

SITE DATA

PROJECT: PENDERLEA K-8 SCHOOL
 OWNER: PENDER COUNTY SCHOOLS
 OWNER CONTACT: PENDER COUNTY BOARD OF EDUCATION
 KENNETH FULLER
 925 PENDERLEA HWY
 BURCAH, NC 28425
 910-259-2187

DESIGNER: CLH DESIGN, PA
 DESIGNER CONTACT: GLENN MEDLIN
 REGENCY PARK
 400 REGENCY FOREST DR., STE. 120
 CARY, NC 27518
 PHONE: 919-319-6716
 FAX: 919-319-7216

PROJECT ADDRESS: 82 PENDERLEA SCHOOL ROAD
 WILLARD, NC 28478

PIN: 2383-61-1475-0000

ZONING: O&I
 EXISTING USE: INSTITUTIONAL/EDUCATIONAL
 PROPOSED USE: INSTITUTIONAL/EDUCATIONAL
 TRACT AREA: 28.11 ACRES
 DISTURBED AREA: 19 ACRES
 FLOODPLAIN: SITE IS NOT WITHIN A FLOODPLAIN
 (REF: FIRM 3720313600J, APRIL 3, 2006)

MAX. BUILDING HEIGHT: 40' (50' MIN. SEPARATION B/W BUILDINGS)
 FRONT SETBACK: 25'
 SIDE SETBACK: 10'
 REAR SETBACK: 10'
 BUILDING SETBACK: 20'
 STREET/YARD BUFFER: 15' TYPE 'A'
 LANDSCAPE BUFFER: TYPE 'B'

PENDERLEA HOMESTEADS HISTORIC DISTRICT - 2013 (PD0318)
 PENDERLEA SCHOOL HPO SITE - 1996 (PD0156)

PARKING REQUIREMENTS:
 PARKING CODE: 1 SPACE PER CLASSROOM + 1 SPACE PER 300-SF OF ADMINISTRATIVE OFFICE SPACE

NO. OF STUDENTS: 550 BASE (600 ALTERNATE/FUTURE)
 NO. OF STAFF: 60
 NO. CLASSROOMS: 29
 SF ADMINISTRATIVE OFFICE SPACE: 1,500-SF
 TOTAL NO. SPACES REQ'D: 29 + 5 = 34 SPACES

EXISTING SPACES: 107 (TOTAL CAMPUS)
 EXISTING SPACES REMOVED: 9
 NEW SPACES ADDED: 81 (TO DIRECTLY SERVE NEW SCHOOL BLDG)
 TOTAL SPACES PROVIDED: 179 (TOTAL CAMPUS)

TOTAL H/C SPACES REQ'D: 4
 EXISTING H/C SPACES: 5
 NEW H/C SPACES ADDED: 5 (W/ 3 VAN ACCESSIBLE)
 TOTAL H/C SPACES PROVIDED: 10

NO. RESIDENTIAL DWELLINGS: ZERO

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 CIVIL/SITE DETAIL SHEETS

UTILITY PROVIDERS TO BE DETERMINED, BUT WOULD INCLUDE POWER, TELEPHONE CABLE, IT/DATA AND GAS.

SITE PLAN VALID FOR FIVE YEARS FROM APPROVAL DATE

APPROVED BY THE PENDER COUNTY UNIFIED DEVELOPMENT ADMINISTRATOR

SIGNATURE _____
 DATE _____

GRAPHIC SCALE
 (IN FEET)
 1 inch = 80 ft.

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 Fax: 919-319-7216
 Lic. No. 006 PC-C-11588

PROFESSIONAL ENGINEER
 KENNETH FULLER
 2383
 5-23-16

PRELIMINARY
 NOT FOR CONSTRUCTION

PENDER COUNTY SCHOOLS
PENDERLEA K-8 SCHOOL
 82 PENDERLEA SCHOOL ROAD, WILLARD, NC 28478



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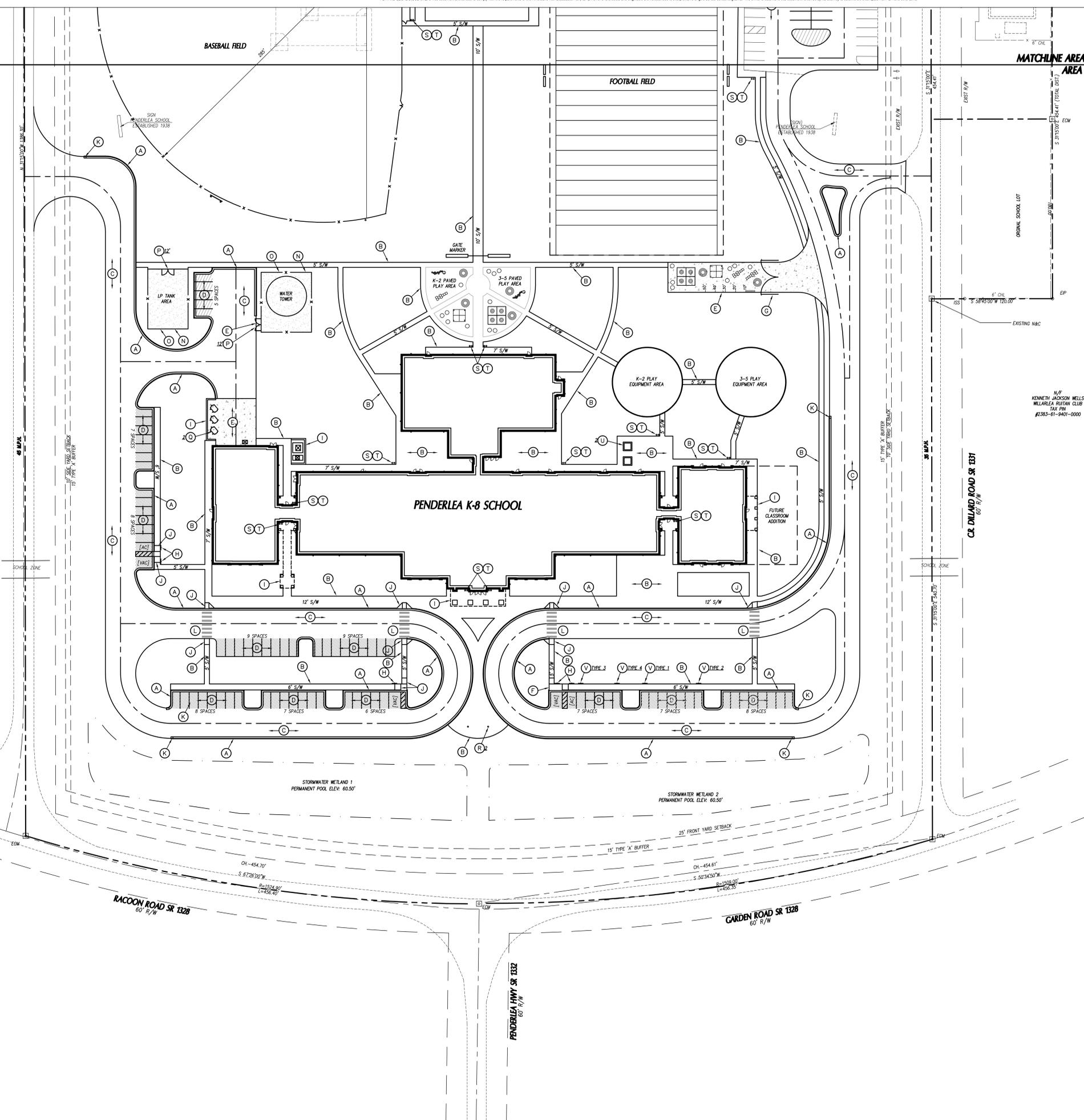
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SITE OVERALL PLAN

C0.01

MATCHLINE AREA 2
AREA 1

MATCHLINE AREA 2
AREA 1



- KEY NOTES**
- (A) 24" CONCRETE CURB & GUTTER, SEE DETAIL SHEET.
 - (B) CONCRETE SIDEWALK, SEE DETAIL SHEET.
 - (C) HEAVY DUTY ASPHALT PAVEMENT, SEE DETAIL SHEET.
 - (D) LIGHT DUTY ASPHALT PAVEMENT, SEE DETAIL SHEET.
 - (E) CONCRETE PAVEMENT, SEE DETAIL SHEET.
 - (F) SIDEWALK FLUSH W/ PAVEMENT, SEE ACCESS. PARKING CURB RAMP DETAIL.
 - (G) 24" PIPE GATE, SEE DETAIL SHEET.
 - (H) ACCESSIBLE PARKING SIGNAGE, SEE DETAIL SHEET.
 - (I) SEE ARCHITECTURAL PLANS FOR SCREEN WALLS, CANOPY, STEPS, ETC.
 - (J) ACCESSIBLE CURB RAMP, SEE DETAIL SHEET.
 - (K) STANDARD METHOD OF ENDING CURB, SEE DETAIL SHEET.
 - (L) HI-VIS CROSSWALK, SEE TRAFFIC CONTROL NOTES THIS SHEET.
 - (M) ASPHALT OVERLAY, SEE DETAIL SHEET.
 - (N) #57 STONE, SEE DETAIL SHEET.
 - (O) 6" VINYL COATED CHAIN LINK FENCE, SEE DETAIL SHEET.
 - (P) VINYL COATED CHAIN LINK GATE, SEE DETAIL SHEET.
 - (Q) DUMPSTERS, PROVIDED BY OWNER.
 - (R) 25' TALL FLAGPOLE, SEE SPECIFICATIONS, SEE DETAIL SHEET FOR FLAGPOLE BASE, THE MAX. HEIGHT ABOVE FINISHED GRADE FOR FLAG POLES IS 25' AND THE MAX. FLAG SIZE IS 5' X 8'.
 - (S) TRASH RECEPTACLE, SEE SPECIFICATIONS.
 - (T) RECYCLE RECEPTACLE, SEE SPECIFICATIONS.
 - (U) SEAT WALL W/ RAISED PLANTER, SEE DETAIL SHEET.
 - (V) SPECIAL PARKING SIGNAGE, SEE DETAIL SHEET.

- GENERAL NOTES**
1. ALL DIMENSIONS SHOWN ARE FACE OF CURB AND FACE OF BUILDING WALL, UNLESS OTHERWISE SHOWN.
 2. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL DIMENSIONS SHOWN AND CONTACT THE ARCHITECT IF ANY DISCREPANCIES OCCUR.
 3. CONSTRUCTION STAKE OUT IS THE RESPONSIBILITY OF THE CONTRACTOR.
 4. ALL SIGNS AND PAVEMENT MARKINGS ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
 5. PAVEMENT MARKINGS IN PUBLIC RIGHT-OF-WAYS AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET PENDER COUNTY AND/OR NCDOT STANDARDS.
 6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NCDOT & PENDER COUNTY STANDARDS AND SPECIFICATIONS.
 7. REPLACEMENT OF ANY BROKEN OR DAMAGED CONCRETE SIDEWALK PANELS OR CURBING THAT OCCURS DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR.
 8. ALL PARKING STALL RADII SHALL BE 4' UNLESS OTHERWISE NOTED.

- TRAFFIC CONTROL NOTES**
1. ALL SITE SIGNAGE SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND NCDOT STANDARDS.

SIGN	MUTCD STD.	SIZE
STOP	R1-1	30"x30"
ONE WAY	R6-1	36"x12"
DO NOT ENTER (DNE)	R5-1	30"x30"
 2. ALL SIGNS SHALL BE MOUNTED WITH 7'-FT MIN. VERTICAL CLEARANCE TO THE BOTTOM OF THE SIGN ON 2'-LX. GALV. STEEL U-CHANNEL POST SET IN 3'-FT DEEP X 12"-IN DIA. CONCRETE FOOTING.
 3. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MUTCD AND NCDOT STANDARDS AND THE PROJECT SPECIFICATIONS.

MARKING	NCDOT STD.	SIZE	COLOR
PARKING SPACE	1205.08	4'-IN	WHT.
DIRECTIONAL ARROWS	1205.08	4'-IN	WHT.
NO PARKING - FIRE LANE	-	4'-IN	WHT.
SOLID	-	4'-IN	WHT.
CROSSWALK	1205.07(H-VIS)	24'-IN	WHT.
STOP BAR	-	24'-IN	WHT.

 - * NO PARKING - FIRE LANE MARKING SHALL CONSIST OF A 4" SOLID WHITE STRIPE AND 8" HIGH WHITE TEXT "NO PARKING - FIRE LANE" AT 50' INTERVALS. PROVIDE IN ALL PAVED AREAS AS DESIGNATED BY FIRE MARSHALL.
 4. ALL PAVEMENT MARKINGS ON SITE MAY BE ALKYD-RESIN TYPE PAINT, EXCEPT FOR CROSSWALKS AND FIRE LANE STRIPING, WHICH SHALL BE THERMOPLASTIC.
 5. ALL SIGNAGE SHALL BE FIELD STAKED AND THE LOCATIONS APPROVED BY CLH DESIGN PRIOR TO SIGN INSTALLATION.
 6. CENTER ALL DIRECTIONAL ARROWS WITHIN TRAVEL LANE.

CONTRACTOR SHALL INCLUDE PRICE FOR 1,000-LF OF TEMPORARY CONSTRUCTION FENCE & GATES IN BASE BID (SEE DETAIL SHEET). LOCATIONS TO BE DETERMINED IN FIELD WITH OWNER AND ENGINEER PRIOR TO INSTALLATION.

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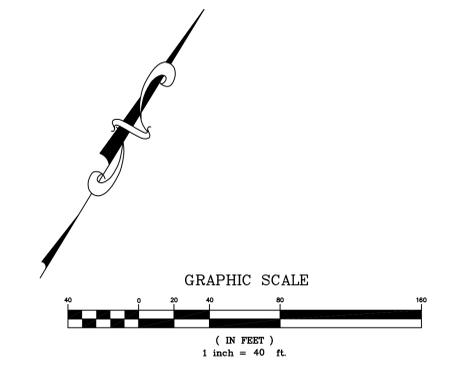
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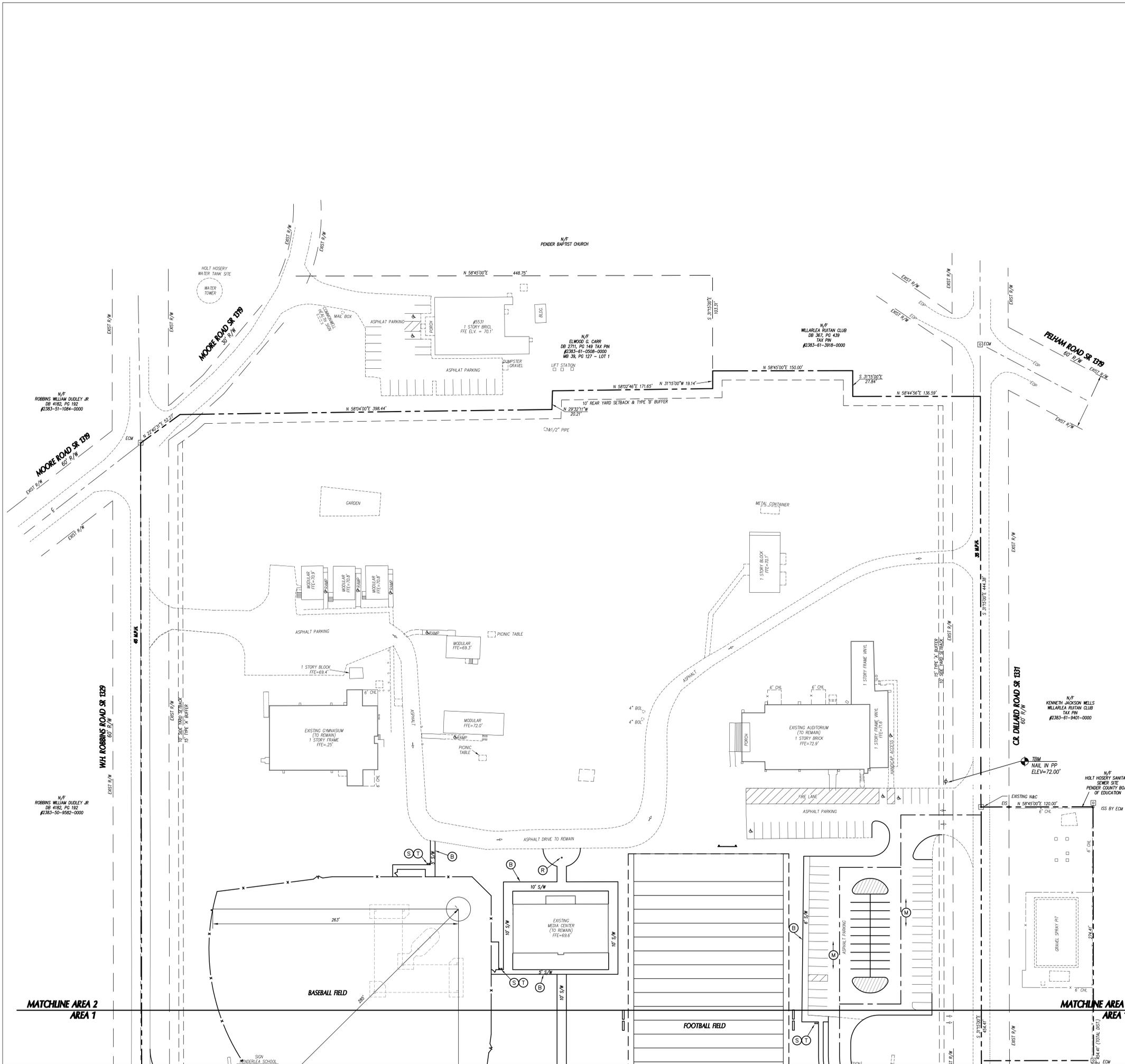
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SITE STAKING PLAN



C1.01



- ### KEY NOTES
- (A) 24" CONCRETE CURB & GUTTER, SEE DETAIL SHEET.
 - (B) CONCRETE SIDEWALK, SEE DETAIL SHEET.
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TRAFFIC CONTROL NOTES

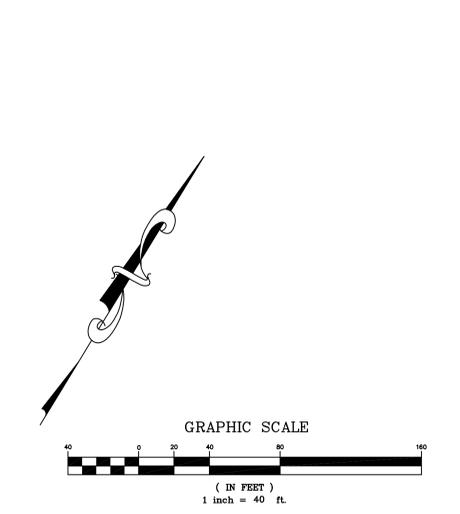
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STOP SIGN	MUTCD STD. SIZE	NCDOT STD. SIZE	COLOR
STOP	36"x36"	30"x30"	WHIT.
ONE WAY	R6-1	36"x12"	WHIT.
DO NOT ENTER (DNE)	R5-1	30"x30"	WHIT.
2. ALL SIGNS SHALL BE MOUNTED WITH 7'-FT MIN. VERTICAL CLEARANCE TO THE BOTTOM OF THE SIGN ON 2'-LB. GALV. STEEL U-CHANNEL POST SET IN 3'-FT DEEP X 12"-IN DIA. CONCRETE FOOTING.
3. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MUTCD AND NCDOT STANDARDS AND THE PROJECT SPECIFICATIONS.

MARKING	NCDOT STD.	SIZE	COLOR
PARKING SPACE	4-4	4'-IN	WHIT.
DIRECTIONAL ARROWS	1205.08	STD.	WHIT.
NO PARKING - FIRE LANE	-	4'-IN	WHIT.
SOLID	-	4'-IN	WHIT.
CROSSWALK	1205.07(H-VIS)	24'-IN	WHIT.
STOP BAR	-	24'-IN	WHIT.

 - * NO PARKING - FIRE LANE MARKING SHALL CONSIST OF A 4" SOLID WHITE STRIPE AND 8" HIGH WHITE TEXT "NO PARKING - FIRE LANE" AT 50' INTERVALS. PROVIDE IN ALL PAVED AREAS AS DESIGNATED BY FIRE MARSHALL.
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PENDERLEA K-8 SCHOOL
82 PENDERLEA SCHOOL ROAD, WILLARD, NC 28478



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MATCHLINE AREA 2
AREA 1

MATCHLINE AREA 2
AREA 1



LEGEND-STRUCTURES/UTILITIES TO REMAIN				
OVERHEAD ELECTRICAL	---	E	LIGHT POLE	LP
UNDERGROUND ELECTRICAL	---	UE	UTILITY POLE	UP
FIRE PROTECTION	---	FP	MANHOLE	MH
GAS	---	G	CLEAN OUT	CO
SANITARY SEWER	---	SS	DROP INLET,CATCH BASIN	DI, CB
TELEPHONE	---	T	FIRE HYDRANT	FH
UNDERGROUND TELEPHONE	---	UT	WATER VALVE	WV
FIBER OPTIC	---	FO		
WATER	---	W		
FORCE MAIN	---	FM		
STORM DRAIN	---	SD		
INDIVIDUAL TREE TO REMAIN	⊗			

LEGEND-STRUCTURES/UTILITIES TO BE REMOVED				
OVERHEAD ELECTRICAL	---	E	LIGHT POLE	LP
UNDERGROUND ELECTRICAL	---	UE	UTILITY POLE	UP
FIRE PROTECTION	---	FP	MANHOLE	MH
GAS	---	G	CLEAN OUT	CO
SANITARY SEWER	---	SS	DROP INLET,CATCH BASIN	DI, CB
TELEPHONE	---	T	FIRE HYDRANT	FH
UNDERGROUND TELEPHONE	---	UT	WATER VALVE	WV
FIBER OPTIC	---	FO	CONSTR./CLEARING LIMITS	
WATER	---	W	PAVEMENT, S/W, CONCRETE TO BE DEMOLISHED	
FORCE MAIN	---	FM	BUILDINGS TO BE DEMOLISHED	
STORM DRAIN	---	SD	REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.	
INDIVIDUAL TREE TO BE REMOVED	⊗			

- GENERAL NOTES**
- ALL UTILITIES OR STRUCTURES NOT INDICATED FOR REMOVAL OR MODIFICATION ARE TO REMAIN AND BE PROTECTED FROM DAMAGE.
 - ALL WASTE MATERIAL GENERATED FROM CLEARING AND DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE RULES AND REGULATIONS.
 - INSTALL TREE PROTECTION FENCING PRIOR TO BEGINNING CLEARING OPERATIONS. CLEAR AND GRASS AS NEEDED WITHIN CONSTRUCTION LIMITS PER SPECIFICATIONS AND DRAWINGS. EXISTING TREES, SHRUBS OR OTHER LANDSCAPE MATERIAL WHICH WILL CONFLICT WITH NEW CONSTRUCTION SHALL BE REMOVED (WHETHER OR NOT SHOWN ON THE DRAWINGS) FOLLOWING APPROVAL OF ARCHITECT. BY SUBMITTING A BID, CONTRACTOR ACKNOWLEDGES THAT THE SITE HAS BEEN INVESTIGATED TO DETERMINE TYPE, SIZE AND QUANTITY OF CLEARING REQUIRED FOR CONSTRUCTION.
 - NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FEEDING HAS BEEN INSTALLED AND APPROVED.
 - NO LAND DISTURBANCE, INCLUDING TREE REMOVAL, IS TO OCCUR OUTSIDE THE LIMITS OF DISTURBANCE SHOWN.
 - ALL PAVEMENT OR CONCRETE TO BE REMOVED SHALL BE SAW CUT TO PROVIDE A STRAIGHT AND UNIFORM JOINT WITH NEW CONSTRUCTION. ANY EXISTING PAVEMENT, SIDEWALK, CURB & GUTTER, ETC. THAT MUST BE REMOVED TO ALLOW NEW CONSTRUCTION SHALL BE REMOVED AND REPAIRED PER THE SPECIFICATIONS AND DETAILS OR TO MATCH EXISTING CONDITIONS (WHETHER OR NOT SHOWN ON THE DRAWINGS TO BE REMOVED). UTILITY INSTALLATIONS MAY UTILIZE OPEN CUT OF PAVEMENTS UNLESS INDICATED OTHERWISE. TRENCH IN EXISTING ASPHALT SHALL BE PATCHED PER PAVEMENT REPAIR ON DETAIL SHEET.
 - PROTECT ALL ADJACENT PROPERTIES, THE GENERAL PUBLIC AND ALL OF THE OWNER'S FACILITIES. SHOULD DAMAGES OCCUR, NOTIFY ARCHITECT IMMEDIATELY.
 - THE CONTRACTOR SHALL EMPLOY A QUALIFIED UTILITY LOCATOR SERVICE TO LOCATE ALL UNDERGROUND UTILITIES (INCLUDING BUT NOT LIMITED TO ELECTRICAL, TELEPHONE, GAS, CABLE, FIBER OPTIC) WITHIN THE LIMITS OF CONSTRUCTION.
 - VERIFY ALL ILLUSTRATED KNOWN UNDERGROUND ELEMENTS. EXERCISE REASONABLE EFFORTS TO PROTECT ANY UNKNOWN UNDERGROUND ELEMENTS. NOTIFY ARCHITECT IMMEDIATELY IF UNKNOWN ELEMENTS ARE DISCOVERED THAT WOULD NECESSITATE MODIFICATION TO THE PROPOSED DESIGN.
 - ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND OSHA REGULATIONS.
 - EXISTING MANHOLES, VALVE BOXES, VAULTS, CLEANOUTS, UTILITY POLES ETC. TO REMAIN WITHIN THE GRADING LIMITS SHALL BE ADJUSTED AS NEEDED TO FUNCTION PROPERLY WITHIN THE PROPOSED FINISHED GRADES (WHETHER OR NOT INDICATED TO BE ADJUSTED).
 - GENERAL CONTRACTOR TO COORDINATE ALL PEDESTRIAN ACCESS PATHS, LOCATIONS, LIGHTING, HANDICAP PARKING, ETC. DURING CONSTRUCTION WITH OWNER.
 - EXISTING SURVEY INFORMATION WAS TAKEN FROM A BOUNDARY AND TOPOGRAPHIC SURVEY BY FW JONES SURVEYING CO. DATED 4-14-16. SURVEY PROVIDED BY OWNER.
 - ANY AND ALL LANDSCAPING AND EXISTING TREES & SHRUBS TO REMAIN WHICH ARE DAMAGED DURING DEMOLITION OR CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR UTILIZING A LICENSED LANDSCAPE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
 - CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE WITHIN THE CONSTRUCTION AREA AFTER DEMOLITION IS COMPLETE. EROSIONS FROM FOOTING AND UTILITY REMOVAL SHALL BE FILLED WITH STRUCTURAL MATERIAL, AS DIRECTED BY THE OWNER'S TESTING AGENCY AND COMPACTED PER SPECIFICATIONS.

