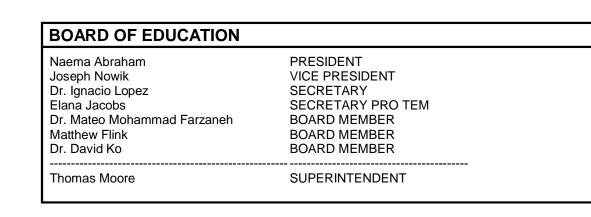
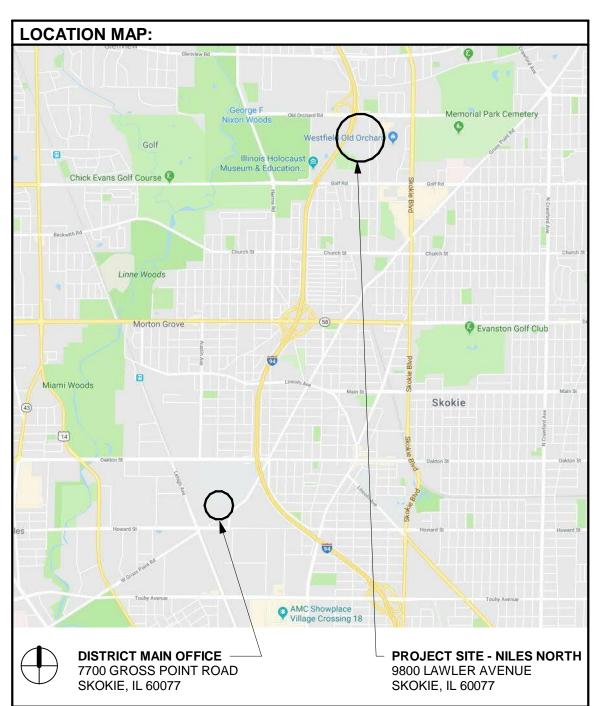
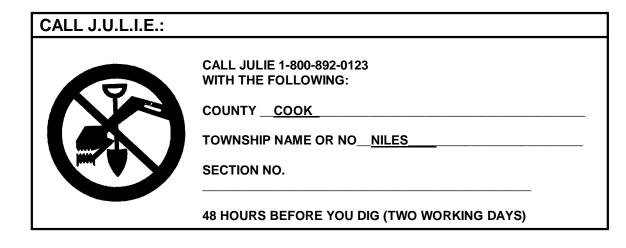
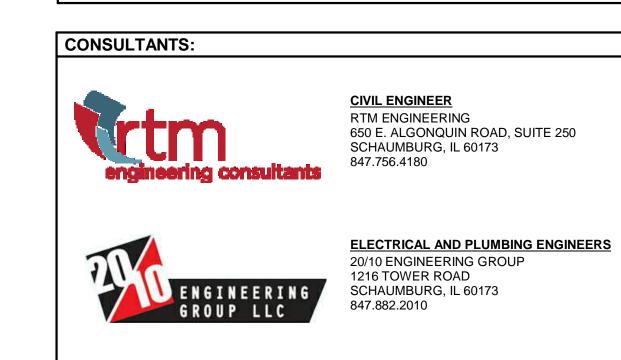
Niles Township High School District 219 Synthetic Turf Athletic Field Sitework

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ALTE	ERNATES:
ALTER	RNATE BID NO. 1: ELECTRICAL WORK - ACCEPTED
,	BASE BID:
	DO NOT PROVIDE ELECTRICAL SCOPE OF WORK.
	ALTERNATE BID:
	PROVIDE ELECTRICAL WORK AS SHOWN ON PLANS.
ALTER	RNATE BID NO. 2: SOFTBALL FIELD FENCING - ACCEPTED
	BASE BID:
	TEMPORARILY REMOVE EXISTING FENCING AT SOFTBALL FIELD AS
	REQUIRED FOR CONSTRUCTION, AND REINSTALL EXISTING FENCING
	UPON COMPLETION OF SYNTHETIC TURF INSTALLATION.
	ALTERNATE BID:
	REMOVE EXISTING FENCING AT SOFTBALL FIELD AND PROVIDE NEW
	FENCING PER PLANS.
ALIER	RNATE BID NO. 3: COMMENCEMENT OF WORK - <u>REJECTED</u>
	BASE BID:
	COMMENCEMENT OF WORK ON SITE TO BE APRIL 3, 2023 AND
	SUBSTANTIALLY COMPLETE ON JUNE 30, 2023.
	ALTERNATE BID:
	COMMENCE WORK ON APRIL 8, 2024 AND BE SUBSTANTIALLY
	COMPLETE ON JUNE 28, 2024

	THAT THESE PLANS AND SPECIFICATIONS WERE PREPARED II TUDIO GC, INC. UNDER MY DIRECT SUPERVISION AND TO THE
	LEDGE, COMPLY WITH THE FOLLOWING:
HEALTH/ LIFE SAFE	TY CODE FOR PUBLIC SCHOOLS
	ADMINISTRATIVE CODE, PART 180
	NATIONAL BUILDING CODE NATIONAL PROPERTY MAINTENANCE CODE
2014 ILLINOIS STAT	E PLUMBING CODE
2018 ILLINOIS ACCE	
2010 ADA 51 ANDAF	RDS FOR ACCESSIBLE DESIGN
	ARCHITECT
	ARCHITECT
	ARCHITECT LICENSE NO. AND EXPIRATION DATE



architecture + interiors 223 West Jackson Boulevard, Suite 1200 Chicago, Illinois 60606 (312) 253-3400 TITLE SHEET

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- EACH CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE PROJECT SITE AND OBSERVING THE SURROUNDING CONDITIONS PRIOR TO SUBMITTING A BID FOR THIS PROJECT. CONTRACTORS SHALL PROMPTLY CONTACT THE ARCHITECT IN WRITING IF THERE IS A CONFLICT BETWEEN THE DRAWINGS AND EXISTING CONDITIONS, OR OTHER QUESTIONS ARISE FROM THE CONTRACTOR'S OBSERVATIONS.
- BEFORE BEGINNING WORK AT THE SITE AND THROUGHOUT THE COURSE OF THE WORK, INSPECT AND VERIFY THE LOCATION AND CONDITION OF EVERY ITEM AFFECTED BY THE WORK UNDER THIS CONTRACT AND REPORT DISCREPANCIES TO THE ARCHITECT BEFORE BEGINNING WORK RELATED TO THAT BEING INSPECTED.
- BEFORE BEGINNING WORK AT THE SITE, INSPECT THE EXISTING BUILDING AND DETERMINE THE EXTENT OF EXISTING FINISHES, SPECIALTIES, EQUIPMENT, AND OTHER ITEMS WHICH MUST BE REMOVED AND REINSTALLED IN ORDER TO PERFORM THE WORK UNDER THIS CONTRACT.
- THE ARCHITECTURAL DRAWINGS SHOW PRINCIPLE AREAS WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. INCIDENTAL WORK MAY ALSO BE NECESSARY IN AREAS NOT SHOWN ON THE ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING EXISTING MECHANICAL, ELECTRICAL, PLUMBING OR OTHER SYSTEMS. SUCH INCIDENTAL WORK IS ALSO PART OF THIS CONTRACT. INDIVIDUAL TRADE CONTRACTORS TO INSPECT THOSE AREAS, AND ASCERTAIN WORK NEEDED, AND DO THAT WORK IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS, AT NO ADDITIONAL
- CONTRACTORS SHALL PROVIDE TEMPORARY BARRIERS AND CONTROLS IN THE PROXIMITY OF SITE THROUGHOUT THE WORK DAY. CONTRACTORS SHALL COORDINATE WITH THE LOCAL MUNICIPALITY AND OWNER TO LIMIT DISRUPTION AND TO PROTECT LOCAL TRAFFIC AND RESIDENTS DURING THE COURSE OF THE WORK.
- ALL REQUIRED PRE-INSTALLATION MEETINGS AND MOCKUPS FOR CRITICAL WORK SHALL BE PERFORMED PRIOR TO COMMENCEMENT. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ADDITIONAL MEETINGS AND MOCKUPS WITH THE ARCHITECT AS THEY DEEM NECESSARY AT NO ADDITIONAL COST.
- EACH CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER
- WHERE DISCREPANCIES EXIST BETWEEN THE DRAWINGS OF THE VARIOUS TRADES, PROMPTLY REPORT THE DISCREPANCIES TO THE ARCHITECT IN WRITING FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.
- WHERE ANY PROVISIONS OF THE DRAWINGS AND SPECIFICATIONS CONFLICT WITH ONE ANOTHER, THE MORE STRINGENT OR COSTLY REQUIREMENT SHALL GOVERN UNLESS SPECIFICALLY DIRECTED OTHERWISE BY THE ARCHITECT.
- EACH CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL FIELD CONDITIONS, MATERIALS, CONSTRUCTION METHODS AND DIMENSIONS PRIOR TO COMMENCING HIS WORK. CONTRACTORS SHALL PROMPTLY CONTACT ARCHITECT IN WRITING IF ISSUES OR QUESTIONS ARISE. COMMENCEMENT OF THE WORK BY A CONTRACTOR CONSTITUTES HIS ACCEPTANCE OF EXISTING CONDITIONS, AS WELL AS TAKING ON THE RESPONSIBILITY FOR ALL UNACCEPTABLE WORK CAUSED BY PREVIOUS CONDITIONS.
- ANY MATERIALS ORDERED, FABRICATED, OR INSTALLED PRIOR TO THE ARCHITECT'S REVIEW AND APPROVAL OF REQUIRED SUBMITTALS, AND ASSOCIATED SUBMITTALS PERTAINING TO THE WORK, IS DONE SO AT EACH CONTRACTOR'S OWN RISK. THE OWNER AND ARCHITECT ASSUME NO RESPONSIBILITY FOR DELAYS OR ADDED COSTS INCURRED BY ANY CONTRACTOR AS A RESULT OF WORK INSTALLED OR COMPLETED WITHOUT PROPER SUBMITTAL REVIEW AND APPROVAL.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL CODES AND ORDINANCES AND ALL AUTHORITIES HAVING JURISDICTION. EACH CONTRACTOR IS RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL APPLICABLE CODES AND ORDINANCES AND THE REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION PRIOR TO SUBMITTING BIDS FOR THIS PROJECTS.
- DO NOT SCALE DRAWINGS; READ DIMENSIONS ONLY. IF A REQUIRED IMENSION IS NOT INDICATED OR ANY DIMENSIONING DISCREPANCIES EXIS ON THE DRAWINGS THE CONTRACTOR SHALL PROMPTLY WRITE TO THE ARCHITECT FOR RESOLUTION.
- CONTRACTORS SHALL NOT CUT STRUCTURAL ELEMENTS OR MEMBERS IN A MANNER RESULTING IN A REDUCTION OF LOAD CARRYING CAPACITY OR LOAD DEFLECTION RATIO. UNLESS OTHERWISE NOTED.
- ALL STRUCTURAL ITEMS, INCLUDING BUT NOT LIMITED TO, BEAMS, LINTELS, JOISTS, DECKS, MASONRY TIES, BOND BEAMS, COLUMNS, CONNECTIONS AND CONNECTORS, ETC., APPEARING ON ARCHITECTURAL DRAWINGS ARE ONLY SHOWN TO ILLUSTRATE RELATIONSHIPS TO OTHER BUILDING MATERIALS AND SYSTEMS AND SHALL BE CONSIDERED FOR INFORMATION ONLY. REFER TO STRUCTURAL DRAWINGS FOR DETAILED CONFIGURATIONS, TYPES, SIZES, CONNECTIONS, NOTES, AND SCHEDULES.
- ALL COLD FORMED METAL AND WOOD FRAMING APPEARING ON ARCHITECTURAL DRAWINGS ARE SHOWN TO ILLUSTRATE INTENT. THE CONTRACTOR, AS PART OF DELEGATED DESIGN SUBMITTAL RESPONSIBILITY UNDER HIS SCOPE, IS TO PROVIDE CONNECTIONS, ACCESSORIES, AND CONFIGURATIONS REQUIRED TO MEET THE SPECIFICATIONS.
- ALL PLUMBING, HVAC, ELECTRICAL, AND FIRE PROTECTION ITEMS APPEARING ON ARCHITECTURAL DRAWINGS ARE ONLY SHOWN TO ILLUSTRATE RELATIONSHIPS TO OTHER BUILDING MATERIALS AND SYSTEMS AND SHALL BE CONSIDERED FOR INFORMATION ONLY. REFER TO EACH DISCIPLINES DRAWINGS FOR DETAILED CONFIGURATIONS, TYPES, SIZES, CONNECTIONS, NOTES, AND SCHEDULES.
- ALL PLUMBING, HVAC, ELECTRICAL AND FIRE PROTECTION ROUGH-IN WORK IN FINISHED AREAS SHALL BE CONCEALED IN AVAILABLE CEILING, WALL AND FLOOR SPACES.
- ALL PENETRATIONS THROUGH THE NEW SLAB ON GRADE, ROOF DECK, WALLS BELOW GRADE, AND EXTERIOR WALLS SHALL BE WATER SEALED. WHERE PENETRATIONS ARE REQUIRED TO BE FIRE SEALED PER THE CONTRACT DOCUMENTS. THE WATER SEAL SHALL BE IN ADDITION. THE FIRE SEALAN SHALL BE INSTALLED FIRST (DEPRESSED A MINIMUM OF 3/4 INCH) AND WITH THE WATER SEAL INSTALLED OVER THE TOP. AN APPROPRIATE BOND BREAKER SHALL BE INSTALLED IN BETWEEN THE TWO TYPES OF SEALANT
- CONTRACTORS SHALL PROVIDE NEW UNDAMAGED MATERIALS. ANY DAMAGED MATERIALS, FIXTURES AND/OR FINISHES RECEIVED ARE NOT TO BE INSTALLED AND RETURNED TO THE MANUFACTURER/ DISTRIBUTOR. INSTALLATION OF DAMAGED MATERIALS WILL BE REJECTED.
- PROVIDE GROUTED CELLS, AS REQUIRED, IN MASONRY WALLS TO ANCHOR ALL WALL MOUNTED ITEMS INCLUDING, BUT NOT LIMITED TO; MILLWORK, CASEWORK, WALL CABINETS, HANDRAILS, COAT RACKS, WALL HOOKS, DOOR STOPS, TOILET ACCESSORIES, OWNER FURNISHED EQUIPMENT, SHELVING, LIGHT FIXTURES, LIFE SAFETY EQUIPMENT AND OTHER SIMILAR ITEMS.
- PROVIDE WOOD OR STEEL FRAME BLOCKING, AS REQUIRED, IN FRAMED WALLS AND CEILINGS TO ANCHOR ALL WALL AND CEILING MOUNTED ITEMS INCLUDING, BUT NOT LIMITED TO: MILLWORK, CASEWORK, WALL CABINETS. HANDRAILS, COAT RACKS, WALL HOOKS, DOOR STOPS, TOILET ACCESSORIES, OWNER FURNISHED EQUIPMENT, SHELVING, LIGHT FIXTURES, LIFE SAFETY EQUIPMENT AND OTHER SIMILAR ITEMS.
- WOOD BLOCKING AND METAL FRAMING IS SHOWN GENERICALLY IN DETAILS TO ACHIEVE THE DESIRED OVERALL DESIGN INTENT. ITS RELATIONSHIP TO OTHER MATERIALS CAN BE ALTERED OR REPLACED AS REQUIRED BY APPROPRIATE CONSTRUCTION PRACTICES TO ACHIEVE THE FINAL APPEARANCE INDICATED ON THE DRAWINGS.
- THE PERIMETER OF ALL OPENINGS ARE TO BE BACKED AS NECESSARY AND SEALED, INTERIOR AND EXTERIOR.
- ALL OPENINGS. INTERIOR AND EXTERIOR, THAT HAVE A RETURN FROM THE

MAIN FACE, SHALL HAVE THE RETURN FINISHED THE SAME AS THE MAIN

EXPOSED FACE U.N.O. THIS APPLIES TO BOTH SIDES OF ALL OPENINGS.

- CONTROL JOINTS IN MASONRY WALLS ARE TO BE PROVIDED AS SHOWN. IN AREAS WHERE JOINTS ARE NOT SHOWN, THE CONTRACTOR SHALL PROVIDE JOINTS AS FOLLOWS: 1. AT EVERY 20 FEET IN RUNNING WALLS AND 6 FEET FROM CORNERS. 2. AT ALL CORNERS OF AN 'L, U, OR T' CONFIGURATION ON A WALL SURFACE, A CONTROL JOINT SHALL BE PROVIDED TO DIVIDE THE SECTIONS. CONTRACTOR IS TO REVIEW ALL LOCATIONS WITH THE ARCHITECT IN THE FIELD PRIOR TO COMMENCING MASONRY INSTALLATION REGARDLESS OF WHETHER JOINTS ARE SHOWN OR THE JOINTS ARE BEING PROVIDED PER THE GUIDELINES NOTED HERE
- PROVIDE BOND BREAKER MATERIAL AT CONTROL JOINTS WHERE JOINTS ARE **FULLY PARGED OR GROUTED**
- CONTROL JOINTS IN GYPSUM BOARD ARE TO BE PROVIDED AS SHOWN. IN AREAS WHERE JOINTS ARE NOT SHOWN. THE CONTRACTOR SHALL PROVIDE JOINTS AS FOLLOWS: 1. AT EVERY 30 FEET IN WALLS OR CEILINGS. 2. AT ALL CORNERS OF AN 'L, U, OR T' CONFIGURATION ON A WALL OR CEILING SURFACE, A CONTROL JOINT SHALL BE PROVIDED TO DIVIDE THE SECTIONS. CONTRACTORS ARE TO REVIEW ALL LOCATIONS WITH THE ARCHITECT IN THE FIELD PRIOR TO COMMENCING CONTROL JOINT INSTALLATION REGARDLESS OF WHETHER JOINTS ARE SHOWN OR THE JOINTS ARE BEING PROVIDED PER
- CONTROL JOINTS IN RATED ASSEMBLIES ARE TO BE TREATED AS NOT TO COMPROMISE THE RATED ASSEMBLY CONTRACTORS SHALL PROVIDE APPROPRIATE BACKING MATERIAL AND FIRE STOPPING TO CLOSE THE CAVITY AND PROVIDE AN APPROPRIATELY RATED SEALANT.

THE GUIDELINES NOTED HERE.

- THE TYPICAL CONDITION, UNLESS DETAILED OTHERWISE, WHERE GYPSUM WALLBOARD MEETS ANY KIND OF DISSIMILAR SURFACE, INCLUDING BUT NOT LIMITED TO MASONRY, WOOD, OR METAL, IS TO HAVE WALLBOARD EDGE FINISHED WITH A PAINTED J-BEAD EDGE AND DRYWALL COMPOUND AND THE
- JOINT CAULKED. WHENEVER MASONRY REQUIRES CUTTING TO ENCLOSE A STRUCTURAL MEMBER, PROVIDE MAXIMUM THICKNESS POSSIBLE AND STILL PREVENT CONTACT WITH THE STRUCTURE, EXCEPT FOR WALL TIES. USE THE SAME

UNITS AS IN WALL SO FACE TEXTURE AND APPEARANCE IS UNIFORM.

- 32. CONTRACTORS SHALL FINISH DESIGNING AND FABRICATE ITEMS DESIGNATED 7. AS A "DELEGATED DESIGN" WITHIN THE SPECIFICATIONS. COORDINATE WITH INDIVIDUAL SPECIFICATION SECTIONS FOR THESE ITEMS.
- CONTRACTORS SHALL CAREFULLY COORDINATE ALL WORK WITH EQUIPMENT BEING FURNISHED BY THE OWNER AND INSTALLED BY THE CONTRACTORS. ALL SHOP DRAWINGS AND OTHER SUBMITTALS SHALL BE CAREFULLY COORDINATED ACCORDINGLY. CONTRACTORS SHALL PROVIDE FOR SOME ADJUSTMENT IN FINAL DESIGN AND FABRICATION TO ACCOMMODATE INSTALLATION OF EQUIPMENT.
- CONTRACTORS SHALL COORDINATE TESTING WITH OWNER'S PROVIDED TESTING SERVICE. CONTRACTOR SHALL PROVIDE TESTING SERVICES AS PART OF THEIR BID FOR THOSE TESTS SPECIFICALLY NOTED AS CONTRACTOR'S RESPONSIBILITY WITHIN THE INDIVIDUAL SPECIFICATIONS
- PROTECT ALL EXISTING CONSTRUCTION AND INFRASTRUCTURE FROM DAMAGE. VIDEOTAPE/ PHOTOGRAPH EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK. CONTRACTORS WILL REPAIR/ REPLACE OR CORRECT ANY AND ALL EXISTING CONSTRUCTION, TO MATCH THAT DAMAGED BY CONSTRUCTION AND/OR INSTALLATION PROCESS UNDER THIS CONTRACT AS NECESSARY AT NO ADDITIONAL EXPENSE TO OWNER.
- REPAIR, PATCH, AND FINISH, OR REFINISH AS APPLICABLE, TO MATCH ADJACENT EXISTING FINISHES THOSE EXISTING SURFACES DAMAGED OR NEWLY EXPOSED DURING PERFORMANCE OF THE WORK UNDER THIS
- WHERE MATCH EXISTING IS INDICATED, NEW CONSTRUCTION, OR FINISHES, AS APPROPRIATE TO THE NOTE SHALL MATCH THE EXISTING IN EVERY PARTICULAR.
- WORK SHOWN IS NEW UNLESS SPECIFICALLY NOTED OR OTHERWISE
- DETERMINE THE LOCATION OF PARTITIONS NOT DIMENSIONED BY THEIR RELATION TO COLUMN FACE OR CENTER, WINDOW JAMB OR MULLION, EXISTING WALLS, OR OTHER SIMILAR FIXED ITEM. IF THE LOCATION IS
- WHERE PERMANENT REMOVAL OF EXISTING MILLWORK, CASEWORK, DOORS AND FRAMES, CABINETWORK, ACCESSORIES, EQUIPMENT OR FURNISHINGS IS REQUIRED, AND PREVIOUSLY CONCEALED SURFACES ARE TO REMAIN EXPOSED, PATCH SUCH SURFACES TO MATCH ADJACENT EXPOSED SURFACES. WHERE SUCH SURFACES ARE SCHEDULED TO RECEIVE NEW FINISHES, PREPARE THE SURFACES TO RECEIVE THE NEW FINISHES.

INDETERMINABLE, PLEASE NOTIFY THE ARCHITECT IMMEDIATELY.

