PO BOX 52747 PHOENIX, AZ 85072

PUBLIC SERVICE GAS CO. 535 W. NICHOLSON ROAD

1250 HADDONFIELD-BERLIN ROAD

300 NEW ALBANY ROAD

NEW JERSEY AMERICAN WATER PO BOX 578 **ALTON, IL 62002** (SERVICING EAST CAMDEN & CRAMER HILL)

ELECTRICAL BUREAU 1056 WRIGHT AVENUE, 2ND FLOOR CAMDEN, NJ 08103

350 NEWTON AVENUE

540 BROAD STREET NEWARK, NJ 07101

WILLIAMS TRANSCO 99 FARBER ROAD

PRINCETOWN, NJ 08540

PRELIMINARY AND FINAL SITE PLAN

WHITTIER FIELD

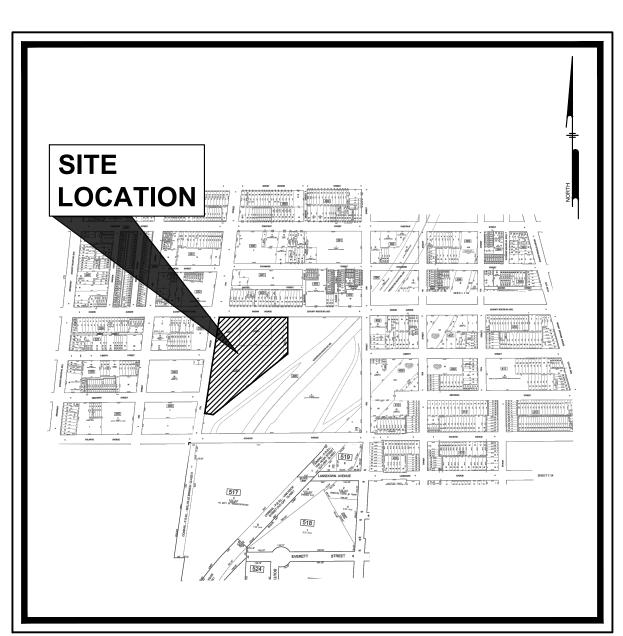
BLOCK 405, LOTS 1,7,8 & 11 CAMDEN COUNTY, NEW JERSEY

PREPARED FOR:

OWNER

KIPP COOPER NORCROSS, INC.

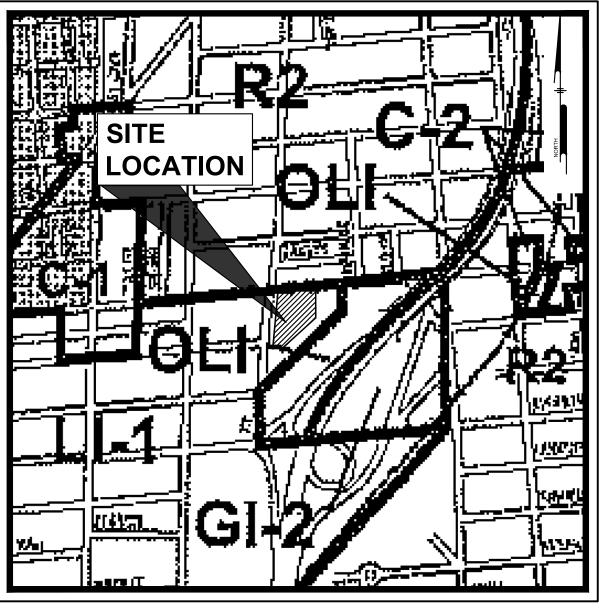
60 PARK PLACE, SUITE 802 **NEWARK, NJ 07102**



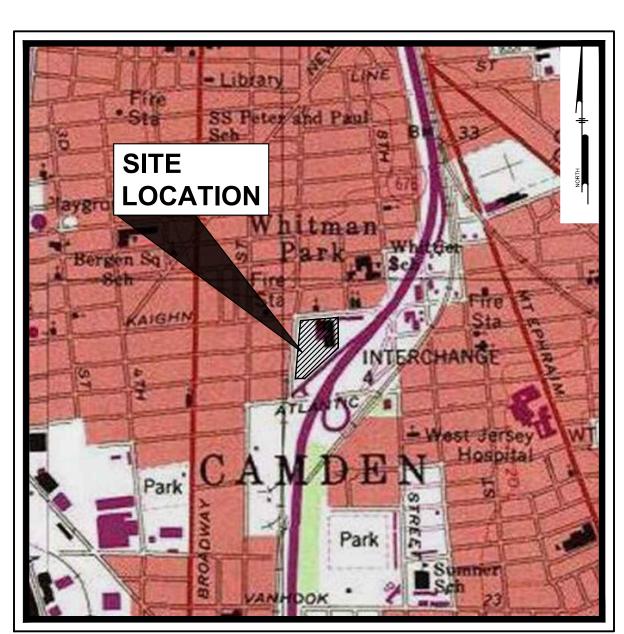
TAX MAP Scale: 1" = 600' [Sheet 7.11]



LOCATION MAP Scale: 1" = 2000'



ZONING MAP Scale: 1" = 2000'



USGS MAP Scale: 1" = 2000'

		DRAWING INDEX	
Sheet Number	Sheet Description	Sheet Title	Drawing Da
1	CS0001	COVER SHEET	yyyy-mm-d
2	CS0002	GENERAL NOTES I	yyyy-mm-d
3	CS0003	GENERAL NOTES II	yyyy-mm-d
4	CS0500	OVERALL SITE PLAN	yyyy-mm-d
5	CS0501	DEMOLITION PLAN	yyyy-mm-d
6	CS1001	SITE PLAN -BASE BID + PHASES 1,2,3 & 4	yyyy-mm-d
7	CS1501	GRADING PLAN	yyyy-mm-d
8	CS1502	ADA RAMP AND DRIVEWAY DETAILS I	yyyy-mm-d
9	CS1503	ADA RAMP AND DRIVEWAY DETAILS II	yyyy-mm-d
10	CS1504	ADA RAMP & DRIVEWAY DETAILS III	yyyy-mm-d
11	CS1505	ADA RAMP AND DRIVEWAY DETAILS IV	yyyy-mm-d
12	CS1701	DRAINAGE PLAN	yyyy-mm-d
13	CS1702	UTILITY PLAN	yyyy-mm-d
14	CS2001	LANDSCAPE PLAN	yyyy-mm-d
15	CS2201	LIGHTING PLAN	yyyy-mm-d
16	CS2202	LIGHTING PLAN - FOOTBALL FIELD	yyyy-mm-d
17	CS4001	STORM SEWER PROFILES I	yyyy-mm-d
18	CS4002	STORM SEWER PROFILE II	yyyy-mm-d
19	CS4003	STORM SEWER PROFILES III	yyyy-mm-d
20	CS6001	CONSTRUCTION DETEAILS I	yyyy-mm-d
21	CS6002	CONSTRUCTION DETAILS II	yyyy-mm-d
22	CS6003	CONSTRUCTION DETAILS III	yyyy-mm-d
23	CS6004	CONSTRUCTION DETAILS IV	yyyy-mm-d
24	CS6005	CONSTRUCTION DETAILS V	yyyy-mm-d
25	CS6006	CONSTRUCTION DETAILS VI	yyyy-mm-d
26	CS6007	CONSTRUCTION DETAILS VII	yyyy-mm-d
27	CS6008	CONSTRUCTION DETAILS VIII	yyyy-mm-d
28	CS6009	CONSTRUCTION DETAILS IX	yyyy-mm-d
29	CS6010	SYNTHETIC FIELD DETAILS	yyyy-mm-d
30	CS6021	DRAINAGE AND WATER MAIN DETAILS I	yyyy-mm-d
31	CS6022	DRAINAGE AND WATER MAIN DETAILS II	yyyy-mm-d
32	CS6041	WATER DETAILS	yyyy-mm-d
33	CS6061	SANITARY SEWER DETAILS	yyyy-mm-d
34	CS6061	LANDSCAPE NOTES	yyyy-mm-d
35	CS6062	LANDSCAPE DETAILS	yyyy-mm-d
36	CS8001	SOIL EROSION & SEDIMENT CONTROL PLAN	yyyy-mm-d
37	CS8501	SOIL EROSION & SEDIMENT CONTROL NOTES	yyyy-mm-d
38	CS8502	SOIL EROSION & SEDIMENT CONTROL DETAILS	yyyy-mm-d
39	CS9801	VEHICULAR CIRCULATION PLAN	yyyy-mm-d

PREPARED BY: PENNONI ASSOCIATES INC.



2 Aquarium Drive, Suite 320 Camden, NJ 08103 **T** 856.668.8600 **F** 856.668.8610

NJ CERTIFICATE OF AUTHORIZATION NO. GA28033300

1-800-272-1000

CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH THE REQUIREMENTS OF THE NEW JERSEY ONE-CALL DAMAGE PREVENTION SYSTEM AS STATED IN THE "UNDERGROUND FACILITY PROTECTION ACT".

NEW JERSEY

CALL BEFORE YOU DIG

THIS MAP IS HEREBY APPROVED BY THE PLANNING BOARD OF THE CITY OF CAMDEN.

BOARD CHAIRMAN **BOARD SECRETARY**

BOARD ENGINEER

ZONING OFFICER/ADMINISTRATIVE OFFICER

NOT FOR CONSTRUCTION

ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER

KCNAX2300 MAY 17, 2024 AS NOTED

PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE

SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL

SHALL INDEMNIFY AND HOLD HARMLESS PENNONI

EXPENSES ARISING OUT OF OR RESULTING THEREFRO

CS0001

SHEET 1 OF 39

- ALL DEMOLITION WORK SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT NFPA 241 AND OSHA STANDARDS, LATEST EDITION.
- CONTRACTOR SHALL NOTIFY APPROPRIATE UTILITY PURVEYOR, OWNER AND THE ENGINEER 72 HRS. PRIOR TO INITIATING UTILITY REMOVAL AND/OR ABANDONMENT.
- PRIOR TO START OF DEMOLITION, THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH EACH UTILITY AND THE OWNER TO THE WORK RELATIVE TO THEIR FACILITIES WITHIN THE LIMITS OF DEMOLITION AREA. THE CONTRACTOR SHALL ENSURE THAT ALL UTILITIES WHETHER SHOWN OR NOT ARE INACTIVE OR DE-ENERGIZED PRIOR TO DEMOLITION.
- REMOVE ALL SANITARY SEWER, STORM SEWER, TELEPHONE AND CABLE SERVICES AND CONDUITS WITHIN THE LIMIT OF DEMOLITION UNLESS OTHERWISE NOTED. ALL WATER SERVICE CONNECTIONS SHALL BE CUT AND CAPPED AT THE MAIN STORM INLETS AND ASSOCIATED PIPING SHALL REMAIN IN-PLACE.
- THE CONTRACTOR SHALL MAINTAIN AND PROTECT ALL EXISTING PAVING, CURBING, CONCRETE BRICK AND SITE AMENITIES NOT CALLED OUT TO BE REMOVED. ANY EXISTING CURB, SIDEWALK PAVEMENT, LANDSCAPING, LIGHTING OR OTHER SITE AMENITIES THAT ARE TO BE MAINTAINED AND PROTECTED AND ARE DAMAGED DURING DEMOLITION OR OTHER CONSTRUCTION RELATED ACTIVITIES, SHALL BE REPLACED PROMPTLY BY THE CONTRACTOR AT NO COST TO THE OWNER.
- PROTECTION OF FIRE HYDRANTS SHALL BE COORDINATED WITH THE CITY OF CAMDEN.
- WATER WILL BE AVAILABLE ONSITE VIA EXISTING HYDRANTS. CONTRACTOR TO COORDINATE WITH THE CITY OF CAMDEN.
- ELECTRICAL UTILITIES SHALL BE DISCONNECTED PRIOR TO BEGINNING ANY DEMOLITION WORK. DEMOLITION SHALL INCLUDE THE REMOVAL OF BURIED AND EXPOSED CONDUIT IN THE AREA DESIGNATED FOR DEMOLITION, SEALING ENDS OF ALL BURIED CONDUIT ABANDONED IN PLACE AND REMOVING ALL POWER AND CONTROL WIRING BETWEEN THE DEMOLISHED FACILITY AND THE TERMINAL JUNCTION BOX, CIRCUIT BREAKER, OR METER CONTROL CENTER SUPPLYING POWER TO THE FACILITY.
- ALL DEMOLITION MATERIAL AND DEBRIS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. NO ON-SITE BURIAL IS PERMITTED. A SOIL REMOVAL PERMIT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL ACTIVE CONSTRUCTION SITES AND LOCATIONS SHALL BE PROVIDED WITH NON-COMBUSTIBLE REFUSE CONTAINER(S) IN SUCH NUMBERS AS SHALL BE NECESSARY TO CONTAIN ALL COMBUSTIBLE REFUSE GENERATED BY THE CONSTRUCTION ACTIVITIES.
- ALL COMBUSTIBLE REFUSE, RUBBISH AND DEBRIS SHALL BE COLLECTED AND DEPOSITED IN THE CONTAINER(S) ON A DAILY BASIS. REFUSE CONTAINER(S) SHALL BE LOCATED A MINIMUM OF TWENTY (20) FEET AWAY FROM ANY BUILDING, STRUCTURE, LOT LINE OR COMBUSTIBLE
- WHILE CONSTRUCTION ACTIVITIES ARE IN PROGRESS, AT LEAST FOUR(4) PORTABLE FIRE EXTINGUISHERS HAVING A RATING OF AT LEAST 10-A, 60-BC SHALL BE PROVIDED, AND SHALL BE MAINTAINED IN A LOCATION APPROVED BY THE FIRE OFFICIAL. PERSONNEL NORMALLY ON THE CONSTRUCTION SITE SHALL BE INSTRUCTED IN THE USE OF THE FIRE EXTINGUISHERS
- THE CONTRACTOR SHALL CONDUCT DEMOLITION OPERATIONS AND REMOVAL OF DEBRIS TO ENSURE MINIMAL INTERFERENCE WITH ROADS. WALKS AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. THE AREAS OF DEMOLITION SHALL BE PROTECTED TO ENSURE THE SAFE PASSAGE OF PEDESTRIANS AS SHOWN ON THE CONTRACT DRAWINGS.
- NO DISTURBANCES NOR PLACEMENT OF MATERIALS SHALL BE PERMITTED BEYOND THE PROJECT LIMIT LINES WITHOUT WRITTEN CONSENT OF THE PROPERTY OWNER(S) INVOLVED DAMAGE CAUSED TO ADJACENT FACILITIES BY DEMOLITIONS OPERATIONS AND/OR STORAGE OF MATERIALS OR EQUIPMENT SHALL BE PROMPTLY REPAIRED/REPLACED AT NO COST TO THE
- DEMOLITION EQUIPMENT AND VEHICLES SHALL STAGE WITHIN PAVED DRIVEWAYS, PARKING LOTS AND WITHIN THE AREA OF EXISTING BUILDING FOOTPRINT TO MINIMIZE SOIL DISTURBANCES DURING DEMOLITION PROCESS.
- 17. CONTRACTOR TO NOTIFY ALL UTILITY COMPANIES PRIOR TO DEMOLITION.
- CONTRACTOR TO COORDINATE ALL UTILITY REMOVAL(S) AND SHUT-OFF(S) (TYPICAL).
- 19. ALL MATERIALS REMOVED FROM SITE ARE TO BE DISPOSED OF AT AN APPROVED FACILITY
- 20. NO MATERIALS ARE TO BE BURIED ONSITE.
- ALL DEMOLITION TO BE PERFORMED IN STRICT ADHERENCE TO ALL FEDERAL. STATE AND LOCAL REGULATIONS.
- 22. CONDUCT DEMOLITION IN SUCH A MANNER TO INSURE MINIMUM INTERFERENCE WITH ROADS, WALKS AND OTHER ADJACENT FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED AREAS WITHOUT WRITTEN CONSENT OF OWNER AND ANY APPLICABLE GOVERNMENTAL AUTHORITIES.
- 23. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS, IF REQUIRED BY CITY OR STATE AGENCIES.
- 24. CONTRACTOR TO USE TEMPORARY ENCLOSURES, WATERING OR OTHER SUITABLE METHODS, AS NECESSARY TO LIMIT THE AMOUNT OF DUST AND DIRT.
- 25 REMOVED MATERIALS SHALL NOT BE STORED, SOLD OR BURNED ON SITE REMOVAL OF HAZARDOUS AND COMBUSTIBLE MATERIAL SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PROCEDURES AS AUTHORIZED BY THE FIRE DEPARTMENT OR OTHER APPROPRIATE REGULATORY AGENCIES AND AUTHORITIES.
- CALL SYSTEM, INC. 1-800-272-1000).

26. NEW JERSEY REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE. (NJ ONE

- . CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING SITE IMPROVEMENTS AND UTILITIES. ANY/ALL DISCREPANCIES SHALL BE REPORTED TO ENGINEER IN WRITING PRIOR TO ANY CONSTRUCTION.
- 28. ALL EXISTING UTILITIES SHALL BE REMOVED BY CONTRACTOR IN ACCORDANCE WITH CITY REQUIREMENTS.

FLOOD ZONE INFORMATION.:

BY GRAPHIC PLOTTING ONLY SUBJECT PARCEL AREA IS LOCATED IN ZONE AE (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL FLOODPLAIN) OF THE FLOOD INSURANCE RATE MAP NO. 34007C0036F WHICH BEARS AN EFFECTIVE DATE OF AUGUST 17, 2016. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE AND AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT

- THE LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES SHOWN ON THE CONTRACT DRAWINGS ARE APPROXIMATE AND ARE BASED UPON BEST AVAILABLE INFORMATION PROVIDED TO ENGINEER. THE FOLLOWING SHALL BE PERFORMED:
- A) VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES WITHIN THE WORK AREA PRIOR TO CONSTRUCTION.
- B) EXERCISE EXTREME CAUTION WHEN WORKING ADJACENT TO EXISTING POWER, COMMUNICATIONS, WATER OR GAS LINES TO PREVENT DAMAGE TO THESE LINES.
- C) IMMEDIATELY REPAIR ANY DAMAGE TO EXISTING UTILITIES IN A MANNER APPROVED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN SITE EXAMINATION AND DETERMINING THE ACTUAL NATURE AND EXTENT OF EXISTING CONDITIONS PRIOR TO UNDERTAKING WORK.
- 3-3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND TO TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER HAS DILIGENTLY ATTEMPTED TO LOCATE AND INDICATE ALL EXISTING FACILITIES ON THESE PLANS; HOWEVER, THIS INFORMATION IS SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES FOR EXACT LOCATION OF THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND REPLACE ANY AND ALL DAMAGE MADE TO UTILITIES BY THE CONTRACTOR.

GENERAL NOTES CONT.:

- G-4. BEFORE EXCAVATING THE PROJECT AREA THE CONTRACTOR IS TO VERIFY THE LOCATION OF ANY UNDERGROUND UTILITY (GAS MAINS, WATER MAINS, SEWER LINES, TELEPHONE LINES, ETC.). SHOULD ANY UNDERGROUND UTILITY INTERFERE WITH PROJECT CONSTRUCTION THE ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH WORK CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND THE OWNER THREE (3) DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION FOR ACCURATE FIELD LOCATIONS. FOR UTILITY MARKOUT CALL 1-800-272-1000. CERTAIN UTILITIES WITHIN THE PROJECT AREA ARE PRIVATE AND A UTILITY MARKOUT (ONE-CALL) MAY NOT DETECT AND MARK THE LOCATION OF THESE UTILITIES. CONTRACTOR SHALL OBTAIN AN INDEPENDENT MARKOUT COMPANY.
- G-5. VERIFY ALL INDICATED CONDITIONS AND DIMENSIONS IN THE FIELD BEFORE PERFORMING ANY WORK. NOTIFY THE ENGINEER OF ANY CONDITIONS OR DIMENSIONS THAT WOULD PREVENT OR HAMPER THE PERFORMANCE OF THE WORK IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS.
- G-6. THE CONTRACTOR AND OR ENGINEER SHALL RESOLVE APPARENT CONTRADICTIONS IN CONTRACT DOCUMENTS WITH THE OWNER BEFORE AFFECTED WORK PROCEEDS.
- G-7. DEVIATION FROM THESE PLANS AND NOTES WITHOUT THE PRIOR CONSENT OF THE OWNER, OWNER'S REPRESENTATIVE AND/OR THE DESIGN ENGINEER MAY BE CAUSE

FOR THE WORK TO BE UNACCEPTABLE.

- G-8. EXISTING SANITARY SEWERS THAT ARE TO REMAIN IN SERVICE SHALL REMAIN IN ACTIVE OPERATION AT ALL TIMES. EXISTING WATER MAINS SHALL REMAIN IN ACTIVE OPERATION EXCEPT AS NECESSARY FOR CONNECTIONS. PROVIDE A MINIMUM OF TWO WEEKS NOTICE TO THE ENGINEER AND OWNER PRIOR TO SERVICE DISRUPTIONS.
- G-9. UTILIZE A MOBILE SWEEPER AND WATER TRUCK DAILY FOR DUST CONTROL ALONG HAUL ROUTES AND IN AREAS MADE AVAILABLE FOR CONSTRUCTION.
- G-10. PREVENT WATER PONDING RESULTING FROM CONSTRUCTION OPERATIONS PROMPTLY REMOVE ANY PONDED WATER TO THE SATISFACTION OF THE ENGINEER.
- G-11. ALL TOPSOIL SHALL BE STRIPPED, STOCKPILED AND REUSED ON SITE AND MAY NOT BE TRANSPORTED OFF-SITE WITHOUT WRITTEN REQUEST AND RESPONSE FROM THE OWNER AUTHORIZING SAME.
- G-12. CONTRACTOR SHALL WORK TO MINIMIZE EXCESS SOIL GENERATED. IF IT IS NECESSARY TO REMOVE SOIL FROM THE SITE, IT SHOULD BE DISPOSED OF AT A PERMITTED DISPOSAL FACILITY. PROVIDE THE NAME OF THE DISPOSAL FACILITY AND SOIL SAMPLE RESULTS 7 DAYS PRIOR TO HAULING SOIL. COPIES OF ALL BILLS-OF-LADING SHALL BE PROVIDED TO THE ENGINEER WITHIN 24 HOURS OF SOIL LEAVING THE SITE. CONTRACTOR SHALL ASSUME OWNERSHIP/RESPONSIBILITY OF EARTH OR CONCRETE SPOILS AND/OR DEBRIS GENERATED DURING CONSTRUCTION.
- G-13. ALL AREAS OUTSIDE THE LIMITS OF CONSTRUCTION WHICH ARE DAMAGED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER AND OWNER.
- G-14. VERIFY ALL INDICATED CONDITIONS AND DIMENSIONS IN THE FIELD BEFORE PERFORMING ANY WORK. NOTIFY THE ENGINEER OF ANY CONDITIONS OR DIMENSIONS THAT WOULD PREVENT OR HAMPER THE PERFORMANCE OF THE WORK IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS.
- G-15. UPON COMPLETION OF THE WORK, REMOVE ALL DEBRIS, EQUIPMENT AND UNUSED MATERIALS FROM OWNER PROPERTY AND RESTORE THE AREAS TO THEIR ORIGINAL CONDITION, AS APPROVED BY THE ENGINEER.
- G-16. A GEOTECHNICAL ENGINEER. RETAINED BY THE CONTRACTOR. IS REQUIRED TO INSPECT, TEST, AND CERTIFY TO THE COMPACTION OF ALL FILLS.
- G-17. THE CONTRACTOR SHALL PROVIDE ANY AND ALL EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- G-18. SOILS TESTING AND ON-SITE INSPECTION SHALL BE PERFORMED BY AN INDEPENDEN GEOTECHNICAL ENGINEER, RETAINED BY THE CONTRACTOR. THE GEOTECHNICAL ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, AND THE CONSTRUCTION MANAGER, AND SHALL PROMPTLY NOTIFY THE CONSTRUCTION MANAGER AND THE CONTRACTOR SHOULD WORK PERFORMED BY THE CONTRACTOR FAIL TO MEET THESE SPECIFICATIONS.
- G-19. THE BOTTOM OF ALL EXCAVATIONS AND COMPACTED EARTHWORK SHALL BE INSPECTED AND APPROVED BY A REGISTERED GEOTECHNICAL ENGINEER RETAINED BY THE CONTRACTOR PRIOR TO PLACING CONCRETE STRUCTURES AND/OR BACKFILLING. APPROVAL BY THE GEOTECHNICAL ENGINEER. IN WRITING, SHALL INDICATE THAT THE SOIL IS ADEQUATE TO SAFELY SUPPORT A FOUNDATION PRESSURE OF 2,000 PSF. EXCAVATION BELOW THE ANTICIPATED BOTTOMS OF CONCRETE STRUCTURES ALONG WITH PLACEMENT OF COMPACTED BACKFILL MAY BE REQUIRED.
- G-20. CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES AND FENCING AROUND THE PERIMETER OF THE WORK AREA AND SHALL PROVIDE PROTECTION AGAINST WATER DAMAGE AND SOIL EROSION.
- G-21. ALL TRAFFIC CONTROL DEVICES TO BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION. SIGN POSTS SHALL BE GALVANIZED STEEL AND ALL SIGN MATERIALS SHALL BE MADE OF REFLECTIVE SHEETING ON ALUMINUM BLANKS IN ACCORDANCE WITH
- G-22. ALL DIMENSIONING IS TO CURB OR BUILDING FACE, UNLESS OTHERWISE NOTED.
- G-23. UNLESS OTHERWISE INDICATED, ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2019, OR LATEST EDITION, AS AMENDED AND SUPPLEMENTED TO DATE.
- G-24. ALL CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 4,500 PSI, UNLESS
- G-25. ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL, AND LOCAL CODES, AND ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER/DEVELOPER.
- G-26. NO WORK IS TO START UNTIL A PRECONSTRUCTION CONFERENCE IS HELD. THE PRECONSTRUCTION CONFERENCE SHALL BE SCHEDULED WITH THE OWNER AND ENGINEER A MINIMUM OF THREE WORKING DAYS PRIOR TO THE START OF WORK.
- G-27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE RESPECTIVE UTILITY COMPANIES FOR GAS SEWER FLECTRIC PHONE AND TV SERVICE LOCATIONS LOCATION OF UTILITIES AS SHOWN ON THESE PLANS ARE PLOTTED FROM AVAILABLE EXACTNESS THE CONTRACTOR IS TO CONTACT LITILITY COMPANIES 72 HOURS PRIOR TO CONSTRUCTION TO DETERMINE EXACT LOCATION AND DEPTH. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES DURING CONSTRUCTION.
- G-28. ALL GAS VALVES AND BOXES WITHIN THE CONSTRUCTION LIMITS SHALL BE RESET BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO RESET ALL WATER VALVES AND BOXES WITHIN THE LIMITS OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING NJ ONE-CALL AT 1-800-272-1000 PRIOR TO
- G-29. ALL STORM SEWER INLET HEADS AND SANITARY SEWER MANHOLE HEADS, WHERE INDICATED ON THE PLANS, SHALL BE SET TO GRADES ESTABLISHED IN THE FIELD USING CONCRETE BRICK AND MORTAR BY THE CONTRACTOR AND APPROVED BY THE
- INTERSECTIONS AND GUTTER LINES, IN THE PLACING OF PAVEMENT TO PROVIDE POSITIVE DRAINAGE. ANY AREAS WHERE WATER IS IMPOUNDED SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. G-31, NO MATERIAL SHALL BE PLACED OR ANY DISTURBANCE PERMITTED. BEYOND THE

G-30. THE CONTRACTOR SHALL EXERCISE PARTICULAR CARE, ESPECIALLY AT

- PROJECT PROPERTY LINE OR RIGHT OF WAY WITHOUT THE WRITTEN PERMISSION OF THE PROPERTY OWNER DIRECTLY INVOLVED. G-32. EXISTING GAS, ELECTRIC & TELEPHONE FACILITIES THAT MAY HAVE TO BE RELOCATED
- OWNER. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND SHALL NOT CLAIM ANY DELAYS TO HIS CONSTRUCTION SCHEDULE. G-33. MAILBOXES, STREET SIGNS, TRAFFIC SIGNS REMOVED FOR CONSTRUCTION PURPOSES

ARE TO BE MOVED BY THE RESPECTIVE UTILITY COMPANY AT NO COST TO THE

MUST BE RESET BY THE CONTRACTOR WITHIN 24 HOURS. G-34. CONTRACTOR TO BE RESPONSIBLE FOR COSTS INCURRED IN TEMPORARY SUPPORT OF UTILITY POLES NEAR EXCAVATION THAT DO NOT REQUIRE RELOCATION. IT SHALL

BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE APPROPRIATE UTILITY

- COMPANY FOR UTILITY POLE RELOCATION. G-35. CONTRACTOR MUST PROVIDE A MEANS OF SAFE INGRESS AND EGRESS AT ALL TIMES TO THE PUBLIC. THIS SHALL INCLUDE RIGHTS OF WAYS AS WELL AS INDIVIDUAL RESIDENCES AND / OR BUSINESSES WITHIN THE PROJECT AREA.
- G-36. CONTRACTOR IS REQUIRED TO ENSURE THE SAFE, ORDERLY AND EXPEDITIOUS FLOW OF TRAFFIC AT ALL TIMES. SAID TRAFFIC FLOW IS TO BE MAINTAINED IN ACCORDANCE WITH RECOGNIZED TRAFFIC CONTROL STANDARDS AND IS ENSURED, BUT NOT LIMITED TO THROUGH THE USE OF FLAG MAN, SIGNING, BARRICADES, FLASHING LIGHTS, CONES, BARRELS, ETC.
- G-37. WATCHMAN AND FLAG MAN SHALL BE EMPLOYED BY THE CONTRACTOR FOR THE PROTECTION OF ANY FOLIPMENT ENTERING LEAVING OR CROSSING ACTIVE TRAFFIC. LANES, OR AS MAY BE REQUIRED FOR THE ROUTING OF ANY TRAFFIC AROUND OR THROUGH THE CONSTRUCTION.
- G-38. DURING THE WINTER MONTHS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE MAINTENANCE OF THE ROADWAY. THE ROADWAY SHALL BE KEPT FREE OF ALL OBSTRUCTIONS AND KEPT IN A SMOOTH RIDING CONDITION AT ALL TIMES. ALL POT HOLES, WASHOUTS, CAVE-INS, ETC., DEVELOPING DURING THIS PERIOD SHALL BE PROPERLY FILLED IN WITH MATERIAL BY METHOD APPROVED BY THE ENGINEER. HOWEVER, THE CONTRACTOR SHALL NOT BE REQUIRED TO REMOVE SNOW AWAY FROM PUBLIC ROADS OVER WHICH TRAFFIC IS BEING MAINTAINED.

GENERAL NOTES CONT.:

- G-39. BEFORE BEGINNING WORK ON ANY STAGE OF THE PROJECT, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL SPECIFIED WARNING SIGNS, BARRICADES, WOOD TRAFFIC GUIDES, LIGHTS, FLARES AND OTHER DEVICES NECESSARY, IN THE OPINION OF THE ENGINEER. TO PROTECT THE PUBLIC DURING THAT PHASE OF HIS OPERATIONS.
- G-40. ALL NECESSARY REGULATORY AND WARNING SIGNS SHALL BE IN ACCORDANCE WITH LATEST ADDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND STANDARD HIGHWAY SIGNS, AND SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. WHEN SUCH SIGNS ARE NO LONGER REQUIRED, THE CONTRACT SHALL IMMEDIATELY AND CAREFULLY REMOVE AND STORE THEM ON THE PROJECT SITE AT LOCATIONS APPROVED BY THE ENGINEER UNTIL THEY ARE REUSED ON THE PROJECT OR REMOVED BY THE CONTRACTOR.
- G-41. THE CONTRACTOR SHALL PROCURE AND PAY FOR ALL NECESSARY PERMITS, ROAD OPENING APPLICATIONS AND LICENSES REQUIRED TO CARRY OUT HIS WORK IN FULL ACCORDANCE WITH REQUIREMENTS OF ALL REGULATIONS AND AUTHORITIES HAVING JURISDICTION. THIS SHALL BE AT NO ADDITIONAL EXPENSE TO THE OWNER OR
- G-42. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, COUNTY, STATE, AND LOCAL LAWS AND ALL CODES, ORDINANCES, RULES AND REGULATIONS OF HEALTH, PUBLIC OF OTHER AUTHORITIES CONTROLLING OR LIMITING THE METHODS, MATERIAL TO BE USED, OR THE ACTIONS OF THOSE EMPLOYED IN WORK OF THIS KIND. ALL WORK, LABOR, OR MATERIAL NECESSARY TO COMPLY WITH THESE LAWS, CODES, ORDINANCES, RULES AND REGULATIONS SHALL BE PERFORMED AND FURNISHED BY SAID CONTRACTOR.
- G-43. ALL SITE IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE NEW JERSEY DEPARTMENT OF TRANSPORTATION, INCLUDING ALL ADDENDA, EXCEPT AS MODIFIED SUPPLEMENTED, AMENDED OR SUPERSEDED BY THE BID SPECIFICATIONS OR AS SPECIFIED ON THE IMPROVEMENT PLANS.
- G-44. EXISTING ASPHALT CONCRETE PAVEMENT SHALL BE CUT AND REMOVED IN SUCH A MANNER SO AS NOT TO TEAR, BULGE OR DISPLACE ADJACENT PAVEMENT. EDGES SHALL BE CLEAN AND VERTICAL, ALL CUTS SHALL BE PARALLEL OR PERPENDICULAR TO THE
- G-45. ALL ADJACENT CONCRETE AND BUILDING SURFACES SHALL BE PROTECTED WHEN ASPHALT TACK COAT AND SEAL COAT IS APPLIED.
- G-46. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE DRAINAGE OF ALL AREAS WHETHER INDICATED ON PLANS OR NOT. POSITIVELY DRAIN ALL ROADWAY AREAS TO THE STORM INLETS DELINEATED IN THE CONSTRUCTION PLANS.
- G-47. ALL PRIVATE PROPERTY THAT MAY BE DISTURBED OR DAMAGED BY ANY CONSTRUCTION ACTIVITY SHALL BE RELOCATED. RESTORED REPAIRED AND/OR REPLACED BY THE CONTRACTOR AT NO COST TO EITHER THE CITY OR THE OWNER OF THE PROPERTY
- G-48. THE CONTRACTOR SHALL NOT REMOVE ANY MATERIALS FROM THE SITE FOR DISPOSAL WITHOUT THE PERMISSION OF THE ENGINEER. EXCESS ROAD MATERIALS MAY BE USED FOR EMBANKMENT OR SUB BASE ONLY ON AN IF AND WHERE DIRECTED BASIS AND AT NO ADDITIONAL COST TO THE OWNER.
- G-49. ALL STATIONS SHOWN ON PLANS ARE MEASURED ALONG THE CONSTRUCTION CENTER LINE, UNLESS SPECIFICALLY DELINEATED OTHERWISE.
- G-50. ONCE THE CONTRACTOR HAS COMMENCED CONSTRUCTION, THE WORK SHALL CONTINUE ON A DAILY BASIS WITHOUT INTERRUPTION UNTIL ALL OF THE WORK HAS BEEN COMPLETED.
- G-51. THE CONTRACTOR IS DIRECTED TO PROVIDE A 1/2" SLOPE ACROSS THE CURB AT ALL HANDICAP RAMPS TO INSURE POSITIVE DRAINAGE. NO PONDING AT HANDICAP RAMPS IS
- G-52. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A PRECONSTRUCTION VIDEO OF THE ENTIRE PROJECT AREA TAKEN PRIOR TO COMMENCING WORK. THE VIDEO SHALL BE TAKEN OF PROPERTIES ON WHICH CONSTRUCTION ACTIVITIES WILL TAKE PLACE. ONE (1) COPY OF THE VIDEO SHALL BE SUBMITTED TO ENGINEER.
- G-53. THE CONTRACTOR SHALL NOTIFY THE OWNERS OF PROPERTIES THROUGH WHICH THE CONTRACTOR WILL ACCESS THE SITES A MINIMUM OF TWO (2) WEEKS PRIOR TO COMMENCING CONSTRUCTION. SAID NOTIFICATION SHALL OUTLINE THE START OF CONSTRUCTION AND APPROXIMATE DATE THAT CONSTRUCTION WILL BE COMPLETED SAID NOTIFICATION SHALL ALSO DESCRIBE THE TYPICAL EQUIPMENT TO BE USED AND HOURS OF CONSTRUCTION AS WELL AS A STATEMENT THAT THE HOMEOWNER SHOULD RELOCATE AND/OR REPLANT ALL IMPROVEMENTS, SHRUBS, ETC. WITHIN THE LIMIT OF DISTURBANCE TO AREA OUTSIDE LIMIT OF DISTURBANCE OR THE CONTRACTOR WILL REMOVE OR RELOCATE SUCH ITEMS AT THE COMMENCEMENT OF CONSTRUCTION.
- G-54. AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN THE FLOW OF STORM WATER THROUGH THE EXISTING STORM WATER SYSTEM NO PLUGGING SANDBAGGING. SHEETING OR DIVERTING OF STORM WATER SUCH THAT LOCAL FLOODING OCCURS DURING A STORM EVENT WILL BE PERMITTED
- G-55. EXISTING VALVE BOXES, METERS, ETC. SHALL BE RESET TO FINISHED GRADE BY THE CONTRACTOR, THE CONTRACTOR SHALL COORDINATE THIS WORK, WHERE APPROPRIATE, WITH THE RESPECTIVE UTILITY COMPANIES.
- G-56. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS HAVE BEEN TAKEN FROM VARIOUS SOURCES AND ARE SHOWN FOR DESIGN AND ESTIMATING PURPOSES ONLY. ACTUAL LOCATIONS OF UTILITIES SHALL BE FIELD VERIFIED BY CONTRACTOR, ANY ENGINEER FOR INTERPRETATION. CONTRACTORS ARE ADVISED TO CALL 1-800-272-1000 BEFORE COMMENCING FOR A MARK OUT OF EXISTING UTILITIES.
- G-57. EXISTING UTILITIES INCLUDING VALVE BOXES, CLEAN OUTS, CURB STOPS, MANHOLES, ETC., SHALL BE ADJUSTED TO MATCH PROPOSED FINISHED GRADE. STORM DRAINAGE STRUCTURES SHALL NOT BE ADJUSTED UNLESS SPECIFICALLY CALLED FOR.
- G-58. WHERE PROPOSED, PAVEMENT WILL ABUT ANY EXISTING PAVEMENT, THE EXISTING PAVEMENT SHALL BE SAW-CUT TO PROVIDE A SMOOTH VERTICAL EDGE. ALL ASPHALT JOINTS SHALL BE SEALED WITH A HOT POURED RUBBER ASPHALT JOINT SEALER CONFORMING TO THE REQUIREMENTS OF ASTM D1190. ALL EXISTING JOINTS SHALL ALSO BE SEALED PRIOR TO PLACEMENT OF THE FABRIC OVERLAY.
- G-59. THE CONTRACTOR SHALL PROPERLY DISPOSE OF SPOILS AND EXCAVATED MATERIALS. NO ON SITE BURIAL OR BURNING OF CONSTRUCTION DEBRIS IS PERMITTED.
- G-60. MEET EXISTING GRADES AT ALL LIMITS OF CONSTRUCTION.
- G-61. PAVEMENT MARKINGS AND SIGNS ARE TO CONFORM WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- G-62. ALL EXISTING CONDITIONS AND DIMENSIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
- G-63. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND
- G-64. ANY REQUIRED UTILITY POLE RELOCATION'S FOR THE PROPOSED IMPROVEMENTS SHALL BE COMPLETED AT NO EXTRA COST TO THE OWNER. CONTRACTOR SHALL PROVIDE ALL NECESSARY ARRANGEMENTS FOR UTILITY POLE RELOCATION.
- G-65. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- G-66. ALL CONTRACTORS MUST CARRY STATUTORY WORKERS COMPENSATION, EMPLOYERS LIABILITY INSURANCE AND APPROPRIATE LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (CGL). ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME PENNONI, ITS SUBCONSULTANTS AS ADDITIONAL INSURED AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE THE HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED BY THE CONTRACTORS. ALL CONTRACTORS MUST FURNISH PENNONI, WITH CERTIFICATES OF INSURANCE. AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION IN ADDITION ALL CONTRACTORS WILL TO THE FULLEST EXTENT PERMITTED BY LAW. INDEMNIFY AND HOLD HARMLESS PENNONI. AND ITS SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES. LIABILITIES OR COSTS. INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS. ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTORS.
- G-67. NEITHER THE PROFESSIONAL ACTIVITIES OF PENNONI, NOR THE PRESENCE OF PENNONI, OR ITS EMPLOYEES AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING. SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. PENNONI. AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY. RWD CONSULTANTS, A DIVISION OF PENNONI, SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND SHALL BE MADE ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY
- G-68. PENNONI, SHALL REVIEW AND APPROVE OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND OTHER DATA WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN CONCEPT AND THE INFORMATION SHOWN IN THE CONSTRUCTION MEANS OR METHODS COORDINATION OF TH WORK WITH OTHER TRADES OR CONSTRUCTION SAFETY PRECAUTIONS. ALL OF WHICH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE REVIEW BY PENNONI, SHALL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE THAT PENNONI, HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT OF PENNONI, SHALL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO THE ATTENTION OF PENNONI, IN WRITING BY THE CONTRACTOR OF PENNONI, SHALL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.

GENERAL NOTES CONT.:

- G-70. THE CONTRACTOR MUST INCLUDE A MEDIATION PROVISION IN ALL AGREEMENTS WITH INDEPENDENT SUBCONTRACTORS AND CONSULTANTS RETAINED FOR THE PROJECT AND TO REQUIRE ALL INDEPENDENT CONTRACTORS AND CONSULTANTS ALSO TO INCLUDE A SIMILAR MEDIATION PROVISION IN ALL AGREEMENTS WITH THEIR SUBCONTRACTORS, SUB CONSULTANTS, SUPPLIERS AND FABRICATORS, THEREBY PROVIDING FOR MEDIATION AS THE PRIMARY METHOD FOR DISPUTE RESOLUTION BETWEEN THE PARTIES TO ALL THOSE
- G-71. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREON. WITHOUT FIRST OBTAINING PRIOR WRITTEN AUTHORIZATION FOR SUCH DEVIATIONS FROM THE OWNER AND ENGINEER, IT SHALL BE RESPONSIBLE FOR THE PAYMENT OF ALL COSTS TO CORRECT ANY WORK DONE, ALI FINES OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND IT SHALL INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ALL SUCH COSTS TO CONNECT ANY SUCH WORK AND FROM ALL SUCH FINES AND PENALTIES, COMPENSATION AND PUNITIVE DAMAGES AND COSTS OF ANY NATURE RESULTING THEREFROM.
- G-72. ALL FILL AND OTHER EARTH WORK MUST BE ESTABLISHED ACCORDING TO THE COUNTY SOIL CONSERVATION
- G-73. ALL PAVEMENT SUBGRADE PREPARATION MUST BE APPROVED BY THE CITY ENGINEER.
- G-74. THE APPLICANT WILL COMPLY WITH THE CITY'S ORDINANCE ESTABLISHING STANDARDS FOR THE SUBMISSION OF MAPS AND OTHER DOCUMENTS IN A DIGITAL FORMAT.

INSTALLED PRIOR TO A BUILDING PERMIT FOR THE ONE COOPER RESIDENTIAL PROJECT

- G-75. ALL SITE WORK CONSTRUCTION AND DETAILS MUST CONFORM TO THE STANDARDS OF THE CITY OF CAMDEN. G-76. ALL DOWNSTREAM STORMWATER IMPROVEMENTS UNDER LIBERTY PROPERTY LIMITED PARTNERSHIP MUST BE
- G-77. NO WORK IS TO START UNTIL A PRECONSTRUCTION CONFERENCE IS HELD. THE PRECONSTRUCTION CONFERENCE SHALL BE SCHEDULED WITH THE PLANNING BOARD ENGINEER'S OFFICE. A MINIMUM OF THREE WORKING DAYS PRIOR TO THE START OF WORK.