TEMPORARY CONSTRUCTION FENCING IS RESPONSIBILITY OF CONTRACTOR. COORDINATE WITH OWNER FOR EXACT LOCATION BASED ON SITE CONSTRUCTION LOGISTICS PLAN (TO BE DEVELOPED BY THE CONTRACTOR).

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PROFESSIONAL ENGINEER
No. 28383
KENTON W. WILSON
5-23-16

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SITE DEMOLITION
AND EXISTING
CONDITIONS PLAN

C2.01

LEGEND-STRUCTURES/UTILITIES TO REMAIN

OVERHEAD ELECTRICAL	---	E	---	LIGHT POLE	LP
UNDERGROUND ELECTRICAL	---	UE	---	UTILITY POLE	UP
FIRE PROTECTION	---	FP	---	MANHOLE	MH
GAS	---	G	---	CLEAN OUT	CO
SANITARY SEWER	---	SS	---	DROP INLET,CATCH BASIN	DI, CB
TELEPHONE	---	T	---	FIRE HYDRANT	FH
UNDERGROUND TELEPHONE	---	UT	---	WATER VALVE	WV
FIBER OPTIC	---	FO	---		
WATER	---	W	---		
FORCE MAIN	---	FM	---		
STORM DRAIN	---	SD	---		
INDIVIDUAL TREE TO REMAIN	---		---		

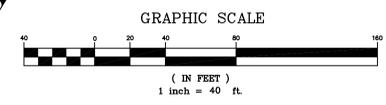
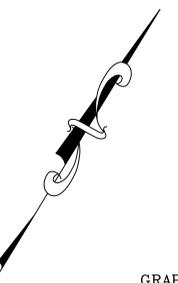
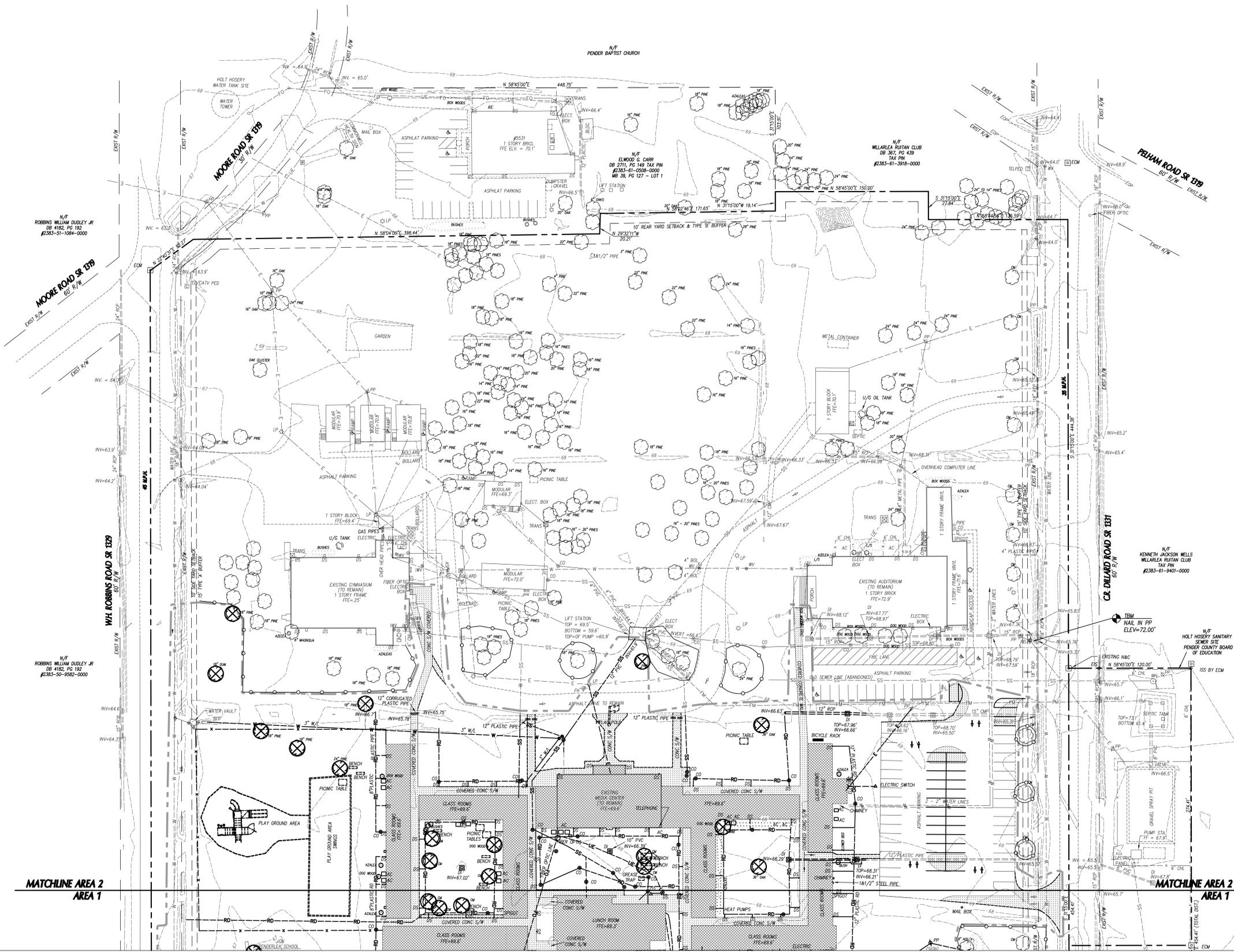
LEGEND-STRUCTURES/UTILITIES TO BE REMOVED

OVERHEAD ELECTRICAL	---	E	---	LIGHT POLE	LP
UNDERGROUND ELECTRICAL	---	UE	---	UTILITY POLE	UP
FIRE PROTECTION	---	FP	---	MANHOLE	MH
GAS	---	G	---	CLEAN OUT	CO
SANITARY SEWER	---	SS	---	DROP INLET,CATCH BASIN	DI, CB
TELEPHONE	---	T	---	FIRE HYDRANT	FH
UNDERGROUND TELEPHONE	---	UT	---	WATER VALVE	WV
FIBER OPTIC	---	FO	---	CONSTR./CLEARING LIMITS TO BE DEMOLISHED	
WATER	---	W	---	PAVEMENT, S/W, CONCRETE TO BE DEMOLISHED	
FORCE MAIN	---	FM	---	BUILDINGS TO BE DEMOLISHED	
STORM DRAIN	---	SD	---	REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.	
INDIVIDUAL TREE TO BE REMOVED	---		---		

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- ALL UTILITIES OR STRUCTURES NOT INDICATED FOR REMOVAL OR MODIFICATION ARE TO REMAIN AND BE PROTECTED FROM DAMAGE.
- ALL WASTE MATERIAL GENERATED FROM CLEARING AND DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE RULES AND REGULATIONS.
- INSTALL TREE PROTECTION FENCING PRIOR TO BEGINNING CLEARING OPERATIONS. CLEAR AND GRUB AS NEEDED WITHIN CONSTRUCTION LIMITS PER SPECIFICATIONS AND DRAWINGS. EXISTING TREES, SHRUBS OR OTHER LANDSCAPE MATERIAL WHICH WILL CONFLICT WITH NEW CONSTRUCTION SHALL BE REMOVED (WHETHER OR NOT SHOWN ON THE DRAWINGS) FOLLOWING APPROVAL OF ARCHITECT. BY SUBMITTING A BID, CONTRACTOR ACKNOWLEDGES THAT THE SITE HAS BEEN INVESTIGATED TO DETERMINE TYPE, SIZE AND QUANTITY OF CLEARING REQUIRED FOR CONSTRUCTION.
- NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING HAS BEEN INSTALLED AND APPROVED.
- NO LAND DISTURBANCE, INCLUDING TREE REMOVAL, IS TO OCCUR OUTSIDE THE LIMITS OF DISTURBANCE SHOWN.
- ALL PAVEMENT OR CONCRETE TO BE REMOVED SHALL BE SAW CUT TO PROVIDE A STRAIGHT AND UNIFORM JOINT WITH NEW CONSTRUCTION. ANY EXISTING PAVEMENT, SIDEWALK, CURB & GUTTER, ETC. THAT MUST BE REMOVED TO ALLOW NEW CONSTRUCTION SHALL BE REMOVED AND REPAIRED PER THE SPECIFICATIONS AND DETAILS OR TO MATCH EXISTING CONDITIONS (WHETHER OR NOT SHOWN ON THE DRAWINGS). UTILITY INSTALLATIONS MAY UTILIZE OPEN CUT OF PAVEMENTS UNLESS INDICATED OTHERWISE. TRENCH IN EXISTING ASPHALT SHALL BE PATCHED PER PAVEMENT REPAIR ON DETAIL SHEET.
- PROTECT ALL ADJACENT PROPERTIES, THE GENERAL PUBLIC AND ALL OF THE OWNER'S FACILITIES. SHOULD DAMAGES OCCUR, NOTIFY ARCHITECT IMMEDIATELY.
- THE CONTRACTOR SHALL EMPLOY A QUALIFIED UTILITY LOCATOR SERVICE TO LOCATE ALL UNDERGROUND UTILITIES (INCLUDING BUT NOT LIMITED TO ELECTRICAL, TELEPHONE, GAS, CABLE, FIBER OPTIC) WITHIN THE LIMITS OF CONSTRUCTION.
- VERIFY ALL ILLUSTRATED KNOWN UNDERGROUND ELEMENTS. EXERCISE REASONABLE EFFORTS TO PROTECT ANY UNKNOWN UNDERGROUND ELEMENTS. NOTIFY ARCHITECT IMMEDIATELY IF UNKNOWN ELEMENTS ARE DISCOVERED THAT WOULD NECESSITATE MODIFICATION TO THE PROPOSED DESIGN.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND OSHA REGULATIONS.
- EXISTING MANHOLES, VALVE BOXES, VAULTS, CLEANOUTS, UTILITY POLES ETC. TO REMAIN WITHIN THE GRADING LIMITS SHALL BE ADJUSTED AS NEEDED TO FUNCTION PROPERLY WITHIN THE PROPOSED FINISHED GRADES (WHETHER OR NOT INDICATED TO BE MODIFIED).
- GENERAL CONTRACTOR TO COORDINATE ALL PEDESTRIAN ACCESS PATHS, LOCATIONS, LIGHTING, HANDICAP PARKING, ETC. DURING CONSTRUCTION WITH OWNER.
- EXISTING SURVEY INFORMATION WAS TAKEN FROM A BOUNDARY AND TOPOGRAPHIC SURVEY BY FW JONES SURVEYING CO. DATED 4-14-16. SURVEY PROVIDED BY OWNER.
- ANY AND ALL LANDSCAPING AND EXISTING TREES & SHRUBS TO REMAIN WHICH ARE DAMAGED DURING DEMOLITION OR CONSTRUCTION SHALL BE REPLAZED BY THE CONTRACTOR UTILIZING A LICENSED LANDSCAPE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE WITHIN THE CONSTRUCTION AREA AFTER DEMOLITION IS COMPLETE. EROSION CONTROL FROM FOOTING AND UTILITY REMOVAL SHALL BE FILLED WITH STRUCTURAL MATERIAL, AS DIRECTED BY THE OWNER'S TESTING AGENCY AND COMPACTED PER SPECIFICATIONS.

TEMPORARY CONSTRUCTION FENCING IS RESPONSIBILITY OF CONTRACTOR. COORDINATE WITH OWNER FOR EXACT LOCATION BASED ON SITE CONSTRUCTION LOGISTICS PLAN (TO BE DEVELOPED BY THE CONTRACTOR).



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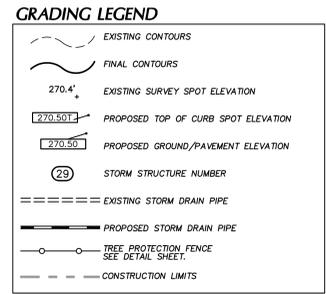
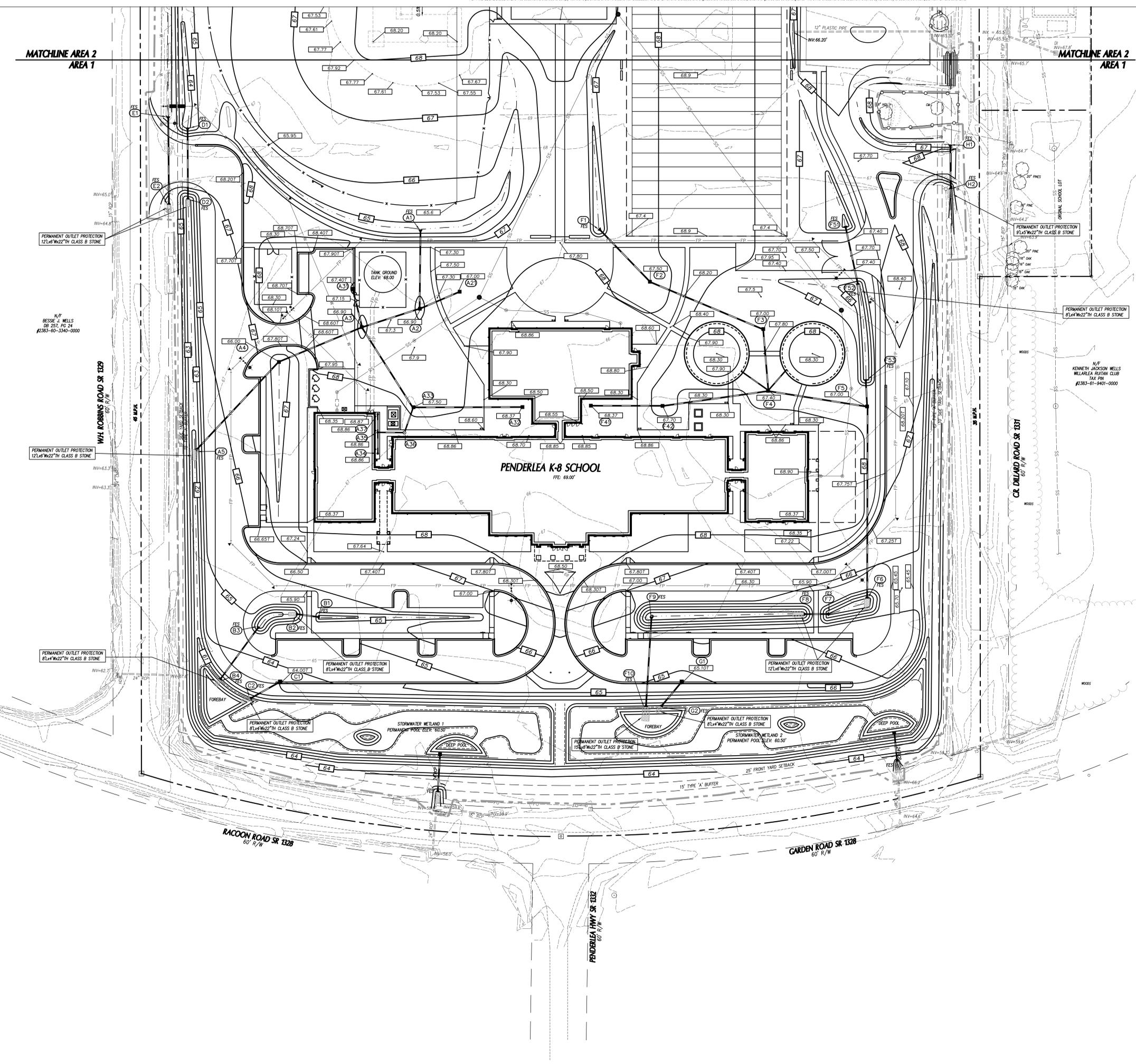
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SITE DEMOLITION
AND EXISTING
CONDITIONS PLAN

MATCHLINE AREA 2
AREA 1

MATCHLINE AREA 2
AREA 1



- ### GRADING NOTES
1. ALL SPOT ELEVATIONS INDICATED AT CURB AND GUTTER ARE TO TOP OF CURB, UNLESS OTHERWISE SHOWN.
 2. DENUDED AREA = 19 AC.
 3. CONTRACTOR SHALL ADJUST ALL EXISTING VAULTS, MANHOLES, STORM DRAIN STRUCTURES, CLEANOUTS, ETC. AS NEEDED TO MATCH FINISH GRADE.
 4. ALL BACKFILL, COMPACTION, SOILS TESTING, ETC. SHALL BE PERFORMED BY THE OWNER'S INDEPENDENT TESTING LABORATORY. (SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION)
 5. ALL STORM DRAIN PIPES SHALL BE PROTECTED WITH STONE FILTER PROTECTION AFTER STORAGE OF WORK EACH DAY.
 6. EXISTING VEGETATION WITHIN TREE PROTECTION AREAS SHALL REMAIN UNDISTURBED, UNLESS NOTED OTHERWISE.
 7. THE GRADING CONTRACTOR SHALL COMPLY WITH ALL STATE CODES IN OBSERVING EROSION CONTROL MEASURES BOTH ON AND OFF-SITE.
 8. THE GRADING CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL DEVICES AFTER EACH RAINFALL EVENT OR AS DIRECTED BY STATE AUTHORITIES OR THE ARCHITECT.
 9. THE GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR OFF-SITE DISPOSAL OF ALL CLEARING AND GRADING WASTE MATERIALS GENERATED DURING CONSTRUCTION AND FOR OBTAINING ALL APPLICABLE PERMITS FOR OFF-SITE STOCKPILES AND/OR WASTE AREAS.
 10. ALL ROOF DRAINS SHALL BE 6" PVC (SCH 40) @ 1:048 MIN. SLOPE UNLESS NOTED OTHERWISE. ROOF DRAINS SHALL BE DIP WHEN COVER IS LESS THAN 12 INCHES. PROVIDE ALL NECESSARY FITTINGS REQUIRED FOR INSTALLATION.

DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NO.	UP STRM	DN STRM	PIPE SLOPE	PIPE DIA. (IN)	PIPE LENGTH (LF)	PIPE MATRL	UPPER INV. (FT)		LOWER INV. (FT)		UPSTREAM STRUCTURE DATA		NOTES
							INV.	(FT)	TOP ELEV. (FT)	DEPTH (FT)	TYPE	NOTES	
A1	A2	0.58%	18	86	RCP	64.00	63.50	67.00	3.00	FES			
A2	A3	0.54%	24	65	RCP	63.40	63.05	66.90	3.50	DI			
A3	A4	0.47%	24	96	RCP	62.96	62.50	66.80	3.96	DI			
A4	A5	0.50%	24	131	RCP	62.40	61.75	66.00	3.60	DI			
A21	A2	0.65%	15	46	RCP	63.80	63.50	67.00	3.20	DI			
A31	A3	1.10%	15	41	RCP	63.50	63.05	67.40	3.90	CB			
A32	A33	0.68%	15	117	RCP	64.50	63.70	68.37	3.87	DI			
A33	A3	0.54%	15	102	RCP	63.60	63.05	67.50	3.90	DI			
A34	A35	1.30%	8	23	PVC	65.80	65.50	68.50	2.70	ID			
A35	A36	1.07%	8	28	PVC	65.40	65.10	68.50	3.10	ID			
A36	A33	1.07%	8	28	PVC	65.10	64.80	68.50	3.40	CO			
A37	A35	1.50%	8	20	PVC	65.80	65.50	68.50	2.70	ID			
B1	B2	3.08%	15	26	RCP	63.00	62.20	65.50	2.50	FES			
B3	B4	1.14%	15	70	RCP	61.30	60.50	64.30	3.00	FES			
C1	C2	1.11%	15	36	RCP	60.80	60.50	64.00	3.10	FES			
D1	D2	0.66%	15	76	RCP	63.50	63.00	67.00	3.50	FES			
E1	E2	0.42%	15	95	RCP	63.40	63.00	67.00	3.60	FES			
F1	F2	0.45%	18	78	RCP	65.20	64.85	67.50	2.30	FES			
F2	F3	0.53%	18	132	RCP	64.75	64.05	67.50	2.75	DI			
F3	F4	0.52%	18	67	RCP	63.95	63.60	67.00	3.05	DI			
F4	F5	0.51%	24	108	RCP	63.50	62.95	67.40	3.90	DI			
F5	F6	0.51%	24	207	RCP	62.85	61.80	67.00	4.15	DI			
F7	F8	0.58%	24	26	RCP	61.65	61.50	65.60	3.95	FES			
F9	F10	0.51%	30	98	RCP	61.00	60.50	66.50	5.50	FES			
F41	F42	0.53%	15	76	RCP	64.70	64.30	68.37	3.67	DI			
F42	F4	0.52%	15	115	RCP	64.20	63.60	67.70	3.50	DI			
F51	F52	0.62%	15	64	RCP	64.80	64.40	67.40	2.60	FES			
F53	F5	3.75%	15	28	RCP	64.00	62.95	67.00	3.00	FES			
G1	G2	1.00%	15	35	RCP	66.85	66.50	65.10	4.25	CB			
H1	H2	0.83%	18	48	RCP	65.05	64.65	68.00	2.95	FES			
J1	J2	1.25%	15	40	RCP	66.50	66.00	68.90	2.40	FES			
J3	J4	0.68%	15	22	RCP	65.55	65.40	68.00	2.45	FES			

- ### LEGEND
- OB SWATH BASIN (NO DET.) SEE DETAIL SHEET.
 - CO CLEANOUT, SEE DETAIL SHEET.
 - DI DRAIN INLET, SEE DETAIL SHEET.
 - FES FES PLUMED END SECTION.
 - ID MAIN DRAIN, SEE DETAIL SHEET.
 - RCP REINFORCED CONCRETE PIPE.
 - EX RCP EXISTING REINFORCED CONCRETE PIPE.
 - (A2) STRUCTURE I.D. NUMBER
- ### NOTES
1. TOP ELEVATION IS TOP OF CURB FOR CATCH BASINS, TOP OF RIM FOR MANHOLES, TOP OF GRADE FOR DRAIN INLETS, AND FINISH GRADE FOR CLEANOUTS.
 2. ALL FES INLETS & OUTLETS SHALL BE RCP.
 3. SAND/FIT EXISTING PIPE AND INSTALL NEW STRUCTURE.