- WHERE CUTTING OF EXISTING SURFACES OR REMOVAL OF EXISTING SURFACES IS REQUIRED TO PERFORM THE WORK UNDER THIS CONTRACT, AND A NEW FINISH IS NOT INDICATED, FILL RESULTING OPENINGS AND PATCH THE SURFACE AFTER DOING THE WORK; FINISH TO MATCH ADJACENT EXISTING SURFACES.
- WHERE DUCTS AND SIMILAR ITEMS ARE SHOWN TO PENETRATE EXISTING WALLS OR PARTITIONS, NEATLY CHASE THE WALLS OR PARTITIONS, INSTALL THE ITEMS, AND PATCH WALLS OR PARTITIONS TO MAKE THE INSTALLATION NOT DISCERNIBLE IN THE FINISH WORK.
- ALL TRADE CONTRACTORS TO INSTALL ALL NEW CONDUITS, PIPES, WIRING AND DUCTS ABOVE NEW OR EXISTING CEILING. REMOVE EXISTING CEILING AS NECESSARY TO PERFORM THE WORK. AFTER INSTALLATION OF CONCEALED WORK, REINSTALL REMOVED CEILING AND PATCH AND REFINISH TO MATCH ADJACENT UNREMOVED CEILINGS.
- ALL TRADE CONTRACTORS SHALL SEAL TIGHT WITH SMOKE SEAL CAULKING ANY NEW WORK THROUGH ALL NON-RATED WALLS.
- 45. PROVIDE WEATHER-TIGHT CONSTRUCTION OF EXISTING BUILDING AT ALL
- MECHANICAL/HVAC CONTRACTOR SHALL PROVIDE FINISH COLLAR AT ALL LOCATIONS WHERE MECHANICAL DUCTWORK PENETRATES EXTERIOR WALL. GENERAL TRADES CONTRACTOR SHALL PROVIDE ALL FLASHINGS FOR WATER/WEATHERTIGHT SEAL AROUND COLLAR.
- ALL AREAS OF DISTURBED EARTH, WHETHER BY CONSTRUCTION PROCESS, DEMOLITION. OR MATERIAL STORAGE. ARE TO BE RESTORED WITH BLACK TOP SOIL & SODDED PER SPECIFICATIONS (NO EXCEPTIONS). ALL LANDSCAPE WORK IS TO BE PERFORMED BY A LANDSCAPE CONTRACTOR. ALL SOD IS TO BE WATERED. MOWED & FERTILIZED UNTIL "VIGOROUS GROWTH" IS ESTABLISHED - TO BE DETERMINED BY OWNER. FOR REGULAR WATERING, CONTRACTOR IS RESPONSIBLE FOR TRUCKING IN. ANY "BROWNED" OR "BURNED OUT" SOD IS TO BE REPLACED @ NO ADDITIONAL COST TO OWNER. (INCLUDING VANDALISM).
- OWNER SHALL PAY FOR ALL BUILDING PERMITS PERTAINING TO THE PROJECT. CONTRACTORS SHALL BE RESPONSIBLE FOR SCHEDULING REQUIRED INSPECTIONS, AND SUBMITTING REQUIRED RECORDS, FORMS AND SUBMITTALS TO THE LOCAL AUTHORITY HAVING JURISDICTION. CONTRACTORS SHALL BE RESPONSIBLE FOR LICENSE FEES AND PERMITS RELATED TO OPERATING AND WORKING WITHIN THE MUNICIPALITY.
- THE CONTRACTORS SHALL PROVIDE ALL WORK AND MATERIALS WHICH ANY SECTION OR PART OF THE DRAWINGS, SPECIFICATIONS, OR CONDITIONS REQUIRE HIM TO PROVIDE FOR ALL SIMILAR WORK. THIS SHALL APPLY TO ALL SIMILAR WORK REGARDLESS OF WHETHER SUCH REQUIREMENT IS OR IS NOT FAITHFULLY REPEATED IN OTHER PARTS OF THE CONTRACT DOCUMENTS. THEREOF TO WHICH, THE PROVISIONS MIGHT BE APPROPRIATE.
- CONFINE OPERATIONS TO AREAS WITHIN CONTRACT LIMITS INDICATED AND AS SPECIFICALLY ALLOWED BY THE OWNER PER WRITTEN APPROVAL. AREAS OF THE SITE BEYOND THE LIMITS OF THE CONTRACT OPERATIONS ARE NOT TO BE DISTURBED. CONTRACTORS SHALL BE RESPONSIBLE FOR REPAIR AND RESTORATION OF ANY EXISTING SITE CONSTRUCTION DAMAGED OUTSIDE OF THE CONTRACT LIMITS.
- KEEP CONSTRUCTION ENTRANCES AND LOCAL ACCESS ROAD SERVING THE SITE CLEAN AND CLEAR AT ALL TIMES. SCHEDULE DELIVERIES TO MINIMIZE SPACE AND TIME REQUIRED FOR STORAGE OF MATERIALS ON SITE.
- CONTRACTORS ARE RESPONSIBLE FOR THEIR OWN CLEANUP AT THE END OF EACH WORK DAY THROUGHOUT THE COURSE OF THE PROJECT.
- CONTRACTORS SHALL PROVIDE A FINAL CLEANUP AT THE END OF THE PROJECT PRIOR TO FINAL COMPLETION. ALL SURFACES, FIXTURES AND FURNITURE ARE TO BE CLEANED THOROUGHLY SO NO MARKS, RESIDUE, STICKERS, OR RUBBISH REMAINS. ANY ITEM THAT CAN NOT BE EFFECTIVELY CLEANED SHALL BE REPLACED
- VERIFY ALL DIMENSIONS IN FIELD PRIOR TO SHOP FABRICATION OF ITEMS. ALL HOLD DIMENSIONS ARE REQUIRED TO BE EXACT WITH 1/8" TOLERANCE ALONG FULL HEIGHT AND FULL WIDTH OF WALL, PARTITION OR BUILDING
- PROVIDE ALL PREPARATION NECESSARY, PRIOR TO BEGINNING PAINTING WORK, INCLUDING BUT NOT LIMITED TO PATCHING HOLES, GOUGES, OR OTHER DAMAGE, SECURING LOOSE TRIM, CONDUITS AND ANY OTHER WALL
- OR CEILING HARDWARE ITEMS REQUIRING ATTENTION. WALLS INDICATED TO BE PAINTED, OR REQUIRED TO BE RE-PAINTED DUE TO REPAIR OF DAMAGED/DISTURBED WORK SHALL HAVE THE ENTIRE WALL SURFACE FROM CORNER TO CORNER, OR OTHER NATURAL BREAK PAINTED.
- CONTRACTORS ARE RESPONSIBLE FOR PROCURING TEMPORARY UTILITIES AND PAYING FOR SUCH UTILITIES UNTIL SUCH TIME THAT THE PERMANENT UTILITIES ARE OPERATIONAL AND THE OWNER HAS GRANTED, IN WRITING, THEIR USE BY THE CONTRACTOR.
- CONTRACTORS ARE RESPONSIBLE FOR PREPARING AND SUBMITTING FULLY DESIGNED FIRE SPRINKLER AND FIRE ALARM DRAWINGS TO THE LOCAL AUTHORITY HAVING JURISDICTION FOR REVIEW AND APPROVAL.
- REPAIR, PATCH AND REFINISH, OR REPLACE, ANY EXISTING CONSTRUCTION AND INFRASTRUCTURE THAT IS DISTURBED OR DAMAGED DURING THE COURSE OF THE WORK. SUCH REPAIR OR REPLACEMENT WORK IS TO MATCH EXISTING CONSTRUCTION IN QUALITY AND FINISH.
- SHOULD DISCREPANCIES APPEAR AMONG THE CONTRACT DOCUMENTS OR BETWEEN THE CONTRACT DOCUMENTS AND EXISTING SITE CONDITIONS, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION FROM THE ARCHITECT BEFORE THE BIDDING PERIOD IS COMPLETE. IF THE CONTRACTORS FAIL TO MAKE SUCH REQUESTS, IT IS PRESUMED THAT BOTH PROVISIONS WERE INCLUDED IN THE BID. AND THE ARCHITECT SHALL DETERMINE WHICH OF THE CONFLICTING REQUIREMENTS SHALL GOVERN. THE CONTRACTORS SHALL PERFORM THE WORK AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH THE ARCHITECT'S DETERMINATION.
- WHERE CONFLICT EXISTS BETWEEN, OR WITHIN, THE CONTRACT DOCUMENTS, BETWEEN THE CONTRACT DOCUMENTS AND APPLICABLE STANDARDS, CODES, ORDINANCES, OR MANUFACTURERS RECOMMENDATIONS, AND CLARIFICATION HAS NOT BEEN REQUESTED FROM THE ARCHITECT PRIOR TO THE CLOSE OF BIDDING, THE MORE STRINGENT OR HIGHER QUALITY STANDARD SHALL PREVAIL. LARGE SCALE DRAWINGS SHALL TAKE PRECEDENCE OVER SMALL SCALE DRAWINGS, FIGURED DIMENSIONS ON THE DRAWINGS OVER SCALED DIMENSIONS, AND NOTED MATERIAL OVER GRAPHIC REPRESENTATIONS.

MAXIMUM FORCE TO OPERATE PER IAC 400.310 (J-10). ALL PUBLIC AND COMMON AREA EXTERIOR DOORS SHALL REQUIRE 8.5# MAXIMUM FORCE TO OPERATE PER IAC 400.310 (J-10).

ALL PUBLIC AND COMMON AREA INTERIOR DOORS SHALL REQUIRE 5#

- CARPET PILE THICKNESS SHALL NOT EXCEED 1/2 INCH PER ICC/ANSI A117.1-2003 (SECTION 302.2). PILE THICKNESS IS MEASURED FROM THE FINISH FLOOR TO TOP OF PILE.
- FLOOR SURFACES SHALL BE FIRM, STABLE, AND SLIP RESISTANT PER ICC/ANSI 25. A117.1-2003 SECTION 302.1.
- THE FIRE ALARM SYSTEM SHALL COMPLY WITH ICC/ANCI A117.1-2003 SECTION 7.702. ALL VISUAL ALARMS TO BE SYNCHRONIZED THROUGHOUT PER ICC/ANSI A117.7-2003 CHAPTER 702.
- WHERE PROVIDED, A PORTION OF EACH CLOSET SHELF AND ROD SHALL BE INSTALLED AT 48" A.F.F. MAXIMUM. AN ACCESSIBLE ROUTE TO THE SHELF AND ROD SHALL BE PROVIDED WHICH WILL ALLOW FOR A FORWARD OR SIDE
- APPROACH PER ICC1ANSI A117.7-2003 CHAPTER 9.905. ACCESSIBLE HIGH-LOW DRINKING FOUNTAINS SHALL BE PROVIDED PER ICC/ANSI A117.1-2003, CHAPTER 602.
- WHERE PROVIDED, A PORTION OF COAT/GARMENT HOOKS SHALL BE INSTALLED AT 48" A.F.F. MAXIMUM. (5% OF TOTAL PROVIDED.)
- WHERE PROVIDED, A PORTION OF LOCKERS SHALL BE INSTALLED WITH THE OPERATING MECHANISM WITHIN THE 15"-48" REACH RANGE.
- CLEAR FLOOR SPACE SHALL BE PROVIDED FOR A PERSON IN A WHEELCHAIR TO MAKE A 180° TURN IN PUBLIC/COMMON ROOMS, TOILET ROOMS, LOCKER ROOMS, AND ALONG ACCESSIBLE ROUTES.
- ALL OPEN STAIRS SHALL HAVE A DETECTABLE WARNING AT THE TOP OF STAIR
- ALL ACCESSIBLE TOILETS AND SHOWERS ARE TO BE EQUIPPED WITH GRAB BARDS 400.310(Q) AND ADAAG 4.26.1. ALL DOORS LEADING TO HAZARDOUS ROOMS OR SPACES SHALL BE PROVIDED

WITH KNURLED HARDWARE. PROVIDE HARDWARE INDICATED ON DOOR

SCHEDULE, SHEET A8.00 AND SPECIFICATION SECTION 087100 COMPLIANT

ALL RECEPTION, TRANSACTION COUNTERS, AND PASS-THROUGHS SHALL HAVE A SECTION CONSTRUCTED BETWEEN 28" TO 34" A.F.F. IN HEIGHT AND 36"

WITH ANSI A117.1-2003 CHAPTER 4.27.3.

- BEFORE BEGINNING WORK AT THE SITE AND THROUGHOUT THE COURSE OF THE WORK INSPECT AND VERIFY THE LOCATION AND CONDITION OF EVERY ITEM AFFECTED BY THE WORK UNDER THIS CONTRACT AND REPORT DISCREPANCIES TO THE ARCHITECT BEFORE BEGINNING WORK.
- BEFORE BEGINNING WORK AT THE SITE, INSPECT THE EXISTING BUILDING AND DETERMINE EXTENT OF THE EXISTING FINISHES, SPECIALTIES, EQUIPMENT AND OTHER ITEMS WHICH MUST BE REMOVED AND REINSTALLED IN ORDER TO PERFORM THE WORK UNDER THIS CONTRACT.
- THE ARCHITECTURAL DRAWINGS SHOW PRINCIPLE AREAS WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. INCIDENTAL WORK MAY ALSO BE NECESSARY IN AREAS NOT SHOWN ON THE ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING THE EXISTING MECHANICAL. ELECTRICAL, PLUMBING OR OTHER SYSTEMS, SUCH INCIDENTAL WORK IS ALSO PART OF THIS CONTRACT. INSPECT THOSE AREAS AND ASCERTAIN WORK NEEDED, AND DO THAT WORK IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS AT NO ADDITIONAL COST. PROTECT EXISTING WORK TO REMAIN FROM DAMAGE.
- REPAIR, PATCH AND FINISH OR REPLACE AS APPLICABLE TO MATCH ADJACENT EXISTING FINISHES. THOSE EXISTING SURFACES DAMAGED OR NEWLY EXPOSED DURING PERFORMANCE OF THE WORK UNDER THIS
- WHERE MATCH EXISTING IS INDICATED, NEW CONSTRUCTION OR FINISHES AS APPROPRIATE TO THE NOTE SHALL MATCH THE EXISTING IN EVERY PARTICULAR.
- WORK SHOWN IS NEW UNLESS SPECIFICALLY NOTED OR OTHERWISE
- RELATION TO COLUMN FACE OR CENTER, WINDOW JAMB OR MULLION. EXISTING WALLS OR OTHER SIMILAR FIXED ITEM. WHERE PERMANENT REMOVAL OF ITEMS IS REQUIRED, AND PREVIOUSLY CONCEALED SURFACES ARE TO REMAIN EXPOSED, PATCH PREVIOUSLY CONCEALED SURFACES TO MATCH ADJACENT EXPOSED SURFACES. WHERE

SUCH SURFACES ARE SCHEDULED TO RECEIVE NEW FINISHES, PREPARE

OR PARTITIONS, INSTALL THE ITEMS, AND PATCH THE WALLS OR PARTITIONS

DETERMINE THE LOCATION OF PARTITIONS NOT DIMENSIONED BY THEIR

- THE SURFACES TO RECEIVE THE NEW FINISHES. WHERE CUTTING OF EXISTING SURFACES OR REMOVAL OF EXISTING SURFACES IS REQUIRED TO PERFORM THE WORK UNDER THIS CONTRACT, AND NEW FINISH IS NOT INDICATED, FILL RESULTING OPENINGS AND PATCH THE SURFACE AFTER DOING THE WORK, AND FINISH TO MATCH ADJACENT
- EXISTING SURFACES. WHERE CONDUITS, DUCTS, AND SIMILAR ITEMS ARE SHOWN TO BE INSTALLED IN EXISTING WALLS OR PARTITIONS, NEATLY CHASE THE WALLS
- SEAL TIGHT AND PROTECT WITH FIRE SAFING AND CAULKING, NEW SLEEVES AND OPENINGS IN FLOORS. INSTALL ALL NEW CONDUITS, PIPES, WIRING AND DUCTS ABOVE NEW OR

TO MAKE THE INSTALLATION NOT DISCERNIBLE IN THE FINISH WORK.

- EXISTING CEILING. REMOVE EXISTING CEILING AS NECESSARY TO PERFORM THE WORK. AFTER INSTALLATION OF CONCEALED WORK, REINSTALL REMOVED CEILING AND PATCH AND REFINISH TO MATCH ADJACENT UNREMOVED CEILINGS.
- REFER TO NEW WORK PLANS TO COORDINATE EXTENT OF DEMOLITION. REFER TO OTHER DISCIPLINE DRAWINGS FOR ADDITIONAL DEMOLITION REQUIRED. CONTRACTOR TO NOTIFY ARCHITECT IMMEDIATELY UPON
- WHERE NOT SPECIFICALLY NOTED, CONTRACTOR SHALL MODIFY EXISTING FLOORING AND CEILING CONSTRUCTION TO REMAIN AS REQUIRED TO ABUT NEW CONSTRUCTION AND MATCH ADJACENT EXISTING CONDITIONS (TYP.).

DISCOVERY OF CONFLICT OR DISCREPANCY WITH ITEMS INDICATED TO BE

- AT ALL AREAS WITHIN THE EXISTING BUILDING WHERE DEMOLITION AND RENOVATION ACTIVITIES ARE SCHEDULED TO OCCUR, CONTRACTOR SHALL REMOVE ALL EXISTING FIXTURES, ELECTRICAL DEVICES, CONDUIT, ANCHORS, WIRING, AND ALL ASSOCIATED ITEMS AND EQUIPMENT BACK TO THE SOURCE OF THE SUPPLY U.O.N. (TYP.) VERIFY ALL CONDITIONS IN FIELD PRIOR TO SUBMITTING BID. REFER TO OTHER DISCIPLINE DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- AT ALL AREAS WITHIN THE EXISTING BUILDING WHERE DEMOLITION AND RENOVATION ACTIVITIES ARE SCHEDULED TO OCCUR, CONTRACTOR SHALL REMOVE ALL MECHANICAL SUPPLY DIFFUSERS AND RETURN GRILLES, AND ALL ASSOCIATED ITEMS AND EQUIPMENT, MODIFY DUCTWORK AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION, AND RECONNECT EXISTING TO NEW AS REQUIRED. VERIFY ALL CONDITIONS IN FIELD PRIOR TO SUBMITTING BID. REFER TO OTHER DISCIPLINE DRAWINGS FOR ADDITIONAL
- CONTRACTOR RESPONSIBLE FOR ENLARGING OR PATCHING MASONRY OPENINGS AT ALL NEW UNIT HEATERS (TYP.)
- SHOULD DISCREPANCIES APPEAR AMONG THE CONTRACT DOCUMENTS OR BETWEEN THE CONTRACT DOCUMENTS AND EXISTING CONDITIONS. THE CONTRACTOR SHALL REQUEST AN INTERPRETATION FROM THE ARCHITECT BEFORE BIDDING. IF THE CONTRACTOR FAILS TO MAKE SUCH REQUESTS, IT IS PRESUMED THAT THE MORE COSTLY SHALL BE INCLUDED IN THE BID, AND THE ARCHITECT SHALL DETERMINE WHICH OF THE CONFLICTING REQUIREMENTS SHALL GOVERN. THE CONTRACTOR SHALL PERFORM THE WORK AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH THE ARCHITECT'S DETERMINATION. WHERE CONFLICT EXISTS BETWEEN OR WITHIN THE CONTRACT DOCUMENTS BETWEEN THE CONTRACT DOCUMENTS AND APPLICABLE STANDARDS, CODES, ORDINANCES, OR MANUFACTURERS' RECOMMENDATIONS. AND CLARIFICATION HAS NOT BEEN REQUESTED FROM THE ARCHITECT PRIOR TO BIDDING AS PROVIDED FOR ABOVE, THE MORE STRINGENT OR HIGHER QUALITY STANDARD SHALL PREVAIL.
- LARGE SCALE DRAWINGS SHALL TAKE PRECEDENCE OVER SMALL SCALE DRAWINGS, FIGURED DIMENSIONS ON THE DRAWINGS OVER SCALED
- DIMENSIONS, AND NOTED MATERIAL OVER GRAPHIC REPRESENTATIONS. THE CONTRACTOR SHALL PROVIDE ALL WORK AND MATERIALS WHICH ANY SECTION OR PART OF THE DRAWINGS, SPECIFICATIONS, OR CONDITIONS REQUIRE HIM TO PROVIDE. REGARDLESS OF WHETHER SUCH REQUIREMENT IS OR IS NOT FAITHFULLY REPEATED IN OTHER PARTS OF DOCUMENTS THEREOF TO WHICH THE PROVISIONS MIGHT BE APPROPRIATE.