- 1. A GEOTECHNICAL ENGINEER, PROVIDED BY THE CONTRACTOR, IS REQUIRED TO INSPECT, TEST AND CERTIFY TO THE COMPACTION OF ALL LOAD BEARING FILLS.
- 2. A MINIMUM 2.0% (IN ONE DIRECTION) AND A MAXIMUM SLOPE OF 3:1 SHALL BE PROVIDED IN ALL LAWN AREAS, UNLESS OTHERWISE SHOWN ON THE CONTRACT DRAWINGS. A MINIMUM SLOPE OF 1.0% IS REQUIRED IN ALL PAVED SURFACES, INCLUDING DRIVEWAYS
- 3. THE CONTRACTOR SHALL INSURE THAT POSITIVE AND ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES DURING CONSTRUCTION WITHIN THE PROJECT LIMITS. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED OR REGRADING AS REQUIRED BY THE ENGINEER, EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT
- 4. THE CONTRACTOR SHALL PROVIDE ANY AND ALL EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY
- 5. THE CONTRACTOR IS TO PROVIDE AN EARTHWORK ANALYSIS TO DETERMINED THE TOTAL (EXPORT/IMPORT) OF
- IMPROVED SURFACES, INCLUDING DRIVEWAYS, SHALL HAVE A MINIMUM GRADE OF ONE PERCENT (1%) AND A MAXIMUM GRADE OF 10% FOR STREETS AND 8% MAX FOR DRIVEWAYS AND BE SO CONSTRUCTED AS TO DIVERT STORMWATER RUNOFF AWAY FROM ANY STRUCTURE SERVICED BY THE IMPROVED SURFACE. PEDESTRIAN WALKS SHALL HAVE A MINIMUM GRADE OF 2 PERCENT. ROAD GRADES ALONG CURB LINES AND IN CONCRETE SWALES MAY BE REDUCED TO 0.5 PERCENT.
- 7. THE GRADE AWAY FROM FOUNDATION WALL SHALL FALL A MINIMUM OF 6 INCHES WITHIN THE FIRST 10 FEET, EXCEPT WHERE RESTRICTED BY LOT LINES, WHERE THE FALL SHALL BE A MINIMUM OF 6 INCHES REGARDLESS OF THE HORIZONTAL DISTANCE AVAILABLE.
- 8. PERMANENT BENCHMARKS SHALL BE SET. CONCRETE MONUMENTS SHALL BE USED.
- 9. MINIMUM SWALE GRADES SHALL BE NOT LESS THAN 2%. EMBANKMENT GRADES SHALL NOT EXCEED A 3:1
- 10. MINIMUM SWALE GRADES SHALL BE NOT LESS THAN 2%. EMBANKMENT GRADES SHALL NOT EXCEED A 3:1
- 11. EMBANKMENTS IN RESIDENTIAL DEVELOPMENTS GREATER THAN THREE FEET IN HEIGHT SHALL NOT EXCEED A 12. NO REPRESENTATION OF A BALANCED CUT AND FILL SITE IS MADE BY THE ENGINEER. IF ADDITIONAL CLEAN FILL

OR SELECT FILL IS REQUIRED THE CONTRACTOR IS TO SUPPLY SAID MATERIALS AT NO ADDITIONAL COST TO

THE OWNER. ALL FILL IS TO BE CERTIFIED CLEAN SOIL. WRITTEN CERTIFICATION IS TO BE PROVIDED.

- 13. EXISTING TOPSOIL ON SITE IS TO BE PROTECTED. NO TOPSOIL IS TO BE SOLD OR REMOVED FROM THE SITE OR USED AS SPOIL
- 14. NO CONSTRUCTION DEBRIS, CUT VEGETATION, TREE STUMPS, OR ANY OTHER SOLID WASTE EXISTING ON SITE IS TO BE BURIED ON SITE. ALL WASTE MUST BE PROPERLY REMOVED AND DISPOSED OFF SITE.

ELECTRICAL AND LIGHTING NOTES:

- 1. POLES AND LUMINAIRES SHALL HAVE FACTORY APPLIED FINISH; COMPONENTS SHALL BE SHIPPED WITH PROTECTIVE WRAPPING. CONTRACTOR TO SUBMIT CUT SHEETS FOR POLES AND LUMINAIRES WITH COLOR SAMPLES TO ENGINEER, ARCHITECT, AND OWNER FOR APPROVAL PRIOR TO PROCURING MATERIALS.
- 2. PROVIDE ONE-QUART OF PAINT TO CLIENT FOR TOUCH-UP.
- 3. PERFORM ALL WORK IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, ALL REGULATIONS AND CODES OF ALL JURISDICTIONAL AUTHORITIES.
- 4. ALL EQUIPMENT SHALL BE LISTED BY UNDERWRITERS LABORATORIES INC. AND SHALL BEAR THE U.L. LABEL. PROVIDE ONLY NEW UNDAMAGED EQUIPMENT.
- 5. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF OTHER CONTRACTORS EMPLOYED ON THE 6. THE ELECTRICAL PLANS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE GENERAL ARRANGEMENT OF THE VARIOUS SYSTEMS AND APPROXIMATE LOCATIONS OF THE EQUIPMENT. THE CONTRACTOR SHALL DETERMINE

THAT THERE IS ADEQUATE SPACE AT THE LOCATIONS INDICATED FOR ALL EQUIPMENT PRIOR TO INSTALLATION

OF SAME. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO THE COMMENCEMENT OF

- 7. CONTRACTOR SHALL INSTALL POLES AND ATTACH LUMINAIRES PER MANUFACTURER'S INSTRUCTIONS.
- 8. CONTRACTOR SHALL TEST ELECTRIC SERVICE AND VERIFY THAT ALL CONNECTIONS WERE PERFORMED
- PROPERLY 9. WIRING OF EXTERIOR BRANCH CIRCUITS SHALL BE TYPE XHHW. WIRING OF INTERIOR BRANCH CIRCUITS SHALL BE TYPE THHW/THHN. WIRES SHALL BE COPPER AND SHALL BE MIN. #12AWG, 600V, 75°C. ALL RACEWAYS ARE
- 10. ALL CONDUIT WHERE EXPOSED INSIDE AND OUTSIDE SHALL BE RIGID GALVANIZED STEEL. ALL CONDUIT BELOW GRADE SHALL BE DIRECT BURIAL PVC CONDUIT WITH RGS ELBOWS AND STUB UPS. ENCASE CONDUIT IN 3" OF CONCRETE AROUND UNDER ROADWAY.
- 11. ALL SPLICES AND CABLE TAPS SHALL BE RAYCHEM 3M DBR/Y-6 OR APPROVED EQUAL.

SHOWN DIAGRAMMATICALLY, EXACT LOCATION TO BE DETERMINED ON THE JOB.

12. CONTRACTOR SHALL PROVIDE ALL PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS.

SAFEGUARDS AND ALSO PROHIBITED ACTIVITY.

- 13. CONTRACTOR SHALL VERIFY ALL VOLTAGES.
- 14. ALL FIXTURES SHALL BE ORDERED WITH THE APPROPRIATE BALLASTS AND/OR DRIVERS THAT HAVE U.L. LABEL. 15. IF ADDITIONAL JUNCTION BOXES ARE REQUIRED FOR PULL AND PER CODE, COORDINATE LOCATIONS WITH

OWNER AND ENGINEER. HIGH-VOLTAGE PROXIMITY ACT

THE CONTRACTOR IS NOTIFIED THAT ALL PROVISIONS OF THE HIGH-VOLTAGE PROXIMITY ACT, P.L. 1948, c. 249 AS AMENDED THROUGH MAY 20, 1987 SHALL BE STRICTLY ADHERED TO. THE CONTRACTOR SHALL ALSO ADHERE TO ALL PROVISIONS OF PART 1926.550, SUBPART N OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF DECEMBER, 1970. PARTICULAR ATTENTION IS DIRECTED TO THE PROVISIONS OF THE ABOVE ACT REQUIRED WARNING SIGNS, NOTIFICATION TO POWER COMPANY AND RESPONSIBILITY FOR

A COPY OF THE HIGH-VOLTAGE PROXIMITY ACT IS AVAILABLE IN THE OFFICE OF THE COUNTY ENGINEER OR MAY BE OBTAINED FROM THE NEW JERSEY DEPARTMENT OF LABOR, DIVISION OF WORKPLACE STANDARDS, OFFICE OF SAFETY COMPLIANCE, TRENTON, NJ 08625

THE OWNER OR HIS REPRESENTATIVE IS TO DESIGNATE AN INDIVIDUAL RESPONSIBLE FOR CONSTRUCTION. SITE SAFETY DURING THE COURSE OF SITE IMPROVEMENTS PURSUANT TO N.J.A.C.5:23-2.21(e) OF THE NJ UNIFORM CONSTRUCTION CODE AND CFR 1926.32(f)(OSHA COMPETENT PERSON)

THE CONTRACTOR IS NOTIFIED THAT ALL PROVISIONS OF THE HIGH-VOLTAGE PROXIMITY ACT, P.L. 1948, c. 249 AS AMENDED THROUGH MAY 20, 1987 SHALL BE STRICTLY ADHERED TO. THE CONTRACTOR SHALL ALSO ADHERE TO ALL PROVISIONS OF PART 1926.550, SUBPART N OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF DECEMBER, 1970. PARTICULAR ATTENTION IS DIRECTED TO THE PROVISIONS OF THE ABOVE ACT REQUIRED WARNING SIGNS, NOTIFICATION TO POWER COMPANY AND RESPONSIBILITY FOR SAFEGUARDS AND ALSO PROHIBITED ACTIVITY.

A COPY OF THE HIGH-VOLTAGE PROXIMITY ACT IS AVAILABLE IN THE OFFICE OF THE COUNTY ENGINEER OR MAY BE OBTAINED FROM THE NEW JERSEY DEPARTMENT OF LABOR, DIVISION OF WORKPLACE STANDARDS, OFFICE OF SAFETY COMPLIANCE, TRENTON, NJ 08625

UTILITY NOTES:

- THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS AT NO COST TO THE OWNER INCLUDING, BUT NOT LIMITED TO, A ROAD OPENING PERMIT FROM THE CITY, COUNTY &
- COVER OVER ALL WATER MAINS & FIRE SERVICES SHALL BE 4'-0" MINIMUM.
- THE CONTRACTOR SHALL NOTIFY THE LOCAL ELECTRIC COMPANY IN ADVANCE OF
- CONSTRUCTION FOR TEMPORARY SUPPORT OF UTILITY POLES.
- THE CONTRACTOR SHALL COMPLY WITH ALL STANDARDS SET FORTH BY THE LOCAL M.U.A.
- THE LOCATION AND/OR DEPTHS OF EXISTING UTILITIES ARE APPROXIMATE & MUST BE
- VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ALL TRENCHES WILL BE BACKFILLED BY COMPACTION IN EIGHT (8) INCH LAYERS
- NO MATERIAL SHALL BE PLACED OR DISTURBED BEYOND THE PROPERTY LINE OF RIGHT-OF-WAY WITHOUT WRITTEN PERMISSION OF THE PROPERTY OWNERS DIRECTLY

COMPACTED TO 95% DENSITY IN STRICT ACCORDANCE WITH THE TRENCH DETAILS &

- INSPECTION OF, OR FAILURE TO INSPECT ANY MATERIALS OR WORKMANSHIP BY THE ENGINEER FOR THE M.U.A. SHALL IN NO WAY RELIEVE THE CONTRACTOR OF THE
- RESPONSIBILITY TO PERFORM THE WORK IN ACCORDANCE WITH THE PLAN, SPECIFICATIONS AND APPLICABLE LAWS. WHENEVER THE TRENCH BOTTOM DOES NOT AFFORD SUFFICIENT BEARING STRENGTH TO
- CRUSHED STONE, AS DIRECTED BY THE ENGINEER. 10. ALL GENERAL CONSTRUCTION MATERIALS, TESTING & METHODS OF INSTALLATION SHALL

SUSTAIN THE WEIGHT OF THE PIPE & SUPERIMPOSED LOADS, THE TRENCH BOTTOM SHALL

BE OVER-EXCAVATED & STABILIZED WITH SIX (6) INCHES MINIMUM THICK LAYERS OF

THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM VARIOUS SOURCES & ARE SHOWN FOR DESIGN & ESTIMATED PURPOSED ONLY. ACTUAL LOCATIONS OF UTILITIES SHALL BE FIELD VERIFIED. ANY DISCREPANCIES OR APPARENT CONFLICTS SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER FOR REMEDIATION.

BE SUBJECT TO THE APPROVAL OF THE M.U.A. & THE ENGINEER.

- 12. CONCRETE ENCASEMENT SHALL BE PROVIDED FOR ALL PIPE/UTILITY CROSSING WHERE LESS THAN EIGHTEEN INCHES OF CLEARANCE WILL RESULT, SUBJECT TO THE REQUIREMENTS OF THE UTILITY COMPANY.
- 13. EXISTING UTILITIES INCLUDING VALVE BOXES, CLEAN OUTS, CURB STOPS, MANHOLES, ETC., SHALL BE ADJUSTED TO MATCH PROPOSED FINISHED GRADE. STORM DRAINAGE STRUCTURES SHALL NOT BE ADJUSTED UNLESS SPECIFICALLY CALLED FOR.

14. THE CONTRACTORS ARE ADVISED THAT ANY REQUIRED UNDERGROUND UTILITY

- RELOCATION'S INCLUDING GAS MAINS AND SERVICES, WATER MAINS AND SERVICES, SEWER MAINS AND SERVICES, ELECTRIC AND TELEPHONE LINES SHALL BE COMPLETED AT NO COST TO THE OWNER UNLESS SPECIFICALLY NOTED OTHERWISE. 15. LOCATION OF ALL ELECTRICAL EQUIPMENT, CIRCUITS, AND INSTALLED ELECTRICAL
- INUNDATION AND FLOODING. 16. INLET PIPE OPENINGS SHALL BE SEALED WITH NON-SHRINK DRY-PACKED GROUT OR

APPROVED EQUAL.

APPLIANCES IN A MANNER WHICH WILL ASSURE THAT THEY ARE NOT SUBJECT TO

- 17. INSTALLATION OF ALL WATER AND SEWER MAINS AND WATER AND SEWER SERVICES MUST COMPLY WITH CITY ORDINANCE.
- MUST WITNESS THE WORK AND CONNECTION. 19. ALL EXISTING WATER SERVICE LINES TO BE ABANDONED SHALL BE CUT AND CAPPED AT THE MAIN, IN ACCORDANCE WITH CAPITAL IMPROVEMENTS AND PROJECT MANAGEMENT

18. THE CITY ENGINEER, AND AMERICAN WATER ENTERPRISES SHALL BE GIVEN 48 HOURS

ADVANCE NOTICE OF SANITARY SEWER/WATER MAIN WORK AND THE REPRESENTATIVES

(CIP) STANDARDS, AND INSPECTED WITHIN 24 HOURS AFTER INSTALLATION OF NEW TAP.

- 20. ALL JOINTS AND FITTINGS SHALL BE SPECIFIED IN THE CITY ORDINANCE WATER MAIN
- 21. CONTRACTOR IS REQUIRED TO SUBMIT RECORD DRAWINGS IN ACCORDANCE WITH THE ORDINANCE FOR WATER SERVICE LINES AND SEWER LATERALS.
- 22. ALL SEWER INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE PROCEDURE MANUAL OF THE CITY OF CAMDEN. 23. ALL METER INSTALLATIONS IN METER PIT OR VAULT SHALL BE PRE-APPROVED BY CIP AND
- HAVE PROPER ACCESS OPENINGS FOR METER READING AND REPLACEMENT. UPON COMPLETION OF THE WATER/SEWER INSTALLATION, THE APPLICANT SHALL SUBMIT THREE (3) SETS OF "AS BUILT" PLANS TO THE CIP AND AMERICAN WATER ENTERPRISES.
- WITH ORDINANCE FOR WATER SERVICE LINES AND SEWER LATERALS. 25. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL TELEVISE THE SEWER MAIN WHERE

TO THE FIRST MANHOLE EASTERLY OF THE PROPOSED CONNECTION POINT, COST TO BE

THE CIP WILL AUTHORIZE SUPPLY WATER UPON ACCEPTANCE OF THE "AS BUILT"

DRAWINGS. SUBMISSIONS OF RECORD DRAWINGS IS REQUIRED IN ACCORDANCE

- INCLUDED IN THE COST FOR CONSTRUCTING THE SEWER SERVICE LATERAL. 26. ALL REINFORCED CONCRETE PIPE SHALL BE CLASS III, UNLESS OTHERWISE NOTED.
- 27. SELECT FILL FOR WATER/SEWER TRENCH INSTALLATION SHALL BE DENSE GRADED AGGREGATE I-5, IN ACCORDANCE WITH THE SPECIFICATION SUBSECTION 901.08 OF THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION AND

CONFORM TO THE TABLE IN SECTION 577-229.H OF THE ORDINANCE.

- 28. AIR RELEASE VALVE SHALL BE INSTALLED AT HIGH POINTS OF THE WATER MAIN. 29. THRUST BLOCKS AND RESTRAINTS SHALL BE INSTALLED AT ALL BENDS AND FITTINGS,
- THRUST BLOCKS SHALL HAVE TWENTY EIGHT (28) DAY STRENGTH OF 4,000 PSI. 30. STORM INLETS WHICH ARE CONNECTED DIRECTLY TO CITY COMBINED SEWERS MUST BE
- FURNISHED WITH A SUMP AND TRAP PER CITY STANDARD DETAILS. 31. A DROP MANHOLE CONNECTION SHALL BE USED WHERE THERE IS A DIFFERENCE IN ELEVATION OF TWO (2) FEET OR GREATER.CONTRACTOR TO REFER TO CITY DETAILS.
- 32. ALL RCP SHALL BE LINED ON THE INTERIOR WITH A COAT TAR EPOXY SEAL COAT WITH A MINIMUM OF FOUR (4) MILS IN THICKNESS (DFT)
- 33. ALL PIPE SHALL BE MANUFACTURED AND SUPPLIED WITHOUT LIFTING HOLES. 34. ALL EXISTING WATER/SEWER SERVICE NOT PROPOSED FOR RE-USE SHALL BE PROPERLY ABANDONED IN ACCORDANCE WITH CITY REQUIREMENTS.

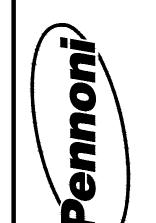
FOR WATER SERVICES, LINES AND SEWER LATERALS.

- 35. THE INSTALLATION OF ALL WATER/SEWER MAINS AND SERVICES SHALL COMPLY WITH 36. SUBMISSION OF RECORD DRAWINGS IS REQUIRED IN ACCORDANCE WITH ORDINANCE
- 37. ALL WATER PIPES, FITTINGS, AND VALVES SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA REQUIREMENTS. 38. ALL METERS SHALL BE ADEQUATELY RESTRAINED WITH METAL BRACKETS FASTENED TO THE FLOOR OR WALL OR OTHER APPROVED MEANS SUCH AS UNIFLANGES WHERE INTERNAL PIPE PRESSURE AND FLOW WARRANT SUCH RESTRAINTS. METERS, DETECTOR

CHECKS, AND VALVES MAY BE SEATED ON CONCRETE BLOCK AND TAPERED SHIMS TO

- PROVIDE ADEQUATE SUPPORT. METERS SHALL BE INSTALLED APPROXIMATELY 36" ABOVE 39 AFTER OBTAINING THE REQUIRED PERMITS (STREET OPENING, TAP, AND METER) THE APPLICANT SHALL CALL THE AUTHORIZED AGENT REPRESENTING CIP TO SCHEDULE THE TAP AT THE CONTRACTOR'S OWN COST. THE EXCAVATION SHALL BE COMPLETED TWENTY-FOUR (24) HOURS PRIOR TO THE SCHEDULED TAP, AND VERIFIED BY CIP OR IT'S AUTHORIZED AGENT BEFORE THE TAP WILL BE INSTALLED. EXCAVATION SHALL BE
- CONSTRUCTED IN ACCORDANCE WITH OSHA REQUIREMENTS FOR SHEETING AND SAFETY. 40. THE TAPPING SLEEVE SHALL PASS PRESSURE TESTING BASED ON AWWA STANDARDS BEFORE TAP IS MADE.
- 41. TAPPING GATES SHALL BE FURNISHED OPEN RIGHT. ALL TAPPING AND CURB VALVES SHALL BE DOUBLE DISC GATE VALVES AND MEET AWWA STANDARDS. THE WET TAP UP TO 12 INCHES SHALL BE PERFORMED BY THE AUTHORIZED AGENT REPRESENTING CIP.
- 42. THE MAXIMUM OF ONE (1) TAP SHALL BE MADE FOR BOTH DOMESTIC AND FIRE SERVICE PER FACILITY. THE TAP SHALL BE A MAXIMUM OF ONE (1) SIZE SMALLER THAN THE CITY'S WATER MAIN. NO TAPPING SHALL BE DONE BY ANYONE EXCEPT THE AUTHORIZED AGENT UNLESS SPECIFICALLY APPROVED BY CIP.

NOT FOR CONSTRUCTION



ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATE ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHE PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI SSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AI EXPENSES ARISING OUT OF OR RESULTING THEREFRO KCNAX2300²

MAY 17, 2024 RAWING SCALE N.T.S. RAWN BY PPROVED BY

CS0002

ENVIRONMENTAL NOTES:

- E-1. ALL MATERIAL BROUGHT ON SITE SHALL BE CERTIFIED CLEAN FILL, SAMPLED, AND ANALYZED IN ACCORDANCE WITH STANDARD NJDEP QUALITY ASSURANCE STANDARDS AND PRACTICES AT A MINIMUM, AS SPECIFIED IN N.J.A.C. 7:26E, TO FULLY CHARACTERIZE THE CONTAMINANTS IN THE LATEST SOIL CLEANUP CRITERIA (SCC). THE CONTRACTOR SHALL SUBMIT TO THE OWNER WRITTEN DOCUMENTATION FROM A LABORATORY CERTIFIED IN NEW JERSEY ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM (FLCP) AND IN ACCORDANCE WITH N.J.A.C. 7:18 PRIOR TO PLACEMENT OF THE MATERIAL ON SITE. THE MATERIAL MUST NOT CONTAIN CONTAMINANTS ABOVE THE MOST RESTRICTIVE DIRECT CONTACT OR IMPACT TO GROUNDWATER (IGW) SCC
- DEWATERING ACTIVITIES SHALL BE CONDUCTED PURSUANT TO CCMUA AND/OR NJDEP PERMITTING OBTAINED BY THE CONTRACTOR. ALL PERMIT FEES ARE TO BE PAID BY CONTRACTOR, INCLUDED IN BID, AND AT NO ADDITIONAL COST TO THE OWNER.
- ABANDONMENT OF EXISTING MONITORING WELLS SHALL BE COORDINATED WITH THE ENGINEER (IF REQUIRED).
- E-4 "CLEAN FILL" DEFINITION: "MATERIAL TO BE USED IN A REMEDIAL ACTION THAT MEETS ALL SOIL REMEDIATION STANDARDS, SITE-SPECIFIC ALTERNATIVE STANDARDS, OR SITE-SPECIFIC INTERIM STANDARDS, DOES NOT CONTAIN EXTRANEOUS DEBRIS OR SOLID WASTE, AND DOES NOT CONTAIN FREE LIQUIDS. THIS ALSO INCLUDES ANY MATERIAL THAT MEETS ALL CRITERIA OR ACTION LEVELS FOR CONTAMINANTS WITHOUT STANDARDS." (N.J.A.C. 7:26E-1.8).
- E-5 THE PRESENCE OF UNCLASSIFIED FILL MATERIALS SHALL BE DOCUMENTED AND ALL LOCAL/STATE/FEDERAL REGULATIONS WILL BE FOLLOWED.
- 6 CONSTRUCTION STAGING ACTIVITIES (INCLUDING THE STORAGE OF EQUIPMENT/VEHICLES/MATERIALS) ARE PROHIBITED IN ENVIRONMENTALLY SENSITIVE AREAS. IF THE CONTRACTOR WISHES TO USE THÉSE AREAS OR ACCESS THESE AREAS FOR ANY REASON, ALL APPROPRIATE PERMITS/APPROVALS MUST BE OBTAINED PRIOR TO SUCH USE.
- 7 BEST MANAGEMENT PRACTICES (SUCH AS THE INSTALLATION OF SILT FENCE, INLET PROTECTION AND PERIODIC CLEAN OUT OF DEBRIS) WILL BE UTILIZED DURING CONSTRUCTION TO PREVENT SEDIMENT AND DEBRIS FROM ENTERING STORMWATER INLETS AND ENVIRONMENTALLY SENSITIVE AREAS ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
- E-8 CONTRACTOR TO REFER TO NJ SOIL EROSION STANDARDS/REQUIREMENTS FOR IMPLEMENTING STANDARD MEASURES FOR MINIMIZATION OF CONSTRUCTION-RELATED NOISE AND AIR QUALITY
- E-9 ANY EXCESS SOILS RELATED TO PROJECT CONSTRUCTION NEEDS TO BE STOCKPILED, SAMPLED, AND DISPOSED OF IN ACCORDANCE WITH NJDEP RULES AND REGULATIONS.
- E-10 VEGETATED COVERED AREAS WILL HAVE A MINIMUM THICKNESS OF ONE FOOT OVERLYING A GEOTEXTILE FABRIC BARRIER.
- E-11 FOR EACH TYPE AND SOURCE OF IMPORTED CLEAN FILL DERIVED OR ORIGINATED FROM A VIRGIN SOURCE OR QUARRY, LABORATORY ANALYTICAL DATA FROM ONE SAMPLE COLLECTED WITHIN THE LAST YEAR AND DOCUMENTATION OF CLEAN FILL IS TO BE PROVIDED (AT THE DISCRETION OF THE LSRP, A SAMPLE MAY NOT BE REQUIRED TO ESTABLISH THE NATURE OF THE CLEAN FILL). THE SAMPLE MUST BE ANALYZED FOR FULL TCL/TAL SUITE, HEXAVALENT CHROMIUM, AND EPH BY AN NJDEP-CERTIFIED LABORATORY WITH METHOD DETECTION LEVELS THAT ALLOW A COMPARISON TO AN APPLICABLE REMEDIATION STANDARD, IN ACCORDANCE WITH THE NJDEP FILL MATERIAL GUIDANCE (http://www.state.nj.us/dep/srp/quidance/#fill srp). IN ADDITION, IF ANY SAMPLE RESULT EXCEEDS THE NJDEP DEFAULT IGWSL. SYNTHETIC PRÉCIPITATION LEACHING PROCEDURE (SPLP) DATA MUST BE PROVIDED FOR THOSE COMPOUNDS TO SUPPORT THAT CLEAN FILL WILL NOT IMPACT GROUND WATER. IN ADDITION. THE VIRGIN SOURCE OR QUARRY SUPPLIER MUST PROVIDE A WRITTEN CERTIFICATION IDENTIFYING THE SOURCE LOCATION OF THE MATERIAL AND THAT THE FILL MEETS THE CLEAN FILL DEFINITION AT N.J.A.C. 7:26E-1.8.
- 12 FOR IMPORTED CLEAN FILL ORIGINATING FROM SOURCES OTHER THAN A VIRGIN SOURCE OR QUARRY, ADDITIONAL SAMPLING WILL BE REQUIRED. FOR EACH TYPE OF CLEAN FILL PER SOURCE, SOIL SAMPLES MUST BE COLLECTED AT A FREQUENCY OF ONE SAMPLE PER 20 CY FOR THE FIRST 100 CY OF SOIL, ONE SAMPLE FOR EACH ADDITIONAL 100 CY UP TO 1,000 CY, AND ONE SAMPLE FOR EVERY ADDITIONAL 1.000 CY. AN ALTERNATIVE SAMPLING FREQUENCY MAY BE USED BASED ON THE DISCRETION OF THE LSRP WHO WILL RELY ON MULTIPLE LINES OF EVIDENCE WHEN EVALUATING CLEAN FILL QUALITY. THE SAME ANALYTICAL PARAMETERS AND WRITTEN CERTIFICATION REQUIRED FOR VIRGIN SOURCES OR QUARRIES APPLIES TO THESE OTHER SOURCES OF CLEAN FILL.
- E-13 ALTERNATE FILL WILL NOT BE USED AS PART OF THE ENGINEERED CAP FOR THIS PROJECT.
- E-14 PUBLIC NOTIFICATION WILL BE MADE AT LEAST 14 DAYS PRIOR TO START OF WORK IN ACCORDANCE WITH N.J.A.C. 7:26C-1.7. A SIGN WILL BE PLACED AT THE SITE AND ASSOCIATED DOCUMENTATION WILL BE SENT TO THE CAMDEN COUNTY CLERK AND THE CAMDEN COUNTY HEALTH OFFICER.

CITY OF CAMDEN STORMWATER REQUIREMENTS:

- TO THE EXTENT PERMITTED BY LAW. THE CITY WILL AT ALL REASONABLE TIMES HAVE A RIGHT OF INGRESS AND EGRESS OVER THE EASEMENT AREA AND THE RIGHT TO ENTER THE EASEMENT AREA VIA ANY ROAD OR PARKING LOT LOCATED WITHIN ANY COMMON AREA OWNED BY THE GRANTOR TO INSPECT THE SYSTEM LOCATED IN THE EASEMENT AREA;
- EXCEPT IN THE CASE OF AN EMERGENCY, THE CITY WILL PROVIDE NOT LESS THAN SEVEN (7) DAYS PRIOR NOTICE TO THE PERFORMING ANY INSPECTION OR MONITOR OF THE SYSTEM IN ACCORDANCE WITH APPROVED PLAN. THE APPLICANT AGREES THAT THE FAILURE TO TIMELY OBJECT AFTER RECEIVING NOTICE FROM THE CITY CONSTITUTES CONSENT TO INSPECTION OF THE PROPERTY WITHIN THE TIMEFRAME SPECIFIED IN THE NOTICE.
- IF, AFTER REASONABLE NOTICE BY THE CITY. THE APPLICANT FAILS TO MAINTAIN THE SYSTEM IN ACCORDANCE WITH THE APPROVED MANUAL AND THE MAINTENANCE PLAN, THE CITY MAY PERFORM ANY MAINTENANCE NEEDED TO CORRECT A CONDITION THAT IMPACTS THE EFFECTIVENESS OF ROUTINE MAINTENANCE AND OPERATIONS OF THE SYSTEM AND COLLECT ANY COSTS INCURRED AS A RESULT FROM EACH OWNER OF THE SYSTEM AND IN THE SAME MANNER AS REAL PROPERTY TAXES ARE COLLECTED. IN ADDITION, THE CITY MAY SEEK REIMBURSEMENT UNDER ANY OTHER METHOD LEGALLY AVAILABLE TO COLLECT DEBTS OWED,
- THE APPLICANT AGREES TO INDEMNIFY AND SAVE THE CITY HARMLESS FROM ANY AND ALL CLAIMS FOR DIRECT DAMAGES TO PERSONS OR PROPERTY ARISING FROM INSPECTIONS PERFORMED BY THE CITY.

DIVISION OF CAPITAL IMPROVEMENTS & PROJECT MANAGEMENT (CIP) CONSTRUCTION GENERAL NOTES (IF REQUIRED):

- ALL CONSTRUCTION, MATERIALS, RESTORATIONS AND METHODS OF INSTALLATION IN CITY ROADS SHALL BE SUBJECT TO THE REQUIREMENTS AND APPROVAL OF THE MUNICIPALITY.
- SANITARY SEWER CONSTRUCTION, MATERIALS AND TESTING SHALL BE SUBJECT TO THE
- APPROVAL OF AN INSPECTION BY THE CITY ENGINEER AND SUBJECT TO GT* ALL SANITARY SEWERS SHALL BE CONSTRUCTED WITH CLASS "C* MODIFIED BEDDING UNLESS
- OTHERWISE NOTED. WHEREVER THE TRENCH BOTTOM DOES NOT AFFORD SUFFICIENT BEARING STRENGTH TO
- SUSTAIN THE WEIGHT OF THE PIPE AND SUPERIMPOSED LOADS, IT SHALL BE OVER EXCAVATED ND STABILIZED WITH A LAYER OF CRUSHED STONE. THE CONTRACTOR SHALL CONSTRUCT TEST PITS AS REQUIRED TO VERIFY THE LOCATION AND
- THE DEPTH OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND CONTRACTOR EFFORTS SHALL BE MADE TO RETAIN EXISTING TREES, VEGETATION AND NATURAL
- THE CONTRACTOR SHALL PAY ALL STREET/SIDEWALK OPENING FEES AND GIVE NOTICES
- NECESSARY FOR AND INCIDENTAL TO THE DUE AND LAWFUL EXECUTION OF THE WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES BEFORE EXCAVATION. NO MATERIALS SHALL BE PLACED NO ANY DISTURBANCE PERMITTED BEYOND THE PROJECT
- PROPERTY LINE WITHOUT THE WRITTEN PERMISSION OF THE PROPERTY OWNER DIRECTLY THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING, PAVING, TOPSOILING, SODDING,
- FERTILIZING AND SEEDING ALL AREAS DISTURBED BY HIS ACTIVITIES.
- ROAD PAYMENT, REPLACEMENT, AND ALL RESTORATION IN COUNTY ROADS SHALL MEET THE REQUIREMENTS OF THE COUNTY ENGINEER.
- INSPECTION OF, OR FAILURE TO INSPECT ANY MATERIALS OR WORKMANSHIP BY STATE, COUNTY OR TOWNSHIP OFFICIALS SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES TO PERFORM THE WORK IN ACCORDANCE WITH APPLICABLE PLANS, SPECIFICATIONS AND LAWS.
- PRIOR TO CONSTRUCTION, ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE APPROVED BY THE SOIL CONSERVATION DISTRICT IN COMPLIANCE WITH CHAPTER 251 OR THE PUBLIC LAWS OF 1975. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED OR THE AREA IS STABILIZED IN ACCORDANCE WITH THE SOIL CONSERVATION DISTRICT'S RECOMMENDATIONS.
- ALL SEWER INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE PROCEDURES MANUAL OF THE CITY OF CAMDEN.
- THRUST BLOCKS ARE TO BE INSTALLED AT ALL FORCE MAIN BENDS.
- SANITARY SEWER LATERALS SHALL NOT BE CONNECTED DIRECTLY INTO MANHOLES. AN EXCEPTION TO THIS RULE MAY BE MADE FOR COMMERCIAL OR INDUSTRIAL USERS AT THE DECISION OF THE CITY. DOMESTIC LATERAL CONNECTIONS SHALL BE MADE A MINIMUM TWO FEET AWAY FROM MANHOLE AND NOT INTO JOINT OF MAIN.
- THE APPLICANT/OWNER IS AWARE AND AGREES THAT THE REVIEW BY THE CITY AND CITY ENGINEER IS BASED UPON THE BEST INFORMATION AVAILABLE AND IN NO WAY DOES IT GUARANTEE THE EXISTENCE OF, OR NON EXISTENCE OF SANITARY SEWER AND FORCE MAINS, AND/OR APPURTENANCES. IT IS THE RESPONSIBILITY OF THE APPLICANT/OWNER TO VERIFY THE LOCATION OF SUCH MAINS/APPURTENANCES.
- THE CONNECTION TO THE EXISTING CITY MANHOLE MUST BE MADE WITH A CORING MACHINE AND WITNESSED BY THE CITY ENGINEER.
- AN A-LOCK SEAL SHOULD BE USED AT THE PIPE PENETRATION. ONLY IN THE CASE THAT AN A-LOCK IS NOT POSSIBLE, THE ANNULAR SPACE SHOULD BE FILLED WITH NON-SHRINK GROUT.

- WHEN POSSIBLE THE NEW BENCH CHANNEL SHOULD BE MADE WITH THE CORING MACHINE: OTHERWISE, THE BENCH CHANNEL SHOULD BE CAREFULLY SAWCUT OR HILTI CUT TO ACCOMMODATE THE NEW SEWER CONNECTION.
- CHANNEL RECONSTRUCTION CEMENT SHALL BE SPEED-CRETE AS MANUFACTURED BY TAMMS, INC. FORMED PORTLAND CEMENT CONCRETE OF 4,000 PSI COMPRESSION STRENGTH. ANY SUBSTITUTES MUST BE APPROVED BY THE CITY
- MANHOLE INTERIOR WALLS AND BENCHES SHALL BE PATCHED WITH CEMENTITIOUS PATCHING/PLUGGING COMPOUNDS AS MANUFACTURED BY TAMMS INC, OR APPROVED EQUAL.
- 4. A PIPE JOINT SHOULD BE PROVIDED WITHIN FOUR FEET OF THE MANHOLE CONNECTION TO ALLOW FOR DIFFERENTIAL SETTLEMENT.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGES TO THE MANHOLE, THE SEWER OR THE ADJACENT PROPERTY DUE TO CONNECTION CONSTRUCTION.
- THE CITY ENGINEER MUST BE GIVEN 48 HOURS ADVANCE NOTICE OF SANITARY SEWER MAIN WORK AND A CITY ENGINEER REPRESENTATIVE MUST BE PRESENT TO WITNESS THE
- A WATER CAPACITY FEE SHALL BE ASSESSED (BASED ON DIAMETER OF WATER SERVICE) FOR ANY CONNECTION TO A CITY OWNED WATER MAIN. APPLICANT IS RESPONSIBLE FOR CONFIRMING UTILITY OWNER(S) PRIOR TO COMMENCEMENT OF WORK ON SAID UTILITY.

ELECTRICAL SPECIFICATIONS

- DEFINITION: UNLESS OTHERWISE NOTED, ALL WORK SPECIFIED HEREIN OR NOTED ON ELECTRICAL DRAWINGS, SHALL BE BY THE ELECTRICAL CONTRACTOR. ALL REFERENCES TO "CONTRACTOR" OR "THIS CONTRACTOR" ON ELECTRICAL DRAWINGS ARE ADDRESSED TO THE ELECTRICAL CONTRACTOR. THE TERM "PROVIDE" WHENEVER ENCOUNTERED ON DRAWINGS OR IN THESE SPECIFICATIONS, SHALL MEAN "FURNISH AND INSTALL."
- EXAMINATION OF DRAWINGS: CONTRACTOR SHALL COORDINATE HIS WORK WITH THE DRAWINGS OF ALL OTHER TRADES FOR EXACT DIMENSIONS, CLEARANCES AND ROUGHING-IN LOCATIONS. CONTRACTOR SHALL COOPERATE WITH ALL OTHER TRADES IN ORDER TO MAKE MINOR FIELD ADJUSTMENTS TO ACCOMMODATE THE WORK OF OTHERS.
- EXAMINATION OF PREMISES: BEFORE SUBMITTING HIS BID, CONTRACTOR SHALL VISIT THE SITE AND EXAMINE ALL CONDITIONS ON WHICH HIS WORK IS IN ANY WAY DEPENDENT FOR THE BEST WORKMANSHIP AND OPERATION ACCORDING TO THE INTENT OF SPECIFICATIONS AND DRAWINGS HE SHALL REPORT TO THE ENGINEER ANY CONDITION WHICH MIGHT PREVENT HIM FROM INSTALLING HIS EQUIPMENT IN THE MANNER INTENDED.
- 4. CODES AND STANDARDS: ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE, ALL APPLICABLE CODES, SPECIFICATIONS, LOCAL ORDINANCES, INDUSTRY STANDARDS, UTILITY COMPANY REGULATIONS AND FIRE INSURANCE CARRIER'S
- FEES AND PERMITS: THE ELECTRICAL CONTRACTOR SHALL PAY FOR AND OBTAIN ALL PERMITS, CERTIFICATES, INSPECTION FEES, AND INSTALLATION FEES AS REQUIRED.
- PROTECTION OF PERSONS AND PROPERTY: THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN
- SCOPE OF WORK: CONSISTS OF PROVIDING COMPLETE ELECTRICAL SYSTEMS AS SHOWN ON DRAWINGS AND SPECIFIED HEREIN. CONTRACTOR SHALL PROVIDE ALL SUPERVISION, LABOR, MATERIALS, EQUIPMENT, MACHINERY, AND ANY AND ALL OTHER ITEMS NECESSARY TO COMPLETE THE SYSTEMS. SCOPE, IN GENERAL, SHALL CONSIST OF, BUT NOT BE LIMITED TO THE FOLLOWING:
- PROVIDE POLE MOUNTED LIGHTING FIXTURES. B. PROVIDE NEW JUNCTION BOXES.
- SHOP DRAWINGS: THIS CONTRACTOR SHALL FURNISH THE ENGINEER TWO SETS OF COMPLETE SHOP DRAWINGS, CATALOG CUTS, WIRING DIAGRAMS AND ASSOCIATED DATA, FOR ALL MAJOR ELEMENTS OF THE ELECTRICAL WORK FOR REVIEW, CHECKING AND APPROVAL, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: A POLE MOUNTED LIGHT FIXTURES
- MANHOLE STRUCTURES AS REQUIRED BY PSE&G SPECIFICATIONS PVC CONDUIT
- D. JUNCTION BOXES
- 9. MATERIALS: ALL MATERIALS FURNISHED BY THIS CONTRACTOR, SHALL BE NEW AND BEAR THE LABEL OR LISTING OF A NATIONALLY RECOGNIZED INDEPENDENT TESTING LABORATORY.
- 10. EXISTING SERVICES: EXISTING SERVICES SHALL BE MAINTAINED AND NO INTERRUPTIONS SHALL BE CAUSED, DAY OR NIGHT WITHOUT THE OWNER'S CONSENT. CONTRACTOR SHALL NOTE THAT OPERATIONS MUST CONTINUE DURING THE LIFE OF THIS CONTRACT AND ALL NECESSARY TEMPORARY CONNECTIONS REQUIRED TO ALLOW SUCH OPERATION SHALL BE INCLUDED. ANY REQUIRED INTERRUPTION IN POWER SHALL BE SCHEDULED WITH THE OWNER IN WRITING A MINIMUM OF 7 DAYS IN ADVANCE. NO INTERRUPTION IN POWER SHALL BE CAUSED WITHOUT THE OWNER'S WRITTEN CONSENT.
- 11. GROUNDING: SHALL BE IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE ARTICLE 250. PROVIDE GROUND WIRES AS REQUIRED AND RESIZE CONDUIT IF NECESSARY.
- 12. AS-BUILT DRAWINGS: CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF ALL DEVIATIONS COMPLETION OF THE PROJECT, TWO (2) COMPLETE SETS OF MARKED-UP PRINTS SHALL BE
- 13. GUARANTEE: CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP TO BE FREE FROM DEFECTS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE BY THE OWNER. CONTRACTOR SHALL MAKE GOOD AT NO EXPENSE TO THE OWNER, ANY DEFECTS DUE TO FAULTY MATERIALS OR WORKMANSHIP, AND SHALL RESTORE ANY DISTURBED ADJACENT WORK TO ITS ORIGINAL CONDITION IN THE PERFORMANCE OF THE GUARANTEE.
- 14. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE GENERAL ARRANGEMENT OF THE VARIOUS SYSTEMS AND APPROXIMATE LOCATIONS OF THE EQUIPMENT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THAT THERE IS ADEQUATE SPACE AT THE LOCATIONS INDICATED FOR ALL EQUIPMENT PRIOR TO INSTALLATION OF SAME. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL DIMENSIONS IN THE FIELD, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

SITE INFORMATION:

DELIVERED TO THE THE OWNER.

PROJECT LOCATION 726 KAIGN AVENUE CITY OF CAMDEN, CAMDEN COUNTY, NEW JERSEY 08103 TAX MAP SHEETS: 6.06, 6.08, 7.08, & 7.11

BLOCK 405, LOTS 1, 7, 8, & 11

KIPP COOPER NORCROSS, INC. 60 PARK PLACE, SUITE 802 NEWARK, NJ 07102

KIPP COOPER NORCROSS, INC.

60 PARK PLACE, SUITE 802 NEWARK, NJ 07102 KELSEY WAITE KWAITE@KIPPTEAMANDFAMILY.ORG PENNONI ASSOCIATES INC.

2 AQUARIUM DRIVE, SUITE 320 CAMDEN, NJ 08103 JOSEPH J. RADAY, P.E., CME EMAIL: JRADAY@PENNONI.COM <u>TAX MAP</u>: SHEET 7.11, BLOCK 405 LOTS 1, 7,8 & 11.

ZONING DISTRICT (GATEWAY REDEVELOPMENT PLAN): OLI-OFFICE / LIGHT INDUSTRIAL ZONE

CODE: GATEWAY REDEVELOPMENT PLAN DIVISION OF PLANNING

PROJECT LOCATION: 726 KAIGHNS AVENUE, CAMDEN, CAMDEN COUNTY, NJ.

