2018 APPENDIX B - BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

CONTACT:	GARY R. ROBBINS				
DESIGNER:	FIRM:	NAME:	LICENSE #	TELEPHONE #	EMAIL
RCHITECTURAL:	ROBBINS ARCHITECTURE, PA	GARY R. ROBBINS	5327	(336) 454-6753	Gary@RobbinsArchitecture.com
IVIL:	JAMESTOWN ENGINEERING GROUP	DANIEL PRITCHETT	11659	<u>336</u> 886-5523	Dan@Jamestownengineering.com
LECTRICAL:	DAN CAMPBELL ENGINEERING, PA	DAN CAMPBELL	14037	336 370-4980	DCENG@BELLSOUTH.NET
IRE ALARM:		<u> </u>		<u>`</u>	
LUMBING:				<u>```</u>	
MECHANICAL:				<u>ــــــــــــــــــــــــــــــــــــ</u>	
PRINKLER -STANDPIPE:	-			$\overline{\Box}$	-
TRUCTURAL:	LEATHERS ENGINEERING	DAN LEATHERS	12334	336 \ 454-2037	LeathersEng@aol.com

2018 EDITION OF NC CODE FOR:	NEW BUILDING ☐ FIRST TIME INTERIOR COMPLETION	ADDITION SHELL/CORE	☐ RENOVATION ☐ PHASED CONSTRUCTION - SHELL/COR
2018 NC EXISTING BUILDING CODE: ALTERATION:	☐ PRESCRIPTIVE ☐ LEVEL I ☐ HISTORIC PROPERTY	REPAIR LEVEL II CHANGE OF USE	☐ CHAPTER 14 ☐ LEVEL III
CONSTRUCTED (Date)RENOVATED (Date)		CURRENT OCCUP. (Ch.3) PROPOSED OCCUP. (Ch.3)	EQUIDMENT QUELTED
OCCUPANCY CATEGORY: (Table 1604.5)	CURRENT		

BASIC BUILDING DATA										
CONSTRUCTION TYPE:	☐ I-A ☐ I-B	☐ II-A ☑ II-B	☐ III-A ☐ III-B		_	V-A V-B				
SPRINKLERS:	⋈ NO	■ PARTIAL	☐ YES	☐ NFPA 13	☐ NFPA 13R	☐ NFPA 13D				
STANDPIPES:	⊠ NO	☐ YES	CLASS: 🔲 I		☐ WET [DRY				
PRIMARY FIRE DISTRICT:	⊠ NO	☐ YES	FLOOD H	AZARD AREA:	⊠ NO	☐ YES				
SPECIAL INSPECTIONS REQ	UIRED:	⊠ NO	☐ YES							

GROSS BUILDING AREA CODE							
FLOOR	NEW (SQ FT)	AREA OF WORK (SQ FT)	SUB-TOTAL				
3 RD							
2 ND							
MEZZANINE							
1 ST	7,404						
BASEMENT / GROUND LEVEL							
TOTAL	7,404						

PRIMARY OCCUPANCY:			ALLO	WABL	E AREA	1		
	BUSINESS DEDUCATIONAL	A-1 A -2			□ A-5			
	HAZARDOUS INSTITUTIONAL	F-1 MODERATE H-1 DETONATE I-1 CONDITION I-2 CONDITION	☐ H-2 DE		☐ H-3 C	OMBUST	☐ H-4 HEALTH	☐ H-5 HPM
	MERCANTILE		1	2	a 3	4	5	
	RESIDENTIAL STORAGE	R-1 R-2 S-1 MODERATE PARKING GARAGE	S-2 LO¹	W	ICED.	☐ HIGH		
	UTILITY AND MISCEL		OPEN	LINCLO	SLU	L KLFAI	IN GARAGE	
ACCESSORY OCCUPANCY INCIDENTAL USES (TABL SPECIAL USES: (CHAPTER	E 509)							
SPECIAL PROVISIONS: (0	HAPTER 5 - LIST CODE	SECTIONS)						
MIVED OCCUPANOV-	⊠NO □YE	S SEPARATI	ON: N/	A HR	FXCFP.	TION:		
MIXED OCCUPANCY:		5 SELLINGIE	J.,,		LAGEI			
_	0 LED LISE (20X D3)							
■ NON-SEPER	` ,	EE BELOW FOR A	REA OF CALO	CULTIONS)				
■ NON-SEPER	,	EE BELOW FOR A	rea of Calo	CULTIONS)				
	,		rea of Calo	,	AREA OF OO	CCUPANCY B	·	

STORY NO.	DESCRIPTION AND USE	(A) BLDG. AREA PER STORY (ACTUAL)	(B) TABLE 506.2⁴ AREA	(C) AREA FOR FRONTAGE INCREASE ^{1,5}	(D) ALLOWABLE AREA PER STORY OR UNLIMITED ^{2,3}
1	STORAGE	7,404	26,000		
	1. FRONTAGE AREA INCREASE	S FROM SECTION 506.2 AF	RE COMPUTED THUS:		
	A. PERIMETER WHICH		OR OPEN SPACE HAVING	G 20 FEET MINIMUM WIDTH =	<i>(F)</i>

C. RATIO $(F/P) = \underline{\hspace{1cm}} (F/P)$ D. $W = MINIMUM WIDTH OF PUBLIC WAY = \underline{\hspace{1cm}} (W)$ E. PERCENT OF FRONTAGE INCREASE $I_f = 100[F/P-0.25] \times W/30 =$ _____ (%)

2 UNLIMITED AREA APPLICABLE UNDER CONDITIONS OF SECTION 507. 3 MAXIMUM BUILDING AREA = TOTAL NUMBER OF STORIES IN THE BUILDING x D (MAXIMUM 3 STORIES) (506.2) 4 THE MAXIMUM AREA OF OPEN PARKING GARAGES MUST COMPLY WITH TABLE 406.5.4.

5 FRONTAGE INCREASE IS BASED ON THE UNSPRINKLERED AREA VALUE IN TABLE 506.2.

ALLOWABLE HEIGHT								
	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE					
BLD. HEIGHT IN FT. (TABLE 504.3) ²	55	21						
BLD. HEIGHT IN STORIES. (TABLE 504.4) ³	3	1						

1 PROVIDE CODE REFERENCE IF THE "SHOWN ON PLANS" IS NOT BASED ON TABLE 504.3 OR 504.4 2 THE MAXIMUM HEIGHT OF AIR TRAFFIC CONTROL TOWERS MUST COMPLY WITH TABLE 412.3.1. 3 THE MAXIMUM HEIGHT OF OPEN PARKING GARAGES MUST COMPLY WITH TABLE 406.5.4.

BUILDING ELEMENT	FIRE SEPARATION	RAT REQ'D	FINGS PROVIDED	DETAIL # -A ND	DESIGN# FOR RATED	SHEET # FOR RATED	SHEET # FOR RATED JOINTS
	DISTANCE (FEET)		(W/ * REDUCTION)	SHEET #	ASSEMBLY	PENETRATION	IMILD JOINTS
STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS, TRUSSES							
BEARING WALLS							
EXTERIOR							
NORTH		N/A					
EAST		N/A					
WEST		N/A					
SOUTH		N/A					
INTERIOR							
NONBEARING WALLS AND PARTITIONS EXTERIOR WALLS							
NORTH		N/A					
EAST		N/A					
WEST		N/A					
SOUTH		N/A					
INTERIOR WALLS AND PARTITIONS							
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEANS AND JOIST		0					
FLOOR CEILING ASSEMBLY		0					
COLUMNS SUPPORTING FLOORS		N/A					
ROOF CONSTRUCTION INCLUDING SUPPORT BEANS & JOIST		0					
ROOF CEILING ASSEMBLY		0					
COLUMNS SUPPORTING ROOF		0					
SHAFT ENCLOSURES - EXIT		N/A					
SHAFT ENCLOSURES - OTHER		N/A					
CORRIDOR SEPARATION		N/A					
OCCUPANCY / FIRE BARRIER SEPARATION		N/A					
PARTY / FIRE WALL SEPARATION		N/A					
SMOKE BARRIER SEPARATION		N/A					
SMOKE PARTITION		N/A					
TENANT / DWELLING UNIT / SLEEPING UNIT SEPARATION		N/A					
INCIDENTAL USE SEPARATION		N/A					

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

LIFE SAFETY SYSTEM REQUIREMENTS NO ☐ YES EXISTING

EXIT SIGNS:	⋈ NO	☐ YES	EXISTING
FIRE ALARM:	⋈ NO	☐ YES	EXISTING
SMOKE DETECTION SYSTEM:	⋈ NO	☐ YES	PARTIAL
CARBON MONOXIDE DETECTION	⋈ NO	☐ YES	

LIFE SAFETY PLAN REQUIREMENTS

- LIFE SAFETY PLAN SHEET #; NOT APPLICABLE OPEN EQUIPMENT SHELTER FIRE AND/OR SMOKE RATE WALL LOCATIONS (CHAPTER 7)
- ASSUMED AND REAL PROPERTY LINE LOCATIONS (IF NOT ON SITE PLAN) EXTERIOR WALL OPENING AREA WITH RESPECT TO DISTANCE TO ASSUMED PROPERTY LINES (705.8)
- OCCUPANCY USE FOR EACH AREA AS IT RELATES TO OCCUPANT LOAD CALCULATION (TABLE 1004.1.2) OCCUPANT LOADS FOR FACH AREA
- EXIT ACCESS TRAVEL DISTANCE (1017) COMMON PATH OF TRAVEL DISTANCES (1006.2.1 & 1006.3.2(1))
- DEAD END LENGTHS (1020.4) ☐ CLEAR EXIT WIDTHS FOR EACH EXIT DOOR

EMERGENCY LIGHTING:

- MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.3) ACTUAL OCCUPANT LOAD FOR EACH EXIT DOOR A SEPARATE SCHEMATIC PLAN INDICATING WHERE FIRE RATED FLOOR/CEILING AND/OR ROOF STRUCTURE IS PROVIDED FOR PURPOSES OF OCCUPANCY SEPARATION
- LOCATION OF DOORS WITH PANIC HARDWARE (1010.1.10)
- LOCATION OF DOORS WITH DELAYED EGRESS LOCKS AND THE AMOUNT OF DELAY (1010.1.9.7) LOCATION OF DOORS WITH ELECTROMAGNETIC EGRESS LOCKS (1010.1.9.9)
- LOCATION OF DOORS WITH HOLD OPEN DEVICES LOCATION OF EMERGENCY ESCAPE WINDOWS (1030)
- THE SQUARE FOOTAGE OF EACH FIRE AREA (202)
 THE SQUARE FOOTAGE OF EACH SMOKE COMPARTMENT FOR OCCUPANCY CLASSIFICATION I-2 (407.5) NOTE ANY CODE EXCEPTIONS OR TABLE NOTES THAT MAY BE UTILIZED REGARDING THE ITEMS ABOVE

ACCESSIBLE DWELLING UNITS

(SECTION 1107) (N/A)										
TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED			

ACCESSIBLE PARKING

(SECTION 1106) (N/A EXISTING)										
LOT OR PARKING TOTAL # OF PARKING SPACES # OF ACCESSIBLE SPACES PROVIDED						TOTAL #				
AREA	REGULAR WITH 5'		VAN SPACE	WITH	ACCESSIBLE					
	REQUIRED PROVIDED	PROVIDED	ACCESS AISLE	132" ACCESS AISLE	8' ACCESS AISLE	PROVIDED				
TOTAL										

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1) EXISTING TOILETS WITHIN 500' OF STRUCTURE IN OFFICE / MAINTENANCE BUILDING

USE	WATERCLOSETS			URINALS	LAVATORIES			SHOWERS/ TUBS		DRINKING FOUNTAINS	
	FEMALE	UNI-SEX	MALE		FEMALE	UNI-SEX	MALE	MALE	FEMALE	REGULAR	ACCESSIBLE
EXISTING											
NEW											
REQUIRED		0		0		0				0	0

SPECIAL APPROVALSSPECIAL APPROVAL: (LOCAL JURISDICTION, DEPARTMENT OF INSURANCE, OSC, DPI, DHHS, ICC, ECT., DESCRIBE BELOW)