- 23. ALL EXISTING SPRAY ON FIREPROOFING TO REMAIN. ANY FIREPROOFING THAT IS DAMAGED DURING THE WORK PREFORMED UNDER THIS CONTRACT IS TO BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
- PROVIDE ALL DEMOLITION WORK AS NECESSARY TO ACCOMPLISH THE WORK INCLUDING THE REMOVAL OF ALL ITEMS WHICH ARE EXPOSED & ARE NOT TO REMAIN IN USE, & ITEMS INDICATED INCLUDING, BUT NOT NECESSARILY LIMITED TO, WALLS, DOORS, FRAMES, CEILINGS, FLOORING, PLUMBING FIXTURES, PIPING, MECHANICAL UNITS, DUCTWORK, WIRING, ETC.
- WHERE DEMOLITION AND/OR REMOVAL IS INDICATED, IT IS INTENDED TO SHOW THE GENERAL NATURE OF EXISTING CONDITIONS AND EXTENT OF WORK. IT IS NOT TO BE CONSIDERED A RECORD DRAWING OF EXISTING
- PROVIDE TEMPORARY AND PERMANENT SUPPORT AS NECESSARY TO MAINTAIN THE INTEGRITY OF EXISTING STRUCTURES.
- VERIFY W/ OWNER ITEMS TO BE SALVAGED AND RETURNED TO OWNER. ALL ITEMS TO BE SALVAGED SHALL BE CAREFULLY REMOVED SO AS TO ALLOW FOR REUSE.
- ANY EXISTING DOORS, FINISH HARDWARE, CONTROLS, SCHEDULED TO BE REMOVED SHALL BE SALVAGED AND RETURNED TO THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ITEMS THE OWNER DOES NOT WANT TO RETAIN POSSESSION OF.
- FIELD VERIFY AND COORDINATE ALL ITEMS, DIMENSIONS, CONDITIONS, AND QUANTITIES, ETC.
- IT IS MANDATORY THAT THE COMPLETE EXISTING BUILDING REMAIN IN CONTINUOUS AND NON-INTERRUPTED OPERATION DURING REMODELING/ALTERING OF SAID EXISTING BUILDING. THE SPECIFIC AREAS BEING REMODELED/ALTERED AT ANY SCHEDULED TIME ARE OBVIOUSLY EXCLUSIVE OF THIS STATEMENT. SERVICES TO EXISTING BUILDING SHALL BE KEPT IN CONTINUOUS OPERATION INCLUDING POWER, SIGNAL SYSTEMS, LIGHTING, TELEPHONE, HEATING, COOLING, VENTILATING, TEMPERATURE CONTROLS, SEWERS AND HOT AND COLD WATER. ANY ABSOLUTELY NECESSARY INTERRUPTION OF THESE SERVICES TO ACCOMPLISH CONTRACT WORK SHALL BE ARRANGED THROUGH THE ARCHITECT WITH THE OWNER A MINIMUM OF FIVE (5) WORKING DAYS IN ADVANCE, SUCH INTERRUPTIONS SHALL BE KEPT TO AN ABSOLUTE MINIMUM AS FAR AS TIME INTERVAL IS INVOLVED AND TEMPORARY SERVICES SHALL BE FURNISHED AND INSTALLED UNDER THIS CONTRACT WHERE NECESSARY TO ACCOMPLISH THIS PURPOSE. TEMPORARIES SHALL BE REMOVED BY THE CONTRACTOR ONLY AFTER NEW PERMANENT SERVICES ARE INSTALLED AND **FULLY OPERATIONAL.**

- BEFORE BEGINNING WORK AT THE SITE AND THROUGHOUT THE COURSE OF THE WORK, INSPECT AND VERIFY THE LOCATION AND CONDITION OF EVERY ITEM AFFECTED BY THE WORK UNDER THIS CONTRACT AND REPORT DISCREPANCIES TO THE ARCHITECT BEFORE BEGINNING WORK.
- BEFORE BEGINNING WORK AT THE SITE, INSPECT THE EXISTING BUILDING AND DETERMINE EXTENT OF THE EXISTING FINISHES, SPECIALTIES, EQUIPMENT AND OTHER ITEMS WHICH MUST BE REMOVED AND REINSTALLED IN ORDER TO PERFORM THE WORK UNDER THIS CONTRACT.
- THE ARCHITECTURAL DRAWINGS SHOW PRINCIPLE AREAS WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. INCIDENTAL WORK MAY ALSO BE NECESSARY IN AREAS NOT SHOWN ON THE ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING THE EXISTING MECHANICAL, ELECTRICAL, PLUMBING OR OTHER SYSTEMS, SUCH INCIDENTAL WORK IS ALSO PART OF THIS CONTRACT. INSPECT THOSE AREAS AND ASCERTAIN WORK NEEDED, AND DO THAT WORK IN ACCORD WITH THE CONTRACT REQUIREMENTS A AT NO ADDITIONAL COST.
- CONTRACTOR SHALL FIELD VERIFY THE SIZE OF EXISTING OPENINGS. WINDOWS, DOORS, CORRIDORS, ROOM, ETC. FOR ACCESS OF THE NEW EQUIPMENT INTO OR REMOVAL OF EXISTING EQUIPMENT FROM THE BUILDING. IF OPENINGS ARE TOO SMALL FOR ACCESS THEN CONTRACTOR SHALL, AT HIS OWN EXPENSE, PROVIDE NEW OR ENLARGED OPENINGS AND RESTORE SAME TO ORIGINAL SIZE AND CONDITION. CONTRACTOR MAY ELECT TO ORDER THE EQUIPMENT DISASSEMBLED AND/OR WITH SPLIT HOUSING FOR ENTRANCE INTO THE EXISTING SPACE OR BUILDING. CONTRACTOR SHALL REASSEMBLE EQUIPMENT AFTER IT IS IN THE SPACE AT HIS OWN EXPENSE.
- PROTECT EXISTING WORK TO REMAIN FROM DAMAGE.
- REPAIR, PATCH AND FINISH OR REPLACE AS APPLICABLE TO MATCH ADJACENT EXISTING FINISHES. THOSE EXISTING SURFACES DAMAGED OR NEWLY EXPOSED DURING PERFORMANCE OF THE WORK UNDER THIS
- WHERE MATCH EXISTING IS INDICATED, NEW CONSTRUCTION OR FINISHES AS APPROPRIATE TO THE NOTE SHALL MATCH THE EXISTING IN EVERY PARTICULAR.
- WORK SHOWN IS NEW UNLESS SPECIFICALLY NOTED OR OTHERWISE
- DETERMINE THE LOCATION OF PARTITIONS NOT DIMENSIONED BY THEIR RELATION TO COLUMN FACE OR CENTER, WINDOW JAMB OR MULLION, EXISTING WALLS OR OTHER SIMILAR FIXED ITEM.
- WHERE PERMANENT REMOVAL OF ITEMS IS REQUIRED, AND PREVIOUSLY CONCEALED SURFACES ARE TO REMAIN EXPOSED, PATCH PREVIOUSLY CONCEALED SURFACES TO MATCH ADJACENT EXPOSED SURFACES. WHERE SUCH SURFACES ARE SCHEDULED TO RECEIVE NEW FINISHES, PREPARE THE SURFACES TO RECEIVE THE NEW FINISHES.
- WHERE CUTTING OF EXISTING SURFACES OR REMOVAL OF EXISTING SURFACES IS REQUIRED TO PERFORM THE WORK UNDER THIS CONTRACT, AND NEW FINISH IS NOT INDICATED, FILL RESULTING OPENINGS AND PATCH THE SURFACE AFTER DOING THE WORK, AND FINISH TO MATCH ADJACENT
- EXISTING SURFACES. WHERE CONDUITS, DUCTS, AND SIMILAR ITEMS ARE SHOWN TO BE INSTALLED IN EXISTING WALLS OR PARTITIONS, NEATLY CHASE THE WALLS OR PARTITIONS, INSTALL THE ITEMS, AND PATCH THE WALLS OR PARTITIONS TO MAKE THE INSTALLATION NOT DISCERNIBLE IN THE FINISH WORK.
- SEAL TIGHT AND PROTECT WITH FIRE SAFING AND CAULKING, NEW SLEEVES AND OPENINGS IN FLOORS. INSTALL ALL NEW CONDUITS, PIPES, WIRING AND DUCTS ABOVE NEW OR EXISTING CEILING. REMOVE EXISTING CEILING AS NECESSARY TO PERFORM

THE WORK. AFTER INSTALLATION OF CONCEALED WORK, REINSTALL

REFER TO OTHER DISCIPLINE DRAWINGS FOR ADDITIONAL DEMOLITION

REQUIRED. CONTRACTOR TO NOTIFY ARCHITECT IMMEDIATELY UPON

DISCOVERY OF CONFLICT OR DISCREPANCY WITH ITEMS INDICATED TO BE

REMOVED CEILING AND PATCH AND REFINISH TO MATCH ADJACENT REFER TO NEW WORK PLANS TO COORDINATE EXTENT OF DEMOLITION.

REMOVED.

- FASCIA AND ROOFING MATERIAL SHALL BE REPLACED AS REQUIRED TO COMPLETE ADJACENT WORK.
- ALL REMOVED EXISTING FACE BRICK SHALL BE CLEANED AND STOCKPILED FOR USE BY THE OWNER.
- FIELD VERIFY AND COORDINATE ALL ITEMS, DIMENSIONS, CONDITIONS, AND QUANTITIES, ETC.
 - IT IS MANDATORY THAT THE COMPLETE EXISTING BUILDING REMAIN IN CONTINUOUS AND NON-INTERRUPTED OPERATION DURING REMODELING/ALTERING OF SAID EXISTING BUILDING. THE SPECIFIC AREAS BEING REMODELED/ALTERED AT ANY SCHEDULED TIME ARE OBVIOUSLY EXCLUSIVE OF THIS STATEMENT. SERVICES TO EXISTING BUILDING SHALL BE KEPT IN CONTINUOUS OPERATION INCLUDING POWER, SIGNAL SYSTEMS, LIGHTING, TELEPHONE, HEATING, COOLING, VENTILATING, TEMPERATURE CONTROLS, SEWERS AND HOT AND COLD WATER, ANY ABSOLUTELY NECESSARY INTERRUPTION OF THESE SERVICES TO ACCOMPLISH CONTRACT WORK SHALL BE ARRANGED THROUGH THE ARCHITECT WITH THE OWNER A MINIMUM OF FIVE (5) WORKING DAYS IN ADVANCE. SUCH INTERRUPTIONS SHALL BE KEPT TO AN ABSOLUTE MINIMUM AS FAR AS TIME INTERVAL IS INVOLVED AND TEMPORARY SERVICES SHALL BE FURNISHED AND INSTALLED UNDER THIS CONTRACT WHERE NECESSARY TO ACCOMPLISH THIS PURPOSE. TEMPORARIES SHALL BE REMOVED BY THE

FULLY OPERATIONAL.

GRADE MATERIALS.

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK WHICH MAY REQUIRE SPECIFIC ATTENTION OR COORDINATION.
- CONTRACTOR SHALL REPAIR OR REPLACE ALL DAMAGED SIDEWALKS, CURBS, OR PAVING AS A RESULT OF CONSTRUCTION ACTIVITIES TO REMAIN

WHICH WOULD NECESSITATE FURTHER EXCAVATION AND ADDITIONAL SUB

- NO EXCAVATIONS ARE TO BE LEFT OPEN TO FOUL WEATHER, RAIN, SNOW,
- CONTRACTOR TO PROTECT NEW AND EXISTING TREES AND LANDSCAPING. CONTRACTOR RESPONSIBLE FOR RESTORING THE SAME.

EXISTING TREES IN THE WAY OF NEW CONSTRUCTION THAT CAN BE

SUCCESSFULLY TRANSPLANTED OR RELOCATED SHOULD BE DONE.

CONSULT ARCHITECT FOR NEW LOCATIONS. CONTRACTOR TO HYDROSEED ALL GRASS AREAS ALONG NEW BUILDING

PERIPHERY WHICH MAY BE DAMAGED DUE TO CONSTRUCTION.

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS AND QUANTITIES AS REQUIRED TO COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE CONTRACTOR WILL NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES OR CHANGES REQUIRED TO COMPLETE THE WORK BEFORE ANY ACTION MAY BE TAKEN. ALL CHANGES OR CHANGE ORDERS MUST BE APPROVED BY THE ARCHITECT AND OWNER BEFORE ANY CHANGES ARE EXECUTED.
- THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. (800-892-0123) 72 HOURS PRIOR TO CONSTRUCTION FOR LOCATION OF UTILITIES AND SHALL BE RESPONSIBLE
- FOR PROTECTION OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL PRIVATE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY DAMAGED DURING THE CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE. NO TREE SHALL BE PLANTED WITHIN 10 LATERAL FEET OF ANY OVERHEAD UTILITY WIRE OR WITHIN 5 LATERAL FEET OF ANY UNDERGROUND WATERLINE, SEWER LINE, TRANSMISSION LINE OR OTHER UTILITY.
- ALL NECESSARY SITE WORK PERMITS AND LICENSES SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF
- THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL AND WORK FOR A PERIOD OF ONE YEAR AFTER FINAL COMPLETION OF THE CONTRACT. BEFORE ACCEPTANCE ALL WORK SHALL BE INSPECTED AND APPROVED BY THE OWNER AND ARCHITECT.
- ALL PLANTS SHALL CONFORM TO THE "AMERICAN STANDARDS FOR NURSERY STOCK" LATEST EDITION, AND SHALL BE INSTALLED ACCORDING TO THE CURRENT STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMAN AND THE VILLAGE SUBDIVISION REGULATIONS.
- ALL PLANTS USED PER THE PLAN SHALL BE HARDY IN USDA ZONE 5.
- ALL PLANT MATERIAL SHALL BE INSPECTED AND APPROVED BY THE ARCHITECT PRIOR TO THE INSTALLATION OF ANY AND ALL PLANT MATERIAL. ALL TREES TO HAVE HARDWOOD MULCH AROUND THEM DIAMETER EQUAL
- TO TREE CANOPY. ALL STRIPING TO BE 3" THICK YELLOW PER IDOT STANDARDS.
- ALL DIRECTIONAL ARROWS TO BE WHITE PER IDOT STANDARDS.
- SLOPES, ETC. SHALL GOVERN OVER THE ARCHITECTURAL SITE PLAN. CONTRACTOR SHALL COMPLY WITH ALL CONSTRUCTION AND DEMOLITION
- CONTRACTOR SHALL COORDINATE ALL DEMOLITION WITH SCOPE OF NEW

ACCORDANCE TO VILLAGE REQUIREMENTS AND SPECIFICATIONS.

- CAPPED AT PROPERTY LINE. CONTRACTOR TO PROVIDE NECESSARY TEMPORARY FENCING IN
- FIELD VERIFY AND COORDINATE ALL ITEMS, DIMENSIONS, CONDITIONS, AND QUANTITIES, ETC.

- CONTRACTOR SHALL FOLLOW MANUFACTURER'S DIRECTION TO ACHIEVE THE REQUIRED ASSEMBLY. IF THERE IS A CONFLICT OR DISCREPANCY BETWEEN THE MANUFACTURER'S INSTRUCTIONS AND THE DRAWINGS OR SPECIFICATIONS, THE CONTRACTOR SHALL NOTIFY
- ALL PENETRATIONS THROUGH ALL FIRE RATED WALL, FLOOR, AND ROOM ASSEMBLIES SHALL BE FIRE SEALED IN ACCORDANCE WITH THE FIRE RESISTANT JOINT MANUFACTURER'S DETAILS. INSTALLATION SHALL BE APPROPRIATE FOR LOCATION, TYPE OF CONSTRUCTION, AND PENETRATING ITEM. ALL PENETRATIONS ARE TO MEET OR EXCEED THE REQUIRED ASSEMBLY RATING.
 - TERMINATIONS OF FIRE RATED WALL TO THE ROOF DECK, FLOOR DECK,
- ALL DUCTWORK, DIFFUSERS, AND GRILLES PENETRATING FIRE RATED ASSEMBLIES SHALL BE INSTALLED WITH AN APPROPRIATE FIRE DAMPER. DAMPER SHALL BE APPROPRIATE FOR LOCATION AND TYPE OF
- ALL FIXTURES, EQUIPMENT, AND DEVICES PENETRATING FIRE RATED ASSEMBLIES SHALL BE UL LISTED FOR INSTALLATION IN THE ASSEMBLY
- NO FIXTURE, EQUIPMENT, OR DEVICES ARE TO BE INSTALLED IF ITS INSTALLATION WITH COMPROMISE A REQUIRED FIRE RATED ASSEMBLY.

ARCHITECTURAL ABBREVIATIONS AND SYMBOLS ANCHOR BOLT JAN. ACOUSTIC JOINT ACOUSTICAL CEILING TILE LAM. LAMINATE ABOVE FINISHED FLOOR LAV. LAVATORY AMERICAN INSTITUTE OF STEEL CONSTRUCTION LIVE LOAD ALUMINUM HOLLOW CORE HM **HOLLOW METAL** HORIZONTAL **BULLETIN BOARD** HEIGHT BD. BOARD INSIDE FACE **BITUMINOUS** INSUL. INSULATION BLDG. BUILDING INT. INTERIOR BLOCK MAS. MASONRY BLKG. BLOCKING MATL MATERIAL BEAM MAX. MAXIMUM BOT. BOTTOM MARKERBOARD **BEARING** MECHANICAL BETWEEN MANUFACTURER **BUILT-UP ROOF** BUR MINIMUM **BOTTOM OF** MISCELLANEOUS CABINET M.O. MASONRY OPENING CHALKBOARD MTL. METAL CEILING MTD. MOUNTED CENTERLINE N.I.C. NOT IN CONTRACT

CEIL. CLOSET NO., # CLEAR NS NO SCALE CLRM. CLASSROOM OC ON CENTER CONCRETE MASONRY UNIT OUTSIDE FACE CLEAN OUT CO COLUMN CONC. CONCRETE

CONT. CONTINUOUS PLAS PLASTIC CONTR. CONTRACTOR PLATE CORR. CORRIDOR PER CARPET **CERAMIC TILE** RISER

RAD. DRINKING FOUNTAIN RD DIAMETER REINF. DIMENSION

DOOR SC DRWG. DRAWING DOWNSPOUT EA.

FINISH SYSTEM **ELEVATIONS (USGS)** CIVIL DRAWINGS SHOWING DIMENSIONS OF PAVED AREAS, RADIUSES, ELEV. ELEVATION

REQUIREMENTS PER THE AUTHORITY HAVING JURISDICTION.

CONTRACTOR SHALL COORDINATE REMOVAL, AND CAPPING, OF ALL UTILITIES WITH ALL NEW WORK UNUSED UTILITIES SHALL BE REMOVED AND THE ARCHITECT IN WRITING PRIOR TO COMMENCEMENT OF THE WORK.

- OR DIFFERING PARTITION TYPE SHALL BE FIRE SEALED ALONG THE
- ENTIRE EDGE TO CLOSE ALL GAPS.
- CONSTRUCTION. DAMPERS ARE TO MEET OR EXCEED THE REQUIRED
- CONTRACTOR ONLY AFTER NEW PERMANENT SERVICES ARE INSTALLED AND

NUMBER

OPPOSITE HAND OPPOSITE COND. CONDITION PARTITION CONST. CONSTRUCTION PRECAST QUARRY TILE DETAIL RADIUS

ROOF DRAIN REINFORCING REQ'D. REQUIRED DEAD LOAD SOLID CORE SECT. SECTION SQUARE FOOT

EACH STRUCTURAL GLAZED TILE SGT. **EXTERIOR INSULATED** SHT. SHEET SIM. SIMILAR SPACES SPECIFICATION SPEC. EQUAL SQUARE

SS STAINLESS STEEL **EACH WAY** STL. ELECTRIC WATER COOLER STOR. STORAGE EXIST. **EXISTING** STRUCT. STRUCTURAL **EXPANSION**

GLASS FIBER REINFORCED

GYPSUM

GLASS

GYP. BD. GYPSUM BOARD

GFRG

EQUIP. EQUIPMENT

SUPPORT **EXTERIOR** SUSP. SUSPENDED **FURNISHED BY OTHERS** SQUARE YARD FLOOR DRAIN TREAD **FOUNDATION** TACK BOARD FIRE EXTINGUISHER

TEMP. TEMPERED CABINET THK. **FINISHED** THICK TOTAL LOAD FLOOR TOILET FRAME TOIL. TYPICAL FRMG. **FRAMING** TΥΡ. TOP OF **FOOTING**

GAUGE UNLESS OTHERWISE NOTE VCT VINYL COMPOSITION TILE **GALVANIZED** GENERAL CONTRACTOR VERT. VERTICAL GEN. **GENERAL** VESTIBULE GLASS FIBER REINFORCED VERIFY IN FIELD CONCRETE WC WATER CLOSET

