COUNTY OF UNION

DEPARTMENT OF ENGINEERING, PUBLIC WORKS & FACILITIES MANAGEMENT
Joseph J. Policay, Jr., CPWM, Director

BOARD OF COUNTY COMMISSIONERS

JOSEPH C. BODEK
Chairman

REBECCA L. WILLIAMS
Vice-Chair

JAMES E. BAKER, JR.

MICHÈLE S. DELISFORT

LOURDES M. LEON

ALEXANDER MIRABELLA

STANLEY J. NERON

KIMBERLY PALMIERI-MOUDED

JOSEPH SIGNORELLO III

EDWARD T. OATMAN
County Manager

AMY CRISP WAGNER
Deputy County Manager

BRUCE H. BERGEN, ESQ.
County Counsel

JAMES E. PELLETTIERE
Clerk of the Board

RICARDO S. MATIAS
PE, CME, CFM
County Engineer
Director, Division of Engineering

DATE: **May 5, 2026**

FROM: **Ricardo S. Matias, PE, CME, CFM**
County Engineer

TO: **All Potential Bidders**

RE: **ADDENDUM NUMBER 1**
Playground at Warinanco Park, City of Elizabeth
County of Union, New Jersey, BA#10-2026,
Union County Engineering Project #2024-031

Attached is Addendum Number 1 for the above referenced project.

Please be sure to complete and submit the standard "Acknowledgement of Addendum" form included in the original bid specifications and submit it with the bid.

DIVISION OF ENGINEERING
2325 South Avenue *Scotch Plains, NJ 07076* *(908)789-3675* *fax(908)789-3674* www.ucnj.org
We're Connected to You!

Colliers
Engineering & Design

May 5, 2026

VIA EMAIL

To: ALL BIDDERS

Re: **Addendum #1**
Playground at Warinanco Park
City of Elizabeth
Union County, New Jersey
CED Project No. 24009762G

You are hereby notified of the following updates within Addendum #1 for the above-referenced project (Responses to Contractor RFI's in **Bold Type**):

1. **The following insurance requirements are updated and shall supersede the requirements included in the original specification:**
    a. **Commercial General Liability (CGL): Coverage on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than $2,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. The County of Union, its officers, officials, employees, agents, and volunteers are to be covered as additional insureds.**
    b. **Automobile Liability: Coverage for all owned, non-owned and hired vehicles with limits not less than $1,000,000 per occurrence, combined single limits (CSL) or its equivalent.**
    c. **Workers Compensation: As required by the State of New Jersey and Employers Liability with limits not less than $1,000,000 per accident for bodily injury or disease.**
    d. **Professional Liability (if design/build): Coverage with limits not less than $1,000,000 per occurrence or claim, $2,000,000 aggregate.**
    e. **Contractor's Pollution Legal Liability and/or Asbestos Legal Liability and/or Errors & Omissions (if project involves environmental hazards): Coverage with limits no less than $1,000,000 per occurrence or claim/$2,000,000 aggregate.**
    f. **Builders Risk (new or major reconstruction): During the course of construction utilizing an "All Risk" coverage form with limits equal to the completed value of the project and no coinsurance penalty provisions. The County shall be named as Loss Payee as their interest may appear.**

2. The bid specifications and plan set do not provide soil testing data. Please provide any available soil testing and environmental reports associated with the site as soon as possible. If no soil testing data exists, the contract cannot be accurately bid as currently structured. In accordance with fair bidding practices and N.J.S.A. 40A:11-23.1a regarding contaminated soil work in public contracts, the schedule of values/proposal pages should be revised to include either:

   Soil disposal allowance; or,

   An allowed unit price for disposal based on assumed analytical parameters. Absent such information, any pricing would constitute a guess and would not represent a fair or reasonable bid number for this work.

   a. **As this project is being partially funded by NJDEP Green Acres, a PAR report was also prepared in a manner required by NJDEP Contaminated Site Remediation and Redevelopment program and no Areas of Concern were identified for the site. This project is being bid based on clean soil assumptions. If contaminated soil is encountered, N.J.S.A. 40A:11-23.1a provides the required remedy via change order. Reports will be provided to the lowest responsible bidder prior to construction.**

3. Please clarify the scope relating to the new 4" water service. The plan states “existing tap main with 4” water service and valve”; however, it also states “New 4” water service by NJAW to City of Elizabeth System.” We are unsure of our complete scope pertaining to this 4" water line.
   a. **The intent of the Contract Documents is as follows:**
      i. **The Contractor’s scope includes the demolition and removal of the existing 2” service and vault on the property, installation of a new 4” water service piping, valves, fittings, vault and associated appurtenances, as shown on the plans and specified.**
      ii. **The connection (tap) to the existing main and work within the public water system/public ROW shall be performed by New Jersey American Water (NJAW) or the applicable water utility serving the City of Elizabeth.**
      iii. **Coordination with NJAW, including scheduling and payment of any related utility fees, shall be performed in accordance with the Specifications and General Conditions.**
      iv. **No additional work beyond what is shown on the plans and described above is intended.**
4. Plan page 8.0 provides a planting schedule; however, there is no line item within the schedule of values to provide pricing.
   a. **Item 51, Pin Oak, has been added to the Bid Proposal with a quantity of 15.**

5. **The Item, Miscellaneous Items, has been removed from the Bid Table on Sheet 1.1, but shall be accounted for in the Bid Proposal as the Contingency.**
6. **Page number on Sheet 1.1 has been revised from C-1.1 to 1.1 to match sheet set.**
7. **Sheets 3.0 and 5.0 had call outs referencing details on Sheet 7.2, which does not exist. The call outs have been changed to reference details on Sheet 7.1. Sheets 3.0 and 5.0 have been updated.**
8. **Sheets 3.0 and 7.0 had call outs referencing Utility Plan Sheet 6.0. Sheet 6.0 is the Soil Erosion & Sediment Control Plan. The call outs have been changed to reference Sheet 5.0. Sheets 3.0 and 7.0 have been updated.**

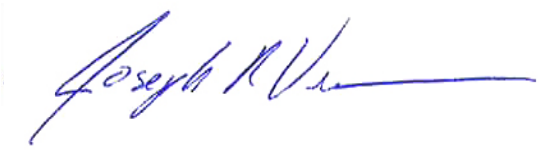
Contractor shall be made aware that the following sheets have been updated as a part of Addendum #1

- **Sheet 1.1**
- **Sheet 3.0**
- **Sheet 5.0**
- **Sheet 7.0**
- **BP4-BP7**

Bidders are reminded of the requirement to complete and submit the "Acknowledgement of Addendum" included with the bid documents. Failure to do so is a mandatory cause of the bid to be rejected.

Sincerely,

Colliers Engineering & Design, Inc.



Joseph R. Venezia, P.E.

Enclosures

\\corp.collierseng.com\LUJ\Projects\2024\24009762G\Bidding Information\Addendum #1\260505 Addendum #1.docx

ACKNOWLEDGMENT OF ADDENDUM

COUNTY OF UNION

_____ _____

(Name of Construction /Public Works Project) **(Project or Bid Number)**

Pursuant to N.J.S.A. 40A:11-23.1a., the undersigned bidder, hereby acknowledges receipt of the following notices, revisions, or addenda to the bid advertisement, specifications or bid documents. By indicating date of receipt, bidder acknowledges the submitted bid takes into account the provisions of the notice, revision or addendum. Note that the County of Union's record of notice to bidders shall take precedence and that failure to include provisions of changes in a bid proposal may be subject for rejection of the bid.

Local Unit Reference Number or Title of Addendum/Revision	How Received (mail, fax, pick-up, etc.)	Date Received

ACKNOWLEDGMENT BY BIDDER:

NAME OF BIDDER: _____

ORIGINAL SIGNATURE: _____

PRINTED NAME AND TITLE:_____

DATE: _____

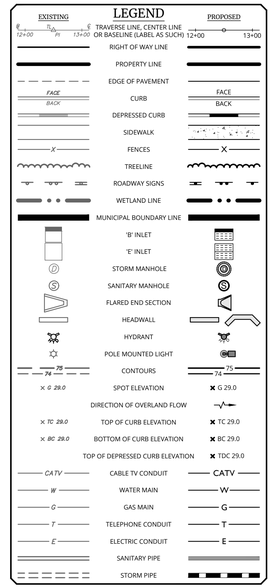
GENERAL NOTES

1. EXISTING CONDITIONS CONTAINED HEREIN ARE BASED ON A PLAN TITLED "PARTIAL TOPOGRAPHIC SURVEY" FOR PLAYGROUND AT RAHWAY RIVER PARK FOR UNION COUNTY, NEW JERSEY. BLOCK 179.01 AND A PART OF LOT 48, PREPARED BY COLLIERS ENGINEERING & DESIGN, DATED OCTOBER 24, 2024.
2. EXISTING SITE TOPOGRAPHIC INFORMATION AS SHOWN HEREON IS BASED UPON NAVD 88 (NORTH AMERICAN VERTICAL DATUM OF 1988) PER GPS OBSERVATION BY COLLIERS ENGINEERING & DESIGN, INC., UTILIZING KEYNET GPS.
3. COLLIERS ENGINEERING & DESIGN MAKES NO GUARANTEES THAT ALL UNDERGROUND UTILITIES IN THIS AREA ARE SHOWN HEREON. LOCATIONS OF SUCH UTILITIES SHOWN ARE APPROXIMATE. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/STRUCTURES. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY HAVE BEEN ENCOUNTERED, THE CONTRACTOR SHALL HAVE ALL UNDERGROUND UTILITIES FIELD-VERIFIED BY THE PROPER UTILITY COMPANIES BEFORE ANY CONSTRUCTION BEGINS.
4. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY COLLIERS ENGINEERING & DESIGN, IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK WOULD BE INHIBITED BY ANY OTHER SITE FEATURES.
5. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
6. CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES AS NECESSARY TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT TO REMAIN, AND TO PROVIDE A SAFE WORK AREA.
7. THE CONTRACTOR IS RESPONSIBLE TO CLEAR ANY AND ALL ITEMS REQUIRED TO BUILD THE PROJECT AS SHOWN ON THE PLANS. THE NOTES SHOWN ON THE PLANS MAY NOT BE ALL-INCLUSIVE. ANY ITEMS NOT SPECIFICALLY SHOWN FOR REMOVAL ON THE PLANS, BUT REQUIRED TO BUILD THE PROPOSED IMPROVEMENTS SHALL BE REMOVED AND RESET OR DISPOSED OF.
8. CONTRACTOR IS RESPONSIBLE FOR REPAIRING THE DAMAGE DONE TO ANY EXISTING ITEM DURING CONSTRUCTION SUCH AS BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. REPAIR SHALL BE EQUAL OR BETTER THAN EXISTING CONDITIONS. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION START.
9. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UTILITIES BY CONTACTING THE APPROPRIATE UTILITY COMPANIES AND CONTACTING THE NJ ONE-CALL SYSTEM (1-800-272-1000). THE LOCATION OF ALL EXISTING UTILITIES MAY NOT BE SHOWN ON THE PLANS.
10. DO NOT INTERRUPT EXISTING UTILITIES SERVING ADJACENT OCCUPIED OR OPERATING FACILITIES UNLESS AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
11. ALL OPERATIONS SHALL BE CONDUCTED SO AS TO PREVENT DAMAGE TO ADJACENT BUILDINGS, STRUCTURES, AND OTHER FACILITIES AND INJURY TO PERSONS, BOTH PEDESTRIAN AND WORKERS ALIKE.
12. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL MUNICIPAL/COUNTY/STATE REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, ETC. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN THE PRICE BID FOR "CLEARING SITE".
14. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS BY ALL OF THE PERMITTING AUTHORITIES.
15. THE OWNER/CONTRACTOR SHALL BE FAMILIAR WITH AND RESPONSIBLE FOR ANY/ALL CERTIFICATIONS, INSPECTIONS, ETC. REQUIRED BY ALL GOVERNING JURISDICTIONAL AGENCIES DURING AND AFTER CONSTRUCTION FOR SIGN-OFF AND CERTIFICATE OF OCCUPANCY ISSUANCE. INCLUDING BUT NOT LIMITED TO PROCUREMENT OF SERVICES, SCHEDULING OF FIELD OBSERVATIONS, AND COORDINATION WITH REPRESENTATIVES OF THE APPROPRIATE PARTIES.
16. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARD OF THE LOCAL GOVERNING AUTHORITY
17. SURVEY LAYOUT AND STAKEOUT SHALL BE PROVIDED BY THE CONTRACTOR FOR ALL IMPROVEMENTS. ALL WORK SHALL BE COMPLETED BY A NEW JERSEY LICENSED PROFESSIONAL LAND SURVEYOR AND ALL COSTS FOR SHALL BE INCLUDED IN THE VARIOUS ITEMS IN THE PROPOSAL. NO SEPARATE PAYMENT SHALL BE MADE FOR CONSTRUCTION LAYOUT.
18. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY COLLIERS ENGINEERING & DESIGN IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK WOULD BE INHIBITED BY ANY OTHER SITE FEATURES.
19. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. 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.
20. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTES) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL TOWN, COUNTY, STATE, AND FEDERAL LAW AND APPLICABLE CODES.
21. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
22. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS AS INDICATED IN SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR SPECIFICATIONS.
23. THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS/MEANS FOR COMPLETION OF THE WORK DEPICTED ON THESE PLANS NOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM THE SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING METHODS/ MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND NOTIFICATION OF OWNER AND ENGINEER OF RECORD WHEN A POTENTIAL CONFLICT IS IDENTIFIED.
24. THE ENGINEER IS NOT RESPONSIBLE FOR JOB SITE SAFETY, NOR HAVE THEY BEEN RETAINED FOR SUCH PURPOSES.
25. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THOSE NOTES CONTAINED THEREON, WITHOUT 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, ALL FINES OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ALL SUCH COSTS TO CORRECT ANY SUCH WORK AND FROM ALL SUCH FINES AND PENALTIES, COMPENSATION AND PUNITIVE DAMAGES AND COSTS OF ANY NATURE RESULTING THEREFROM.
26. THE CONTRACTOR IS RESPONSIBLE TO CLEAR ANY AND ALL ITEMS REQUIRED TO BUILD THE PROJECT AS SHOWN ON THE PLANS. THE NOTES SHOWN ON THE PLANS MAY NOT BE ALL-INCLUSIVE. ANY ITEMS NOT SPECIFICALLY SHOWN FOR REMOVAL ON THE PLANS, BUT REQUIRED TO BUILD THE PROPOSED IMPROVEMENTS SHALL BE REMOVED AND RESET OR DISPOSED OF.
27. DO NOT INTERRUPT EXISTING UTILITIES SERVING ADJACENT OCCUPIED OR OPERATING FACILITIES UNLESS AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
28. THE CONTRACTOR SHALL PROVIDE PROTECTION FOR THE GENERAL PUBLIC AND CONSTRUCTION WORKERS IN AND AROUND THE CONSTRUCTION AREAS, AND FOR THE ADJACENT PROPERTY AND PERSONS. ADEQUATE BARRIERS SHALL BE PROVIDED TO EXERCISE CONTROL OF SAFE INGRESS AND EGRESS AT ALL ROADWAY INTERSECTIONS. THE CONTRACTOR SHALL BARRICADE ALL UNSAFE OR INJURIOUS CONDITIONS.
29. ALL OPERATIONS SHALL BE CONDUCTED SO AS TO PREVENT DAMAGE TO ADJACENT BUILDINGS, STRUCTURES, AND OTHER FACILITIES AND INJURY TO PERSONS, BOTH PEDESTRIAN AND WORKERS ALIKE.
30. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING THE SITE TO A CLEAN, SAFE, AND PASSABLE CONDITION AT THE END OF EACH WORK DAY. NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR DAILY RESTORATION OF THE SITE. NO MATERIALS OR EQUIPMENT MAY BE STAGED IN THE WORK ZONE OVERNIGHT UNLESS SPECIFICALLY PERMITTED BY THE OWNER. A STAGING AREA MAY BE PROVIDED AT THE DISCRETION OF THE OWNER, THE LOCATION OF WHICH SHALL BE IDENTIFIED AT THE PRE-CONSTRUCTION MEETING.
31. THE CONTRACTOR SHALL MEET THE ELEVATION OF THE EXISTING PAVEMENT AND PATHWAYS AT THE LIMITS OF PROPOSED WORK.
32. ALL PROPOSED GRADES ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL GRADES , INLET ELEVATIONS, AND LOCATIONS IN THE FIELD PRIOR TO CONSTRUCTION.
33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING A SAFE ACCESS TO ALL HOMES AND BUSINESSES FOR PEDESTRIANS AND VEHICLES. IF ROAD AND/OR SIDEWALK CLOSURE IS REQUIRED TO COMPLETE THE IMPROVEMENTS, THE CONTRACTOR SHALL PROVIDE A DETOUR PLAN IN ACCORDANCE WITH MUTCD FOR REVIEW AND APPROVAL BY THE ENGINEER.
34. ALL NON-CONFORMING CURB RAMPS CONSTRUCTED BY THE CONTRACTOR SHALL BE REPLACED AS DIRECTED BY THE ENGINEER TO CONFORM WITH CURRENT ADA REQUIREMENTS AT NO ADDITIONAL COST TO THE OWNER.
35. EXCAVATIONS SHALL BE MADE SAFE IN ACCORDANCE WITH THE CURRENT REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) PURSUANT TO THE 1970 OCCUPATIONAL SAFETY AND HEALTH ACT.
36. THE TOPSOIL USED FOR THIS PROJECT SHALL BE IN STRICT CONFORMANCE TO THE PROJECT SPECIFICATIONS, ANY TOPSOIL NOT MEETING THE SPECIFICATIONS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
37. CONTRACTOR SHALL SUBMIT SEED BAG TICKETS TO THE ENGINEER FOR APPROVAL PRIOR TO PLACING SEED.
38. CONTRACTOR SHALL ESTABLISH A FULL STAND OR GRASS WITH NO BARE PATCHES, CRABGRASS, OR WEEDS.
39. NO SEPARATE PAYMENT WILL BE MADE FOR EXCAVATION, DEWATERING OR TRENCH RESTORATION REQUIRED TO INSTALL THE PIPES AND STRUCTURES SPECIFIED TO BE CONSTRUCTED. PAYMENT FOR EXCAVATION, DEWATERING, AND TRENCH RESTORATION SHALL BE INCLUDED IN THE LUMP SUM PAY ITEM "CLEARING SITE".
40. ALL PAVEMENT STRIPING, MARKINGS, REGULATORY AND WARNING SIGNS SHALL CONFORM WITH THE STANDARDS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
41. CONTRACTOR TO MAINTAIN ACCESS FOR PEDESTRIANS AND EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
42. THE 2019 NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ALL AMENDMENTS, INCLUDING THE 2019 SPECIAL PROVISIONS FOR LOCAL AID PROJECTS, THERETO OR MODIFIED HEREIN SHALL GOVERN THE CONSTRUCTION OF THIS PROJECT.
43. AFTER THE CONTRACTOR PROVIDES THE AS-BUILT FOR THE OWNER, NO SEPARATE PAYMENT WILL BE MADE FOR ANY ADDITIONAL CORRECTIVE MEASURES INCLUSIVE OF CONCRETE CURB OR COMBINATION CONCRETE CURB AND GUTTER THAT ARE DEEMED NECESSARY BY THE OWNER TO CORRECT THE GRADING TO BE AS PER THE CONTRACT PLANS. ALL COSTS SHALL BE INCLUDED IN THE VARIOUS ITEMS IN THE PROPOSAL.
44. CONTRACTOR TO EXERCISE CAUTION WHEN PERFORMING WORK ADJACENT TO EXISTING RETAINING WALLS AND LANDSCAPE STRUCTURES AND FEATURES. ANY RETAINING WALLS OR LANDSCAPE STRUCTURES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR IS ENCOURAGED TO TAKE PRE-CONSTRUCTION PHOTOGRAPHS TO AVOID INCONCLUSIVE DISPUTES DURING OR AFTER CONSTRUCTION.
45. CONTRACTOR SHALL NOT MILL IN EXCESS OF AREA TO BE PAVED WITHIN THE SAME DAY OF WORK.
46. CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE PATTERNS WHEN CONSTRUCTING OR OVERLAYING UNLESS OTHERWISE SHOWN OR DIRECTED BY THE ENGINEER. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY QUESTIONABLE DRAINAGE AREAS SO THAT FIELD ADJUSTMENTS CAN BE MADE TO ELIMINATE PONDING.
47. CONTRACTOR SHALL RESET ANY GAS AND WATER CURB VALVES AT NO ADDITIONAL COST TO THE OWNER. ALL MATERIAL AND LABOR SHALL BE PAID FOR THROUGH THE VARIOUS ITEMS IN THE PROPOSAL
48. CONTRACTOR IS RESPONSIBLE FOR COORDINATING BRINGING POWER TO ALL REQUIRED ENTITIES WITHIN THE LIMIT OF DISTURBANCE. EXISTING CONNECTIONS MAY NEED TO BE REROUTED, AND ALL IMPROVEMENTS ARE DEPICTED CONCEPTUALLY. CONTRACTOR SHALL PROVIDE A SIGNED AND SEALED ELECTRICAL PLAN SHOWING CONNECTIONS AND ROUTING OF POWER AND EXISTING UTILITIES FOR REVIEW AND APPROVAL.
49. LOCATIONS, QUANTITIES, AND SIZES OF ALL WIRING, CONDUITS, JUNCTION BOXES, PULL BOXES, METER CABINET, TRANSFORMERS, AS WELL AS LOCATIONS OF LIGHT POLES ARE DEPICTED CONCEPTUALLY. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THIS LAYOUT. THE CONTRACTOR SHALL PROVIDE AN ELECTRICAL LAYOUT AND CALCULATIONS, SIGNED AND SEALED BY AN ENGINEER LICENSED IN NEW JERSEY, FOR APPROVAL BY THE OWNER PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY COMPANY ON ALL REQUIRED AND PROPOSED LOADING INFORMATION, AMPAGE INFORMATION, VOLTAGE INFORMATION, ETC. EXACT LOCATIONS OF ALL ITEMS IN THE ELECTRICAL LAYOUT SHALL BE DETERMINED IN THE FIELD DURING CONSTRUCTION. THE ELECTRICAL LAYOUT IN THIS CONTRACT DOCUMENTS IS SCHEMATIC AND FOR INFORMATION ONLY.
50. CONTRACTOR IS REQUIRED TO COORDINATE WITH PSE&G ON ALL REQUIRED INFORMATION AND DESIGN COMPONENTS. ALL INFORMATION REQUIRED BY JCP&, AND MUSCO MUST BE PROVIDED BY THE CONTRACTOR'S LICENSED ELECTRICIAN TO JCP&, AND MUSCO ON BEHALF OF THE TOWNSHIP. EXISTING ELECTRICAL VOLTAGE, CAPACITY, ETC. IS NOT DOCUMENTED IN THESE DOCUMENTS AND WILL HAVE TO BE DETERMINED BY THE CONTRACTOR AND THEIR ELECTRICAL SUBCONTRACTOR. ALL EXISTING ELECTRICAL FEATURES NOT NEEDED FOR THE PROJECT IMPROVEMENTS SHALL BE REMOVED IN ACCORDANCE WITH THE APPROPRIATE CODE AND STANDARDS.

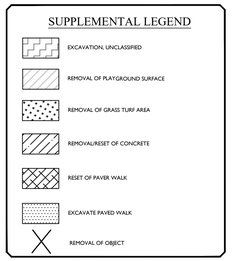
DISTRIBUTION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITIES
1	MOBILIZATION	LS	1
2	SOIL EROSION AND SEDIMENT CONTROL MEASURES	LS	1
3	CLEARING SITE	LS	1
4	EXCAVATION UNCLASSIFIED, BORROW EXCAVATION, AND GRADING	LS	1
5	3/4" CLEAN STONE	CY	444
6	HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK	SY	88
7	1" X 12" PERF. HIGH DENSITY POLYETHYLENE PIPE	LF	854
8	8" PERF. HIGH DENSITY POLYETHYLENE PIPE	LF	230
9	FILTER FABRIC, NON WOVEN GEOTEXTILE	SY	1,907
10	8" CLEANOUT	UN	2
11	10" PVC PIPE	LF	13
12	YARD INLET	UN	1
13	RECONSTRUCTED INLET, TYPE 'A', USING EXISTING CASTING	UN	1
14	RECONSTRUCTED MANHOLE, USING EXISTING CASTING	UN	1
15	4' HIGH ALUMINUM PICKET FENCE	LF	527
16	4' HIGH ALUMINUM SINGLE SELF CLOSING GATE, BLACK	UN	1
17	4' HIGH ALUMINUM DOUBLE SELF CLOSING GATE, BLACK	UN	2
18	CONCRETE SIDEWALK, 4" THICK	SY	217
19	CONCRETE PAD, REINFORCED, 6" THICK	SY	13
20	12" X 15" X 18" FLUSH CONCRETE CURB	LF	566
21	RESET PAVER WALK	SY	104
22	PARK BENCH	UN	16
23	POURED-IN-PLACE PLAYGROUND SURFACE	SF	17,164
24	RELOCATION OF EXISTING PARK SIGN BOARD & COMMUNICATION BOARD	LS	1
25	RELOCATION OF EXISTING TREE SWING SET	LS	1
26	RELOCATION OF EXISTING PLAYGROUND EQUIPMENT	LS	1
27	RELOCATION OF EXISTING GRILL AND PICNIC TABLE	LS	1
28	HARMONIC CHIMES (SET OF 7)	UN	1
29	CANTATA CHIMES	UN	1
30	CONCERT TRIO	UN	1
31	ROXALL SEE SAW	UN	1
32	SENSORY COVER CLIMBER - SQUARE	UN	1
33	INCLUSIVE WHIRL - NATURAL	UN	1
34	ROCKIN ROBIN	UN	1
35	MODERN CITY M SERIES 2	UN	1
36	SHADE 10' CANTILEVER UMBRELLA	UN	1
37	SWING SEATS - SET OF 8 - BELT SEATS (4), ADAPTIVE SEAT (1), 5-12 ZERO-G CHAIR (1), TOT SEATS (2)	UN	1
38	FOUR BAY SWING SHADE	UN	1
39	CUSTOM POWERSCAPE 2-5 UNIT	UN	1
40	CUSTOM POWERSCAPE 5-12 UNIT	UN	1
41	PLAYGROUND INSTALLATION	LS	1
42	GREEN ACRES SIGN	UN	1
43	SITE UTILITY IMPROVEMENTS - WATER SITE WORK	LS	1
44	SITE UTILITY IMPROVEMENTS - SANITARY SITE WORK	LS	1
45	SITE UTILITY IMPROVEMENTS - ELECTRICAL SITE WORK	LS	1
46	SITE UTILITY IMPROVEMENTS - BATHROOM SITE WORK	LS	1
47	BASIC SINGLE RESTROOM BUILDING - NON SELF CLEANING	LS	1
48	TOPSOIL SPREADING, 5" THICK	SY	1,725
49	FERTILIZING AND SEEDING, TYPE A-4	SY	1,725
50	STRAW MULCHING	SY	1,725
51	PIN OAK, 2.5" - 3" Cal. B&B	UN	15
A1	BASIC SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE - NON SELF CLEANING	LS	1
A2	DEDUCTION OF ITEM 47	LS	-1
B1	SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE AND EXTRA STORAGE ROOM - NON SELF CLEANING	LS	1
B2	DEDUCTION OF ITEM 47	LS	-1
C1	SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE AND EXTRA STORAGE ROOM - SELF CLEANING	LS	1
C2	DEDUCTION OF ITEM 47	LS	-1

LEGEND



SUPPLEMENTAL LEGEND



1

Colliers
Engineering & Design
www.colliersengineering.com

Copyright © 2026, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	05/05/26	JA	REVISED PER ADDENDUM #1.

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design
HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	MJU	JJR/NV

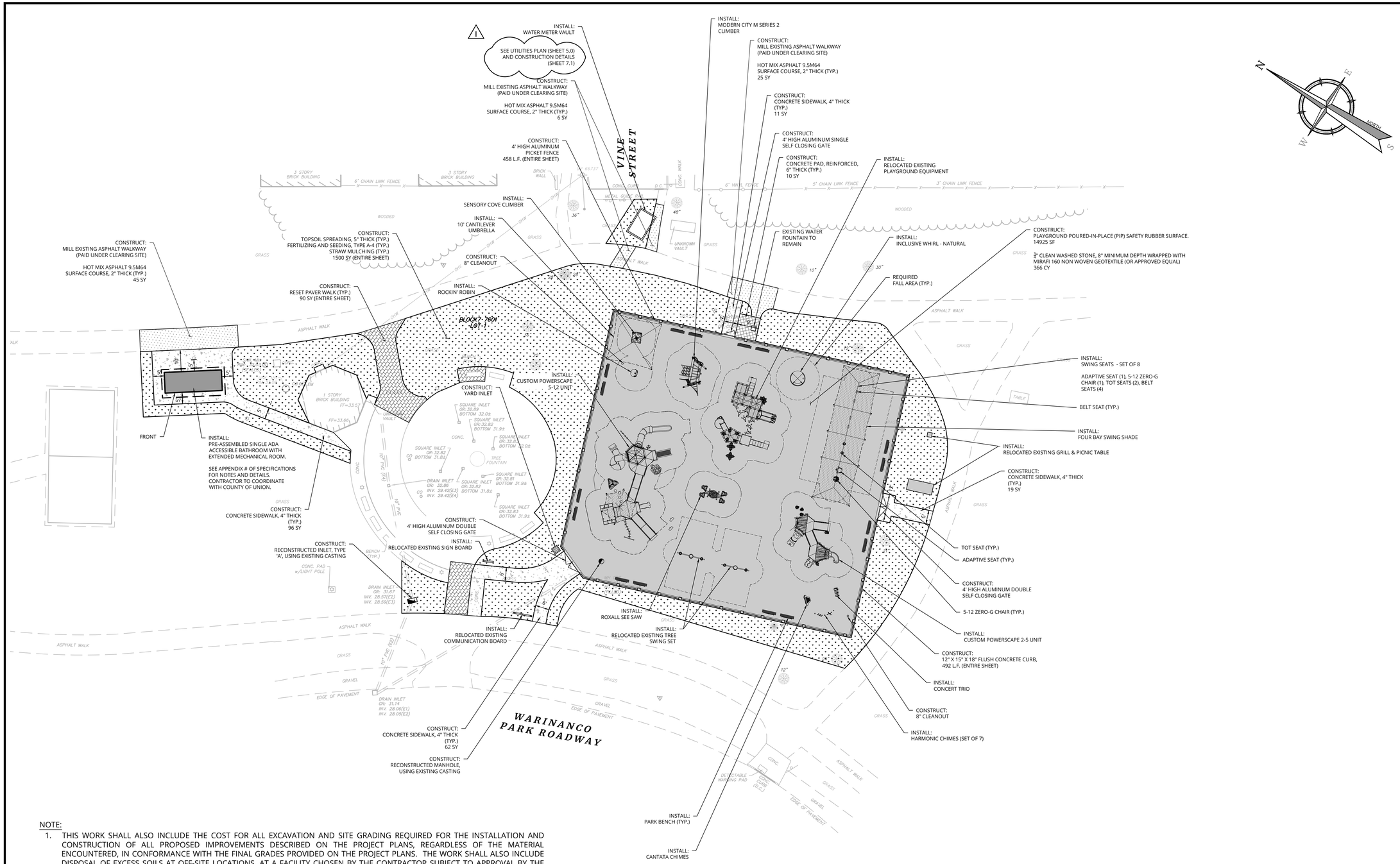
PROJECT NUMBER:	DRAWING NAME:
24009762G	C-COVER

SHEET TITLE:
GENERAL NOTES, QUANTITIES AND LEGENDS

SHEET NUMBER:
1.1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

2024/24009762G/Engineering/Site Plans/C-COVER.dwg/C1.1 NOTES By: JUSTIN.ANDERSEN



NOTE:

1. THIS WORK SHALL ALSO INCLUDE THE COST FOR ALL EXCAVATION AND SITE GRADING REQUIRED FOR THE INSTALLATION AND CONSTRUCTION OF ALL PROPOSED IMPROVEMENTS DESCRIBED ON THE PROJECT PLANS, REGARDLESS OF THE MATERIAL ENCOUNTERED, IN CONFORMANCE WITH THE FINAL GRADES PROVIDED ON THE PROJECT PLANS. THE WORK SHALL ALSO INCLUDE DISPOSAL OF EXCESS SOILS AT OFF-SITE LOCATIONS. AT A FACILITY CHOSEN BY THE CONTRACTOR SUBJECT TO APPROVAL BY THE OWNER. THE COST OF LOADING, TRANSPORT, AND TIPPING FEE IF ANY IS DEEMED TO BE INCLUDED IN THE VARIOUS ITEMS IN THE PROPOSAL. THE WORK SHALL ALSO INCLUDE IMPORT OF CLEAN FILL AS NEEDED TO DEVELOP THE PROPOSED IMPROVEMENTS. THE COST OF LOADING, TRANSPORT, AND TIPPING FEE IF ANY IS DEEMED TO BE INCLUDED IN THE VARIOUS ITEMS IN THE PROPOSAL.
2. CONTRACTOR'S BID COST IS TO BE BASED ON THE BASIS OF DESIGN PRODUCTS AND STANDARDS NOTED IN THE CONTRACT DOCUMENTS. CONTRACTOR SHALL NOT SUBMIT BID BASED ON ANY ANTICIPATED SUBSTITUTION REQUESTS. ANY SUBSTITUTION REQUESTS OR REQUESTS FOR CONSIDERATION OF AS EQUAL PRODUCTS WILL ONLY BE EVALUATED WITH A REQUISITE VALUE ENGINEERING PROPOSAL FOR REVIEW AND APPROVAL BY THE ENGINEER."
3. CONTRACTOR'S BID COST IS TO BE BASED ON THE BASIS OF DESIGN PRODUCTS AND STANDARDS NOTED IN THE CONTRACT DOCUMENTS. CONTRACTOR SHALL NOT SUBMIT BID BASED ON ANY ANTICIPATED SUBSTITUTION REQUESTS. ANY SUBSTITUTION REQUESTS OR REQUESTS FOR CONSIDERATION OF AS EQUAL PRODUCTS WILL ONLY BE EVALUATED WITH A REQUISITE VALUE ENGINEERING PROPOSAL FOR REVIEW AND APPROVAL BY THE ENGINEER.
4. CONTRACTOR SHALL JET, CLEAN AND CONFIRM CONDITION AND LOCATION/DIRECTION SIZE OF SYSTEM UPSTREAM PRIOR TO CONSTRUCTION OF PARK - PAID FOR THROUGH CLEARING SITE.
5. MANHOLES & ALL CLEANOUTS ON POUR IN PLACE SURFACE SHALL HAVE AN ACCESS RING TO ENSURE STEEL RIM IS NOT EXPOSED. SHALL BE PROTECTED AND CAPPED BY A SECTION OF REMOVABLE POUR IN PLACE SURFACE.
6. REFER TO LANDSCAPE PLANS FOR ADDITIONAL DETAIL AND NOTES ON PAVERS, FENCING, FURNISHING, AND PLANTINGS.
7. GREEN ACRES SIGN SHALL BE MOUNTED AND VISIBLE DURING CONSTRUCTION.
8. PARK BENCHES SHALL BE PERMANENTLY INSTALLED WITH CONCRETE FOOTINGS AND NOT BE MOVABLE.

Colliers
Engineering & Design
www.colliersengineering.com
Copyright © 2026. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.
Doing Business as MASER CONSULTING
811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	05/05/26	JA	REVISED PER ADDENDUM #1.

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design
HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	MJU	JJR/NV

PROJECT NUMBER:	DRAWING NAME:
24009762G	C-LAYT

SHEET TITLE:
LAYOUT PLAN

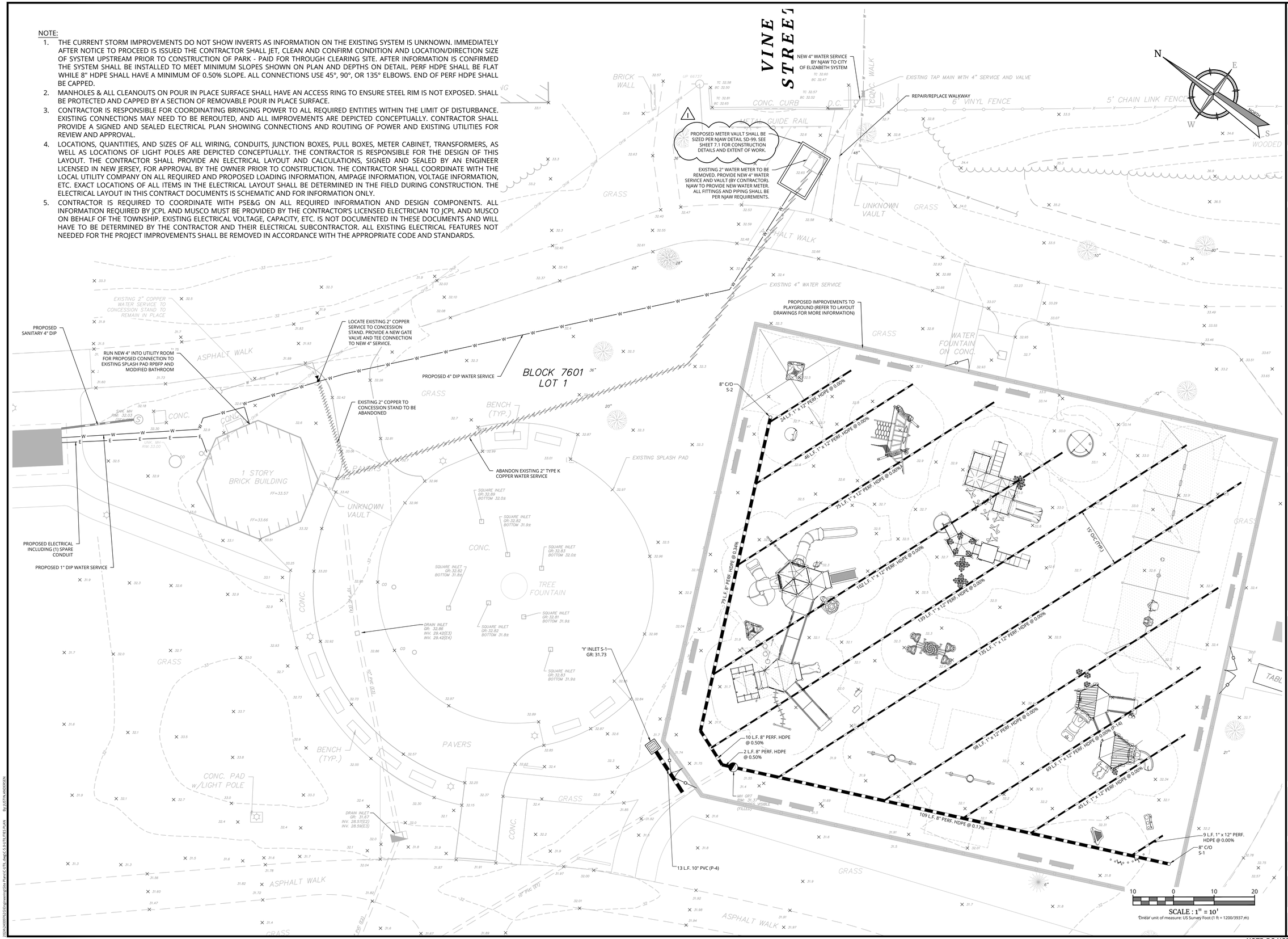
SHEET NUMBER:
3.0

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

2024/24009762G/Engineering/Site Plans/C-LAYT.dwg/C-3.0-LAYOUT By:JUSTIN.ANDERSEN

NOTE:

1. THE CURRENT STORM IMPROVEMENTS DO NOT SHOW INVERTS AS INFORMATION ON THE EXISTING SYSTEM IS UNKNOWN. IMMEDIATELY AFTER NOTICE TO PROCEED IS ISSUED THE CONTRACTOR SHALL JET, CLEAN AND CONFIRM CONDITION AND LOCATION/DIRECTION SIZE OF SYSTEM UPSTREAM PRIOR TO CONSTRUCTION OF PARK - PAID FOR THROUGH CLEARING SITE. AFTER INFORMATION IS CONFIRMED THE SYSTEM SHALL BE INSTALLED TO MEET MINIMUM SLOPES SHOWN ON PLAN AND DEPTHS ON DETAIL. PERF HDPE SHALL BE FLAT WHILE 8" HDPE SHALL HAVE A MINIMUM OF 0.50% SLOPE. ALL CONNECTIONS USE 45°, 90°, OR 135° ELBOWS. END OF PERF HDPE SHALL BE CAPPED.
2. MANHOLES & ALL CLEANOUTS ON POUR IN PLACE SURFACE SHALL HAVE AN ACCESS RING TO ENSURE STEEL RIM IS NOT EXPOSED. SHALL BE PROTECTED AND CAPPED BY A SECTION OF REMOVABLE POUR IN PLACE SURFACE.
3. CONTRACTOR IS RESPONSIBLE FOR COORDINATING BRINGING POWER TO ALL REQUIRED ENTITIES WITHIN THE LIMIT OF DISTURBANCE. EXISTING CONNECTIONS MAY NEED TO BE REROUTED, AND ALL IMPROVEMENTS ARE DEPICTED CONCEPTUALLY. CONTRACTOR SHALL PROVIDE A SIGNED AND SEALED ELECTRICAL PLAN SHOWING CONNECTIONS AND ROUTING OF POWER AND EXISTING UTILITIES FOR REVIEW AND APPROVAL.
4. LOCATIONS, QUANTITIES, AND SIZES OF ALL WIRING, CONDUITS, JUNCTION BOXES, PULL BOXES, METER CABINET, TRANSFORMERS, AS WELL AS LOCATIONS OF LIGHT POLES ARE DEPICTED CONCEPTUALLY. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THIS LAYOUT. THE CONTRACTOR SHALL PROVIDE AN ELECTRICAL LAYOUT AND CALCULATIONS, SIGNED AND SEALED BY AN ENGINEER LICENSED IN NEW JERSEY, FOR APPROVAL BY THE OWNER PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY COMPANY ON ALL REQUIRED AND PROPOSED LOADING INFORMATION, AMPAGE INFORMATION, VOLTAGE INFORMATION, ETC. EXACT LOCATIONS OF ALL ITEMS IN THE ELECTRICAL LAYOUT SHALL BE DETERMINED IN THE FIELD DURING CONSTRUCTION. THE ELECTRICAL LAYOUT IN THIS CONTRACT DOCUMENTS IS SCHEMATIC AND FOR INFORMATION ONLY.
5. CONTRACTOR IS REQUIRED TO COORDINATE WITH PSE&G ON ALL REQUIRED INFORMATION AND DESIGN COMPONENTS. ALL INFORMATION REQUIRED BY JCPL AND MUSCO MUST BE PROVIDED BY THE CONTRACTOR'S LICENSED ELECTRICIAN TO JCPL AND MUSCO ON BEHALF OF THE TOWNSHIP. EXISTING ELECTRICAL VOLTAGE, CAPACITY, ETC. IS NOT DOCUMENTED IN THESE DOCUMENTS AND WILL HAVE TO BE DETERMINED BY THE CONTRACTOR AND THEIR ELECTRICAL SUBCONTRACTOR. ALL EXISTING ELECTRICAL FEATURES NOT NEEDED FOR THE PROJECT IMPROVEMENTS SHALL BE REMOVED IN ACCORDANCE WITH THE APPROPRIATE CODE AND STANDARDS.



Colliers
Engineering & Design
www.colliersengineering.com

Copyright © 2026. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, revised, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	05/05/26	JA	REVISED PER ADDENDUM #1.

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design
HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	MJU	JJR/NV

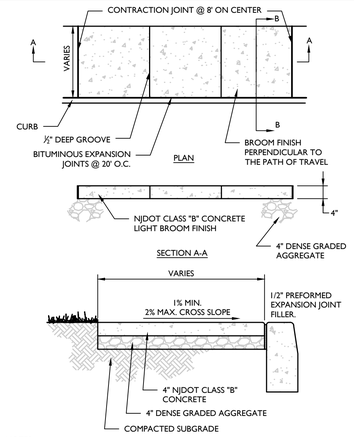
PROJECT NUMBER:	DRAWING NAME:
24009762G	C-UTIL

SHEET TITLE: UTILITIES PLAN

SHEET NUMBER: 5.0

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

2024\24009762G\Engineering\Site Plans\C-UTIL.dwg|C-5 UTILITIES PLAN By: JUSTIN.ANDERSEN

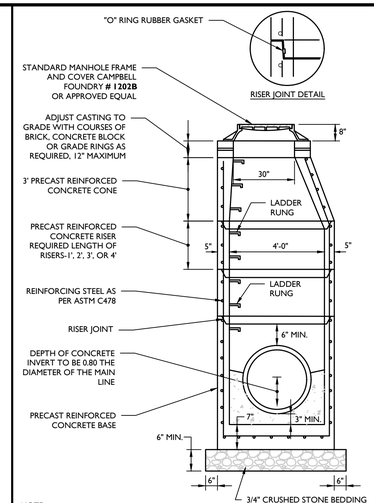


NOTES:

1. ½" EXPANSION JOINT FILLER INSTALLED BETWEEN THE CURB AND CONCRETE SIDEWALK AT 10' MAXIMUM SPACING, RECESS TO ¼" FROM THE TOP OF SIDEWALK.
2. ½" CONTRACTION JOINTS INSTALLED AT AN INTERVAL 24 TO 30 TIMES THE THICKNESS OF THE SLAB, TO A DEPTH OF ¼ OF THE THICKNESS OF THE SLAB, RECESS TO ¼" FROM THE TOP OF SIDEWALK, FOR THE FULL WIDTH OF THE SIDEWALK. SCORE A ¼" GROOVED JOINT HALF WAY BETWEEN THE CONTRACTION JOINTS.
3. JOINT FILLER SHALL CONFORM TO AASHTO M-33. SURFACE OF CONCRETE SHALL BE BROOM FINISH. ROUND EDGES USING AN EDGING TOOL WITH A ¼" RADIUS.
4. CONCRETE SIDEWALK SHALL BE CONSTRUCTED PER THE LATEST ADA REQUIREMENTS.

CONCRETE SIDEWALK (NEXT TO CURB) DETAIL

NOT TO SCALE | MCNJ-SITE-PVMT-2000 | 08/01/20

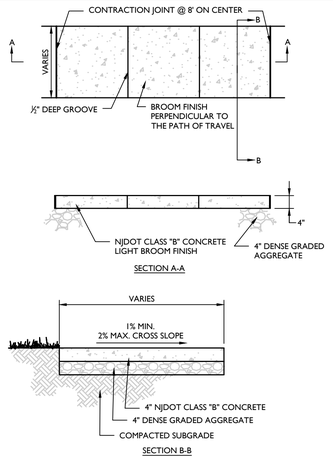


NOTE:

1. IN ACID SOILS, TWO COATS OF BITUMASTIC WATER PROOFING SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATION.
2. ALL CONCRETE TO BE NJDOT CLASS "B".
3. MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH HS-25 LOADING REQUIREMENTS.

PRECAST CONCRETE STORM MANHOLE 4' DIA. DETAIL

NOT TO SCALE | MCNJ-UTIL-STRM-1600 | 07/01/21

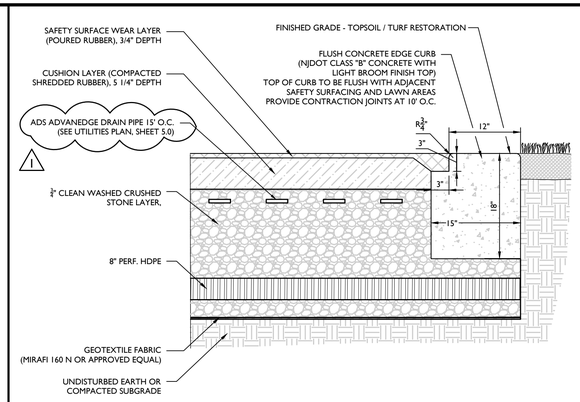


NOTES:

1. ½" CONTRACTION JOINTS INSTALLED AT AN INTERVAL 24 TO 30 TIMES THE THICKNESS OF THE SLAB, TO A DEPTH OF ¼ OF THE THICKNESS OF THE SLAB, RECESS TO ¼" FROM THE TOP OF SIDEWALK, FOR THE FULL WIDTH OF THE SIDEWALK. SCORE A ¼" GROOVED JOINT HALF WAY BETWEEN THE CONTRACTION JOINTS.
2. JOINT FILLER SHALL CONFORM TO AASHTO M-33. SURFACE OF CONCRETE SHALL BE BROOM FINISH. ROUND EDGES USING AN EDGING TOOL WITH A ¼" RADIUS.
3. CONCRETE SIDEWALK SHALL BE CONSTRUCTED PER THE LATEST ADA REQUIREMENTS.

CONCRETE SIDEWALK DETAIL

NOT TO SCALE | MCNJ-SITE-PVMT-2001 | 08/01/20

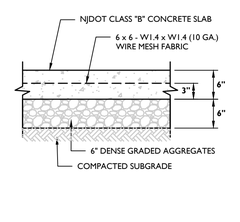


NOTE:

1. COLOR OF RUBBERIZED SURFACE SHALL BE A STANDARD COLOR AND SELECTED BY OWNER DURING SUBMITTAL PHASE.
2. SURFACE TO BE INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS.
3. THE TOTAL DEPTH OF THE SAFETY SURFACE SHALL BE INSTALLED IN STRICT ACCORDANCE AND CONFORMITY TO THE MANUFACTURER'S DRAWINGS AND THE SPECIFICATION REQUIREMENTS. THE THICKNESS OF THE IMPACT LAYER WILL BE INSTALLED ACCORDING TO THE FALL HEIGHT(S) OF THE PLAY EQUIPMENT. THESE REQUIREMENTS MUST BE VERIFIED IN THE FIELD PRIOR TO STARTING THE INSTALLATION OF THE IMPACT LAYER HEIGHT).

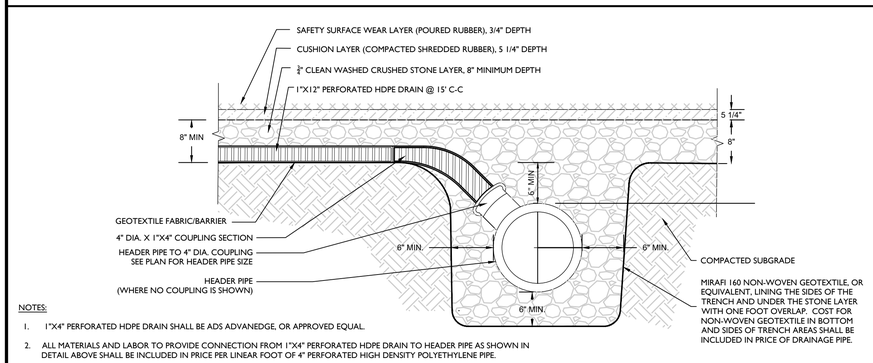
RUBBER SURFACE AND CURBING DETAIL

NOT TO SCALE



CONCRETE PAD DETAIL

NOT TO SCALE | MCNJ-SITE-PVMT-2100 | 08/01/20

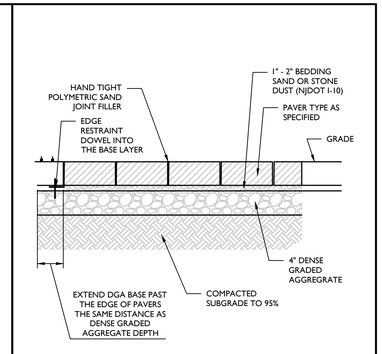


NOTES:

1. 1"X4" PERFORATED HDPE DRAIN SHALL BE ADS ADVANEDGE, OR APPROVED EQUAL.
2. ALL MATERIALS AND LABOR TO PROVIDE CONNECTION FROM 1"X4" PERFORATED HDPE DRAIN TO HEADER PIPE AS SHOWN IN DETAIL ABOVE SHALL BE INCLUDED IN PRICE PER LINEAR FOOT OF 4" PERFORATED HIGH DENSITY POLYETHYLENE PIPE.

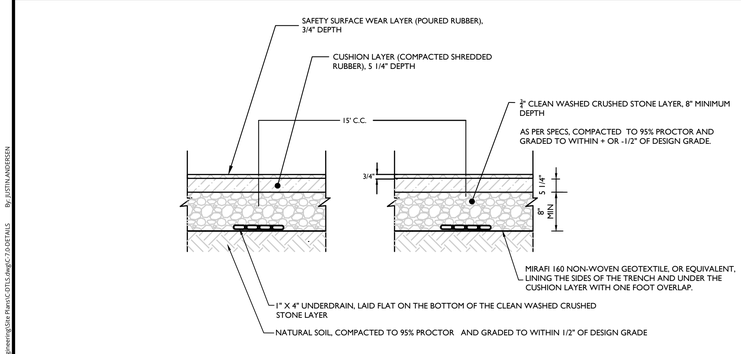
FLAT PIPE AND HEADER PIPE CONNECTION DETAIL

NOT TO SCALE



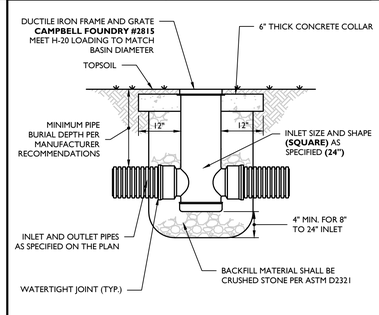
TYPICAL STANDARD PAVER SECTION DETAIL

NOT TO SCALE | MCNJ-SITE-PVMT-2600 | 05/01/17



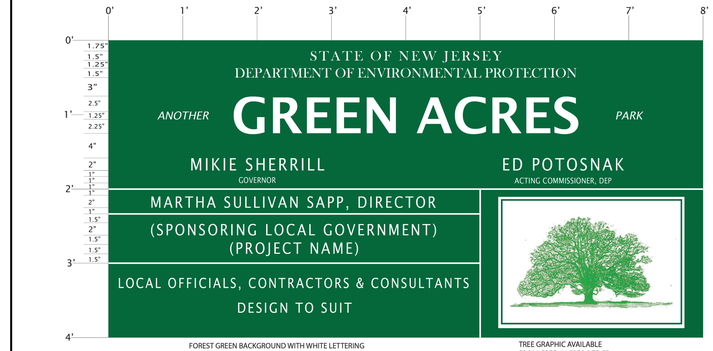
FLAT DRAIN / PLAYGROUND SECTION DETAIL

NOT TO SCALE



YARD DRAIN (NYLOPLAST) DETAIL

NOT TO SCALE | MCNJ-UTIL-STRM-1800 | 05/01/17



FOREST GREEN BACKGROUND WITH WHITE LETTERING

TREE GRAPHIC AVAILABLE FROM GREEN ACRES OFFICE

GREEN ACRES SIGN DETAIL

NOT TO SCALE | GNRL-DTLS-STND-GRID | 08/12/21

REV	DATE	DRAWN BY	DESCRIPTION
1	05/05/26	JA	REVISED PER ADDENDUM #1.

Colliers Engineering & Design
www.colliersengineering.com

Copyright © 2026. Colliers Engineering & Design. All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, revised, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design
HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	MJU	JJR/NV

PROJECT NUMBER: 24009762G
DRAWING NAME: C-DTLS

SHEET TITLE: CONSTRUCTION DETAILS

SHEET NUMBER: 7.0

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

2024\24009762G\Engineering\Site Plans\C-DTLS.dwg|C-7.0-DETAILS By: JUSTIN.ANDERSEN

Bidders name: _____

BID FORM

I/We have carefully examined the plans, specifications, and advertisement for bid for the

Playground at Warinanco Park, City of Elizabeth,
County of Union, New Jersey
BA#10-2026; Union County Engineering Project #2024-031

that is on file in the Union County Division of Engineering. I/We have inspected the site of the work and will contract to do all the work and furnish all materials mentioned in said plans and specifications. Work will be accomplished in the manner prescribed therein.

BASE BID ITEMS:

ITEM NO	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	AMOUNT
1	MOBILIZATION	LS	1		
2	SOIL EROSION AND SEDIMENT CONTROL MEASURES	LS	1		
3	CLEARING SITE	LS	1		
4	EXCAVATION UNCLASSIFIED, BORROW EXCAVATION, AND GRADING	LS	1		
5	3/4" CLEAN STONE	CY	444		
6	HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK	SY	88		
7	1" X 12" PERF. HIGH DENSITY POLYETHYLENE PIPE	LF	854		
8	8" PERF. HIGH DENSITY POLYETHYLENE PIPE	LF	230		
9	FILTER FABRIC, NON-WOVEN GEOTEXTILE	SY	1,907		
10	8" CLEANOUT	UN	2		
11	10" PVC PIPE	LF	13		
12	YARD INLET	UN	1		
13	RECONSTRUCTED INLET, TYPE 'A', USING EXISTING CASTING	UN	1		
14	RECONSTRUCTED MANHOLE, USING EXISTING CASTING	UN	1		
15	4' HIGH ALUMINUM PICKET FENCE	LF	527		
16	4' HIGH ALUMINUM SINGLE SELF CLOSING GATE, BLACK	UN	1		
17	4' HIGH ALUMINUM DOUBLE SELF CLOSING GATE, BLACK	UN	2		
18	CONCRETE SIDEWALK, 4" THICK	SY	217		
19	CONCRETE PAD, REINFORCED, 6" THICK	SY	13		
20	12" X 15" X 18" FLUSH CONCRETE CURB	LF	566		
21	RESET PAVER WALK	SY	104		
22	PARK BENCH	UN	16		
23	POURED-IN-PLACE PLAYGROUND SURFACE	SF	17,164		

24	RELOCATION OF EXISTING PARK SIGN BOARD & COMMUNICATION BOARD	LS	1		
25	RELOCATION OF EXISTING TREE SWING SET	LS	1		
26	RELOCATION OF EXISTING PLAYGROUND EQUIPMENT	LS	1		
27	RELOCATION OF EXISTING GRILL AND PICNIC TABLE	LS	1		
28	HARMONIC CHIMES (SET OF 7)	UN	1		
29	CANTATA CHIMES	UN	1		
30	CONCERT TRIO	UN	1		
31	ROXALL SEE SAW	UN	1		
32	SENSORY COVER CLIMBER - SQUARE	UN	1		
33	INCLUSIVE WHIRL - NATURAL	UN	1		
34	ROCKIN ROBIN	UN	1		
35	MODERN CITY M SERIES 2	UN	1		
36	SHADE 10' CANTILEVER UMBRELLA	UN	1		
37	SWING SEATS - SET OF 8 - BELT SEATS (4), ADAPTIVE SEAT (1), 5-12 ZERO-G CHAIR (1), TOT SEATS (2)	UN	1		
38	FOUR BAY SWING SHADE	UN	1		
39	CUSTOM POWERSCAPE 2-5 UNIT	UN	1		
40	CUSTOM POWERSCAPE 5-12 UNIT	UN	1		
41	PLAYGROUND INSTALLATION	LS	1		
42	GREEN ACRES SIGN	UN	1		
43	SITE UTILITY IMPROVEMENTS - WATER SITE WORK	LS	1		
44	SITE UTILITY IMPROVEMENTS - SANITARY SITE WORK	LS	1		
45	SITE UTILITY IMPROVEMENTS - ELECTRICAL SITE WORK	LS	1		
46	SITE UTILITY IMPROVEMENTS - BATHROOM SITE WORK	LS	1		
47	BASIC SINGLE RESTROOM BUILDING - NON SELF CLEANING	LS	1		
48	TOPSOIL SPREADING, 5" THICK	SY	1,725		
49	FERTILIZING AND SEEDING, TYPE A-4	SY	1,725		
50	STRAW MULCHING	SY	1,725		
51	PIN OAK, 2.5" - 3" Cal. B&B	UN	15		

TOTAL BASE BID AMOUNT:

_____ _____

Written Figures

A1	BASIC SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE - NON SELF CLEANING	LS	1		
A2	DEDUCTION OF ITEM 47	LS	-1		

TOTAL ALTERNATE 'A' AMOUNT:

_____ _____

Written Figures

B1	SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE AND EXTRA STORAGE ROOM - NON SELF CLEANING	LS	1		
B2	DEDUCTION OF ITEM 47	LS	-1		

TOTAL ALTERNATE 'B' AMOUNT:

_____ _____

Written Figures

C1	SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE AND EXTRA STORAGE ROOM - SELF CLEANING	LS	1		
C2	DEDUCTION OF ITEM 47	LS	-1		

TOTAL ALTERNATE 'C' AMOUNT:

_____ _____

Written Figures

TOTAL BASE BID AMOUNT:

_____ _____
Written Figures

BID CONTINGENCY: (To be used if and when directed by the County)

One Hundred Thousand Dollars $100,000.00
Written Figures

TOTAL BASE BID PLUS CONTINGENCY AMOUNT:

_____ _____
Written Figures

TOTAL BASE BID PLUS CONTINGENCY PLUS ALTERNATE 'A' AMOUNT:

_____ _____
Written Figures

TOTAL BASE BID PLUS CONTINGENCY PLUS ALTERNATE 'B' AMOUNT:

_____ _____
Written Figures

TOTAL BASE BID PLUS CONTINGENCY PLUS ALTERNATE 'C' AMOUNT:

_____ _____
Written Figures

SPECIFICATIONS

FOR

Playground at Warinanco Park, City of Elizabeth,
County of Union, New Jersey
BA#10-2026; Union County Engineering Project #2024-031

April 2026

UNION COUNTY
BOARD OF COUNTY COMMISSIONERS

Joseph C. Bodek, Chairwoman
Rebecca Williams, Vice Chairman
James E. Baker, Jr., Commissioner
Michele S. Delisfort, Commissioner
Lourdes M. Leon, Commissioner
Alexander Mirabella, Commissioner
Stanley Neron, Commissioner
Kimberly Palmieri-Mouded, Commissioner
Rebecca Williams, Commissioner
Joseph Signorello, III, Commisioner

CLERK OF THE BOARD
James E. Pellettiere, RMC

COUNTY MANAGER
Edward T. Oatman

DEPARTMENT OF ENGINEERING, PUBLIC WORKS AND FACILITIES MANAGEMENT
Joseph J. Policay, Jr., CPWM
Director, Department of Engineering, Public Works and Facilities Management

COUNTY ENGINEER
DIVISION OF ENGINEERING
Ricardo Matias, PE, CME, CFM

Prepared by:
Colliers Engineering & Design
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733

COUNTY OF UNION
NOTICE TO BIDDERS

Sealed bids will be received by the assistant director of the Division of Purchasing, or her designee, at the County of Union, New Jersey on May 14, 2026, at 10:30 a.m., prevailing time, in the 3rd Floor Conference Room, U.C. Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey for:

Playground at Warinanco Park, City of Elizabeth,
County of Union, New Jersey
BA#10-2026; Union County Engineering Project #2024-031

Bid Packages may be obtained at no charge by registering and downloading at http://ucnj.org/bid-specs. Bid Packages may also be obtained in person from the Division of Engineering at 2325 South Avenue, Scotch Plains, New Jersey 07076 between 8:30 a.m. and 4:00 p.m. weekdays upon payment of a non-refundable money order or bank check in the amount of $275.00 made payable to the County of Union. No Personal / Company checks will be accepted. Requests for mailing of specifications will not be honored. For further information please call 908-789-3675.

The County reserves the right to reject any and all bids and to waive any and all informalities in the bid in accordance with the New Jersey Local Public Contracts Law.

Bids shall be submitted in a sealed envelope and clearly marked with the subject of the bid, name and address of the bidder, phone & fax number, and date of the bid opening. Each bid must be delivered to reach the Division of Purchasing prior to the stated time of the opening of the bids. The County will not be responsible for late delivery by the U.S. Mail or any other carrier. If hand delivered, please note that parking and security access at the County Complex may cause delays and bidders should take them into consideration in order to submit a timely bid. **No** late bids will be accepted.

"Please be advised that State funds through the Green Acres Program are being utilized in this project. Under N.J.A.C. 7:1D-2, vendors currently suspended, debarred, or disqualified are excluded from participation on this project."

Bidders are required to comply with the requirements of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27.

MICHELLE HAGOPIAN, ASSISTANT DIRECTOR OF PURCHASING

Union County Board of County Commissioners

We're Connected to You!

Playground at Warinanco Park, City of Elizabeth,
County of Union, New Jersey
BA#10-2026; Union County Engineering Project #2024-031
TABLE OF CONTENTS

NB-1: Notice to Bidders

GENERAL SPECIFICATIONS
Definitions

Section 1: BID FORM
Section 2: WITHDRAWAL OF BID DUE TO MISTAKE
Section 3: QUALIFICATIONS OF BIDDERS AND REQUIRED SUBMISSIONS
Section 4: INTERPRETATIONS AND ADDENDA
Section 5: OBLIGATION OF BIDDER TO INSPECT SITE AND CONTRACT DOCUMENTS
Section 6: BID AND PERFORMANCE GUARANTEE
Section 7: COMMENCEMENT AND COMPLETION
Section 8: BIDDER AFFIDAVIT
Section 9: LABOR AND MATERIALS
Section 10: INSURANCE REQUIREMENTS
Section 11: INDEMNIFICATION REQUIREMENTS
Section 12: ROYALTIES AND PATENTS
Section 13: PLANS AND SPECIFICATIONS
Section 14: GUARANTEE AGAINST DEFECTIVE WORK
Section 15: TRAFFIC AND STREET MAINTENANCE
Section 16: CONTRACTOR'S EMPLOYEES
Section 17: OWNERSHIP DISCLOSURES REQUIRED
Section 18: NON-COLLUSION AFFIDAVIT
Section 19: EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCES
Section 20: COMPLIANCE WITH NEW JERSEY PREVAILING WAGE ACT
Section 21: BRAND NAME OR EQUAL
Section 22: LINES AND GRADES
Section 23: NUMBER OF WORKING DAYS
Section 24: PROMPT PAYMENT OF CONSTRUCTION CONTRACTS (NJ Prompt Payment Act)
Section 25: STOPPING WORK ON ACCOUNT OF BAD WEATHER
Section 26: ACCESS FOR OTHER CONTRACTORS
Section 27: CONDEMNED MATERIALS AND WORK
Section 28: STORAGE
Section 29: FINAL CLEAN UP
Section 30: SUB-LETTING OF WORK
Section 31: SAFETY
Section 32: QUALITY, SAFETY AND PERFORMANCE STANDARDS
Section 33: MATTERS NOT MENTIONED IN CONTRACT DOCUMENTS
Section 34: PERMITS
Section 35: CONTRACTOR TO PROVIDE PROOF OF PAYMENT
Section 36: CHANGE ORDERS
Section 37: SUPPLEMENTAL WORK
Section 38: FORM OF CONTRACT
Section 39: PROGRESS PAYMENTS
Section 40: INSPECTION
Section 41: DAMAGES
Section 42: LIQUIDATED DAMAGES
Section 43: AFFIRMATIVE ACTION REQUIREMENTS
Section 44: DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN FORM

GENERAL SPECIFICATIONS CONTINUED

Section 45: DISCLOSURE OF NON-INVOLVEMENT ACTIVITES IN RUSSIA OR BELARUS
Section 46: COMPLIANCE WITH THE PUBLIC WORKS CONTRACTOR REGISTRATION ACT (N.J.S.A. 34:11-56.48 et. seq.)
Section 47: UTILITIES
Section 48: MATERIAL COMPLIANCE AND SHOP DRAWINGS
Section 49: PRECONSTRUCTION
Section 50: DISPUTES UNDER THE CONTRACT
Section 51: CONTRACTOR BUSINESS REGISTRATION CERTIFICATE (New Mandatory Requirement – Effective 1/18/2010
Section 52: BID PROTEST - LEGAL FEES AND COSTS
Section 53: AMERICAN GOODS AND PRODUCTS WHERE POSSIBLE
Section 54: NEW JERSEY PAY-TO-PLAY REQUIREMENTS
Section 55: STATEMENT OF EQUIPMENT TO BE USED IN CONSTRUCTION
Section 56: NEW JERSEY SALES AND USE TAX REQUIREMENTS
Section 57: RESOLUTION No. 2014-408
Section 58: FEDERAL TERMS
Section 59: RIGHT TO KNOW ACT

BIDDING DOCUMENTS
Bid Document Submission Checklist
Bidding Documents
Bid Form
Consent of Surety
Bidder Signature Page
Bidder Disclosure Statement
Subcontractor Identification Statement: List of Subcontractors
Subcontractor Identification Certification
Acknowledgement of Addendum
Contractor Business Registration Certificate
Affirmative Action Requirement
Experience Statement
Certificate of Bidder Showing Ability to Perform Contract
Non-Collusion Affidavit
Contractor Registration Advisement
Americans with Disabilities Act
Statement of Bidder's Qualifications
Contractor Performance Record
Affidavit Regarding List of Disbarred, Suspended or Disqualified Bidders
Prior Negative Experience Questionnaire-Certification
Contractor's Certification of Compliance - New Jersey Prevailing Wage Act
Uncompleted Contracts Affidavit
Certificate of Insurance Statement
Collection of Use Tax on Sales to Local Governments Statement
Time of Completion
Disclosure of Investment Activities in Iran
Disclosure of Non-Involvement in Activities in Russia or Belarus
Federal Non-Debarment Certification
Byrd Anti-Lobbying Amendment Certification
Certification regarding lobbying
Disclosure of lobbying activities (LLL Form)

STANDARD SPECIFICATION FORM - SS-1

NEW JERSEY PREVAILING WAGE DETERMINATION DOCUMENTS

PROJECT TECHNICAL SPECIFICATIONS

APPENDIX A – RESTROOM REFERENCE MATERIALS

UNION COUNTY BOARD OF COUNTY COMMISSIONERS
INSTRUCTIONS TO BIDDERS AND FORMS

DEFINITIONS

Wherever reference is made to the County, Title of Project, Bidder, or Vendor/Contractor they shall be as follows:

OWNER/COUNTY:
Union County Board of County Commissioners
UC Administration Building, 6th Floor
10 Elizabethtown Plaza
Elizabeth, New Jersey 07207

ADDRESS INQUIRIES TO:
Union County Division of Purchasing
UC Administration Building, 3rd Floor
10 Elizabethtown Plaza
Elizabeth, NJ 07207
Attn: Michelle Hagopian, Assistant Director, Division of Purchasing
Telephone: 908-527-4130
Facsimile: 908-558-2548
ucbids@ucnj.org

ADDRESS BIDS AND SUBMIT TO:
Union County Division of Purchasing
UC Administration Building, 3rd Floor
10 Elizabethtown Plaza
Elizabeth, NJ 07207
Attn: Michelle Hagopian, Assistant Director, Division of Purchasing
Telephone: 908-527-4130
Facsimile: 908-558-2548
ucbids@ucnj.org

TITLE OF PROJECT: Playground at Warinanco Park, City of Elizabeth, County of Union, New Jersey; BA# 10-2026; Union County Engineering Project #2024-031

BIDDER: Bidder shall be a single overall contract bidder

ENGINEER: Colliers Engineering & Design

COUNTY ENGINEER AND/OR CONSTRUCTION MANAGER (as applicable):

COUNTY ENGINEER:
Ricardo S. Matias, PE, CME, CFM
Union County
Division of Engineering

CONSTRUCTION MANAGER:

GENERAL SPECIFICATIONS

1. BID FORM

Bids for this Work will be enclosed in a sealed envelope addressed to the Purchasing Division, County of Union, New Jersey, Union County Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey 07207, with the full name of the Project clearly marked on the outside. Refer to the sheet marked "Notice of Bid (Advertisement)" for the correct name of the Project. Bidders must submit their bids on the attached pricing sheet (Bid Form), in a sealed envelope addressed to the County and bearing on the outside: the name of the Bidder, Bidder's business address, and the title of the Project.

The Division of Purchasing will receive the bids for this Work at the Union County Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey on the date and time noted on the sheet marked "**Notice of Bid (Advertisement)**".

The County will not assume responsibility for bids forwarded by mail. It is the individual's responsibility to see that the bids are presented to the Purchasing Division at the time and at the place designated.

Bids will be accepted only on the Bid Form supplied. Bids on forms other than the original supplied herein will be rejected. The "complete" Bid Documents includes the Bid Bond, Bid Form, Bidder's Checklist, Consent of Surety, Ownership Disclosure Certification, Non-Collusion Affidavit, and any other documents noted in these Instructions to Bidders or Contract Document to be submitted with this Bid.

The bidder will state in the bidding sheet the price per unit of measure for each scheduled Item of Work for which he will agree to carry out the Work, and the Total Bid Price for the construction of the Project.

The prices in the Bid Form shall be typed or written in pen and ink. Erasures or alterations must be initialed by the bidder in ink.

The bidding sheet for this Project may include a fixed amount as a Bid Allowance. If applicable, all bidders are required to add this fixed amount to their base bid and to include this additional amount in their Bid Bond. This sum will be included in the Contract as well as the performance, labor and materials bond. Payment by the County will be made to the Contractor from these funds only upon the completion of extra Work pursuant to a written Change Order(s) signed by the County's Engineer or his designee and the Contractor, prior to the commencement of such Work. Work commenced prior to written approval by the County shall be done at Contactor's risk. Such payment will only be in the amount agreed to by the parties, in writing in the Change Order(s). See Section 37, Change Orders, of these general specifications for further details.