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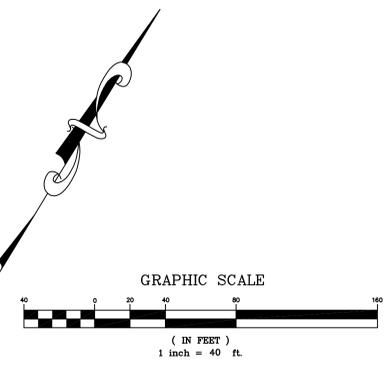
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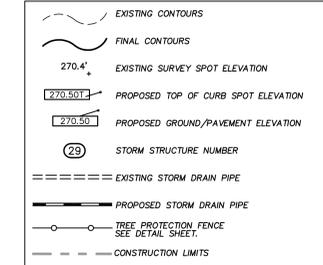
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SITE GRADING PLAN

C3.01

GRADING LEGEND



GRADING NOTES

- ALL SPOT ELEVATIONS INDICATED AT CURB AND GUTTER ARE TO TOP OF CURB, UNLESS OTHERWISE SHOWN.
- DENUDED AREA = 19 AC.
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- ALL BACKFILL, COMPACTION, SOILS TESTING, ETC. SHALL BE PERFORMED BY THE OWNER'S INDEPENDENT TESTING LABORATORY. (SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION)
- ALL STORM DRAIN PIPES SHALL BE PROTECTED WITH STONE FILTER PROTECTION AFTER STOPPAGE OF WORK EACH DAY.
- EXISTING VEGETATION WITHIN TREE PROTECTION AREAS SHALL REMAIN UNDISTURBED, UNLESS NOTED OTHERWISE.
- THE GRADING CONTRACTOR SHALL COMPLY WITH ALL STATE CODES IN OBSERVING EROSION CONTROL MEASURES BOTH ON AND OFF-SITE.
- THE GRADING CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL DEVICES AFTER EACH RAINFALL EVENT OR AS DIRECTED BY STATE AUTHORITIES OR THE ARCHITECT.
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- ALL ROOF DRAINS SHALL BE 6" PVC (SCH 40) @ 1/408 MIN. SLOPE UNLESS NOTED OTHERWISE. ROOF DRAINS SHALL BE DIP WHEN COVER IS LESS THAN 12 INCHES. PROVIDE ALL NECESSARY FITTINGS REQUIRED FOR INSTALLATION.

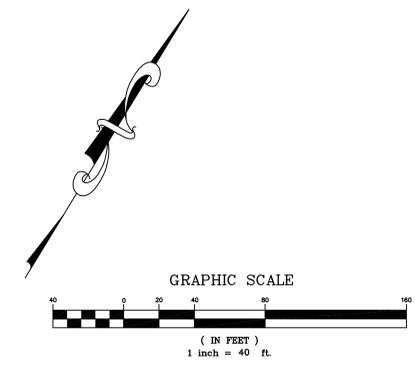
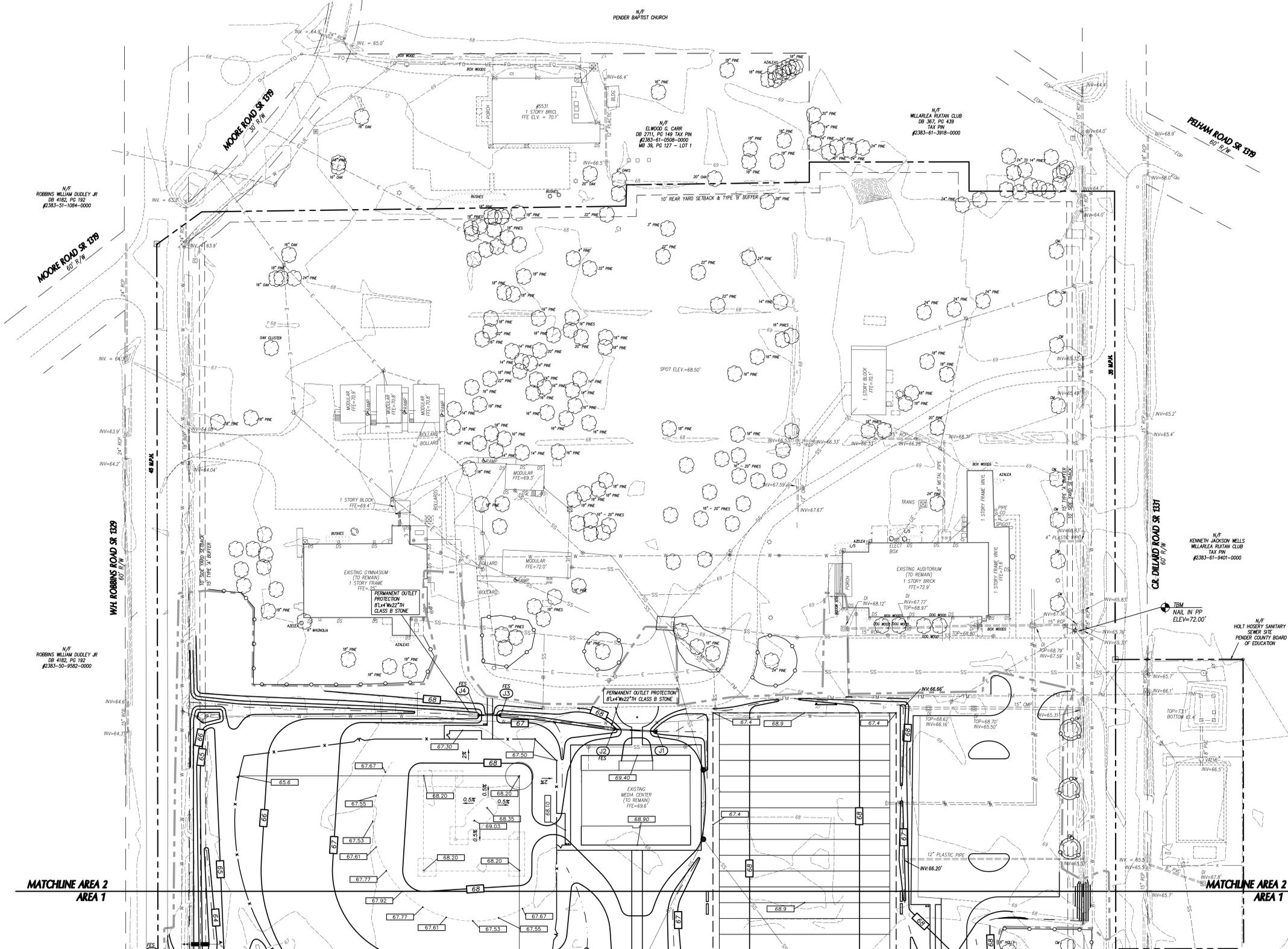
DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NO.	UP STRM	DN STRM	SLOPE	PIPE DIA. (IN)	PIPE LENGTH (LF)	MATERIAL	UPPER INV. (FT)	LOWER INV. (FT)	UPSTREAM STRUCTURE DATA		
									TOP ELEV. (FT)	DEPTH (FT)	TYPE
A1	A2	0.58%	18	86	RCP	64.00	63.50	67.00	3.00	FES	
A2	A3	0.54%	24	65	RCP	63.40	63.05	66.90	3.50	DI	
A3	A4	0.47%	24	96	RCP	62.96	62.50	66.80	3.96	DI	
A4	A5	0.50%	24	131	RCP	62.40	61.75	66.00	3.60	DI	
A21	A2	0.65%	15	46	RCP	63.80	63.50	67.00	3.20	DI	
A31	A3	1.10%	15	41	RCP	63.50	63.05	67.40	3.90	CB	
A32	A33	0.68%	15	117	RCP	64.50	63.70	68.37	3.87	DI	
A33	A3	0.54%	15	102	RCP	63.60	63.05	67.50	3.90	DI	
A34	A35	1.30%	8	23	PVC	65.80	65.50	68.50	2.70	ID	
A35	A36	1.07%	8	28	PVC	65.40	65.10	68.50	3.10	ID	
A36	A33	1.07%	8	28	PVC	65.10	64.80	68.50	3.40	CO	
A37	A35	1.50%	8	20	PVC	65.80	65.50	68.50	2.70	ID	
B1	B2	3.08%	15	26	RCP	63.00	62.20	65.50	2.50	FES	
B3	B4	1.14%	15	70	RCP	61.30	60.50	64.30	3.00	FES	
C1	C2	1.11%	15	36	RCP	60.80	60.50	64.00	3.10	FES	
D1	D2	0.66%	15	76	RCP	63.50	63.00	67.00	3.50	FES	
E1	E2	0.42%	15	95	RCP	63.40	63.00	67.00	3.60	FES	
F1	F2	0.45%	18	78	RCP	65.20	64.85	67.50	2.30	FES	
F2	F3	0.53%	18	132	RCP	64.75	64.05	67.50	2.75	DI	
F3	F4	0.52%	18	67	RCP	63.65	63.60	67.00	3.05	DI	
F4	F5	0.51%	24	108	RCP	63.50	62.95	67.40	3.90	DI	
F5	F6	0.51%	24	207	RCP	62.85	61.80	67.00	4.15	DI	
F7	F8	0.58%	24	26	RCP	61.65	61.50	65.60	3.95	FES	
F9	F10	0.51%	30	98	RCP	61.00	60.50	66.50	5.50	FES	
F41	F42	0.53%	15	76	RCP	64.70	64.30	68.37	3.67	DI	
F42	F4	0.52%	15	115	RCP	64.20	63.60	67.70	3.50	DI	
F51	F52	0.62%	15	64	RCP	64.80	64.40	67.40	2.60	FES	
F53	F5	3.75%	15	28	RCP	64.00	62.95	67.00	3.00	FES	
G1	G2	1.00%	15	35	RCP	66.85	66.50	65.10	4.25	CB	
H1	H2	0.83%	18	48	RCP	65.05	64.85	68.00	2.95	FES	
J1	J2	1.25%	15	40	RCP	66.50	66.00	68.90	2.40	FES	
J3	J4	0.68%	15	22	RCP	65.55	65.40	68.00	2.45	FES	

LEGEND
 @ CATCH BASIN (NODOT), SEE DETAIL SHEET.
 CO CLEANOUT, SEE DETAIL SHEET.
 DI DROP INLET, SEE DETAIL SHEET.
 DI PROPOSED END SECTION.
 DI MAIN DRAIN, SEE DETAIL SHEET.
 RCP REINFORCED CONCRETE PIPE.
 EX RCP EXISTING REINFORCED CONCRETE PIPE.

NOTES:
 1. TOP ELEVATION IS TOP OF CURB FOR CATCH BASINS, TOP OF RIM FOR MANHOLES, TOP OF GRADE FOR DRAIN INLETS, AND FINISH GRADE FOR CLEANOUTS.
 2. ALL FES INLETS & OUTLETS SHALL BE RCP.
 3. SAND/JIT EXISTING PIPE AND INSTALL NEW STRUCTURE.

LEGEND
 (A2) STRUCTURE I.D. NUMBER



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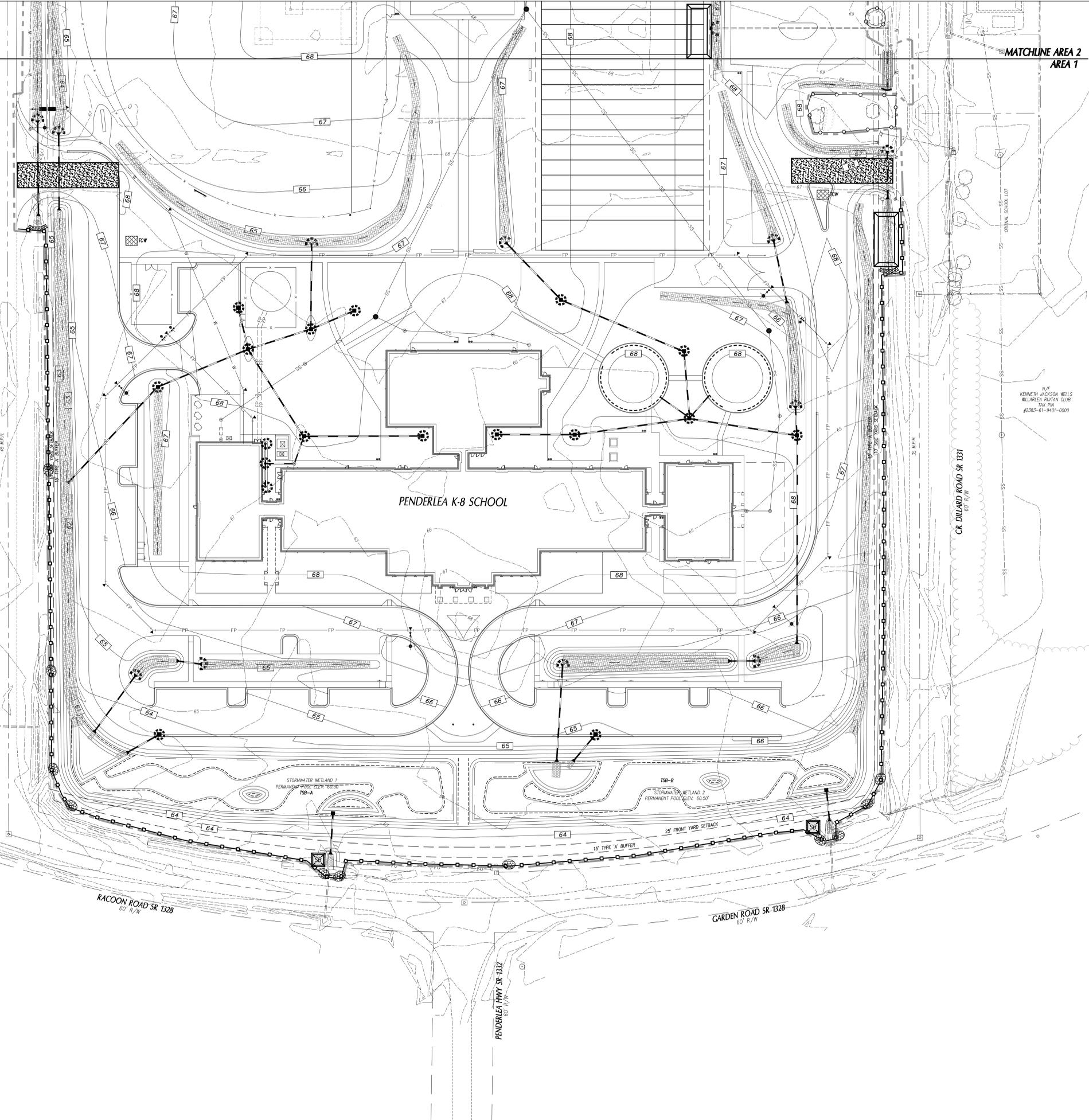
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SITE GRADING PLAN

C3.02

MATCHLINE AREA 2
AREA 1

MATCHLINE AREA 2
AREA 1



LEGEND

	GRAVEL CONCR. ENTRANCE SEE DETAIL SHEET.		CONSTRUCTION LIMITS UNLESS OTHERWISE NOTED.
	TEMP. INLET PROTECTION DEVICE SEE DETAIL SHEET.		PROPOSED STORM SEWER PIPES
	TEMPORARY SILT FENCE SEE DETAIL SHEET.		EXISTING STORM SEWER PIPES
	REINFORCED SILT FENCE OUTLET SEE DETAIL SHEET.		FINISHED CONTOUR
	PERMANENT OUTLET PROTECTION SEE DETAIL SHEET.		TEMPORARY CONTOUR (TEMP. GRADES DURING CONSTR.)
	TEMPORARY CONCRETE WASHOUT AREA, SEE DETAIL SHEET.		TEMPORARY DEWATERING SILT BAG, SEE DETAIL SHEET.
	TEMPORARY SEDIMENT SUMMER BASIN, SEE DETAIL SHEET.		TEMPORARY CHECK DAM W/ MESH SEE DETAIL SHEET.
	TEMPORARY ROCK PIPE INLET PROTECTION, SEE DETAIL SHEET.		TEMPORARY PLASTIC LINING SEE DETAIL SHEET.
	CHANNEL LINING, SEE DETAIL SHEET.		

- GENERAL NOTES**
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL PENDER COUNTY AND NC DOT STANDARDS, SPECIFICATIONS AND DETAILS.
 2. THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL CODES IN OBSERVING EROSION CONTROL MEASURES BOTH ON AND OFF SITE. ALL OFF-SITE SOIL BORROW AND WASTE SITES SHALL BE PROPERLY PERMITTED FOR SUCH ACTIVITIES. CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION OF SEDIMENT & EROSION CONTROL PERMIT FOR ANY OFF-SITE SITES TO BE OPENED.
 3. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL DEVICES AFTER EACH RAINFALL EVENT OR AS DIRECTED BY LOCAL AUTHORITIES OR ARCHITECT.
 4. TOTAL DISTURBED AREA: 19 AC.
 5. ALL OPEN STORM PIPES SHALL BE PROTECTED WITH STONE FILTER PROTECTION AFTER WORK STORAGE EACH DAY. SEE DETAIL SHEET.
 6. ALL STORM DRAINAGE PIPES SHALL BE THOROUGHLY FLUSHED OF ALL SEDIMENT FOLLOWING SITE STABILIZATION. INTERIOR FLUSHING OF SYSTEMS SHALL BE PERFORMED AS NEEDED TO MAINTAIN PROPER FUNCTIONING OF THE DRAINAGE SYSTEM.
 7. THE INDICATED STAGING AREA IS INTENDED FOR VEHICLES AND NON-ERODIBLE MATERIALS ONLY. NO SOIL, SAND OR OTHER ERODIBLE, FINE GRAINED MATERIAL SHALL BE STORED OUTSIDE OF THE LIMITS OF THE SITE PROTECTED BY SEDIMENT AND EROSION CONTROL DEVICES AND MEASURES. STOCKPILES SHALL BE STABILIZED WITH PROTECTED BY SEDIMENT AND EROSION CONTROL DEVICES AND MEASURES. STOCKPILES SHALL BE STABILIZED AS REQUIRED AS INDICATED IN THE SLOPE & SURFACE STABILIZATION NOTES ON THIS PLAN.
 8. TREE PROTECTION CERTIFICATION MUST BE SUBMITTED TO THE CITY OF WILMINGTON PLANNING DEPARTMENT AND TREE PROTECTION INSPECTION COMPLETED PRIOR TO EROSION CONTROL PERMIT ISSUANCE.
 9. ROADSIDE DITCHES AND CHANNELS SHALL BE STABILIZED DAILY UNTIL PERMANENT GROUND COVER IS ESTABLISHED.

SLOPE & SURFACE STABILIZATION

GROUND STABILIZATION SHALL BE PROVIDED ON ALL DISTURBED AREAS ACCORDING TO FOLLOWING SCHEDULE:

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERMITS DITCHES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WOOD (HQM) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7-DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERMETERS AND HOW ZONES).

EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE-SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE (SECTION 6.6(2) (b)).

THE ABOVE REQUIREMENTS ARE THE MINIMUM NECESSARY TO MEET EROSION AND SEDIMENT CONTROL REGULATIONS. THE CONTRACT DOCUMENTS INCLUDE ADDITIONAL SEEDING AND STABILIZATION REQUIREMENTS AND SCHEDULES WHICH MAY EXCEED THOSE ABOVE.

INSTALL TEMPORARY SLOPE EROSION CONTROL EXCELSDOR MATTING FOR STABILIZATION DURING THE ESTABLISHMENT OF VEGETATIVE COVER ON ALL STEEP SLOPES (3:1 OR STEEPER). UTILIZE TEMPORARY COCOMAT MAT IN AREAS DESIGNATED ON PLAN. REFER TO SPECIFICATION SECTION 235000 FOR MATERIAL SPECIFICATIONS. INSTALL MATTING PER MANUFACTURER'S INSTRUCTIONS.

- MAINTENANCE PLAN**
1. DURING ALL PHASES OF CONSTRUCTION, GROUND COVER ON EXPOSED SLOPES SHALL BE PROVIDED ACCORDING TO GROUND STABILIZATION TABLE (BELOW) FOLLOWING COMPLETION OF ANY PHASE OF GRADING.
 2. FINAL PERMANENT GROUND COVER FOR ALL DISTURBED AREAS SHALL BE PROVIDED ON ALL DISTURBED AREAS ACCORDING TO GROUND STABILIZATION TABLE (BELOW) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.
 3. THE ABOVE REQUIREMENTS ARE THE MINIMUM NECESSARY TO MEET EROSION AND SEDIMENT CONTROL REGULATIONS. THE CONTRACT DOCUMENTS INCLUDE ADDITIONAL SEEDING AND STABILIZATION REQUIREMENTS AND SCHEDULES WHICH MAY EXCEED THOSE ABOVE.
 4. SLOPE EROSION CONTROL MATTING SHALL BE INSTALLED FOR TEMPORARY STABILIZATION DURING THE ESTABLISHMENT OF VEGETATIVE COVER ON ALL STEEP SLOPES (3:1 OR STEEPER). REFER TO MATERIAL SPECIFICATIONS. INSTALL MATTING PER MANUFACTURER'S INSTRUCTIONS.
 5. ALL OTHER SEEDED AREAS SHALL BE MULCHED WITH STRAW AND TACKED WITH ASPHALT.