W/O

WOOD

WITH

WITHOUT

WELDED WIRE FABRIC

GENERAL NOTES AND ABBREVIATIONS

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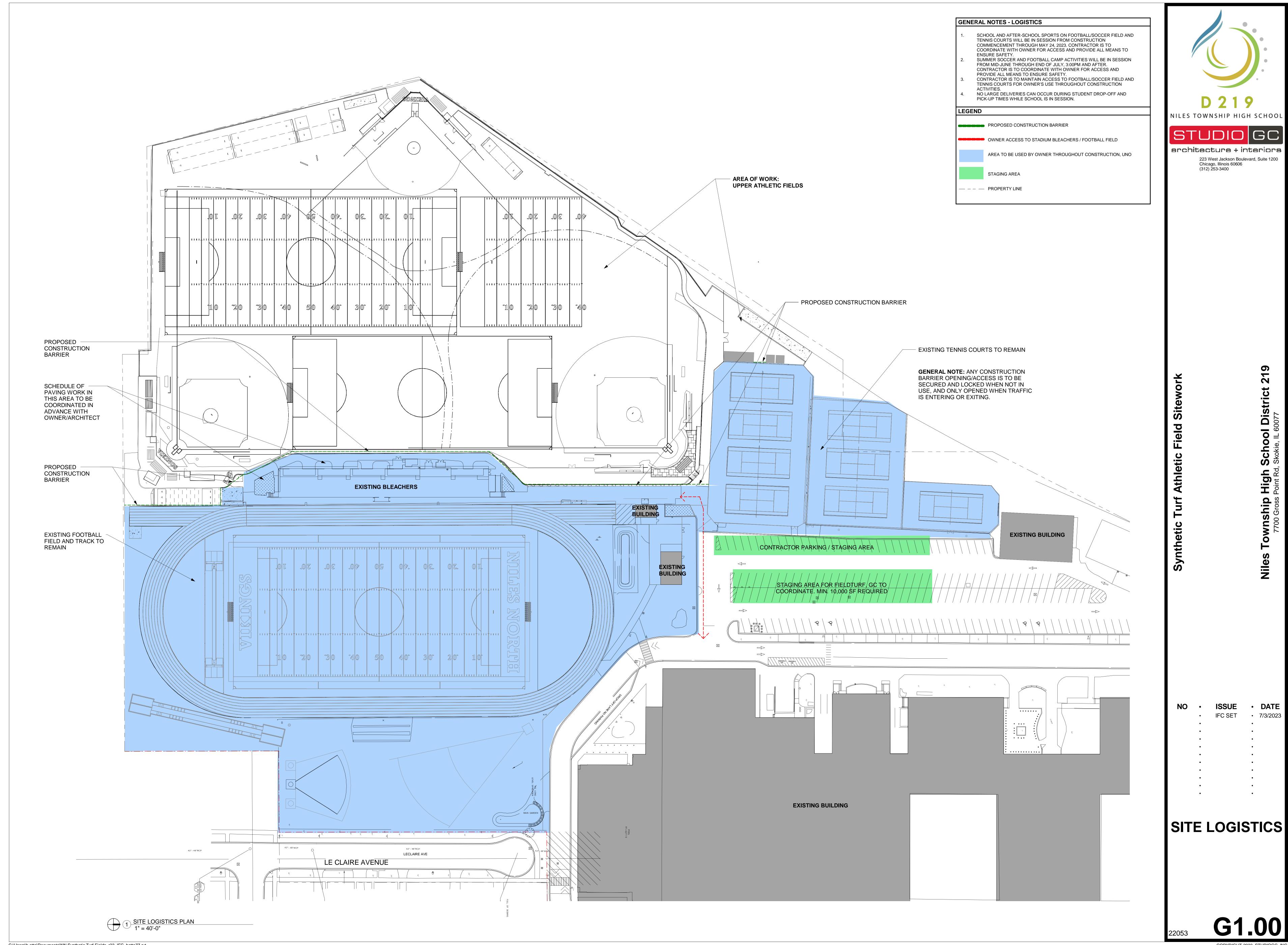
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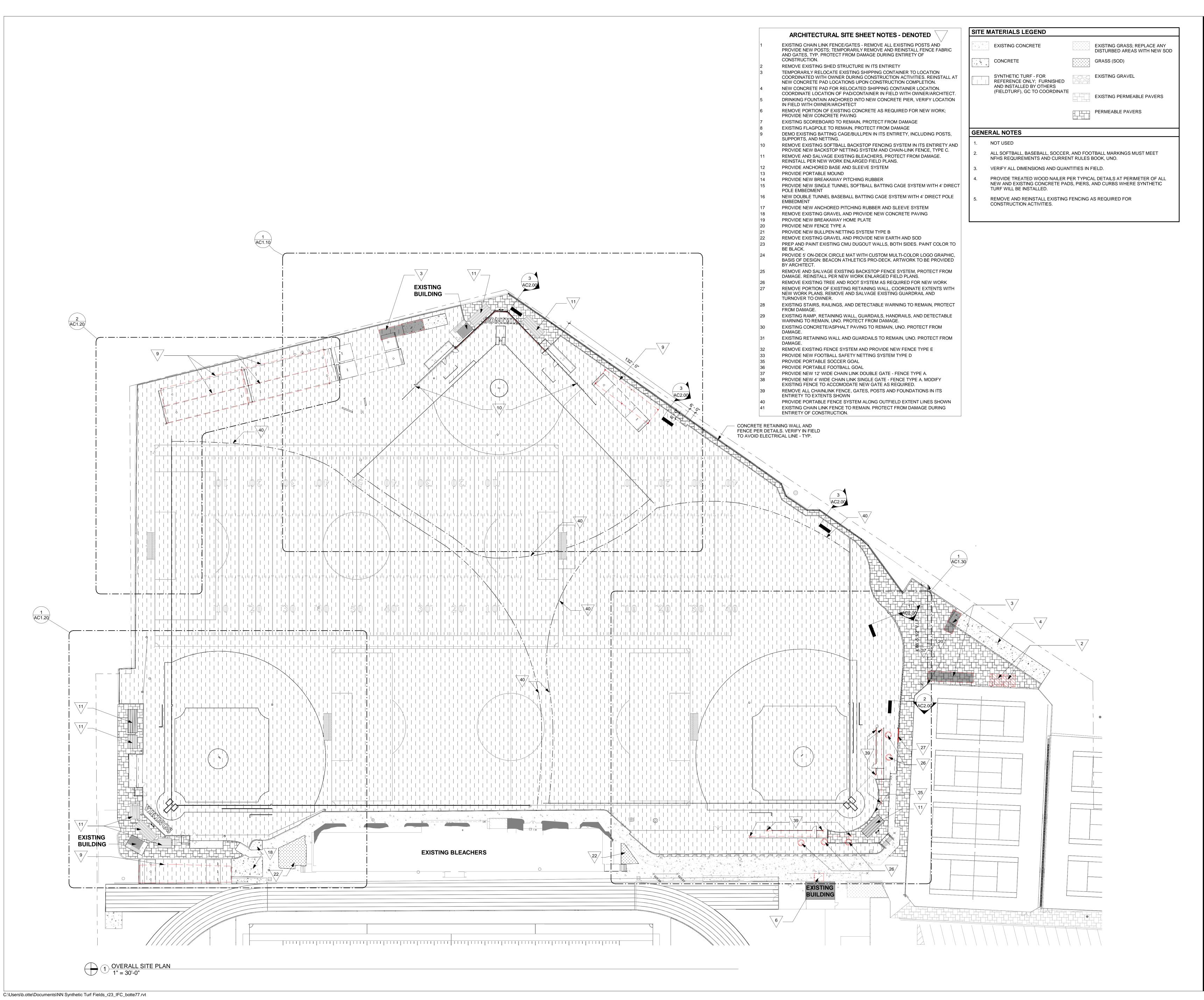
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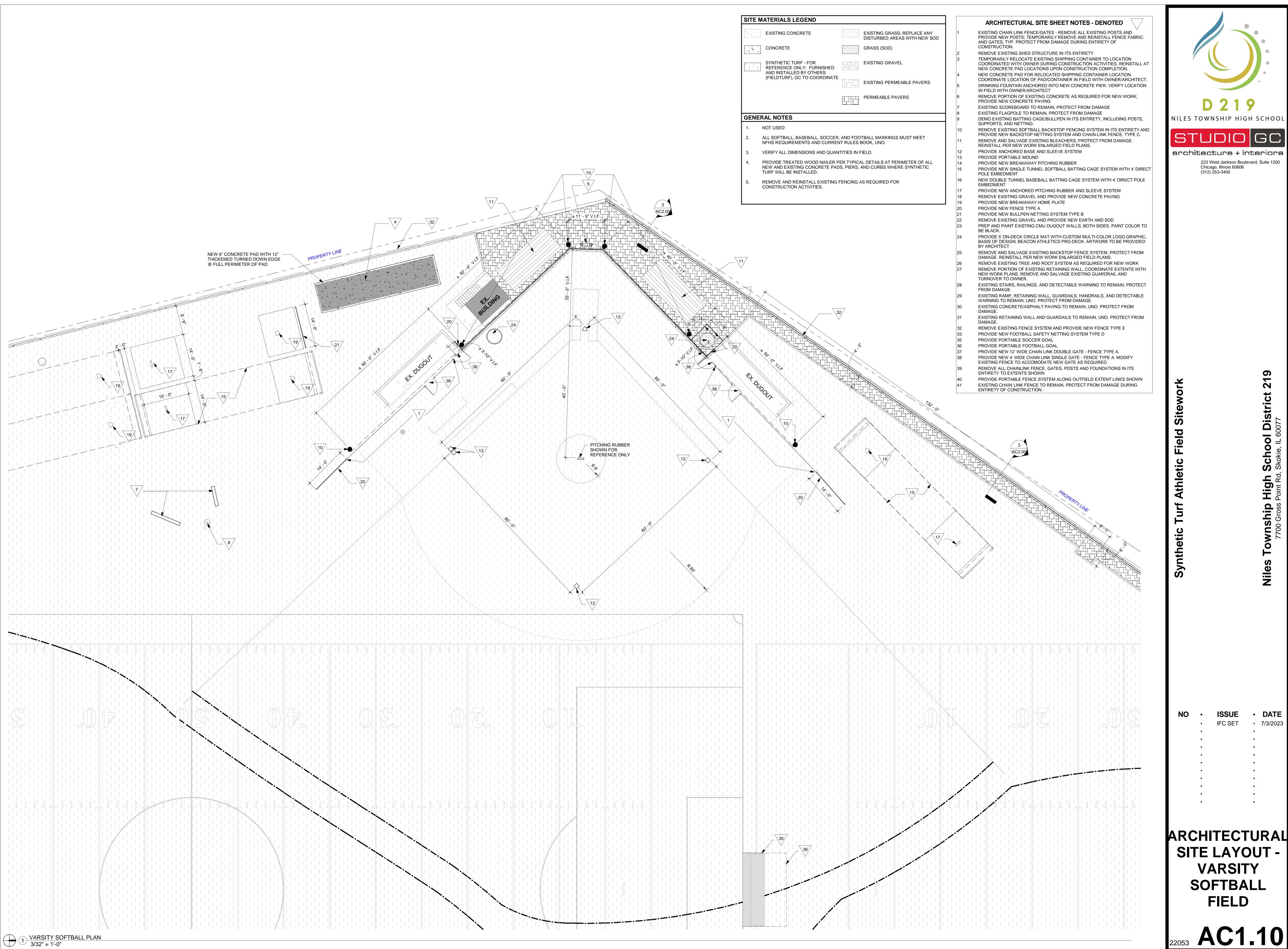
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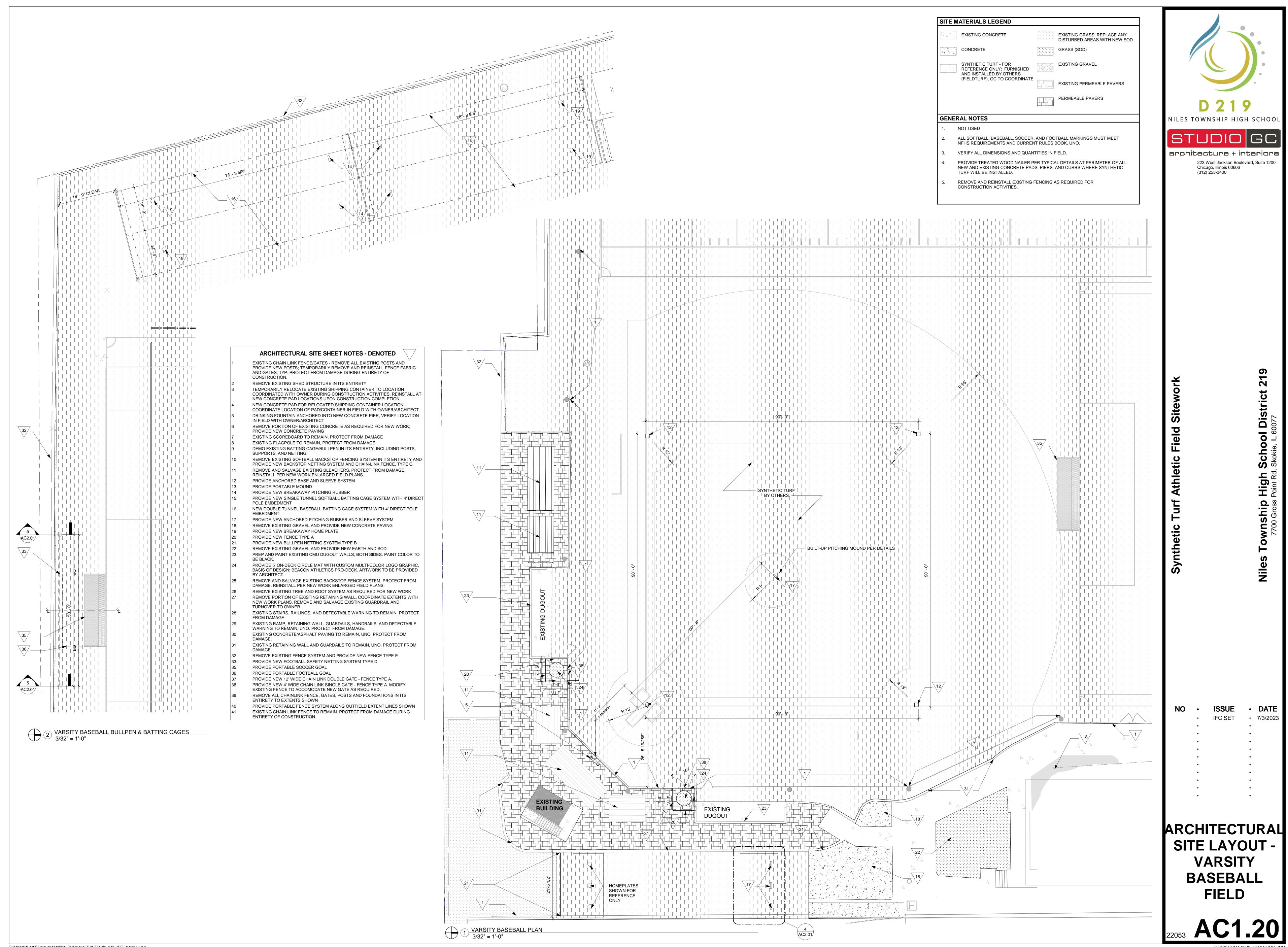


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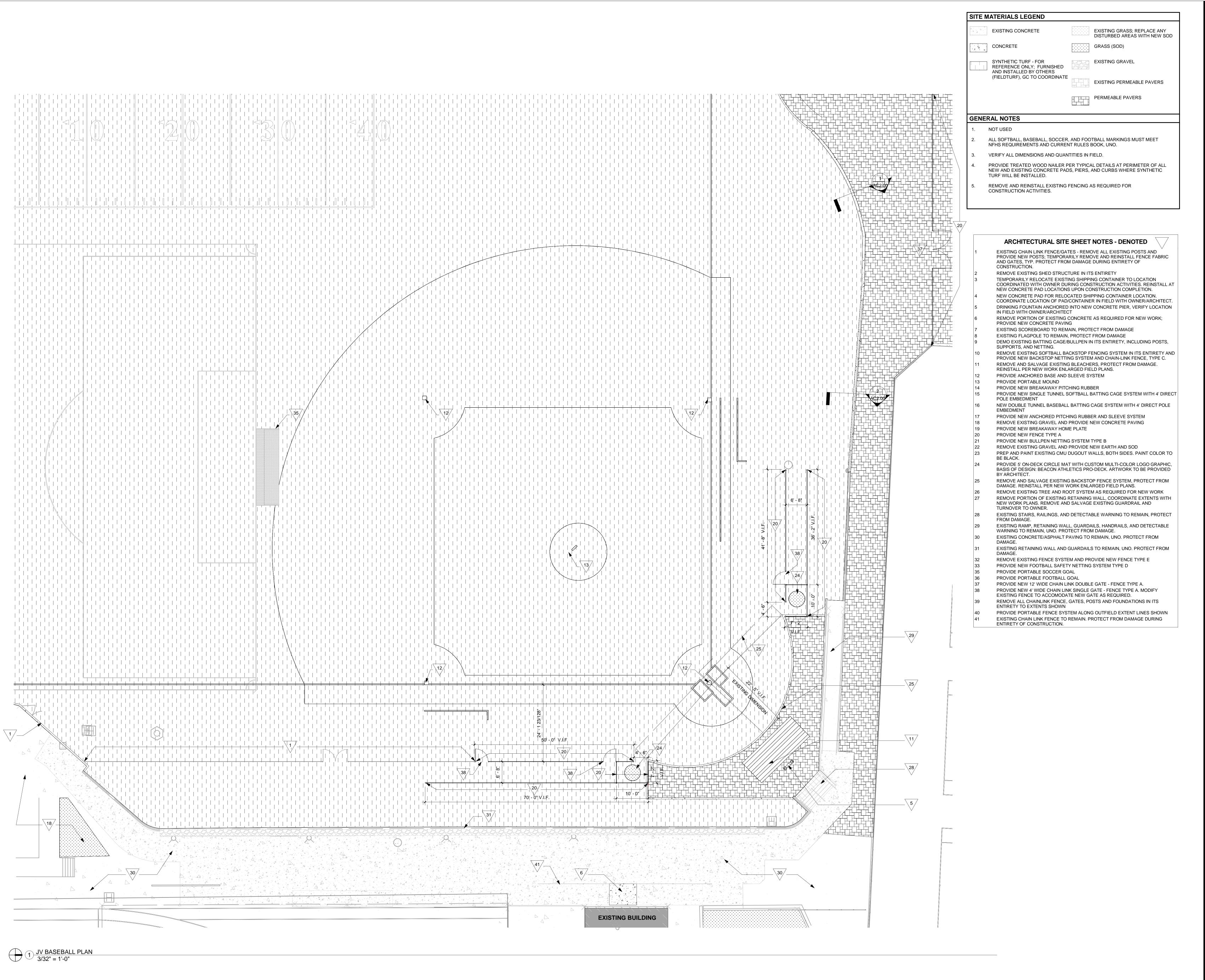
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ARCHITECTURAL SITE LAYOUT -**VARSITY SOFTBALL FIELD**



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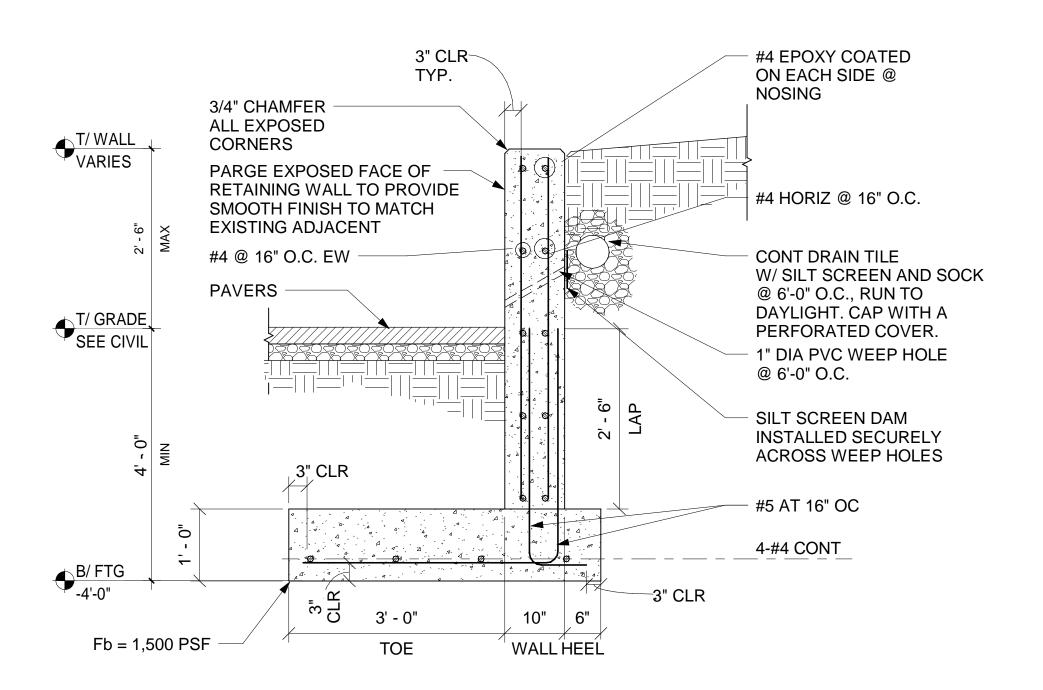
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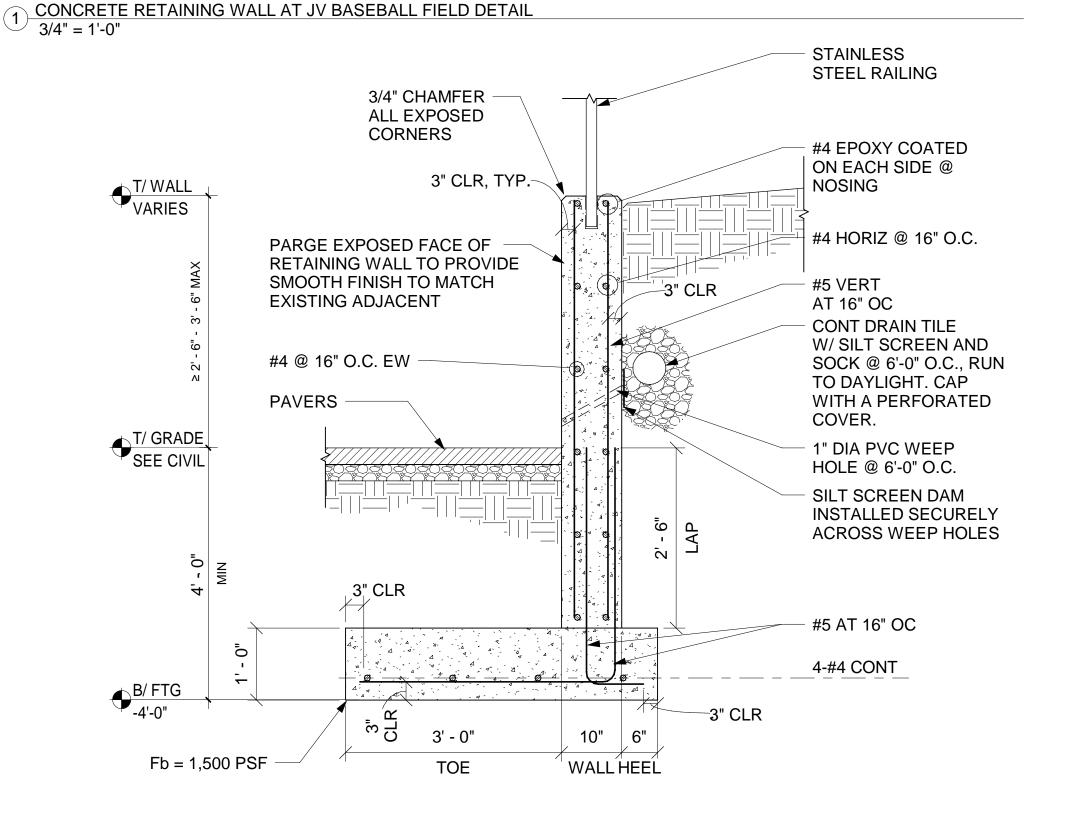
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ARCHITECTURAL SITE LAYOUT -JV BASEBALL FIELD

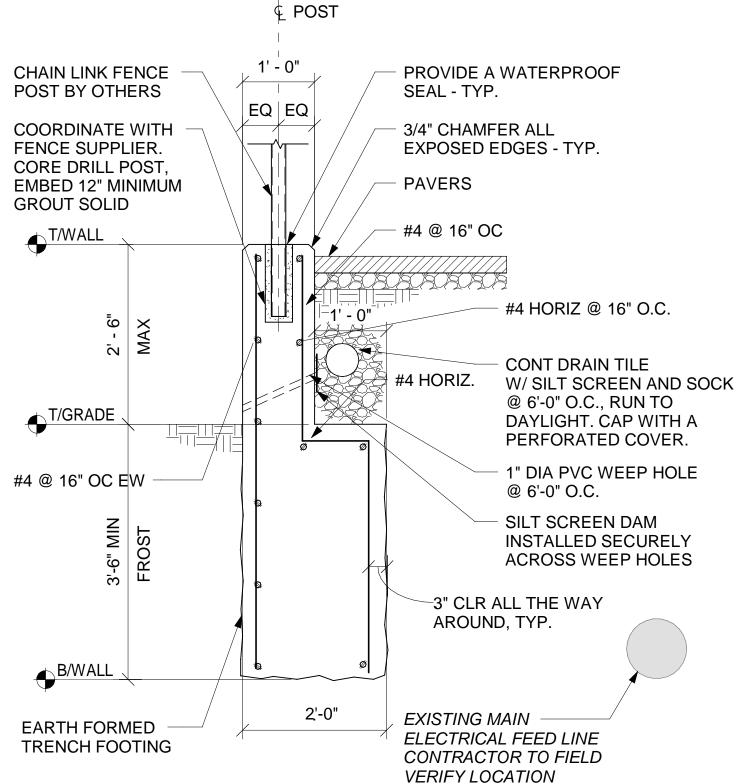
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CONCRETE RETAINING WALL WITH GUARDRAIL DETAIL 3/4" = 1'-0"



3 CONCRETE RETAINING WALL ALONG PATH DETAIL 3/4" = 1'-0"

1. PROVIDE TEMPORARY SHEETING AS REQUIRED IF THE NATURE OF THE MATERIAL DOES NOT ALLOW FOR GRADUAL SLOPING TO THE EXCAVATION.