Refer to Bid Document Submission Checklist for all required documents.

In the event there is a discrepancy between the unit price given and the extended total, the unit price will govern. Any discrepancies will be mathematically adjusted.

Insert applicable alternates, if any have been specified, applicable to the Bidder's Work. All alternates MUST be bid upon. Any Bidder's failure to do so will be deemed a material, non-waivable defect and shall render the bid nonresponsive. The Bidder shall clearly designate whether the change in price is an addition or subtraction, by using either a "+" sign or the word "addition", or in the alternative, a "-"sign or the word "minus". If there is no other change in price, the Bidder shall insert "NC" or "No Charge".

When two or more low bids are equal in all respects, awards will be made according to the provisions of N.J.S.A. 40A:11-6.1(d).

Where unit prices have already been established by the Contract Documents, the Bidder agrees that such unit prices shall prevail. All unit prices, whether filled in by the Bidder or established by the Contract Documents, shall become part of the Contract. No bid will be considered or award made, unless applicable unit prices, as required, are filled in.

The County reserves the right to reject any or all bids and also reserves the right to waive any minor informalities or non-material exceptions in the bids.

The County of Union has the right to reject any and all bids from any bidder that is in, or contemplates bankruptcy of any chapter of nature. Said bidder shall notify the County, in writing, of any condition or knowledge of the same.

Conditional bids will not be accepted. Bids may be withdrawn prior to the advertised time for the opening of bids or authorized postponement thereof or in accordance with the provisions of N.J.S.A. 40A:11-23.3 discussed below. Bids received after the advertised time shall not be considered. Bidders shall be solely responsible for premature opening or late delivery of bids not properly marked, addressed, or directed.

2. WITHDRAWAL OF BID DUE TO MISTAKE

N.J.S.A. 40A:11-23.3 authorizes a bidder to request withdrawal of a public works bid due to a mistake on the part of the bidder. A mistake is defined by N.J.S.A. 40A:11-2(42) as a clerical error that is an **unintentional and substantial computational error** or **an unintentional omission of a substantial quantity of labor, material, or both, from the final bid computation.**

A bidder claiming a mistake under N.J.S.A. 40A:11-23.3 must submit a request for withdrawal, **in writing,** by certified or registered mail to Michelle Hagopian, Assistant Director, Division of Purchasing, County of Union, New Jersey, Union County Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey 07207. The

bidder must request withdrawal of a bid due to a mistake, as defined by the law, within five business days after the receipt and opening of the bids. Since the bid withdrawal request shall be effective as of the postmark of the certified or registered mailing, Michelle Hagopian, Assistant Director of the Division of Purchasing or his designee may contact all bidders, after bids are opened, to ascertain if any bidders wish to, or already have exercised a request to withdraw their bid pursuant to N.J.S.A. 40A:11-23.3.

A bidder's request to withdraw the bid **shall** contain evidence, including any pertinent documents, demonstrating that a mistake was made. Such documents and relevant written information shall be reviewed and evaluated by the County's designated staff pursuant to the statutory criteria of N.J.S.A. 40A:11-23.3.

The County will not consider any written request for a bid withdrawal for a mistake, as defined by N.J.S.A. 40A:11-2(42), by a bidder in the preparation of a bid proposal unless the postmark of the certified or registered mailing is within the five business days following the opening of bids.

3. QUALIFICATIONS OF BIDDERS AND REQUIRED SUBMISSIONS

The County may make such investigation as it deems necessary to determine the ability of the Bidders to perform the Work, which includes investigation of any and all subcontractors listed with the bid. The Bidder shall furnish any information and data for this purpose as the County may request.

4. INTERPRETATIONS AND ADDENDA

Any explanation desired by a bidder regarding the meaning or interpretation of the Contract Documents must be requested in writing to the Assistant Director, Division of Purchasing at ucbids@ucnj.org with reasonable time allowed for a reply to reach bidders before submission of their bids. Any interpretation or instruction made by the County Engineer will be in the form of an addendum to the Contract Documents or clarification and will be furnished to all prospective bidders. Oral explanations or instructions given before the award of the Contract will not be binding. Bidders are required to bring to the attention of the Assistant Director, Division of Purchasing at ucbids@ucnj.org, the discovery of any apparent ambiguity, inconsistency, error, discrepancy, omission in the Contract Documents for interpretation and correction at least ten (10) working days before opening of bids with the exception of Saturdays, Sundays and holidays.

All Addenda issued through the Office of the Division of Purchasing are amendments to the Contract Documents and shall be considered in preparing bids. Same shall become part of the Contract Documents.

Addenda take precedence over all earlier documents and over each other according to the latest date. Addenda unless themselves interpretive remain subject to interpretation the same as any other document incorporated in the Contract.

Addenda may be issued by the Assistant Director, Division of Purchasing up to seven (7) working days prior to the opening of bids. Failure of any bidder to receive an addendum shall not relieve such bidder from the obligation imposed by such addendum. Bidders are to keep themselves currently acquainted with the Contract Documents during the entire bidding period and make inquiry on their own initiative as to issuance of any Addenda. Receipts of all Addenda shall be acknowledged on the "*Acknowledgement of Receipt of Changes*" included in the bid package and must be submitted with the bid.

5. OBLIGATION OF BIDDER TO INSPECT SITE AND CONTRACT DOCUMENTS

At the time of the opening of bids, each Bidder will be presumed to have inspected the site(s) and to have read, and be thoroughly familiar with the Contract Documents. The failure or neglect of any Bidder to receive or examine any form, instrument, or document shall in no way relieve any Bidder from any obligation in respect to its bid.

The Bidder shall examine the contents of the Project Manual and the set of Drawings and assure itself that all pages of the Specifications, Drawings, and other Contract Documents are included in the documents obtained for bidding purposes. Should the Specifications, Drawings, and other Contract Documents be incomplete, the Bidder shall notify the County Engineer in writing, who will supply the Bidder with any missing pages of Specifications, Drawings, or other Contract Documents. The lack of such written notification by the Bidder will be construed as evidence that the Specifications, Drawings, or other Contract Documents supplied it for bidding purposes are full and complete and as a waiver of any subsequent claim to the contrary.

6. BID AND PERFORMANCE GUARANTEE

Each bidder must furnish a Bid Bond, Certified Check or Bank Cashier's Check in the amount of ten percent (10%) of the Bid. Checks shall be drawn to the order of the County of Union, New Jersey, not to exceed $20,000.

Each bidder must furnish with the bid a certificate from a Surety Company, i.e. Consent of Surety, stating that in the event of the contract being awarded to said bidder, such Surety Company will provide the Contractor with bonds guaranteeing the faithful performance of the Work in accordance with the plans and specifications, and the payment for labor, materials, and all other indebtedness which may accrue on the account

of this Work. A Performance, Labor and Materials Bond will be furnished by the Contractor upon an award of Contract, and will be in the amount of 100% of the contract price.

A one-year Maintenance Bond will be required upon acceptance of the Project by the County in the amount as stated in Section 15 of the General Specifications. Bonds will be written by a firm authorized to issue the bonds under the laws of the State of New Jersey and be in a form acceptable to the County Counsel.

N.J.S.A. 40A:11-1 *et seq*. allows the prime Contractor to furnish the Performance Security for his Subcontractors. The County of Union requires Performance Security to be furnished by the prime contractor for the entire job in the total amount of the contract.

The County will return all certified checks or cashier's checks after the proposals have been opened, tabulated and reviewed except those of the three (3) bidders lowest responsible bidders. The County will return the checks of these bidders when a contract is awarded to the successful bidder within ten (10) days after the award of the contract.

If the successful bidder refuses or neglects to sign an agreement and furnish the required bonds, the Bid Bond will be held and used by the County to offset any damages for such refusal or neglect.

7. COMMENCEMENT AND COMPLETION

Work will not commence until a Notice to Proceed is received from the County Engineer.

Upon substantial completion of the Project, the Contractor must request a joint inspection with the County Engineer. Upon completion of this inspection, the County Engineer will prepare a list of incomplete or incorrect items (punch list) and have Contractor initial and date same. The Contractor shall rectify all deficiencies noted on the punch list within 30 calendar days of receipt of the list. The County Engineer may approve extensions for extenuating circumstances.

8. BIDDER AFFIDAVIT

All Bidders are required to complete, sign, and submit with their Bid, the attached "Affidavit Regarding List of Debarred, Suspended or Disqualified Bidders". (See form enclosed)

9. LABOR AND MATERIALS

The prices will cover all costs of any nature incident to and growing out of the Work, including all labor, material, equipment, transportation, loss by damage or destruction of the Project, settlement of damages, and for replacement of defective work or materials.

N.J.S.A. 54:32B-1 et seq. exempts all materials sold to the County of Union from sales or use taxes and should not be included in the prices provided on the Bidding Sheet.

10. INSURANCE REQUIREMENTS

The County of Union requires all contractors to be able to comply with the following insurance requirements. In the event a bid is accepted by the County, the contractor must accept the applicable insurance requirements, as set forth below, as part of any contract awarded to it by the County.

Contractor shall carry and maintain at all times while the contract is in full force and effect, the following insurance coverage with an insurance company or companies acceptable to the County, with limits not less than those shown below. A Certificate of Insurance shall be filed with the County prior to commencement of any Work indicating the following:

a) Commercial General Liability (CGL): Coverage for all operations including, but not limited to, contractual, products and completed operations, and personal injury with limits no less than $5,000,000 per occurrence/$10,000,000 aggregate. The County of Union, its Board of County Commissioners, officers, employees, agents and servants shall be included as an additional insured. Coverage is provided on a primary and non-contributory basis to the County of Union, et al.

b) Automobile Liability: Coverage for all owned, non-owned and hired vehicles with limits not less than $5,000,000 per occurrence, combined single limits (CSL) or its equivalent.

c) Workers Compensation: As required by the State of New Jersey and Employers Liability with limits not less than $1,000,000 per accident for bodily injury or disease.

d) Professional Liability (if design/build): Coverage with limits not less than $1,000,000 per occurrence or claim, $2,000,000 aggregate

e) Contractor's Pollution Legal Liability and/or Asbestos Legal Liability and/or Errors & Omissions (if project involves environmental hazards): Coverage with limits no less than $1,000,000 per occurrence or claim/$2,000,000 aggregate.

f) Builders Risk (for major renovations): During the course of construction utilizing an "All Risk" coverage form with limits equal to the completed value of the project and no coinsurance penalty provisions.

Where applicable, a waiver of subrogation in favor of the County of Union, its Board of County Commissioners, officers, employees, agents, servants and the State of New Jersey is to be included in those policies of insurance where permitted by law.

Notice of Cancellation: Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the Entity.

Special Risks or Circumstances: The County reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

11. INDEMNIFICATION REQUIREMENTS

The County of Union requires all bidders to accept the following indemnification requirements in the event the County accepts their bid. The Contract awarded by the County to the successful bidder will contain the following provision:

> "To the fullest extent permitted by law the Contractor shall indemnify, defend, and hold harmless the owner and the owner's consultants, agents, representatives, and employees from and against any and all claims, damages, losses, costs, and expenses, including, but not limited to attorneys' fees, legal costs and legal expenses arising out of or resulting from the performance of the Contractor's work under this contract, provided that such claim, damage, loss, cost, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) caused or alleged to be caused by the negligent acts, negligent omissions, and/or fault of the Contractor, anyone directly or indirectly employed or retained by the Contractor, or anyone for whose acts the Contractor may be liable regardless of whether caused in part by the negligent act or omission of a party indemnified hereunder provided it is not caused by the sole negligence of a party indemnified hereunder. Contractor shall further indemnify and hold harmless the County and the County's consultants, agents, representative, and employees from and against any and all claims, damages, losses, costs, and expenses, including, but not limited to attorneys' fees, legal costs and legal expenses, arising out of or resulting from performance of the work, provided that such claim, damage, loss, cost, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) caused or alleged to be caused by the negligent acts, negligent omissions, and/or fault of the County or the County's consultants, agents, representatives, or employees and arises out of this project and provided such claim, damage, loss, cost, or expense is not caused by the sole negligence of a party indemnified hereunder."

12. ROYALTIES AND PATENTS

The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall hold the County harmless from loss on account thereof.

13. PLANS AND SPECIFICATIONS

In carrying out the Work, the plan(s) and the specifications will be followed by the Contractor. Minor alterations in the plan may be made or permitted by the County Engineer from time to time and, if no additional Work is necessary, there will be no additional charge for carrying out such minor alterations.

The Contractor shall provide the County Engineer a set of reproducible as-built drawings upon completion of the Project. The Contractor shall maintain an updated construction progress plan in the Project field office at all times.

When applicable, The New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, as amended, and Supplemental Specifications for State Aid Projects, herein after referred to as the "Standard Specifications", are made a part of these specifications and contract for the improvements, and will govern the construction of this Project, the material used and the execution of this Project, except as revised and modified herein. The references to these specifications are given herein for the purpose of aiding in the rapid location of the description of the various items herein specified. The entire Work must be carried on and completed to the satisfaction of the County. The Standard Specifications are amended as follows:

> "Any reference to the Commissioner, Department, Department Laboratory, Engineer or Inspector should be redefined to be the County of Union".

14. GUARANTEE AGAINST DEFECTIVE WORK

Prior to final payment being made or before the release of the performance security required by Section 3 above, the Contractor and Surety shall execute and deliver to the County an original Maintenance Bond with an original signature and seal having a penal sum equal to:

A) One hundred percent (100%) of the final adjusted Contract amount, if such amount is $50,000.00 or less;
B) Fifty percent (50%) of the final adjusted Contract amount, if such amount be greater than $50,000.00 but less than $250,000.00; and,
C) Twenty-five percent (25%) of the final adjusted contract amount, if such amount is $250,000.00 or more.

The Bond and Surety shall be satisfactory to the Union County Counsel. The Surety shall hold a Certificate of Authorization to do business in the State of New Jersey and shall conform to P.L. 1995 c.384, codified as N.J.S.A. 2A:44-143, 144. The Surety Disclosure Statement and Certification required by N.J.S.A. 2A: 44-143, 144, shall be attached to the Bond. Such Maintenance Bond shall remain in full force and effect for a period of one (1) year from the date of Final Completion. Such Maintenance Bond shall also provide that the Contractor and the Surety guarantee to replace for the said period of one (1) year from the date of Final Completion, all Work performed and/or all materials furnished that were not performed or were not furnished in accordance to the terms and performance requirements of the Contract Documents, and will make good any defects thereof which become apparent before the expiration of one (1) year. If, during that period, any part of the Project, in the judgment of the Engineer, is found defective, the Contractor will repair or replace same within five (5) days of receipt of notice from the County Engineer. If the Contractor refuses or neglects to do such Work in the time specified, the County Engineer may have the Work done by others and the Contractor or his Surety thereof will pay the cost.

The Contractor will furnish the County a Maintenance Bond for a percentage of the final adjusted contract price, as stated above. The one (1) year period will start the day of Final Completion of Project by the County. Final payment is conditional on the receipt of a maintenance bond in a form acceptable to County Counsel.

15. TRAFFIC AND STREET MAINTENANCE

The Work must be started and performed by the Contractor in such a manner as to minimize delays to the traveling public. It must be completed in a timely fashion, with little or no inconvenience to traffic and pedestrians, where such inconvenience may be avoided.

All municipal, county, and state roadways shall remain open to traffic unless otherwise provided for in the technical specifications.

If modified traffic patterns are authorized in order to provide a safe working or traveling environment, the Contractor is responsible for providing all equipment, barrels, cones, signs, and barricades to implement the work zone and detours, unless otherwise specified in the technical specifications. All work zones and detours shall be established in accordance with the technical plans and specifications if provided or in strict compliance with the current version of the Manual for Uniform Traffic Control Devices (MUTCD). The Contractor shall obtain approval for these work zones and detour plans from the Municipal Police or applicable police agency and the Union County Bureau of Traffic Maintenance prior to implementation.

All traffic control plans shall provide for safe movement of vehicular, bicycle, and pedestrian traffic. Particular attention shall be given to requirements of the Americans with Disabilities Act.

No portion of any street or alleyway may be used for the storage of any materials or equipment without the approval of the Municipal Police or other applicable police agency. Sidewalks, gutters, drains, fire hydrants and private drives shall be maintained for their intended use unless specifically approved by the County Engineer.

Upon suspension of Work, at the end of the day or for protracted periods, the Contractor shall remove all rubbish and materials from the Work site to the approved storage/staging location. All road cuts, saw cuts, and trenches that may pose hazard to vehicular, pedestrian, or bicycle traffic, to include handicapped users, shall be filled to the surface of the roadway or sidewalk. At no time will steel plates or settled trenches be allowed at the daily suspension of Work, unless specifically approved by the County Engineer.

Use of Traffic Control Officers shall be determined by the County in accordance with the provisions of N.J.S.A. 40A:11-23.1(c). If applicable to the Project, the County shall have provided an allowance for same as set forth in the Bid Form.

With respect to pedestrian traffic, the Contractor shall install signs restricting access of the general public and, as necessary, Union County employees to the area of construction. The Contractor shall provide safe access to required areas and place physical barriers to restricted areas. These barriers may range from caution tape to actual barriers, at the direction of the County Engineer.

16. CONTRACTOR'S EMPLOYEES

The Contractor must employ only suitable and competent labor in the Work, and must remove from the Work any incompetent, unsuitable, or disorderly person upon complaint from the County Engineer.

The parties to any contract resulting from this proposal do hereby agree that the provisions of N.J.S.A. 10:2-1 through 10:2-4 (discrimination in employment on public works contracts): 34:11-56.25 et seq. (payment of prevailing rate of wages determined pursuant to N.J.S.A. 34:11-56.30 by the Commissioner), and the Rules and Regulations promulgated pursuant thereto, are hereby made a part of any contract and are binding upon them.

There will be no discrimination against any employee who is employed in the Work to be covered by any contract resulting from this bid because of age, race, creed, color, national origin, ancestry, marital status or sex.

Any person, firm, or corporation violating the provisions of this Section will be deemed and judged a disorderly person.

17. OWNERSHIP DISCLOSURES REQUIRED

Pursuant to P.L. 2016, c. 43, codified as N.J.S.A. 52:25-24.2.no corporation, partnership, or limited liability company shall be awarded any contract nor shall any agreement be entered into for the performance of any work or the furnishing of any materials or supplies the County unless prior to the receipt of the bid or accompanying the bid, of said corporation, said partnership, or said limited liability company there is submitted a statement setting forth the names and addresses of all stockholders in the corporation who own ten percent (10%) or more of its stock, of any class, or of all individual partners in the partnership who own a ten percent (10%) or greater interest therein, or of all members in the limited liability company who own a ten percent (10%) or greater interest therein, as the case may be. If one or more such stockholder or partner or member is itself a corporation or partnership or limited liability company, the stockholders holding ten percent (10%) or more of that corporation's stock, or the individual partners owning ten percent (10%) or greater interest in that partnership, or the members owning ten percent (10%) or greater interest in that limited liability company, as the case may be, shall also be listed. The disclosure shall be continued until names and addresses of every non corporate stockholder, and individual partner, and member, exceeding the ten percent (10%) ownership criteria has been listed.

To comply with this section, a bidder with any direct or indirect parent entity which is publicly traded may submit the name and address of each publicly traded entity and the name and address of each person that holds a ten percent (10%) or greater beneficial interest in the publicly traded entity as of the last annual filing with the federal Securities and Exchange Commission ("SEC") or the foreign equivalent, and, if there is any person that holds a ten percent (10%) or greater beneficial interest, also shall submit links to the websites containing the last annual filings with the federal SEC or the foreign equivalent and the relevant page numbers of the filings that contain the information on each person that holds a ten percent (10%) or greater beneficial interest.

(See forms attached)

18. NON-COLLUSION AFFIDAVIT

The Bidder shall submit with its bid either the attached completed "Non-Collusion Affidavit" or a statement of non-collusion with verbiage similar to same.

19. EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCES

The successful bidder shall be required to complete and submit an Initial Project Workforce Report, New Jersey Department of Treasury Form AA-201, upon notification of award. Failure to submit this completed form may result in the Contract being terminated.

The successful bidder shall also be required to submit a copy of its Monthly Project Workforce Report, New Jersey Department of Treasury Form AA-202, to the New Jersey Department of Treasury's Division of Public Contracts Equal Employment Opportunity Compliance and to the Board.

20. COMPLIANCE WITH NEW JERSEY PREVAILING WAGE ACT

The County of Union, in order to fulfill the requirements of N.J.S.A. 34:11-56.25 et seq, requires that the following additional conditions be strictly followed. The bidders represent that he is not listed or is not on record in the Office of the Commissioner or the Department of Labor and Workforce Development as one who failed to pay prevailing wages in accordance with the provisions of this Act. The bidder agrees to the inclusion of a contract provision upon award which specifically requires said Contractor to fully comply with each and all of the requirements of the aforesaid Act as it relates to prevailing rates of wages on public contracts as set forth in the New Jersey Prevailing Wage Act, P.L. 1963, Chapter 150 and P.L. 1974, Chapter 64.

A Copy of the Prevailing Wage Rates is attached for your reference. Applicable rates are those wages and fringe benefit rates in effect on the date the contract is awarded. All predetermined rate increases listed at the time the contract award must also be paid, beginning on the dates specified. Rates may change between the time of issuance of this determination and the award of the public works contract. Therefore, prior to the award of the contract, verification must be made with the Public Contracts section, to insure that the rates contained in this determination are still prevailing.

The Contractor agrees to abide and be bound by each and all of the said statutory provisions with respect to the payment of prevailing rates of wages, and acknowledges that the County reserves the right to terminate the Contractor's (or his subcontractors') right to proceed with the scope of Work, or such portion thereof that relates to the failure to pay prevailing rates of wages. In such event or under the terms of N.J.S.A. 34:11-56.27, the Contractor and his surety will be liable to the County of Union for any excess costs occasioned by such a violation.

The Contractor or subcontractors for this Project will post the Prevailing Wage Rates for each craft and classification involved as determined by the Commissioner of Labor and Industry, including the effective date of any changes thereof, in prominent and easily accessible places at the site of the Work or at such place or places as are used by them to pay workmen their wages.

The County of Union requires a copy of payroll records from the Contractor and subcontractors. Payroll records shall be submitted with each voucher request for payment. Prevailing wage rates may be obtained from the New Jersey Labor, Division of Workplace Standards, Public Contracts Section, (609-292-2259).

In addition to compliance with the New Jersey Prevailing Wage Act, the County requires compliance with procedures established by Resolution No. 2014-0408 adopted by the Union County Board of County Commissioners on May 8, 2014. The resolution is furnished in Section 56 of these General Specifications.

UNION LABOR IS PREFERRED ON ALL COUNTY WORK

The foregoing reference to specific laws will not be deemed to be a limitation of obligation of the Contractor to perform his obligations in full compliance with the provisions and requirements of all federal and state statues and local ordinances applicable to the Work to be done under the contract.

It is agreed and understood that any contracts and/or orders placed as a result of this proposal will be governed and construed and the rights and obligations of the parties hereto will be determined in accordance with the laws of the State of New Jersey.

Upon completion of the Work, the Contractor will furnish a Certification of Compliance with the New Jersey Prevailing Wage Act. The certificate in a form acceptable to County Counsel is a condition of the final payment. (See form attached)

21. BRAND NAME OR EQUAL

When the Specifications, Forms, and other Contract Documents use “brand name or equivalent” or similar language, the listed brand name shall serve as a reference or point of comparison for the functional or operational characteristic desired for the goods or services being requested. Where a bidder attempts to submit an equivalent product for a brand name, it shall be the responsibility of the bidder to fully describe and document the product to be provided with the bid in order to establish the equivalence claim.

A. If the Bidder proposes to offer substitute goods as an equal to those specified herein, the bidder shall so indicate with the Bid Proposal. For the purposes of this paragraph, a proposed item shall be considered equal to goods specified herein if:

1. The County, in its sole discretion, determines that: (i) the goods conform substantially, even with deviations, to the brand name goods specified herein; (ii) the goods are

equal to or greater than the brand name goods specified herein in terms of quality, durability, functionality, appearance, strength and design; (iii) the goods are capable, at least as well as the brand name goods specified herein, or performing with existing equipment; and (iv) the goods do not cost the County more than the brand name goods specified herein costs the County.

B. To offer substitute goods as an equal to those specified herein, it is necessary that:

1. The Bidder submits sufficient information with its bid to permit the County to determine that the goods are equivalent to the brand name goods specified herein, including, but not necessarily limited to the brand, catalog number and specifications/data sheets;

2. The Bidder fully identifies and describes the variations of the goods from the brand name goods specified herein on a separate sheet that is to be submitted with the bid proposal. Bidder's literature WILL NOT suffice in explaining exceptions to these specifications.

3. The Bidder certifies that the goods (i) are similar in substance to the brand name goods specified, and (ii) are suited to the same use as the item specified;

C. The County shall be allowed a reasonable time within which to evaluate the Bidder's proposal to offer substitute goods as an equal to those specified herein. The County shall be the sole judge of acceptability. No "or-equal" goods shall be ordered, delivered, assembled, set-up or utilized until the County's evaluation is complete. The County's determination as to equivalency shall be deemed final and absolute.

In the event the Bidder does not provide sufficient supporting documentation with the bid, it will be presumed and required that the brand name goods and services as described in the specifications will be provided.

22. LINES AND GRADES

Normally, horizontal and vertical control points will be provided in the technical specifications. All other surveying will be the responsibility of the Contractor unless otherwise noted.

23. NUMBER OF WORKING DAYS

In accordance with N.J.S.A. 40A:11-17, the Work for the within Project shall be completed as specified on the Time of Completion Form. See form attached

There shall be taken a deduction from the contract price, or any wages paid by the County, to any inspector(s) necessarily employed by it on the Work, for any number of days in excess of the number allowed in the specifications.

24. PROMPT PAYMENT OF CONSTRUCTION CONTRACTS (NJ Prompt Payment Act)

Pursuant to N.J.S.A. 2A:30A-1 et seq., payment to the Contractor, other than for Work done pursuant to a contact allowance, where applicable, shall be processed and paid as follows:

1. All contractor bills shall be either approved for payment, or notice provided as to why the bill or any portion of it will not be approved by the representative(s) of the governing body no later than the public meeting following 20 calendar days of the billing date as defined in the statute.

2. If the billing is approved, said bill shall be paid in the payment cycle following the meeting.

25. STOPPING WORK ON ACCOUNT OF BAD WEATHER

Work must only be performed in weather suitable for the type of construction planned or underway. Extremes in temperature, humidity, precipitation, evaporation, etc. can detrimentally affect the constructed product. Refer to the Standard and Technical Specifications for specific items.

26. ACCESS FOR OTHER CONTRACTORS

The Contractor for this Work will give proper access to other contractors who may be employed upon the Project and must not hinder or delay unnecessarily any Work that may be progressing under other contracts.

27. CONDEMNED MATERIALS AND WORK

Any materials and or part of the Work that may be condemned by the County Engineer will be removed and replaced by the Contractor or otherwise rectified, as may be directed by the County Engineer. No payment will be made upon the Work until such faulty work has been made good as may be directed. In the event the Contractor refuses or neglects to make good such faulty work, he will be deemed to have abandoned the contract and proceedings may be taken against him as provided herein.

28. STORAGE

In the event that it is necessary for the Contractor to stockpile or store materials or equipment on the job site, the Contractor shall inform the County of such necessity and the County may offer available space, if any, for storage of such materials or equipment. The Contractor shall use said space only for such purpose. Any and all materials which may be stored in such space or which may be brought onto the job site at any time by the Contractor will be at the Contractor's sole risk. The County will not be responsible for loss of or damage to said materials or equipment for any cause whatsoever. The Contractor shall take necessary measures to protect any such storage area and shall be responsible for any and all damages.

29. FINAL CLEAN UP

Upon completion of the Work, the Contractor will remove all equipment, unused materials, rubbish, etc., and will repair, or replace in an a manner acceptable to the County Engineer, all areas that may have been damaged in the prosecution of the Work. Same shall be a condition precedent to final payment. Should said Contractor fail to comply with this requirement, the County shall undertake the clean-up with its own forces and charge the cost of same against the Contractor's contract balance.

30. SUB-LETTING OF WORK

Except for the List of Subcontractors, pursuant to N.J.S.A. 40A:11-16 (See form attached), no portion of the Work will be sublet by the Contractor to any other entities, except with the consent of the County Engineer. A complete list of subcontractors must be submitted to the County Engineer at the preconstruction meeting. If the job does not warrant a preconstruction meeting, the Contractor must submit such list prior to the start of Work.

All Subcontractors will be subject to N.J.S.A. 34:11-56 et al.

N.J.S.A. 40A:11-16 requires the bidder to list in the bid sheets the name or names of all subcontractors involved in the following types of Work: plumbing and gas fitting and all kindred work, steam and hot water heating, ventilating apparatus, steam power plants and kindred work, electrical work, ornamental iron work, and structural steel. In addition,

the County may require the identification of specific additional subcontractors. If these trades are expected to be part of the contract, such subcontractors should be listed on the "Subcontractor Identification Statement List of Subcontractors" and Bidder shall certify same on the accompanying sheet titled "Subcontractor Identification Certification". (See forms attached) **Bidder's failure to submit these two forms shall be considered a material defect and result in rejection of Bidder's bid.** Substitutions of any listed subcontractors pursuant to N.J.S.A. 40A:11-16 will not be permitted except with the consent of the County Engineer.

31. SAFETY

The Contractor shall observe all rules and regulations of the Federal, State, and local health officials. Attention is directed to Federal, State, and local laws, rules, and regulations concerning construction safety and health standards. The Contractor shall not require any worker to work in surroundings or under conditions that are unsanitary, hazardous, or dangerous to the worker's health or safety.

The Contractor shall admit to the site, without delay and without the presentation of an inspection warrant, any inspector of OSHA or other legally responsible agency involved in safety and health administration upon presentation of proper credentials.

The Contractor shall make available to the Contractor's employees, subcontractors, the County Engineer, and the public, all information pursuant to OSHA 29 CFR Part 1926.59 of The Hazard Communication Standard 29 CFR 1910.1200, and shall also maintain a file on each job site containing all Material Safety Data Sheets (MSDS) for products in use at the Project. These Material Safety Data Sheets shall be made available to the Engineer upon request.

The Contractor shall at all times conduct the Work to provide for the safety and convenience of the general public and protection of persons and property. The safety provisions of applicable laws, OSHA regulations, building and construction codes, and the rules and regulations of the New Jersey Department of Labor and Workforce Development shall be observed.

32. QUALITY, SAFETY AND PERFORMANCE STANDARDS

All goods and services must be constructed and provided with the highest quality materials and workmanship. It is the intent of these specifications that only equipment equal to, or exceeding, the standard specified will be acceptable in order to protect the safety of the occupants of the Building.

33. MATTERS NOT MENTIONED IN CONTRACT DOCUMENTS

Any Work, material, or method, not specifically described in these specifications, but shown upon the plans of the Work, will be carried out as shown on said plan.

34. PERMITS

The Contractor will obtain all necessary permits required by law and provide the County with necessary approvals prior to commencement of permitted Work.

35. CONTRACTOR TO PROVIDE PROOF OF PAYMENT

Upon the completion of the Work, the Contractor will furnish a General Release as proof that all claims for labor, materials, etc., have been settled by the Contractor. The General Release, in a form acceptable to County Counsel, is a condition of final payment.

36. CHANGE ORDERS

The applicability of change orders and change order procedures shall comply with *N.J.S.A.* 40A:11-16.7 and *N.J.A.C.* 5:30-11.1 *et seq.*, "Change Orders and Open End Contracts".

37. SUPPLEMENTAL WORK

In case any supplemental work is necessary, it will be performed by the Contractor at a price fixed by agreement between the Contractor and the County Engineer and approved by the County as specified in Section 36. The Contractor will do no supplemental work on any character, for which the Contractor will demand pay, except upon the written order of the County.

38. FORM OF CONTRACT

The Contract will be subject to all statutory provisions on the matter of Public Works, Public Contracts, The Law Against Discrimination, the Laws Governing Affirmative Action and Prevailing Rates of Wages under the laws of New Jersey.

The Agreements shall be executed by both parties not later than twenty-one (21) days from the date of the award by the County (Sundays and holidays excluded); however, such time frame may be extended by agreement of the parties.

39. PROGRESS PAYMENTS

Monthly progress payments will be made based on the value of labor and materials incorporated in the Work and of materials suitably stored at the site. An itemized schedule of values shall be submitted with each Application for Payment.

(Refer to the Owner/Contractor Agreement for Retainage and other conditions pertaining to payment and the application of N.J.S.A. 2A:30A-1 et seq.)

All Applications for Payment shall be accompanied by paid invoices for materials incorporated in the Work and for materials suitably stored at the site, and affidavit(s) by Subcontractors whose Work was included in the next to the last application to the effect such Work and such materials have been paid for.

No payment shall be made without Contractor having provided all submittals set forth in this Section, and the approval of same by the County.

For contracts exceeding $100,000.00, monthly payments will be made on the Work to the extent of 98% of the value of the Work done which is considered to be retainage.

For contracts less than $100,000.00, monthly payments will be on the Work to the extent of 90% of the value of the Work done. In lieu of the retainage, the Contractor will, at his option, deposit with the County Counsel negotiable bearer bonds of the State of New Jersey or any political subdivision thereof, equal to the amount otherwise withheld as retainage.

When the Project is completed, the final cost of the Project will be based on actual quantities of authorized Work done under each item scheduled in the bidding sheet and approved Change Orders, if any. The money due to the Contractor as determined by said final certificate after deduction of previous monthly payments on account, will be paid to the Contractor in accordance with the terms of the contract dealing with Prompt Payment, providing, however that before such final payment is made, all outstanding claims against the Contractor must be satisfied. Before final payment is released, the Contractor must furnish: a**)** Maintenance Bond (see Section 6 of these general specifications); **b)** Certification of Compliance, New Jersey Prevailing Wage Act (see Sections 21 and 51); and **c)** General Release (see Section 36) in a form satisfactory to County Counsel; **d)** complete set of as-built plans in the latest AutoCad on compact disc; and e) a complete set of in-progress photos in jpg, jpeg, or bmp digital format on a compact disc.

40. INSPECTION

The Work must be done in accordance with the plans and specifications, and will be inspected by the County Engineer. An inspector may be placed upon the Work at any time by the County Engineer to see that the plans, specifications, and instructions of the County Engineer are carried out. In connection herewith, bidders are referred to N.J.S.A. 40A:11-17.

41. DAMAGES

The Contractor will be held responsible for all damages that may occur to Work, or to persons or property by reason of the nature of the Work or from the elements, or by reason of inadequate protection of the Work, or from any carelessness or negligence on his part or on the part of his employees. The County will withhold payments on the Work until all suits or claims for damages sustained on, or by reason of, this Work will have been settled by the Contractor.

The construction and final completion of this Work will be guaranteed by the Contractor. Any damages that may be done to the Work or any part thereof, by the elements or otherwise, during its construction, will be made good by the Contractor.

42. LIQUIDATED DAMAGES

If the Project is not completed within the time specified herein or within such further time as may have been granted by the County Engineer, then the Contractor hereby agrees to pay to the County as liquidated damages, but not as a penalty, $1,000.00 per day for each and every calendar day that he is in default on time to complete the Work. The said sum will be deducted from moneys due the Contractor and if the damages exceed this amount, then the Contractor or his Surety Company will pay the excess. These damages may be waived at the option of the County.

43. AFFIRMATIVE ACTION REQUIREMENTS

(REVISED 01/2022)

EXHIBIT B

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE

N.J.S.A. 10:5-31 et seq. (P.L.1975, c.127)

N.J.A.C. 17:27-1.1 et seq.

CONSTRUCTION CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional

or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer, pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. l7:27-7.2; provided, however, that the Dept. of LWD, Construction EEO Monitoring Program, may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, A, B, and C, as long as the Dept. of LWD, Construction EEO Monitoring Program is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Dept. of LWD, Construction EEO Monitoring Program, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2. The contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

(A) If the contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et. seq., as supplemented and amended from time to time and the Americans with Disabilities

Act. If the contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the contractor or subcontractor agrees to afford equal employment opportunities minority and women workers directly, consistent with this chapter. If the contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided said assurances, indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, the contractor or subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the hiring or scheduling procedures prescribed under (B) below; and the contractor or subcontractor further agrees to take said action immediately if it determines that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.

(B) If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (A) above, or if the contractor does not have a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor agrees to take the following actions:

(l) To notify the public agency compliance officer, the Dept. of LWD, Construction EEO Monitoring Program, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;

(2) To notify any minority and women workers who have been listed with it as awaiting available vacancies;

(3) Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;

(4) To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;

(5) If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and nondiscrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions;

(6) To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor:

(i) The contactor or subcontractor shall interview the referred minority or women worker.

(ii) If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in order to perform the work of the construction trade, the contractor or subcontractor shall in good faith determine the qualifications of such individuals. The contractor or subcontractor shall hire or schedule those individuals who satisfy appropriate qualification standards in conformity with the equal employment opportunity and non-discrimination principles set forth in this chapter. However, a contractor or subcontractor shall determine that the individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the Dept. of LWD, Construction EEO Monitoring Program. If necessary, the contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (C) below.

(iii) The name of any interested women or minority individual shall be maintained on a waiting list, and shall be considered for employment as described in (i) above, whenever vacancies occur. At the request of the Dept. of LWD, Construction EEO Monitoring Program, the contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.

(iv) If, for any reason, said contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its files, and send a copy to the public agency compliance officer and to the Dept. of LWD, Construction EEO Monitoring Program.

(7) To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the Dept. of LWD, Construction EEO Monitoring Program and submitted promptly to the Dept. of LWD, Construction EEO Monitoring Program upon request.

(C) The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the contractor or subcontractor agrees that, in implementing the procedures of (B) above, it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

After notification of award, but prior to signing a construction contract, the contractor shall submit to the public agency compliance officer and the Dept. of LWD, Construction EEO Monitoring Program an initial project workforce report (Form AA-201) electronically provided to the public agency by the Dept. of LWD, Construction EEO Monitoring Program, through its website, for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7. The contractor also agrees to submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration of this contract to the Dept. of LWD, Construction EEO Monitoring Program, and to the public agency compliance officer.

The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the-job programs for outreach and training of minorities and women. (D) The contractor and its subcontractors shall furnish such reports or other documents to the Dept. of LWD, Construction EEO Monitoring Program as may be requested by the Dept. of LWD, Construction EEO Monitoring Program from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Dept. of LWD, Construction EEO Monitoring Program for conducting a compliance investigation pursuant to N.J.A.C. 17:27-1.1 et seq.

44. INVESTMENT ACTIVITIES IN IRAN

Pursuant to N.J.S.A. 52:32-55 et seq., prohibits State and local public contracts with persons or entities engaging in certain investment activities in energy or finance sectors of Iran.

45. NON-INVOLVEMENT ACTIVIES IN RUSSIA OR BELARUS

Pursuant to N.J.S.A. 52:32-60.1 et seq., Pursuant to N.J.S.A. 52:32-60.1, et seq. (L. 2022, c. 3) any person or entity (hereinafter "Vendor") that seeks to enter into or renew a contract with a State agency for the provision of goods or services, or the purchase of bonds or other obligations, must complete the certification below indicating whether or not the Vendor is identified on the Office of Foreign Assets Control (OFAC) Specially Designated Nationals and Blocked Persons list, available here:

https://sanctionssearch.ofac.treas.gov/. If the Department of the Treasury finds that a Vendor has made a certification in violation of the law, it shall take any action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

46. COMPLIANCE WITH THE PUBLIC WORKS CONTRACTOR REGISTRATION ACT - (N.J.S.A. 34:11-56.48 et. seq.)

Pursuant to the above-referenced law, Bidders are required to be registered with the New Jersey Department of Labor and Workforce Development and to possess a current certificate by said Department indicating compliance with the Act prior to the time and date that bids are received. Bidders are notified of this requirement of their compliance. Such certificates or applications shall also be provided for each Subcontractor furnishing plumbing and gas fitting, steam and hot water heating and ventilating apparatus, and all kindred work, steam power plants and kindred work, electrical work, structural steel and ornamental iron work, and such other subcontractors as the specifications require relative to prior identification.

47. UTILITIES

Attention of the bidder is directed to the fact that the approximate locations of known utility structures and facilities that may be encountered within and adjacent to the limits of the Work are shown on the plans and described herein. The accuracy and completeness of this information is not guaranteed by the County Engineer and the bidder is advised to ascertain for himself all the facts concerning the location of these and other utilities.

The Contractor will not proceed with his Work until he has made diligent inquiries of all public utility and municipal officials to determine the exact location of all-underground structures and pipes within the site of the Project. The Contractor will notify utility owners not less than ten (10) days in advance of the time he proposes to perform any Work that will endanger or affect their facilities in compliance with **New Jersey One-Call.** In excavating in any part of the Work, care must be taken not to remove or damage any gas, water, sewer, or other pipe, conduit, or structure, - public or private - without the concurrence of the owner and the County Engineer. The Contractor will, at his own expense, shore up, secure and maintain a continuous flow in such structures, and will keep them in repair until final acceptance of the Work.

When pipes or other structures are encountered or when the removal, relocation or protection of these utilities are necessary in carrying out the Project as planned, the Contractor will cooperate with the owner of said utilities and will permit the owners or their agents access to the site of the Work in order to relocate or protect their facilities and not hinder or delay unnecessarily the Work of the owners in moving same. No extra allowance of payment will be made to the Contractor for the use of any materials, equipment, etc., or for the performance of any Work in connection with the moving of said structures unless the Contractor is specifically ordered by the County Engineer to furnish such materials, equipment, or services. If directed by the County Engineer to do any Work or furnish any materials or equipment, payment will be allowed the Contractor in accordance with the unit prices bid for such Work, or, if such items are not scheduled in the proposal, such Work shall be allowed "Supplemental Work" as provided in Section 39 of these general specifications. The corporations, companies, agencies or municipalities owning or controlling the utilities, and the name, and telephone numbers are listed in the beginning of the Technical Specifications.

48. MATERIAL COMPLIANCE AND SHOP DRAWINGS

The Contractor will require the manufacturer or supplier to furnish three (3) copies of Certification of Compliance with each delivery of materials, components and manufactured items for the Project. Two (2) copies will be furnished to the County Engineer; one copy will be retained by the Contractor. Certificates of Compliance will contain the following information:

1. Project to which material is consigned;
2. Name of the Contractor to which the material is supplied;
3. Kind of material supplied;
4. Quantity of material represented by the Certificate;
5. Means of identifying the consignment, such as label marking, seal number, etc.;
6. Date and method of shipment;
7. That the material is in conformity with the pertinent specifications stated in the certificate; and

8. Signature of a person having legal authority to bind the supplier.

The Contractor will submit to the County Engineer for his approval five (5) copies of complete and fully detailed shop or working drawings for those items listed in the beginning of the technical specifications.

Each drawing will identify the name of the job, location and Contractor.

All drawings will be approved in accordance with the standard specifications. Refer to the Technical Specifications for specific items.

All materials or articles used in the Work will be of American manufacture, insofar as same are available, in conformance with N.J.S.A. 40A:11-18.

49. PRECONSTRUCTION

In order to provide full coordination of this Project among the parties concerned, the County Engineer will arrange for a preconstruction meeting between the Contractor, County Engineer and other interested parties as soon as possible after the contract is executed. At this meeting the Contractor will present his proposed schedule of Work which shall be subject to review and approval of the County through its designated representatives.

50. DISPUTES UNDER THE CONTRACT

A dispute arising under the Contract shall be submitted in writing to the County Engineer with all facts and supporting data. The County Engineer will review the dispute and issue his decision or request additional facts or documentation after which he will render his decision.

In the event the dispute is not then resolved, the matter shall, pursuant to law, be submitted to mediation before being submitted to a court of competent jurisdiction venued in Union County.

The County Engineer will notify the County Counsel when a matter is to be submitted to mediation. The County Counsel will communicate with the parties and inform them of the procedures to be followed in making such a submission.

51. CONTRACTOR BUSINESS REGISTRATION CERTIFICATE

Pursuant to N.J.S.A. 52:32-44, the County of Union is prohibited from entering into a contract with an entity unless the bidder/proposer/contractor, and each subcontractor that is required by law to be named in a bid/proposal/contract has a valid Business

Registration Certificate on file with the Division of Revenue and Enterprise Services within the Department of the Treasury.

Prior to contract award or authorization, the contractor shall provide the County of Union with its proof of business registration and that of any named subcontractor(s).

Subcontractors named in a bid or other proposal shall provide proof of business registration to the bidder, who in turn, shall provide it to the County of Union prior to the time a contract, purchase order, or other contracting document is awarded or authorized.

Proof of registration must show that the bidder was in fact registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids. If subcontractors are named on the bid, proof of the business registration for each must be provided prior to the award of a contract. Similarly, to the bidder, the proof must show that each subcontractor was registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

During the course of contract performance:

1) the contractor shall not enter into a contract with a subcontractor unless the subcontractor first provides the contractor with a valid proof of business registration.
2) the contractor shall maintain and submit to the County of Union a list of subcontractors and their addresses that may be updated from time to time.
3) the contractor and any subcontractor providing goods or performing services under the contract, and each of their affiliates, shall collect and remit to the Director of the Division of Taxation in the Department of the Treasury, the use tax due pursuant to the Sales and Use Tax Act, (N.J.S.A. 54:32B-1 et seq.) on all sales of tangible personal property delivered into the State. Any questions in this regard can be directed to the Division of Taxation at (609)292-6400. Form NJ-REG can be filed online at http://www.state.nj.us/treasury/revenue/busregcert.shtml.

Before final payment is made under the contract, the contractor shall submit to the County of Union a complete and accurate list of all subcontractors used and their addresses.

Pursuant to N.J.S.A. 54:49-4.1, a business organization that fails to provide a copy of a business registration as required, or that provides false business registration information, shall be liable for a penalty of $25 for each day of violation, not to exceed $50,000, for each proof of business registration not properly provided under a contract with a contracting agency.

52. BID PROTEST – LEGAL FEES AND COSTS

In the event a Bidder unsuccessfully challenges a Bid Submission by filing an action in a court of law concerning same, said Bidder shall be responsible for payment of reasonable legal costs and fees incurred by the County relating to said protest.

53. AMERICAN GOODS AND PRODUCTS WHERE POSSIBLE

Bidder shall comply with the requirements of N.J.S.A. 40A:11-18 and use only manufactured and farm products of the United States, wherever available, for the Project.

54. NEW JERSEY PAY-TO-PLAY REQUIREMENTS

This Contract is required by law to be publicly advertised for bids. As such, lists of political contributions pursuant to N.J.S.A. 19:44A-1 et seq. are NOT REQUIRED to be provided with the bids.

55. STATEMENT OF EQUIPMENT TO BE USED IN CONSTRUCTION

Pursuant to N.J.S.A. 40A:11-20 entitled Certificate of Bidder Showing Ability to Perform Contract, the County requires a Certification from all bidders submitting a bid showing that the Bidder owns, leases, or controls all necessary equipment required by the Project Plans and Specifications. All bidders shall provide this information at the time of the bid opening using the attached form entitled, “CERTIFICATE OF BIDDER SHOWING ABILITY TO PERFORM CONTRACT’.

If the Bidder is not the actual owner of the equipment, it shall state the source from which the equipment will be obtained and shall attach a certificate from the owner or person in control of the equipment demonstrating that the equipment owner has granted the Bidder control of the requisite equipment during such time as may be necessary for completion of the portion of the contract for which the equipment is necessary.

56. NEW JERSEY SALES AND USE TAX REQUIREMENTS,

Contractors are required to comply with the following:

New Jersey Sales and Use Tax Requirements: All contractors with subcontractors, or any of their affiliates, who enter into contracts for the provision of goods or services with or for New Jersey local government entities, are required to collect and remit to the New Jersey Director of Taxation in the Department of the Treasury the use tax due on all of their sales of tangible personal property delivered into the State of New Jersey pursuant to the “Sales and Use Tax Act,” (N.J.S.A. 54:32B-1 et seq.), regardless of whether the tangible personal property is intended for a contract with the contracting agency. This tax shall be remitted for the term

of the Contract.

For purposes herein “affiliate” shall mean any entity that: (a) directly, indirectly, or constructively controls another entity, (b) is directly, indirectly, or constructively controlled by another entity, or (c) is subject to the control of a common entity. For purposes of the immediately preceding sentence, an entity controls another entity if it owns, directly or indirectly, more than fifty percent (50%) of the ownership interest in that entity. NJSA 52:32-44(g)(3).

57. RESOLUTION NO. 2014-408

WHEREAS, the County of Union recognizes there is a need to ensure that all work on significant public construction and maintenance contracts is performed by responsible, qualified firms that maintain the capacity, expertise, personnel, and other qualifications and resources necessary to successfully perform public contracts in a timely, reliable, and cost-effective manner; and

WHEREAS, in order to effectuate the purpose of selecting responsible contractors for significant public contracts and to protect Union County's capital investments in such contracts prospective contractors and subcontractors should be required to meet pre-established, clearly-defined, minimum standards relating to contractor responsibility, including retirements and criteria concerning qualifications, competency) expertise, adequacy of resources, including equipment, financial and personnel, and satisfactory records regarding past project performance, safety, legal compliance and business integrity; and

WHEREAS, the County has a compelling interest in assuring that its Public Works Projects meet the highest standard of safety and quality; and

WHEREAS, due to the critical impact that skilled construction craft labor has on public works projects, and due to the limited availability of skilled construction craft labor and imminent craft labor skill shortages, it is necessary to require contractors and subcontractors to participate in established, formal apprenticeship training programs for the purpose of both promoting successful project delivery and ensuring future workforce development; and

WHEREAS, an apprenticeship program is a structured system of training designed to prepare individuals for occupations and lifelong careers in skilled trades and crafts by providing a wage-paying job that incorporates extensive workplace and classroom training under the supervision of experienced workers, in preparation for highly skilled occupations; and

WHEREAS, apprenticeship programs are a critical component in public safety, by ensuring that workers on public projects are properly trained, able, competent and capable craftsmen, and provide assurance of compliance with the County's bid specifications and achieve high quality standards; and

WHEREAS, for an apprenticeship program to be fully effective, the public and private sectors must recognize its value and commit to supporting its mission; and

WHEREAS, Union County has long recognized the value of apprenticeship programs through its support of the Union County Vocational-Technical Schools, which offer training programs to help ensure that Union County will continue to produce a skilled and educated work force in the trade specialties, and thus, strengthen Union County's economy by fostering the development of highly paid trade and craft careers; and

WHEREAS, the use of apprenticeship programs or apprenticeship trained employees on Union County Public Works Projects will serve the dual goal of providing the County with assurance that its public works projects are completed with a well-trained workforce, in a highly skilled and timely fashion, while creating opportunities for careers in the skilled trades and craft industry for County residents; and

WHEREAS, the County of Union also recognizes that it is beneficial to their employees to utilize fair business, employment, and training practices that have a positive impact on local communities affected by such contracts:

NOW, THEREFORE, BE IT RESOLVED by the Board of Chosen Freeholders of the County of Union as follows:

1. The County of Union shall require compliance with the provisions of this Resolution by business entities seeking to provide services to the County of Union as specified herein. The requirements of this Resolution are intended to supplement, not replace, existing contractor qualifications and performance standards or criteria currently required by law, public policy or contracting documents, including but not limited to Union County's DPMC classification and Project Labor Agreement policies

2. All contractors and subcontractors that perform significant work on any public facility or public works project, including construction, alteration, renovation, repair, service, or maintenance work, shall meet the requirements of this Resolution. For purposes of this Resolution, the

term "significant work" shall be defined as any work or activity covered under the New Jersey Prevailing Wage Act, N.J.S.A. 34:11-56.25 et seq.

3. All firms engaged in contracts covered by this Resolution shall be qualified responsible contractors or subcontractors that have sufficient capabilities in all respects to successfully perform contracts on which they are engaged, including the necessary experience, equipment, technical skills and qualifications and organizational, financial and personnel resources. Firms bidding on public contracts shall also be required to have a satisfactory past performance record and a satisfactory record of legal compliance, integrity and business ethics. Compliance with these standards shall be established by compliance with the requirements set forth in paragraph 8 of this Resolution.

4. As a condition of performing work on public works contracts over the public works threshold, the general contractor shall provide certification that he and each subcontractor working on the project shall have at least one (I) employee who has successfully completed the OSHA 10-hour construction safety and health course. As a condition of performing work on public works contracts of $500,000.00 or more total cost of project, the general contractor shall provide certification that each subcontractor working on the project shall have at least one (1) employee who has successfully completed the OSHA 30-hour construction safety and health course.

5. All contractors and subcontractors that perform significant work on any public facility or public works project shall be required to affirmatively provide evidence of and confirm compliance with proof of participation in an Apprenticeship Program currently registered and approved by the United States Department of Labor ("USDOL"), the New Jersey Department of Labor ("NJDOL") or any state having equal to or higher requirements as either the USDOL or NJDOL apprenticeship programs. Additionally, Apprenticeship Programs shall meet the criteria set forth in Section 8(i) of this Resolution.

6. As a condition of performing work on public works contracts subject to this Resolution, a general contractor seeking award of a contract shall submit a Contractor Responsibility Certification at the time it submits its bid for contract.

7. The Contractor Responsibility Certification shall be completed on a form provided by the Union County Purchasing Department and shall reference the project for which a bid is being submitted by name and contract or project number.

8. In the Contractor Responsibility Certification, general contractors and subcontractors shall certify the following facts regarding their past performance and work history and its current qualifications and performance capabilities:

a. The firm has all valid, effective licenses, registrations or certificates required by federal, state, county, or local law, including, but not limited to, licenses, registrations, certificates required to: (1) do business in the designated locale; and (2) perform the contract work it seeks to perform. These shall include, but not be limited to, licenses, registrations or certificates for any type of trade work or specialty work, which the firm proposes to self-perform.

b. The firm meets the bonding requirements for the contract, as required by applicable law or contract specifications and any insurance requirements, as required by applicable law or contract specifications, including general liability insurance, workers compensation insurance and unemployment requirements.

c. The firm has not been debarred by any federal, state or local government agency or authority in the past three (3) years.

d. The firm has not defaulted on any project in the past three (3) years.

e. The firm has not had any type of business, contracting or trade license, registration, or other certification suspended or revoked in the past three (3) years.

f. The firm has not been cited and found guilty for a willful violation of federal or state safety laws in the past three (3) years.

g. The firm and/or its owners have not been convicted of any crime relating to the contracting business by a final decision of a court or government agency in the past three (3) years.

h. The firm will pay all craft employees that it employs on the project the current wage rates and benefits as required under applicable Federal or State prevailing wage laws.

i. The firm participates in an Apprenticeship Program that is

currently registered with the USDOL, the NJDOL or any state having equal to or higher requirements as either the USDOL or NJDOL apprenticeship programs, for each craft or trade in which it apprentices. The firm shall provide proof of meeting this qualification standard by submitting appropriate documentation as an attachment to this Certification. The firm shall continue to participate in applicable apprenticeship programs for the full duration of the contract work. The apprenticeship program in which the firm participates shall have graduated at least one (1) enrollee in each of the past three (3) years.

9. The County of Union may conduct any additional inquiries to verify that the prospective awardee and its subcontractors have the technical qualifications and performance capabilities necessary to successfully perform the contract and that the firms have a sufficient record of legal compliance and business integrity to justify the award of a public contract. In conducting such inquiries, the County of Union may seek relevant information from the firm, its prior clients or customers, its subcontractors or any other relevant source.

10. If any provision of this Resolution shall be held to be invalid or unenforceable by a court of competent jurisdiction, any such holding shall not invalidate any other provisions of this Resolution and all remaining provisions shall remain in full force and effect.

NOW, THEREFORE, BE IT RESOLVED by the Board of Chosen Freeholders of the County of Union that it hereby establishes and adopts the Responsible Contractor Policy, and it hereby authorizes the County Manager to sign any and all documents necessary to make said Policy effective immediately.

58. FEDERAL TERMS

TERMS AND CONDITIONS APPLICABLE TO ALL CONTRACTS/PURCHASES FUNDED, IN WHOLE OR IN PART, BY FEDERAL FUNDS.

The provisions set forth below apply to all contracts funded, in whole or in part, by Federal funds as required by 2 CFR 200.317.

1. CONTRACTING WITH SMALL AND MINORITY BUSINESSES, WOMEN'S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS

Pursuant to 2 CFR 200.321, the State must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible. Accordingly, if subawards are to be made the Contractor shall:

(1) Include qualified small and minority businesses and women's business enterprises on solicitation lists;

(2) Assure that small and minority businesses, and women's business enterprises are

solicited whenever they are potential sources;
(3) Divide total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
(4) Establish delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and,
(5) Use the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

2. DOMESTIC PREFERENCE FOR PROCUREMENTS

Pursuant to 2 CFR 200.322, where appropriate, the State has a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). If subawards are to be made the Contractor shall include a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). For purposes of this section:
(1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
(2) "Manufactured products" means items and construction materials composed in whole or in part of nonferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

3. PROCUREMENT OF RECOVERED MATERIALS

Where applicable, in the performance of contract, pursuant to 2 CFR 200.323, the contractor must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $ 10,000 or the value of the quantity acquired during the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.
To the extent that the scope of work or specifications in the contract requires the contractor to provide recovered materials the scope of work or specifications are modified to require that as follows.
i. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—
    1. Competitively within a timeframe providing for compliance with the contract performance schedule;
    2. Meeting contract performance requirements; or
    3. At a reasonable price.

ii. Information about this requirement, along with the list of EPA- designated items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive- procurement-guideline-cpg-program.
iii. The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act."

4. EQUAL EMPLOYMENT OPPORTUNITY

Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor." See, 2 CFR Part 200, Appendix II, para. C.
During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:
Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
(3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
(4) The contractor will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
(5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
(6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his/her books, records, and

accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

5. DAVIS-BACON ACT, 40 U.S.C. 3141-3148, AS AMENDED

When required by Federal program legislation, all prime construction contracts in excess of $2,000 shall be done in compliance with the Davis-Bacon Act (40 U.S.C. 3141- 3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable. The contractor shall comply with 40 U.S.C. 3141-3144, and 3146-3148 and the requirements of 29 C.F.R. pt. 5 as applicable. Contractors are required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. Additionally, contractors are required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

6. COPELAND ANTI-KICKBACK ACT

Where applicable, the Contractor must comply with Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States").

a. Contractor. The Contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into the OGS centralized contract.
b. Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
c. Breach. A breach of the clauses above may be grounds for termination of the OGS centralized contract, and for debarment as a Contractor and subcontractor as provided in 29 C.F.R. § 5.12.

7. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT, 40 U.S.C. 3701-3708

Where applicable, all contracts awarded by the non-Federal entity in excess of $ 100,000 that involve the employment of mechanics or laborers must comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5).

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the

sum of $27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The unauthorized user shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

8. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT

If the Federal award meets the definition of "funding agreement" under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

9. CLEAN AIR ACT, 42 U.S.C. 7401-7671Q, AND THE FEDERAL WATER POLLUTION CONTROL ACT, 33 U.S.C. 1251-1387, AS AMENDED

Where applicable, Contracts and subgrants of amounts in excess of $150,000, must comply with the following:

Clean Air Act

1. The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
2. The contractor agrees to report each violation to the Division of Purchase and Property and understands and agrees that the Division of Purchase and Property will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
3. The contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA.

Federal Water Pollution Control Act

1. The contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.

2. The contractor agrees to report each violation to the Division of Purchase and Property and understands and agrees that the Division of Purchase and Property will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
3. The contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA.

10. DEBARMENT AND SUSPENSION (EXECUTIVE ORDERS 12549 AND 12689)

(1) This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the contractor is required to verify that none of the contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
(2) The contractor must comply with 2 C.F.R. pt. 180, subpart C and2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
(3) This certification is a material representation of fact relied upon by the State or authorized user. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the State or authorized user, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
(4) The bidder or proposer agrees to comply with the requirements of2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

11. BYRD ANTI-LOBBYING AMENDMENT, 31 U.S.C. 1352

Contractors that apply or bid for an award exceeding $100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

12. PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

(a) Recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:
(1) Procure or obtain;
(2) Extend or renew a contract to procure or obtain; or
(3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115–232, section 889,

covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

(i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

(ii) Telecommunications or video surveillance services provided by such entities or using such equipment.

(iii) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

13. CONTRACTS FOR MORE THAN THE SIMPLIFIED ACQUISITION THRESHOLD

Contracts for more than the simplified acquisition threshold, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

14. TERMINATION FOR CONVENIENCE PROVISION

All contracts in excess of $10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.

15. BONDING REQUIREMENTS

For construction or facility improvement contracts or subcontracts exceeding the Simplified Acquisition Threshold, the Federal awarding agency or pass-through entity may accept the bonding policy and requirements of the non-Federal entity provided that the Federal awarding agency or pass-through entity has made a determination that the Federal interest is adequately protected. If such a determination has not been made, the minimum requirements must be as follows:

(a) A bid guarantee from each bidder equivalent to five percent of the bid price. The “bid guarantee” must consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of the bid, execute such contractual documents as may be required within the time specified.

(b) A performance bond on the part of the contractor for 100 percent of the contract price. A “performance bond” is one executed in connection with a contract to secure fulfillment of all the contractor's requirements under such contract.

(c) A payment bond on the part of the contractor for 100 percent of the contract price. A “payment bond” is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

59. RIGHT TO KNOW ACT

The provisions of N.J.S.A. 34:5A-I et seq. and N.J.A.C 5:89-5 et seq., which require the labeling of all containers of hazardous substances are applicable to this contract. Therefore, all goods offered for purchase to the County or used by a contractor in the course of any construction, maintenance, repair or performance of a concession must be labeled and stored by the contractor in compliance with the provisions of the Act. Containers that the law and rules require to be labeled shall show the Chemical Abstracts Service number of all the components and the chemical name. Further, all applicable Material Safety Data Sheets (MSDS) aka hazardous substance fact Sheet, must be furnished.

EDWARD T. OATMAN
COUNTY MANAGER

MICHELLE HAGOPIAN, ASSISTANT DIRECTOR
DIRECTOR / DIVISION OF PURCHASING

BID DOCUMENT SUBMISSION CHECKLIST
ALL SIGNATURES AND SEALS SHALL BE ORIGINALS UNLESS OTHERWISE SPECIFIED
BID SHEETS SHOULD NOT BE SUBMITTED DOUBLE SIDED PAGES, (SINGLE SIDE ONLY)

EACH BIDDER SHOULD COMPLETE THIS FORM AND INITIAL EACH ENTRY.
DATE COMPLETED: _____

PLEASE SUBMIT BID DOCUMENTS ON SINGLE SIDED PAPER ONLY, WITH THE EXCEPTION OF THE SURETY AND BID BOND DOCUMENTS.

IN ACCORDANCE WITH THE BID SPECIFICATIONS I HAVE REVIEWED, COMPLETED / EXECUTED AND INCLUDED THE FOLLOWING FORMS:

_____ Bid Form Page **(Signed, Dated and Bid on all alternatives applicable to the Work)**.

_____ Security in the form of:
____ Bid bond in an amount equal to 10% of the total amount of this bid not to exceed $20,000.00; or
____ Certified check or cashier's check in the amount of 10% of this bid not to exceed $20,000.00

_____ Consent of Surety form signed by a Surety Company if the total amount of your Bid is over $36,000.00.
If your bid is accepted, the Surety Company that provided the Consent shall be required to furnish a Performance, Labor and Materials Bond in the amount of 100% of the award of the contract.
The County of Union has provided its Consent of Surety form for your use. The use of this form by your Surety Company will expedite the bid review process and eliminate the possibility of having your bid rejected. If, however, you should need to use another form, please use language similar to that used on the Union County form and avoid making any additions or deletions to the Union County form language. In lieu of the Consent of Surety you may submit a Certified Check in the full amount of the bid.

_____ STATEMENT OF BIDDER OWNERSHIP. Pursuant to N.J.S.A. 52:25-24.2, which includes **BOTH** of the following documents:

- Bidder Signature Page
- Bidder Disclosure Statement **(Fill out 2 pages completely)**

_____ SUBCONTRACTOR IDENTIFICATION. Pursuant to N.J.S.A. 40A:11-16, which includes **BOTH** of the following documents:

- Subcontractor Identification Statement: List of Subcontractors **(only for certain types of work)**
- Subcontractor Identification Certification

_____ Acknowledgement of Addendum form**: (This form is to be used only when an addendum has been added to the specifications)**.

_____ A copy of the State of New Jersey Department of the Treasury, Division of Revenue, **Business Registration Certificate ("BRC")** may be included with the bids to expedite the contract process because the bidder is required to provide the County of Union with its proof of business registration and that of any named subcontractor(s) prior to contract award or authorization.

_____ A copy of the State of New Jersey Department of the Treasury, Division of Revenue, **Business Registration Certificate ("BRC")** of all named or listed subcontractors (List of Subcontractors) in a Construction bid may be included with the bid as the BRC(s) for each named or listed subcontractors in order to expedite the contract process. Subcontractors named in a bid or other proposal shall provide proof of business registration to the bidder, who in turn, shall provide it to the County of Union prior to the time a contract, purchase order, or other contracting document is awarded or authorized.

_____ Affirmative Action Requirement

_____ Experience Statement

_____ Certificate of Bidder showing ability to perform Contract

_____ Non-Collusion Affidavit – Fill out completely and notarize

_____ Certificates from New Jersey Department of Labor and Workforce Development – Public Works Contractor Registration Act. **(Only for certain types of work)**

_____ Federal Attachments **(If applicable)**

_____ NJDPMC Certificate / Notice of Classification **(If applicable)**

_____ Americans with Disabilities Act

_____ Statement of Bidder's Qualifications

_____ Contractor Performance Record

_____ Affidavit Regarding List of Debarred, Suspended or Disqualified Bidders

_____ Prior Negative Experience Questionnaire

_____ Contractor's Certification of Compliance – New Jersey Prevailing Wage Act

_____ Uncompleted Contracts Affidavit **(For Bidder, if applicable) MUST ALSO PROVIDE DPMC FORM 701**

_____ Certificate of Insurance Statement

_____ Collection of Use Tax on Sales to Local Government Statement

_____ Time of Completion

_____ Disclosure of Investment Activities in Iran

-------- Disclosure of Non-Involvement in Activities in Russia or Belarus

_____ Federal Non-Debarment Certification

_____ BYRD Anti-Lobbying Amendment Certification

_____ Certification regarding Lobbying

_____ Disclosure of Lobbying Activities (LLL Form)

I HAVE TAKEN THE FOLLOWING ACTIONS:

_____ Visited the site and attended the Pre-Bid Meeting **(Where applicable)**

_____ Reviewed the Contract Documents (including any permits the County or its professionals may have obtained), Work, Site, Locality, and Local Conditions and Laws and Regulations that in any manner may affect Cost, Progress, Performance or Furnishing of Work.

_____ Reviewed Bond Requirements

_____ Provided Proof of Compliance with New Jersey Prevailing Wage Act

_____ Reviewed Form of Owner/Contractor Agreement and General Conditions to the Contract

NOTE: QUESTIONS PERTAINING TO THIS BID ARE TO BE DIRECTED TO THE DIVISION OF PURCHASING AT ucbids@ucnj.org.

BIDDING DOCUMENTS

The Bidding Documents consist of the following items:

- **ADDENDA, if issued**
- **CLARIFICATIONS, if issued**
- **INSTRUCTION TO BIDDERS**
- **BID FORM**
- **SPECIFICATIONS: As outlined in the Table of Contents and included in the Project Manual.**
- **DRAWINGS: As per List of Drawings, indicated on the Project Title Sheet.**

Bidders name: _____

BID FORM

I/We have carefully examined the plans, specifications, and advertisement for bid for the

Playground at Warinanco Park, City of Elizabeth,
County of Union, New Jersey
BA#10-2026; Union County Engineering Project #2024-031

that is on file in the Union County Division of Engineering. I/We have inspected the site of the work and will contract to do all the work and furnish all materials mentioned in said plans and specifications. Work will be accomplished in the manner prescribed therein.

BASE BID ITEMS:

ITEM NO	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	AMOUNT
1	MOBILIZATION	LS	1		
2	SOIL EROSION AND SEDIMENT CONTROL MEASURES	LS	1		
3	CLEARING SITE	LS	1		
4	EXCAVATION UNCLASSIFIED, BORROW EXCAVATION, AND GRADING	LS	1		
5	3/4" CLEAN STONE	CY	444		
6	HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK	SY	88		
7	1" X 12" PERF. HIGH DENSITY POLYETHYLENE PIPE	LF	854		
8	8" PERF. HIGH DENSITY POLYETHYLENE PIPE	LF	230		
9	FILTER FABRIC, NON-WOVEN GEOTEXTILE	SY	1,907		
10	8" CLEANOUT	UN	2		
11	10" PVC PIPE	LF	13		
12	YARD INLET	UN	1		
13	RECONSTRUCTED INLET, TYPE 'A', USING EXISTING CASTING	UN	1		
14	RECONSTRUCTED MANHOLE, USING EXISTING CASTING	UN	1		
15	4' HIGH ALUMINUM PICKET FENCE	LF	527		
16	4' HIGH ALUMINUM SINGLE SELF CLOSING GATE, BLACK	UN	1		
17	4' HIGH ALUMINUM DOUBLE SELF CLOSING GATE, BLACK	UN	2		
18	CONCRETE SIDEWALK, 4" THICK	SY	217		
19	CONCRETE PAD, REINFORCED, 6" THICK	SY	13		
20	12" X 15" X 18" FLUSH CONCRETE CURB	LF	566		
21	RESET PAVER WALK	SY	104		
22	PARK BENCH	UN	16		
23	POURED-IN-PLACE PLAYGROUND SURFACE	SF	17,164		

24	RELOCATION OF EXISTING PARK SIGN BOARD & COMMUNICATION BOARD	LS	1		
25	RELOCATION OF EXISTING TREE SWING SET	LS	1		
26	RELOCATION OF EXISTING PLAYGROUND EQUIPMENT	LS	1		
27	RELOCATION OF EXISTING GRILL AND PICNIC TABLE	LS	1		
28	HARMONIC CHIMES (SET OF 7)	UN	1		
29	CANTATA CHIMES	UN	1		
30	CONCERT TRIO	UN	1		
31	ROXALL SEE SAW	UN	1		
32	SENSORY COVER CLIMBER - SQUARE	UN	1		
33	INCLUSIVE WHIRL - NATURAL	UN	1		
34	ROCKIN ROBIN	UN	1		
35	MODERN CITY M SERIES 2	UN	1		
36	SHADE 10' CANTILEVER UMBRELLA	UN	1		
37	SWING SEATS - SET OF 8 - BELT SEATS (4), ADAPTIVE SEAT (1), 5-12 ZERO-G CHAIR (1), TOT SEATS (2)	UN	1		
38	FOUR BAY SWING SHADE	UN	1		
39	CUSTOM POWERSCAPE 2-5 UNIT	UN	1		
40	CUSTOM POWERSCAPE 5-12 UNIT	UN	1		
41	PLAYGROUND INSTALLATION	LS	1		
42	GREEN ACRES SIGN	UN	1		
43	SITE UTILITY IMPROVEMENTS - WATER SITE WORK	LS	1		
44	SITE UTILITY IMPROVEMENTS - SANITARY SITE WORK	LS	1		
45	SITE UTILITY IMPROVEMENTS - ELECTRICAL SITE WORK	LS	1		
46	SITE UTILITY IMPROVEMENTS - BATHROOM SITE WORK	LS	1		
47	BASIC SINGLE RESTROOM BUILDING - NON SELF CLEANING	LS	1		
48	TOPSOIL SPREADING, 5" THICK	SY	1,725		
49	FERTILIZING AND SEEDING, TYPE A-4	SY	1,725		
50	STRAW MULCHING	SY	1,725		

TOTAL BASE BID AMOUNT:

_____ _____

Written Figures

A1	BASIC SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE - NON SELF CLEANING	LS	1		
A2	DEDUCTION OF ITEM 47	LS	-1		

TOTAL ALTERNATE 'A' AMOUNT:

_____ _____

Written Figures

B1	SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE AND EXTRA STORAGE ROOM - NON SELF CLEANING	LS	1		
B2	DEDUCTION OF ITEM 47	LS	-1		

TOTAL ALTERNATE 'B' AMOUNT:

_____ _____

Written Figures

C1	SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE AND EXTRA STORAGE ROOM - SELF CLEANING	LS	1		
C2	DEDUCTION OF ITEM 47	LS	-1		

TOTAL ALTERNATE 'C' AMOUNT:

_____ _____

Written Figures

TOTAL BASE BID AMOUNT:

_____	_____
Written	Figures

BID CONTINGENCY: (To be used if and when directed by the County)

One Hundred Thousand Dollars	$100,000.00
Written	Figures

TOTAL BASE BID PLUS CONTINGENCY AMOUNT:

_____	_____
Written	Figures

TOTAL BASE BID PLUS CONTINGENCY PLUS ALTERNATE 'A' AMOUNT:

_____	_____
Written	Figures

TOTAL BASE BID PLUS CONTINGENCY PLUS ALTERNATE 'B' AMOUNT:

_____	_____
Written	Figures

TOTAL BASE BID PLUS CONTINGENCY PLUS ALTERNATE 'C' AMOUNT:

_____	_____
Written	Figures

CONSENT OF SURETY
TO ACCOMPANY PROPOSAL (BID)

_____ (hereinafter called Surety), organized and existing under the laws of the State of _____ duly authorized and qualified to transact business in the State of New Jersey, in consideration of the sum of One Dollar ($1.00), lawful money of the United States of America, to it in hand paid, receipt whereof is hereby acknowledged, and in consideration, hereby certifies and agrees that if the contract for which the attached proposal is made be awarded to _____ (hereinafter called Contractor) for the performance of certain work and labor or the supplying of certain materials, or both, as more particularly set forth in said proposal and described for purposes of this instrument as a proposal for _____ to the COUNTY OF UNION and if Contractor shall enter into the contract, Surety will become bound as surety for its faithful performance, labor and material payment and will provide the Contractor with a performance, labor and material payment bound in the full amount of the contract price.