- SELF-INSPECTION RULES**
1. SELF-INSPECTION SHALL BE CONDUCTED AFTER EACH PHASE OF THE PROJECT, AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
 2. THE FINANCIALLY RESPONSIBLE PERSON AND/OR HIS AGENT WILL PERFORM SELF INSPECTIONS OF THE EROSION AND SEDIMENTATION CONTROL MEASURES USING INCORPORATED SELF INSPECTION REPORT (WORKSHEET) AND THIS WILL BE KEPT ON-SITE.
 3. NOTIFICATION OF LAND RESOURCES SEDIMENT AND EROSION CONTROL SELF-INSPECTION PROGRAM: THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND RESTORING ACTIVITIES REPORT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. RULES REGARDING THE DOCUMENTATION OF THESE INSPECTIONS FROM EFFECT OCTOBER 1, 2016. THE SELF-INSPECTION PROGRAM IS SEPARATE FROM THE NEPA SELF-MONITORING PROGRAM OF THE NILES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES. THE GOAL OF THE SELF-INSPECTION REPORT IS THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES ACCORDING TO THE APPROVED PLAN. THE INSPECTIONS MUST BE CONDUCTED FOR EACH PHASE OF THE PROJECT, AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED IN ACCORDANCE WITH NCOS 114-94.1 AND 15A NCAC 02B.01. THE SELF-INSPECTION REPORT FORM IS AVAILABLE AS AN EXCEL SPREADSHEET FROM <http://portal.ncdwr.org/ncos/114/94/15a>. IF YOU HAVE QUESTIONS OR CANNOT ACCESS THE FORM, PLEASE CONTACT INCORP OFFICE AT 910-799-4200.

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PENDER COUNTY SCHOOLS
PENDERLEA K-8 SCHOOL
82 PENDERLEA SCHOOL ROAD, WILLARD, NC 28478



ID	DATE	DESCRIPTION
ISSUE DATE:	05.23.2016	
PROJECT #:	01505.000	
DRAWN BY:	KAL/GM	
CHECKED BY:	TH	
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SITE EROSION CONTROL PLAN		

C4.01

MATCHLINE AREA 2
AREA 1

MATCHLINE AREA 2
AREA 1

UTILITY LEGEND

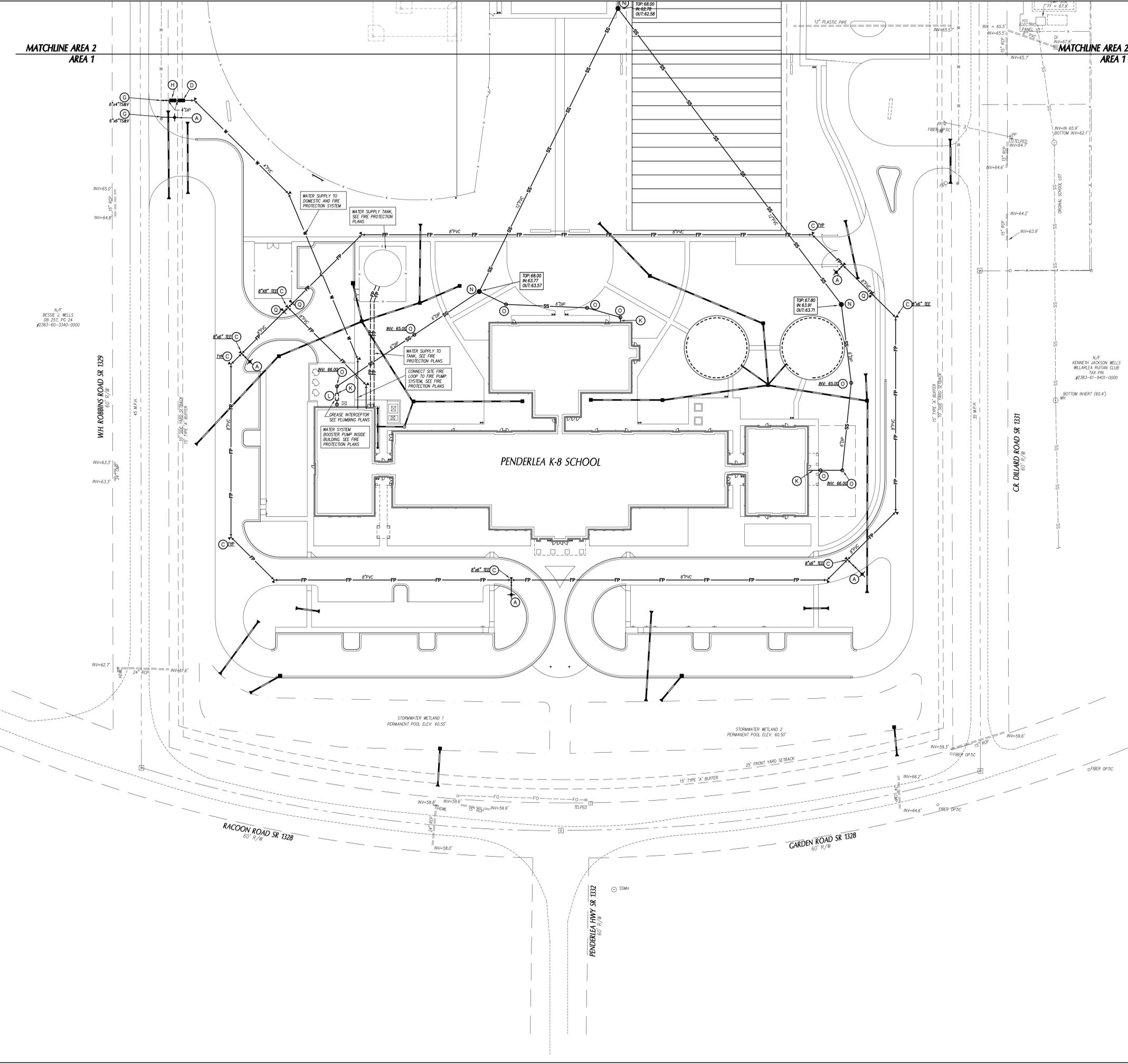
	EXISTING	PROPOSED
OVERHEAD ELECTRICAL	---E---	E
UNDERGROUND ELECTRICAL	---UE---	UE
GAS	---G---	G
SANITARY SEWER	---SS---	SS
TELEPHONE	---T---	T
UNDERGROUND TELEPHONE	---UT---	UT
WATER	---W---	W
FIRE PROTECTION	---FP---	FP
FORCE MAIN	---FM---	FM
CHILLED WATER	---CW---	CW
FOUNDATION DRAIN	---FD---	FD
FIBER OPTIC	---FO---	FO
ROOF DRAIN	---RD---	RD
STORM DRAIN	---	---
LIGHT POLE	LP	*
UTILITY POLE	PP	*
MANHOLE	MH	●
CLEAN OUT	CO	○
DROP INLET/CATCH BASIN	DI, CB	■
FIRE HYDRANT	FH	+
WATER VALVE	WV	+
TELEPHONE PEDESTAL	TP	■
COMMUNICATION BOX	CB	■
SANITARY SEWER STRUCTURE I.D.		3
STORM SEWER STRUCTURE I.D.		8

UTILITY NOTES

- INSTALL WATERMANS WITH A COVER OF NO LESS THAN 4'-FT. INSTALL WATER SERVICES WITH NO LESS THAN 18-IN OF COVER TO SUBGRADE.
- INSTALL SEWER MAINS WITH A COVER OF NO LESS THAN 3'-FT TO FINISHED GRADE UNLESS DUCTILE IRON PIPE IS USED. INSTALL SEWER SERVICES WITH NO LESS THAN 18-IN OF COVER TO SUBGRADE.
- INSTALL ALL UTILITIES TO PROVIDE REQUIRED CLEARANCES AS INDICATED IN THE SPECIFICATIONS.
- WATERLINES AND SEWER MAINS SHALL BE INSTALLED WITH A MINIMUM HORIZONTAL CLEARANCE OF 10'-FT.
- WATER AND SEWER MAINS SHALL BE INSTALLED WITH A MINIMUM VERTICAL CLEARANCE 12-IN TO STORM DRAINAGE PIPES.
- COORDINATE AND SCHEDULE INSTALLATION OF ALL UTILITIES WITH OTHER PRIME CONTRACTORS, UTILITY COMPANIES AND OTHER TRADES INCLUDING BUT NOT LIMITED TO: NATURAL GAS, ELECTRICITY, TELEPHONE AND CATV.
- VERIFY EXISTING CONDITIONS AND CONNECTIONS TO EXISTING UTILITIES PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT IF ANY DISCREPANCIES ARE DISCOVERED.
- CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES DURING CONSTRUCTION AND SHALL MAKE REPAIRS AT NO EXPENSE TO THE OWNER.
- ALL CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE NCSCB AND OSHA REQ'S.
- THE CONTRACTOR SHALL PROVIDE AN AS-BUILT SURVEY OF ALL UTILITY AND STORM DRAINAGE IMPROVEMENTS FOLLOWING CONSTRUCTION.
- CONTRACTOR SHALL PHASE DEMOLITION AND NEW CONSTRUCTION TO ENSURE UNINTERRUPTED ACCESS AND UTILITY SERVICE TO ADJACENT FACILITIES. COORDINATE SHORT-TERM, OFF-HOUR, TEMPORARY SHUT-DOWNS WITH THE OWNER.
- SEE GENERAL NOTES ON EXISTING CONDITIONS AND DEMOLITION PLAN FOR REQUIREMENTS FOR REMOVAL AND PATCHING OF PAVEMENT FOR UTILITY INSTALLATION.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH PENDER COUNTY STANDARDS AND SPECIFICATIONS.
- ALL ROOF DRAINS SHALL BE 6" PVC @ 1.04% MIN. SLOPE UNLESS INDICATED OTHERWISE. USE DUCTILE IRON WHEN COVER IS LESS THAN 24-IN.
- ALL SANITARY SEWER SERVICES SHALL BE 4" PVC (SCH 40) @ 1.04% MIN. SLOPE UNLESS INDICATED OTHERWISE. USE DUCTILE IRON WHEN COVER IS LESS THAN 24-IN.
- CONTACT THE NC ONE CALL CENTER PRIOR TO ANY DIGGING. 1-800-632-4849

KEY NOTES

- (A) FIRE HYDRANT ASSEMBLY, SEE DETAIL SHEET C7.05.
- (B) DOWNSPOUT CONNECTION, SEE DETAIL SHEET C7.04.
- (C) THRUST BLOCKING, TYP, SEE DETAIL SHEET C7.05.
- (D) 4" REDUCED PRESSURE ASSEMBLY (RPA) IN ABOVE GROUND HEATED ENCLOSURE, SEE DETAIL SHEET C7.04. SEE ELEC. PLANS FOR ADPT. INFO.
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- (H) 4" WATER METER, SEE DETAIL SHEET.
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- (J) GAS METER & GAS SERVICE LINES, SEE MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
- (K) EXTEND UTILITY TO WITHIN 5'-0" OF BUILDING WALL OR AS INDICATED ON PLUMBING PLANS. REFER TO PLUMBING PLANS FOR LOCATION & INVERT.
- (L) NEW GREASE TRAP, REFER TO PLUMBING PLANS FOR LOCATION & INVERT.
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PROFESSIONAL
ENGINEER
KENNETH J. JACKSON
5-23-16

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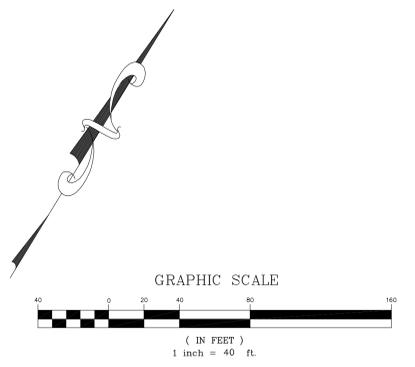
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SITE UTILITY PLAN



UTILITY LEGEND

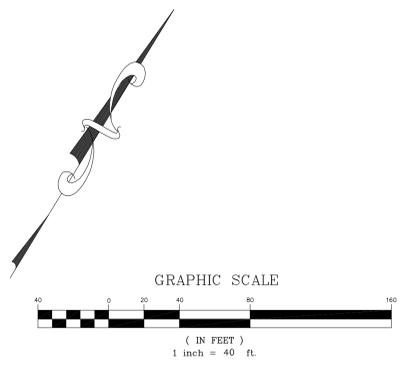
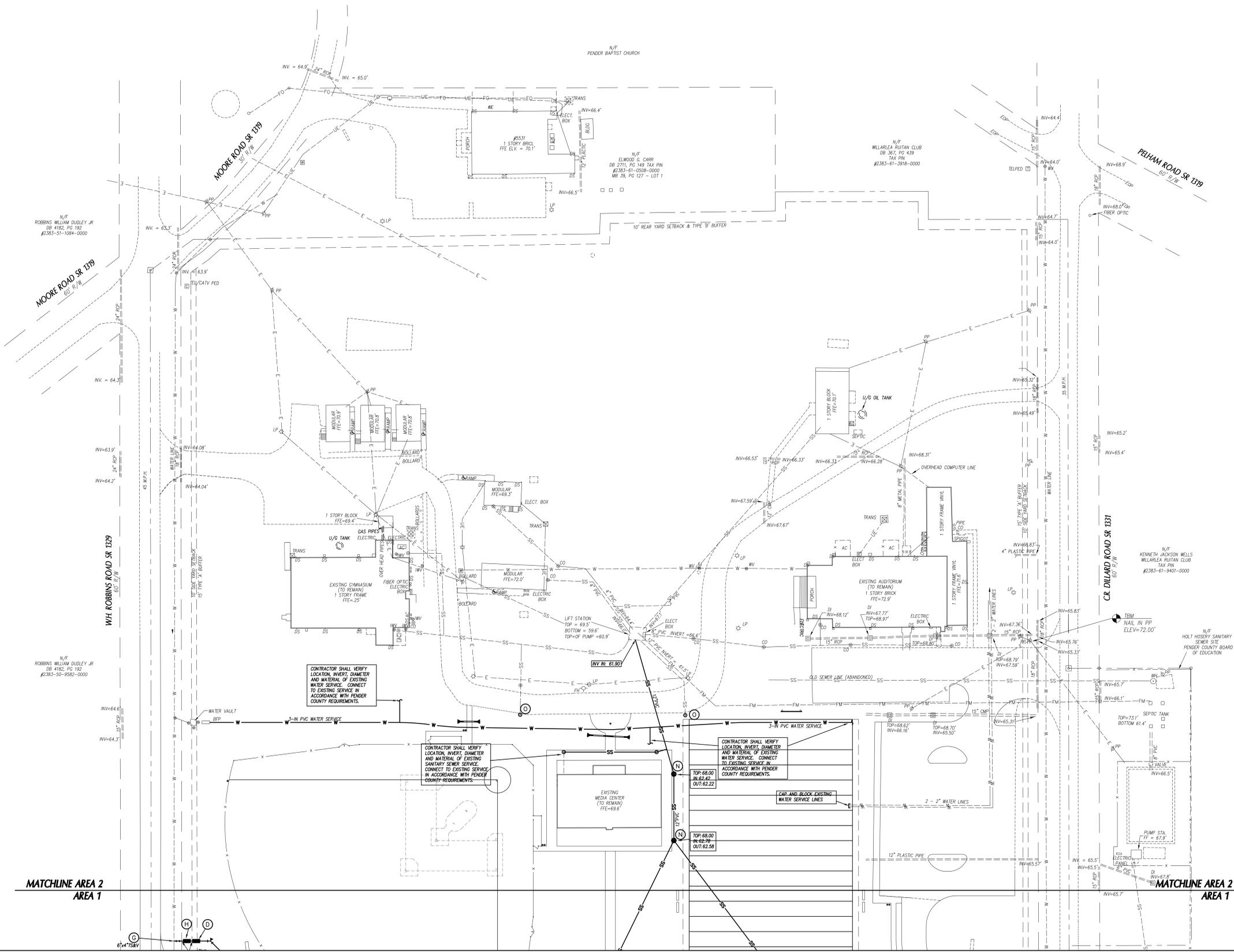
	EXISTING	PROPOSED
OVERHEAD ELECTRICAL	--- E ---	E
UNDERGROUND ELECTRICAL	--- UE ---	UE
GAS	--- G ---	G
SANITARY SEWER	--- SS ---	SS
TELEPHONE	--- T ---	T
UNDERGROUND TELEPHONE	--- UT ---	UT
WATER	--- W ---	W
FIRE PROTECTION	--- FP ---	FP
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FOUNDATION DRAIN	--- FD ---	FD
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STORM DRAIN	---	---
LIGHT POLE	LP	*
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MANHOLE	MH	●
CLEAN OUT	CO	○
DROP INLET, CATCH BASIN	DI, CB	□
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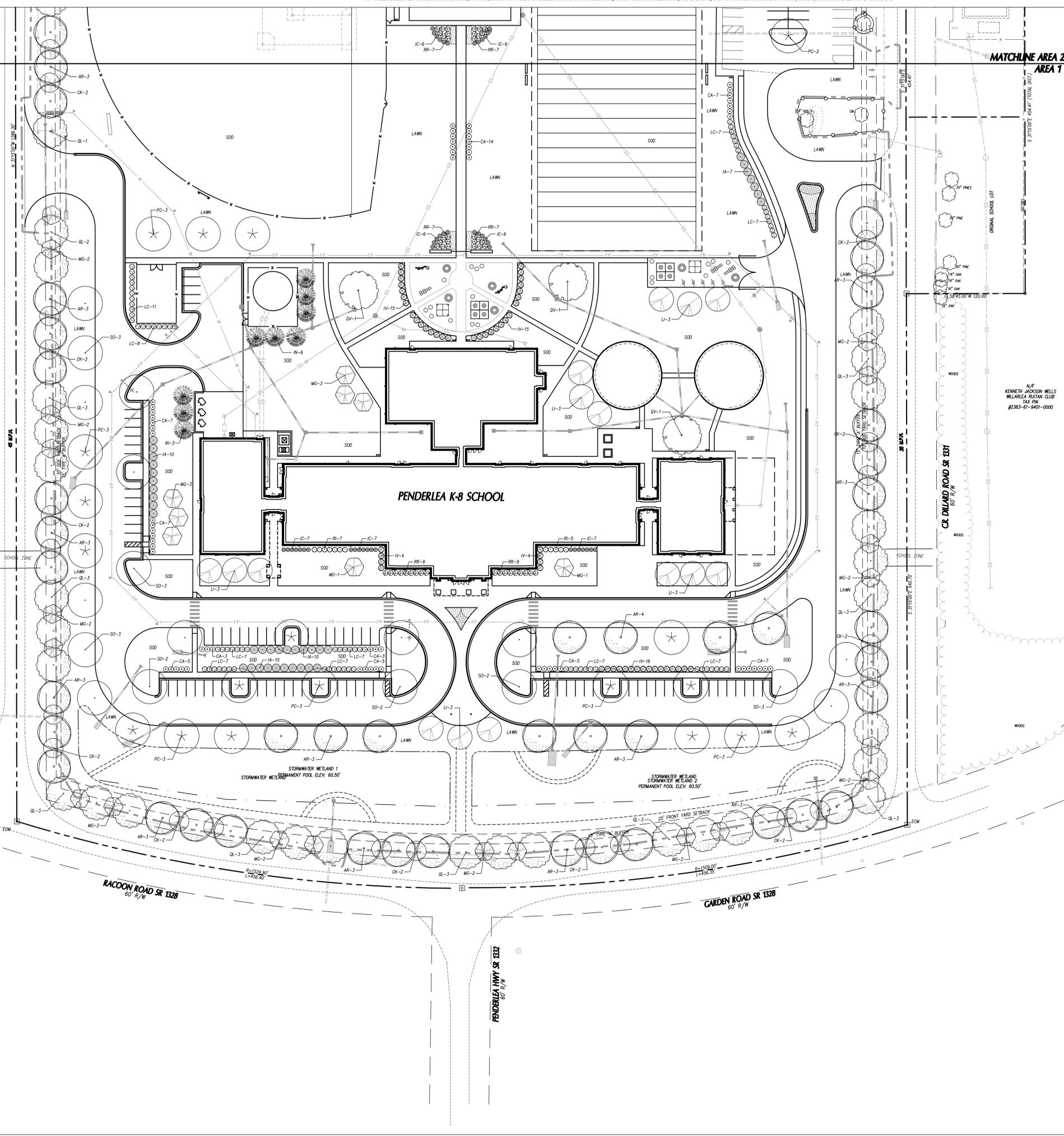
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PROJECT #:	01505.000	
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SITE UTILITY PLAN

C5.02

MATCHLINE AREA 2
AREA 1

MATCHLINE AREA 2
AREA 1



LANDSCAPE NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CITY OF WILMINGTON AND/OR NC DOT STANDARDS AND SPECIFICATIONS.
- LOCATE ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF PLANT MATERIAL. NOTIFY OWNER OF ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THOSE SHOWN ON THE PLAN.
- VERIFICATION OF TOTAL QUANTITIES AS SHOWN ON THE PLANT LIST SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR AND THE TOTAL QUANTITIES SHALL BE AS SHOWN ON THE PLAN.
- LAWN AREAS SHALL BE SEED WITH SUNSTAR/PIVERA BERBERIA GRASS 95% COVERAGE (BASED ON A PER SQUARE YARD SAMPLE) SHALL BE ATTAINED PRIOR TO FINAL INSPECTION.
- ALL PLANT MATERIAL SHALL CONFORM WITH THE STANDARDS SET FORTH BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND THE WRITTEN SPECIFICATIONS.
- PLANTING BEDS TO BE MULCHED WITH A MINIMUM OF 3" OF TRIPLE SHREDDED HARDWOOD MULCH. ALL PLANT GROUPINGS SHALL BE MULCHED AS ONE BED.
- ESTABLISH POSITIVE DRAINAGE IN ALL PLANTING BEDS AND AWAY FROM BUILDINGS.
- APPLY PRE-EMERGENT HERBICIDE TO ALL NEW PLANTING BEDS AT AT MANUFACTURER'S RECOMMENDED RATE PRIOR TO INSTALLATION OF MULCH.
- DO NOT INSTALL PLANT MATERIAL IN IMPERVIOUS SOILS, (i.e. HOLES WHICH, WHEN FILLED WITH WATER, DO NOT COMPLETELY DRAIN WITHIN TWO HOURS).
- ALL SODDED AREAS SHALL BE TFWAY-419 BERBERIA.
- ANY TREE WRAP SHALL BE REMOVED IMMEDIATELY AFTER INSTALLATION.
- SEE SPECIFICATIONS REGARDING WARRANTY/MAINTENANCE REQUIREMENTS FOR ALL PLANTS, SOD, AND LAWN SEEDING.
- DEAD OR DETERIORATING SCREENING SHALL BE REPLACED WITHIN SIX MONTHS OR DURING NEXT PLANTING SEASON.
- ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30' - 10'.