EXISTING USE: VACANT / OPEN SPACE PROPOSED USE: MULTI-USE ATHLETIC FIELD AND ASSOCIATED RECREATIONAL FACILITIES

OLI - OFFICE LIGHT INDUSTRIAL ZONE				
CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE
REDEV (PG. 21)	PERMITTED USES	ATHLETIC FIELDS, PARKS, PLAYGROUNDS, AND RECREATION AREAS	ATHLETIC FIELDS, PARKS, PLAYGROUNDS, AND RECREATION AREAS	С
REDEV (PG. 21)	ACCESSORY USE	ACCESSORY BUILDINGS AND STRUCTURES, CONCESSION STANDS, OFF-STREET PARKING, FENCES, WALLS AND SIGNS	ACCESSORY BUILDINGS AND STRUCTURES, CONCESSION STANDS, OFF-STREET PARKING, FENCES, WALLS AND SIGNS	С

AREA ANI	BULK REGULATIONS [GATEV	VAY REDEVELOPMENT] [NON	I-RESIDENTIAL / GENER	RAL INDUSTRIAL	AMENDMENT]
CODE REF	STANDARD	REQUIRED/PERMITTED	EXISTING	PROPOSED	CONFORMANCE
REDEV - (PG. 7)	MIN. LOT AREA	4 AC	4.573 AC ± [199,221 SF]	4.573 AC ± [199,221 SF]	С
REDEV - (PG. 7)	MIN. LOT WIDTH	250 FT	N/A	426.8 FT	С
REDEV - (PG. 7)	MIN. FENCING AND WALLS SETBACK	0 FT	N/A	0 FT	С
REDEV - (PG. 7)	MIN. PEDESTRIAN PATHWAYS SETBACK	0 FT	N/A	0 FT	С
REDEV - (PG. 7)	MIN. BIO DETENTION BASINS AND STORMWATER MANAGEMENT FEATURES SETBACK	5 FT	0 FT	5.75 FT	С
REDEV - (PG. 7)	MIN. PRINCIPAL PERMITTED USES SETBACK	12 FT	0 FT	13 FT	С
REDEV - (PG. 7)	MIN. PARKING LOTS SETBACK	15 FT	0 FT	22.7 FT	С
REDEV - (PG. 7)	MIN. ALL OTHER ACCESSORY BUILDING AND STRUCTURES SETBACK	25 FT	0 FT	25 FT	С
REDEV - (PG. 7)	MAX. HEIGHT FOR ACCESSORY BUILDINGS AND STRUCTURES	20 FT	0 FT	12 FT	С
REDEV - (PG. 7)	MAX. HEIGHT FOR SCOREBOARD	50 FT	N/A	29 FT	С
REDEV - (PG. 7)	MAX. HEIGHT FOR BLEACHERS	40 FT	N/A	24 FT	С
REDEV - (PG. 7)	MAX. HEIGHT FOR FIELD LIGHTS	100 FT	N/A	70 FT	С
REDEV - (PG. 7)	MAX. BUILDING COVERAGE	20%	N/A	1.137%	С
REDEV - (PG. 7)	MAX. IMPERVIOUS COVERAGE	85%	N/A	77.85%	С

LANDSCAPING [GATEWAY REDEVELOPMENT] [NON-RESIDENTIAL]				
CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE
REDEV - E.2 (PG. 29)	MIN. DISTANCE OF STREET TREES	40 FT O.C.	40 FT	С

TRAFFIC CIRCULATION [GATEWAY REDEVELOPMENT] [NON-RESIDENTIAL]				
CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE
REDEV - (PG. 4)	MIN. SIDEWALK WIDTH	5 FT W/ 3FT MIN. LANDSCAPE BUFFER	8 FT	С

FENCES AND WALLS [GATEWAY REDEVELOPMENT] [NON-RESIDENTIAL / GENERAL INDUSTRIAL AMENDMENT]					
CODE REF	STANDARD	REQUIRED/PERMITTED	EXISTING	PROPOSED	CONFORMANCE
REDEV - (PG. 7)	MAX. FENCE HT. [FRONT YARD]	6 FT	N/A	6 FT	С
REDEV - (PG. 7)	MAX. FENCE HT. [SIDE AND REAR YARDS]	6 FT	N/A	6 FT	С

PARKING AND LOADING REQUIREMENTS [CITY ORDINANCE]				
CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE
3.4.2	PARKING SPACES	1 SPACES PER 8 PERMANENT SEATS AT THE FIELD [75 SPACES]	75 SPACES [600 PROPOSED PERMANENT SEATS/8 PERMANENT SEATS]	С
870-230 [Z.]	MIN. BICYCLE SPACES [10% OF FIRST 100 SPACES, PLUS 2% OF ANY THEREAFTER]	8 SPACES	8 SPACES	С
870-230 [AA.]	MIN. SIDEWALK WIDTH ADJACENT TO PARKING LOTS	6 FT	6 FT	С

PARKING AND LOADING DESIGN STANDARDS [CITY ORDINANCE]				
CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE
870-231 [B.1.A]	MIN. STANDARD CAR SPACE DIMENSIONS [90°]	9 FT X 18 FT	9 FT X 18 FT	С
870-231 [B.1.A]	MIN. STANDARD AISLE WIDTH [90°; 2-WAY]	24 FT	24 FT	С
870-231 [B.1.A]	MIN. STANDARD AISLE WIDTH [PARALLEL; 1-WAY]	12 FT	N/A	N/A
870-231 [B.4]	MIN. PARKING DIMENSIONS FOR PARALLEL SPACE	8 FT X 24 FT	N/A	N/A
MUTCD [FIG. 3B-21]	MIN. PARKING DIMENSIONS FOR PARALLEL SPACE	8 FT X 22 FT	N/A	N/A
870-231 [C.1.C]	MIN. LOADING SPACES [>10,000 SF FLOOR AREA]	1 SPACE	N/A	N/A
870-231 [C.2]	MIN. LOADING SPACE DIMENSIONS	12 FT X 50 FT	N/A	N/A
870-231 [C.2]	MIN. LOADING AREA DISTANCE TO STREET INTERSECTION	50 FT	N/A	N/A
870-231 [C.2]	LOADING AREA IN SIDE YARD	NOT PERMITTED	NOT PERMITTED	С
870-231 [C.2]	MIN. OFF STREET PARKING AND LOADING AREA SETBACK FROM RIGHT-OF-WAY	5 FT	N/A	N/A

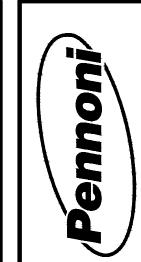
VEHICULAR CIRCULATION [CITY ORDINANCE]				
CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE
870-235 [A.6]	MIN. DRIVEWAY SETBACK FROM AN INTERSECTION	50 FT	250 FT	С
870-235 [A.7]	MIN. DRIVEWAY SETBACK FROM ANY SIDE YARD	10 FT	100 FT	С
870-235 [A.8]	MIN. DRIVEWAY DISTANCE TO CROSSWALK	25 FT	250 FT	С
870-235 [A.11]	MIN. DRIVEWAY ANGLE FOR 2-WAY DRIVEWAY [PERMITTING LEFT TURNS TO STREET!	60°	90°	С

LIGHTING [CITY ORDINANCE]					
CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE	
870-243 [A.15.A.]	MIN. LEVEL OF LIGHTING ALONG WALKWAY NOT PART OF A PARKING LOT	0.5 FC	0.4 FC	NC	
870-243 [A.15.A.]	MAX. LEVEL OF LIGHTING ALONG WALKWAY NOT PART OF A PARKING LOT	1.0 FC	0.8 FC	NC	
870-243 [D.2]	MIN. LEVEL OF LIGHTING PARKING LOT	0.25 FC	0.0 FC	NC	
870-243 [D.2]	AVG. LEVEL OF LIGHTING PARKING LOT	0.5 FC TO 2.0 FC	1.3 FC	С	
870-243 [D.2]	MAX. LEVEL OF LIGHTING PARKING LOT	3.0 FC 5.0 FC [DIRECTLY UNDER FIXTURE]	18.2 FC	NC	
870-243 [D.3]	MIN. LEVEL OF LIGHTING AT ANY INGRESS OR EGRESS PORTION OF PARKING LOT	1.0 FC	0.7 FC	NC	

LANDSCAPING AND BUFFERING [CITY ORDINANCE]				
CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE
870-244 (A.3.F)	MIN. BUFFER WIDTH [SIDE YARD & REAR YARD ADJACENT TO RESIDENTIAL ZONE]	5 FT	5 FT	С
870-244 (C.6)	FOUNDATION PLANTINGS REQUIRED ALONG ALL BUILDING ELEVATIONS	REQUIRED	PROVIDED	С
870-244 (D.2.A)	MAX. STREET TREE SPACING O.C.	40 FT	40 FT	С

SOLID WASTE AND RECYCLING [CITY ORDINANCE]				
CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE
870-255 (A.7)	RECYCLING AND REFUSE COLLECTION AREA	INDOOR OR OUTDOOR	OUTDOOR	С

C = CONFORMS NC = NON CONFORMING *NC = CONCESSION STAND, BATHROOMS CHANGING AREA AND STORAGE ROOMS N/A = NOT APPLICABLE



 \Box

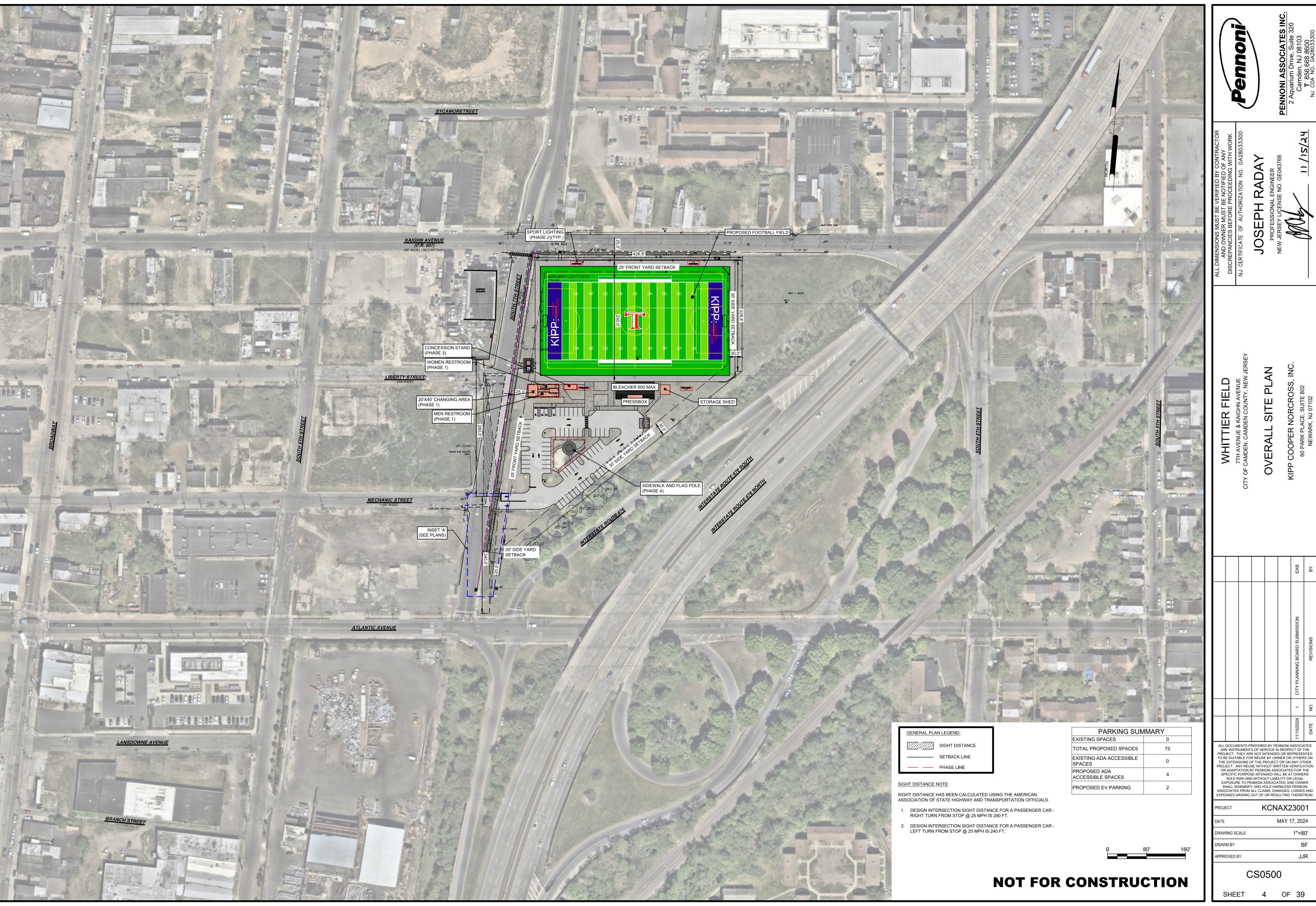
Z U

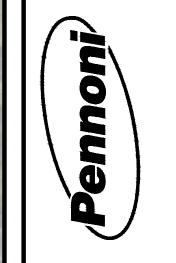
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATE ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHE PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AN EXPENSES ARISING OUT OF OR RESULTING THEREFRO

KCNAX2300² MAY 17, 2024 RAWING SCALE N.T.S.

DRAWN BY

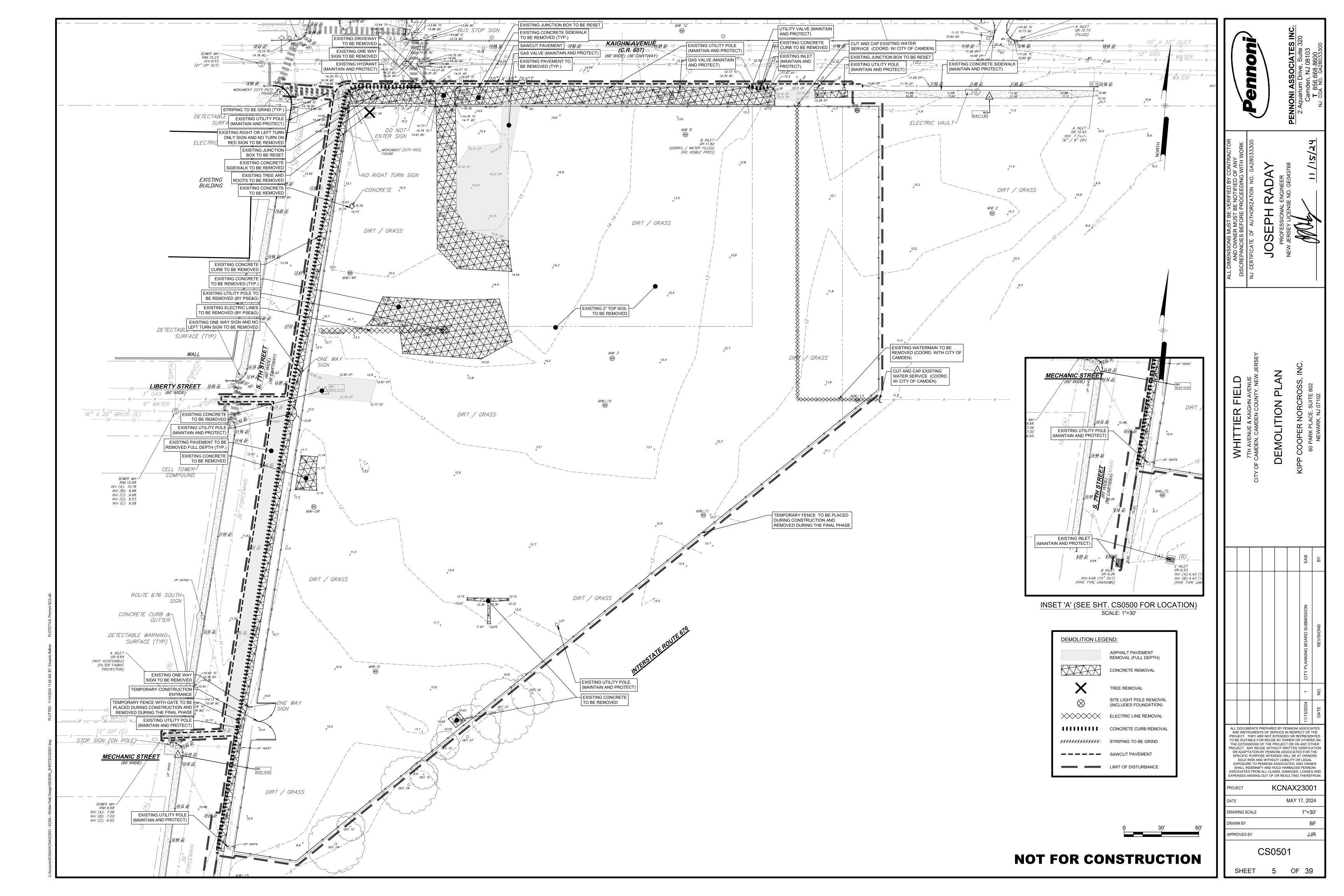
PPROVED BY CS0003

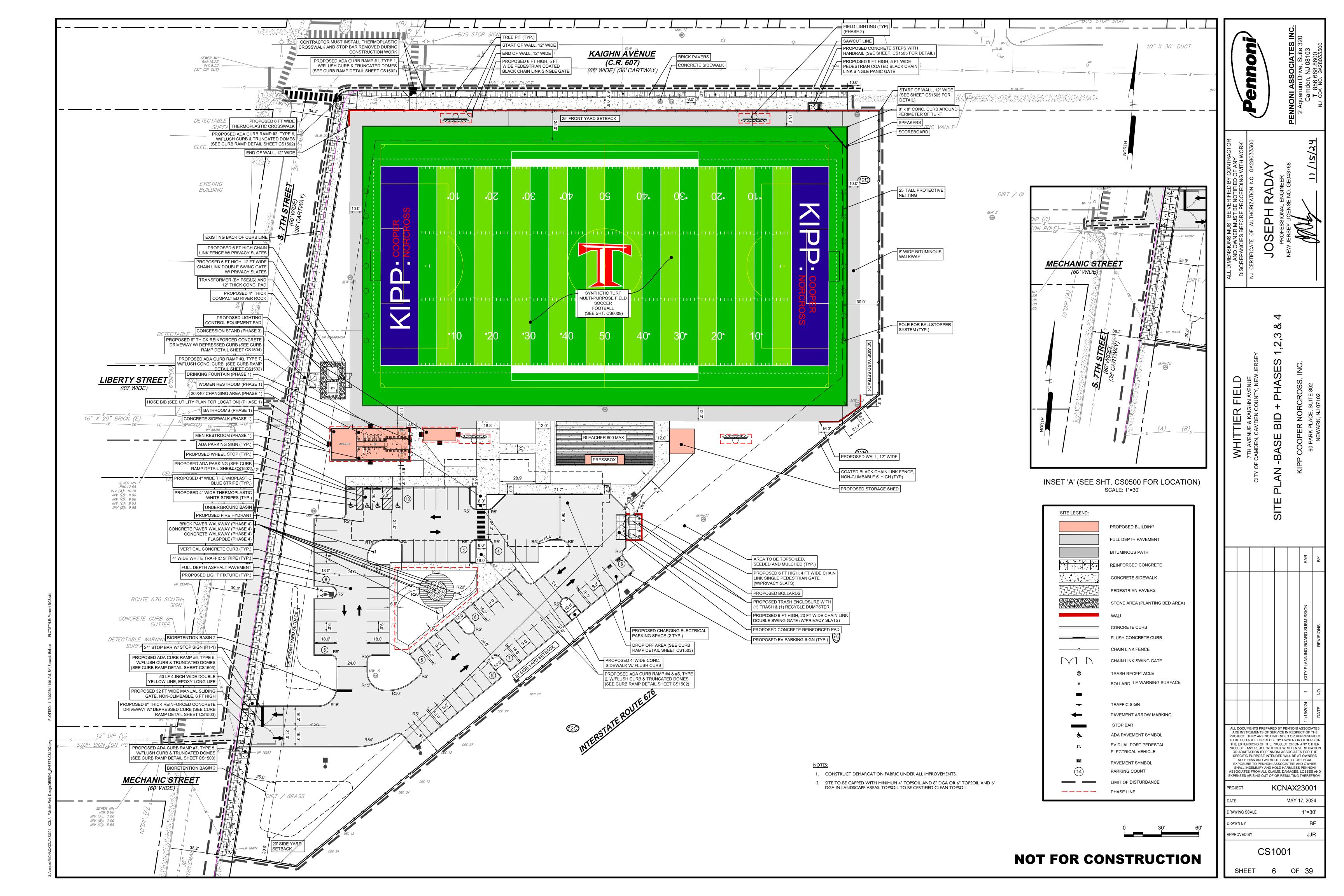


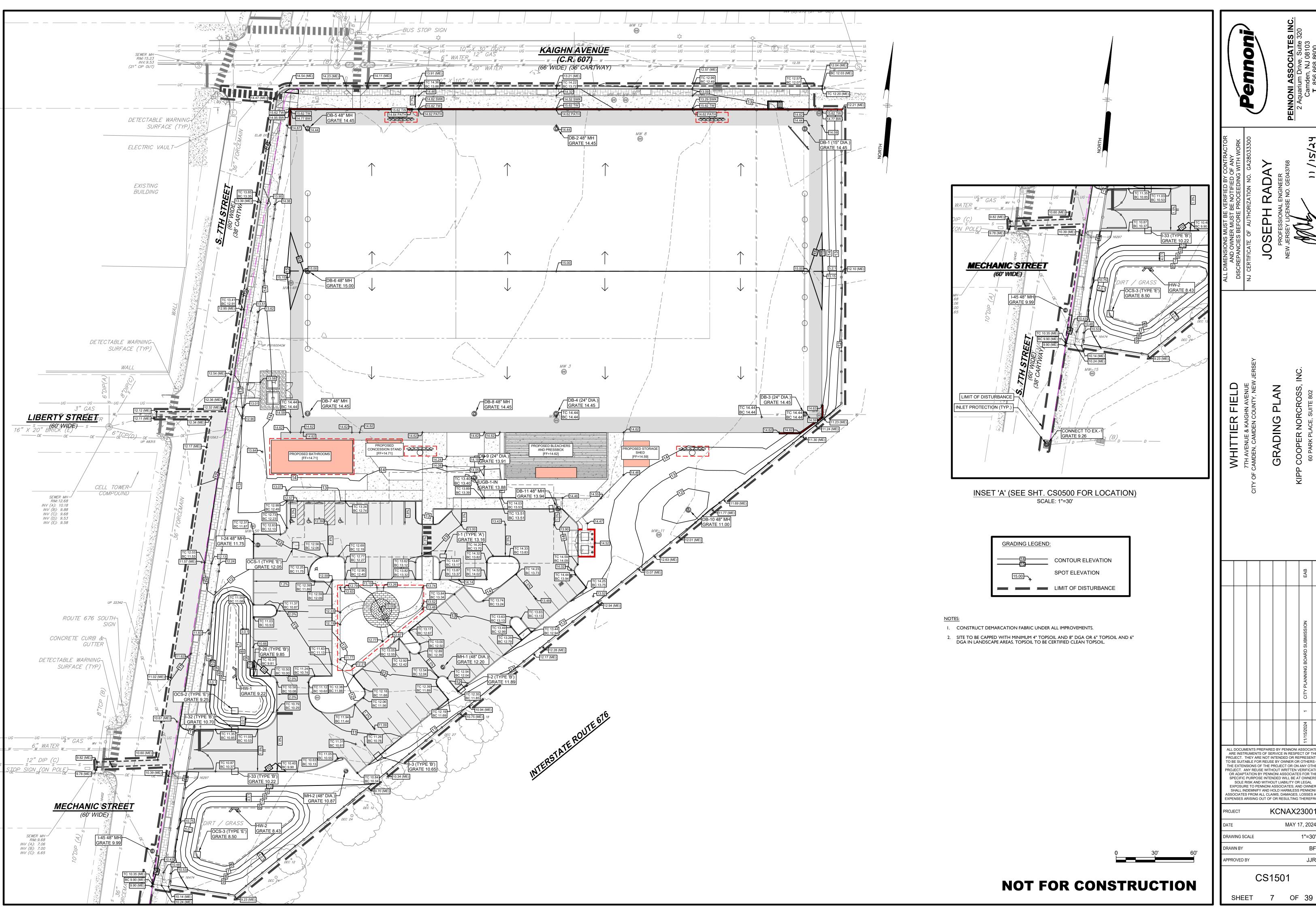


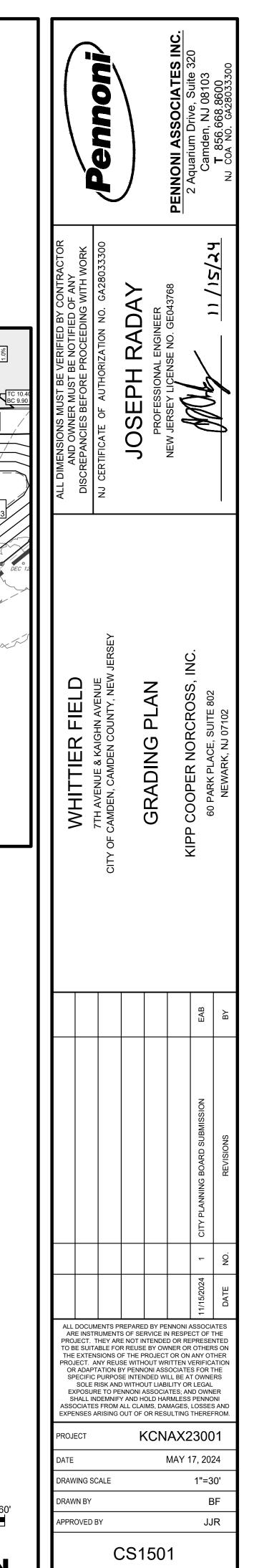
KCNAX23001 MAY 17, 2024

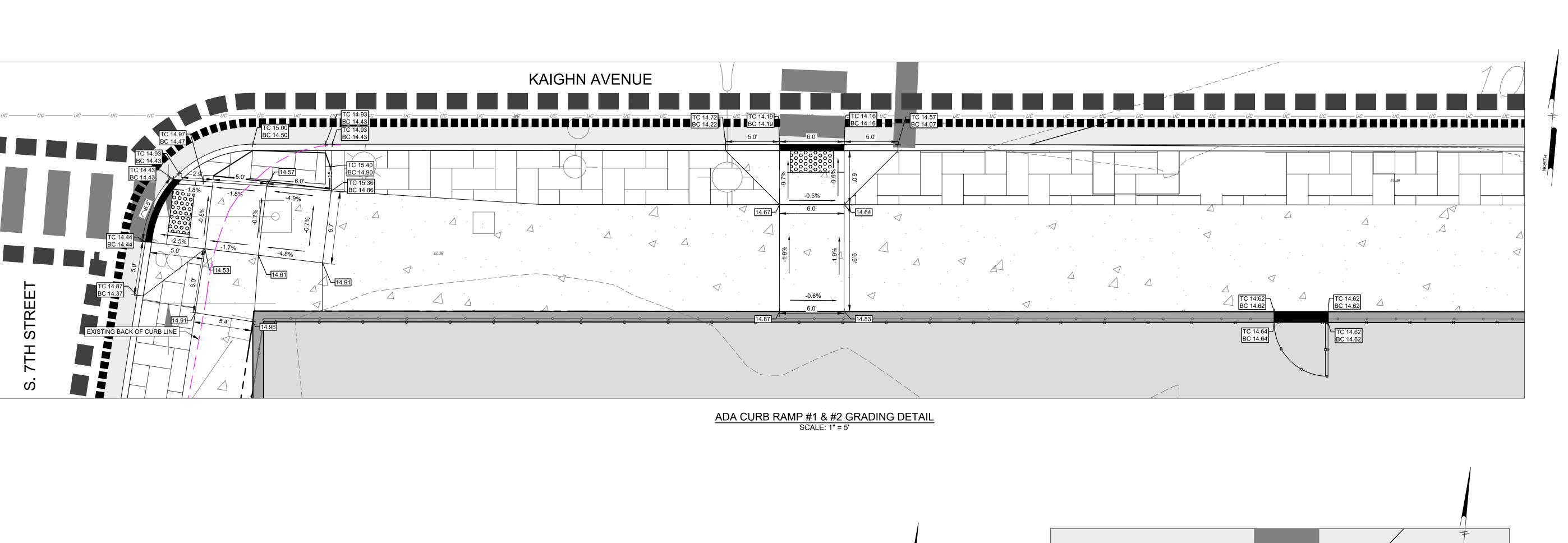
CS0500

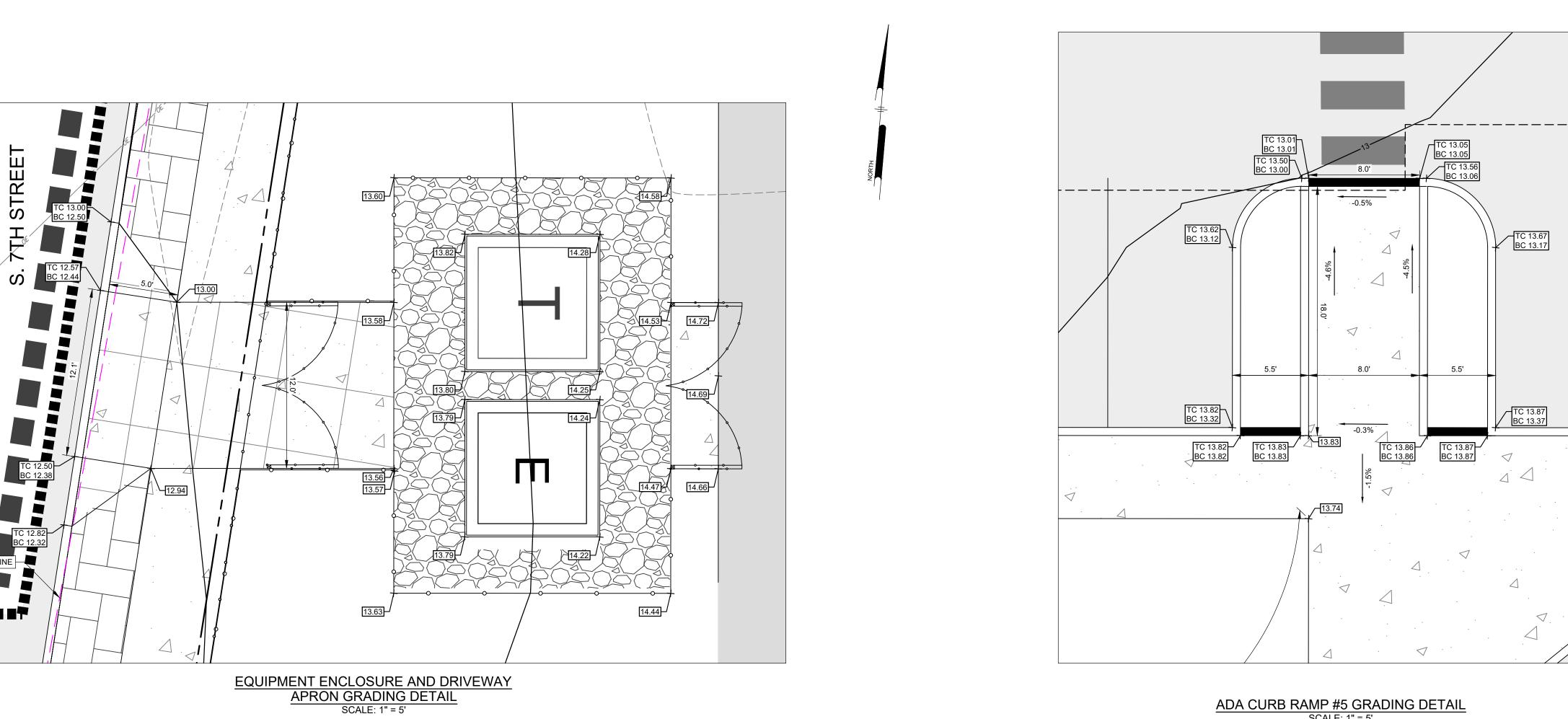


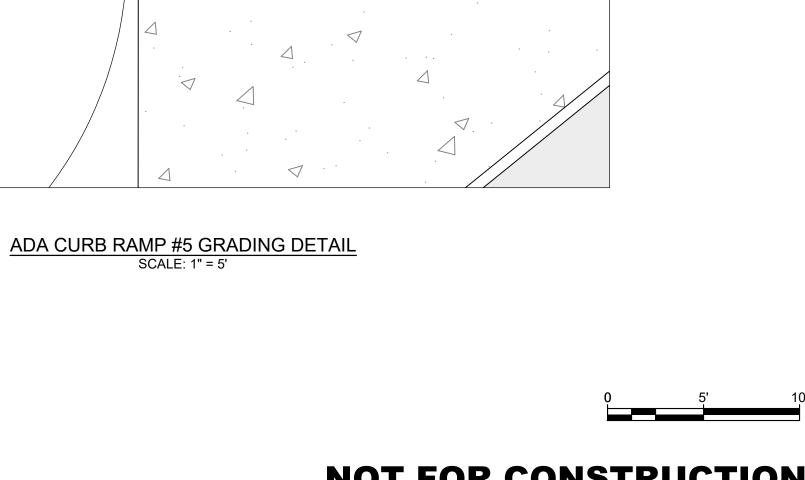








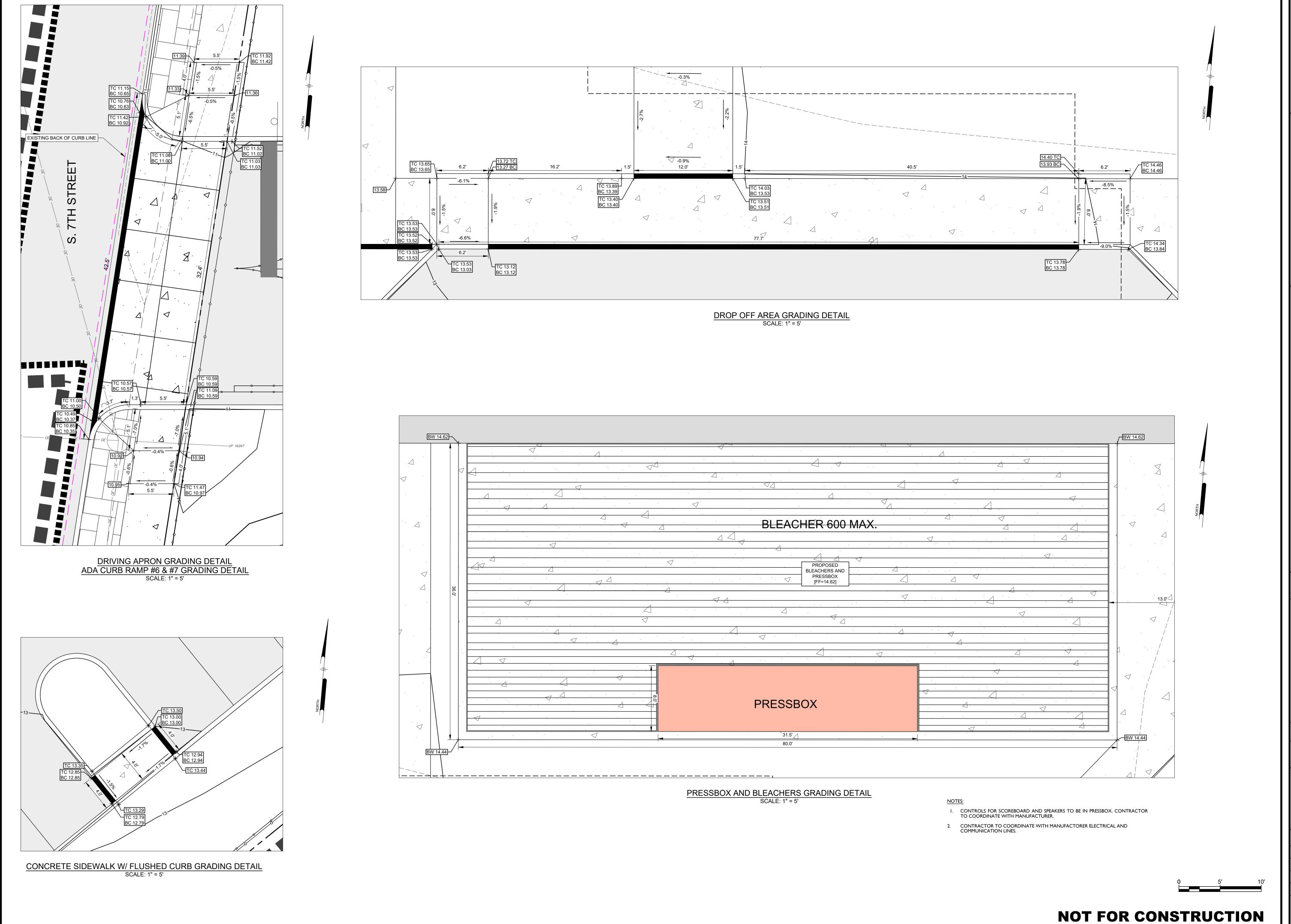




NOT FOR CONSTRUCTION

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND
EXPENSES ARISING OUT OF OR RESULTING THEREFROM. KCNAX23001 MAY 17, 2024 DRAWING SCALE CS1502

SHEET 8 OF 39



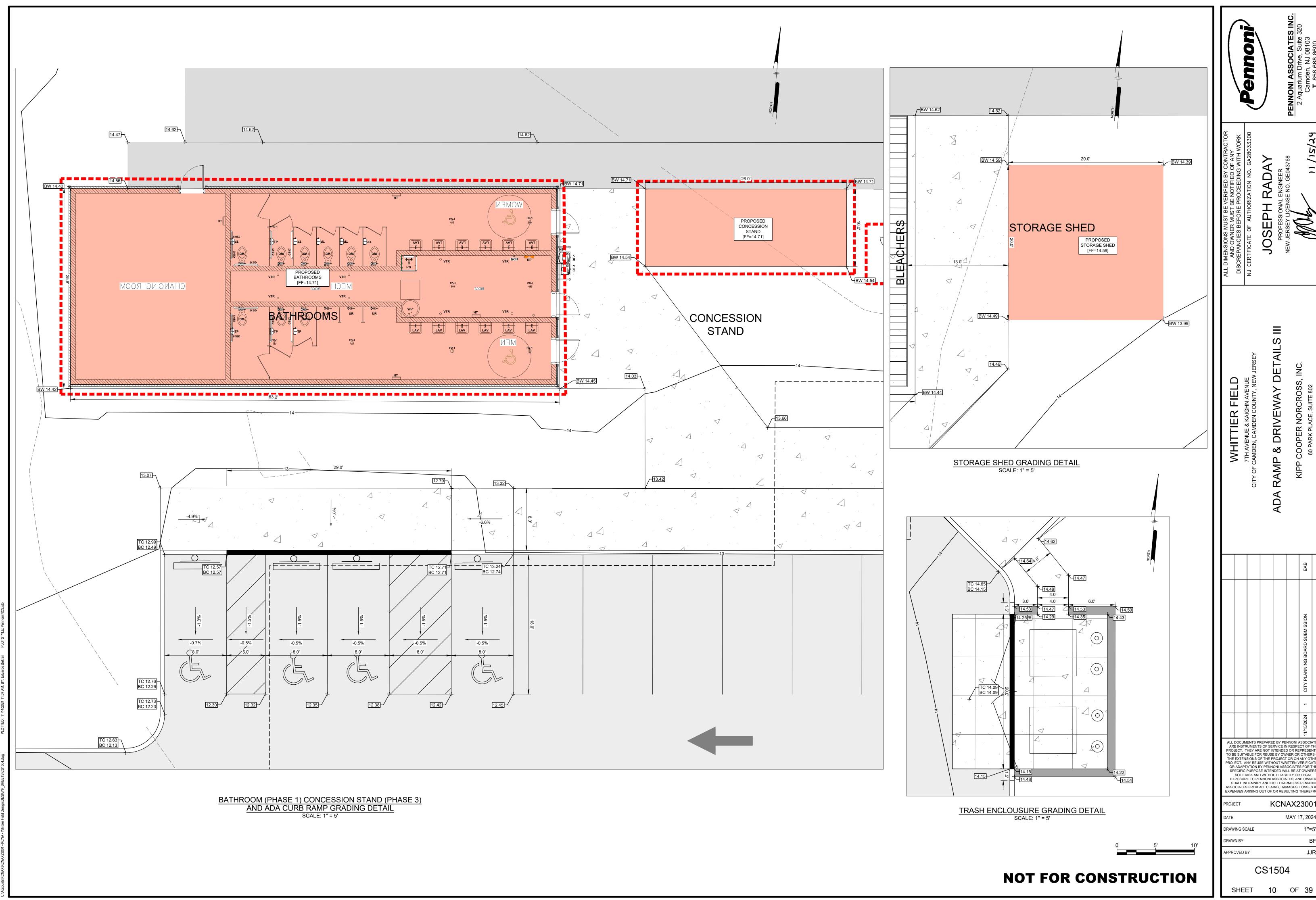
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND
EXPENSES ARISING OUT OF OR RESULTING THEREFROM. KCNAX23001 MAY 17, 2024

DRAWING SCALE

CS1503

SHEET 9 OF 39

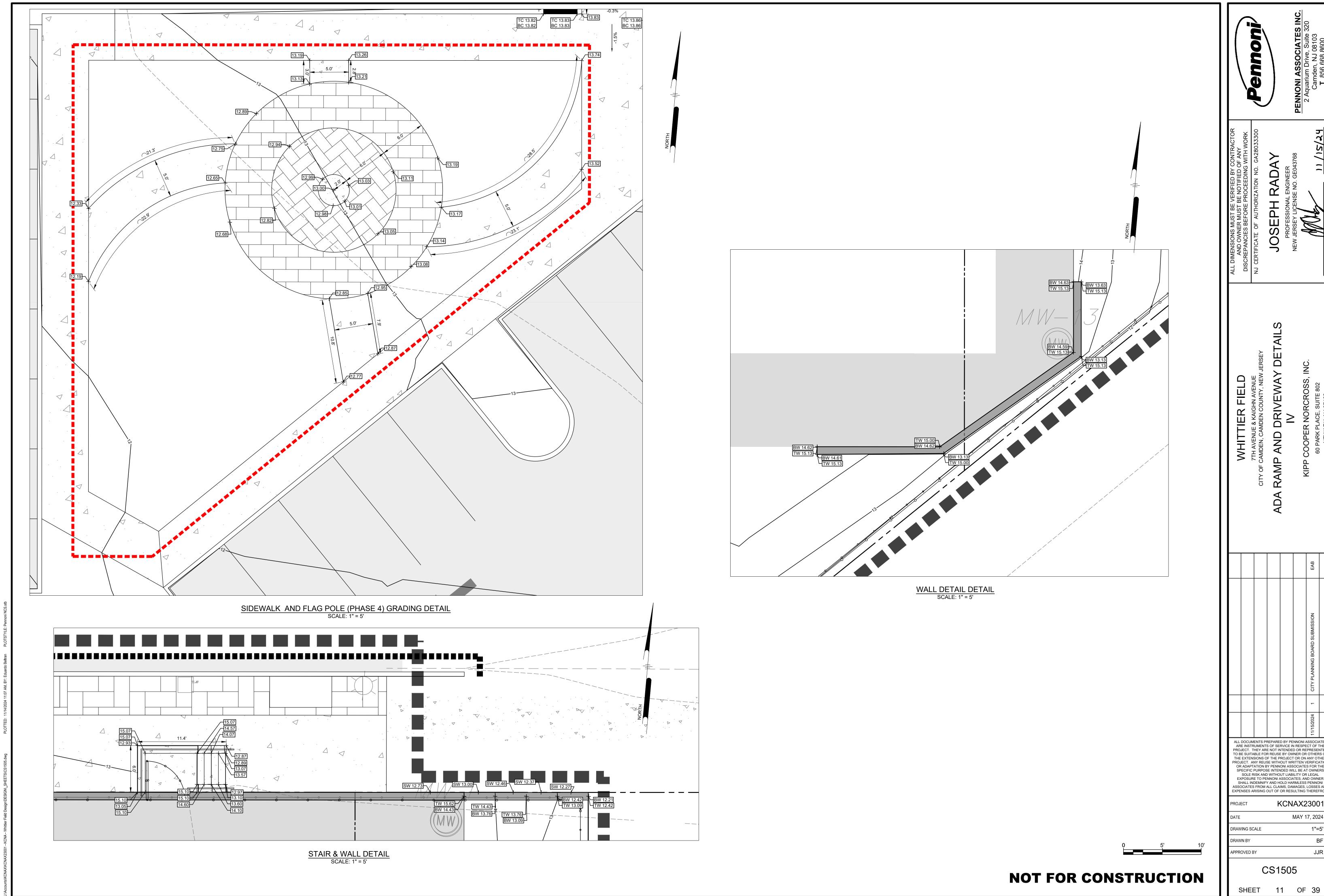
1"=5'