NOTE:
Expiration date
Needed if Annual
Surety

_____
NAME OF INSURANCE COMPANY

ADDRESS: _____
_____
_____

_____
ORIGINAL SIGNATURE
ATTORNEY-IN-FACT FOR INSURANCE CO.

NOTE: **PROOF OF AUTHORITY OF OFFICERS OF SURETY COMPANY TO EXECUTE THIS DOCUMENT MUST BE SUBMITTED.**

BIDDER SIGNATURE PAGE

THE BIDDER MUST READ THE FOLLOWING INSTRUCTIONS TO COMPLETE THIS PAGE:

1. If doing business under a **trade name, partnership or a sole proprietorship**, you must submit the bid under exact title of the trade name, partnership, or proprietorship, and the bid must be signed by either the **owner**, or a **partner** and **witnessed** by a **notary public**.

2. If a **Corporation**, the bid must be signed by the **President** or **Vice President** and **witnessed** by a **Corporate Secretary** (corporate title must be exact) and **affix corporate seal**. If a Corporate Secretary does not exist, President or Vice President's signature shall be witnessed by a Notary Public.

3. Other persons **authorized** by **corporate resolution** to execute agreements in its behalf may also sign the bid documents (pages). **Copy of a resolution must accompany the bid**.

4. The person who signs this bid form **must also** sign the **Non-Collusion Affidavit**.

5. You **cannot** witness your own signature.

_____

NAME OF BIDDER

_____

_____

_____

ADDRESS OF BIDDER

_____

ORIGINAL SIGNATURE
CORPORATE SECRETARY

_____

PRINT NAME AND TITLE
CORPORATE SECRETARY

TEL: _____
FAX: _____
E-Mail: _____

BY: _____

ORIGINAL SIGNATURE

Corporate Seal

_____

_____

PRINT OR TYPE NAME AND TITLE

WARNING: IF YOU FAIL TO FULLY, ACCURATELY, AND COMPLETELY SUPPLY THE INFORMATION REQUESTED ON THIS PAGE, YOUR BID MAY BE REJECTED.

STATEMENT OF OWNERSHIP DISCLOSURE

N.J.S.A. 52:25-24.2 (P.L. 1977, c.33, as amended by P.L. 2016, c.43)

This statement shall be completed, certified to, and included with all bid and proposal submissions. Failure to submit the required information is cause for automatic rejection of the bid or proposal.

Name of Organization: _____

Organization Address: _____

Part I Check the box that represents the type of business organization:

☐ Sole Proprietorship (skip Parts II and III, execute certification in Part IV)

☐ Non-Profit Corporation (skip Parts II and III, execute certification in Part IV)

☐ For-Profit Corporation (any type) ☐ Limited Liability Company (LLC)

☐ Partnership ☐ Limited Partnership ☐ Limited Liability Partnership (LLP)

☐ Other (be specific): _____

Part II

☐ The list below contains the names and addresses of all stockholders in the corporation who own 10 percent or more of its stock, of any class, or of all individual partners in the partnership who own a 10 percent or greater interest therein, or of all members in the limited liability company who own a 10 percent or greater interest therein, as the case may be. (**COMPLETE THE LIST BELOW IN THIS SECTION**)

OR

☐ No one stockholder in the corporation owns 10 percent or more of its stock, of any class, or no individual partner in the partnership owns a 10 percent or greater interest therein, or no member in the limited liability company owns a 10 percent or greater interest therein, as the case may be. (**SKIP TO PART IV**)

(Please attach additional sheets if more space is needed):

Name of Individual or Business Entity	Address

Part III DISCLOSURE OF 10% OR GREATER OWNERSHIP IN THE STOCKHOLDERS, PARTNERS OR LLC MEMBERS LISTED IN PART II

If a bidder has a direct or indirect parent entity which is publicly traded, and any person holds a 10 percent or greater beneficial interest in the publicly traded parent entity as of the last annual federal Security and Exchange Commission (SEC) or foreign equivalent filing, ownership disclosure can be met by providing links to the website(s) containing the last annual filing(s) with the federal Securities and Exchange Commission (or foreign equivalent) that contain the name and address of each person holding a 10% or greater beneficial interest in the publicly traded parent entity, along with the relevant page numbers of the filing(s) that contain the information on each such person. **Attach additional sheets if more space is needed**.

Website (URL) containing the last annual SEC (or foreign equivalent) filing	Page #'s

Please list the names and addresses of each stockholder, partner or member owning a 10 percent or greater interest in any corresponding corporation, partnership and/or limited liability company (LLC) listed in Part II **other than for any publicly traded parent entities referenced above**. The disclosure shall be continued until names and addresses of every noncorporate stockholder, and individual partner, and member exceeding the 10 percent ownership criteria established pursuant to N.J.S.A. 52:25-24.2 has been listed. **Attach additional sheets if more space is needed.**

Stockholder/Partner/Member and Corresponding Entity Listed in Part II	Address

Part IV Certification

I, being duly sworn upon my oath, hereby represent that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I acknowledge: that I am authorized to execute this certification on behalf of the bidder/proposer; that the ***County of Union*** is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the completion of any contracts with ***County of Union*** to notify the ***County of Union*** in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the, permitting the ***County of Union*** to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):		Title:	
Signature:		Date:	

SUBCONTRACTOR IDENTIFICATION STATEMENT

LIST OF SUBCONTRACTORS

This form is ONLY required for plumbing and gas fitting, steam and hot water heating and ventilating apparatus, steam power plants, electrical work, structural steel, ornamental iron work, and any other trades required to be identified by the specifications (including, but not limited, to satisfying any DPMC Classification requirements).

☐ **CHECK THIS BOX IF NONE OF THE ABOVE LISTED TRADES OR THOSE REQUIRED TO BE IDENTIFIED IN THE SPECIFICATIONS ARE TO BE USED TO PERFORM THE WORK**

In compliance with N.J.S.A. 40A:11-16 and the bid specifications, the undersigned hereby lists the name or names of the following subcontractors:

Company Name:_____

Address:_____

Telephone: _____ Subcontract Amount: $_____

Specific Scope of Work Subcontracted: _____

_____

License No. _____

Company Name:_____

Address: _____

Telephone: _____ Subcontract Amount: $_____

Specific Scope of Work Subcontracted: _____

_____

License No. _____

Company Name:_____

Address: _____

Telephone: _____ Subcontract Amount: $_____

Specific Scope of Work Subcontracted: _____

_____

License No. _____

IF MORE THAN THREE SUBCONTRACTORS, PLEASE COPY THIS SHEET AS NECESSARY AND ATTACH TO THE BID PACKAGE.

(Continued on following page)

SUBCONTRACTOR IDENTIFICATION CERTIFICATION

Note the law does not permit the listing of alternate subcontractors. However, multiple subcontractors for the same trade are permitted to be named provided the bidder meets the following requirements:

- Bidder identifies each subcontractor named for that category;
- Bidder states the scope of work, goods and services (the portion of the work) to be performed by each subcontractor; and
- Bidder provides the price quote provided by each subcontractor.

The bidder is advised that any change of subcontractor(s) from ones listed herein is subject to the County's approval. Change of subcontractor(s) will be approved only if made for good cause and not as a result of an arbitrary purpose.

The undersigned Bidder certifies and declares that the subcontractors listed above shall be used as subcontractors to complete certain portions of the work in this project as set forth in N.J.S.A. 40A: 11-16.

Witness _____ **NAME OF BIDDER**

Date _____

ADDRESS

By: _____
ORIGINAL SIGNATURE ONLY

PRINT NAME AND TITLE

ACKNOWLEDGMENT OF ADDENDUM

COUNTY OF UNION

_____ _____

(Name of Construction /Public Works Project) **(Project or Bid Number)**

Pursuant to N.J.S.A. 40A:11-23.1a., the undersigned bidder, hereby acknowledges receipt of the following notices, revisions, or addenda to the bid advertisement, specifications or bid documents. By indicating date of receipt, bidder acknowledges the submitted bid takes into account the provisions of the notice, revision or addendum. Note that the County of Union's record of notice to bidders shall take precedence and that failure to include provisions of changes in a bid proposal may be subject for rejection of the bid.

Local Unit Reference Number or Title of Addendum/Revision	How Received (mail, fax, pick-up, etc.)	Date Received

ACKNOWLEDGMENT BY BIDDER:

NAME OF BIDDER: _____

ORIGINAL SIGNATURE: _____

PRINTED NAME AND TITLE:_____

DATE: _____

CONTRACTOR BUSINESS REGISTRATION CERTIFICATE

New Mandatory Requirement - Effective 1/18/2010

The recently enacted **P.L. 2009, c.315**, requires that effective January 18, 2010; a contracting agency must receive proof of the bidder's business registration prior to the award of a contract. However, the proof must show that the bidder was in fact registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

If subcontractors are named on the bid, proof of the business registration for each subcontractor must be provided prior to the award of bid. Similarly to the bidder, the proof must show that each subcontractor was registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

Proof of business registration shall be

- A copy of a Business Registration Certificate issued by the Department of the Treasury, Division of Revenue;

or

- A copy of the web version provided by the NJ Division of Revenue, or

Register online at www.nj.gov/treasury/revenue/taxreg.htm. Click the "online" link and then select "Register for Tax and Employer Purposes or call the Division at 609-292-1730.
Note: A NJ Certificate of Authority is not acceptable.

FAILURE to submit proof of registration of the bidder or any subcontractor named on the bid prior to the award of a contract shall be cause to reject the bids.

FAILURE of the bidder or any subcontractor named on the bid to be registered prior to the receipt of bids is cause for a **MANDATORY REJECTION** of bids. (A NON-WAIVABLE DEFECT). This covers construction work as well as non-construction bids.

IN ADDITION:

The contractor shall provide written notice to all **subcontractors and suppliers** not specifically named on the bid of the responsibility to register and submit proof of business registration to the contractor. The requirement of proof of business registration extends down through all levels (tiers) of the project.

Before final payment on the contract is made by the contracting agency, the contractor shall submit an accurate list and the proof of business registration of each subcontractor or supplier used in the fulfillment of the contract, or shall attest that no subcontractors were used.

For the term of the contract, the contractor and each of its affiliates and a subcontractor and each of its affiliates [N.J.S.A. 52:32-44(g)(3)] shall collect and remit to the Director, New Jersey Division of Taxation, the use tax due pursuant to the Sales and Use Tax Act on all sales of tangible personal property delivered into this State, regardless of whether the tangible personal property is intended for a contract with a contracting agency.

A business organization that fails to provide a copy of a business registration as required pursuant to section 1 of P.L.2001,c.134 (C.52:32-44 et al.) or subsection e. or f. of section 92 of P.L.1977,c.110 (C.5:12-92), or that provides false business registration information under the requirements of either of those sections, shall be liable for a penalty of $25 for each day of violation, not to exceed $50,000 for each business registration copy not properly provided under a contract with a contracting agency.

BUSINESS REGISTRATION

Pursuant to N.J.S.A. 52:32-44, the County of Union is prohibited from entering into a contract with an entity unless the bidder/proposer/contractor, and each subcontractor that is required by law to be named in a bid/proposal/contract has a valid Business Registration Certificate on file with the Division of Revenue and Enterprise Services within the Department of the Treasury.

Prior to contract award or authorization, the contractor shall provide the County of Union with its proof of business registration and that of any named subcontractor(s).

Subcontractors named in a bid or other proposal shall provide proof of business registration to the bidder, who in turn, shall provide it to the County of Union prior to the time a contract, purchase order, or other contracting document is awarded or authorized.

Proof of registration must show that the bidder was in fact registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids. If subcontractors are named on the bid, proof of the business registration for each must be provided prior to the award of a contract. Similarly to the bidder, the proof must show that each subcontractor was registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

During the course of contract performance:

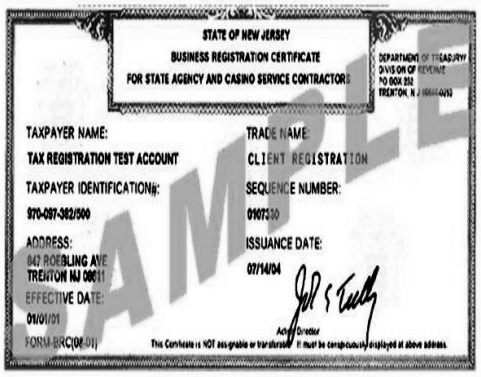
(1) the contractor shall not enter into a contract with a subcontractor unless the subcontractor first provides the contractor with a valid proof of business registration.

(2) the contractor shall maintain and submit to the County of Union a list of subcontractors and their addresses that may be updated from time to time.

(3) the contractor and any subcontractor providing goods or performing services under the contract, and each of their affiliates, shall collect and remit to the Director of the Division of Taxation in the Department of the Treasury, the use tax due pursuant to the Sales and Use Tax Act, (N.J.S.A. 54:32B-1 et seq.) on all sales of tangible personal property delivered into the State. Any questions in this regard can be directed to the Division of Taxation at (609)292-6400. Form NJ-REG can be filed online at http://www.state.nj.us/treasury/revenue/busregcert.shtml.

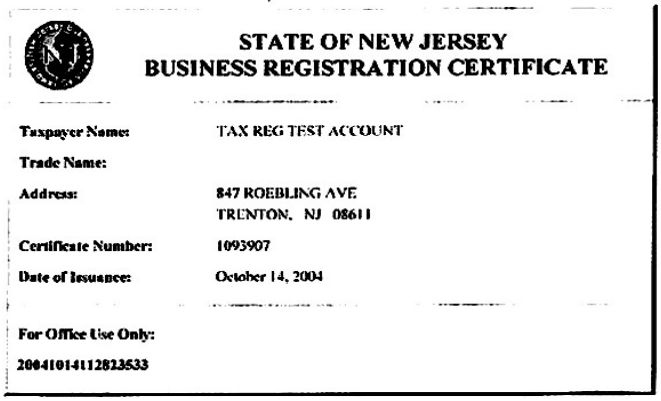
Before final payment is made under the contract, the contractor shall submit to the County of Union a complete and accurate list of all subcontractors used and their addresses.

Pursuant to N.J.S.A. 54:49-4.1, a business organization that fails to provide a copy of a business registration as required, or that provides false business registration information, shall be liable for a penalty of $25 for each day of violation, not to exceed $50,000, for each proof of business registration not properly provided under a contract with a contracting agency.


STATE OF NEW JERSEY
BUSINESS REGISTRATION CERTIFICATE
FOR STATE AGENCY AND CASINO SERVICE CONTRACTORS

TAXPAYER NAME:
TAX REGISTRATION TEST ACCOUNT
TRADE NAME:
CLIENT REGISTRATION
TAXPAYER IDENTIFICATION:
SEQUENCE NUMBER:
ADDRESS:
ISSUANCE DATE:
EFFECTIVE DATE:

SAMPLE


STATE OF NEW JERSEY
BUSINESS REGISTRATION CERTIFICATE

Taxpayer Name: TAX REG TEST ACCOUNT
Trade Name:
Address: 847 ROEBLING AVE
TRENTON, NJ 08611
Certificate Number: 1093907
Date of Issuance: October 14, 2004

For Office Use Only:
20041014112823533

AFFIRMATIVE ACTION REQUIREMENT

REQUIRED AFFIRMATIVE ACTION EVIDENCE

General Requirements of P.L. 1975, c. 127: You are hereby put on notice that:

CONSTRUCTION CONTRACTS: The successful contractor must submit within three (3) days of the notice of intent to award or the signing of the contract the initial project manning report (A.A.201). This report should be submitted at the time the signed contract is returned to the County of Union. Attention: *Affirmative Action Officer.*

If the successful contract does not submit the initial project manning report (A.A.201) within the three (3) days from the time the signed contract is returned to the County of Union, the County of Union WILL declare the contractor non-responsive and award the contract to the next lowest responsible bidder.

_____
NAME OF BIDDER

_____
ORIGINAL SIGNATURE

_____
PRINT OR TYPE NAME AND TITLE

_____
DATE THIS FORM IS COMPLETED

EXPERIENCE STATEMENT

I hereby certify that my company has performed the following private or public work, which is relevant to this bid. I further certify that my company has never defaulted under any contract. Should you not sign this form due to prior defaults, please provide details on an attached sheet.

_____
Witness

_____
Date

_____
NAME OF BIDDER

_____
_____
_____
ADDRESS

By: _____
ORIGINAL SIGNATURE ONLY

_____

_____
PRINT NAME AND TITLE

YOU MAY ATTACH ADDITIONAL SHEETS, BUT YOU MUST SIGN AND WITNESS THIS SHEET.

CERTIFICATE OF BIDDER SHOWING ABILITY TO PERFORM CONTRACT

STATE OF NEW JERSEY / _____)
Specify, if Other) SS:
COUNTY OF _____)

I, _____, of the (City, Town, Borough, etc.) of _____ _____ State of _____, of full age, being duly sworn according to law on my oath depose and say that:

I am _____ of the firm of _____, the Bidder making the proposal for the above named Project ("Contractor'), and that I executed said proposal with full authority to do so; and that said Contractor, pursuant to N.J.S.A. 40A:11-20, certifies that it owns, leases or controls all the necessary equipment required by the Plans, Specifications and Advertisements under this Bids are asked for.

If the Bidder is not the actual owner or lessee of any such equipment, then the Bidder shall attach to this Certificate information identifying the source from which the equipment will be obtained, and such information shall be accompanied by a certificate from the owner or person in control of the equipment definitively granting to the Bidder the control of the equipment required during such time as may be necessary for the completion of that portion of the contract.

_____
(Also type or print name of affiant under signature)

By:_____

NON-COLLUSION AFFIDAVIT

(N.J.S.A. 52:34-15)

STATE OF _____)
) **SS:**_____
COUNTY OF _____)

I _____, of the City of _____, in the County of _____, and the State of _____, of full age, being duly sworn according to law, on my oath depose and say that: I am _____ of the firm of _____, the bidder making the proposal for the above named project, and that I executed the said proposal for the above named project, and that I executed the said proposal with full authority to do so; that said bidder has not, directly or indirectly, entered into any agreement, participation in any collusion, or otherwise taken any action in restraint of free, competitive bidding in connection with the above named project; and that all statements contained in said proposal and in this Affidavit are true and correct, and made with full knowledge that the COUNTY OF UNION, NEW JERSEY relies upon the truth of the statements contained in said proposal and in the statements contained in the affidavit in awarding the contract for the said project.

I further warrant that no person or selling agency has been employed or retained to solicit or secure such contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, except bona fide employees or bonafide established commercial or selling agencies maintained by _____ (N.J.S.A. 52:34-15).

_____

NAME OF BIDDER

_____

ORIGINAL SIGNATURE ONLY

NOTE: The person who signed the bidder signature page for the bidder should sign this form also.

Subscribed and sworn to before me

this _____ day of_____, 20__.

_____

(Seal) Notary Public of New Jersey/_____
Specify Other State

My Commission Expires _____, 20__.

WARNING: IF YOU FAIL TO FULLY, ACCURATELY, AND COMPLETELY FILL OUT THIS AFFIDAVIT OF NON-COLLUSION, YOUR BID MAY BE REJECTED.

Contractor Registration Advisement

For Public Works Projects

A new law, known as “The Public Works Contractor Registration Act” (P.L. 1999, c.238), became effective April 11, 2000. Under the Act, no contractor/subcontractor will be permitted to bid on or engage in any contract for public work, as defined in Section 2 of P.L. 1963, c.150 (C:34:11-56.26), unless that contractor/subcontractor is registered with the New Jersey Department of Labor and Workforce Development. The Act provides that upon registration with the Department, a public works contractor/subcontractor will be issued a certificate by the Department indicating compliance with the Act’s requirements. The registration fee has been set at $300.00 per year. Upon the effective date of the Act, public bodies will be expected to request production of such a certificate from those bidding on or engaging in public works projects.

It is important to note that the term “contractor,” is defined in the, Act as, “a person, partnership, association, joint stock company, trust, corporation or other legal business entity or successor thereof who enters into a contract which is subject to the provision of the “New Jersey Prevailing Wage Act,” P.L. 1963, c.150 (C.34:11-56.25, et seq.) for the construction, reconstruction, demolition, alteration, repair or maintenance of a public building regularly open to and used by the general public or a public institution, and includes any subcontractor or lower tier subcontractor as defined herein: except that, for the purposes of the act, no pumping station, treatment plant or other facility associated with utility and environmental construction, reconstruction, demolition, alteration, repair or maintenance shall be regarded as a public building regularly open to and used by the general public or a public institution.”

Registration forms, copies of the Act, and other relevant information can be obtained by contacting:

Contractor Registration Unit
New Jersey Department of Labor and Workforce Development
Division of Wage & Hour Compliance
PO Box 389
Trenton, New Jersey 08625-0389
Telephone: 609-292-9464
Fax: 609-633-8591
E-mail: contreg@dol.state.nj.us

AMERICANS WITH DISABILITIES ACT

EQUAL OPPORTUNITY FOR INDIVIDUALS WITH DISABILITIES

The contractor and the County of Union (hereafter "Owner") do hereby agree that the provisions of Title II of the Americans With Disabilities Act of 1990 (the "Act") (42 US.C. S12101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereunto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the Owner pursuant to this contract, the contractor agrees that the performance shall be in strict compliance with the Act. In the event the contractor, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the contractor shall defend the Owner in any action or administrative proceeding commenced pursuant to this Act. The contractor shall indemnify, protect, and save harmless the Owner, its agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The contractor shall, at its own expense, appear, defend, and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the Owner's grievance procedure, the contractor agrees to abide by any decision of the Owner which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the Owner, or if the Owner incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the contractor shall satisfy and discharge the same at its own expense.

The Owner shall, as soon as practicable after a claim has been made against it, give written notice thereof to the contractor along with full and complete particulars of the claim. If any action or administrative proceeding is brought against the Owner or any of its agents, servants, and employees, the Owner shall expeditiously forward or have forwarded to the contractor every demand, complaint, notice, summons, pleading, or process received by the Owner or its representatives.

It is expressly agreed and understood that any approval by the Owner of the services provided by the contractor pursuant to this contract will not relieve the contractor of the obligation to comply with the Act and to defend, indemnify, protect, and save harmless the Owner pursuant to this paragraph.

It is further agreed and understood that the Owner assumes no obligation to indemnify or save harmless the contractor, its agents, servants, employees and subcontractors for any claim which may arise out of their performance of this Agreement. Furthermore, the contractor expressly understands and agrees that the provisions of this indemnification clause shall in no way limit the contractor's obligations assumed in this Agreement, nor shall they be construed to relieve the contractor from any liability, nor preclude the Owner from taking any other actions available to it under any other provisions of this Agreement or otherwise at law.

Name _____ (Please print or type)

Signature _____Date _____

STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. Questions may be answered on separate attached sheets. The Bidder may submit any additional information it desires.

1. _____
(Name of Bidder)

2. _____
(Permanent Main Office Address)

3. _____
(When Organized)

4. _____
(If a Corporation, where incorporated)

5. Number of years your organization has been engaged in construction or contracting business under present firm or trade name? _____

6. How many years of experience in construction work has your organization had (a) as a general contractor? And/or (b) As a subcontractor? _____

7. Contracts on hand: (Attach a list or table showing gross amounts of each Contract and the appropriate dates of completion)_____

_____

_____

_____

8. General character of work performed by you._____

_____

9. Have you ever failed to complete any work awarded to you? _____

_____

10. Have you ever defaulted on a Contract?_____ If so, complete details, including where and why?

_____

_____

_____

_____

_____

STATEMENT OF BIDDER'S QUALIFICATIONS - (continued)

11. Has any officer or partner of your organization ever failed to complete a construction contract handled in its own name? If so, state name of individual, name of owner, location and type of project, and reason for the failure to complete._____

_____

_____

12. List your major equipment available for this Contract.

_____

_____

13. Experience in the construction work similar in importance to this Project.

_____

_____

14. Have you had any material adverse changes from the trades as listed in NJ Notice of Classification within last five (5) years? _____. If so, list prior classification.

15. Background and experience of the principal members of your organization, including the officers.

Individual's Name	Present Position or Office	Yrs. of Construction Experience	Magnitude & Type of Work	In What Capacity

16. Bank Reference. (Name, Address, Phone, Representative) _____

17. Will you, upon request, fill out a detailed financial statement? _____

18. The undersigned, hereby authorizes and requests any person, firm or corporation to furnish any information requested by the proper agency in verification of the responses comprising this Statement of Bidder's Qualifications.

19. Bidder's telephone number, fax number and e-mail address (if applicable).

Phone _____

Fax _____

E-mail_____

Mobile _____

Dated at _____ this _____ day of _, 20__.

_____
BIDDER (Signature)

_____
BIDDER (Print Name)

Subscribed and sworn to before me

this _____ day of_____, 20__.

_____
(Seal) Notary Public of New Jersey/_____
Specify Other State

My Commission Expires _____, 20__.

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

CONTRACTOR PERFORMANCE RECORD

List all contracts completed by you below or provide separate form.

Name of Owner	Name & Location of Project: Type Of Work	Prime or Sub-Cont.	Engineer or Architect in Charge for Owner	Contract Price (Omit Cost)	Date Completed	Was Time* Extension Necessary	Were Any Penalties Imposed	Were Liens* Claims or Stop Notice Filed

* If answer is YES, provide explanation of details in connection with non-completion of contracts, time extensions, penalties imposed, labor troubles, liens, claims and notices filed against contracts listed in preceding item “Performance Record” on an attached sheet.

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

CONTRACTOR PERFORMANCE RECORD CERTIFICATION

The information above is true and complete to the best of my knowledge and belief.

_____
(Name of Organization)

_____
(Signature)

_____
(Title)

Subscribed and sworn to before me

this _____ day of_____, 20__.

_____
(Seal) Notary Public of New Jersey/_____
Specify Other State

My Commission Expires _____, 20__.

AFFIDAVIT REGARDING LIST OF DEBARRED, SUSPENDED OR DISQUALIFIED BIDDERS

STATE OF NEW JERSEY / _____)
Specify, if Other) SS:
COUNTY OF _____)

I, _____, of the (City, Town, Borough, etc.) of _____ _____ State of _____, of full age, being duly sworn according to law on my oath depose and say that:

I am _____ of the firm of _____, the Bidder making the Proposal for the above named Project. I have executed the said Proposal with full authority to do so. Said Bidder is not at the time of the making this bid included on the New Jersey State Treasurer's or the Federal Government's List of Debarred, Suspended or Disqualified Bidders as a result of action taken by any State or Federal Agency.

_____
Name of Contractor

By:_____
(Signature of Authorized Representative)

Subscribed and sworn to before me

this _____ day of_____, 20__.

_____
(Seal) Notary Public of New Jersey/_____
Specify Other State

My Commission Expires _____, 20__.

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

PRIOR NEGATIVE EXPERIENCE QUESTIONNAIRE

(N.J.S.A. 40A:11-4)

1. Within the past ten (10) years, have you been found, through either court adjudication, arbitration, mediation, or other contractually stipulated alternate dispute resolution mechanism, to have: failed to provide or perform goods or services; or failed to complete a contract in a timely manner; or otherwise performed unsatisfactorily under a prior contract with a public entity?

   _____ yes _____ no If yes, please provide full, detailed explanation.

   _____
   _____
   _____
   _____

2. Within the past ten (10) years, have you defaulted on a contract, thereby requiring a public entity to utilize the services of another contractor to provide the goods or perform the services or to correct or complete the contract?

   _____ yes _____ no If yes, please provide full, detailed explanation.

   _____
   _____
   _____
   _____

3. Within the past ten (10) years, have you defaulted on a contract, thereby requiring a public entity to look to your surety for completion of the contract or tender of the costs of completion?

   _____ yes _____ no If yes, please provide full, detailed explanation.

   _____
   _____
   _____
   _____

4. Within the past ten (10) years, have you been debarred or suspended from contracting with any of the agencies or department of the executive branch of the State of New Jersey at the time of the contract award, where the action was based on failure to perform a contact for goods or services with a public entity?

   _____ yes _____ no If yes, please provide full, detailed explanation.

   _____
   _____
   _____
   _____

PRIOR NEGATIVE EXPERIENCE CERTIFICATION

I hereby certify that the above statements are true and accurate as of this _____day of _____ _____, 20__.

_____
Name of Contractor

By_____
(Signature of Authorized Representative)

Subscribed and sworn to before me

this _____ day of_____, 20__.

_____
(Seal) Notary Public of New Jersey/_____
Specify Other State

My Commission Expires _____, 20__.

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

TO BE COMPLETED ONLY WHEN FINAL PAYMENT IS REQUESTED

CONTRACTOR'S CERTIFICATION OF COMPLIANCE - NEW JERSEY PREVAILING WAGE ACT

TO: County of Union
Division of Engineering
2325 South Avenue
Scotch Plains, New Jersey 07076

CONTRACT:

PROJECT:

In accordance with the requirements of the New Jersey Prevailing Wage Act, N.J.S.A. 34:11-56 et al *, the undersigned contractor on the public work being performed for:

COUNTY OF UNION

hereby certifies that he/she has complied with the contract requirements regarding the payment of the minimum prevailing wages established under "The New Jersey Prevailing Wage Act" N.J.S.A. 34:11-56 et al.

CONTRACTOR: _____
ADDRESS: _____
_____
BY: _____
ORIGINAL SIGNATURE ONLY

STATE OF NEW JERSEY
COUNTY OF _____

Being by me duly sworn according to law, on his oath deposes and says that _____is _____ of _____the above named contractor, and that the facts set forth in the above statement are true.

Subscribed and sworn to before me

this _____ day of_____, 20__.

_____
(Seal) Notary Public of New Jersey/_____
Specify Other State

My Commission Expires _____, 20__.

* N.J.S.A. 34:11-56.33 requires the contractor and subcontractor to file written statements with the public body in form satisfactory to the Commissioner certifying to the amounts then due and owing from such contractor and subcontractor filing such statement to any and all workmen for wages due on account of the public work, setting forth therein the names of the persons whose wages are unpaid and the amount due to each respectively. Union County will withhold the amount so deducted for the benefit of the workmen whose wages are unpaid as shown by the verified statement filed, and will pay directly to any workman the amount shown by such statement to be due to him for such wages. Such payment shall thereby discharge the obligation of the contractor to the person receiving such payment to the extent of the amount thereof.

UNCOMPLETED CONTRACTS AFFIDAVIT

(To be Submitted with DPMC Form 701)

PURSUANT TO N.J.A.C. 17:19-2.13, BIDDER DECLARES THE FOLLOWING WITH RESPECT TO ITS UNCOMPLETED CONTRACTS, ON ALL WORK, FROM WHATEVER SOURCE (PUBLIC AND PRIVATE), BOTH IN NEW JERSEY AND FROM OTHER GOVERNMENTAL JURISDICTIONS				
ENTITY	**PROJECT TITLE**	**ORIGINAL CONTRACT AMOUNT**	**UNCOMPLETED AMOUNT AS OF BID OPENING DATE**	**NAME AND TELEPHONE NUMBER OF PARTY TO BE CONTACTED FROM ENTITY FOR VERIFICATION**

TOTAL AMOUNT OF UNCOMPLETED CONTRACTS $_____

BIDDER:

_____
(Signature)

_____
(Print Name)

Subscribed and sworn to before me

this _____ day of_____, 20__.

_____
(Seal) Notary Public of New Jersey/_____
Specify Other State

My Commission Expires _____, 20__.

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

CERTIFICATE OF INSURANCE STATEMENT

The Bidder fully understands the County of Union insurance requirements as stated in the Instructions to Bidders as well as the Owner/Contractor Agreement and agrees to provide all insurance required by these documents prior to the issuance of the Notice to Proceed.

_____
BIDDER (Signature)

_____
BIDDER (Print Name)

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

COLLECTION OF USE TAX ON SALES TO LOCAL GOVERNMENTS STATEMENT

The Bidder fully understands the requirements of the use tax on sales to local governments as stated in the General Conditions to the Contract for Construction and the Instructions to Bidders, and agrees at all times to comply with the “Contractor Use Tax Collection Legislation”, as defined therein, and the terms relating thereto contained in the Contract Documents.

_____
BIDDER (Signature)

_____
BIDDER (Print Name)

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

TIME OF COMPLETION

The undersigned proposed that if awarded the Contract, the scope of work will be started within ten (10) calendar days and will be substantially completed within **120 calendar days** from the date of the notice to proceed.

I, _____ of _____
NAME (Print or type) COMPANY

Agree to complete work in the time frame specified _____
SIGNATURE

SITE VISIT – GENERAL CONTRACTOR

I, _____ of _____
NAME (Print or type) COMPANY

Visited the site of the work on _____ _____
SIGNATURE

COUNTY OF UNION NEW JERSEY
Division of Purchasing
DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN FORM

Solicitation Number: _____ Vendor/Bidder: _____

PART 1
CERTIFICATION
VENDOR/BIDDER MUST COMPLETE PART 1 BY CHECKING ONE OF THE BOXES
FAILURE TO CHECK ONE OF THE BOXES WILL RENDER THE PROPOSAL NON-RESPONSIVE

Pursuant to Public Law 2012, c. 25, any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract must complete the certification below to attest, under penalty of perjury, that neither the person nor entity, nor any of its parents, subsidiaries, or affiliates, is identified on the State of New Jersey, Department of the Treasury's Chapter 25 list as a person or entity engaged in investment activities in Iran. The Chapter 25 list is found on the Department's website at http://www.nj.gov/treasury/purchase/pdf/Chapter25List.pdf. Vendors/Bidders **must** review this list prior to completing the below certification. **Failure to complete the certification will render a Vendor's/Bidder's proposal non-responsive.** If the Director of the Division of Purchase and Property finds a person or entity to be in violation of the law, s/he shall take action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

CHECK THE APPROPRIATE BOX

☐ A. I certify, pursuant to Public Law 2012, c.25, that neither the Vendor/Bidder listed above nor any of its parents, subsidiaries, or affiliates is listed on the N.J. Department of Treasury's list of entities determined to be engaged in prohibited activities in Iran pursuant to P.L. 2012, c. 25 ("Chapter 25 List"). Disregard Part 2 and complete and sign the Certification below.

OR

☐ B. I am unable to certify as above because the Vendor/Bidder and/or one or more of its parents, subsidiaries, or affiliates is listed on the Department's Chapter 25 list. I will provide a detailed, accurate and precise description of the activities in Part 2 below and sign and complete the Certification below. Failure to provide such information will result in the proposal being rendered as non-responsive and appropriate penalties, fines and/or sanctions will be assessed as provided by law.

PART 2
PLEASE PROVIDE ADDITIONAL INFORMATION RELATED TO INVESTMENT ACTIVITIES IN IRAN

If you checked Box "B" above, provide a detailed, accurate and precise description of the activities of the Vendor/Bidder, or one of its parents, subsidiaries or affiliates, engaged in investment activities in Iran by completing the information below.

ENTITY NAME: _____
RELATIONSHIP TO VENDOR/BIDDER: _____
DESCRIPTION OF ACTIVITIES: _____
DURATION OF ENGAGEMENT: _____
ANTICIPATED CESSATION DATE: _____
VENDOR/BIDDER CONTACT NAME: _____
VENDOR/BIDDER CONTACT PHONE#: _____
Attach Additional Sheets If Necessary

CERTIFICATION

I, the undersigned, certify that I am authorized to execute this certification on behalf of the Vendor/Bidder, that the foregoing information and any attachments hereto, to the best of my knowledge are true and complete. I acknowledge that the County of Union, New Jersey is relying on the information contained herein, and that the Vendor/Bidder is under a continuing obligation from the date of this certification through the completion of any contract(s) with the County of Union to notify the County of Union in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I will be subject to criminal prosecution under the law, and it will constitute a material breach of my agreement(s) with the County of Union, permitting the County of Union to declare any contract(s) resulting from this certification void and unenforceable.

_____ _____
Signature Date

_____
Print Name and Title

CERTIFICATION OF NON-INVOLVEMENT IN PROHIBITIED ACTIVITIES IN RUSSIA OR BELARUS

Pursuant to N.J.S.A. 52:32-60.1, et seq. (L. 2022, c. 3) any person or entity (hereinafter "Vendor[i]") that seeks to enter into or renew a contract with a State agency for the provision of goods or services, or the purchase of bonds or other obligations, must complete the certification below indicating whether or not the Vendor is identified on the Office of Foreign Assets Control (OFAC) Specially Designated Nationals and Blocked Persons list, available here: https://sanctionssearch.ofac.treas.gov/. If the Department of the Treasury finds that a Vendor has made a certification in violation of the law, it shall take any action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

I, the undersigned, certify that I have read the definition of "Vendor" below, and have reviewed the Office of Foreign Assets Control (OFAC) Specially Designated Nationals and Blocked Persons list, and having done so certify:

(Check the Appropriate Box)

○ A. That the Vendor is not identified on the OFAC Specially Designated Nationals and Blocked Persons list on account of activity related to Russia and/or Belarus.

OR

○ B. That I am unable to certify as to "A" above, because the Vendor is identified on the OFAC Specially Designated Nationals and Blocked Persons list on account of activity related to Russia and/or Belarus.

OR

○ C. That I am unable to certify as to "A" above, because the Vendor is identified on the OFAC Specially Designated Nationals and Blocked Persons list. However, the Vendor is engaged in activity related to Russia and/or Belarus consistent with federal law, regulation, license or exemption. A detailed description of how the Vendor's activity related to Russia and/or Belarus is consistent with federal law is set forth below.

_____

_____

_____

_____

_____

_____

(Attach Additional Sheets If Necessary.)

Signature of Vendor's Authorized Representative	Date
Print Name and Title of Vendor's Authorized Representative	Vendor's FEIN
Vendor's Name	Vendor's Phone Number
Vendor's Address (Street Address)	Vendor's Fax Number
Vendor's Address (City/State/Zip Code)	Vendor's Email Address

[i] Vendor means: (1) A natural person, corporation, company, limited partnership, limited liability partnership, limited liability company, business association, sole proprietorship, joint venture, partnership, society, trust, or any other nongovernmental entity, organization, or group; (2) Any governmental entity or instrumentality of a government, including a multilateral development institution, as defined in Section 1701(c)(3) of the International

Financial Institutions Act, 22 U.S.C. 262r(c)(3); or (3) Any parent, successor, subunit, direct or indirect subsidiary, or any entity under common ownership or control with, any entity described in paragraph (1) or (2).

NJ Rev. 1.22.2024

STANDARD BID DOCUMENT REFERENCE	
Name of Form:	**FEDERAL NON-DEBARMENT CERTIFICATION**
Statutory Reference:	N.J.S.A. 52:32-44.1 (P.L. 2019, c.406)
Description:	Meets statutory criteria for certification of non-debarment by a federal government agency.

Summary of the Certification Requirements under N.J.S.A. 52:32-44.1

Pursuant to state law any natural person, company, firm, association, corporation, or other entity prohibited, or "debarred," from contracting with the federal government agencies, shall also be prohibited from contracting for public work in the state of New Jersey. This prohibition also extends to any affiliate organization(s) held by or subject to the control of an entity of that prohibited person or entity.

Prior to awarding a contract for public work a local units must obtain written certification from the contracting person or entity through the form below, attesting to their non-debarment from contracting with federal government agencies. Contracting units are reminded that they must fill-in the boilerplate information in the certification sections of Parts II through IV regarding their name and type of contracting unit before using the form.

CERTIFICATION OF NON-DEBARMENT

FOR FEDERAL GOVERNMENT CONTRACTS

N.J.S.A. 52:32-44.1 (P.L. 2019, c.406)

This certification shall be completed, certified to, and submitted to the contracting unit prior to contract award, except for emergency contracts where submission is required prior to payment.

PART I: VENDOR INFORMATION	
Individual or Organization Name	
Physical Address of Individual or Organization	
Unique Entity ID (if applicable)	
CAGE/NCAGE Code (if applicable)	
Check the box that represents the type of business organization:	

☐Sole Proprietorship (skip Parts III and IV) ☐Non-Profit Corporation (skip Parts III and IV)

☐For-Profit Corporation (any type) ☐Limited Liability Company (LLC) ☐Partnership

☐Limited Partnership ☐Limited Liability Partnership (LLP)

☐Other (be specific): _____

PART II – CERTIFICATION OF NON-DEBARMENT: Individual or Organization
I hereby certify that the **individual or organization listed above in Part I** is not debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the County of Union is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by the County of Union to notify the County of Union in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the County of Union, permitting the County of Union to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):		Title:	
Signature:		Date:	

PART III – CERTIFICATION OF NON-DEBARMENT: Individual or Entity Owning Greater than 50 Percent of Organization	
Section A (Check the Box that applies)	
☐	Below is the name and address of the stockholder in the corporation who owns more than 50 percent of its voting stock, or of the partner in the partnership who owns more than 50 percent interest therein, or of the member of the limited liability company owning more than 50 percent interest therein, as the case may be.
Name of Individual or Organization	
Physical Address	
OR	
☐	No one stockholder in the corporation owns more than 50 percent of its voting stock, or no partner in the partnership owns more than 50 percent interest therein, or no member in the limited liability company owns more than 50 percent interest therein, as the case may be.
Section B (Skip if no Business entity is listed in Section A above)	
☐	Below is the name and address of the stockholder in the corporation who owns more than 50 percent of the voting stock of the organization's parent entity, or of the partner in the partnership who owns more than 50 percent interest in the organization's parent entity, or of the member of the limited liability company owning more than 50 percent interest in organization's parent entity, as the case may be.
Stockholder/Partner/Member Owning Greater Than 50 Percent of Parent Entity	
Physical Address	
OR	

☐	No one stockholder in the parent entity corporation owns more than 50 percent of its voting stock, no partner in the parent entity partnership owns more than 50 percent interest therein, or no member in the parent entity limited liability company owns more than 50 percent interest therein, as the case may be.

Section C – Part III Certification			
Section C – Part III Certification I hereby certify that no individual or organization that is debarred by the federal government from contracting with a federal agency owns greater than 50 percent of the **Organization listed above in Part I** or, if applicable, owns greater than 50 percent of a parent entity of **<name of organization>** _____. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the County of Union is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by the County of Union to notify the County of Union in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the County of Union, permitting the County of Union to declare any contract(s) resulting from this certification void and unenforceable.			
Full Name (Print):		Title:	
Signature:		Date:	

Part IV – CERTIFICATION OF NON-DEBARMENT: Contractor – Controlled Entities	
Section A	
☐	Below is the name and address of the corporation(s) in which the **Organization listed in Part I** owns more than 50 percent of voting stock, or of the partnership(s) in which the **Organization listed in Part I** owns more than 50 percent interest therein, or of the limited liability company or companies in which the **Organization listed above in Part I** owns more than 50 percent interest therein, as the case may be.
Name of Business Entity	**Physical Address**

Add additional sheets if necessary	
OR	
☐	The **Organization listed above in Part I** does not own greater than 50 percent of the voting stock in any corporation and does not own greater than 50 percent interest in any partnership or any limited liability company.
Section B (skip if no business entities are listed in Section A of Part IV)	
☐	Below are the names and addresses of any entities in which an entity listed in Part III A owns greater than 50 percent of the voting stock (corporation) or owns greater than 50 percent interest (partnership or limited liability company).

Name of Business Entity Controlled by Entity Listed in Section A of Part IV	**Physical Address**
Add additional Sheets if necessary	
OR	
☐	No entity listed in Part III A owns greater than 50 percent of the voting stock in any corporation or owns greater than 50 percent interest in any partnership or limited liability company.
Section C – Part IV Certification	
I hereby certify that the **Organization listed above in Part I** does not own greater than 50 percent of any entity that that is debarred by the federal government from contracting with a federal agency and, if applicable, does not own greater than 50 percent of any entity that in turns owns greater than 50 percent of any entity debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the County of Union is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by the County of Union to notify the County of Union in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the County of Union, permitting the County of Union to declare any contract(s) resulting from this certification void and unenforceable.	

Full Name (Print):		Title:	
Signature:		Date:	

BYRD ANTI-LOBBYING AMENDMENT CERTIFICATION
(To be submitted with each bid, proposal or offer exceeding $100,000)

The undersigned, [Company] _____ certifies, to the best of his or her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The Contractor, [Company] _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. § 3801 et seq., apply to this certification and disclosure, if any.

_____
Signature of Contractor's Authorized Representative

_____
Name and Title of Contractor's Authorized Representative

_____
Date

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents of all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, United States Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Organization: _____

Street address: _____

City, State, Zip: _____

_____

CERTIFIED BY: (type or print)

TITLE: _____

_____ _____

(signature) (date)

DISCLOSURE OF LOBBYING ACTIVITIES (LLL Form)
Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352 0348-0046

☐ N/A – My agency does not engage in any lobbying activities

1. Type of Federal Action:	**2. Status of Federal Action:**	**3. Report Type:**
☐ a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	☐ a. bid/offer/application b. Initial award c. Post-award	☐ a. initial filing b. material change **For Material Change Only:** year _____ quarter _____ date of last report _____

4. Name and Address of Reporting Entity:	**5. If Reporting Entity in NO.4 is a Subawardee, enter Name and Address of Prim:**
☐ Prime ☐ Subawardee Tier _____,*if known:* **Congressional District,** *if known:*	 **Congressional District,** *if known:*
6. Federal Department/Agency:	**7. Federal Program Name/Description:** CDFA NUMBER, if applicable _____
8. Federal Action Number, *if known:*	**9. Award Amount,** *if known:* $
10. a. Name and address of Lobbying Registrant *(if individual, last name, first name, MI):*	**b. Individuals Performing Services** *(including address if different from No. 10a) (las name, first name, MI):*
11. Information request through this form is authorized by title 31 U.S.C. Section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.	**Signature:** _____ **Print Name:** _____ **Title:** _____ **Telephone NO.:** _____ **Date:** _____

Federal Use Only:	Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

Bidder's Name_____

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer of employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, state and zip code of the reporting entity include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is or expects to be a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number, Invitation for Bid (IFB) number, grant announcement number, the contract, grant, or loan award number, the application/proposal control number assigned by the Federal agency.) Include prefixes, e.g. "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. A) Enter the full name, address, city, state and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.
    B) Enter the full names of the individual(s) performing services, and include full address if different from 10(a). Enter last name, first name and middle initial (MI).
11. The certifying official shall sign and date the form; print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-10046), 'Washington, DC 20503.

STANDARD SPECIFICATIONS

The Standard Specifications for Road and Bridge Construction of New Jersey Department of Transportation, 2019 Edition; is added to and/or amended elsewhere herein by the Notice to Contractors (Advertisement), Proposal, Information for Bidders, General Conditions, Supplemental Conditions, Project Plans, and Supplementary Specifications; shall, insofar as technical requirements are involved, govern in the execution of this project.

Such Standard Specifications are made a part of these Specifications by this reference and will not be repeated herein. It is the responsibility of prospective bidders to familiarize themselves with these Standard Specifications, copies of which may be examined at the office of the Engineer and may be obtained, upon payment of the cost thereof, from:

Department of Transportation
State of New Jersey
1035 Parkway Avenue
Trenton, New Jersey 08625

The Notice to Contractors (Advertisement), Proposal, General Conditions, Special Provisions, Project Plans and/or Supplementary Specifications shall govern and prevail in the case of conflict between them and the Standard Specifications.

In these Standard Specifications the words "COMMISSIONER" or "DEPARTMENT" shall refer to and mean the person, persons, body, board or agent legally empowered to enter into contracts and otherwise legally act for the Owner. The word "STATE" shall refer to and mean the professional engineering representative of the Owner as hereinbefore defined and the word "ENGINEER" shall refer to and mean the professional engineering representative of the Owner as hereinbefore defined and the word "INSPECTOR" shall mean the authorized project representative of the Engineer with the authority as hereinbefore defined. The word "LABORATORY" shall mean and refer to the Engineer who may, at his discretion, and with the consent of the Owner, employ qualified technical personnel or testing laboratories to assist him in fulfilling the duties normally assigned to the "LABORATORY" in these Standard Specifications.

When reference is made herein to the bulletins, standards, specifications, publications or requirements of the American Association of State Highway Official (AASHO), the American Concrete Institute (ACI), the American Society of Civil Engineers (ASCE) or similar national or regional societies, associations, institutes or organizations; the requirements of the bulletins, specifications, publications or requirements referred to shall be considered a part of these Specifications by such reference and shall not be repeated herein but shall have the same import and be as binding as if herein set forth in full.

STATE OF NEW JERSEY
Department of Labor and Workforce Development
Division of Wage and Hour Compliance - Public Contracts Section
PO Box 389
Trenton, NJ 08625-0389

PREVAILING WAGE RATE DETERMINATION

The New Jersey Prevailing Wage Act (N.J.S.A. 34:11-56.25 et seq.) requires that the Department of Labor and Workforce Development establish and enforce a prevailing wage level for workers engaged in public works in order to safeguard their efficiency and general well being and to protect them as well as their employers from the effects of serious and unfair competition.

Prevailing wage rates are wage and fringe benefit rates based on the collective bargaining agreements established for a particular craft or trade in the locality in which the public work is performed. In New Jersey, these rates vary by county and by the type of work performed.

Applicable prevailing wage rates are those wages and fringe benefits in effect on the date the contract is awarded. All pre-determined rate increases listed at the time the contract is awarded must also be paid, beginning on the dates specified. Rates that have expired will remain in effect until new rates are posted.

Prevailing Wage Rate

The prevailing wage rate for each craft will list the effective date of the rate and the following information:

W = Wage Rate per Hour **B** = Fringe Benefit Rate per Hour* **T** = Total Rate per Hour

* Fringe benefits are an integral part of the prevailing wage rate. Employers not providing such benefits must pay the fringe benefit amount directly to the employee each payday. Employers providing benefits worth less than the fringe benefit amount must pay the balance directly to the employee each payday.

Unless otherwise stated in the Prevailing Wage Rate Determination, the fringe benefit rate for overtime hours remains at the straight time rate.

When the Overtime Notes in the Prevailing Wage Rate Determination state that the overtime rates are "inclusive of benefits," the benefit rate is increased by the same factor as the wage rate (i.e. multiplied by 1.5 for time and one-half, multiplied by 2 for double time, etc.).

Apprentice Rate Schedule

An “apprentice” is an individual who is registered with the United States Department of Labor - Office of Apprenticeship and enrolled in a certified apprenticeship program during the period in which they are working on the public works project.

The apprentice wage rate is a percentage of the journeyman wage rate, unless otherwise indicated. The apprentice benefit rate is the full journeyman benefit rate, unless otherwise indicated.

If there is no apprentice rate schedule listed, the individual must be paid at least the journeyman rate even if that individual is in a certified apprentice program for that trade.

If there is no ratio of apprentices to journeymen listed for a particular craft, then the ratio shall be one (1) apprentice to every four (4) journeymen.

Comments/Notes

For each craft listed there will be comments/notes that cover the definition of the regular workday, shift differentials, overtime, recognized holidays, and any other relevant information.

Public Works Contractor Registration

The Public Works Contractor Registration Act (N.J.S.A. 34:11-56.48, et seq.) requires that **all** contractors, subcontractors, or lower tier subcontractors who are working on or who bid on public works projects register with the Department of Labor and Workforce Development. Applications are available at *www.nj.gov/labor* (click on Wage & Hour and then go to Registration & Permits).

Pursuant to N.J.S.A. 34:11-56.51:

No contractor shall bid on any contract for public work as defined in section 2 of P.L.1963, c. 150 (C.34:11-56.26) unless the contractor is registered pursuant to this act. No contractor shall list a subcontractor in a bid proposal for the contract unless the subcontractor is registered pursuant to P.L.1999, c.238 (C.34:11-56.48 et seq.) at the time the bid is made. No contractor or subcontractor, including a subcontractor not listed in the bid proposal, shall engage in the performance of any public work subject to the contract, unless the contractor or subcontractor is registered pursuant to that act.

Snow Plowing

Snow plowing contracts are <u>not</u> subject to the New Jersey Prevailing Wage Act or the Public Works Contractor Registration Act.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Air Conditioning & Refrigeration - Service and Repair **PREVAILING WAGE RATE**

	03/07/25
Journeyman (Mechanic)	W46.23 B31.42 T77.65

Craft: Air Conditioning & Refrigeration - Service and Repair **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
As Shown	1st Year	2nd Year	3rd Year	4th Year	5th Year	Wage = %	of Jnymn	Wage		
Wage and Bene	40%	50%	60%	70%	80%	Bene = %	of Jnymn	Bene		

Ratio of Apprentices to Journeymen - 1:4

Craft: Air Conditioning & Refrigeration - Service and Repair **COMMENTS/NOTES**

THESE RATES MAY BE USED FOR THE FOLLOWING:
- Service/Repair/Maintenance Work to EXISTING facilities.
- Replacement or Installation of air conditioning and refrigeration equipment when the combined tonnage does not exceed 15 tons for refrigeration, or 25 tons for air conditioning.
- Replacement or Installation of "packaged" or "unitary" rooftop-type units when the combined tonnage of the units does not exceed 75 tons.

NOTE: These rates may NOT be used for any work in new construction (including work on new additions).

The regular workday shall consist of 8 hours, starting between 6:00 AM and 10:00 AM, Monday through Friday.

SHIFT DIFFERENTIALS:
- The second and third shifts shall be paid an additional 15% of the hourly rate.
- All shifts must run for a minimum of 5 consecutive days.

OVERTIME:
Hours worked in excess of 8 per day or before or after the regular workday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the hourly rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the hourly rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Boilermaker **PREVAILING WAGE RATE**

	01/12/24
Foreman	W54.11 B47.08 T101.19
General Foreman	W56.11 B48.14 T104.25
Journeyman	W49.11 B45.31 T94.42

Craft: Boilermaker **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
1000 Hours	65%	70%	75%	80%	85%	90%	95%			
Benefit =	38.33	39.30	40.32	41.31	42.32	43.32	44.30			

Ratio of Apprentices to Journeymen - *

* 1 apprentice will be allowed for the first 5 journeymen, 1 apprentice for the next 10 journeymen and 1 apprentice for each succeeding 20 journeymen up to a maximum of 5 apprentices per contractor on any one job.

Craft: Boilermaker **COMMENTS/NOTES**

HIGH WORK: All apprentices working on the erection, repair, or dismantling of smoke stacks, standpipes, or water towers shall be paid the Journeyman rate.

The regular workday shall consist of 8 hours, between 8:00 AM and 4:30 PM.

SHIFT DIFFERENTIALS:
- The second shift shall work 7.5 hours and receive 8 hours pay, at a rate equal to the regular hourly rate plus 10%.
- The third shift shall work 7 hours and receive 8 hours pay, at a rate equal to the regular hourly rate plus 20%.
- For "Municipal Water Works" projects only, the following shall apply: Two, four day, 10 hour shifts may be worked at straight time Monday through Thursday. The day shift shall work four days, at 10 hours, for 10 hours pay. The second shift shall work four days, at nine and a half hours, for 10 hours pay, plus 10% the hourly rate for new work and .25 cents on repair work. Friday may be used as a make-up day at straight time, due to weather conditions, hoilday or any other circumstances beyond the employer's control.

OVERTIME:
- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays (except Labor Day) shall be paid at double the hourly rate. All hours on Labor Day shall be paid at four times the hourly rate.
- If any other craft employed by the same contractor, or a subcontractor thereof, receives double time in lieu of time and one-half, then the Boilermaker shall receive double time in lieu of time and one-half.
- For "Municipal Water Works" projects only, the following shall apply: Four 10 hour days may be worked Monday through Thursday at straight time. Friday may be used as a make-up day for a day lost to inclement weather, holiday or other conditions beyond the control of the employer. Overtime shall be paid for any hours that exceed 10 hours per day or 40 hours per week.

RECOGNIZED HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Boilermaker - Minor Repairs **PREVAILING WAGE RATE**

	01/12/24
Foreman	W35.88 B17.89 T53.77
General Foreman	W36.38 B17.89 T54.27
Mechanic	W34.38 B17.89 T52.27

Craft: Boilermaker - Minor Repairs **COMMENTS/NOTES**

NOTE: These rates apply to MINOR REPAIR WORK ONLY (repair work in the field for which the contract amount does not exceed $125,000.00), for boilers that do not produce electric or are not used in the heating of petroleum products.

OVERTIME:
Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays (except Labor Day) shall be paid at double the hourly rate. All hours on Labor Day shall be paid at four times the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Washington's Birthday, Good Friday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Thanksgiving Day, day after Thanksgiving, Christmas Day. Saturday holidays observed the preceding Friday, Sunday holidays observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Bricklayer, Stone Mason **PREVAILING WAGE RATE**

	05/13/25
Deputy Foreman	W52.60 B38.68 T91.28
Foreman	W57.35 B38.68 T96.03
Journeyman	W49.60 B38.68 T88.28

Craft: Bricklayer, Stone Mason **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
6 Months	40%	50%	55%	60%	65%	70%	75%	80%		
Benefits	4.66	5.83	6.41	6.99	25.90	27.73	29.57	31.38		

Ratio of Apprentices to Journeymen - 1:5

Craft: Bricklayer, Stone Mason **COMMENTS/NOTES**

The regular workday shall consist of 8 hours, between 6:00 AM and 4:30 PM.

SHIFT DIFFERENTIALS:
- When a 2 shift schedule (including a day shift) is established, the first, or day shift, shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular rate plus 10%, inclusive of benefits.
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular hourly rate, the second shift shall receive the regular rate plus 10%, inclusive of benefits, and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis. The second shift shall receive the regular rate plus 10%, inclusive of benefits, and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When an irregular shift must be established, this shift shall receive the regular rate plus 10%, inclusive of benefits.

OVERTIME:
- The first 2 hours in excess of 8 per day, or before or after the regular workday that are not shift work, Monday through Friday, shall be paid at time and one-half the regular rate, inclusive of benefits. Any additional overtime shall be paid at double the regular rate, inclusive of benefits. The first 10 hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. Any additional overtime shall be paid at double the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.
- Saturday may be used as a make-up day for hours lost to inclement weather.
- When Bricklayers/Stone Masons work on Saturday with Laborers, and no other crafts are working on the project for the day, benefits may be paid at straight time. If other crafts are present, the applicable overtime rate for benefits shall be paid.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Carpenter **PREVAILING WAGE RATE**

	06/03/25
Foreman	W66.03 B39.70 T105.73
General Foreman	W74.65 B44.81 T119.46
Journeyman	W57.42 B34.60 T92.02

Craft: Carpenter **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
Yearly	40%	55%	65%	80%	90%					
Benefit	59.25% of	Appren	tice	Wage Rate	for all	intervals	+ $0.58			

Ratio of Apprentices to Journeymen - 1:3

For Solar installation- all work on solar projects that fall under the jurisdiction of the carpenters, and does not require an electrician, the ratio of Apprentices to Journeymen shall be 1:1.

Craft: Carpenter **COMMENTS/NOTES**

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES REGISTERED AS OF 5-1-19:

INTERVAL PERIOD AND RATES
Yearly 40% 55% 65% 80%
Benefits 59.25% of apprentice wage rate for all intervals + $0.58

FOREMAN REQUIREMENTS:
- When there are 2 or more Carpenters on a job, 1 shall be designated as a Foreman.
- When there are 21 or more Carpenters on a job, 2 shall be designated as Foremen.
- When there are 36 or more Carpenters on a job, there shall be 1 General Foreman and 2 Foremen. Thereafter, an additional Foreman shall be required for each additional 10 Carpenters on a job.

The regular workday shall consist of 8 hours, starting between 6:00 AM and 9:00 AM.

SHIFT DIFFERENTIALS:
- When a 2 shift schedule (including a day shift) is established, the day shift shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular rate plus 10%, inclusive of benefits.
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular hourly rate, the second shift shall receive the regular rate plus 10% and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis. The second shift shall receive the regular rate plus 10% and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When an irregular shift must be established, this shift shall receive the regular rate plus 15%, inclusive of benefits.
- All time worked before and after a regularly established shift shall be paid at the applicable overtime rate. When a portion

of the regularly established shift works into Saturday, Sunday or a holiday, that time worked shall be paid at the established shift rate.

OVERTIME:
- All hours in excess of 8 per day, or before or after an established shift that are not shift work, and all hours on Saturdays shall be paid at time and one-half the hourly rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the hourly rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday to Thursday, at straight time. Friday may be used as a make-up day for a day lost due to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans' Day may be substituted for the day after Thanksgiving.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Carpenter - Resilient Flooring **PREVAILING WAGE RATE**

	05/01/25
Foreman	W66.03 B39.62 T105.65
Journeyman	W57.42 B34.52 T91.94

Craft: Carpenter - Resilient Flooring **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
Yearly	40%	55%	65%	80%	90%					
Benefit	59.25%	of	Appren	tice	Wage Rate	for all	intervals	+ $0.50		

Ratio of Apprentices to Journeymen - *

* 1 apprentice shall be allowed to every 2 journeymen or major fraction therof. No more than 3 apprentices on any one job or project.

Craft: Carpenter - Resilient Flooring **COMMENTS/NOTES**

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES REGISTERED AS OF 5-1-19:

INTERVAL PERIOD AND RATES
Yearly 40% 55% 65% 80%
Benefits 59.25% of apprentice wage rate for all intervals + $0.50.

FOREMAN REQUIREMENTS:
- On any job where there are 4 or more Carpenters of Resilient Flooring, 1 must be designated a Foreman.

FOR SYNTHETIC TURF INSTALLATION ONLY:
- The rate shall be 90% of the wage and benefit rate.

The regular workday consists of 8 hours, starting between 6:00 AM and 9:00 AM.

SHIFT DIFFERENTIALS:
- When a 2 shift schedule (including a day shift) is established, the day shift, shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular wage rate plus 10%.
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular wage rate, the second shift shall receive the regular wage rate plus 10% and the third shift shall receive the regular wage rate plus 15%.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis. The second shift shall receive the regular wage rate plus 10% and the third shift shall receive the regular wage rate plus 15%.
- When an irregular shift must be established, this shift shall receive the regular rate plus 15%, inclusive of benefits.

OVERTIME:
- Hours in excess of 8 per day or 40 per week, or before or after the regular workday, Monday through Friday, shall be paid at time and one-half the wage rate. Saturday may be used as a make-up day, at straight time, up to 8 hours, for hours lost to reasons beyond the control of the employer, up to a total of 40 hours per week; hours in excess of 8 on Saturday shall

then be paid at time and one-half the wage rate. If Saturday is not a make-up day, all hours on Saturday shall be paid at time and one-half the wage rate. All hours on Sundays and holidays shall be paid at double the wage rate.
- Four 10-hour days may be worked, Monday to Thursday, at straight time. Friday may be used as a make-up day for hours lost to reasons beyond the control of the employer. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the wage rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday. Veterans' Day may be substituted for the day after Thanksgiving.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Cement Mason **PREVAILING WAGE RATE**

See "Bricklayer, Stone Mason" Rates

Craft: Cement Mason **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									

Ratio of Apprentices to Journeymen - 1:4

Craft: Cement Mason **COMMENTS/NOTES**

See "Bricklayer, Stone Mason" Rates

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Commercial Painter **PREVAILING WAGE RATE**

	05/01/25
Foreman	W50.11 B31.61 T81.72
General Foreman	W54.66 B31.61 T86.27
Journeyman	W45.55 B31.61 T77.16

Craft: Commercial Painter **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
6 Months	40%	45%	55%	65%	70%	75%	80%	80%		
Benefits	9.84	9.84	12.55	12.55	13.65	13.65	16.55	16.55		

Ratio of Apprentices to Journeymen - 1:4

Craft: Commercial Painter **COMMENTS/NOTES**

* Commercial Painters perform work on all commercial structures such as offices, schools, hotels, shopping malls, restaurants, condominiums, etc.

Spraying, sandblasting, lead abatement work on commercial buildings, work performed above 3 stories or 30 feet in height, or using swing scaffolds requires an additional 10% of the wage rate.

FOREMEN REQUIREMENTS:
- When there are 4 or more Painters on a job, 1 shall be designated a Foreman.
- When there are 15 or more Painters on a job, 1 shall be designated a General Foreman.

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:
- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.

OVERTIME:
- Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate. All hours on Sundays and holidays shall be paid at double the regular rate.
- Saturday or Sunday may be used to make up a day lost to inclement weather, at straight time.
- Four 10-hour days may be worked, at straight time, Monday through Friday.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, General Election Day,

Veterans' Day, Thanksgiving Day, Christmas Day.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Diver **PREVAILING WAGE RATE**

	05/01/25
Diver	W65.97 B53.74 T119.71
Tender	W54.23 B53.74 T107.97

Craft: Diver **COMMENTS/NOTES**

NOTE: All dive crews must consist of a Tender, a Diver, and a standby Diver (standby Diver is the same rate as a Diver).

DEPTH & PENETRATION RATES: Divers shall be paid the following depth and penetration rates, in addition to the regular hourly rate, when applicable:

AIR DIVES:
0-59 feet: No additional wage
60-74 feet: + $0.25 per foot
75-125 feet: + $0.78 per foot

MIXED GAS DIVES:
0-74 feet: No additional wage
75-125 feet: + $1.00 per foot
126-200 feet: + $2.00 per foot

PENETRATION DIVES:
126-200 feet: + $1.50 per foot
201-275 feet: + $1.75 per foot
276-350 feet: + $2.00 per foot
351-425 feet: + $2.50 per foot

SHIFT DIFFERENTIAL:
- When a 2 shift schedule (including a day shift) is established, the day shift shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis and receive an additional 113% of the wage rate.
- When a three shift schedule is established, all three shifts shall be established on an 8 hour basis, but the second and third shifts shall receive an additional 113% of the wage rate.
- Benefits on shift work shall be paid at the straight-time rate.

OVERTIME:
Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Presidential Election Day, Thanksgiving Day, Christmas Day. Veterans' Day may be switched with the day after Thanksgiving.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Dockbuilder/Pile Driver **PREVAILING WAGE RATE**

	05/01/25
Foreman	W62.36 B53.74 T116.10
Foreman (Concrete Form Work)	W61.26 B40.39 T101.65
Journeyman	W54.23 B53.74 T107.97
Journeyman (Concrete Form Work)	W53.27 B40.39 T93.66

Craft: Dockbuilder/Pile Driver **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
Yearly	21.69	27.12	35.25	43.38						
Benefits	35.34	for all	intervals							

Ratio of Apprentices to Journeymen - *

* When there are 4 or fewer Dockbuilders/Pile Drivers on a job, no more than 1 may be an apprentice. When there are 5 or more Dockbuilders/Pile Drivers, there may be 1 apprentice for every 5 Dockbuilders/Pile Drivers.

Craft: Dockbuilder/Pile Driver **COMMENTS/NOTES**

APPRENTICE RATE SCHEDULE FOR CONCRETE FORM WORK ONLY:

INTERVAL PERIOD AND RATES
Yearly 21.31 26.64 34.63 42.62
Benefits 27.41 for all intervals

NOTE: The following shall be required for type of work indicated-
- There shall be one foreman and four journeymen on all land pile driving rigs. As part of the crew, one may be an apprentice.
- There shall be one foreman and two journeymen on self-contained hydraulic driving rigs. As part of the crew, one may be an apprentice.
- There shall be one foreman and two journeymen when driving sheeting with an excavator. As part of the crew, one may be an appprentice.
- When utilizing a drill rig to install Auger cast piles there shall be one foreman and two journeymen. As part of the crew , one may be an apprentice.
- There shall be one foreman and one journeyman on drilled or bored soldier piles.
- There shall be one foreman and not less than one journeyman per rig on all drilled shaft and caissons.
- There shall be one foreman and not less than one journeyman per rig on all earth retention tie-back and anchors.
- There shall be one foreman and three joruneymen for driving of piles 60 feet or less. As part of the crew, one may be an apprentice.

CREOSOTE HANDLING:
When handling creosote products on land piledriving, floating marine construction, and construction of wharves, the worker shall receive an additional $0.25 per hour.

HAZARDOUS WASTE WORK:
- Hazardous waste removal work on a state or federally designated hazardous waste site where Level A, B, or C personal protection is required: an additional 20% of the hourly rate, per hour.
- Hazardous waste removal work in Level D, or where personal protection is not required: an additional $1.00 per hour.

CERTIFIED WELDER: When required on the job by the project owner, a Certified Welder shall receive an additional $1.00 per hour.

FOREMAN REQUIREMENTS:
The first Dockbuilder/Pile Driver on the job shall be designated a Foreman.

SHIFT DIFFERENTIAL:
- When a 2 shift schedule (including a day shift) is established, the day shift shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis and receive an additional 113% of the wage rate.
- When a three shift schedule is established, all three shifts shall be established on an 8 hour basis, but the second and third shifts shall receive an additional 113% of the wage rate.
- Benefits on shift work shall be paid at the straight-time rate.

OVERTIME:
Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Presidential Election Day, Thanksgiving Day, Christmas Day. Veterans' Day may be switched with the day after Thanksgiving.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Drywall Finisher **PREVAILING WAGE RATE**

	05/13/25
Foreman	W49.36 B31.65 T81.01
General Foreman	W51.60 B31.65 T83.25
Journeyman	W44.87 B31.65 T76.52

Craft: Drywall Finisher **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
Yearly	22.44	29.17	35.90	40.38						
Benefits	17.98	17.98	17.98	17.98						

Ratio of Apprentices to Journeymen - 1:4

Craft: Drywall Finisher **COMMENTS/NOTES**

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:
- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, and the third shift shall receive 8 hours pay for 7 hours of work.
- Shift work must run for a minimum of 5 consecutive workdays.

OVERTIME:
- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.
- Saturday or Sunday may be used to make up a day lost to inclement weather, at straight time.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Saturday holiday observed the preceding Friday. Sunday holiday observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Electrician **PREVAILING WAGE RATE**

	06/02/25	06/01/26	05/31/27
Cable Splicer	W71.97 B47.29 T119.26	W74.71 B49.10 T123.81	W77.32 B50.81 T128.13
Foreman (11-20 Journeymen)	W76.55 B50.31 T126.86	W79.47 B52.21 T131.68	W82.24 B54.05 T136.29
Foreman (1-3 Journeymen)	W71.97 B47.29 T119.26	W74.71 B49.10 T123.81	W77.32 B50.81 T128.13
Foreman (4-10 Journeymen)	W75.24 B49.44 T124.68	W78.11 B51.33 T129.44	W80.83 B53.12 T133.95
General Foreman (21-30 Journeymen)	W78.52 B51.59 T130.11	W81.51 B53.56 T135.07	W84.35 B55.43 T139.78
General Foreman (31-60 Journeymen)	W85.06 B55.89 T140.95	W88.30 B58.02 T146.32	W91.38 B60.05 T151.43
General Foreman (61+ Journeymen)	W86.37 B56.75 T143.12	W89.65 B58.92 T148.57	W92.78 B60.97 T153.75
Journeyman	W65.43 B43.00 T108.43	W67.92 B44.64 T112.56	W70.29 B46.19 T116.48
Sub-Foreman	W74.59 B49.02 T123.61	W77.43 B50.88 T128.31	W80.13 B52.66 T132.79

Craft: Electrician **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
Yearly	40%	49%	58%	68%	80%		of Jour	neyman	Wage	Rate
Benefit	40%	49%	58%	68%	80%		of Jour	neyman	Benefit	Rate

Ratio of Apprentices to Journeymen - 2:3

Craft: Electrician **COMMENTS/NOTES**

THESE RATES ALSO APPLY TO THE FOLLOWING:
-All burglar and fire alarm work.
-All fiber optic work.
-Teledata work in new construction.
-Teledata work involving 16 Voice/Data Lines or more.

The regular workday shall be 8 hours, between 8:00 AM and 4:30 PM.

FOREMAN REQUIREMENTS:
- 1 to 3 Journeymen- 1 must be a Foreman (Foreman/1-3 Journeymen rate).
-4 to 10 Journeymen- 1 must be a Foreman (Foreman/4-10 Journeymen rate).
-11 to 20 Journeymen- 1 must be Foreman (Foreman/11-20 Journeymen rate) and 1 must be a Sub-Foreman.
-21 to 30 Journeymen- 1 must be a General Foreman (General Foreman/21-30 Journeymen rate) and 2 must be a Sub-Foreman.
-31 to 40 Journeymen- 1 must be a General Foreman (General Foreman/31-40 Journeymen rate) and 3 must be a Sub-Foreman.
-41 to 50 Journeymen- 1 must be a General Foreman (General Foreman/31-60 Journeymen rate) and 4 must be a Sub-Foreman.
-51 to 60 Journeymen- 1 must be a General Foreman (General Foreman/31-60 Journeymen rate) and 5 must be a Sub-Foreman.
-61+ Journeymen- 1 must be a General Foreman (General Foreman/61+ Journeymen rate) and 6 must be a Sub-Foreman.