PLANT SCHEDULE

KEY	QTY	PLANT NAME	SIZE	REMARKS
CANOPY AND UNDERSTORY TREES				
AR	-	OCTOBER GLORY RED MAPLE <i>Acer rubrum 'October Glory'</i>	2'-2 1/2" CAL. 12'-14" HT	B&B, STRAIGHT TRUNK FULL CROWN
PC	-	CHINESE PISTACHIO <i>Pistacia chinensis</i>	2'-2 1/2" CAL. 10'-12" HT	B&B, STRAIGHT TRUNK FULL CROWN
CK	-	KOUZA DOGWOOD <i>Cornus kousa 'National'</i>	8'-10" HT. 2'-2 1/2" CAL.	B&B, STRAIGHT TRUNK FULL CROWN
LI	-	NATCHEZ GRAPE MYRTLE <i>Lagerstroemia l. x F. 'Natchez'</i>	3-5 TRUNKS 7'-8" HT.	B&B, FULL CROWN
IV	-	NELLIE STEVENS HOLLY <i>Ilex x 'Nellie R. Stevens'</i>	6'-8" HT. MIN. B&B	B&B, STRAIGHT TRUNK FULL TO GROUND
MG	-	LITTLE GEM MAGNOLIA <i>Magnolia grandiflora 'Little Gem'</i>	1'-1 1/2" CAL. 8'-10" HT	B&B, STRAIGHT TRUNK FULL TO GROUND
OV	-	LIVE OAK <i>Quercus virginiana</i>	2'-2 1/2" CAL. 10'-12" HT	B&B, STRAIGHT TRUNK FULL CROWN
QL	-	OVERCUP OAK <i>Quercus lyrata 'Highbeam'</i>	2'-2 1/2" CAL. 10'-12" HT	B&B, STRAIGHT TRUNK FULL CROWN
QS	-	SHUMARD OAK <i>Quercus shumardii</i>	2'-2 1/2" CAL. 10'-12" HT	B&B, STRAIGHT TRUNK FULL CROWN
SHRUBS AND UNDERSTORY TREES				
IC	-	GREEN LUSTER HOLLY <i>Ilex cornuta 'Green Lustre'</i>	24" HT. MIN. CONT.	FULL PLANTS MATCHING, 5' O.C.
LC	-	CHINESE FRINGE FLOWER <i>Loropetalum chinense 'Ruby'</i>	24" HT. MIN. MIN 3-GAL. CONT.	FULL PLANTS MATCHING, 5' O.C.
IA	-	SPICE BUSH <i>Illicium anisatum</i>	24" HT. MIN. MIN 3-GAL. CONT.	FULL PLANTS MATCHING, 8' O.C.
LI	-	BIG BLUE LIRIOPE <i>Liriope muscari 'Big Blue'</i>	3-5 BIBS	MATCHING, 18" O.C.
DL	-	STELLA DE ORO DAYLILY <i>Hemerocallis x 'Stella De Oro'</i>	1-GAL. 1-2 FANS	MATCHING, 24" O.C.
RI	-	REDBIRD INDIAN HAWTHORN <i>Rhodaphysalis indica 'Redbird'</i>	18" HT./SPR. CONT.	FULL PLANTS MATCHING, 4' O.C.
RR	-	KNOCKOUT ROSE 'RADRAZZ' <i>Rosa 'Rozraz'</i>	24" HT. MIN. MIN 3-GAL. CONT.	FULL PLANTS MATCHING, 5' O.C.
IV	-	VIRGINIA SWEETSPIRE <i>Itlea virginica</i>	36" HT. MIN. MIN 5-GAL. CONT.	FULL PLANTS MATCHING, 6' O.C.
CA	-	PURPLE BEAUTYBERRY <i>Callicarpa dichotoma</i>	18" HT. MIN. MIN 3-GAL. CONT.	FULL PLANTS MATCHING, 5' O.C.

GRAPHIC SYMBOLS SUPERCEDE WRITTEN QUANTITIES WHERE DISCREPANCIES OCCUR. SEE DETAIL SHEET FOR MORE INFORMATION.

TFWAY 419 SOD, SEE DETAIL SHEET.

LANDSCAPE CALCULATIONS

STREET YARD REQUIREMENTS

15' TYPE 'A' STREET YARD

MINIMUM STANDARD: 3 CANOPY TREE + 2 UNDERSTORY TREES PER 100-LF

RACON RD/GARDEN RD: 825-LF = 24 CANOPY TREES + 16 UNDERSTORY TREES

CR DILWARD RD: 1330-LF = 18 CANOPY TREES + 12 UNDERSTORY TREES

WH ROBBINS RD: 1,035-LF = 30 CANOPY TREES + 20 UNDERSTORY TREES

INTERIOR PARKING AREA PLANTING REQUIREMENTS

SINGLE ROW PARKING TERMINAL: 1 CANOPY TREE IN EACH LANDSCAPE ISLAND

1 LANDSCAPE ISLAND PER 10 PARKING SPACES MAX.

SCREENING SHRUBS ENTIRE LENGTH OF LANDSCAPE ISLAND

PERIMETER TREES & SPACING: 1 CANOPY TREE AVERAGE OF 50-FT AROUND TOTAL PERIMETER OF PARKING LOT AND ALL VEHICULAR SURFACE AREAS.

FOUNDATION PLANTING REQUIREMENTS: N/A

SIGNIFICANT TREES

2 NEW TREES OF SAME SPECIES MIN. 2-IN CAL. FOR EACH SIGNIFICANT TREE REMOVED

LANDSCAPE NOTES

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5. ALL PLANT MATERIAL SHALL CONFORM WITH THE STANDARDS SET FORTH BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND THE WRITTEN SPECIFICATIONS.

6. PLANTING BEDS TO BE MULCHED WITH A MINIMUM OF 3" OF TRIPLE SHREDDED HARDWOOD MULCH. ALL PLANT GROUPINGS SHALL BE MULCHED AS ONE BED.

7. ESTABLISH POSITIVE DRAINAGE IN ALL PLANTING BEDS AND AWAY FROM BUILDINGS.

8. APPLY PRE-EMERGENT HERBICIDE TO ALL NEW PLANTING BEDS AT AT MANUFACTURER'S RECOMMENDED RATE PRIOR TO INSTALLATION OF MULCH.

9. DO NOT INSTALL PLANT MATERIAL IN IMPERVIOUS SOILS, (i.e. HOLES WHICH, WHEN FILLED WITH WATER, DO NOT COMPLETELY DRAIN WITHIN TWO HOURS).

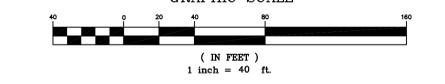
10. ALL SODDED AREAS SHALL BE TFWAY-419 BERBERIA.

11. ANY TREE WRAP SHALL BE REMOVED IMMEDIATELY AFTER INSTALLATION.

12. SEE SPECIFICATIONS REGARDING WARRANTY/MAINTENANCE REQUIREMENTS FOR ALL PLANTS, SOD, AND LAWN SEEDING.

13. DEAD OR DETERIORATING SCREENING SHALL BE REPLACED WITHIN SIX MONTHS OR DURING NEXT PLANTING SEASON.

14. ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30' - 10'.



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1861

PRELIMINARY
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PENDER COUNTY SCHOOLS
PENDERLEA K-8 SCHOOL

82 PENDERLEA SCHOOL ROAD, WILLARD, NC 28478

ENERGY
STAR
PARTNER

ID	DATE	DESCRIPTION
ISSUE DATE:	05.23.2016	
PROJECT #:	01505.000	
DRAWN BY:	KAL/GM	
CHECKED BY:	TH	
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SITE PLANTING PLAN		

C6.01

LANDSCAPE NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CITY OF WILMINGTON AND/OR NC DOT STANDARDS AND SPECIFICATIONS.
- LOCATE ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF PLANT MATERIAL. NOTIFY OWNER OF ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THOSE SHOWN ON THE PLAN.
- VERIFICATION OF TOTAL QUANTITIES AS SHOWN ON THE PLANT LIST SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR AND THE TOTAL QUANTITIES SHALL BE AS SHOWN ON THE PLAN.
- LAWN AREAS SHALL BE SEED WITH SUNSTAR/PIVERA BERMAUDA GRASS 95% COVERAGE (BASED ON A PER SQUARE YARD SAMPLE) SHALL BE ATTAINED PRIOR TO FINAL INSPECTION.
- ALL PLANT MATERIAL SHALL CONFORM WITH THE STANDARDS SET FORTH BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND THE WRITTEN SPECIFICATIONS.
- PLANTING BEDS TO BE MULCHED WITH A MINIMUM OF 3" OF TRIPLE SHREDDED HARDWOOD MULCH. ALL PLANT GROUPINGS SHALL BE MULCHED AS ONE BED.
- ESTABLISH POSITIVE DRAINAGE IN ALL PLANTING BEDS AND AWAY FROM BUILDINGS.
- APPLY PRE-EMERGENT HERBICIDE TO ALL NEW PLANTING BEDS AT AT MANUFACTURER'S RECOMMENDED RATE PRIOR TO INSTALLATION OF MULCH.
- DO NOT INSTALL PLANT MATERIAL IN IMPERVIOUS SOILS, (i.e. HOLES WHICH, WHEN FILLED WITH WATER, DO NOT COMPLETELY DRAIN WITHIN TWO HOURS).
- ALL SOODED AREAS SHALL BE TFWAY-419 BERMAUDA.
- ANY TREE WRAP SHALL BE REMOVED IMMEDIATELY AFTER INSTALLATION.
- SEE SPECIFICATIONS REGARDING WARRANTY/MAINTENANCE REQUIREMENTS FOR ALL PLANTS, SOO, AND LAWN SEEDING.
- DEAD OR DETERIORATING SCREENING SHALL BE REPLACED WITHIN SIX MONTHS OR DURING NEXT PLANTING SEASON.
- ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30' - 10'.

PLANT SCHEDULE

KEY	QTY	PLANT NAME	SIZE	REMARKS
CANOPY AND UNDERSTORY TREES				
AR	-	OCTOBER GLORY RED MAPLE <i>Acer rubrum 'October Glory'</i>	2"-2 1/2" CAL. 12'-14' HT	B&B, STRAIGHT TRUNK FULL CROWN
PC	-	CHINESE PISTACHIO <i>Pistacia chinensis</i>	2"-2 1/2" CAL. 10'-12' HT	B&B, STRAIGHT TRUNK FULL CROWN
CK	-	KOUSS DOGWOOD <i>Cornus kousa 'National'</i>	8"-10" HT. 2"-2 1/2" CAL.	B&B, STRAIGHT TRUNK FULL CROWN
LI	-	NATCHEZ GRAPE MYRTLE <i>Lagerstroemia l. x f. 'Natchez'</i>	3-5 TRUNKS 7'-8' HT	B&B, FULL CROWN
IV	-	NELLIE STEVENS HOLLY <i>Ilex x 'Nellie R. Stevens'</i>	6'-8" HT. MIN. B&B	B&B, STRAIGHT TRUNK FULL TO GROUND
MG	-	LITTLE GEM MAGNOLIA <i>Magnolia grandiflora 'Little Gem'</i>	1"-1 1/2" CAL. 8'-10' HT	B&B, STRAIGHT TRUNK FULL TO GROUND
OV	-	LIVE OAK <i>Quercus virginiana</i>	2"-2 1/2" CAL. 10'-12' HT	B&B, STRAIGHT TRUNK FULL CROWN
QL	-	OVERCUP OAK <i>Quercus lyrata 'Highbeam'</i>	2"-2 1/2" CAL. 10'-12' HT	B&B, STRAIGHT TRUNK FULL CROWN
QS	-	SHUMARD OAK <i>Quercus shumardii</i>	2"-2 1/2" CAL. 10'-12' HT	B&B, STRAIGHT TRUNK FULL CROWN
SHRUBS AND GROUNDCOVERS				
IC	-	GREEN LUSTER HOLLY <i>Ilex cornuta 'Green Lustre'</i>	24" HT. MIN. CONT.	FULL PLANTS MATCHING, 5' O.C.
LC	-	CHINESE FRINGE FLOWER <i>Loropetalum chinense 'Ruby'</i>	24" HT. MIN. MIN 3-GAL. CONT.	FULL PLANTS MATCHING, 5' O.C.
IA	-	SPICE BUSH <i>Illicium anisatum</i>	24" HT. MIN. MIN 3-GAL. CONT.	FULL PLANTS MATCHING, 8' O.C.
LI	-	BIG BLUE LIROPE <i>Liriodendron 'Big Blue'</i>	3-5 BIBS	MATCHING, 18" O.C.
DL	-	STELLA DE ORO DAYLILY <i>Hemerocallis x 'Stella De Oro'</i>	1-GAL. 1-2 FANS	MATCHING, 24" O.C.
RI	-	REDBIRD INDIAN HAWTHORN <i>Rhodaphysalis indica 'Redbird'</i>	18" HT./SPR. CONT.	FULL PLANTS MATCHING, 4' O.C.
RR	-	KNOCKOUT ROSE 'RADRAZZ' <i>Rosa 'Rozdrax'</i>	24" HT. MIN. MIN 3-GAL. CONT.	FULL PLANTS MATCHING, 5' O.C.
IV	-	VIRGINIA SWEETSPIRE <i>Itlea virginica</i>	36" HT. MIN. MIN 5-GAL. CONT.	FULL PLANTS MATCHING, 6' O.C.
CA	-	PURPLE BEAUTYBERRY <i>Callicarpa dichotoma</i>	18" HT. MIN. MIN 3-GAL. CONT.	FULL PLANTS MATCHING, 5' O.C.

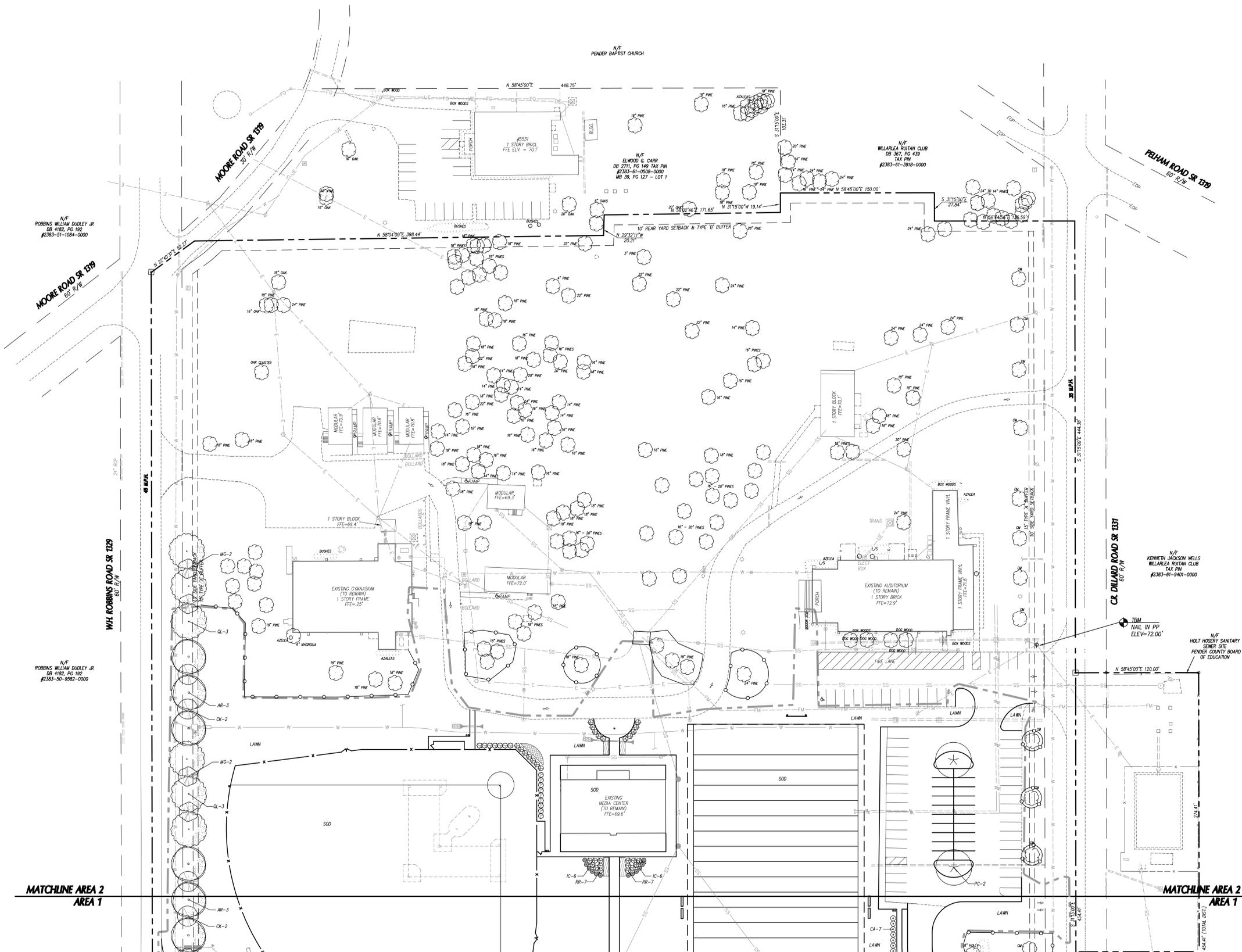
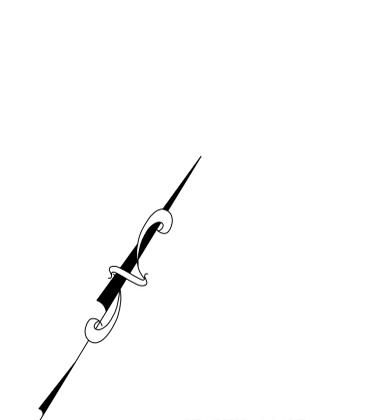
GRAPHIC SYMBOLS SUPERCEDE WRITTEN QUANTITIES WHERE DISCREPANCIES OCCUR. SEE DETAIL SHEET FOR MORE INFORMATION.

TFWAY 419 SOO, SEE DETAIL SHEET.

LANDSCAPE CALCULATIONS

STREET YARD REQUIREMENTS
15' TYPE 'A' STREET YARD
MINIMUM STANDARD: 3 CANOPY TREE + 2 UNDERSTORY TREES PER 100-LF
PALMADON RD/GARDEN RD: 825-LF = 24 CANOPY TREES + 16 UNDERSTORY TREES
CK DILLARD RD: 1330-LF = 18 CANOPY TREES + 12 UNDERSTORY TREES
WH ROBBINS RD: 1,035-LF = 30 CANOPY TREES + 20 UNDERSTORY TREES
INTERIOR PARKING AREA PLANTING REQUIREMENTS
SINGLE ROW PARKING TERMINAL: 1 CANOPY TREE IN EACH LANDSCAPE ISLAND
1 LANDSCAPE ISLAND PER 10 PARKING SPACES MAX.
SCREENING SHRUBS ENTIRE LENGTH OF LANDSCAPE ISLAND
PERIMETER TREES & SPACING: 1 CANOPY TREE AVERAGE OF 50-FT AROUND TOTAL PERIMETER OF PARKING LOT AND ALL VEHICULAR SURFACE AREAS.
FOUNDATION PLANTING REQUIREMENTS: N/A
SIGNIFICANT TREES
2 NEW TREES OF SAME SPECIES MIN. 2-IN CAL. FOR EACH SIGNIFICANT TREE REMOVED

TRM NAIL IN PP ELEV=72.00'
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PENDER COUNTY SCHOOLS
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SITE PLANTING
PLAN

