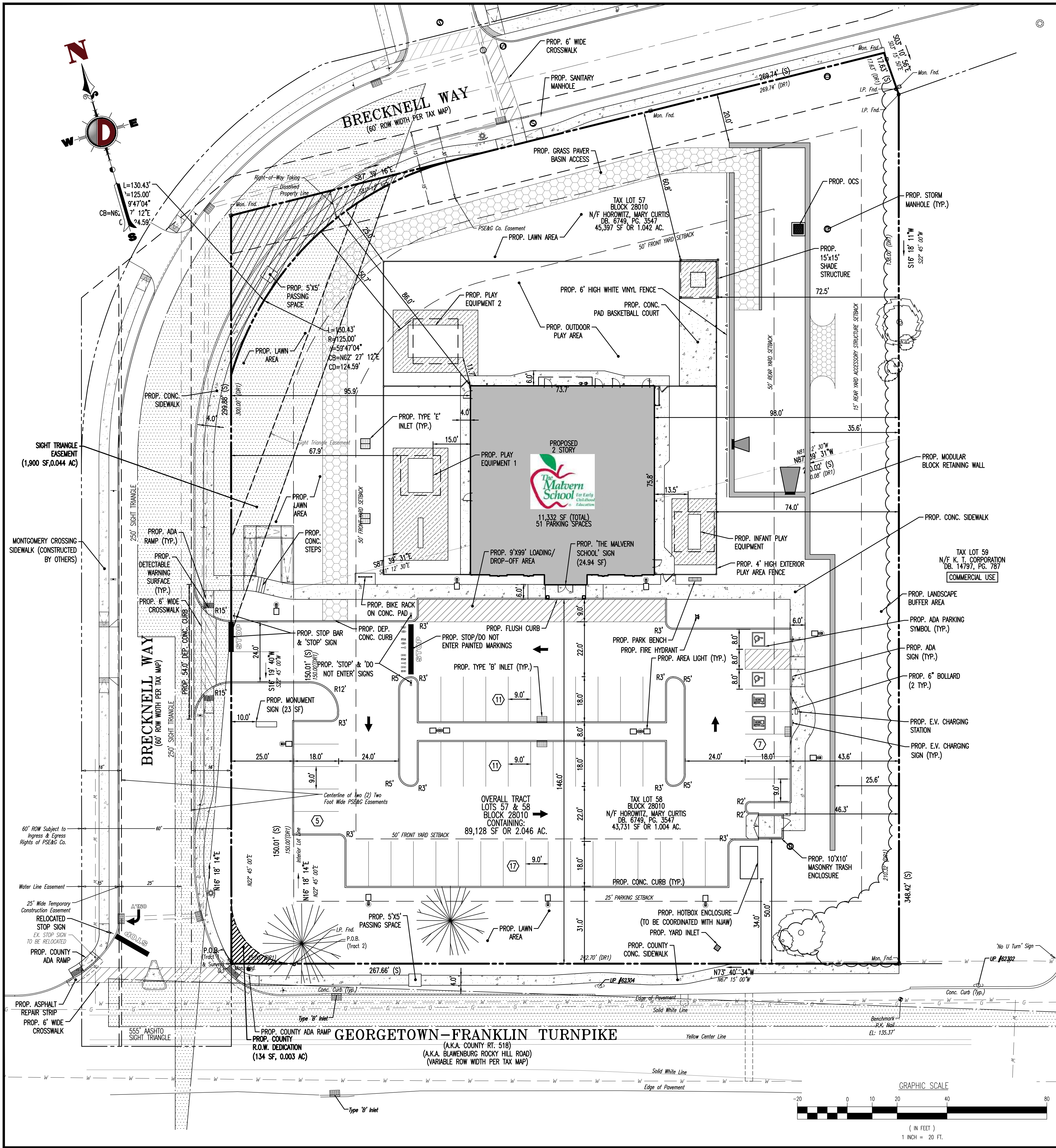




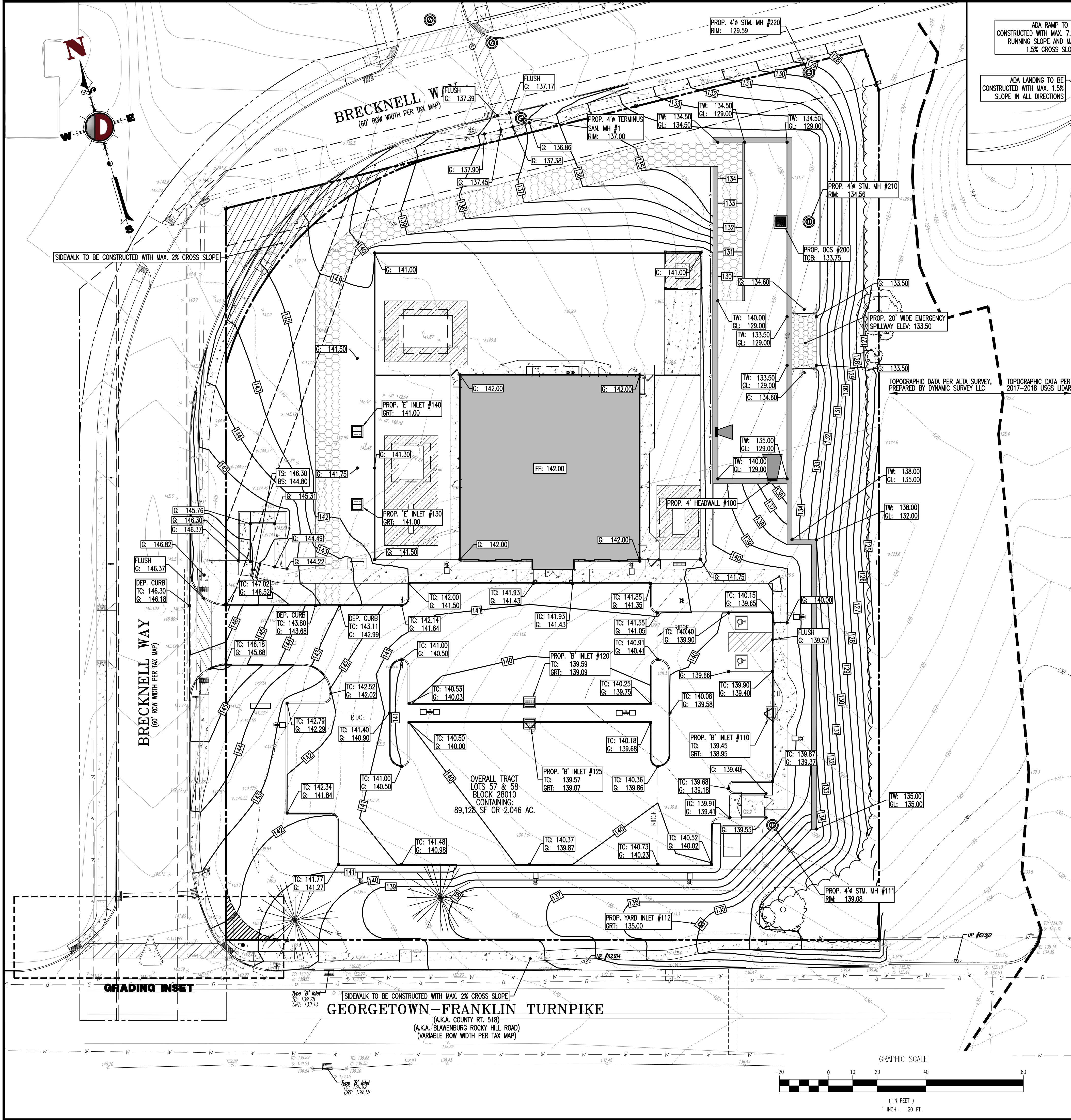






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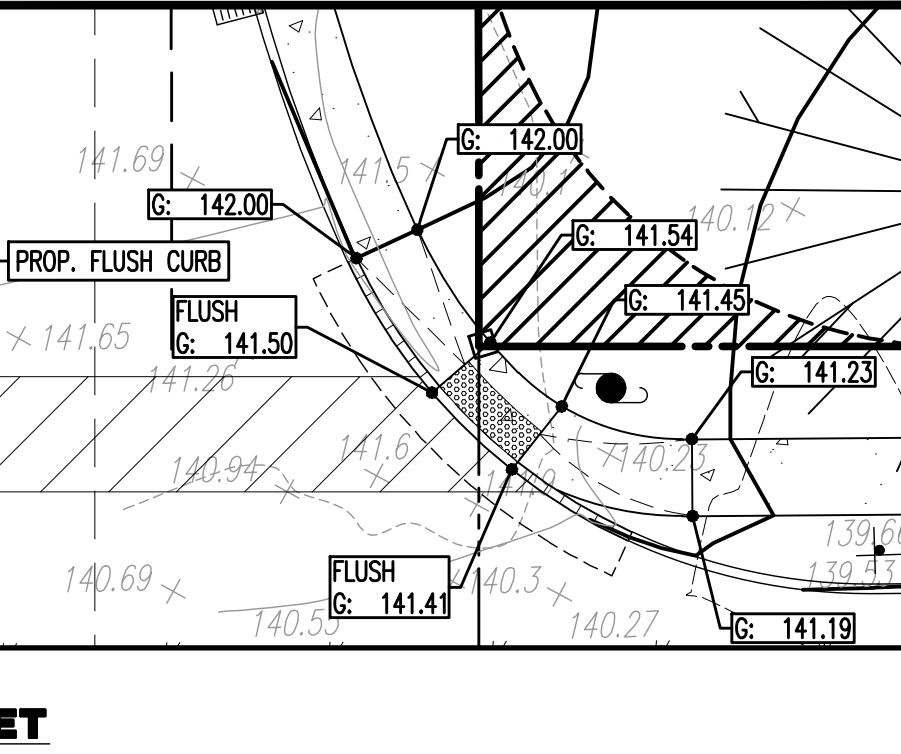




- GRADING NOTES**
1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT REFERENCED IN THIS PLAN SET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMEDIATING AND REPAIRING ALL SOIL YIELDING OR UNDESIRABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE SOILS REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 2% BELOW REGISTERED WHEN THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING FOOT AREA AND AREAS TO BE FLOORED HAVE BEEN COMPLETED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT.
  2. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INSERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO OBTAIN 0.75% MIN. SLOPE AGAINST ALL ISLAND OUTLETS, CURBS AND LOTS ON ALL CONCRETE SURFACES, AND 1-1/2% MAX. ON ASPHALT TO PREVENT POOLING AND DISCREPANCIES THAT MAY EFFECT THE PUBLIC SAFETY OF PROJECT. COSTS MUST BE IDENTIFIED TO THE ENGINEER IN WRITING. MANUALLY. PROCEEDING WITH CONSTRUCTION WITH DESIGN DISCREPANCIES IS DONE SO AT THE CONTRACTOR'S OWN RISK.
  3. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 4" ABOVE EXISTING LOCAL ASPHALT DRIVE UNDERLYING NOTES. YIELD ADJUST TO CREATE A MIN. OF 0.75% GUTTER GRADE ALONG CURB FACE. ENGINEER TO APPROVE FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION.
  4. SUBGRADE MATERIAL FOR SIDEWALKS, CURBS, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBGRADE BE DEEMED UNSUITABLE, SUBGRADE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL, COMPACTED TO 95% OPTIMUM DENSITY (AS DETERMINED BY MODIFIED PROCTOR METHOD).
  5. REFER TO SITE PLAN FOR ADDITIONAL NOTES.
  6. IN CASE OF DISCREPANCIES BETWEEN PLANS, THE SITE PLAN WILL SUPERCEDE IN ALL CASES. CONTRACTOR MUST NOTIFY ENGINEER OF RECORD OF ANY CONFLICTS IMMEDIATELY.
  7. MAXIMUM CROSS SLOPE OF 2% ON ALL SIDEWALKS.
  8. CONTRACTOR TO ENSURE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS IN ADA PARKING SPACES AND ADA ACCESSIBLE MOLES. CONTRACTOR TO ENSURE A MAXIMUM OF 1% RUNNING SLOPE AND 2% CROSS SLOPE ALONG ALL OTHER PORTIONS OF ACCESSIBLE ROUTE, WITH THE EXCEPTION OF RAMP AND CURB RAMP. CONTRACTOR SHALL CLARIFY ANY QUESTIONS CONCERNING CONSTRUCTION IN ADA AREAS WITH THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.
  9. THE OWNER SHALL RETAIN DYNAMIC ENGINEERING, LLC (908-870-7080) OR AN ALTERNATE QUALIFIED OF THE BASIN BOTTOM SOILS AND ANY FILL MATERIALS WITHIN ANY PROPOSED INFILTRATION OR RETENTION BASIN TO CONDUCT PERMEABILITY TESTING.
  10. CONTRACTOR IS TO REMOVE EXISTING UNSUITABLE OR OVERLY COMPACT SOIL OR ROCK AS NEEDED TO ACHIEVE REQUIRED PERMEABILITY AS DIRECTED BY THE OWNER'S GEOTECHNICAL ENGINEER AND FIRM. IF NEEDED, SHALL HAVE AN IN PLACE PERMEABILITY GREATER THAN OR EQUAL TO THE DESIGN CRITERIA.
  11. CONTRACTOR IS RESPONSIBLE FOR CONTRACTING THE OWNER'S GEOTECHNICAL ENGINEER PRIOR TO ONSET OF CONSTRUCTION TO QUOTE AND CONFIRM THE CONTRACTOR'S PROPOSED MEANS AND MATERIALS AND TO SCHEDULE INSPECTION FOR BOTTOM OF BASIN REMOVAL OF UNSUITABLE SOIL, FILL PLACEMENT, AND FINE GRAIN PERMEABILITY TESTING.
  12. THE CONTRACTOR IS RESPONSIBLE FOR AS-BUILT PLANS AND GRADE CONTROL UNLESS DEFINED OTHERWISE ELSEWHERE IN THE CONTRACT DOCUMENTS.

IF DURING CONSTRUCTION INSPECTION IT IS FOUND THAT EQUIPMENT EXCEEDING THE MAXIMUM 8.0 POUNDS PER SQUARE INCH REQUIREMENT HAS BEEN USED FOR BACKFILL OR FINAL GRADING OF DESIGNATED LAWN AREAS, THE APPLICANT MUST STOP WORK IMMEDIATELY AND NOTIFY THE ENGINEER OF RECORD. THE ENGINEER OF RECORD SHALL DETERMINE THE FEASIBILITY OF THE UPPER 18 INCHES OF COMPACTED SOIL SHALL BE SITE-SPECIFIC, AND SUBJECT TO THE APPROVAL OF THE REVIEWING AUTHORITY.