SHIFT DIFFERENTIALS:
- Shift work must run for a minimum of 5 consecutive workdays.
- 2nd Shift (4:30 PM to 12:30 AM) shall receive 8 hours pay for 7.5 hours work + an additional 10% of the regular rate, per hour, inclusive of benefits.
- 3rd Shift (12:30 AM to 8:00 AM) shall receive 8 hours pay for 7 hours work + an additional 15% of the regular rate, per hour, inclusive of benefits.

OVERTIME:
Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, and all hours on Saturdays, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Electrician - Teledata (15 Voice/Data Lines & Less) **PREVAILING WAGE RATE**

	12/24/25	11/30/26	11/29/27	12/04/28
Journeyman Technician (1-2 Workers on Job)	W48.88 B32.13 T81.01	W50.71 B33.32 T84.03	W52.53 B34.52 T87.05	W54.35 B35.72 T90.07
Master Tech/General Foreman (26 + Workers on Job)	W64.04 B42.08 T106.12	W66.94 B43.97 T110.91	W69.34 B45.56 T114.90	W71.74 B47.15 T118.89
Senior Technician/Lead Foreman (16-25 Workers on Job)	W58.66 B38.54 T97.20	W61.36 B40.32 T101.68	W63.56 B41.77 T105.33	W65.76 B43.23 T108.99
Technician A/Foreman (9-15 Workers on Job)	W56.21 B36.95 T93.16	W58.82 B38.66 T97.48	W60.93 B40.05 T100.98	W63.05 B41.44 T104.49
Technician B/Working Foreman (4-8 Workers on Job)	W53.77 B35.34 T89.11	W56.29 B36.99 T93.28	W58.31 B38.32 T96.63	W60.33 B39.65 T99.98
Technician C/Foreman (3 Workers on Job)	W51.33 B33.73 T85.06	W53.75 B35.32 T89.07	W55.68 B36.59 T92.27	W57.61 B37.86 T95.47

Craft: Electrician - Teledata (15 Voice/Data Lines & Less) **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
6 Months	37%	38%	41%	44%	48%	54%	61%	67%	74%	81%
Benefits	9.83	10.09	10.91	11.70	12.75	14.34	16.21	17.81	19.14	21.51

Ratio of Apprentices to Journeymen - 2:3

Craft: Electrician - Teledata (15 Voice/Data Lines & Less) **COMMENTS/NOTES**

APPRENTICE RATE SCHEDULE AS OF 11-30-26:

NTERVAL PERIOD AND RATES
6 Mos. 37% 38% 41% 44% 48% 54% 61% 67% 74% 81%
Ben. 10.20 10.47 11.31 12.12 13.23 14.89 16.82 18.48 20.40 22.32

APPRENTICE RATE SCHEDULE AS OF 11-29-27:

NTERVAL PERIOD AND RATES
6 Mos. 37% 38% 41% 44% 48% 54% 61% 67% 74% 81%
Ben. 10.57 10.85 11.71 12.56 13.71 15.41 17.41 19.13 21.13 23.12

APPRENTICE RATE SCHEDULE AS OF 12-4-28:

County - UNION

NTERVAL	PERIOD AND RATES									
6 Mos.	37%	38%	41%	44%	48%	54%	61%	67%	74%	81%
Ben.	10.93	11.23	12.12	13.00	14.18	15.95	18.01	19.78	21.85	23.92

NOTES:
- These rates are for service, maintenance, moves, and/or changes affecting
15 Voice/Data (teledata) lines or less. These rates may NOT be used for any teledata work in new construction (including additions) or any fiber optic work.
- The number of Teledata workers on the jobsite is the determining factor for which Foreman category applies .

The regular workday shall be 8 hours, between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:
- Shift work must run for a minimum of 5 consecutive workdays.
- 2nd Shift (4:30 PM to 12:30 AM) shall receive 8 hours pay for 7.5 hours work + an additional 10% of the regular rate, per hour, inclusive of benefits.
- 3rd Shift (12:30 AM to 8:00 AM) shall receive 8 hours pay for 7 hours work + an additional 15% of the regular rate, per hour, inclusive of benefits.

OVERTIME:
Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, that are not shift work, and the first 10 hours on Saturday, shall be paid at time and one-half the regular rate, inclusive of benefits. Hours in excess of 10 on Saturday and all hours on Sunday and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked Monday through Friday, between the hours of 7:00 AM and 5:30 PM. A make-up day may be used for a day not being worked during the four 10-hour day schedule if a holiday occurs during the week or for any other conditions that prevent an employee from working the four 10-hour day schedule.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday. Saturday holidays will be observed the preceding Friday.

County - UNION

Craft: Electrician - Teledata (16 Instruments & More) **PREVAILING WAGE RATE**

See "Electrician" Rates

Craft: Electrician - Teledata (16 Instruments & More) **COMMENTS/NOTES**

See ELECTRICIAN Rates

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Electrician- Outside Commercial **PREVAILING WAGE RATE**

	06/03/25	06/01/26	05/31/27
Cable Splicer	W72.30 B46.96 T119.26	W75.05 B48.75 T123.80	W77.67 B50.45 T128.12
Certified Welder	W69.01 B44.83 T113.84	W71.65 B46.54 T118.19	W74.14 B48.16 T122.30
Equipment Operator	W65.73 B42.70 T108.43	W68.23 B44.32 T112.55	W70.61 B45.87 T116.48
Foreman (11-20 Journeymen workers on job)	W76.90 B49.95 T126.85	W79.83 B51.85 T131.68	W82.62 B53.67 T136.29
Foreman (1-3 Journeymen workers on job)	W72.30 B46.96 T119.26	W75.05 B48.75 T123.80	W77.67 B50.45 T128.12
Foreman (4-10 Journeymen workers on job)	W75.58 B49.09 T124.67	W78.47 B50.97 T129.44	W81.21 B52.75 T133.96
General Foreman (21-30 Journeymen workers on job)	W78.88 B51.24 T130.12	W81.88 B53.19 T135.07	W84.74 B55.04 T139.78
General Foreman (31-60 Journeymen workers on job)	W85.45 B55.50 T140.95	W88.70 B57.62 T146.32	W91.80 B59.63 T151.43
General Foreman (61+ Journeymen workers on job)	W86.76 B56.36 T143.12	W90.06 B58.50 T148.56	W93.21 B60.54 T153.75
Groundman	W39.44 B25.62 T65.06	W40.94 B26.60 T67.54	W42.37 B27.52 T69.89
Journeyman Lineman/Technician	W65.73 B42.70 T108.43	W68.23 B44.32 T112.55	W70.61 B45.87 T116.48
Sub-Foreman	W74.93 B48.67 T123.60	W77.79 B50.53 T128.32	W80.50 B52.29 T132.79

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Electrician- Outside Commercial **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
1000 Hours	60%	65%	70%	75%	80%	85%	90%			
Benefits	64.95% of	Journey	man	wage	+ $.01					

Craft: Electrician- Outside Commercial **COMMENTS/NOTES**

APPRENTICE RATE SCHEDULE AS OF 6-1-26:

Interval Period and Rates
1000 Hours 60% 65% 70% 75% 80% 85% 90%
Benefits 64.95% of the Journeyman wage + $.01

APPRENTICE RATE SCHEDULE AS OF 5-31-27:

Interval Period and Rates
1000 Hours 60% 65% 70% 75% 80% 85% 90%
Benefits 64.95% of the Journeyman wage + $.01

* FOR UTILITY WORK PLEASE SEE STATEWIDE RATES

The regular worday shall be 8 hours, between 8:00 AM and 4:30 PM.

FOREMAN REQUIREMENTS:
- 1 to 3 Journeymen- 1 must be a Foreman (Foreman/1-3 Journeymen rate).
-4 to 10 Journeymen- 1 must be a Foreman (Foreman/4-10 Journeymen rate).
-11 to 20 Journeymen- 1 must be Foreman (Foreman/11-20 Journeymen rate) and 1 must be a Sub-Foreman.
-21 to 30 Journeymen- 1 must be a General Foreman (General Foreman/21-30 Journeymen rate) and 2 must be a Sub-Foreman.
-31 to 40 Journeymen- 1 must be a General Foreman (General Foreman/31-40 Journeymen rate) and 3 must be a Sub-Foreman.
-41 to 50 Journeymen- 1 must be a General Foreman (General Foreman/31-60 Journeymen rate) and 4 must be a Sub-Foreman.
-51 to 60 Journeymen- 1 must be a General Foreman (General Foreman/31-60 Journeymen rate) and 5 must be a Sub-Foreman.
-61+ Journeymen- 1 must be a General Foreman (General Foreman/61+ Journeymen rate) and 6 must be a Sub-Foreman.

SHIFT DIFFERENTIALS:
Shift work must run for a minimum of 5 consecutive workdays.
2nd Shift (4:30 PM to 12:30 AM): 8 hrs. pay for 7.5 hrs. work + an additional 10% of the regular rate, inclusive of benefits.
3rd Shift (12:30 AM to 8:00 AM): 8 hrs. pay for 7 hrs. work + an additional 15% of the regular rate per hour, inclusive benefits.

OVERTIME:
Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, and all hours on Saturdays, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS:
New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day,

Thanksgiving Day and Christmas Day.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Electrician-Utility Work (North) **PREVAILING WAGE RATE**

Rates are located in the "Statewide" rate package

Craft: Electrician-Utility Work (North) **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
* 6 Months	60%	65%	70%	75%	80%	85%	90%			
Benefits	70% of	Appren	tice	Wage	Rate	for all	intervals			

Craft: Electrician-Utility Work (North) **COMMENTS/NOTES**

Electrician-Utility Work (North) rates are located in the "Statewide" rate package.

* The apprentice wage rate is paid at the percentage of the Journeyman Lineman wage rate located in the "Statewide" rate package.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Electrician-Utility Work (South) **PREVAILING WAGE RATE**

Rates are located in the "Statewide" rate package

Craft: Electrician-Utility Work (South) **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
6 Months	34.59	37.47	40.36	43.24	46.12	49.00	51.89			
Benefits	31.56	33.45	35.32	37.21	39.08	40.98	42.85			

Craft: Electrician-Utility Work (South) **COMMENTS/NOTES**

Electrician-Utility Work (South) rates are located in the "Statewide" rate package.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Elevator Constructor **PREVAILING WAGE RATE**

	08/26/25	03/17/26	03/17/27	03/17/28
Journeyman	W83.27 B47.65 T130.92	W86.43 B48.96 T135.39	W89.76 B50.27 T140.03	W92.93 B51.92 T144.85

Craft: Elevator Constructor **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
Yearly	35.73	45.80	54.13	62.45						
Benefits	36.90	37.99	39.70	41.40						

Ratio of Apprentices to Journeymen - 1:1

Craft: Elevator Constructor **COMMENTS/NOTES**

APPRENTICE RATE SCHEDULE AS OF 3-17-26:

INTERVAL	PERIOD AND RATES			
Yearly	37.10	47.54	56.18	64.82
Benefits	37.66	38.80	40.60	42.39

APPRENTICE RATE SCHEDULE AS OF 3-17-27:

INTERVAL	PERIOD AND RATES			
Yearly	38.54	49.37	58.34	67.32
Benefits	38.42	39.62	41.50	43.39

APPRENTICE RATE SCHEDULE AS OF 3-17-28:

INTERVAL	PERIOD AND RATES			
Yearly	39.90	51.11	60.41	69.70
Benefits	39.67	40.91	42.86	44.81

The regular workday shall consist of either 7 or 8 hours to be established at the beginning of the project, between 7:00 AM and 4:30 PM.

OVERTIME:
For all hours worked before or after the regular workday, Monday through Friday, and all hours on Saturday and Sunday , shall be paid at double the hourly rate. Holiday pay is one days wages (8 hours) plus double the hourly rate for all hours worked.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day and the day after, Christmas Day. Saturday holidays shall be observed on the previous Friday and Sunday holidays shall be observed on the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Elevator Modernization & Service **PREVAILING WAGE RATE**

	08/26/25	03/17/26	03/17/27	03/17/28
Journeyman	W65.54 B46.47 T112.01	W68.06 B47.73 T115.79	W70.72 B49.00 T119.72	W73.20 B50.61 T123.81

Craft: Elevator Modernization & Service **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
Yearly	35.73	36.05	42.60	49.16						
Benefits	36.88	37.58	39.20	40.83						

Ratio of Apprentices to Journeymen - 1:1

Craft: Elevator Modernization & Service **COMMENTS/NOTES**

APPRENTICE RATE SCHEDULE AS OF 3-17-26:

INTERVAL	PERIOD AND RATES			
Yearly	37.10	37.43	44.24	51.05
Benefits	37.63	38.37	40.09	41.81

APPRENTICE RATE SCHEDULE AS OF 3-17-27:

INTERVAL	PERIOD AND RATES			
Yearly	38.54	38.90	45.97	53.04
Benefits	38.39	39.17	40.98	42.79

APPRENTICE RATE SCHEDULE AS OF 3-17-28:

INTERVAL	PERIOD AND RATES			
Yearly	39.90	40.26	47.58	54.90
Benefits	39.65	40.45	42.32	44.18

MODERNIZATION (addition, replacement, refurbishing, relocation, or changes in design or appearance, of elevator equipment in existing buildings):

- The regular workday consists of 8 hours, between 7:00 AM and 4:30 PM.

- Overtime:
Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and all hours on Saturday and Sunday shall be paid at time and one-half the hourly rate. Holiday pay is one days wages (8 hours) plus time and one-half the hourly rate for all hours worked.

SERVICE (repair or replacement of parts for the purpose of maintaining elevator equipment in good operating condition):

- The regular workday consists of 8 hours, between 6:00 AM and 6:00 PM.

- Overtime:
Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and all hours on Saturday shall be paid at time and one-half the hourly rate. All hours on Sunday and holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS (Modernization and Service): New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day and the day after, Christmas Day. Saturday holidays shall be observed on the previous Friday and Sunday holidays shall be observed on the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Glazier **PREVAILING WAGE RATE**

	05/01/25
* Leadman	W54.68 B33.23 T87.91
Foreman	W56.68 B33.47 T90.15
General Foreman	W58.68 B33.71 T92.39
Journeyman	W52.68 B32.99 T85.67

Craft: Glazier **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
6 Months	46%	46%	55%	55%	61%	61%	70%	70%		
Benefits	13.67	13.67	15.45	15.45	18.92	18.92	20.65	20.65		

Ratio of Apprentices to Journeymen - 1:4

Craft: Glazier **COMMENTS/NOTES**

Hazard/Height Pay: +$1.00 per hour

* When there are three (3) men working on a jobsite for three (3) days or longer, 1 Journeyman may be designated as a Leadman for the duration of the job, provided he has his OSHA certification.

FOREMAN REQUIREMENTS:
- When there are 4 or more Glaziers on a job, 1 must be designated a Foreman.
- When there are 15 or more Glaziers on a job, 1 must be designated a General Foreman.

The regular workday shall consist of 8 hours, between 7:00 AM and 5:30 PM, Monday to Friday.

SHIFT DIFFERENTIALS:
- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, and the third shift shall receive 8 hours pay for 7 hours of work.

OVERTIME:
Hours in excess of 8 per day, or before or after the regular workday Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate. All hours on Sundays and holidays shall be paid at double the regular

rate.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, General Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Saturday holiday observed the preceding Friday. Sunday holiday observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Heat & Frost Insulator **PREVAILING WAGE RATE**

	12/18/25
Foreman	W63.27 B41.92 T105.19
General Foreman	W65.61 B43.03 T108.64
Journeyman	W60.74 B41.36 T102.10

Craft: Heat & Frost Insulator **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
Yearly	28.70	33.99	40.83	47.61						
Benefits	25.32	28.78	31.53	34.39						

Ratio of Apprentices to Journeymen - 1:3

Craft: Heat & Frost Insulator **COMMENTS/NOTES**

NOTE: These rates apply to the installing of insulation on hot and cold mechanical systems.

The regular workday shall be 8 hours between 7:00 AM and 3:30 PM. In addition, the regular workday may also be 8 hours between 6:00 AM and 2:30 PM.

SHIFT DIFFERENTIAL:
- Shift work must run for a minimum of 5 consecutive workdays.
- Second Shift shall work 7.5 hours and receive 8 hours pay, at the regular rate, plus 25% per hour.
- Third Shift shall work 7 hours and receive 8 hours pay, at the regular rate, plus 30% per hour.

OVERTIME:
The first 2 hours in excess of 8 per day, hours outside of the regular workday Monday through Friday that are not shift work, and the first 10 hours on Saturday, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours in excess of 10 per day, and all hours on Sunday and holidays (except Labor Day) shall be paid at double the regular rate, inclusive of benefits. All hours on Labor Day shall be paid at triple the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Presidential Election Day, Thanksgiving Day and Christmas Day. Sunday holidays observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Heat & Frost Insulator - Asbestos Worker **PREVAILING WAGE RATE**

	12/18/25
Asbestos Helper Abatement	W36.89 B24.92 T61.81

Craft: Heat & Frost Insulator - Asbestos Worker **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	SEE	HEAT &	FROST	INSULATOR						

Ratio of Apprentices to Journeymen - 1:3

Craft: Heat & Frost Insulator - Asbestos Worker **COMMENTS/NOTES**

NOTE: These rates apply only to the removal of insulation materials/asbestos from mechanical systems, including containment erection and demolition, and placing material in appropriate containers.

The regular workday shall be 8 hours between 7:00 AM and 3:30 PM. In addition, the regular workday may also be 8 hours between 6:00 AM and 2:30 PM.

SHIFT DIFFERENTIALS:
- Shift work must run for a minimum of 5 consecutive workdays.
- The second shift shall work 7.5 hours and receive 8 hours pay at the regular rate, plus 25% per hour.
- The third shift shall work 7 hours and receive 8 hours pay at the regular rate, plus 30% per hour.

OVERTIME: The first 2 hours in excess of 8 per day, hours outside of the regular workday Monday through Friday that are not shift work, and the first 10 hours on Saturday, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours in excess of 10 per day, and all hours on Sunday and holidays (except Labor Day) shall be paid at double the regular rate, inclusive of benefits. All hours on Labor Day shall be paid at triple the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Presidential Election Day, Thanksgiving Day and Christmas Day. Sunday holidays observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Industrial Painter- Bridges **PREVAILING WAGE RATE**

	02/20/26
Foreman	W65.07 B39.13 T104.20
General Foreman	W67.57 B39.13 T106.70
Journeyman	W60.07 B39.13 T99.20

Craft: Industrial Painter- Bridges **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
6 Months	50%	70%	90%							
Benefits	14.94	22.01	28.91							

Ratio of Apprentices to Journeymen - 1:3

Craft: Industrial Painter- Bridges **COMMENTS/NOTES**

* Industrial Painters perform work on all industrial structures, such as bridges.

These rates apply to: All bridges that span waterways, roadways, railways and canyons. All tunnels, overpasses, viaducts and all appurtenances.

FOREMEN REQUIREMENTS:
- When there are 4 or more Painters on a job, 1 shall be designated a Foreman.
- When there are 15 or more Painters on a job, 1 shall be designated a General Foreman.

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:
- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.

OVERTIME:
- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays and Sundays shall be paid at time and one-half the regular rate. All hours on holidays shall be paid at double the regular rate, except Veterans Day, which shall be paid at time and one-half the regular rate.
- During a regular work week schedule, Saturday may be used as a make-up day lost to inclement weather, paid at the regular rate.
- Four 10-hour days may be worked, at the regular rate, Monday through Thursday. When the four 10-hour day schedule is used, the 11th and 12th hours shall be paid at time and one-half the regular rate. After the 12th hour, a worker shall be paid at double the regular rate. Friday may be used as a make-up day lost to inclement weather, paid at the regular rate.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Saturday holiday observed the preceding Friday. Sunday holiday observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Industrial Painter- Structural Steel **PREVAILING WAGE RATE**

	02/20/26
Foreman	W53.81 B36.78 T90.59
General Foreman	W56.31 B36.78 T93.09
Journeyman	W48.81 B36.78 T85.59

Craft: Industrial Painter- Structural Steel **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
	SEE	INDUST	RIAL	PAINTER	BRIDGES					

Ratio of Apprentices to Journeymen - 1:3

Craft: Industrial Painter- Structural Steel **COMMENTS/NOTES**

* Industrial Painters perform work on all industrial structures, such as water tanks, waste water facilitites, refineries, any structural steel work, etc.

These rates apply to: All work in power plants (any aspect). On steeples, on dams, on hangers, transformers, substations, on all open steel, in refineries, tank farms, water/sewerage treatment facilities and on pipelines.

FOREMEN REQUIREMENTS:
- When there are 4 or more Painters on a job, 1 shall be designated a Foreman.
- When there are 15 or more Painters on a job, 1 shall be designated a General Foreman.

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:
- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.

OVERTIME:
- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays and Sundays shall be paid at time and one-half the regular rate. All hours on holidays shall be paid at double the regular rate, except for Veterans Day, which shall be paid at time and one-half the regular rate.
- During the regular work week schedule, Saturday may be used to make-up a day lost to inclement weather, paid at the regular rate.
- Four 10-hour days may be worked, at the regular rate, Monday through Thursday. When the four 10-hour day schedule is used, the 11th and 12th hours shall be paid at time and one-half the regular rate. After the 12th hour, a worker shall be paid at double the regular rate. Friday may be used as a make-up day lost to inclement weather, paid at the regular rate.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Saturday holiday observed the preceding Friday. Sunday holiday observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Industrial Painter- Water Tanks **PREVAILING WAGE RATE**

	02/20/26
Foreman	W54.86 B36.43 T91.29
General Foreman	W57.36 B36.43 T93.79
Journeyman	W49.86 B36.43 T86.29

Craft: Industrial Painter- Water Tanks **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
6 Months	50%	70%	90%							
Benefits	14.94	22.01	28.91							

Ratio of Apprentices to Journeymen - 1:3

Craft: Industrial Painter- Water Tanks **COMMENTS/NOTES**

* Industrial Painters perform work on all industrial structures, such as water tanks, waste water facilitites, refineries, any structural steel work, etc.

These rates apply to: All new and repaint water tanks (interior and exterior).

FOREMEN REQUIREMENTS:
- When there are 4 or more Painters on a job, 1 shall be designated a Foreman.
- When there are 15 or more Painters on a job, 1 shall be designated a General Foreman.

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:
- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.

OVERTIME:
- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays and Sundays shall be paid at time and one-half the regular rate. All hours on holidays shall be paid at double the regular rate, except Veterans Day, which shall be paid at time and one-half the regular rate.
- During a regular work week schedule, Saturday may be used to make-up a day lost to inclement weather, paid at the regular rate.
- Four 10-hour days may be worked, at the regular rate, Monday through Thursday. When the four 10-hour day schedule is used, the 11th and 12th hours shall be paid at time and one-half the regular rate. After the 12th hour, a worker shall be paid at double the regular rate. Friday may be used as a make-up day lost to inclement weather, paid at the regular rate.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Saturday holiday observed the preceding Friday. Sunday holiday observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Ironworker **PREVAILING WAGE RATE**

	07/01/25
Rod /Fence Foreman	W54.94 B51.87 T106.81
Rod/Fence Journeyman	W49.94 B51.87 T101.81
Structural Foreman	W57.47 B51.87 T109.34
Structural Journeyman	W52.24 B51.87 T104.11

Craft: Ironworker **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
6 Months	50%	60%		Yearly	70%	80%	90%			
Benefits	same as	journeyman	amount							

Ratio of Apprentices to Journeymen - 1:4

Craft: Ironworker **COMMENTS/NOTES**

HAZARDOUS WASTE WORK: On hazardous waste removal work on a state or federally designated hazardous waste site where the Ironworker is required to wear Level A,B, or C personal protection: + $3.00 per hour

The regular workday consists of 8 hours between 6:00 AM and 4:30 PM.

FOREMAN REQUIREMENTS:
When there are 2 or more Ironworkers on a job, 1 shall be designated a Foreman.

SHIFT DIFFERENTIALS:
- When a 2 shift schedule is established, the first, or day shift , shall be established on an 8 hour basis .The second shift shall be established on an 8 hour basis, and receive the regular rate plus 15%.
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular hourly rate, the second shift shall receive the regular rate plus 15%, and the third shift shall receive the regular rate plus 20%.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis.
- When an irregular shift is established for four days or less (unless working a four 10-day day shift) on all projects bid after July 1, 2024, that shift shall be paid time and one-half the regular rate, inclusive of benefits. However, when an irregular shift is established at five 8-hour days or more the shift premium shall be 15% above the regular rate. When an irregular shift is established at four 10-hour days or more the shift premium shall be 15% above the regular rate. When an irregular shift extends into Saturday, time and one-half shall be paid on the regular rate, inclusive of benefits, beginning at midnight (12:00 am) for the duration of the shift. A Sunday shift that extends into Monday shall be paid at double the

regular rate, inclusive of benefits, until 12:00 am on Monday, at which time the 15% shift differential will apply to the regular rate.

OVERTIME:
- All hours in excess of 8 per day, or before or after an established shift that are not shift work, and all hours on Saturday, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the hourly rate, inclusive of benefits. Saturday may be used as a make-up day for a day lost to inclement weather. If Saturday is not a make-up day, all hours on Saturday shall be paid at time and one-half the hourly rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday to Thursday, at straight time. Friday may be used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Laborer - Asbestos & Hazardous Waste Removal **PREVAILING WAGE RATE**

	03/11/26
Foreman	W47.00 B26.71 T73.71
Journeyman (Handler)	W41.78 B26.71 T68.49

Craft: Laborer - Asbestos & Hazardous Waste Removal **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
Yearly	22.47	28.55	32.62	36.70						
Benefits	22.31	for	all	intervals						

Ratio of Apprentices to Journeymen - *

* Ratio of apprentices to journeymen shall not be more than one apprentice for the first journeyman and no more than (1) apprentice for each additional three (3) journeymen.

Craft: Laborer - Asbestos & Hazardous Waste Removal **COMMENTS/NOTES**

NOTE: These rates apply to work in connection with Asbestos, Radiation, Hazardous Waste, Lead, Chemical, Biological, Mold Remediation and Abatement.

The regular workday shall be 8 hours.

OVERTIME:
- Hours in excess of 8 per day, Monday through Saturday, and all hours on Sunday and holidays shall be paid at time and one-half the regular rate.
- Benefits on ALL overtime hours shall be paid at straight time.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Easter, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. (Holidays start at 12:00 am).

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Laborer - Building **PREVAILING WAGE RATE**

	06/18/25
Class A Journeyman	W40.25 B33.87 T74.12
Class B Journeyman	W39.25 B33.87 T73.12
Class C Journeyman	W33.36 B33.87 T67.23
Foreman	W45.28 B33.87 T79.15
General Foreman	W50.31 B33.87 T84.18

Craft: Laborer - Building **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
6 Months	60%	70%	80%	90%	of Class B	wage rate				
Benefit	30.62	30.62	30.62	30.62						

Ratio of Apprentices to Journeymen - *

* Ratio of apprentices to journeymen shall not be more than one apprentice for the first journeyman and no more than (1) apprentice for each additional three (3) journeymen.

Craft: Laborer - Building **COMMENTS/NOTES**

CLASS A: Specialist laborer including mason tender or concrete pour crew; scaffold builder (scaffolds up to 14 feet in height); operator of forklifts, Bobcats (or equivalent machinery), jack hammers, tampers, motorized tampers and compactors, vibrators, street cleaning machines, hydro demolition equipment, riding motor buggies, conveyors, burners; and nozzlemen on gunite work.
CLASS B: Basic laborer - includes all laborer work not listed in Class A or Class C.
CLASS C: Janitorial-type light clean-up work associated with the TURNOVER of a project, or part of a project, to the owner. All other clean-up work is Class B.

The regular workday shall be 8 hours between 6:00 AM and 6:00 PM.

SHIFT DIFFERENTIALS:
- Shift work must run for a minimum of 5 consecutive workdays.
- When a 2-shift schedule is worked, including a day shift, both shifts shall be established on the basis of 8 hours pay for 8 hours worked. The second shift shall receive the regular rate plus an additional 10%.
- When a 3-shift schedule is worked, the day shift shall be established on the basis of 8 hours pay for 8 hours worked, the second shift shall be established on the basis of 8 hours pay for 7.5 hours worked, and the third shift shall be established

on the basis of 8 hours pay for 7 hours worked. The day shift shall receive the regular rate, the second shift shall receive the regular rate plus an additional 10%, and the third shift shall receive the regular rate plus an additional 15%.
- When a second or third shift is worked with no day shift, the second or third shift shall be established on the basis of 8 hours pay for 8 hours worked. The second shift shall receive the regular rate plus an additional 10%, and the third shift shall receive the regular rate plus an additional 15%.
- When an irregular shift must be established this shift shall receive the regular rate plus an additional 10%.

OVERTIME:
- Hours in excess of 8 per day, or outside the regular workday that are not shift work, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate. Saturday may be used as a make-up day (paid at straight time) for a day lost to inclement weather, or for a holiday that is observed during the work week, Monday through Friday. All hours on Sundays and holidays shall be paid at double the regular rate.
- Four 10-hour days may be worked Monday to Thursday, at straight time, with Friday used a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the regular rate.
- Benefits on ALL overtime hours shall be paid at time and one-half.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Laborer - Heavy & General **PREVAILING WAGE RATE**

Rates are located in the
"Statewide" rate package

Craft: Laborer - Heavy & General **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
1000 Hours	60%	70%	80%	90%						
Benefit	25.08	for	all	intervals						

Ratio of Apprentices to Journeymen - *

* No more than 1 apprentice for the first journeyman and no more than 1 apprentice for each additional 3 journeymen.

As of 3-1-25, benefits shall be 26.13.
As of 3-1-26, benefits shall be 27.13.

Craft: Laborer - Heavy & General **COMMENTS/NOTES**

Heavy & General Laborer rates are located in the "Statewide" rate package.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Laborer-Residential and Modular Construction **PREVAILING WAGE RATE**

	04/01/25	04/01/26	04/01/27
* Skilled Tradesman (only applies to Modular Construction)	W36.00 B5.45 T41.45	W36.50 B5.45 T41.95	W37.00 B5.45 T42.45
Foreman (person directing crew, regardless of his skill classification)	W38.00 B5.45 T43.45	W38.50 B5.45 T43.95	W39.00 B5.45 T44.45
Residential and Modular Construction Laborer	W32.00 B5.45 T37.45	W32.50 B5.45 T37.95	W33.00 B5.45 T38.45

Craft: Laborer-Residential and Modular Construction **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
As shown	800 hours	600 hours	600 hours							
wage & benefit	70%	80%	90%							

Ratio of Apprentices to Journeymen-

One (1) apprentice shall be allowed for the first journeyman on site and no more than one (1) additional apprentice for each additional three (3) journeymen on site.

Craft: Laborer-Residential and Modular Construction **COMMENTS/NOTES**

* SKILLED TRADESMAN-
any worker doing work not typically done by a Building Laborer. Some examples are installing interior doors, sheet rock, hooking up appliances, installing light fixtures, installing railing systems, etc. Please note where local building codes require that certain work be performed under the supervision of a licensed tradesman (i.e. Plumber, Electrician, etc.) Laborers shall work under such supervision.

RESIDENTIAL CONSTRUCTION- All residential construction (not commercial), single-family, stand-alone duplex houses, townhouses and multi-family buildings of not more than four (4) floors. Each housing unit must be fully and independently functional; each housing unit must have its own kitchen and bathroom. The definition includes all incidental items such as site work, parking areas, utilities, streets and sidewalks. Please note the construction must be Residential in nature. A First Floor at or below grade may contain commercial space not to exceed 50% square footage of the floor; at least 50% of the First Floor must contain living accommodations or related nonresidential uses (e.g. laundry space, recreation/hobby rooms, and/or corridor space). Basement stories below grade used for storage, parking, mechanical systems/equipment, etc., are considered basement stories which are not used in determining the building's height. An attic is an unfinished space located immediately below the roof. Such space is not used in determining a building's height even if used for storage purposes. In addition, barracks and dormitories are not considered residential projects.

MODULAR RESIDENTIAL CONSTRUCTION- all aspects of modular residential construction (not commercial) at the site of installation of structures of no more than four (4) stories, including all excavation and site preparation, footings and foundation systems whether poured on-site or prefabricated, all underground waterproofing, underground utilities, concrete slabs, sidewalks, driveways, paving, hardscape and landscaping. Please note the construction must be Residential as defined above. All work performed by the Set Crew (the crew of workers who set the modular boxes on the foundation), including the rigging, setting, attaching and assembly of all modules and structural members, preparation of the foundation

to accept modules, such as sill plates, connection of all in-module and under-module connections including, but not limited to, plumbing, electrical, HVAC, fire suppression, CAT5, telephone, television/internet, and fiber optic, the building or installation of any porches or decks regardless of material or method of construction, the on-site installation of, or completion of any roof system, doors, windows and fenestrations, including flashing, gutter and soffit systems, waterproofing, insulation and interior and exterior trim work, and painting. Please note that modular construction does not include on-site stick built construction, tip up construction or panel built construction.

The regular workday shall be 8 hours between 6:00 AM and 6:00 PM.

OVERTIME:
Hours worked in excess of 8 per day/40 per week, Monday through Saturday, and all hours worked on Sunday and holidays shall be paid at time and one-half the hourly rate.

RECOGNIZED HOILDAYS:
New Year's Day, Martin Luther King Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day and Christmas Day.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Millwright **PREVAILING WAGE RATE**

	05/01/25
Foreman	W67.67 B40.72 T108.39
Journeyman	W58.84 B35.49 T94.33

Craft: Millwright **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
6 Months	40%	55%	65%	80%	90%					
Benefits	59.25% of	Appren	tice	Wage	Rate	for all	intervals	+ $0.63		

Ratio of Apprentices to Journeymen - 1:3

Craft: Millwright **COMMENTS/NOTES**

FOREMAN REQUIREMENTS:
- When there are 2 or more Millwrights on a job, 1 shall be designated as a Foreman.

The regular workday shall consist of 8 hours, starting between 6:00 AM and 9:00 AM.

SHIFT DIFFERENTIALS:
- When a 2 shift schedule (including a day shift) is established, the day shift shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular rate plus 15%, inclusive of benefits.
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular hourly rate, the second shift shall receive the regular rate plus 15% and the third shift shall receive the regular rate plus 20%, inclusive of benefits.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis. The second shift shall receive the regular rate plus 15% and the third shift shall receive the regular rate plus 20%, inclusive of benefits.
- When an irregular shift must be established, this shift shall receive the regular rate plus 15%, inclusive of benefits.

OVERTIME:
- All hours in excess of 8 per day, or before or after an established shift that are not shift work, and all hours on Saturdays shall be paid at time and one-half the hourly rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the hourly rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday to Thursday, at straight time. Friday may be used as a make-up day for a day lost due to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday. Veterans' Day may be substituted for the day after Thanksgiving.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Operating Engineer **PREVAILING WAGE RATE**

Rates are located in the
"Statewide" rate package

Craft: Operating Engineer **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
Yearly	60%	70%	80%	90%						

Ratio of Apprentices to Journeymen - *

* 1 apprentice for each piece of heavy equipment. At least 10 pieces of heavy equipment or a minimum of 5 Operating Engineers must be on site.

Craft: Operating Engineer **COMMENTS/NOTES**

Operating Engineer rates are located in the "Statewide" rate package.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Operating Engineer - Field Engineer **PREVAILING WAGE RATE**

Rates are located in the
"Statewide" rate package

Craft: Operating Engineer - Field Engineer **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
Yearly	70%	75%	of Rod/	Chainman	Wage					
Yearly			80%	90%	Transit/	Instrument	man	Wage		

Ratio of Apprentices to Journeymen - *

* No more than 1 Field Engineer Apprentice per Survey Crew.

Craft: Operating Engineer - Field Engineer **COMMENTS/NOTES**

Operating Engineer - Field Engineer rates are located in the "Statewide" rate package.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Painter - Line Striping **PREVAILING WAGE RATE**

	12/01/25
Apprentice (1st year)	W32.04 B17.68 T49.72
Apprentice (2nd year)	W36.55 B28.63 T65.18
Foreman (Charge Person)	W46.12 B29.41 T75.53
Journeyman 1 (at least 1 year of working exp. as a journeyman)	W41.35 B29.41 T70.76
Journeyman 2 (at least 2 years of working exp. as a journeyman)	W45.12 B29.41 T74.53

Craft: Painter - Line Striping **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									

Ratio of Apprentices to Journeymen - 1:1

Craft: Painter - Line Striping **COMMENTS/NOTES**

OVERTIME:
Hours in excess of 8 per day, Monday through Saturday, and all hours on Sundays and holidays shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day and Christmas Day. Veterans Day may be substituted for the day after Thanksgiving.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Paperhanger **PREVAILING WAGE RATE**

	05/01/25
Foreman	W55.12 B31.61 T86.73
Journeyman	W50.11 B31.61 T81.72

Craft: Paperhanger **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
	SEE	COMMER	CIAL	PAINTER						

Craft: Paperhanger **COMMENTS/NOTES**

FOREMEN REQUIREMENTS:
- When there are 4 or more Paperhangers on a job, 1 shall be designated a Foreman.

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:
- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.

OVERTIME:
- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate. All hours on Sundays and holidays shall be paid at double the regular rate.
- Saturday or Sunday may be used to make up a day lost to inclement weather, at straight time.
- Four 10-hour days may be worked, at straight time, Monday through Friday.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, General Election Day, Veterans Day, Thanksgiving Day, Christmas Day

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Pipefitter **PREVAILING WAGE RATE**

	05/06/25
Foreman	W60.59 B54.63 T115.22
Journeyman	W56.34 B50.80 T107.14

Craft: Pipefitter **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
Yearly	35%	45%	55%	65%	75%					
Benefit	28.73	32.11	35.49	38.87	42.25					

Ratio of Apprentices to Journeymen - 1:5

Craft: Pipefitter **COMMENTS/NOTES**

FOREMAN REQUIREMENTS:
- When there are 2 or more Journeyman Pipefitters on a job, 1 shall be designated a Foreman.
- There shall be a Foreman for every 8 Journeyman Pipefitters on a job.

The regular workday shall be 8 hours between 7:00 AM and 3:30 PM.

SHIFT DIFFERENTIAL:
- 2nd Shift (3:30 PM-11:30 PM) shall work 7.5 hours and receive 8 hours pay at the regular rate, plus 10% per hour on the total rate.
- 3rd Shift (11:30 PM-7:00 AM) shall work 7 hours and receive 8 hours pay at the regular rate, plus 15% per hour on the total rate.

OVERTIME:
- All hours worked in excess of 8 per day, Monday through Friday, and all hours worked on Saturday, shall be paid at time and one-half, inclusive of benefits. All hours on Sunday and holidays shall be paid at double time, inclusive of benefits.
- By mutual agreement, employees may work four 10-hour days, Monday to Thursday, at straight time rate. Friday may be used as a make-up day for a day lost to inclement weather, and may be paid at straight time. If Friday is not a make-up day, the first 8 hours shall be paid at time and one-half, inclusive of benefits; hours in excess of 8 shall be paid at double time, inclusive of benefits.

SHIFT DIFFERENTIAL (Maintenance Work Only):
- 2nd Shift (3:30 PM-11:30 PM) shall work 7.5 hours and receive 8 hours pay at the regular rate, plus 10% per hour on the total rate.
- 3rd Shift (11:30 PM-7:00 AM) shall work 7 hours and receive 8 hours pay at the regular rate, plus 15% per hour on the total rate.

OVERTIME (Maintenance Work Only):
- All hours in excess of 8 per day, Monday through Saturday, shall be paid at time and one-half, inclusive of benefits. All

hours on Sundays and holidays shall be paid at double time, inclusive of benefits.

NOTE: Maintenance work is work to repair, restore, or improve the efficiency of existing facilities. This does NOT apply to ANY new construction.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays are observed the following Monday.

County - UNION

Craft: Plasterer **PREVAILING WAGE RATE**

See Bricklayer, Stone Mason Rates

Craft: Plasterer **COMMENTS/NOTES**

See BRICKLAYER, STONE MASON Rates

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Plumber **PREVAILING WAGE RATE**

	05/01/25
Foreman	W67.06 B45.40 T112.46
General Foreman	W71.40 B45.40 T116.80
Journeyman	W62.09 B45.40 T107.49

Craft: Plumber **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
Yearly	35%	45%	55%	65%	75%					
Benefits	19.23	25.20	27.57	29.95	32.32					

Ratio of Apprentices to Journeymen - *

* Employers may employ 1 apprentice on any job where 1 or 2 journeymen are employed. Thereafter, 1 apprentice may be employed for every 4 journeymen.

Craft: Plumber **COMMENTS/NOTES**

FOREMAN REQUIREMENTS:
- On any job having 2 or more Plumbers, 1 must be designated a Foreman.
- On any job having 9 or more Plumbers, 2 shall be designated as Foremen.

The regular workday shall consist of 8 hours between 7:00 AM and 4:30 PM.

SHIFT DIFFERENTIALS:
- Shift work must continue for a minimum of 5 consecutive workdays.
- When two shifts are worked, the second shift shall work 7.5 hours and receive 8 hours pay, at a rate equal to the hourly rate plus 10%, inclusive of benefits.
- When a third shift is worked, the third shift shall work 7 hours and receive 8 hours pay, at a rate equal to the hourly rate plus 15%, inclusive of benefits.

OVERTIME:
- All hours in excess of 8 per day, or before of after the regular workday that are not shift work, Monday through Friday , and all hours on Saturday, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays, shall be paid at double the hourly rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday to Thursday, at straight time. Friday may be used as a make-up day for a day lost due to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Roofer **PREVAILING WAGE RATE**

	06/01/25
Foreman	W48.77 B33.34 T82.11
Journeyman	W45.77 B33.34 T79.11

Craft: Roofer **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
6 Months	17.80	22.26	26.71	28.94	31.16	33.39	35.62	40.07		
Benefits	2.19	2.19	28.34	28.34	28.34	28.34	28.34	28.34		

Ratio of Apprentices to Journeymen - *

* A) For roofing jobs that are of the 1 or single ply nature: 1:2 or fraction thereof
B) For roofing jobs on new built up roofs: 1:3 or fraction thereof
C) For roofing jobs that are of a tear-off nature: 1:2 or fraction thereof
D) For roofing jobs {not requiring complete removal of existing systems, installation done over existing roof}: 1:3 or fraction thereof

Craft: Roofer **COMMENTS/NOTES**

APPRENTICE RATE SCHEDULE AS OF 6-1-25:

INTERVAL	PERIOD AND RATES							
6 Months	18.30	22.88	27.46	29.75	32.03	34.33	36.62	41.19
Benefits	2.44	2.44	29.09	29.09	29.09	29.09	29.09	29.09

Pitch: +.50 per hour

Mop Man: +.30 per hour

The regular workday consists of 8 hours between 8:00 AM and 4:30 PM.

OVERTIME:
Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and all hours on Saturdays, Sundays, and holidays shall be paid at time and one-half the regular rate.

RECOGNIZED HOLIDAYS: New Year's Day, Good Friday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Sheet Metal Sign Installation **PREVAILING WAGE RATE**

	04/03/25
Foreman	W46.50 B46.30 T92.80
Journeyman	W43.50 B46.30 T89.80

Craft: Sheet Metal Sign Installation **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
1000 hours	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%
Benefits	15.35	17.52	19.67	21.83	24.51	26.71	28.93	31.12	33.34	35.53

Ratio of Apprentices to Journeymen - 1:3

Craft: Sheet Metal Sign Installation **COMMENTS/NOTES**

FOREMAN REQUIREMENT:
When there are 6 or more Sheet Metal Sign Installers on a job, 1 shall be designated a Foreman.

The regular workday consists of 8 hours, between 7:00 AM and 3:30 PM.

OVERTIME:
Hours before or after the regular workday, Monday though Friday, and all hours worked on Saturday shall be paid at time and one-half the hourly rate. All hours on Sunday and holidays shall be paid at double the hourly rate.

Four(4) 10 hour days may be worked, Monday through Friday, at straight time, for projects lasting at least one week in duration. The fifth day may be used as a make-up day at straight time for a day lost due to inclement weather. However, if the fifth day is not a make-up day, all hours worked will be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day and the day after, Christmas Day. Saturday holidays observed the preceding Friday, Sunday holidays observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Sheet Metal Worker **PREVAILING WAGE RATE**

	07/02/25
Foreman	W63.84 B51.93 T115.77
General Foreman	W64.84 B51.93 T116.77
Journeyman	W59.84 B51.93 T111.77

Craft: Sheet Metal Worker **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
Yearly	45%	48%	52%	65%	of	Journey	man	Wage	Rate	
Benefit	45%	48%	52%	65%	of	Journey	man	Benefit	Rate	

Ratio of Apprentices to Journeymen - 1:4

Craft: Sheet Metal Worker **COMMENTS/NOTES**

FOREMAN REQUIREMENTS:
- When there are 2 or more Sheet Metal Workers on a project, 1 must be designated a Foreman.
- When there are 17 or more Sheet Metal Workers on a project, 1 must be designated a General Foreman.
- When there is only 1 Sheet Metal Worker (1 Journeyman) on a project, he/she shall receive $1.00 more than the regular Journeyman's rate.

The regular workday is 8 hours between 7:00 AM and 4:30 PM.

SHIFT DIFFERENTIAL:
- 2nd Shift (3:30 PM - 12:00 AM) : +17% of regular hourly rate
- Shift work must run for a minimum of 5 consecutive workdays.

OVERTIME:
- Hours in excess of 8 per day, or before or after the regular workday, that are not shift work, and the first 10 hours on Saturdays shall be paid at time and one-half of the regular rate, inclusive of benefits. Hours in excess of 10 per day on Saturday, and all hours on Sundays and holidays shall be at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Friday, at straight time, with hours in excess of 10 per day, and hours in excess of 40 per week paid at the overtime rates listed above.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Sprinkler Fitter **PREVAILING WAGE RATE**

	01/09/26
Foreman	W74.77 B43.55 T118.32
General Foreman	W78.36 B43.55 T121.91
Journeyman	W69.97 B43.55 T113.52

Craft: Sprinkler Fitter **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
1000 Hours									80%	85%
Benefits							Intervals	9 to 10	Jourymn	Ben.

Craft: Sprinkler Fitter **COMMENTS/NOTES**

Apprentice rate schedule for those apprentices registered as of 7-1-13:

Interval Period and Rates
1000 Hrs. 25% 30% 40% 45% 55% 60% 70% 75% 85% 90%
Ben. 16.10 16.10 33.55 33.55 33.55 33.55 Intervals 7-10 Journy. Ben.

Apprentice rate schedule for those apprentices registered as of 7-1-22:

Interval Period and Rates
1000 Hrs. 30% 35% 40% 45% 50% 55% 60% 70% 85% 95%
Ben. 16.10 16.10 33.55 33.55 33.55 33.55 Intervals 7-10 Journy. Ben.

The regular workday consists of 8 consecutive hours between 6:00 AM and 4:30 PM.

FOREMAN REQUIREMENTS:
- The first Sprinkler Fitter on the job must be designated a Foreman.
- On any job having 12 or more Sprinkler Fitters, one must be designated a General Foreman.

SHIFT DIFFERENTIALS:
- Shift work must run for a minimum of 2 consecutive workdays.
- 2nd and 3rd shift shall receive an additional 15% of the regular rate, per hour.
- Any "off hours" shift starting at 8:00 PM or later shall receive an additional 25% of the regular rate, per hour.

OVERTIME:
The first 2 hours in excess of 8 per day, after the regular workday that are not shift work, Monday through Friday, shall be paid at time and one-half the regular rate. Hours worked in excess of 10 per day, Monday through Friday, and all hours on Saturday, Sunday and holidays, shall be paid double the regular rate.
Four 10 hour days may be worked, Monday through Friday, at straight-time.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Tile Finisher-Marble **PREVAILING WAGE RATE**

	01/09/26
Finisher	W50.72 B38.40 T89.12

Craft: Tile Finisher-Marble **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
750 Hours	27.39	41.07	44.49	47.91	51.33	53.73	65.21			
Benefits	28.66	31.76	32.53	33.31	34.08	40.86	41.17			

Ratio of Apprentices to Journeymen - 1:4

Craft: Tile Finisher-Marble **COMMENTS/NOTES**

OVERTIME:
Hours in excess of 7 per day, Monday through Friday, and the first 7 hours on Saturdays shall be paid at time and one half the regular rate, inclusive of benefits. Hours in excess of 7 on Saturdays and all hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Martin Luther King Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day and the day after, Christmas Day. Sunday holidays observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Tile Setter - Ceramic **PREVAILING WAGE RATE**

	06/19/25
Finisher	W50.05 B33.90 T83.95
Setter	W64.90 B37.28 T102.18

Craft: Tile Setter - Ceramic **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
750 Hours	35%	40%	50%	55%	60%	65%	70%	75%	80%	90%

Ratio of Apprentices to Journeymen - 1:4

Craft: Tile Setter - Ceramic **COMMENTS/NOTES**

OVERTIME:
Hours in excess of 7 per day, and the first 10 hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Saturdays after 10 hours shall be paid double the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, Christmas Day.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Tile Setter - Marble **PREVAILING WAGE RATE**

	01/09/26
Tile Setter	W65.21 B41.17 T106.38

Craft: Tile Setter - Marble **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
750 Hours	27.39	41.07	44.49	47.91	51.33	53.73	65.21			
Benefits	28.66	31.76	32.53	33.31	34.08	40.86	41.17			

Ratio of Apprentices to Journeymen - 1:4

Craft: Tile Setter - Marble **COMMENTS/NOTES**

OVERTIME:
Hours in excess of 7 per day, Monday through Friday, and the first 7 hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. Hours in excess of 7 on Saturdays, and all hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Martin Luther King Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day and the day after, Christmas Day. Sunday holidays observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Tile Setter - Mosaic & Terrazzo **PREVAILING WAGE RATE**

	01/01/26
Grinder or Assistant	W60.67 B43.36 T104.03
Mechanic	W62.27 B43.38 T105.65
Terrazzo Resinous Worker	W51.68 B35.61 T87.29

Craft: Tile Setter - Mosaic & Terrazzo **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
1500 Hours	35%	45%	60%	70%	80%	90%				

Ratio of Apprentices to Journeymen - 1:5

Craft: Tile Setter - Mosaic & Terrazzo **COMMENTS/NOTES**

The regular workday consists of 7 hours, between 8:00 AM and 3:30 PM.

OVERTIME:
- Hours in excess of 7 per day, or before or after the regular workday, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Martin Luther King Day, Presidents' Day, Good Friday, Easter Sunday, Memorial Day, July 4th, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day and the day after, Christmas Day. Sunday holidays observed the following Monday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Truck Driver **PREVAILING WAGE RATE**

	05/16/25	05/01/26	05/01/27
Bucket, Utility, Pick-up, Fuel Delivery trucks	W46.41 B45.28 T91.69	W47.41 B47.28 T94.69	W48.41 B49.03 T97.44
Dump truck, Asphalt Distributor, Tack Spreader	W46.41 B45.28 T91.69	W47.41 B47.28 T94.69	W48.41 B49.03 T97.44
Euclid-type vehicles (large, off-road equipment)	W46.51 B45.28 T91.79	W47.51 B47.28 T94.79	W48.51 B49.03 T97.54
Helper on Asphalt Distributor truck	W46.41 B45.28 T91.69	W47.41 B47.28 T94.69	W48.41 B49.03 T97.44
Low Boy Driver	W48.51 B45.28 T93.79	W49.51 B47.28 T96.79	W50.51 B49.03 T99.54
Slurry Seal, Seeding/Fertilizing/ Mulching truck	W46.41 B45.28 T91.69	W47.41 B47.28 T94.69	W48.41 B49.03 T97.44
Straight 3-axle truck	W46.41 B45.28 T91.69	W47.41 B47.28 T94.69	W48.41 B49.03 T97.44
Tractor Trailer (all types)	W46.51 B45.28 T91.79	W47.51 B47.28 T94.79	W48.51 B49.03 T97.54
Vacuum or Vac-All truck (entire unit)	W46.41 B45.28 T91.69	W47.41 B47.28 T94.69	W48.41 B49.03 T97.44
Winch Trailer	W46.61 B45.28 T91.89	W47.61 B47.28 T94.89	W48.61 B49.03 T97.64

Craft: Truck Driver **COMMENTS/NOTES**

BLENDED RATE:
When a truck driver is performing work on the site and also serving as a material delivery driver, the driver shall be paid a "blended rate" which shall be 80% of the above-listed wage rates, plus the full benefit rate. This rate shall be used when the driver "round robins" for a minimum of 6 hours during the work day.

HAZARDOUS WASTE REMOVAL:
- On hazardous waste removal work on a State designated hazardous waste site where the driver is in direct contact with hazardous materials and when personal protective equipment is required for respiratory, skin, and eye protection, the driver shall receive an additional $3.00 per hour (with or without protective gear).
- A hazardous waste related certified worker at a designated hazardous waste site who is not working in a zone requiring level A, B or C personal protection shall receive an additional $1.00 per hour.

TRUCK FOREMAN: $1.00 per hour above regular rate. Overtime shall be increased accordingly.

The regular workday shall be 8 hours, starting between 6:00 AM and 8:00 AM.

SHIFT DIFFERENTIAL:
- Shifts starting at 4:00 PM (2nd Shift): + $5.00 per hour.
- Shifts starting at 12:00 AM (midnight/3rd Shift): time and one-half the hourly rate.
- Shifts starting at a time other than from 6:00 AM to 8:00 AM, when such hours are mandated by the project owner: + $5.00 per hour.

OVERTIME:
- Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, that are not shift work, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Employees may work four 10-hour days at straight time, Monday through Thursday, with Friday used as a make-up day for a lost day. If Friday is not a make-up day, then all hours on Friday shall be paid at time and one-half the hourly rate.
-Benefits on overtime shall be $45.03.
-Benefits on overtime on 5-1-26 shall be $47.03.
-Benefits on overtime on 5-1-27 shall be $48.78.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day (Decoration Day), July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday. The day after Thanksgiving may be substituted for Veteran's Day.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Truck Driver-Material Delivery Driver **PREVAILING WAGE RATE**

	05/16/25	05/01/26	05/01/27
Driver	W37.12 B45.28 T82.40	W37.82 B47.28 T85.10	W38.72 B49.03 T87.75

Craft: Truck Driver-Material Delivery Driver **COMMENTS/NOTES**

BLENDED RATE:
When a truck driver is performing work on the site and also serving as a material delivery driver, the driver shall be paid a "blended rate". See the "Truck Driver" craft for the blended rates.

Truck Foreman/Shop Steward: +$0.25 per hour

SHIFT DIFFERENTIALS:
- 2nd Shift shall receive an additional $0.50 per hour
- 3rd Shift shall receive time and one-half the hourly rate.

OVERTIME:
- Hours in excess of 8 per day, or before or after the regular workday that are not shift work, Monday through Friday, and all hours on Saturday shall be paid at time and one-half the hourly rate. All hours on Sunday and holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day (Decoration Day), July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday. The day after Thanksgiving may be substituted for Veterans Day.

Craft: Welder **PREVAILING WAGE RATE**

Welder

Craft: Welder **COMMENTS/NOTES**

Welders rate is the same as the craft to which the welding is incidental.

STATEWIDE RATES

TERRITORY

ENTIRE STATE

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

OPERATING ENGINEERS **Rates Expiration Date :**

{For apprentice rates refer to "Operating Engineers" apprentice rates in any county rate package}

The regular workday consists of 8 hours, Monday to Friday, between 6:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:
- Shift work must be established for 5 consecutive workdays.
- Any work started outside of the allowed start time, 6:00 AM to 9:00 AM, except for * tidal work, shall be considered an irregular shift and paid at straight time, plus 15% for the first eight hours, inclusive of benefits.
- * FOR TIDAL WORK- a contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work), providing the eight hour shift is completed between the hours of 5:00 AM and 6:30 PM.
- All time worked in excess of an established shift (an established shift is a shift that is determined at the time of the bid) shall be paid at the applicable overtime rate. When a portion of an established shift works into Saturday, Sunday or a holiday, that time worked shall be paid at the established shift rate.
- When working with other trades who receive a higher irregular shift differential, these employees shall also receive the higher differential rate.

OVERTIME:
- Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with all hours on Friday paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. When all trades on a particular job site agree, the day after Thanksgiving may be substituted for Veterans Day.

For projects bid after April 1, 2020, on hazardous waste removal work of any kind, including a state or federally designated site, where the operating engineer is required to wear level A, B, or C personal protection, the operating engineer shall receive an hourly wage rate of his regular hourly wage plus $5.00 per hour.
- An operating engineer working at a hazardous waste removal project or site at a task requiring hazardous waste related certification, but who is not working in a zone requiring level A, B, or C personal protection, shall receive an hourly wage rate of his regular rate plus $1.00 per hour.

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
60.13	40.40	100.53

CLASSIFICATIONS:

A-Frame

Backhoe (combination)

Boom Attachment on loaders (Except pipehook)

Boring & Drilling Machine

Brush Chopper, Brush Shredder, Tree Shredder, Tree Shearer

Bulldozer, finish grade

Cableway

Carryall

Concrete Pump

Concrete Pumping System (Pumpcrete & similar types)

Conveyor, 125 feet or longer

Drill Doctor (Duties include dust collector and maintenance)

Front End Loader (2 cu. yds. but less than 5 cu. yds.)

Grader, finish

Groove Cutting Machine (ride-on type)

Heater Planer

Hoist: Outside Material Tower Hoist (all types including steam, gas, diesel, electric, air hydraulic, single and double drum, concrete, brick shaft caisson, snorkle roof, and other similar types, Except Chicago-boom type) * receives an addtional $1.00 per hour on 100 ft. up to 199 ft. total height, and an additional $2.00 per hour on 200 ft. and over total height.

Hydraulic Crane (10 tons & under)

Hydraulic Dredge

Hydro-Axe

Hydro-Blaster

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
60.13	40.40	100.53

CLASSIFICATIONS:

Jack (screw, air hydraulic, power-operated unit, or console type, Except hand jack or pile load test type)

Log Skidder

Pan

Paver, concrete

Plate & Frame Filter Press

Pumpcrete (unit type)

Pumpcrete, Squeezecrete, or Concrete Pumping machine (regardless of size)

Scraper

Side Boom

Straddle Carrier (Ross and similar types)

Whiphammer

Winch Truck (hoisting)

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
58.22	40.40	98.62

CLASSIFICATIONS:

Asphalt Curbing Machine

Asphalt Plant Engineer

Asphalt Spreader

Autograde Curb Trimmer & Sidewalk Shoulder Slipform (CMI & similar types)

Autograde Curecrete Machine (CMI & similar types)

Autograde Tube Finisher & Texturing Machine (CMI & similar types)

Bar Bending Machines (Power)

Batcher, Batching Plant, & Crusher [On Site]

Belt Conveyor System

Boom-Type Skimmer Machine

Bridge Deck Finisher

Bulldozer (all sizes)

Captain (Power Boats)

Car Dumper (railroad)

Compressor & Blower unit for loading/unloading of concrete, cement, fly ash, or similar type materials (used independently or truck-mounted)

Compressor (2 or 3 battery)

Concrete Breaking Machine

Concrete Cleaning/Decontamination Machine

Concrete Finishing Machine

Concrete Saw or Cutter (ride-on type)

Concrete Spreader (Hetzel, Rexomatic & similar types)

Concrete Vibrator

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
58.22	40.40	98.62

CLASSIFICATIONS:

Conveyors - under 125 feet

Crane Signalman

Crushing Machine

Directional Boring Machine

Ditching Machine - Small (Ditchwitch, Vermeer or similar types)

Dope Pot - Mechanical (with or without pump)

Dumpster

Elevator

Fireman

Fork Lift (Economobile, Lull & similar types)

Front End Loader (1 cu. yd. and over but less than 2 cu. yds.)

Generator (2 or 3 battery)

Giraffe Grinder

Goldhofer/Hydraulic Jacking Trailer

Grader & Motor Patrols

Grout Pump

Gunnite Machine (Excluding nozzle)

Hammer - Vibratory (in conjunction with generator)

Heavy Equipment Robotics - Operator/Technician

Hoist (roof, tugger, aerial platform hoist, house car)

Hopper

Hopper Doors (power operated)

Ladder (motorized)

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
58.22	40.40	98.62

CLASSIFICATIONS:

Laddervator

Locomotive (Dinky-type)

Maintenance Utility Man

Master Environmental Maintenance Technician

Mechanic

Mixer (Except paving mixers)

Pavement Breaker (truck-mounted or small self-propelled ride-on type)

Pavement Breaker - maintenance of compressor or hydraulic unit

Pipe Bending Machine (power)

Pitch Pump

Plaster Pump (regardless of size)

Post Hole Digger (post pounder, auger)

Rod Bending Machines

Roller (black top)

Scale (power)

Seamen Pulverizing Mixer

Shoulder Widener

Silo

Skimmmer Machine (boom type)

Steel Cutting Machine (service & maintenance)

Tamrock Drill

Tractor

Transfer Machines

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
58.22	40.40	98.62

CLASSIFICATIONS:

Tug Captains

Tug Master (Power Boats)

Ultra High Pressure Waterjet Cutting Tool System - Operator/Maintenance Technician

Vacuum Blasting Machine - Operator/Maintenance Technician

Vibrating Plant (used with unloading)

Welder & Repair Mechanic

Effective Dates:

07/01/2025

Rate	Fringe	Total
52.88	40.40	93.28

CLASSIFICATIONS:

Assistant Engineer/Oiler

Driller's Helper

Field Engineer - Transit man or Instrument man

Maintenance Apprentice (Deckhand)

Maintenance Apprentice (Oiler)

Mechanic's Helper

Off Road Back Dump

Tire Repair & Maintenance

Effective Dates:

07/01/2025

Rate	Fringe	Total
50.30	40.40	90.70

CLASSIFICATIONS:

Field Engineer - Rodman or Chainman

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
60.46	40.40	100.86

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (minimum)

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
61.72	40.40	102.12

CLASSIFICATIONS:

Autograde Pavement Profiler (CMI & similar types)

Autograde Pavement Profiler - Recycle Type (CMI & similar types)

Autograde Placer/Trimmer/Spreader Combination (CMI & similar types)

Autograde Slipform Paver (CMI & similar types)

Backhoe (Excavator)

Central Power Plant

Concrete Paving Machine

Cranes, Derricks, Pile Drivers (all types), under 100 tons with a boom (including jib and/or leads) under 100 ft.

Draglines

Drill, Bauer, AMI and similar types

Drillmaster, Quarrymaster

Drillmaster/Quarrymaster (down-the-hole drill), rotary drill, self-propelled hydraulic drill, self-powered drill

Elevator Grader

Field Engineer-Chief of Party

Front End Loader (5 cu. yards or larger)

Gradall

Grader, Rago

Helicoptor Co-Pilot

Helicoptor Communications Engineer

Juntann Pile Driver

Locomotive (large)

Mucking Machine

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
61.72	40.40	102.12

CLASSIFICATIONS:

Pavement & Concrete Breaker (Superhammer & Hoe Ram)

Pile Driver

Prentice Truck

Roadway Surface Grinder

Scooper (loader & shovel)

Shovel (Excavator)

Trackhoe (Excavator)

Tree Chopper with boom

Trenching Machine (cable plow)

Tunnel Boring Machine

Vacuum Truck

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
56.59	40.40	96.99

CLASSIFICATIONS:

Chipper

Compressor (single)

Concrete Spreader (small type)

Conveyor Loader (Except elevator graders)

Engines, Large Diesel (1620 HP) & Staging Pump

Farm Tractor

Fertilizing Equipment (operation & maintenance)

Fine Grade Machine (small type)

Form Line Grader (small type)

Front End Loader (under 1 cubic yard)

Generator (single)

Grease, Gas, Fuel, & Oil Supply Trucks

Heaters (Nelson or other type)

Lights - portable generating light plant

Mixer, Concrete (small)

Mulching Equipment (operation & maintenance)

Power Broom or Sweeper

Pump (diesel engine & hydraulic - regardless of power)

Pump (larger than 2 inch suction, including submersible pumps)

Road Finishing Machine (small type)

Roller - grade, fill, or stone base

Seeding Equipment (operation & maintenance)

Sprinkler & Water Pump Trucks

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
56.59	40.40	96.99

CLASSIFICATIONS:

Steam Generator or Boiler

Stone Spreader

Tamping Machine (vibrating ride-on type)

Temporary Heating Plant (Nelson or other type, including proprane, natural gas, and flow-type units)

Water or Sprinkler Truck

Welding Machine (gas, diesel, or electric convertor, of any type)

Welding System - Multiple (rectifier transformer type)

Wellpoint Systems (including installation by bull gang and maintenance)

Effective Dates:

07/01/2025

Rate	Fringe	Total
63.54	40.40	103.94

CLASSIFICATIONS:

Helicoptor Pilot/Engineer

Effective Dates:

07/01/2025

Rate	Fringe	Total
68.22	40.40	108.62

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), 100 tons and over and TOWER CRANE with boom (including jib and/or leads) 140 ft. and over

Effective Dates:

07/01/2025

Rate	Fringe	Total
67.22	40.40	107.62

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), 100 tons and over and TOWER CRANE with boom (including jib and/or leads) from 100 ft. to 139 ft.

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
63.72	40.40	104.12

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types) , under 100 tons with a boom (including jib and/or leads) 140 ft. and over

Effective Dates:

07/01/2025

Rate	Fringe	Total
66.22	40.40	106.62

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), 100 tons and over and TOWER CRANE with a boom (including jib and/or leads) under 100 ft.

Effective Dates:

07/01/2025

Rate	Fringe	Total
62.72	40.40	103.12

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), under 100 tons with a boom (including jib and/or leads) from 100 ft. to 139 ft.

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

{For apprentice rates refer to "Operating Engineers" apprentice rates in any county rate package}

The regular workday consists of 8 hours, Monday to Friday, between 6:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:
- Shift work must be established for 5 consecutive workdays.
- Any work started outside of the allowed start time, 6:00 AM to 9:00 AM, except for * tidal work, shall be considered an irregular shift and paid at straight time, plus 15% for the first eight hours, inclusive of benefits.
- * FOR TIDAL WORK- a contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work), providing the eight hour shift is completed between the hours of 5:00 AM and 6:30 PM.
- All time worked in excess of an established shift (an established shift is a shift that is determined at the time of the bid) shall be paid at the applicable overtime rate. When a portion of an established shift works into Saturday, Sunday or a holiday, that time worked shall be paid at the established shift rate.
- When working with other trades who receive a higher irregular shift differential, these employees shall also receive the higher differential rate.

OVERTIME:
- Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with all hours on Friday paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. When all trades on a particular job site agree, the day after Thanksgiving may be substituted for Veterans Day.

For projects bid after April 1, 2020, on hazardous waste removal work of any kind, including a state or federally designated site, where the operating engineer is required to wear level A, B, or C personal protection, the operating engineer shall receive an hourly wage rate of his regular hourly wage plus $5.00 per hour.
- An operating engineer working at a hazardous waste removal project or site at a task requiring hazardous waste related certification, but who is not working in a zone requiring level A, B, or C personal protection, shall receive an hourly wage rate of his regular rate plus $1.00 per hour.

Effective Dates:

07/01/2025

Rate	Fringe	Total
65.35	40.40	105.75

CLASSIFICATIONS:

Helicopter Co-Pilot & Communications Engineer

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
61.29	40.40	101.69

CLASSIFICATIONS:

A-Frame

Cherry Picker -10 tons or less (Over 10 tons use crane rate)

Hoist (all types Except Chicago-boom)

Jack (screw, air hydraulic, power-operated unit or console type, Except hand jack or pile load test type)

Side Boom

Straddle Carrier

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
58.63	40.40	99.03

CLASSIFICATIONS:

Aerial Platform Used On Hoists

Apprentice Engineer/Oiler with Compressor or Welding Machine

Captain (Power Boats)

Compressor (2 or 3 in battery)

Concrete Cleaning/Decontamination Machine Operator

Conveyor or Tugger Hoist

Directional Boring Machine

Elevator or House Car

Fireman

Forklift

Generator (2 or 3)

Heavy Equipment Robotics, Operator/Technician

Maintenance Utility Man

Master Environmental Maintenance Technician

Tug Master (Power Boats)

Ultra High Pressure Waterjet Cutting Tool System Operator/Maintenance Technician

Vacuum Blasting Machine Operator/Maintenance Technician

Welding Machines, Gas or Electric Converters on any type-2 or 3 in battery including diesels

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
57.10	40.40	97.50

CLASSIFICATIONS:

Compressor (Single)

Generators

Welding Machines, Gas, Diesel, Or Electric Converters of any type-single

Welding System, Multiple (Rectifier Transformer Type)

Effective Dates:

07/01/2025

Rate	Fringe	Total
53.34	40.40	93.74

CLASSIFICATIONS:

Assistant Engineer/Oiler

Drillers Helper

Field Engineer - Transit/Instrument Man

Maintenance Apprentice (Deckhand)

Maintenance Apprentice (Oiler)

Off Road Back Dump

Effective Dates:

07/01/2025

Rate	Fringe	Total
60.91	40.40	101.31

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (Minimum)

Effective Dates:

07/01/2025

Rate	Fringe	Total
50.30	40.40	90.70

CLASSIFICATIONS:

Field Engineer - Rodman or Chainman

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
62.05	40.40	102.45

CLASSIFICATIONS:

Field Engineer-Chief of Party

Vacuum Truck

Effective Dates:

07/01/2025

Rate	Fringe	Total
70.24	40.40	110.64

CLASSIFICATIONS:

Cranes (all cranes, land or floating with booms, including jib, 140 ft. and over, above ground). Derricks (all derricks, land, floating or Chicago Boom type with booms including jib, 140 ft. and over, above ground), and Pile Drivers (all types) 100 tons and over and Tower Cranes.

Effective Dates:

07/01/2025

Rate	Fringe	Total
68.58	40.40	108.98

CLASSIFICATIONS:

Cranes (all cranes, land or floating with booms including jib, less than 140 ft. abovr ground), Derricks (all derricks. land, floating or Chicago Boom type with booms including jib, less than 140 ft. above ground), Pile Drivers (all types), 100 tons and over and Tower Crane.

Effective Dates:

07/01/2025

Rate	Fringe	Total
65.74	40.40	106.14

CLASSIFICATIONS:

Cranes (all cranes, land or floating with booms including jib, 140 ft. and over, above ground), Derricks (all derricks, land, floating or Chicago Boom type with booms including jib, 140 ft. and over, above ground), Pile Drivers (all types), under 100 tons.

Effective Dates:

07/01/2025

Rate	Fringe	Total
64.08	40.40	104.48

CLASSIFICATIONS:

Cranes (all cranes, land or floating with booms including jib, less than 140 ft. above ground), Derricks (all derricks, land, floating or Chicago Boom type with booms including jib, less than 140 ft. above ground), Pile Drivers (all types), under 100 tons.

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2025

Rate	Fringe	Total
65.74	40.40	106.14

CLASSIFICATIONS:

Helicopter Pilot & Engineer

TEST BORING PRELIMINARY TO CONSTRUCTION-SOUTH/WEST **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:
Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Hunterdon, Mercer, Monmouth, Ocean, Salem, Sussex, Warren

The regular workday consists of 8 hours, Monday to Friday, between 6:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:
- Shift work must be established for 5 consecutive workdays.
- Any work started outside of the allowed start time, 6:00 AM to 9:00 AM, except for * tidal work, shall be considered an irregular shift and paid at straight time, plus 15% for the first eight hours, inclusive of benefits.
- * FOR TIDAL WORK- a contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work), providing the eight hour shift is completed between the hours of 5:00 AM and 6:30 PM.
- All time worked in excess of an established shift (an established shift is a shift that is determined at the time of the bid) shall be paid at the applicable overtime rate. When a portion of an established shift works into Saturday, Sunday or a holiday, that time worked shall be paid at the established shift rate.
- When working with other trades who receive a higher irregular shift differential, these employees shall also receive the higher differential rate.

OVERTIME:
- Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with all hours on Friday paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. When all trades on a particular job site agree, the day after Thanksgiving may be substituted for Veterans Day.

For projects bid after April 1, 2020, on hazardous waste removal work of any kind, including a state or federally designated site, where the operating engineer is required to wear level A, B, or C personal protection, the operating engineer shall receive an hourly wage rate of his regular hourly wage plus $5.00 per hour.
- An operating engineer working at a hazardous waste removal project or site at a task requiring hazardous waste related certification, but who is not working in a zone requiring level A, B, or C personal protection, shall receive an hourly wage rate of his regular rate plus $1.00 per hour.

Effective Dates:

07/01/2025

Rate	Fringe	Total
61.72	40.40	102.12

CLASSIFICATIONS:

Driller

Effective Dates:

07/01/2025

Rate	Fringe	Total
54.88	40.40	95.28

CLASSIFICATIONS:

Driller's Helper

FREE AIR TUNNEL JOBS **Rates Expiration Date :**

{For apprentice rates refer to "Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:
- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional $3.00 per hour.