NEDCY DECLIDEMENTS.				ERGY SU N/A OPEN SHE		ARY						
NERGY REQUIREMENTS: THE FOLLOWING DATA SHALL BE CON EACH DESIGNER SHALL FURNISH THE IF PERFORMANCE METHOD, STATE TH PROPOSED DESIGN.	SIDERED MINIMU REQUIRED PORTI E ANNUAL ENERG	M AND AN ONS OF TI Y COST FO				MEET THE ENER PLAN DATA SHE N VS. ANNUAL E	RGY CODE SH EET. ENERGY COST	ALL ALSO BE	PROVIDED			
EXISTING BUILDING ENVELOP	E COMPLIES V	VITH CO	DDE:	■ NO	0	YES (THE R	REMAINDER O	F THIS SECT.	ON IS NOT	APPLICABL	E)	
EXEMPT BUILDING:	■ NO	o '	YES (PROVIDE CODE OR	STATUTOR	Y REFERNCE)						
CLIMATE ZONE:	□ 3A	o 4	4A	□ 5A								
METHOD OF COMPLIANCE: EN	ERGY CODE SHRAE 90.1	000	PERF	FORMANCE FORMANCE ER:	0	PRESCRIP PRESCRIP						
THERMAL ENVELOPE (PRESCRIP ROOF/CEILING ASSEMBLY (EAC		-)									
DESCRIPTION OF ASSET		,										
U-VALUE OF TOTAL AS:	SEMBLY											
R-VALUE OF INSULATION	ON											
SKYLIGHTS IN EACH AS	SEMBLY											
	OF SKYLIGHT											
TOTAL SQUARE FOOTA	GE OF SKYLIG	HTS IN	EACH	1 ASSEMBLY								
EXTERIOR WALLS (EACH ASSE	MBLY)											
DESCRIPTION OF ASSER	MBLY											
U-VALUE OF TOTAL AS:	SEMBLY											
R-VALUE OF INSULATION	NC											
OPENINGS (WINDOWS	or doors w	ITH GLA	AZING	i)								
	OF ASSEMBLY											
	at gain coe On factor	FFICIEN	11									
DOOR R-V												
WALLS BELOW GRADE (EACH A	ASSEMBLY)											
DESCRIPTION OF ASSE	•											
U-VALUE OF TOTAL AS:	SEMBLY											
R-VALUE OF INSULATION	NC											
FLOORS OVER UNCONDITIONE	D SPACE (FAC	H ASSE	MBI Y)								
DESCRIPTION OF ASSEM	•			, 								
U-VALUE OF TOTAL ASS												
R-VALUE OF INSULATION												
FLOORS SLAB ON GRADE												
DESCRIPTION OF ASSEM	MBLY											

DEGIONALOADO			TURAL D				
DESIGN LOADS: IMPORTANCE FACTORS:	SNOW (I _S) SEISMIC (I _F)		-				
LIVE LOAD:	ROOF MEZZANINE FLOOR	PSF PSF PSF					
GROUND SNOW LOAD:		PSF					
WIND LOAD:	ULTIMATE WIND S EXPOSURE CATEGO		'H (ASCE-7)				
SEISMIC DESIGN CATEGO PROVIDE THE FOLLOWING SEISMIC DESIGN	PARAMETERS		C C	D D			
RISK CATEGORY (Tabl	,	_		☐ IV			
SPECTRAL RESPONSE						_%g	
SITE CLASSIFICATION	,	A D B	C C	D D	□ E	□ F	NATA
BASIC STRUCTURAL S	DATA SOURCE: YSTEM	☐ FIELD	IESI	☐ PRESUMF	IIVE	☐ HISTORICAL [DATA
BECOMOCIONES	0	BEARING WALL BUILDING FRAMI MOMENT FRAME	=			it frame R/C or special st	EEL
ANALYSIS PROCEDURE		SIMPLIFIED	O E	QUIVALENT LA	TERAL FORCE		DYNAMIC
ARCHITECTURAL, MECH	HANICAL, COMPONEN	NTS ANCHORED ?	0	YES I	□ NO		
LATERAL DESIGN CONTR	OL: EARTHQUA	AKE 🗖	WII	ND 🗖			
SOIL BEARING CAPACITIE		· DEDODT \		DOS	_		
PRESUMPTIVE BE	OVIDE COPY OF TEST	REPORT)		PSF PSF			
PILE SIZE, TYPE,							

MECHANICAL SUMMARY

(N/A)	
MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT	
THERMAL ZONE	
winter dry bulb summer dry bulb	
INTERIOR DESIGN CONDITIONS	
winter dry bulb summer dry bulb relative humidity BUILDING HEATING LOAD BUILDING COOLING LOAD	
MECHANICAL SPACING CONDITIONING SYSTEM Unitary description of unit heating efficiency cooling efficiency size category of unit	
Boiler	
Size category. If oversized, state reason:	
Chiller	
Size category. If oversized, state reason:	

LIST EQUIPMENT EFFICIENCIES

ELECTRICAL SUMMARY

	(SEE ELECTRICAL PLANS)	1	
ELECTRICAL SYSTEM AND EQ	UIPMENT		
METHOD OF COMPLIANCE:	ENERGY CODE: ASHRAE 90.1:	PERFORMANCE PERFORMANCE	☐ PRESCRIPTIVE ☐ PRESCRIPTIVE
LIGHTING SCHEDULE		_	_
	n fixture n the fixture s in fixture	nole building or space by sp	pace)
ADDITIONAL EFFICIENCY PA (WHEN USING THE 2018	ACKAGE OPTIONS B NCECC; NOT REQUIRED FOR ASHR	AE 90.1)	
☐ C406.3 REDUC ☐ C406.4 ENHAN ☐ C406.5 ON-ST ☐ C406.6 DEDIC	EFFICIENT HVAC EQUIPME CED LIGHTING POWER DEN NCED DIGITAL LIGHTING C TE RENEWABLE ENERGY CATED OUTDOOR AIR SYST CED ENERGY USE IN SERVI	ISITY ONTROLS EM	

NEW EQUIPMENT SHELTER

CITY OF ARCHDALE PUBLIC WORKS

18 OLD SCHOOL RD. ARCHDALE, NC

Robbins Architecture, P.A.

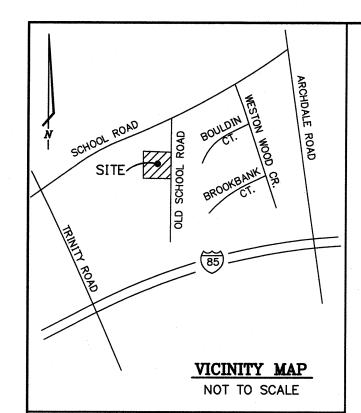
ra Robbins Architecture, p.a.

GARY R. ROBBINS, ARCHITECT

210 N MAIN STREET, SUITE 130 KERNERSVILLE, N.C. 27284 TEL: 336 - 454 - 6753









BEFORE YOU DIG!
CALL 811
N.C. ONE—CALL CENTER
IT'S THE LAW!

GENERAL NOTES (APPLY TO ALL SHEETS)

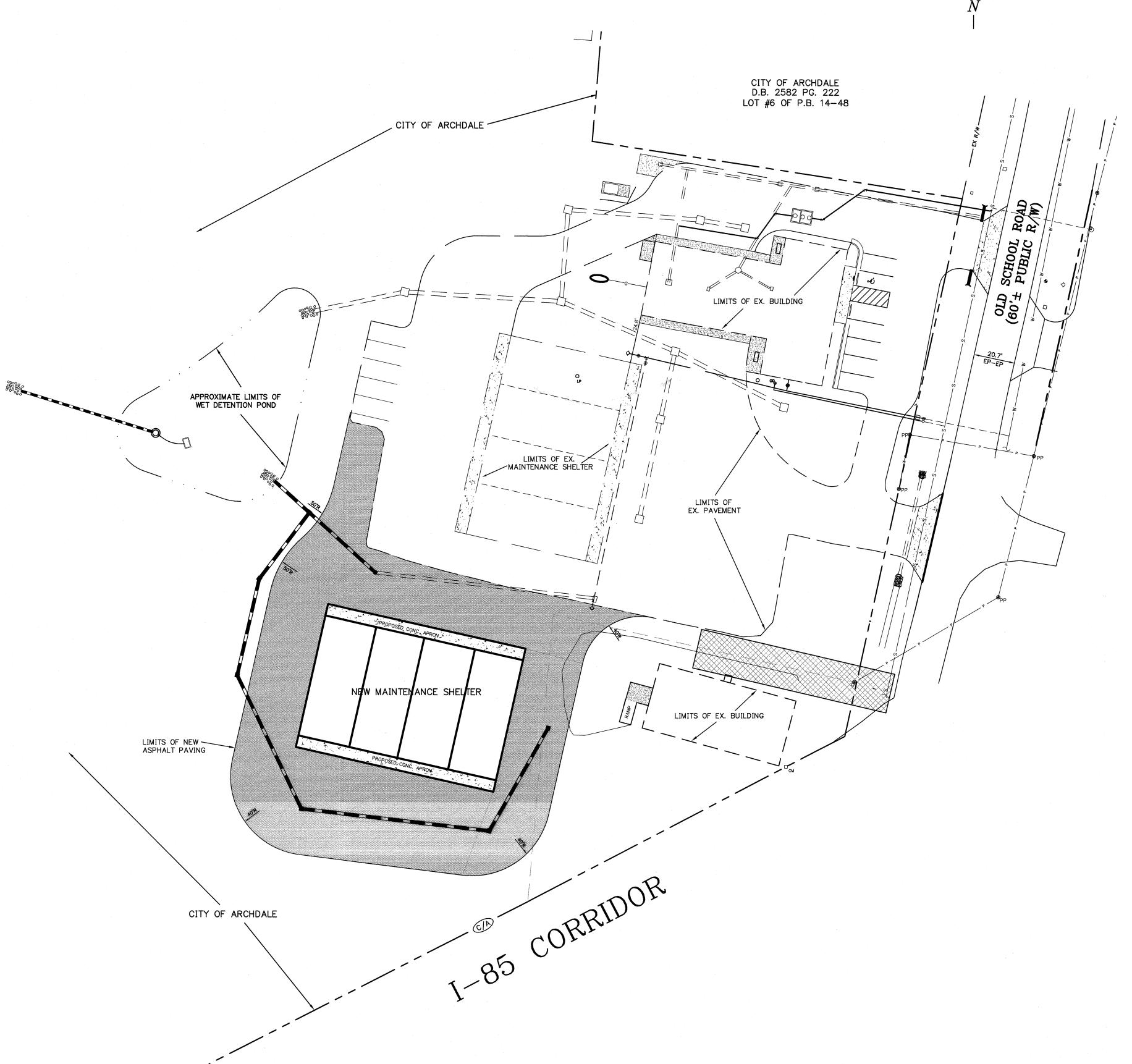
Limited sub—surface investigations have been performed at the site. The General Contractor is encouraged to perform additional sub—surface investigations prior to establishing his contract price for site grading. It shall be the General Contractor's responsibility to establish cut and fill quantities necessary to provide the final grades indicated on these plans. Fill material not available at the site shall be provided by the General Contractor, or excess material shall be removed/disposed of by the contractor, at no additional cost to the owner. Furthermore, the General Contractor, by way of establishing a contract price for site grading, has acknowledged that he is aware of the limited subsurface information and available fill material or excess material necessary to complete the work, and that his established contract price is sufficient to ensure the proper completion of the project and conditions which may affect the work, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials; water tables or similar conditions at the site; availability of labor, water, electric power, roads, and uncertainties of weather; and the character of equipment and facilities needed preliminary to and during prosecution of the work. Any failure by the Contractor to acquaint himself with these facts will not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the work. The Owner assumes no responsibility for any conclusions or interpretations made by the Contractor on the basis of the information, if any, made available by the Owner.All fill material shall be placed in conformance with the Geo—Tech Engineer's recommendation, and compacted to a minimum of 95% Standard Proctor density.

The Contractor shall be responsible for any damage to gas or water pipes, public or private sewers, drains or

- The Contractor shall be responsible for any damage to gas or water pipes, public or private sewers, drains or culverts, railroad or traffic signal cables, telephone or power conduits, or other structures. When utility lines that are to be removed are encountered within the area of operations, the Contractor shall notify the Owner's representative in in ample time for the necessary measures to be taken to prevent interruption of the services. Reasonable care has been exercised in showing the location of existing utilities on the plans. The exact location of such utilities is not known in all cases. The Contractor shall explore the area ahead of the grading operation by observations, electronic devices, and by personal contacts with utility companies, and locate such utilities in advance of the trenching or grading operations, and shall conduct his work so as to eliminate or minimize damage to the existing structures or utilities.
- i. Vertical and horizontal reference points are available from the engineer, and are intended to establish base lines fo locating the principal components of the Work. From this information the Contractors shall develop and make all detailed surveys needed for construction of all types. Costs associated with the provision of construction lay—out shall be included in the contract price for the related work. In no case shall information provided on the plans relieve the Contractor from his responsibility of providing building locations and dimensions as indicated on the architects plans. The Contractor shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, shall be charged with the resulting expense and shall be responsible for any mistake that may be caused by their unnecessary loss or disturbance.
- 4. The General Contractor shall be responsible for conformance with all current local, state, and OSHA safety codes during all phases of the work. Contract prices established for the work shall include costs associated with the provision of safety equipment, and personnel necessary to complete the work, including but not limited to, trench bracing, and personnel licensed by OSHA as competent for evaluating soil stability.