GRADING/UTILITY GRAPHIC LEGEND	
	PROPERTY LINE (PARCEL IN QUESTION)
	OFF-SITE PROPERTY LINES
	EXIST. CABLE LINE
	PROP. CABLE LINE
	EXIST. ELECTRIC LINE
	PROP. ELECTRIC LINE
	EXIST. FIBER OPTIC LINE
	PROP. FIBER OPTIC LINE
	EXIST. GAS LINE
	PROP. GAS LINE
	EXIST. OVERHEAD WIRES
	PROP. OVERHEAD WIRES
	EXIST. TELEPHONE LINE
	PROP. TELEPHONE LINE
	EXIST. WATER LINE
	PROP. WATER LINE
	EXIST. FIRE SERVICE
	PROP. FIRE SERVICE
	EXIST. UNDERGROUND ELEC./TELE. SERVICE (NO. & SIZE OF CONDUITS NOT DEFINED)
	PROP. UNDERGROUND ELEC./TELE. SERVICE (NO. & SIZE OF CONDUITS NOT DEFINED)
	EXIST. SANITARY SEWER LINE
	PROP. SANITARY SEWER LINE
	EXIST. FORCE MAIN
	PROP. FORCE MAIN
	EXIST. STORM DRAIN LINE
	PROP. STORM DRAIN LINE
	EXIST. MINOR CONTOUR & ELEVATION
	PROP. MINOR CONTOUR & ELEVATION
	EXIST. MAJOR CONTOUR & ELEVATION
	PROP. MAJOR CONTOUR & ELEVATION
	EXIST. SPOT ELEVATIONS
	PROP. SPOT ELEVATIONS
	EXIST. TOP OF CURB ELEV.
	PROP. TOP OF CURB ELEV.
	EXIST. FINISH FLOOR ELEV.
	PROP. FINISH FLOOR ELEV.
	EXIST. GARAGE FLOOR ELEV.
	PROP. GARAGE FLOOR ELEV.
	EXIST. TOP OF CURB & FINISHED GRADE ELEV.
	PROP. TOP OF CURB & FINISHED GRADE ELEV.
	EXIST. TOP OF WALL (ACTUAL BOTTOM OF WALL FOOTING TO BE ESTABLISHED BY WALL DESIGNER)
	PROP. TOP OF WALL (ACTUAL BOTTOM OF WALL FOOTING TO BE ESTABLISHED BY WALL DESIGNER)
	EXIST. TOP OF EXTENDED CURB & (H) FINISHED GRADE @ HIGH SIDE OF EXTENDED CURB & (L) FINISHED GRADE @ LOW SIDE OF EXTENDED CURB
	PROP. TOP OF EXTENDED CURB & (H) FINISHED GRADE @ HIGH SIDE OF EXTENDED CURB & (L) FINISHED GRADE @ LOW SIDE OF EXTENDED CURB
	EXIST. GUY WIRE
	EXIST. LIGHT POLE
	EXIST. BUILDING LIGHT
	EXIST. SHADE BOX LIGHT
	EXIST. COBRA LIGHT POLE
	EXIST. TRAFFIC SIGNAL POLE
	EXIST. MANHOLE
	EXIST. "A" INLET
	EXIST. "B" INLET
	EXIST. "C" INLET
	EXIST. "D" INLET
	EXIST. FLARED END SECTION
	EXIST. HEADWALL
	EXIST. MONITORING WELL
	EXIST. TEST PIT LOCATION
	EXIST. FIRE HYDRANT
	EXIST. WATER VALVE
	EXIST. GAS VALVE
	EXIST. GAS METER
	EXIST. ELECTRIC METER
	EXIST. ELECTRIC BOX
	EXIST. CLEAN OUT
	EXIST. WELL
	EXIST. WATER SHUT OFF VALVE
	EXIST. TELEPHONE BOX
	EXIST. CABLE TV BOX
	EXIST. UTILITY POLE
	PROP. WATER VALVE
	PROP. GAS VALVE
	PROP. STORM CLEANOUT
	PROP. SANITARY CLEANOUT
	PROP. AREA LIGHT
	PROP. OUTLET CONTROL STRUCTURE
	PROP. DRAINAGE MANHOLE
	PROP. SANITARY SEWER MANHOLE
	PROP. "A" INLET
	PROP. "B" INLET
	PROP. "C" INLET
	PROP. "D" INLET
	PROP. FLARED END SECTION
	PROP. HEADWALL



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ENGINEERING  
SURVEY • TRAFFIC

DATE	09/19/23	REV.	PER TWP. COMPLETENESS COMMENTS	BY
1				KTK

THIS PLAN SET IS FOR PERMITTING PURPOSES ONLY AND MAY NOT BE USED FOR CONSTRUCTION

DRAWN BY: KTK  
DESIGNED BY: AF  
CHECKED BY: JSH

PROJECT: **MALVERN SCHOOL PROPERTIES, LP**  
BLOCK 28010, LOTS 57 & 58  
98A GEORGETOWN-FRANKLIN TURNPIKE  
TOWNSHIP OF MONTGOMERY, SOMERSET COUNTY, NEW JERSEY

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Houston, Texas • T: 281.787.4400  
Dallas, Texas • T: 972.644.0000  
Del Rio, Texas • T: 361.921.0000

**JEFFREY HABERMAN**  
PROFESSIONAL ENGINEER  
NEW JERSEY LICENSE NO. 53560

**JACQUELYN GIORDANO**  
PROFESSIONAL ENGINEER  
NEW JERSEY LICENSE NO. 53568

TITLE: **GRADING PLAN**

SCALE: (H) 1"=20'  
(V) 1"=20'

PROJECT NO: 4447-22-01334

SHEET NO: **5** OF 22

DATE: 08/17/2023

Rev. #:





IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY UTILITY "ONE-CALL" NUMBER 72 HOURS PRIOR TO ANY EXCAVATION ON THIS SITE. CONTRACTOR SHALL ALSO NOTIFY LOCAL WATER & SEWER DEPARTMENTS TO MARK-OUT THEIR UTILITIES.

2. ROOF LEADER COLLECTION PIPES ARE CONCEPTUAL IN NATURE AND ARE NOT FOR CONSTRUCTION. ACTUAL ROOF LEADER COLLECTION PIPING IS TO BE COORDINATED BY ARCHITECTURAL PLANS FOR EACH INDIVIDUAL BUILDING. ALL ROOF LEADER COLLECTION PIPING SHALL BE SCHEDULE 40 PVC UNLESS OTHERWISE DESIGNED.

3. MANUFACTURED REINFORCED CONCRETE STORM PIPE TO CONFORM TO ASTM C-76, CLASS II, UNLESS OTHERWISE DESIGNATED. MANUFACTURED REINFORCED CONCRETE ELLIPTICAL STORM PIPE TO CONFORM TO ASTM C-507, CLASS II, UNLESS OTHERWISE DESIGNATED. REINFORCED CONCRETE STORMWATER PIPE TO BE INSTALLED IN ACCORDANCE WITH AMERICAN CONCRETE PIPE ASSOCIATION INSTALLATION GUIDELINES AND MORTAR OR PREFORMED FLEXIBLE JOINT SEALANTS IN ACCORDANCE WITH ASTM C-443. STORM PIPES SHALL PROVIDE A SILENT-JOINT. UNLESS SPECIFICALLY INDICATED, REINFORCED CONCRETE STORM PIPE JOINTS SHALL BE WATERIGHT AND CONFORM TO ASTM C-443.

4. HDPE DRAINAGE PIPE SHALL HAVE A SMOOTH WALL INTERIOR WITH ANNUAL EXTERIOR CORRUGATIONS AND CONFORM TO ASTM F2306. SLOPED PIPE SHALL HAVE GASKETED WATER-TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM F2306 AND ASTM D3212. PERFORATED PIPE SHALL HAVE GASKETED SILENT-TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM F2306 AND ASTM F4287. HDPE PIPE SHALL BE FROM A MANUFACTURER WHO IS AN EASTERN STATES CONSTRUCTION (ESC) QUALIFIED MANUFACTURER OF HDPE PIPE AND SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER.

5. HDPE DRAINAGE PIPE SHALL HAVE A SMOOTH WALL INTERIOR WITH ANNUAL EXTERIOR CORRUGATIONS AND CONFORM TO ASTM F2376 (12"-36" PIPE) AND ASTM F2681 (36"-60" PIPE). SLOPED PIPE SHALL HAVE GASKETED WATER-TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM D3212 AND ASTM F427. FIELD WATERTIGHTNESS PERFORMANCE VERIFICATION MAY BE ACCOMPLISHED IN ACCORDANCE WITH ASTM F2487. HDPE PIPE SHALL BE FROM A MANUFACTURER WHO IS AN EASTERN STATES CONSTRUCTION (ESC) QUALIFIED MANUFACTURER OF HDPE PIPE AND INSTALLED IN ACCORDANCE WITH PIPE MANUFACTURER RECOMMENDATIONS.

6. PIPE LENGTHS ON THIS PLAN HAVE BEEN MEASURED AS THE DISTANCE BETWEEN THE CENTER POINT OF THE 2 CONNECTED STRUCTURES. ACTUAL PHYSICAL PIPE LENGTH FOR INSTALLATION IS EXPECTED TO BE LESS AND SHOULD BE ACCORDED FOR BY THE CONTRACTOR ACCORDINGLY.

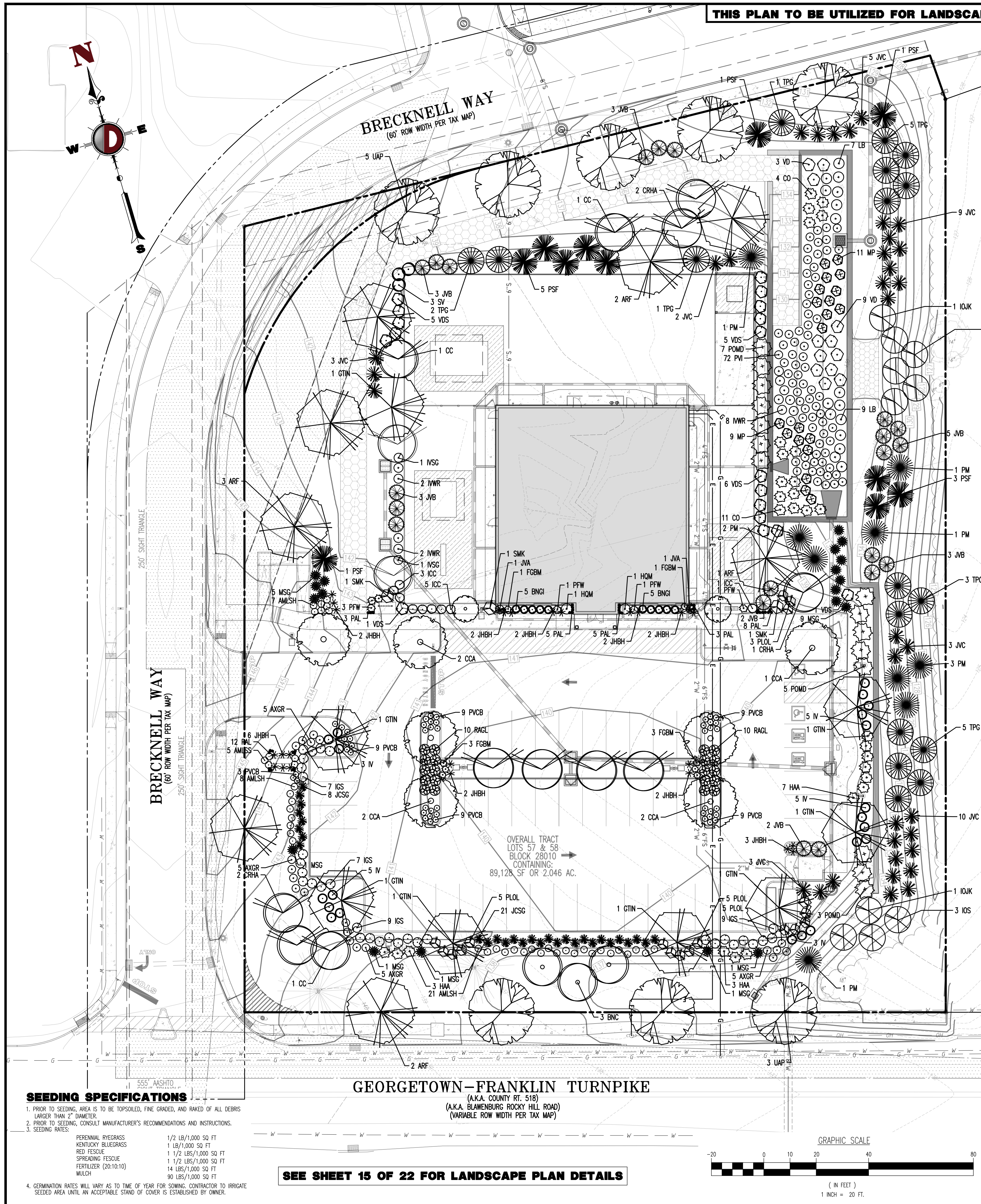
7. EXISTING STORMWATER PIPE BEYOND PROPOSED CONNECTION SHALL BE TEASED PRIOR TO ANY PROPOSED CONNECTION.











## LANDSCAPE SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
<b>SHADE TREE(S)</b>					
ARF	8	ACER RUBRUM 'FRANKSRED'	RED SUNSET MAPLE	2 1/2-3" CAL.	B+B
CCA	7	CARPINUS CAROLINIANA	AMERICAN HORNBAM	2 1/2-3" CAL.	B+B
GTN	8	GLEDITSIA TRACANTHOS INERMIS 'SUNCOLE'	SUNBURST THORNLESS HONEYLOCUST	2 1/2-3" CAL.	B+B
QPG	2	QUERCUS PALustris 'GREEN PILLAR'	GREEN PILLAR PIN OAK	2 1/2-3" CAL.	B+B
UAP	8	ULMUS AMERICANA 'PRINCETON'	PRINCETON AMERICAN ELM	2 1/2-3" CAL.	B+B
	33				
<b>ORNAMENTAL TREE(S)</b>					
BNC	3	BETULA NIGRA 'CULLY'	HERITAGE RIVER BIRCH, MULTI-STEM	8-10'	B+B
CC	3	CERCIS CANADENSIS	EASTERN REDBUD	8-10'	B+B
CRHA	5	CORNUS RUBRA 'A'	AURORA DOGWOOD HYBRID	8-10'	B+B
MV	2	MAGNOLIA VIRGINIANA	SWEEETBAY MAGNOLIA	8-10'	B+B
PSCS	4	PRUNUS SARGENTI 'COLUMNARIS'	COLUMNAR SARGENT CHERRY	8-10'	B+B
	17				
<b>EVERGREEN TREE(S)</b>					
IJKK	2	ILEX OPACA 'JERSEY KNIGHT'	JERSEY KNIGHT AMERICAN HOLLY	6-7'	B+B
IOS	8	ILEX OPACA 'SATYR HILL'	SATYR HILL HOLLY	6-8'	B+B
JVB	21	JUNIPERUS VIRGINIANA 'BURKII'	BURKII RED CEDAR	6-8'	B+B
JVC	35	JUNIPERUS VIRGINIANA 'CORCORCOR'	EMERALD SENTINEL RED CEDAR	6-8'	B+B
PM	9	PSEUDOTSUGA MENZIESI	DOUGLAS FIR	6-7'	B+B
PSF	11	PINUS STROBUS 'FASTIGIATA'	PYRAMIDAL WHITE PINE	6-8'	B+B
TPG	17	THUJA PLICATA 'GREEN GIANT'	GREEN GIANT ARBORVITAE	7-8'	B+B
	103				
<b>EVERGREEN SHRUB(S)</b>					
AXGR	20	ABELIA X GRANDIFLORA 'RADIANCE'	RADIANCE AELIA	24-30"	#3 CAN
INGC	10	BUXUS 'NEW GEN INDEPENDENCE'	NEW GEN INDEPENDENCE BOXWOOD	24-30"	B+B
ENCI	9	ILEX GRENAITA 'COMPACTA'	COMPACT JAPANESE HOLLY	24-30"	#3 CAN
IOS	32	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERY HOLLY	24-30"	#3 CAN
JCSG	29	JUNIPERUS CHINENSIS 'SEA GREEN'	SEA GREEN JUNIPER	24-36" SPFD.	B+B
JWA	2	JUNIPERUS VIRGINIANA 'TARROWNVB'	AQUINIA JUNIPER	36-42"	#7 CAN
PLOL	18	PRUNUS LAUROCEASUS 'OTTO LUYKEN'	OTTO LUYKEN CHERRYLAUREL	24-30"	#3 CAN
	120				
<b>DECIDUOUS SHRUB(S)</b>					
AMLSH	36	ARONIA MELANOCARPA 'LOW SCAPE HEDGER'	'LOW SCAPE HEDGER' CHOCHEBERRY	18-24"	#3 CAN
AMLS5	5	ARONIA MELANOCARPA 'SUMANPEM'	'LOW SCAPE SNOWFIRE' CHOCHEBERRY	18-24"	#3 CAN
CO	16	CEPHALANTHUS OCCIDENTALIS	BUTTON BUSH	12-15"	#2 CAN
FOBM	8	FOTHERGILLIA GARDENII 'BLUE MIST'	'BLUE MIST' DWARF FOTHERGILLIA	2-3"	#3 CAN
HAA	13	HYDRANGEA ABORESCENS 'ANNABELLE'	'ANNABELLE' HYDRANGEA	24-30"	#3 CAN
HOM	2	HYDRANGEA QUERCIFOLIA 'MUNCHKIN'	'MUNCHKIN' OAKLEAF HYDRANGEA	24-30"	#3 CAN
IV	21	ITEA VIRGINICA 'HENRY'S GARNET'	GARNET SWEETSPIRE	24-30"	#5 CAN
IVSG	2	ILEX VERTICILLATA 'SOUTHERN GENTLEMAN'	SOUTHERN GENTLEMAN WINTERBERRY HOLLY	30-36"	#5 CAN
INWR	12	ILEX VERTICILLATA 'WINTER RED'	WINTER RED WINTERBERRY HOLLY	30-36"	#5 CAN
LB	16	LINDERA BENZOIN	SPICEBUSH	12-15"	#2 CAN
MP	20	MYRTICA PENNSYLVANICA	NORTHERN BARBERRY	12-15"	#2 CAN
PFW	6	POTENTILLA FRUTICOSA 'HAPPY FACE WHITE'	HAPPY FACE WHITE POTENTILLA	2-3"	#3 CAN
PMD	15	PHYSCARPUS OPULOIFOLUS	'NINE BARB' 'DABOLO'	30-36"	#5 CAN
SUNK	3	SYRINGA PATULA 'MISS KIM'	MISS KIM CROUNED LILAC	24-30"	#5 CAN
SV	3	SYRINGA VULGARIS	COMMON PURPLE LILAC	3-4"	B+B
VD	12	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	12-15"	#2 CAN
VDS	18	VIBURNUM DENTATUM 'SYNNESTVEDT'	CHICAGO LUSTRE ARROWWOOD VIBURNUM	30-36"	#5 CAN
	208				
<b>GROUND COVER</b>					
JHSH	24	JUNIPERUS HORIZONTALIS 'BAR HARBOR'	BAR HARBOR CREEPING JUNIPER	15-18" SPFD.	#3 CAN
RAGL	20	RHUS AROMATICA 'GRO-LOW'	GRO-LOW SUMAC	1 GAL.	CONTAINER
	44				
<b>ORNAMENTAL GRASS(S)</b>					
MSG	19	MISCANTHUS SINENSIS 'GRACILLIMUS'	MAIDEN GRASS	3 GAL.	CONTAINER
PAL	36	PENNISETUM ALOPECUROIDES 'LITTLE BUNNY'	LITTLE BUNNY FOUNTAIN GRASS	2 GAL.	CONTAINER
PVCB	48	PANICUM VIRGATUM 'CAPE BREEZE'	CAPE BREEZE SWITCH GRASS	2 GAL.	CONTAINER
PVI	70	PANICUM VIRGATUM	SWITCH GRASS	1 GAL.*	CONTAINER
	173				