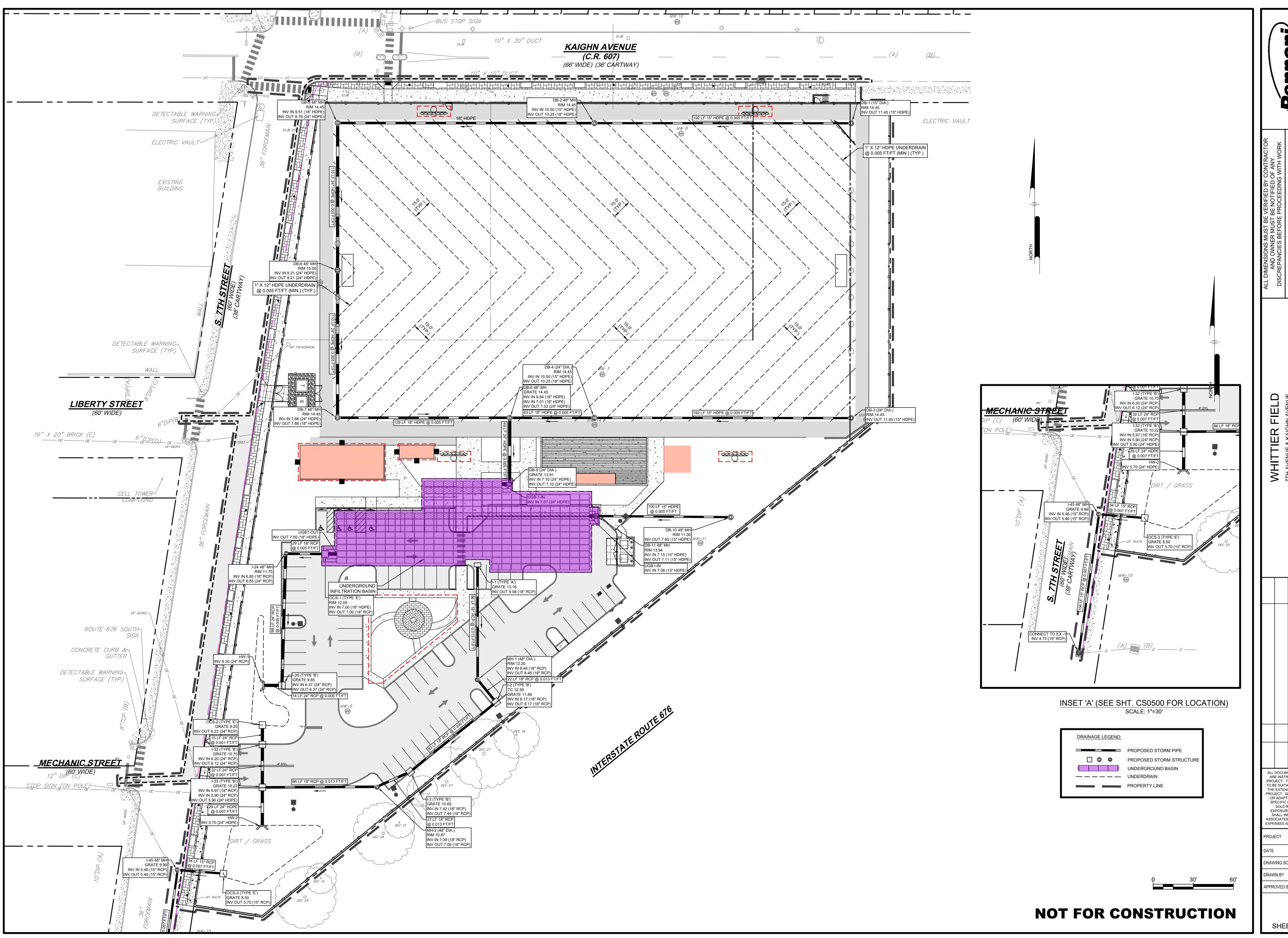
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND
EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

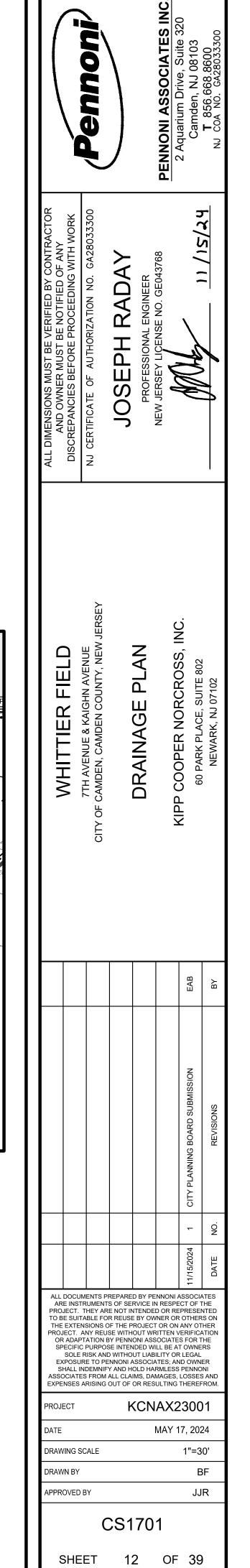
KCNAX23001 MAY 17, 2024 1"=5'

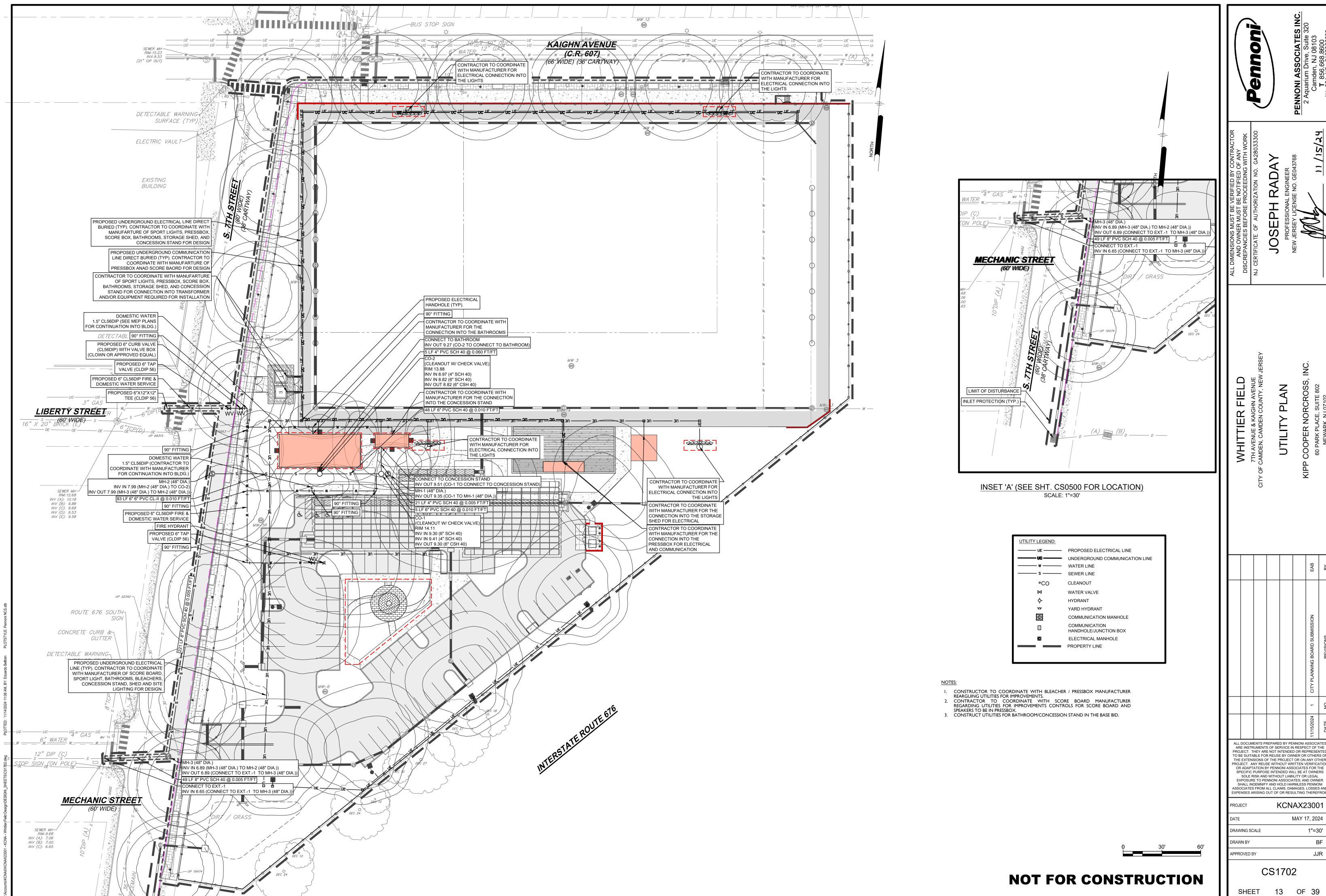
CS1504



ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND
EXPENSES ARISING OUT OF OR RESULTING THEREFROM. KCNAX23001 MAY 17, 2024 DRAWING SCALE CS1505

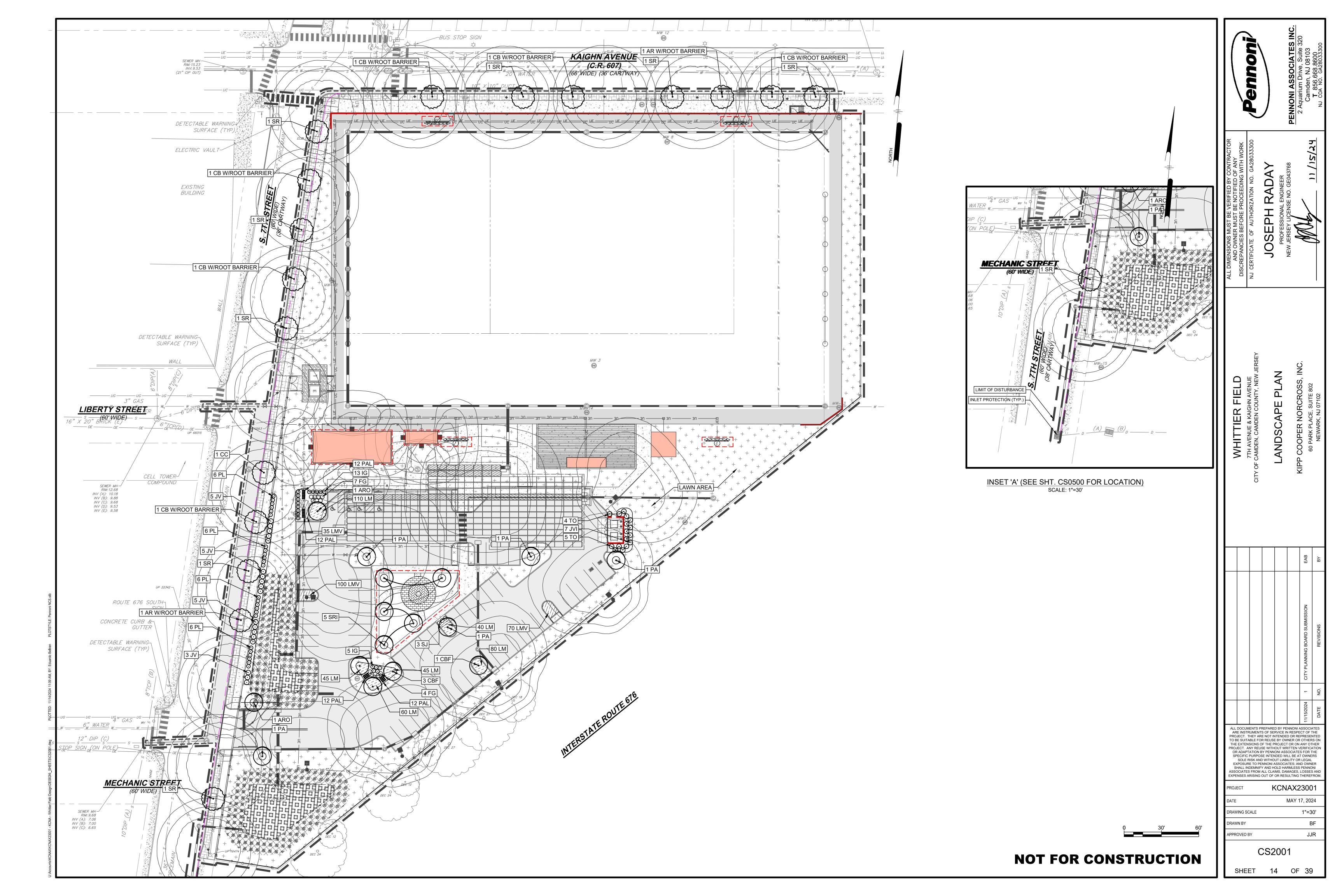


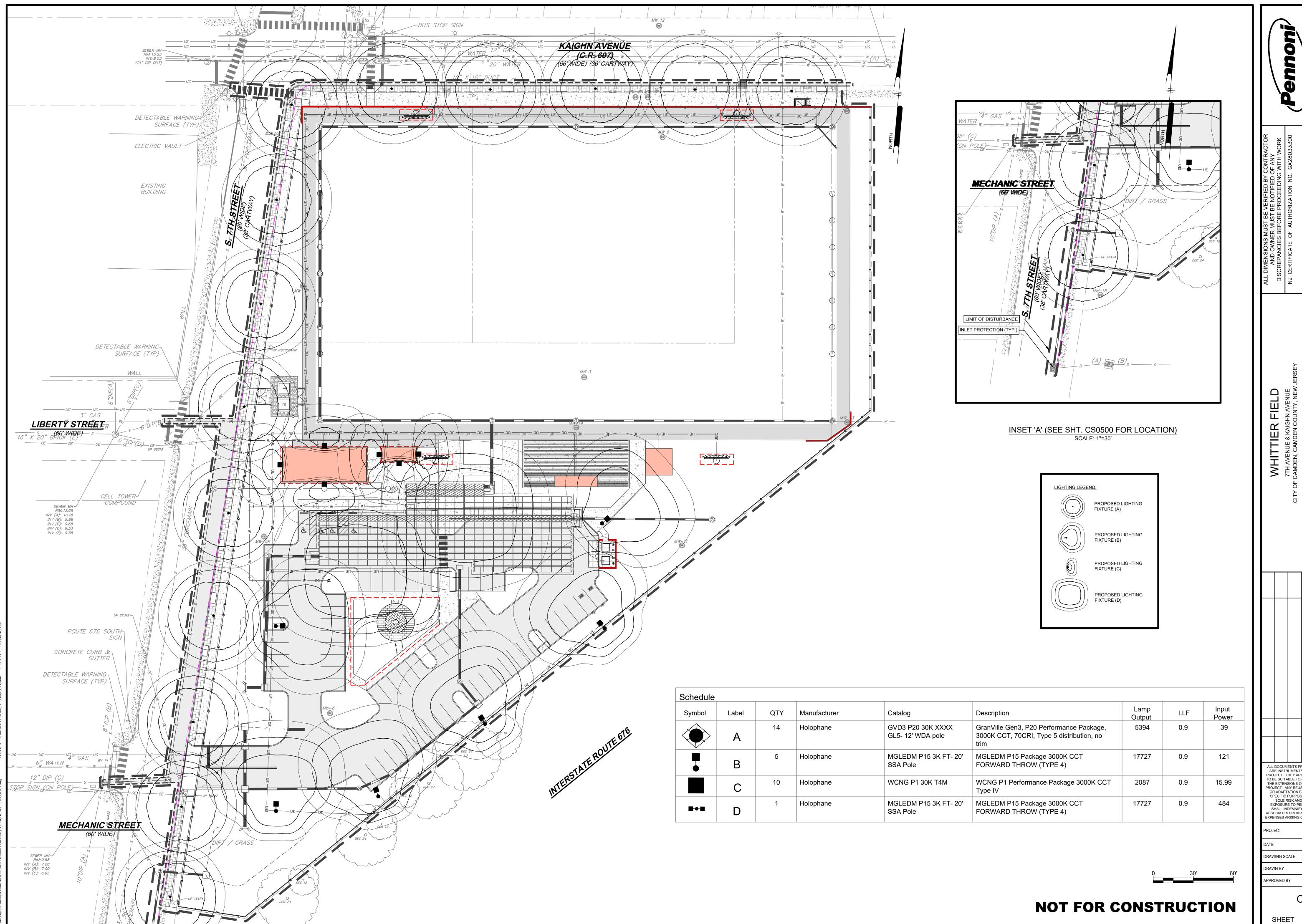




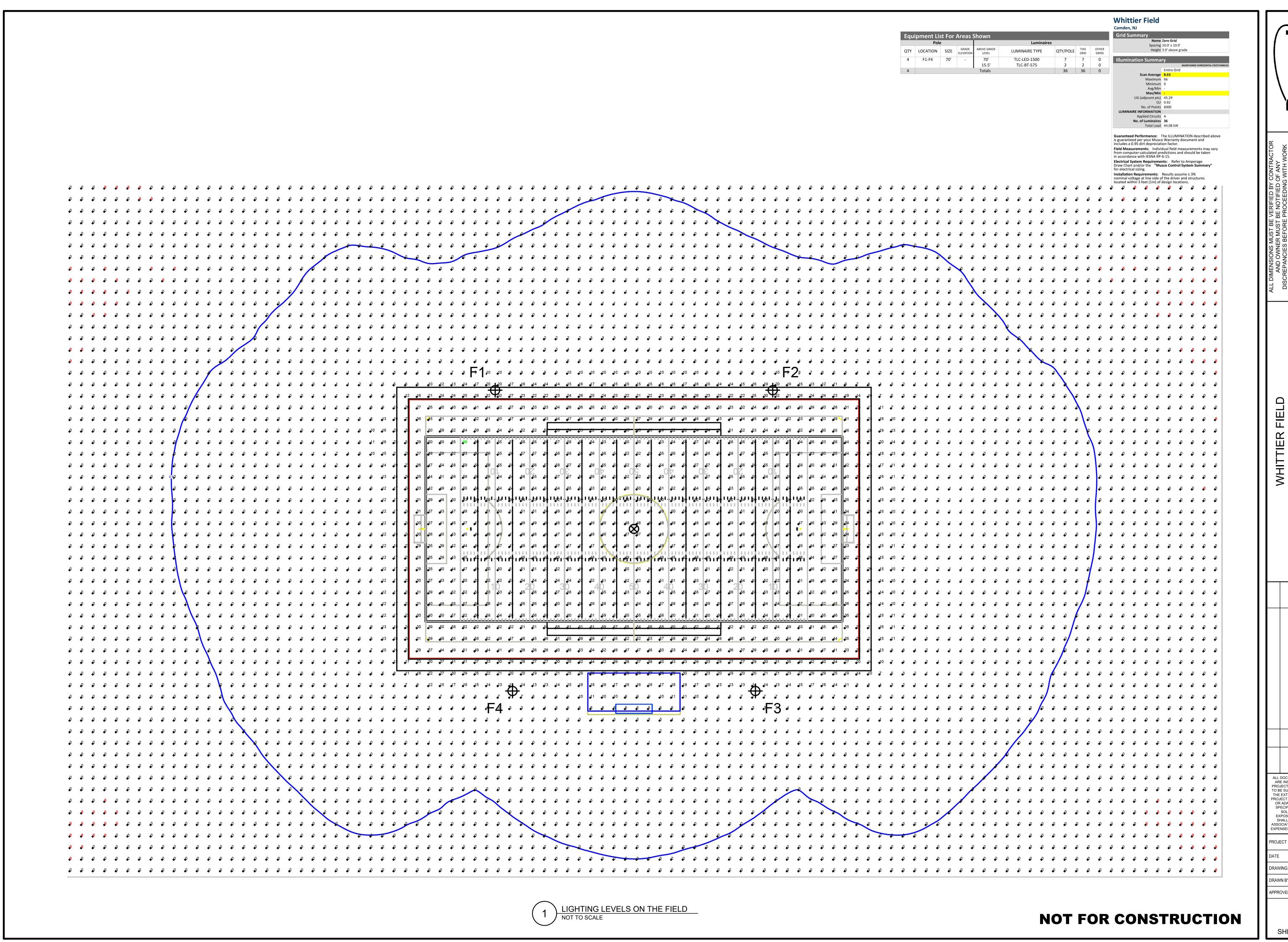
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS OF THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AN

KCNAX2300 MAY 17, 2024 1"=30'

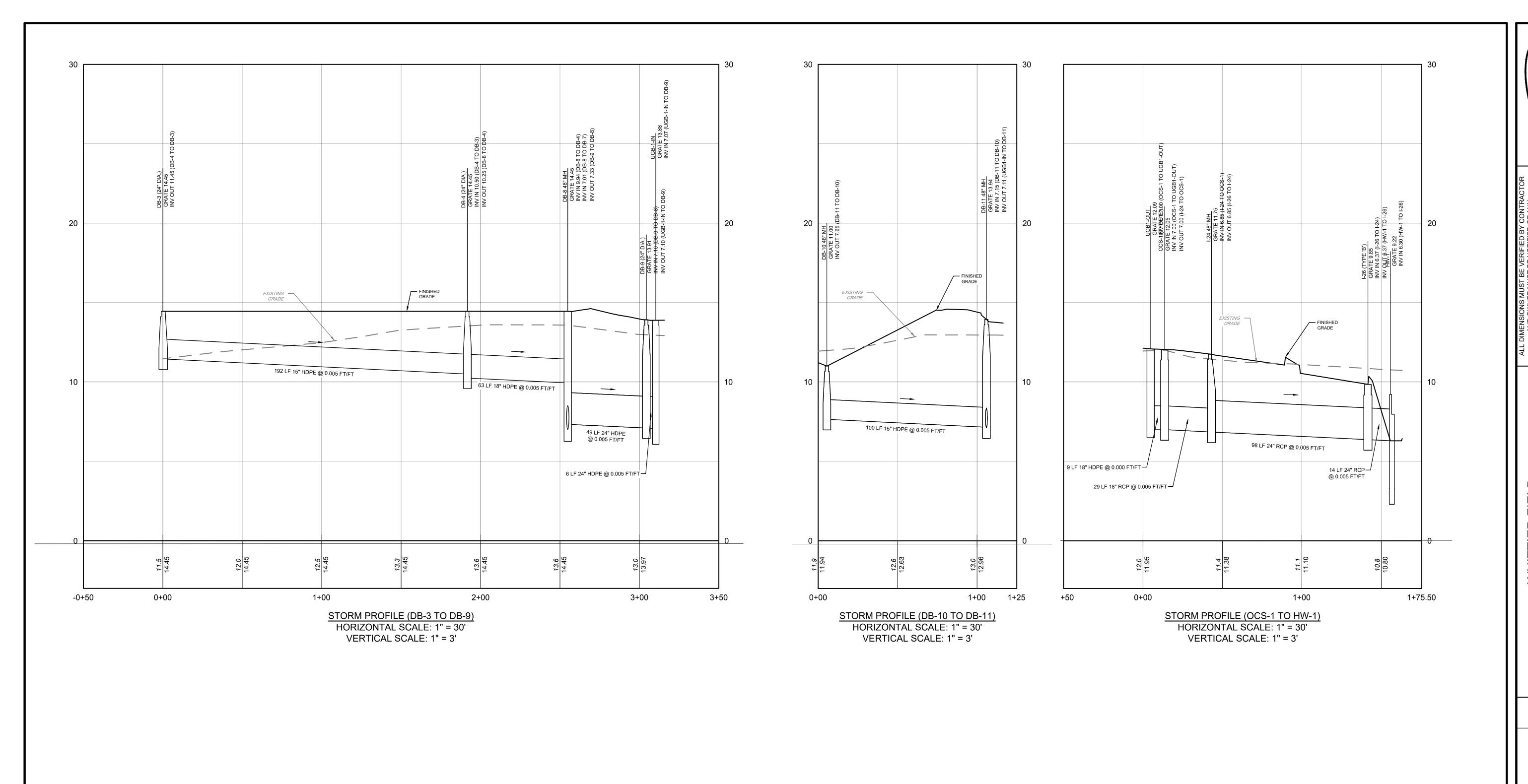




ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS OF THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES ANI EXPENSES ARISING OUT OF OR RESULTING THEREFROM KCNAX2300 MAY 17, 2024 1"=30' CS2201 SHEET 15 OF 39



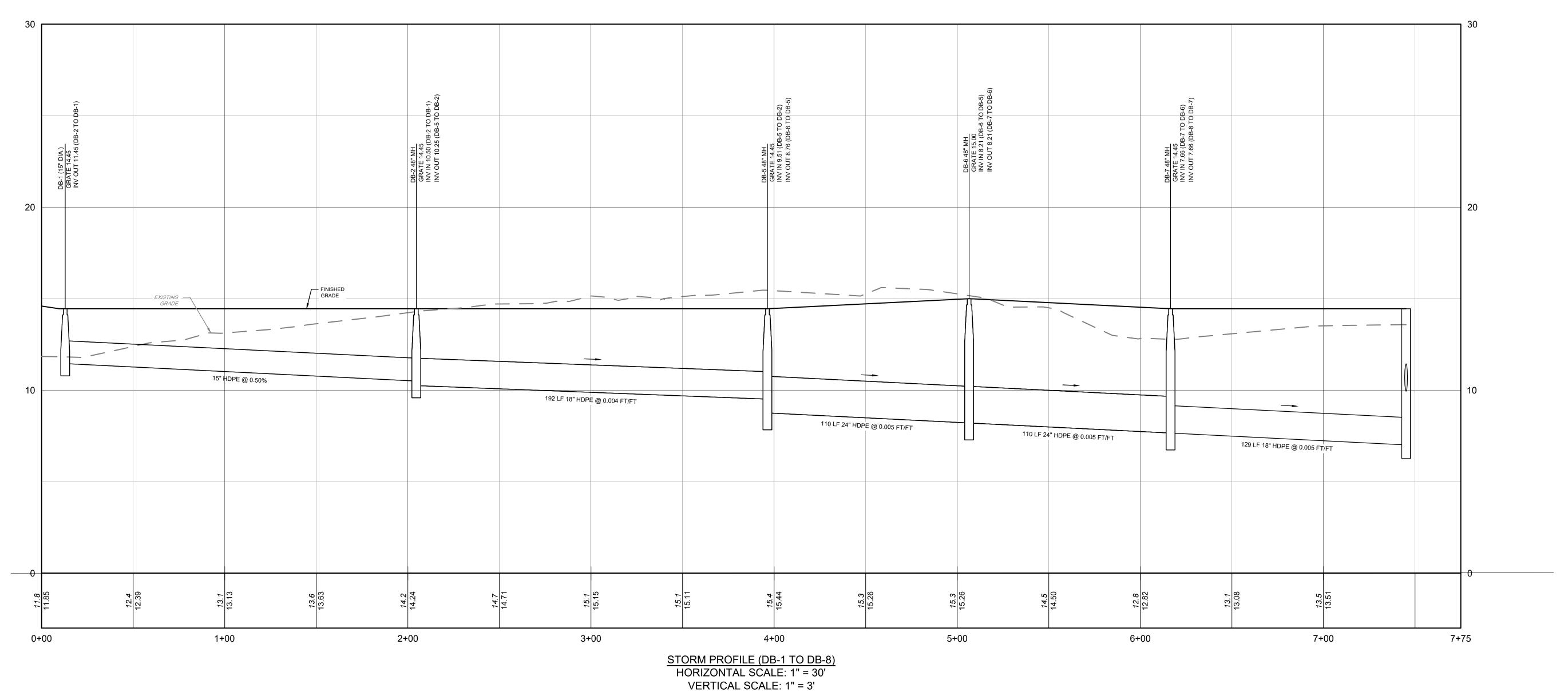
Д S AN ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHE PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AI EXPENSES ARISING OUT OF OR RESULTING THEREFRO KCNAX2300 MAY 17, 2024 APPROVED BY CS6009 SHEET 16 OF 39

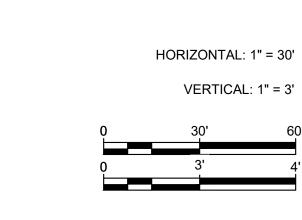


NOTE: ALL SITE WORK CONSTRUCTION AND DETAILS MUST CONFORM TO THE STANDARDS OF THE CITY OF CAMDEN

NOT FOR CONSTRUCTION

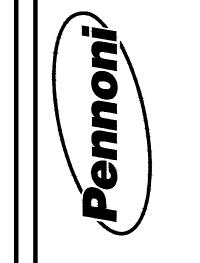






NOTE: ALL SITE WORK CONSTRUCTION AND DETAILS MUST CONFORM TO THE STANDARDS OF THE CITY OF CAMDEN

NOT FOR CONSTRUCTION



PENNONI ASSC

JOSEPH RADAY

PROFESSIONAL ENGINEER

NEW JERSEY LICENSE NO. GE043768

STORM SEWER PROFILE

11/15/2024 1 CITY PLANNING BOARD SUBMISSION EAB
DATE NO. REVISIONS BY

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND
EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PROJECT

KCNAX23001

DATE

MAY 17, 2024

DRAWING SCALE

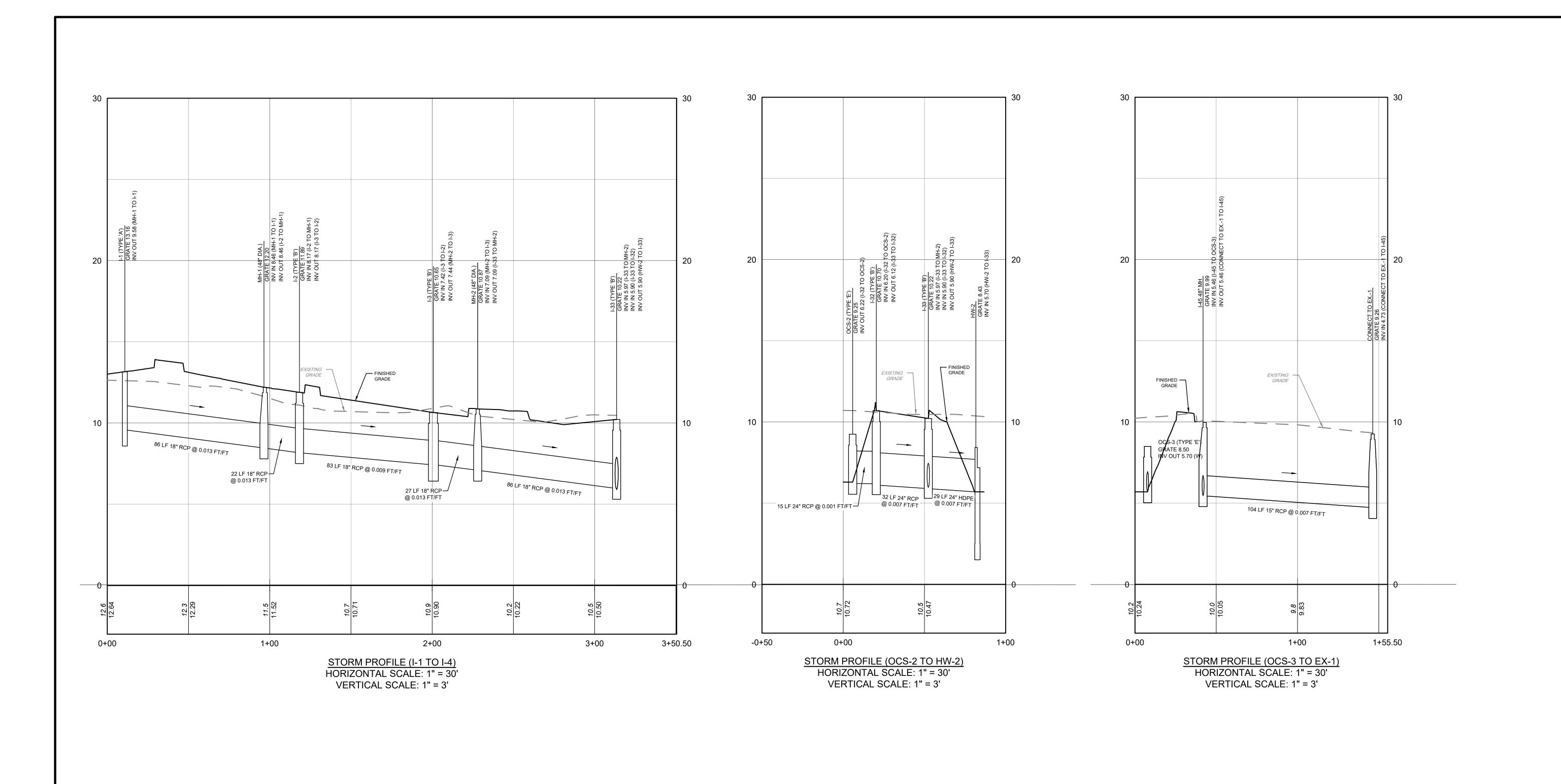
1"=30'

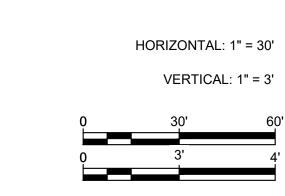
CS4002

DRAWN BY

SHEET 18 OF 39

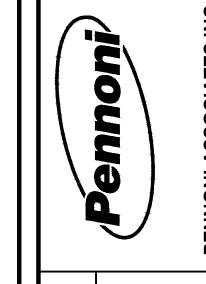
JJR





NOTE: ALL SITE WORK CONSTRUCTION AND DETAILS MUST CONFORM TO THE STANDARDS OF THE CITY OF CAMDEN

NOT FOR CONSTRUCTION



JOSEPH RADAY

		CITY OF CAMDEN, CAMDEN COUNTY, NEW JERSEY				60 PARK PLACE, SUITE 802	NEWARK, NJ 07102
						EAB	ВУ
						CITY PLANNING BOARD SUBMISSION	REVISIONS
						1	NO.
						11/15/2024	DATE
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.							

KCNAX23001

CS4003

SHEET 19 OF 39

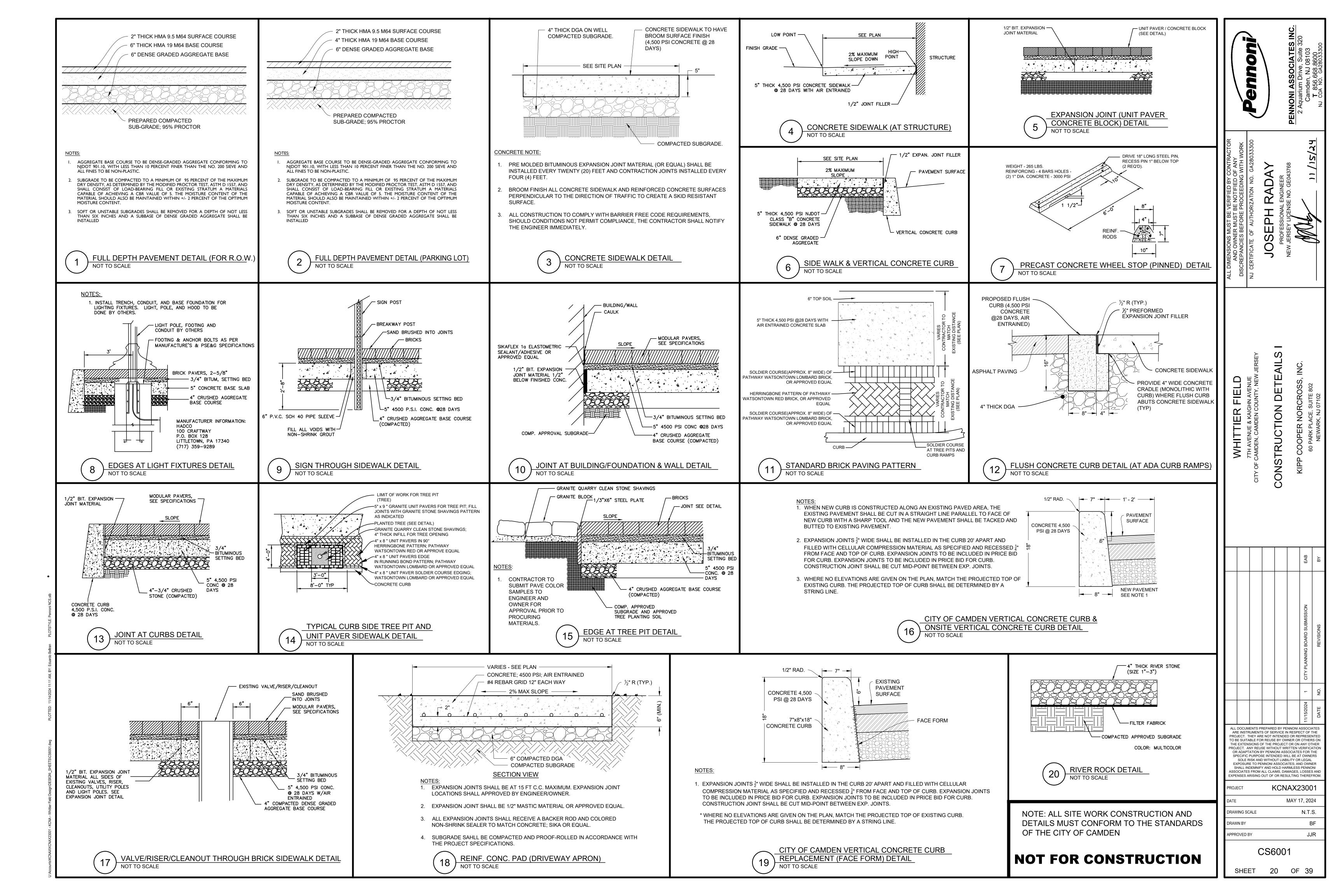
DRAWING SCALE

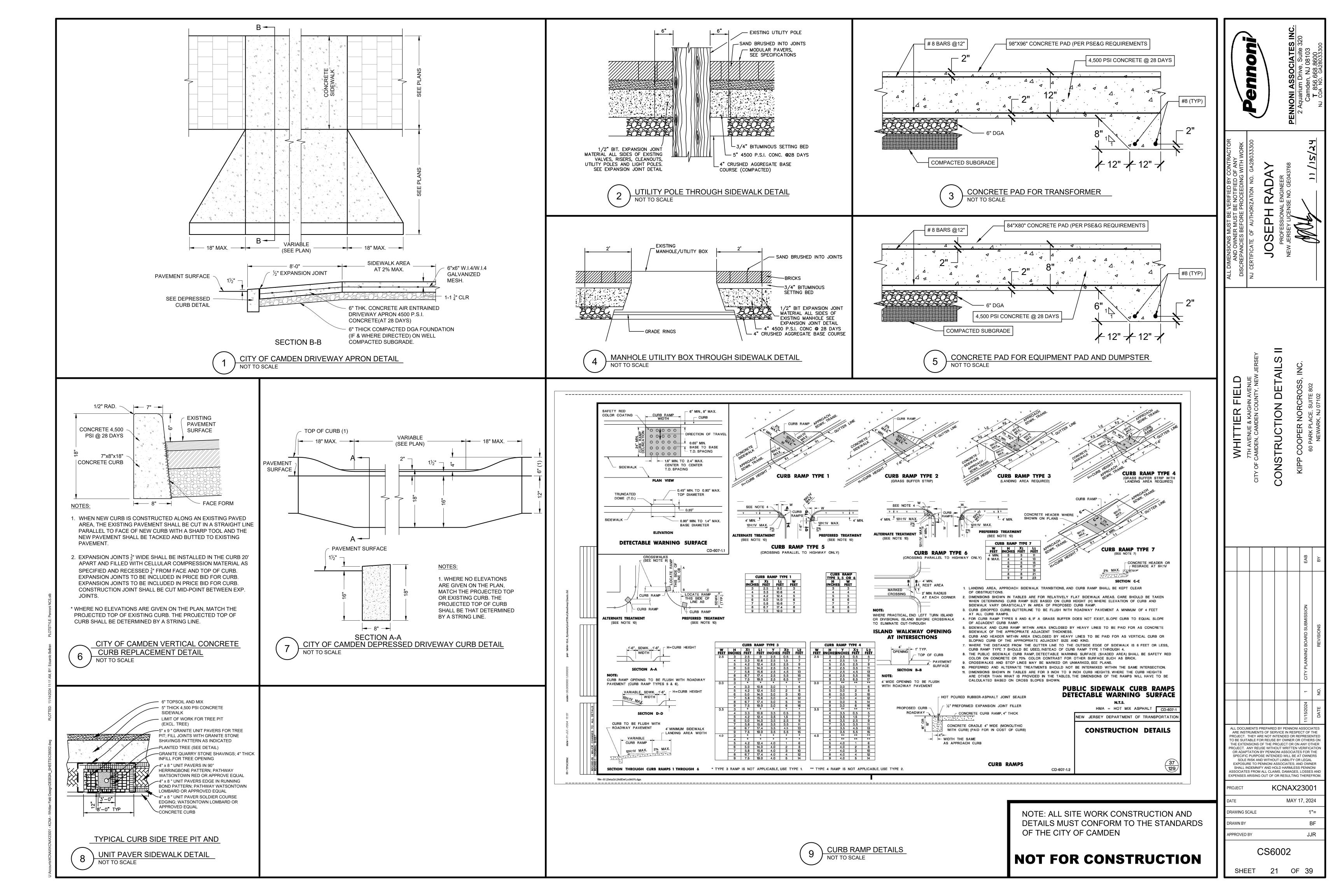
DRAWN BY

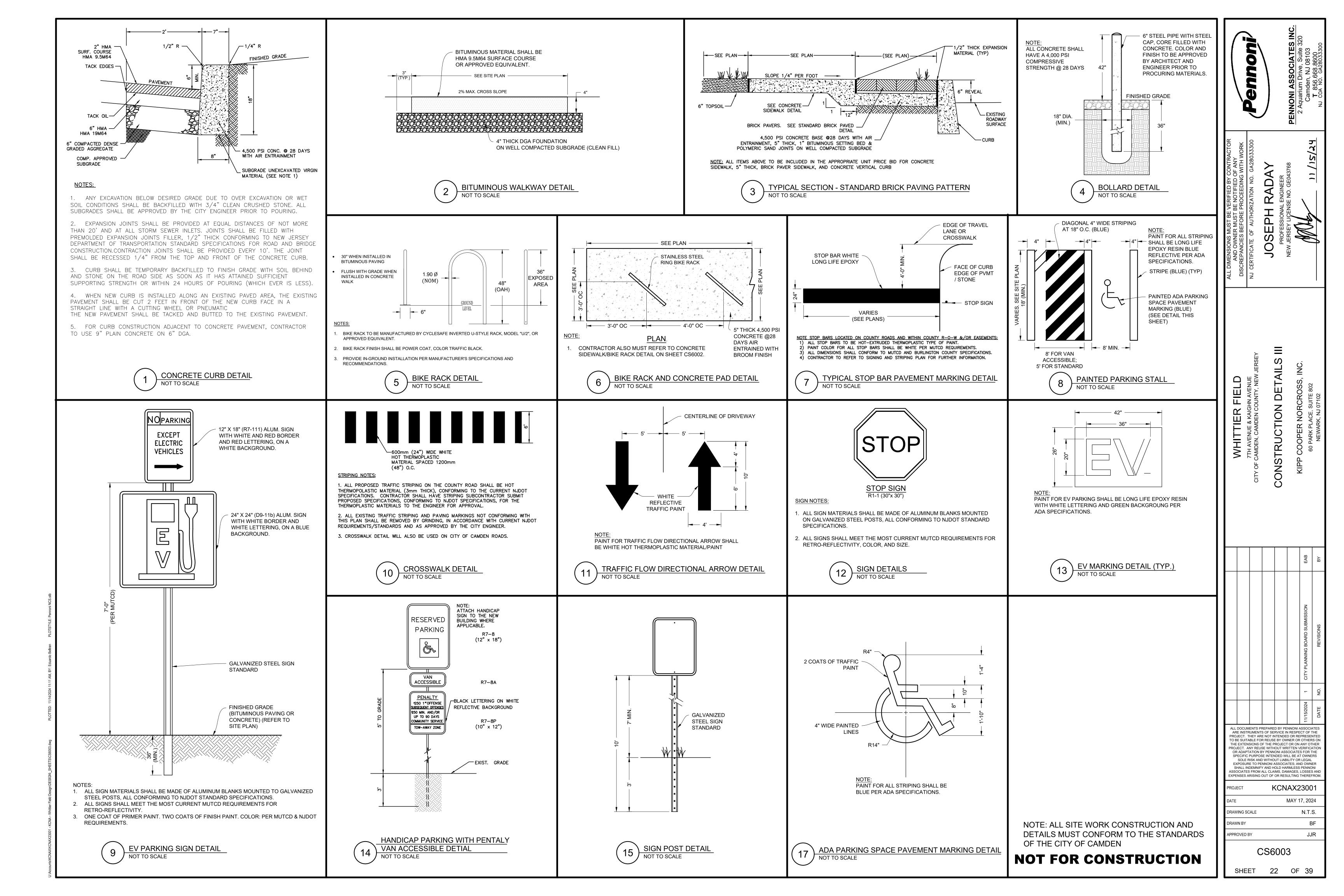
APPROVED BY

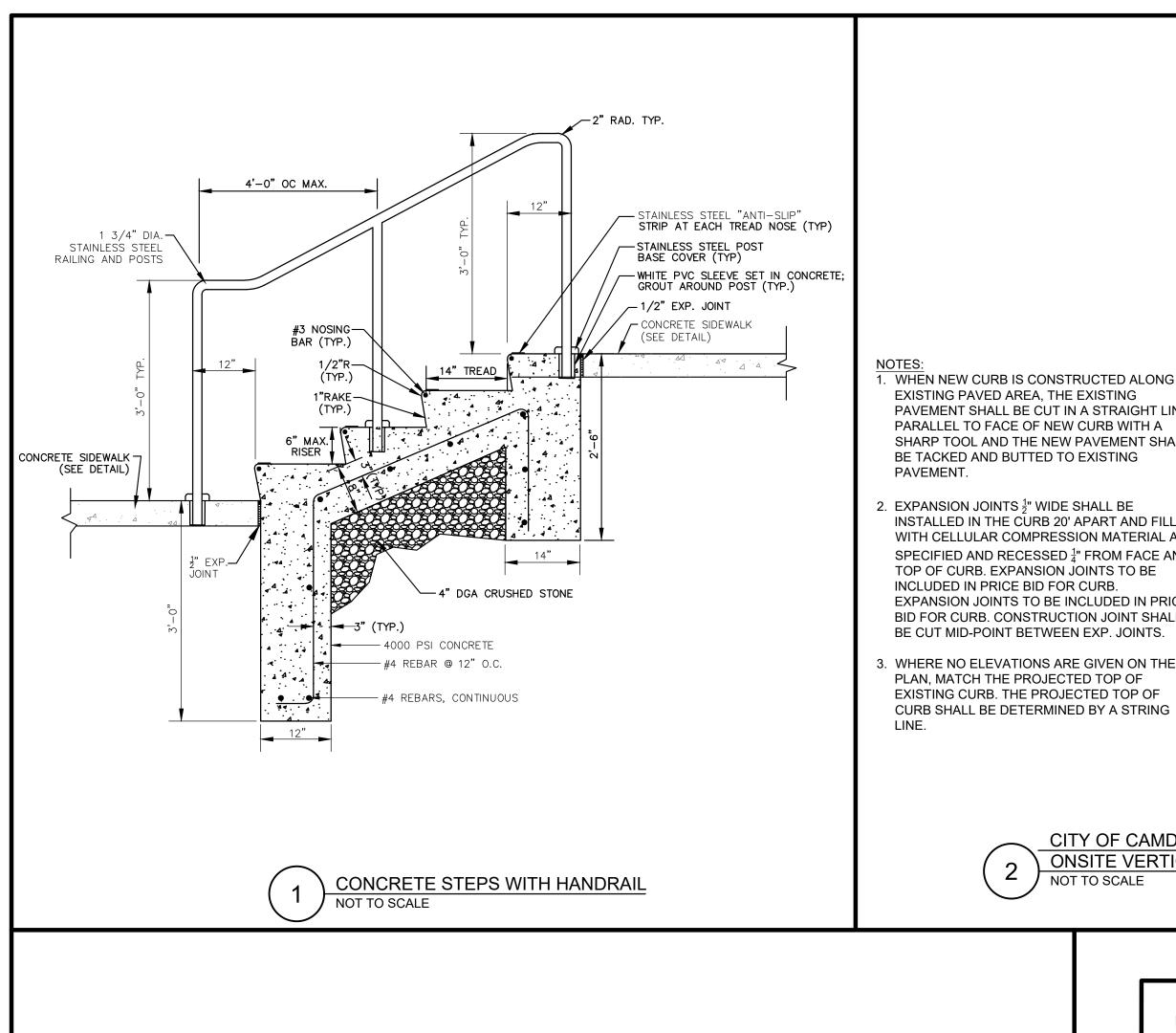
MAY 17, 2024

1"=30'







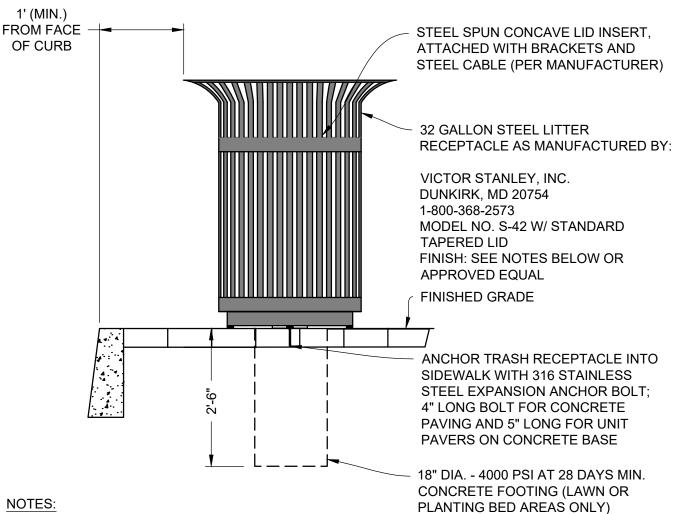


. WHEN NEW CURB IS CONSTRUCTED ALONG AN EXISTING PAVED AREA, THE EXISTING PAVEMENT SHALL BE CUT IN A STRAIGHT LINE PARALLEL TO FACE OF NEW CURB WITH A SHARP TOOL AND THE NEW PAVEMENT SHALL BE TACKED AND BUTTED TO EXISTING PAVEMENT.