MATERIAL AND INSTALLATION SPECIFICATIONS

SHOP DRAWINGS FOR ALL MATERIALS WILL BE SUBMITTED TO THE ENGINEER FOR APPROVAL INCLUDING, BUT NOT LIMITED TO, WATER LINE, WATER VALVES, STORM STRUCTURES, STORM PIPING, ASPHALT MIX DESIGNS AND CONCRETE MIX DESIGNS.
 ALL ROADWAY AND STORM DRAINAGE MATERIALS AND METHODS OF INSTALLATION SHALL CONFORM WITH N.C. DEPT. OF TRANSPORTATION STANDARDS INCLUDING, BUT NOT LIMITED TO, ASPHAL PAVEMENT, STONE BASE, 24" STORM PIPE, AND STORM INLET STRUCTURES.
 ALL ROADWAY AND SIDEWALK SUBGRADES SHALL BE COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY OR AS APPROVED BY THE SITE GEO—TECH ENGINEER. NO ASPHALT OR STONE BASE MATERIAL WILL BE INSTALLED UNTIL WHICH TIME THE SITE'S GEO—TECH ENGINEER HAS APPROVED THE SUBGRADE AND STONE BASE. AREAS REQUIRING PLACEMENT OF FILL WITHIN AND ADJACENT TO THE BUILDING WILL BE PLACED IN ACCORDANCE WITH REQUIREMENTS OF THE SITE'S GEO—TECH ENGINEER.
 ALL CUT AND FILL SLOPES SHALL BE 3:1 OR GREATER UNLESS INDICATED OTHERWISE.



COVER SHEET

FOR

MAINTENANCE FACILITY IMPROVEMENTS

20 OLD SCHOOL ROAD CITY OF ARCHDALE

RANDOLPH COUNTY - NORTH CAROLINA JOB No. 2021003 FEBRUARY, 2023

<u>OWNER</u>

CITY OF ARCHDALE
307 BALFOUR DRIVE
ARCHDALE, N.C. 27263

SHEET INDEX

C-1 COVER SHEET

- C-2 SITE, FINAL GRADING AND PHASE II EROSION CONTROL PLAN
- C-3 PHASE 1 EROSION CONTROL PLAN
- C-4 WATER QUALITY POND DETAILS
- C-5 EROSION CONTROL DETAIL SHEET
 - NCGO1 CONSTRUCTION GENERAL PERMIT REQUIREMENTS

TOTAL DISTURBED AREA = 1.6 AC.

SITE DATA = M-1

TAX PARCEL 7718127626 D.B. 1071 PG 148 = 1.0 AC.± TAX PARCEL 7718126604 D.B. 2136 PG 110 = 1.8 AC.± TAX PARCEL 7718126488 D.B. 2792 PG 962 = 0.3 AC.±

TOTAL SITE AREA: = $3.1 \text{ AC.}\pm$

WATERSHED DATA: RANDLEMAN GENERAL WATERSHED AREA

EX. IMPERVIOUS SURFACE AREA (ISA) = 1.14 AC. (NOTE: EX. ISA PRIOR TO 1993 = 0.89 AC.)

(NOTE: EX. ISA PRIOR TO 1993 = 0.89 AC.) PROPOSED ISA = 0.59 AC.

TOTAL ISA = 1.73 AC. % ISA = 1.73/3.1

% ISA = 1.73/3.1 = 55.8%

SOIL TYPE: EnB, HhB AVERAGE SLOPE: 5%

DISTANCE TO FLOODWAY: 1100 LF± FLOOD MAP = 3710771800 J

LATITUDE: 35.8964

LONGITUDE: -79.9739

SURFACE WATER CLASSIFICATIONS
RIVER BASIN: CAPE FEAR

STREAM NAME: MUDDY CREEK STREAM INDES: 17-9-(1)

CLASSIFICATION: WS-IV

WET DETENTION POND DATA TOTAL DRAINAGE AREA

TOTAL DRAINAGE AREA = 2.8 AC. EX. ISA (BUILDINGS/PAVEMENT) = 1.00 AC.

PROPOSED ISA = 0.59 AC.

FUTURE ALLOWABLE = 0.26 AC.

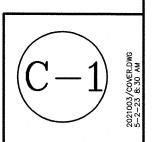
TOTAL = 1.85 AC.

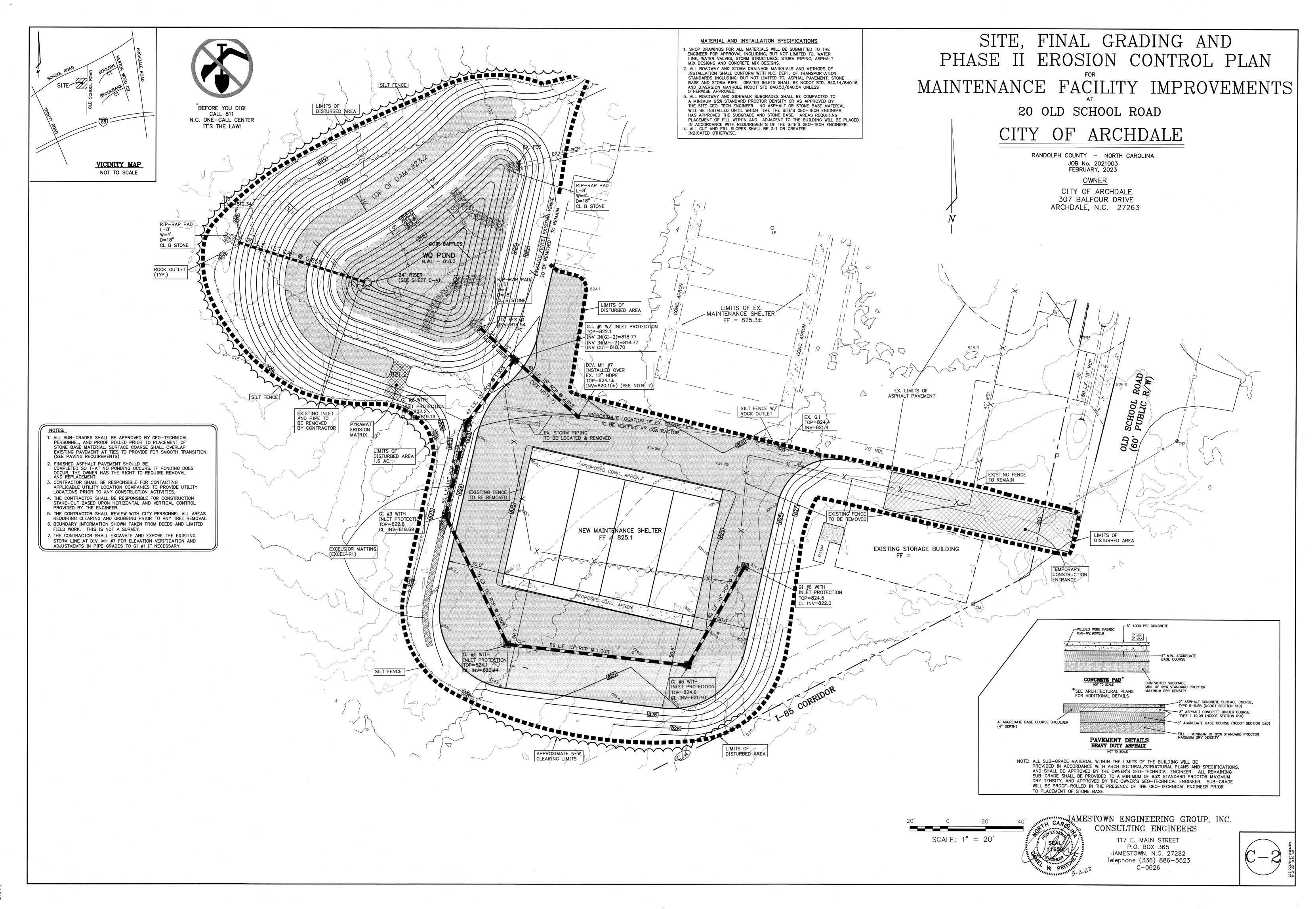
= 66.1%

30' 20' 10' 0 30' SCALE: 1" = 30'

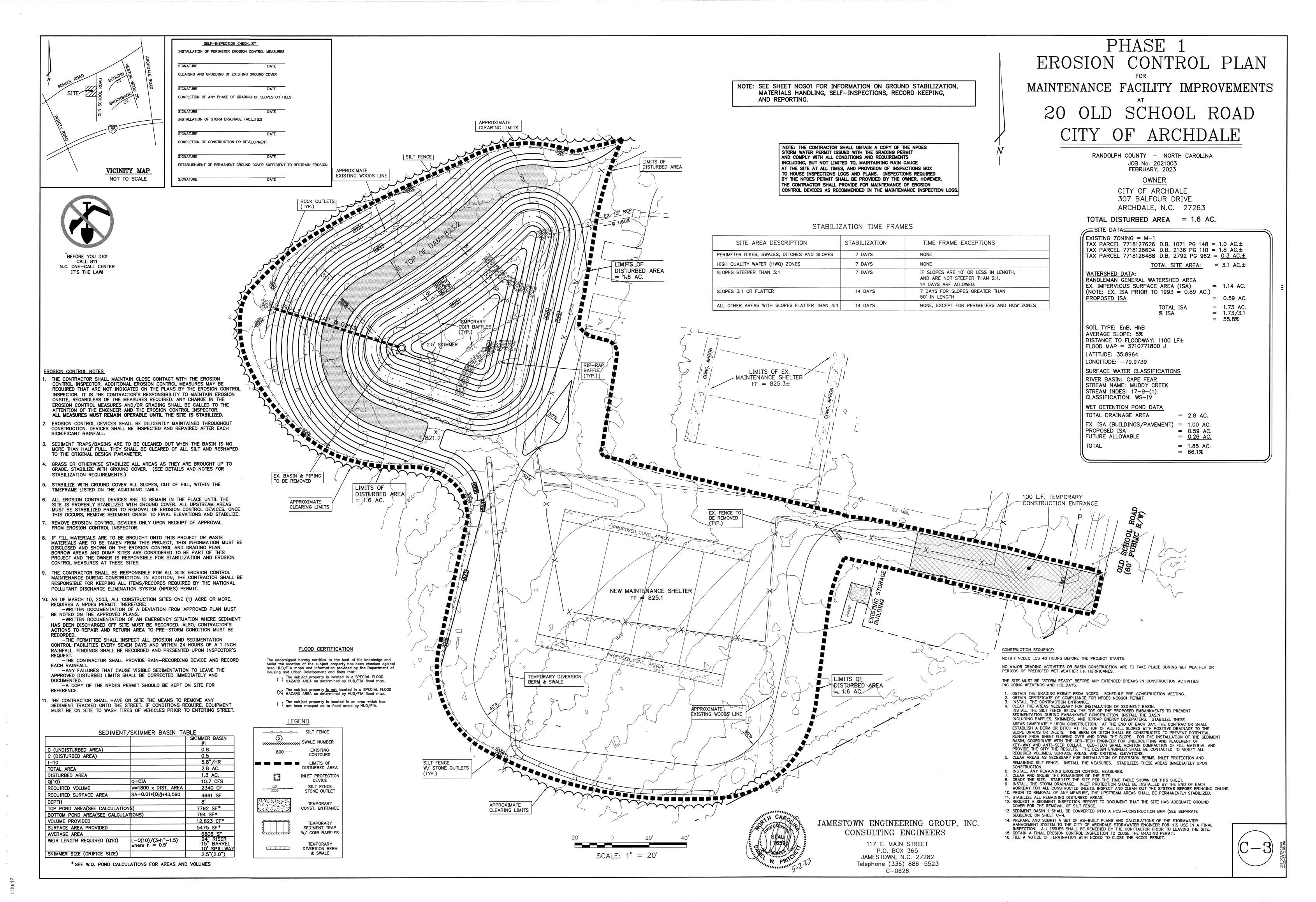
JAMESTOWN ENGINEERING GROUP, INC.
CONSULTING ENGINEERS

117 E. MAIN STREET
P.O. BOX 365
JAMESTOWN, N.C. 27282
Telephone (336) 886-5523
C-0626





Chayi.



W/ ROCK OUTLETS D=18" TOP OF DAM=823.2 RIP-RAP PAD 24" RISER ASSEMBLY TOP=4820.2 1.06" ORIFICE =813.2 6" BOT TOM DRAIN= 812. 15" INV OUT=812.9 SCALE: 1" = 20WET DETENTION POND

I/DA = 66.07%SA REQ'D = 2,887 S.F.SA PROV'D = 5.517 S.F.

DURING CONSTRUCTION, THE POND WILL FUNCTION AS A TEMPORARY SEDIMENT BASIN FOR EROSION CONTROL. THE REMOVABLE 6" PLATE SHALL REMAIN ATTACHED AND THE FAIRCLOTH SKIMMER (OR APPROVED EQUAL) SHALL BE USED TO DECANT/DRAIN THE BASIN TO THE ELEVATION OF THE BARREL INVERT. UPON STABILIZATION OF THE SITE, ALL SEDIMENT SHALL BE REMOVED FROM THE BASIN AND THE 6" PLATE AND THE SKIMMER SHALL BE REMOVED. THE CONTRACTOR SHALL COMPLETE CONSTRUCTION OF THE POND (SEE POND CONSTRUCTION SEQUENCE).