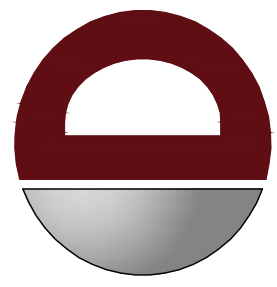
NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE

## PLANTING NOTES

- [illegible]

## PLANTING SPECIFICATIONS

- [illegible]



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ENGINEERING • EARTH  
• SURVEY • TRAFFIC

			KTK
			BY
			REV. PER TWP. COMPLETENESS COMMENTS
			COMMENTS
1	09/19/23		
REV.	DATE		
		COMMENTS	

THIS PLAN SET IS FOR PERMITTING PURPOSES  
ONLY AND MAY NOT BE USED FOR CONSTRUCTION

DESIGNED BY:	CHECKED BY:	CHECKED BY:
KTK	AF	JSH
		-

PROJECT: **MALVERN SCHOOL PROPERTIES, LP**  
**PROPOSED DAY SCHOOL**  
BLOCK 28010, LOTS 57 & 58  
982 GEORGETOWN-FRANKLIN TURNPIKE  
TOWNSHIP OF MONTGOMERY, SOMERSET COUNTY, NEW JERSEY

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JEFFREY HABERMAN  
  
PROFESSIONAL ENGINEER  
NEW JERSEY LICENSE No. 53560

JACQUELYN GIORDANO

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PROFESSIONAL ENGINEER

TITLE: **LANDSCAPE  
PLAN**

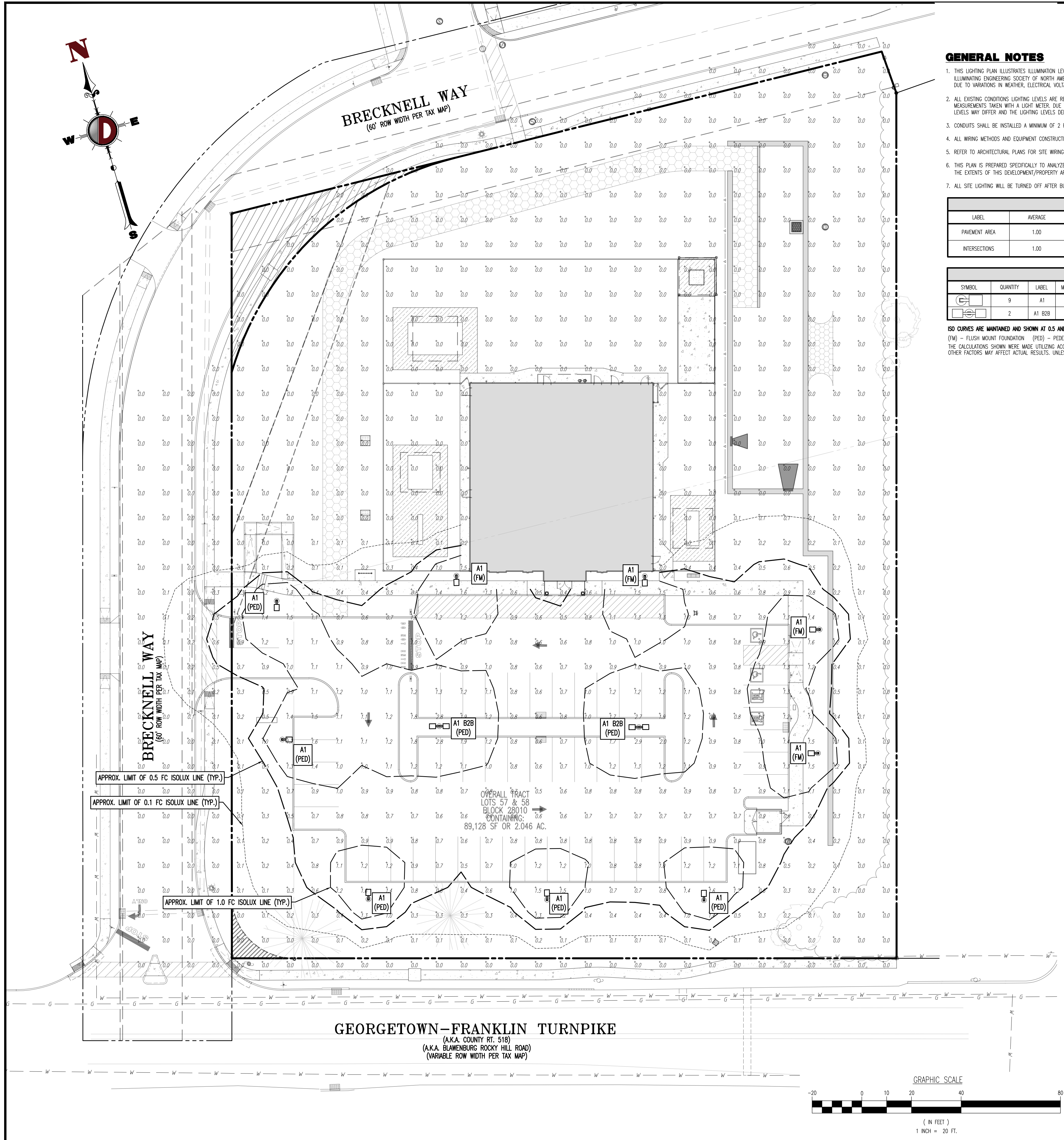
SCALE: (H) 1"=20' (V)	DATE: 08/17/2023
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PROJECT No:  
4447-22-01334

SHEET No: **8** Rev. #:



Plotted: 09/20/23 - 4:10 PM. By: kkkk  
File: P:\JECPC PROJECTS\4447 The Malvern School\22-01334 Montgomery\DWG\Site Plans\04447221334S1.dwg. ---> 09 LIGHTING PLAN



THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY

### GENERAL NOTES

- THIS LIGHTING PLAN ILLUSTRATES ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA) APPROVED METHODS. ACTUAL SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER RELATED VARIABLE FIELD CONDITIONS.
- ALL EXISTING CONDITIONS LIGHTING LEVELS ARE REPRESENTATIVE OF AN APPROXIMATION UTILIZING LABORATORY DATA FOR SIMILAR FIXTURES AND/OR ACTUAL FIELD MEASUREMENTS TAKEN WITH A LIGHT METER. DUE TO FACTORS SUCH AS FIXTURE MAINTENANCE, EQUIPMENT TOLERANCES, WEATHER CONDITIONS, ETC., ACTUAL LIGHTING LEVELS MAY DIFFER AND THE LIGHTING LEVELS DEPICTED ON THIS PLAN SHOULD BE CONSIDERED AS APPROXIMATE.
- CONDUITS SHALL BE INSTALLED A MINIMUM OF 2 FEET BEHIND GUIDELINE POSTS.
- ALL WIRING METHODS AND EQUIPMENT CONSTRUCTION SHALL CONFORM TO THE CURRENT NATIONAL ELECTRICAL CODE.
- REFER TO ARCHITECTURAL PLANS FOR SITE WIRING DIAGRAM.
- THIS PLAN IS PREPARED SPECIFICALLY TO ANALYZE THE LIGHTING LEVELS GENERATED BY THE PROPOSED ON-SITE LIGHTING ONLY. EXISTING LIGHT FIXTURES BEYOND THE EXTENTS OF THIS DEVELOPMENT/PROPERTY ARE NOT MODELED IN THIS DESIGN, AND MAY ALTER ACTUAL LIGHT LEVELS AT THE PROPERTY LINES.
- ALL SITE LIGHTING WILL BE TURNED OFF AFTER BUSINESS HOURS.

### STATISTICAL AREA SUMMARY

LABEL	AVERAGE	MAXIMUM	MINIMUM	AVG./MIN.	MAX./MIN.	DESCRIPTION
PAVEMENT AREA	1.00	2.90	0.50	2.00	5.80	LIGHT LEVELS WITHIN PAVEMENT AREA
INTERSECTIONS	1.00	1.20	0.80	1.25	1.50	LIGHT LEVELS AT DRIVEWAY INTERSECTIONS

### LIGHTING LUMINAIRE SCHEDULE

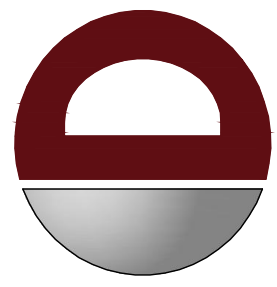
SYMBOL	QUANTITY	LABEL	MOUNTING HEIGHT	ARRANGEMENT	LIGHT LOSS FACTOR	MANUFACTURER	DESCRIPTION	TEMPERATURE	IES FILE
	9	A1	16 FT	SINGLE	1.000	COOPER LIGHTING SOLUTIONS	MEDIUM TYPE 4 WALL MOUNTED LIGHT	3000K	MEM-ED1-LED-E-U-14-7030
	2	A1 B2B	16 FT	BACK-TO-BACK	1.000	COOPER LIGHTING SOLUTIONS	MEDIUM TYPE 4 WALL MOUNTED LIGHT	3000K	MEM-ED1-LED-E-U-14-7030

ISO CURVES ARE MAINTAINED AND SHOWN AT 0.5 AND 0.1 FC.

(FM) - FLUSH MOUNT FOUNDATION (PED) - PEDESTAL FOUNDATION

THE CALCULATIONS SHOWN WERE MADE UTILIZING ACCEPTED PROCEDURES OF THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA. VARIATIONS IN LAMP OUTPUT, BALLAST OUTPUT, LINE VOLTAGE, DIRT DEPRECIATION, AND OTHER FACTORS MAY AFFECT ACTUAL RESULTS. UNLESS OTHERWISE STATED, ALL RESULTS ARE MAINTAINED VALUES, UTILIZING ACCEPTED LIGHT LOSS FACTORS (LLF).

SEE SHEET 15 OF 22 FOR LIGHTING DETAILS



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REV.	DATE	COMMENTS	BY
1	09/19/23	REV. PER TWP. COMPLETENESS COMMENTS	KTK

THIS PLAN SET IS FOR PERMITTING PURPOSES ONLY AND MAY NOT BE USED FOR CONSTRUCTION

DRAWN BY: KTK  
DESIGNED BY: AF  
CHECKED BY: JSH

PROJECT: **MALVERN SCHOOL PROPERTIES, LP**  
BLOCK 28010, LOTS 57 & 58  
PROPOSED DAY SCHOOL  
988 GEORGETOWN-FRANKLIN TURNPIKE  
TOWNSHIP OF MONTGOMERY, SOMERSET COUNTY, NEW JERSEY



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NEW JERSEY LICENSE No. 53568

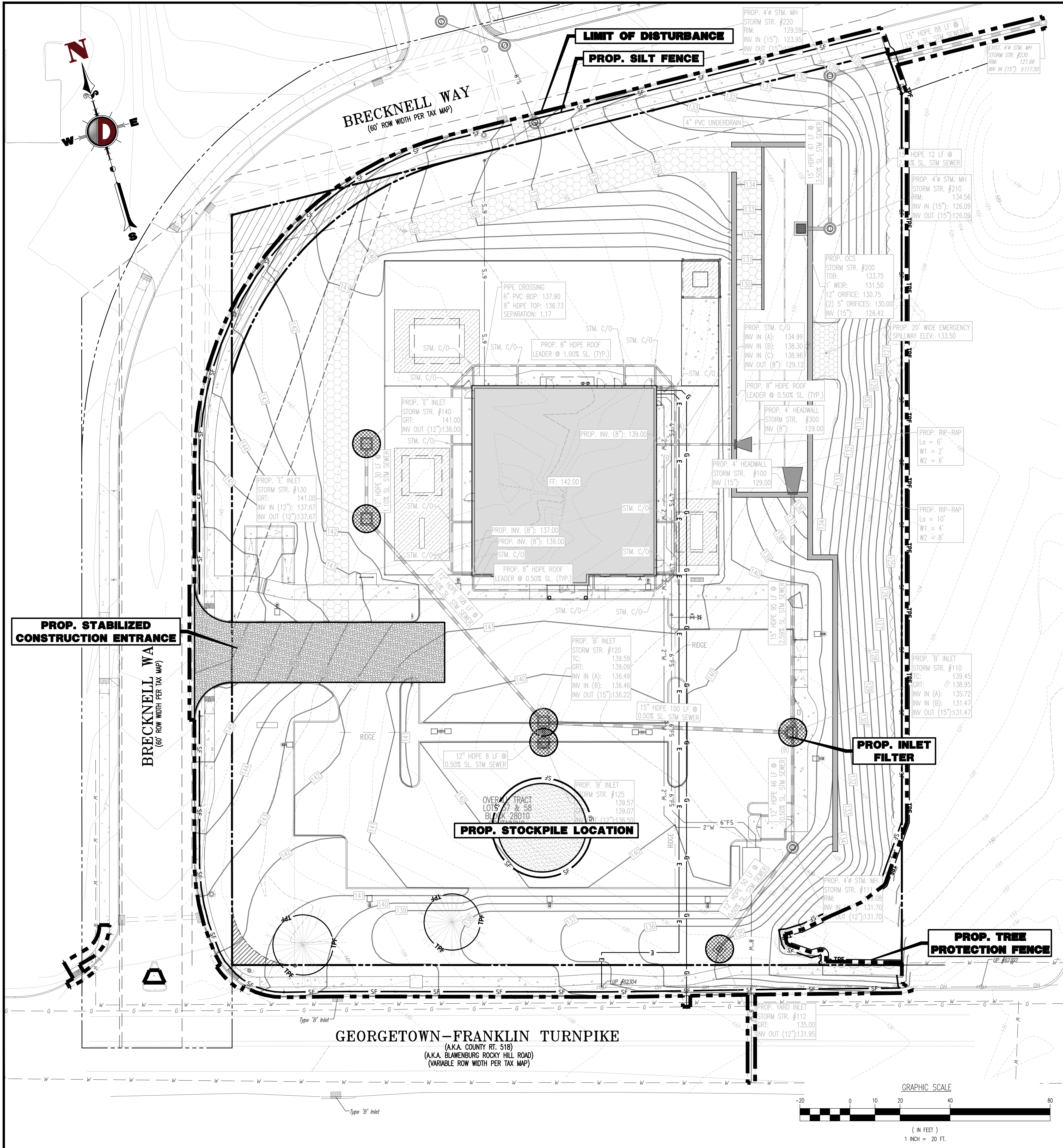
TITLE:  
**LIGHTING PLAN**

SCALE: (H) 1" = 20'  
(V) 1" = 20'  
DATE: 08/17/2023  
PROJECT No: 4447-22-01334

SHEET No: **9** OF 22  
Rev. #: 1



Plotted: 09/20/23 - 4:11 PM, By: ktk  
File: P:\CEPC PROJECTS\4447 The Malvern School\22-01334 Montgomery\DWG\Site Plans\04447221334SD.dwg, ---> 10 SOIL EROSION AND SEDIMENT CONTROL PLAN



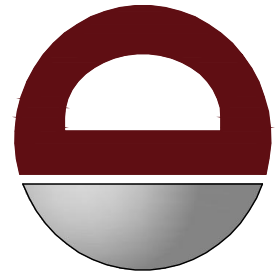
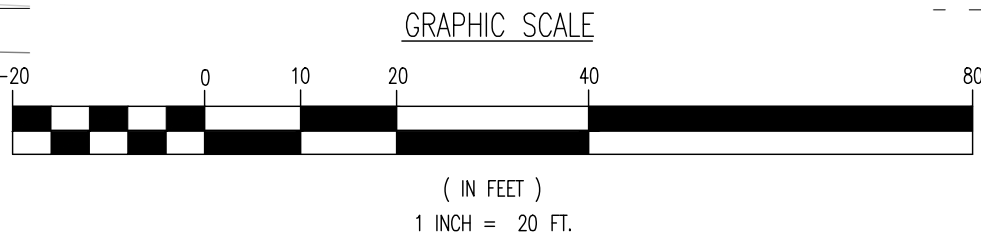
THIS PLAN TO BE UTILIZED FOR SOIL EROSION & SEDIMENT CONTROL PURPOSES ONLY

SEE SHEET 12 OF 22 FOR SOIL EROSION NOTES & DETAILS

LIMIT OF DISTURBANCE = 97,778 SF. ( 2.24 Ac.)