OVERTIME:
- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:
-where Level A, B, or C protection is required: + $5.00/hr
-other Hazardous Waste site: + $1.00/hr

Traffic Control Coordinator: When either of the work classifications found below are working as a Traffic Control Coordinator they are to receive $.75 above their current rate of pay.

Effective Dates:

03/01/2026

Rate	Fringe	Total
69.31	40.63	109.94

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

03/01/2026

Rate	Fringe	Total
68.94	40.63	109.57

CLASSIFICATIONS:

Heading Foreman, Shaft Foreman, Rod Foreman, Electrician Foreman, Rigging Foreman

FREE AIR TUNNEL JOBS **Rates Expiration Date :**

Effective Dates:

03/01/2026

Rate	Fringe	Total
68.31	40.63	108.94

CLASSIFICATIONS:

Iron Foreman, Caulking Foreman, Form Foreman, Cement Finishing Foreman, Concrete Foreman, Track Foreman, Cleanup Foreman, Grout Foreman

Effective Dates:

03/01/2026

Rate	Fringe	Total
71.44	40.63	112.07

CLASSIFICATIONS:

Blaster

Effective Dates:

03/01/2026

Rate	Fringe	Total
67.63	40.63	108.26

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

03/01/2026

Rate	Fringe	Total
67.19	40.63	107.82

CLASSIFICATIONS:

Skilled Men (including Caulker, Powder Carrier, all other skilled men)

Skilled Men (including Miner, Drill Runner, Iron Man, Conveyor Man, Manitenance Man, Safety Miner, Rigger, Block Layer, Cement Finisher, Tod Man)

Effective Dates:

03/01/2026

Rate	Fringe	Total
67.00	40.63	107.63

CLASSIFICATIONS:

Semi-Skilled Men (including Bell or Signal Man Top or Bottom, Form Worker & Mover, Concrete Worker, Shaft Man, Tunnel Laborer, Caulker's Helper, all other semi-skilled)

Semi-Skilled Men (including Miner's Helper, Chuck Tender, Track Man, Nipper, Brake Man, Derail Man, Cable Man, Hose Man, Gravel Man, Form Man)

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION

FREE AIR TUNNEL JOBS **Rates Expiration Date :**

Effective Dates:

03/01/2026

Rate	Fringe	Total
66.50	40.63	107.13

CLASSIFICATIONS:

All Others (including Powder Watchman, Change House Attendant, Top Laborer)

DRILL FOR GROUND WATER SUPPLY **Rates Expiration Date :**

The well driller and/or helper may perform all work relative to the construction, finishing, and servicing of wells, pumps and borings for ground water supply. The present methods of well drilling entailing as they do, many diverse job operations calling for drilling, pump discharge, piping, and the operation of various types of related power equipment, shall all be within the job duties and functions of the well driller and/or helper. In the event that an extension of work should occur beyond water well drilling functions, into the field of general construction work, such extension of work would come under the appropriate rates listed elsewhere in this wage determination.

- For Work Hours, Shift Differentials, Overtime Rates, and Recognized Holidays see the "Operating Engineers" section of this wage determination.

Effective Dates:

07/01/2025

Rate	Fringe	Total
60.47	40.40	100.87

CLASSIFICATIONS:

Driller

Effective Dates:

07/01/2025

Rate	Fringe	Total
53.63	40.40	94.03

CLASSIFICATIONS:

Driller's Helper

OPERATING ENGINEERS MARINE-DREDGING **Rates Expiration Date :**

NOTE: These wage rates only apply to dredging and other marine construction activities occurring in navigable waters and their tributaries.
Boat crews carrying explosive material (dynamite, pourfex, and other similar materials) shall be paid at 120% of the hourly wage rate for hours engaged in handling of said materials. Employees required to possess a Hazardous Material Certification as a condition of employment shall be compensated at 120% of the hourly wage rate.
OVERTIME:
Hours in excess of 40 per week, and all hours on Saturdays and Sundays, shall be paid at time and one-half the hourly rate. All hours on holidays shall be paid at double the hourly rate.
RECOGNIZED HOLIDAYS: New Year's Day, Martin Luther King Day, Good Friday, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

Effective Dates:

	10/01/2025		**10/01/2026**
Rate	Fringe	Total	Total
48.48	15.44	63.92	65.74

CLASSIFICATIONS:

Lead Dredgerman, Operator, Leverman

Licensed Tug Operator with MOTV, Deck Captain

Effective Dates:

	10/01/2025		**10/01/2026**
Rate	Fringe	Total	Total
41.93	14.99	56.92	58.47

CLASSIFICATIONS:

Derrick Operator, Spider/Spill Barge Operator

Engineer, Electrician, Chief Welder, Chief Mate

Fill Placer, Operator II

Licensed Boat Operator

Maintenance Engineer

Effective Dates:

	10/01/2025		**10/01/2026**
Rate	Fringe	Total	Total
39.46	14.81	54.27	55.75

CLASSIFICATIONS:

Certified Welder

OPERATING ENGINEERS MARINE-DREDGING **Rates Expiration Date :**

Effective Dates:

	10/01/2025		10/01/2026
Rate	Fringe	Total	Total
38.38	14.74	53.12	54.54

CLASSIFICATIONS:

Mate, Drag Barge Operator, Steward, Assistant Fill Placer

Welder

Effective Dates:

	10/01/2025		10/01/2026
Rate	Fringe	Total	Total
37.15	14.65	51.80	53.18

CLASSIFICATIONS:

Boat Operator

Effective Dates:

	10/01/2025		10/01/2026
Rate	Fringe	Total	Total
30.86	14.21	45.07	46.22

CLASSIFICATIONS:

Shoreman, Deckhand, Rodman, Scowman

Effective Dates:

	10/01/2025		10/01/2026
Rate	Fringe	Total	Total
43.20	15.07	58.27	59.89

CLASSIFICATIONS:

Crane Operator

MICROSURFACING/SLURRY SEAL **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:
Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem
IN ALL OTHER COUNTIES use the Heavy and General Laborers - North "Slurry Seal Laborer" rates.

SHIFT DIFFERENTIALS:
Any shift starting at 3:30 PM or later shall receive an additional $0.35/hr

OVERTIME:
Hours in excess of 8 per day or 40 per week shall be paid at time and one-half the hourly rate. All hours on holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day.

Effective Dates:

03/01/2026

Rate	Fringe	Total
53.80	29.95	83.75

CLASSIFICATIONS:

Foreman

Effective Dates:

03/01/2026

Rate	Fringe	Total
51.85	29.95	81.80

CLASSIFICATIONS:

Box man, Hopper, CM Controller

Effective Dates:

03/01/2026

Rate	Fringe	Total
50.15	29.95	80.10

CLASSIFICATIONS:

Microsurface/Slurry Preparation

Effective Dates:

03/01/2026

Rate	Fringe	Total
50.80	29.95	80.75

CLASSIFICATIONS:

Squeegee man

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION

MICROSURFACING/SLURRY SEAL **Rates Expiration Date :**

Effective Dates:

03/01/2026

Rate	Fringe	Total
48.70	29.95	78.65

CLASSIFICATIONS:

Cleaner, Taper

ASPHALT LABORERS - SOUTH **Rates Expiration Date :**

"THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem
{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}
The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.
SHIFT DIFFERENTIALS:
- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional $3.00 per hour.
OVERTIME:
- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.
RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.
Hazardous Waste Work:
-where Level A, B, or C protection is required: + $5.00/hr
-other Hazardous Waste site: + $1.00/hr
FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

Effective Dates:

03/01/2026

Rate	Fringe	Total
56.95	40.63	97.58

CLASSIFICATIONS:

Paving Foreman

Effective Dates:

03/01/2026

Rate	Fringe	Total
53.50	40.63	94.13

CLASSIFICATIONS:

Head Raker

Effective Dates:

03/01/2026

Rate	Fringe	Total
53.65	40.63	94.28

CLASSIFICATIONS:

Screedman

ASPHALT LABORERS - SOUTH **Rates Expiration Date :**

Effective Dates:

03/01/2026

Rate	Fringe	Total
53.10	40.63	93.73

CLASSIFICATIONS:

Tampers, Smoothers, Kettlemen, Painters, Shovelers, Roller Boys

Effective Dates:

03/01/2026

Rate	Fringe	Total
53.20	40.63	93.83

CLASSIFICATIONS:

Milling Controller

Effective Dates:

03/01/2026

Rate	Fringe	Total
53.40	40.63	94.03

CLASSIFICATIONS:

Traffic Control Coordinator

Effective Dates:

03/01/2026

Rate	Fringe	Total
53.35	40.63	93.98

CLASSIFICATIONS:

Raker, Luteman

Effective Dates:

Rate	Fringe	Total

CLASSIFICATIONS:

Certified Paving Foreman

TEST BORING PRELIMINARY TO CONSTRUCTION-NORTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:
Bergen, Essex, Hudson, Middlesex, Morris, Passaic, Somerset, Union

SHIFT DIFFERENTIAL:
Employees on a shift other than between the hours of 8:00 AM and 5:00 PM shall receive an additional $2.00 per hour.

OVERTIME:
Hours in excess of 8 per day, Monday through Friday, and all hours on Saturday shall be paid at time and one-half the regular rate. All hours on Sundays and holidays shall be paid at double the regular rate.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day. Sunday holidays observed the following Monday.

Hazardous Waste Pay (for Levels A, B, and C): an additional 15% of the hourly rate, per hour.

A newly hired Helper with no experience in the industry shall be paid as follows:
1st year on the job - 70% of Helper wage rate
2nd year on the job - 80% of Helper wage rate
3rd year on the job - 90% of Helper wage rate
All helpers receive full fringe benefit rate.

Effective Dates:

10/21/2025

Rate	Fringe	Total
38.15	36.22	74.37

CLASSIFICATIONS:

Helper (4th year helper)

Effective Dates:

10/21/2025

Rate	Fringe	Total
48.78	36.22	85.00

CLASSIFICATIONS:

Driller

Effective Dates:

10/21/2025

Rate	Fringe	Total
55.61	36.22	91.83

CLASSIFICATIONS:

Foreman

HEAVY & GENERAL LABORERS - NORTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:
Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, Warren

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:
- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional $3.00 per hour.
FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

OVERTIME:
- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:
-where Level A, B, or C protection is required: + $5.00/hr
-other Hazardous Waste site: + $1.00/hr

Effective Dates:

03/01/2026

Rate	Fringe	Total
52.70	40.63	93.33

CLASSIFICATIONS:

"D" Rate:
basic, landscape, asphalt, slurry seal, or railroad track laborer; utility meter installer; flagman; salamander tender; pitman; dumpman; rakers or tampers on cold patch work; wrappers or coaters of pipe; waterproofer; timberman; wagon drill or drill master helper; powder carrier; magazine tender; signal man; power buggy operator; tree cutter; operator of basic power tools

Effective Dates:

03/01/2026

Rate	Fringe	Total
53.40	40.63	94.03

CLASSIFICATIONS:

"C" Rate:
pipe layer; laser man; conduit or duct line layer; operator of jack hammer, chipping hammer, pavement breaker, concrete cutter, asphalt cutter, sheet hammer, or walk-behind saw cutter; sandblaster; acetylene cutting or burning; wagon drill, directional drill, or hydraulic drill operator; drill master; core driller; asphalt raker or lute man

HEAVY & GENERAL LABORERS - NORTH **Rates Expiration Date :**

Effective Dates:

03/01/2026

Rate	Fringe	Total
53.65	40.63	94.28

CLASSIFICATIONS:

"B" Rate:
concrete finisher; setter of brick or stone pavers; stone cutter; form setter; manhole, catch basin, or inlet builder; asphalt screedman; rammer; hardscaping; gunite nozzle man

Effective Dates:

03/01/2026

Rate	Fringe	Total
57.20	40.63	97.83

CLASSIFICATIONS:

"A" Rate:
blaster

Effective Dates:

03/01/2026

Rate	Fringe	Total
56.95	40.63	97.58

CLASSIFICATIONS:

"FOREMAN" Rate:
labor foreman, asphalt foreman, drill foreman, pipe foreman, grade foreman, finisher foreman, concrete foreman

Effective Dates:

03/01/2026

Rate	Fringe	Total
57.95	40.63	98.58

CLASSIFICATIONS:

"GENERAL FOREMAN" Rate

Effective Dates:

03/01/2026

Rate	Fringe	Total
54.15	40.63	94.78

CLASSIFICATIONS:

TRAFFIC CONTROL COORDINATOR Rate

HEAVY & GENERAL LABORERS - NORTH **Rates Expiration Date :**

Effective Dates:

03/01/2026

Rate	Fringe	Total
59.45	40.63	100.08

CLASSIFICATIONS:

" CERTIFIED FOREMAN Rate" :

Effective Dates:

03/01/2026

Rate	Fringe	Total
60.45	40.63	101.08

CLASSIFICATIONS:

" CERTIFIED GENERAL FOREMAN Rate" :

HEAVY & GENERAL LABORERS - SOUTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:
Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:
- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional $3.00 per hour.

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

OVERTIME:
- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:
-where Level A, B, or C protection is required: + $5.00/hr
-other Hazardous Waste site: + $1.00/hr

Effective Dates:

03/01/2026

Rate	Fringe	Total
52.70	40.63	93.33

CLASSIFICATIONS:

"D" Rate:
basic, landscape, asphalt, slurry seal, or railroad track laborer; utility meter installer; flagman; salamander tender; pitman; dumpman; rakers or tampers on cold patch work; wrappers or coaters of pipe; waterproofer; timberman; wagon drill or drill master helper; powder carrier; magazine tender; signal man; power buggy operator; tree cutter; operator of basic power tools

Effective Dates:

03/01/2026

Rate	Fringe	Total
53.40	40.63	94.03

CLASSIFICATIONS:

"C" Rate:
pipe layer; laser man; conduit or duct line layer; operator of jack hammer, chipping hammer, pavement breaker, concrete cutter, asphalt cutter, sheet hammer, or walk-behind saw cutter; sandblaster; acetylene cutting or burning; wagon drill, directional drill, or hydraulic drill operator; drill master; core driller; asphalt raker or lute man

HEAVY & GENERAL LABORERS - SOUTH **Rates Expiration Date :**

Effective Dates:

03/01/2026

Rate	Fringe	Total
57.20	40.63	97.83

CLASSIFICATIONS:

"A" Rate:
blaster

Effective Dates:

03/01/2026

Rate	Fringe	Total
56.95	40.63	97.58

CLASSIFICATIONS:

"FOREMAN" Rate:
labor foreman, asphalt foreman, drill foreman, pipe foreman, grade foreman, finisher foreman, concrete foreman

Effective Dates:

03/01/2026

Rate	Fringe	Total
57.95	40.63	98.58

CLASSIFICATIONS:

"GENERAL FOREMAN" Rate

Effective Dates:

03/01/2026

Rate	Fringe	Total
54.15	40.63	94.78

CLASSIFICATIONS:

TRAFFIC CONTROL COORDINATOR Rate

Effective Dates:

03/01/2026

Rate	Fringe	Total
60.45	40.63	101.08

CLASSIFICATIONS:

" CERTIFIED GENERAL FOREMAN Rate" :

HEAVY & GENERAL LABORERS - SOUTH **Rates Expiration Date :**

Effective Dates:

03/03/2026

Rate	Fringe	Total
59.45	40.63	100.08

CLASSIFICATIONS:

" CERTIFIED FOREMAN Rate" :

Effective Dates:

03/01/2026

Rate	Fringe	Total
53.65	40.63	94.28

CLASSIFICATIONS:

"B" Rate:
concrete finisher; setter of brick or stone pavers; stone cutter; form setter; manhole, catch basin, or inlet builder; asphalt screedman; rammer; hardscaping; gunite nozzle man

PIPELINE - MAINLINE TRANSMISSION **Rates Expiration Date :**

These rates apply to the following: welding on Transportation Mainline pipe lines (cross-country pipe lines, or any segments thereof, transporting coal, gas, oil, water or other transportable materials, vapors or liquids, including portions of such pipe lines within private property boundaries up to the final metering station or connection - the point where a valve, consumer connection, or town border station divides mainline transmission lines or higher pressure lateral and branch lines from lower pressure distribution systems).

PER DIEM PAYMENT:
In addition to the total wage rate paid for each craft, the following per diem (per day) amounts must also be paid - Pipeline Journeyman: $80.50; Pipeline Journeyman Welder: $140.50; and Pipeline Helper: $64.50. Note: in order to receive the per diem payment an employee must work a minimum of 8 hours in a 24 hour period.

NOTES:
- Journeymen employed as "stringer bead" welders and journeymen who are regularly employed as "hot-pass" welders shall receive $1.00 per hour more than other journeymen.
- Welders running "stringer bead" or "hot-pass" on "cutouts" or "tie-ins" on a production basis shall be paid $1.00 per hour above the journeymen rate.
- Whenever a welder helper is employed using a power buffer or power grinder immediately behind the stringer bead and /or hot-pass welders, and the pipe gang is set on a production basis, the helper shall be paid $2.00 per hour above the helper rate.
- If back welding is performed inside a pipe under either or both of the following conditions, the welder engaged in the welding will receive $3.00 per hour above the regular rate for the job only for the days on which such back welding is performed:
  - The employer elects, as a regular procedure, to back weld each line-up. This condition is not intended to apply to occasional back welding performed by the pipe gang to repair a bead, to rectify a "high-lo" condition or wall thickness, etc.
  - A welder is required to back weld a completed weld behind the firing line.
- If the welder helper is required to go inside the pipe for the purpose of brushing, buffing and grinding the weld, they shall receive a wage rate $1.00 per hour above the regular
helper rate for the days involved.
- Welders working on "hot work" shall be paid $2.00 per hour above the regular rate for each day engaged in such work. "Hot work' is defined as work on lines in service where there is the danger of fire or explosion.

The regular workday shall be 8 hours, between 8:00 AM and 4:30 PM.

OVERTIME:
Hours in excess of 8 per day, and all hours on Sundays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day. Sunday holidays observed the following Monday.

Effective Dates:

06/18/2025

Rate	Fringe	Total
58.89	36.35	95.24

CLASSIFICATIONS:

Pipeline Journeyman Welder

Effective Dates:

06/18/2025

Rate	Fringe	Total
58.89	36.35	95.24

CLASSIFICATIONS:

Pipeline Journeyman

PIPELINE - MAINLINE TRANSMISSION **Rates Expiration Date :**

Effective Dates:

06/18/2025

Rate	Fringe	Total
33.84	25.47	59.31

CLASSIFICATIONS:

Pipeline Helper

PIPELINE - GAS DISTRIBUTION **Rates Expiration Date :**

These rates apply to the following: welding on gas line distribution systems (that portion of the gas distribution system placed in streets, roads, subways, tunnels, viaducts, highways and easements which serves the users of gas).

SHIFT DIFFERENTIALS:
An "irregular" shift may start any time from 5:00 PM to 12:00 AM, Monday through Friday, and shall receive an additional 15% of the regular rate per hour, inclusive of benefits.

OVERTIME:
Hours in excess of forty per week, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day. Sunday holidays observed the following Monday.

Effective Dates:

11/05/2025

Rate	Fringe	Total
66.32	36.10	102.42

CLASSIFICATIONS:

Pipeline Journeyman Welder

Effective Dates:

11/05/2025

Rate	Fringe	Total
66.32	36.10	102.42

CLASSIFICATIONS:

Pipeline Journeyman

Effective Dates:

11/05/2025

Rate	Fringe	Total
43.28	25.22	68.50

CLASSIFICATIONS:

Pipeline Helper

ASPHALT LABORERS- NORTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:
Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, Warren
{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}
The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.
SHIFT DIFFERENTIALS:
- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional $3.00 per hour.
OVERTIME:
- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.
RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.
Hazardous Waste Work:
-where Level A, B, or C protection is required: + $5.00/hr
-other Hazardous Waste site: + $1.00/hr
FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

Effective Dates:

03/01/2026

Rate	Fringe	Total
56.95	40.63	97.58

CLASSIFICATIONS:

Asphalt Foreman

Effective Dates:

03/01/2026

Rate	Fringe	Total
53.65	40.63	94.28

CLASSIFICATIONS:

Asphalt Screedman

Effective Dates:

03/01/2026

Rate	Fringe	Total
53.40	40.63	94.03

CLASSIFICATIONS:

Asphalt Raker or Lute Man

ASPHALT LABORERS- NORTH **Rates Expiration Date :**

Effective Dates:

03/01/2026

Rate	Fringe	Total
52.70	40.63	93.33

CLASSIFICATIONS:

Asphalt Laborer

Effective Dates:

03/01/2026

Rate	Fringe	Total
59.45	40.63	100.08

CLASSIFICATIONS:

Certified Asphalt Foreman

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date :**

Electrician-Utility Work (North)
(For apprentice rates refer to Electrician-Utility Work (North) in any county rate package).
These rates apply to work contracted for by the following utility companies:
Public Service Electric & Gas Co. of NJ, GPU Energy, Borough of Madison Electric Department, Sussex Rural Electric Cooperative, Rockland Utilities, and Butler Municipal Electric Co.
These rates do not apply to work on substations or switching stations.
For Utility work contracted for by a utility company other than those listed above or those listed under "Electrician-Utility Work (South), see the "Outside Commercial Rates" for the county in which the jobsite is located.

* FOR OUTSIDE COMMERCIAL RATES PLEASE SEE COUNTY RATES

The regular workday is 8 hours, between 6:00 AM and 6:00 PM.
FOR EMERGENCY WORK ONLY: (emergency work is defined as work caused by storm, catastrophe, act of god, and circumstances beyond the control of the employer)-all hours of work shall be paid at double the hourly rate.
SHIFT DIFFERENTIALS:
Shift work must run for a minimum of 5 consecutive workdays.
2nd shift (between the hours of 4:30 PM and 1:00 AM): 8 hours of work + 17.3% of the regular rate, inclusive of benefits.
3rd shift (between the hours of 12:30 AM and 9:00 AM): 8 hours of work + 31.4% of the regular rate per hour, inclusive of benefits.

OVERTIME:
Hours in excess of 8 per day, or before or after the regular wokday Monday through Friday, that is not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the hourly rate, inclusive of benefits.
Four 10-hour days may worked, at straight time, between 6:00 AM and 6:00 PM, Monday through Thursday.

RECOGNIZED HOLIDAYS:
New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day and Christmas Day, or day on which they are legally observed.

Effective Dates:

12/04/2025			11/29/2026	11/28/2027	12/03/2028
Rate	Fringe	Total	Total	Total	Total
69.55	48.68	118.23	122.97	127.89	132.99

CLASSIFICATIONS:

Chief Lineman

Effective Dates:

12/04/2025			11/29/2026	11/28/2027	12/03/2028
Rate	Fringe	Total	Total	Total	Total
63.23	44.26	107.49	111.79	116.26	120.90

CLASSIFICATIONS:

Journeyman Lineman

Effective Dates:

12/04/2025			11/29/2026	11/28/2027	12/03/2028
Rate	Fringe	Total	Total	Total	Total
63.23	44.26	107.49	111.79	116.26	120.90

CLASSIFICATIONS:

Special License Operator

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date :**

Effective Dates:

12/04/2025			11/29/2026	11/28/2027	12/03/2028
Rate	Fringe	Total	Total	Total	Total
66.39	46.47	112.86	117.38	122.07	126.95

CLASSIFICATIONS:

Journeyman Lineman when welding, splicing, hot stick, barehand and helicopter work

Effective Dates:

12/04/2025			11/29/2026	11/28/2027	12/03/2028
Rate	Fringe	Total	Total	Total	Total
60.70	42.49	103.19	107.32	111.60	116.07

CLASSIFICATIONS:

Line Equipment Operator

Effective Dates:

12/04/2025			11/29/2026	11/28/2027	12/03/2028
Rate	Fringe	Total	Total	Total	Total
47.42	33.19	80.61	83.84	87.19	90.67

CLASSIFICATIONS:

Groundman

Effective Dates:

12/04/2025			11/29/2026	11/28/2027	12/03/2028
Rate	Fringe	Total	Total	Total	Total
80.93	56.65	137.58	143.08	148.81	154.75

CLASSIFICATIONS:

General Foreman

Effective Dates:

12/04/2025			11/29/2026	11/28/2027	12/03/2028
Rate	Fringe	Total	Total	Total	Total
74.61	52.22	126.83	131.92	137.19	142.66

CLASSIFICATIONS:

Assistant General Foreman

Effective Dates:

12/04/2025			11/29/2026	11/28/2027	12/03/2028
Rate	Fringe	Total	Total	Total	Total
72.71	50.89	123.60	128.55	133.70	139.04

CLASSIFICATIONS:

Line Foreman

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date :**

Effective Dates:

12/04/2025			11/29/2026	11/28/2027	12/03/2028
Rate	Fringe	Total	Total	Total	Total
50.58	35.40	85.98	89.43	93.00	96.73

CLASSIFICATIONS:

GTO (Groundman Truck Operator) with CDL A

Effective Dates:

12/04/2025			11/29/2026	11/28/2027	12/03/2028
Rate	Fringe	Total	Total	Total	Total
47.42	33.19	80.61	83.84	87.19	90.67

CLASSIFICATIONS:

First Responder

Effective Dates:

12/04/2025			11/29/2026	11/28/2027	12/03/2028
Rate	Fringe	Total	Total	Total	Total
50.58	35.40	85.98	89.43	93.00	96.73

CLASSIFICATIONS:

Line Equipment Mechanic

ELECTRICIAN- UTILITY WORK (SOUTH) **Rates Expiration Date :**

Electrician-Utility Work (South)
(For apprentice rates refer to Electrician-Utility Work (South) in any county rate package).
These rates apply to work contracted for by the following utility company:
Atlantic City Electric.
These rates do not apply to work on substations or switching stations.
For utility work contracted for by a utility company other than the one listed above or those listed under "Electrician-Utility Work (North), see the "Outside Commercial Rates" for the county in which the jobsite is located.

* FOR OUTSIDE COMMERCIAL RATES PLEASE SEE COUNTY RATES

The regular workday is 8 hours, between 7:00 AM and 4:30 PM.
FOR EMERGENCY WORK ONLY: (emergency work is defined as work caused by storm, catastrophe, act of god, and circumstances beyond the control of the employer)- all hours of work shall be paid at double the hourly rate.
SHIFT DIFFERENTIALS:
Shift work must run for a minimum of 5 consecutive workdays.
When two (2) or three (3) shifts are worked the following shall apply:
1st shift (between the hours of 8:00 AM and 4:30 PM)
2nd shift (between the hours of 4:30 PM and 12:30 AM): 8 hours of work + 10% of the regular rate of pay for 7.5 hours worked.

3rd shift (between the hours of 12:30 AM and 8:00 AM): 8 hours of work + 15% of the regular rate of pay for 7 hours worked.

OVERTIME:
Hours in excess of 8 per day, or before or after the regular wokday Monday through Friday, that is not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate. All hours on Sundays and Holidays shall be paid double the hourly rate.

Four 10-hour days may be worked, at straight time, between 6:00 AM and 6:00 PM, Monday through Thursday with Friday used as a make-up day.

RECOGNIZED HOLIDAYS:
New Year's Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day or on days celebrated.

WORKING RULES:
There shall be a Foreman in charge of each work crew. No crews are to exceed twelve (12) men, including Foremen.

There shall be a General Foreman designated for transmission work when three (3) or more crews are on the same job and for distribution work where there are are more than twenty (20) employees on site.

A small job crew shall consist of five (5) or less employees, one (1) of the Journeyman Linemen in the crew shall be designated as a Small Job Foreman.
Work performed from ladders and/or mechanical lift equipment shall be the work of Linemen and/or Apprentices.
On new construction, fitting and framing poles, towers or structures may be done by Journeymen and/or Apprentices.
Groundmen may assist, but may not perform any work which would be performed by Linemen if assembled in the air.

There shall be a Journeyman Lineman in each pole setting, erection, grounding, wire and cable-pulling crew of more than three (3) men.

Effective Dates:

12/02/2025

Rate	Fringe	Total
73.79	62.52	136.31

CLASSIFICATIONS:

General Foreman

ELECTRICIAN- UTILITY WORK (SOUTH) **Rates Expiration Date :**

Effective Dates:

12/02/2025

Rate	Fringe	Total
65.72	57.24	122.96

CLASSIFICATIONS:

Foreman

Effective Dates:

12/02/2025

Rate	Fringe	Total
62.26	55.01	117.27

CLASSIFICATIONS:

Small Job Foreman

Effective Dates:

12/02/2025

Rate	Fringe	Total
57.65	51.98	109.63

CLASSIFICATIONS:

Heavy Equipment Operator

Effective Dates:

12/02/2025

Rate	Fringe	Total
60.53	53.85	114.38

CLASSIFICATIONS:

Cable Splicer

Effective Dates:

12/02/2025

Rate	Fringe	Total
57.65	51.98	109.63

CLASSIFICATIONS:

Journeyman Lineman

Effective Dates:

12/02/2025

Rate	Fringe	Total
60.53	53.85	114.38

CLASSIFICATIONS:

Journeyman Welder

ELECTRICIAN- UTILITY WORK (SOUTH) **Rates Expiration Date :**

Effective Dates:

12/02/2025

Rate	Fringe	Total
57.65	51.98	109.63

CLASSIFICATIONS:

Journeyman Painter

Effective Dates:

12/02/2025

Rate	Fringe	Total
46.12	44.49	90.61

CLASSIFICATIONS:

Light Equipment Operator

Effective Dates:

12/02/2025

Rate	Fringe	Total
40.36	40.72	81.08

CLASSIFICATIONS:

Groundman Truck Driver

Effective Dates:

12/02/2025

Rate	Fringe	Total
37.47	38.85	76.32

CLASSIFICATIONS:

Groundman 3rd Year

Effective Dates:

12/02/2025

Rate	Fringe	Total
34.59	36.96	71.55

CLASSIFICATIONS:

Groundman 2nd Year

Effective Dates:

12/02/2025

Rate	Fringe	Total
31.71	35.09	66.80

CLASSIFICATIONS:

Groundman 1st Year

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION

ELECTRICIAN- UTILITY WORK (SOUTH) **Rates Expiration Date :**

Effective Dates:

12/02/2025

Rate	Fringe	Total
25.37	30.96	56.33

CLASSIFICATIONS:

Flagman

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS **Rates Expiration Date :**

THESE RATES APPLY TO CONSTRUCTION ON NEW TRANS HUDSON TUNNELS ONLY

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:
- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional $3.00 per hour.

OVERTIME:
- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:
-where Level A, B, or C protection is required: + $5.00/hr
-other Hazardous Waste site: + $1.00/hr

Traffic Control Coordinator: When either of the work classifications found below are working as a Traffic Control Coordinator they are to receive $.75 above their current rate of pay.

Effective Dates:

03/01/2026

Rate	Fringe	Total
83.18	40.63	123.81

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

03/01/2026

Rate	Fringe	Total
82.73	40.63	123.36

CLASSIFICATIONS:

Heading Foreman, Shaft Foreman, Rod Foreman, Electrical Foreman, Rigging Foreman

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS **Rates Expiration Date :**

Effective Dates:

03/01/2026

Rate	Fringe	Total
81.98	40.63	122.61

CLASSIFICATIONS:

Iron Foreman, Caulking Foreman, Form Foreman, Cement Finishing Foreman, Concrete Foreman, Track Foreman, Clean-up Foreman, Grout Foreman

Effective Dates:

03/01/2026

Rate	Fringe	Total
85.73	40.63	126.36

CLASSIFICATIONS:

Blaster

Effective Dates:

03/01/2026

Rate	Fringe	Total
81.15	40.63	121.78

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

03/01/2026

Rate	Fringe	Total
80.63	40.63	121.26

CLASSIFICATIONS:

Skilled Men (including Caulker, Powder Carrier, all other skilled men)
Skilled Men (including Miner, Drill Runner, Iron Man, Conveyor Man, Maintenance Man, Safety Miner, Rigger, Block Layer, Cement Finisher, Rod Man)

Effective Dates:

03/01/2026

Rate	Fringe	Total
80.40	40.63	121.03

CLASSIFICATIONS:

Semi-Skilled Men (including Bell or Signal Man top or bottom, Form Worker & Mover, Concrete Worker, Shaft Man, Tunnel Laborer, Caulker's Helper, all other semi-skilled)
Semi-Skilled Men (including Miner's Helper, Chuck Tender, Track Man, Nipper, Brake Man, Derail Man, Cable Man, Hose Man,
Gravel Man, Form Man)

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS **Rates Expiration Date :**

Effective Dates:

03/01/2026

Rate	Fringe	Total
79.80	40.63	120.43

CLASSIFICATIONS:

All others (including Powder Watchman, Change House Attendant, Top Laborer, Job Steward)

The Contractor is made aware that regular text denotes the Supplementary changes made by the NJDOT. Paragraphs and Pay Items in bold text denote revisions and additions made by the Engineer to be project specific.

WAGE RATES

The contractor shall pay the minimum wage rates determined by the New Jersey Department of Labor.

State wage rates may be obtained from the New Jersey Department of Labor (Telephone: 609-292-2259) or by accessing the Department of Labor's web site at http://lwd.dol.state.nj.us/labor/wagehour/wagerate/prevailing_wage_determinations.html The State wage rates in effect at the time of award will be made a part of this Contract, pursuant to Chapter 150, Laws of 1963 (NJSA 34:11-56.25, *et seq.*).

In the event it is found that any employee of the contractor or any subcontractor covered by the contract, has been paid a rate of wages less than the minimum wage required to be paid by the contract, the contracting agency may terminate the contractor's or subcontractor's right to proceed with the work, or such part of the work, as to which there has been a failure to pay required wages and to prosecute the work to completion or otherwise. The contractor and his sureties shall be liable to the contracting agency for any excess costs occasioned thereby.

GENERAL

All awards shall be made subject to the approval of the New Jersey Department of Transportation. No construction shall start before approval of said award by the New Jersey Department of Transportation. Prior to the start of construction the contractor must submit a Material Questionnaire (SA-11) listing all sources of materials. Any materials used on the project from a non-approved New Jersey Department of Transportation source will be considered non-participating. The contractor is also notified that the District Office, Division of Local Aid and Economic Development must be notified of the construction commencement date at least five (5) calendar days prior to the start of construction.

Award of contract and subletting will not be permitted to, materials will not be permitted from, and use of equipment will not be permitted that is owned and/or operated by, firms and individuals included in the report of suspensions, debarments and disqualifications of firms and individuals as maintained by the Department of the Treasury, General Services Administration, CN-039, Trenton NJ 08625 (609-633-3990).

Payment for a pay item in the proposal includes all the compensation that will be made for the work of that item as described in the contract documents unless the "basis of payment" clause provides that certain work essential to that item will be paid for under another pay item.

Whenever any section, subsection, subpart or subheading is amended by such terms as changed to, deleted or added it is construed to mean that it amends that section, subsection, subpart or subheading of the 2019 Standard Specifications unless otherwise noted.

Whenever reference to page number is made, it is construed to refer to the 2019 Standard Specifications unless otherwise noted.

Henceforth in this supplementary specification whenever reference to the State, Commissioner, Department, Engineer or Inspector is made, it is construed to mean the particular municipality or county executing this contract.

Whenever reference to Title 27 is made, it is construed to mean Title 40.

SPECIAL PROVISIONS

AUTHORIZATION OF CONTRACT

The Contract is authorized by the provisions of Title 27 of the Revised Statutes of New Jersey and supplements thereto, and Title 23 of the United States Code - Highways.

The Contract is authorized by the provisions of Title 27 of the Revised Statutes of New Jersey and supplements thereto.

SPECIFICATIONS TO BE USED

The 2019 Standard Specifications for Road and Bridge Construction, of the New Jersey Department of Transportation (Department) as amended herein will govern the construction of this Project and the execution of the Contract.

These Special Provisions consist of the following:

Pages SP1 to SP48 inclusive.

General wage determinations issued under Davis-Bacon and related acts, published by US Department of Labor, may be obtained from the Wage Determinations online website at sam.gov. Select state, county and construction type heading: HIGHWAY where the Project is to be performed then click Search.

Pay the prevailing wage rates determined by the United States Secretary of Labor and the New Jersey Department of Labor and Workforce Development. If the prevailing wage rate prescribed for any craft by the United States Secretary of Labor is not the same as the prevailing wage rate prescribed for that craft by the New Jersey Department of Labor and Workforce Development, pay the higher rate.

State wage rates may be obtained from the New Jersey Department of Labor & Workforce Development (Telephone: 609-292-2259) or by accessing the Department of Labor & Workforce Development's website at https://www.nj.gov/labor/wagehour/wagerate/prevailing_wage_determinations.html. The State wage rates in effect at the time of award are part of this Contract, pursuant to Chapter 150, Laws of 1963 (N.J.S.A. 34:11-56.25 et seq.)

If an employee of the Contractor or subcontractor has been paid a rate of wages less than the prevailing wage, the Department may suspend the Work, and declare the Contractor in default.

The NJDOT must report all suspected or reported violations to the federal agency providing the funding for the project.

Contractor's compliance is required with the Copeland "Anti-Kickback" Act, (40 U.S.C. 3145), as supplemented by the Department of Labor regulations (29 CFR Part 3, "Contractors and subcontractors on Public Building or Public Work Financed in Whole or In Part by Loans or Grants from the United States"). Each contractor or subcontractor is prohibited from inducing by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The NJDOT must report all suspected or reported violations to the federal agency providing the funding for the project.

DIVISION 100 – GENERAL PROVISIONS

SECTION 101 – GENERAL INFORMATION

THIS SECTION IS NOT APPLICABLE TO THIS CONTRACT

SECTION 102 – BIDDING REQUIREMENTS AND CONDITIONS

THIS SECTION IS NOT APPLICABLE TO THIS CONTRACT

SECTION 103 – AWARD AND EXECUTION OF CONTRACT

THIS SECTION IS NOT APPLICABLE TO THIS CONTRACT

SECTION 104 – SCOPE OF WORK

THIS SECTION IS NOT APPLICABLE TO THIS CONTRACT

SECTION 105 – CONTROL OF WORK

THIS SECTION IS NOT APPLICABLE TO THIS CONTRACT

SECTION 106 – CONTROL OF MATERIAL

THIS SECTION IS NOT APPLICABLE TO THIS CONTRACT

SECTION 107 – LEGAL RELATIONS

THIS SECTION IS NOT APPLICABLE TO THIS CONTRACT

SECTION 108 – PROSECUTION AND COMPLETION

THIS SECTION IS NOT APPLICABLE TO THIS CONTRACT

SECTION 109 – MEASUREMENT AND PAYMENT

THIS SECTION IS NOT APPLICABLE TO THIS CONTRACT

DIVISION 150 – CONTRACT REQUIREMENTS

SECTION 151 – PERFORMANCE BOND AND PAYMENT BOND

THIS SECTION IS NOT APPLICABLE TO THIS CONTRACT

SECTION 152 – INSURANCE

THIS SECTION IS NOT APPLICABLE TO THIS CONTRACT

SECTION 153 – PROGRESS SCHEDULE

THIS SECTION IS NOT APPLICABLE TO THIS CONTRACT

SECTION 154 – MOBILIZATION

154.01 DESCRIPTION
THE FOLLOWING IS ADDED:

MOBILIZATION shall include the cost of initiating the Contract, and such portions of the following that are required for the Project: setting up the Contractor's general plant, offices, shops, storage areas, sanitary and other facilities as required; providing access to the project sites; obtaining necessary permits and licenses, and payment of fees; protecting existing utilities; lighting work areas; providing working drawings; sampling and testing of materials; providing required insurance and bonds.

154.02 MATERIALS
THE FOLLOWING IS ADDED:

Materials shall include, but not be limited to, all items necessary to prevent public entry to the site of work. These items shall include: snow fence, lights, barricades, or other means necessary to prevent entry of the public to the site of work.

Any such equipment that is necessary to clean and prepare roads, including graders, shovels, picks, and mechanical sweepers. Mechanical sweepers shall be of the enclosed type and shall be provided with a suitable dust control apparatus. Sweepers which raise dust will not be acceptable.

154.03 PROCEDURE
THE FOLLOWING IS ADDED:

Prior to the start of work, it is the responsibility of the CONTRACTOR to notify the owners of the overhead and underground utilities that may be encountered during all construction operations.

Prior to any excavation, the CONTRACTOR shall have all utilities marked out. If applicable, the CONTRACTOR shall arrange for any necessary utility work and shall reschedule his operations appropriately.

The CONTRACTOR shall take care and caution to preserve and protect all existing pavements, curbs, landscape areas, sidewalk, private and public property along and adjacent to the lines of work. Any destruction to any of the above, beyond the limits of work, or caused by careless construction procedures shall be replaced by the CONTRACTOR at no additional cost to the OWNER.

The CONTRACTOR shall notify all property owners affected by the proposed work at least seventy-two (72) hours prior to the commencement of construction. This notification shall be done by door-hangers or letters and should indicate the anticipated starting and completion dates.

CONTRACTOR shall provide barricades to protect the public from injury from the CONTRACTOR's work. Barricades shall be placed so as to prevent unauthorized persons from entering the work area. Barricades shall consist of snow fence, lights, or other means necessary to prevent entry to the work area.

154.04 MEASUREMENT & PAYMENT
THE FOLLOWING IS ADDED:

MOBILIZATION shall include the cost of initiating the Contract, and such portions of the following that are required for the Project: setting up the Contractor's general plant, offices, shops, storage areas, sanitary and other facilities as required; providing access to the project sites; obtaining necessary permits and licenses, and payment of fees; protecting existing utilities; lighting work areas; providing working drawings; sampling and testing of materials; providing required insurance and bonds.

Pay Item	***Pay Unit***
MOBILIZATION	**LUMP SUM**

SECTION 155 – CONSTRUCTION FIELD OFFICE

THIS SECTION IS NOT APPLICABLE TO THIS CONTRACT

SECTION 156 – MATERIALS FIELD LABORATORY AND CURING FACILITY

THIS SECTION IS NOT APPLICABLE TO THIS CONTRACT

SECTION 157 – CONSTRUCTION LAYOUT AND MONUMENTS

THE SECTION IS RENAMED TO:

SECTION 158 – SOIL EROSION AND SEDIMENT CONTROL AND WATER QUALITY CONTROL

158.03.02 SESC MEASURES

THE FOLLOWING IS ADDED:

Soil Erosion and Sediment Control measures (SESC measures) shall be provided and maintained in accordance with the standards for soil erosion and sediment control in New Jersey and also in accordance with the standards of the Somerset-Union Soil Conservation District.

The Contractor shall adhere to the approved soil erosion and sediment control plan and the soil erosion and sediment control details and notes. The soil erosion and sediment control plan and soil erosion and sediment control details and notes have been made a part of the project plans.

158.04 MEASUREMENT AND PAYMENT

THE ENTIRE SUBSECTION IS REPLACED BY THE FOLLOWING:

Payment for all costs associated with Soil Erosion and Sediment Control and Water Quality Control Measures, as delineated on the plans and/or directed in the field by the Engineer and as required by the Somerset-Union Soil Conservation District, shall be measured for payment per the following items scheduled in the proposal.

It is the Contractors responsibility to notify the Somerset-Union Soil Conservation District in advance of disturbance in compliance with the Soil Conservation District (SCD) certification. The Contractor must copy Colliers Engineering &

Design on the written notice to the SCD. Any costs or effort associated with SCD coordination and complying with the SCD certification should be included in the lump sum pay item "Soil Erosion and Sediment Control Measures".

158.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED TO THE PAY ITEMS:

Pay Item	***Pay Unit***
SOIL EROSION AND SEDIMENT CONTROL MEASURES	**LUMP SUM**

SECTION 159 – TRAFFIC CONTROL

159.01 DESCRIPTION

THE FOLLOWING IS ADDED AFTER THE FIRST SENTENCE:

The Contractor shall be responsible for the proper notification of residences, businesses, emergency services, busing services, and all other parties affected by the traffic control implemented on the project.

159.03 PROCEDURE

SUBSECTION 159.03.09 EMERGENCY TOWING SERVICE

THIS SUBSECTION IS DELETED.

159.04 MEASUREMENT AND PAYMENT:

THE FOLLOWING IS ADDED:

ALL TRAFFIC CONTROL ITEMS IN SECTION 159 SHALL BE ACCOUNTED FOR IN THE LUMP SUM COST FOR MOBILIZATION IN THE PROPOSAL.

SECTION 161 – FINAL CLEANUP

THE FOLLOWING IS ADDED:

161.03.02 Restoration

Restoration not specifically called out with construction notes, such as grading, concrete and paver walks, lawn, fencing, railings, curb, driveway restoration, pavement restoration, trench restoration, signage, survey monuments, water and gas valves, cleanouts, roof leaders or similar piping, benches, and any other items disturbed or removed during construction shall be restored and reset to their original condition and location. The Contractor shall reset items at their preconstruction locations, unless otherwise directed by the Engineer. Amenities which are anchored to the ground shall be reset utilizing footing sizes, anchoring methods and materials as specified by the product's manufacturer or as approved by the Engineer. Survey monuments shall be reset by a professional land surveyor licensed in the state of New Jersey. All costs associated with site restoration shall be included in the various pay items scheduled in the proposal.

All fences, decorative landscaping, signposts, street marking posts, receptacles, benches, and all other features that interfere with construction operations shall be removed and reset in order to perform work. Any material damaged during construction shall be replaced and installed in its original location. All costs associated with site restoration shall be included in the various pay items scheduled in the proposal.

In areas where existing paver walkways are to be removed and replaced with concrete sidewalk, the Contractor shall reset pavers at the limits of construction to meet the location and grades of the new sidewalk. If a paver soldier course surrounds the existing pavers, the Contractor shall reset the existing paver soldier course, supplementing with additional pavers, at the limits of concrete sidewalk construction. All costs associated with resetting paver sidewalks at the limits of concrete sidewalk construction shall be included in the various pay items scheduled in the proposal.

161.04 MEASUREMENT AND PAYMENT

Restoration will not be measured for payment. No separate payment will be made for restoration. The contractor shall perform all work described in this section and include costs under the various pay items in the proposal.

DIVISION 200 – EARTHWORK

SECTION 201 – CLEARING SITE

201.03.01 Clearing Site
THE FOLLOWING IS ADDED:

Work for CLEARING SITE shall include but is not limited to the removal and disposal of existing miscellaneous roadway material, castings, drainage structures, pipe, endwalls, foundations, fencing, driveways, miscellaneous debris, lawn, removal and/or relocation of signs, relocation of mailboxes, tree trimming, restoration, and any other work required to prepare the site for construction.

The CONTRACTOR is responsible to clear any and all items required to build the project as shown on the plans. The notes shown on the plans may not be all-inclusive. Any items not specifically shown for removal on the plans, but required to build the proposed improvements shall be removed and disposed of under CLEARING SITE.

Before any clearing site work or mobilization is performed at the project site, the Contractor is to film a pre-construction video of the entire existing site. The video should be common DVD standard formatting found in any home. One copy should be given to the Owner and the other copy to the Engineer at the Pre-Construction Meeting or soon thereafter. The notice to proceed will not be issued until the ENGINEER has received the pre-con video. All existing driveways, aprons, sidewalks and other private property shall be specifically included in the video. Special attention shall be taken to these items to ensure accurate restoration.

Restoration not specifically called out with construction notes, such as grading, concrete and paver walks, lawn, fencing, walks, curb, driveway restoration, pavement restoration, signage, and any other items disturbed or removed during construction shall be restored and reset to their original condition and location. All costs associated with site restoration shall be paid for under the CLEARING SITE pay item in the proposal.

All fences, decorative landscaping, signposts, street marking posts, asphalt, concrete, inlets, and all other features that interfere with construction operations shall be removed and reset in order to perform work. Any damaged material shall be replaced and installed in its original location. Include all costs associated with work in the CLEARING SITE pay item in the Proposal.

Any items to remain including but not limited to pavers, stairs, amenities, or any other items removed, replaced or disturbed, shall be restored, and reset to their original condition and location.

Unless otherwise directed, all excess material shall be removed from the site and disposed of by the CONTRACTOR. Should the OWNER wish to retain portions of the excess material, the CONTRACTOR shall deliver said material to the required location within the Borough at no additional cost to the OWNER.

CONTRACTOR shall also remove and dispose of all construction debris. All debris shall be cleaned up on a daily basis and placed in containers or trucks. The materials shall be removed from the site of work and disposed of by the CONTRACTOR at no additional cost to the OWNER.

The CONTRACTOR, during the construction of the project, shall not stockpile materials or his equipment on any private property; except in areas designated on the plans or as directed by the ENGINEER. Areas for stockpiling and staging shall be approved by the ENGINEER prior to the commencement of construction.

All dust, dirt, debris and other foreign materials including vegetation shall be removed from the surface of the road which is being repaired. All material, of whatever nature, resulting from the preparation of roads, shall be removed from the site of work and disposed of by the CONTRACTOR at no additional cost to the OWNER.

Contractor shall be made aware that there are various utilities, above or below ground, that will need to be relocated, raised, or lowered that are currently within the project limits. All utility items including but not limited to utility boxes, valves, meters, etc. that need to be adjusted and/or relocated to complete the project must be

completed. All material, labor, and coordination with the relevant utilities shall be paid for through the lump sum item Clearing Site. No separate payment shall be made for any additional material, labor, and utility coordination to adjust or replace any utility entity to conform with the proposed improvements. Any utility entity that is in existing pavement, curb, sidewalk, or grass will need to be set in concrete in a manner that conforms with the Contract Documents. Contractor shall have no claim for delays due to utility companies needing to reset features.

This includes any materials required by the Borough and various utilities to establish the utility entities in a manner that allow them to be accessible and operable. All materials needed to set utility entities in the sidewalk, including but not limited to risers, C-4 boxes, rings, etc., shall be paid for through Clearing Site. This note accounts for any entity for any utility, above or below ground, which may pose as a conflict to the construction of the proposed improvements. The Contractor shall take notice that they should visit the site and inspect the level of effort, material, and coordination needed to adjust these utility entities to complete the project and include that fee in Clearing Site.

THE CONTRACTOR SHALL PROVIDE, AND REMOVE AT THE CONCLUSION OF THE WORK, A TEMPORARY SITE ENCLOSURE FENCE AROUND THE WORK AREA. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS MATERIAL OR LABOR, AND SHALL BE PAID FOR THROUGH THE LUMP SUM PRICE FOR CLEARING SITE.

201.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

The Department will not make payment for the Item CLEARING SITE in excess of $20,000 until Completion.

THE FOLLOWING IS ADDED TO THE END OF THE SECTION:

Payment for CLEARING SITE shall include but is not limited to the removal and disposal of existing miscellaneous roadway material, castings, drainage structures, pipe, driveways, miscellaneous debris, lawn, removal and/or relocation of signs, relocation of mailboxes, tree trimming, and any other work required to prepare the site for construction.

The CONTRACTOR is responsible to clear any and all items required to build the project as shown on the plans. The notes shown on the plans may not be all-inclusive. Any items not specifically shown for removal on the plans, but required to build the proposed improvements shall be removed and disposed of under CLEARING SITE.

CLEARING SITE shall also include a preconstruction video record of existing conditions made by the Contractor and provided to the Engineer prior to start of construction.

THE CONTRACTOR SHALL PROVIDE, AND REMOVE AT THE CONCLUSION OF THE WORK, A TEMPORARY SITE ENCLOSURE FENCE AROUND THE WORK AREA. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS MATERIAL OR LABOR, AND SHALL BE PAID FOR THROUGH THE LUMP SUM PRICE FOR CLEARING SITE.

Pay Item	***Pay Unit***
CLEARING SITE	**LUMP SUM**

SECTION 202 – EXCAVATION

THE FOLLOWING IS ADDED:

This work shall also include the removal of all excess materials and shall include soils unsuitable for re-use. Material that is observed to weave or pump during construction operations shall be deemed unsuitable for re-use and disposed off-site as per the direction of the Engineer. No separate payment shall be made for the excavation and off-site removal of material that is observed to be unsuitable for re-use and all costs shall be included in the various Items in the

Proposal. This work shall also include the material and labor for importing of the fill material (borrow excavation) and spreading of the borrowing excavation, as needed to complete the project improvements.

This work shall also include the cost for all excavation, borrow certified clean fill, and site grading required for the installation and construction of all proposed improvements described on the project plans, regardless of the material encountered, in conformance with the final grades provided on the project plans. The work shall also include disposal of excess soils at off-site locations at a facility chosen by the contractor subject to approval by the Owner. The cost of loading, transport, and tipping fee if any is deemed to be included in the various Items in the Proposal. The work shall also include import of clean fill as needed to develop the proposed improvements. The cost of loading, transport, and tipping fee if any is deemed to be included in the various Items in the Proposal.

This work shall also consist of all work necessary to excavate in a manner which complies with the Occupation Safety and Health Administration (OSHA) requirements. The Contractor shall coordinate excavations with the Engineer. All excavations must be filled or plated prior to end of work shift. No open excavations are permitted at any time that work is not in progress. Plating of open excavations must be specifically approved by the Engineer.

This work shall also include the removal of rock due the need to install proposed underground improvements as indicated and as directed by the Engineer. The manner of rock excavation shall be examined on a case by case basis but shall include removal by hand or machine, the use of blasting is not permitted on this project.

All excavation and disposal including cutting, rock removal, etc., as required shall be included herein. Materials to be excavated are unclassified. Contractor shall be responsible for removal of any and all excessive and unsuitable materials encountered, without additional cost to the Owner.

Following the site clearing and stripping, excavation within the grading limits of the project shall be performed to establish the sub-grade for the site, as needed and determined in the field by the Engineer. Cost for disposal of all material shall be the responsibility of the contractor. Payment will be made under the Lump Sum item Excavation Unclassified, Borrow Excavation, and Grading.

Any excess subsoil shall be kept separate from topsoil and/or other excavated materials and properly stored in stockpiles so that it shall not be subject to abnormal erosion and loss and does not interfere with subsequent construction, material storage and/or contamination from construction activities. Material removed below grade shall be replaced with approved material, thoroughly compacted to a density equal to adjacent areas using suitable equipment, as approved by the Engineer. Payment will be made under the Lump Sum item Excavation Unclassified, Borrow Excavation, and Grading.

Contractor shall carry excavation to lines and grades required, to dimensions and depths shown, with sufficient working space to permit placing, protection, inspection, and completion of all contract work. Materials of every nature encountered shall be loosened and removed manually or with power equipment. Excavated material shall be stockpiled on the construction site, if needed for the work; otherwise, it shall be disposed of properly off site. Payment will be made under the Lump Sum item Excavation Unclassified, Borrow Excavation, and Grading.

The sides of all excavations shall be free of undercuts and properly sloped or braced to prevent slides and caving. Provide barriers, snow fence, markings, and guarding lighting as required at all open excavations for working and public safety. Remove protective materials when no longer required. All excavations shall be maintained free of water and protected at all times from frost.

1. Critical Areas of Existing Utilities: Hand excavation of such areas shall be required to ensure that utilities are not damaged.
2. Inspection: Contractor shall not begin work until bearing surfaces have been cleared, and Engineer's authorization given to proceed. Contractor is required to give ample advance notice to permit the Engineer to arrange for proper field inspection of conditions. The Engineer shall approve the sub-grade before permission is granted to proceed.
3. Timing: Contractor shall schedule excavation, construction, protection, inspection, and completion so as to minimize length of time that any excavation remains open.

Site grading shall include grading, preparation, and compacting all material required to bring the site to grade, as shown on the plans or as directed by the Engineer, and all incidental work to the satisfaction of the Engineer.

The spreading of the existing material to meet the sub-grade requirements shall be paid for under the Excavation Unclassified, Borrow Excavation, and Grading item. The importing of the fill material (borrow excavation) and spreading of the borrowing excavation, shall be paid for on a percentage complete basis. All material shall be certified clean by the contractor and/or contractor's representative or be virgin material as certified by a commercial quarry. The contractor shall install the material in lifts and compact the material to 95% compaction so that settling of the site does not occur. The contractor shall utilize the services of a geotechnical engineer in areas of fill that are greater than four feet.

Compaction shall be performed in accordance with Section 203 of the NJDOT Standard Specification. Payment will be made under the Lump Sum item Excavation Unclassified, Borrow Excavation, and Grading.

202.04 MEASUREMENT AND PAYMENT.

THE ENTIRE SUBSECTION IS REPLACED BY THE FOLLOWING:

No separate payment for excavation, borrow excavation, and grading shall be measured and all costs associated with the work described above shall be included in the lump sum bid price for Excavation Unclassified, Borrow Excavation, and Grading. These costs shall include, but not be limited to, all costs associated with unclassified excavation, importing of material, disposal of material off-site, vehicle costs, stakeout and movement of all material to meet the final grades as described on the project plans and to the satisfaction of the Engineer, and unclassified excavation for installation of all proposed athletic fields, pavement, buildings, sidewalks, utilities, curb, bleachers, etc. The contractor shall account for all soil movement activity including off-site disposal within the allotted lump sum bid price.

Costs of compaction and compaction testing shall be included in the lump sum bid price for Excavation Unclassified, Borrow Excavation, and Grading.

Excavation Unclassified, Borrow Excavation, and Grading shall include the cost of any physical testing of the soil such as sieve analysis, proctor density, moisture content etc. as required by the receiving facility. All soil sampling for physical tests shall be conducted in the presence of the engineer.

No separate payments shall be made for excavation related to the installation of conduit or junction boxes, sidewalks, light pole foundations, trees, or benches, etc. Cost should be included in the various Pay Items scheduled in the Proposal.

No separate payment shall be made for test pits. All material and labor related costs shall be paid for in the lump sum item "Excavation Unclassified, Borrow Excavation, and Grading".

Payment for Excavation, Test Pit, in a roadway shall be made through the Lump Sum price of Excavation Unclassified, Borrow Excavation, and Grading, which price shall include sawcutting, excavation, removal and disposal of existing roadway and subbase material, compaction, supply and installation of Dense-Graded Aggregate Base Course, 6" Thick, Hot Mix Asphalt 19M64 Base Course, 6" Thick required to repair the test pit, and all other work and materials required to dig and restore the test pit as shown on the plans and as specified herein.

Payment for Excavation, Test Pit, outside of a roadway shall be made through the Lump Sum price of Excavation Unclassified, Borrow Excavation, and Grading, which price shall include sawcutting, excavation, removal and disposal of existing surface and subbase material, compaction, supply and restoration of area with excavated material and appropriate seeding required to repair the test pit, and all other work and materials required to dig and restore the test pit as shown on the plans and as specified herein.

Payment for Excavation, Unclassified, shall be made through the lump sum item Clearing Site as required to install the improvements as described in the Construction Documents. When excavation is in the roadway, this shall consist of sawcutting, excavation, removal and disposal of existing roadway and subbase material. All materials and labor for removing existing materials to establish the project improvements shall be accounted for in Clearing Site.

THE FOLLOWING IS ADDED TO THE PAY ITEMS:

Pay Item	***Pay Unit***
EXCAVATION UNCLASSIFIED, BORROW EXCAVATION, AND GRADING	**LUMP SUM**

DIVISION 400 – PAVEMENTS

SECTION 401 – HOT MIX ASPHALT (HMA) COURSES

401.02.01 Materials

THE FIRST ITEM IS CHANGED TO:

Tack Coat 64-22, PG 64S-22 ..... 902.01.01

401.03.01 Milling

401.03.03 HMA Pavement Repair

THE TITLE AND ENTIRE SUBSECTION IS CHANGED TO:

401.03.03 HMA Repair

A. HMA Pavement Repair. Arrange a project site meeting with the RE to establish the limits of HMA pavement repair. Additional repairs, not delineated on the Plans or by the RE during the project site meeting, may be required if the need is established by the RE.

If potholes are discovered, notify the RE immediately. The RE may immediately direct repairs of small areas. The RE may require further evaluation of a large area to determine the need for additional milling and paving.

Perform HMA repairs as a separate operation before milling, paving, and other surface treatments. The Contractor may request approval of the RE to perform the repair work as one operation with the paving or surface treatment.

HMA repairs may be performed on full depth HMA pavement or on composite pavement (HMA over concrete pavement). For full depth HMA pavement, sawcut existing HMA pavement to a depth of 8 inches. For composite pavement, sawcut existing HMA to a depth of 8 inches or up to the top of concrete, whichever is less. Sawcut lines parallel and perpendicular to the roadway baseline and 3 inches away, at the closest point, from the damaged area to be repaired.

Remove damaged and loose material within the boundary of the sawcuts to form rectangular openings with vertical sides to a depth of 8 inches for HMA pavement, or to the top of concrete for composite pavement. A milling machine may be used to remove damaged pavement to form the repair areas if approved by the RE.

After the existing damaged HMA and loose material has been removed, the RE will examine underlying material to determine its condition.

If the base of the repair area is unbound material, then shape and compact the unbound material to produce a firm and level base.

If water exists in the area, remove the underlying material to the depth as directed by the RE. Place geotextile, then place and compact coarse aggregate to required grade to provide for a minimum 8 inch thick HMA pavement repair. Compact coarse aggregate as specified in 203.03.02.B.3.

If the base of the repair is HMA or concrete pavement, then ensure that the remaining pavement is cleaned and dry prior to applying tack coat.

Apply tack coat at an application rate of 0.15 gallons per square yard to the vertical surfaces and base of the opening. Spread and grade HMA surface course mix in the opening as specified for the roadway surface or a HMA surface course mix approved by the RE. Ensure that the temperature of the HMA when placed is at least 250 °F, and compact as specified in 401.03.07.F. Compact areas not accessible to rollers with a flat face compactor. Compact until the top of the patch is flush with, or 1/8 inch higher than, the adjacent pavement surface.

Reuse removed material as specified in 202.03.03.C.1.

B. HMA Longitudinal Joint Repair. Arrange a project site meeting with the RE to establish the limits of HMA longitudinal repair areas. Additional repairs, not delineated on the Plans or by the RE during the project site meeting, may be required if the need is established by the RE.

Mill 2 feet wide, unless directed otherwise by the RE, centered over the HMA longitudinal joint, rumble strip, longitudinal distress areas or any combination of the three, as shown on the Plans and as directed by the RE. Mill to a minimum 2 inches in depth, or as required to remove the damaged pavement. For distress areas wider than 4 feet, the RE may direct the use of HMA pavement repair as specified in 401.03.03.A.

Clean the milled area as specified in 401.03.01.A. Obtain RE approval of the repair area before proceeding with the repair.

Apply polymerized joint adhesive to the vertical surfaces of the repair area as specified in 401.03.04. Apply tack coat as specified in 401.03.05 at an application rate of 0.15 gallons per square yard to the bottom surface of the repair area. Obtain RE approval of the repair area before proceeding with the repair. Spread and grade Hot Mix Asphalt 9.5M64 Surface Course in the repair area as specified in 401.03.07.E. Ensure that the temperature of the HMA when placed and compacted is at least 250 ºF. Compact as specified in 401.03.07.F, ensuring that the top of the compacted HMA is flush with, or not greater than 1/8 inch higher than, the adjacent pavement surface.

Reuse removed material as specified in 202.03.03.C.1.

401.03.07 HMA Courses

A. Paving Plan.
PART (4) IS CHANGED TO:

4. Lighting plan for night operations as specified in 108.06.

C. Test Strip

REPLACE THE FIRST PARAGRAPH OF THIS SECTION WITH THE FOLLOWING:

Test Strip. Construct a test strip for each HMA mix for contracts with more than a total of 5,500 tons of HMA. For HMA HIGH RAP, construct the test strip at least 14 days prior to production. Test strips are not necessary for temporary pavement. Ensure that the tack coat or prime coat has been placed as specified in 401.03.05 and 401.03.06, before placing HMA. Transport and deliver, spread and grade, and compact as specified in 401.03.07.D, 401.03.07.E, and 401.03.07.F, respectively, and according to the approved paving plan. Construct a test strip for the first 700 to 1,200 square yards placed for each job mix formula. If the paving lot area is less than 700 square yards, the District Local Aid Office may waive the coring requirements. While constructing the test strip, record the following information and submit to the RE:

D. Transportation and Delivery of HMA.
THE SECOND SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

Do not allow trucks to leave the plant within 1 hour of sunset unless lighting for night operations is provided as specified in 108.06.

E. Spreading and Grading.

G. Opening to Traffic.

THE FOLLOWING IS ADDED AFTER THE LAST PARAGRAPH:

Ensure that RPMs are installed and rumble strips are constructed within 14 days of opening each day's surface paving to traffic.

H. Air Void Requirements

FOR LOCAL AID PROJECTS, THIS SUBSECTION IS REPLACED BY THE FOLLOWING.

Pavement lots are defined as approximately 15,000 square yards of pavement in Surface area. If pavement lot area is less than 5000 square yards, the Local Aid District Office may waive the air voids requirements.

The RE will designate an independent testing agency (Laboratory) to perform the quality assurance sampling, testing and analysis. The Laboratory is required to be accredited by the AASHTO Accreditation Program (www.amrl.net). The Laboratory's accreditation must include AASHTO T 166 and AASHTO T 209.

The Laboratory Technician who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2.

The Laboratory will determine air voids from 5 (Five) 6 inch diameter cores taken from each lot in random locations within the traveled way and at least one core in each travel lane. The HMA Core Sampling Plan form provided on the Local Aid Website must be utilized by the Laboratory to determine the random locations of the cores. The Laboratory may rerun the random location functions on the HMA Core Sampling Plan form to resolve any conflicts generated by the HMA Core Sampling Plan form and physical limitations of the HMA lot, such as utility conflicts, or the specifications defined herein. The coring locations must be designated by a station and offset, and offsets are taken from the left edge of the pavement in the direction of travel within the lane lines. The Laboratory must disclose the contents of the HMA Core Sampling Plan with the Contractor to assist in the schedule of construction.

The Laboratory will determine air voids of cores from the values for the maximum specific gravity of the mix and the bulk specific gravity of the core. The Laboratory will determine the maximum specific gravity of the mix according to NJDOT B-3 and AASHTO T 209, except that minimum sample size may be waived in order to use a 6-inch diameter core sample. The Laboratory will determine the bulk specific gravity of the compacted mixture by testing each core according to AASHTO T 166.

The Laboratory will calculate the percent defective (PD) as the percentage of the lot outside the acceptable range of 2 percent air voids to 8 percent air voids. The acceptable quality limit is 15 percent defective. For lots in which PD > 15, the Department will assess a negative pay adjustment.

The Laboratory will use and submit to the RE the DS8S-PD form provided on the Local Aid Website and verify manually the PD calculation.

The Laboratory will calculate pay adjustments based on the following:

1. Sample Mean ($\bar{X}$) and Standard Deviation (S) of the N Test Results (X1, X2,…, XN).

$$\bar{X} = \frac{(X_1 + X_2 + \cdots + X_N)}{N}$$

$$S = \sqrt{\frac{(X_1 - \bar{X})^2 + (X_2 - \bar{X})^2 + \cdots + (X_N - \bar{X})^2}{N - 1}}$$

2. Quality Index (Q).

$$Q_L = \frac{(\bar{X} - 2.0)}{S}$$

$$Q_U = \frac{(8.0 - \bar{X})}{S}$$

3. **Percent Defective (PD).** Using NJDOT ST for the appropriate sample size, the Laboratory will determine PD_L and PD_U associated with Q_L and Q_U, respectively. $PD = PD_L + PD_U$

4. **Reduction Per Lot.** Calculate the reduction per lot as specified in Table 401.03.07-3:

Table 401.03.07-3

Reduction in Payment for Nonconformance to Air Void Requirements

Percent Defective (PD) Per Lot	Reduction Per Lot (%)
$0 < PD \leq 15$	0
$15 < PD \leq 30$	0.5
$30 < PD \leq 35$	2
$35 < PD \leq 40$	10
$40 < PD \leq 45$	15
$45 < PD \leq 50$	20
$50 < PD \leq 60$	30
$60 < PD \leq 75$	45
$PD > 75$	Remove & Replace

5. **Outlier Detection.** If $PD < 10$, the Laboratory will not screen for outliers. If $PD \geq 10$, the Laboratory will screen acceptance cores for outliers using a statistically valid procedure. The following procedure applies only for a sample size of 5 or 10.
   1. The Laboratory will arrange the core results in ascending order, in which X_1 represents the smallest value and X_N represents the largest value.
   2. If X_N is suspected of being an outlier, the Laboratory will calculate:

$$R = \frac{X_N - X_{(N-1)}}{X_N - X_1}$$

   3. If X_1 is suspected of being an outlier, the Laboratory will calculate:

$$R = \frac{X_2 - X_1}{X_N - X_1}$$

   4. For N = 5 if R > 0.642, the value is judged to be statistically significant and the core is excluded.
      For N = 10 if R > 0.412, the value is judged to be statistically significant and the core is excluded.

   If an outlier is detected for N = 5 and no retest is warranted, the Contractor may replace that core by taking an additional core at the same offset and within 5 feet of the original station. If an outlier is detected and a retest is justified, take a replacement core for the outlier at the same time as the 5 additional retest cores are taken. If the outlier replacement core is not taken within 15 days, the Laboratory will use the initial core results to determine reduction per lot.

If an outlier is detected for N = 10, the Contractor may replace that core by taking an additional core at the same offset and within 5 feet of the original station. If the outlier replacement core is not taken within 15 days, the Laboratory will use the initial core results to determine the reduction per lot.

6. **Retest.** If the initial series of 5 cores produces a percent defective value of PD ³ 30 for mainline or ramp lots, or PD ³ 50 for other pavement lots, the Contractor may elect to take an additional set of 5 cores at random locations chosen by the HMA Core Sampling Plan form. Take the additional cores within 15 days of receipt of the initial core results. If the additional cores are not taken within the 15 days, the Laboratory will use the initial core results to determine the PPA. If the additional cores are taken, the Laboratory will recalculate the reduction per lot using the combined results from the 10 cores.

7. **Removal and Replacement.** If the final lot PD ≥ 75 (based on the combined set of 10 cores or 5 cores if the Contractor does not take additional cores), remove and replace the lot and all overlying work. The replacement work is subject to the same requirements as the initial work.

   For shoulder lots, the Department will assess the calculated reduction per lot instead of removal and replacement. Fog seal the lot as specified in 422.03.01.

I. Thickness Requirements

DELETE THIS SUBSECTION AND REPLACE THIS SUBSECTION'S CONTENTS WITH THE FOLLOWING:
This subsection is deleted. In no instance will a compacted average thickness of less than 1.25 inches be acceptable.

DELETE THIS SUBSECTION AND REPLACE THIS SUBSECTION'S CONTENTS WITH THE FOLLOWING:

Thickness requirements will apply when full-depth, uniform-thickness HMA pavement construction is shown.

Pavement lots are defined as approximately 15,000 square yards of pavement area. The Engineer will not include areas consisting of different HMA mixtures or thicknesses in the same lot. If thickness lot area is less than 5000 square yards, the District Local Aid Office may waive the thickness requirements.

The RE will designate an independent testing agency (Laboratory) to perform the quality assurance sampling, testing and analysis. The Laboratory is required to be accredited by the AASHTO Accreditation Program (www.amrl.net). The Laboratory's accreditation must include AASHTO T 166 and AASHTO T 209.

The Laboratory Technician who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2.

The Laboratory will test for thickness using the full-depth cores taken for surface course air voids, evaluated according to NJDOT B-4. The Laboratory will base acceptance on total thickness and thickness of the surface course.

1. **Total Thickness.** The Laboratory will calculate the percent defective (PD) as the percentage of the lot that is less than the design thickness. The Laboratory will consider 25 percent defective as the acceptable quality limit. For lots where PD < 25, the Department will award a positive pay adjustment. For lots where PD > 25, the Department will assess a negative pay adjustment.

   The Department will base total thickness acceptance on the percentage of the lot estimated to fall below the specified thickness as follows

   a. **Sample Mean ($\bar{X}$) and Standard Deviation (S) of the N Test Results (X_1, X_2,..., X_N).** Calculate as specified in 401.03.07.H.1.

$$\overline{X} = \frac{(X_1 + X_2 + \ldots + X_N)}{N}$$

$$S = \sqrt{\frac{(X_1 - \overline{X})^2 + (X_2 - \overline{X})^2 + \ldots + (X_N - \overline{X})^2}{N - 1}}$$

b. Quality Index (Q_I)

$$Q_L = \frac{(\overline{X} - T_{des})}{S}$$

Where T_{des} = design thickness.

c. Percent Defective (PD). Using NJDOT ST for the appropriate sample size, determine the percentage of material (PD) falling below the design thickness associated with Q_L (lower limit).

d. Reduction in Payment. The Department will determine the reduction in payment based on the quantity of the surface course multiplied by the percent reduction in payment from Table 401.03.07-5.

Table 401.03.07-5 Reduction in Payment for Nonconformance to Requirements for Total Thickness

Percent Defective	Percent Reduction
0 to 25.0	0
25.1 to 30.0	2
30.1 to 35.0	5
35.1 to 40.0	10
40.1 to 45.0	20
Over 45.0	Remove & Replace

e. **Retest.** If the initial series of 5 cores produces a percent defective value of PD ≥ 30, the Contractor may elect to take an additional set of 5 cores at random locations chosen by the RE. Notify the RE within 15 days of receipt of the initial core results to take the additional cores. If the RE is not notified within the 15 days, the Laboratory will use the initial core results to determine the reduction in payment for nonconformance requirements. If the additional cores are taken, the ME will recalculate the reduction in payment for nonconformance requirements using the combined results from the 10 cores.

f. **Removal and Replacement.** If the lot PD ³ 45, remove and replace, or mill and overlay, the lot. The replacement work is subject to the same requirements as the initial work.