POND CONSTRUCTION SEQUENCE:

3. INSTALL TEMPORARY EROSION CONTROL DEVICES INCLUDING BUT NOT LIMITED TO THE TEMPORARY BERM AND SILT FENCE.

4. CLEAR AND GRUB REMAINING AREAS. 5. GRADE POND, COORDINATING WITH GEO-TECH ENGINEER FOR UNDERCUTTING OF KEY-WAY AND PLACEMENT OF ALL FILL MATERIAL. AS FILL IS PLACED, ENSURE FLOW IS DIRECTED INTO THE POND. SILT FENCE SHALL PROTECT FILL AREAS ON THE DOWNSTREAM SIDE OF THE DAM. 6. COORDINATING WITH GEO-TECH ENGINEER PLACEMENT OF FILTER DIAPHRAGM AND KEY-WAY COMPACTION REQUIREMENTS.

7. FINE GRADE SITE ASSURING THAT ALL MINIMUM SLOPES AND BENCHES ARE PROVIDED FOR. 8. CONTACT DESIGN ENGINEER FOR VERIFICATION OF ALL REQUIRED VOLUMES/SURFACE AREAS AND AS-BUILT OF SPILLWAY STRUCTURES. 9. REVISE GRADES IF NECESSARY. 10. REQUEST INSPECTION BY APPLICABLE NCDEQ PERSONNEL

11. INSTALL RIP-RAP PADS, COIR BAFFLES AND ANY OTHER EROSION CONTROL DEVICES.

12. SEED ALL DISTURBED AREAS. 13. ONCE SITE IS STABILIZED AND ALL HARD SURFACES ARE IN PLACE, CLEAN OUT BASIN

PRIOR TO CONVERTING TO SCM/BMP. REMOVE ALL SEDIMENT AND DISPOSE OF ADEQUATELY. 14. REMOVE ALL TEMPORARY EROSION CONTROL DEVISES SUCH AS COIR BAFFLES, SKIMMER, ETC. 15. INSTALL LINER IN POND UP TO THE MIDDLE OF THE SHELF (IF NECESSARY). RE-GRADE AS NECESSARY TO FINAL DESIGN GRADES. INSTALL RIP RAP BAFFLÈS. 16. CONTACT DESIGN ENGINEER FOR VERIFICATION OF ALL REQUIRED VOLUMES/SURFACE AREAS AND AS-BUILT OF SPILLWAY STRUCTURES. 17. REVISE GRADES IF NECESSARY.

18. MAKE ADJUSTMENTS AS NECESSARY TO THE RISER AND CLOSE THE DRAIN GATE TO ALLOW POND TO BEGIN TO ATTAIN ITS PERMANENT POOL ENSURING NO LEAKAGE OR INFILTRATION. 19. INSTALL SHELF PLANTINGS PER THE APPROVED POND LANDSCAPE PLAN. SEED AND STABILIZE ALL OF THE POND SLOPES AND SURROUNDING AREAS PER SEEDING/STABILIZATION SPECIFICATIONS (USE ONLY NON-CLUMPING TURF GRASS FOR THE POND SLOPES).
20. PREPARE AND SUBMIT A SET OF THE AS-BUILT PLANS AND CALCULATIONS OF THE STORMWATER MANAGEMENT SYSTEM TO THE CITY OF TRINITY STORMWATER ENGINEER FOR THEIR USE IN A FINAL INSPECTION.

(ALL OF THESE ITEMS SHALL BE ADDRESSED BEFORE THE CONTRACTOR LEAVES THE SITE TO ENSURE ANY DISCREPANCIES ARE REMEDIED.)

SUGGESTED PLANTING LIST NUMBER OF PLANTS SYM SPECIES COMMON NAME HERBACEOUS PLANTS (SHALLOW WATER ZONE) (1580 SF/200SF*50=395) Swamp Milkweed Asclepias incarnata Scarlet rose mallow Hibiscus coccineus

Kosteletzkya viginica Seashore Mallow HERBACEOUS PLANTS (SHALLOW LAND ZONE) (1600 SF/200SF*50=400) CS Carex spp.

Sedge Soft rush Juncus effusus Panicum virgatum Switchgrass ROUTINE MAINTENANCE — To be provided by the Property Owner at the designated frequencies for each of the

A) MOWING — Quarterly — Grass vegetation is an effective way to prevent erosion of the embankment surfaces. While not necessary for embankment stabilization, mowing the area surrounding a pond helps eliminate problems from animal pests and provides a more aesthetically appealing area. Grass shall be moved when the uniform height exceends six (6) inches.

B) DEBRIS REMOVAL — Many permanent runoff control structures have pipe and riser spillways with low flow orifices. Any of these that become plugged with trash or debris will reduce the spillway capacity. As a result, the emergency spillway will operate more frequently and there is a greater potential for overtopping the dam. Trash racks are normally installed to prevent clogging and debris must be removed from these devices periodically. For these reasons, it is recommended to inspect the trash racks monthly and/or after major storm events and to remove debris as

C) MINOR SLOPE FAILURES — Minor slope failures should be repaired by seeding or sodding as soon as they are discovered to prevent major damage or sediment build—up in the pond. Re—occurring slope failures may be an indication of a more serious problem and should be brought to the attention of the governmental office having

D) PERIODIC INSPECTIONS — After storm inspections should be done after major storm events (more than 2 inches of rainfall in 24 hours) or after extended periods of rainy weather (more than 2 or three days). Major items to look fo are damage to spillways or channels, excessive debris build-up on trash guards, and eroded or slumped embankments. E) VALVES AND GATES — The reservoir drain should always be operable so that the permanent pool can be drawn down in case of an emergency, for repairs, or for clean—out of sediment. Reservoir drain valves that have not been operated for a long time are often a problem in that the valve may not open. Also it may not close after opening which will drain the impoundment. All valves should be operated from the fully closed to the fully open position at least 🕻 twice a year.

F) TREES AND BRUSH - Trees and brush should not be permitted on embankment surfaces or in vegetated spillways. Brush and trees provide a haven for burrowing animals (like muskrats and groundhogs) and extensive root systems can weaken an earth fill dam or provide a pathway for excessive water flow through the dams. Tree growth adjacent to concrete walls and structures will eventually cause damage to footings creating cracks and possible

G) MISCELLANEOUS ITEMS — Excessive plant growth, algae blooms, odors, discoloration, perceived animal pests, etc. should be addressed with the governmental office leaving jurisdiction for watershed protection on an as needed basis. Solutions to these types of problems should be non-chemical and deemed safe for drinking water supply

H) ANNUAL INSPECTIONS - Annual maintenance inspections will be performed by the owner. Documentation of

inspections and maintenance must be submitted to the Stormwater Engineer annually upon the anniversary of the as—built plan set approval by the City. The "Wet Detention Basin Operation and Maintenance Manual" is available on the City of Greensboro website. This form shall be utilized for the annual inspection. NON-ROUTINE MAINTENANCE - To be provided by the Property Owner at the designated frequencies for each of the following items. These maintenance items will require a registered professional engineer to prepare a plan and/or

detail(s) and to certify completion of the maintenance in accordance with the plan and/or detail(s). All revisions and repairs to permanent runoff control structures shall be done in accordance with City of Winston—Sálem guidelines and A) SEDIMENT CLEAN-OUT — Water quality measures like wet detention ponds and retention ponds trap sediment

as an inherent part of their function. With time, the volume allocated to sediment will become filled and they must be cleaned out to remain effective.

Sediment removal from the pool, sediment forebay(s) or rip—rap baffles shall be detailed to indicate finish elevations (relative to riser), removal and disposal method(s), stabilization of disturbed areas, erosion control, and stabilization of spoil areas. Engineering detail and certifications for rip—rap baffle clean—out only, may be waived on a case—by—case basis depending upon the extent of the work involved and whether the baffle is damaged. B) CHANNEL STABILIZATION - Grassed waterways will filter out sediment (when there is a sediment load) and they will in time aggrade to the point that they no longer have the capacity to handle the required flow. This is a major maintenance problem. Another problem is erosion of the channel bottom, particularly before the grass can become

Both situations require repair, possibly regrading. Small rills can be repaired by sodding, the preferred approach. However, waterways, which have lost much of their capacity due to sedimentation, will require reshaping and

revegetating. Waterways need to be mowed a minimum of three times a year to prevent tree growth and excessively high

Rip-rap channels need to be maintained to prohibit tree growth on the banks and bottom as necessary to maintain the required capacity. Where rip—rap is used, the channel should be inspected after major storms to see if it is damaged. I

so, rip—rap will need to be replaced in the damaged areas. C) PRINCIPAL SPILLWAY CONDUITS - Most water quality ponds have a pipe or conduit that serves as a principal spillway. These carry normal stream flow and small flood flows safely past the dam throughout the life of the structure. Pipes through embankments can be extremely dangerous to the embankment if problems develop after

Frequent inspection is necessary to ensure the spillway conduit is functioning properly. All conduits should be inspected for improper alignment, elongation and displacement of joints, cracks, leaks, loss of protective coating,

corrosion, and blockage Problems with conduits occur most frequently at joints. Open joints can cause erosion of embankment materials or cause leakage of water. The outlet should be checked for signs of water seeping along the exterior of the pipe. A depression in the soil surface may be a sign the joint is no longer watertight and that soil is being removed from around the pipe. Metal pipe spillways will have to be replaced when they become so corroded that they are no longer

Principal spillway replacement shall be detailed, approved, constructed, and certified in accordance with Guilford

County guidelines. D) EMERGENCY SPILLWAYS — Channel and structure repair or replacement shall be detailed, approved,

E) DAM FAILURE — Which endangers the structural integrity or watertightness of the dam shall have a plan and detail(s) prepared to repair said damage.

F) SEEPAGE — At most dams, some water will seep from the reservoir through the foundation. The need for remedial seepage control will depend on the quantity and location of the seepage. As a general rule, seepage control measures construction is complete) will not be necessary unless seepage is threatening the safety of the dam. Remedial OVER ASSEMBLY, SEDIMENT STORAGE AREA IN FRONT OF ASSEMBLY, AND EROSION CONTROL measures to control seepage will be required if the safety of the dam is threatened. All methods to control seepage of the dam is threatened.

			·
DAM	DESIGN DATA	SUN	MARY
	BOTTOM ELEV.	=	812.0
	TOP OF RISER ELEVATION	==	820.2
	EMER. SPILLWAY ELEVATION	=	821.2
	NORMAL WATER LEVEL	=	818.2
	SECONDARY ORIFICES	=	1.06"
	TOP OF DAM	=	823.2
	1 YEAR H.W.L.	-	820.3
	2 YEAR H.W.L.	=	820.4
	10 YEAR H.W.L.		820.8
	100 YEAR H.W.L.	*******	821.2
	SURFACE AREA REQUIRED SURFACE AREA PROVIDED	=	2,887 S.F. 5,517 S.F.
	WQV REQUIRED WQV PROVIDED	=	6,552 C.F. 12,823 C.F.
	1 YR. 24-HR PRE-DEV. PEA	K =	2.7 CFS

1 YR. 24-HR POST-DEV. PEAK = 0.3 CFS

STORMWATER QUANTITY CONTROL THE STORMWATER CONTROL STRUCTURE(S) SHOWN ON THIS PLAN ARE DESIGNED IN ACCORDANCE WITH CITY OF ARCHDALE AND NCDEQ STANDARDS TO REDUCE THE POST-DEVELOPMENT 1-YEAR 24 HOUR STORM EVENT. STORMWATER QUALITY CONTROL

TO BE CONTROLLED PER NCDEQ REGULATIONS IS CONTROLLED BY A PERMANENT ENGINEERED

STORMWATER QUALITY CONTROL THAT HAS BEEN DESIGNED TO MEET OR

EXCEED THE REQUIREMENTS IN THE NCDEQ BMP MANUAL.

I CERTIFY THAT, PURSUANT TO GENERALLY ACCEPTED ENGINEERING STANDARDS IN THE COMMUNITY, IT IS MY

PROFESSIONAL OPINION THAT RUNOFF FROM THE FIRST INCH OF RAINFALL FROM AREAS THAT ARE REQUIRED

5-2-23

CONTOURS LIMITS OF DEVICE SILT FENCE STONE OUTLET TEMPORARY

DE DE CHE

SHEET NO.

DISTURBED AREA INLET PROTECTION CONST. ENTRANCE **TEMPORARY** SEDIMENT TRAP W/ COIR BAFFLES TEMPORARY DIVERSION BERM & SWALE

BOUYANCY CALCULAT	TONS					
RISER 7.3 $\left(\frac{24/12^n}{2}\right)^2 \pi = 1$	22.9 FT. FORCE (- , ,	$(62.4 \text{ lb./FT}^3) = 2,5$			
BARREL (15.0') $\left(\frac{15"/12"}{2}\right)^2 \pi = \sum_{i=1}^{n} \frac{1}{2} \sum_{i=$		$TE = \frac{2,577 \text{ lb.}}{87.6 \text{ lb./F1}^3}$	= 29.5 FT³ ⇒ USE	35 CF		
$\Sigma = \frac{3}{1}$	41.3 FT.			1 3	TOP DAM =	= 823.
	=			ELEV.	= 821.2	ļ
*	***************************************			×		
		10'		PYRAMA	AT EROSION	MATRI
	SECTION -	EMERGENCY	SPILLWAY			i
		NOT TO SCALE				

THIS IS NOT A SURVEY. NOT FOR RECORD, SALES, OR CONVEYANCE.