EROSION CONTROL LEGEND

- PROP. LIMIT OF DISTURBANCE LINE
- PROP. SILT FENCE LINE
- PROP. TREE PROTECTION FENCE LINE
- PROP. INLET FILTER
- PROP. HAYBALE SEDIMENT BARRIER



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DESIGNED BY: KTK  
CHECKED BY: JSH  
DATE: 09/19/23

PROJECT: **MALVERN SCHOOL PROPERTIES, LP**  
BLOCK 28010, LOTS 57 & 58  
983 GEORGETOWN-FRANKLIN TURNPIKE  
TOWNSHIP OF MONTGOMERY, SOMERSET COUNTY, NEW JERSEY



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TITLE: **SOIL EROSION AND  
SEDIMENT CONTROL PLAN**

SCALE: (H) 1"=20'  
(V) 1"=20'  
DATE: 08/17/2023  
PROJECT No: 4447-22-01334

SHEET No: **10**  
Rev. #: 1  
OF 22





OF 22



SOMERSET-UNION SOIL CONSERVATION DISTRICT  
SOIL EROSION & SEDIMENT CONTROL NOTES:

- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW OR EQUIVALENT MATERIAL AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO NJ STATE STANDARDS.
- PERMANENT VEGETATION SHALL BE SEEDDED OR SOODED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL SEEDING IS ESTABLISHED.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NJ STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, 7TH EDITION LAST REVISED JANUARY 2014.
- A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS OF PRELIMINARY GRADING.
- IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING ALL CRITICAL AREAS SUBJECT TO EROSION (I.E.: STEEP SLOPES, ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO THE NJ STATE STANDARDS.
- ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E.: SLOPES GREATER THAN 3:1).
- TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A 50'X30'X6"PAD OF 1 1/2" OR 2" STONE, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
- THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING 48 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY. AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDESUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES.
- IN THAT NJSA 42:24-39 ET SEQ., REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES. ALL SITE WORK FOR SITE PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS, WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ASSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.
- CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
- ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT NJ STATE SOIL EROSION & SEDIMENT CONTROL STANDARDS.
- THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN OWNERSHIP.
- MULCHING TO THE NJ STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL REPORT OF COMPLIANCE. CONDITIONALS ARE ONLY ISSUED WHEN THE SEASON PROHIBITS SEEDING.
- CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS CLEAN DURING LIFE OF CONSTRUCTION PROJECT.
- THE DEVELOPER SHALL BE RESPONSIBLE FOR REMEDIATING ANY EROSION OR SEDIMENT PROBLEMS THAT ARISE AS A RESULT OF ONGOING CONSTRUCTION AT THE REQUEST OF THE SOMERSET-UNION SOIL CONSERVATION DISTRICT.
- HYDRO SEEDING IS A TWO- STEP PROCESS. THE FIRST STEP INCLUDES SEED, FERTILIZER, LIME, ETC., ALONG WITH MINIMAL AMOUNTS OF MULCH TO PROMOTE CONSISTENCY, GOOD SEED TO SOIL CONTACT, AND GIVE A VISUAL INDICATION OF COVERAGE. UPON COMPLETION OF SEEDING OPERATION, HYDRO-MULCH SHOULD BE APPLIED AT A RATE OF 1500 LBS. PER ACRE IN SECOND STEP. THE USE OF HYDRO-MULCH, AS OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE NJ STANDARDS.

STANDARD FOR PERMANENT VEGETATIVE  
COVER FOR SOIL STABILIZATION

1. SITE PREPARATION
  - A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.
  - B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.
  - C. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.
  - D. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.
2. SEEDBED PREPARATION
  - A. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS CO-OPERATIVE EXTENSION OFFICES (HTTP://NJAESRUTGERS.EDU/COUNTY/).
  - FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE.
  - CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES.
  - B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.
  - C. HIGH ACID PRODUCING SOILS: SOILS HAVING A PH OF 4 OR LESS OR CONTAINING ION SILULIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.
3. SEEDING
  - A. PERMANENT VEGETATIVE MIXTURES & PLANTING RATES
    - GENERAL LAWN AREAS (SCD MIX 13 FROM TABLE 4)
      - (1) HARD FESCUE AND/OR CHENING FESCUE AND/OR STRONG CREEPING RED FESCUE - 175 LBS/ACRE 4 LBS/1000 SQ.FT.
      - (2) PERENNIAL RYEGRASS - 45 LBS/ACRE 1 LBS/1000 SQ.FT.
      - (3) KENTUCKY BLUEGRASS (BLENDED) - 45 LBS/ACRE 1 LBS/1000 SQ.FT.
    - BASIN AREAS (SCD MIX 9 FROM TABLE 4)
      - (1) DEER TONGUE - 20 LBS/ACRE 0.45 LBS/1000 SQ.FT.
      - (2) REDTOP - 2 LBS/ACRE 0.05 LBS/1000 SQ.FT.
      - (3) WILD RYE (EULYMIS) - 15 LBS/ACRE 0.35 LBS/1000 SQ.FT.
      - (4) SWITCHGRASS - 25 LBS/ACRE 0.60 LBS/1000 SQ.FT.
  - B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDER OR CULTPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE-TEXTURED SOIL.
  - C. AFTER SEEDING, FIRING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION WILL BE PROMOTED.
  - D. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK, OR TRAILER-MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORTFIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION 4-MULCHING BELOW). HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.
4. MULCHING
  - MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEDMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.
  - A. STRAW OR HAY. UNROTTED SMALL GRAM STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1.5 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRUMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.
  - APPLICATION, SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.
  - ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS IN ACCORDANCE WITH THE STATE STANDARDS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COST:
    - 1. PEG AND TWINE
    - 2. MULCH NETTINGS
    - 3. CRUMPER MULCH ANCHORING COULTER TOOL
    - 4. LIQUID MULCH-BINDERS
  - B. WOOD-FIBER OR PAPER-FIBER MULCH - SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS. USED AT THE RATE OF 1,500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.
  - C. PELLETIZED MULCH - COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS, AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDD AREA AND WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS/1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS. SEEDD AREAS WHERE WEEDSEED FREE MULCH IS DESIRED, OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL, OR DESIRABLE. APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

1. SITE PREPARATION
  - A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.
  - B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.
  - C. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.
  - D. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.
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  - FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE.
  - CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES.
  - B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.
  - C. HIGH ACID PRODUCING SOILS: SOILS HAVING A PH OF 4 OR LESS OR CONTAINING ION SILULIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.
3. SEEDING
  - A. PERMANENT VEGETATIVE MIXTURES & PLANTING RATES
    - GENERAL LAWN AREAS (SCD MIX 13 FROM TABLE 4)
      - (1) HARD FESCUE AND/OR CHENING FESCUE AND/OR STRONG CREEPING RED FESCUE - 175 LBS/ACRE 4 LBS/1000 SQ.FT.
      - (2) PERENNIAL RYEGRASS - 45 LBS/ACRE 1 LBS/1000 SQ.FT.
      - (3) KENTUCKY BLUEGRASS (BLENDED) - 45 LBS/ACRE 1 LBS/1000 SQ.FT.
    - BASIN AREAS (SCD MIX 9 FROM TABLE 4)
      - (1) DEER TONGUE - 20 LBS/ACRE 0.45 LBS/1000 SQ.FT.
      - (2) REDTOP - 2 LBS/ACRE 0.05 LBS/1000 SQ.FT.
      - (3) WILD RYE (EULYM