REMOVE ALL SOFT, LOOSE, FILL, OR ORGANIC MATERIAL WHICH MAY BE IN THE FINAL GRADING BENEATH THE BUILDING SLAB.

ALLOWABLE SOIL BEARING PRESSURE:

- FOUNDATIONS HAVE BEEN DESIGNED FOR AN ASSUMED NET ALLOWABLE SOIL BEARING OF 3000 PSF TO BE VERIFIED AT THE TIME OF EXCAVATION.
- ALL BEARING ALLOWABLES SHALL BE FIELD VERIFIED BY A QUALIFIED SOIL TESTING LABORATORY.
- IF FOR ANY REASON THE INDICATED BEARING ALLOWABLE IS
- NOT ATTAINABLE AT ELEVATIONS SHOWN ON THE DRAWINGS, THE ARCHITECT/ENGINEER SHALL BE NOTIFIED IMMEDIATELY. BEARING SHALL BE ON VIRGIN, UNDISTURBED NATURAL
- MEDIUM DENSE GRANULAR SOILS, STIFF COHESIVE SOILS, OR IF FILL IS REQUIRED, IT SHALL BE APPROVED FOR USE BY THE PROJECT TESTING LABORATORY, AND SHALL BE COMPACTED IN ACCORDANCE WITH APPROPRIATE ASTM STANDARDS TO OBTAIN REQUIRED ALLOWABLE BEARING PRESSURE.

BACKFILLING:

- 1. ALL BACKFILL MATERIALS ALONG FOUNDATION WALLS AND UNDER BUILDING SLABS SHALL BE FREE DRAINING AND SUBJECT TO THE REVIEW OF THE ARCHITECT/ENGINEER.
- BACKFILLING SHALL BE DONE EVENLY ON BOTH SIDES OF WALLS.
- RETAINING WALLS SHALL BE BACKFILLED ONLY AFTER HAVING REACHED DESIGN STRENGTH OR WHILE BEING TEMPORARILY BRACED UNTIL FINAL CURING OF ITS FINAL SUPPORT.
- FILL MATERIALS FOR ALL SLAB AREAS SHALL BE PLACED IN LAYERS NOT EXCEEDING 9" AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D1557. UNTIL FINAL GRADE IS ATTAINED.
- ALL SLAB ON GRADE AREAS SHALL BE PROOF ROLLED WITH THE HEAVIEST EQUIPMENT AVAILABLE (25 TONS) AND ALL SOFT SPOTS SHALL BE REMOVED AND REPLACED WITH APPROVED FILL MATERIALS, TO THE REQUIRED GRADES.

MAX W/C RATIO f'c @ 28 DAYS AIR CONTENT

 WALLS & PIERS......0.45 4500 PSI 6% +/- 1.5%

CONCRETE REINFORCEMENT:

- ASTM A615-60; PLACE TO ACI CLEARANCES UNLESS
- DETAILED OTHERWISE. ALL REINFORCING SHALL BE PLACED TO CLEARANCES PER THE ACI AND IN ACCORDANCE WITH THE RECOMMENDATIONS OF ACI AND THE CONCRETE REINFORCING INSTITUTE (CRSI).
- PROVIDE BAR SUPPORTS AND OTHER ACCESSORIES IN ACCORDANCE WITH CRSI RECOMMENDATIONS AND STANDARD PRACTICES. AND AS NECESSARY TO HOLD REINFORCING IN PROPER POSITION DURING CONCRETING.
- REINFORCING SHALL BE CLEANED OF ALL OIL, SCALE,
- RUST, ETC., WHICH MAY IMPAIR BOND. PLACE "L" BARS AT ALL CORNERS AND WALL INTERSECTIONS. SIZE AND SPACING TO MATCH THOSE OF THE HORIZONTAL REINFORCING DETAILED. PROVIDE ADDITIONAL VERTICAL BARS AS
- REQUIRED TO SUPPORT OUTSIDE CORNER "L" BARS. PLACE 2 - #5 ADDITIONAL BARS ALL AROUND WALL

LARGER TO BE 47 BAR DIAMETERS.

- OPENINGS. EXTEND 2'-0" BEYOND OPENING EDGE. ALL EMBEDMENT LENGTHS AND LAPS SHALL BE AS REQUIRED BY ACI 318, UNLESS OTHERWISE NOTED.
- MINIMUM EMBEDMENT FOR #6 BARS AND SMALLER TO BE 38 BAR DIAMETERS OR 24", WHICHEVER IS GREATER. MINIMUM EMBEDMENT FOR #7 BARS AND
- MINIMUM LAP LENGTH FOR #6 BARS AND SMALLER TO BE 50 BAR DIAMETERS. MINIMUM LAP LENGTH FOR #7 BARS AND LARGER TO BE 62 BAR DIAMETERS.

1' - 2" 4' - 0" 4' - 0" 1' - 2" MAX. SPACING (2) 3/4" O.D. VERTICALS (10) 3/4" O.D. VERTICALS PIPES SPACED EQUALLY — 1 1/2" O.D. STAINLESS STEEL PIPES SPACED EQUALLY BALUSTER TOP, BOTTOM AND VERTICAL POST MEMBERS 3/4" O.D. STAINLESS STEEL VERTICAL POST MEMBERS T/RETAINING WALL OF RETAINING WALL TO PROVIDE SMOOTH FINISH

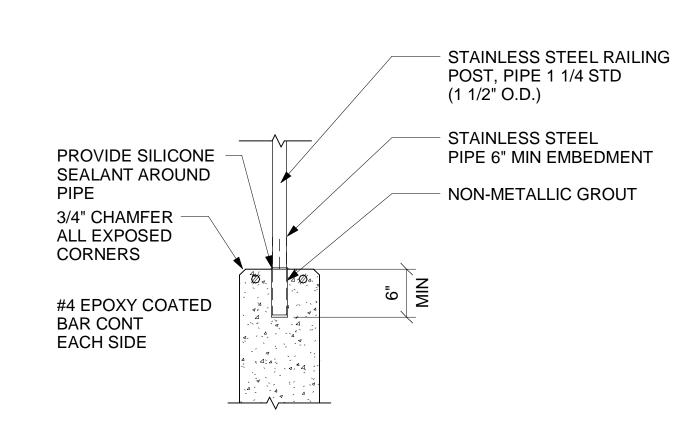
10' - 4"

VERIFY ALL DIMENSIONS IN FIELD TO MATCH EXISTING ADJACENT

4 GUARDRAIL PANEL - TYPICAL 1" = 1'-0"

EXPANSION JOINT @ 100'-0" OC MAX ALIGN WITH LOW **RIB OF FORM LINER** 1/2" COMPRESSIBLE **JOINT FILLER &** SEALANT 1/2" DIA BAR DOWEL W/ PLASTIC SLEEVE ONE SIDE, SPACED 12" O.C.

5 RETAINING WALL EXPANSION JOINT - TYPICAL 1" = 1'-0"



6 RAILING CONNECTION - TYPICAL 1" = 1'-0"

ARCHITECTURAL SITE DETAILS

PARGE EXPOSED FACE

TO MATCH EXISTING

ADJACENT

Sch

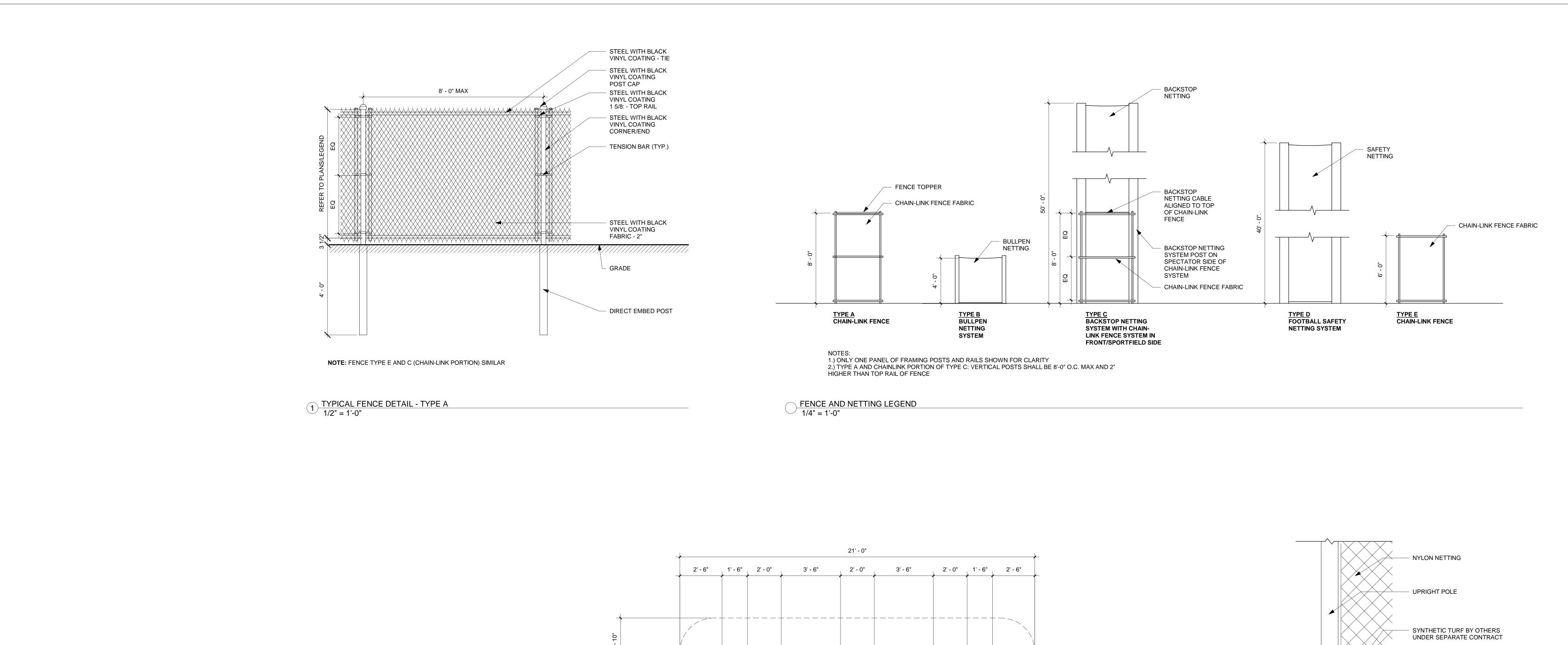
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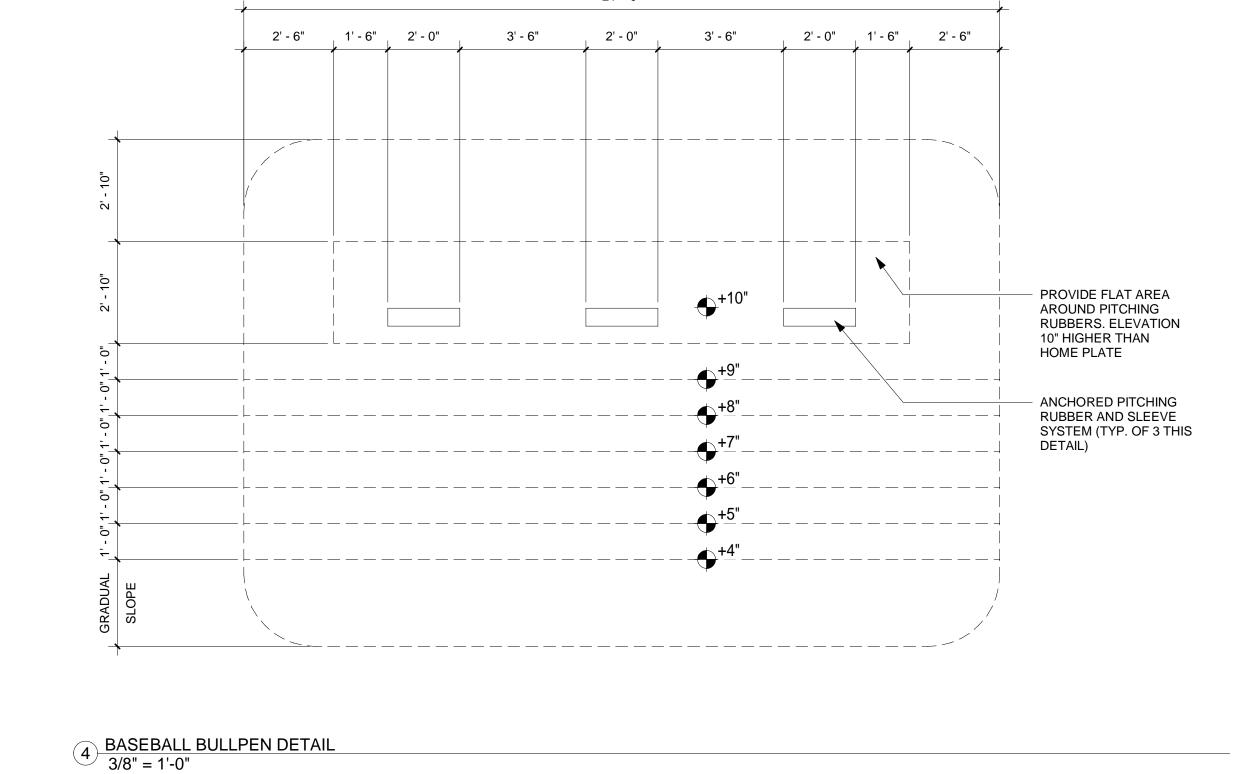
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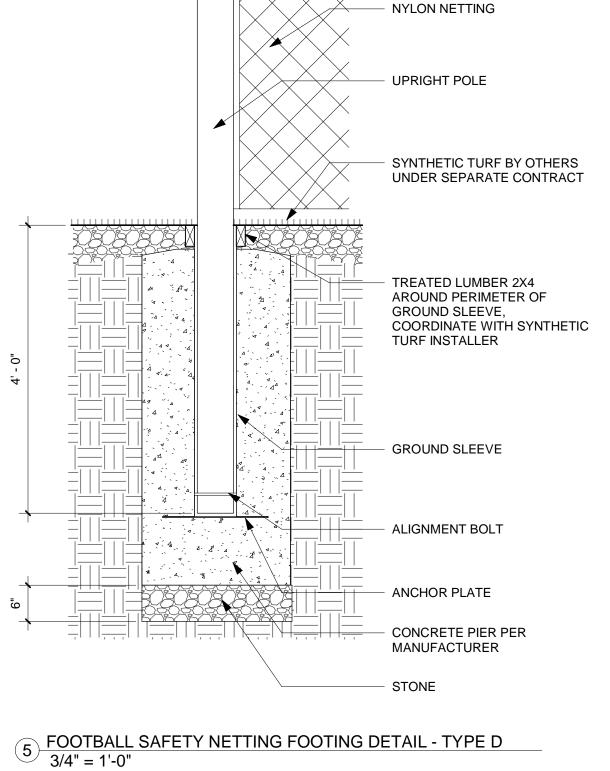
architecture + interiors

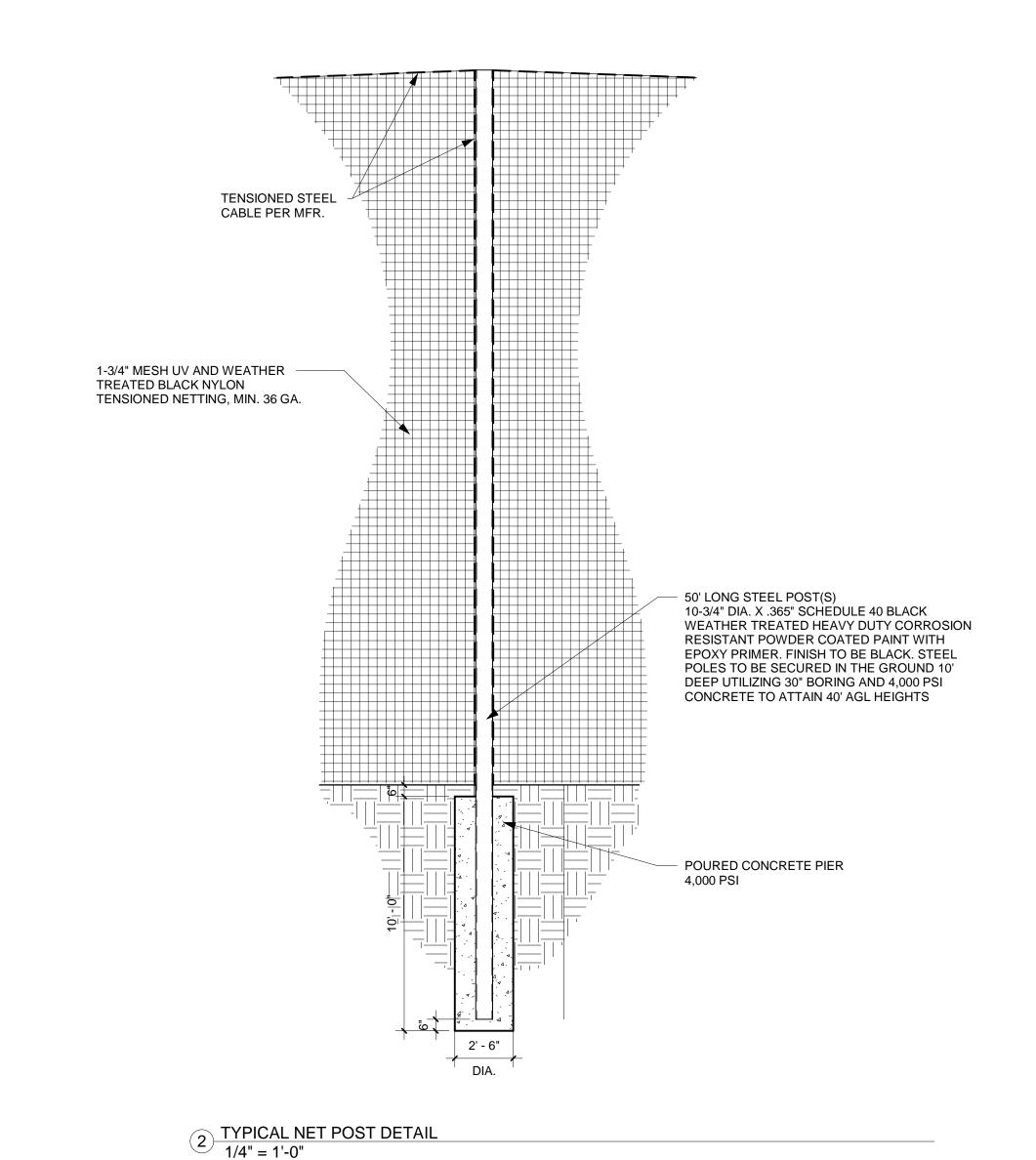
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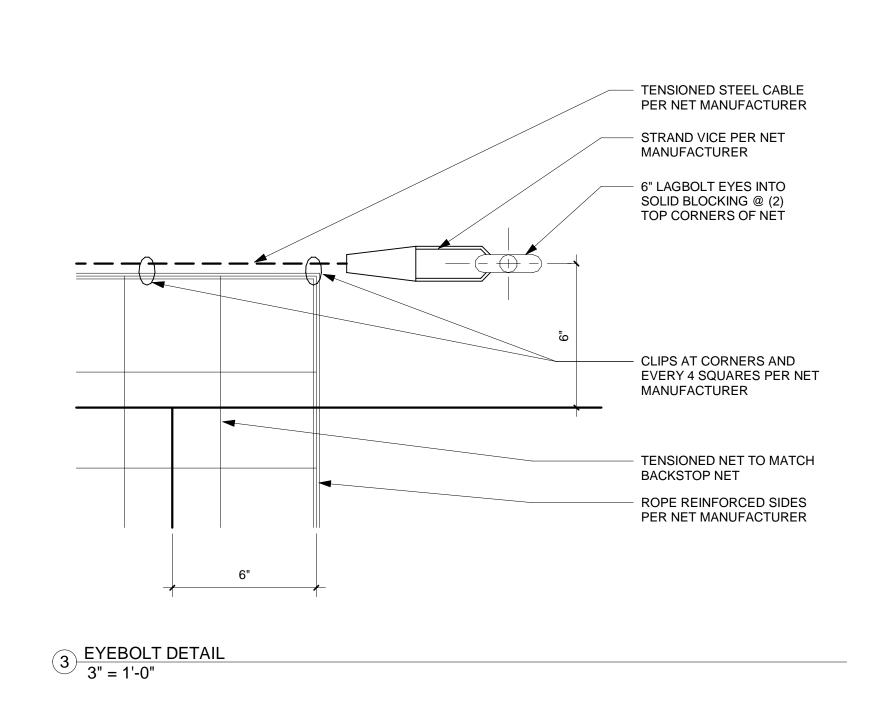
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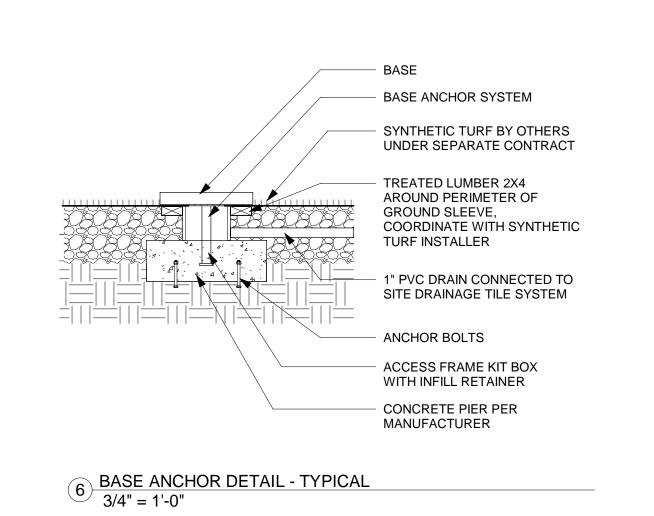












FENCE/ EQUIPMENT DETAILS

IFC SET

7/3/2023

NILES TOWNSHIP HIGH SCHOOL

erchitecture + interiors

Chicago, Illinois 60606 (312) 253-3400

223 West Jackson Boulevard, Suite 1200

22053 AC2.01

CODVENEUT 2002 CTUDIOCC INC

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ALL WORK INDICATED IN THIS AREA -SHALL BE PART OF <u>BASE BID</u> WORK.