2. EXPANSION JOINTS $\frac{1}{2}$ WIDE SHALL BE INSTALLED IN THE CURB 20' APART AND FILLED | CONCRETE 4,500 ~ WITH CELLULAR COMPRESSION MATERIAL AS SPECIFIED AND RECESSED ¹/₄" FROM FACE AND TOP OF CURB. EXPANSION JOINTS TO BE INCLUDED IN PRICE BID FOR CURB. EXPANSION JOINTS TO BE INCLUDED IN PRICE BID FOR CURB. CONSTRUCTION JOINT SHALL BE CUT MID-POINT BETWEEN EXP. JOINTS. 3. WHERE NO ELEVATIONS ARE GIVEN ON THE

- PAVEMENT SURFACE PSI @ 28 DAYS NEW PAVEMENT 8" — SEE NOTE 1

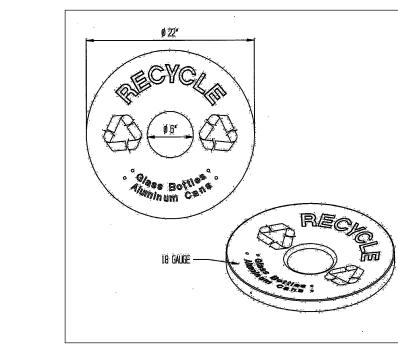
CITY OF CAMDEN VERTICAL CONCRETE CURB & ONSITE VERTICAL CONCRETE CURB DETAIL NOT TO SCALE



TWO TRASH RECEPTACLES SHALL BE PROVIDED AT EACH REFUSE LOCATION.

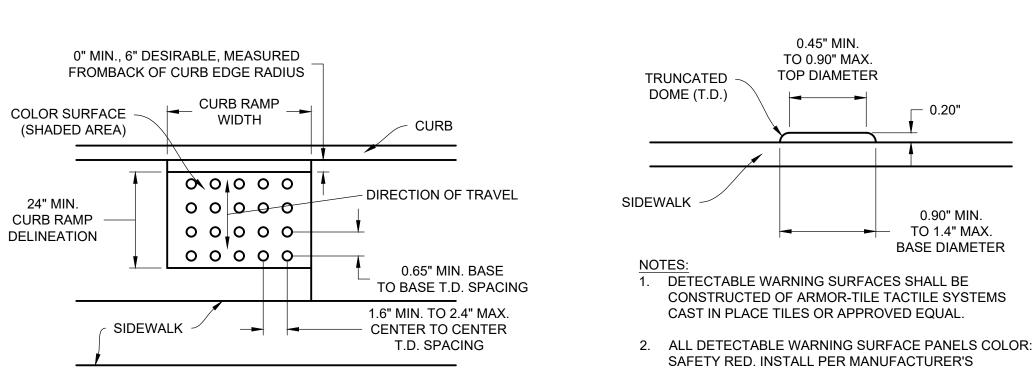
- ONE LID INSERT FOR TRASH RECEPTACLE AND ONE LID INSERT FOR RECYCLE RECEPTACLE. TRASH FINISHED COLOR TO BE BLACK, POWDER COATED. RECYCLE FINISHED COLOR TO BE BLUE, POWDER COATED AND BE MARKED FOR RECYCLABLES.
- CONTRACTOR SHALL PROVIDE THE OWNER WITH CATALOG CUTS FOR SELECTION OF FINAL COLOR PRIOR TO PROCUREMENT OF MATERIAL.
- CONTRACTOR IS TO PROVIDE A COMPLETE INSTALLATION OF BOTH TYPES OF RECEPTACLE CONTAINERS.







RECYCLE LID INSERT



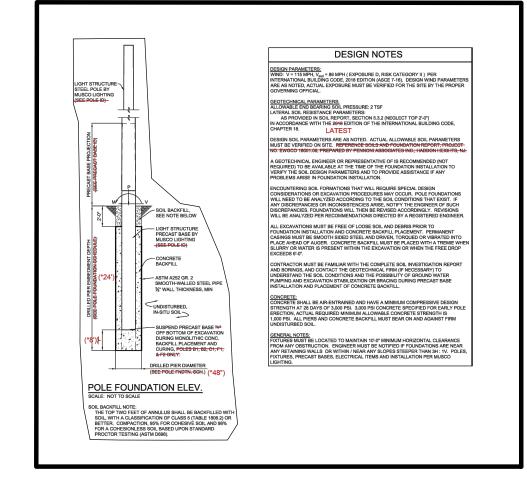
PLAN VIEW

NOT TO SCALE

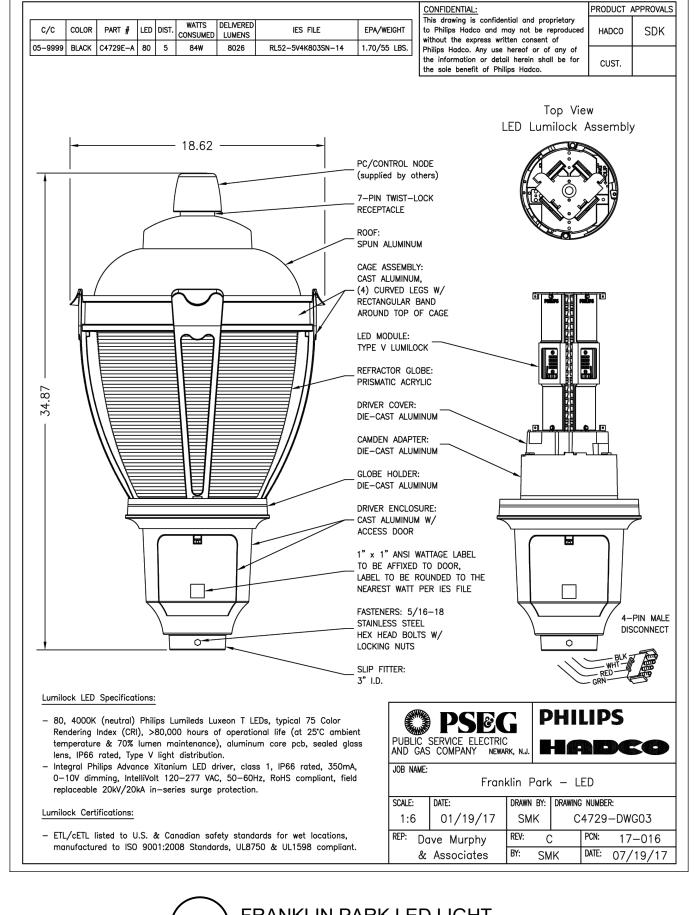
ELEVATION

DETECTABLE WARNING SURFACE (DWS) DETAIL

RECOMMENDATIONS.



SPORT LIGHTING DETAIL NOT TO SCALE



FRANKLIN PARK LED LIGHT NOT TO SCALE

NOT FOR CONSTRUCTION

NOTE: ALL SITE WORK CONSTRUCTION AND

OF THE CITY OF CAMDEN

DETAILS MUST CONFORM TO THE STANDARDS

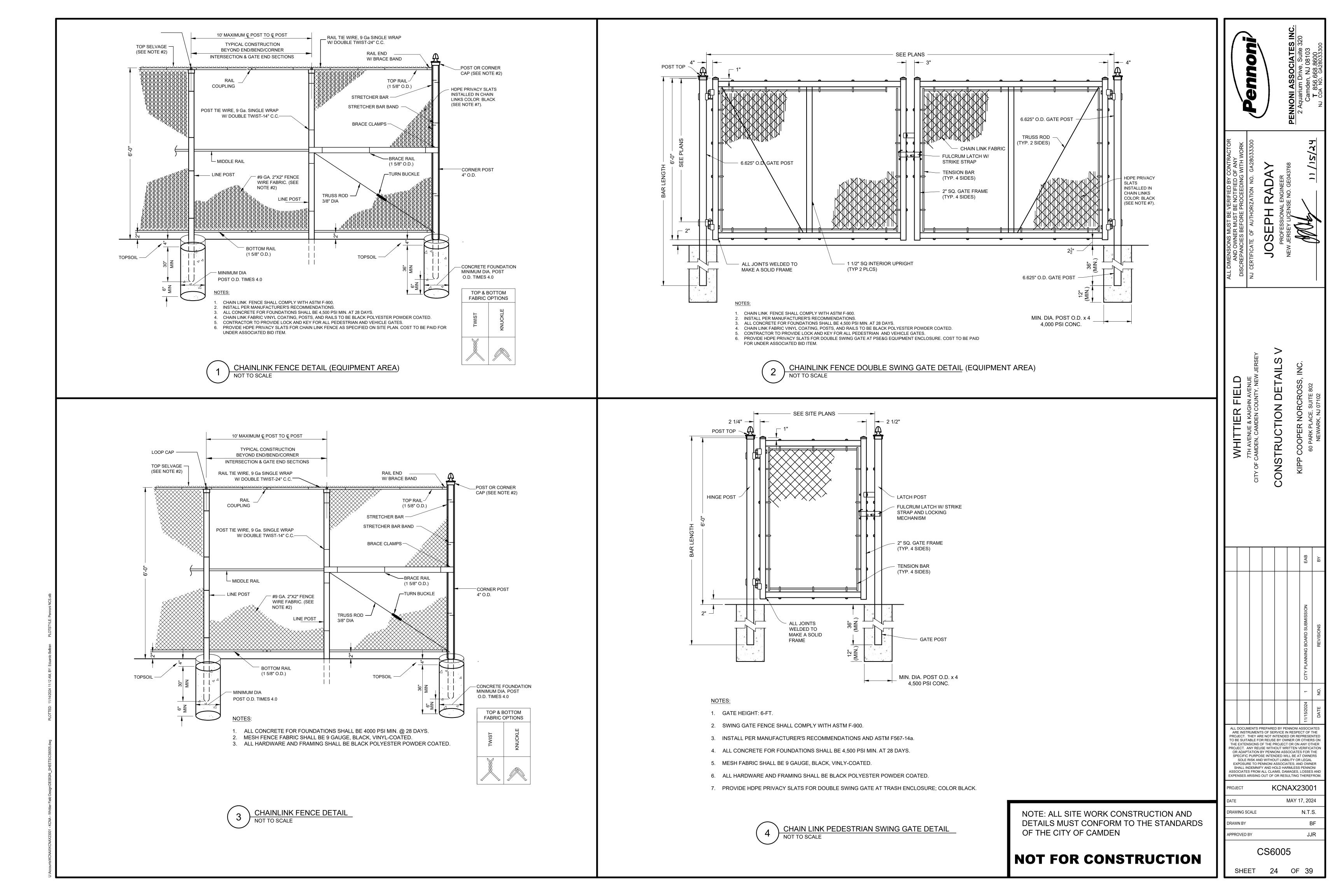
JOSEPH TRUCTION

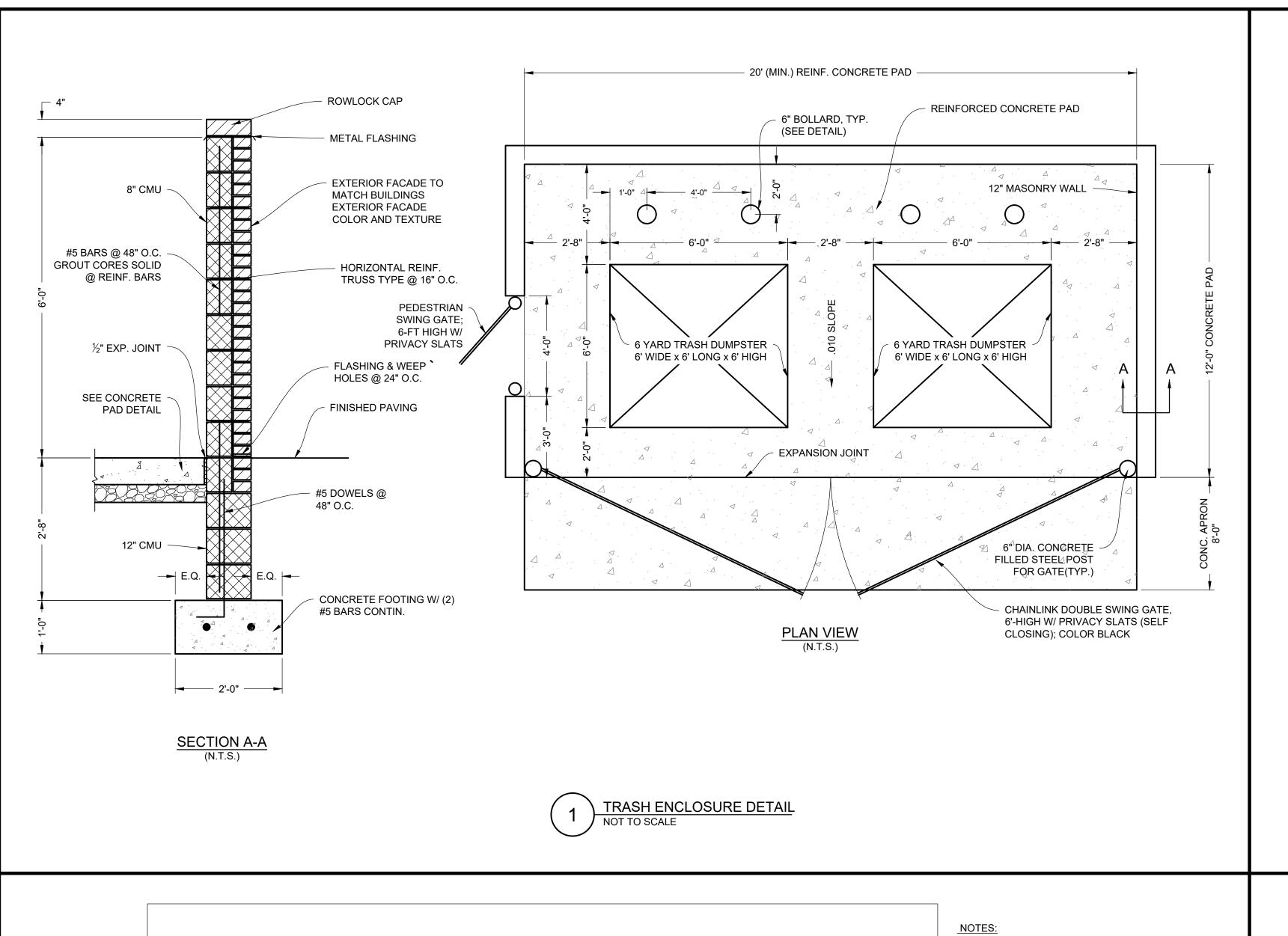
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS OF THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AN EXPENSES ARISING OUT OF OR RESULTING THEREFRO

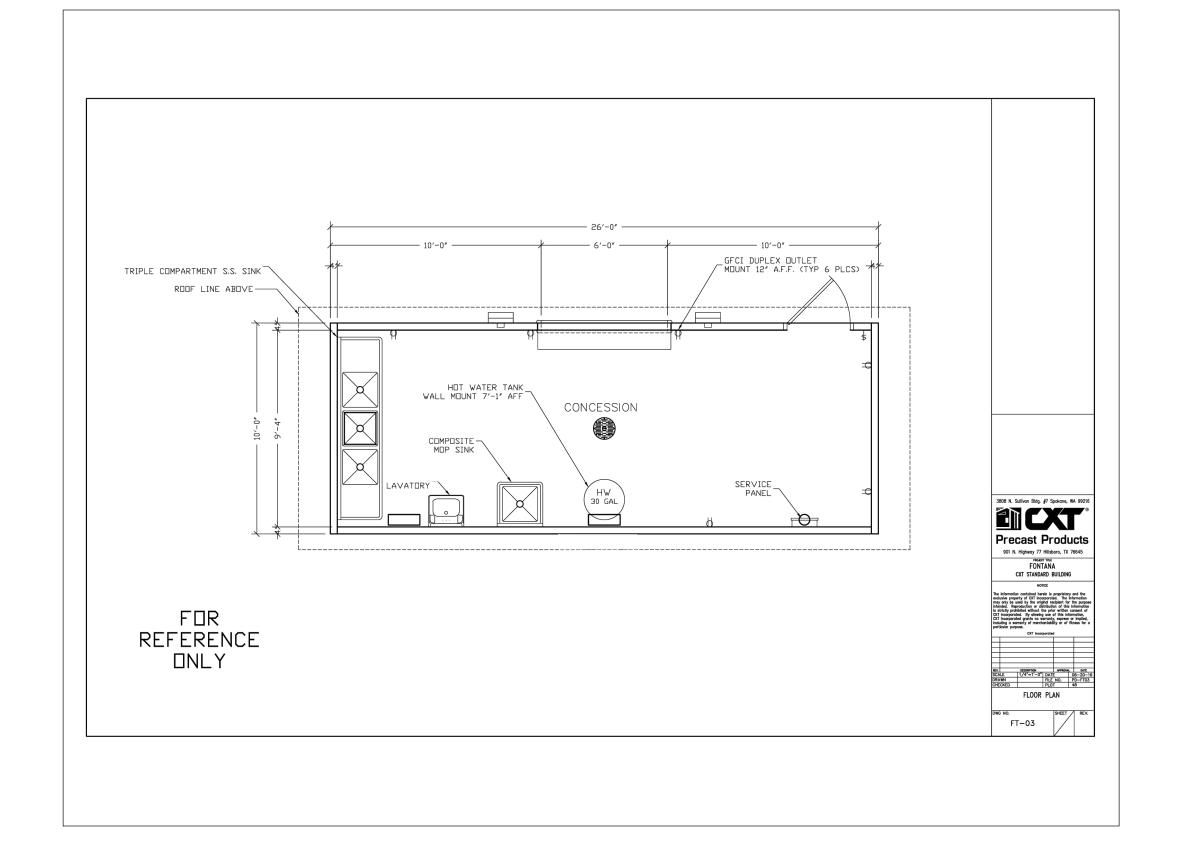
KCNAX2300 MAY 17, 2024 DRAWING SCALE N.T.S. RAWN BY PPROVED BY

CS6004

SHEET 23 OF 39





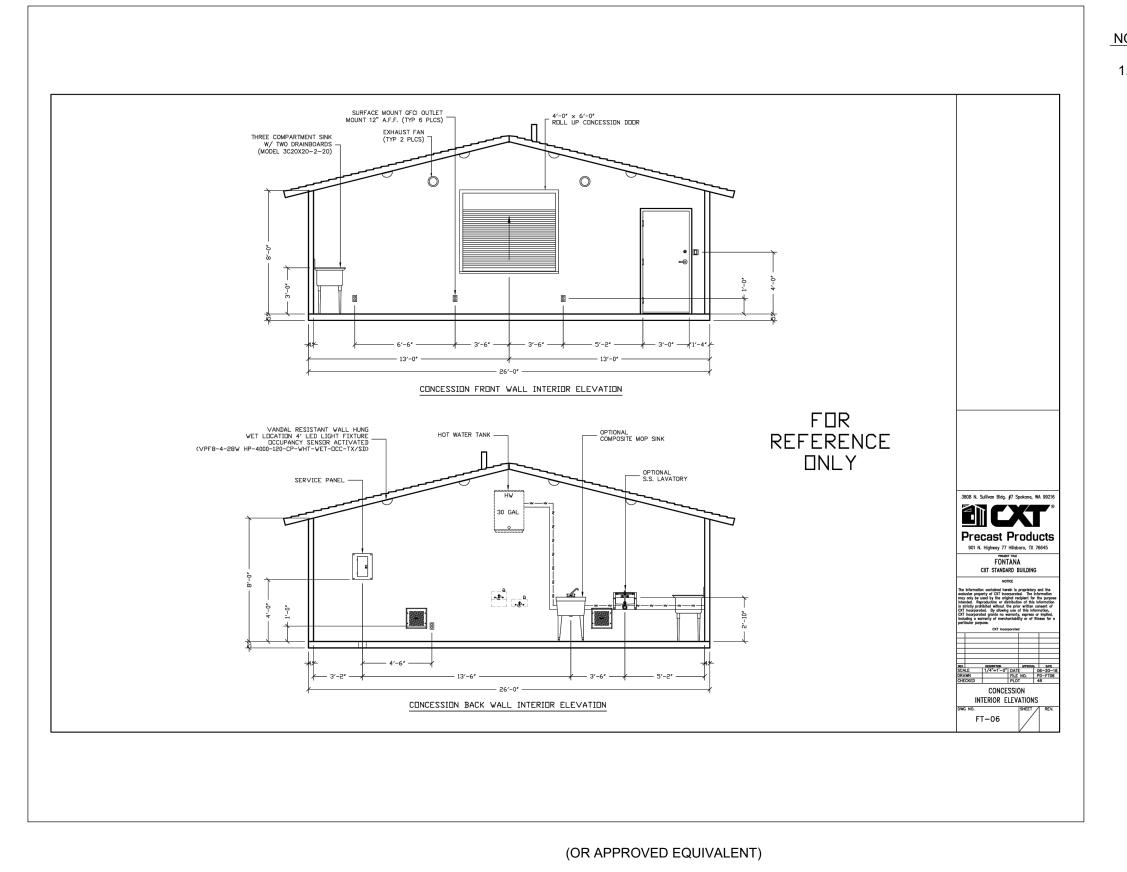


(OR APPROVED EQUIVALENT)

- 1. CONTRACTOR TO COORDINATE DESIGN WITH MANUFACTURER REGARDING HVAC, MECHANICAL, ELECTRICAL, UTILITIES AND PLUMBING.
- 2. CONTRACTOR TO INTALL VAPOR BARRIER UNDER SLAB.

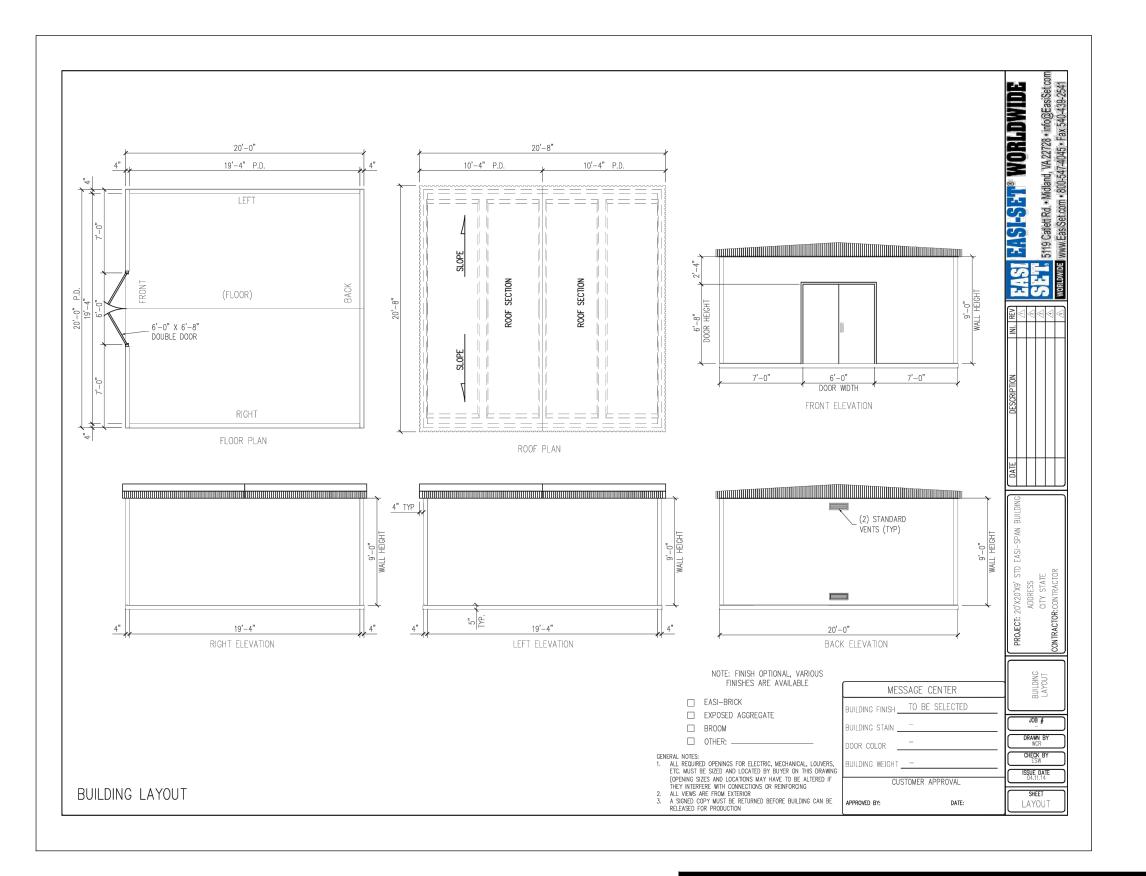
NOTES:

CONCESSION STAND FLOOR PLAN DETAIL



CONCESSION STAND ELEVATION PLAN DETAIL

1. CONTRACTOR TO COORDINATE DESIGN WITH MANUFACTURER REGARDING ELECTRICAL.



NOTES:

(OR APPROVED EQUIVALENT) 1. CONTRACTOR TO COORDINATE DESIGN WITH

> STORAGE SHED PLAN DETAIL NOT TO SCALE

MANUFACTURER REGARDING ELECTRICAL.

NOTE: ALL SITE WORK CONSTRUCTION AND DETAILS MUST CONFORM TO THE STANDARDS OF THE CITY OF CAMDEN

NOT FOR CONSTRUCTION

JOSEPH

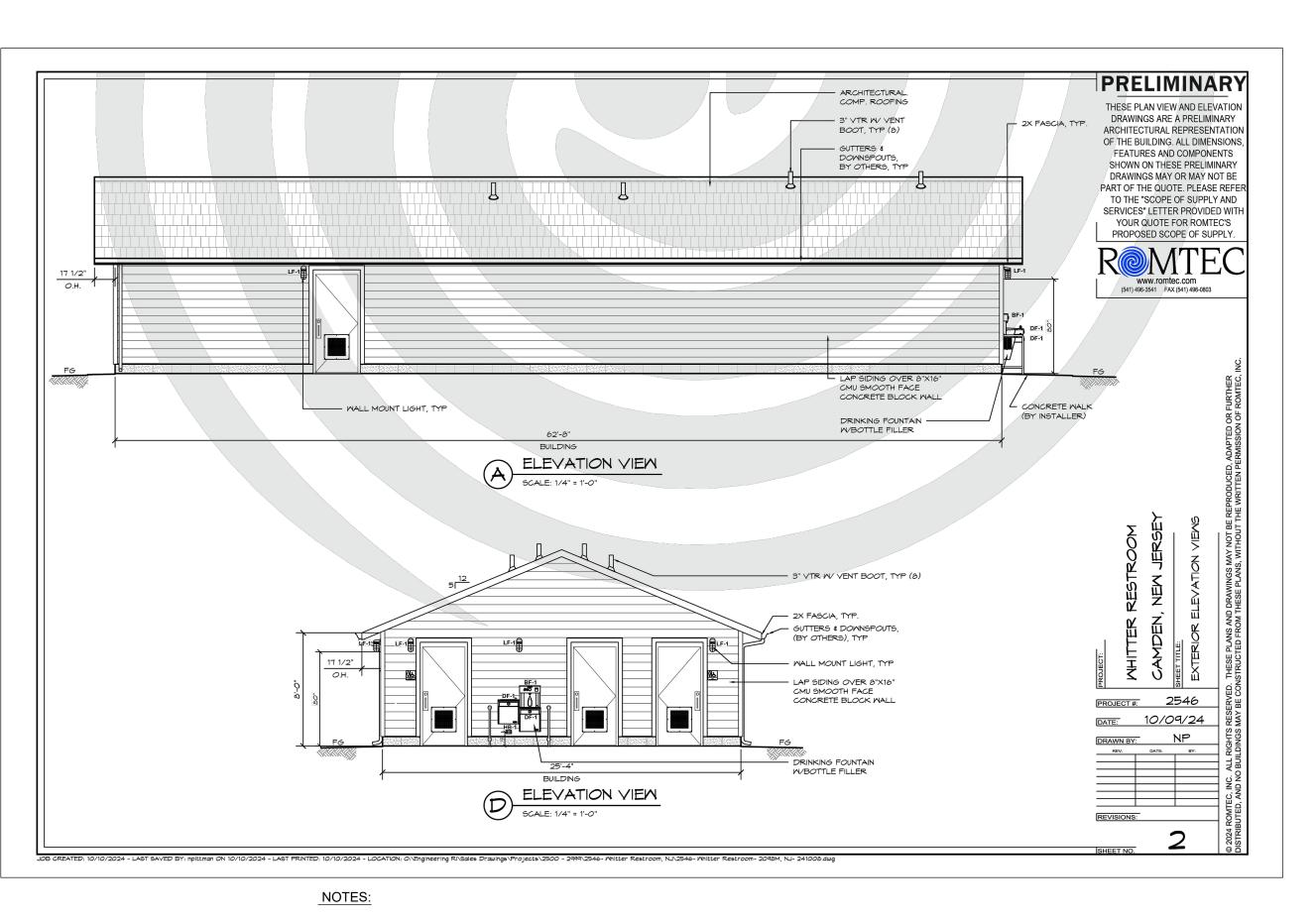
NOIL

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS OF THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AN EXPENSES ARISING OUT OF OR RESULTING THEREFROM

KCNAX23007 MAY 17, 2024 N.T.S. RAWING SCALE DRAWN BY

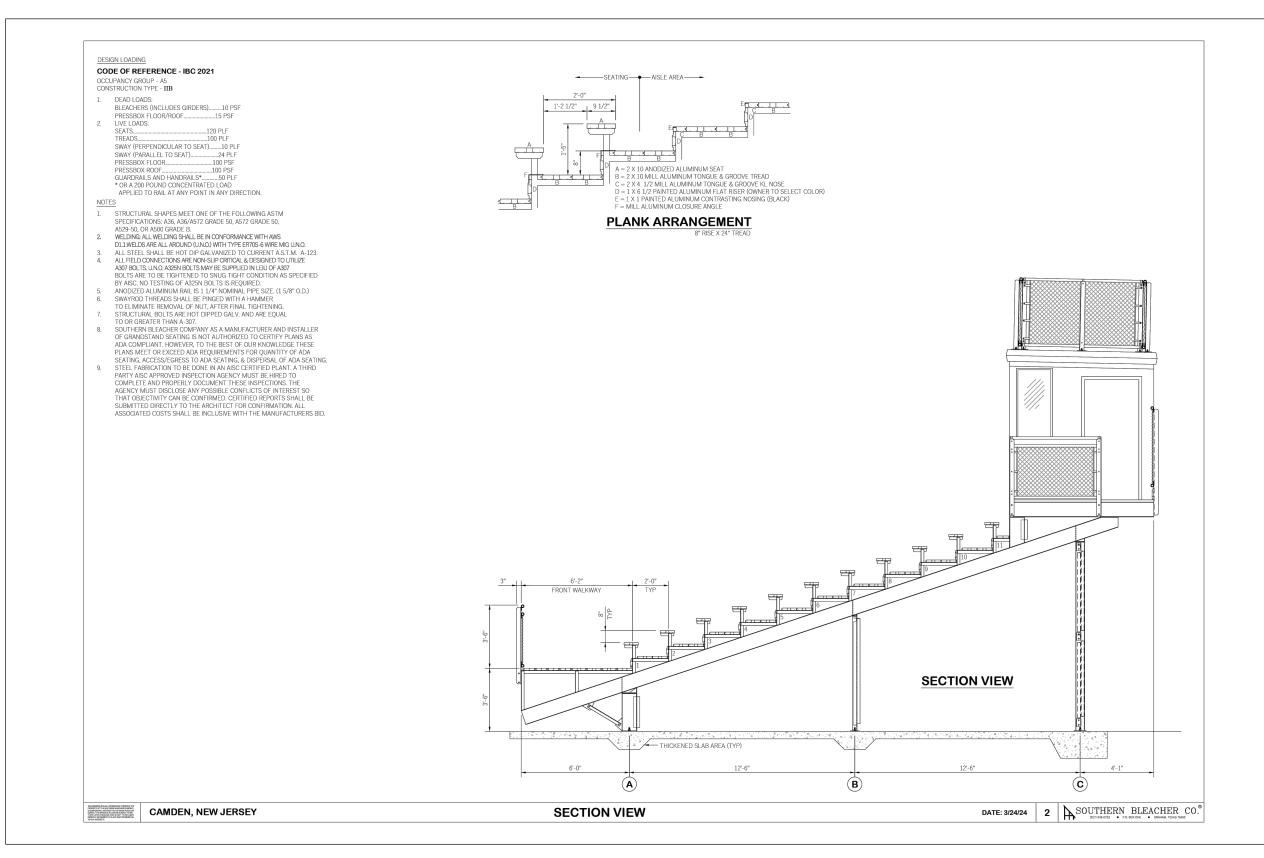
PPROVED BY CS6006

SHEET 25 OF 39



- CONTRACTOR TO COORDINATE DESIGN WITH MANUFACTURER REGARDING HVAC, MECHANICAL, ELECTRICAL, UTILITIES AND PLUMBING.
- 2. CONTRACTOR TO INTALL VAPOR BARRIER UNDER SLAB.

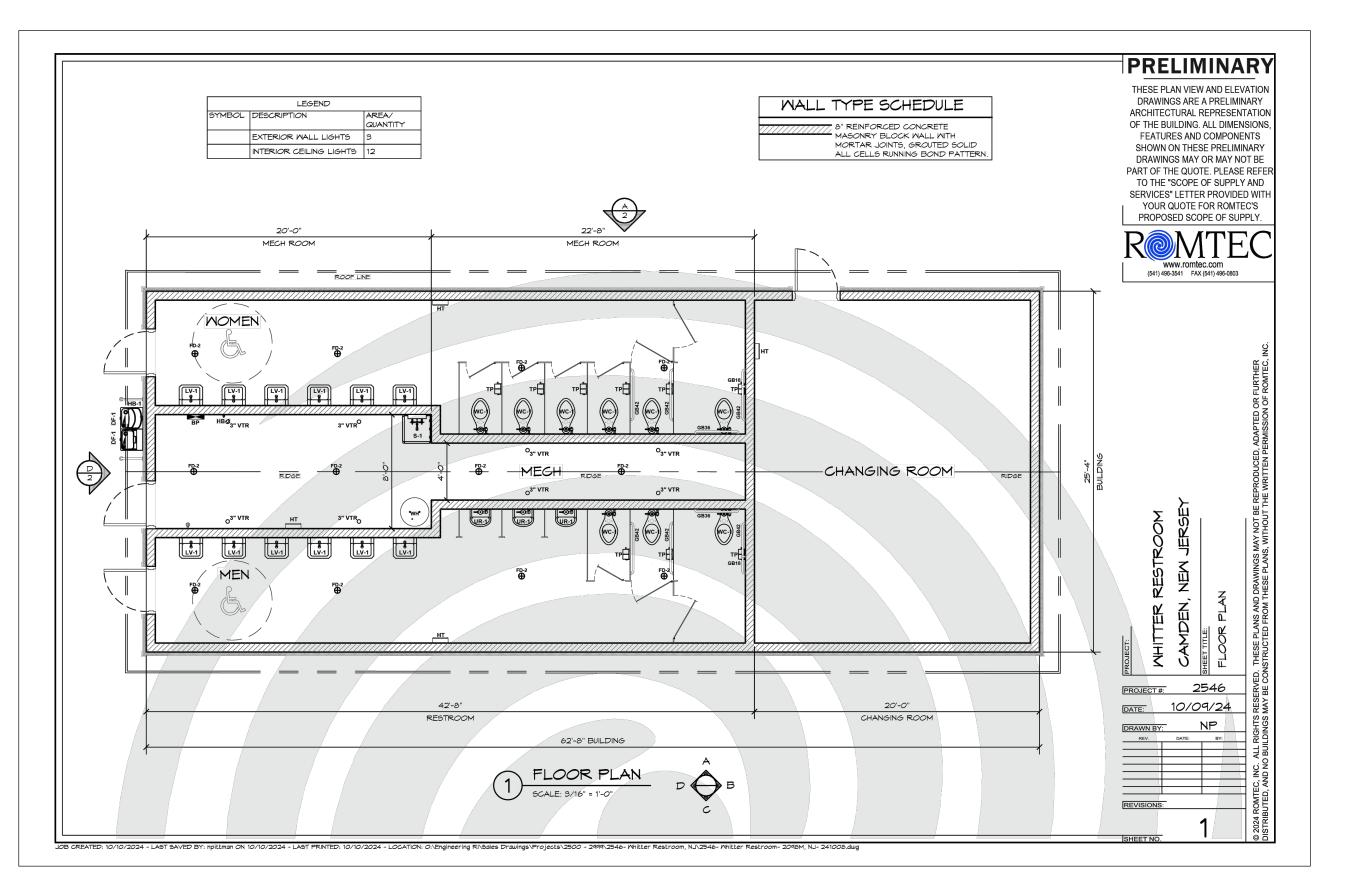




NOTE:

CONTRACTOR TO COORDINATE DESIGN WITH MANUFACTURER REGARDING ELECTRICAL AND COMMUNICATION.

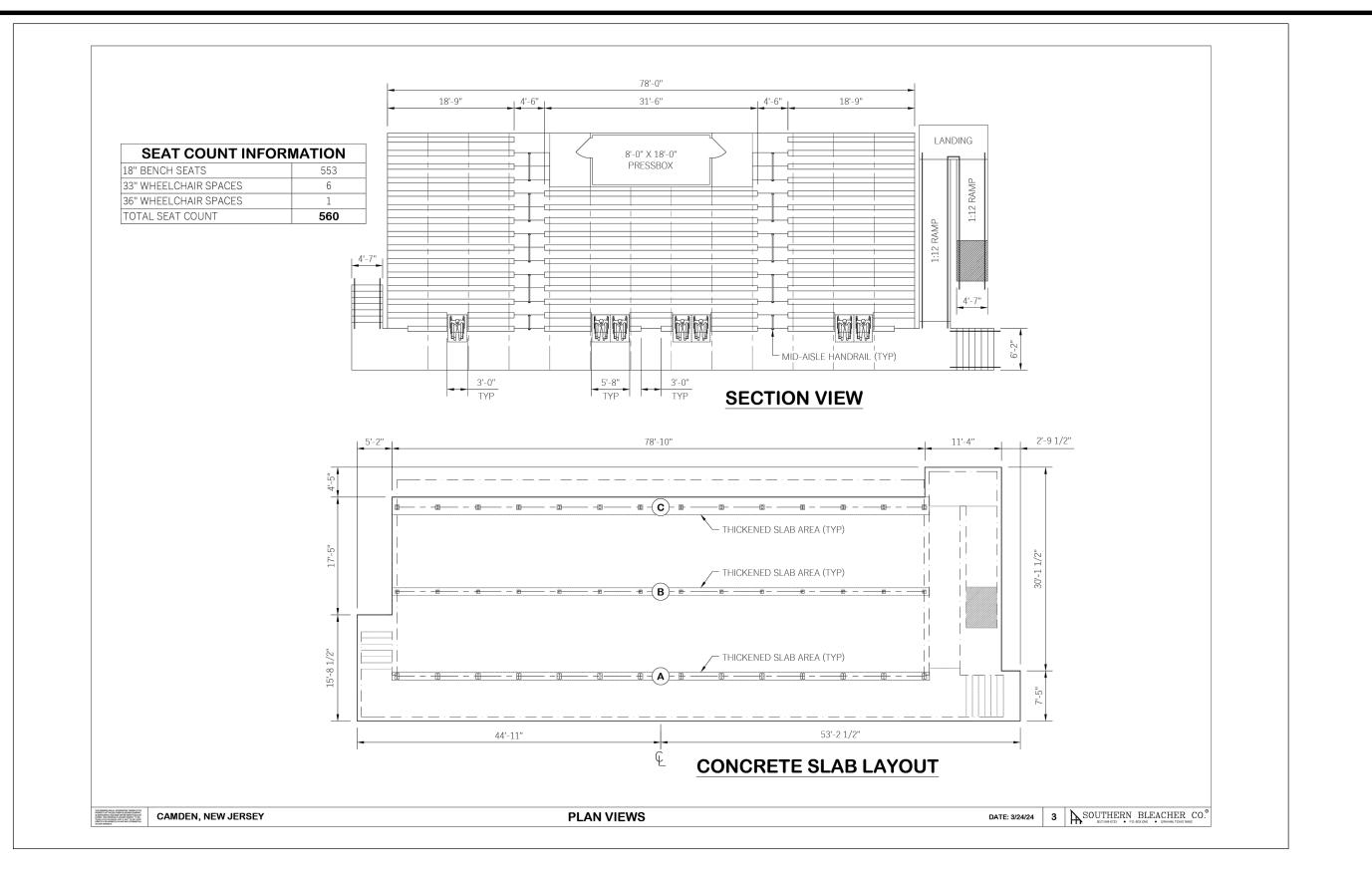
BLEACHER SECTION VIEW DETAIL



NOTES:

- CONTRACTOR TO COORDINATE DESIGN WITH MANUFACTURER REGARDING HVAC, MECHANICAL, ELECTRICAL, UTILITIES AND PLUMBING.
- 2. CONTRACTOR TO INTALL VAPOR BARRIER UNDER SLAB.