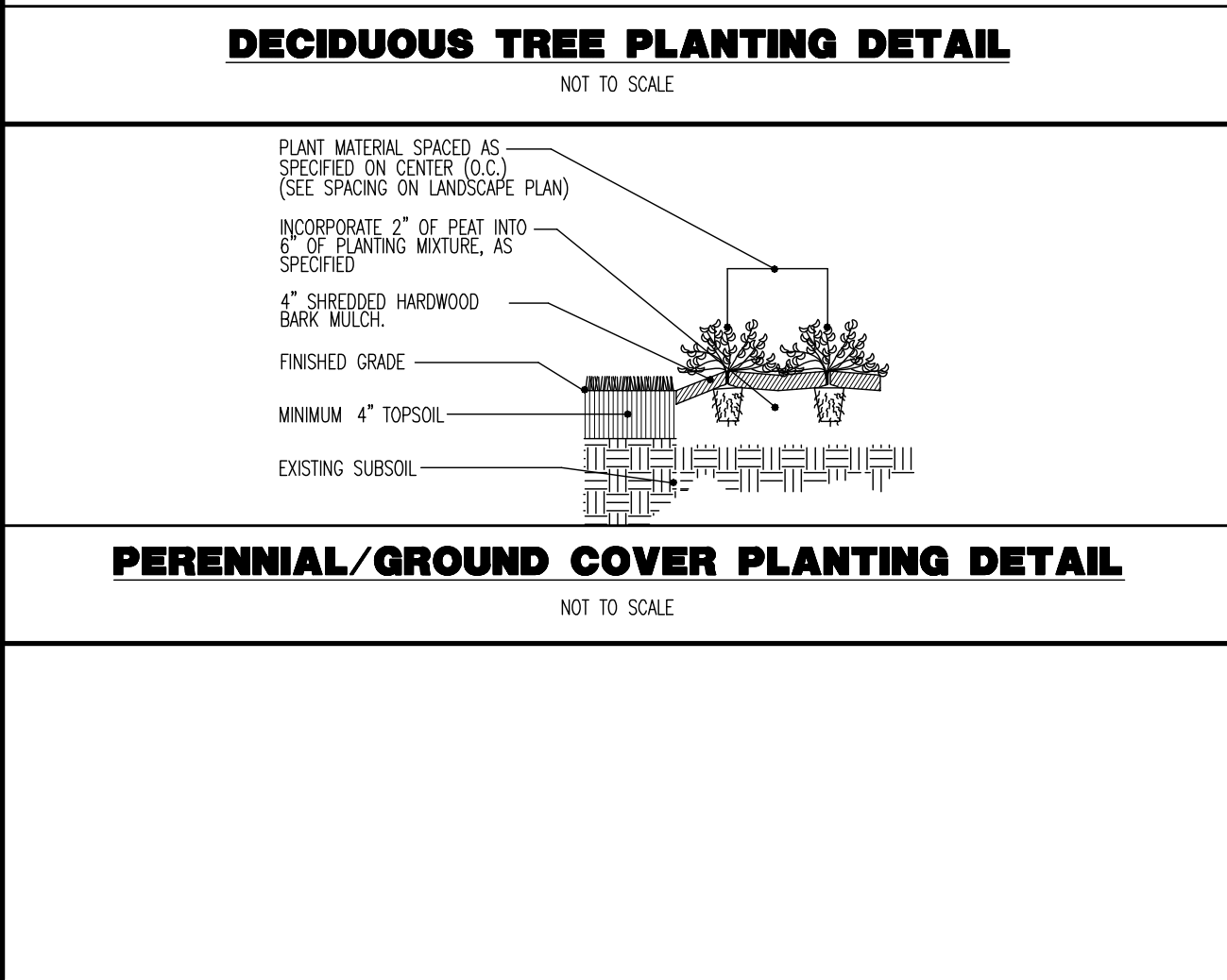
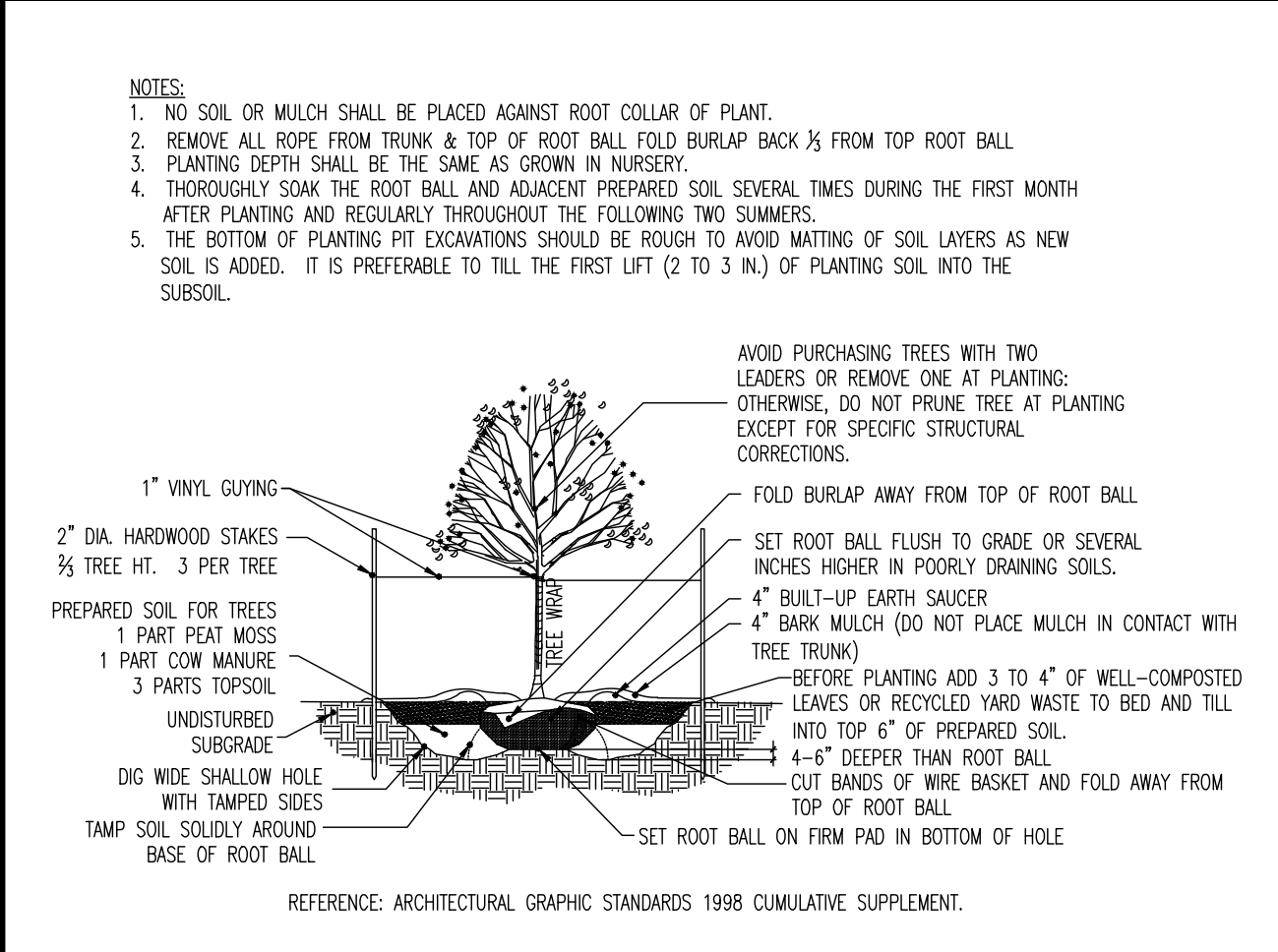
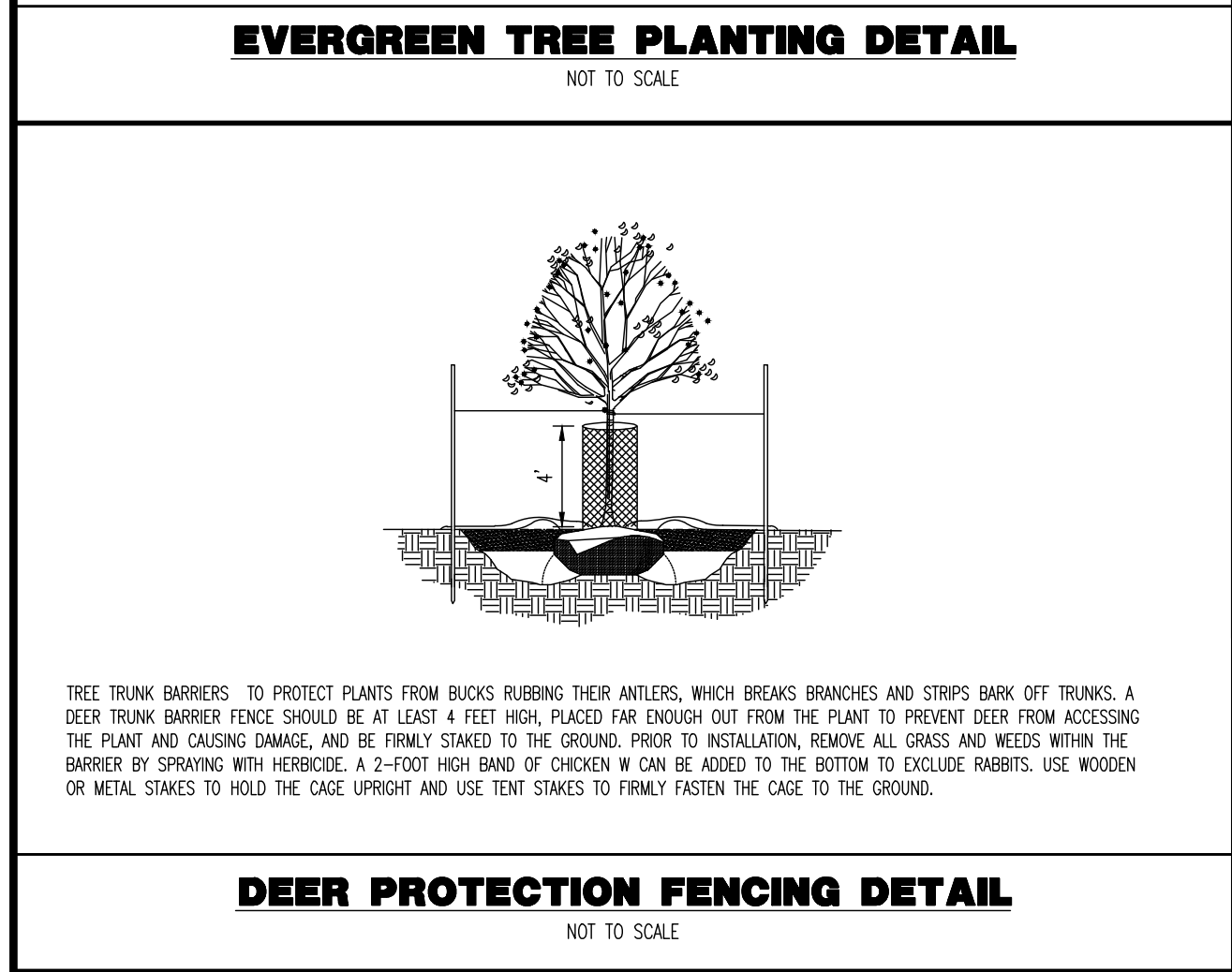
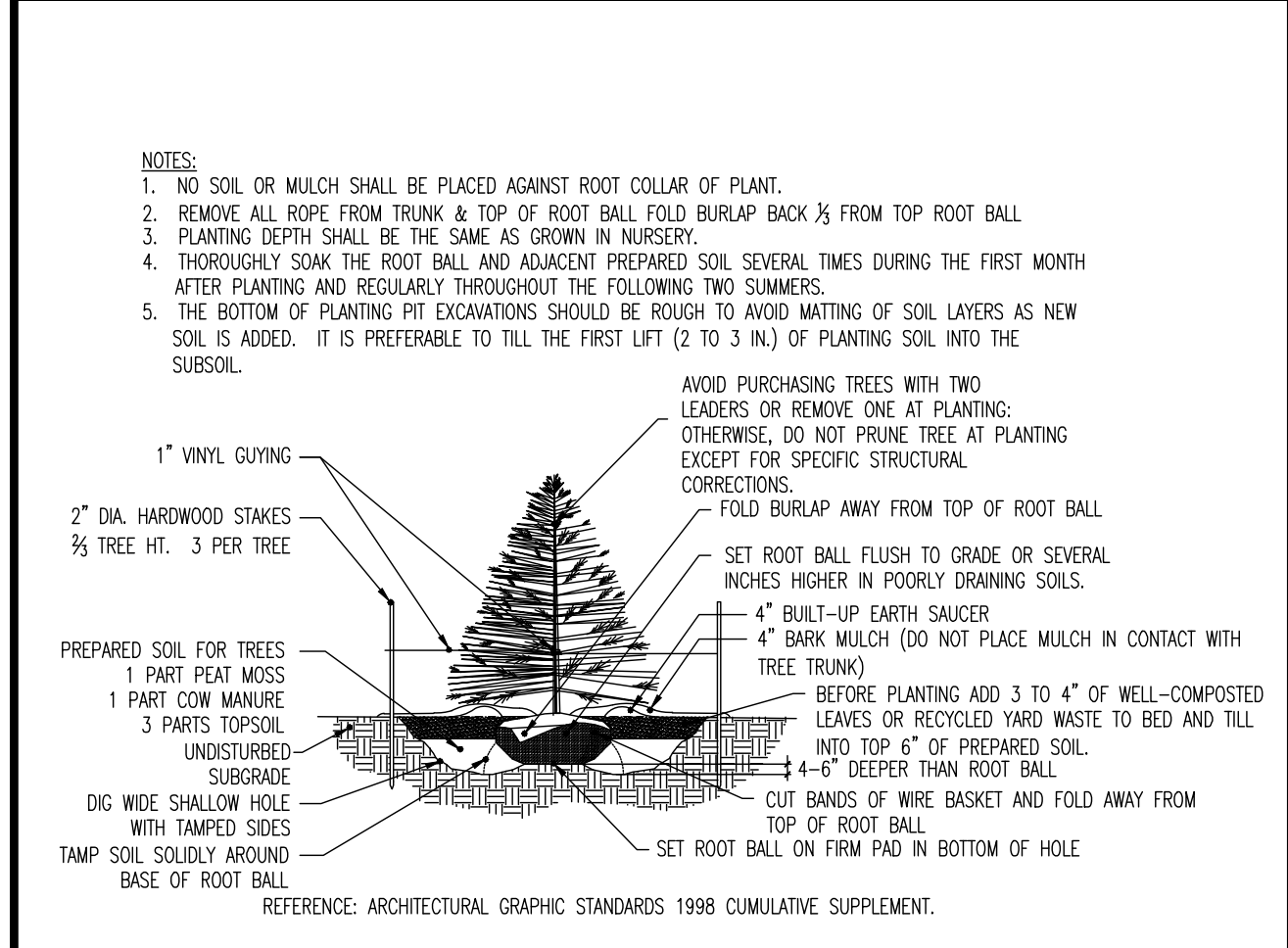
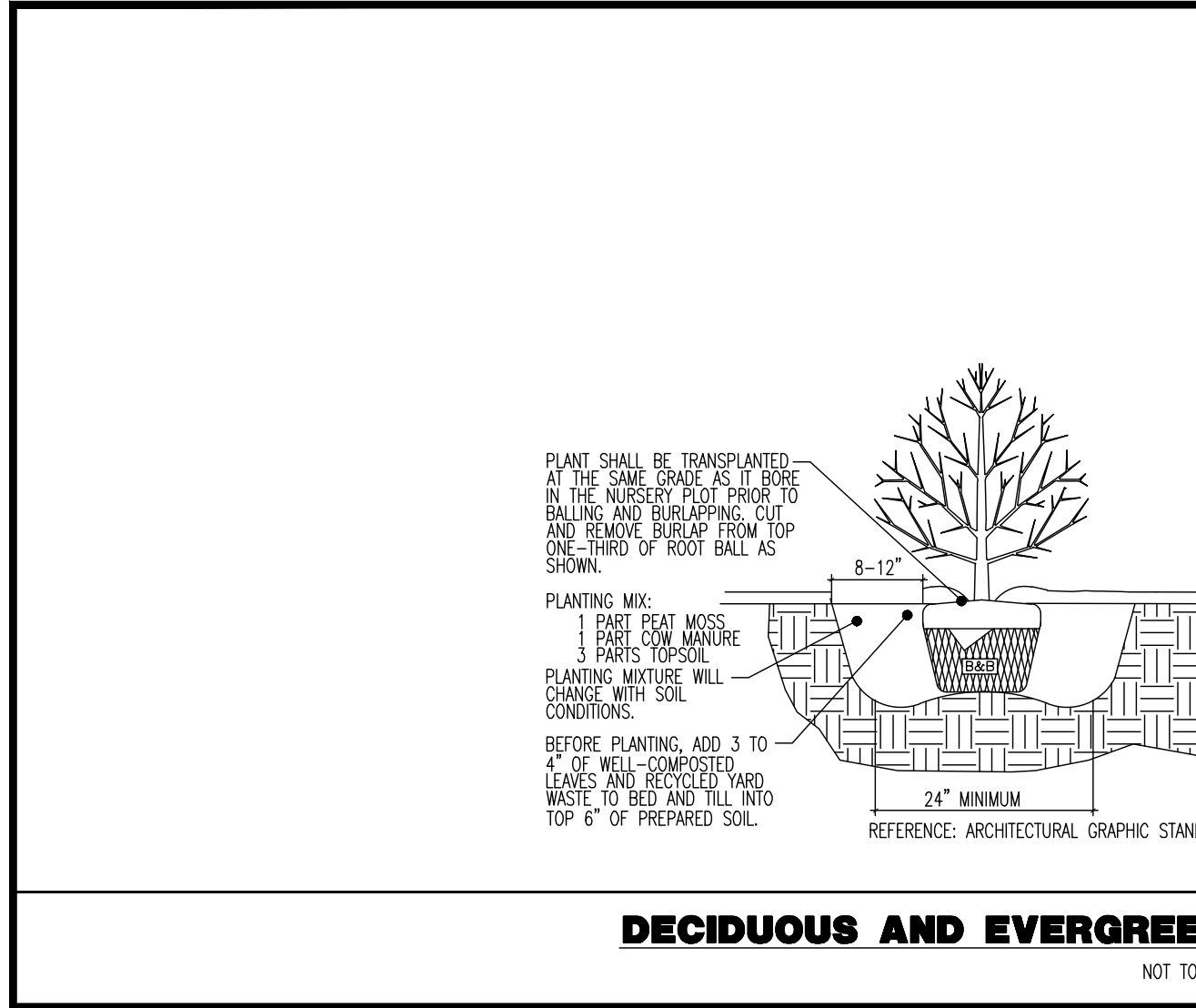












**DESCRIPTION**

The EPIC Collection delivers custom luminaire flexibility with high quality, yet availability expectations of standard specification grade product. The EPIC Collection can be dressed to suit any application. Recognizing evolving environmental and legislative trends, the EPIC Collection delivers world class LED optical and performance solutions to the decorative luminaire marketplace.

**SPECIFICATION FEATURES**

**Construction**  
TOP: Cast aluminum top housing attaches to cast aluminum mounting arm hub with four stainless steel fasteners. One-piece silicone gasket between mounting hub and top casting seals out moisture and contaminants. (See the mounting accessories section for a full selection of mounting arms. (Only these arms are compatible with the Epic luminaire). MIDSECTION: Continuous silicone gaskets seal lens to top casting and shade. The mid section features cast aluminum construction and stainless steel assembly. SHADES: Heavy gauge precision spun aluminum shades offer superior surface finish and consistency in form. DOORFRAME: Die-cast aluminum 1/8" thick door and doorframe seal to underside of shade with a thick wall continuous silicone gasket. Mounting hub ships attached to mounting arm.

**Optics**  
Choice of twelve patented, high-efficiency AccuLED Optic technology manufactured from injection-molded acrylic. Optics are precisely designed to shape the optics, maximizing efficiency and application spacing. AccuLED Optic technology, creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (4+ 275K) CCT and nominal 70 CRI. Optional 3000K CCT and 5000K CCT. For the ultimate level of spill light control, an optional house-side shield accessory can be field or factory installed. The house-side shield is designed to seamlessly integrate with the SL2, SL3 or SL4 optics.

**Electrical**  
LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, greater than 0.9 power factor, less than 20% harmonic distortion, and is suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10Kv/10KA common – and differential – mode surge protection. LightBARs feature an IP66 enclosure rating and maintain greater than 95% lumen maintenance at 50,000 hours per IESNA TM-21. Occupancy sensor and dimming options available.

**Finish**  
Housing is finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. LightBAR™ cover plates are standard white and may be specified to match finish of luminaire housing. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult Outdoor Architectural Colors brochure for a complete selection. Options to meet Bay American and other domestic preference requirements.