LANDSCAPE NOTES: 1. PLANT MATERIALS SHALL BE PURCHASED FROM A LOCAL SOURCE TO ENSURE MAXIMUM SURVIVABILITY. 2. ALL LANDSCAPE MATERIAL SHALL BE PLANTED IN GOOD TOPSOIL. NATIVE UNDERLYING SOILS MAY BE SUITABLE FOR PLANTING IF AMENDED WITH SUFFICIENT QUANTITIES OF WELL-AGED COMPOST TILLED INTO THE SUBGRADE. COMPOST USED SHOULD MEET SPECIFICATIONS FOR GRADE 'A' COMPOST QUALITY.

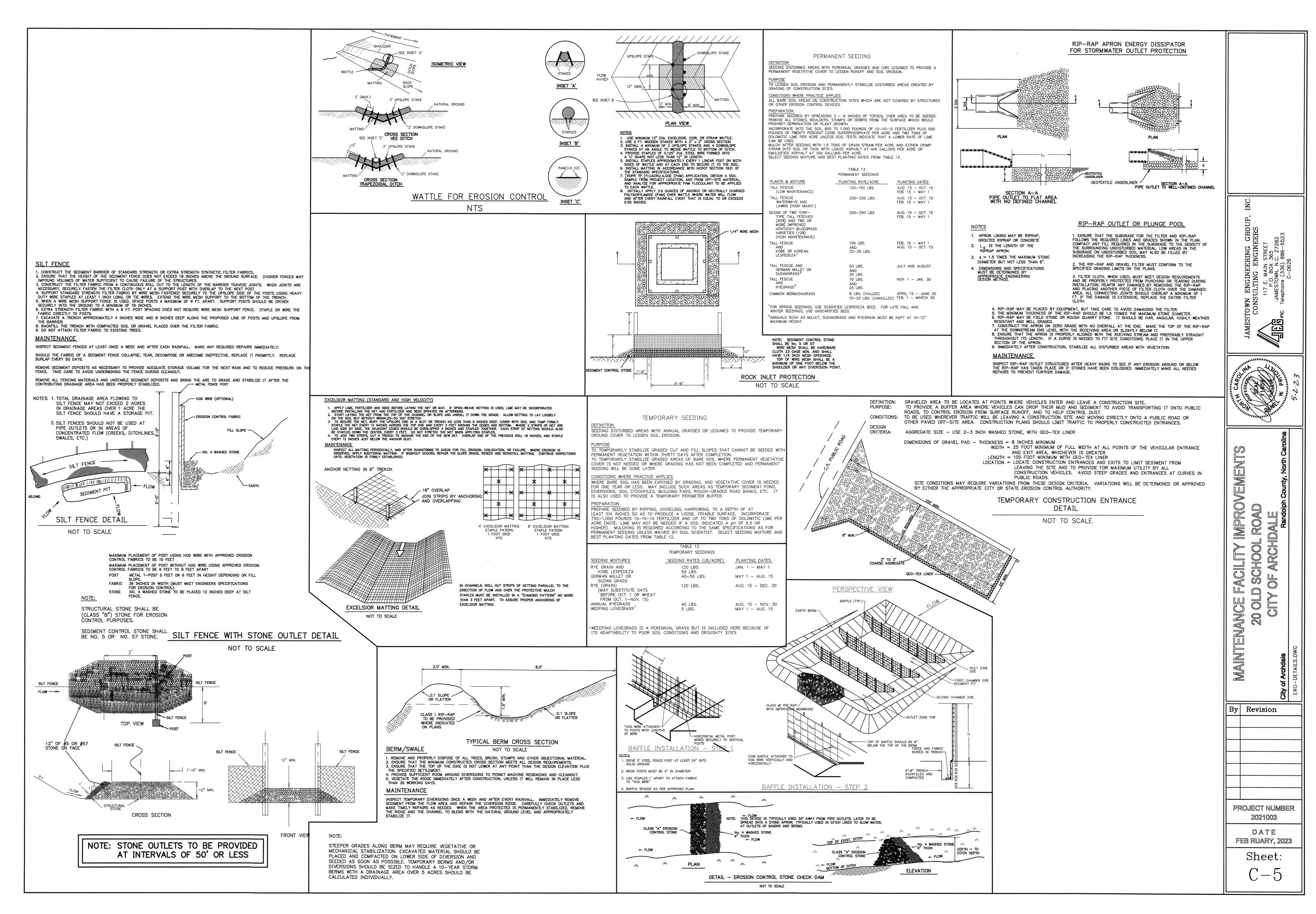
I. PLANT MATERIAL SHALL CONFORM TO THE CURRENT EDITION OF AMERICAN STANDARDS FOR NURSERY STOCK. 5. PLANTS SHALL HAVE NORMAL, WELL—DEVELOPED BRANCHES AND VIGOROUS ROOT SYSTEMS, AND BE FREE FROM PHYSICAL DEFECTS, PLANT DISEASES, AND INSECT PESTS, TAGGED FOR IDENTIFICATION. 6. PLANT SIZES SHALL BE NO LESS THAN 1-QUART FOR HERBACEOUS PLANTS.

3. SOIL AMENDMENTS AND PLANTING SHALL NOT COMPROMISE THE POND LINER.

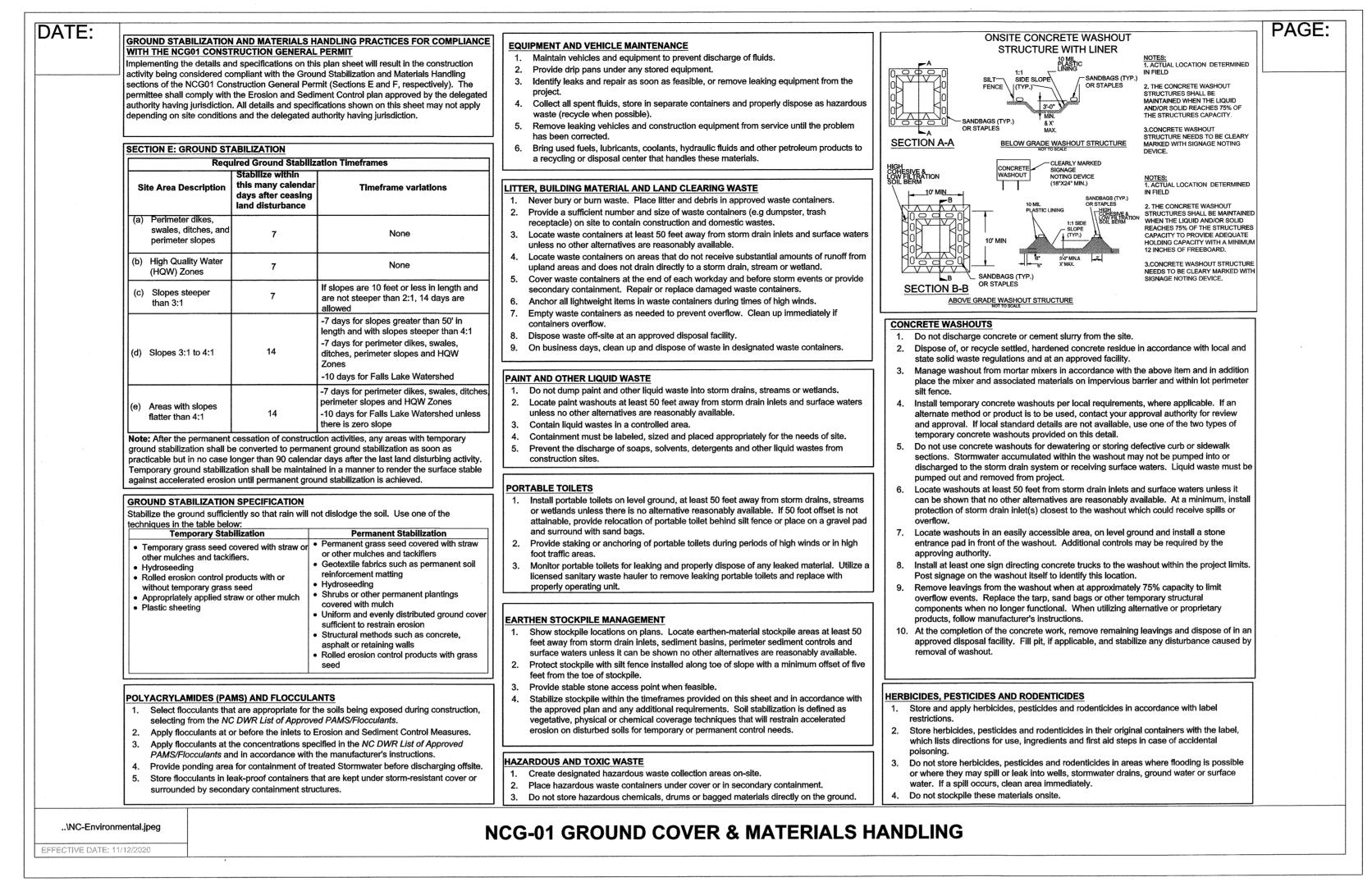
SUMMER PLANTING DRASTICALLY INCREASES PLANT MORTALITY AND REQUIRES REGULAR WATERING IMMEDIATELY FOLLOWING INSTALLATION 8. DURING THE 12-MONTH WARRANTY PERIOD, ALL PLANTS THAT DO NOT SURVIVE SHALL BE REPLACED AS NEEDED TO MAINTAIN THE FUNCTION OF THE VEGETATION. ESTABLISHMENT PROCEDURES, SUCH AS CONTROL OF INVASIVE WEEDS, ANIMAL AND VANDAL DAMAGE,

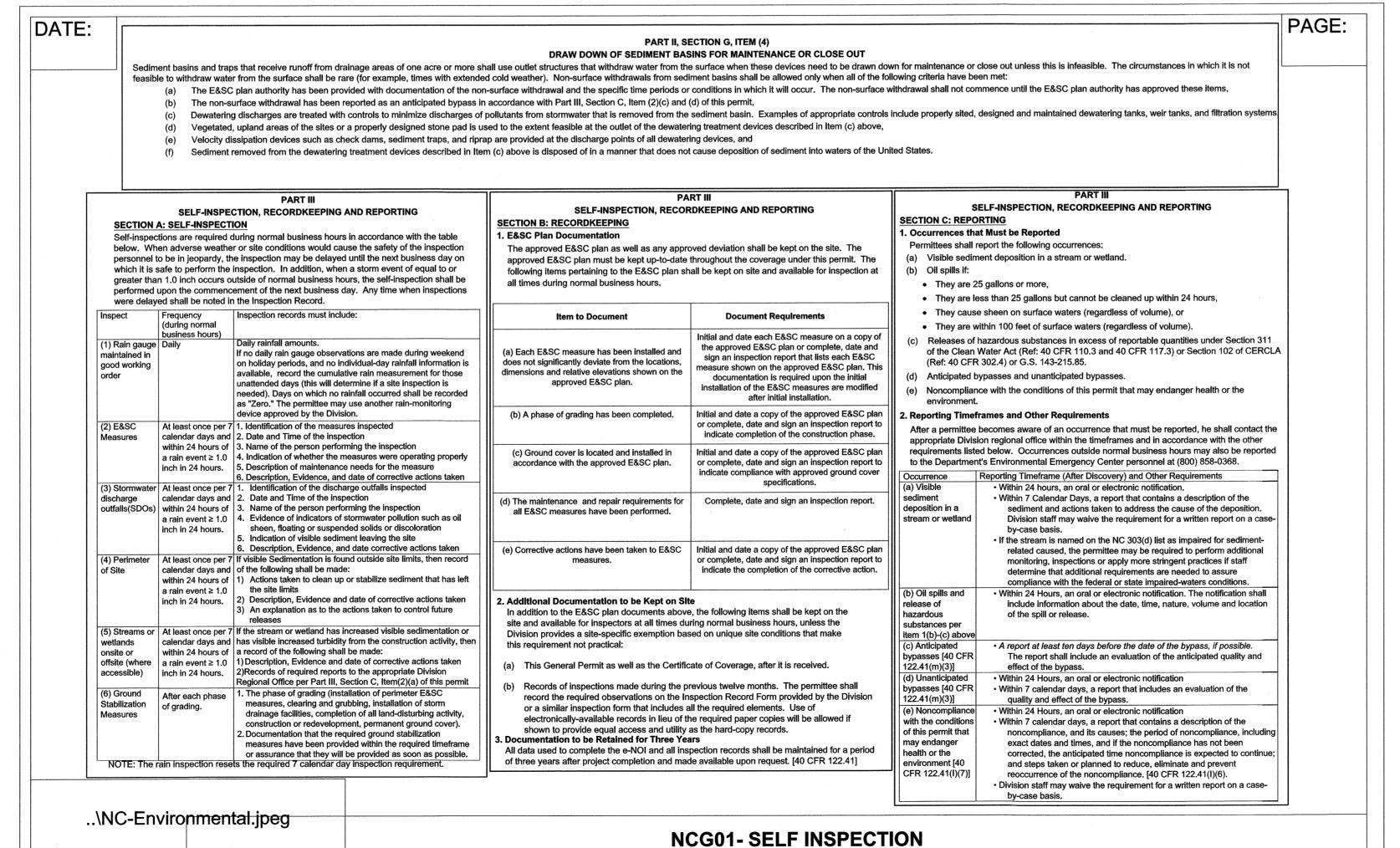
7. FALL AND WINTER PLANTING ARE BEST. SPRING IS ACCEPTABLE BUT WILL REQUIRE MORE SUMMER WATERING THAN FALL PLANTING.