NOTE:

CONTRACTOR TO COORDINATE DESIGN WITH MANUFACTURER REGARDING ELECTRICAL AND COMMUNICATION.



BLEACHER PLAN VIEW DETAIL

NOTE: ALL SITE WORK CONSTRUCTION AND DETAILS MUST CONFORM TO THE STANDARDS OF THE CITY OF CAMDEN

NOT FOR CONSTRUCTION

Pennoni

PENNONI ASSOCIATE

JOSEPH RADAY

PROFESSIONAL ENGINEER

NEW JERSEY LICENSE NO. GE043768

TAILS VIII SS, INC.

CONSTRUCTION DETAIL
KIPP COOPER NORCROSS, INC

11/15/2024 1 CITY PLANNING BOARD SUBMISSION EAB
DATE NO. REVISIONS BY

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS OF THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES ANI EXPENSES ARISING OUT OF OR RESULTING THEREFROM

PROJECT KCNAX23001

DATE MAY 17, 2024

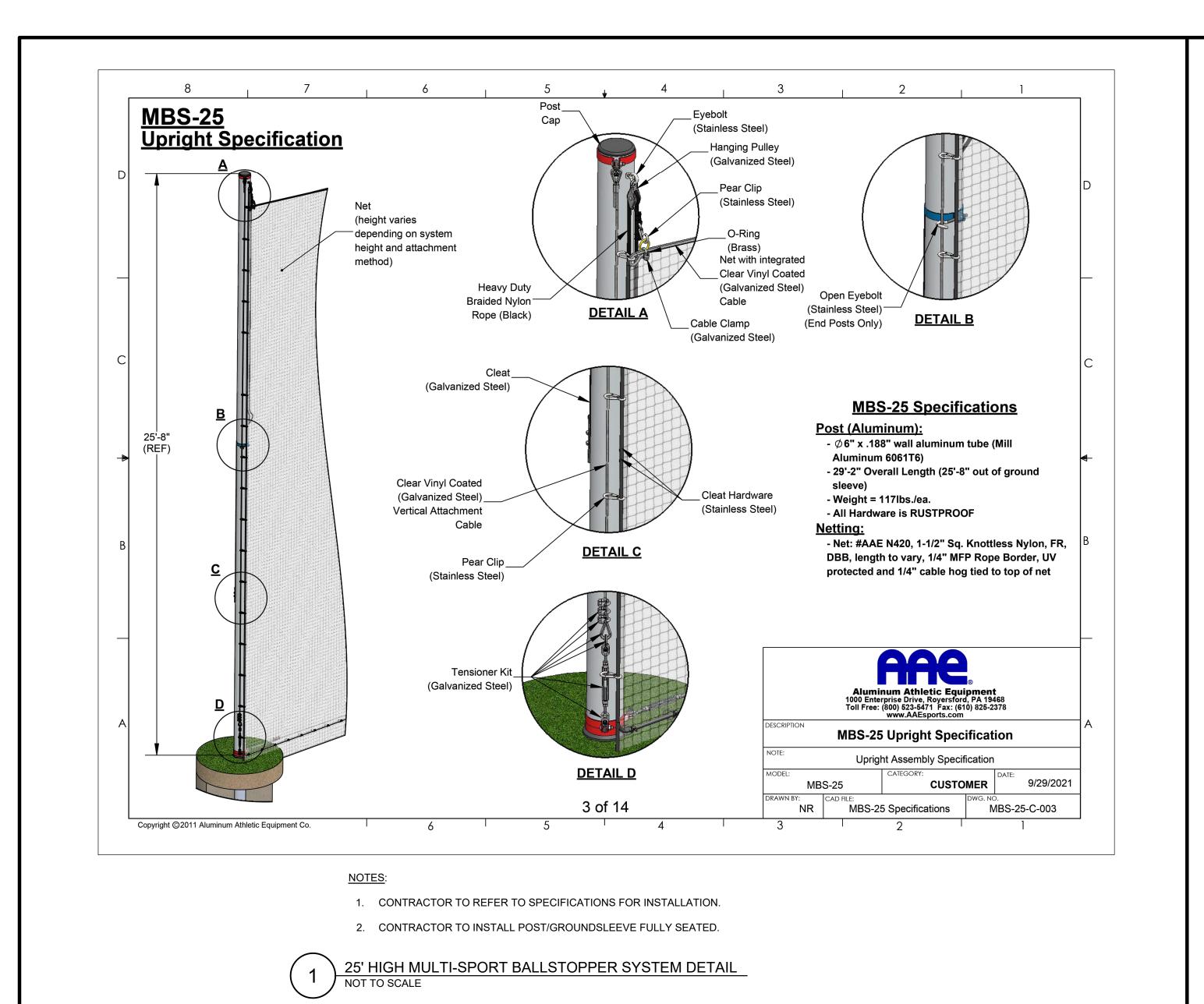
DRAWING SCALE N.T.S.

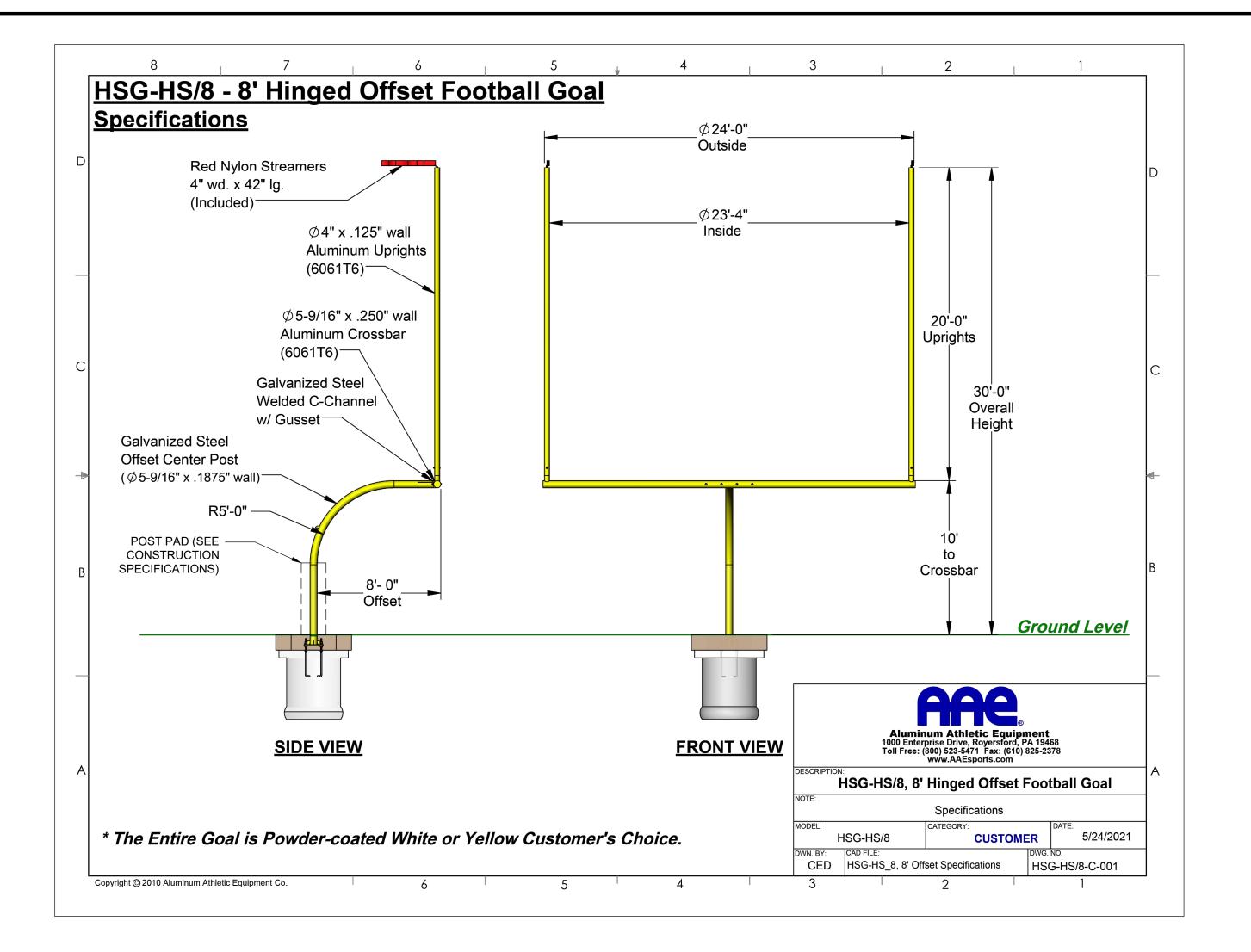
DRAWN BY BF

CS6007

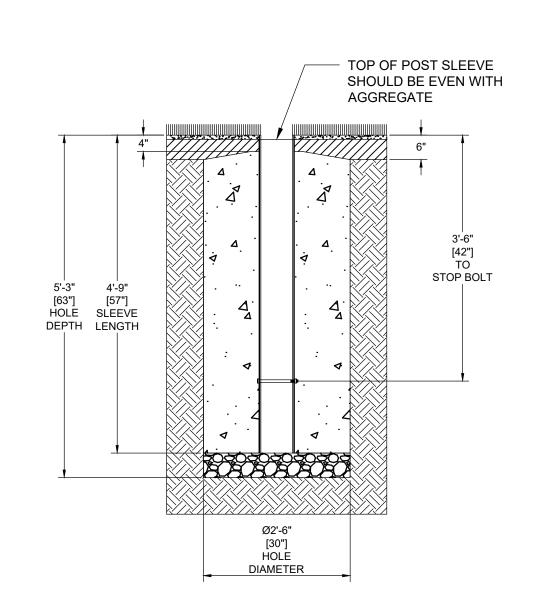
JJR

SHEET 26 OF 39

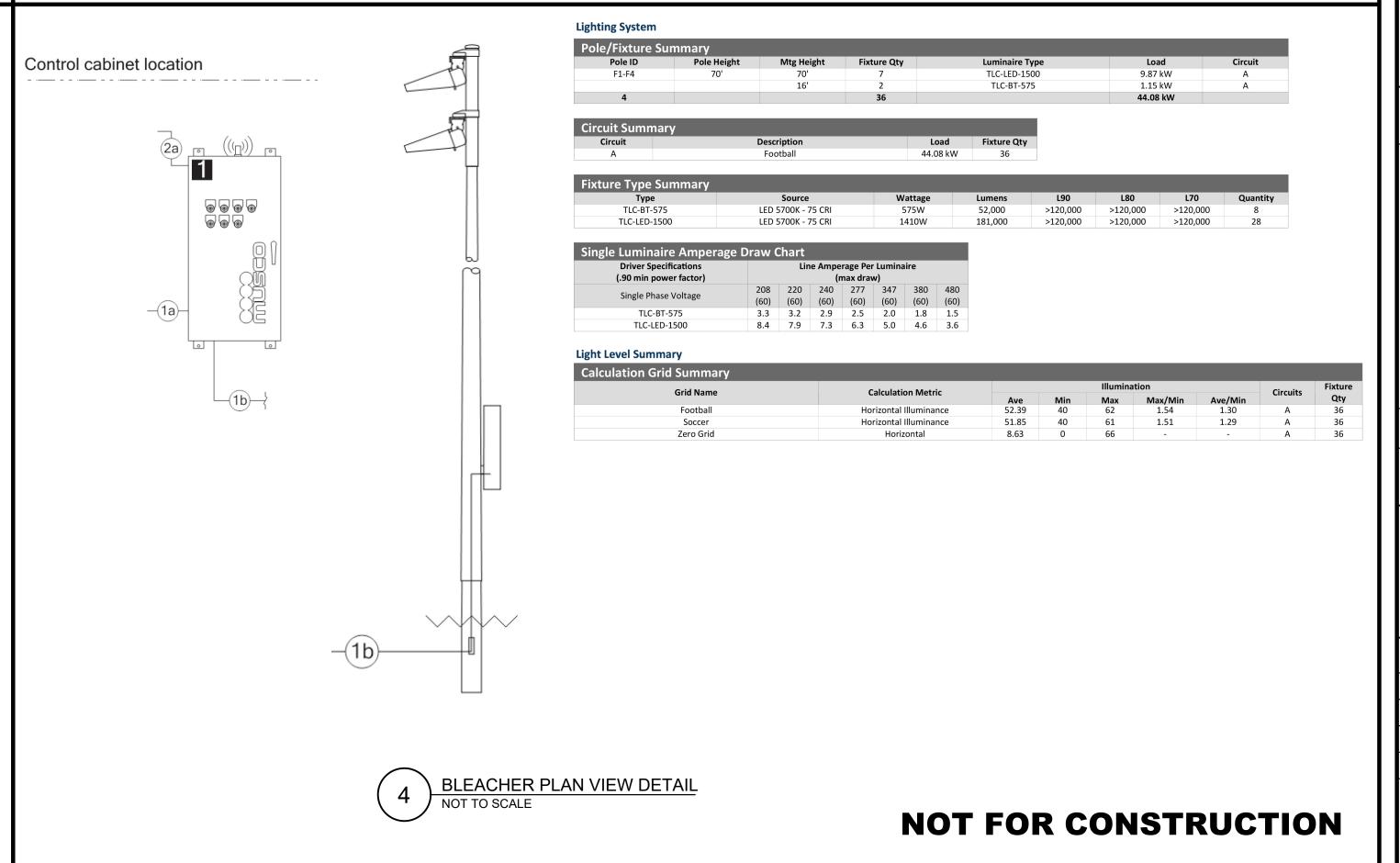




2 FOOTBALL GOAL DETAIL
NOT TO SCALE



BALL STOPPER POST FOUNDATION DETAIL

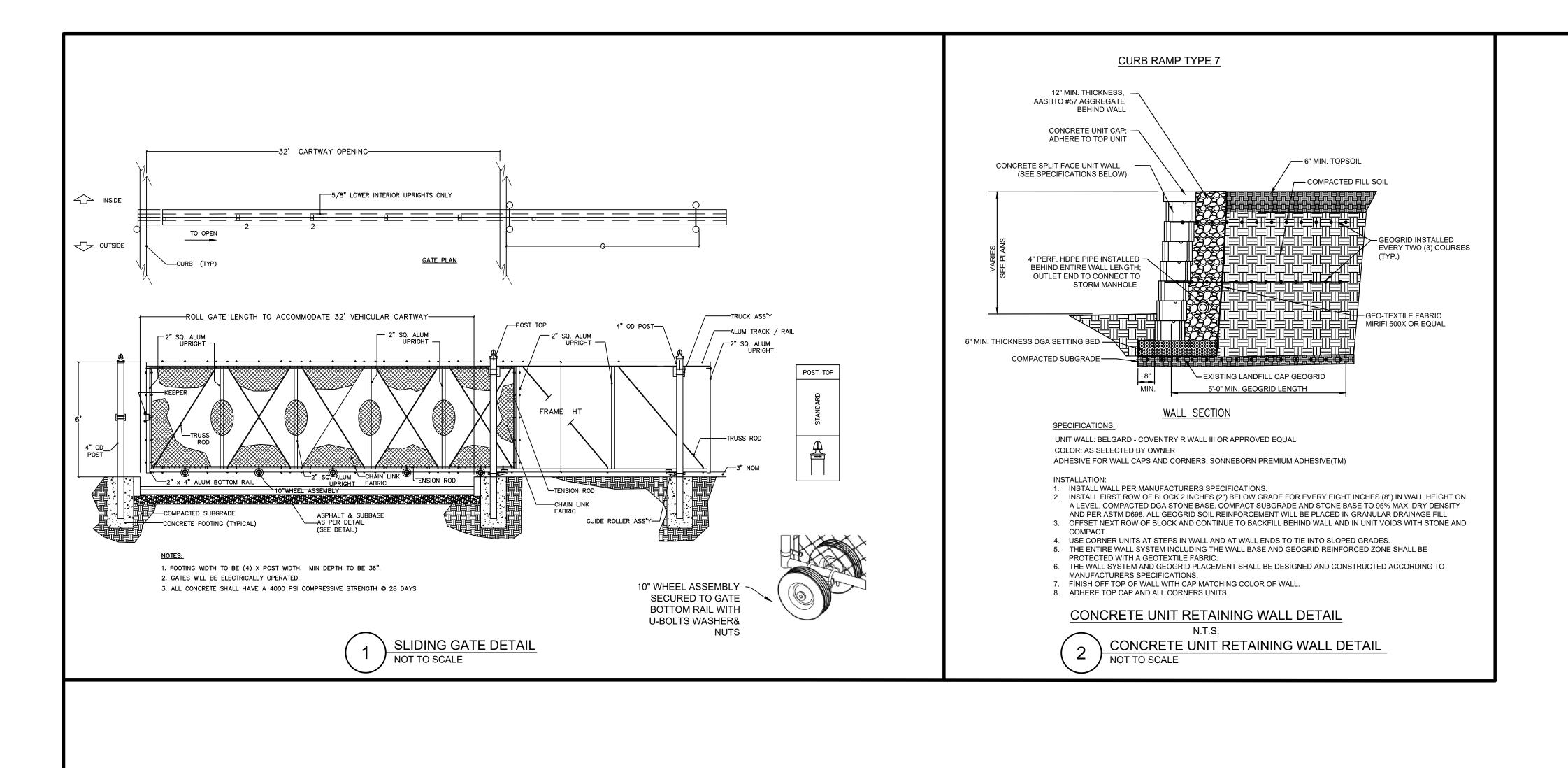




APPROVED BY

CS6008

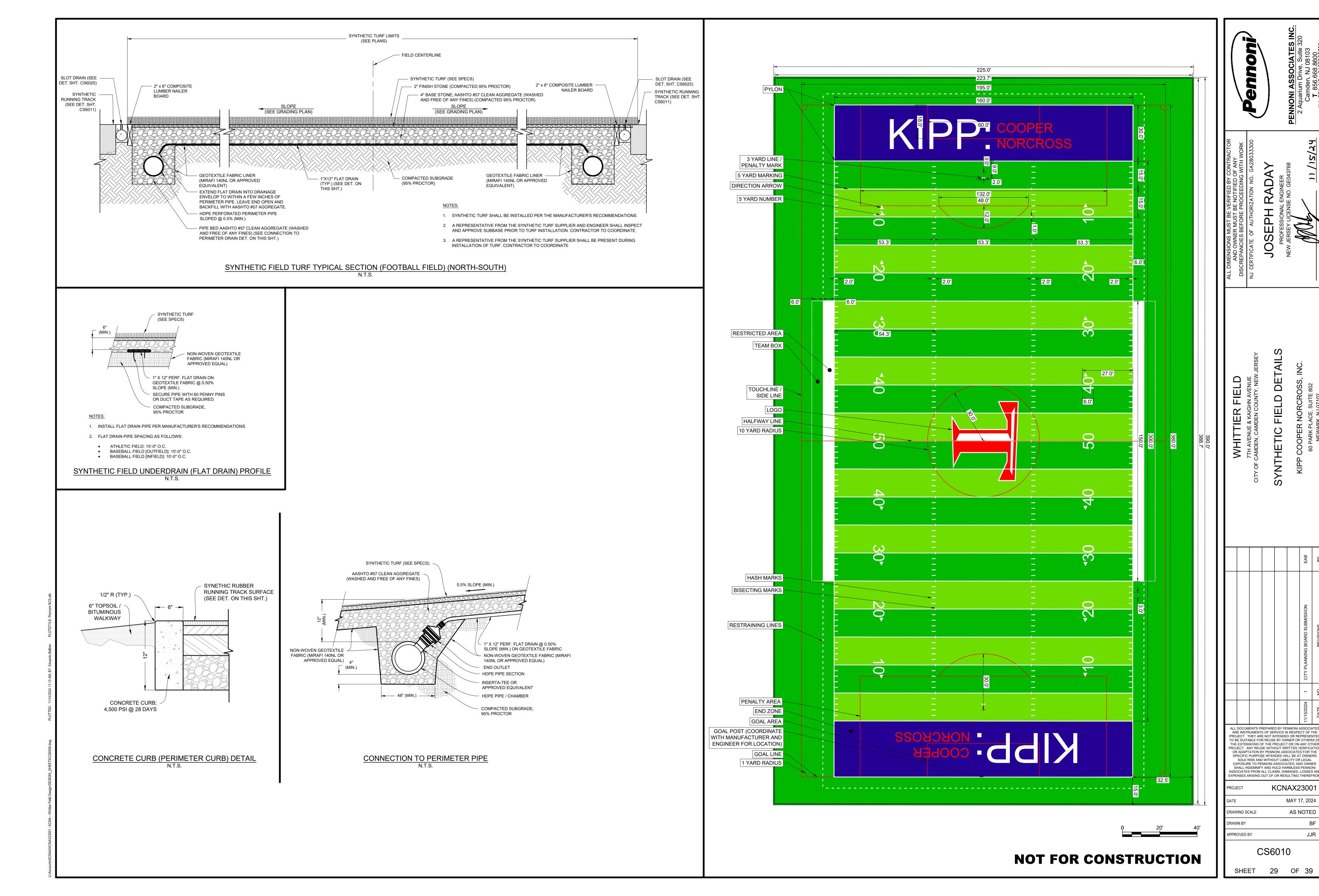
SHEET 27 OF 39

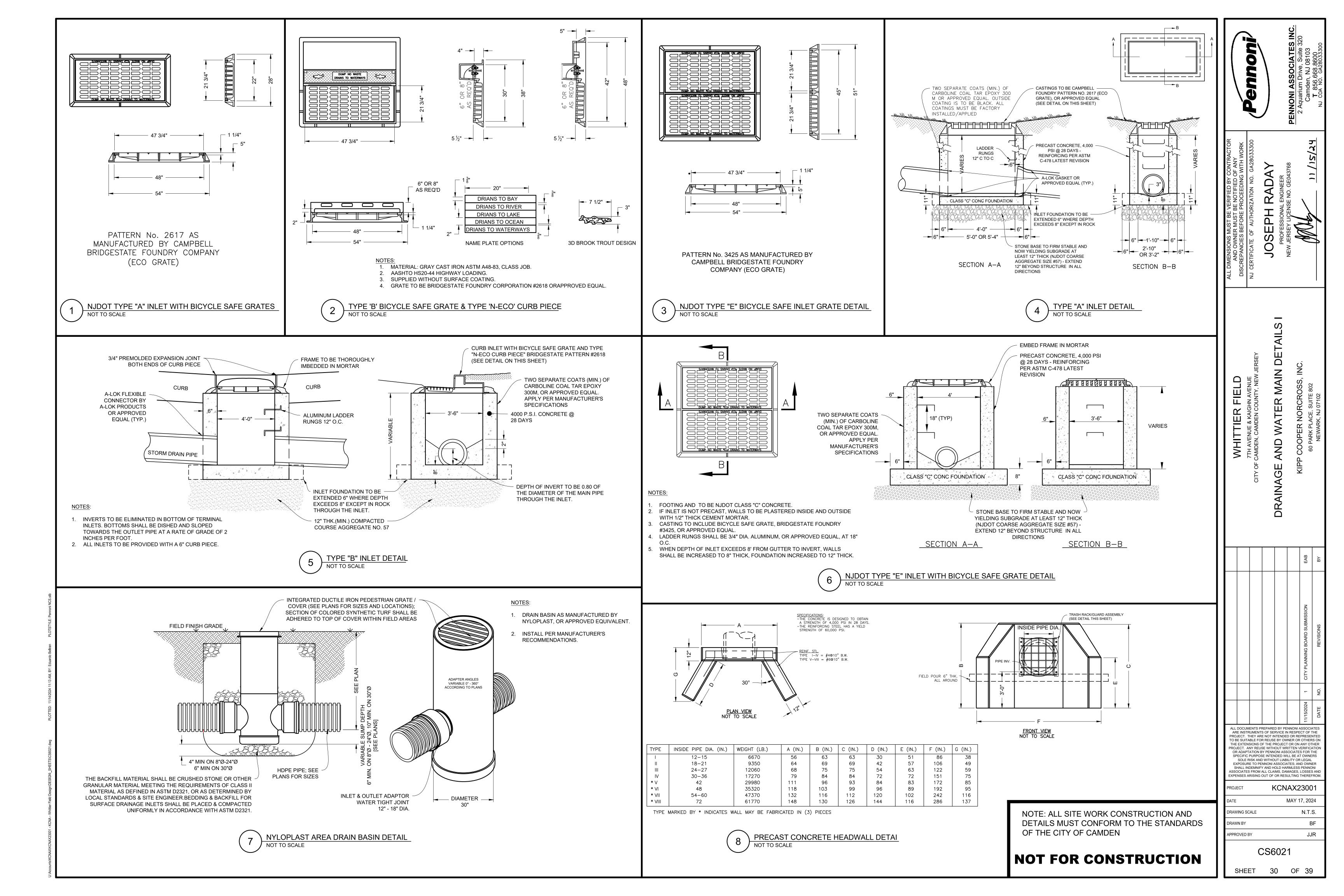


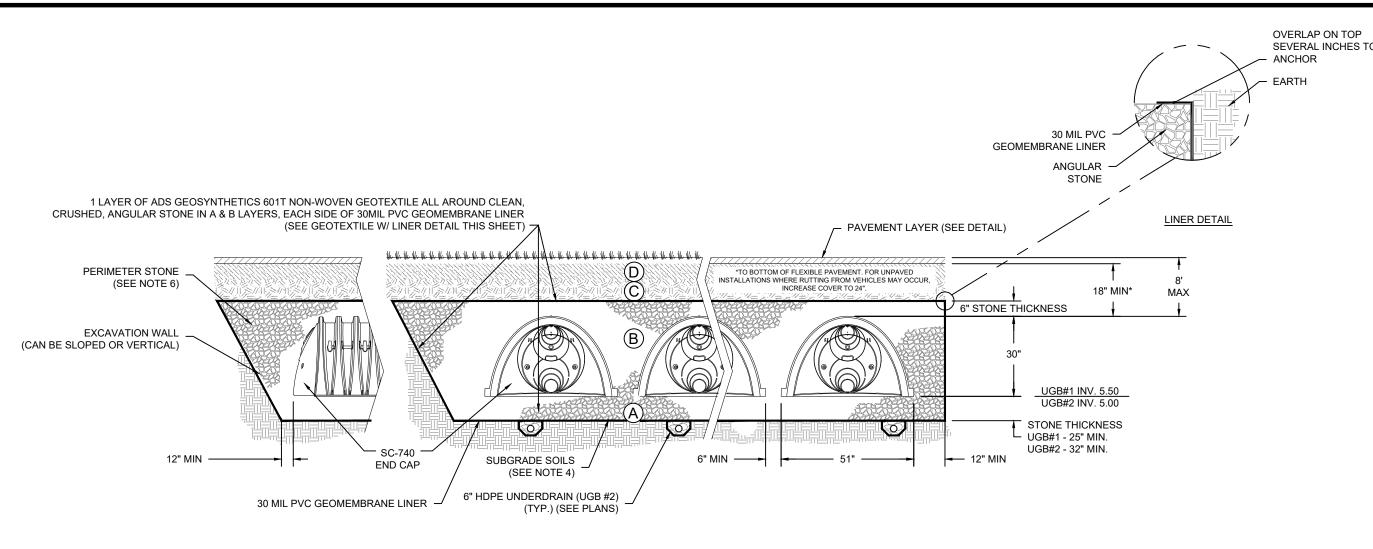
NOTE: ALL SITE WORK CONSTRUCTION AND DETAILS MUST CONFORM TO THE STANDARDS OF THE CITY OF CAMDEN

NOT FOR CONSTRUCTION

	<u> </u>		PENNO		
ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK	NJ CERTIFICATE OF AUTHORIZATION NO. GA28033300	JOSEPH RADAY	NEW JERSEY LICENSE NO. GE043768		
WHITTIER FIELD	7TH AVENUE & KAIGHN AVENUE CITY OF CAMDEN, CAMDEN COUNTY, NEW JERSEY	CONSTRUCTION DETAILS IX		KIPP COOPER NORCROSS, INC. 60 PARK PLACE, SUITE 802	NEWARK, NJ 07102
	CIT)		
	CIT			EAB	BY
	CIT				REVISIONS BY
	CIT			1 CITY PLANNING BOARD SUBMISSION EAB	
				11/15/2024 1 CITY PLANNING BOARD SUBMISSION EAB	DATE NO. REVISIONS
ARE INS PROJECT TO BE SIX THE EXT PROJECT OR ADA SPECIF SOL EXPOS SHALL ASSOCIA	UMENTS P STRUMENT THEY AR INTABLE FO ENSIGNS E RISK ANI URE TO PE INDEMNIF ES FROM S ARISING	REPARED BY S OF SERVICE RE REUSE BY DF THE PROJ SE WITHOUT I SE INTENDED D WITHOUT L ENNONI ASSO V AND HOLD ALL CLAIMS, OUT OF OR I	PENNOI CE IN RES VIDED OR OWNER PECTION (C ASSOCIA DWILL BE LIABILITY) DCIATES; HARMLE DAMAGE RESULTIN	EAB CITY PLANNING BOARD SUBMISSION CITY PLANNING BOARD SUBMI	DATE NO. BEVISIONS REVISIONS REVISIONS 1
ARE IN: PROJECT TO BE SIL THE EXT PROJECT OR ADA SPECIF SOL EXPOS SHALL ASSOCIA' EXPENSE PROJECT DATE DRAWING	UMENTS PETRUMENT THEY ARE UENSIONS OF THE PETRUMENT ANY REU PRATION E IC PURPO E RISK ANI URE TO PE INDEMNIF TES FROM S ARISING S ARISING	REPARED BY S OF SERVICE RE REUSE BY DF THE PROJ SE WITHOUT I SE INTENDED D WITHOUT L ENNONI ASSO V AND HOLD ALL CLAIMS, OUT OF OR I	Y PENNOI CE IN RES VIDED OR OWNER ECT OR (TWITTE ASSOCIA DWILL BE LIABILITY DCIATES; HARMLE DAMAGE RESULTIN	EAB CITY PLANNING BOARD SUBMISSION CITY PLANNING BOARD SUBMI	ON JESS ER SANDING TO STREET ON STREET ON SERVISIONS OF SANDING TO STREET ON SERVICE OF SANDING TO SANDING







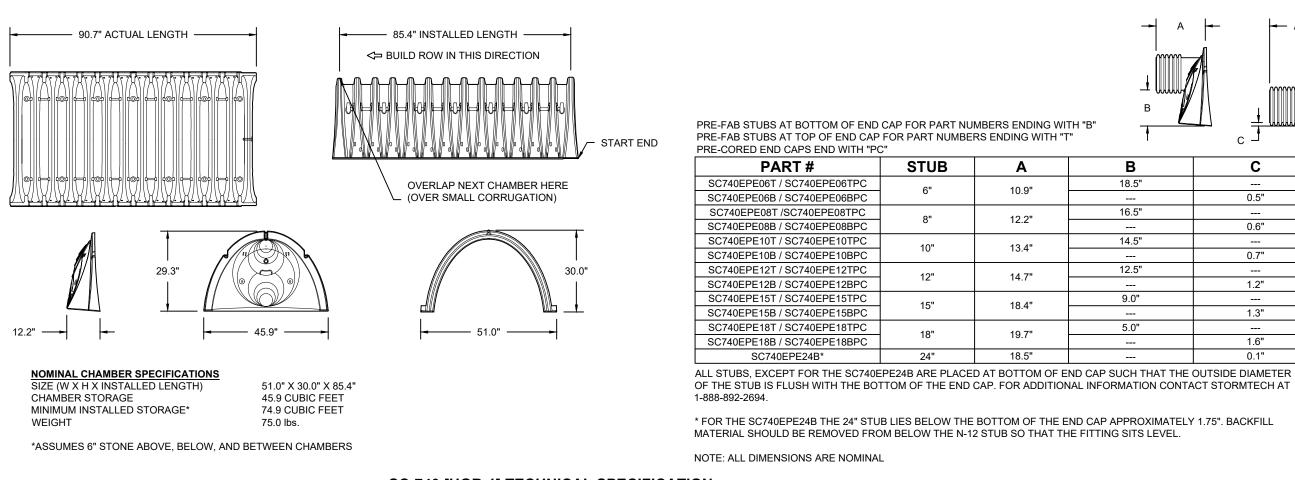
	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
С	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	OR	BEGIN COMPACTIONS AFTER 12" OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs. DYNAMIC FORCE NOT TO EXCEED 20,000 lbs.
В	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
А	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2 3}

1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M.3) STONE"

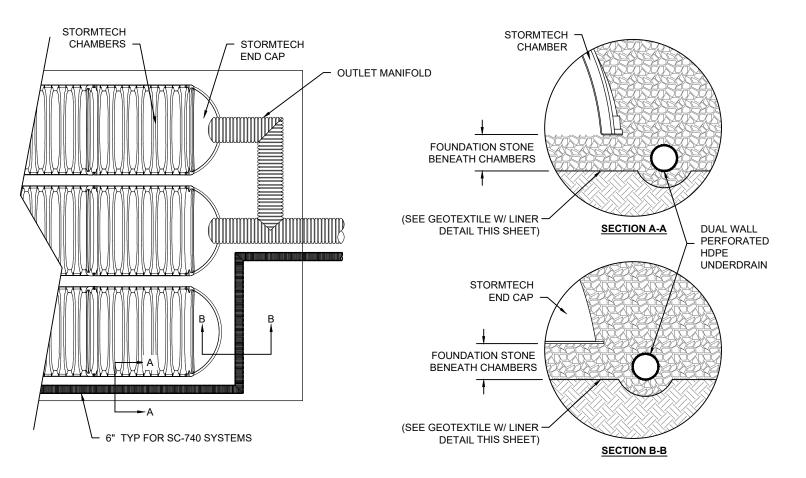
- ANGULAR NO. 4 (ASSTICEMENT) STONE:
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION
- EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

 4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS [UGB-1]

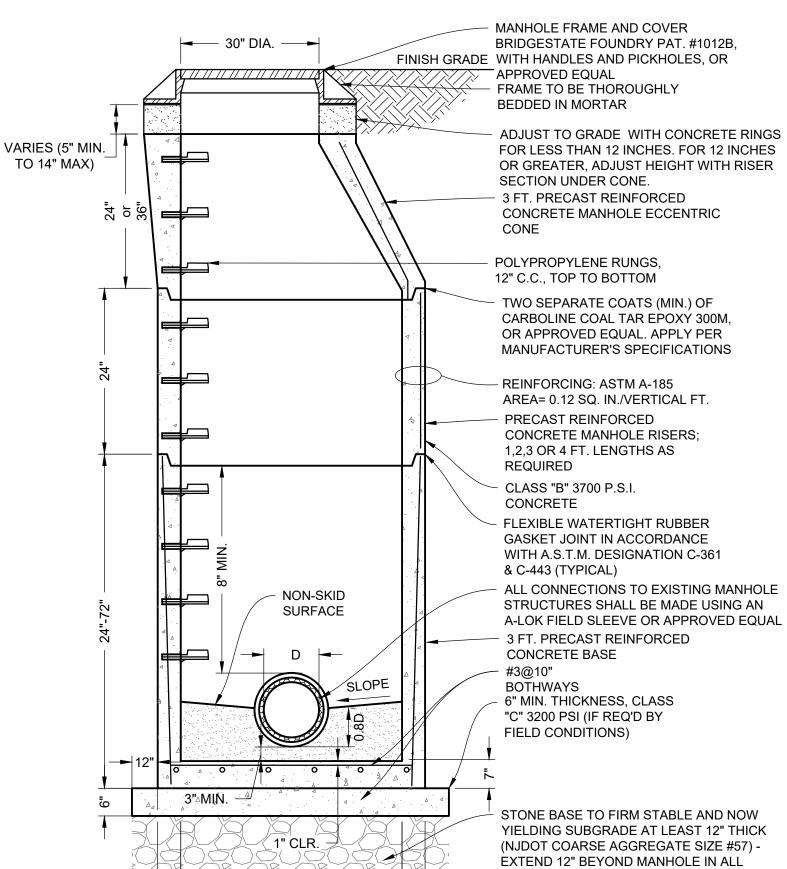


SC-740 [UGB-1] TECHNICAL SPECIFICATION NTS



UNDERDRAIN DETAIL

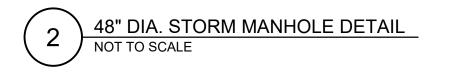
UGB-1 [SC-740] AND UGB-2 [MC-3500] SUBSURFACE DETENTION BASIN DETAILS



DIRECTIONS

NOTES

- 1. PRECAST MANHOLE IN ACCORDANCE WITH A.S.T.M DESIGNATION C-478, MINIMUM COMPRESSIVE STRENGTH 4000 P.S.I. (TYP.) MANHOLE TO BE MANUFACTURED BY ATLANTIC CONCRETE, OR APPROVED EQUAL.
- 2. ALL MANHOLES NOT LOCATED IN CROWN OF ROAD SHALL BE CONSTRUCTED WATERTIGHT WITHOUT THE USE OF A RUBBER GASKET. WATER TIGHTNESS MAY BE ACHIEVED BY DISH SHAPED INSERTS, WATERTIGHT CASTING, OR APPROVED EQUAL. DISH SHAPED WATERTIGHT INSERT SHALL BE SUPPLIED, TWO PER MANHOLE.
- 3. SMOOTH CONCRETE CHANNEL WITH DEPTH EQUAL TO 0.80 TIMES THE DIA. OF THE MAIN SEWER FOR SIZES 8" TO 15" AND 0.50 TIMES THE DIA. FOR SIZES 16" AND ABOVE. (USE CLASS C CONCRETE).
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING ADEQUATE BALLAST TO OFFSET FLOATATION FORCES ACTING ON MANHOLES INSTALLED IN WET AREAS. PROVIDE CALCULATIONS WITH SUBMITTAL SIGNED AND SEALED BY N.J.P.E.
- 5. POLYPROPYLENE RUNGS, WITH GRADE 60 STEEL REINFORCEMENT AND TEETH AND SIDE CLEATS, AS MANUFACTURED BY MA INDUSTRIES. STEEL RUNGS NOT ALLOWED, FOR MANHOLES GREATER THAN 15'-0" DEEP. APPLICANT SHALL CONTACT CCMUA FOR SPECIFIC MANHOLE REQUIREMENTS. ALL OSHA REQUIREMENTS MUST BE MET.
- 6. ANY MANHOLE REQUIRING LINING SHALL HAVE MANHOLE RUNGS REMOVED AND HAVE A COMPOSITE LADDER INSTALLED.
- 7. PROVIDE WRAPIDSEAL MANHOLE ENCAPSULATION SYSTEM, AS MANUFACTURED BY CANUSA-CPS, AROUND FRAME AND GRADE RINGS FOR ALL MANHOLES AND AROUND ALL RISER JOINTS. INSTALLATION SHALL BE PROVIDED IN ACCORDANCE WITH ALL OF MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS. WHERE APPLICABLE, THE MANHOLE INTERIOR SHALL BE LINED WITH AN APPROVED CIP (GEOPOLYMER) LINER.
- 3. MANHOLE FRAME SHALL BE LAID IN 1-INCH OF MORTAR AND HAVE 1-INCH MORTAR AROUND THE RIM.
- 9. THERE SHALL BE NO CHANGE IN FLOW DIRECTION GREATER THAN 90 DEGREES.
- 10. THE FLEXIBLE CONNECTIONS SHALL BE A-LOK FLEXIBLE CONNECTOR BY A-LOK PRODUCTS, OR APPROVED EQUAL, DESIGNED TO MEET THE REQUIREMENTS OF ASTM C-1478, "STORM DRAIN RESILIENT CONNECTORS BETWEEN REINFORCED CONCRETE STORM SEWER STRUCTURES, PIPES, AND LATERALS."



Pennoni

PENNONI ASSOCIATES I 2 Aquarium Drive, Suite 320 Camden, NJ 08103

CERTIFICATE OF AUTHORIZATION NO. GA280333

JOSEPH RADAY

PROFESSIONAL ENGINEER

NEW JERSEY LICENSE NO. GE043768

MAIN DETAILS II
ROSS, INC.

INAGE AND WATER MAIN DI

11/15/2024 1 CITY PLANNING BOARD SUBMISSION EAB
DATE NO. REVISIONS BY

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND
EXPENSES ARISING OUT OF OR RESULTING THEREFRON

PROJECT KCNAX23001

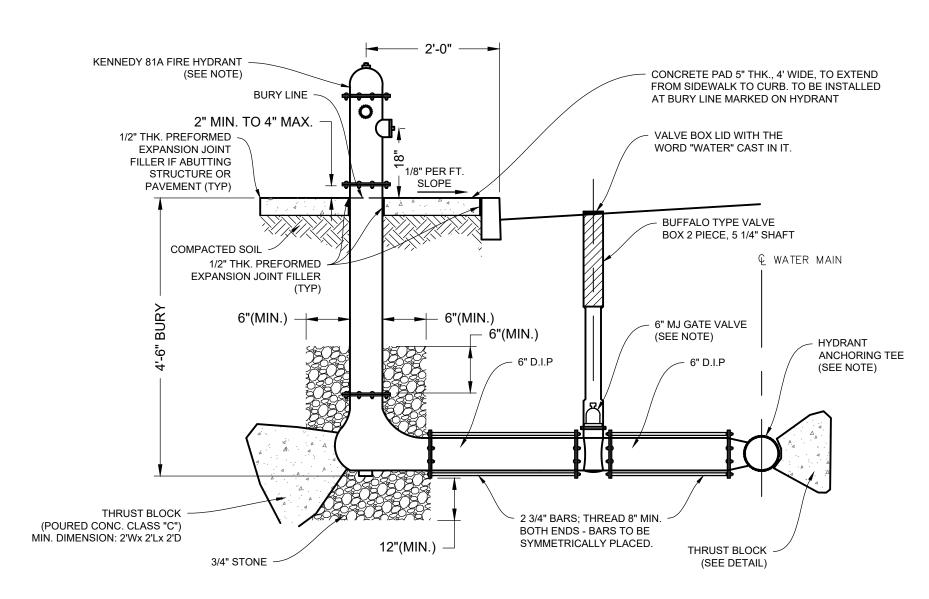
DATE MAY 17, 2024

DRAWING SCALE N.T.S.

DRAWN BY BF

CS6022

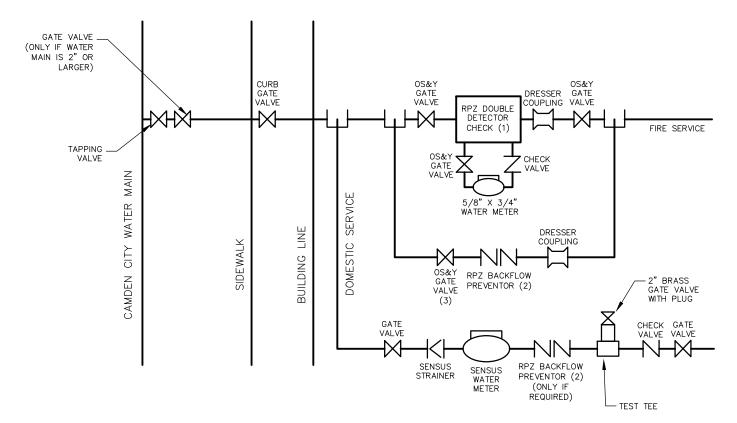
SHEET 31 OF 39



FIRE HYDRANT NOTES:

- 1. THE INLET HUB, GATE VALVE AND HYDRANT TEE SHALL BE RODDED TOGETHER WITH CONTINUOUS THREADED RODS (ALL THREAD -M.J.), SOCKET CLAMPS, WASHERS AND CORPORATION EYE BOLTS TO PREVENT HYDRANT FROM BLOWING OFF.
- 2. CONTRACTOR SHALL INSURE THAT THE FIRE HYDRANT THREADS CONFORM TO LOCAL FIRE COMPANY'S STANDARDS.
- 3. ALL FIRE HYDRANTS SHALL OPEN BY TURNING LEFT (COUNTERCLOCKWISE). THE OPERATING NUT AND OUTLET NOZZLE CAP NUTS SHALL BE PENTAGON, MEASURING $1\frac{1}{2}$ " FROM POINT TO FLAT AT BASE. HYDRANTS SHALL BE PRIME COATED AND PAINTED IN ACCORDANCE WITH ANSI/SWWA STANDARD SPECIFICATIONS, FINISH PAINTED CONFORMING TO THE STANDARDS OF THE CITY OF CAMDEN.