**Warranty**  
Five-year warranty.

**CEM/MEM EPIC MEDIUM LED**

**1 - 4 LightBARs Solid State LED**

**DECORATIVE AREA LUMINAIRE**

**CERTIFICATION DATA**  
UL/UL Listed  
IP66 LightBARs  
1070 lumen  
20 Variation Tested  
ISO 9001

**ENERGY DATA**  
Electronic LED Driver  
v-0.9 Power Factor  
-20% Total Harmonic Distortion  
120-277V 50/60Hz, 347V/60Hz, 480V/60Hz  
-40°C Minimum Temperature  
40°C Ambient Temperature Rating

**EPA**  
Effective Projected Area (Sq. Ft.) 0.34

**SHIPPING DATA**  
Approximate Net Weight: 45 lbs. (20 kg.)

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November 18, 2021 2:19 PM

**Streetworks**

Catalog #	Type
Project	Date
Comments	
Prepared by	

**CEM/MEM EPIC MEDIUM LED**

**1 - 4 LightBARs Solid State LED**

**DECORATIVE AREA LUMINAIRE**

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UL/UL Listed  
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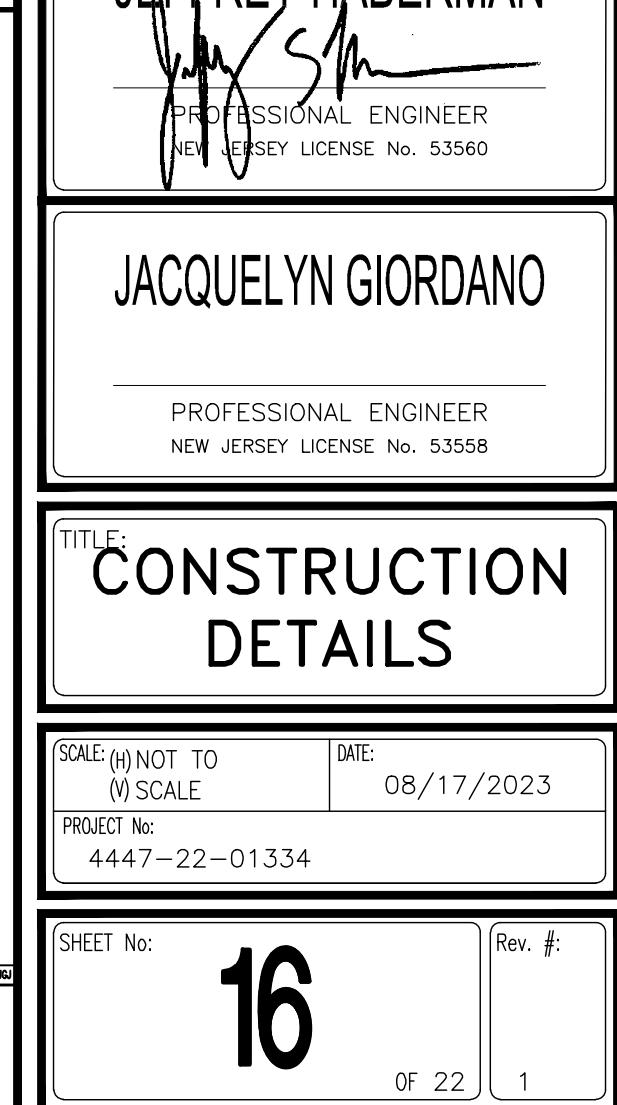
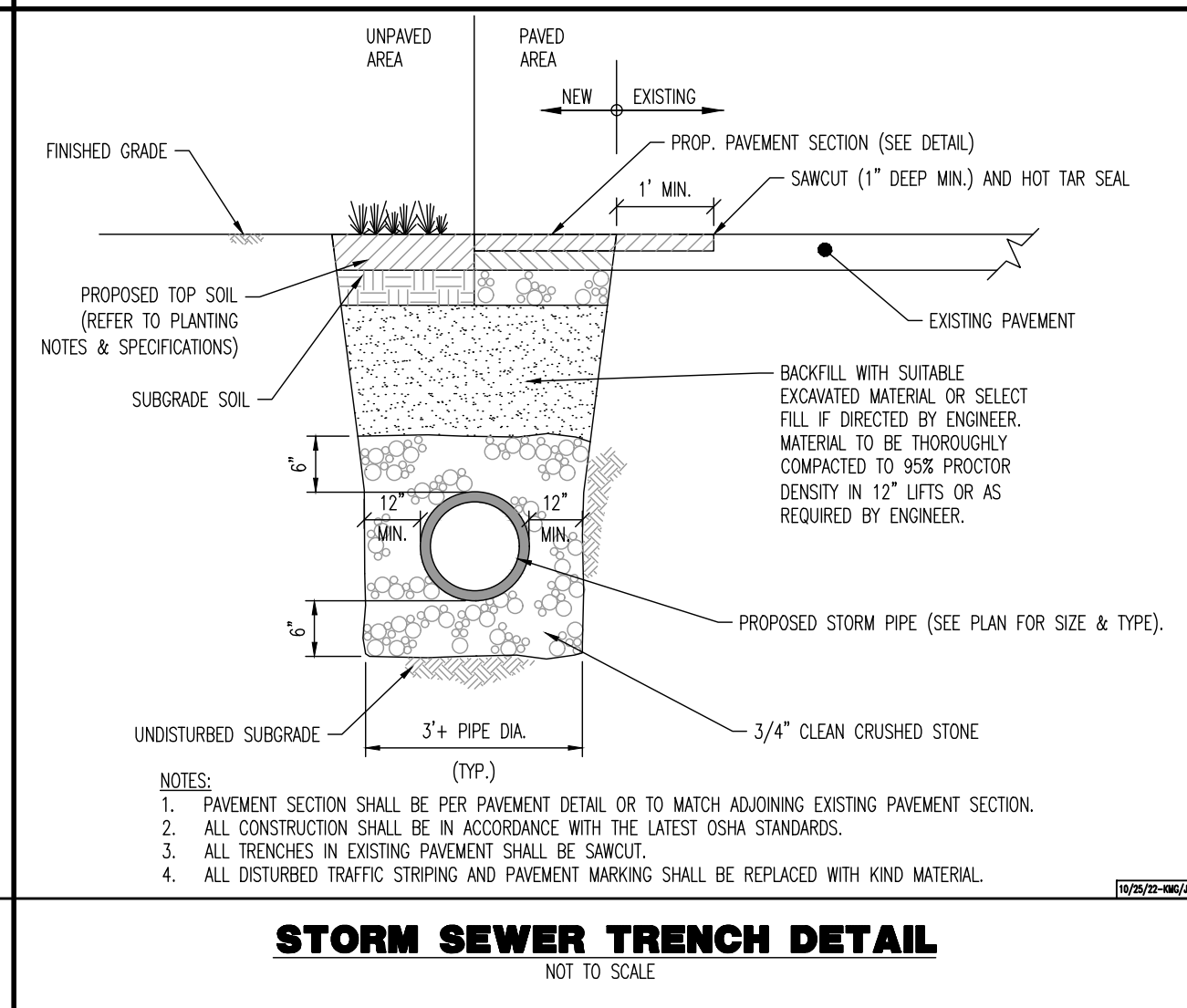
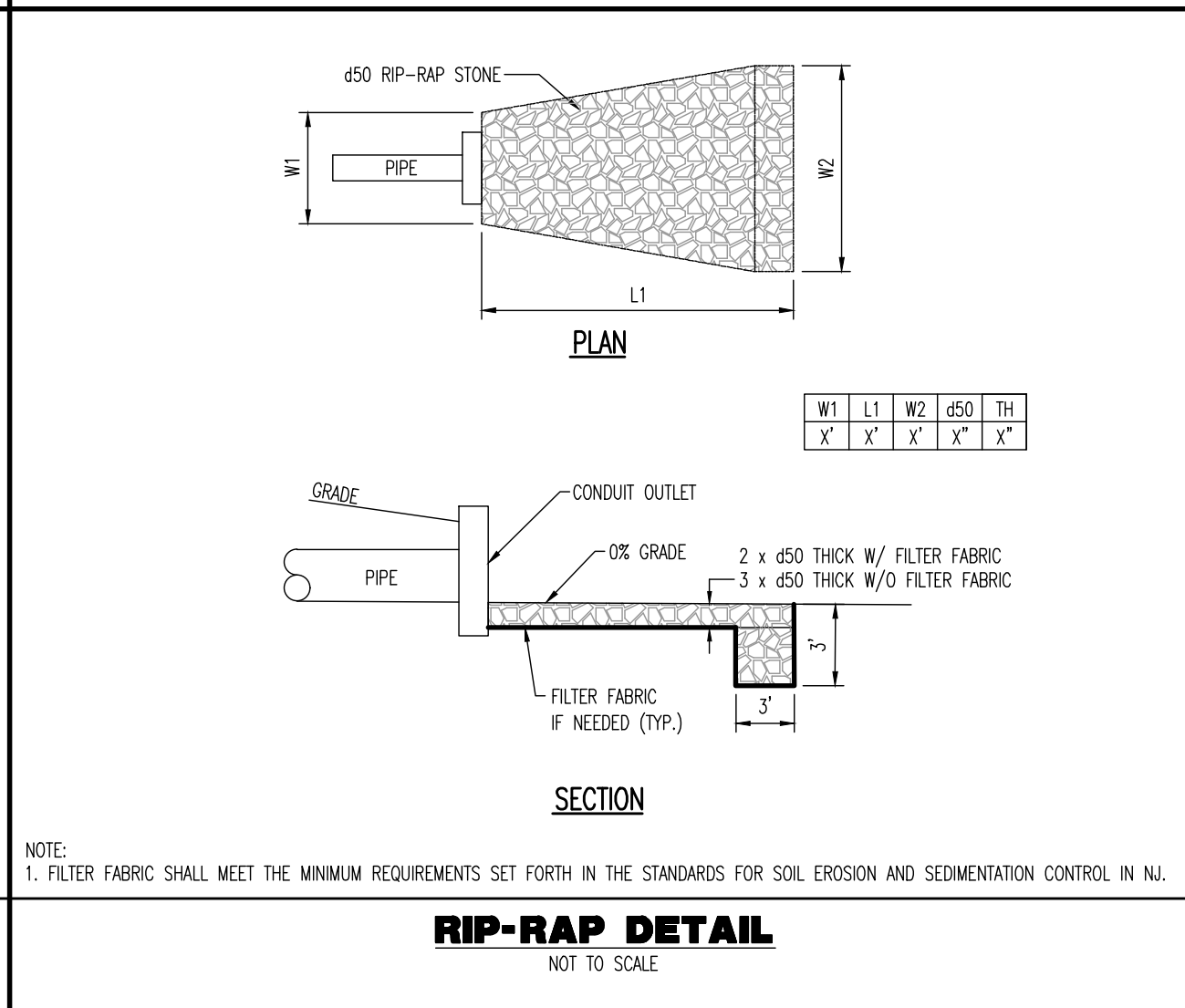
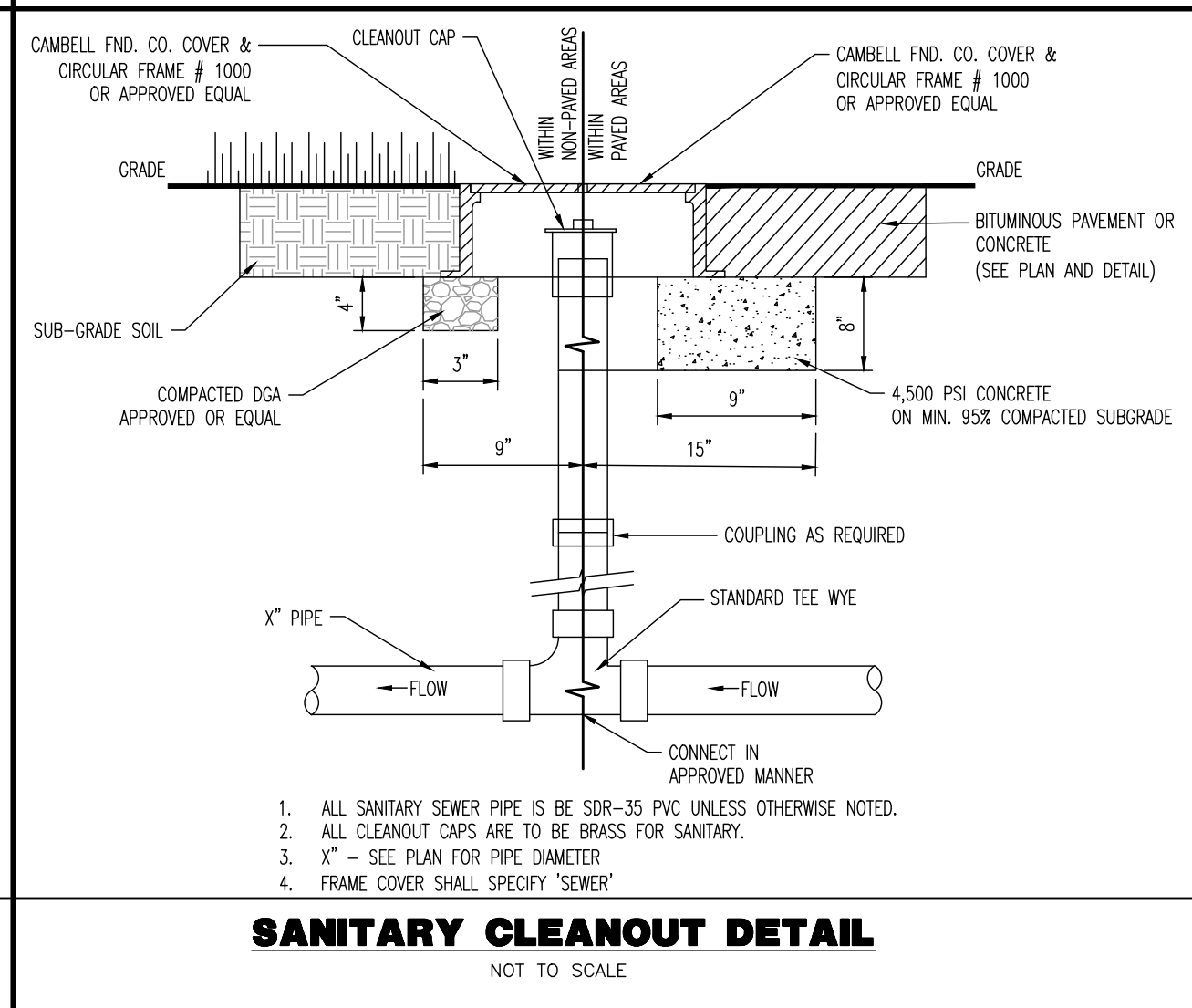
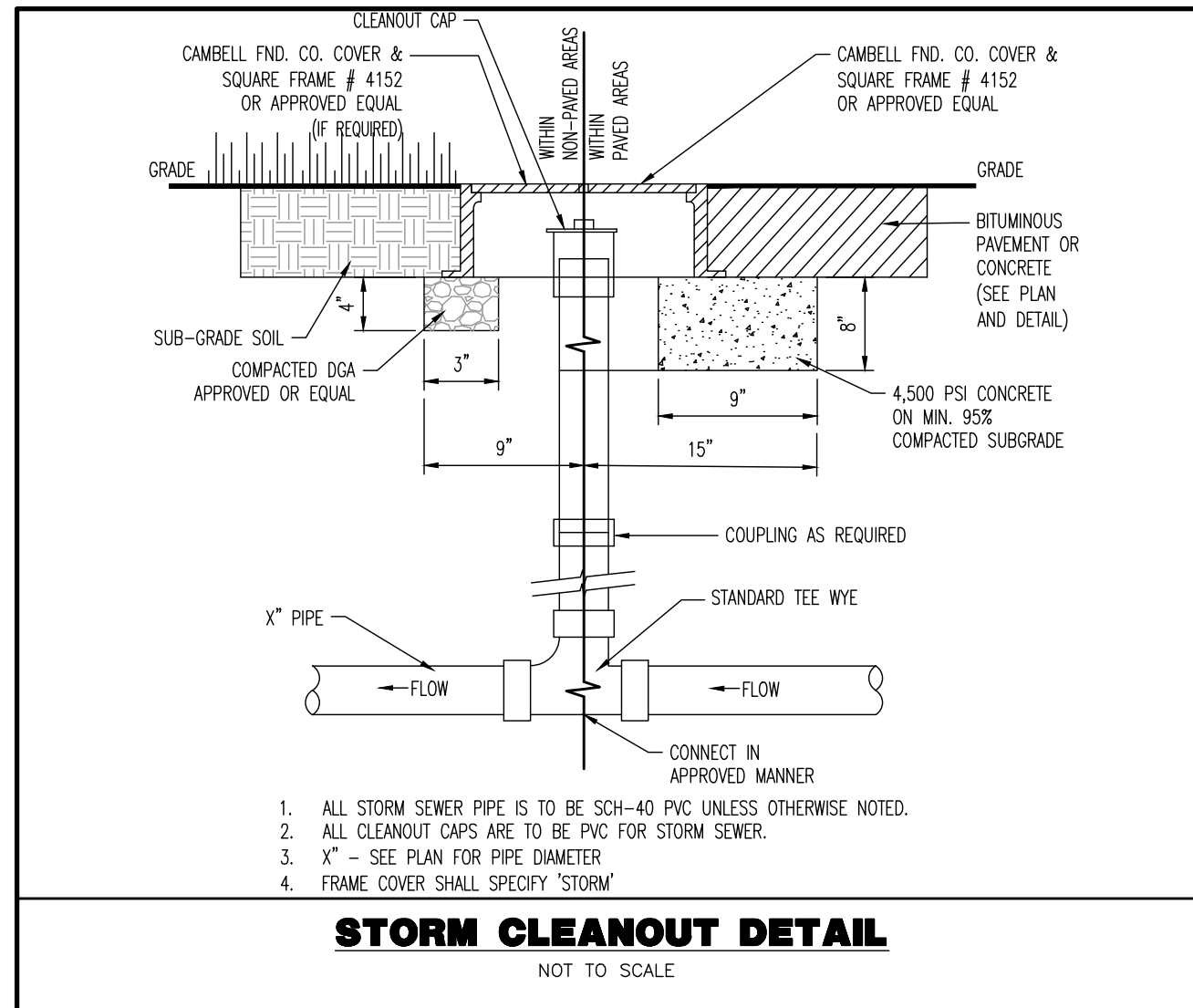
**EPA**  
Effective Projected Area (Sq. Ft.) 0.34