I. UNDERGROUND CONDUIT SHALL EXTEND INTO THE HANDHOLE ENCLOSURE.

2. HANDHOLE ENCLOSURE COVERS SHALL HAVE AN IDENTIFYING MARK OR LOGO THAT PROMINENTLY IDENTIFIES THE FUNCTION OF THE ENCLOSURE

HANDHOLE ENCLOSURE FOR LOCATIONS IN TURF DETAIL NO SCALE

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HANDHOLE ENCLOSURE DETAIL NO SCALE

ELECTRICAL ABBREVIATIONS

A	AMPERES	GFPI	GROUND FAULT PROTECTIVE EQUIPMENT	TP	TAMPER PROOF
AFCI	ARC FAULT CIRCUIT	un.		TYP.	TYPICAL
	INTERRUPTER	HP	HORSEPOWER	U.N.O.	UNLESS NOTED OTHE
A.F.F.	ABOVE FINISHED FLOOR	I.T.	INFORMATION TECHNOLOGY	٧	VOLTS
С	CONDUIT	KCM	THOUSAND CIRCULAR MILS	VA	VOLT - AMPERES
C/B	CIRCUIT BREAKER	MAX	MAXIMUM	W	WATTS
CT	CURRENT TRANSFORMER	MCA	MINIMUM CIRCUIT AMPS		
CU	COPPER	MCB	MAIN CIRCUIT BREAKER	WG	WIRE GUARD
EC	ELECTRICAL CONTRACTOR	MIN	MINIMUM	WP	WEATHER PROOF
EM	EMERGENCY	MLO	MAIN LUGS ONLY	XFMR	TRANSFORMER
FLA	FULL LOAD AMPS	MOCP	MAXIMUM OVERCURRENT	IP	SINGLE POLE
		TICCE	PROTECTION	2P	TWO POLE
G, GRD.	GROUND	PT	POTENTIAL TRANSFORMER	3P	THREE POLE
GFI	GROUND FAULT CIRCUIT INTERRUPTER	SPD	SURGE PROTECTIVE DEVICE	φ	PHASE

DRAWING NOTES (TYPICAL FOR THIS DRAWING ONLY)

- (1) PROVIDE POLYMER CONCRETE 12" x 12" x "12", TEIR 15, UL LISTED, IN-GRADE JUNCTION BOX FOR A FUTURE SPORT FIELD LIGHTING STANDARD. UNDERGROUND CONDUIT SHALL EXTEND INTO THE HANDHOLE ENCLOSURE. PROVIDE HUBBELL QUAZITE BOX WITH GASKETED COVER AND STAINLESS STEEL TAMPER PROOF FASTENERS TO SECURE LID TO BOX. REFER TO "HANDHOLE ENCLOSURE DETAIL" FOR ADDITIONAL INFORMATION. COORDINATE EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH-IN.
- (2) PROVIDE POLYMER CONCRETE 30" x 48" x 24", TEIR 15, UL LISTED, IN-GRADE JUNCTION BOX FOR A FUTURE SPORT FIELD LIGHTING COONTROLLER. UNDERGROUND CONDUIT SHALL EXTEND INTO THE HANDHOLE ENCLOSURE. PROVIDE HUBBELL QUAZITE BOX WITH GASKETED COVER AND STAINLESS STEEL TAMPER PROOF FASTENERS TO SECURE LID TO BOX. REFER TO "HANDHOLE ENCLOSURE DETAIL" FOR ADDITIONAL INFORMATION. COORDINATE EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH-IN.
- (3) PROVIDE 2" UNDERGROUND CONDUIT WITH PULL STRING FOR FUTURE FIELD LIGHTING
- (4) PROVIDE POLYMER CONCRETE 12" x 12" x "12", TEIR 15, UL LISTED, IN-GRADE JUNCTION BOX FOR A FUTURE SPORT FIELD LIGHTING STANDARD. UNDERGROUND CONDUIT SHALL EXTEND INTO THE HANDHOLE ENCLOSURE. PROVIDE HUBBELL QUAZITE BOX WITH GASKETED COVER AND STAINLESS STEEL TAMPER PROOF FASTENERS TO SECURE LID TO BOX. REFER TO "HANDHOLE ENCLOSURE FOR LOCATIONS IN TURF DETAIL" FOR ADDITIONAL INFORMATION. COORDINATE EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH-IN.
- (5) EXISTING POWER FOR BATTING CAGES SHALL BE TEMPORARILY REMOVED AND REINSTALLED AS REQUIRED TO ACCOMMODATE RENOVATIONS. CONTRACTOR SHALL RELOCATE EXISTING JUNCTION BOXES, EXTEND CONDUIT AND WIRING AS REQUIRED TO ACCOMMODATE THE RENOVATIONS. FIELD VERIFY EXISTING CONDITIONS.
- (6) PROVIDE NEW RACEWAY AND CONDUCTORS BETWEEN RELOCATED JUNCTION BOXES. PROVIDE NEW RACEWAY AND CONDUCTORS OF SIMILAR SIZE AS PREVIOUS CIRCUITRY SERVING ELECTRICAL DEVICES. VERIFY EXISTING CONDITIONS IN FIELD.
- (7) CONTRACTOR SHALL INTERCEPT EXISTING RACEWAY SERVING BATTING CAGES AND MODIFY AAS REQUIRED TO ACCOMMODATE THE NEW LOCATIONS FOR ELECTRICAL BOXES SERVING BATTING CAGES. REMOVE CONDUCTORS BACK TO SOURCE IN PRESS BOX AND PROVIDE NEW CONDUCTORS BETWEEN RELOCATED JUNCTION BOXES AND PANEL SERVING ELECTRICAL DEVICES. PROVIDE NEW CONDUCTORS OF SIMILAR SIZE AS PREVIOUS CIRCUITRY SERVING ELECTRICAL DEVICES. VERIFY EXISTING CONDITIONS IN FIELD.

ALL WORK INDICATED ON THIS SHEET TO BE PART OF ALTERNATE BID NO. I, UNLESS NOTED OTHERWISE

UNLESS NOTED OTHERWISE, ALL EXTERIOR LIGHTING WIRING SHALL BE #6 AWG COPPER. ALL GRADE, VERIFY EXACT LOCATION OF ALL OUTDOOR LIGHTING WITH ARCHITECT AND OWNER'S REPRESENTATIVE.

3. PROVIDE ALL TRENCHING, AND BACKFILL AS REQUIRED. BACKFILL PER ARCHITECT'S

5. INCLUDE COSTS IN BID PROPOSAL TO LOCATE AND MARK EXISTING UNDERGROUND UTILITIES WHERE NEW UNDERGROUND WORK IS INDICATED. PRIOR TO ANY CONSTRUCTION ACTIVITIES, FOR LOCATION OF UTILITIES, CALL J.U.L.I.E. AT 1-800-892-0123.

6. LOCATIONS OF UTILITY LINES SHOWN FOR REFERENCE ONLY. EXACT ROUTING AND CONFIGURATION

7. VOLTAGE DROP FROM END OF THE BRANCH CIRCUIT TO PANEL SHALL BE LIMITED TO 3%. INCREASE WIRE SIZES AS REQUIRED.

8. CUTTING, BORING, PATCHING, AND RESTORATION INCLUDING SOD, LANDSCAPING, CONCRETE, AND ASPHALT PAVEMENT SHALL BE CONTRACTOR'S RESPONSIBILITY. ALL DISTURBED SURFACES SHALL BE PATCHED AND RESTORED TO MATCH EXISTING. CONTRACTOR SHALL PROVIDE FLUSH IN-GRADE PULL BOXES AS REQUIRED TO FACILITATE PULLING OF CONDUCTORS.

9. CONTRACTOR SHALL EXERCISE CARE IN EXCAVATION AND CONSTRUCTION SO AS NOT TO DISTURB EXISTING UNDERGROUND SITE UTILITIES (UNLESS SPECIFICALLY DOCUMENTED TO DO SO). CONTRACTOR SHALL EMPLOY A SERVICE TO LOCATE UTILITIES AND SHALL CONSULT WITH THE OWNER AS TO POSSIBLE LOCATIONS OF UNDERGROUND UTILITIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO RESTORE SERVICE AND PAY FOR ANY UTILITY FEES IN CONNECTION WITH RESTORATION OF SERVICE IN THE EVENT OF DISRUPTION DUE TO EXCAVATION OR CONSTRUCTION.

SUCH INCIDENTAL WORK IS ALSO PART OF THIS CONTRACT. INSPECT THOSE AREAS, COORDINATE WITH OWNER, AND ASCERTAIN WORK NEEDED, AND DO THAT WORK IN ACCORD WITH THE CONTRACT REQUIREMENTS, AT NO ADDITIONAL COST. THE REMOVAL & REINSTALLATION OF EXISTING WORK TO ACCOMMODATE CHANGES TO EXISTING, OR INSTALLATION OF, ELECTRICAL, OTHER SYSTEMS IS ALSO PART OF THIS CONTRACT.

NOTE

CONTRACTOR SHALL PRODUCE AND SUBMIT ASBUILT DRAWINGS FOR ALL WORK PERFORMED UNDER THIS CONTRACT.

ELECTRICAL SPECIFICATIONS

- I. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND SHALL CONFORM TO ILLINOIS SCHOOL CODE.
- 2. PROVIDE ALL PERMITS AND INSPECTION FEES.

TO VIBRATION.

- 3. ALL MATERIAL AND LABOR SHALL BE GUARANTEED FOR ONE YEAR AFTER FINAL ACCEPTANCE BY THE ENGINEER.
- 4. THIS CONTRACTOR SHALL PROVIDE ALL THEIR OWN RIGGING, SCAFFOLDING, RUBBISH REMOVAL, AND LEAVE SPACE BROOM CLEAN.
- 5. MINIMUM SIZE CONDUIT SHALL BE 3/4" EMT, PROVIDE IMC FOR CONDUITS 2" AND LARGER OR WHERE EXPOSED TO WET OR DAMP LOCATIONS. EMT FITTINGS SHALL BE COMPRESSION TYPE. IMC SHALL HAVE THREADED CONNECTIONS. TRANSITION TO LIQUID-TIGHT FLEXIBLE METAL CONDUIT

FOR FINAL CONNECTION (MAXIMUM LAST 6 FEET) OF CONDUCTORS SERVING EQUIPMENT SUBJECT

- 6. MINIMUM SIZE CONDUCTOR SHALL BE #12 THHN, OR THWN WHERE REQUIRED, WITH #14 USED FOR CONTROL WIRING. CONDUCTOR MATERIAL SHALL BE COPPER ONLY.
- 7. PROVIDE SEPARATE, INSULATED EQUIPMENT GROUNDING CONDUCTOR WITHIN EACH FEEDER AND BRANCH CIRCUIT RACEWAY. TERMINATE EACH END ON SUITABLE LUG, BUS, OR BUSHING.
- 8. BRANCH CIRCUIT CONDUCTORS FOR 20 AMP RECEPTACLES AND LIGHTING CIRCUITS SHALL BE ADJUSTED FOR VOLTAGE DROP:

A. 120/208V: 0-751 - #12AWG MINIMUM 75'-150' - #10AWG MINIMUM 150¹-225¹ - #8AWG MINIMUM 277/480V:0-100¹ - #12AWG MINIMUM 1001-2001 - #10AWG MINIMUM

200'-300' - #8AWG MINIMUM

- 9. CONDUCTOR SIZES #14 AWG, #12 AWG, AND #10 AWG SHALL BE SOLID. CONDUCTOR SIZES #8 AWG AND LARGER SHALL BE STRANDED. ALL CONDUCTORS SHALL BE COLOR CODED.
- 10. THIS CONTRACTOR SHALL PROVIDE ALL NECESSARY CUTTING AND PATCHING INCLUDING SLEEVES AND INSERTS
- II. THE COLOR AND FINISH OF ALL MATERIALS SHALL BE SUBJECT TO REVIEW AND APPROVAL OF ARCHITECT OR ENGINEER. PROVIDE SHOP DRAWINGS REQUIRED FOR FINISH AND COLOR SELECTION.
- 12. ALL NEW CIRCUIT BREAKERS SHALL BE BOLT-ON BREAKERS (10,000 A.I.C.), COMPATIBLE WITH EXISTING PANELBOARD. PROVIDE TYPEWRITTEN DIRECTORIES IN ALL PANELS.
- ASCERTAIN ALL WORK INVOLVED IN THE PROJECT.

13. BEFORE SUBMITTING THEIR BID, THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE TO

- 14. THIS CONTRACTOR SHALL COORDINATE THEIR WORK WITH OTHER CONTRACTORS ON THE PROJECT.
- 15. THIS CONTRACTOR SHALL MAKE NECESSARY MODIFICATIONS AND ADJUSTMENTS TO ALL ELECTRICAL ITEMS AND EQUIPMENT AS MAY BE REQUIRED BY THIS WORK.
- 16. ALL ELECTRICAL EQUIPMENT MUST MAINTAIN WORKING CLEARANCES AS REQUIRED BY NEC.
- 17. UNLESS INDICATED ON ARCHITECTURAL DRAWINGS, THE CONTRACTOR SHALL BE RESPONSIBLE AND PAY FOR ALL CORING, CUTTING, PATCHING, REPAIRING, REFINISHING, AND REMOVAL/REPLACEMENT OF NEW OR EXISTING BUILDING CONSTRUCTION REQUIRED TO ACCOMMODATE THE INSTALLATION OR REMOVAL OF THEIR WORK. REMOVE, STORE, AND REINSTALL CEILING TILES AS REQUIRED TO INSTALL WORK ABOVE EXISTING REMOVABLE CEILINGS WHICH REMAIN; REPLACE TILES BROKEN OR DAMAGED DURING CONSTRUCTION. ALL PATCHING, REPAIRING, AND REFINISHING WORK TO OTHER FINISHES AND STRUCTURAL ELEMENTS SHALL BE PERFORMED BY THOSE REGULARLY INVOLVED IN THAT TRADE AND SHALL MATCH THE ADJACENT CONSTRUCTION AS CLOSELY AS POSSIBLE WHILE MAINTAINING EXISTING FIRE RATINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXISTING FIRE RATINGS OF CEILINGS AND PARTITIONS SYSTEMS. CARE SHALL BE TAKEN SO AS NOT TO DAMAGE ANY EXISTING BUILDING CONSTRUCTION OR ITEMS THAT ARE TO REMAIN. ANY EXISTING FINISHES THAT ARE DAMAGED DURING THE INSTALLATION OF NEW WORK OR REMOVAL OF EXISTING WORK SHALL BE REPAIRED, REPLACED, AND PAID FOR BY THE INSTALLING CONTRACTOR TO THE SATISFACTION OF THE ARCHITECT AND OWNER. REFER TO ARCHITECTURAL DRAWINGS FOR EXISTING BUILDING CONSTRUCTION THAT IS TO REMAIN AND, THEREFORE, SUBJECT TO PATCHING, REPAIRING, REFINISHING, AND REMOVAL/REPLACEMENT
- 18. FLEXIBLE RACEWAY SYSTEMS SHALL NOT BE USED TO PENETRATE ROOFS, FLOORS, OR AIR/MOISTURE BARRIERS.
- 19. RACEWAY SYSTEMS SHALL NOT BE ROUTED THROUGH OR IN HVAC DUCTS.

SITE PLAN GENERAL NOTES

- EXTERIOR LIGHTING WIRING SHALL BE ROUTED IN PVC SCHEDULE 80 CONDUIT, MINIMUM 36" BELOW
- 2. ALL PENETRATIONS THROUGH BUILDING SHALL BE SEALED WATER TIGHT PER ARCHITECT'S REQUIREMENTS.
- REQUIREMENTS, SURFACE SUITABLE FOR FINAL PAVEMENT LAYER. FINAL PAVEMENT BY OTHERS, THIS CONTRACTOR TO COORDINATE WORK WITH ALL OTHER TRADES PRIOR TO ANY EXCAVATION.
- 4. COORDINATE AND REVIEW WITH ARCHITECT FOR CONSTRUCTION PHASING, SCHEDULES, AND FOR ADDITIONAL INFORMATION PRIOR TO SUBMITTING BID. INCLUDE ALL ASSOCIATED COSTS REQUIRED FOR A COMPLETE INSTALLATION AND OPERATIONAL SYSTEM.
- TO BE DETERMINED.

- 10. NO HARDSCAPE OR ATHLETIC SURFACES SHALL BE DISTURBED WITHOUT PERMISSION GIVEN BY THE OWNER'S REPRESENTATIVE AND/OR ARCHITECT.

NOTE
INCIDENTAL WORK MAY ALSO BE NECESSARY DUE TO CHANGES AFFECTING, SITE WORK, ELECTRICAL, OR OTHER SYSTEMS.

MOTE
ALL WORK SHALL CONFORM TO O.S.H.A., N.E.C., THE ILLINOIS SCHOOL CODE AND ALL OTHER LOCAL CODE REQUIREMENTS.

NILES TOWNSHIP HIGH SCHOOL

architecture + interiors 223 West Jackson Boulevard, Suite 1200

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(312) 253-3400

Mechanical - Electrical Engineers 1216 Tower Road Schaumburg, Illinois 60173 847.882.2010 Fax 847.882.220 ENGINEERING

Design Firm Registration Number:

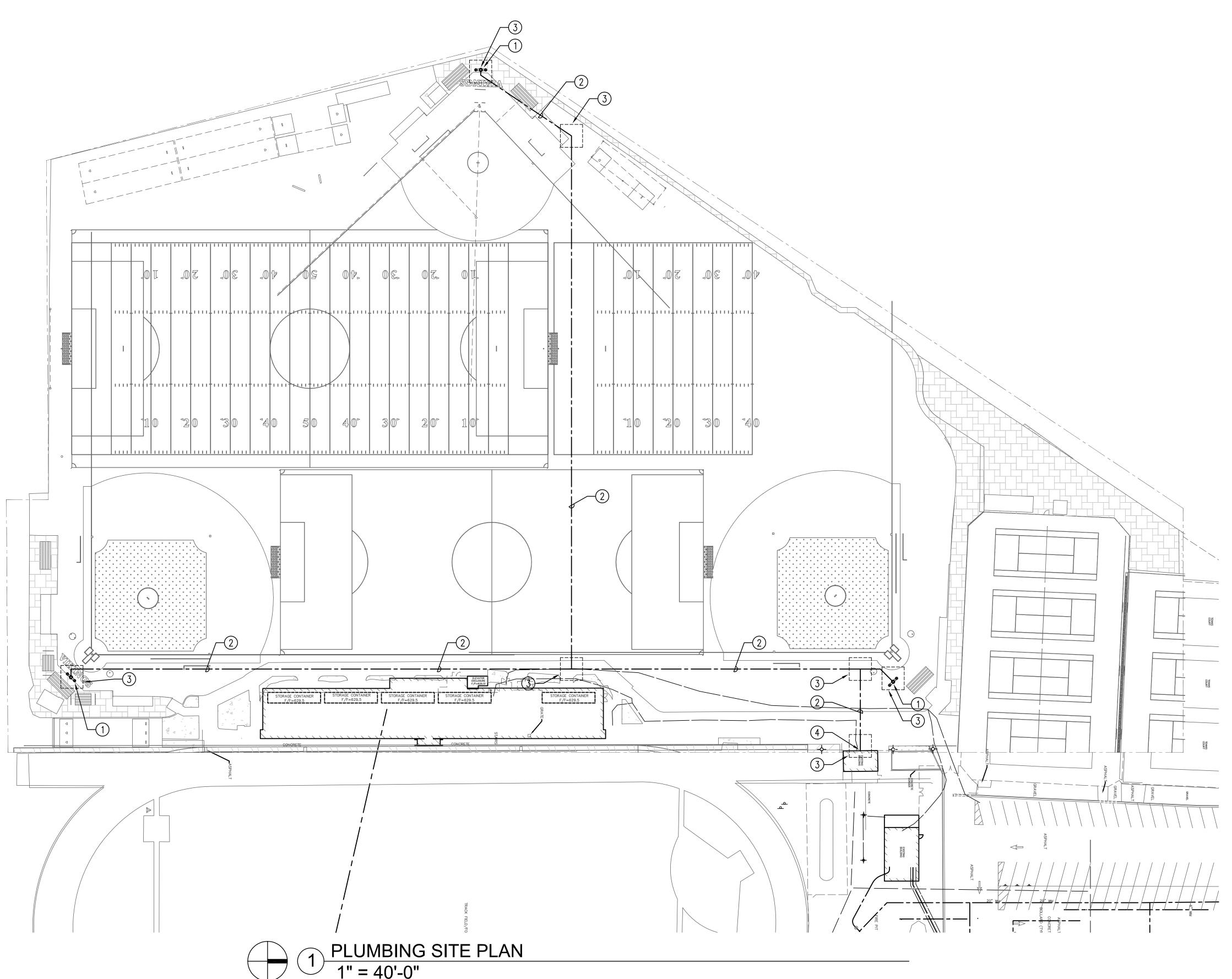
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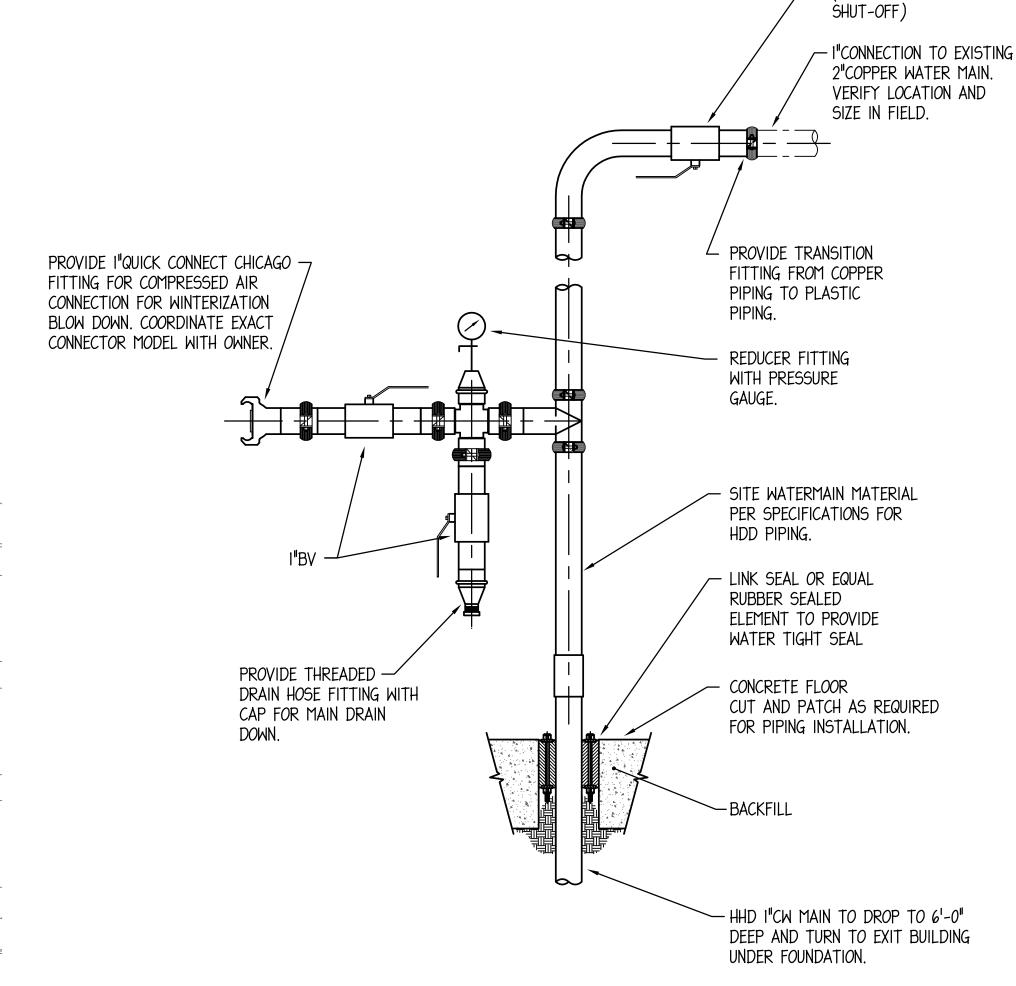
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PARTIAL ELECTRICAL SITE PLAN