2. Surface Course Thickness. The Laboratory will evaluate the surface course solely to determine whether a remove- and-replace or an overlay condition exists, not for pay adjustment. The Laboratory will calculate the percent defective (PD) as the percentage of the lot that is less than the allowable thickness for the nominal maximum aggregate used in the surface course. The Laboratory will accept pavement lots with PD £ 30 and will reject pavement lots with PD > 30.

The Laboratory will base surface thickness acceptance on the percentage of the lot estimated to fall below the allowable thickness as follows:

a. **Sample Mean (X) and Standard Deviation (S) of the N Test Results (X1, X2,..., XN).** Calculate using the formula as specified in 401.03.03.I.1.

b. Quality Index (Q).

$Q_L = (\mathbf{X} - T_{all})/S$, where T_{all} is the minimum allowable thickness from Table 401.03.07-6.

Table 401.03.07-6 Surface Course Thickness Requirements

HMA Mix Design Size Designation	Minimum Allowable Compacted Lift Thickness (T_{all})
4.75 MM	0.50 inch
9.5 MM	1.00 inch
12.5 MM	1.25 inches
19 MM	2.00 inches

c. **Percent Defective.** Using NJDOT ST - Statistical Tables (NJDOT Standard Specs for Roads and Bridges 2019-NJDOT TEST METHODS) for the appropriate sample size, determine the percentage of material (PD) falling below the allowable thickness associated with QL (lower limit).

d. **Retest.** If the initial series of 5 cores produces a percent defective value of PD > 30, the Contractor may take an additional 5 cores at random locations determined by the Laboratory. Notify the RE within 15 days of receipt of the initial core results to take the additional cores. If the RE is not notified within the 15 days, the Laboratory will use the initial core results to determine the PPA. When the additional cores are taken, the Laboratory will recalculate the reduction in payment for nonconformance requirements using the combined results from the 10 cores to obtain the total PD.

e. **Removal and Replacement.** If the surface course fails to meet the acceptance requirement with a PD ≤ 45, the Department will require removal and replacement of the lot. The replacement work is subject to the same requirements as the initial work.

J. Ride Quality Requirements.

The Department will evaluate the ride quality of the final riding surface of all constructed pavement on the project, for routes designated as National Highway System (NHS) and routes under NJDOT jurisdiction, using the International Roughness Index (IRI) according to ASTM E 1926. All NHS roadways are listed on the Department's website here. The Department may evaluate ride quality of other routes not designated as NHS or under NJDOT jurisdiction. The final riding surface is defined as the last lift of the pavement structure where traffic will be allowed. The pavement will be evaluated using the current average IRI (C) to select the target IRI (T) from Table 401.03.07-8. The current average IRI (C) is defined as the preconstruction ride quality measured not more than two years from the start of the project pavement construction.

The RE will designate an independent testing agency to perform the ride quality testing and analysis. The testing agency is required to comply with testing and certification requirements according to NJDOT R-1. If the current average IRI (C) is not available, then the testing agency will test, analyze and report ride quality before pavement construction to measure current average IRI (C). The testing agency will use and submit to the RE the IRI Testing Summary Report form provided from The Local Aid District Office and verify manually the pay adjustment calculation.

Current IRI data for paving routes designated NHS or NJDOT jurisdiction can be made available by request by contacting Shahid Haji and Peter Brzostowski at Shahid.Haji@dot.nj.gov and Peter.Brzostowski@dot.nj.gov. Municipal or county officials may request IRI information through this process. Contractors, consultants, and bidding parties shall not request IRI values through this process for their own benefit.

For projects paving routes designated NHS or NJDOT jurisdiction on mainline travel lanes equal to or greater than 2,500 feet length and any lane within the project of at least 1,000 feet length, the Department will evaluate the ride quality of the final riding surface of the mainline travel lanes using IRI. The Department will use the measured IRI

to calculate the pay adjustment (PA) using pay adjustment equation (PAE) type PA1 as specified in Table 401.03.07-7. PA will be based on lots of 0.01 mile length. The PA will be zero for acceptable quality and negative for inferior quality work.

For projects paving routes designated NHS or NJDOT jurisdiction on mainline travel lanes of less than 2,500 feet length, the RE will visually inspect the final riding surface. Based on visual inspection, if the RE determines that the work may not conform to the ride quality requirements, then the Department will evaluate the ride quality of the final riding surface using IRI. Visual inspection by the RE is considered sufficient grounds for such evaluation. The Department will use the measured IRI to calculate the PA using pay equation type PA1 as specified in Table 401.03.07-7.

For paving on ramps and shoulders, the RE will visually inspect the final riding surface. Based on visual inspection, if the RE determines that the work may not conform to the ride quality requirements, then the Department will evaluate the ride quality of the final riding surface using IRI. Visual inspection by the RE is considered sufficient grounds for such evaluation. The Department will use the measured IRI to calculate the pay adjustment using pay equation type PA2 as specified in Table 401.03.07-7.

When paving over bridge structures on NHS or NJDOT jurisdiction roadways, the Department will use the measured IRI to calculate the pay adjustment using pay equation type PA3 as specified in Table 401.03.07-7.

For paving on Local roadways other than NHS and NJDOT jurisdiction on mainline travel lanes equal to or greater than 2,500 feet length and any lane within the project of at least 1,000 feet length, the Department may evaluate the ride quality of the final riding surface of the mainline travel lanes using IRI. Local roadways are defined as municipal and county roads that are not designated as part of the NHS. The Department will use the measured IRI to calculate the pay adjustment (PA) using pay adjustment equation (PAE) type PA4 as specified in Table 401.03.07-7.

1. **Smoothness Measurement.** The Department will test the longitudinal profile of the final riding surface for ride quality with a Class 1 Inertial Profiling System according to NJDOT R-1. If project conditions preclude the use of the Class 1 Inertial Profiling System, the Department will use a Class 1 Walking Profiler or lightweight profiler.

2. **Quality Control Testing.** Perform quality control testing during lift placement to ensure compliance with the ride quality requirements specified in Table 401.03.07-8.

3. **Preparation for IRI Testing.** Notify the RE when all paving is complete and the RE will request IRI testing by independent testing agency. Provide traffic control when the independent testing agency performs IRI testing. Perform mechanical sweeping of the surface before IRI testing. To facilitate auto triggering on laser profilers, place a single line of temporary pavement marking tape perpendicular to the roadway baseline at the beginning and end of each lane, shoulder, and ramp to be tested or as per direction of the independent testing agency. Submit the actual stationing for each temporary pavement marking tape location to the RE.

4. **Quality Acceptance.** The Department will determine acceptance and provide PA based on the following:

    a. **Pay Adjustment.** The acceptable IRI for the roadway pavement will be the target IRI (T) from Table 401.03.07-8 rounded to the nearest whole number for which full payment will be made and will be determined using the latest available current average IRI (C) data. The number of lots for final pay adjustment will be reduced by the number of lots excluded for each segment shown in Table 401.03.07-7. Lots excluded from final PA will be those with the highest recorded IRI numbers for respective roadway and bridge deck segments. A single average IRI value and the corresponding PA for each 0.01 mile lot will be reported. IRI units are in inches per mile.

Table 401.03.07-7 Pay Adjustment Equations (PAE) for Ride Quality

Pay Equation Type	Exclusions	Pay Equations	
PA1	As shown in the Special Provisions Table 401.03.07-7A	IRI<T	PA1=PAE (see note 2)
		T≤IRI≤170	PA1=PAE
		IRI>170	PA1= -A or Corrective action

PA2	Will include, if tested	IRI ≤ 120	PA2 =0
		120 < IRI ≤ 170	PA2 = (IRI − 120) x (−$5.00)
		IRI>170	Maximum Negative Pay or Corrective action
PA3	Will include, if tested	IRI≤120	PA3=0
		120<IRI≤170	PA3=PAE
		IRI>170	PA3= -A or Corrective action
PA4	Will include, if tested	IRI ≤ T	PA4=0
		T < IRI ≤ T+80 or 170 whichever is higher	PA4 = (IRI − T) x (−$1.25)
		IRI>T+80 or 170 whichever is higher	Maximum Negative Pay or Corrective action

$$PAE = \frac{\mathrm{A}}{-37.75347 \times \log_e(T) + 194.87} - \frac{\mathrm{A}}{-37.75347 \times \log_e(IRI) + 194.87}$$

$$\mathrm{A} = 1267.2\left[\frac{\mathrm{M}}{9} + \frac{\mathrm{PD}}{150}\right]$$

P = Bid price of last lift of the pavement structure to be evaluated or price listed in table 401.03.07-7B, whichever is higher, per Ton
D^1 = Design thickness of last lift to be evaluated, Inch
M = Bid price of Milling, per Square Yard
T = Target IRI

1. For various design thicknesses of last lift to be evaluated within a segment, calculate the thickness using the following equation:

$$\text{Design thickness of last lift to be evaluated (D)} = \frac{\mathrm{D_1N_1 + D_2N_2 + \cdots D_NN_N}}{\mathrm{N_1 + N_2 + N_3 + \cdots N_N}}$$

Where:
D_N = Design thickness of the last lift to be evaluated of N sections having same mix, Inch
N_N = Number of lots of N section with design thickness D_N of last lift to be evaluated

2. Positive pay adjustment will be used to offset negative pay adjustment. Total pay adjustment for each lane will not be greater than zero, but may result in a negative pay adjustment.

THE FOLLOWING IS ADDED:

Table 401.03.07-7A Exclusions for Resurfacing or Reconstruction

Roadway	Lane Number	Exclusions

Lane designation is by increasing numbers from left to right in the direction of traffic with left lane being Lane 1.

Table 401.03.07-7B Minimum Value of P

Surface Course Mix	P
Hot Mix Asphalt (Dense Graded) with PG 64-22 binder	$60.00
Hot Mix Asphalt (Dense Graded) with PG 64E-22 binder	$70.00

Stone Matrix Asphalt, High Performance Thin Overlay, Ultra-Thin Friction Course, Open Graded or Gap Graded Mixes not specified in this table	$80.00
Bridge Deck Waterproof Surface Course	$250.00

Table 401.03.07-8 Target IRI for Resurfacing or Reconstruction (T)[3]

Roadway Type	Current average IRI (C)	New Construction or Reconstruction	Number of Operation for other than New Construction or Reconstruction[5]			
			One[4]	Two[4]	Three[4]	Four or More[4]
			Target IRI (T)			
NHS & NJDOT Freeways or Limited Access Highways	≤ 60	50	50	50	50	50
	61 to ≤95		53	50	50	50
	96 to ≤170		55	53	50	50
	171 to≤200		0.64C[7]	55	53	50
	201 to ≤285			58	55	50
	>286[8]			60	58	53
NHS & NJDOT Roadways other than Freeways or Limited Access Highways with speed limit > 35 MPH	≤ 60	60	60	60	60	60
	61 to ≤95		63	60	60	60
	96 to ≤170		66	63	60	60
	171 to≤200		0.64C[7]	66	63	60
	201 to ≤285			69	66	60
	>286[8]			72	69	63
NHS & NJDOT Roadways other than Freeways or Limited Access Highways with speed limit ≤ 35 MPH	≤ 60	70	70	70	70	70
	61 to ≤95		74	70	70	70
	96 to ≤170		77	74	70	70
	171 to≤200		0.64C[7]	77	74	70
	201 to ≤285			81	77	70
	>286[8]			84	81	74
Local Roadway with Posted Speed ≥45 MPH	C	80	0.7C or 80 whichever is higher	0.49C or 80 whichever is higher	0.34C or 80 whichever is higher	0.24C or 80 whichever is higher
Local Roadway with Posted Speed <45 MPH	C	100	0.84C or 100 whichever is higher	0.59C or 100 whichever is higher	0.41C or 100 whichever is higher	0.29C or 100 whichever is higher

1. The Department will determine target IRI (T) of roadways containing multiple speed limits of greater than 35 MPH and less than or equal to 35 MPH based on the following equation:

$$\text{Target IRI of a roadway consists of N Roadway type (T)} = \frac{T_1L_1 + T_2L_2 + \cdots \ldots T_NL_N}{L_{1+}L_{2+}L_{3+} \ldots . L_N}$$

Where T_N is the Target IRI of N section and L_N is the length of N section in miles to the nearest 0.01 mile

2. Current average IRI (C) is the average of the latest available preconstruction IRI data.
3. The target IRI (T) is selected or calculated from the table and rounded to the nearest whole number.
4. Multiply T with 1.05 for HMA over Concrete, if total HMA after proposed treatment is less than 8 inch thick.
5. Milling is one operation. Paving each layer of asphalt mix is an individual operation unless plans specify paving a mix in two lifts. In such case, each lift is considered as an operation.
6. Construction or reconstruction of full pavement box on subgrade is new construction or reconstruction.
7. Use Pay Equation as below:

   IRI≤T PA=PAE*

   IRI>T PA=PAE

   *Positive Pay adjustment will be used to offset negative pay adjustment. Total pay adjustment for each lane will not be greater than zero, but may result in a negative pay adjustment.
8. For paving over rubblized concrete, use C >286 to determine target IRI, then multiply T with 1.05 if total HMA after proposed treatment is less than 8-inch thick.
9 Paving in one lift with no corrective work such as milling, grinding or pre-levelling of at least 25 percent of surface area of existing pavement is one operation.

b. Corrective Action. The Department may require corrective action or assess the maximum negative pay adjustment as computed in Table 401.03.07-7, if the average IRI after testing is performed of NHS or NJDOT jurisdiction roadway is greater than 170 inches per mile, or average IRI local roadway is greater than T+80 or 170 whichever is higher. If the Department requires corrective action submit a plan for corrective action. If the plan for corrective action is approved and the lot is corrected, the Department will retest and evaluate the corrected area as a new lot that must meet the same requirements as the initial work. If the plan for corrective action is not approved, the Department may require removal and replacement. The replacement work is subject to the same requirements as the initial work.

401.03.08 Core Samples

REPLACE THIS SUBSECTION WITH THE FOLLOWING:

The LPA will designate an independent testing agency (Laboratory) to perform the quality assurance sampling, testing and analysis. The Laboratory is required to be accredited by the AASHTO Accreditation Program (www.amrl.net). The Laboratory's accreditation must include AASHTO T 166 and AASHTO T 209. The Laboratory Technician who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2.

Upon completion of an HMA lot, the Laboratory shall drill cores at random locations at least 12 hours after paving. Take cores in the presence of the RE. The Laboratory will determine air voids from 5 (Five) 6 inch diameter cores taken from each lot in random locations within the traveled way and at least one core in each travel lane. The HMA Coring Layout Sheet provided on the Local Aid Website must be utilized by the Laboratory to determine the random locations of the cores. The Laboratory may rerun the random location functions on the HMA Coring Layout Sheet to resolve any conflicts generated by the HMA Core Sampling Plan form and physical limitations of the HMA lot, such as utility conflicts, or the specifications defined herein. The Laboratory must disclose the contents of the HMA Core Sampling Plan with the Contractor to assist in the schedule of construction.

The Laboratory shall use drilling equipment with a water-cooled, diamond-tipped masonry drill bit that produces 6 inch nominal diameter cores for the full depth of the pavement. The Laboratory shall remove the core from the pavement without damaging it. After the Laboratory removes the core, the Laboratory shall remove all water from the hole. The Laboratory shall apply an even coating of tack coat to sides of the hole. The Laboratory shall place cold patching material or HMA in maximum lifts of 4 inches in the hole and compact each lift. If cold patching material is utilized to fill the coring hole, then it is not necessary to apply tack coat to the sides of the hole. The Laboratory shall ensure that the final surface is 1/4 inch above the surrounding pavement surface.

HMA cores are to be taken from the HMA lot for quality assurance sampling, testing and analysis within seven (7) days of completing the HMA lot. For test strip lots and the first traveled way lot, the Laboratory shall deliver cores from the field to the testing Laboratory within 48 hours of completing the lot. The Laboratory shall deliver all other acceptance cores within 7 days of completing the lot.

After each air void lot is placed, the Laboratory shall drill cores so that the full depth of the course is recovered for air void acceptance testing. If thickness acceptance testing is required as specified in 401.03.07.I, the Laboratory shall drill the surface course air void cores for the full depth of pavement.

The Laboratory shall utilize a tamper proof core sample box for core storage and transportation. The Laboratory shall ensure that the core sample box can be locked and sealed and is tamper proof in such a manner that it cannot be opened without removing the seals. The Laboratory shall ensure that the core sample box provides protection for the cores from being disturbed or damaged during transit. The Laboratory shall mark the assigned core number on the side of the sample. The Laboratory shall place core samples in the core sample box. The Laboratory shall transport the sealed core sample boxes to the testing Laboratory.

The Laboratory will not accept damaged core samples for testing. If the core sample box exhibits indications of tampering, the core samples will be rejected. If any core samples are rejected, drill a replacement core at the same offset and within 5 feet of the original station and deliver to the Laboratory as specified above within 48 hours.

If the project is utilizing quality control cores, the Laboratory shall provide the results of the quality control core testing to the Contractor in a timely manner which will not unnecessarily impede construction.

401.04 Measurement and Payment
THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Pay Item	***Pay Unit***
HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2” THICK	SQUARE YARD

DIVISION 600 – MISCELLANEOUS CONSTRUCTION

SECTION 601 – PIPE

601.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This section also includes requirements for constructing underdrains for subsurface drainage, for constructing combination drains for both surface and subsurface drainage, and for work appurtenant to constructing pipes of various kinds.

601.03 CONSTRUCTION

601.03.01.B Excavation

ADD THE FOLLOWING:

The Contractor shall furnish, put in place and maintain such sheeting and bracing, etc., as may be required to support the sides of the excavation and to prevent any movement of earth which could in any way diminish the width of the excavation below that are necessary for proper construction, or otherwise injure or delay the work or endanger adjacent structures.

601.03.01.C Bedding

Except as otherwise provided in 601, all pipe will be laid in Class B bedding per detail.

601.03.01 D. Installing Pipe

THE FOLLOWING IS ADDED:

Water shall be completely removed from all excavations promptly and continuously throughout the progress of the work and the Contractor shall keep excavations absolutely dry at all times until the storm drains have been properly joined and bedded and work completed. Precautions shall be taken to protect uncompleted work from flooding during storms or from other causes.

Filter Fabric shall be Mirafi N160 Non-Woven Geotextile or Approved Equal. All Stone around perforated pipe shall be ¾" Clean Washed Crushed Stone at minimum depth stated in contract documents. All perforations shall be on bottom of pipe.

601.03.01.F Backfilling

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Backfill for underdrains, and combination drains, will be in accordance with the detail, or as directed by the Engineer.

Unless otherwise shown on the plan, or as directed by the Engineer, trench repairs for those areas outside paved areas shall consist of filling the trenches with the specified backfill, topsoiling 5 inches thick, fertilizing and seeding, and straw mulching.

601.04 MEASUREMENT AND PAYMENT

ADD TO SUBSECTION:

Specific pipe bedding specified or shown on the plans or details shall not be measured and the cost thereof shall be included in the various items in the Proposal.

The unit prices bid shall include all costs to connect the pipes to the drainage structures and all costs of appurtenant work. The unit prices bid shall include all costs for the dewatering of the trench, if required. The unit prices bid shall include all costs for temporary trench repairs. The unit prices bid shall include all costs for any sheeting or bracing needed.

THE FOLLOWING PAY ITEMS ARE DESCRIBED:

Pay Item	***Pay Unit***
¾" CLEAN STONE	CUBIC YARD
1" X 12" PERF. HIGH DENSITY POLYETHYLENE PIPE	LINEAR FOOT
8" PERF. HIGH DENSITY POLYETHYLENE PIPE	LINEAR FOOT
FILTER FABRIC, NON-WOVEN GEOTEXTILE	SQUARE YARD
10" PVC PIPE	LINEAR FOOT

SECTION 602 – DRAINAGE STRUCTURES

602.02 Materials
THE FOLLOWING PARAGRAPHS ARE ADDED:

Type A inlets shall have an inlet frame and bicycle safe grate that shall be Campbell Foundry Pattern Number 3405 or approved equal. All pieces shall be included in the bid price for the appropriate drainage structure item in the Proposal.

602.03.02 Inlets and Manholes
THE FOLLOWING PARAGRAPH IS ADDED

When inlets are to be constructed or reconstructed in an area where the roadway is to be milled and overlayed, the Contractor shall sawcut the existing HMA, remove existing concrete road, excavate necessary materials for installation of inlet(s), compact sub grade, install Dense Graded Aggregate Base Course in accordance with Section 301, and install Hot Mix Asphalt Base Course. The frames and grates shall be reset to the same grate elevation as existing unless otherwise specified.

All drainage structures shall be built in accordance with the details in the contract documents. All work and materials described in the details, and notes of the details, shall be included in the bid price for the drainage structure in the proposal.

602.03.03 Setting Castings, Resetting Castings, and Reconstructing Inlets and Manholes
THE FOLLOWING PARAGRAPHS ARE ADDED:

No separate payment shall be made for the connection of existing or proposed pipe to proposed, reconstructed or reset inlets. All costs thereof shall be included in the prices bid for each respective item.

602.04 MEASUREMENT AND PAYMENT
THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Pay Item	***Pay Unit***
8" CLEANOUT	UNIT
YARD INLET	UNIT
RECONSTRUCTED INLET, TYPE 'A', USING EXISTING CASTING	UNIT
RECONSTRUCTED MANHOLE, USING EXISTING CASTING	UNIT

When inlets are to be constructed or reconstructed in an area where the roadway is to be milled and overlayed, no separate payment will be made for sawcutting, excavation, compaction, supply and placement of Dense Graded

Aggregate Base Course, and supply and placement of Hot Mix Asphalt Base Course. All costs shall be included in the price bid for the appropriate Pay Item.

SECTION 605 - FENCE

605.01 DESCRIPTION

The work required under this Section consists of furnishing all labor, materials, equipment, services and related items necessary to supply and install all FOUR FOOT HT. ALUMINUM PICKET FENCE., and all related work, complete, as indicated on the drawings or specified herein. The contractor must comply with applicable requirements of the following standards. Where these standards conflict with other specified requirements, the most restrictive requirements shall govern.

605.01.01 RELATED WORK

Division 200 - Earthwork
Section 607 – Curb

605.01.02 REFERENCES

- ASTM B117 - Practice for Operating Salt-Spray (Fog) Apparatus.
- ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles and Tubes.
- ASTM D523 - Test Method for Specular Gloss.
- ASTM D822 - Practice for Conducting Tests on Paint and Related Coatings and Materials using Filtered Open-Flame Carbon-Arc Light and Water Exposure Apparatus.
- ASTM D1654 - Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments.
- ASTM D2244 - Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates.
- ASTM D2794 - Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
- ASTM D3359 - Test Method for Measuring Adhesion by Tape Test.
- ASTM D6695 – Standard Practice for Xenon-Arc Exposures of Paint and Related Coatings
- IBC 2018 1607.8.1 Handrails and Guards
- American Architectural Manufacturers Association (AAMA): AAMA 2604 - Voluntary Specification, Performance Requirements, and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
- American Welding Society (AWS):AWS D1.1 - Structural Welding Code - Steel (copyrighted by AWS, ANSI approved).
- AWS D1.2 - Structural Welding Code - Aluminum (copyrighted by AWS, ANSI approved).

605.02 MATERIALS

605.02.01 SYSTEM DESCRIPTION

The manufacturer shall supply a total ornamental aluminum fencing system as indicated on drawings. The system shall include all components; pickets, posts, rails, gates, and hardware required for a complete functioning enclosure. No pickets shall extend above the top rail. All fence parts and hardware shall be from one manufacturer to ensure all components are compatible.

605.02.02 QUALITY ASSURANCE

The contractor shall provide laborers and supervisors who are thoroughly familiar with the type of construction involved and the materials specified.

605.02.03 SUBMITTAL

The manufacturer's submittal package shall be submitted not less than four (4) weeks prior to installation to confirm compliance with all requirements for materials specified in this section.

605.02.04 PRODUCT HANDLING AND STORAGE

Upon receipt at the job site, all materials shall be checked to ensure that no damage occurred during shipping or handling. Materials shall be stored in such a manner to ensure proper ventilation and drainage and to protect against damage, weather, vandalism and theft.

605.02.05 MANUFACTURER

A. All fence parts and hardware shall be from one manufacturer to ensure all components are compatible.
B. Four Foot Aluminum Picket Fence manufactured by:
   1. Ameristar's Echelon Plus aluminum ornamental fencing, Majestic, 3-rail, style, manufactured by Ameristar Perimeter Security USA Inc. in Tulsa, Oklahoma.
   2. Jerith Premiere style #202 (FB), manufactured by Jerith Manufacturing LLC, Philadelphia, PA.
   3. approved equal

605.02.06 MATERIALS

A. Aluminum material for fence framework (i.e., tubular pickets, rails and posts) shall conform to the requirements of ASTM B221. The aluminum extrusions for posts and rails shall be Alloy and Temper Designation 6005-T5. The aluminum extrusions for pickets shall be Alloy and Temper Designation 6063-T52.
B. Pickets shall be 3/4" square x .045" thick. Horizontal rails shall be 1-1/4" x 1-7/16" profile with .090" top wall, .060" internal web, and .110" side walls, allowing variable pitch connection. Horizontal rails shall be punched to accept pickets. The rail shall be constructed with an internal web providing a raceway for the pickets to be retained with a 1/8" retaining rod. The number of rails shall vary with the style, height and strength as determined by manufacturer. Fence posts and gate posts shall meet the minimum size requirements of Table 1.
C. Accessories: Aluminum castings shall be used for all post caps, scrolls, finials, and other miscellaneous hardware. Hinges and latches shall be fabricated from aluminum, stainless steel or composite materials.

Table 1 – Minimum Sizes for Fence & Gate Posts

Fence Posts	Panel Height		
2-1/2" x 2-1/2" x .060" w/ reinforced web	Up to 6' Height		
Gate Leaf	Gate Height		
	Up to & Including 4'	Over 4' Up to & Including 5'	Over 5' Up to & Including 6'
Up to 4' wide	2 1/2" x 2-1/2" x .060" Alum.	3" x 3" x .120" Alum.	4" x 4" x .250" Alum. or 3" x 3" x 12ga. Steel
4'1" to 6' wide	3" x 3" x .120" Alum.	4" x 4" x .250" Alum. or 3" x 3" x 12ga. Steel	3" x 3" x 12ga. Steel
6'1" to 8' wide	4" x 4" x .250" Alum. or 3" x 3" x 12ga. Steel	4" x 4" x 11ga. Steel	4" x 4" x 11ga. Steel

Table 2 – Coating Performance Requirements

Quality Characteristics	ASTM Test Method	Performance Requirements
Adhesion	D3359 – Method B	Adhesion (Retention of Coating) over 90% of test area (Tape and knife test).
Corrosion Resistance	B117 & D1654	Corrosion Resistance over 1000 hours (Scribed per D1654; failure mode is accumulation of 1/8" coating loss from scribe or medium #8 blisters).
Impact Resistance	D2794	Impact Resistance over 60 inch lb. (Forward impact using 0.625" ball).

Weathering Resistance	D822, D2244, D523 (60˚ Method)	Weathering Resistance over 1,000 hours (Failure mode is 60% loss of gloss or color variance of more than 3 delta-E color units).

Table 3 – Aluminum Fence Post Spacing By Bracket Type					
Span	8’ Nominal (91-3/4” Rail)				
Post Size	2-1/2”	2-1/2”	3”	2-1/2”	3”
Bracket Type	Line Boulevard (ABB3)	Swivel* (ABB2)		Flat Mount (ABB1)	
Post Settings ± 1/4” O.C.	95”	*95”	*95-1/2”	95”	95-1/2”
Span	6’ Nominal (73-1/16” Rail)				
Post Size	2-1/2”	2-1/2”	3”	2-1/2”	3”
Bracket Type	Line Boulevard (ABB3)	Swivel* (ABB2)		Flat Mount (ABB1)	
Post Settings ± 1/4” O.C.	76-1/4”	*76-1/4”	*76-3/4”	76-1/4”	76-3/4”
*Note: When using ABB2 swivel brackets on either or both ends of a panel installation, care must be taken to ensure the spacing between post and adjoining pickets meets applicable codes. This will require trimming one or both ends of the panel.					

Table 4 – Aluminum Fence – IBC Compliant System Requirements			
Panel Options		Post Options	Brackets Options
Styles	*Rail Configuration*	*Aluminum Post Options*	Line Boulevard Brackets
Majestic	3 rails	3” SQ x .125 wall	*Flat Mount Brackets
		Post Plate Options (anchorage by others)	*Note: Flat Mount Brackets require a thru-bolt installation
		8” x 8” x 3/8” – for 2.5” posts	
Panel, post, and bracket assemblies shall be subjected to structural performance testing according to Chapter 17 - Structural Tests and Special Inspections - International Building Code (IBC) 2018. Physical testing to be completed by accredited third party testing facility. Completed assembly shall demonstrate loading capacity of 2.5 times prescribed design loads found in section 1607.8.1, 1607.8.1.1 and 1607.8.1.2 of IBC 2018 for Handrails and Guards.			

605.02.07 FABRICATION

A. Pickets, rails and posts shall be pre-cut to specified lengths. Horizontal rails shall be pre-punched to accept pickets. Grommets shall be inserted into the pre-punched holes in the rails and pickets shall be inserted through the grommets so that pre-drilled picket holes align with the internal upper raceway of the horizontal rails (Note: This can best be accomplished by using an alignment template). Retaining rods shall be inserted into each horizontal rail so that they pass through the pre-drilled holes in each picket, thus completing the panel assembly. Panels without rings shall be biasable up to a 12% change in grade.

B. The manufactured framework shall be subjected to thermal stratification coating process (high-temperature, in-line, multi-stage, and multi-layer) including, as a minimum, a six-stage pretreatment/wash and an electrostatic spray application of a polyester finish. The topcoat shall be a “no-mar” TGIC polyester powder coat finish with a minimum thickness of 2 mils (0.0508mm). The color shall be Black. The stratification-coated framework shall be capable of meeting the performance requirements for each quality characteristic shown in Table 2.

C. Finish: All fence components shall be subject to a six-stage pretreatment/wash followed by an electrostatic spray application of a "no-mar" TGIC polyester powder coat finish with a minimum thickness of 2-4 mils. The color shall be (specify black, bronze or white).
D. Fence styles with 3-rail configurations shall meet IBC compliance. Panel, post and bracket assemblies shall be subjected to structural performance testing according to Chapter 17 – Structural Tests and Special Inspections – International Building Code (IBC) 2018. Physical testing to be completed by accredited third party testing facility. Completed assembly shall demonstrate loading capacity of 2.5 times prescribed design loads found in section 1607.8.1, 1607.8.1.1 and 1607.8.1.2 of IBC 2018 for Handrails and Guards. IBC compliant fence system requirements detailed within Table 4.
E. Swing gates shall be fabricated using 1-1/4" x 1-7/16" Forerunner rail, 1.75” sq. x .125” gate ends, and 3/4” sq. x .080 pickets. Gates that exceed 6’ in width will have a 1.75” sq. x .125” intermediate upright. All rail and upright intersections shall be joined by welding. All picket and rail intersections shall also be joined by welding.

605.03 METHODS OF CONSTRUCTION

Install Site Furninshings in accordance with manufacturer recommended installation.

605.03.01 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.
B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding

605.03.02 PREPARATION

A. All new installation shall be laid out by the contractor in accordance with the construction plans.
B. Clean surfaces thoroughly prior to installation
C. Prepare the grade and remove surface irregularities, if any, which may cause interference with the installation of fencing.
D. If preparation and condition is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

605.03.03 INSTALLATION

A. Install in accordance with manufacturer's instructions.
B. Use of non-Ideal Aluminum Products parts/components will negate manufacturer's warranty.
C. Fence posts shall be set in accordance with the manufacturer recommended spacing.
D. Insert fence horizontal rail end into pre-punched posts and fasten with Tek screws
E. Center and align posts, place concrete around posts and vibrate or tamp for consolidation. Recheck vertical and top alignment of posts and make necessary corrections.
F. Install gates plumb, level, and secure for full opening without interference. For double gates, install drop rod. Adjust hardware for smooth operation.
G. Division 2 and Division 3 Sections shall govern post base material requirements.
H. Gate posts shall be spaced according to the manufacturers' gate drawings, dependent on standard out-to-out gate leaf dimensions and gate hardware selected.
I. Type and quantity of gate hinges shall be based on the application; weight, height, and number of gate cycles.
J. The manufacturer's gate drawings shall identify the necessary gate hardware required for the application.
K. Gate hardware shall be provided by the manufacture of the gate and shall be installed according to the manufacturer's recommendation

605.03.04 FENCE INSTALLATION

Fence post shall be spaced according to Table 3, plus or minus ½". For installations that must be raked to follow sloping grades, the post spacing dimension must be measured along the grade. Fence panels shall be attached to posts with brackets supplied by the manufacturer. Posts shall be set in concrete footers of sufficient depth and diameter to meet project specific requirements and conforms to any federal, state, and/or local codes. The "Earthwork" and "Concrete" sections of this specification shall govern material requirements for the concrete footer. Posts setting by other methods such as plated posts or grouted core-drilled footers are permissible only if shown by engineering analysis to be sufficient in strength for the intended application.

605.03.05 FENCE INSTALLATION MAINTENANCE

When cutting/drilling rails or posts adhere to the following steps to seal the exposed surfaces; 1) Remove all metal shavings from cut area. 2) Apply custom finish paint matching fence color. Failure to seal exposed surfaces per steps 1 & 2 above will negate warranty. Ameristar spray cans or paint pens shall be used to finish exposed surfaces; it is recommended that paint pens be used to prevent overspray. Use of non-Ameristar parts or components will negate the manufactures' warranty.

605.03.06 GATE INSTALLATION

Gate posts shall be spaced according to the manufacturers' gate drawings, dependent on standard out-to-out gate leaf dimensions and gate hardware selected. Type and quantity of gate hinges shall be based on the application; weight, height, and number of gate cycles. The manufacturers' gate drawings shall identify the necessary gate hardware required for the application. Gate hardware shall be provided by the manufacture of the gate and shall be installed per manufacturer's recommendations.

605.03.07 CLEANING

A. The contractor shall clean the jobsite of excess materials; post-hole excavations shall be scattered uniformly away from posts.
B. Clean surfaces thoroughly prior to installation
C. Leave immediate work area neat at end of each work day.
D. Clean jobsite of excess materials; scatter excess material from post hole excavations uniformly away from posts. Remove excess material if required.
E. Clean fence with mild household detergent and clean water rinse well. Mortar should be removed from exposed posts and other fencing material using a 10% solution of muriatic acid followed immediately by several rinses with clean water.
F. Touch up scratched surfaces using materials recommended by manufacturer.
G. Match touchup paint color to fence finish.

605.03.08 PROTECTION

A. Protect installed products until completion of project.
B. Touch-up, repair or replace damaged products before Substantial Completion

605.04 MEASUREMENT AND PAYMENT

Item	Pay Unit
4' HIGH ALUMINUM PICKET FENCE	LINEAR FOOT
4' HIGH ALUMINUM SINGLE SELF CLOSING GATE, BLACK	UNIT
4' HIGH ALUMINUM DOUBLE SELF CLOSING GATE, BLACK	UNIT

Refer to Site Plan for quantity and location.

SECTION 606 – SIDEWALKS, DRIVEWAYS, AND ISLANDS

606.01

606.02 MEASUREMENT AND PAYMENT

THE FOLLOWING PAY ITEMS ARE DESCRIBED:

Item	*Pay Unit*
CONCRETE SIDEWALK, 4" THICK	**SQUARE YARD**
CONCRETE PAD, REINFORCED, 6" THICK	**SQUARE YARD**
RESET PAVER WALK	**SQUARE YARD**

There is no specific payment for stripping or dense graded aggregate placement beneath new concrete surfaces, as this work and material shall be included in their respective concrete pay item.

The cost to strip forms, backfill and compact behind sidewalks with topsoil, select gravelly fill, should be included in the unit price bid for said items.

SECTION 607 – CURB

607.01 DESCRIPTION

THE PARAGRAPH IS CHANGED TO:

This Section describes the requirements for constructing concrete curb, granite curb, and HMA curb, for resetting granite curb, and for cutting concrete vertical curb.

607.02.02 EQUIPMENT
THE FOLLOWING IS ADDED:

Concrete Vertical Curb Saw..... 1008.07

THE FOLLOWING SUBPART IS ADDED:

607.03.08 Sawcut Vertical Curb

The RE will determine if the existing concrete vertical curb is suitable for sawcutting. Construct cast in place curb as specified in 607.03.02 if the existing curb exhibits visible cracking or deterioration or both.

Provide a concrete vertical curb saw as specified in 1008.07. Construct erosion control measures as specified in 158.03.02. Set the concrete vertical curb saw height to the desired vertical curb face height. Sawcut the vertical curb to within ±1/2 inch of the desired curb face dimension. Sawcut grooves as specified in 507.03.02.L to transition height differentials.

Finish the sawcut concrete vertical curb as specified in 607.03.01.E. Seal sawcut concrete with epoxy waterproofing as specified in 504.03.03. Prepare sawcut surface of concrete vertical curb according to manufacturer's directions before applying epoxy waterproofing.

Dispose of cut material as specified in 201.03.01.H.

607.03.02 Concrete Vertical Curb

THE FOLLOWING IS ADDED:

<u>Concrete Curb placed in Areas of Milling and HMA Overlay.</u>
When concrete curb is being constructed in areas where the roadway is to remain or will be milled and overlayed, the CONTRACTOR shall sawcut the existing HMA or concrete surface, excavate the necessary materials for the new curb, compact the sub grade, install DGA Base Course in accordance with Section 301 and install HMA Base Course in accordance with Section 406 and the details contained on the plans.

G. Backfilling Curb

THE FOLLOWING IS ADDED:

Backfill the subgrade to the depth required to construct a the Dense-graded Aggregate Base Course and Hot Mix Asphalt 19M64 Base Course or Hot Mix Asphalt 12.5M64 Base Course pavement repair strip as shown on the construction details.

THE FOLLOWING IS ADDED:

When Concrete Curb is placed in areas of Milling and HMA Overlay, sawcutting, excavating, compaction, will not be measured for payment. All costs thereof shall be included in the price bid for Concrete Vertical Curb.

Payment for the Curb shall be made at the Linear Foot price bid in the Proposal. Such work shall include excavation, sawcutting, survey and layout, supply and installation of concrete, backfill, compaction, extension of existing roof leaders and sump pump outlet pipes through the face of the curb, and all other work and materials required to construct the curb as shown on the plans and as specified herein.

607.04 MEASUREMENT AND PAYMENT

THE FOLLOWING PAY ITEMS ARE DESCRIBED:

Pay Item	***Pay Unit***
12" X 15" X 18" FLUSH CONCRETE CURB	**LINEAR FOOT**

SECTION 612 – SIGNS

612.01 DESCRIPTION

THE FOLLOWING IS ADDED:

Furnish handicapped parking signs with posts as per the Accessible Parking Sign Detail within the Contract Documents. Install sign where noted on the plans.

612.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

All costs associated with the purchase, delivery and installation of REGULATORY AND WARNING SIGN and GREEN ACRES SIGN as shown on the project plans, including, but not limited to, posts, concrete footings and mounting, shall be included in the pay items described below.

No separate payment shall be made for the removal of existing signs or any other materials required to properly construct the above-mentioned pay items but shall be included in the pay items described in this section.

The Contractor is to install the handicapped parking signs with posts as per the manufacturer's recommendation as well as the construction details.

All items such as signpost, foundation, New Jersey Penalty Sign, R7-8P Sign, and R7-8 Sign shall be paid for through the unit price for Accessible Parking Signs with Post.

Contractor is to furnish and install Green Acres Sign as described in the Contract Documents. All labor and materials required to furnish and install the sign shall be included in the unit price for the item "Green Acres Sign".

THE FOLLOWING PAY ITEM HAS BEEN ADDED:

Pay Item:	*Pay Unit*
GREEN ACRES SIGN	UNIT

SECTION 615 - SITE FURNISHINGS

615.01 DESCRIPTION

The work required under this Section consists of furnishing all labor, materials, equipment, services and related items necessary to supply and install all site furnishings, and all related work, complete, as indicated on the drawings or specified herein. The contractor must comply with applicable requirements of the following standards. Where these standards conflict with other specified requirements, the most restrictive requirements shall govern.

American Sports Builders Association (ASBA)
American Wood Preserver's Association (AWPA)
American with Disability Act (ADA)
ASTM International
Consumer Product Safety Commission (CPSC)

International Play Equipment Manufacturers Association – (IPEMA) Equipment Certification
IPEMA Surfacing Certification
ISO 9001 – quality manufacturing standard
ISO 14001 – "Green Certification"
PCI 4000 certification – powder coating quality standards
Manufacturers Data and Recommended Installation Requirements

615.02 MATERIALS

Major items of work include, but are not limited to, supplying and installing:

615.02.01 FURNISHINGS

A. Park Bench
    a. Manufacturer: GameTime
    b. Product ID: Tuffclad Series Bench # 28009.
    c. Or approved equal.
    d. Materials/Finishes: Galvanized Steel pipe frame and Punched Steel Seat and back with Plastisol coating, in Forester Green color, to be verified by Owner.
    e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer.
B. Swing Shade:
    a. Manufacturer: GameTime
    b. Product ID: Swing Shade Frame- 4 Bay # 5194.
    c. Or approved equal.
    d. Materials/Finishes: Galvanized Steel pipe frame and UV fabric shade, Forester Green color palette, color to be verified by Owner.
    e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer.
C. Belt Seat
    a. Manufacturer: GameTime
    b. Product ID: 5287.
    c. Or approved equal.
    d. Materials/Finishes: includes seat, chains, hardware and ALL appurtenances & accessories, necessary to install properly functioning swing.
    e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufact7urer's instructions and recommendations as directed by the Engineer.
D. Tot Seat Swing:
    a. Manufacturer: GameTime
    b. Product ID: 5293, verify model number.
    c. Or approved equal.
    d. Materials/Finishes: includes tot seat, swing casting, swing assembly package, chains, hardware and ALL appurtenances & accessories, necessary to install properly functioning swing.
    e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer.
E. Zero-G Chair -5 to 12 years old:
    a. Manufacturer: GameTime
    b. Product ID: 5376.
    c. Or approved equal.
    d. Materials/Finishes: includes Zero-G Chair & assembly, Forester Green palette, seat brace & latch, swing assembly package, chains, hardware and ALL appurtenances & accessories, necessary to install properly functioning swing, color to be verified by Owner.
    e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer.
F. Adaptive Swing Seat– 2 to 5 years old

a. Manufacturer: GameTime
b. Product ID: 5294, verify model number.
c. Or approved equal.
d. Materials/Finishes: includes Zero-G Chair & assembly, Forester Green palette, seat brace & latch, swing assembly package, chains, hardware and ALL appurtenances & accessories, necessary to install properly functioning swing, color to be verified by Owner.
e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer.

G. Sensory Cove Climber
a. Manufacturer: GameTime
b. Product ID: 6249.
c. Or approved equal.
d. Materials/Finishes: Steel pipe frame, HDPE panels and HDPE accessory pieces, hardware, in Forester Green palette, and ALL appurtenances & accessories, necessary to install properly functioning equipment.
e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer.

H. Rockin Robin
a. Manufacturer: GameTime
b. Product ID: 38020.
c. Or approved equal.
d. Materials/Finishes: Steel pipe frame, HDPE panels and HDPE accessory pieces, hardware, in Forester Green palette, and ALL appurtenances & accessories, necessary to install properly functioning equipment.
e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer.

I. Roxall See Saw
a. Manufacturer: GameTime
b. Product ID: 6245.
c. Or approved equal.
d. Materials/Finishes: Steel pipe frame, HDPE panels and HDPE accessory pieces, hardware, in Forester Green palette, and ALL appurtenances & accessories, necessary to install properly functioning equipment.
e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer.

J. 10 foot Cantilever Umbrella
a. Manufacturer: GameTime
b. Product ID: QR1196.
c. Or approved equal.
d. Materials/Finishes: Steel pipe frame in Forester Green palette, UV fabric shade in Forester Green, hardware and ALL appurtenances & accessories, necessary to install properly functioning equipment.
e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer.

K. Modern City M Series 2 Climber
a. Manufacturer: GameTime
b. Product ID: MCM2NI.
c. Or approved equal.
d. Materials/Finishes: Steel pipe frame powder coated Forester Green palette, hardware and ALL appurtenances & accessories, necessary to install properly functioning equipment.
e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer

L. Inclusive Whirl
a. Manufacturer: GameTime
b. Product ID: 6262.
c. Or approved equal.

d. Materials/Finishes: Steel pipe frame powder coated Forester Green palette, hardware and ALL appurtenances & accessories, necessary to install properly functioning equipment.
e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer.

M. Concert Trio
a. Manufacturer: GameTime
b. Product ID: 3259.
c. Or approved equal.
d. Materials/Finishes: Steel pipe frame, HDPE panels and HDPE accessory pieces, hardware, in Forester Green palette, and ALL appurtenances & accessories, necessary to install properly functioning equipment.
e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer.

N. Harmonic Chimes
a. Manufacturer: GameTime
b. Product ID: 4676.
c. Or approved equal.
d. Materials/Finishes: Steel pipe frame, accessory pieces, and hardware, in Forester Green palette, and ALL appurtenances & accessories, necessary to install properly functioning equipment.
e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer/

O. Cantata Chimes
a. Manufacturer: GameTime.
b. Product ID: 3256.
c. Or approved equal.
d. Materials/Finishes: Steel pipe frame, HDPE panels and HDPE accessory pieces, hardware, in Forester Green palette, and ALL appurtenances & accessories, necessary to install properly functioning equipment.
e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer/

P. Custom Powerscape 2-5 year old Units
a. Manufacturer: GameTime
b. Product ID: Custom designed package.
c. Or approved equal.
d. Materials/Finishes: Powder coated steel pipe, handrails, HDPE panels, molded HDPE pieces, and accessory pieces, hardware and ALL appurtenances & accessories, necessary to install properly functioning equipment, Forester Green palette, color to be verified by Owner.
e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer.

Q. Custom Powerscape 5-12 year old Units
a. Manufacturer: GameTime
b. Product ID: Custom designed package
c. Or approved equal.
d. Materials/Finishes: Powder coated steel pipe, handrails, HDPE panels, molded HDPE pieces, and accessory pieces, hardware and ALL appurtenances & accessories, necessary to install properly functioning equipment, Forester Green color palette, color to be verified by Owner
e. Installation: All components shall be installed in conformance with the detail drawings and/or with the manufacturer's instructions and recommendations as directed by the Engineer

615.02.02 RELOCATED FURNISHINGS

A. RELOCATED PLAYGROUND EQUIPMENT
a. Disassemble existing play structure as necessary to accommodate removal and reinstallation of same structure.
b. Remove existing concrete footing as necessary for clean installation.

c. Replace any missing, broken or damaged pieces and hardware.
d. Do not damage equipment during this work.
e. Install according to manufacturer's original recommendations.
f. Recertify from original manufacturer to meet current CPSC & IPEMA standards.

B. RELOCATED EXISTING TREE SWING SET
a. Disassemble existing play structure as necessary to accommodate removal and reinstallation of same structure.
b. Remove existing concrete footing as necessary for clean installation.
c. Replace any missing, broken or damaged pieces and hardware.
d. Do not damage equipment during this work.
e. Install according to manufacturer's original recommendations.
f. Recertify from original manufacturer to meet current CPSC & IPEMA standards.

C. RELOCATED EXISTING GRILL & TABLE
a. Remove existing concrete footing as necessary for clean installation.
b. Install according to manufacturer's original recommendations.

615.02.03 SUBMITTALS

Manufacturer's Data: Submit manufacturer's shop drawings, catalogue cuts and color samples for each item of play equipment and site furnishing.

CONTRACTOR'S BID COST IS TO BE BASED ON THE BASIS OF DESIGN PRODUCTS AND STANDARDS NOTED IN THE CONTRACT DOCUMENTS. CONTRACTOR SHALL NOT SUBMIT BID BASED ON ANY ANTICIPATED SUBSTITUTION REQUESTS. ANY SUBSTITUTION REQUESTS OR REQUESTS FOR CONSIDERATION OF AS-EQUAL PRODUCTS WILL ONLY BE EVALUATED WITH A REQUISITE VALUE ENGINEERING PROPOSAL FOR REVIEW AND APPROVAL BY THE ENGINEER.

615.02.04 QUALITY ASSURANCE

Manufacturers warranties shall pass to the Owner and certification made that the product materials meet all applicable grade trademarks or conform to industry standards and inspection requirements.

615.02.05 PRODUCT DELIVERY AND STORAGE

Materials delivered to the site shall be examined for damage or defects in shipping. Any defects shall be noted and reported to the Owners representative. Replacements, if necessary, shall be immediately re-ordered, so as to minimize any conflict with the construction schedule. Sound materials shall be stored above ground under protective cover or indoors so as to provide proper protection.

615.03 METHODS OF CONSTRUCTION

Install Site Furninshings in accordance with manufacturer recommended installation.

615.04 MEASUREMENT AND PAYMENT

Item	Pay Unit
PARK BENCH	LUMP SUM
RELOCATION OF EXISTING PARK SIGN BOARD & COMMUINCATION BOARD	LUMP SUM
RELOCATION OF EXISTING TREE SWING SET	LUMP SUM
RELOCATION OF EXISTING PLAYGROUND EQUIPMENT	LUMP SUM
RELOCATION OF EXISTING GRILL AND PICNIC TABLE	LUMP SUM
HARMONIC CHIMES (SET OF 7)	UNIT
CANTATA CHIMES	UNIT
CONCERT TRIO	UNIT

ROXALL SEE SAW	UNIT
SENSORY COVER CLIMBER - SQUARE	UNIT
INCLUSIVE WHIRL - NATURAL	UNIT
ROCKIN ROBINUN	UNIT
MODERN CITY M SERIES 2	UNIT
SHADE 10' CANTILEVER UMBRELLA	UNIT
SWING SEATS - SET OF 8 - BELT SEATS (4), ADAPTIVE SEAT (1), 5-12 ZERO-G CHAIR (1), TOT SEATS (2)	UNIT
FOUR BAY SWING SHADE	UNIT
CUSTOM POWERSCAPE 2-5 UNIT	UNIT
CUSTOM POWERSCAPE 5-12 UNIT	UNIT
PLAYGROUND INSTALLATION	LUMP SUM

CONTRACTOR'S BID COST IS TO BE BASED ON THE BASIS OF DESIGN PRODUCTS AND STANDARDS NOTED IN THE CONTRACT DOCUMENTS. CONTRACTOR SHALL NOT SUBMIT BID BASED ON ANY ANTICIPATED SUBSTITUTION REQUESTS. ANY SUBSTITUTION REQUESTS OR REQUESTS FOR CONSIDERATION OF AS-EQUAL PRODUCTS WILL ONLY BE EVALUATED WITH A REQUISITE VALUE ENGINEERING PROPOSAL FOR REVIEW AND APPROVAL BY THE ENGINEER.

SECTION 616 - POURED-IN-PLACE SAFETY SURFACING

616.01 DESCRIPTION

The work required under this Section consists of furnishing all labor, materials, equipment, services and related items necessary to supply and install all Poured-In-Place Safety Surfacing, and all related work, complete, as indicated on the drawings or specified herein. The contractor must comply with applicable requirements of the following standards. Where these standards conflict with other specified requirements, the most restrictive requirements shall govern.

616.01.01 REFERENCES

A. American Society for Testing and Materials (ASTM):
   a. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers-Tension.
   b. ASTM D624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.
   c. ASTM D2047 Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine.
   d. ASTM D2859 Standard Test Method for Flammability of Finished Textile Floor Covering Materials.
   e. ASTM E108 - Fire Test. Product shall exhibit a minimum result of a Class A Rating.
   f. ASTM E303 Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester.
   g. ASTM F1292 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment. in compliance with the Critical Fall height as determined by the Playground Equipment to be installed in conjunction with the poured-in-place surfacing system.
   h. ASTM F1487 - Standard Consumer Safety Performance Specification for Playground Equipment for Public Use
   i. ASTM F1951/PS83 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.
B. ADAAG- Americans with Disabilities Act, 1990, Titles II.
C. Consumer Product Safety Commission (CSPC) Handbook for Public Playground Safety #325, Current Edition.
D. International Play Equipment Manufacturers Association – (IPEMA) Equipment Certification
E. IPEMA Surfacing Certification
F. Manufacturers Product Data and Recommended Installation Requirements

616.01.02 QUALIFICATIONS

A. Manufacturer shall have manufactured and installed playground poured-in-place surfacing systems to current ASTM F1292 Test Criteria for a minimum of 5 years. The installation of the poured-in-place product shall be completed by Manufacturer Certified Contractors or by direct employees of the Manufacturer's Installation Division. Manufacturer's detailed installation procedures shall be submitted to the Architect.

616.02 MATERIALS

616.02.01 SYSTEM DESCRIPTION

A. Performance Requirements: Provide a 2-layer rubber-urethane playground surfacing system which has been designed, manufactured and installed to meet the following criteria:
   a. Shock Attenuation (ASTM F1292):
      i. Gmax: Less than 200.
      ii. Head Injury Criteria: Less than 1,000.
   b. Flammability (ASTM D2859): Pass.
   c. Tensile Strength (ASTM D412): 60 psi (413 kPa).
   d. Tear Resistance (ASTM D624): 140%.
   e. Water Permeability: 0.4 gal/yd2/second.
   f. Accessibility: Comply with requirements of ASTM F1951.

616.02.02 POURED-IN-PLACE PLAYGROUND SURFACING SYSTEM

A. Description: Dual durometer poured-in-place system with wearing layer upper membrane and an underlying impact attenuation cushion layer. The finished surface shall be porous, and capable of being installed at varying thickness to comply with Critical Fall height requirements of playground equipment installed in conjunction with the surface.
B. Materials: The surface shall be manufactured from EPDM and SBR rubber compounds mixed with a 100 percent MDI (Diisocyanate) based Polyurethane Resin. Polyurethane containing any TDI (Toluene Diphenel Isocyanate) shall not be allowed due to environmental regulations.
C. Manufacturer / Supplier
   a. Surface America, Inc., Contact: PO Box 157, Williamsville, NY 14231; Tel.: (800) 999-0555, (716) 632-8413; Fax: (716) 632-8324; E-mail: info@surfaceamerica.com; website: http://www.surfaceamerica.com.
   b. Premier Materials, Contact: 715 Fountain Avenue, Lancaster, PA 176701; Tel: (775) 397-8014, (866) 219-0949, website: https://www.premier-materials.com/
   c. Ben Shaffer Recreation, Contact: PO Box 844 Lake Hopatcong, NJ 07849; Tel: (973) 663-2021, website: https://www.benshaffer.com/
   d. Approved equal
D. Materials: Poured-in-place playground surfacing system, including the following:
   a. Primer: Non-yellowing aromatic urethane resin.
   b. Cushion Layer aka Basemat Material: shall be a mixture of 3/8" shredded and a 1mm-3mm SBR rubber particles of heterogeneous distribution (50/50 mixture) bonded by a polyurethane binder applied to 100 percent of the rubber and installed to a designated thickness as required by the Consumer product Safety's Commission's Guidelines and ASTM F1292 Test Criteria. Thickness of Cushion layer varies according to CPSC Guideline depending on height of fall for tallest equipment.
   c. Material: Blend of 100% recycled SBR (styrene butadiene rubber) and urethane.
   d. Formulation Components: Blend of strand and granular material.
   e. Thickness:
      i. 1-3/4" minimum for 4’ critical fall height, 2-1/4" min. for 5’ critical fall height, 2-1/2” min. for 6’ 3” min for 7’ critical fall heights, 3-1/2" min. for 8’ critical fall height, 4-1/2" min. for 9’ critical fall height, 5" min. for 10’ critical fall height, 6" min. for 12’ critical fall height, 7" min. for 13’ critical fall height.
      ii. Verify finished thickness meets all CSPC & ASTM F1292 fall height safety requirements.

iii. Verify selected manufacturer or supplier meets all CSPC & ASTM F1292 fall height safety requirements.

f. Wearing Surface aka Top Surface
   i. Material: shall be a mixture of black or colored EPDM granules, 1mm-3mm, bonded by a non-yellowing polyurethane binder applied to 100 percent of the granules and applied to a thickness of 1/2 inch over the cushion layer.
   ii. Thickness: Nominal 1/2", minimum 3/8", maximum 5/8".
   iii. Color: Bright Green, provide physical sample as in 2.05, C. Color to be confirmed by Owner representative, PRIOR to installation.

g. Finished thickness: Measured in-situ safety surface to meet ASTM fall height requirements based on the fall height of the specific equipment it is placed under. Coordinate with play equipment manufacturer specified equipment fall heights.

h. Provide transition ramp from adjacent materials and safety surface of differing thicknesses.

i. Dry Static Coefficient of Friction (ASTM D2047): 1.0.

j. Wet Static Coefficient of Friction (ASTM D2047): 0.9.

k. Dry Skid Resistance (ASTM E303): 89.

l. Wet Skid Resistance (ASTM E303): 57.

m. Geotextile Fabric: Geotextile membrane applied over compacted and graded substrate for aggregate substrate installation.

n. Aggregate sub-base, permeable: Crushed Aggregate Base: 3/4 inch maximum grading, crushed rock and rock dust conforming to requirements below. The percentage composition by weight of permeable aggregate base material in place must comply with the gradation requirements shown in the following table:

Permeable Aggregate Material
Gradation Requirements

Sieve size	Percentage passing
1"	100
3/4"	90–100
3/8"	40–100
No. 4	25–40
No. 8	18–33
No. 30	5–15
No. 50	0–7
No. 200	0–3

Permeable material must have a sand equivalent value of not less than 75.

616.02.03 MIXES

A. Required mix proportions by weight:
   a. Cushion Layer aka Basemat: 16+% urethane (as ratio: 14% urethane divided by 86% rubber). 14% urethane, 86% rubber (based on entire rubber & urethane mix).
   b. Wearing Surface aka Top Surface: 22% urethane (ratio: 18% urethane divided by 82% rubber). 18% urethane, 82% rubber (based on entire rubber & urethane mix).

616.02.04 SUBMITTALS

A. General: Submit listed submittals in accordance with Conditions of the Contract and Submittal Procedures Section.
B. Product Data: Submit manufacturer's product data literature, specification data, indicate substrate requirements and installation methods and instructions,
C. Verification Samples: Submit manufacturer's standard verification samples of 9" x 9" minimum.
D. Quality Assurance/Control Submittals: Submit the following:
   a. Certificate of qualifications of the playground surfacing installer.
   b. IPEMA Surfacing Certification

E. Closeout Submittals: Submit the following:
   a. Warranty documents specified herein.

616.02.05 QUALITY ASSURANCE

A. Product data: Submit manufacturer's Data Safety Sheet, sample, testing data for alternate manufacturer.
B. Qualifications: Utilize an installer approved and trained by the manufacturer of the playground surfacing system, having experience with other projects of the scope and scale of the work described in this section.
C. Certifications: Certification by manufacturer that installer is an approved applicator of the playground surfacing system.
D. International Play Equipment Manufacturers Association (IPEMA) certified.

616.02.06 DELIVERY, STORAGE & HANDLING

A. General: Comply with Product Requirement Section.
B. Materials and play areas shall comply with the requirements of ASTM F1951.
C. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
D. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at a minimum temperature of 40 degrees F and a maximum temperature of 90 degrees F.

616.02.07 PROJECT/SITE CONDITIONS

A. Environmental Requirements: Install surfacing system when minimum ambient temperature is 40 degrees F and rising and maximum ambient temperature is 90 degrees F. Do not install in steady or heavy rain.

616.02.08 WARRANTY

A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.
C. Warranty period not less than 5 years from Date of Completion of the Work.
D. Proper drainage is critical to the longevity of the PlayBound Poured-in-Place surfacing system. Inadequate drainage will cause premature breakdown of the poured system in affected areas; and void the warranty.

616.02.09 EXTRA MATERIALS

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
B. Repair Kits: Full size units for each color provided.

616.03 METHODS OF CONSTRUCTION

616.03.01 MANUFACTURER'S INSTRUCTIONS

A. Comply with the instructions and recommendations of the playground surfacing manufacturer.

616.03.02 EXAMINATION

A. Scarify and compact soil sub-base to 90%.
B. Verify that substrate is graded, smooth and ready to receive work of this Section. Substrate preparation must be in accordance with surfacing manufacturer's specification. New asphalt must be fully cured – up to 30 days. New concrete must be fully cured – up to 7 days.

C. Verify drainage system has been installed. Proper drainage is critical to the longevity of the Poured-in-Place surfacing system. Inadequate drainage may cause premature breakdown of the poured system in affected areas; and void the warranty.
D. Verify gradients and elevations of substrate are correct.
E. Verify perimeter curbing or edging has been installed per drawings.
F. Finished safety surface to be Flush with Exposed Concrete Perimeter Curb: Top of concrete curb to flush with finished surface, tooled rounded edges.
G. Install minimum 4 inch thick aggregate substrate, compacted to 90%, 1/4” in 10 feet maximum tolerance, installed in two 2-inch lifts grade to slope minimum 2%, install geotextile fabric over aggregate substrate.
H. Coordinate with installation of playground equipment.

616.03.03 INSTALLATION

A. Materials and play areas shall comply with the requirements of ASTM F1951.
B. Do not proceed with playground surfacing installation until all applicable site work, including substrate preparation, fencing, playground equipment installation and other relevant work, has been completed.
C. Surface Preparation: Using a brush or short nap roller, apply primer to the substrate perimeter and any adjacent vertical barriers such as playground equipment support legs, curbs or slabs that will contact the surfacing system at the rate of 300 ft2/gal.
D. Primer Application: Using a brush or short nap roller, apply primer to the basemat perimeter and any adjacent vertical barriers such as playground equipment support legs, curbs or slabs that will contact the surfacing system at the rate of 300 ft2/gal.
E. Basemat Installation:
    a. Using screeds and hand trowels, install the basemat at a consistent density of 29 pounds, 1 ounce per cubic foot to the specified thickness.
    b. Allow basemat to cure for sufficient time so that indentations are not left in the basemat from applicator foot traffic or equipment.
    c. Do not allow foot traffic or use of the basemat surface until it is sufficiently cured.
F. Top Surface Installation:
    d. Using a hand trowel, install top surface at a consistent density of 58 pounds, 9 ounces per cubic foot to a nominal thickness of 1/2".
    e. Allow top surface to cure for a minimum of 48 hours.
    f. At the end of the minimum curing period, verify that the top surface is sufficiently dry and firm to allow foot traffic and use without damage to the surface.
    g. Do not allow foot traffic or use of the surface until it is sufficiently cured.
G. Make necessary adjustments to system to accommodate playground equipment uprights installed into grade.
H. Install play surfacing level abutting Path of Travel and each playground equipment.

616.03.04 PROTECTION

A. Protect the installed playground surface from damage resulting from subsequent construction activity on the site.

616.04 MEASUREMENT AND PAYMENT

Item	Pay Unit
POURED-IN-PLACE PLAYGROUND SAFETY SURFACE	SQUARE FOOT

Refer to Site Plan for quantity and location.

DIVISION 650 – UTILITIES

SECTION 651 – WATER

651.01 DESCRIPTION

This specification covers all necessary site work, materials, and labor required for the completion of site utility upgrades related to site water work under a lump sum pay item. The work includes, but is not limited to, installation, replacement, modification, and connection of water utilities to serve the project site as indicated on the contract documents.

SUMMARY

This section specifies the requirements for the coordination between the Contractor and affected utility company, demolition, removal, and completion of water utility improvements as indicated in the Contract Documents and as required for the project.

Work includes, but is not limited to:

Demolition of existing water utilities;

Removal and salvage or disposal of materials;

Scheduling and execution of all tie-ins, shutdowns, testing, and service interruptions between the Contractor and utility company;

Submission of all required documentation, permits, and notifications to the utility company by the Contractor;

RELATED DOCUMENTS

Drawings and general provisions of the Contract,

Applicable codes, ordinances, and regulations.

COORDINTATION

Contractor shall coordinate demolition and improvement activities with other trades and disciplines to ensure uninterrupted water service to occupied areas, unless otherwise approved by the Owner.

Contractor shall notify the Owner, Architect, and affected utility companies at least 72 hours prior to any service interruption.

Contractor shall verify locations of existing utilities prior to the start of demolition.

Protect active utilities during demolition. Provide temporary supports or bypasses as required.

Schedule activities to minimize disruption to occupants and adjacent properties.

SUBMITTALS

Submit demolition and removal plans describing sequencing, methods, and proposed safety precautions.

Submit shop drawings, product data, and material certifications for all new water utility materials and equipment.

Provide copies of permits and approvals from authorities having jurisdiction.

QUALITY ASSURANCE

Contractor shall have a minimum of 5 years' experience in water utility demolition and construction.

Perform work in accordance with local, state, and federal regulations and utility provider standards.

All personnel must be properly trained and certified for the work performed.

PROJECT CONDITIONS

Verify existing site and utility conditions before commencing work.

Take necessary precautions to prevent damage to structures, landscaping, and adjacent utilities.

Immediately notify the Owner of any unforeseen conditions or discrepancies.

651.02 MATERIALS

All new materials shall meet the requirements of the local utility authority and as specified in the Contract Documents.

Acceptable piping materials include ductile iron, PVC, Copper, or HDPE, as indicated on the Drawings.

Provide valves, hydrants, fittings, and appurtenances as specified.

Use approved backfill, bedding, and compaction materials.

ACCESSORIES

Provide thrust blocks, joint restraints, marking tape, and tracer wire as required.

Temporary supports, shoring, and enclosures as necessary for demolition and installation phases.

651.03 CONSRUCTION

PREPARATION

Locate and mark all existing water utilities prior to demolition.

Verify shutoff locations and ensure all valves are operational.

Install temporary facilities to maintain service where required.If performance specifying is used, coordinate with Section specifying compacted subgrade to suit intended loads.

DEMOLITION

Remove water utility components as indicated, in accordance with approved demolition plan.

Cap or plug abandoned lines as required by code and utility authority.

Salvage or dispose of materials according to Contract Documents and regulatory requirements.

INSTALLATION

Install new water utility infrastructure as shown on Drawings and per specifications.

Connect to existing systems in accordance with utility standards.

Test all new and reconnected systems for leaks and integrity prior to backfilling.

Disinfect all new waterlines and obtain required approvals and test results before placing in service.

Backfill and restore surfaces to match original or as required by Contract Documents.

UNFORSEEN FIELD CONDITIONS

In the event that the Contractor encounters unforeseen utilities not shown on the the Drawings, the Contractor shall immediately notify the Engineer and shall not resume work in the affected area until directed by the Engineer.

In the event that the Contractor damages an active utility, the Contractor shall immediately notify the utility owner, Engineer, and Owner.

Contractor shall take immediate precautions to stop flows or leaks if safe to do so to prevent further damage.

Contractor shall be fully responsible for coordination with the utility owner for repairs, as well as the cost of repair, restoration, and associated damages.

FIELD QUALITY CONTROL

Perform pressure and leakage testing on all new installations.

Provide inspection and test reports to the Owner and Engineer.

Correct defects or deficiencies promptly and re-test as necessary.

CLEANING AND RESTORATION

Remove debris, surplus materials, and equipment from the site upon completion of the work.

Restore all disturbed areas to original condition or as specified in the Drawings.

CLOSEOUT

Submit as-built drawings, warranties, and operation/maintenance manuals upon completion.

Coordinate final inspection with the Owner and authority having jurisdiction.

651.04 MEASUREMENT AND PAYMENT

All costs, labor, materials, equipment, supervision, coordination between the Contractor and utility company, and incidentals required to complete the demolition and coordination, to the water utility, as described in this section and in the Contract Documents, shall be paid for at the Lump Sum pay item: "SITE UTILITY UPGRADES – WATER SITE WORK"

The lump sum Pay Item "Site Utility Upgrades – Water Site Work" Shall Include all labor, materials and equipment to provide water service to the proposed features as described in the Contract Documents. The intent is to provide operational water service to each feature designated in the Contract Documents.

No separate or additional payment will be made for any work described herein; all such costs are included in the Lump Sum price.

The CONTRACTOR shall take care to maintain the existing condition of the various valve boxes to be reset. Any damage to the existing valve boxes by the CONTRACTOR shall be replaced with an equivalent to the existing and to the satisfaction of the ENGINEER at no additional cost to the OWNER.

No separate payment will be made for resetting water valves. All costs for material, labor, and utility coordination shall be paid for through the line item CLEARING SITE.

SECTION 652 – SANITARY SEWERS

652.01 DESCRIPTION

This section specifies the requirements for the coordination between the Contactor and affected utility company, demolition, removal, and any re-routing of existing sanitary utilities related to existing sanitary utilities within the site limits as shown on the Contract Documents.

Work includes, but is not limited to:

a. Demolition of existing sanitary utilities if required;

b. Removal and salvage or disposal of materials;

c. Scheduling and execution of all tie-ins, shutdowns, and service interruptions between the Contractor and utility company, as needed;

d. Submission of all required documentation, permits, and notifications to the utility company by the Contractor;

e. Re-routing of existing sanitary mains, services, and appurtenances if required.

REALTED DOCUMENTS

a. Drawings and general provisions of the Contract

b. Applicable codes, ordinances, and regulations.

COORDINATION

a. Contractor shall coordinate demolition and improvement activities with other trades and disciplines to ensure uninterrupted water service to occupied areas, unless otherwise approved by the Owner.

b. Contractor shall notify the Owner, Architect, and affected utility companies at least 72 hours prior to any service interruption.

c. Contractor shall verify locations of existing utilities prior to the start of demolition.

d. Protect active utilities during demolition. Provide temporary supports or bypasses as required.

e. Schedule activities to minimize disruption to occupants and adjacent properties.

SUBMITTALS

a. Submit demolition and removal plans describing sequencing, methods, and proposed safety precautions.

b. Provide copies of permits and approvals from authorities having jurisdiction.

QUALITY ASSURANCE

a. All work shall be performed by experienced contractors with a proven record of successful utility demolition and improvements, particularly in sanitary systems.

b. Comply with all codes, ordinances, and requirements of the local sanitary utility and regulatory bodies.

c. Employ proper safety measures to protect workers, the public, and the environment.

d. Coordinate continuously with the local utility for approvals and inspections.

PROJECT CONDIITONS

a. Locate and verify all existing sanitary utilities before commencing work. Use utility locators, as-built drawings, and coordination with the local utility.

b. Protect all existing and adjacent utilities to remain in service.

c. Prevent unauthorized discharge of sewage or contaminated water during demolition procedures.

652.02 MATERIALS

a. All piping, manholes, fittings, and appurtenances for new or improved sanitary utilities shall conform to the specifications in the Contract Documents and the standards of the local utility.

b. Use only new, undamaged materials approved by the Engineer and the local utility.

c. Acceptable materials include, but are not limited to, PVC, ductile iron, or other pipe types as specified. Provide manufacturer's certifications as required.

BACKFILL AND BEDDING MATERIALS

a. Backfill and bedding shall be as specified in the Contract Documents and approved by the local utility authority.

b. Provide select granular material, free from debris and organic matter, for pipe bedding and backfill as required.

SPECIAL PRODUCTS

a. Temporary bypass systems (pumping, piping) as required to maintain sanitary service during demolition and installation.

b. Warning tape and markers for underground utilities as per utility authority requirements.

652.03 CONSTRUCTION

PREPARATION

a. Verify locations and depths of all existing sanitary utilities before commencing work.

b. Notify utility providers and obtain necessary permits and shutdowns.

c. Coordinate with other trades and schedule work to minimize utility disruptions.

DEMOLITION AND REMOVAL

a. Remove existing sanitary sewer lines, manholes, cleanouts, and related structures as indicated or required to facilitate site improvements.

b. Cap and seal abandoned lines according to utility authority requirements.

c. Perform demolition in a manner that prevents damage to adjacent structures and active utilities.

d. Minimize dust, noise, and other disruptions per local ordinances.

e. Lawfully dispose of all removed materials; recycle where possible.

INSTALLATION

a. Install sanitary sewer lines, manholes, cleanouts, and related appurtenances if re-routing is required.

b. Maintain proper alignment, slope, and depth as specified.

c. Perform all connections to existing sanitary systems as detailed, using approved coupling and sealing methods.

d. Ensure all installations are watertight and tested per utility requirements.

UNFORSEEN FIELD CONDITIONS

a. In the event that the Contractor encounters unforeseen utilities not shown on the Drawings, the Contractor shall immediately notify the Engineer and shall not resume work in the affected area until directed by the Engineer.

b. In the event that the Contractor damages an active utility, the Contractor shall immediately notify the utility owner, Engineer and Owner.

c. Contractor shall take immediate precautions to stop flows or leaks if safe to do so to prevent further damage.

d. Contractor shall be fully responsible for coordination with the utility owner for repairs, as well as the cost of repair, restoration, and associated damages.