MULCHING, RE-STAKING, WATERING, AND MESH OR TUBE PROTECTION REPLACEMENT, SHALL BE PERFORMED BY THE CONTRACTOR TO IMPROVE PLANT VIGOR AND SURVIVAL. STAKING SHALL BE REMOVED AFTER ESTABLISHMENT (APPROX. 12 MONTHS) TO PREVENT STRANGLING OF THE PLANTS.



mike12

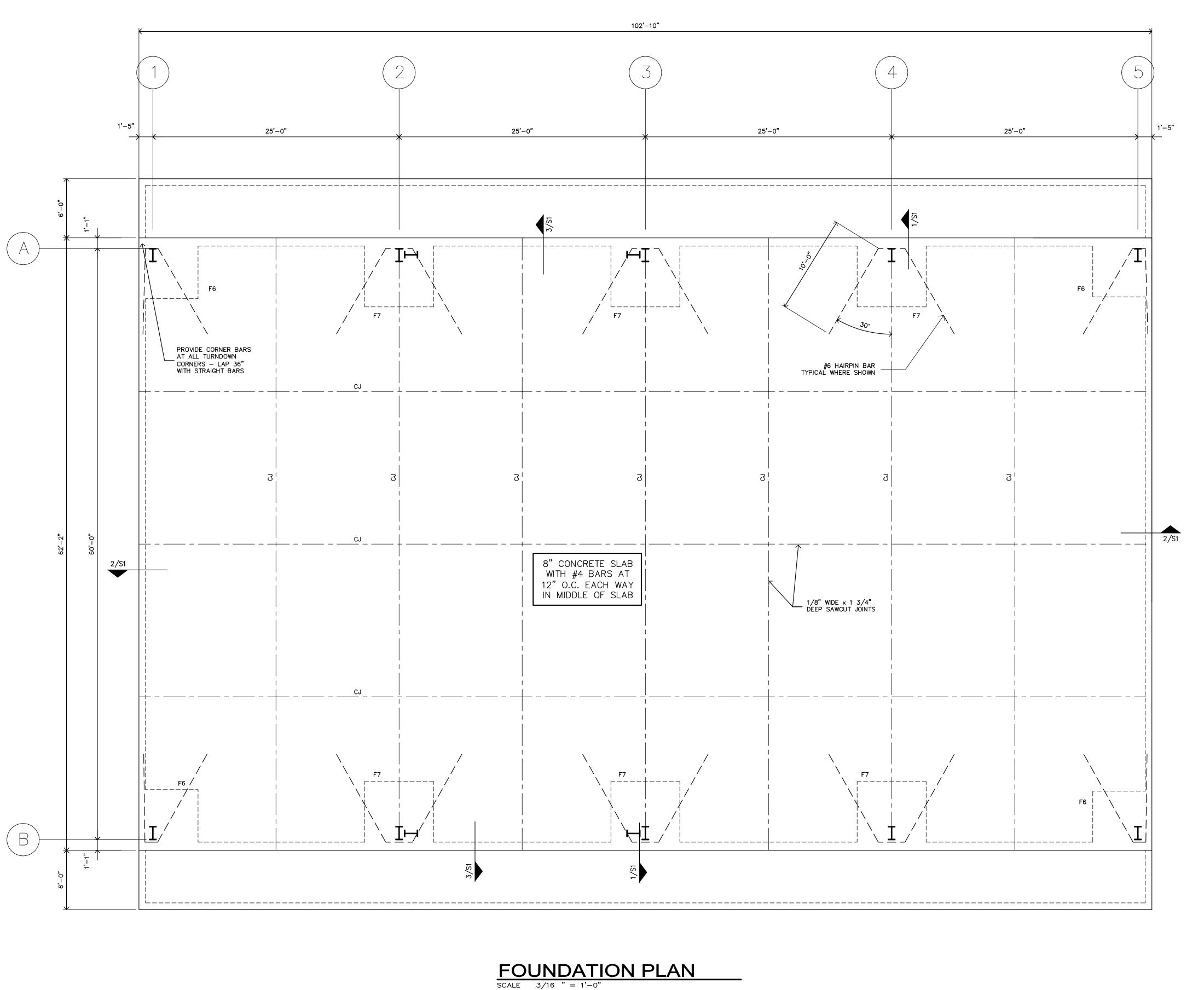




FFECTIVE DATE: 11/12/2020

SHEET NO.

NCG01 CONSTRUCTION GENERAL PERMIT REQUIREMENTS



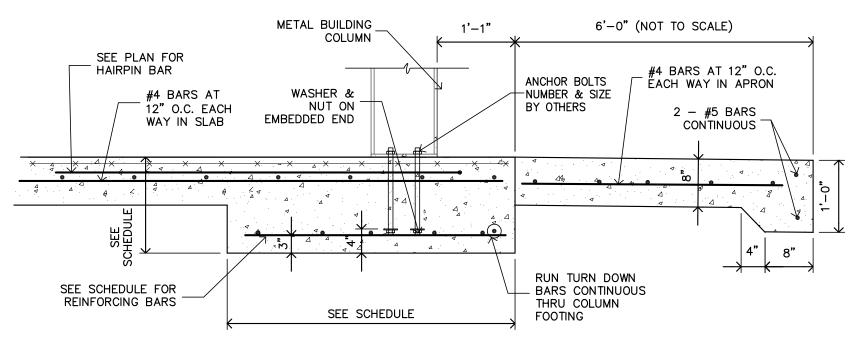
FOOTING SCHEDULE

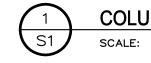
FOOTING F6: $6'-0" \times 6'-0" \times 2'-0"$ THICK WITH (8) #5 BARS EACH WAY TOP AND BOTTOM

FOOTING F7: 7'-0" x 7'-0" x 2'-0" THICK WITH (8) #6 BARS EACH WAY TOP AND BOTTOM

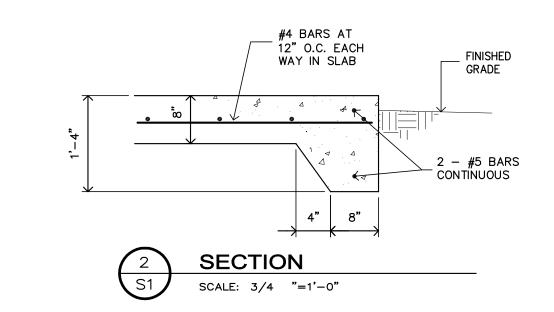
FOUNDATION NOTES:

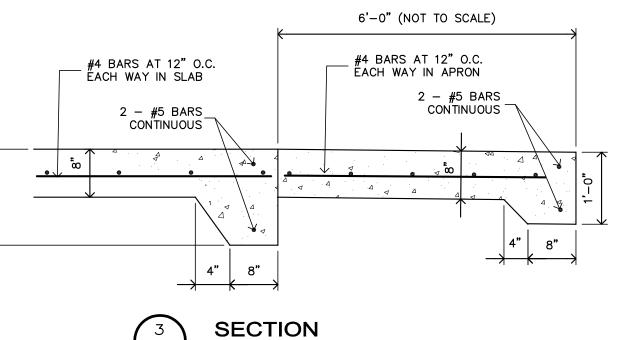
- 1. UNLESS NOTED OTHERWISE, FINISHED FLOOR ELEVATION IS +0'-0". ELEVATIONS OF TOPS OF FOOTING AND POINT ELEVATIONS OF SLABS
- RELATIVE TO FINISHED FLOOR ARE INDICATED THUS (...) ON PLAN. 2. UNLESS NOTED OTHERWISE, SLAB ON GRADE SHALL BE 8 INCHES THICK AND SHALL BE REINFORCED WITH #4 BARS AT 12" O.C. BOTH WAYS IN MIDDLE OF SLAB. MINIMUM LAP SPLICE = 30 INCHES. PROVIDE 4 INCHES OF CRUSHED STONE BELOW SLAB.
- 3. CONTROL JOINTS IN SLABS ON GRADE ARE INDICATED THUS -- AND/OR ARE LABELED "C.J." ON PLAN. JOINTS MAY BE EITHER CAST IN PLACE OR SAW CUT. SEE TYPICAL DETAILS FOR SAW CUT CONTROL JOINTS.
- 4. FOOTING DEPTHS ARE ON PLAN FOR ESTIMATING PURPOSES ONLY AND REPRESENT THE MINIMUM INTENT OF THE DESIGN. IF REQUIRED BY SOIL, GRADING, UNDERGROUND UTILITY. OR OTHER CONDITIONS. FOOTING DEPTHS SHALL BE INCREASED. UNDER NO CIRCUMSTANCES SHALL FOOTINGS BE PLACED AT A HIGHER ELEVATION THAN THAT INDICATED ON THE PLANS WITHOUT APPROVAL OF THE ENGINEER. THE BOTTOMS OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 1'-6" BELOW FINISHED GRADE.
- 5. MINIMUM CONCRETE COMPRESSIVE STRENGTH SHALL BE 4000 PSI AT 28 DAYS UNLESS NOTED OTHERWISE.
- MINIMUM CONCRETE COMPRESSIVE STRENGTH FOR FLOOR SLAB SHALL BE 4000 PSI AT 28 DAYS. REINFORCING STEEL SHALL BE GRADE 60.
- 8. ALL REINFORCING DETAILING, FABRICATION AND PLACEMENT SHALL BE IN
- ACCORDANCE WITH ACI 318 AND ACI 301.
- 9. PRESUMPTIVE DESIGN SOIL PRESSURE = 2000 PSF. 10. THE CONTRACTOR SHALL COORDINATE THE ELEVATIONS OF ALL FOOTINGS WITH
- RESPECT TO UNDERGROUND UTILITIES.
- 11. VERIFY LOCATION, DEPTH, AND SIZE OF ALL FLOOR SLAB DEPRESSIONS
- WITH ARCHITECTURAL DRAWINGS.
- 12. CONCRETE FOR EXTERIOR SLABS SHALL BE AIR ENTRAINED.





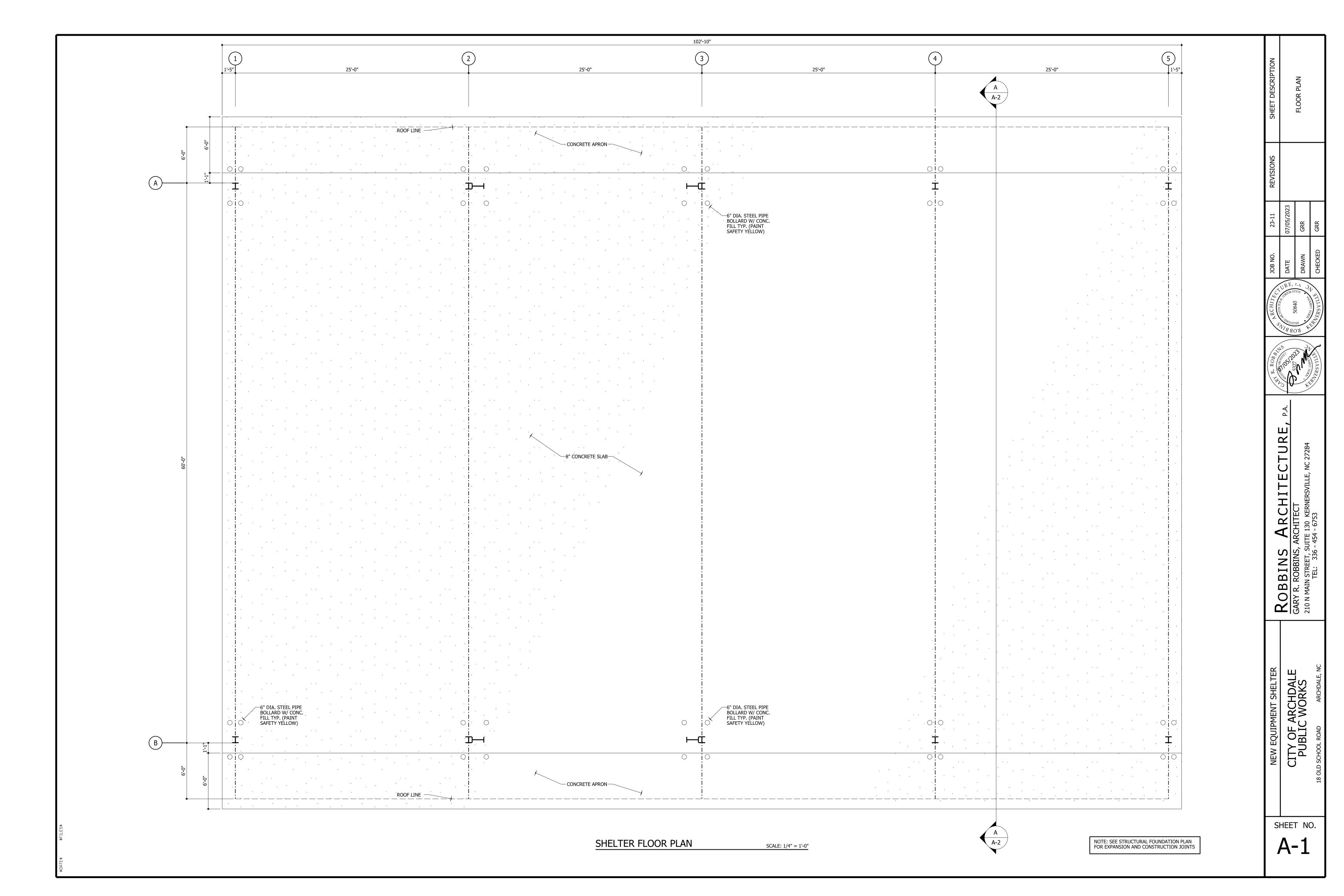
COLUMN FOOTING SECTION SCALE: 3/4 "=1'-0"