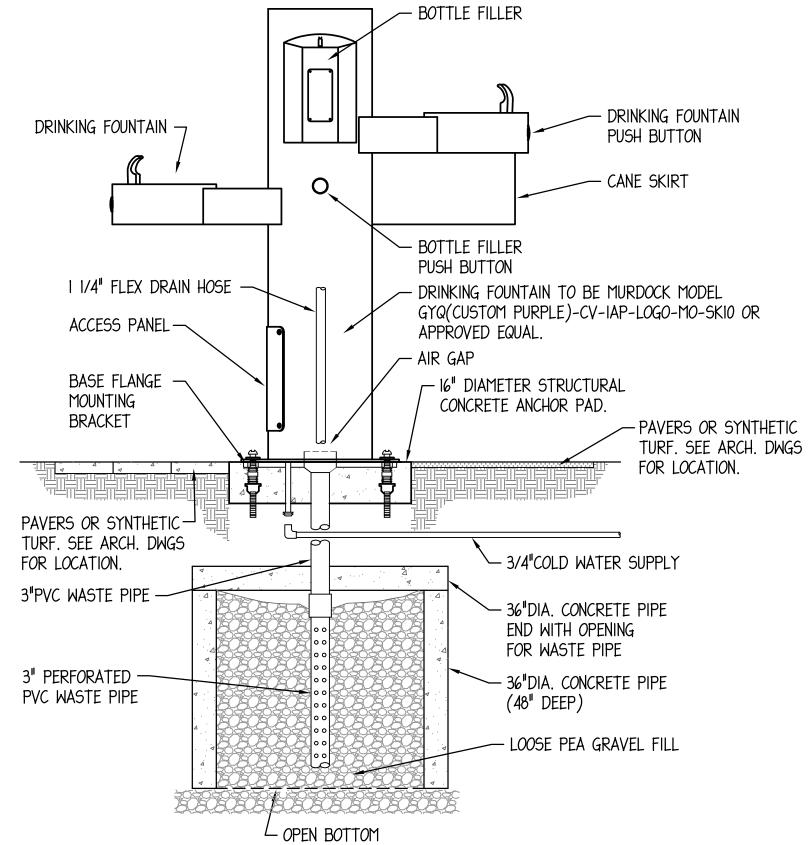
PARTIAL ELECTRICAL SITE PLAN

1" = 30'-0"

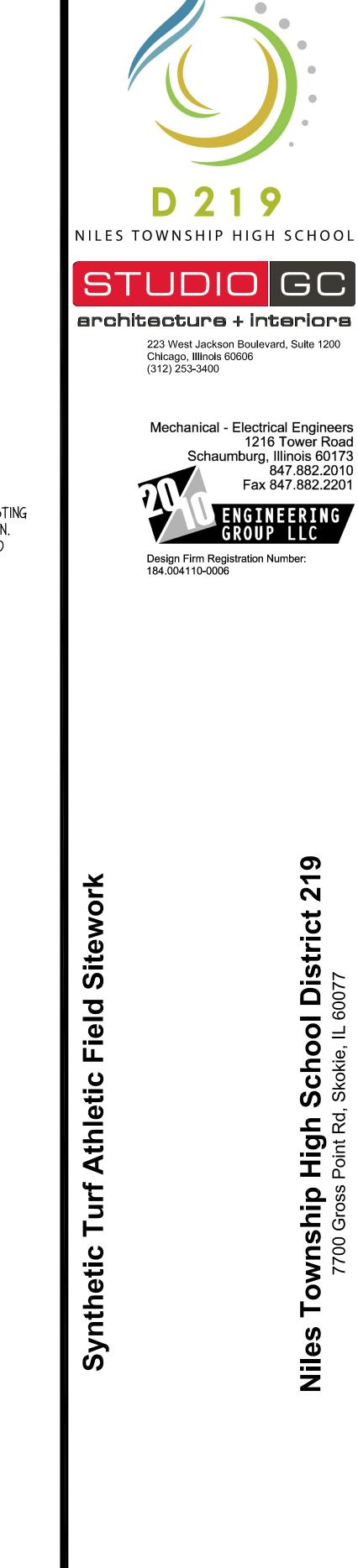




PLUMBING PIPING THROUGH FLOOR NO SCALE



EXTERIOR DRINKING FOUNTAIN DETAIL NO SCALE



/ I"BALL VALVE

(MAIN SITE WATER

1216 Tower Road

847.882.2010

Distric

High

ISSUE • DATE • CONSTRUCTION • 2/22/2023

PLUMBING SITE **PLAN**

PLUMBING SYMBOLS AND ABBREVIATIONS

—————— WATER MAIN TO BE DEMOLISHED/ABANDONED (OR PER NOTATION) — - — - — NEW WATER MAIN/CW PIPING UNDERGROUND WATER SERVICE VALVE AND BOX BALL VALVE —O PIPE ELBOW (TURNED UP) —> PIPE ELBOW (TURNED DOWN) PIPE TEE DOWN (DROP) PIPE TEE UP NEW CONNECTION

CAST IRON

- CLEANOUT
- CW COLD WATER
- DN. DOWN NC NEW CONNECTION
- TYP. TYPICAL

DRAWING NOTES: (TYPICAL FOR THIS DRAWING ONLY.)

- 1) DF-I: NEW SELF DRAINING DRINKING FOUNTAIN. SEE DETAILS AND SPECIFICATIONS FOR MODEL AND INSTALLATION REQUIREMENTS. ARCHITECT TO DETERMINE FINAL LOCATION AND ORIENTATION OF DRINKING FOUNTAIN
- (2) CONTRACTOR TO HORIZONTAL DIRECTIONALLY DRILL (HDD) NEW I" WATERMAIN (POTABLE) AT A DEPTH OF 6'-0" OR DEEPER. COORDINATE PIPE ROUTING AND BORE PIT LOCATIONS WITH ARCHITECT PRIOR TO STARTING ANY WORK ON SITE.
- (3) CONTRACTOR TO EXCAVATE AS NEEDED FOR INSTALLATION OF WATERMAIN AND CONNECTIONS TO WATERMAIN. CONTRACTOR TO BED PIPING AND BACKFILL ALL EXCAVATIONS PER SPECIFICATION. CONTRACTOR TO PREPARE AND GRADE FOR FINAL SURFACE. RESTORE FINAL ASPHALT AND GRASS SURFACES. COORDINATE PIPE ROUTING AND BORE PIT LOCATIONS WITH ARCHITECT PRIOR TO STARTING ANY WORK ON SITE.
- (4) CONTRACTOR TO HORIZONTAL DIRECTIONALLY DRILL (HDD) NEW I" WATERMAIN (POTABLE) TO EXISTING TOILET BUILDING MECHANICAL ROOM. RISE IN MECHANICAL ROOM AND CONNECT TO EXISTING POTABLE WATER SUPPLY TO FIXTURES. PROVIDE WINTERIZATION BLOW DOWN CONNECTIONS AND TRIM AS INDICATED ON DETAIL.

1.1 DESCRIPTION

A. SCOPE OF WORK: FURNISH AND INSTALL UNDERGROUND UTILITIES USING THE HORIZONTAL DIRECTIONAL DRILLING (HDD) METHOD OF INSTALLATION, ALSO COMMONLY REFERRED TO AS DIRECTIONAL BORING OR GUIDED HORIZONTAL BORING FOR PRESSURE PIPE. THIS WORK SHALL INCLUDE ALL PIPING SERVICES, EQUIPMENT MATERIALS, AND LABOR FOR THE COMPLETE AND PROPER INSTALLATION TESTING, RESTORATION OF UNDERGROUND UTILITIES, AND ENVIRONMENTAL PROTECTION AND RESTORATION.

1.2 QUALITY ASSURANCE

A. QUALIFICATIONS

- I. DIRECTIONAL DRILLING CONTRACTOR OR SUBCONTRACTOR SHALL HAVE A MINIMUM OF 4-YEARS EXPERIENCE CONSTRUCTING WATER, WASTEWATER, OR RECLAIMED WATER EXPERIENCE TO INCLUDE PIPELINES OF THE SAME OR LARGER DIAMETER AND THE SAME OR GREATER LENGTHS. ALL PIPE AND APPURTENANCES OF SIMILAR TYPE AND MATERIAL SHALL BE FURNISHED BY A SINGLE MANUFACTURER.
- 2. THE CONTRACTOR'S OPERATIONS SHALL BE IN CONFORMANCE WITH THE DIRECTIONAL CROSSING CONTRACTORS ASSOCIATION (DCCA) PUBLISHED GUIDELINES (LATEST EDITION) AND PIPE MANUFACTURER'S GUIDELINES AND RECOMMENDATIONS.

1.3 SHOP DRAWINGS AND SUBMITTALS

- A. SUBMITTALS SHALL BE SUBMITTED TO THE COUNTY FOR REVIEW AND ACCEPTANCE PRIOR TO CONSTRUCTION IN ACCORDANCE WITH THE GENERAL CONDITIONS AND SPECIFICATIONS SECTION 01300 "SUBMITTALS."
- I. WORK PLAN
- 2. PIPE
- 3. COUPLINGS
- 4. HDPE MECHANICAL JOINT ADAPTERS
- 5. TRAINING AND EXPERIENCE OF DIRECTIONAL BORING MACHINE OPERATOR 6. DIRECTIONAL DRILLING EQUIPMENT SPECIFICATIONS INCLUDING CALIBRATION
- **RECORDS**
- B. PRIOR TO BEGINNING WORK, THE CONTRACTOR MUST SUBMIT A WORK PLAN TO THE SCHOOL DISTRICT DETAILING THE PROCEDURE AND SCHEDULE TO BE USED TO EXECUTE THE PROJECT. THE WORK PLAN SHOULD INCLUDE THE FOLLOWING:
- I. A DESCRIPTION OF ALL EQUIPMENT TO BE USED
- 2. DOWN-HOLE TOOLS
- 3. LIST OF PERSONNEL AND THEIR QUALIFICATIONS AND EXPERIENCE 4. LIST OF SUBCONTRACTORS
- 5. A SCHEDULE OF WORK ACTIVITY
- 6. A SAFETY PLAN AND TRAFFIC CONTROL PLAN (IF APPLICABLE) 7. AN ENVIRONMENTAL PROTECTION PLAN AND
- 8. CONTINGENCY PLANS FOR POSSIBLE PROBLEMS

C. EQUIPMENT

- 1. THE CONTRACTOR WILL SUBMIT SPECIFICATIONS ON DIRECTIONAL DRILLING EQUIPMENT TO BE USED TO ENSURE THAT THE EQUIPMENT WILL BE ADEQUATE TO COMPLETE THE PROJECT. EQUIPMENT SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
- a. DRILLING RIG
- b. MUD SYSTEM
- c. MUD MOTORS (IF APPLICABLE) d. DOWN-HOLE TOOLS
- e. GUIDANCE SYSTEM AND
- f. RIG SAFETY SYSTEMS

PART 2 - PRODUCTS

2.1 GENERAL

- A. ALL MATERIAL SUPPLIED SHALL BE ONE OF THE PRODUCTS SPECIFIED IN APPENDIX D "LIST OF APPROVED PRODUCTS" APPENDED TO THESE TECHNICAL SPECIFICATIONS.
- B. THE DIRECTIONAL DRILLING EQUIPMENT SHALL CONSIST OF THE FOLLOWING:
- I. A DIRECTIONAL DRILLING RIG OF SUFFICIENT CAPACITY TO PERFORM THE BORE AND I PULLBACK OPERATIONS.
- 2. A DRILLING FLUID MIXING, DELIVERY, AND RECOVERY SYSTEM OF SUFFICIENT CAPACITY TO COMPLETE THE CROSSING.
- 3. A DRILLING FLUID RECYCLING SYSTEM TO REMOVE SOLIDS FROM THE DRILLING
- FLUID SO THAT THE FLUID CAN BE REUSED. 4. A MAGNETIC GUIDANCE SYSTEM TO ACCURATELY GUIDE BORING OPERATIONS. 5. A VACUUM TRUCK OF SUFFICIENT CAPACITY TO HANDLE THE DRILLING FLUID
- VOLUME AND 6. TRAINED AND COMPETENT PERSONNEL SHALL OPERATE THE SYSTEM.
- C. ALL EQUIPMENT SHALL BE IN GOOD, SAFE OPERATING CONDITION WITH SUFFICIENT SUPPLIES, MATERIALS, AND SPARE PARTS ON HAND TO MAINTAIN THE SYSTEM IN PROPER WORKING ORDER.

2.2DRILLING SYSTEM

A. THE DIRECTIONAL DRILLING MACHINE SHALL CONSIST OF A HYDRAULICALLY POWERED SYSTEM TO ROTATE, PUSH, AND PULL HOLLOW DRILL PIPE INTO THE GROUND AT A VARIABLE ANGLE WHÎLE DELIVERING A PRESSURIZED FLUID MIXTURE TO A GUIDABLE DRILL (BORE) HEAD. THE MACHINE SHALL BE ANCHORED TO THE GROUND TO WITHSTAND THE PULLING, PUSHING, AND ROTATING PRESSURE REQUIRED TO COMPLETE THE CROSSING. THE HYDRAULIC POWER SYSTEM SHALL BE SELF-CONTAINED WITH SUFFICIENT PRESSURE AND VOLUME TO POWER DRILLING OPERATIONS. HYDRAULIC SYSTEM SHALL BE FREE OF LEAKS. RIG SHALL HAVE A SYSTEM TO MONITOR AND RECORD MAXIMUM PULLBACK PRESSURE DURING PULLBACK OPERATIONS. THE RIG SHALL BE GROUNDED DURING DRILLING AND PULLBACK OPERATIONS. THERE SHALL BE A SYSTEM TO DETECT ELECTRICAL CURRENT FROM THE DRILLING STRING AND AN AUDIBLE ALARM THAT AUTOMATICALLY SOUNDS WHEN AN ELECTRICAL CURRENT IS DETECTED.

2.3PIPE

A. PIPE SHALL BE PVC OR HDPE PIPE WITH DUCTILE IRON PIPE OUTSIDE DIAMETERS IN ACCORDANCE WITH AWWA C900 (C905) OR C906 RESPECTIVELY. THE DIMENSION RATIO SHALL BE VERIFIED BY THE CONTRACTOR BASED ON THE PIPE, JOINT, AND MATERIAL PULL STRENGTH REQUIRED FOR THE DIRECTIONAL DRILLING.

B. PVC PIPE

1. PVC RESTRAINED JOINT PIPE SHALL HAVE MAXIMUM DIMENSION RATIOS EQUAL TO THE FOLLOWING TABLE:

MAXIMUM DIMENSION RATIOS FOR PVC PIPE

TABLE I

TYPE OF PIPE SYSTEM MAXIMUM DIMENSION RATIO

- I. PVC PIPE SHALL MEET THE REQUIREMENTS OF AWWA C900. THE PIPE SHALL BE JOINED USING SEPARATE COUPLINGS THAT HAVE BEVELED EDGES, BUILT-IN SEALING GASKETS AND RESTRAINING GROOVES OR STEEL RING-AND-PIN GASKETED JOINTS. THE RESTRAINING SPLINES SHALL BE SQUARE AND MADE FROM NYLON 101. PIPE AND COUPLINGS SHALL BE UNDERWRITERS LABORATORY AND FACTORY MUTUAL APPROVED.
- 2. INSTALLATION CURVATURE: THE PIPELINE CURVATURE SHALL NOT HAVE A RADIUS LESS THAN AS SHOWN IN TABLE 2.

TABLE 2

PVC PIPE DEFLECTION INFORMATION PIPE DIAMETER MINIMUM RADIUS OF OFFSET PER 20-FT DEFLECTION PER 20-FT LENGTH (INCHES) LENGTH (DEGREES) 17.25 12.00

A. HDPE PIPE

I. HDPE PIPE AND RELATED FITTINGS SHALL BE MADE WITH PRIME VIRGIN RESINS EXHIBITING A MINIMUM CELL CLASSIFICATION AS DEFINED IN ASTM D3350 AND MEETING THE PE 3408 CODE DESIGNATION WITH MAXIMUM DIMENSION RATIOS EQUAL TO THE FOLLOWING.

TABLE 3

MAXIMUM DIMENSION RATIOS FOR HDPE PIPE TYPE OF PIPE SYSTEM MAXIMUM DIMENSION RATIO

WATER

- 2. HDPE PIPE 4-INCH AND LARGER NOMINAL DIAMETER SHALL BE JOINED BY MEANS OF ZERO LEAK-RATE BUTT (THERMAL HEAT) FUSION WELDS AND/OR APPROVED FLANGED JOINTS. JOINTS SHALL PROVIDE AXIAL PULLOUT RESISTANCE. PIPE SHALL MEET THE REQUIREMENTS OF ANSI/AWWA C906, AND HAVE AN OUTSIDE DIAMETER DIMENSION OF DUCTILE IRON PIPE. FLANGED JOINTS SHALL NOT BE USED BELOW FINISHED GRADE FOR HORIZONTAL DIRECTIONAL DRILLING APPLICATIONS.
- 3. HDPE PIPE SHALL HAVE BEEN CONTINUOUSLY MARKED BY THE MANUFACTURER WITH PERMANENT PRINTING INDICATING AT A MINIMUM THE FOLLOWING:
- a. NOMINAL SIZE (INCHES)
- b. DIMENSION RATIO (DR)
- c. PRESSURE RATING (PSI)
- d. TRADE NAME
- e. MATERIAL CLASSIFICATION (PE 3408)
- f. PLANT, EXTRUDER, AND OPERATOR CODES
- a. RESIN SUPPLIER CODE
- h. DATE PRODUCED AND
- HDPE PIPE USED FOR PORTABLE WATER MAINS SHALL BEAR THE NSF SEAL OF APPROVAL.
- 4. HDPE PIPE SHALL BE BLACK IN COLOR WITH PERMANENT COLORED STRIPES EXTRUDED INTO THE PIPE LENGTH OR SHALL BE I SOLID-COLOR, PER THE APPLICABLE SERVICE.

TABLE 4 PIPE COLOR

COLOR CODING PIPE USE POTABLE WATER BLUE

5. INSTALLATION CURVATURE

a. THE PIPELINE CURVATURE SHALL NOT HAVE A RADIUS LESS THAN AS SHOWN IN TABLE 5.

TABLE 5 HDPE PIPE DEFLECTION INFORMATION

PIPE DIAMETER MINIMUM RADIUS OF OFFSET PER 20-FT (INCHES) CURVATURE (FEET) LENGTH (INCHES)

2.4LOCATING WIRE

A. LOCATING WIRE SHALL BE 10-GAUGE CONTINUOUS SINGLE STRAND SOLID CORE COPPER WIRE WITH NON-METALLIC INSULATION.

B. COLOR-CODING SHALL BE SIMILAR TO PIPELINE IDENTIFICATION COLORS.

C. A MINIMUM OF 3 LOCATING WIRES SHALL BE ATTACHED WITH NYLON WIRE TIES AT DIFFERENT RADIAL LOCATIONS AROUND THE PIPE TO ENSURE CONTINUITY IN AT LEAST I WIRE SUBSEQUENT TO INSTALLATION. CONTRACTOR SHALL BE REQUIRED TO PROVIDE AS MANY WIRES AS NECESSARY TO MAINTAIN CONTINUITY THROUGHOUT THE LENGTH OF THE DIRECTIONAL BORE. FAILURE OF CONTINUOUS CONTINUITY IN THE LOCATING WIRE SHALL RESULT IN ABANDONMENT AND REINSTALLATION OF THE DIRECTIONAL DRILL, AT THE DISCRETION OF THE COUNTY.

2.5DRILLING FLUIDS

A. DRILLING FLUIDS SHALL CONSIST OF A MIXTURE OF POTABLE WATER AND GEL-FORMING COLLOIDAL MATERIAL, SUCH AS BENTONITE OR A POLYMER SURFACTANT MIXTURE PRODUCING A SLURRY OF CUSTARD-LIKE CONSISTENCY.

PART 3 - EXECUTION

3.1 PERSONNEL REQUIREMENTS

- A. RESPONSIBLE REPRESENTATIVES OF THE CONTRACTOR AND SUBCONTRACTOR(S) SHALL BE PRESENT AT ALL TIMES DURING DIRECTIONAL DRILLING OPERATIONS. A RESPONSIBLE REPRESENTATIVE AS SPECIFIED HEREIN IS DEFINED AS A PERSON EXPERIENCED IN THE TYPE OF WORK BEING PERFORMED AND WHO HAS THE AUTHORITY TO REPRESENT THE CONTRACTOR IN A ROUTINE DECISION MAKING CAPACITY CONCERNING THE MANNER AND METHOD OF CARRYING OUT THE WORK.
- B. THE CONTRACTOR AND SUBCONTRACTOR(S) SHALL HAVE SUFFICIENT NUMBER OF COMPETENT WORKERS ON THE PROJECT AT ALL TIMES TO ENSURE THE UTILITY PLACEMENT IS MADE IN A TIMELY, SATISFACTORY MANNER. ADEQUATE PERSONNEL FOR CARRYING OUT ALL PHASES OF THE DIRECTIONAL DRILLING OPERATION (WHERE APPLICABLE: TUNNELING SYSTEM OPERATORS, OPERATOR FOR REMOVING SPOIL MATERIAL, AND LABORERS AS NECESSARY FOR VARIOUS RELATED TASKS) MUST BE ON THE JOB SITE AT THE BEGINNING OF WORK. A COMPETENT AND EXPERIENCED SUPERVISOR REPRESENTING THE CONTRACTOR OR SUBCONTRACTOR THAT IS THOROUGHLY FAMILIAR WITH THE EQUIPMENT AND TYPE OF WORK TO BE PERFORMED, MUST BE IN DIRECT CHARGE AND CONTROL OF THE OPERATION AT ALL TIMES. IN ALL CASES, THE SUPERVISOR MUST BE CONTINUALLY PRESENT AT THE PROJECT SITE DURING THE DIRECTIONAL DRILLING OPERATION.