**SHIPPING DATA**  
Approximate Net Weight: 45 lbs. (20 kg.)

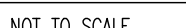
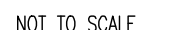
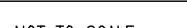
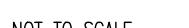
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November 18, 2021 2:19 PM

MUNICIPAL, COUNTY, STATE AND INVA DETAILS TO SUPERSEDE DYNAMIC ENGINEERING DETAILS WHERE APPLICABLE									
CEM/EMC SPECIFIC EPIQUE MEDICUM LEMD									
ORDERING INFORMATION									
Sample Number: CEM-E04-LED-12-F-LGM									
Product Family *	Number of LightBARs **	Lamp Type	Voltage	Distribution	Mid Section Type	Shade Type	Color *		
CEM-Epic Classical Medium MEM-Epic Modern Medium BAA-CEM-Epic Classical Medium, Bay American Art Compliant *	E01-(1) 21 LED LightBAR E02-(2) 21 LED LightBARs E03-(3) 21 LED LightBARs E04-(4) 21 LED LightBARs F01-(1) 7 LED LightBAR F02-(2) 7 LED LightBARs F03-(3) 7 LED LightBARs F04-(4) 7 LED LightBARs	LED-Solid State Emitting Diodes	E1-Electronic 120-277V 347-347V 480-480V	T2-Type II T2-Type III T4-Type IV SL2-Type II w/Spill Control SL2-Type III w/Spill Control SL4-Type IV w/Spill Control SMD-Type V Square Medium SMD-Type V Square Wide SMD-Type V Square Extra Wide RSL-90° Spill Light Eliminator Left SLR-90° Spill Light Eliminator Right	SO-Solid SR-Solid Rings	SN-Straight Narrow SW-Straight Wide BL-Shell FL-Flare	AP-Grey BZ-Bronze BK-Black DP-Black CM-Graphite PL-Platinum GM-Graphite MT-Metallic GN-Green WH-White		
BAA-EMC-Epic Modern Medium, Bay American Art Compliant *									
TAA-EMC-Epic Modern Medium, Trade American Art Compliant *									
Options (Add as Suffix)									
Accessories (Order Separately) **									
Accessory Options **									







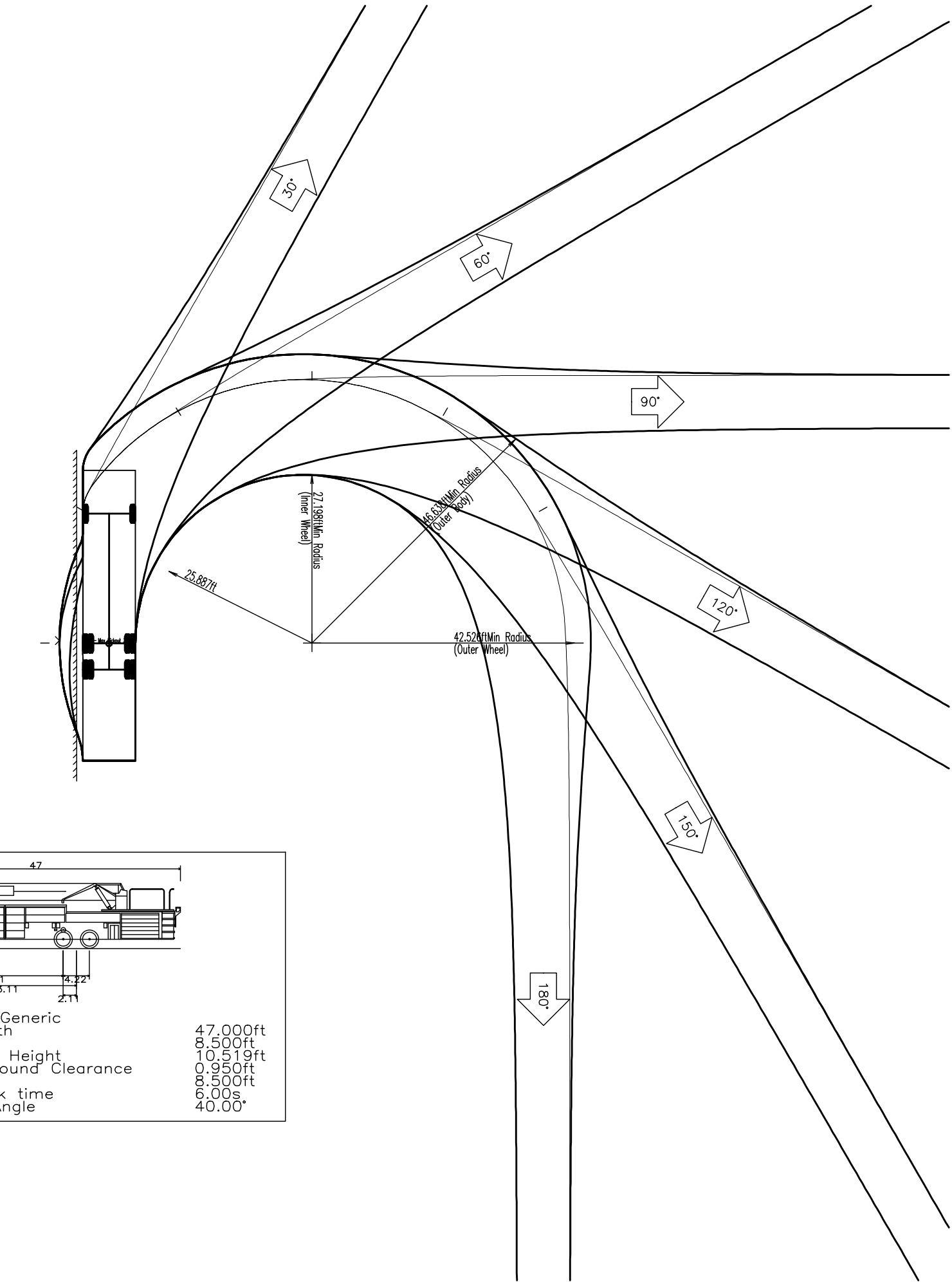
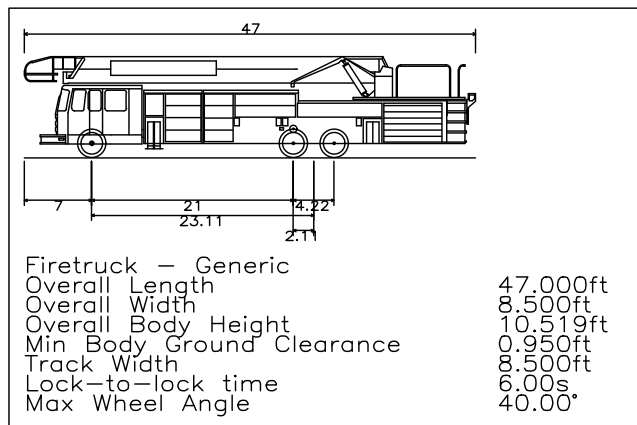
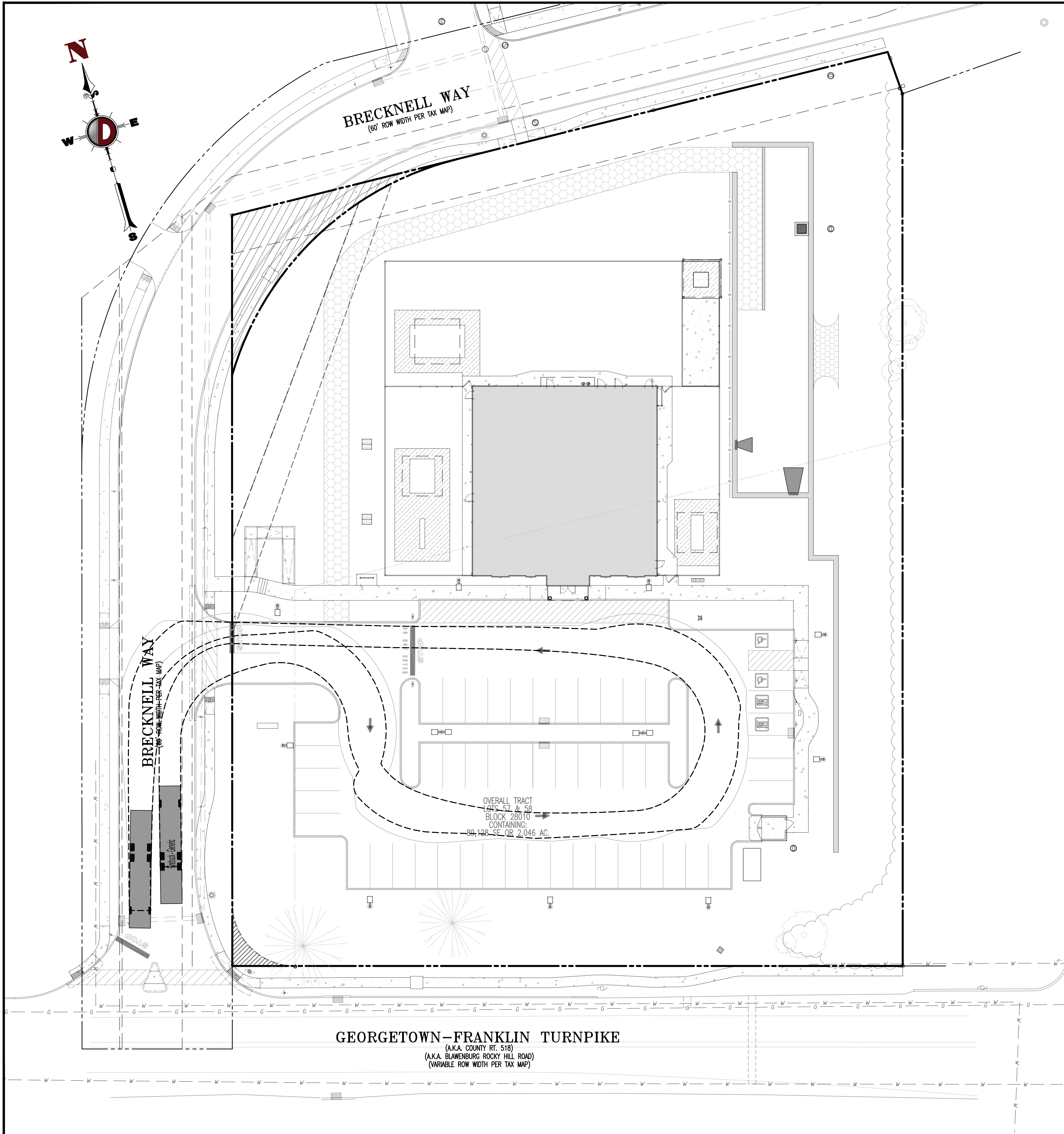








Plotted: 09/20/23 - 4:12 PM, By: ktk  
File: P:\CEPC PROJECTS\4447 The Malvern School\22-01334 Montgomery\Draw\Site Plans\04447221334SV.dwg, --> 19 VEHICLE CIRCULATION PLAN - FIRE TRUCK



THIS PLAN TO BE UTILIZED FOR VEHICLE CIRCULATION PURPOSES ONLY

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REV.	DATE	COMMENTS
1	09/19/23	REV. PER TWP. COMPLETENESS COMMENTS

THIS PLAN SET IS FOR PERMITTING PURPOSES ONLY AND MAY NOT BE USED FOR CONSTRUCTION

DESIGNED BY: KTK  
CHECKED BY: AF  
DESIGNED BY: JSH  
CHECKED BY: JSH

PROJECT: **MALVERN SCHOOL PROPERTIES, LP**  
BLOCK 28010, LOTS 57 & 58  
PROPOSED DAY SCHOOL  
980 GEORGETOWN-FRANKLIN TURNPIKE  
TOWNSHIP OF MONTGOMERY, SOMERSET COUNTY, NEW JERSEY

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**JEFFREY HABERMAN**  
  
PROFESSIONAL ENGINEER  
NEW JERSEY LICENSE No. 53560

**JACQUELYN GIORDANO**  
  
PROFESSIONAL ENGINEER  
NEW JERSEY LICENSE No. 53568

TITLE: **VEHICLE CIRCULATION PLAN - FIRE TRUCK**

SCALE: (H) 1"=20'  
(V) 1"=20 FT.