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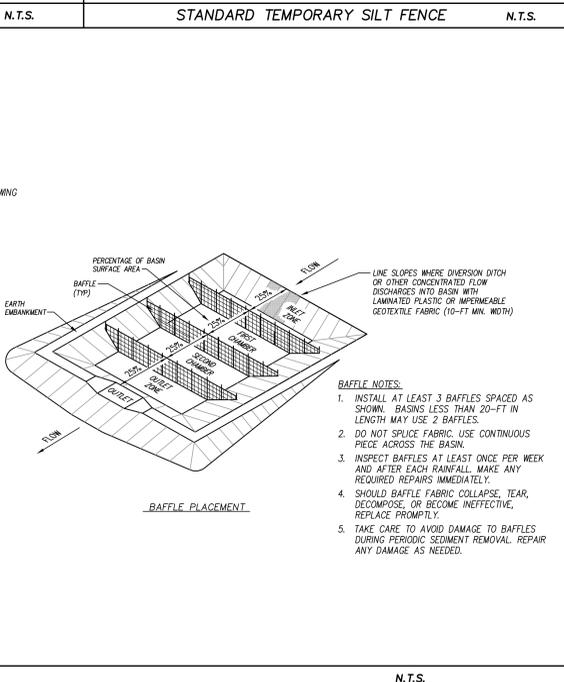
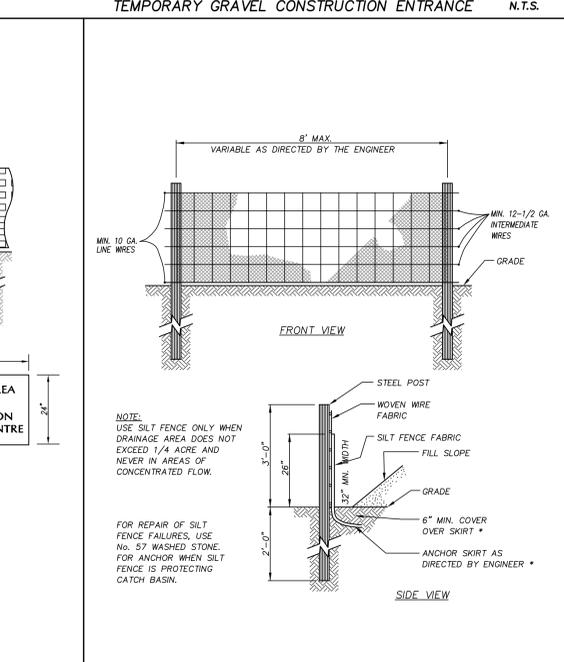
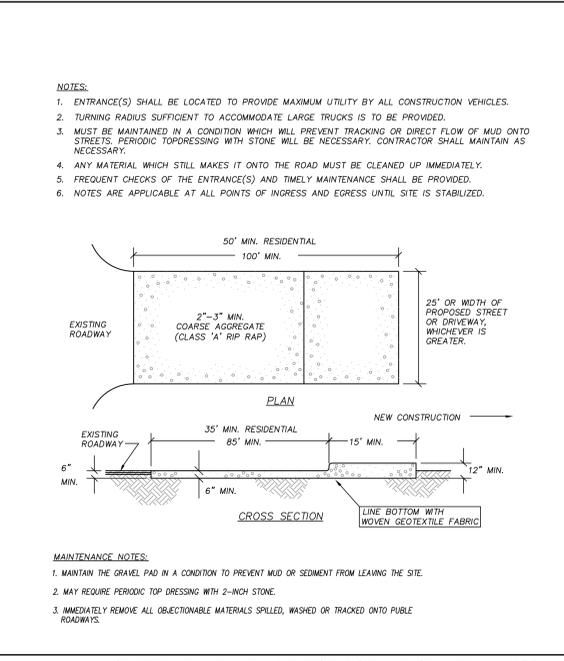
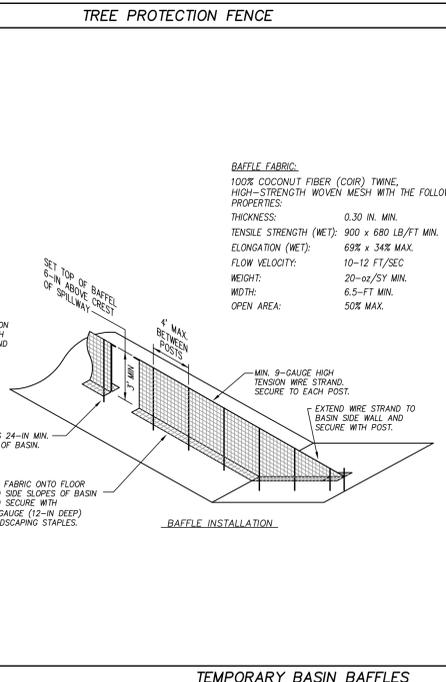
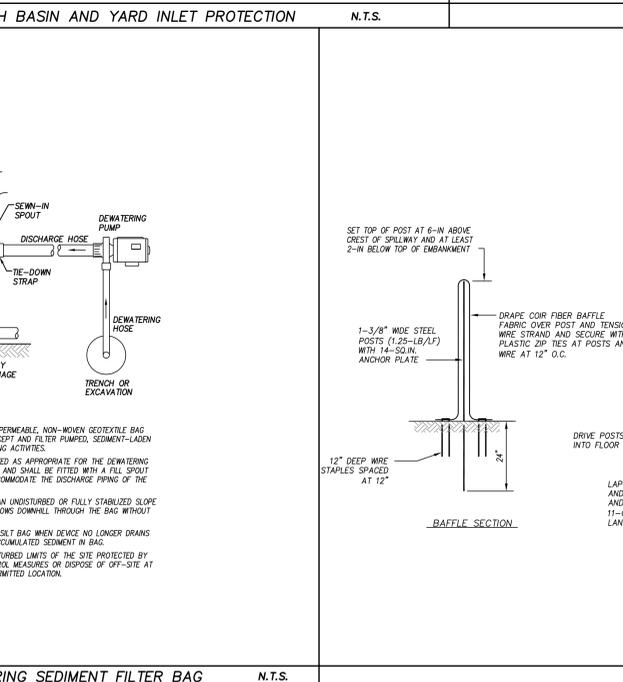
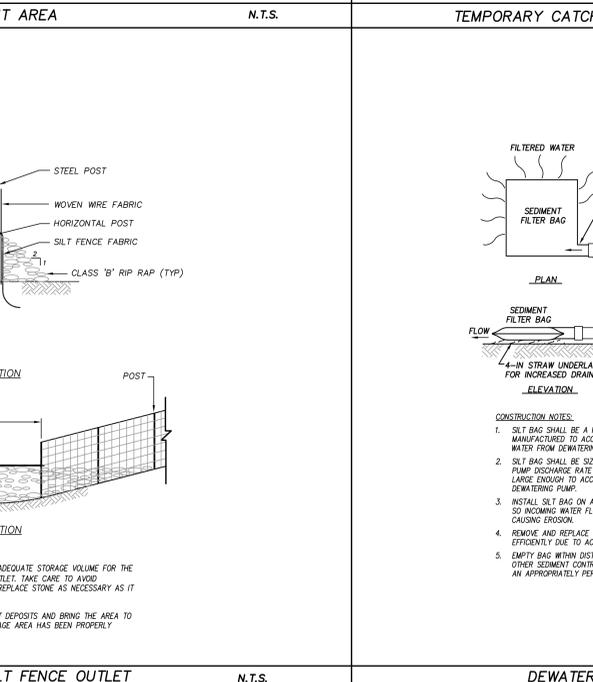
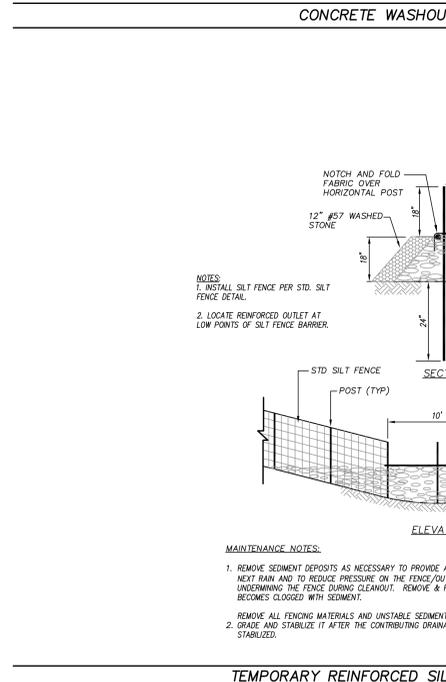
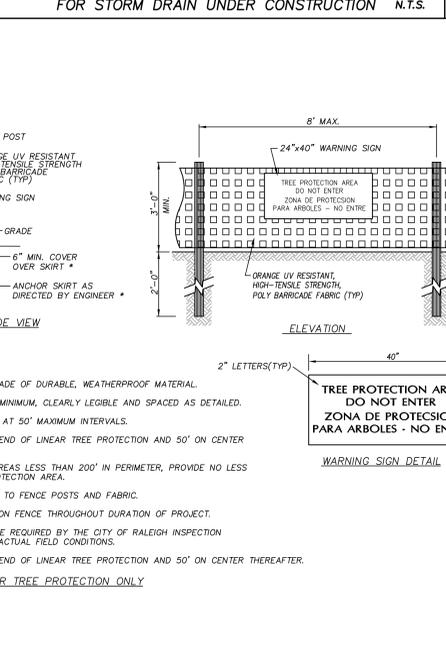
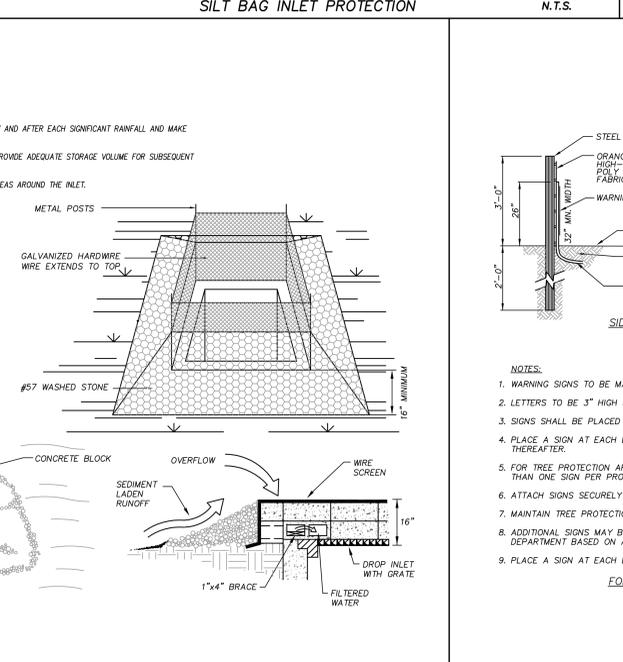
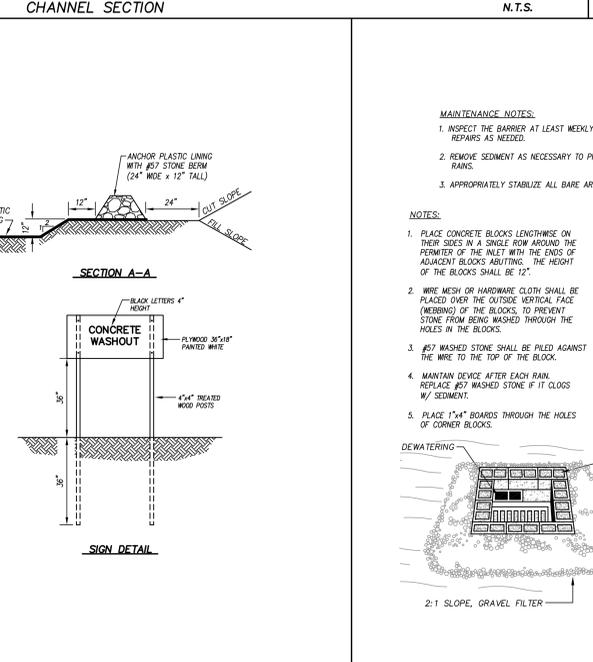
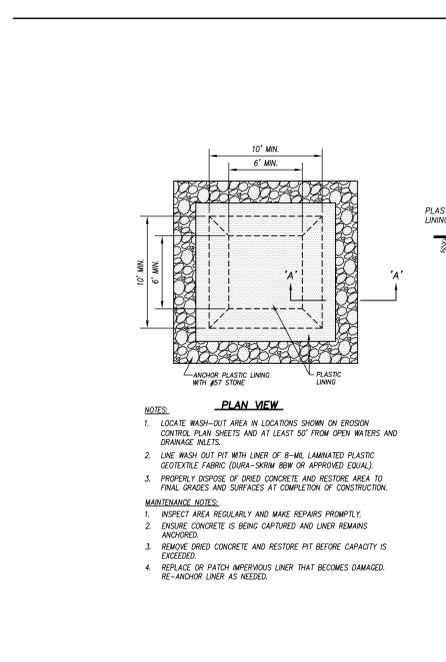
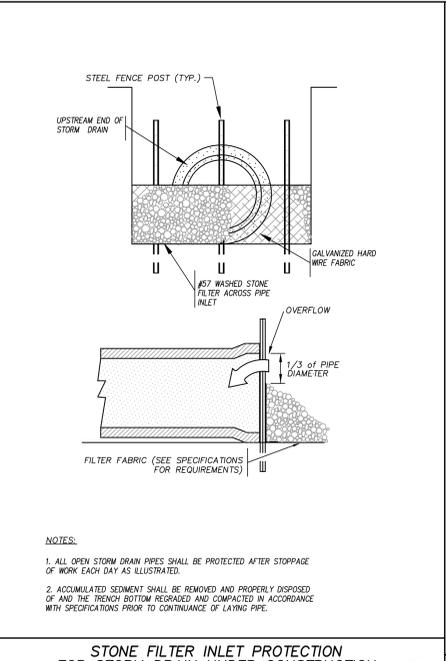
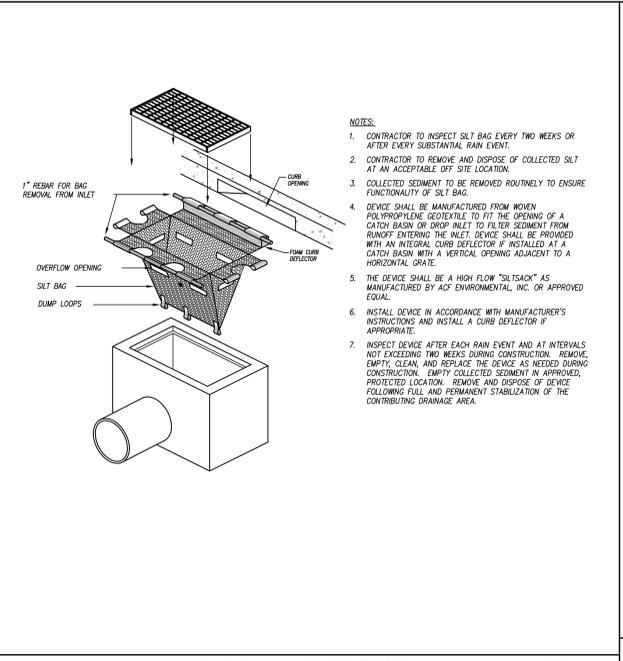
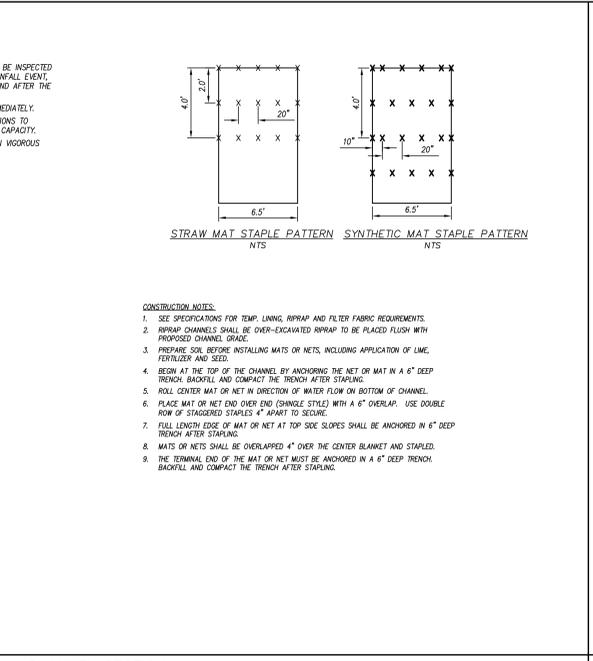
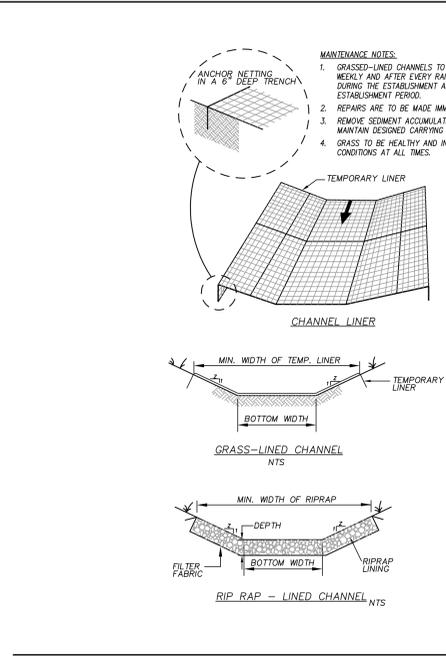
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PROFESSIONAL ENGINEER
No. 23983
KENTON W. A. ORDO
5-23-16

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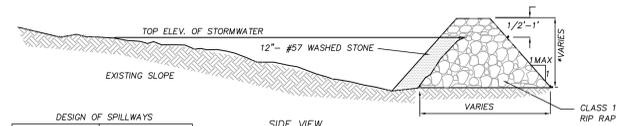
ENERGY STAR PARTNER

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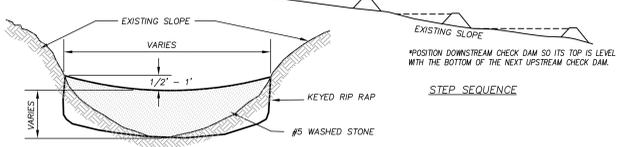
SITE / CIVIL DETAILS

C7.01



DESIGN OF SPILLWAYS

DRAINAGE AREA (ACRES)	MIN. WEIR LENGTH (FT)
1	4.0
2	6.0
3	8.0
4	10.0
5	12.0

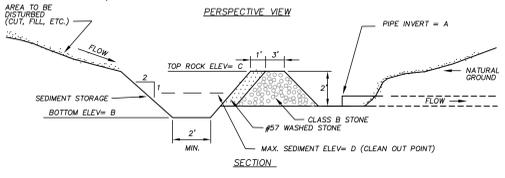
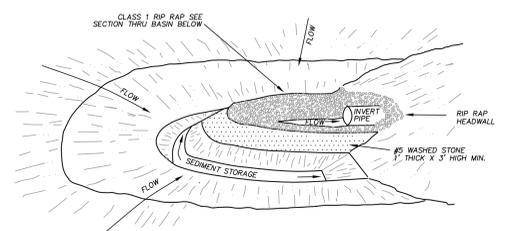


- NOTES:
HEIGHT AND WIDTH DETERMINED BY EXISTING TOPOGRAPHY AND SEDIMENT STORAGE REQUIRED.
KEY RIP RAP INTO THE DAM FOR STABILIZATION.
- *POSITION DOWNSTREAM CHECK DAM SO ITS TOP IS LEVEL WITH THE BOTTOM OF THE NEXT UPSTREAM CHECK DAM.
- MAINTENANCE NOTES:
1. INSPECT CHECK PROTECTION WEEKLY AND AFTER 1" RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT STRAW, LIMBS, OR OTHER DEBRIS THAT COULD CLOG THE CHANNEL WHEN NEEDED.
2. IMMEDIATELY CORRECT ANY DAMAGE CAUSED BY SUBMERGED AND DEPOSITION ABOVE THE CHECK DAM AND FROM HIGH FLOWS AROUND THE EDGES.
3. REMOVE SEDIMENT ACCUMULATED BEHIND THE DAMS AS NEEDED TO PREVENT DAMAGE TO CHANNEL VEGETATION. ALLOW THE CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM. ADD STONES TO DAMS AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.

TEMPORARY CHECK DAM

N.T.S.

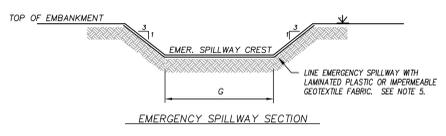
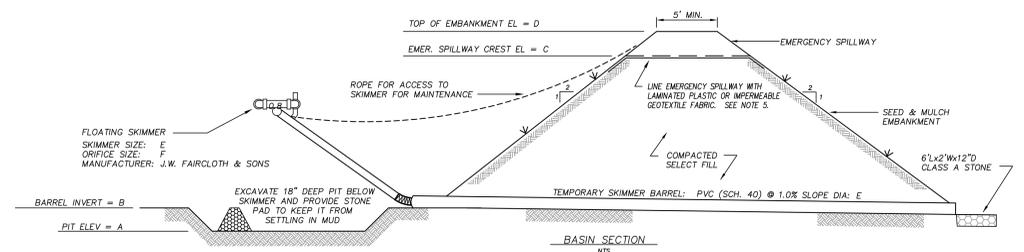
- MAINTENANCE NOTES:
1. INSPECT THE BARRIER AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL AND REPAIR IMMEDIATELY.
2. REMOVE SEDIMENT AND RESTORE SEDIMENT STORAGE AREA TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP.
3. CHECK THE STRUCTURE FOR DAMAGE AND REPLACE ANY DISPLACED RIPRAP IMMEDIATELY.
4. APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET.



TEMPORARY ROCK PIPE INLET PROTECTION

N.T.S.

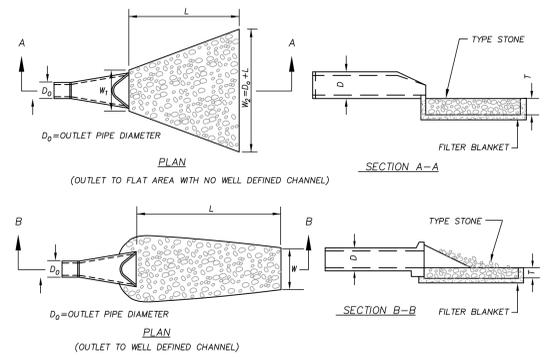
- CONSTRUCTION NOTES:
1. PLACE TEMPORARY SEDIMENT CONTROL MEASURES BELOW BASIN AS INDICATED. CLEAR, GRUB AND STRIP THE AREA UNDER THE EMBANKMENT OF ALL VEGETATION AND ROOT MAT. REMOVE ALL SURFACE SOILS CONTAINING HIGH AMOUNTS OF ORGANIC MATTER.
2. PLACE OUTLET BARREL ON A FIRM, SMOOTH FOUNDATION OF IMPERVIOUS SOIL. DO NOT USE PERVIOUS MATERIAL SUCH AS SAND, GRAVEL OR CRUSHED STONE AS BACKFILL AROUND PIPE. PLACE FILL MATERIAL AROUND PIPE IN 4-INCH LAYERS AND COMPACT IT UNDER AND AROUND THE PIPE TO AT LEAST 90% OF THE STANDARD PROCTOR DENSITY. CARE SHALL BE TAKEN TO NOT RAISE THE PIPE FROM FIRM CONTACT WITH ITS FOUNDATION.
3. ASSEMBLE THE SKIMMER IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ATTACH SKIMMER TO BARREL PIPE WITH FLEXIBLE JOINT AND POSITION THE SKIMMER OVER THE EXCAVATED PIT. ATTACH A ROPE TO THE SKIMMER AND ANCHOR IT TO THE SIDE OF THE BASIN.
4. EMBANKMENT SHALL BE CONSTRUCTED OF CLEAN STRUCTURAL SOIL, FREE OF ROOTS, VEGETATION, ROCKS & OTHER OBJECTIONABLE MATERIAL. SCOURIFY SURFACES BEFORE PLACING FILL. PLACE FILL IN 6-8 INCH LOOSE LIFTS. COMPACT TO AT LEAST 90% OF THE STANDARD PROCTOR DENSITY.
5. LINE THE ENTIRE EMERGENCY SPILLWAY WITH LAMINATED PLASTIC OR IMPERMEABLE GEOTEXTILE FABRIC. FABRIC SHALL BE WIDE ENOUGH TO COVER THE BOTTOM AND SIDES OF THE SPILLWAY AND EXTEND ONTO THE TOP OF THE DAM FOR ANCHORING IN A TRENCH. THE EDGES SHALL BE SECURED WITH 8-IN STAPLES OR PINS. THE FABRIC SHALL BE LONG ENOUGH TO EXTEND DOWN THE SLOPE AND EXIT ONTO STABLE GROUND. THE WIDTH OF THE FABRIC IS INSUFFICIENT FOR THE ENTIRE LENGTH OF THE SPILLWAY. MULTIPLE SECTIONS, SPANNING THE COMPLETE WIDTH, MAY BE USED. THE UPPER SECTIONS SHALL OVERLAP THE LOWER SECTIONS SO WATER CANNOT FLOW UNDER THE FABRIC. SECURE THE UPPER EDGE AND SIDES OF THE FABRIC IN A TRENCH WITH STAPLES OR PINS.
6. LINE SLOPES WHERE DIVERSION DITCH DISCHARGES INTO BASIN WITH LAMINATED PLASTIC OR IMPERMEABLE GEOTEXTILE FABRIC.



- MAINTENANCE NOTES:
1. INSPECT DEVICE AFTER EACH RAINFALL. REMOVE SEDIMENT WHEN SEDIMENT REACHES A DEPTH OF NO MORE THAN ONE-HALF THE HEIGHT OF THE RISER. REPAIR BAFFLES IF THEY ARE DAMAGED.
2. PULL SKIMMER TO SIDE OF BASIN WITH ROPE AND INSPECT REGULARLY. KEEP SKIMMER HEAD, ORIFICE AND PIPE FREE OF DEBRIS. REMOVE SEDIMENT FROM BENEATH SKIMMER AND ENSURE VEGETATION DOES NOT INTERFERE WITH SKIMMER OPERATION.
3. CHECK FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REPAIRS WITH FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY.

TEMPORARY SKIMMER SEDIMENT BASIN

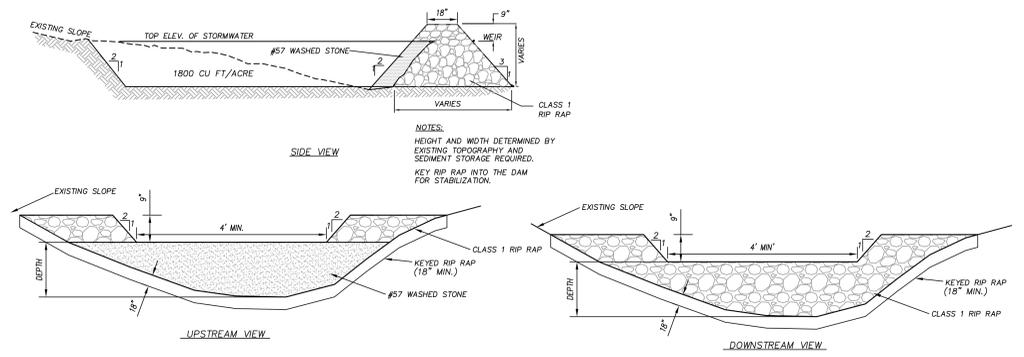
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- NOTES:
1. TOP OF RIP RAP AT DOWNSTREAM END OF APRON SHALL BE FLUSH WITH NATURAL GRADE OF THE RECEIVING CHANNEL.
2. VEGETATE ALL DISTURBED AREAS WITH VEGETATION IMMEDIATELY AFTER INSTALLATION.
3. SEE EROSION CONTROL PLAN FOR DIMENSIONS.
- MAINTENANCE:
RIP RAP OUTLET STRUCTURES TO BE INSPECTED WEEKLY AND 1. AFTER EVERY RAINFALL EVENT. REPAIRS ARE TO BE MADE IMMEDIATELY.

FES & RIPRAP OUTLET PROTECTION

N.T.S.



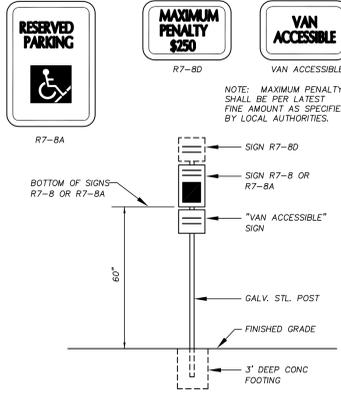
- NOTES:
1. HEIGHT AND WIDTH DETERMINED BY EXISTING TOPOGRAPHY AND SEDIMENT STORAGE REQUIRED.
2. KEY RIP RAP INTO SLOPES FOR STABILITY.
- MAINTENANCE NOTES:
1. INSPECT CHECK PROTECTION WEEKLY AND AFTER 1" RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT STRAW, LIMBS, OR OTHER DEBRIS THAT COULD CLOG THE CHANNEL WHEN NEEDED.
2. IMMEDIATELY CORRECT ANY DAMAGE CAUSED BY SUBMERGED AND DEPOSITION ABOVE THE CHECK DAM AND FROM HIGH FLOWS AROUND THE EDGES.
3. REMOVE SEDIMENT ACCUMULATED BEHIND THE DAMS AS NEEDED TO PREVENT DAMAGE TO CHANNEL VEGETATION. ALLOW THE CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM. ADD STONES TO DAMS AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.