NOTES:

1. A BACKFLOW PREVENTER MUST BE PROVIDED FOR ALL PROPOSED FIRE SERVICE LINES. FOR A REGULAR FIRE SUPPRESSION SYSTEM (COMBINED SERVICE LINE LARGER THAN 2"), A COMBINED REDUCED PRESSUYRE DETECTOR ASSEMBLY (AMES 5000 SS, AMES 5000 RPDA OR WATT 9098 RPDA*) SHALL BE INSTALLED ON THE MAIN FIRE SERVICE LINE AND A REDUCED PRESSURE BACKFLOW PREVENTER ON THE BYPASS (AMES 4000 SS OR WATT 909*). ON THE LIMITED FIRE SUPPRESSION SYSTEM (COMBINED SERVICE LINE 1.5" OR 2"), A FIRE LINE DETECTOR CHECK WITH A SINGLE CHECK VALVE (AMES 1000 DCV*) SHALL BE INSTALLED ON THE MAIN FIRE LINE AND A REDUCED PRESSURE BACKFLOW PREVENTER (AMES 4000 SS OR WATT 909*) SGALL BE INSTALLED DOWNSTREA OF THE BYPASS. ALL REGULAR FIRE SUPPRESSION SYSTEMS MUST HAVE OS&Y VALVES, HOWEVER, LIMITED FIRE SUPPRESSION SYSTEMS MAY USE BALL VALVES (VICTAULIC SERIES 728 FIRELOCK*) INSTED OF OS&Y VALVES. THE FIRE UNIT SHALL BE FURNISHED WITHA $\frac{5}{8}$ INCH X $\frac{3}{4}$ INCH METERED BYPASS. THE APPLICANT SHALL APPLY FOR AND REGISTER ALL RPZ WITH NJDEP.

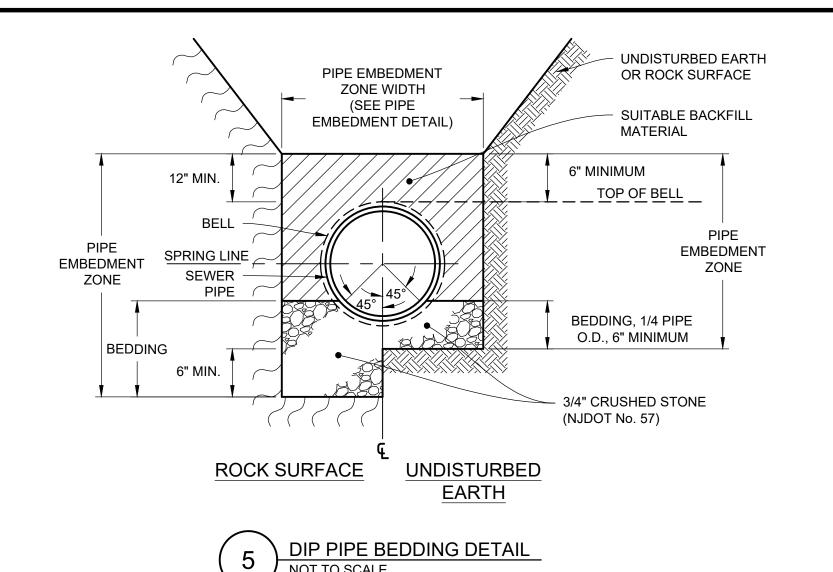
2. ALL METER SIZE 2 INCHES THROUGH 6 INCHES SHALL BE SINGLE COMPOUND METERS AND ALL METERS 8 INCHES AND LARGER SHALL BE DUPLEX COMPOUND MANIFOLD METERS.

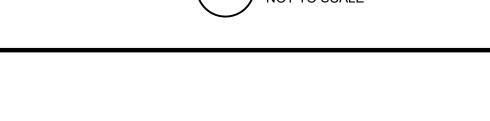
3. ALL METERS SHALL BE ADEQUATELY RESTRAINED WITH METAL BRACKETS FASTENED TO THE FLOOR OR WALL OR OTHER APPROVED MEANS SUCH AS UNIFLANGES WHERE INTERNAL PIPE PRESSURE AND FLOW WARRANT SUCH RESTRAINTS. METERS, DETECTOR CHECKS, AND VALVES MAY BE SEATED ON CONCRETE BLOCK AND TAPERED SHIMS TO PROVIDE ADEQUATE SUPPORT. METERS SHALL BE INSTALLED APPROXIMATELY 36" ABOVE FLOOR GRADE.

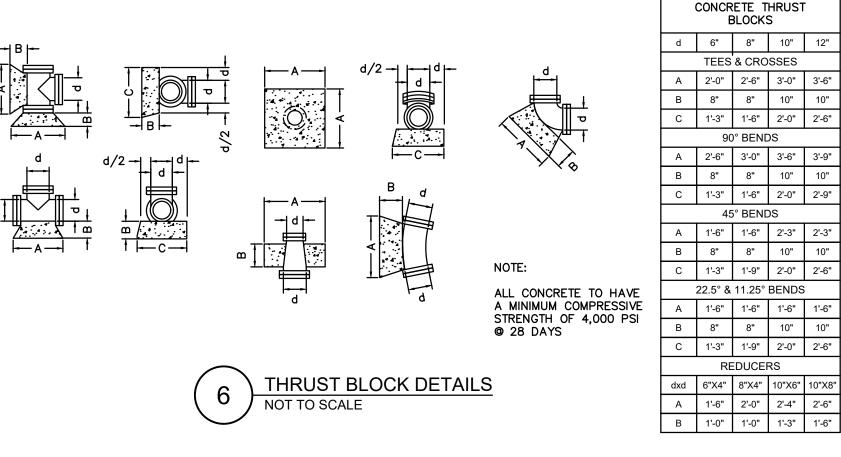
4. REFER TO CITY OF CAMDEN DETAILS.



1.5" CONNECTION







NOTE: ALL SITE WORK CONSTRUCTION AND DETAILS MUST CONFORM TO THE STANDARDS OF THE CITY OF CAMDEN

RAD, Д

JOSE

MINIMUM SIZE OF

ËR

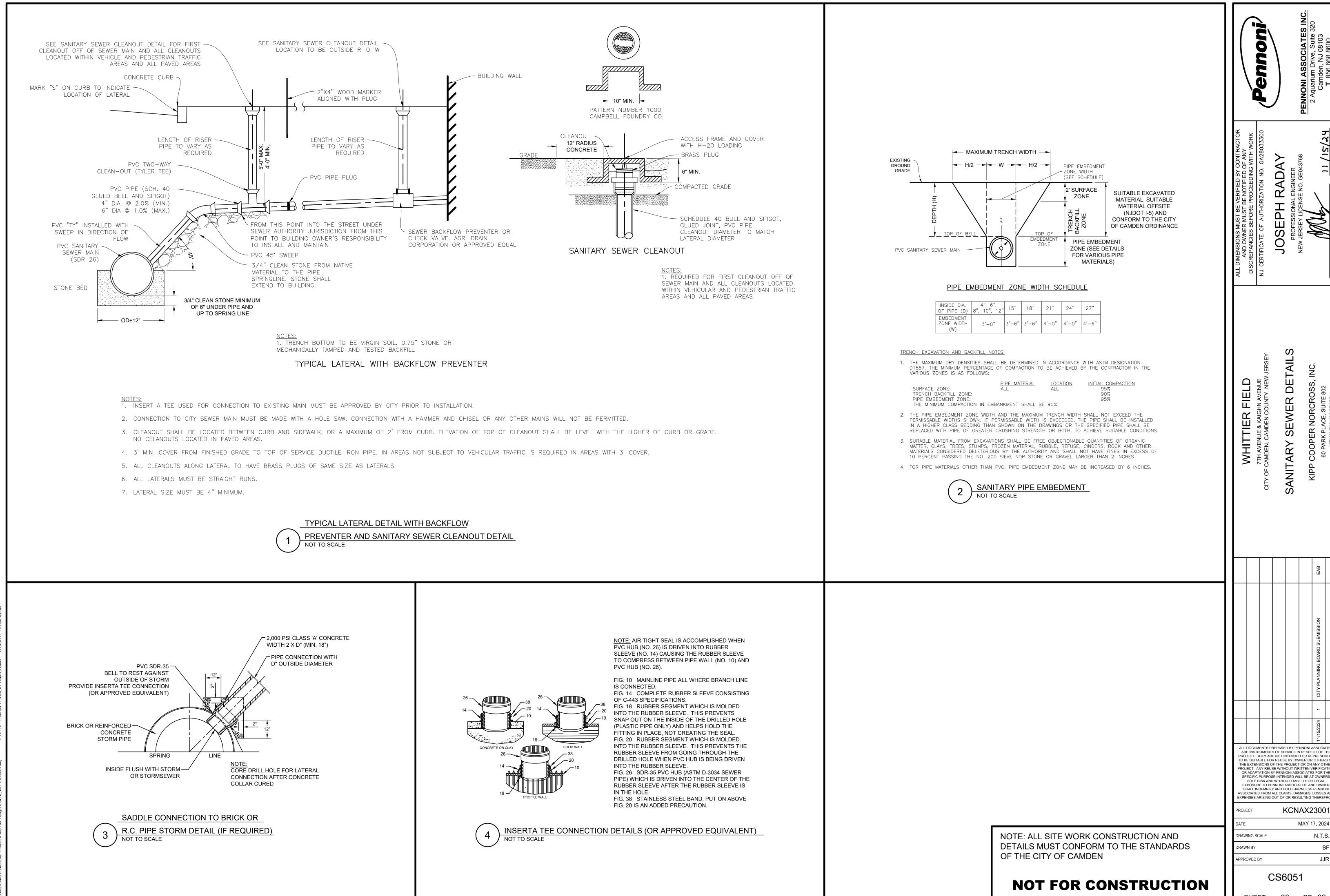
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS OF THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AN EXPENSES ARISING OUT OF OR RESULTING THEREFROM

KCNAX23007 MAY 17, 2024 RAWING SCALE N.T.S. DRAWN BY

APPROVED BY CS6041

32 OF 39

NOT FOR CONSTRUCTION



RAD, Д S Ó

WER

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATE ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS OF THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AN

> KCNAX23007 MAY 17, 2024

> N.T.S.

CS6051

SHEET 33 OF 39

- 2. THE CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE ARCHITECT /ENGINEER UPON COMPLETION OF GUARANTEE PERIOD AND REQUEST A FINAL REVIEW PRIOR TO ACCEPTANCE OF WORK SHOULD ANY PORTION OF THE WORK BE UNACCEPTABLE, CONTRACTOR SHALL MAKE ALL WORK ACCEPTABLE AND REQUEST RE-REVIEW BY OWNER AND LANDSCAPE ARCHITECT/ENGINEER. CONTRACTOR WILL BE NOTIFIED BY LETTER OF ACCEPTANCE WITHIN FIVE (5) DAYS AFTER INSPECTION OR FIVE (5) DAYS AFTER RE-REVIEW SHOULD THE LATTER BE NECESSARY.
- 3. THE GATOR BAGS ARE TO BE INSTALLED ON EACH NEW TREE AND GUARANTEE FOR ONE YEAR. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO CHECK THE GATOR BAG FOR WATER AND /OR IF PERCOLATION IS OCCURRING AROUND THE TREE. PERCOLATION IS NOT OCCURRING, THEN THE CONTRACTOR IS TO CLEAN THE GATOR BAGS OR REPLACE IT WITH A NEW ONE. IF ANY TREE INSTALLED LOOKS STRESSED OUT AND/OR IS A REPLACEMENT TREE, THE GATOR BAG MUST RECEIVE ANOTHER YEAR FROM THE TIME OF INSTALLATION WITH THE ORIGINAL GUARANTEE STILL IN PLACE ANY GATOR BAGS FOUND DEFICIENT AND/OR LOST/STOLEN MUST BE REPLACED/PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER AND/OR CITY. CONTRACTOR IS TO REMOVE THE GATOR BAGS EVERY SIXTY (60) DAYS AND PLACE BACK ON EVERY SEVEN (7) DAYS. THE CONTRACTOR CAN REMOVE THE GATOR BAGS DURING THE WINTER MONTHS UNLESS THE TEMPERATURE GOES ABOVE 55 DEGREES FAHRENHEIT FOR A PERIOD OF THREE STRAIGHT DAYS OR MORE.
- 4. ALL DISTURBED AREAS TO BE GRASS ARE TO RECEIVE SCREENED CLEAN TOPSOIL, FINE GRADED, SEEDED, AND MULCHED PRIOR TO INSTALLATION, THE CONTRACTOR. MUST SUBMIT SHOP DRAWINGS FOR BOTH EROSION CONTROL MULCH BLANKET AND SEED MIX TO THE LANDSCAPE ARCHITECT/ENGINEER FOR APPROVAL. REFER TO PROJECT SPECIFICATIONS FOR FURTHER INFORMATION REGARDING EACH ITEM.
- 5. ALL PLANT LOCATIONS SHALL BE STAKED IN THE FIELD AND LOCATIONS APPROVED BY LANDSCAPE ARCHITECT/OR ENGINEER PRIOR TO PLANTING.
- 6. TOPSOIL WITH A QUALITY ORGANIC SOIL AMENDMENT SHALL BE USED FOR ALL PLANTING AND SEEDING OPERATIONS.
- 7. INSTALL 24" MINIMUM TOPSOIL MIXTURE IN THREE BEDS; 12" MINIMUM TOPSOIL MIXTURE IN PERENNIAL, GROUNDCOVER, SHRUB AND EVERGREEN BEDS. 6" OF TOPSOIL MIXTURE ARE TO REMAIN ON ALL DISTURBED AREAS TO RECEIVE SEED.
- 8. NOTIFY ALL UTILITY COMPANIES AND LOCATE ALL UTILITIES PRIOR TO EXCAVATING PLANT PITS. PLANT LOCATIONS MAY BE ADJUSTED IN THE FIELD TO AVOID INTERFERENCE WITH UNDERGROUND UTILITIES.
- 9. SHOULD ANY DISCREPANCY ARISE BETWEEN THE PLANTING PLAN AND THE PLANTING SCHEDULE, THE CONTRACTOR IS RESPONSIBLE FOR THE QUANTITIES SHOWN ON THE LANDSCAPE PLAN.
- 10. ALL PLANT MATERIAL SHALL BE OF NURSERY STOCK QUALITY AS DEFINED BY THE AMERICAN ASSOCIATION OF NURSERYMAN STANDARDS AND SHALL BE FIRST QUALITY NURSERY GROWN STOCK FREE OF DISEASE AND OBJECTIONABLE DISFIGUREMENTS AND PLANTED IN CONFORMANCE WITH SOUND NURSERY PRACTICE AND APPLICABLE CITY STANDARDS.
- 11. ALL NON-BIODEGRADABLE ROOT WRAPPING TO BE REMOVED COMPLETELY BEFORE PLANTING.
- 12. ALL TREES SHALL BE BALLED AND BULLAPED, NURSERY GROWN STOCK.
- 13. ALL PLANT MATERIAL AND LAWNS SHALL BE PLANTED WITHIN THE RECOMMENDED SEASONAL TIME PERIODS AS PRESCRIBED BY ACCEPTED HORTICULTURAL PRACTICE. REFER TO CONSTRUCTION SPECIFICATIONS FOR RECOMMENDED PLANTING TIMES. FALL DIGGING AND TRANSPLANT HAZARD TREE SPECIES (OAKS,ETC.) SHALL ONLY BE DUG AND PLANTED IN SPRING.
- 14. ALL PLANT MATERIAL SHALL BE APPROVED UPON ARRIVAL TO THE SITE BY LANDSCAPE ARCHITECT OR ENGINEER, UNLESS OTHERWISE NOTIFIED.
- 15. PROPOSED PLANT MATERIAL MAY BE SUBSTITUTED BY SIMILAR PLANTS PRIOR TO INSTALLATION, SUBJECT TO APPROVAL BY THE ENGINEER.
- 16. A TEMPORARY FENCE, SUCH AS SNOW FENCE, SHALL BE ERECTED AT THE PERIMETER OF THE DRIPLINE OF ALL EXISTING VEGETATION INDICATED TO REMAIN. PRIOR TO EXCAVATION, CONSTRUCTION OR SITE WORK. THIS FENCE SHALL BE REMOVED ONLY AT THE TIME OF COMPLETION OF ALL CONSTRUCTION AND FINAL GRADING. COST TO BE INCLUDED IN ASSOCIATED BID ITEMS.
- 17. EXISTING TREES TO BE RELOCATED SHALL BE HANDLED ACCORDING TO ACCEPTABLE HORTICULTURE PRACTICE.
- 18. ALL DISTURBED AREAS NOT SHOWN AS PLANTED OR LAWN SHALL BE TOPSOILED AND SEEDED OR RETURNED TO THEIR ORIGINAL STATE BEFORE DISTURBANCE AS DIRECTED BY THE ENGINEER.
- 19. ALL AREAS NOT RELATED TO THE PROPOSED DEVELOPMENT SHALL REMAIN IN THEIR NATURAL STATE. DISTURBANCE OF EXISTING VEGETATION SHALL BE LIMITED TO WORK AREA AND AS DEFINED ON DWGS.
- 20. ADDITIONAL LANDSCAPING APPROVED BY THE ENGINEER SHALL BE PROVIDED BY THE APPLICANT TO REPLACE ANY VEGETATION IN ADVERTENTLY REMOVED OUTSIDE THE LIMIT OF DISTURBANCE LINE AS SHOWN ON THE APPROVED GRADING PLAN DURING CONSTRUCTION.
- 21. PROPOSED TREES SHALL NOT BE PLANTED WITHIN EASEMENTS, DRIVEWAYS AND SITE TRIANGLES. THEREFORE, THE TREE LOCATIONS SHALL BE APPROXIMATE AND SHALL BE ADJUSTED IN THE FIELD AS REQUIRED.
- 22. ALL SHADE TREES IN PEDESTRIAN WALKS AREAS SHALL HAVE AN INITIAL LIMBS PRUNED STARTING AT A MINIMUM OF 7 FT. ABOVE FINISHED GRADE.
- 23. MULCH THICKNESS MUST BE SHREDDED HARDWOOD BARK AND TO FOLLOW VARIOUS PLANTING DETAILS ON SHEET CS6061. NO DYE MULCH IS ACCEPTABLE. SEE CONSTRUCTION SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 24. PLANTS ARRANGED IN CONTINUOUS GROUPINGS SHALL BE SET IN MULCHED BEDS. THIS INCLUDES ANY PLANTS SPACED 7 FT O.C. OR CLOSER. ANY STREET TREES MUST FOLLOW TREE PIT DETAIL FOR STREET TREE PIT REQUIREMENTS.
- 25. ALL PLANTING DEBRIS SHALL BE REMOVED FROM THE PROPERTY.
- 26. ANY LIVE TREE WHICH IS SUBSTANTIALLY DAMAGED AS A RESULT OF GRADING OR GENERAL CONSTRUCTION MUST BE REMOVED AND REPLACED WITH ANOTHER TREE OR TREES AS APPROVED BY THE ENGINEER.
- 27. TREE REMOVAL FROM ANY SLOPE OR ENVIRONMENTALLY SENSITIVE AREA IS PROHIBITED IF IT WILL CONTRIBUTE, IN THE OPINION OF THE ENGINEER, TO EXTRA RUNOFF OF SURFACE WATER ONTO ADJOINING PROPERTY AND EROSION AND SILTING, UNLESS OTHER MEANS APPROVED BY THE ENGINEER ARE PROVIDED TO PREVENT RUNOFF AND EROSION.
- 28. NO HEALTHY TREE THAT IS SPECIAL BY VIRTUE OF HISTORY, UNUSUAL SIZE, OR AGE OR OF RARE SPECIES, SHALL BE REMOVED EXCEPT AS MAY BE REQUIRED FOR PROTECTION OF PUBLIC HEALTH, SAFETY AND WELFARE.
- 29. SELECTED EXISTING HEALTHY TREES SIX (6) INCHES IN CALIPER OR LESS MEASURED FOUR (4) FEET ABOVE THE GROUND SHALL BE RELOCATED ON-SITE UNDER THE DIRECTION AND APPROVAL OF THE ENGINEER.
- 30. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF PLANTING. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT AND REGULAR GROWTH OF PLANTS. CONTRACTOR TO REFER TO CONSTRUCTION SPECIFICATIONS.
- 31. SEED ALL DISTURBED AREAS WITH REQUIRED SEED MIX (CONTRACTOR TO REFER TO CONSTRUCTION SPECIFICATIONS).
- 32. TREES SHOULD BE PLANTED A MIN. OF FIVE (5) FEET FROM SIDEWALKS UNLESS IN TREE PITS.
- 33. GUY WIRES AND STAKES WILL ONLY BE UTILIZED IF CONDITIONS MERIT AND WILL BE REMOVED BY THE CONTRACTOR AT THE END OF THE GUARANTEE PERIOD.
- 34. CONTRACTOR MUST REVIEW CONSTRUCTION SPECIFICATIONS FOR ADDITIONAL INFORMATION ON PLANTING PLANTS.

LANDSCAPE MAINTENANCE NOTES:

THE OWNERS OF THE COMPANY AND THEIR AGENTS OR ASSIGNS SHALL BE RESPONSIBLE FOR THE INSTALLATION, PRESERVATION AND MAINTENANCE OF ALL PLANTING AND PHYSICAL FEATURES SHOWN ON THE PLANS. ANY AND ALL PLANT MATERIAL THAT DIES OR FAILS TO THRIVE SHALL BE IMMEDIATELY REPLACED WITH LIKE SPECIES. THE OWNERS SHALL BE RESPONSIBLE FOR ANNUAL MAINTENANCE OF SITE VEGETATION TO INCLUDE BUT NOT BE LIMITED TO:

1. <u>FERTILIZER</u>: MOW LAWN - FERTILIZE TWICE PER YEAR.

MEADOW - DO NOT FERTILIZE THE AREAS

RAIN GARDEN - DO NOT FERTILIZE THE AREAS

2. <u>PRUNING</u>: PRUNING SHALL BE LIMITED OR REMOVAL OF DEAD WOOD OR BRANCHES FOR TREES OR FOR SIGHT DIFFERENCES/SAFETY REASONS. PRUNING OF SHRUBS AND TREES SHALL BE LIMITED TO THE PRUNING NECESSARY TO MAINTAIN THE NATURAL SHAPE OF THE PLANT EXCEPT FOR SHEARED HEDGES.

3. <u>PEST CONTROL</u>: PRE-EMERGENT WEED CONTROL FOR MOWN LAWNS AND SHRUB BEDS MAY BE APPLIED IN FEBRUARY. CHEMICAL TREATMENT FOR INSECT INFESTATION AND DISEASE MAY BE APPLIED AND SHALL BE SPECIFIC TO THE

4. MULCHING: MULCHING SHALL BE MAINTAINED AT A DEPTH OF 3" IN PLANT BEDS AND AROUND BASE OF TREES.

5.MOWING: MOWN LAWN SEED MIX SHALL BE MOWN AT REGULAR INTERVALS THROUGHOUT THE GROWING SEASON. GRASS HEIGHT SHOULD NOT EXCEED 3 INCHES. MOWER BLADES SHALL BE SET AT 2-1/2 INCHES UNLESS OTHERWISE DIRECTED.

MEADOW SEED MIX AREAS FIRST YEAR MAINTENANCE CONSISTS OF OBSERVATION OF THE DESIRED SPECIES GROWTH AND WEED COMPETITION WHEN MAKING MAINTENANCE DECISIONS. WHEN UNDESIRABLE VEGETATION REACHES 12"-18" TALL, MOW TO NO LESS THAN 6" HIGH (WITH A MOWER OR WEED EATER) TO PREVENT THE WEEDS FROM DEVELOPING SEED. GENERALLY, NATIVE PLANTS WILL GROW MORE EXTENSIVE ROOT SYSTEMS THAN TOPS IN THE FIRST YEAR; THEREFORE, MOWING TO 6"-8" HIGH WILL NOT CAUSE HARM. THIS PRACTICE ALLOWS SUNLIGHT TO REACH DESIRED SPECIES. DO NOT MOW WITH A LAWN MOWER, AS MOWING TOO CLOSE ENCOURAGES WEEDY GRASS SPECIES. PROVIDE IRRIGATION DURING PERIODS OF DRY WEATHER IS NEEDED FOR PROPER GERMINATION. MAINTAIN 1" OF WATER PER WEEK THROUGHOUT THE GROWING SEASON. SECOND YEAR MAINTENANCE OF THESE AREAS CONSISTS OF REMOVING UNDESIRED VEGETATION AND MOWING ONCE, CLOSE TO THE GROUND, IN EARLY SPRING. THIS ALLOWS YOUNG NATIVE PLANTS TO EMERGE AND RAPID WARMING OF THE SOIL. YEAR THREE AND BEYOND FOR THE AREAS, CONSISTS OF REMOVING UNDESIRABLE VEGETATION AND PREVENTING A BUILD-UP OF DEAD VEGETATION KNOWN AS "THATCH". THATCH WILL KEEP THE MEADOW AREAS FROM BEING HEALTHY AND DIVERSE. DEPENDING ON THE RATE OF THATCH BUILD-UP, MOW TO THE GROUND AND RAKE OFF THE RESIDUAL VEGETATION BEFORE SPRING GREEN-UP (APRIL), EVERY THREE TO FIVE YEARS.

6. PLANT PROTECTION: AVOID EXCESS INTRUSION INTO THE ROOT ZONE AREA OF ESTABLISHED PLANTINGS.

7. <u>WATERING:</u> UNLESS STATED OTHERWISE IN THESE DOCUMENTS, PROVIDE APPROXIMATELY 1—INCH OF RAINFALL/WATER PER WEEK THROUGHOUT THE GROWING SEASON FOR THE FIRST YEAR.

PERENNIAL AND GROUNDCOVER MAINTENANCE

1. WEED CONTROL CAN BE A PROBLEM UNTIL THE GROUNDCOVERS/ PERENNIALS HAVE SPREAD AND FILLED IN THE AREA. CONTROL OF PERSISTENT, PERENNIAL WEEDS, SUCH AS BERMUDAGRASS AND NUTGRASS SHOULD BE ACHIEVED BEFORE PLANTING. USE A NONSELECTIVE HERBICIDE, SUCH AS ROUNDUP. A MULCH APPLIED AFTER PLANTING AND REPLENISHED AS NEEDED TO MAINTAIN A DEPTH OF 3 INCHES WILL REDUCE THE NEED TO WEED BY HAND. PRE-EMERGENCE HERBICIDES CAN BE USED ON MANY TYPES OF GROUNDCOVER TO AID WEED CONTROL; READ THE LABEL CAREFULLY BEFORE APPLYING. AS THE GROUNDCOVER FILLS IN WEEDS WILL BECOME LESS OF A PROBLEM BECAUSE OF THE SHADED SOIL. SOME HAND WEEDING WILL MOST LIKELY BE NEEDED.

2. FOR BIORETANTION/RAINGARDEN PEST CONTROL:
ONLY USE NJDEP APPROVED WEED CONTROL CHEMICALS, CHEMICAL TREATMENT FOR INSECTS INFESTATION
AND DISEASE CAN BE USED IN THE BIORETANTION/RAINGARDENS PRIOR TO INSTALLING ANY CHEMICALS,
CONTRACTOR MUST GET APPROVAL FROM CITY. GENERALLY, CONTRACTOR IS REQUIRED TO PULL
WEEDS/INVASIVE WEED SPECIES (INCLUDING ROOTS) BY HAND FOR THREE (3) GROWING SEASONS / YEARS.
AFTER YEAR THREE (3) PULLING WEEDS IS TO CONTINUE AS REQUIRED UNDER MAINTENACE CONTRACT
WITH OWNER.

3.FERTILIZER — MOST GROUND COVERS WILL BENEFIT FROM AN APPLICATION OF FERTILIZER IN LATE WINTER TO EARLY SPRING. USE 2 TO 4 POUNDS OF A COMPLETE FERTILIZER PER 1,000 SQUARE FEET. WATER OR BRUSH FERTILIZER OFF THE FOLIAGE AFTER BROADCASTING.

SEEDING NOTES:

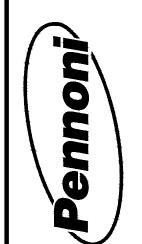
- 1. SEED ALL AREAS DISTURBED BY CONSTRUCTION NOT OTHERWISE CONTAINING PLANTING BEDS, SIDEWALKS, BUILDINGS, ETC.
- 2. BEFORE SEEDING, CONTRACTOR SHALL PROVIDE SOIL TESTS AND INCORPORATE NECESSARY SOIL AMENDMENTS PER SOIL TEST RECOMMENDATIONS.
- 3. PERFORM ALL FINISH GRADING, WITHIN AREAS OF DISTURBANCE, NECESSARY TO BRING SITE TO REQUIRED FINISHED ELEVATIONS. FINISH GRADING SHALL CONSIST OF PREPARING SUBGRADE AND SPREADING TOPSOIL READY FOR SEEDING OPERATIONS.
- 4. TOPSOIL SHALL BE UNIFORMLY SPREAD IN DISTURBED AREAS WITH BLADE GRADER, OR BY ANY OTHER APPROVED METHOD, TO A MINIMUM DEPTH OF 6 INCHES TO PERMIT 1 INCH OF SETTLEMENT. CORRECT ANY SURFACE IRREGULARITIES TO PREVENT FORMATION OF LOW SPOTS AND POCKETS THAT WOULD RETAIN WATER. PRIOR TO FINE GRADING, REMOVE ALL EXISTING ANNUAL TYPE VEGETATION.
- 5. SOW SEED AT THE RECOMMENDED SEEDING RATE AS SHOWN IN THE SEEDING MIX SCHEDULE.
- 6. SEED SHALL BE APPLIED APRIL 15TH THRU MAY 31ST OR AUGUST 17TH THRU OCTOBER 15TH.
- 7. AFTER SEEDING APPLICATION, WOOD CELLULOSE FIBER SHALL BE APPLIED HYDRAULICALLY AT A NET RATE DRY WEIGHT OF 1,500 LBS PER ACRE OR AT RATES RECOMMENDED BY THE MANUFACTURER. MULCH ALL SEEDED AREAS WITH CLEAN STRAW.
- 8. ON ALL SLOPES 3:1 OR GREATER, USE AN ORGANIC SOIL STABILIZER SUCH AS 'CON-TACK' OR EQUAL AT THE RATE OF 25 LBS PER 1,000 GALLONS OR AT RATES RECOMMENDED BY THE MANUFACTURER.
- 9. KEEP NEWLY SEEDED GRASS AREAS MOISTENED DURING SEED GERMINATION AND UNTIL THE GRASS COVERS AT LEAST 75% OF THE SEEDED AREAS TO A HEIGHT OF 2 TO 3 INCHES.
- 10. ALL AREAS AND SPOTS, WHICH DO NOT SHOW A PROMPT CATCH OF GRASS, SHALL THEN BE RE-SEEDED, AND THE OPERATION REPEATED UNTIL COMPLETE COVERAGE IS OBTAINED.

IRRIGATION NOTES

- 1. ALL ON-SITE IRRIGATION TO BE DESIGNED BY CONTRACTOR. CONTRACTOR TO SUBMIT SHOP DRAWING WITH LAYOUT TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- 2. CONTRACTOR IS RESPONSIBLE FOR COMPLETE WATER COVERAGE IN ALL WATERING AREAS OF PARK (INCLUDES ALL PLANT BEDS, TREES, AND DISTURBED LAWN AREAS). CONTRACTOR IS TO COORDINATE WORK WITH THE OWNER AND ENGINEER TO DETERMINE THE EXACT PIPE ROUTING AND PLACEMENT OF ALL COMPONENTS ON SITE. THIS INCLUDES ALL PLACEMENT OF VALVES. CONTRACTOR IS TO COORDINATE IRRIGATION WORK WITH ANY EXISTING AND PROPOSED UTILITIES. COST TO BE INCLUDED IN THE LUMP SUM BID COST FOR AN IRRIGATION SYSTEM.
- 3. ALL MAIN PIPING SHALL BE SDR 21 CLASS 200 PVC PIPE.
- 4. ALL ZONE PIPING SHALL BE SDR 21 CLASS 200 PVC PIPE.
- 5. ALL PIPE AND WIRE UNDER HARD SURFACES MUST BE INSTALLED IN A PVC SCH 40 PIPE SLEEVES. ALL PIPE SLEEVES ARE TO BE 2 TIMES THE OD OF THE PIPE TO BE SLEEVED. ALL WIRE SLEEVES MUST BE A MINIMUM OF 4-INCH OD PIPE. ALL SLEEVES TO EXTEND 18" PAST CURBS, STEPS, PAVEMENT, SIDEWALK, AND/OR HARD SURFACES SLEEVED. ALL SLEEVES ARE TO HAVE 6" LEVEL CLEAN SAND BEDDING.
- 6. ALL T7P SPRINKLERS USE #12 NOZZLE OR APPROVED EQUAL AT A MINIMUM.
- 7. ALL ZONES WITH FULL CIRCLE SPRINKLERS RUN TWICE AS LONG AS PART CIRCLE ZONES.
- 8. IRRIGATION CONTROL SYSTEM IS TO BE INSTALLED IN THE MECHANICAL ROOM OF BUILDING. COST TO BE INCLUDED IN THE LUMP SUM BID COST FOR THE IRRIGATION SYSTEM.

9. <u>DESIGN REQUIREMENTS:</u>

- THE CONTRACTOR MUST BE CIC CERTIFIED TO INSTALL IRRIGATION IN THE STATE OF NEW JERSEY
- THE CONTRACTOR MUST SUPPLY A RECORD DRAWING WITH CID STAMP CERTIFIED IN LATEST A-CAD VERSION
- THE CONTRACTOR MUST SUPPLY A IRRIGATION SCHEDULE BY A CID COMMERCIAL IRRIGATION TO BE REVIEWED BY OWNER'S AGENT
- THE CONTRACTOR TO USE GATE VALVES PER SIZE OF IRRIGATION PIPES IN THE IRRIGATION SYSTEM DESIGN.
- THE CONTRACTOR TO USE 1" QUICK COUPLER VALVES IN THE IRRIGATION SYSTEM DESIGN.
- ALL PLANTING BEDS ARE TO RECEIVE DRIP IRRIGATION.
- WEATHERTRAK TWO WIRE CONTROLLER OF APPROVED EQUAL IS TO BE INSTALLED IN A CONTROL BOX WITH A CAPABILITY TO HOLD A LOCK. LOCK TO BE PROVIDED BY CONTRACTOR. CONTROLLER IS TO BE LOCATED INSIDE THE CHAIN LINK ENCLOSURE.
- CONTRACTOR TO PROVIDE A BACKFLOW PREVENTOR AND A HOTBOX.
- ALL UNDERGROUND, WATER BOXES ARE TO BE INSTALLED IN A TAMPER PROOF BOX.
- WEATHERTRAK SURGE DEVICE WITH GROUND ROAD AND CADWELD CLAMPS OR APPROVED EQUAL. SURGE DEVICES NOT TO EXCEED 500 FEET ON ANY LEG OF DECODER WIRE.
- 14/2 DECODER WIRE WITH 4 FOOT LOOP AT EACH VALVE
- CONTRACTOR SHALL RUN A MINIMUM OF 2 WIRE LEGS AND USE PAIGE LEG SPLICES AT ALL SPLICE TEE LOCATIONS.
- CONTRACTOR SHALL SUBMIT SHOP DRAWING OF IRRIGATION ALONG WITH 2 WIRE LEG RUNS TO ENGINEER FOR REVIEW AND APPROVALS.



2 Aquarium Drive, Suite 320 Camden, NJ 08103

JOSEPH RADAY
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. GE043768

NDSCAPE NOTES

2024 1 CITY PLANNING BOARD SUBMISSION EAB
E NO. REVISIONS BY

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATE.
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTE
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS OF
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AN
EXPENSES ARISING OUT OF OR RESULTING THEREFRO

DATE KCNAX23001

DATE MAY 17, 2024

DRAWING SCALE N.T.S.

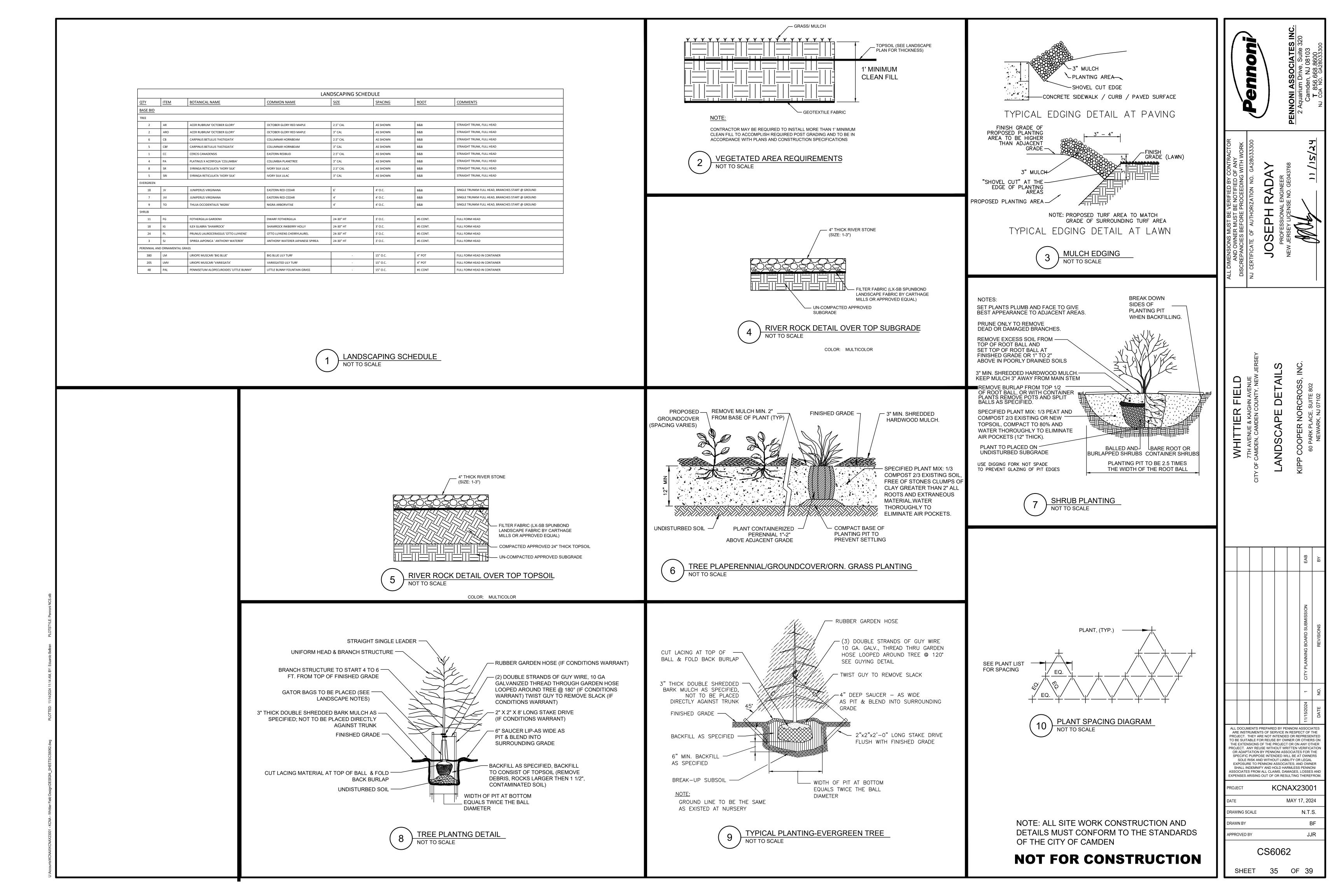
DRAWN BY BF

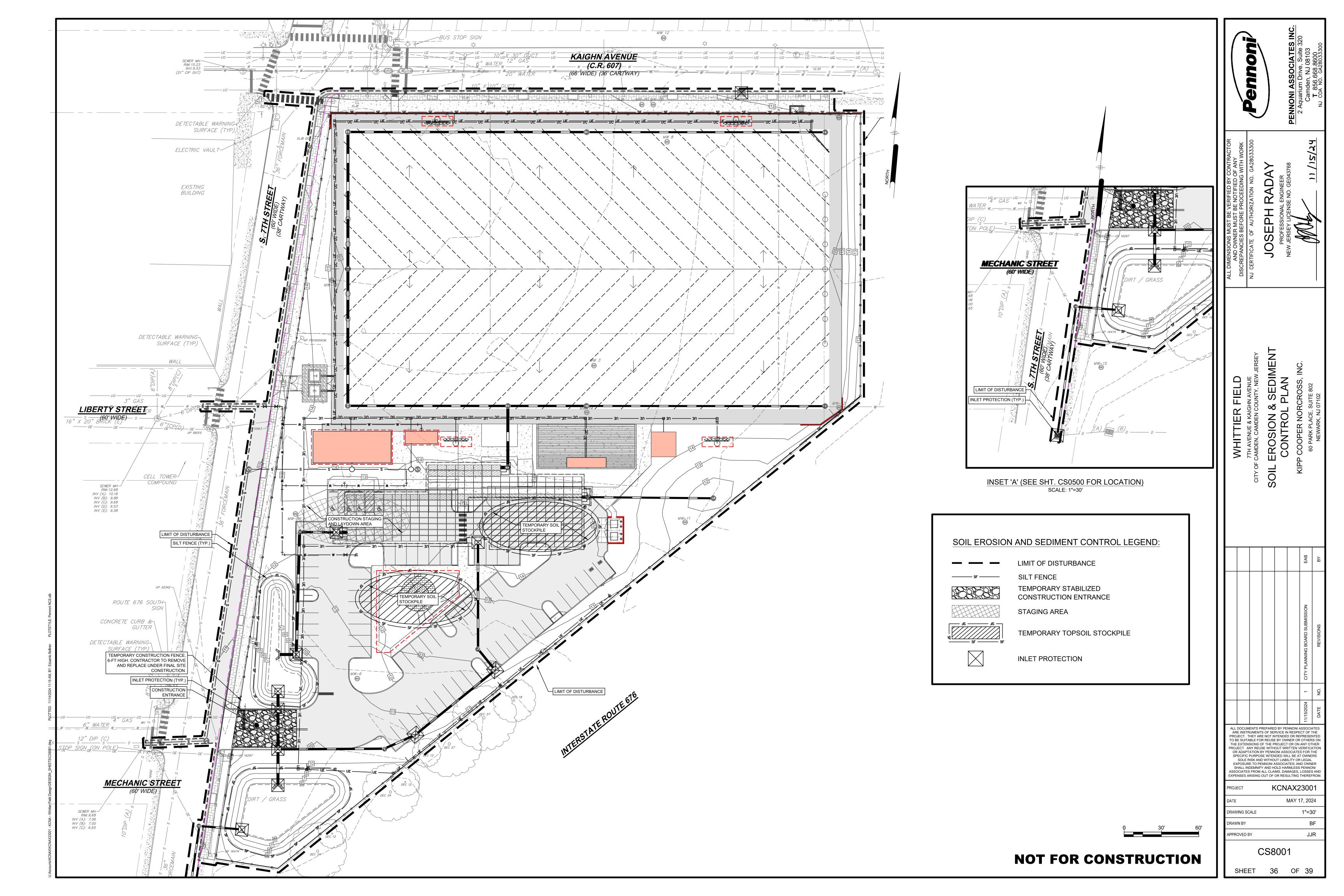
CS6061

JJR

SHEET 34 OF 39

NOT FOR CONSTRUCTION





2. SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THIS PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.

3. APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND/OR THE AREA IS STABILIZED.

4. THE CONTRACTOR SHALL PERFORM ALL WORK, FURNISH ALL MATERIALS AND INSTALL ALL MEASURES REQUIRED TO REASONABLY CONTROL SOIL EROSION RESULTING FROM CONSTRUCTION OPERATIONS AND PREVENT EXCESSIVE FLOW OF SEDIMENT FROM THE CONSTRUCTION SITE.

. ANY DISTURBED AREA THAT IS TO BE LEFT EXPOSED FOR MORE THAN THIRTY (30) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND FERTILIZATION IN ACCORDANCE WITH THE NEW JERSEY STANDARDS AND THEIR RATES SHOULD BE INCLUDED IN THE NARRATIVE. II THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS (I.E. PEG AND TWINE, MULCH NETTING OR LIQUID MULCH BINDER).

6. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO PROVIDE CONFIRMATION OF LIME, FERTILIZER AND SEED APPLICATION AND RATES OF APPLICATION AT THE REQUEST OF THE CAMDEN SOIL CONSERVATION DISTRICT.

7. ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH AT A RATE OF 2 TONS PER ACRE ACCORDING TO THE NEW JERSEY STANDARDS IMMEDIATELY FOLLOWING ROUGH GRADING.

8. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL

9. ALL SEDIMENTATION STRUCTURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS AND AFTER EVERY STORM EVENT.

10. A CRUSHED STONE, TIRE CLEANING PAD WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS EXISTS. THE STABILIZED PAD WILL BE INSTALLED ACCORDING TO THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS.