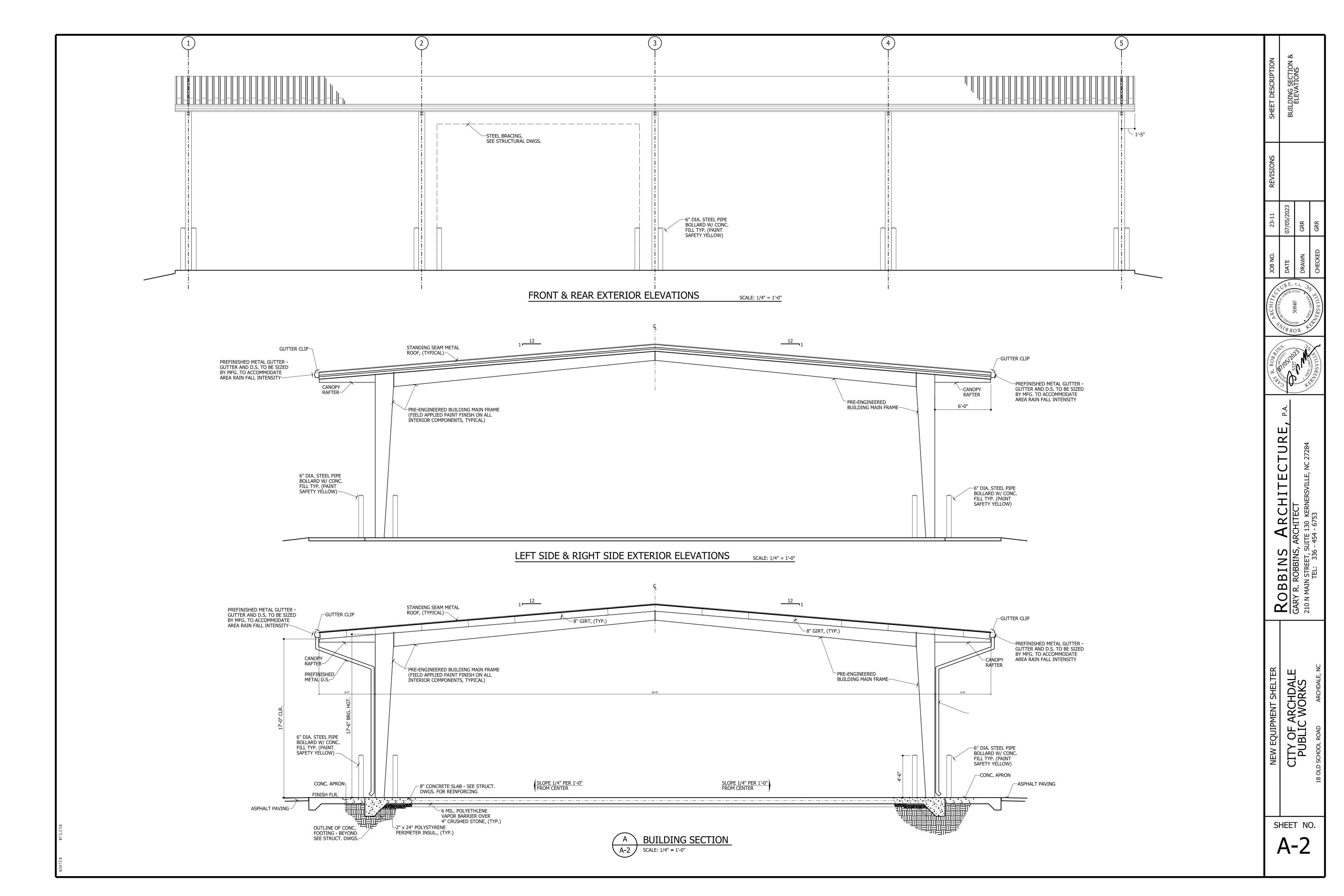


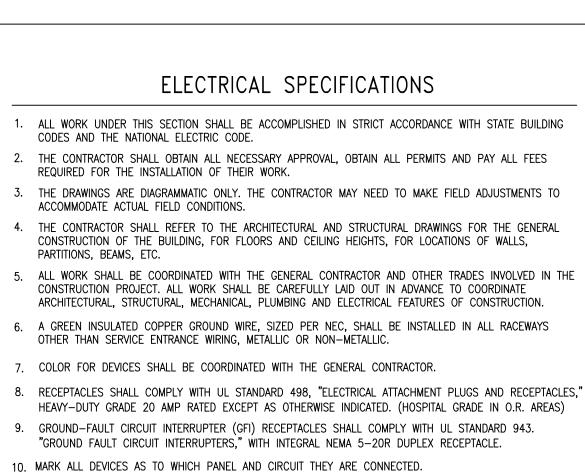


ROBBINS,
GARY R. ROBBINS,
210 N MAIN STREET, SU
TEL: 336-4

SHEET NO.







11. ELECTRICAL SERVICE IS EXISTING 120/240V SINGLE PHASE, 3 WIRE PANEL. E.C. SHALL PAY FOR ALL REQUIRED LICENSED, PERMITS, FEES, ETC. NECESSARY TO OBTAIN ELECTRIC SERVICE. VERIFY SIZE AND LOCATION OF EXISTING CONDUITS WITH FACILITY AND UTILITY COMPANY PRIOR TO START OF CONSTRUCTION.

12. ALL WIRING FOR EQUIPMENT SHALL BE COPPER WITH ONE OF THE FOLLOWING TYPES OF INSULATION: THW, THHW, THWN WITH A RATING OF AT LEAST 75 DEG. C.

13. BACK TO BACK DEVICES LOCATED IN RATED WALLS SHALL BE SEPARATED BY A DISTANCE OF AT LEAST 24" HORIZONTALLY.

14. FINAL LOCATIONS OF ALL EXIT AND EMERGENCY LIGHTS SHALL BE VERIFIED WITH THE BUILDING INSPECTOR PRIOR TO INSTALLATION.

15. WIRING SHALL BE INSTALLED IN EMT CONDUIT, NO M.C. CABLE TO BE USED. CONDUIT IS TO BE INSTALLED PARALLEL OR AT 90deg TO BUILDING WALLS AND INSTALLED IN A WORKMAN-LIKE MANNER. CONNECTION TO EQUIPMENT SHALL BE WITH LIQUID TIGHT FLEXIBLE METAL CONDUIT, WHERE VIBRATION OR ROUTING IS A CONCERN. USE APPROPRIATE NEMA ENCLOSURES FOR JUNCTION BOXES AND DEVICES, INDOOR AND OUTDOOR.

SYMBOL SCHEDULE

> SWITCHED CIRCUITS (LIGHTING, ETC.)

(HOME RUNS) CONDUIT CONCEALED ABOVE CEILING AND/OR IN WALLS OR EXPOSED, WHERE ALLOWED. 2#12 & #12EG, UNLESS NOTED.

CONNECTIONS BETWEEN JUNCTION BOXES AND SWITCHES TO DISTRIBUTE HOME RUNS — 2#12 & #12EG, UNLESS NOTED.