DATE: 08/17/2023

PROJECT No: 4447-22-01334

SHEET No: **19** OF 22

Rev. #: 1

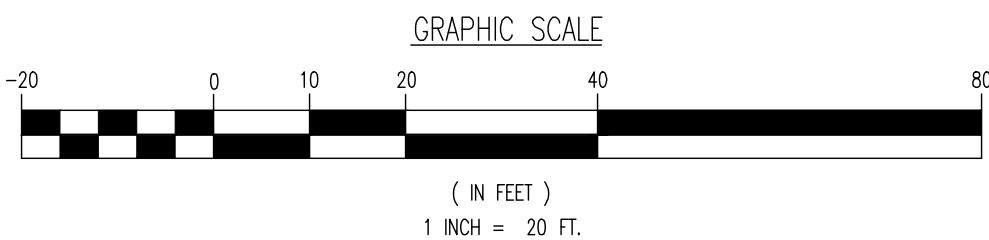
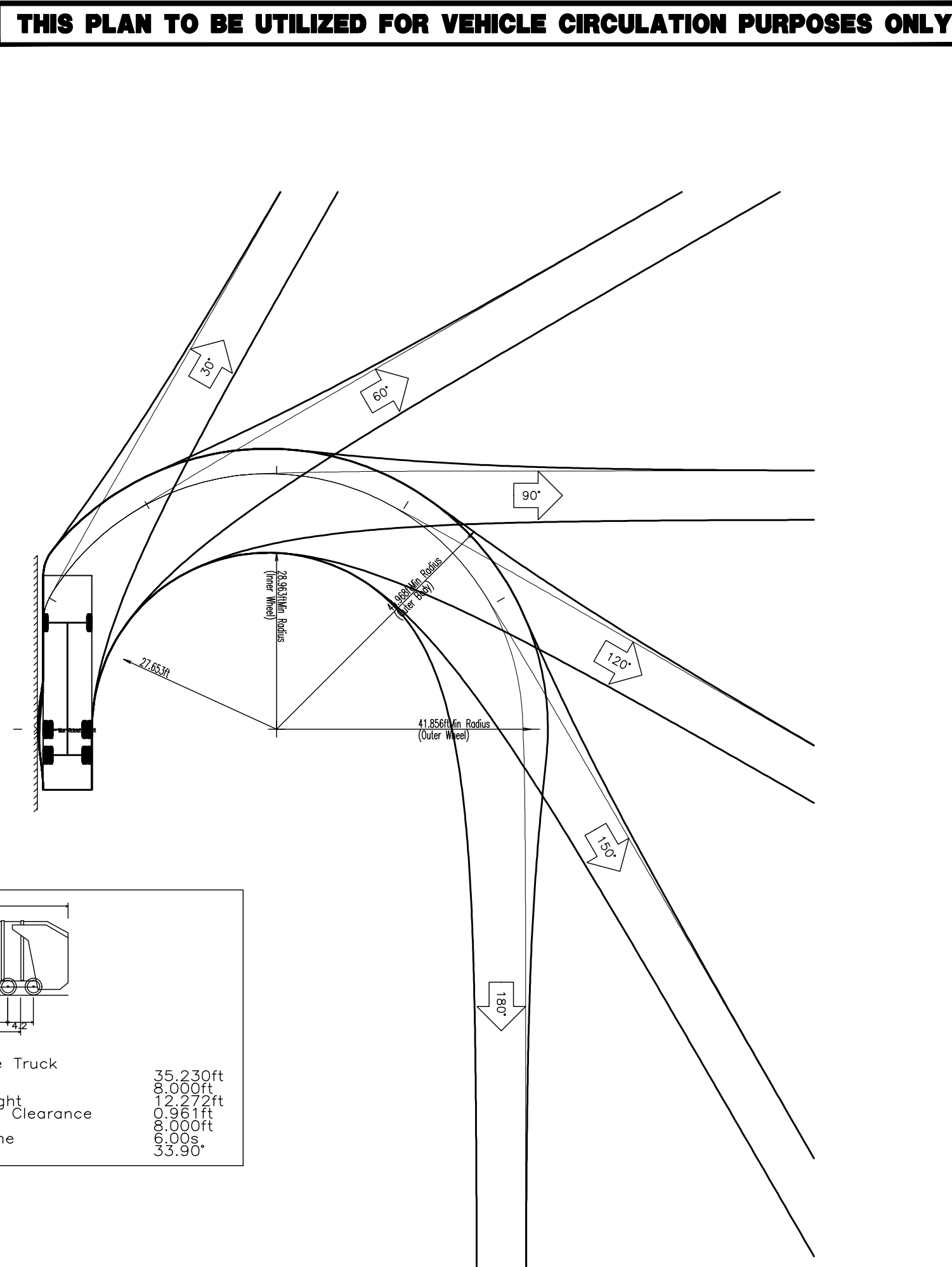
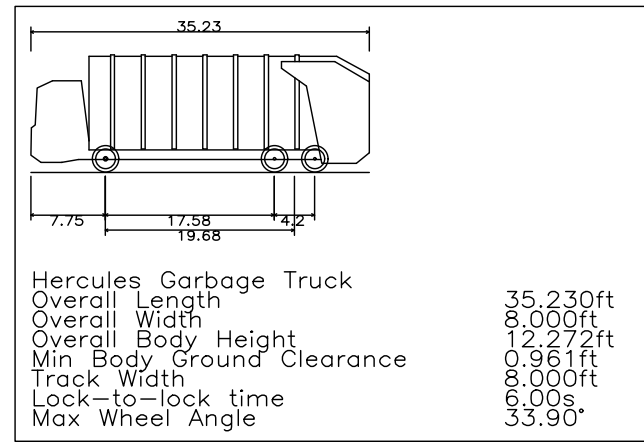
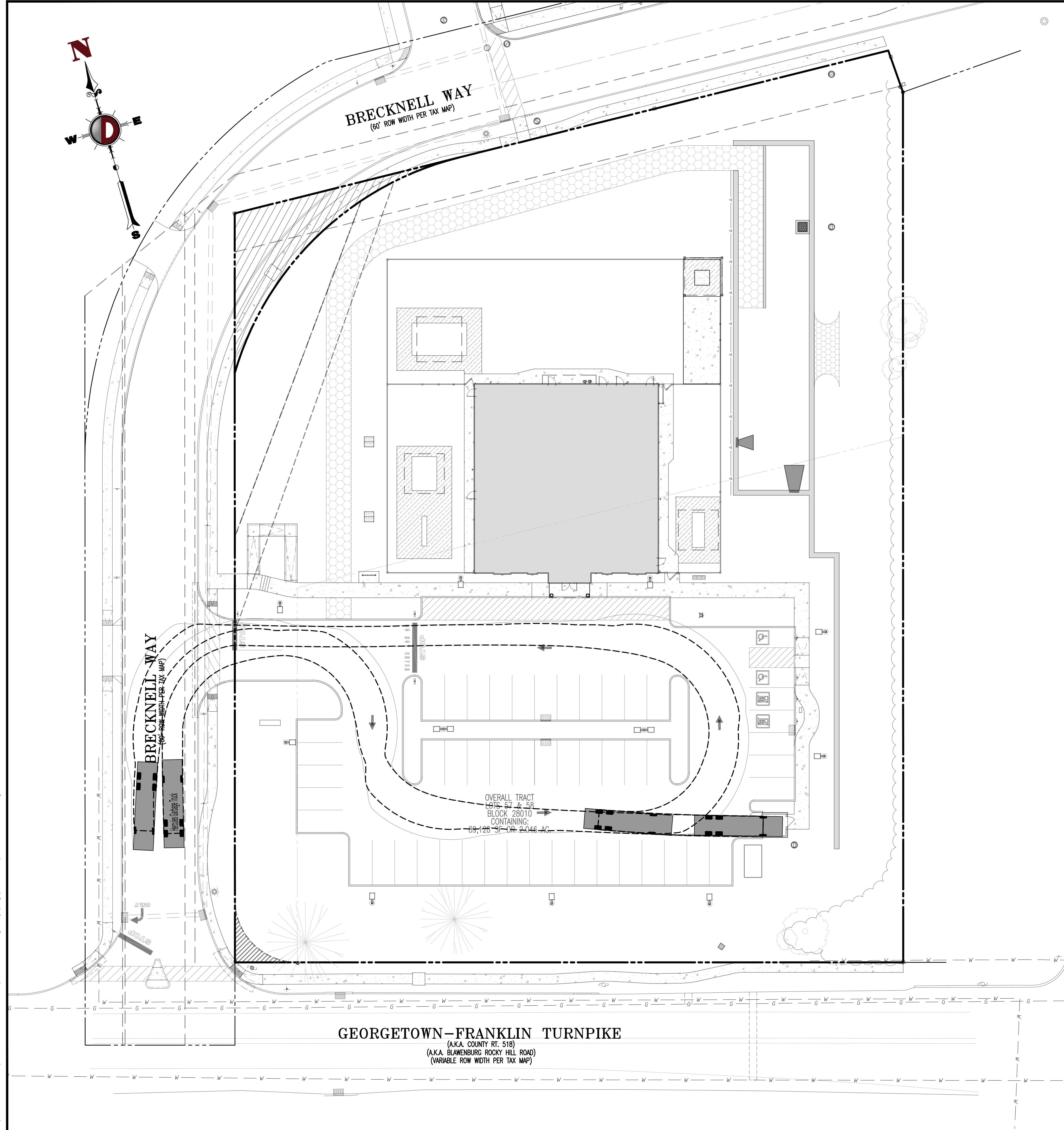
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REV.	DATE	COMMENTS	BY
1	09/19/23	REV. PER TWP. COMPLETENESS COMMENTS	KTK

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DRAWN BY:	DESIGNED BY:	CHECKED BY:	CHECKED BY:
KTK	AF	JSH	-

PROJECT: **MALVERN SCHOOL PROPERTIES, LP**  
BLOCK 28010, LOTS 57 & 58  
PROPOSED DAY SCHOOL  
98A GEORGETOWN-FRANKLIN TURNPIKE  
TOWNSHIP OF MONTGOMERY, SOMERSET COUNTY, NEW JERSEY

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**JEFFREY HABERMAN**  
PROFESSIONAL ENGINEER  
NEW JERSEY LICENSE No. 53560

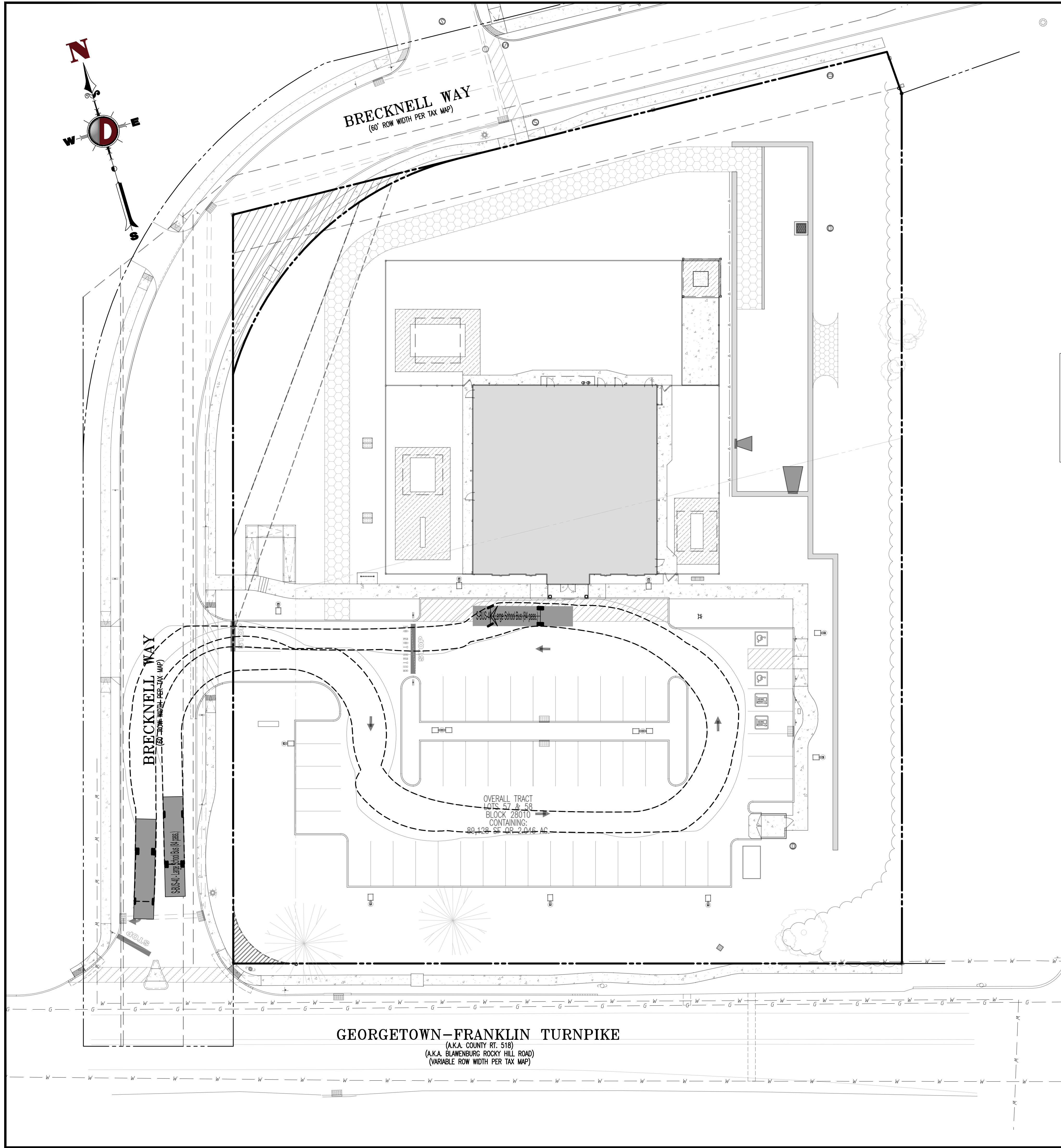
**JACQUELYN GIORDANO**  
PROFESSIONAL ENGINEER  
NEW JERSEY LICENSE No. 53568

TITLE: **VEHICLE CIRCULATION PLAN - REFUSE TRUCK**

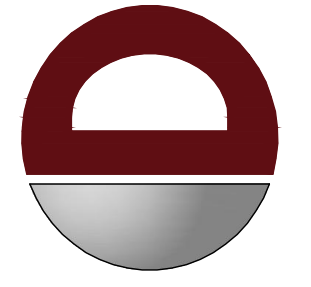
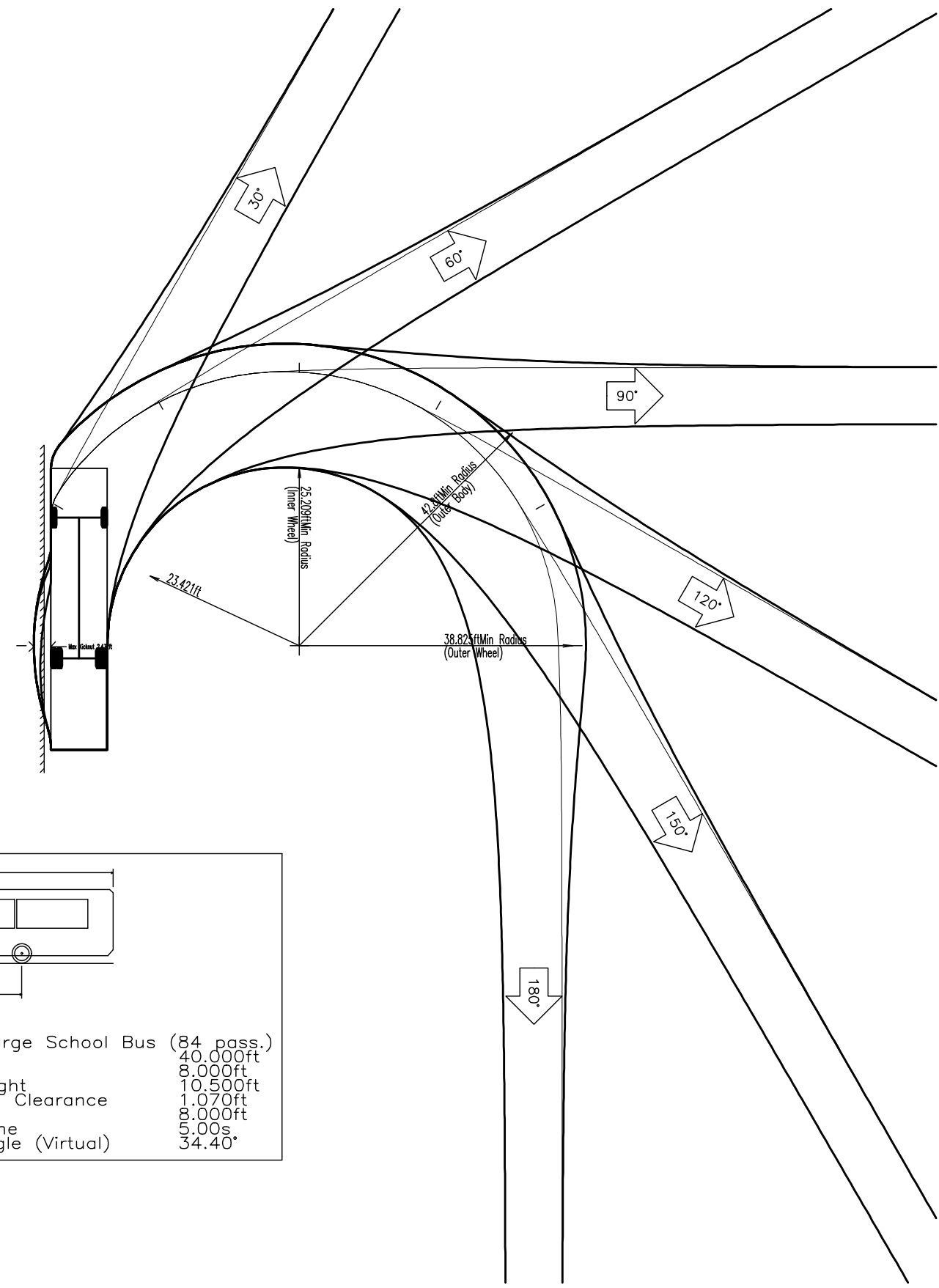
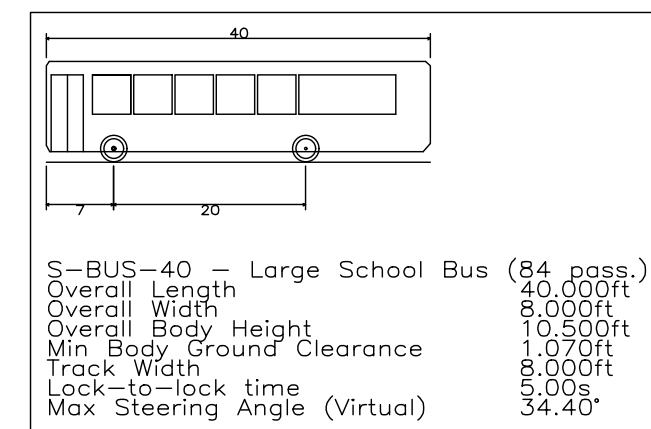
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PROJECT No: 4447-22-01334	Rev. #:

SHEET No: <b>21</b>	OF 22	1
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DRAWN BY:	DESIGNED BY:	CHECKED BY:	CHECKED BY:
KTK	AF	JSH	-

PROJECT: MALVERN SCHOOL PROPERTIES, LP  
PROPOSED DAY SCHOOL  
BLOCK 28010, LOTS 57 & 58  
982 GEORGETOWN-FRANKLIN TURNPIKE  
TOWNSHIP OF MONTGOMERY, SOMERSET COUNTY, NEW JERSEY



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PROFESSIONAL ENGINEER  
NEW JERSEY LICENSE No. 53560

JACQUELYN GIORDANO

PROFESSIONAL ENGINEER  
NEW JERSEY LICENSE No. 53558

### VEHICLE CIRCULATION PLAN - SCHOOL BUS

SCALE: (H) 1"=20' (V)	DATE: 08/17/2023
PROJECT No: 4447-22-01334	

SHEET No:	22	Rev. #:	
	OF 22		1