3.2WORK PLAN

- A. WORK PLAN SHOULD BE COMPREHENSIVE, REALISTIC, AND BASED ON ACTUAL WORKING CONDITIONS FOR THIS PARTICULAR PROJECT. PLAN SHOULD DOCUMENT THE REQUIREMENTS TO COMPLETE THE PROJECT.
- I. CALIBRATION RECORDS FOR GUIDANCE EQUIPMENT SHALL BE INCLUDED. SPECIFICATIONS FOR ANY DRILLING FLUID ADDITIVES THAT THE CONTRACTOR INTENDS TO USE OR MIGHT USE SHALL BE SUBMITTED.

3.3PROCEDURE

A. THE INSTALLATION OF APPROPRIATE SAFETY AND WARNING DEVICES IN ACCORDANCE WITH THE "FDOT MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES" SHALL BE COMPLETED PRIOR TO BEGINNING WORK.

3.4INSTALLATION

- A. EROSION AND SEDIMENTATION CONTROL MEASURES AND ON-SITE CONTAINERS SHALL BE INSTALLED TO PREVENT DRILLING MUD FROM SPILLING OUT OF ENTRY AND/OR EXIT PITS. DRILLING MUD SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS AND/OR PERMIT CONDITIONS.
- I. NO OTHER CHEMICALS OR POLYMER SURFACTANT SHALL BE USED IN THE DRILLING FLUID WITHOUT WRITTEN CONSENT OF THE COUNTY AND AFTER A DETERMINATION IS MADE THAT THE CHEMICALS TO BE ADDED ARE NOT HARMFUL OR CORROSIVE TO THE FACILITY AND ARE ENVIRONMENTALLY SAFE.
- B. PILOT HOLE: PILOT HOLE SHALL BE DRILLED ON BORE PATH WITH NO DEVIATIONS GREATER THAN 2% OF DEPTH OVER A LENGTH OF 100-FEET. IN THE EVENT THAT PILOT DOES DEVIATE FROM BORE PATH MORE THAN 2% OF DEPTH IN 100-FEET, THE CONTRACTOR SHALL NOTIFY THE COUNTY. THE COUNTY MAY REQUIRE THE CONTRACTOR TO PULLBACK AND RE-DRILL FROM THE LOCATION ALONG BORE PATH BEFORE THE DEVIATION.
- C. REAMING: UPON SUCCESSFUL COMPLETION OF PILOT HOLE, THE CONTRACTOR WILL REAM BOREHOLE TO A MINIMUM OF 25% GREATER THAN OUTSIDE DIAMETER OF PIPE USING THE APPROPRIATE TOOLS. CONTRACTOR WILL NOT ATTEMPT TO REAM AT ONE TIME MORE THAN THE DRILLING EQUIPMENT AND MUD SYSTEM ARE DESIGNED TO SAFELY HANDLE.
- D. PULLBACK: AFTER SUCCESSFULLY REAMING BOREHOLE TO THE REQUIRED DIAMETER, CONTRACTOR SHALL PUT THE PIPE THROUGH THE BOREHOLE. IN FRONT OF THE PIPE SHALL BE A SWIVEL AND BARREL REAMER TO COMPACT BORE HOLE WALLS. ONCE PULLBACK OPERATIONS HAVE COMMENCED, OPERATIONS MUST CONTINUE WITHOUT INTERRUPTION UNTIL PIPE IS COMPLETELY PULLED INTO BOREHOLE. DURING PULLBACK OPERATIONS, THE CONTRACTOR SHALL NOT APPLY MORE THAN THE MAXIMUM SAFE PIPE PULL PRESSURE AT ANY TIME. A BREAK AWAY HEAD RATED AT THE MAXIMUM SAFE PULL PRESSURE SHALL BE UTILIZED.
- E. AS-BUILT VARIANCE FROM THE DESIGNED BORE PATH SHALL NOT EXCEED ± (PLUS MINUS) I-FOOT IN THE VERTICAL PLANE AND ± 2-FEET IN THE HORIZONTAL PLANE. THE CONTRACTOR SHALL SUBMIT ANY PROPOSED DEVIATIONS FROM THE DESIGN BORE PATH WITH SHOP DRAWINGS.
- F. THE PIPE ENTRY AREA SHALL BE GRADED TO PROVIDE SUPPORT FOR THE PIPE TO ALLOW FREE MOVEMENT INTO THE BOREHOLE. THE PIPE SHALL BE GUIDED IN THE BOREHOLE TO AVOID DEFORMATION OF, OR DAMAGE TO, THE PIPE.

G. IF UNEXPECTED SUBSURFACE CONDITIONS ARE ENCOUNTERED DURING THE BORE, THE

- PROCEDURE SHALL BE STOPPED. THE INSTALLATION SHALL NOT CONTINUE UNTIL THE COUNTY HAS BEEN CONSULTED. H. THE PIPE SHALL BE PULLED BACK THROUGH THE BOREHOLE USING THE WET INSERTION
- THE PIPE SHALL BE INSTALLED IN A MANNER THAT DOES NOT CAUSE UPHEAVAL SETTLEMENT, CRACKING, MOVEMENT OR DISTORTION OF SURFACE FEATURES.

CONSTRUCTION TECHNIQUE. THE PIPE SHALL BE INSTALLED FULL OF WATER.

- J. A BORING LOG SHALL BE KEPT WITH HORIZONTAL AND VERTICAL LOCATION EVERY 10-FEET. THE HORIZONTAL LOCATION OF THE BORE SHALL BE MARKED IN THE FIELD DURING THE BORE. THE SURVEYOR SHALL LOCATE THESE MARKS AND INCLUDE THIS INFORMATION WITH THE BORE DEPTHS IN THE RECORD DRAWINGS. THE SURVEYOR MAY MAKE A NOTE ON THE DRAWING PAGE CONTAINING THE DIRECTIONAL DRILL AND PROVIDE AN EXCEPTION FOR THE DIRECTIONAL DRILL ONLY, AS THE DIRECTIONAL DRILL ROUTE CANNOT BE UNCOVERED AND PHYSICALLY LOCATED.
- K. THE PIPE SHALL BE INSTALLED AT A DEPTH OF NO MORE THAN 15-FEET BELOW PAVEMENT, AS MEASURED FROM THE TOP OF PIPE.

3.5FIELD TESTING

A. PVC PIPE

I. PERFORM HYDROSTATIC TESTING FOR LEAKAGE FOLLOWING INSTALLATION IN ACCORDANCE WITH THE APPLICABLE TEST SECTIONS.

B. HDPE PIPE

- I. PERFORM HYDROSTATIC TESTING FOR LEAKAGE FOLLOWING INSTALLATION OF THE DIRECTIONAL DRILL.
- a. TEST DURATION: THE TOTAL TEST TIME INCLUDING INITIAL PRESSURIZATION, INITIAL EXPANSION, AND TIME AT TEST PRESSURE MUST NOT EXCEED 8-HOURS. IF THE TEST IS NOT COMPLETED DUE TO LEAKAGE, EQUIPMENT FAILURE, ETC., THE TEST SECTION SHALL BE DEPRESSURIZED AND ALLOWED TO "RELAX" FOR A MINIMUM OF 8-HOURS BEFORE IT IS BROUGHT BACK UP TO TEST PRESSURE. THE TEST PROCEDURE CONSISTS OF THE INITIAL EXPANSION PHASE AND LEAKAGE TEST PHASE.
- b. INITIAL EXPANSION PHASE: DURING THE INITIAL EXPANSION PHASE, THE TEST SECTION IS PRESSURIZED TO THE TEST PRESSURE AND ENOUGH MAKE-UP LIQUID IS ADDED EACH HOUR FOR 3-HOURS TO RETURN TO TEST PRESSURE
- c. LEAKAGE TEST PHASE: THE LEAKAGE TEST PHASE FOLLOWS IMMEDIATELY AND SHALL BE EITHER 2 OR 3-HOURS IN DURATION. AT THE END OF THE TIME TEST. THE TEST SECTION SHALL BE RETURNED TO TEST PRESSURE BY ADDING A MEASURED AMOUNT OF LIQUID. THE AMOUNT OF MAKE-UP LIQUID ADDED SHALL NOT EXCEED THE VALUES PROVIDED IN TABLE 6 PLUS ALLOWABLE LEAKAGE.

ALLOWANCE FOR MAKE-UP WATER UNDER PRESSURE*

EST DURATION	2	4	6	8	12	16	20	24	
(HOURS)		AL	LOWAN	CE/100-	FEET OF	PIPEL	INE		
2	0.11	0.25	0.60	1.00	2.30	3.30	5.50	8.90	
4	0.19	0.40	0.90	1.50	3.40	5.50	8.00	13.30	

*APPLIES TO TEST PERIOD AND NOT TO INITIAL EXPANSION PHASE

C. PRESSURE TESTING

1. THE TEST PRESSURE FOR THE PIPE SHALL BE 150-PSI FOR WATER AND RECLAIMED WATER AND 100-PSI FOR WASTEWATER.

D. MANDREL TESTING

I. PERFORM MANDREL TESTING THROUGH THE ENTIRE LENGTH OF THE INSTALLED PIPE. THE MANDREL SIZE SHALL BE 90% OF THE INSIDE DIAMETER OF THE PIPE.

SITEWORK SPECIFICATIONS AND NOTES:

GENERAL NOTES REFERENCED SPECIFICATIONS AND CODES.

- 1.2 THE STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION (SSRBC), ADOPTED JANUARY 1, 2012 AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JANUARY 1, 2015 BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, AND ALL AMENDMENTS THERETO. THE DESIGN MANUAL, HIGHWAY STANDARDS, AND THE CULVERT MANUAL, ALSO PREPARED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.
- 1.3 THE STANDARD SPECIFICATION FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS. LATEST EDITION EXCEPT AS MODIFIED HEREIN OR BY ANY PUBLIC AGENCY PERMITS ISSUED FOR THIS WORK.
- 1.4 THE ILLINOIS PROCEDURES AND STANDARD FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL. AND IEPA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENTATION CONTROL.
- 1.5 ALL REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.
- 1.6 THE CITED STANDARD SPECIFICATIONS, CODES AND PERMITS, WITH THESE CONSTRUCTION PLANS AND DETAILS, ARE ALL TO BE CONSIDERED PART OF THE WORK. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE CONSIDERED A PART OF THESE IMPROVEMENTS.
- 1.7 IN CASE OF CONFLICT, THE MORE RESTRICTIVE PROVISION SHALL APPLY.

- **UTILITY LOCATIONS** 2.1 IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM OR ESTABLISH THE EXISTENCE OF ALL EXISTING UTILITY FACILITIES AND THEIR EXACT LOCATIONS, AND TO SAFELY SCHEDULE ALL UTILITY RELOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE ENGINEER DOES NOT WARRANT THE LOCATION OF ANY EXISTING UTILITIES SHOWN ON THE PLAN. THE CONTRACTOR SHALL CALL J.U.L.I.E. AT 800-892-0123 AND THE VILLAGE OF TINLEY PARK FOR UTILITY LOCATIONS. FOR ADDITIONAL INFORMATION, THE AGENCIES LISTED ON THIS SHEET MAY BE CONTACTED.
- 2.2 IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH LOCATIONS OF THE NEW CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.

UTILITY COORDINATION

3.1 THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE NATURE AND STATUS OF ALL UTILITY RELOCATION WORK PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO ENSURE THAT CONSTRUCTION OPERATIONS DO NOT INTERFERE WITH THE UTILITY FACILITIES AND RELOCATION WORK. THE SCHEDULE SHOULD REFLECT CONSTRUCTION SEQUENCING WHICH COORDINATES WITH ALL UTILITY RELOCATION WORK. THE CONTRACTOR SHALL BE REQUIRED TO ADJUST THE ORDER OF WORK FROM TIME TO TIME, TO COORDINATE SAME WITH UTILITY RELOCATION WORK, AND SHALL PREPARE REVISED SCHEDULE(S) IN COMPLIANCE THEREWITH AS DIRECTED BY THE OWNER.

- COMMENCING CONSTRUCTION 4.1 PRIOR TO COMMENCEMENT THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THE WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR WILL BE RESPONSIBLE FOR CONSTRUCTION LAYOUT. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTIONS ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.
- 4.2 THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN AND VEHICULAR ACCESS AT ALL TIMES. AT NOT TIME SHALL ACCESS BE DENIED TO PROPERTIES SURROUNDING THE SITE.
- 4.3 ITEMS SPECIFIED FOR REMOVAL, INCLUDING BUT NOT LIMITED TO THEIR, PAVEMENT, SIDEWALK, CURB, CURB AND GUTTER, CULVERTS, ETC. SHALL BE LEGALLY DISPOSED OF OFF-SITE BY THE CONTRACTOR AT HIS OWN EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR ANY PERMIT REQUIRED FOR SUCH DISPOSAL.
- 4.4 THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY ON THE JOB.
- 4.5 THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DEBRIS, EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE, MACHINERY, TOOLS AND OTHER MISCELLANÉOUS ITEMS WHICH WHERE NOT PRESENT PRIOR TO PROJECT COMMENCEMENT AT NO ADDITIONAL EXPENSE TO THE CHSD 230. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY AND ALL PERMITS NECESSARY FOR THE HAULING AND DISPOSAL REQUIRED FOR CLEAN-UP AS DIRECTED BY THE ENGINEER OF CHSD 230.
- GENERAL EXCAVATION/UTILITY NOTES 5.1 COST FOR SHORING AND BRACING, SHEET PILING, UPRIGHT, STRINGERS, CROSS BRACES, ETC. SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE WORK. NO ADDITIONAL
- COMPENSATION WILL BE ALLOWED. 5.2 THE CONTRACTOR SHALL: PREVENT SURFACE WATER AND SUBSURFACE OR GROUNDWATER FROM FLOWING INTO EXCAVATIONS: REMOVE WATER TO PREVENT SOFTENING OF FOUNDATION BOTTOMS, UNDERCUTTING FOOTINGS, AND SOIL CHANGES DETRIMENTAL TO STABILITY OF SUBGRADES AND FOUNDATIONS; PROVIDE AND MAINTAIN PUMPS, SUMPS, SUCTION AND DISCHARGE LINES AND OTHER DEWATERING SYSTEM COMPONENTS NECESSARY TO CONVEY WATER AWAY FROM EXCAVATIONS; CONVEY WATER REMOVED FROM EXCAVATIONS AND RAINWATER TO COLLECTING OR RUN-OFF AREAS ACCEPTABLE TO AUTHORITIES THE VILLAGE OF TINLEY PARK; PROVIDE AND MAINTAIN TEMPORARY DRAINAGE DITCHES AND OTHER DIVERSIONS OUTSIDE EXCAVATION LIMITS FOR EACH STRUCTURE. THE CONTRACTOR SHALL
- 5.3 UNDERGROUND WORK SHALL INCLUDE TRENCHING, INSTALLATION OF PIPE, CASTINGS, STRUCTURES, BACKFILLING OF TRENCHES AND COMPACTION AND TESTING AS SHOWN ON THE CONSTRUCTION PLANS. FITTINGS AND ACCESSORIES NECESSARY TO COMPLETE THE WORK MAY NOT BE SPECIFIED, BUT SHALL BE CONSIDERED AS INCIDENTAL TO THE COST OF THE IMPROVEMENTS.

NOT USE TRENCH EXCAVATIONS AS TEMPORARY DRAINAGE DITCHES.

5.4 TRENCH BACKFILL WILL BE REQUIRED FOR THE FULL TRENCH DEPTH WITHIN TWO (2) FEET OF PROPOSED OR EXISTING PAVEMENTS, UTILITIES, DRIVEWAYS, AND SIDEWALKS. THE TRENCH BACKFILL SHALL CONSIST OF GRANULAR MATERIAL MEETING SSRBC CA-6 GRADATION, UNLESS NOTED OTHERWISE. THE TRENCH BACKFILL SHALL BE COMPACTED IN ACCORDANCE WITH SSRBC SPECIFICATIONS. JETTING WITH WATER SHALL NOT BE

EARTHWORK NOTES

- 6.1 THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS ARE FINISHED GRADE UNLESS NOTED
- 6.2 THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION, AND PREVENT STORMWATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR WORK RESULTING FROM CONTRACTOR'S FAILURE TO PROVIDE PROPER DRAINAGE. GRADED AREAS SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION AND TRAFFIC.
- 6.3 THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE "SOIL EROSION AND SEDIMENTATION CONTROL MEASURES". THE INITIAL ESTABLISHMENT OF EROSION CONTROL AND THE PLACEMENT OF SILT AND FILTER FENCING. ETC. TO PROTECT ADJACENT PROPERTIES, WETLANDS, ETC. SHALL OCCUR BEFORE ANY WORK BEGINS.
- 6.4 EXCESS MATERIALS SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND LEGALLY DISPOSED OF OFF-SITE BY THE CONTRACTOR.

TOP SOIL I.I TOPSOIL SHALL BE REMOVED WITHIN THOSE AREAS THAT WILL REQUIRE EARTH EXCAVATION OR STRUCTURAL FILL MATERIAL. EXISTING VEGETATION SHALL BE REMOVED PRIOR TO

- 7.2 TOPSOIL SHALL BE PLACED IN DESIGNATED AREAS FOR FUTURE USE WITHIN AREAS TO BE LANDSCAPED, AND THOSE AREAS NOT REQUIRING STRUCTURAL FILL MATERIAL. PROVIDE NECESSARY EROSION CONTROL MEASURES FOR STOCKPILE.
- 7.3 TOPSOIL STOCKPILE FOR RESPREAD SHALL BE FREE OF CLAY AND SHALL NOT CONTAIN ANY OF THE TRANSITIONAL MATERIAL BETWEEN THE TOP SOIL AND CLAY. THE TRANSITIONAL MATERIAL SHALL BE USED IN NON-STRUCTURAL FILL AREAS OR DISPOSED OF OFF-SITE.
- .4 TOPSOIL RESPREAD SHALL INCLUDE HAULING AND SPREADING 6"OF TOPSOIL OVER AREAS TO BE LANDSCAPED WHERE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER.
- 7.5 MODERATE COMPACTION IS REQUIRED IN NON-STRUCTURAL FILL AREAS.

STRIPPING TOPSOIL OR FILLING AREAS.

- **EXCAVATION/EMBANKMENT** \mid 8,1 \mid SUB-GRADE SHALL BE GRADED TO WITHIN A TOLERANCE OF 0.1 FEET + OF THE PLAN SUBGRADE ELEVATIONS WHILE MAINTAINING PROPER DRAINAGE. THE + TOLERANCE WITHIN PAVEMENT AREAS SHALL BE SUCH THAT THE EARTH MATERIALS SHALL "BALANCE" DURING THE FINE GRADING OPERATION.
- 8.2 FILL MATERIAL SHALL BE PLACED IN LOOSE LIFTS THAT SHALL NOT EXCEED EIGHT (8) INCHES IN THICKNESS, AND THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE REQUIRED COMPACTION. STRUCTURAL FILL MATERIAL MAY BE PLACED WITHIN THOSE PORTIONS OF THE SITE NOT REQUIRING STRUCTURAL FILL, HOWEVER, THIS (6) INCHES OF THE PLAN FINISHED GRADE ELEVATION. IN AREAS REQUIRING STRUCTURAL FILL HOWEVER. THIS MATERIAL SHALL NOT BE PLACED OVER TOPSOIL OR OTHER UNSUITABLE MATERIAL'S UNLESS SPECIFICALLY DIRECTED BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.
- 8.3 COMPACTION OF THE CLAY AND OTHER SUITABLE MATERIALS SHALL BE TO AT LEAST 93% OF THE MODIFIED PROTECTOR DRY DENSITY WITHIN PROPOSED PAVEMENT AREAS, SIDEWALK, ETC. COMPACTION SHALL BE AT LEAST 95% OF THE MODIFIED PROTECTOR WITHIN PROPOSED BUILDING PAD AREAS.
- 8.4 UNSUITABLE MATERIAL SHALL BE CONSIDERED AS MATERIAL WHICH IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION, AND IS ENCOUNTERED BELOW NORMAL TOPSOIL DEPTHS AND THE PROPOSED SUBGRADE ELEVATION. THE DECISION TO REMOVE SAID MATERIAL, AND TO WHAT EXTENT, SHALL BE MADE BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.

PAVING NOTES

- GENERAL 9.1 PAVING WORK INCLUDES FINAL SUBGRADE SHAPING, PREPARATION AND COMPACTION; PLACEMENT OF SUB-BASE OR BASE COURSE MATERIALS; AND FINAL CLEAN-UP AND ALL RELATED WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR BITUMINOUS BINDER AND/OR SURFACE COURSES; FORMING, FINISHING AND CURING CONCRETE PAVEMENT, CURBS AND
- 9.2 COMPACTION REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE SSRBC.
- 9.3 IT SHALL BE THE CONTRACTOR'S RESPONSIBLY TO PROVIDE PROPER BARRICADING, WARNING DEVICES AND THE SAFE MANAGEMENT OF TRAFFIC WITHIN THE AREA OF CONSTRUCTION.

SUB-GRADE PREPARATION

10.1 EARTHWORK FOR PROPOSED PAVEMENT SUBGRADE SHALL BE FINISHED TO +0.1 FOOT OF PLAN SUBGRADE ELEVATION. THE CONTRACTOR SHALL SATISFY HIMSELF THAT THE SUBGRADE HAS BEEN PROPERLY PREPARED AND THAT THE FINISH TOP SUBGRADE ELEVATION HAS BEEN GRADED WITHIN TOLERANCE ALLOWED IN THESE SPECIFICATIONS. UNLESS THE CONTRACTOR ADVISE THE OWNER AND ENGINEER IN WRITING PRIOR TO FINE GRADED FOR BASE COURSE CONSTRUCTION, IT IS UNDERSTOOD THAT HE HAS APPROVED AND ACCEPTS THE RESPONSIBILITY FOR THE SUBGRADE.

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DATE CONSTRUCTION • 2/22/2023

PLUMBING EXTERIOR HHD **SPECIFICATIONS** AND NOTES

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