CLEANING AND RESTORATION

a. Backfill and compact trenches as per specifications and utility authority standards.

b. Restore disturbed surfaces, including pavement, landscaping, and structures, to original or better condition.

c. Remove all debris, temporary facilities, and equipment from the project site upon completion.

CLOSEOUT

a. Submit as-built drawings, warranties, and operation/maintenance manuals upon completion.

b. Coordinate final inspection with the Owner and authority having jurisdiction.

MEASUREMENT AND PAYMENT

a. All costs, labor, materials, equipment, supervision, coordination between the Contractor and utility company, and incidentals required to complete the demolition to the sanitary utility, as described in this section and in the Contract Documents, shall be paid for at the Lump Sum pay item: “CLEARING SITE”.

b. No separate or additional payment will be made for any work described herein; all such costs are included in the Lump Sum price.

SECTION 653 – GAS

653.04 MEASUREMENT AND PAYMENT
THE FOLLOWING IS ADDED:

The CONTRACTOR shall reset the existing gas valve boxes. Any damage to the existing valve boxes by the CONTRACTOR shall be replaced with an equivalent to the existing and to the satisfaction of the ENGINEER at no additional cost to the OWNER.

No separate payment will be made for resetting gas valves. All costs for material, labor, and utility coordination shall be paid for through the line item CLEARING SITE.

DIVISION 700 – ELECTRICAL

SECTION 701 – GENERAL ITEMS

701.01 DESCRIPTION.
THE FOLLOWING SECTION IS ADDED:

Any Utility Pole near improvements, such as inlets, curbs, or handicap ramps, shall be braced as directed in the field by the Engineer. No separate pay item shall be made for bracing, but all costs shall be included within the price bid for other items.

1.1 SUMMARY

A. Section Includes: Demolition, removal, relocation, and improvement of electrical site utilities and related appurtenances as indicated in the Contract Documents and Specifications.

B. Work includes, but is not limited to:

1. Demolition of existing electrical utilities;

2. Removal and salvage or disposal of materials;

3. Scheduling and execution of all tie-ins, shutdowns, and service interruptions between the Contractor and utility company;

4. Submission of all required documentation, permits, and notifications to the utility company by the Contractor;

1.2 REALTED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

B. Refer to other relevant Electrical Sections for interrelated requirements.

C. Applicable codes, ordinances, and regulations including the National Electrical Code (NEC), local utility provider standards, and municipal requirements.

1.3 COORDINATION

A. Contractor shall coordinate demolition and improvement activities with other trades and disciplines to ensure uninterrupted electrical service to occupied areas, unless otherwise approved by the Owner.

B. Contractor shall notify the Owner, Architect, and affected utility companies at least 72 hours prior to any service interruption.

C. Contractor shall verify locations of existing utilities prior to the start of demolition.

D. Protect active utilities during demolition. Provide temporary supports or bypasses as required.

E. Schedule activities to minimize disruption to occupants and adjacent properties.

1.4 SUBMITTALS

A. Submit demolition plans, utility coordination correspondence, and required permits prior to start of work.

B. Submit shop drawings, product data, and material certifications for all new electrical utility materials and equipment.

C. Provide as-built documentation of all demolition and new utility installations upon completion.

1.5 QUALITY ASSURANCE

A. Qualified contractor with proven experience in utility demolition and improvements as specified.

B. All work to be performed under the supervision of a licensed electrician as required by jurisdictional authority.

1.6 PROJECT CONDITIONS

A. Verify existing utility conditions on site prior to commencement of work.

B. Protect all existing utilities not scheduled for demolition.

C. Maintain access to and operation of existing site utilities during construction unless otherwise directed.

701.02 MATERIALS

A. Materials for demolition and new installations shall conform to the requirements of the Contract Documents and Specifications.

B. All new materials shall be new, UL listed, and approved by the local utility provider where applicable.

701.03 CONSTRUCTION

1.1 PREPARATION

A. Locate and identify existing utilities before beginning demolition.

B. Install temporary utilities or connections as required to maintain service during construction.

C. Obtain all necessary permits and approvals from authorities having jurisdiction and the local utility provider.

1.2 DEMOLITION

A. Remove existing site utilities as scheduled, including but not limited to underground conduits, manholes, handholes, cables, and related equipment.

B. Cap, seal, or terminate abandoned utilities as required by local codes and utility provider guidelines.

C. Dispose of removed materials in accordance with applicable regulations.

1.3 IMPROVEMENTS

A. Install new utility services, conduits, manholes, and related appurtenances as shown and specified.

B. Ensure all work is coordinated with the local utility provider for proper service connections.

C. Restore surfaces disturbed by demolition or new work to original or better condition.

1.4 UNFORSEEN FIELD CONDITIONS

A. In the event that the Contractor encounters unforeseen utilities not shown on the the Drawings, the Contractor shall immediately notify the Engineer and shall not resume work in the affected area until directed by the Engineer.

B. In the event that the Contractor damages an active utility, the Contractor shall immediately notify the utility owner, Engineer, and Owner.

1. Contractor shall take immediate precautions to stop flows or leaks if safe to do so to prevent further damage.

2. Contractor shall be fully responsible for coordination with the utility owner for repairs, as well as the cost of repair, restoration, and associated damages.

1.5 FIELD QUALITY CONTROL

A. Test new installations as specified and required to ensure full compliance with Contract Documents and utility standards.

B. Arrange for utility inspections and approvals prior to final acceptance.

1.6 CLEANUP AND RESTORATION

A. Remove debris, surplus materials, and equipment from the site upon completion.

B. Leave work area in a clean, safe condition.

C. Restore all disturbed areas to original condition of as specified in the Drawings.

701.04 MEASURMENT AND PAYMENT

1.1 All costs, labor, materials, equipment, supervision, coordination between the Contractor and utility company, and incidentals required to complete the demolition, coordination, and improvements to the water utility, as

described in this section and in the Contract Documents, shall be paid for at the Lump Sum pay item: "SITE UTILITY UPGRADES – ELECTRICAL SITE WORK".

1.2 No additional or separate payment will be made for any work, coordination, or requirements outlined in this section; all associated costs shall be included within the Bid Lump Sum Price for SITE UTILITY UPGRADES – ELECTRICAL SITE WORK.

1.3 This contract includes all work associated with the furnishing of all labor, materials and equipment for the complete installation of electrical service to the proposed site amenities requiring electric service. Refer to the lighting plan for additional details, as well as the lighting summary.

1.4 The contractor shall be responsible for installing underground utility service which will include all conduit, conductors, and required restoration from existing electrical equipment.

1.5 This work shall include all utility coordination and restoration of all disturbed surfaces in kind.

1.6 The contractor is responsible for sizing all conduits and conductors and coordinating the exact alignment of the installation. The exact alignment shall be submitted to the engineer and owner during the shop drawing review process.

1.7 The contractor is responsible for complying with all applicable building and electrical codes and obtaining all applicable permits. The contractor is responsible for preparing any plans or completing any documents required to obtain electric service from the utility company or permits from the township. The City will pay any utility company fees directly to the utility company.

1.8 The pay items "SITE UTILITY UPGRADES – ELECTRICAL SITE WORK" shall include all materials, labor and equipment necessary to provide electrical service to all existing and new site amenities requiring electrical service and for installation of empty conduit, pull wire, and junction boxes to various locations throughout the site to reach all existing and proposed electrical components.

1.9 No separate payment will be made for excavation, dewatering, caissons, or trench restoration to install the components of the electrical system as described in these contract documents. Payment for all necessary construction activities to provide a working sports lighting system shall be paid for in the lump sum pay item for SITE UTILITY UPGRADES – ELECTRICAL SITE WORK.

1.10 Contractor is to coordinate and provide the voltage to pole requirements and phase to enclosure to vendor. All coordination and effort for this shall be paid for under in the lump sum pay item for base bid item SITE UTILITY UPGRADES – ELECTRICAL SITE WORK.

1.11 Contractor is required to coordinate with PSE&G and Musco on all required information and design components. All information required by PSE&G and Musco must be provided by the contractors licensed electrician on behalf of the City. Existing electrical voltage, capacity, etc is not documented in these documents and will have to be determined by the contractor and their electrical subcontractor. All existing electrical features not needed for the project improvements shall be removed in accordance with the appropriate code and

standards. Removal of electrical components to be paid for under the price bid item SITE UTILITY UPGRADES – ELECTRICAL SITE WORK.

DIVISION 800 – LANDSCAPING

SECTION 804 – TOPSOILING

THE FOLLOWING IS ADDED:

806.01 DESCRIPTION

All areas disturbed and all areas within the property boundaries are to be restored with topsoil, fertilizer, and seed if no other material is defined. The Contractor shall topsoil, fertilize, and seed and straw mulch grass areas disturbed during construction.

806.01.01 SUBMITTALS

A. Product Data: For each type of product indicated.
B. Certification of Grass Seed: From seed vendor for each grass-seed monostand or mixture stating the botanical and common name and percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.
    a. Certification of each seed mixture, identifying source, including name and telephone number of supplier.
C. Product Certificates: For soil amendments and fertilizers, signed by product manufacturer.
D. Qualification Data: For landscape Installer.
E. Material Test Reports: For existing surface soil and imported topsoil.
F. Planting Schedule: Indicating anticipated planting dates for each type of planting.

806.01.02 QUALITY ASSURANCE

A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful lawn establishment.
    a. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when planting is in progress.
B. Soil-Testing Laboratory Qualifications: An independent laboratory, recognized by the State Department of Agriculture, with the experience and capability to conduct the testing indicated and that specializes in types of tests to be performed.
C. Topsoil Analysis: Furnish soil analysis by a qualified soil-testing laboratory stating percentages of organic matter; gradation of sand, silt, and clay content; cation exchange capacity; deleterious material; pH; and mineral and plant-nutrient content of topsoil.
    a. Report suitability of topsoil for lawn growth. State recommended quantities of nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce a satisfactory topsoil.

806.01.03 SCHEDULING

A. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with maintenance periods to provide required maintenance from date of Substantial Completion.
    a. Spring Planting: 3/1-4/30
    b. Fall Planting: 8/15-11/15
B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit.

806.01.04 LAWN MAINTENANCE

A. Begin maintenance immediately after each area is planted and continue until acceptable lawn is established, but for not less than the following periods:
    a. Lawns: 3 months from date of Substantial Completion.
        i. When full maintenance period has not elapsed before end of planting season, or if lawn is not fully established, continue maintenance during next planting season.

B. Maintain and establish lawn by watering, fertilizing, weeding, mowing, trimming, replanting, and other operations. Roll, regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth lawn.
    a. In areas where mulch has been disturbed by wind or maintenance operations, add new mulch. Anchor as required to prevent displacement.
C. Watering: Provide and maintain temporary piping, hoses, and lawn-watering equipment to convey water from sources and to keep lawn uniformly moist to a depth of 4 inches.
    a. Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly planted areas.
    b. Water lawn at a minimum rate of 1 inch per week.
D. Mow lawn as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than 40 percent of grass height. Remove no more than 40 percent of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain the following grass height:
    a. Mow grass 1 to 2 inches high.
E. Lawn Post fertilization: Apply fertilizer after initial mowing and when grass is dry.
    a. Use fertilizer that will provide actual nitrogen of at least 1 lb/1000 sq. ft. to lawn area.

806.02 MATERIALS

TOPSOIL

A. Topsoil: ASTM D 5268, pH range of 5.5 to 7, a minimum of 5 percent organic material content; free of stones 1 inch or larger in any dimension and other extraneous materials harmful to plant growth.
    a. Topsoil Source: Reuse surface soil stockpiled on-site. Verify suitability of stockpiled surface soil to produce topsoil. Clean surface soil of roots, plants, sod, stones, clay lumps, and other extraneous materials harmful to plant growth.
        i. Supplement with imported or manufactured topsoil from off-site sources when quantities are insufficient. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches deep; do not obtain from bogs or marshes.
    b. Topsoil Source: Import topsoil or manufactured topsoil from off-site sources. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches deep; do not obtain from bogs or marshes.
    c. Topsoil Source: Amend existing in-place surface soil to produce topsoil. Verify suitability of surface soil to produce topsoil. Clean surface soil of roots, plants, sod, stones, clay lumps, and other extraneous materials harmful to plant growth.
        i. Surface soil may be supplemented with imported or manufactured topsoil from off-site sources. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches deep; do not obtain from bogs or marshes.

806.03 CONSTRUCTION

A. EXAMINATION
    a. Examine areas to receive lawns and grass for compliance with requirements and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.
B. PREPARATION
    a. Protect structures, utilities, sidewalks, pavements, and other facilities, trees, shrubs, and plantings from damage caused by planting operations.
        i. Protect adjacent and adjoining areas from hydro seeding overspray.
    b. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
C. LAWN PREPARATION
    a. Limit lawn subgrade preparation to areas to be planted.
    b. Newly Graded Subgrades: Loosen subgrade to a minimum depth of 4 inches. Remove stones larger than 2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.

i. Apply fertilizer directly to subgrade before loosening.
ii. Thoroughly blend planting soil mix off-site before spreading or spread topsoil, apply soil amendments and fertilizer on surface, and thoroughly blend planting soil mix.
1. Delay mixing fertilizer with planting soil if planting will not proceed within a few days.
2. Mix lime with dry soil before mixing fertilizer.
iii. Spread planting soil mix to a depth of 6 inches but not less than required to meet finish grades after light rolling and natural settlement. Do not spread if planting soil or subgrade is frozen, muddy, or excessively wet.

c. Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Grade to within plus or minus 1/2 inch of finish elevation. Roll and rake, remove ridges, and fill depressions to meet finish grades. Limit fine grading to areas that can be planted in the immediate future.
d. Moisten prepared lawn areas before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
e. Restore areas if eroded or otherwise disturbed after finish grading and before planting.

D. SEEDING
a. Sow seed with spreader or seeding machine. Do not broadcast or drop seed when wind velocity exceeds 5 mph. Evenly distribute seed by sowing equal quantities in two directions at right angles to each other.
i. Do not use wet seed or seed that is moldy or otherwise damaged.
b. Sow seed at the rate of 3 to 4 lb/1000 sq. ft..
c. Rake seed lightly into top 1/8 inch of topsoil, roll lightly, and water with fine spray.
d. Protect seeded areas by spreading straw mulch. Spread uniformly at a minimum rate of 2 tons/acre to form a continuous blanket 1-1/2 inches in loose depth over seeded areas. Spread by hand, blower, or other suitable equipment.
i. Bond straw mulch by spraying with asphalt emulsion at the rate of 10 to 13 gal./1000 sq. ft. Take precautions to prevent damage or staining of structures or other plantings adjacent to mulched areas. Immediately clean damaged or stained areas.

E. SATISFACTORY LAWNS
a. Satisfactory Seeded Lawn: At end of maintenance period, a healthy, uniform, close stand of grass has been established, free of weeds and surface irregularities, with coverage exceeding 90 percent over any 10 sq. ft. (0.92 sq. m) and bare spots not exceeding 5 by 5 inches.

F. CLEANUP AND PROTECTION
a. Promptly remove soil and debris created by lawn work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
b. Erect barricades and warning signs as required to protect newly planted areas from traffic. Maintain barricades throughout maintenance period and remove after lawn is established.
c. Remove erosion-control measures after grass establishment period.

804.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

Pay Item	*Pay Unit*
TOPSOIL SPREADING, 5” THICK	SQUARE YARD

A topsoil sample shall be provided to the project landscape architect for analysis prior to any material being delivered to the site.

The price bid for the above item shall include all requirements in the standard specifications, the above specifications and all labor, equipment and materials required for the furnishing, placing/installing, and finishing of said items as set forth in the bid documents.

SECTION 806 – FERTILIZING AND SEEDING

804.04 MEASUREMENT AND PAYMENT
THE FOLLOWING IS ADDED:

A. Seed Varieties: Fresh, clean, dry, new-crop seed complying with AOSA's "Journal of Seed Technology; Rules for Testing Seeds" for purity and germination tolerances.

Seed Species: Seed of grass species as follows, with not less than 95 percent germination, not less than 85 percent pure seed, and not more than 0.5 percent weed seed:

	Botanical Name	Common Name
30.00 %	*Festuca arundinacea, 'Fawn'*	Tall Fescue, 'Fawn'
30.00 %	*Lolium perenne, 'Shining Star'*	Perennial Ryegrass, 'Shining Star' (turf type)
15.00 %	*Poa pratensis, 'Shamrock'*	Kentucky Bluegrass, 'Shamrock'
15.00 %	*Poa pratensis, 'Volt'*	Kentucky Bluegrass, 'Volt'
10.00 %	*Lolium multiflorum*	Annual Ryegrass

100.00 %

Seeding Rate: 75-150 lb per acre, or 3-5 lb per 1,000 sq ft

Item	*Pay Unit*
FERTILIZING AND SEEDING, TYPE A-4	**SQUARE YARD**

THE PRICE BID FOR THE ABOVE ITEM SHALL INCLUDE ALL REQUIREMENTS IN THE STANDARD SPECIFICATIONS, THE ABOVE SPECIFICATIONS AND ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED FOR THE FURNISHING, PLACING/INSTALLING AND FINISHING OF SAID ITEMS AS SET FORTH IN THE BID DOCUMENTS.

SECTION 809 – MULCHING

809.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

Item	*Pay Unit*
STRAW MULCHING	SQUARE YARD

SECTION 811 - PLANTING AND PLANTING SOILS

811.01 DESCRIPTION

This item shall include the selection, delivery and installation of plant materials as indicated on Planting Plan, Planting Soils, Soil Amendments, Mulch, Watering, and incidental materials and labor.

811.02 MATERIALS

811.02.01 PLANT MATERIALS

A. General: Furnish nursery-grown plants true to genus, species, variety, cultivar, stem form, shearing, and other features indicated in Plant Schedule or Plant Legend shown on Drawings and complying with ANSI Z60.1; and with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock, densely foliated when in leaf and free of disease, pests, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.

B. Root-Ball Depth: Furnish trees and shrubs with root balls measured from top of root ball, which shall begin at root flare according to ANSI Z60.1. Root flare shall be visible before planting.

C. Annuals and Biennials: Provide healthy, disease-free plants of species and variety shown or listed, with well-established root systems reaching to sides of the container to maintain a firm ball, but not with excessive root growth encircling the container. Provide only plants that are acclimated to outdoor conditions before delivery.

D. Submittals: photographic images of plants for approval. Not less than 3 images of each species. Images shall be clear representative examples of the plant form and quality. Plants may be in ground, B&B or pots.

811.02.02 INORGANIC SOIL AMENDMENTS

E. Lime: ASTM C 602, agricultural liming material containing a minimum of 80 percent calcium carbonate equivalent and as follows:
   1. Class: T, with a minimum of 99 percent passing through No. 8 (2.36-mm) sieve and a minimum of 75 percent passing through No. 60 (0.25-mm) sieve.
   2. Class: O, with a minimum of 95 percent passing through No. 8 (2.36-mm) sieve and a minimum of 55 percent passing through No. 60 (0.25-mm) sieve.

F. Sulfur: Granular, biodegradable, and containing a minimum of 90 percent sulfur, with a minimum of 99 percent passing through No. 6 (3.35-mm) sieve and a maximum of 10 percent passing through No. 40 (0.425-mm) sieve.

G. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.

H. Aluminum Sulfate: Commercial grade, unadulterated.

I. Agricultural Gypsum: Minimum 90 percent calcium sulfate, finely ground with 90 percent passing through No. 50 (0.30-mm) sieve.

J. Sand: Clean, washed, natural or manufactured, and free of toxic materials.

K. Diatomaceous Earth: Calcined, 90 percent silica, with approximately 140 percent water absorption capacity by weight.

L. Zeolites: Mineral clinoptilolite with at least 60 percent water absorption by weight.

811.02.03 ORGANIC SOIL AMENDMENTS

M. Compost: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 7.0; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch (25-mm) sieve; soluble salt content of 5 to 10 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings.

N. Submittals: test result for above measurements.

811.02.04 FERTILIZERS

O. Bonemeal: Commercial, raw or steamed, finely ground; a minimum of 4 percent nitrogen and 20 percent phosphoric acid.

P. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:

1. Composition: 20 percent nitrogen, 10 percent phosphorous, and 10 percent potassium, by weight.

Q. Submittals: Manufacturer's data sheet, product label.

811.02.05 PLANTING SOILS

A. Planting Soil : NJDOT Section 917 for reference and soil additives.

B. Verify suitability of soil to produce viable planting soil. Clean soil of roots, plants, sod, stones, clods, clay lumps, pockets of coarse sand, concrete slurry, concrete layers or chunks, cement, plaster, building debris, and other extraneous materials harmful to plant growth.

1. Composition: fertile, friable, loamy topsoil, organic matter 3% - 5%, pH 5.8 – 7.0,

C. Submittals: supplier information, soil source, blending methods, blend analysis, physical & chemical characteristics, soil test; particle gradation, pH, organic matter content, soil texture.

811.02.06 MULCHES

A. Mulch: Double shredded hardwood mulch not less than ½" no more than 3" on longest dimension, and treated with a pre-emergent herbicide. No mulch shall come in direct contact with root flare/collar; under no circumstances shall the root crown be buried. Ensure mulch is at least 6" away from tree trunk. No mulch directly against any plant material.

B. Mulch shall be: free of stones, weeds, deleterious material, free of contaminants, no preservative treated wood allowed, less than 10% moisture.

C. Submittals: bagged product label, or bulk product data certifying hardwood material, sieve size, and source.

811.02.07 SUBMITTALS

A. Requested submittals and samples to be submitted not less than 4 weeks prior to planned installation.

B. All SDS, product information, product labels, certifications, applicator certifications and any other incidental product or application necessary for approval.

811.03 METHODS OF CONSTRUCTION

811.03.01 PLANTING AREA ESTABLISHMENT

A. Loosen subgrade of planting areas to a minimum depth of 4 inches. Remove stones larger than 2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.

1. Thoroughly blend planting soil off-site before spreading or spread topsoil, apply soil amendments and fertilizer on surface, and thoroughly blend planting soil.
2. Spread planting soil to a depth of 4 inches but not less than required to meet finish grades after natural settlement. Do not spread if planting soil or subgrade is frozen, muddy, or excessively wet.

B. Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

811.03.02 EXCAVATION FOR TREES AND SHRUBS

A. Planting Pits and Trenches: Excavate circular planting pits with sides sloping inward at a 45-degree angle. Excavations with vertical sides are not acceptable. Trim perimeter of bottom leaving center area of bottom raised slightly to support root ball and assist in drainage away from center. Do not further disturb base. Ensure

that root ball will sit on undisturbed base soil to prevent settling. Scarify sides of planting pit smeared or smoothed during excavation.

1. Excavate approximately three times as wide as ball diameter.
2. Excavate at least 12 inches wider than root spread and deep enough to accommodate vertical roots for bare-root stock.
3. Do not excavate deeper than depth of the root ball, measured from the root flare to the bottom of the root ball.

B. Subsoil and topsoil removed from excavations may not be used as planting soil.

811.03.03 TREE, SHRUB, AND VINE PLANTING

A. Before planting, verify that root flare is visible at top of root ball according to ANSI Z60.1.
B. Remove stem girdling roots and kinked roots. Remove injured roots by cutting cleanly; do not break.
C. Set stock plumb and in center of planting pit or trench with root flare at a normal or natural relationship to the adjacent finish grades.
   1. Use planting soil for backfill.
   2. Balled and Burlapped: After placing some backfill around root ball to stabilize plant, carefully cut and remove burlap, rope, and wire baskets from tops of root balls and from sides, but do not remove from under root balls. Remove pallets, if any, before setting. Do not use planting stock if root ball is cracked or broken before or during planting operation.
   3. Container-Grown: Carefully remove root ball from container without damaging root ball or plant.
   4. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.
   5. Continue backfilling process. Water again after placing and tamping final layer of soil.
D. When planting on slopes, set the plant so the root flare on the uphill side is flush with the surrounding soil on the slope; the edge of the root ball on the downhill side will be above the surrounding soil. Apply enough soil to cover the downhill side of the root ball.

811.03.04 TREE, SHRUB, AND VINE PRUNING

A. Remove only dead, dying, or broken branches. Do not prune for shape.
B. Prune, thin, and shape trees, shrubs, and vines according to standard professional horticultural and arboricultural practices. Unless otherwise indicated by Architect, do not cut tree leaders; remove only injured, dying, or dead branches from trees and shrubs; and prune to retain natural character.

811.03.05 GROUND COVER AND PLANT PLANTING

A. Set out and space ground cover and plants other than trees, shrubs, and vines as indicated in even rows with triangular spacing.
B. Use planting soil for backfill.
C. Dig holes large enough to allow spreading of roots.
D. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water.
E. Water thoroughly after planting, taking care not to cover plant crowns with wet soil.
F. Protect plants from hot sun and wind; remove protection if plants show evidence of recovery from transplanting shock.

811.03.06 PLANTING AREA MULCHING

G. Mulch backfilled surfaces of planting areas and other areas indicated
   1. Trees in Turf Areas: Apply mulch ring of 4-inch thickness, with 42-inch radius around trunks or stems. Do not place mulch within 6 inches of trunks or stems.
   2. Mulch in Planting Areas: Apply 4-inch average thickness of mulch over whole surface of planting area, and finish level with adjacent finish grades. Do not place mulch within 6 inches of trunks or stems. Mulch shall not be “dusty” or “wet”.

811.03.07 PLANT MAINTENANCE

A. Maintain plantings by pruning, cultivating, watering, weeding, fertilizing, mulching, restoring planting saucers, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings. Spray or treat as required to keep trees and shrubs free of insects and disease.
B. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence.
C. Apply treatments as required to keep plant materials, planted areas, and soils free of pests and pathogens or disease. Use practices to minimize the use of pesticides and reduce hazards.
D. Apply pesticides and other chemical products and biological control agents in accordance with authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed. Submit applicator certification & or licenses, SDS for all products, product labels not less than 4 weeks prior to planned operations.
E. Protect plants from damage due to landscape operations and operations of other contractors and trades. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.

THE FOLLOWING IS ADDED:

SECTION 999 – RESTROOM BUILDING

999.01 DESCRIPTION

See Appendix A1 below for specifications of restroom building of each add alternate.

999.02 MATERIALS

See Appendix A1 below for specifications of restroom building of each add alternate.

999.03 EXECUTION

See Appendix A1 below for specifications of restroom building of each add alternate.

999.04 MATERIALS AND PAYMENT

999.04.01 BASE BID

Item	*Pay Unit*
BASIC SINGLE RESTROOM BUILDING - NON SELF CLEANING	LUMP SUM

See Appendix A2 for Vendor Sample Drawings for reference.

The Lump Sum price for the complete BASIC SINGLE RESTROOM BUILDING - NON SELF CLEANING installation shall include **all materials, labor, equipment, and coordination necessary to deliver a fully functional and complete system**. This includes, but is not limited to:

- **All utility coordination**, whether above or below grade, including identification, protection, relocation, adjustment, and all required communication and scheduling with utility companies and affected authorities.
- **Coordination with the bathroom vendor**, including review and approval of all shop drawings, product data, samples, and delivery schedules.
- **Material procurement and approvals**, including the cost of all products, fixtures, equipment, and related components required for installation.
- **Full installation labor and workmanship**, including all activities required to properly install, connect, test, and commission the bathroom as shown in the Contract Documents.

No separate payment will be made for any material, labor, or coordination effort associated with the above; **all costs shall be deemed included in the Lump Sum price**.

999.04.02 ADD ALTERNATE A

Item	*Pay Unit*
BASIC SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE - NON SELF CLEANING	LUMP SUM
DEDUCTION OF ITEM 46	LUMP SUM

See Appendix A3 for Vendor Sample Drawings for reference.

The Lump Sum price for the complete BASIC SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE - NON SELF CLEANING installation shall include **all materials, labor, equipment, and coordination necessary to deliver a fully functional and complete system**. This includes, but is not limited to:

- **All utility coordination**, whether above or below grade, including identification, protection, relocation, adjustment, and all required communication and scheduling with utility companies and affected authorities.
- **Coordination with the bathroom vendor**, including review and approval of all shop drawings, product data, samples, and delivery schedules.
- **Material procurement and approvals**, including the cost of all products, fixtures, equipment, and related components required for installation.
- **Full installation labor and workmanship**, including all activities required to properly install, connect, test, and commission the bathroom as shown in the Contract Documents.

No separate payment will be made for any material, labor, or coordination effort associated with the above; **all costs shall be deemed included in the Lump Sum price**.

999.04.03 ADD ALTERNATE B

Item	*Pay Unit*
SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE AND EXTRA STORAGE ROOM - NON SELF CLEANING	LUMP SUM
DEDUCTION OF ITEM 46	LUMP SUM

There are no sample drawings for Add Alternate B. Bidders shall coordinate with Vendor for submittal.

The Lump Sum price for the complete SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE AND EXTRA STORAGE ROOM - NON SELF CLEANING installation shall include **all materials, labor, equipment, and coordination necessary to deliver a fully functional and complete system**. This includes, but is not limited to:

- **All utility coordination**, whether above or below grade, including identification, protection, relocation, adjustment, and all required communication and scheduling with utility companies and affected authorities.
- **Coordination with the bathroom vendor**, including review and approval of all shop drawings, product data, samples, and delivery schedules.
- **Material procurement and approvals**, including the cost of all products, fixtures, equipment, and related components required for installation.
- **Full installation labor and workmanship**, including all activities required to properly install, connect, test, and commission the bathroom as shown in the Contract Documents.

No separate payment will be made for any material, labor, or coordination effort associated with the above; **all costs shall be deemed included in the Lump Sum price**.

999.04.04 ADD ALTERNATE C

Item	*Pay Unit*
SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE AND EXTRA STORAGE ROOM - SELF CLEANING	LUMP SUM
DEDUCTION OF ITEM 46	LUMP SUM

The Lump Sum price for the complete SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE AND EXTRA STORAGE ROOM - SELF CLEANING installation shall include **all materials, labor, equipment, and coordination necessary to deliver a fully functional and complete system**. This includes, but is not limited to:

- **All utility coordination**, whether above or below grade, including identification, protection, relocation, adjustment, and all required communication and scheduling with utility companies and affected authorities.
- **Coordination with the bathroom vendor**, including review and approval of all shop drawings, product data, samples, and delivery schedules.
- **Material procurement and approvals**, including the cost of all products, fixtures, equipment, and related components required for installation.
- **Full installation labor and workmanship**, including all activities required to properly install, connect, test, and commission the bathroom as shown in the Contract Documents.

No separate payment will be made for any material, labor, or coordination effort associated with the above; **all costs shall be deemed included in the Lump Sum price**.

There are no sample drawings for Add Alternate C. Bidders shall coordinate with Vendor for submittal.

Appendix A

RESTROOM REFERENCE MATERIALS

Appendix A1

RESTROOM TECHNICAL SPECIFICATIONS

Specification	Description
Overall Dimensions:	The size is 8’ 11’’ x 22’ 4’’.
Structure – Material:	The structural frame of the Urben Blu washroom unit is fabricated from 16-gauge galvanized steel, providing strength, durability, and corrosion resistance suitable for outdoor public installations. The walls are composed of ultra-performance concrete panels, consisting of two laminated 20 mm sheets, with the outer layer finished in ultra-performance concrete coated with an epoxy finish for enhanced durability, impact resistance, and ease of maintenance. The ceiling is constructed from stainless steel, offering excellent corrosion resistance, vandal resistance, and ease of cleaning. The structural concrete pad is made of 35 MPa fiber-reinforced concrete, delivering superior structural integrity and long-term performance in high-traffic public environments. The unit is built for a 25-year design life, engineered for year-round use, and is fire- and vandal-resistant, ensuring long-term reliability and low maintenance in demanding public settings.
Structure – Warranty:	10-year full coverage on the structure and 3 years on all parts and labour. Urben Blu will provide a dedicated email address and phone number for clients to use for any inquiries, service requests, repairs. In accordance with company policy, clients can expect a response within 24 business hours. For replacement parts, we are committed to delivering within 3 days, subject to availability and excluding exceptional cases where parts must be specially ordered. To ensure optimal performance and client satisfaction, we also offer preventive maintenance inspections before the warranty period expires. These inspections allow us to identify and replace any components that may require attention while still under warranty.
Floor Slab: Specify floor slab thickness, include information about sewer/water cutouts or provisions.	304.8 mm (12-inch) structural concrete slab. The concrete pad is pre-formed with openings for water (1 inch required), sewer (4-inch pipe required), and electrical piping. Urben Blu will provide the city with detailed drawings and a template indicating the precise locations of these openings on the concrete pad.

Power Requirements:	Power :125 amp Hydro: 120 -240 1 phase
Insulation:	The walls of the Urben Blu washroom units are insulated to **R22**, providing excellent thermal performance and energy efficiency suitable for year-round use in North-American climates. The ceiling is insulated to **R44**, ensuring superior heat retention and additional protection against outdoor temperature fluctuations. This level of insulation contributes to user comfort, reduces energy consumption, and supports the long-term durability of the unit. Cement-based flooring is rated **R-10**
Interior – Floor Finish:	The concrete pad is prefabricated in our factory using precision molds to ensure consistent slope across all units. The pad is engineered with a slope to facilitate proper water drainage following cleaning cycles. It is also equipped with an integrated electric heating system to promote drying of any residual water. Additionally, the surface features a non-slip epoxy finish to minimize the risk of slips and injuries.
Interior – Ceiling Finish:	The interior ceiling of the unit is constructed from stainless steel 304L, a material chosen for its superior corrosion resistance, durability, and suitability for high-humidity public environments. This ceiling finish provides a smooth, modern appearance while being highly resistant to vandalism and easy to clean, ensuring low maintenance and long-term performance. The panels are securely fastened to prevent tampering or disassembly, supporting both safety and longevity.
Roof:	The Urben Blu washroom unit features a flat roof constructed with a 1.5 mm Soprema white waterproof membrane, providing excellent protection against water infiltration and ensuring long-term durability in all weather conditions. The roof is covered by a 25-year manufacturer's warranty, with warranty service provided directly by the manufacturer in collaboration with Urben Blu to ensure timely and professional support for any required maintenance or repairs. The roof design incorporates 609 mm overhangs to shelter and protect doorways and

	entrances, while also reducing wall weathering. It features concealed fasteners and anti-climb design elements to deter vandalism, including a smooth exterior finish with no exposed gutters. The roof is also engineered to allow safe access for cleaning and maintenance, including debris removal, supporting long-term durability and ease of upkeep.
Roof Drainage:	The roof of the Urben Blu washroom unit is designed with a built-in slope to promote efficient water runoff. This sloped design ensures that rainwater and melting snow naturally drain toward the roof edges, preventing water accumulation and reducing the risk of leaks or structural damage. The drainage system is low-maintenance and optimized to ensure long-term roof performance and durability.
Water Bottle Filling Station:	Urben Blu suggests the wall-mounted Elkay ezH2O Vandal-Resistant Bottle Filling Station & Bi-Level Reverse Cooler (Model VRCTLRDDWSK) in stainless steel. The station features sensor/electronic activation for the bottle filler with a mechanical button for the bubbler, and it is furnished with a vandal-resistant bubbler. The unit is suitable for outdoor use, with a freeze-resistant design requiring seasonal winterization or shut-off in colder climates to protect the water lines. This ensures year-round performance and compliance with public safety requirements.
Toilet and Seat:	The toilet is made of porcelain and is fully protected by a one-piece fiberglass cover that shields both the interior and exterior of the toilet from impacts. This integrated cover also serves as the toilet seat, featuring the same opening. As a single molded component, it cannot be disassembled or stolen by users, ensuring durability and security in public use. For maintenance, the cover can be easily replaced from the mechanical room by removing the bolts. Its angled design also facilitates efficient cleaning cycles by preventing water accumulation and simplifying wash-down procedures.

	The toilet also gets cleaned, disinfected and dried after each use.
Sink:	The sink is in stainless steel or concrete, providing exceptional durability, resistance to vandalism, and ease of cleaning for public environments. The sink is securely bolted from the mechanical room, allowing it to be removed and replaced by simply unfastening the bolts, minimizing maintenance time and service disruption.
Confirm sink can be easily replaced	The sink is securely bolted from the mechanical room, allowing it to be removed and replaced by simply unfastening the bolts.
Accessibility Compliance:	The units feature barrier-free access with no ramps or steps, and the entrance door is flush with the exterior sidewalk. At the front of each unit, clear signage indicates that the washroom is a barrier-free washroom, and written instructions are provided on how to use the unit. Braille signage is also available. Upon entry, users are greeted with audible voice instructions, and the door is operated via a push-button mechanism for ease of access. Braille signage is also available inside and outside of the unit Inside the unit, grab bars are installed in accordance with the state's standards, and all fixtures are positioned at compliant heights, including those beside and behind the accessible toilet. The interior provides a 1500 mm turning radius to facilitate wheelchair maneuverability, and the sink is fully touchless for improved hygiene. For the section with an adult changing table, the radius is 1700mm. For enhanced inclusivity, an adult changing table can be installed on one side of the unit. This fold-down, height-adjustable table meets structural loading and accessibility criteria to ensure safe and comfortable use. In the companion cabin, a baby changing table is provided. Each unit is equipped with an emergency panic button that activates both an exterior light and an audible signal, ensuring rapid response in the event of an emergency.

Barrier-Free Compliance	The entrance door is flush with the sidewalk, eliminating any threshold or step and allowing seamless access for users with mobility aids such as wheelchairs or walkers. The interior is designed to provide adequate maneuvering space and meet all accessibility clearances ensuring a safe and barrier-free experience for all users.
Faucet	The unit does not include a traditional faucet; water is delivered through a fully touchless distribution system. All equipment is concealed within the mechanical room for a clean appearance and enhanced vandal resistance, while remaining easily serviceable and replaceable. All plumbing is constructed from durable brass and stainless-steel finish.
Dryer:	Global industrial dryer, easily replaceable and heavy-duty and CSA-UL approved. It is also hidden in the mechanical room to prevent anyone from damaging it.
Soap Dispenser	The soap dispenser operates through a touchless, automatic sensor-activated system. It is CSA-UL certified and vandal-resistant, with all components concealed behind the mirror and easily serviceable and replaceable from the mechanical room.
Doors	The front doors are constructed from anodized aluminum, providing exceptional durability and resistance to vandalism. They feature latch-locking mechanisms and are fully compliant with CSA and UL accessibility standards (40'' opening). Designed for outdoor use, the doors are vandal-resistant, corrosion-resistant, and feature contrasting finishes with adjacent surfaces to enhance visibility. Accessibility features include a D-pull handle and push-button operation. The mechanical room door is made of steel and equipped with a combination lock.
Ventilation:	Air exchanger and heating system for the user side from Fantech (model:SHR-150) and Stelpro (model: SDHR06020001DU)
Interior Lighting: Confirm indoor LED lighting and waterproof confirmation.	The LED lighting is motion-activated, waterproof, and fully CSA/UL certified. They are also suitable to operate in 90% Relate Humidity and can be easily replaced.

Exterior Lighting:	The LED lighting is waterproof, CSA/UL certified, and equipped with a dusk-to-dawn control system for automatic operation
Occupancy Sensors:	A ceiling-mounted microwave sensor is installed for dual functionality. It prevents cleaning cycles from starting while the restroom is occupied and sends alerts if any activity, such as littering, is detected inside the unit after closing hours. The sensor is easily replaceable for simplified maintenance. The sensors are also Suitable to operate in 90% Relate Humidity
Anti-Graffiti Coating	All interior surfaces, with the exception of the mirror, are finished with an anti-graffiti coating. The exterior finish utilizes Longboard aluminum siding, an architectural product with integrated anti-graffiti properties. Its high-performance coating prevents graffiti from adhering, preserving the siding's appearance and ensuring long-term durability.
Exterior Finish	The exterior of the Urben Blu washroom is finished with Longboard aluminum panels, a premium high-performance cladding system specifically engineered for long-term durability in outdoor public environments. The finish is designed to: • Withstand freeze-thaw cycles, moisture, UV exposure, and physical impact, maintaining its integrity and appearance year-round. • Be vandal-resistant and easy to clean, with a permanent anti-graffiti coating that allows quick removal of markings without damaging the surface. • Protect the structure from rain, snow, wind, and moisture, contributing to the overall weather resistance and longevity of the unit. Typical configuration features Longboard aluminum panels on the front facade to create an urban, architectural appearance, while the three remaining sides are clad in durable corrugated metal for impact resistance and weather protection. However, all four sides can be finished in Longboard if the City prefers a uniform premium aesthetic, at an additional cost.

	The modern, urban design is intended to complement park settings and surrounding architecture. The final exterior finish will be reviewed and approved by the City and may include aluminum siding with a permanent anti-graffiti coating, or other high-gauge metal or masonry solutions that meet the City's performance and design requirements. This combination of durability, weather resistance, vandal protection, and contemporary design ensures the Urben Blu washroom maintains a high-quality, low-maintenance exterior throughout its service life.
Signage	The front signage of the Urben Blu washroom is designed for clarity, safety, and durability. The top horizontal panel displays the word "Restrooms" with universal pictograms indicating: Toilet, Male and female users, Wheelchair accessibility, Hearing assistance, Baby/adult changing table. This panel provides clear visual identification of the washroom as a barrier-free, universal facility. The vertical side panel includes the Urben Blu logo, status indicators (Free, Cleaning Cycle, and Occupied/Out of Order), and accessibility and safety icons, as well as a bottom paragraph of instructions on how to use the unit. Status indicators are displayed with colored lights made of durable plastic, while the remainder of the panels are fabricated from aluminum. The aluminum panels have smooth surfaces and no sharp edges, ensuring user safety and resistance to vandalism. The robust materials and construction also provide long-term durability for outdoor public use. Inside of the washrooms, we have different panels that indicate the usage of the unit (also in braille), panic button.
Water Piping:	Urben Blu washrooms utilize stainless steel, brass, and ABS piping. ABS piping is specifically used for floor sprinklers to facilitate easy replacement and maintenance. All piping for potable water is made of stainless steel or

	brass, ensuring durability, corrosion resistance, and compliance with public health standards.
Garbage Bin:	The fire-resistant garbage receptacle is constructed from durable aluminum and designed for vandal resistance. The receptacle itself is located within the mechanical room, while the user only has access to a disposal opening. No exposed components can be disassembled, removed, or damaged. The receptacle has a 33-liter capacity and is engineered to withstand liquids and various types of waste, ensuring durability, hygiene, and ease of maintenance in high-traffic public environments.
Toilet Paper Dispenser:	The toilet paper dispenser will be vandal-proof and fire-resistant. It is designed to hold standard jumbo rolls with easy roll replacement from the front for maintenance efficiency. The unit will be constructed from high-quality ABS plastic, providing lighter weight and cost savings while maintaining strength and durability. The dispenser will be installed within the locked mechanical room, with only a small wall-mounted opening on the user side to minimize visible fingerprints, reduce scratches, prevent theft, and ensure accessibility. The opening on the user side is designed for controlled dispensing (sheet-by-sheet) to reduce waste and overuse. The dispenser includes a locking mechanism for added security (accessible only from the mechanical room) and is equipped with a low-supply indicator that alerts the City via the control system when replenishment is required. This design minimizes vandalism risks, enhances fire safety, ensures compliance with accessibility standards, and promotes efficient and sustainable use of supplies.
Electrical Service: size, make and compliance with:	The Urben Blu washroom is equipped with an electrical service rated at 125 amps, managed through a Siemens control system (Siemens PLC Simatic S7-1200) This configuration ensures safe and reliable operation of all electrical components, including the lighting, ventilation, heating, self-cleaning system, and monitoring equipment,

	while meeting all regulatory and safety standards for public installations.
Solenoids:	The Urben Blu washroom units are equipped with brass solenoids operating at 24 VDC, designed for reliable control of water and soap distribution. These solenoids ensure efficient and precise activation of the plumbing and soap systems, supporting hygienic, touchless operation and long-term durability in public washroom environments. The models of our solenoids are ASCO-8210G009 et ASCO-8210G002
Remote Monitoring :	Urben Blu washroom units are equipped with a Siemens control system that provides robust remote monitoring and management capabilities. Many features are fully programmable, including the opening hours of the unit and various building parameters. Cleaning cycles can also be initiated remotely through the application, and the system provides real-time usage statistics for operational oversight. The control system sends alerts in multiple scenarios to support proactive maintenance. For example: • If the toilet becomes blocked, the door automatically locks, and an alert is issued. • When soap or toilet paper levels reach 30%, the system sends a low consumable alert. • If an individual stays inside of the unit after closing hours, the system will also send an alert. (During the day, there is a time limit per use. The door will open automatically for safety reasons once the time limit is reached. It will not send alert in this scenario. This time limit is also adjustable) Each unit is connected to a centralized monitoring platform, which allows: • Real-time alerts • Remote programming of cleaning cycles, lighting, occupancy duration, and heating • Remote diagnostics to support preventive maintenance and troubleshooting

	These remote monitoring capabilities allow Urben Blu to quickly identify and address potential issues. If a component underperforms, the system generates an alert, enabling us to promptly coordinate shipment of replacement parts. Our efficient logistics system ensures that parts are delivered quickly, minimizing downtime and keeping the unit operational. The smart features are powered by a Siemens S7-1200 wall-mounted control system located in the mechanical room. The unit is well-ventilated to prevent overheating. This Human Machine Interface (HMI), equipped with a minimum 7" display, allows the City to modify programming either on-site or remotely. Urben Blu will provide and fully cover the cost of cellular services for remote alarms and monitoring for a period of five years. Programming updates will also be included at no additional cost during this period. Subsequently, the city must subscribe to a service plan with Urben Blu to ensure continuity of remote connection and SIM card, updates, and annual license renewal.
Cell Signal Access:	Urben Blu washroom units are equipped with a Siemens EON control system that operates using a SIM card with cellular data connectivity. This setup ensures secure and reliable communication for both remote monitoring and emergency notifications. The control system allows full remote management of the unit, including status monitoring, and it can send real-time alerts in various scenarios, such as maintenance requirements, operational issues, or emergency events. This cellular-based solution provides continuous connectivity without reliance on local Wi-Fi networks, supporting safe and efficient unit operation.
Paper Towel Dispenser:	Urben Blu washroom units do not include a paper towel dispenser, as they are designed with a touchless hand dryer integrated into the mirror. This design promotes hygiene, reduces maintenance, and eliminates paper waste. The integrated hand dryer is automatic and CSA/UL listed for use in North-America,

	ensuring safety, compliance, and reliable hands-free operation in public washroom environments.
Automation System:	Siemens control (Siemens PLC Simatic S7-1200). Please see the image in annex 7 of our control cabinet.
Software and Updates:	Urben Blu washroom units include all necessary software licenses, firmware, and updates as part of the system. Support, updates, and firmware upgrades are fully included for a period of five (5) years, ensuring that the control system remains secure, up to date, and fully supported throughout the warranty period. The system also enables remote monitoring, allowing Urben Blu to track operational status, receive alerts, and perform certain diagnostics to ensure optimal performance and timely maintenance. Subsequently, the city must subscribe to a service plan with Urben Blu to ensure continuity of remote connection and SIM card, updates, and annual license renewal.
Self Cleaning Features:	The Urben Blu washroom is equipped with a dual self-cleaning system designed to maintain optimal hygiene with minimal manual intervention. The first cleaning cycle is dedicated to the toilet bowl, which is automatically cleaned, disinfected, and dried after each use. The cleaning equipment is in the mechanical room, and the cycle begins when the door remains closed for 30 seconds with no users inside. This feature reduces waiting time if there is a line-up. The second cleaning cycle targets the floor. Stainless steel sprinklers positioned around the floor spray pressurized water and disinfectants in sequence, effectively channeling dirt and debris toward the drains in the mechanical room as guided by the sloped floor. After the wash cycle, the electric floor heating system dries any remaining water. By default, the floor cleaning cycle is triggered after every 10 users, but the frequency is fully programmable to meet the City's preferences and traffic patterns. During any cleaning cycle, the door automatically locks, and the front panel indicates the cleaning status of the unit. No

	cleaning cycle can be triggered if someone is inside the toilet, as detected by the presence sensor. All components are UL-approved, and the system operates without moving parts, which minimizes preventive maintenance requirements and reduces the risk of mechanical failure. All parts and labor are fully warrantied for 3 years.
Self Cleaning Zones:	Yes, two separate cleaning cycle for toilet seat and the floor. Toilet seat is cleaning, disinfected and dried after each use (door needs to be closed for 30 seconds for cleaning cycle to start). Basin can be power washed. By default, the floor cleaning cycle is triggered after every 10 users, but the frequency is fully programmable to meet the City's preferences and traffic patterns.
Warranty Services:	Urben Blu provides a comprehensive warranty to ensure long-term reliability and peace of mind. This includes a three-year warranty on all parts and labour, covering any manufacturing defects, and a ten-year warranty on the structure, guaranteeing the integrity and durability of the unit's framework. Any required replacement parts and labor will be provided at Urben Blu's expense, except in cases of damage caused by vandalism. In addition, before the warranty period expires, Urben Blu offers preventive maintenance inspections to identify and replace any components that may require attention while still covered under warranty.
Extended Services:	Urben Blu offers different extended warranty. Urben Blu will contact the city prior to the end of the warranty to choose an extended plan according to the city's needs.
Soap Pumps:	Soap and detergent Pump are ULKA 120 V
Other information that will be useful to evaluate	Urben Blu units, parts and factory are CSA-A277 certified as required in the National Building Code (A 1.1.1.1 2) ,the prefabricated product must be built in compliance with CSA-A277 (9.1.1.9 B).

	Entirely designed and manufactured in Quebec using North-American products, no imported materials are used in the manufacture of our products.
Total Spare Parts to be Supplied:	Urben Blu doesn't typically supply spare parts proactively, as the repair is under warranty for 3 years. However, it is possible to provide spare parts listed below. Urben Blu will keep the parts below in our factory at all-time to ensure quick replacement during the 3-year warranty. - Soap dispensing pumps - Soap dispenser - Air dryer - Exterior LED lights - Solenoids - Consumables (Urben Blu sends 1 box of consumable with the unit) - Sensors - PLC boards and HMI screens

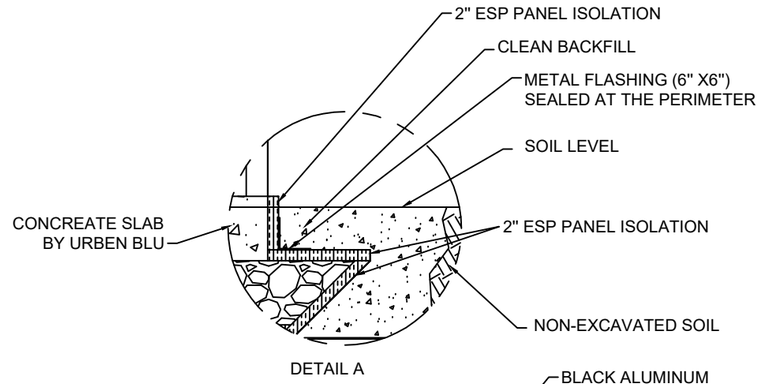
Appendix A2

BASE BID – SAMPLE DRAWING

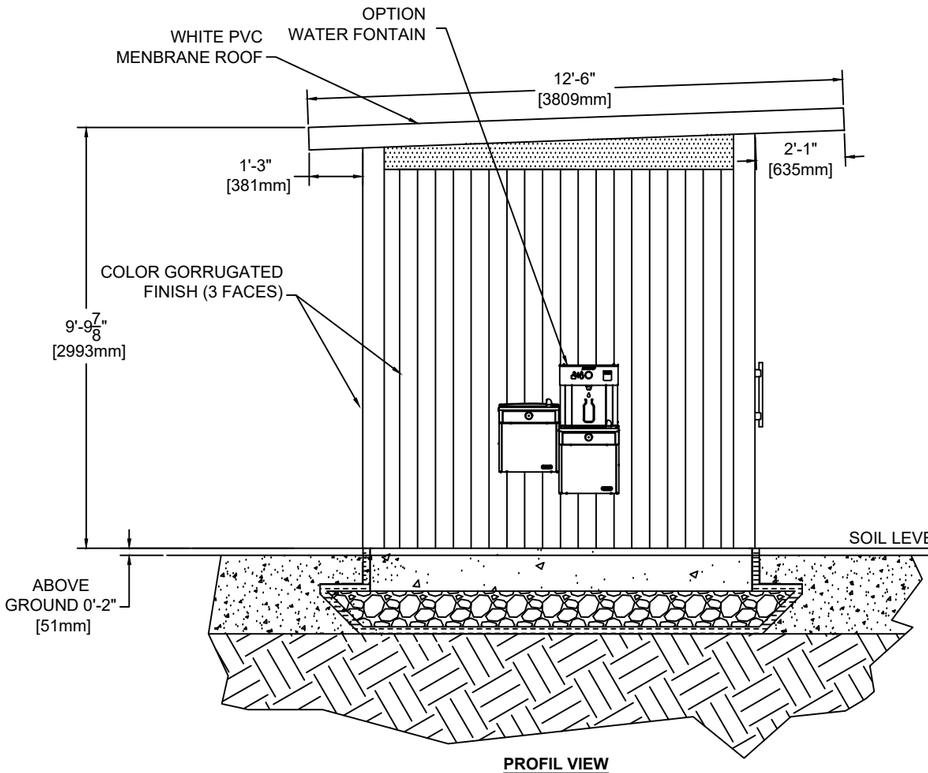
BASIC SINGLE RESTROOM BUILDING - NON SELF CLEANING

NOTES: PRELIMINARY WORK TO DEVELOP THE SITE AT THE EXPENSE OF THE CLIENT.

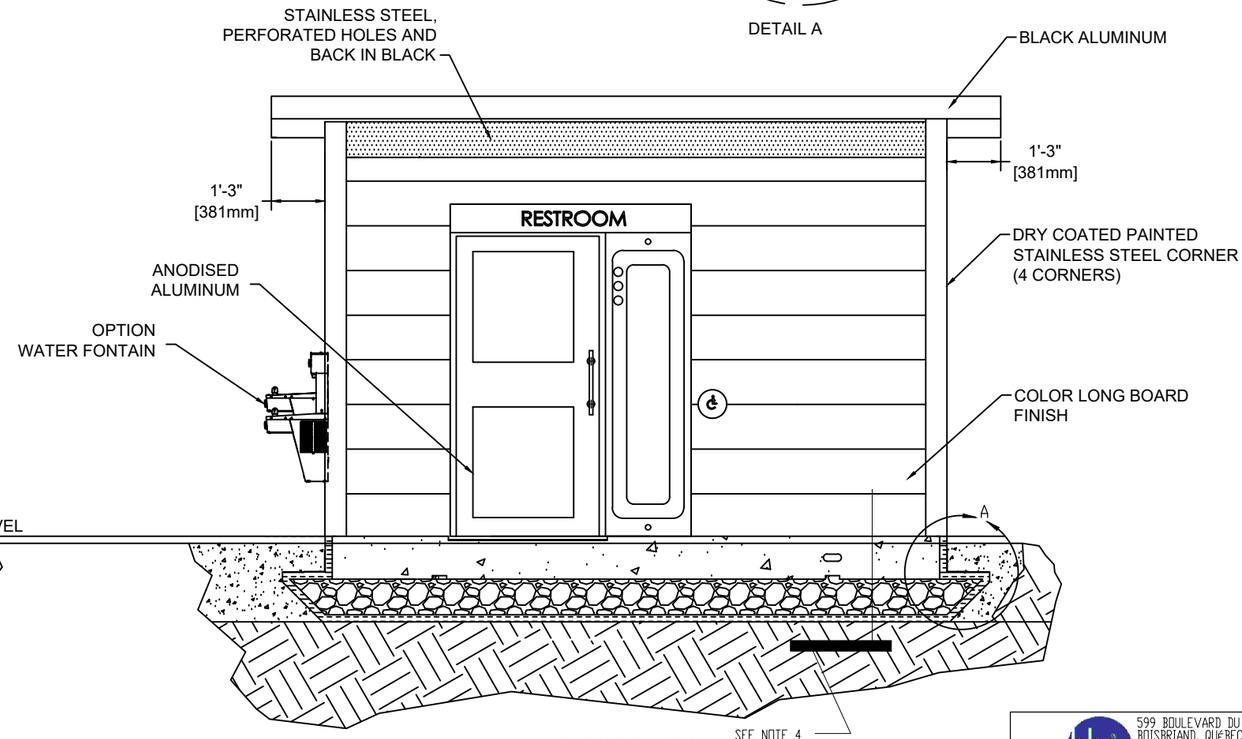
1-The site must have a minimum bearing capacity of 50 kpa over the entire surface of the seat of the building.
2-Excavate the ground (12'') 300mm wider and longer than the exterior dimension of the building.
3-The bottom of the excavation must be (12'') 300mm lower than the projected bottom of the building.
4-Galvanised plate of 1/4'' x 14 3/4'' x 9 3/4'' (wired Ø5/8, 8mas to 3/0 TOR) for grounding, 24'' below ground level with mesh not supplied by UrbenBlu.
5-An approved geotextile membrane as TEXEL 7609 or equivalent is required at the bottom of the excavation.
6-Install a (2'') 50mm high density insulation at the bottom of the excavation, (seal any opening crossing the insulation).
7-Fill the excavation with a (12'') 300mm layer of granular stone compacted to 95% of the modified proctor.
8-Install (2'') 50mm high density insulation around the perimeter of the slab vertically and horizontally.



DETAIL A



PROFIL VIEW



ELEVATION VIEW

PRELIMINARY

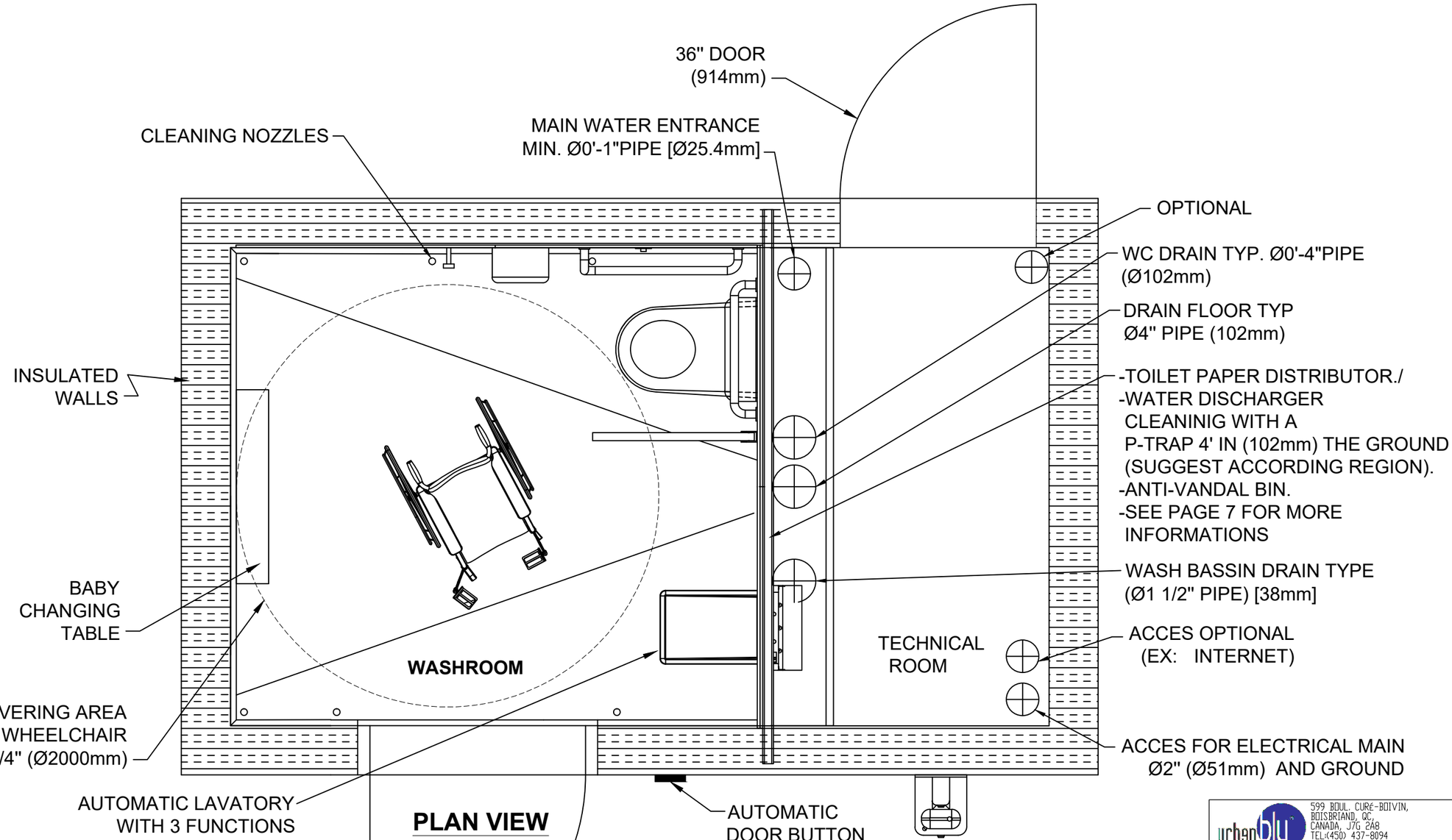
urbenblu
599 BOULEVARD DU CURÉ-BOIVIN
BOISBRIAND, QUÉBEC J7G 2A8
TEL:(450) 437-8094
FAX:(450) 951-9181

TOLERANCES / TOLÉRANCES : DIMENSIONS IN INCHES / DIMENSIONS EN POUCE TOLERANCES / TOLÉRANCES : FRACTIONAL / FRACTION : ± 1/16 ANGULAR / ANGULAIRE : ±0.5° BEND / PLI ±0.020'' X ±0.040'' X.X ±0.020'' X.XX ±0.010'' X.XXX ±0.005''	CLIENT : XXXXXXXXX
DRAWN BY / DESSINÉ PAR : S.ASSELIN	DATE : 2023-05-30
APPROVED BY / APPROUVÉ PAR : GUY THIBAULT	PROJECT / PROJET : SIMPLE ADA
DRAWING No / No DESSIN : UBXX-9100	
MATERIAL / MATÉRIEL : N/A	FORMAT : B
REV : NR	
PEINT / PEINTURE : N/A	PAGE : 1 OF / DE 7

PROPRIETARY AND CONFIDENTIAL / EXCLUSIF ET CONFIDENTIEL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF URBEN BLU. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF URBEN BLU IS PROHIBITED.

LES INFORMATIONS CONTENUES DANS CE LE DESSIN EST LA PROPRIÉTÉ UNIQUE DE URBEN BLEU. QUELCONQUE REPRODUCTION PARTIELLE OU GLOBALE SANS L'AUTORISATION ÉCRITE DE URBEN BLEU EST INTERDIT.



PRELIMINARY

urbanblu
599 BOUL. CURÉ-BOIVIN,
BOISBRIAND, QC,
CANADA, J7G 2A8
TEL:(450) 437-8094
FAX:(450) 951-9181

TOLERANCES / TOLÉRANCES :
DIMENSIONS IN INCHES /
DIMENSIONS EN POUCE
TOLERANCES / TOLÉRANCES :
FRACTIONAL / FRACTION :± 1/16
ANGULAR / ANGULAIRE : ±0.5°
BEND / PLI ±0.020"
X ±0.040"
X.X ±0.020"
X.XX ±0.010"
X.XXX ±0.005"

CLIENT :
XXXXXXXXXX

DRAWN BY / DESSINÉ PAR :
S.ASSELIN
DATE : 2023-05-30

APPROVED BY / APPROUVÉ PAR :
GUY THIBAULT

PROJECT / PROJET :
SIMPLE ADA

DRAWING No / No DESSIN :
UBXX-9100

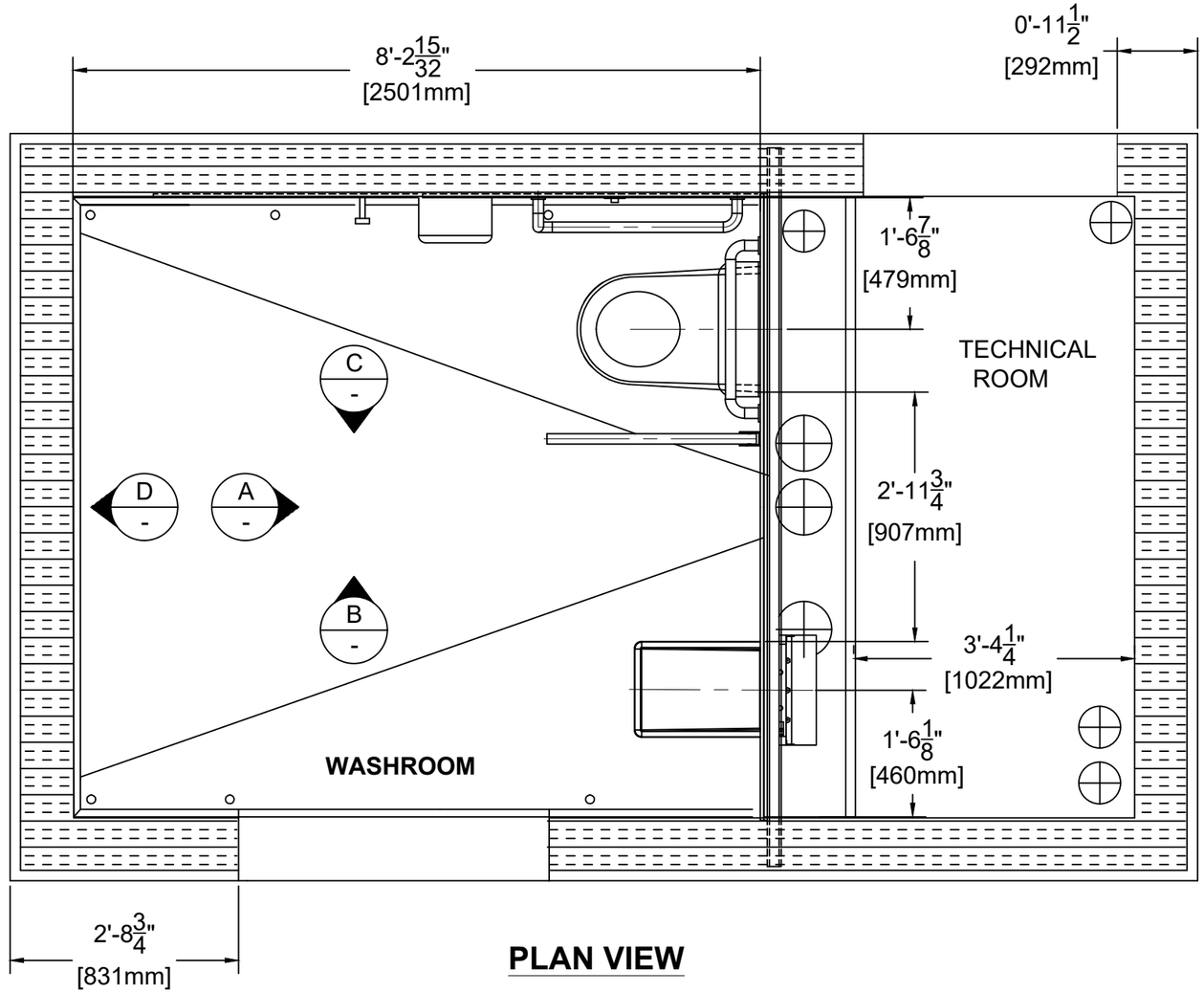
PROPRIETARY AND CONFIDENTIAL / EXCLUSIF ET CONFIDENTIEL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF URBEN BLU. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF URBEN BLU IS PROHIBITED.
LES INFORMATIONS CONTENUES DANS CE LE DESSIN EST LA PROPRIÉTÉ UNIQUE DE URBEN BLEU. QUELCONQUE REPRODUCTION PARTIELLE OU GLOBALE SANS L'AUTORISATION ÉCRITE DE URBEN BLEU EST INTERDIT.

MATERIAL / MATÉRIEL :
N/A

FORMAT :
B

REV :
NR

PEINT / PEINTURE :
N/A



PLAN VIEW

PRELIMINARY

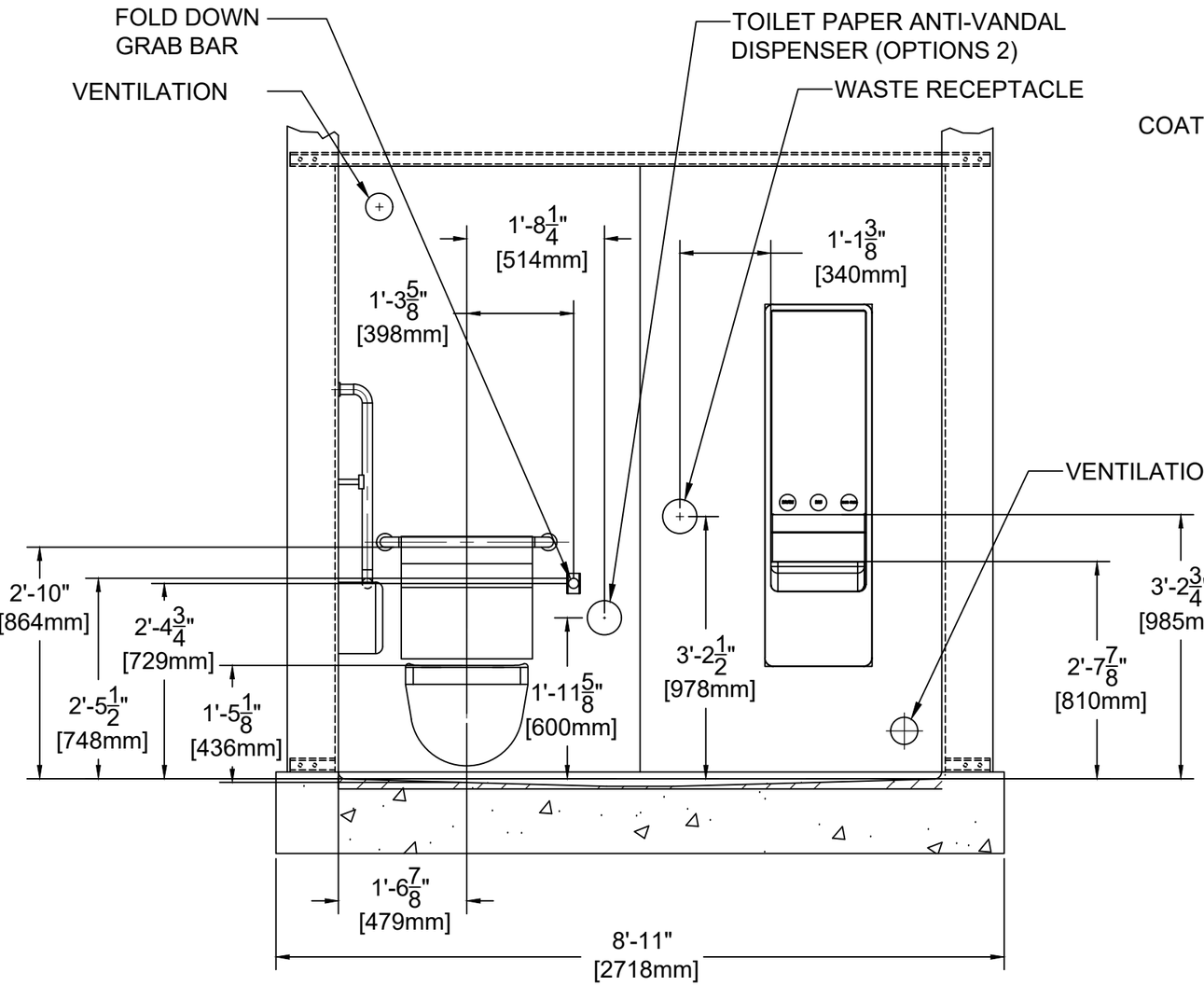
urbanblu
599 BOUL. CURÉ-BOIVIN,
BOISBRIAND, QC,
CANADA, J7G 2A8
TEL:(450) 437-8094
FAX:(450) 951-9181

TOLERANCES / TOLÉRANCES : DIMENSIONS IN INCHES / DIMENSIONS EN POUCE TOLERANCES / TOLÉRANCES : FRACTIONAL / FRACTION : ± 1/16 ANGULAR / ANGULAIRE : ± 0.5° BEND / PLI ± 0.020" X ± 0.040" X.X ± 0.020" X.XX ± 0.010" X.XXX ± 0.005"	CLIENT : XXXXXXXXXX
	DRAWN BY / DESSINÉ PAR : S.ASSELIN
	DATE : 2023-05-30
	APPROVED BY / APPROUVÉ PAR : GUY THIBAULT
PROJECT / PROJET : SIMPLE ADA	
DRAWING No / No DESSIN : UBXX-9100	
MATERIAL / MATÉRIEL : N/A	FORMAT : B / REV : NR
PEINT / PEINTURE : N/A	PAGE : 3 OF / DE 7

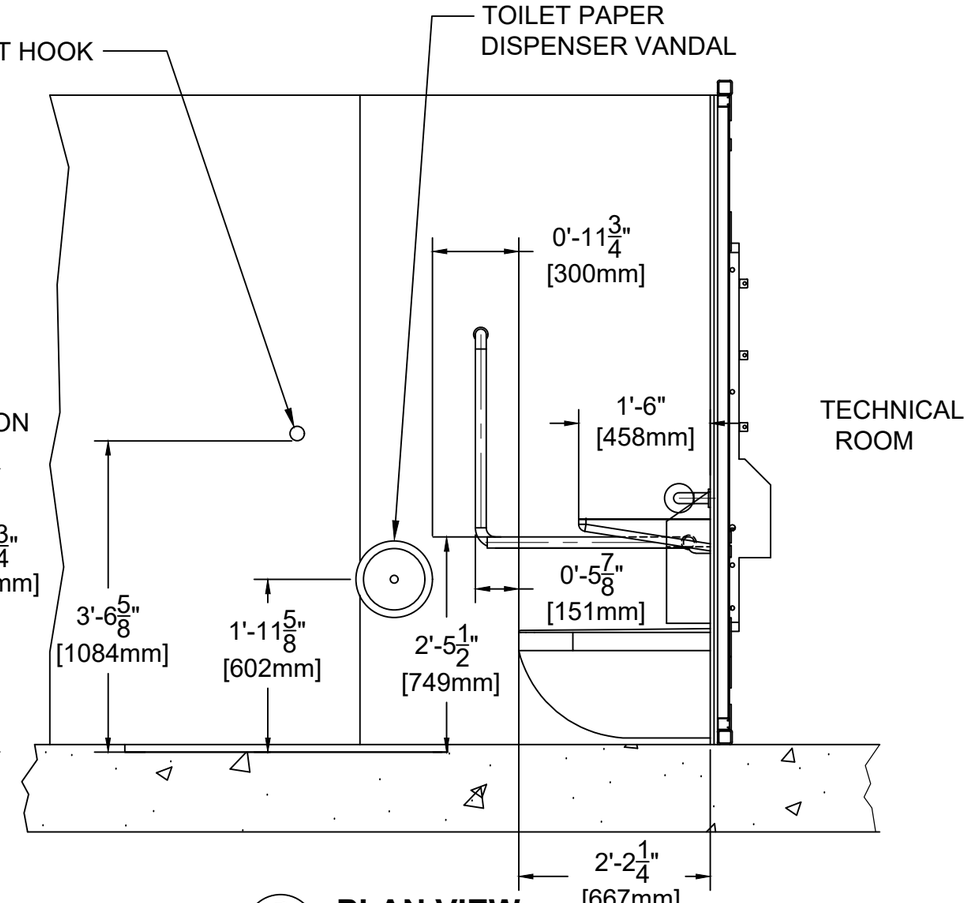
PROPRIETARY AND CONFIDENTIAL / EXCLUSIF ET CONFIDENTIEL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF URBEN BLU. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF URBEN BLU IS PROHIBITED.