DEDICATED 20A DUPLEX RECEPTACLE MOUNTED 16" AFF UNLESS OTHERWISE NOTED

15A OR 20A DUPLEX RECEPTACLE MOUNTED 16" AFF UNLESS OTHERWISE NOTED \bigcirc

15A OR 20A QUAD RECEPTACLE MOUNTED 16" AFF UNLESS OTHERWISE NOTED

240V 1ph RECEPTACLE

240V 3ph RECEPTACLE

FLOOR-MOUNTED RECEPTACLE

20A SINGLE POLE SWITCH MOUNTED 46" AFF UNLESS OTHERWISE NOTED

20A THREE WAY SWITCH MOUNTED 46" AFF UNLESS OTHERWISE NOTED

WALL RECESSED DUAL TECHNOLOGY OCCUPANCY SENSOR

TELEPHONE/DATA OUTLET MOUNTED 44" AT COUNTERS, 16" IN OFFICES

JUNCTION OR PULL BOX, SIZE AS INDICATED OR REQUIRED

F SAFETY SWITCH, SEE NOTE ON PLAN

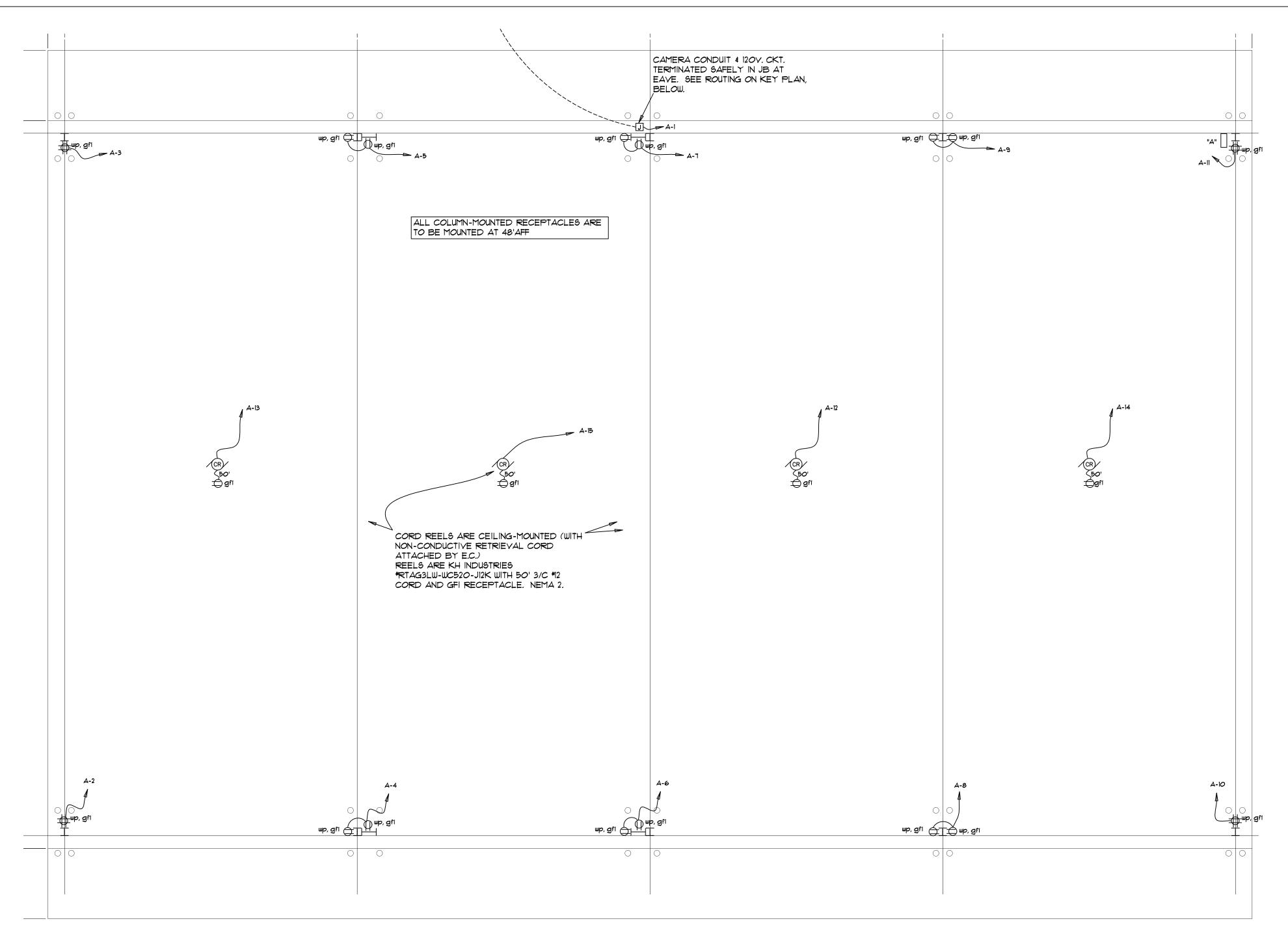
MOLDED CASE CIRCUIT BREAKER

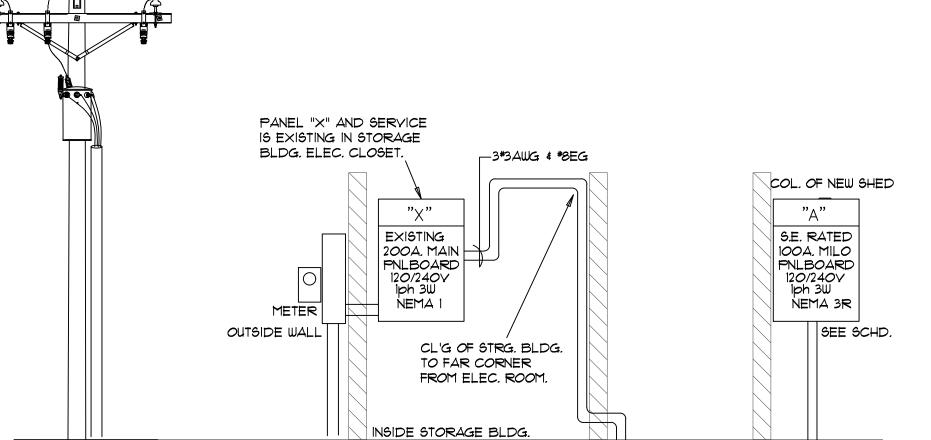
ELECTRICALLY OPERATED COMBINATION STARTER

/HP/ MOTOR CONNECTION, NUMBER INDICATES HORSEPOWER

`-----

UTILITY WIRING EXT'G

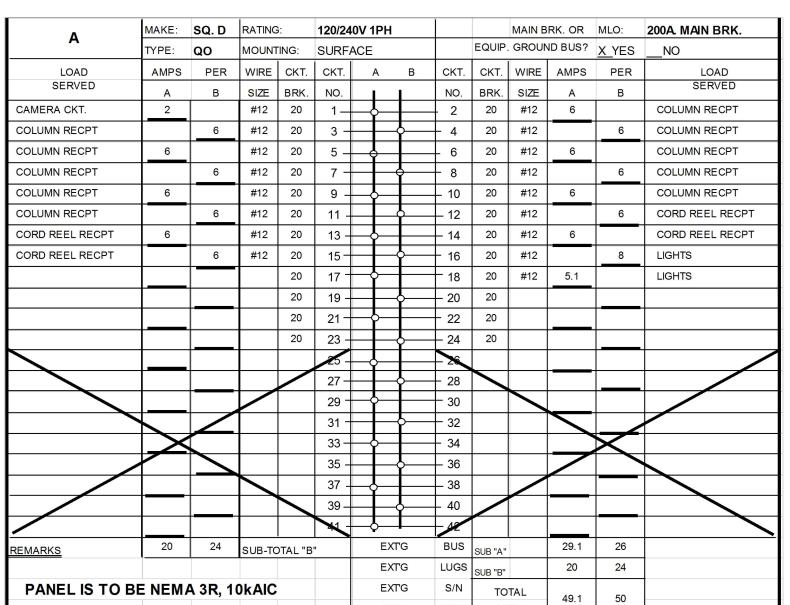






UNDERGROUND TO

SHED SEE KEY PLAN



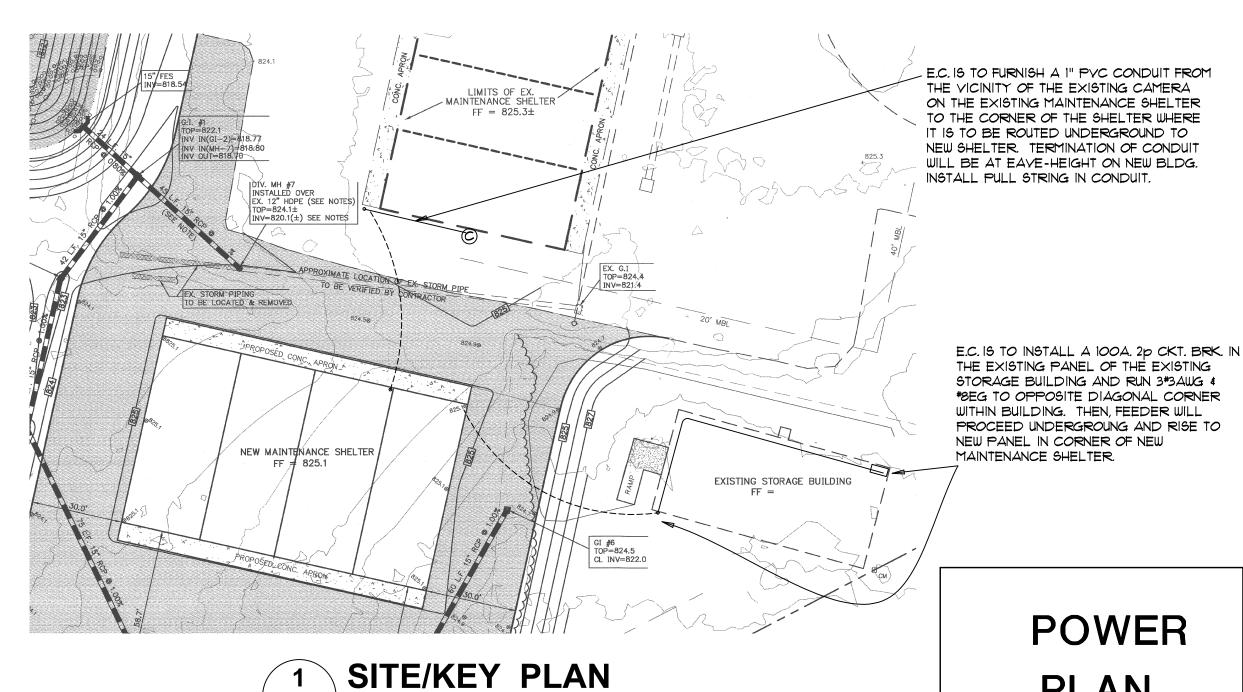
TOP

FEED

AMPS

E1 $\sqrt{3/16"} = 1'-0"$

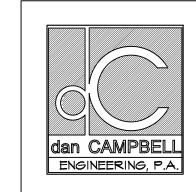
POWER PLAN



E1 $\int \frac{1}{32} = 1'-0''$

POWER PLAN

Approved For Construction



CAMPBELL ENGINEERING, PA

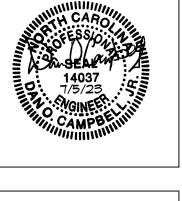
O KY

~

911 South Chapman St. Greensboro, N.C. 27403 (336) 370-4980 dceng@bellsouth.net

PROJECT NO. 23090 REVISIONS





0

ROAI C. SCHOOL DALE, N. SE AR(20 4

DRAWINGS 4

> July 5, 2023 CD E-1

OF _2

LIGHTING PLAN **E**3 **3/16" = 1'-0"**

(NEW) LIGHTING SCHEDULE & ENERGY TABULATION

FIXTURE COUNT IS FOR ENERGY CALCULATIONS ONLY. CONFIRM FINAL COUNTS WITH OWNER OR OWNER'S REP.

TYPE	FIXTURE SYMBOL	FIXTURE DESCRIPTION	MANUFACTURER	# OF FIXT. SPEC'D.	LAMP WATTS	WATTS/ FIXTURE	SUB-TOTAL WATTS	
		L.E.D. HIGH BAY UL WET LOCATION	LITHONIA X1B L24 24000LM ATWD MVOLT 40K	9	155.3	155.3	1,397.7	
^	ПП	SURFACE-MTD. ON STEEL CROSS MEMBER	80CRI WITH WGX WIREGUARD & SBGR6 ADC					
Α		WITH YOKE MTD. ACCESSORY	MOTION SENSOR WITH DIMMER PHOTOCELL					
			"EB" BATTER BACKUP #1E18WCPHECW					
			ALL UNITS TO HAVE SURGE PROTECTION					
		L.E.D. WALL PACK FIXTURE	ATLAS #WPM 64LED 4K PC BRONZE	2	64	64	128	EXTERIO
В			WITH PHOTOCELL CONTROL					
	Ш							
					FOTAL W	ATTS SPEC	D: 1,397.7	•

EMERGENCY LIGHTING FIXTURE SCHEDULE

OR EQUAL DUALITE AND UNIVERSAL MTD. EXIT SIGN W/ BATTERY PHILLIPS #VERWEM MTG.	I INTEC	BACKL
2 HEAD EMER. LT W/ ADJUSTABLE HEADS PHILLIPS #V06 OR EQUAL DUALITE BATT AND UNIVERSAL MTD. EXIT SIGN W/ BATTERY PHILLIPS #VERWEM MTG.	ERY E	BACKL
AND UNIVERSAL MTD. EXIT SIGN W/ BATTERY PHILLIPS #VERWEM MTG.	ALL F	
UNIVERSAL MTD. EXIT SIGN W/ BATTERY PHILLIPS #VERWEM MTG.		REQ'D
	HARD	
😾)WARE
OR EQUAL DUALITE		
COMBO EXIT/EMER. W/ BATTERY. PHILLIPS #VCRWLRC		
HEADS MTD. ON SIDES OR EQUAL DUALITE.		
INCLUDE EXTRA CAPACITY BATTERY		
TWO LAMP OUTDOOR RATED EMG. LUMINAIRE LTG. CORP		
EGRESS LT. WITH PHOTOCELL AND EMG. #YRV 13-2PLC13-MVOLT-CP-		 I
BATTERY PACK. BRZ-EMB-SHCAB-PC	•	

- 3 OR 4 = THREE-WAY OR FOUR-WAY SWITCHING O = DUAL TECHNOLOGY OCCUPANCY SENSOR (MOTION + HEAT)
- 20A SINGLE POLE SWITCH MOUNTED 46" AFF UNLESS OTHERWISE NOTED
- 20A THREE WAY SWITCH MOUNTED 46" AFF UNLESS OTHERWISE NOTED
- WALL RECESSED DUAL TECHNOLOGY OCCUPANCY SENSOR
- Occupant Sensor Controls. Section C 405.2.1 Occupancy sensors must be installed in the following areas. 1) Classrooms/lecture/training rooms, 2) Conference/meeting rooms/multipurpose rooms, 3) Copy/print rooms. 4) Lounges. 5) Employee lunch and break rooms; 6) Private offices. 7) Restrooms.
- 8) Storage rooms over 100 square feet; and 9) Janitorial closets.
- 10) Computer server rooms. 11) Mechanical and electrical equipment rooms.
- Also see NEC article 110.26(D).
- 12) Warehouses or other methods listed in section C 405.

2018 INTERNATIONAL ENERGY CONSERVATION CODE <u>SECTION 405</u> – LIGHTING SYSTEMS ☐ ENERGY COST BUDGET □ PRESCRIPTIVE ☐ PERFORMANCE (LIGHTING - SEE PLAN FOR FIXTURE SPECIFICATIONS) TABLE <u>C405.4.</u>2 WAS USED TO CALCULATE THE INTERIOR LIGHTING POWER ALLOWANCES: BUILDING AREA (AFFECTED BY NEW LIGHTING) = $\frac{6,324}{}$ sq. ft. ALLOWED WATTS = $1.19 \text{ w/ft} \times 6.324 = 7.525.6 \text{ WATTS}$ (WORKSHOP)

WATTS SPECIFIED = $_{_{_{_{_{_{1}}}397.7}}}$ WATTS

% OF ALLOWED = ___1,397.7 /__ 7,525.6 ___ = __18.6 _% REDUCED LIGHTING POWER DENSITY SYSTEM IN ACCORDANCE WITH SECTION C406.3

EQUIPMENT SCHEDULES WITH MOTORS (NOT USED FOR MECHANICAL SYSTEMS) MOTOR HP(S) NUMBER OF PHASES

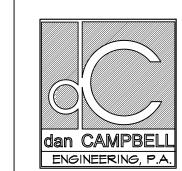
MINIMUM EFFICIENCY (%) NA MOTOR TYPE # OF POLES

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE ELECTRICAL SYSTEM AND EQUIPMENT REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION

DESIGNER STATEMENT:

SIGNED: PLEASE SEE SEAL NAME: <u>Dan O. Campbell, Jr.</u> TITLE: P.E. (Electrical Engineer)

Approved For Construction



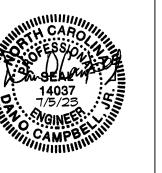
CAMPBELL ENGINEERING, PA

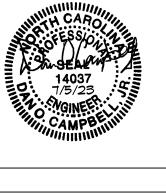
RO GARY 210 NOI

 Δ

911 South Chapman St. Greensboro, N.C. 27403 (336) 370-4980 dceng@bellsouth.net

> PROJECT NO. 23090 REVISIONS





0

July 5, 2023

E-2

OF _2

LIGHTING PLAN