TEMPORARY CHECK DAM WITH WEIR

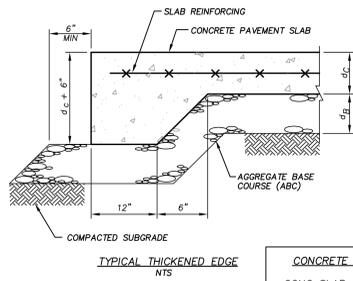
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ALL SIGNS SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, NCSBC AND ADA SPECIFICATIONS AND REQUIREMENTS.

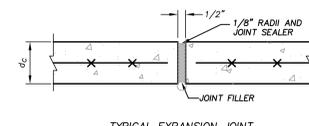
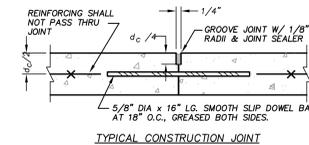
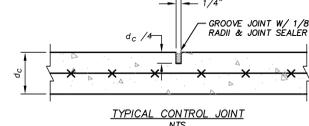


ACCESSIBLE PARKING SIGNAGE N.T.S.

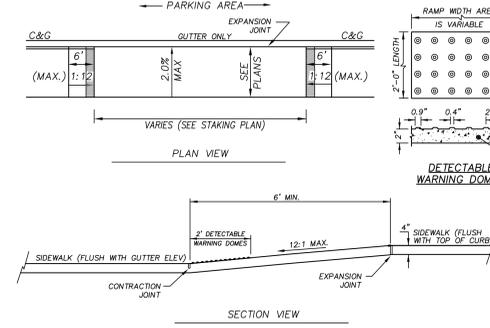


CONCRETE PAVEMENT DIMENSIONS
CONC SLAB THICKNESS, $d_c = 6"$
ABC THICKNESS, $d_g = 6"$
REINFORCEMENT = 6x6-W2.9xW2.9 OR FIBER (SEE SPECS)

- NOTES:
- ALL CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI (ASTM C39).
 - CONTRACTION JOINTS SHALL BE SPACED AT 15 FT O.C.E.W. MAX. OR AS INDICATED ON THE PLAN.
 - EXPANSION JOINTS SHALL BE SPACED AT 50 FT O.C.E.W. MAX. OR AS INDICATED ON THE PLAN AND WHERE CONCRETE PAVEMENT ABUTS ANY RIGID OBJECT.

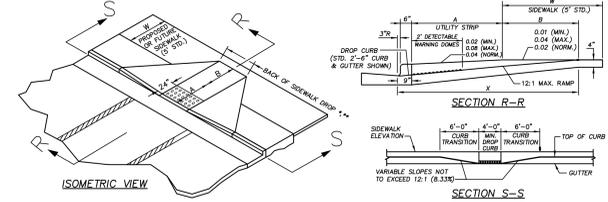


CONCRETE PAVEMENT N.T.S.



- NOTES:
- DETECTABLE WARNING DOMES SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
 - REFER TO NCDOT STANDARD DETAIL 84800S FOR ADDITIONAL INFORMATION.
 - ALL CONCRETE SHALL BE 3,000 P.S.I. WITH FIBER REINFORCING.
 - ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 50' INTERVALS.

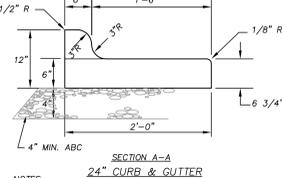
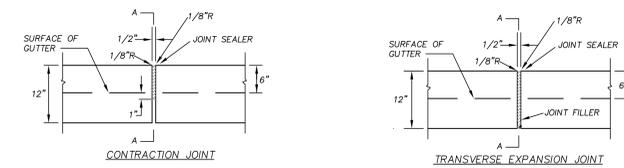
ACCESSIBLE PARKING CURB RAMPS N.T.S.



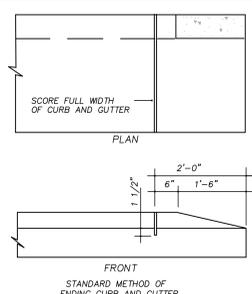
- NOTES:
- DETECTABLE WARNING DOMES SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
 - THE RAMP MAY BE YELLOW IN COLOR OR ANY COLOR WITH A 70% CONTRAST RATIO.
 - REFER TO NCDOT STANDARD DETAIL 84800S FOR ADDITIONAL INFORMATION.

RAMP WIDTH AREA IS VARIABLE	W	A	W/A	X	B
1.00	50'	5.00'	5.00'	5.00'	5.00'
1.00	60'	6.00'	6.00'	6.00'	6.00'
1.00	70'	7.00'	7.00'	7.00'	7.00'
1.00	80'	8.00'	8.00'	8.00'	8.00'
1.00	90'	9.00'	9.00'	9.00'	9.00'
1.00	100'	10.00'	10.00'	10.00'	10.00'
1.00	110'	11.00'	11.00'	11.00'	11.00'
1.00	120'	12.00'	12.00'	12.00'	12.00'
1.00	130'	13.00'	13.00'	13.00'	13.00'
1.00	140'	14.00'	14.00'	14.00'	14.00'
1.00	150'	15.00'	15.00'	15.00'	15.00'

W = 4' (MIN.)
B = DISTANCE FROM FRONT EDGE OF SIDEWALK TO BACK POINT OF CURB
X = 2.1' (8.33%) SLOPE
Y = BACK OF SIDEWALK DROP REQUIRED FOR ALL SIDEWALK SLOPES
Z = BACK OF SIDEWALK DROP REQUIRED FOR SIDEWALK SLOPE 0.04



- NOTES:
- ALL CONCRETE SHALL BE 3,000 P.S.I.
 - CONTRACTION JOINTS SHALL BE SPACED AT 10' INTERVALS. SPACING MAY BE INCREASED TO 15' IF MACHINE IS USED.
 - CONTRACTION JOINTS SHALL BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1-1/2" SHALL BE OBTAINED.
 - EXPANSION JOINTS SHALL BE SPACED AT 90' MAX INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS.
 - ALL JOINTS SHALL BE FILLED WITH JOINT FILLER AND SEALER.

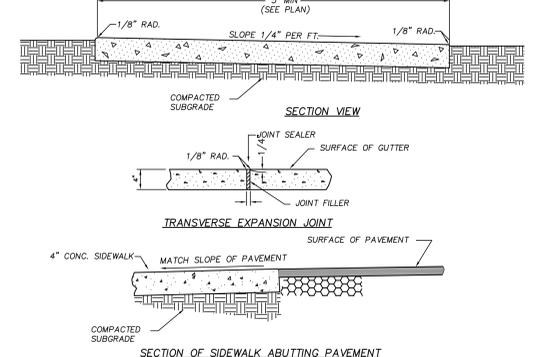


24" CONCRETE CURB AND GUTTER N.T.S.

	HEAVY DUTY	LIGHT DUTY	OVERLAY
TYPE SF-9.5B SURFACE COURSE	1.5-IN	2-IN	2-IN
TYPE SF-9.5B BINDER COURSE	1.5-IN	-	-
AGGREGATE BASE COURSE	8-IN	6-IN	-

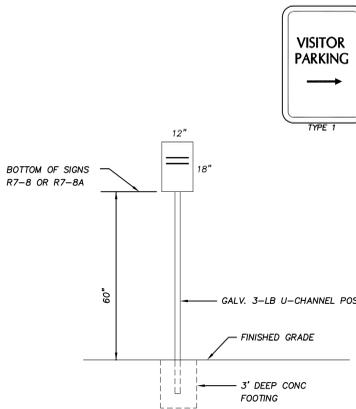
- NOTES:
- SEE SPECIFICATIONS FOR PROOFROLLING, COMPACTION & TESTING REQUIREMENTS.
 - DETAIL IS FOR ON-SITE PAVING OPERATIONS ONLY.
 - THE CONTRACTOR MAY CHOOSE TO INSTALL INTERMEDIATE COURSES OF PAVEMENT TO STABILIZE THE SITE DURING CONSTRUCTION AT NO ADDITIONAL COST. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE ADEQUATE THICKNESS REQUIRED FOR INTERMEDIATE PAVING. INCREASES IN THE DESIGN PAVEMENT SECTION TO FACILITATE INTERMEDIATE PAVING SHALL BE PROVIDED AT NO ADDITIONAL COST.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGES TO SUBGRADE, INSTALLED BASE COURSE AND/OR INTERMEDIATE PAVING PRIOR TO PLACING SUBSEQUENT PAVEMENT LIFTS AT NO ADDITIONAL COST.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING PAVEMENT DURING ALL PHASES OF WORK. THE FINAL SURFACE OF PAVEMENT SHALL BE FREE OF ALL DEFECTS OR DAMAGE.

ASPHALT PAVEMENT N.T.S.

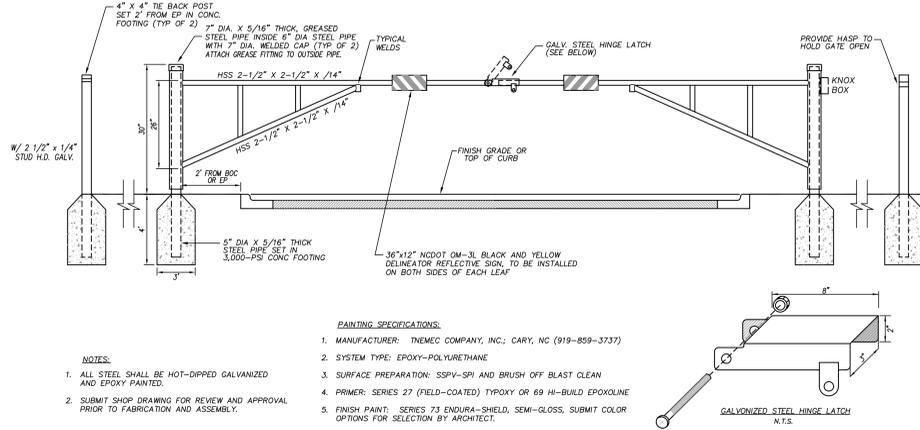


- GENERAL NOTES:
- A GROOVE JOINT 1" DEEP WITH 1/8" RADI SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS UNLESS INDICATED OTHERWISE. SEE SPECS FOR ADDITIONAL JOINT SPACING REQUIREMENTS.
 - ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 50' INTERVALS.
 - A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
 - ALL CONCRETE SHALL BE 3,000 P.S.I.

CONCRETE SIDEWALK N.T.S.

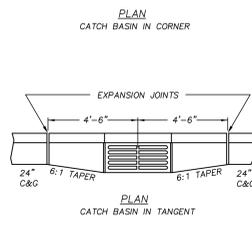
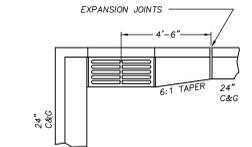


SPECIAL PARKING SIGNAGE N.T.S.

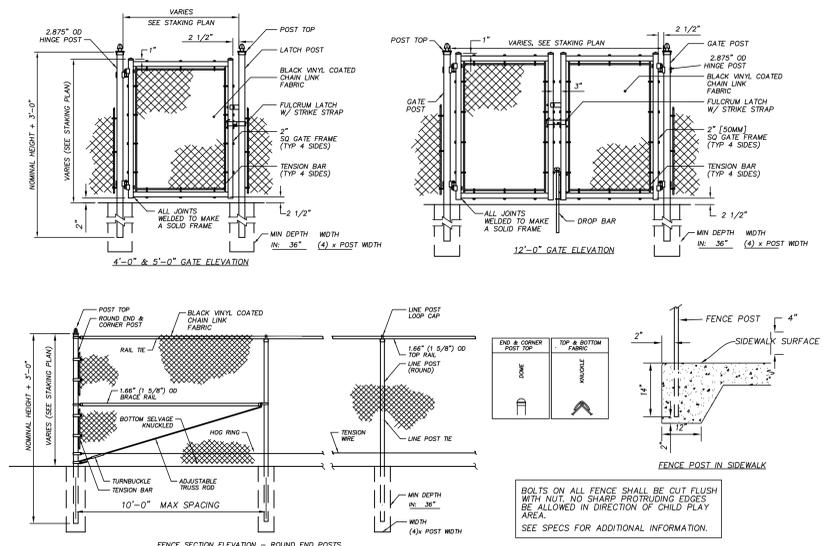


- PAINTING SPECIFICATIONS:
- MANUFACTURER: THEMEC COMPANY, INC.; CARY, NC (919-859-3737)
 - SYSTEM TYPE: EPOXY-POLYURETHANE
 - SURFACE PREPARATION: SSPV-SPI AND BRUSH OFF BLAST CLEAN
 - PRIMER: SERIES 27 (FIELD-COATED) TYPKOY OR 69 HI-BUILD EPOXIOLINE
 - FINISH PAINT: SERIES 73 ENDURA-SHELD, SEMI-GLOSS, SUBMIT COLOR OPTIONS FOR SELECTION BY ARCHITECT.
 - CONTRACTOR SHALL INSTALL KNOX BOX AT THE DIRECTION OF FIRE MARSHAL. KNOX BOX SHALL BE PER TOWN OF APEX STANDARDS.

PIPE GATE N.T.S.



CURB & GUTTER AT CATCH BASINS N.T.S.



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600 Hargett Street, Suite 200
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Phone: 919-518-8216
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PROFESSIONAL ENGINEER
SINCE 1983
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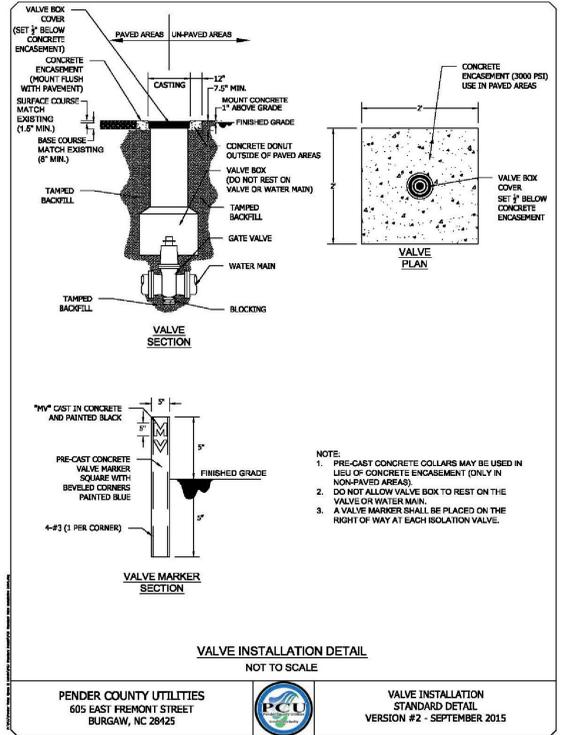
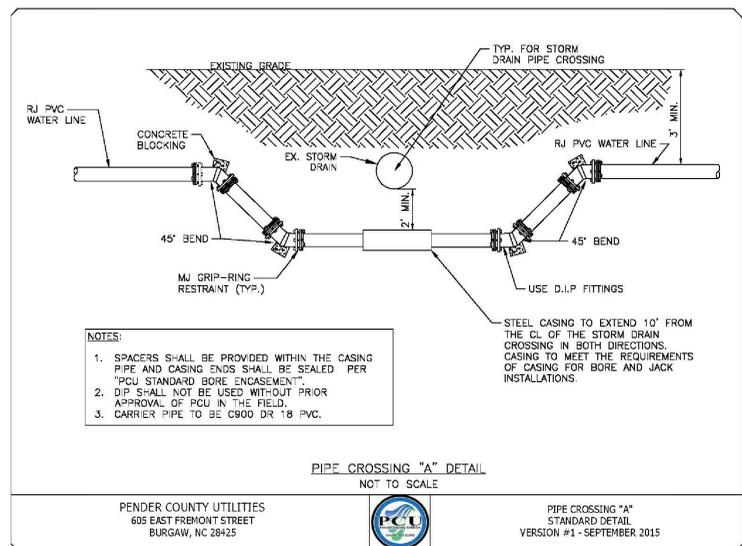
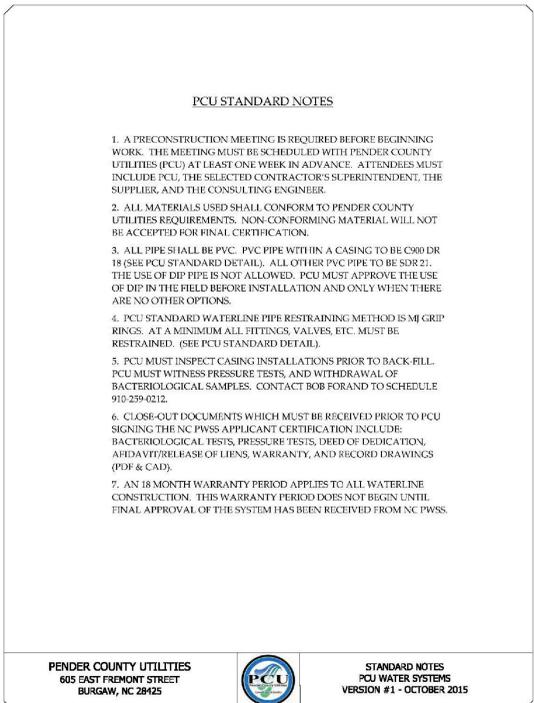
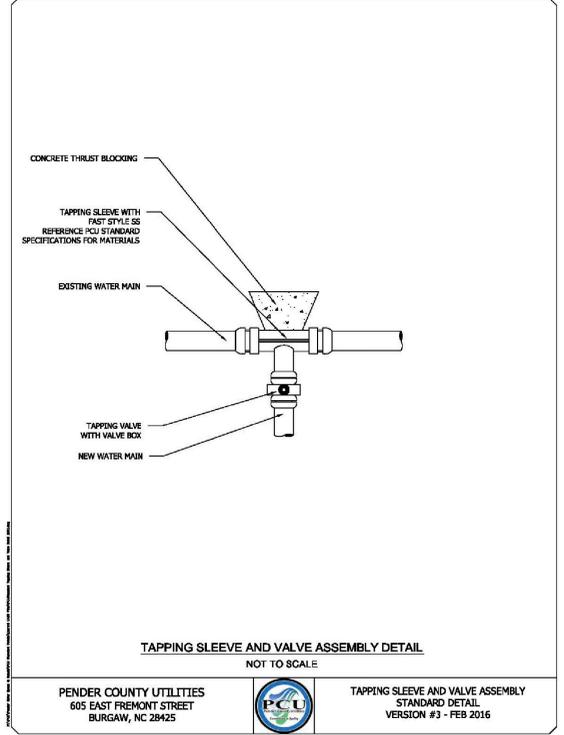
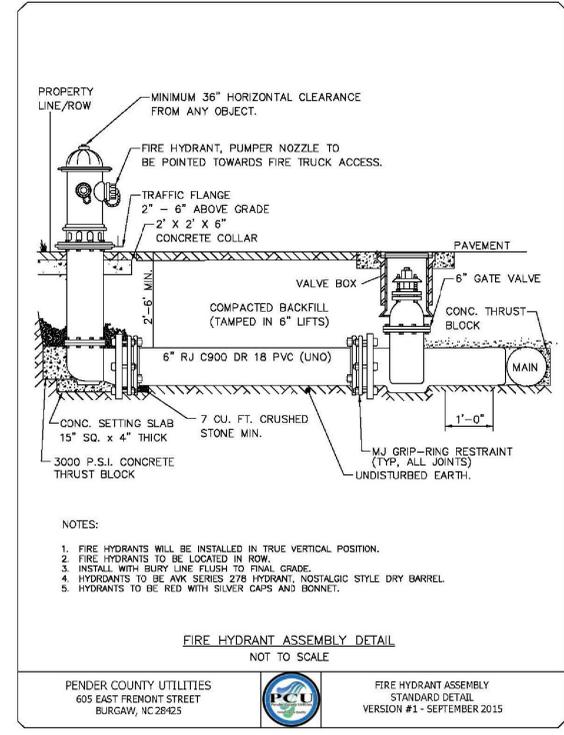
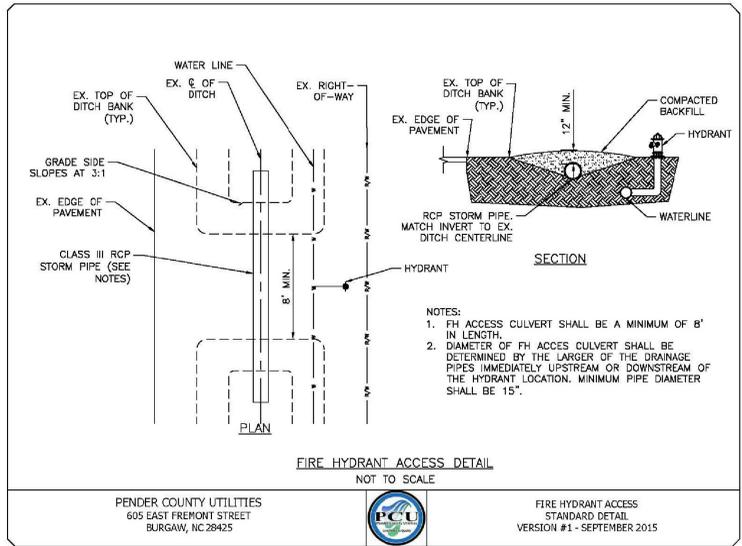
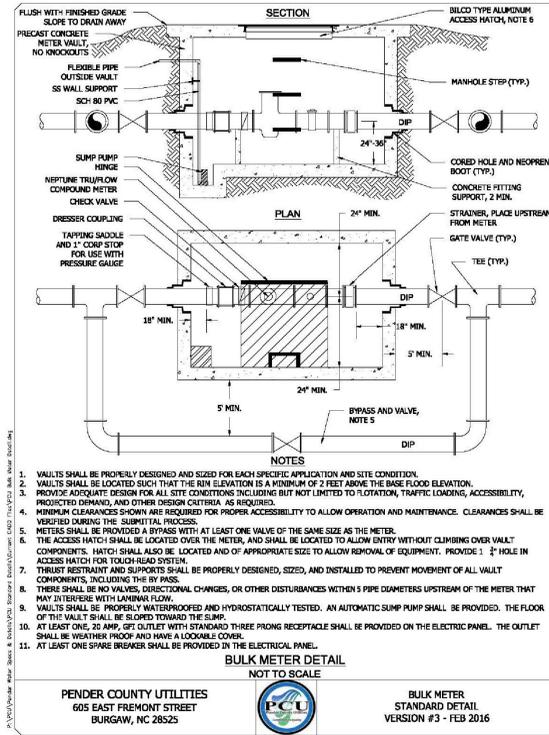
ENERGY STAR PARTNER

ID	DATE	DESCRIPTION
ISSUE DATE:	05.23.2016	
PROJECT #:	01505.000	
DRAWN BY:	KAL/GM	
CHECKED BY:	TH	

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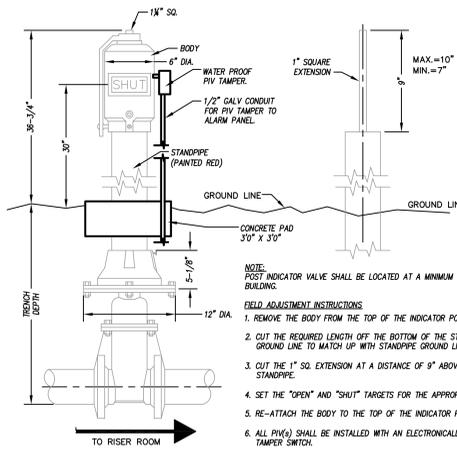
PROFESSIONAL ENGINEER
STATE OF NORTH CAROLINA
No. 28383
5-23-16

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PENDERLEA K-8 SCHOOL
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ENERGY STAR PARTNER

ID	DATE	DESCRIPTION
ISSUE DATE:	05.23.2016	
PROJECT #:	01505.000	
DRAWN BY:	KAL/GM	
CHECKED BY:	TH	
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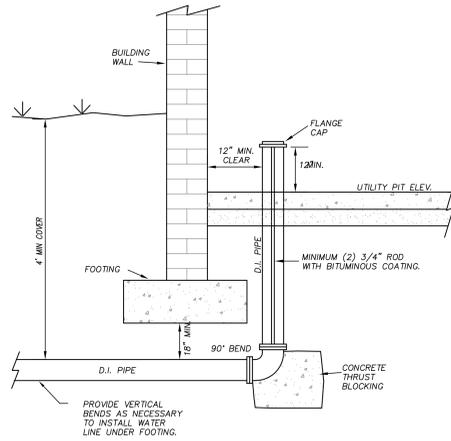
NOTE:
POST INDICATOR VALVE SHALL BE LOCATED AT A MINIMUM 40'-R FROM BUILDING.