11. ALL DRIVEWAYS MUST BE STABILIZED WITH 2-½" CRUSHED STONE OR SUBBASE PRIOR TO INDIVIDUAL LOT CONSTRUCTION.

12. PAVED AREAS MUST BE KEPT CLEAN AT ALL TIMES.

13. ALL CATCH BASIN INLETS WILL BE PROTECTED ACCORDING TO THE CERTIFIED PLAN.

14. ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED, AS REQUIRED BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.

15. ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTER AREA. THE SEDIMENT FILTER SHOULD BE COMPOSED OF A SUITABLE SEDIMENT FILTER FABRIC. (SEE DETAIL). THE BASIN MUST BE DEWATERED TO NORMAL POOL WITHIN 10 DAYS OF THE DESIGN STORM.

16. NJSA 4:24-39, ET SEQ. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE ALL PROVISIONS OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES. ALL SITE WORK FOR THE PROJECT MUST BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE A PREREQUISITE TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.

17. MULCHING IS REQUIRED ON ALL SEEDED AREAS TO INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED TO PROMOTE EARLIER VEGETATION COVER.

18. OFFSITE SEDIMENT DISTURBANCE MAY REQUIRE ADDITIONAL CONTROL MEASURES TO BE DETERMINED BY THE EROSION CONTROL INSPECTOR.

19. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE MAINTAINED ON THE PROJECT SITE DURING CONSTRUCTION.

20. THE CAMDEN SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED 72 HOURS PRIOR TO ANY LAND DISTURBANCE.

21. ANY CONVEYANCE OF THIS PROJECT PRIOR TO ITS COMPLETION WILL TRANSFER FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CERTIFIED PLAN TO ANY SUBSEQUENT OWNERS

22. IMMEDIATELY AFTER THE COMPLETION OF STRIPPING AND STOCKPILING OF TOPSOIL, THE STOCKPILE MUST BE STABILIZED ACCORDING TO THE STANDARD FOR TEMPORARY VEGETATIVE COVER STABILIZE TOPSOIL STOCKPILE WITH STRAW MULCH FOR PROTECTION IF THE SEASON DOES NOT PERMIT THE APPLICATION AND ESTABLISHMENT OF TEMPORARY SEEDING. ALL SOIL STOCKPILES ARE NOT TO BE LOCATED WITHIN FIFTY (50) FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY AND THE BASE MUST BE PROTECTED WITH A SEDIMENT

23. ANY CHANGES TO THE SITE PLAN WILL REQUIRE THE SUBMISSION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN TO THE CAMDEN SOIL CONSERVATION DISTRICT. THE REVISED PLAN MUST BE IN ACCORDANCE WITH THE CURRENT NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL.

24. METHODS FOR THE MANAGEMENT OF HIGH ACID PRODUCING SOILS SHALL BE IN ACCORDANCE WITH THE STANDARDS. HIGH ACID PRODUCING SOILS ARE THOSE FOUND TO CONTAIN IRON SULFIDES OR HAVE A PH OF 4 OR LESS.

25. TEMPORARY AND PERMANENT SEEDING MEASURES MUST BE APPLIED ACCORDING TO THE NEW JERSEY STANDARDS, AND MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS (I.E. PEG AND TWINE, MULCH NETTING OR LIQUID MULCH BINDER).

26. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT BE CONSTRUCTED STEEPER THAN 3:1 UNLESS OTHERWISE APPROVED BY THE DISTRICT.

27. DUST IS TO BE CONTROLLED BY AN APPROVED METHOD ACCORDING TO THE NEW JERSEY STANDARDS AND MAY INCLUDE WATERING WITH A SOLUTION OF CALCIUM

28. ADJOINING PROPERTIES SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS ON THE PROPOSED SITE.

29. USE STAGED CONSTRUCTION METHODS TO MINIMIZE EXPOSED SURFACES, WHERE APPLICABLE.

30. ALL VEGETATIVE MATERIAL SHALL BE SELECTED IN ACCORDANCE WITH AMERICAN STANDARDS FOR NURSERY STOCK OF THE AMERICAN ASSOCIATION OF THE NURSERYMAN AND IN ACCORDANCE WITH THE NEW JERSEY STANDARDS.

31. NATURAL VEGETATION AND SPECIES SHALL BE RETAINED WHERE SPECIFIED ON THE

LANDSCAPING PLAN.

32. THE SOIL EROSION INSPECTOR MAY REQUIRE ADDITIONAL SOIL EROSION MEASURES TO BE INSTALLED, AS DIRECTED BY THE DISTRICT INSPECTOR.

33. CONTRACTOR SHALL REMOVE ALL WASHED, TRACKED OR SPILLED SEDIMENTS ON

STANDARD FOR TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION:

ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER ON SOILS EXPOSED FOR PERIODS OF TWO TO 6 MONTHS WHICH ARE NOT BEING GRADED, NOT UNDER ACTIVE CONSTRUCTION OR NOT SCHEDULED FOR PERMANENT SEEDING WITHIN 60 DAYS.

TO TEMPORARILY STABILIZE THE SOIL AND REDUCE DAMAGE FROM WIND AND WATER EROSION UNTIL PERMANENT STABILIZATION IS ACCOMPLISHED.

WATER QUALITY ENHANCEMENT

PAVED ROADWAY SURFACES IMMEDIATELY

PROVIDES TEMPORARY PROTECTION AGAINST THE IMPACTS OF WIND AND RAIN, SLOWS THE OVERLAND MOVEMENT OF STORMWATER RUNOFF, INCREASES INFILTRATION AND RETAINS SOIL AND NUTRIENTS ON SITE, PROTECTING STREAMS OR OTHER STORMWATER CONVEYANCES.

ON EXPOSED SOILS THAT HAVE THE POTENTIAL FOR CAUSING OFF-SITE ENVIRONMENTAL

METHODS AND MATERIALS

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING, P. 19-1.

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

2. SEEDBED PREPARATION

A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS THOSE OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS CO-OPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 PONDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. APPLY LIMESTONE AT THE RATE OF 2 TONS/ACRE UNLESS SOIL TEST INDICATES OTHERWISE. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES. TABLE BELOW IS A GENERAL GUIDELINE FOR LIMESTONE APPLICATION.

SOIL TEXTURE	TONS/ACRE	LBS./1,000 S.F.
CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL	3	135
SANDY LOAM, LOAM, SILT LOAM	2	90
LOAMY SAND, SAND	1	45

PULVERIZED DOLOMITIC LIMESTONE IS PREFERRED FOR MOST SOILS SOUTH OF THE NEW **BRUNSWICK-TRENTON LINE**

B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEEDBED IS PREPARED.

C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AS ABOVE.

D. SOILS HIGH ON SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, PG. 1-1 OF THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.

A. SELECT SEED FROM RECOMMENDATIONS IN TABLE

	SEEDING RATES 1* (POUNDS)		OPTIN BASED ON	OPTIMUM SEED DEPTH 4*		
SEED TYPES	PER ACRE	PER 1,000 SQ. FT.	ZONE 5	ZONE 6	ZONE 7	(INCHES)
COOL SEASON GRASSES						
PERENNIAL RYEGRASS	170	4.0	3/15 - 6/1 & 8/1 - 9/15	3/1 - 5/15 & 8/15 - 10/1	2/15 - 5/1 & 8/15 - 10/15	0.5
SPRING OATS	86	2.0	3/15 - 6/1 & 8/1 - 9/15	3/1 - 5/15 & 8/15 - 10/1	2/15 - 5/1 & 8/15 - 10/15	1.0
WINTER BARLEY	96	2.2	8/1 - 9/15	8/15 - 10/1	8/15 - 10/15	1.0
WINTER CEREAL RYE	112	2.8	8/1 - 11/1	8/1 - 11/15	8/1 - 12/15	1.0
WARM SEASON GRASSES						
PEARL MILLET	20	0.5	6/1 - 8/1	5/15 - 8/15	5/1 - 9/1	1.0
MILLET (GERMAN OR HUNGARIAN	30	0.7	6/1 - 8/1	5/15 - 8/15	5/1 - 9/1	1.0
WEEPING LOVEGRASS	5	0.2	6/1 - 8/1	5/15 - 8/15	5/1 - 9/1	0.25

1* SEEDING RATE FOR WARM SEASON GRASS, SHALL BE ADJUSTED TO REFLECT THE AMOUNT OF PURE LINE SEED (PLS) AS DETERMINED BY A GERMINATION TEST RESULT. NO

ADJUSTMENT IS REQUIRED FOR COOL SEASON GRASSES. 2* MAY BE PLANTED THROUGHOUT SUMMER IF SOIL MOISTURE IS ADEQUATE OR CAN BE

3* PLANT HARDINESS ZONE (SEE BELOW) 4* TWICE THE DEPTH FOR SANDY SOILS

ZONE 5B (-10 TO -15) PORTIONS OF SUSSEX AND WARREN COUNTIES

ZONE 6A (-5 TO -10)
PORTIONS OF SUSSEX, WARREN, PASSAIC, MORRIS, SOMERSET AND HUNTERDON COUNTIES.

PORTIONS OR BERGEN, CAMDEN, ESSEX AND GLOUCESTER, HUNTERDON, MERCER, MIDDLESEX, HUDSON,MONMOUTH, OCEAN, BURLINGTON, MORRIS, PASSAIC, SOMERSET, UNION, ATLANTIC, CUMBERLAND, AND CAPE MAY COUNTIES.

PORTIONS OF CAMDEN, GLOUCESTER, SALEM, CUMBERLAND, CAPE MAY, ATLANTIC, BURLINGTON, OCEAN, AND MONMOUTH COUNTIES. ZONE 7B (10 TO 5) PORTIONS OF CAPEMAY, ATLANTIC, OCEAN AND MONMOUTH COUNTIES.

B. CONVENTIONAL SEEDING - APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.

C. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK OR TRAILER MOUNTED TANK. WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MUI CH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT FIBERED MUI CH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. POOR SEED TO SOIL CONTACT OCCURS REDUCING SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH

D. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDING EMERGENCE, THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

4. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. (THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT

A. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, OR SALT HAY TO BE APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

SPREAD UNIFORMLY BY HAND MECHANICALLY SO THAT APPROXIMATELY 85% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

PEG AND TWINE - DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE OIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE

BETWEEN PEGS IN A CRISS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND

MULCH NETTINGS - STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.

EACH PEG WITH TWO OR MORE ROUND TURNS.

CRIMPER (MULCH ANCHORING TOOL) - A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC-HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS

4. <u>LIQUID MULCH-BINDERS</u> - MAY BE USED TO ANCHOR SALT HAY OR STRAW MULCHES.

a. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. REMAINDER OF AREA SHOULD BE UNIFORM IN **APPEARANCE**

b. USE ONE OF THE FOLLOWING:

(1) EMULSIFIED ASPHALT - (SS-1, CSS-1, CMS-2, MS-2, RS-1, RS-2, CRS-1, AND CRS-2). APPLY 0.04 GAL./SQ. YD. OR 194 GAL./ACRE ON FLAT SLOPES LESS THAN 8 FEET HIGH. ON SLOPES 8 FEET OR MORE HIGH, USE 0.075 GAL./SQ. YD. OR 363 GAL./ACRE. THESE MATERIALS MAY BE DIFFICULT TO APPLY UNIFORMLY AND WILL DISCOLOR SURFACES.

(2) ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING POWDER BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS

(3) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

B. WOOD-FIBER OR PAPER-FIBER MULCH. SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS. USED AT THE RATE OF 1 500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. THIS MULCH SHALL NOT BE MIXED IN THE TANK WITH THE SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

C. PELLETIZED MULCH. COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORM A MULCH MAT PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS, MILLOH MAY BE APPLIED BY HAND OR MECHANICA RATE OF 60-75 LBS/1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED OR ON

APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZE MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE

SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE.

STANDARD FOR PERMANENT VEGETATIVE **COVER FOR SOIL STABILIZATION:**

ESTABLISHMENT OF PERMANENT VEGETATIVE COVER ON EXPOSED SOILS WHERE PERENNIAL VEGETATION IS NEEDED FOR LONG TERM PROTECTION.

TO PERMANENTLY STABILIZE THE SOIL, ASSURING CONSERVATION OF SOIL AND WATER, AND TO ENHANCE THE ENVIRONMENT.

WATER QUALITY ENHANCEMENT

SLOWS THE OVERLAND MOVEMENT OF STORMWATER RUNOFF, INCREASES INFILTRATION AND RETAINS SOIL AND NUTRIENTS ON SITE, PROTECTING STREAMS OR OTHER STORMWATER

WHERE APPLICABLE

ON EXPOSED SOILS THAT HAVE A POTENTIAL FOR CAUSING OFF-SITE ENVIRONMENTAL

METHODS AND MATERIALS

1. SITE PREPARATION

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING, P. 19-1.

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

2. SEED BED PREPARATION

A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS THOSE OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS CO-OPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 PONDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. APPLY LIMESTONE IN ACCORDANCE WITH THE TABLE BELOW AND THE RESULTS OF SOIL TESTING. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES. TABLE BELOW IS A GENERAL GUIDELINE FOR LIMESTONE APPLICATION RATES.

SOIL TEXTURE	TONS/ACRE	LBS./1,000 S.F.
CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL	3	135
SANDY LOAM, LOAM, SILT LOAM	2	90
LOAMY SAND, SAND	1	45

PULVERIZED DOLOMITIC LIMESTONE IS PREFERRED FOR MOST SOILS SOUTH OF THE NEW

- B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEEDBED IS
- C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.)
- D. HIGH ACID PRODUCING SOIL

SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH 5 OR MORE BEFORE INITIATING SEEDBED PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS.

3. SEEDING

A. SEED MIX SHALL BE AS FOLLOWS

TYPE 'A-3' SEED MIXTURE - TO BE PLANTED FROM 2/1 - 4/30 AND FROM 8/15 - 10/30.

KIND OF SEED	MINIMUM PURITY-%	MINIMUM GERMINATION-%	% OF TOTAL WEIGHT MIXTURE	PLANTING RATE POUNDS/ACRE
TALL FESCUE (REBEL OR FALCON)	95	80	70	120
KENTUCKY BLUEGRASS (KENBLUE, SOUTH DAKOTA OR PARK)	85	75	10	20
CHEWINGS FESCUE (HIGHLIGHT OR JAMESTOWN)	95	85	10	40
PERENNIAL RYEGRASS (LINN)	98	85	10	20

B. CONVENTIONAL SEEDING - APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.

C. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK OR TRAILER MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED. WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. POOR SEED TO SOIL CONTACT OCCURS REDUCING SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH

AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

FOLLOW SAME STANDARDS AS LISTED UNDER TEMPORARY VEGETATIVE COVER FOR STABILIZATION.

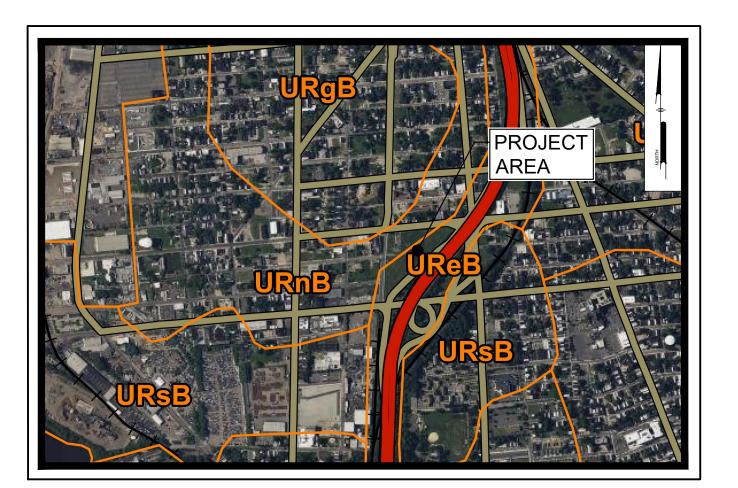
5. IRRIGATION (WHERE FEASIBLE)

IF SOIL MOISTURE IS DEFICIENT, AND MULCH IS NOT USED, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER (A MINIMUM OF \$\frac{1}{4}\$ INCH TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.

SINCE SLOW RELEASE NITROGEN FERTILIZER (WATER INSOLUBLE IS PRESCRIBED IN SECTION II.A. SEEDBED WHERE GRASS NITROGEN DEFICIENCY EXISTS TO THE EXTENT THAT TURF FAILURE MAY DEVELOP. IN THAT INSTANCE, TOPDRESS WITH 10-10-10 OR EQUIVALENT AT 400 POUNDS PER 1,000 SQ. FT.

7. ESTABLISHING PERMANENT VEGETATIVE STABILIZATION

THE QUALITY OF PERMANENT VEGETATION RESTS WITH THE CONTRACTOR. THE TIMING OF SEEDING, PREPARING THE SEEDBED, APPLYING NUTRIENTS, MULCH AND OTHER MANAGEMENT ARE ESSENTIAL. THE SEED APPLICATION RATE IS REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN APPLICATION RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO REQUESTING A REPORT OF COMPLIANCE FROM THE DISTRICT. THIS RATE APPLIES TO ALL METHODS OF SEEDING. ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVER (OF THE SEEDED

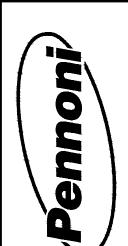


SOILS MAP SCALE: 1"=1000"

SOILS LEGEND

00110 110111	
SOIL MAP UNIT SYMBOL	SOIL MAP UNIT NAME
UR	Urban Land, 96.7 percent slope
WATER	Water, 3.3 percent slopes

NOT FOR CONSTRUCTION



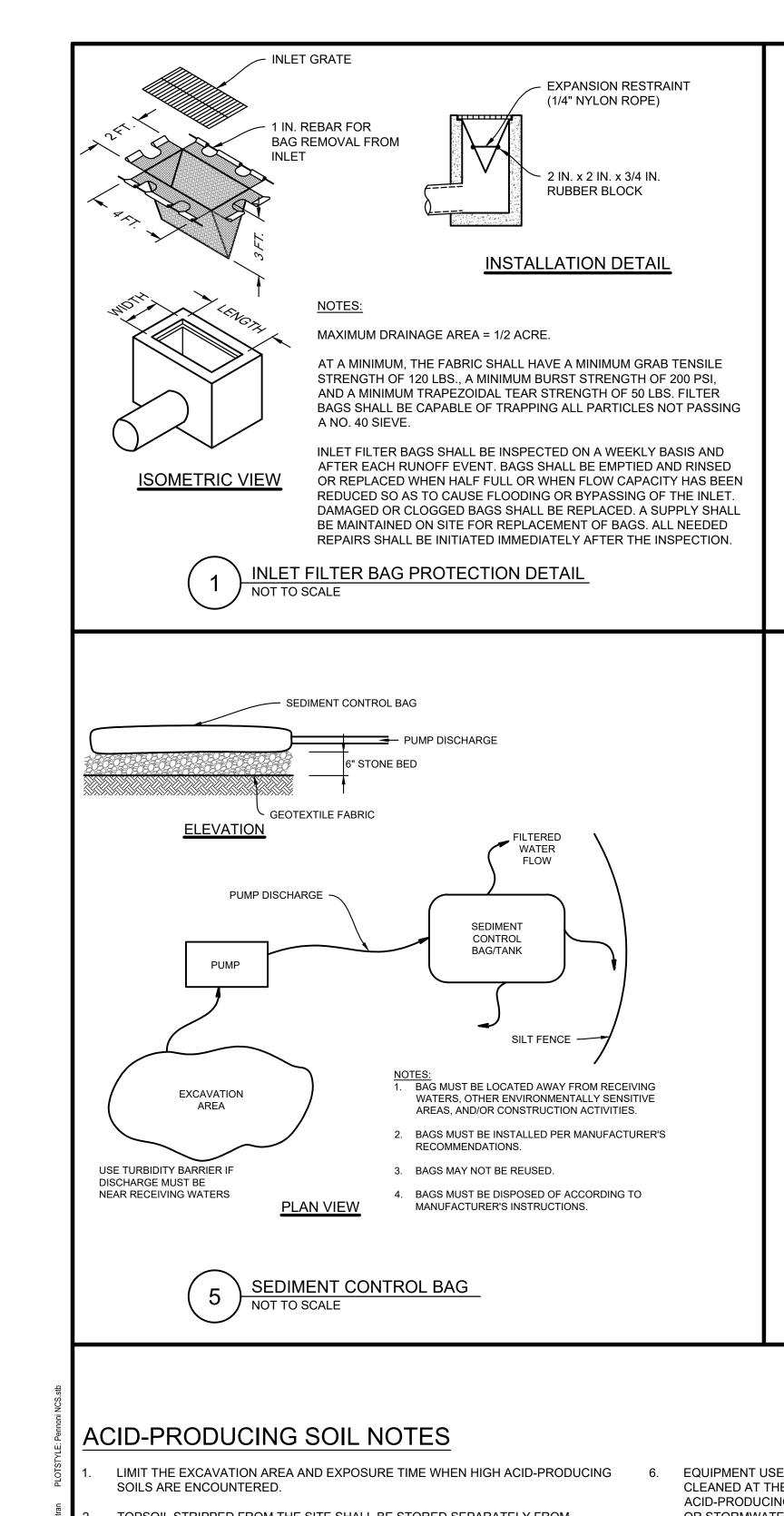
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATE: ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS (THE EXTENSIONS OF THE PROJECT OR ON ANY OTHE PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI SSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES A EXPENSES ARISING OUT OF OR RESULTING THEREFRO

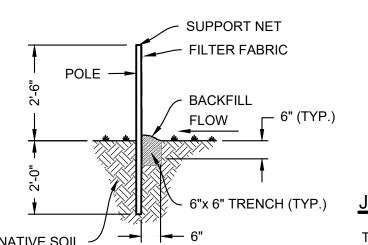
KCNAX2300 MAY 17, 2024 RAWING SCALE N.T.S. DRAWN BY

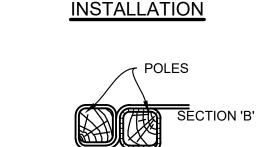
CS8501

PPROVED BY

SHEET 37 OF 39







JOINING SECTION - PLAN VIEW

COUPLER SECTION 'B' JOINING SECTION - ELEVATION

THE FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM CONSISTING OF METAL FASTENERS (NAILS OR STAPLES) AND A HIGH STRENGTH REINFORCEMENT MATERIAL (NYLON WEBBING, GROMMETS, WASHERS, ETC.) PLACED BETWEEN THE FASTENER AND THE GEOTEXTILE FABRIC.

> RECORD DEPTH OF PENETRATION WHEN WIRE DEFORMS; MINIMUM DEPTH OF 6" TO PASS TEST. EITHER PREMEDITATE OR PERFORM THE NEXT TEST.

> > SOIL SHOULD BE MOIST BUT NOT SATURATED

OO NOT TEST WHEN SOIL IS EXCESSIVELY DRY OR

SUBJECT TO FREEZING TEMPERATURES. SLOW, STEADY DOWNWARD PRESSURED USED TO ADVANCE

* WIRE MAY BE RE-INSERTED IF/WHEN AN

OBSTRUCTION (ROCK, ROOT, DEBRIS) IS

ENCOUNTERED.

6" MIN. VISIBLE

MARK ON WIRE AT

DEPTH

USE CORRECT SIZE TIP

FOR SOIL TYPE

HANDHELD SOIL PENETROMETER TEST

PROBING WIRE TEST

15.5 GA. STEEL WIRE (SURVEY FLAG)

NOTE: SOIL SHOULD BE MOIST BUT NOT SATURATED. DO NOT TEST WHEN SOIL IS EXCESSIVELY DRY OR SUBJECT

PRESSURED USED TO ADVANCE THE PROBE. MEASURE

* PENETROMETER MAY BE RE-INSERTED IF/WHEN AN

OBSTRUCTION (ROCK, ROOT, DEBRIS) IS ENCOUNTERED.

OF 6 INCHES.

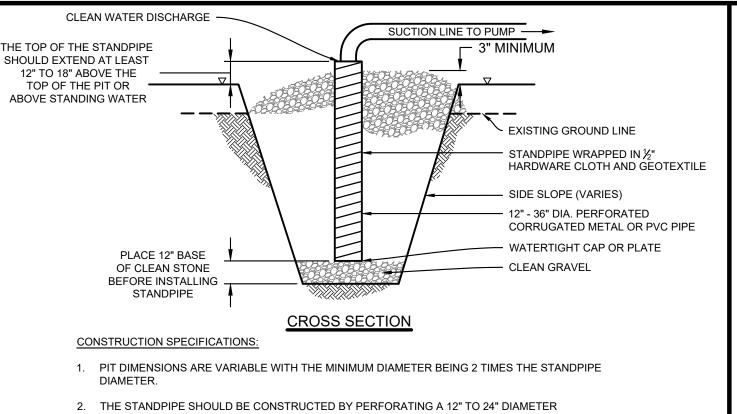
DEPTH WHEN GAGE READING REACHES 300 PSI OR DEPTH

TO FREEZING TEMPERATURES. SLOW, STEADY DOWNWARD

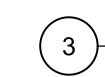
SILT FENCE TO BE USED ON SITE SHALL BE "ENVIROFENCE" PRECONSTRUCTED SILT FENCE OR EQUAL.

SPECIFICATIONS ARE: LENGTH: 100 FT. FABRIC WIDTH: 3 FT. POLE LENGTH: 4.5 FT POLE SPACING: 7.7 FT. INSTALLED HEIGHT: 2.5 FT.

SEDIMENT FABRIC: MIRAFI 100. T FENCE DETAIL



- CORRUGATED OR PVC PIPE. THEN WRAPPING WITH 1/2" HARDWARE CLOTH AND GEOTEXTILE FABRIC. THE PERFORATIONS HALL BE $\frac{1}{2}$ " x 6" SLITS OR 1" DIAMETER HOLES.
- 3. A BASE OF FILTER MATERIAL CONSISTING OF CLEAN GRAVEL OR ASTM C33 STONE SHOULD BE PLACED IN THE PIT TO A DEPTH OF 12". AFTER INSTALLING THE STANDPIPE, THE PIT SURROUNDING THE STANDPIPE SHOULD THEN BE BACKFILLED WITH THE SAME FILTER MATERIAL
- 4. THE STANDPIPE SHOULD EXTEND 12" TO 18" ABOVE THE LIP OF THE PIT OR THE RISER CREST ELEVATION (BASIN DEWATERING ONLY) AND THE FILTER MATERIAL SHOULD EXTEND 3" MINIMUM ABOVE THE ANTICIPATED STANDING WATER ELEVATION.



SOIL DE-COMPACTION AND TESTING REQUIREMENTS

SUBGRADE SOILS PRIOR TO THE APPLICATION OF TOPSOIL (SEE PERMANENT SEEDING AND STABILIZATION NOTES FOR TOPSOIL REQUIREMENTS) SHALL BE FREE OF EXCESSIVE

AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION TESTING AND/OR MITIGATION

DISTRICT. THIS FORM MUST BE FILLED OUT AND SUBMITTED PRIOR TO RECEIVING A

IN THE EVENT THAT TESTING INDICATES COMPACTION IN EXCESS OF THE MAXIMUM

TUBE BULK DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED) NUCLEAR DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED) NOTE: ADDITIONAL TESTING METHODS WHICH CONFORM TO ASTM STANDARDS AND

FURTHER INFORMATION REGARDING SOIL TESTING METHOD OPTIONS ARE LOCATED IN THE

SOIL COMPACTION TESTING IS NOT REQUIRED IF/WHEN SUBSOIL COMPACTION REMEDIATION

RESTORATION OF COMPACTED SOILS SHALL BE THROUGH DEEP SCARIFICATION/TILLAGE (6"

SYSTEMS, ETC.). IN THE ALTERNATIVE, ANOTHER METHOD AS SPECIFIED BY A NEW JERSEY

THE CONTRACTOR MUST COMPLETE AND SUBMIT A SOIL RESTORATION

LICENSED PROFESSIONAL ENGINEER MAYRE SUBSTITUTED SUBJECT TO DISTRICT APPROVAL

(SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) OR SIMILAR) IS PROPOSED AS PART OF THE

STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, CHAPTER 19,

OR THE WWW.NJ.GOV/AGRICULTURE/DIVISIONS/ANR/NRC/NJEROSION.HTML

TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER

SPECIFICATIONS, AND WHICH PRODUCE A DRY WEIGHT, SOIL BULK DENSITY MEASUREMENT MAY BE

PROCEDURES SHALL BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF

MINIMUM DEPTH) WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION

SELF-CERTIFICATION FORM TO THE CAMDEN COUNTY SOIL CONSERVATION DISTRICT (CCSCD) FOR REVIEW AND APPROVAL. CONTRACTOR SHALL PROVIDE A COPY OF CCSCD

THRESHOLDS INDICATED FOR THE SIMPLIFIED TESTING METHODS (SEE DETAILS BELOW)

LIMITS OF EXCESSIVE COMPACTION WHEREUPON ONLY THE EXCESSIVELY COMPACTED AREAS WOULD REQUIRE COMPACTION MITIGATION. ADDITIONAL DETAILED TESTING SHALL

THE CONTRACTOR SHALL HAVE THE OPTION TO PERFORM EITHER (1) COMPACTION MITIGATION OVER THE ENTIRE MITIGATION AREA DENOTED ON THE PLAN (EXCLUDING EXEMPT AREAS), OR (2) PERFORM ADDITIONAL, MORE DETAILED TESTING TO ESTABLISH THE

COMPACTION TESTING LOCATIONS ARE DENOTED ON THE PLAN. A COPY OF THE PLAN OR

PORTION OF THE PLAN SHALL BE USED TO MARK LOCATIONS OF TESTS, AND ATTACHED TO

THE COMPACTION REMEDIATION FORM, AVAILABLE FROM THE LOCAL SOIL CONSERVATION

COMPACTION TO A DEPTH OF 6.0 INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT

SOIL COMPACTION TESTING REQUIREMENTS

COMPACTION TESTING METHODS

ALLOWED SUBJECT TO DISTRICT APPROVAL

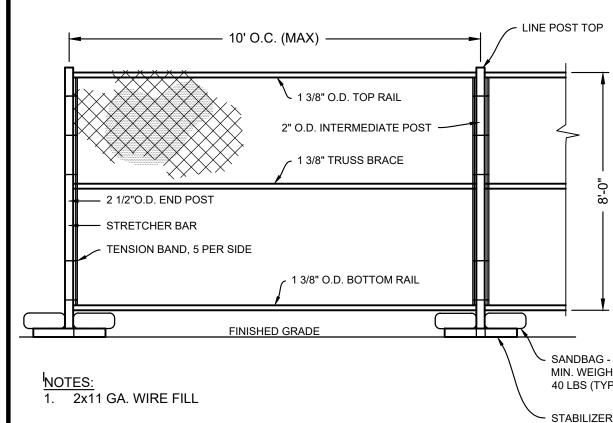
PROCEDURES FOR SOIL COMPACTION MITIGATION

SOIL COMPACTION MITIGATION VERIFICATION FORM

APPROVAL TO ENGINEER FOR RECORDS.

HAND-HELD PENETROMETER TEST (SEE DETAIL)

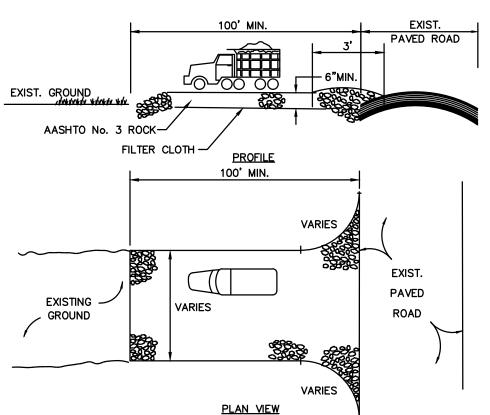
SUMP PIT DETAIL



- 2. TENSION BANDS W/ NUTS AND BOLTS (NOT PRESS CLIPS)
- 3. WIRE TIES EVERY 12"
- 4. ALL PIPE AND WIRE TO BE HAND DIPPED GALVANIZED



TEMPORARY CONSTRUCTION FENCE DETAIL



1. STONE SIZE: USE AASHTO #3 ROCK. (2" TO 6") 2. LENGTH: AS REQUIRED BUT NOT LESS THAN FIFTY (50) FEET.

3. THICKNESS: NOT LESS THAN SIX (6) INCHES. 4. WIDTH: TWENTYFIVE (25) FEET MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINT WHERE INGRESS OR EGRESS OCCURS. 5. FILTER CLOTH: WILL BE PLACED OVER ENTIRE AREA PRIOR TO PLACING OF STONES.

. SURFACE WATER: ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED. 7. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONES AS CONDITIONS

SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY. 8. VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY, WHEN WASHING IS REQUIRED IT SHALL BE DONE ON AN APPROVED SEDIMENT TRAPPING DEVICE. INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP

ROCK CONSTRUCTION ENTRANCE DETAIL

- TOPSOIL STRIPPED FROM THE SITE SHALL BE STORED SEPARATELY FROM TEMPORARILY STOCKPILED HIGH ACID-PRODUCING SOILS.
- STOCKPILES OF HIGH ACID-PRODUCING SOIL SHOULD BE LOCATED ON LEVEL LAND TO MINIMIZE ITS MOVEMENT, ESPECIALLY WHEN THIS MATERIAL HAS A HIGH CLAY CONTENT.
- TEMPORARILY STOCKPILED HIGH ACID-PRODUCING SOIL MATERIAL TO BE STORED MORE THAN 48 HOURS SHOULD BE COVERED WITH PROPERLY ANCHORED, HEAVY 8. GRADE SHEETS OF POLYETHYLENE WHERE POSSIBLE. IF NOT POSSIBLE, STOCKPILES SHALL BE COVERED WITH A MINIMUM OF 3 TO 6 INCHES OF WOOD CHIPS TO MINIMIZE EROSION OF THE STOCKPILE. SILT FENCE SHALL BE INSTALLED AT THE TOE OF THE SLOPE TO CONTAIN MOVEMENT OF THE STOCKPILED MATERIAL. TOPSOIL SHALL NOT BE APPLIED TO THE STOCKPILES TO PREVENT TOPSOIL CONTAMINATION WITH HIGH ACID-PRODUCING SOIL.
- HIGH ACID-PRODUCING SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE (INCLUDING BORROW FROM CUTS OR DREDGED SEDIMENT) SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS PER ACRE (OR 450 POUNDS PER 1,000 SQUARE FEET OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12 INCHES OF SETTLED SOIL WITH A PH OF 5.0 OR MORE EXCEPT AS FOLLOWS:
- a. AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED SHALL BE COVERED
- WITH A MINIMUM OF 24 INCHES OF SOIL WITH A PH OR 5 OR MORE b. DISPOSAL AREAS SHALL NOT BE LOCATED WITHIN 24 INCHES OF ANY SURFACE OF A SLOPE OR BANK, SUCH AS BERMS, STREAM BANKS, DITCHES, AND OTHERS, TO PREVENT POTENTIAL LATERAL LEACHING DAMAGES.

- EQUIPMENT USED FOR MOVEMENT OF HIGH ACID-PRODUCING SOILS SHOULD BE CLEANED AT THE END OF EACH DAY TO PREVENT SPREADING OF HIGH ACID-PRODUCING SOIL MATERIALS TO OTHER PARTS OF THE SITE, INTO STREAMS OR STORMWATER CONVEYANCES, AND TO PROTECT MACHINERY FROM ACCELERATED RUSTING.
- NON-VEGETATIVE EROSION CONTROL PRACTICES (STONE TRACKING PADS, STRATEGICALLY PLACED LIMESTONE CHECK DAM, SEDIMENT BARRIER, WOOD CHIPS) SHOULD BE INSTALLED TO LIMIT THE MOVEMENT OF HIGH ACID-PRODUCING SOILS FROM, AROUND, OR OFF THE SITE.
- FOLLOWING BURIAL OR REMOVAL OF HIGH ACID-PRODUCING SOIL, TOPSOILING AND SEEDING OF THE SITE (SEE TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION, PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION, AND TOPSOILING), MONITORING MUST CONTINUE FOR A MINIMUM OF 6 MONTHS TO ENSURE THERE IS ADEQUATE STABILIZATION AND THAT NO HIGH ACID-PRODUCING SOIL PROBLEMS EMERGE. IF PROBLEMS STILL EXIST, THE AFFECTED AREA MUST BE TREATED AS INDICATED ABOVE TO CORRECT THE PROBLEM.

SEQUENCE OF CONSTRUCTION:

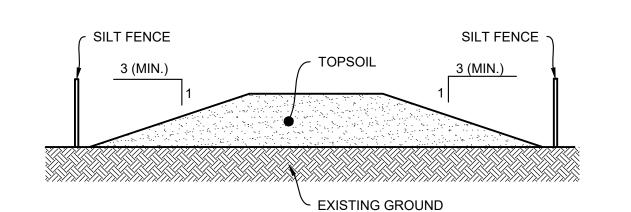
GAGE READING 300 PSI

6" MIN. VISIBLE MARK

ON SHAFT AT DEPTH

OR LESS AT 6"

<u>IT</u>	<u>EM</u>	DURATION
1.	MOBILIZE AND CLEARLY DEFINE LIMITS OF CLEARING WITH FLAGGING. WORK SHALL BE LIMITED TO AREAS SPECIFICALLY SHOWN ON PLANS.	1 DAY
2.	INSTALL SILT FENCE DOWNSTREAM OF ALL DEMOLITION AREAS.	2 DAYS
3.	INSTALL ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL BMP'S AS DETAILED ON APPROVED PLANS.	2 DAYS
4.	BEGIN SITE DEMOLITION AS SHOWN ON SHEET CS0501. THE USE OF TEMPORARY BMP'S WILL NEED TO BE IMPLEMENTED AS SITE CONDITIONS WARRANT.	1 WEEK
5.	COMPLETE ALL SITE CLEARING, GRUBBING AND STRIPPING AND STOCKPILE AND STABILIZATION OF TOPSOIL. CLEAR AND EXCAVATE STORMWATER MANAGEMENT AREAS .	1 WEEK
6.	CONSTRUCT STORMWATER MANAGEMENT AREAS. STABILIZE SLOPED AREAS USING EROSION CONTROL MATTING AND SEEDING.	1 WEEK
7.	PERFORM ROUGH GRADING. IMMEDIATELY STABILIZE GRADED AREAS THAT WILL NOT BE DISTURBED AGAIN WITH TOPSOIL, PERMANENT SEEDING AND MULCH OR EROSION CONTROL BLANKETS PER PLANS.	4 WEEKS
8.	INSTALL STORMWATER CONVEYANCE PIPE AND INLETS AND INLET PROTECTION.	2 WEEKS
9.	INSTALL BUILDING FOUNDATIONS.	2 MONTHS
10.	INSTALL UTILITY SERVICES AND STRUCTURES.	4 WEEKS
11.	BUILDING CONSTRUCTION (ONGOING)	8 MONTHS
12.	CONSTRUCT CONCRETE CURBING, PADS AND SIDEWALKS.	6 WEEKS
13.	INSTALL SITE LIGHTING CONCRETE BASES, CONDUIT AND PANEL BOX/PAD.	2 WEEKS
14.	INSTALL STONE BASE FOR ASPHALT PAVEMENT AND ASPHALT BASE COURSE.	1 WEEK
15.	INSTALL FENCING AND SITE FURNITURE.	1 WEEK
16.	INSTALL ASPHALT WEARING COURSE.	1 WEEK
17.	INSTALL ALL LANDSCAPE MATERIAL AND RE-SPREAD TOPSOIL AND PROVIDE PERMANENT VEGETATIVE STABILIZATION OF ALL EXPOSED AREAS IN ACCORDANCE WITH SPECIFICATIONS HEREON.	2 WEEKS
18.	DEWATER AND REMOVE ANY SEDIMENT COLLECTED IN STORMWATER MANAGEMENT AREAS, SPREAD ON SITE AND STABILIZE.	1 WEEK
19.	AFTER VEGETATIVE COVER HAS BEEN ESTABLISHED TO THE SATISFACTION OF THE DISTRICT INSPECTOR, REMOVE TEMPORARY SOIL EROSION AND SEDIMENT CONTROL	3 DAYS



1. TOPSOIL STOCKPILE SHALL BE SURROUNDED BY SILT FENCE.

2. STOCKPILE SHALL RECEIVE TEMPORARY VEGETATIVE STABILIZATION IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY IMMEDIATELY AFTER COMPLETION OF STOCKPILE.



NOTE: ALL SITE WORK CONSTRUCTION AND DETAILS MUST CONFORM TO THE STANDARDS OF THE CITY OF CAMDEN

THIS PLAN IS FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY NOT FOR CONSTRUCTION \Box S

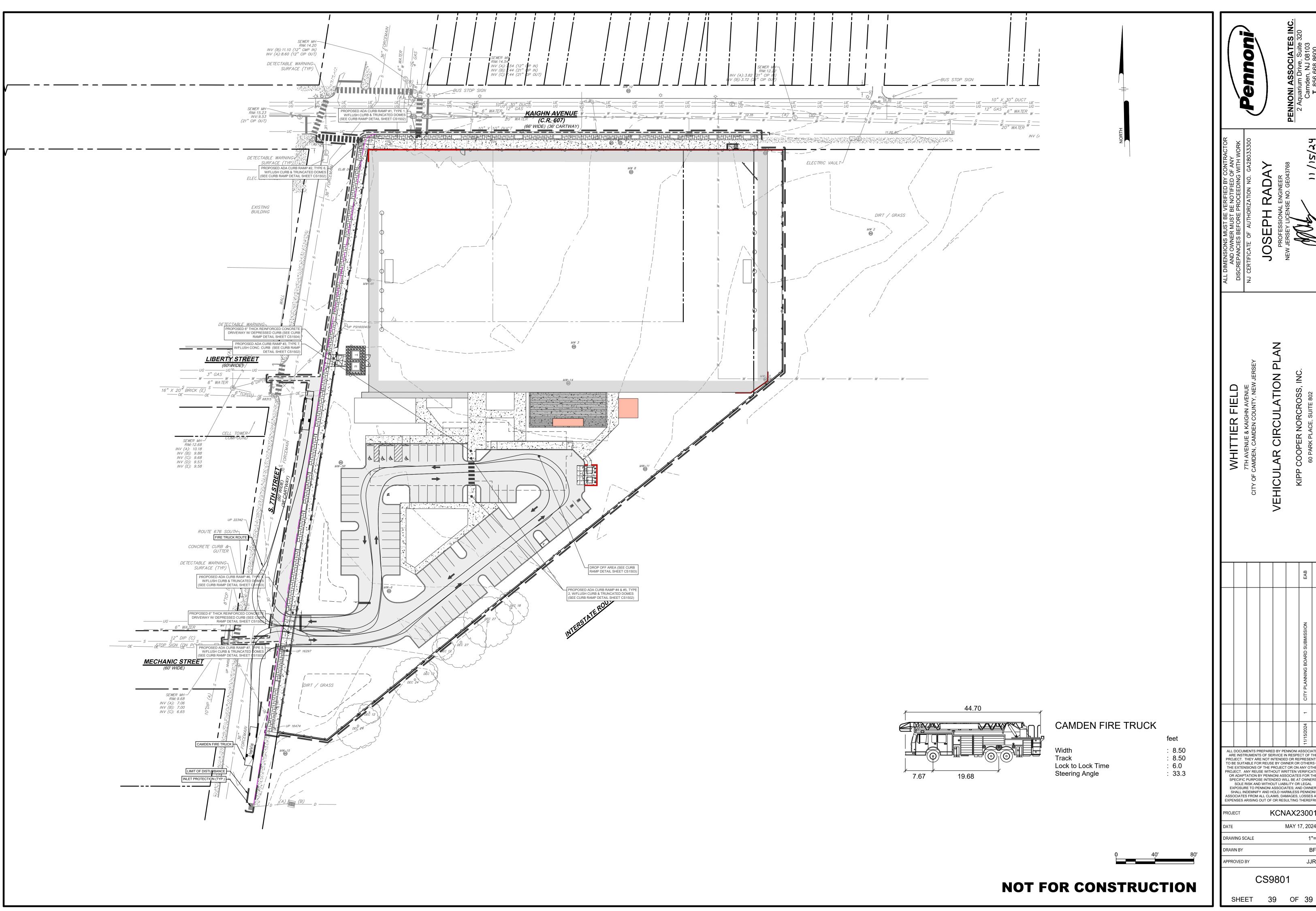
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE

PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS (THE EXTENSIONS OF THE PROJECT OR ON ANY OTHE PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THI SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI SSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AI EXPENSES ARISING OUT OF OR RESULTING THEREFRO

PROJECT KCNAX23007 MAY 17, 2024 RAWING SCALE N.T.S. DRAWN BY

PPROVED BY JJR CS8502

38 OF 39



ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS OF THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM. KCNAX23001 MAY 17, 2024 CS9801