FIELD ADJUSTMENT INSTRUCTIONS

1. REMOVE THE BODY FROM THE TOP OF THE INDICATOR POST ASSEMBLY.
2. CUT THE REQUIRED LENGTH OFF THE BOTTOM OF THE STANDPIPE FOR THE GROUND LINE TO MATCH UP WITH STANDPIPE GROUND LINE MARK.
3. CUT THE 1" SQ. EXTENSION AT A DISTANCE OF 9" ABOVE THE TOP OF THE STANDPIPE.
4. SET THE "OPEN" AND "SHUT" TARGETS FOR THE APPROPRIATE VALVE SIZE.
5. RE-ATTACH THE BODY TO THE TOP OF THE INDICATOR POST ASSEMBLY.
6. ALL PIVs SHALL BE INSTALLED WITH AN ELECTRONICALLY CONTROLLED TAMPER SWITCH.

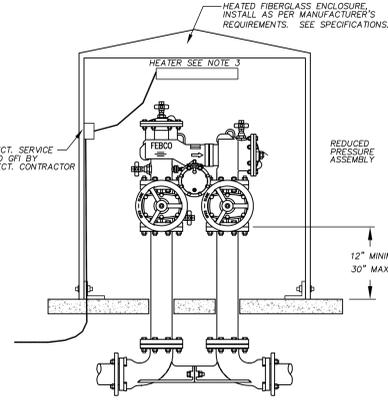
POST INDICATOR VALVE

N.T.S.



STANDARD FIRE SERVICE INSTALLATION AT BUILDING

N.T.S.

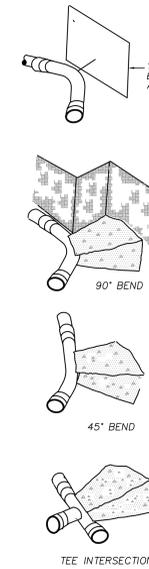


NOTES:

1. REDUCED PRESSURE ASSEMBLY SHALL BE FEBCO MODEL 880V ("N" CONFIGURATION) OR APPROVED EQUAL. ALL BACKFLOW PREVENTERS SHALL BE AS LISTED AS APPROVED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT HANDBOOK.
2. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS OF BACKFLOW PREVENTER, VALVES, ENCLOSURE, ETC.
3. HEATER AND POWER CORD BY G.C. SEE SPECIFICATIONS. INSTALL PER MANUFACTURER'S INSTRUCTIONS.

REDUCED PRESSURE ASSEMBLY

N.T.S.



NOTES:

1. CONCRETE SHALL BE 2500 PSI.
2. CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MECHANICAL JOINT FITTINGS.
3. TRENCHES SHALL CONFORM TO STANDARD TRENCH DETAIL.
4. ALL BENDS AND INTERSECTIONS SHALL HAVE CONCRETE THRUST BLOCKING.

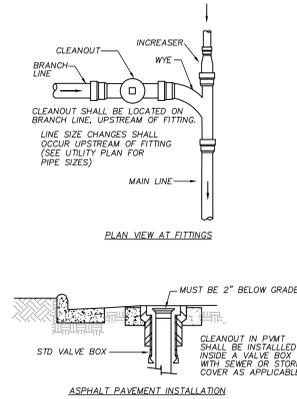
REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BENDS									
BASED ON TEST PRESSURE OF 200 P.S.I. (ALL AREA IN SQUARE FEET)									
SIZE AND DEGREE OF BEND	STATUS	THURST IN	THURST OUT						
6\"/>									
12\"/>	1	1	1	1	1	1	1	1	1
18\"/>	1	2	2	2	2	2	2	2	2
24\"/>	1	3	3	3	3	3	3	3	3
30\"/>	1	4	4	4	4	4	4	4	4
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42\"/>	1	6	6	6	6	6	6	6	6
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NOTES:

REACTION BEARING AREAS ARE IN SQUARE FEET MEASURED IN A VERTICAL PLANE IN THE TRENCH SIDE AT AN ANGLE OF 90° TO THE USE 6\"/>

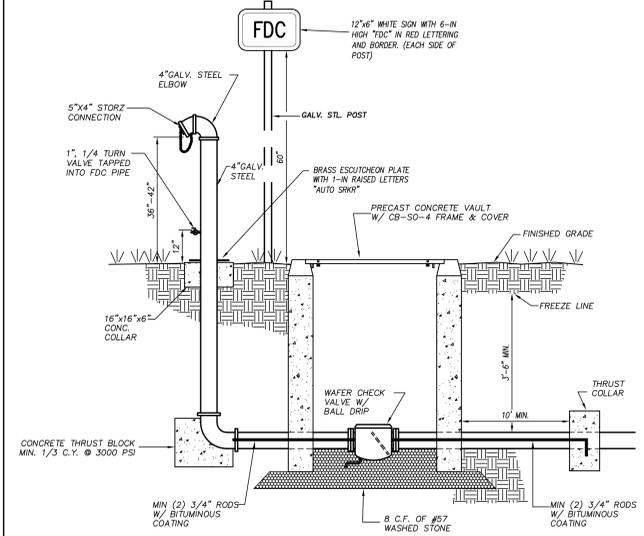
STANDARD THRUST BLOCKING

N.T.S.



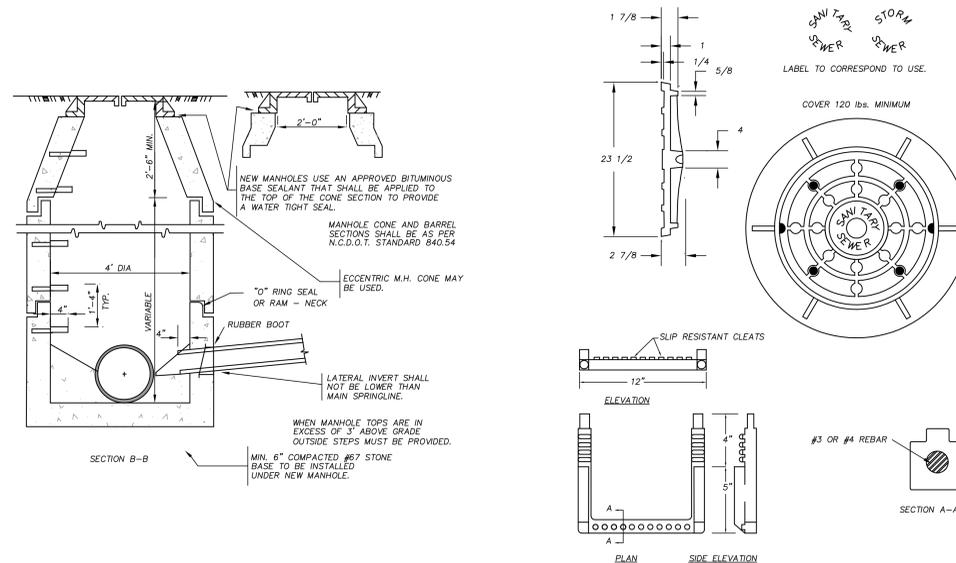
STANDARD CLEANOUT

N.T.S.



FIRE DEPARTMENT STORZ CONNECTION DETAIL

N.T.S.



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ENERGY STAR PARTNER

ID	DATE	DESCRIPTION
	05.23.2016	ISSUE DATE:
	01505.000	PROJECT #:
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	TH	CHECKED BY:
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		SITE / CIVIL DETAILS

TYPE	PLANTING RATE
APR 15 - JULY 15 **	HULLED SUNSTAR OR RIVERIA BERMUDA 85 LBS/ACRE *
JULY 15 - AUG 15	SUNSTAR OR RIVERIA BERMUDA SPRIGS 5 BUSHELS/1,000 SF
AUG 15 - APR 15	TEMPORARY SEEDING APPLIES**

* OR AS REQUIRED TO ACHIEVE 95% COVERAGE AS DETERMINED ON A PER SQUARE YARD BASIS PRIOR TO SUBSTANTIAL COMPLETION.

** WHEN SEEDING MUST TAKE PLACE OUT-OF-SEASON FOR PERMANENT GRASS, APPROPRIATE TEMPORARY SEEDING SHALL BE DONE AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERMANENT SEEDING AS SPECIFIED IN SEASON AT NO ADDITIONAL COST TO OWNER.

- LAWN MAINTENANCE NOTES:**
- CONTRACTOR SHALL BE RESPONSIBLE FOR LAWN MAINTENANCE UNTIL FINAL COMPLETION.
 - LAWN MUST BE AT 95% COVERAGE AT SUBSTANTIAL COMPLETION REVIEW TO BE ACCEPTED.
 - IF NOT AT 95% SUBSTANTIAL COMPLETION WILL BE DELAYED UNTIL THE FOLLOWING GROWING SEASON.

SUBSTANTIAL COMPLETION (GRASS):

CONTRACTOR SHALL BE RESPONSIBLE FOR LAWN MAINTENANCE AND WATERING UNTIL SUBSTANTIAL COMPLETION. LAWN/TURF SHALL BE CONSIDERED SUBSTANTIALLY COMPLETE WHEN GRASS ESTABLISHMENT IS AT A MIN. 95% COVERAGE AND THE SURFACE COMPLIES WITH THE SLOPE, SMOOTHNESS AND OTHER SPECIFIED TOLERANCES. IF THE MINIMUM REQUIREMENTS ARE NOT MET, SUBSTANTIAL COMPLETION WILL BE DELAYED UNTIL THE MINIMUM REQUIREMENTS ARE MET (POSSIBLY INTO THE FOLLOWING GROWING SEASON). THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR WATERING AND MAINTENANCE OF THE GRASS UNTIL SUBSTANTIAL COMPLETION IS REACHED. SEE SPECIFICATIONS FOR FURTHER INFORMATION.

PERMANENT SEEDING SCHEDULE- BERMUDA SEED N.T.S.

PERMANENT OR TEMPORARY GROUND COVER SHALL BE PROVIDED OVER ALL DISTURBED AREAS OF THE SITE AS SOON AS POSSIBLE, HOWEVER, NO LATER THAN 30 DAYS AFTER CONSTRUCTION ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED DURING ANY PHASE OF WORK.

TEMPORARY OR PERMANENT GROUND COVER SHALL BE PROVIDED ON ALL SLOPES WITHIN 15 WORKING DAYS OR 30 CALENDAR DAYS AFTER CONSTRUCTION ACTIVITIES PERMANENTLY OR TEMPORARILY CEASED.

DATE	TYPE	PLANTING RATE
AUG 15 - FEB 1	TALL FESCUE AND WINTER RYE (GRAIN)	70 LBS/ACRE 25 LBS/ACRE
APR 1 - AUG 15	TALL FESCUE AND GERMAN MILLET *** OR SUDANGRASS (SMALL-STEMMED VAR.) ***	120 LBS/ACRE 25 LBS/ACRE 30 LBS/ACRE

CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENIED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

***TEMPORARY - RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12" IN HEIGHT BEFORE MOWING.

TEMPORARY SEEDING SCHEDULE N.T.S.

- LOCATE ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF PLANT MATERIAL. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THOSE SHOWN ON THE PLAN.
- VERIFICATION OF TOTAL QUANTITIES AS SHOWN ON THE PLANT LIST SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND THE TOTAL QUANTITIES SHALL BE AS SHOWN ON THE PLAN.
- CONTACT THE LANDSCAPE ARCHITECT FOR INSPECTION 48 HOURS IN ADVANCE OF THE SCHEDULED SITE VISIT AND AT THE FOLLOWING INTERVALS:
 - REVIEW OF GRADING PRIOR TO PLANT AND LAWN INSTALLATION
 - REVIEW OF PLANT MATERIAL PRIOR TO INSTALLATION
 - ONE SUBSTANTIAL COMPLETION MEETING FOR PLANT INSTALLATION.
 - ONE FINAL INSPECTION FOR ALL SEEDING/PLANTING OPERATIONS.
- ALL PLANT MATERIAL SHALL CONFORM WITH THE STANDARDS SET FORTH BY THE AMERICAN ASSOCIATION OF NURSERMEN AND THE WRITTEN SPECIFICATIONS.
- ESTABLISH POSITIVE DRAINAGE IN ALL PLANTING BEDS AND AWAY FROM BUILDING.
- APPLY PRE-EMERGENT HERBICIDE TO ALL NEW PLANTING BEDS AT MANUFACTURER'S RECOMMENDED RATE PRIOR TO INSTALLATION OF PLANT MATERIAL.
- DO NOT INSTALL PLANT MATERIAL IN IMPERVIOUS SOILS (i.e. HOLES WHICH WHEN FILLED WITH WATER, DO NOT COMPLETELY DRAIN WITHIN TWO HOURS).
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING ALL PLANTS AND LAWN AREAS AT HIS COST FROM HIS OWN WATER SOURCE INCLUDING DURING PERIODS OF DROUGHT UNTIL FINAL COMPLETION. ANY WATERING OR MAINTENANCE REQUIRED AFTER FINAL COMPLETION SHALL BE AT OWNER'S COST.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL EQUIPMENT & SUBCONTRACTORS AWAY FROM SEEDING AREAS. IF DAMAGE OCCURS, THROUGH NO FAULT OF THE OWNER, AREAS SHALL BE REGRADED AND RESEEDED IMMEDIATELY AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL WATER AND MAINTAIN THOSE AREAS UNTIL THEY ARE AT 95% COVERAGE AT SUBSTANTIAL COMPLETION.
- SUBSTITUTIONS OF PLANT MATERIAL SHALL ONLY BE ACCEPTED 60 DAYS PRIOR TO COMMENCEMENT OF PLANTING OPERATIONS. SUBSTITUTION REQUESTS MUST BE IN WRITING AND WILL ONLY BE ACCEPTED FOR LACK OF AVAILABILITY REASONS WHICH CAN BE SUBSTANTIATED OR FOR SUPERIOR STOCK SUBSTITUTIONS.
- SEEDING
- GENERAL LAWN AREAS SHALL BE SEEDING WITH SUNSTAR OR RIVERIA BERMUDAGRASS OR APPROVED EQUAL.
- LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT TO REVIEW GRADING ONE WEEK PRIOR TO SEEDING, IF THE LANDSCAPE CONTRACTOR AND LANDSCAPE ARCHITECT FIND GRADING UNACCEPTABLE FOR FINAL SEEDING, LANDSCAPE CONTRACTOR SHALL BRING IT TO THE ATTENTION OF THE GENERAL CONTRACTOR. LANDSCAPE CONTRACTOR SHALL NOT PROCEED WITHOUT APPROVAL BY LANDSCAPE ARCHITECT.

LANDSCAPE NOTES

- CHISEL ALL CUT GRADED OR COMPACTED AREAS TO A MINIMUM DEPTH OF 8".
- DISC ALL AREAS TO RECEIVE GRASS TO A MINIMUM OF 8 INCHES, MIX AND AMEND WITH 3 INCHES OF WELL SCREENED TOPSOIL. ON-SITE TOPSOIL MAY BE USED IN PLACE OF IMPORTED TOPSOIL, IF WELL-SCREENED AND DRY PRIOR TO APPLICATION IN ACCORDANCE WITH SPECIFICATION SECTION 329000.
- REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
- APPLY AGRICULTURAL LIME, FERTILIZER, AND PHOSPHATE UNIFORMLY AS PER SPECIFICATIONS AND MIX WELL WITH SOIL.
- CONTINUE TILLAGE UNTIL A WELL-MIXED BED OF PLANT MATERIAL IS PREPARED TO A 6 INCH DEPTH.
- SEED AT RATE SPECIFIED OR AS NEEDED TO ACHIEVE AND MAINTAIN A THICK HEALTHY GROUND COVERAGE.
- MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH. BEGIN THOROUGH WATERING OF GRASS AREAS IMMEDIATELY UPON INSTALLATION. DO NOT ALLOW GRASS SEED AREAS TO BECOME EXCESSIVELY DRY.
- INSPECT ALL SEEDING AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS AS NEEDED.
- IF CONFLICTS OCCUR BETWEEN WRITTEN SPECIFICATIONS AND THE DRAWINGS, THE WRITTEN SPECIFICATIONS SHALL PREVAIL.

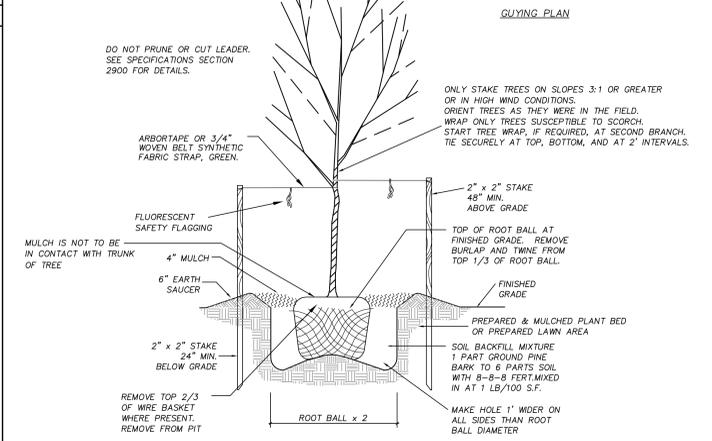
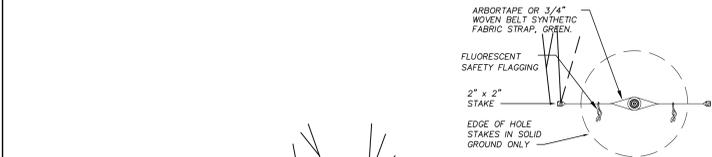
SEEDBED PREPARATION

APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY A MINIMUM 3,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND A MINIMUM 500 LB/ACRE 10-10-10 FERTILIZER, AS NEEDED TO ESTABLISH 95% COVERAGE (AS DETERMINED ON A PER SQUARE YARD BASIS) PRIOR TO SUBSTANTIAL COMPLETION. CONTRACTOR TO SUBMIT A COPY OF ALL SOIL REPORTS TO OWNER UPON RECEIPT.

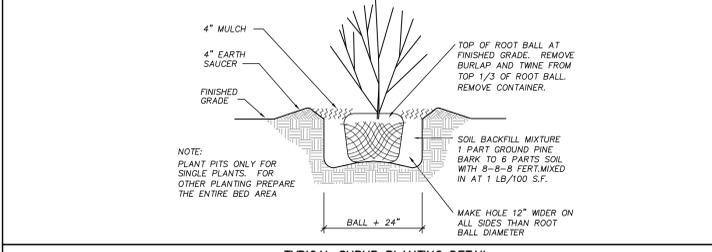
LIME & FERTILIZATION SCHEDULE

- DURING ALL PHASES OF CONSTRUCTION, GROUNDCOVER ON EXPOSED SLOPES SHALL BE PROVIDED WITHIN 14 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING.
- FINAL PERMANENT GROUNDCOVER FOR ALL DISTURBED AREAS SHALL BE PROVIDED ON ALL DISTURBED AREAS WITHIN 14 CALENDAR DAYS FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.
- USE EXCESSION MATTING OR OTHER APPROVED CHANNEL LINING MATERIAL TO COVER THE BOTTOM OF CHANNELS.
- APPLY 4000 LB/ACRE (2 TONS LB/AC) GRAIN STRAW OVER SEEDING AREAS AND ANCHOR STRAW CRIMPING WITH HAND OR MECHANICAL CRIMPERS 8" MAX. SPACING. ASPHALT TACKING OR OTHER APPROVED METHOD. ASPHALT TACKING SHALL BE 400 GAL/ACRE (9 GAL/1000 SF).
- MULCH AND ANCHORING MATERIALS MUST NOT BE ALLOWED TO WASH DOWN SLOPES AND CLOG DRAINAGE DEVICES.

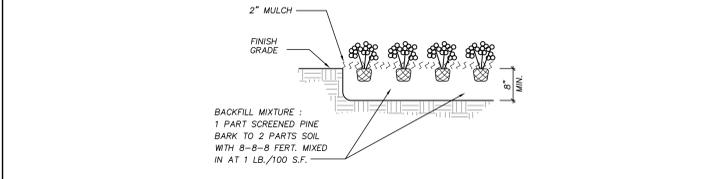
SURFACE STABILIZATION REQUIREMENTS



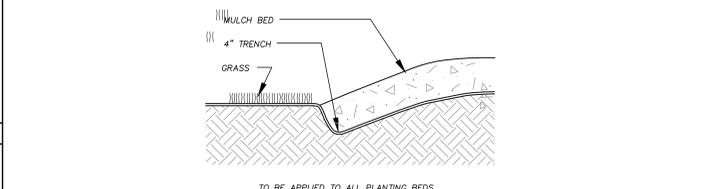
TREE PLANTING DETAIL



TYPICAL SHRUB PLANTING DETAIL

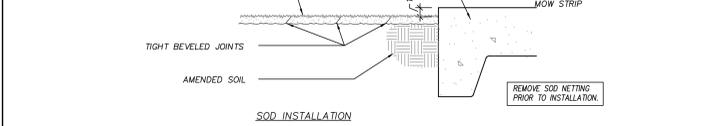


GROUND COVER PLANTING DETAIL

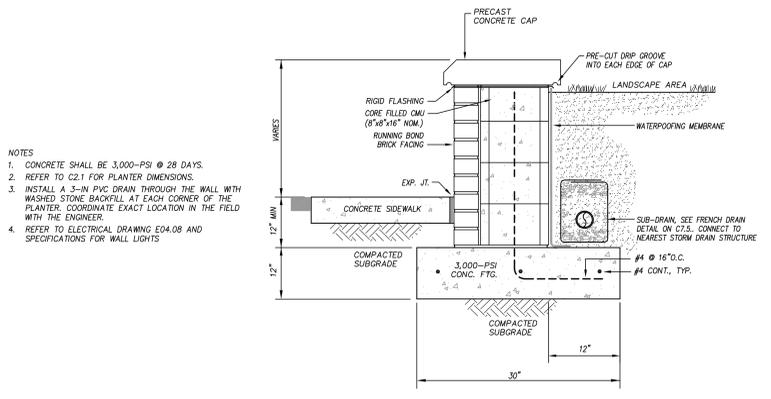


TO BE APPLIED TO ALL PLANTING BEDS

GROUND COVER PLANTING DETAIL



SOD INSTALLATION DETAIL



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PRELIMINARY
NOT FOR CONSTRUCTION

PENDER COUNTY SCHOOLS
PENDERLEA K-8 SCHOOL
82 PENDERLEA SCHOOL ROAD, WILLARD, NC 28478

ENERGY STAR PARTNER

ID	DATE	DESCRIPTION
ISSUE DATE:	05.23.2016	
PROJECT #:	01505.000	
DRAWN BY:	KAL/GM	
CHECKED BY:	TH	

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SITE / CIVIL DETAILS

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