LES INFORMATIONS CONTENUES DANS CE LE DESSIN EST LA PROPRIÉTÉ UNIQUE DE URBEN BLEU. QUELCONQUE REPRODUCTION PARTIELLE OU GLOBALE SANS L'AUTORISATION ÉCRITE DE URBEN BLEU EST INTERDIT.



A P3 **PLAN VIEW**
WASHROOM



B P3 **PLAN VIEW**

PRELIMINARY

urbanblu
599 BOUL. CURÉ-BOIVIN,
BOISBRIAND, QC,
CANADA, J7G 2A8
TEL:(450) 437-8094
FAX:(450) 951-9181

TOLERANCES / TOLÉRANCES :
DIMENSIONS IN INCHES /
DIMENSIONS EN POUCE
TOLERANCES / TOLÉRANCES :
FRACTIONAL / FRACTION : ± 1/16
ANGULAR / ANGULAIRE : ± 0.5°
BEND / PLI ± 0.020"
X ± 0.040"
X.X ± 0.020"
X.XX ± 0.010"
X.XXX ± 0.005"

CLIENT : XXXXXXXXXX

DRAWN BY / DESSINÉ PAR : S.ASSELIN
DATE : 2023-05-30

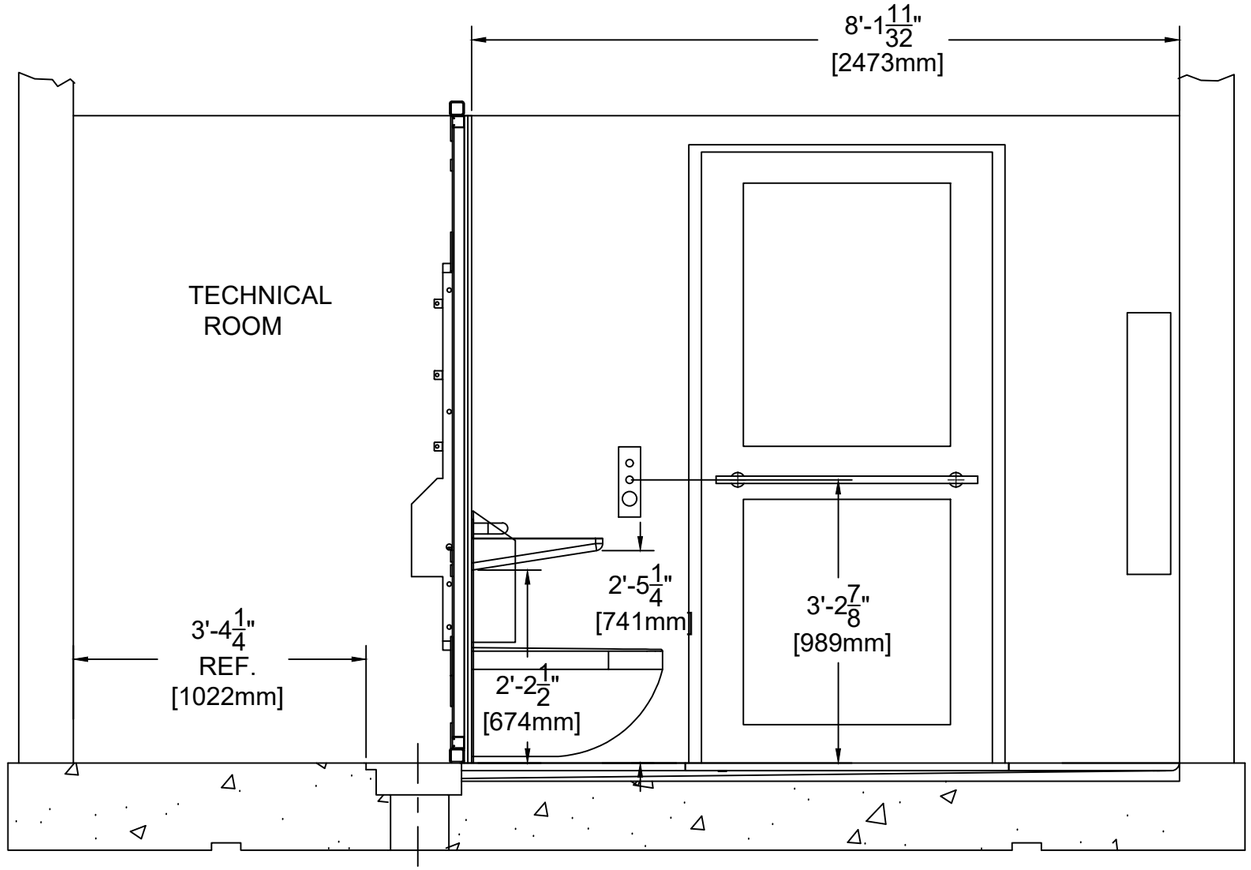
APPROVED BY / APPROUVÉ PAR : GUY THIBAULT

PROJECT / PROJET : SIMPLE ADA

DRAWING No / No DESSIN : UBXX-9100

PROPRIETARY AND CONFIDENTIAL / EXCLUSIF ET CONFIDENTIEL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF URBEN BLU. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF URBEN BLU IS PROHIBITED.
LES INFORMATIONS CONTENUES DANS CE LE DESSIN EST LA PROPRIÉTÉ UNIQUE DE URBEN BLEU. QUELCONQUE REPRODUCTION PARTIELLE OU GLOBALE SANS L'AUTORISATION ÉCRITE DE URBEN BLEU EST INTERDIT.

MATERIAL / MATÉRIEL : N/A
FORMAT : B
REV : NR
PEINT / PEINTURE : N/A
PAGE : 4 OF / DE 7



DC P3 **PLAN VIEW**
WASHROOM

PRELIMINARY

urbanblu
599 BOUL. CURÉ-BOIVIN,
BOISBRIAND, QC,
CANADA, J7G 2A8
TEL:(450) 437-8094
FAX:(450) 951-9181

TOLERANCES / TOLÉRANCES :
DIMENSIONS IN INCHES /
DIMENSIONS EN POUCE
TOLERANCES / TOLÉRANCES :
FRACTIONAL / FRACTION ± 1/16
ANGULAR / ANGULAIRE : ± 0.5°
BEND / PLI ± 0.020"
X ± 0.040"
X.X ± 0.020"
X.XX ± 0.010"
X.XXX ± 0.005"

CLIENT : XXXXXXXXXX

DRAWN BY / DESSINÉ PAR : S.ASSELIN

DATE : 2023-05-30

APPROVED BY / APPROUVÉ PAR : GUY THIBAULT

PROJECT / PROJET : SIMPLE ADA

DRAWING No / No DESSIN : UBXX-9100

MATERIAL / MATÉRIEL : N/A

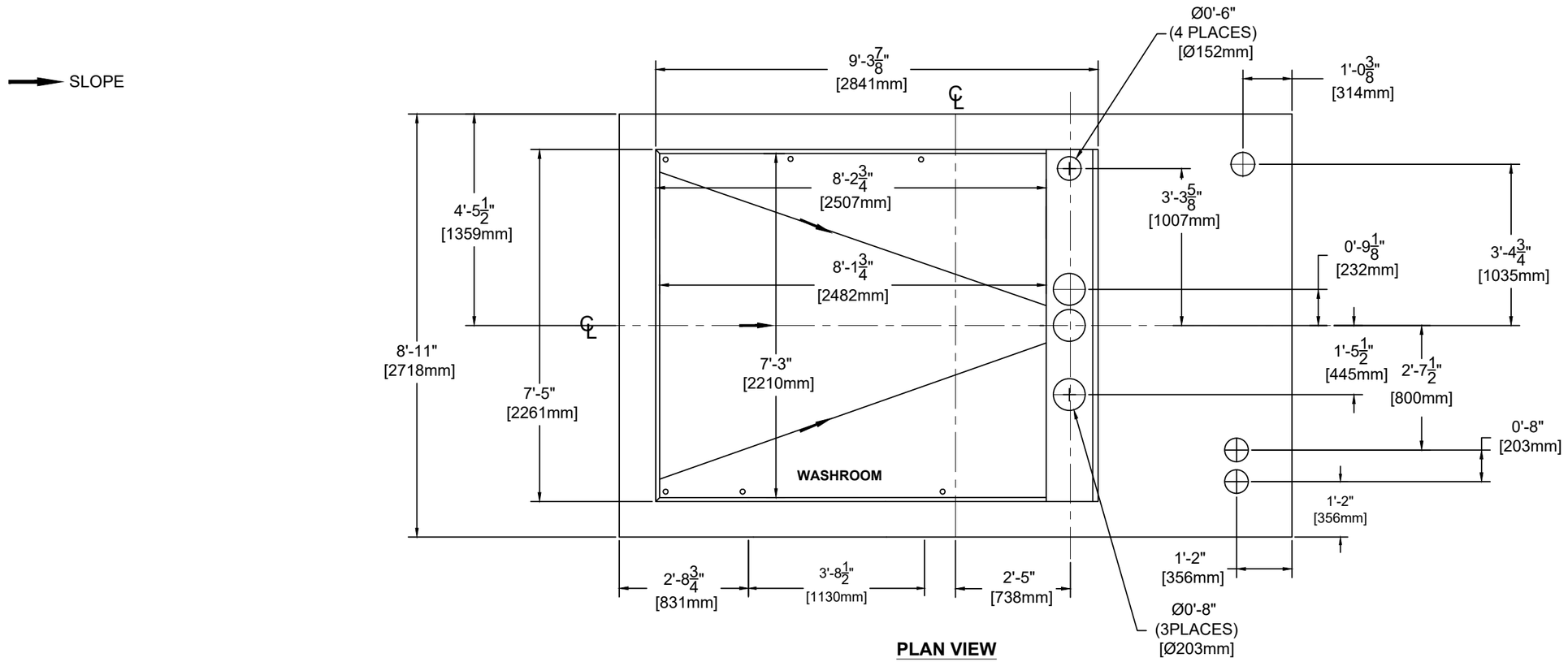
FORMAT : B

REV : NR

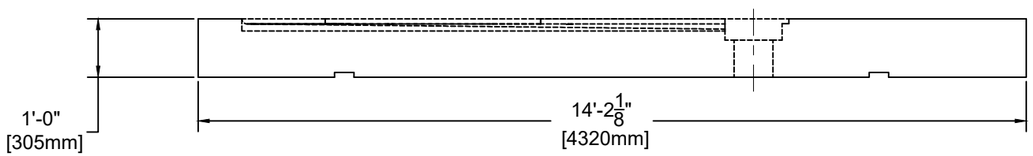
PEINT / PEINTURE : N/A

PAGE : 5 OF / DE 7

PROPRIETARY AND CONFIDENTIAL / EXCLUSIF ET CONFIDENTIEL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF URBEN BLU. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF URBEN BLU IS PROHIBITED.
LES INFORMATIONS CONTENUES DANS CE LE DESSIN EST LA PROPRIÉTÉ UNIQUE DE URBEN BLEU. QUELCONQUE REPRODUCTION PARTIELLE OU GLOBALE SANS L'AUTORISATION ÉCRITE DE URBEN BLEU EST INTERDIT.



PLAN VIEW



ELEVATION

PRELIMINARY

urbenblu
599 BOULEVARD DU CURÉ-BOIVIN
BOISBRIAND, QUÉBEC J7G 2A8
TEL:(450) 437-8094
FAX:(450) 951-9181

TOLERANCES / TOLÉRANCES :
DIMENSIONS IN INCHES /
DIMENSIONS EN POUCE
TOLERANCES / TOLÉRANCES :
FRACTIONAL / FRACTION : ± 1/16
ANGULAR / ANGULAIRE : ± 0.5°
BEND / PLI ± 0.020"
X ± 0.040"
X.X ± 0.020"
X.XX ± 0.010"
X.XXX ± 0.005"

CLIENT :
XXXXXXXXXX

DRAWN BY / DESSINÉ PAR :
S.ASSELIN
DATE : 2023-05-30

APPROVED BY / APPROUVÉ PAR :
GUY THIBAULT

PROJECT / PROJET :
SIMPLE ADA

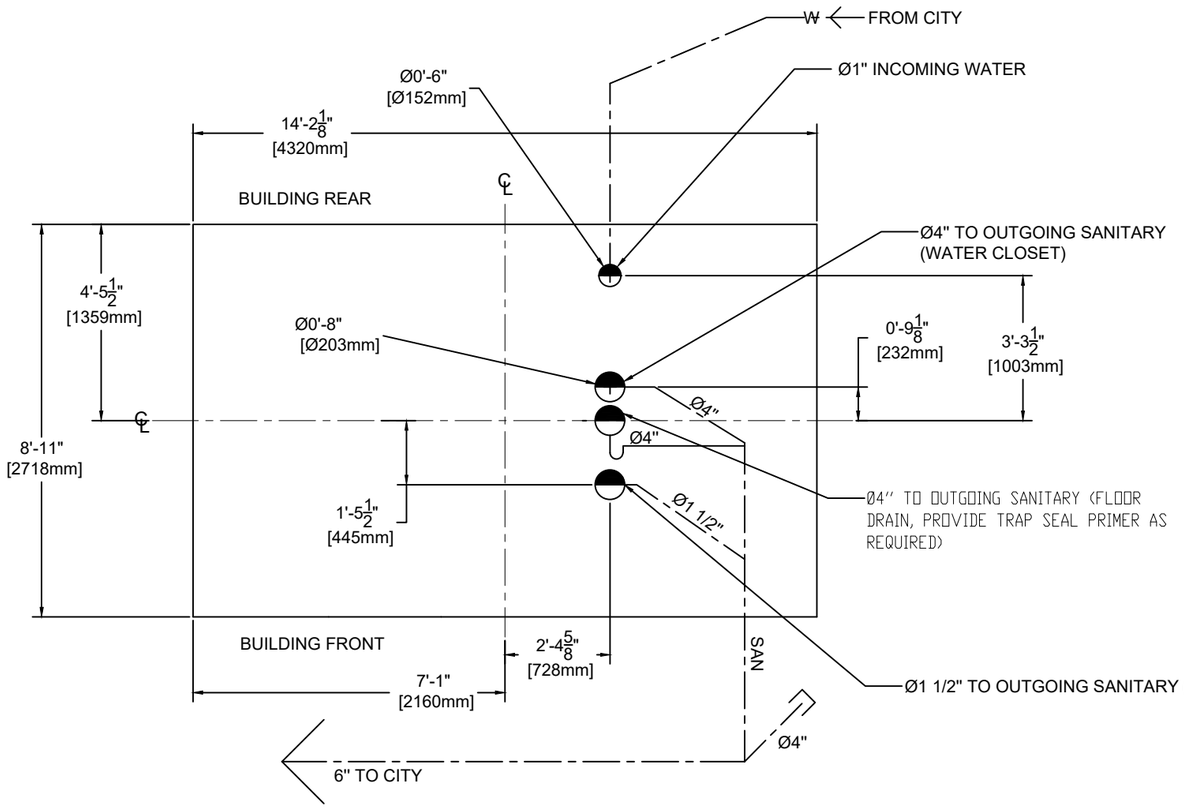
DRAWING No / No DESSIN :
UBXX-9100

PROPRIETARY AND CONFIDENTIAL / EXCLUSIF ET CONFIDENTIEL

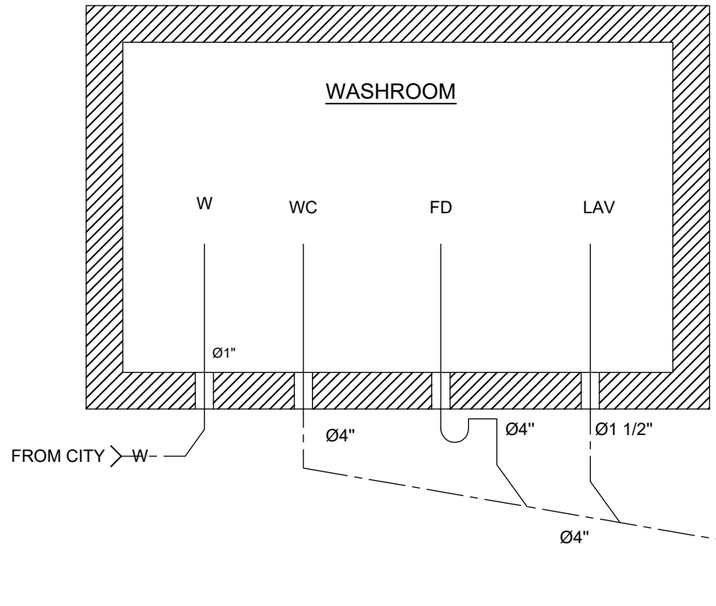
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF URBEN BLU. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF URBEN BLU IS PROHIBITED.

LES INFORMATIONS CONTENUES DANS CE LE DESSIN EST LA PROPRIÉTÉ UNIQUE DE URBEN BLEU. QUELCONQUE REPRODUCTION PARTIELLE OU GLOBALE SANS L'AUTORISATION ÉCRITE DE URBEN BLEU EST INTERDIT.

MATERIAL / MATÉRIEL : N/A
FORMAT : B
REV : NR
PEINT / PEINTURE : N/A
PAGE : 6 OF / DE 7



PLUMBING PLAN BELOW GRADE



LEGEND

- NEW SANITARY DRAIN BLOW GRADE
- NEW SANITARY SERVICE BLOW GRADE
- SANITARY TRAP
- PIPE SECTION
- WC — WATER CLOSET
- LAV — LAVATORY
- FD — FLOOR DRAIN
- CO — CLEAN OUT
- W — CLEAN WATER

NOTE : READ THESE DRAWINGS IN CONJUNCTION WITH ALL THE REFERENCE DRAWINGS LISTED

PRELIMINARY

urben blu
599 BOULEVARD DU CURÉ-BOIVIN
BOISBRIAND, QUÉBEC J7G 2A8
TEL:(450) 437-8094
FAX:(450) 951-9181

TOLERANCES / TOLÉRANCES :
DIMENSIONS IN INCHES /
DIMENSIONS EN POUCE
TOLERANCES / TOLÉRANCES :
FRACTIONAL / FRACTION ±1/16
ANGULAR / ANGULAIRE : ±0.5°
BEND / PLI ±0.020"
X ±0.040"
X.X ±0.020"
X.XX ±0.010"
X.XXX ±0.005"

CLIENT : XXXXXXXX

DRAWN BY / DESSINÉ PAR : S.ASSELIN
DATE : 2023-05-30

APPROVED BY / APPROUVÉ PAR : GUY THIBAULT

PROJECT / PROJET : SIMPLE ADA

DRAWING No / No DESSIN : UBXX-9100

PROPRIETARY AND CONFIDENTIAL / EXCLUSIF ET CONFIDENTIEL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF URBEN BLU. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF URBEN BLU IS PROHIBITED.

LES INFORMATIONS CONTENUES DANS CE LE DESSIN EST LA PROPRIÉTÉ UNIQUE DE URBEN BLEU. QUELCONQUE REPRODUCTION PARTIELLE OU GLOBALE SANS L'AUTORISATION ÉCRITE DE URBEN BLEU EST INTERDIT.

MATERIAL / MATÉRIEL : N/A

FORMAT : B

REV : NR

PEINT / PEINTURE : N/A

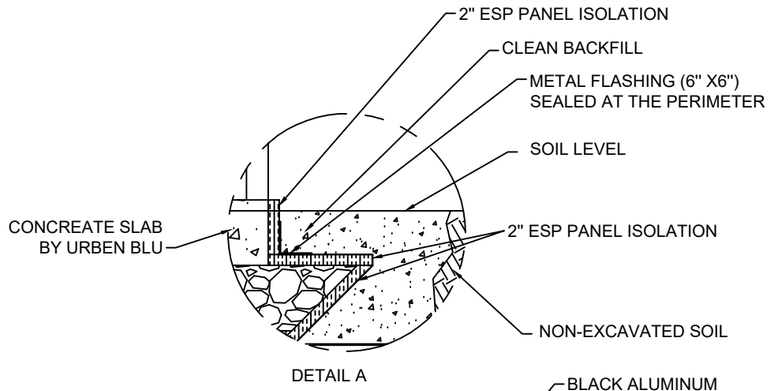
Appendix A3

ADD ALTERNATE A – SAMPLE DRAWING

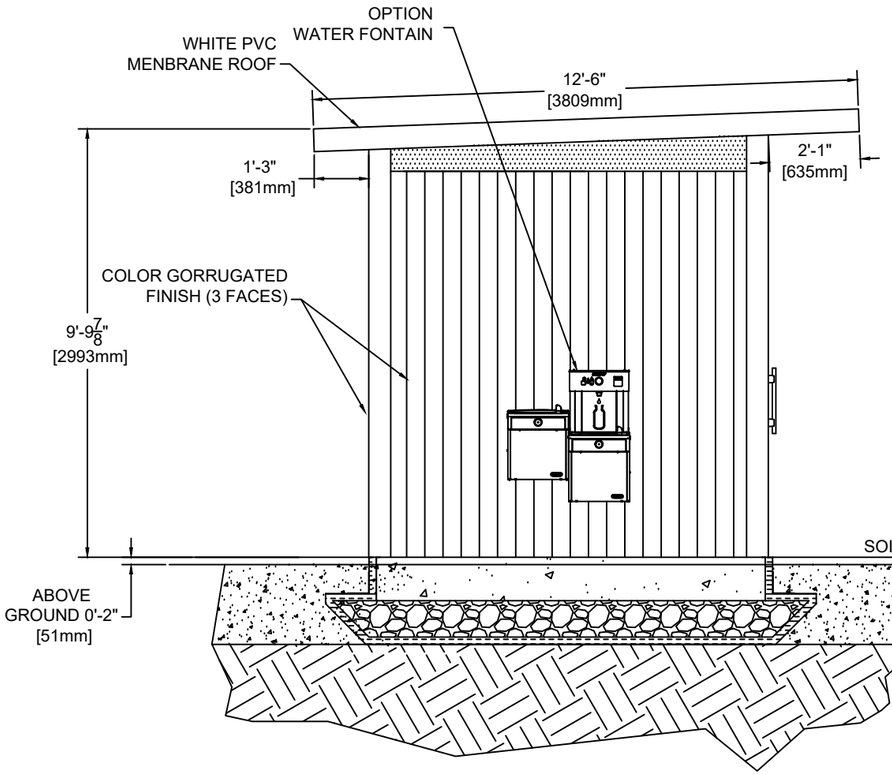
BASIC SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE - NON SELF CLEANING

NOTES: PRELIMINARY WORK TO DEVELOP THE SITE AT THE EXPENSE OF THE CLIENT.

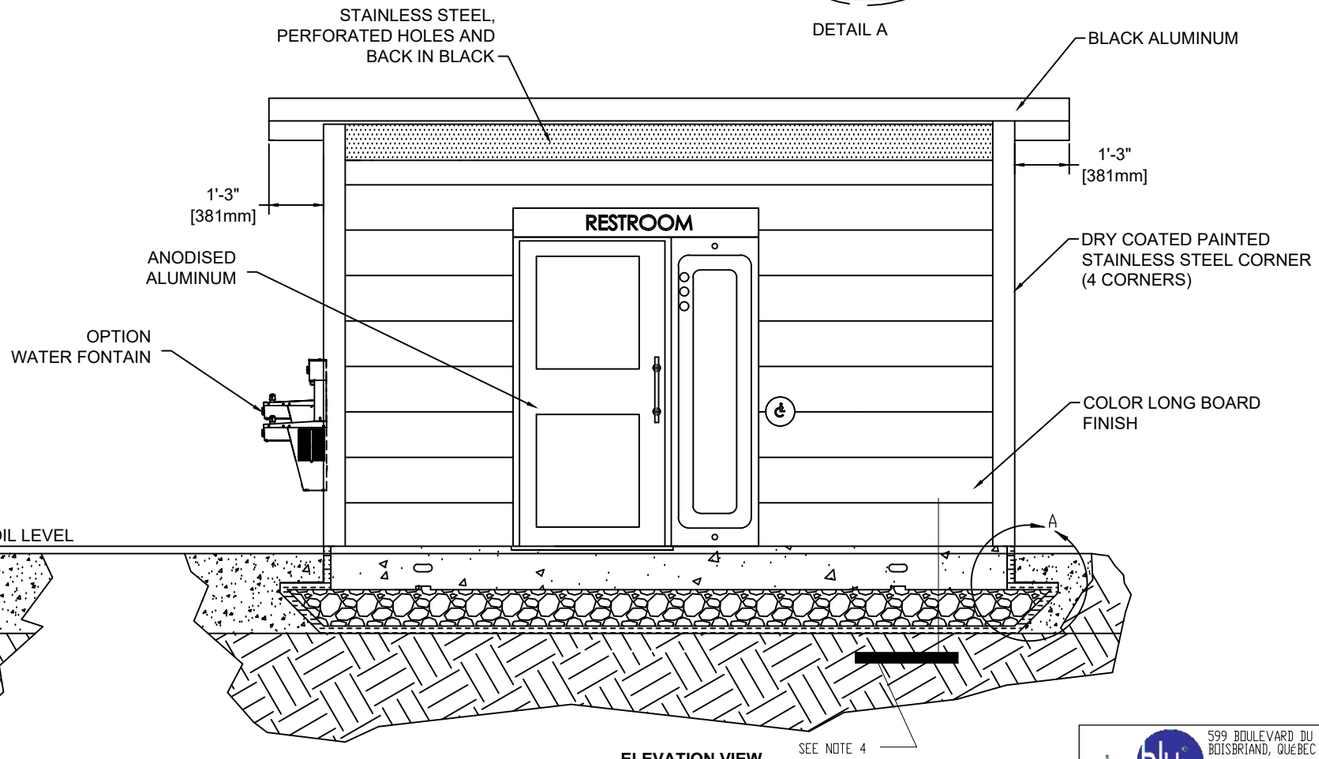
1-The site must have a minimum bearing capacity of 50 kpa over the entire surface of the seat of the building.
2-Excavate the ground (12'') 300mm wider and longer than the exterior dimension of the building.
3-The bottom of the excavation must be (12'') 300mm lower than the projected bottom of the building.
4-Galvanised plate of 1/4'' x 14 3/4'' x 9 3/4'' (wired Ø5/8, 8mas to 3/0 TOR) for grounding, 24'' below ground level with mesh not supplied by UrbenBlu.
5-An approved geotextile membrane as TEXEL 7609 or equivalent is required at the bottom of the excavation.
6-Install a (2'') 50mm high density insulation at the bottom of the excavation, (seal any opening crossing the insulation).
7-Fill the excavation with a (12'') 300mm layer of granular stone compacted to 95% of the modified proctor.
8-Install (2'') 50mm high density insulation around the perimeter of the slab vertically and horizontally.



DETAIL A



PROFIL VIEW



ELEVATION VIEW

PRELIMINARY

599 BOULEVARD DU CURÉ-BOIVIN
BOISBRIAND, QUÉBEC J7G 2A8
TEL:(450) 437-8094
FAX:(450) 951-9181

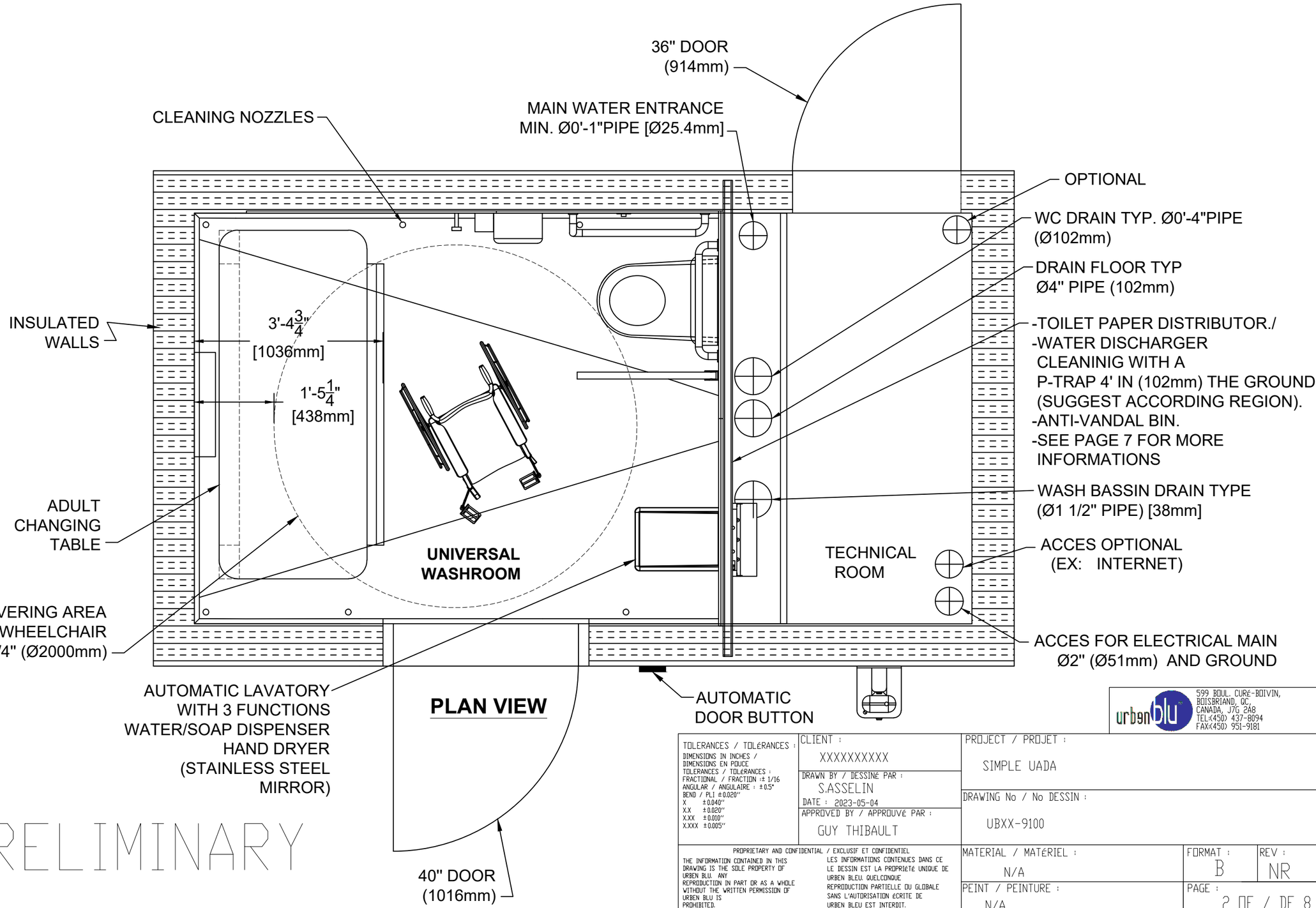
TOLERANCES / TOLÉRANCES : DIMENSIONS IN INCHES / DIMENSIONS EN POUCE TOLERANCES / TOLÉRANCES : FRACTIONAL / FRACTION :± 1/16 ANGULAR / ANGULAIRE : ±0.5° BEND / PLI ±0.020'' X ±0.040'' X.X ±0.020'' X.XX ±0.010'' X.XXX ±0.005''	CLIENT : XXXXXXXXXX DRAWN BY / DESSINÉ PAR : S.ASSELIN DATE : 2023-05-04 APPROVED BY / APPROUVÉ PAR : GUY THIBAULT	PROJECT / PROJET : SIMPLE UADA DRAWING No / No DESSIN : UBXX-9100

PROPRIETARY AND CONFIDENTIAL / EXCLUSIF ET CONFIDENTIEL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF URBEN BLU. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF URBEN BLU IS PROHIBITED.

LES INFORMATIONS CONTENUES DANS CE LE DESSIN EST LA PROPRIÉTÉ UNIQUE DE URBEN BLEU. QUELCONQUE REPRODUCTION PARTIELLE OU GLOBALE SANS L'AUTORISATION ÉCRITE DE URBEN BLEU EST INTERDIT.

MATERIAL / MATÉRIEL :	FORMAT :	REV :
N/A	B	NR
PEINT / PEINTURE : N/A	PAGE : 1 OF / DE 8	



PRELIMINARY

urban blu
599 BOUL. CURÉ-BOIVIN,
BOISBRIAND, QC,
CANADA, J7G 2A8
TEL(450) 437-8094
FAX(450) 951-9181

TOLERANCES / TOLÉRANCES :
DIMENSIONS IN INCHES /
DIMENSIONS EN POUCE
TOLERANCES / TOLÉRANCES :
FRACTIONAL / FRACTION :± 1/16
ANGULAR / ANGULAIRE : ±0.5°
BEND / PLI ±0.020"
X ±0.040"
X.X ±0.020"
X.XX ±0.010"
X.XXX ±0.005"

CLIENT : XXXXXXXXXX

DRAWN BY / DESSINÉ PAR : S.ASSELIN

DATE : 2023-05-04

APPROVED BY / APPROUVÉ PAR : GUY THIBAULT

PROJECT / PROJET : SIMPLE UADA

DRAWING No / No DESSIN : UBXX-9100

MATERIAL / MATÉRIEL : N/A

FORMAT : B

REV : NR

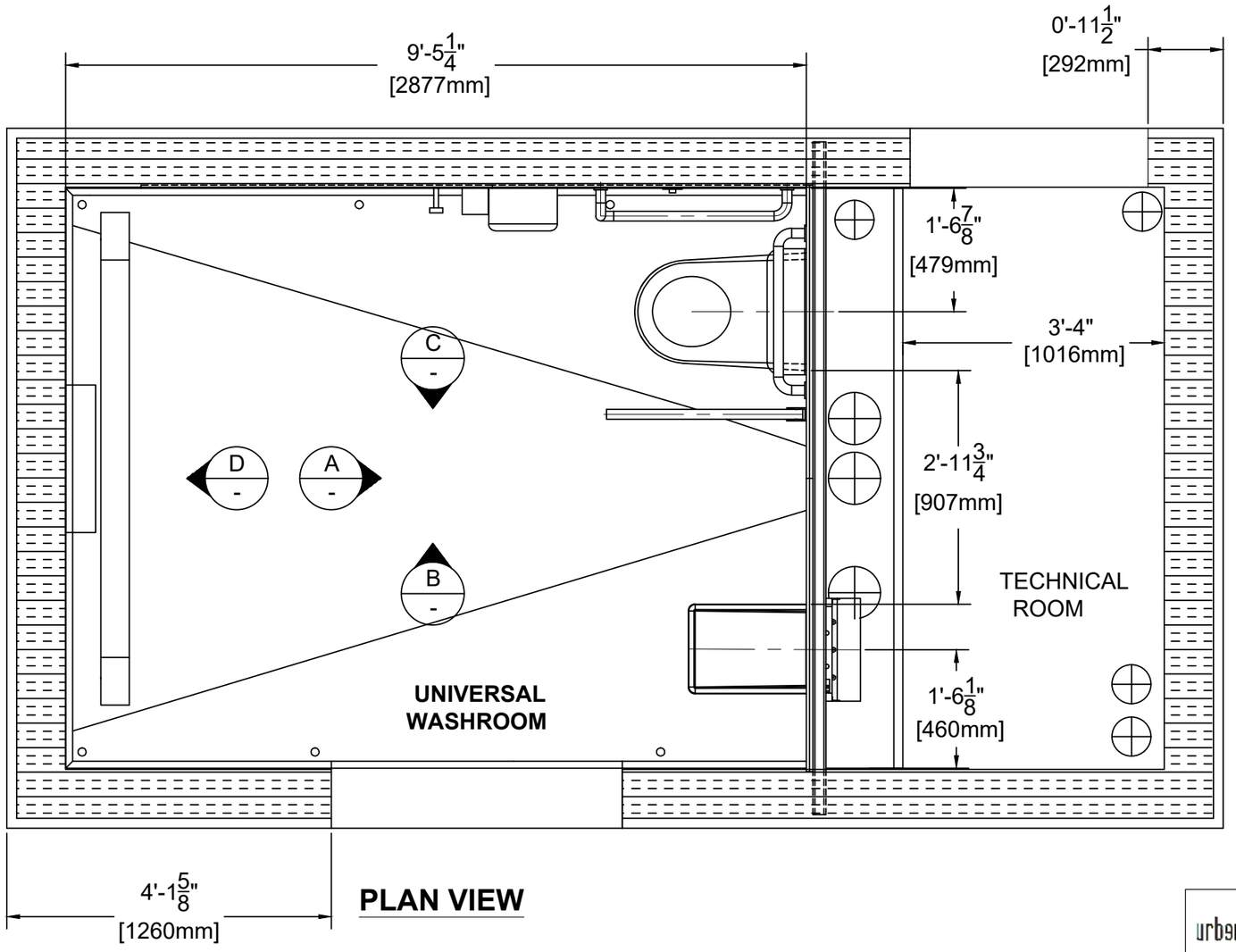
PEINT / PEINTURE : N/A

PAGE : 2 OF / DE 8

PROPRIETARY AND CONFIDENTIAL / EXCLUSIF ET CONFIDENTIEL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF URBEN BLU. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF URBEN BLU IS PROHIBITED.

LES INFORMATIONS CONTENUES DANS CE LE DESSIN EST LA PROPRIÉTÉ UNIQUE DE URBEN BLEU. QUELCONQUE REPRODUCTION PARTIELLE OU GLOBALE SANS L'AUTORISATION ÉCRITE DE URBEN BLEU EST INTERDIT.



PLAN VIEW

PRELIMINARY

urbanblu
599 BOUL. CURÉ-BOIVIN,
BOISBRIAND, QC,
CANADA, J7G 2A8
TEL:(450) 437-8094
FAX:(450) 951-9181

TOLERANCES / TOLÉRANCES :
DIMENSIONS IN INCHES /
DIMENSIONS EN POUCE
TOLERANCES / TOLÉRANCES :
FRACTIONAL / FRACTION :± 1/16
ANGULAR / ANGULAIRE : ±0.5°
BEND / PLI ±0.020"
X ±0.040"
X.X ±0.020"
X.XX ±0.010"
X.XXX ±0.005"

CLIENT : XXXXXXXXXX

DRAWN BY / DESSINÉ PAR : S.ASSELIN

DATE : 2023-05-04

APPROVED BY / APPROUVÉ PAR : GUY THIBAULT

PROJECT / PROJET : SIMPLE UADA

DRAWING No / No DESSIN : UBXX-9100

MATERIAL / MATÉRIEL : N/A

FORMAT : B

REV : NR

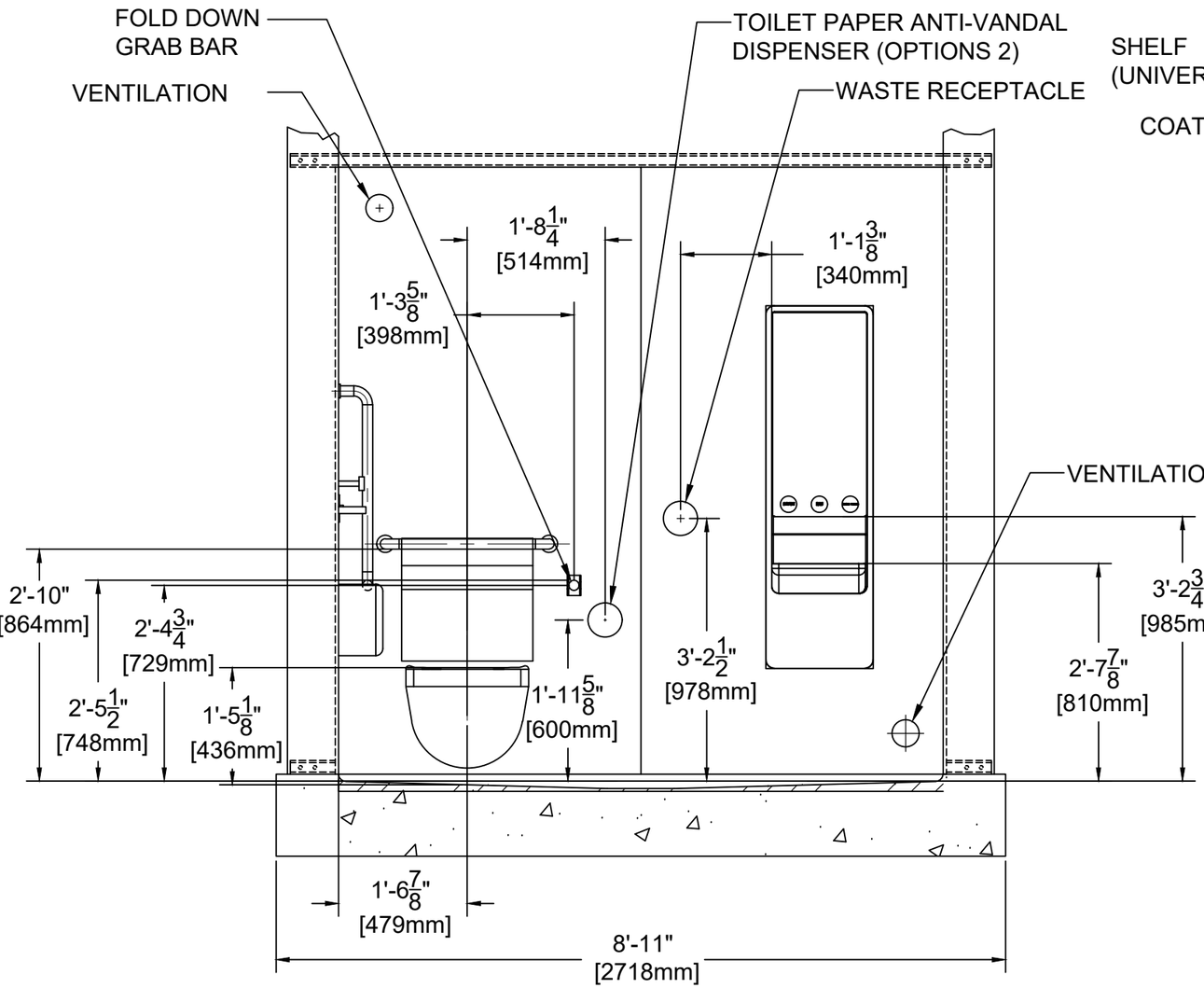
PEINT / PEINTURE : N/A

PAGE : 3 OF / DE 8

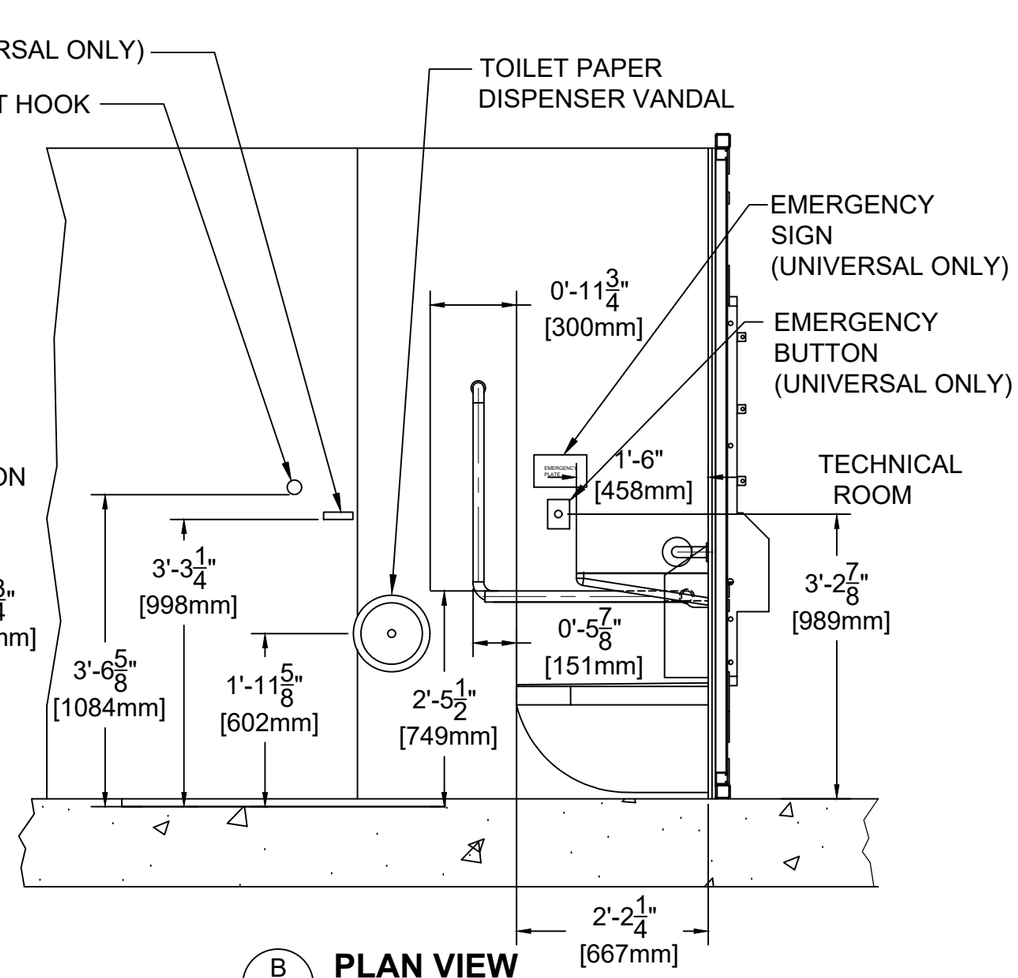
PROPRIETARY AND CONFIDENTIAL / EXCLUSIF ET CONFIDENTIEL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF URBEN BLU. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF URBEN BLU IS PROHIBITED.

LES INFORMATIONS CONTENUES DANS CE LE DESSIN EST LA PROPRIÉTÉ UNIQUE DE URBEN BLEU. QUELCONQUE REPRODUCTION PARTIELLE OU GLOBALE SANS L'AUTORISATION ÉCRITE DE URBEN BLEU EST INTERDIT.



A P3 **PLAN VIEW UNIVERSAL WASHROOM**



B P3 **PLAN VIEW**

PRELIMINARY

urbanblu
599 BOUL. CURÉ-BOIVIN,
BOISBRIAND, QC,
CANADA, J7G 2A8
TEL:(450) 437-8094
FAX:(450) 951-9181

TOLERANCES / TOLÉRANCES :
DIMENSIONS IN INCHES / DIMENSIONS EN POUCE
TOLERANCES / TOLÉRANCES :
FRACTIONAL / FRACTION : ± 1/16
ANGULAR / ANGULAIRE : ± 0.5°
BEND / PLI ± 0.020"
X ± 0.040"
X.X ± 0.020"
X.XX ± 0.010"
X.XXX ± 0.005"

CLIENT : XXXXXXXXXX

DRAWN BY / DESSINÉ PAR : S.ASSELIN

DATE : 2023-05-04

APPROVED BY / APPROUVÉ PAR : GUY THIBAULT

PROJECT / PROJET : SIMPLE UADA

DRAWING No / No DESSIN : UBXX-9100

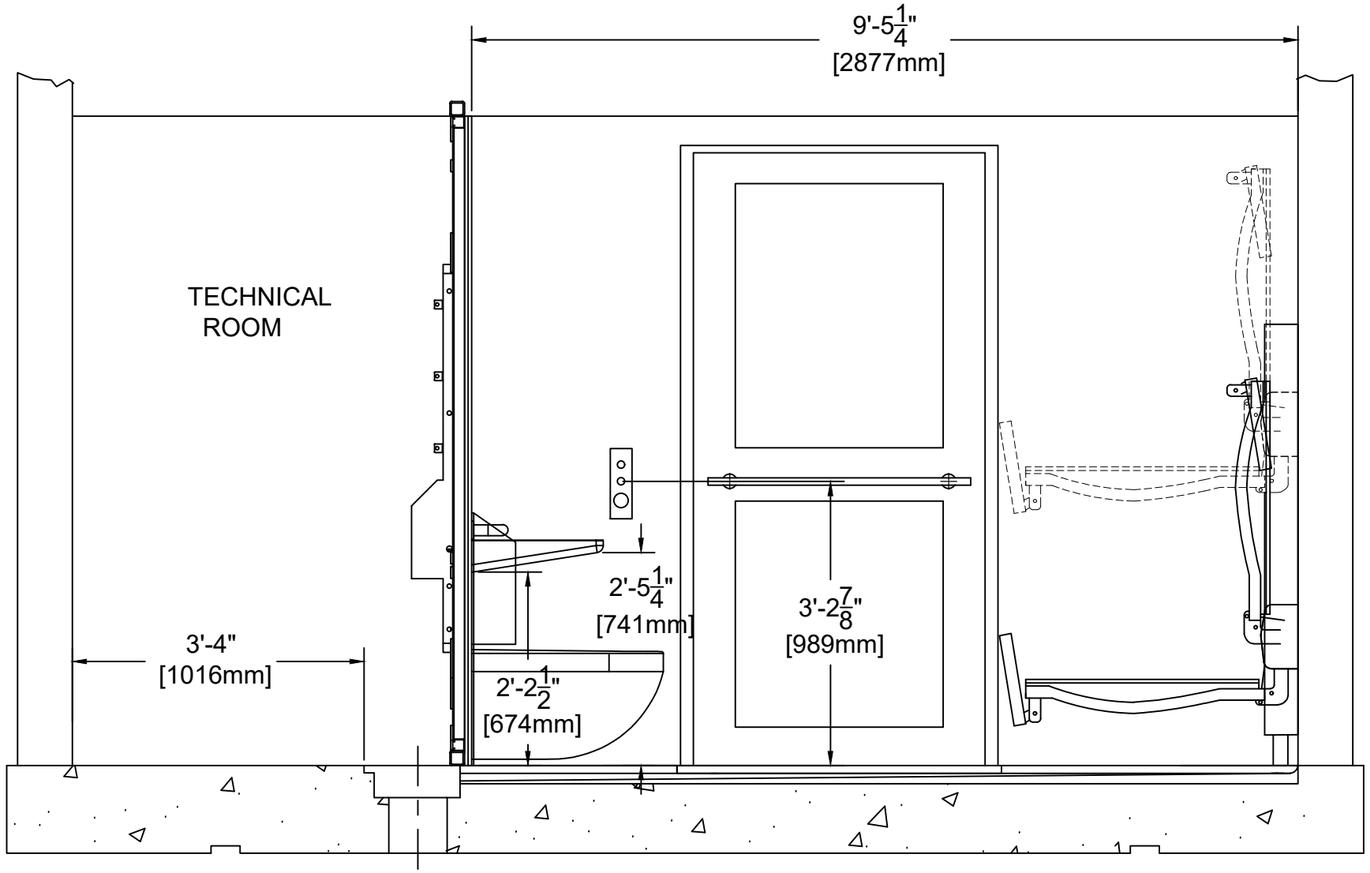
PROPRIETARY AND CONFIDENTIAL / EXCLUSIF ET CONFIDENTIEL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF URBEN BLU. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF URBEN BLU IS PROHIBITED.
LES INFORMATIONS CONTENUES DANS CE LE DESSIN EST LA PROPRIÉTÉ UNIQUE DE URBEN BLEU. QUELCONQUE REPRODUCTION PARTIELLE OU GLOBALE SANS L'AUTORISATION ÉCRITE DE URBEN BLEU EST INTERDIT.

MATERIAL / MATÉRIEL : N/A

FORMAT : B

REV : NR

PEINT / PEINTURE : N/A



DC P3

PLAN VIEW
UNIVERSAL WASHROOM

PRELIMINARY

urbanblu
599 BOUL. CURÉ-BOIVIN,
BOISBRIAND, QC,
CANADA, J7G 2A8
TEL:(450) 437-8094
FAX:(450) 951-9181

TOLERANCES / TOLÉRANCES :
DIMENSIONS IN INCHES / DIMENSIONS EN POUCE
TOLERANCES / TOLÉRANCES :
FRACTIONAL / FRACTION ±1/16
ANGULAR / ANGULAIRE : ±0.5°
BEND / PLI ±0.020"
X ±0.040"
X.X ±0.020"
X.XX ±0.010"
X.XXX ±0.005"

CLIENT : XXXXXXXXXX

DRAWN BY / DESSINÉ PAR : S.ASSELIN

DATE : 2023-05-04

APPROVED BY / APPROUVÉ PAR : GUY THIBAULT

PROJECT / PROJET : SIMPLE UADA

DRAWING No / No DESSIN : UBXX-9100

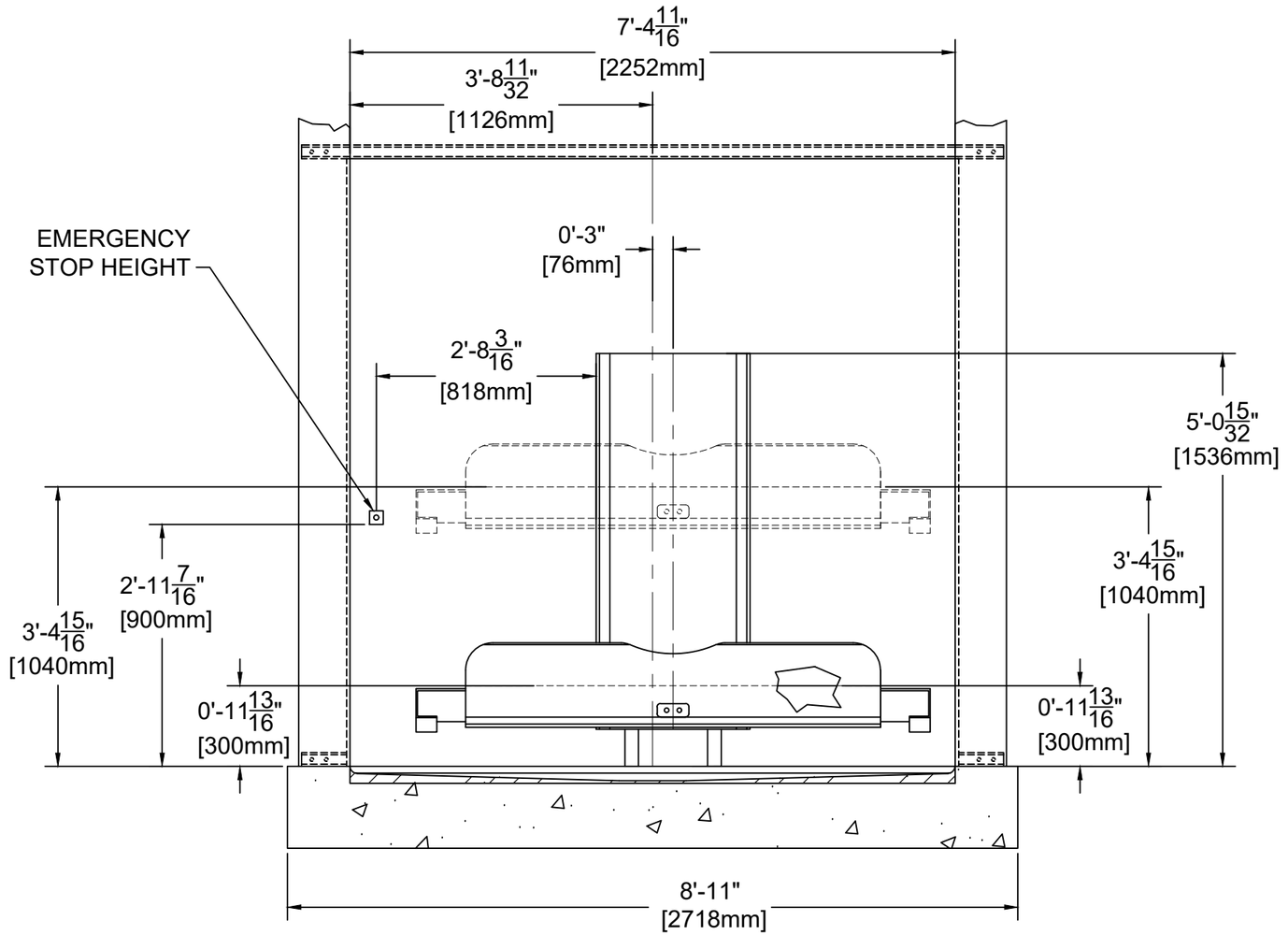
PROPRIETARY AND CONFIDENTIAL / EXCLUSIF ET CONFIDENTIEL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF URBEN BLU. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF URBEN BLU IS PROHIBITED.
LES INFORMATIONS CONTENUES DANS CE LE DESSIN EST LA PROPRIETÉ UNIQUE DE URBEN BLEU. QUELCONQUE REPRODUCTION PARTIELLE OU GLOBALE SANS L'AUTORISATION ÉCRITE DE URBEN BLEU EST INTERDIT.

MATERIAL / MATÉRIEL : N/A

FORMAT : B

REV : NR

PEINT / PEINTURE : N/A



D
P3

PLAN VIEW
UNIVERSAL WASHROOM

PRELIMINARY

urbanblu
599 BOUL. CURÉ-BOIVIN,
BOISBRIAND, QC,
CANADA, J7G 2A8
TEL:(450) 437-8094
FAX:(450) 951-9181

TOLERANCES / TOLÉRANCES :
DIMENSIONS IN INCHES /
DIMENSIONS EN POUCE
TOLERANCES / TOLÉRANCES :
FRACTIONAL / FRACTION :± 1/16
ANGULAR / ANGULAIRE : ±0.5°
BEND / PLI ±0.020"
X ±0.040"
X.X ±0.020"
X.XX ±0.010"
X.XXX ±0.005"

CLIENT : XXXXXXXXXX

DRAWN BY / DESSINÉ PAR : S.ASSELIN

DATE : 2023-05-04

APPROVED BY / APPROUVÉ PAR : GUY THIBAULT

PROJECT / PROJET : SIMPLE UADA

DRAWING No / No DESSIN : UBXX-9100

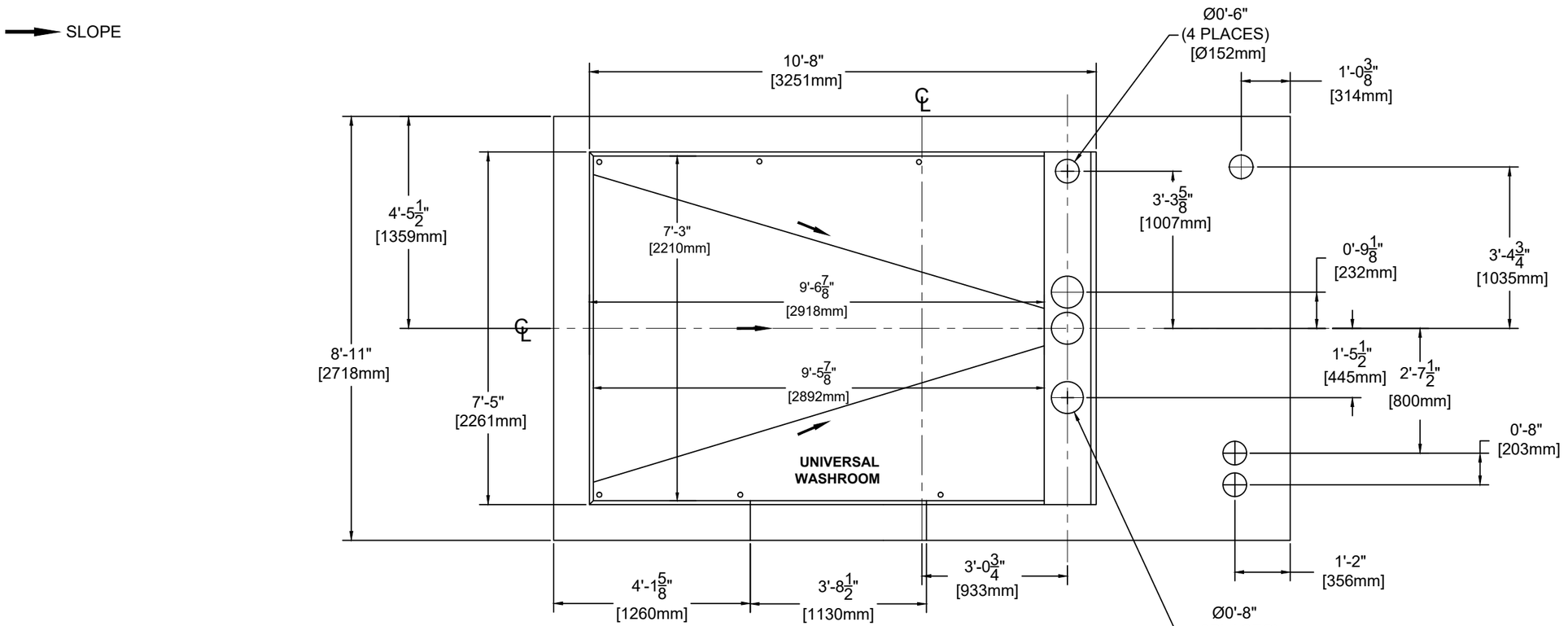
PROPRIETARY AND CONFIDENTIAL / EXCLUSIF ET CONFIDENTIEL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF URBEN BLU. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF URBEN BLU IS PROHIBITED.
LES INFORMATIONS CONTENUES DANS CE LE DESSIN EST LA PROPRIETÉ UNIQUE DE URBEN BLEU. QUELCONQUE REPRODUCTION PARTIELLE OU GLOBALE SANS L'AUTORISATION ÉCRITE DE URBEN BLEU EST INTERDIT.

MATERIAL / MATÉRIEL : N/A

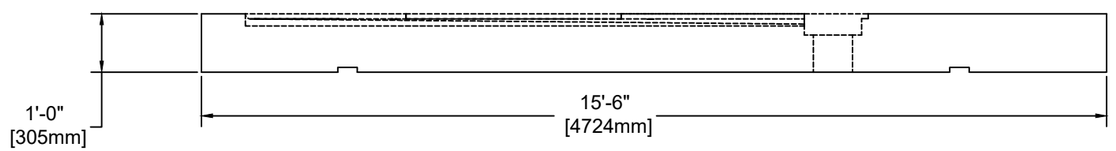
FORMAT : B

REV : NR

PEINT / PEINTURE : N/A



PLAN VIEW



ELEVATION

PRELIMINARY

urban blu
599 BOULEVARD DU CURÉ-BOIVIN
BOISBRIAND, QUÉBEC J7G 2A8
TEL:(450) 437-8094
FAX:(450) 951-9181

TOLERANCES / TOLÉRANCES :
DIMENSIONS IN INCHES /
DIMENSIONS EN POUCE
TOLERANCES / TOLÉRANCES :
FRACTIONAL / FRACTION : ± 1/16
ANGULAR / ANGULAIRE : ± 0.5°
BEND / PLI ± 0.020"
X ± 0.040"
X.X ± 0.020"
X.XX ± 0.010"
X.XXX ± 0.005"

CLIENT : XXXXXXXXXX

DRAWN BY / DESSINÉ PAR : S.ASSELIN

DATE : 2023-05-04

APPROVED BY / APPROUVÉ PAR : GUY THIBAULT

PROJECT / PROJET : SIMPLE UADA

DRAWING No / No DESSIN : UBXX-9100

PROPRIETARY AND CONFIDENTIAL / EXCLUSIF ET CONFIDENTIEL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF URBEN BLU. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF URBEN BLU IS PROHIBITED.

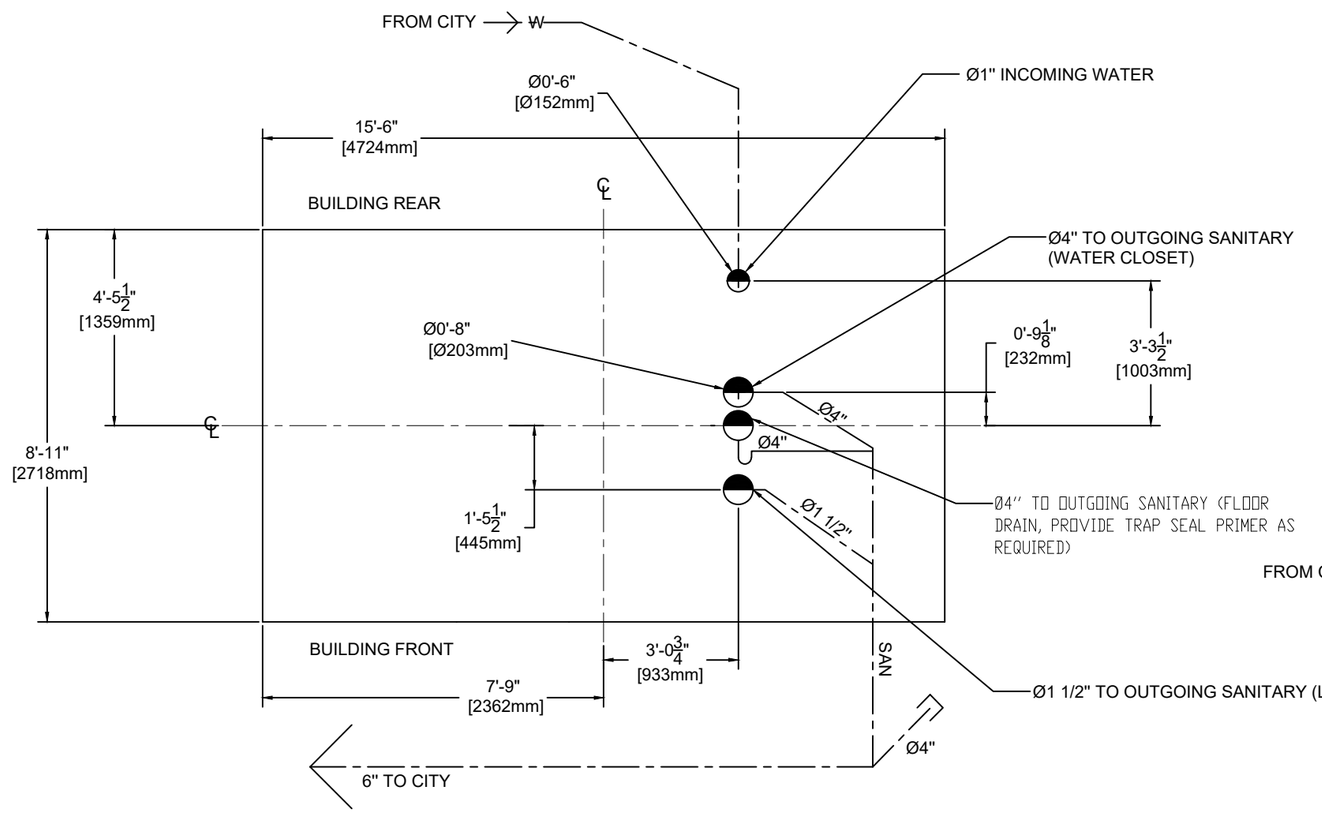
LES INFORMATIONS CONTENUES DANS CE LE DESSIN EST LA PROPRIÉTÉ UNIQUE DE URBEN BLEU. QUELCONQUE REPRODUCTION PARTIELLE OU GLOBALE SANS L'AUTORISATION ÉCRITE DE URBEN BLEU EST INTERDIT.

MATERIAL / MATÉRIEL : N/A

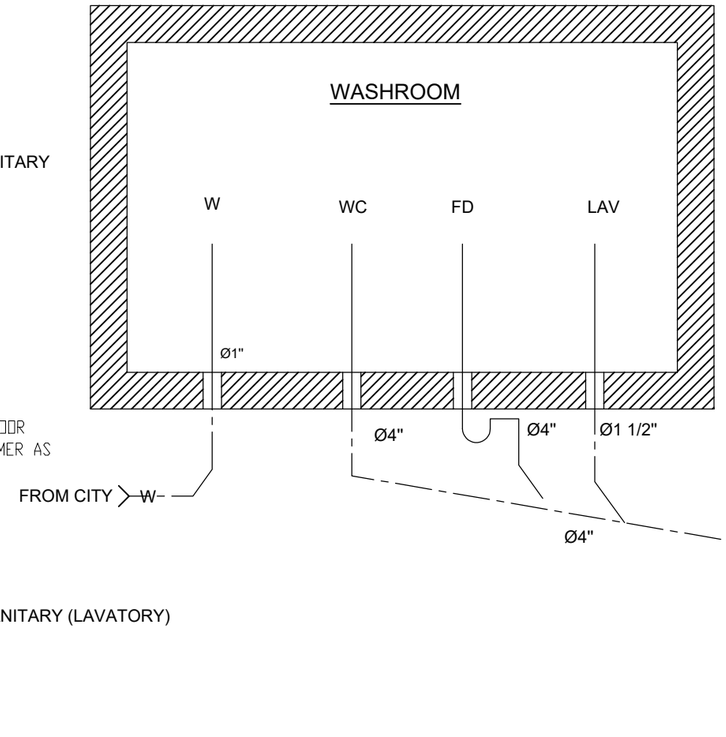
FORMAT : B

REV : NR

PEINT / PEINTURE : N/A



PLUMBING PLAN BELOW GRADE



LEGEND

— — —	NEW SANITARY DRAIN BLOW GRADE
— — —	NEW SANITARY SERVICE BLOW GRADE
	SANITARY TRAP
	PIPE SECTION
WC	WATER CLOSET
LAV	LAVATORY
FD	FLOOR DRAIN
CO	CLEAN OUT
W	CLEAN WATER

NOTE : READ THESE DRAWINGS IN CONJUNCTION WITH ALL THE REFERENCE DRAWINGS LISTED

PRELIMINARY

urbenblu
599 BOULEVARD DU CURÉ-BOIVIN
BOISBRIAND, QUÉBEC J7G 2A8
TEL:(450) 437-8094
FAX:(450) 951-9181

TOLERANCES / TOLÉRANCES :
DIMENSIONS IN INCHES /
DIMENSIONS EN POUCE
TOLERANCES / TOLÉRANCES :
FRACTIONAL / FRACTION :± 1/16
ANGULAR / ANGULAIRE : ±0.5°
BEND / PLI ±0.020"
X ±0.040"
X.X ±0.020"
X.XX ±0.010"
X.XXX ±0.005"

CLIENT :
XXXXXXXX

DRAWN BY / DESSINÉ PAR :
S.ASSELIN

DATE : 2023-05-04

APPROVED BY / APPROUVÉ PAR :
GUY THIBAULT

PROJECT / PROJET :
SIMPLE UADA

DRAWING No / No DESSIN :
UBXX-9100

MATERIAL / MATÉRIEL :
N/A

FORMAT :
B

REV :
NR

PEINT / PEINTURE :
N/A

PAGE :
8 OF / DE 8

PROPRIETARY AND CONFIDENTIAL / EXCLUSIF ET CONFIDENTIEL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF URBEN BLU. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF URBEN BLU IS PROHIBITED.

LES INFORMATIONS CONTENUES DANS CE LE DESSIN EST LA PROPRIETE UNIQUE DE URBEN BLEU. QUELCONQUE REPRODUCTION PARTIELLE OU GLOBALE SANS L'AUTORISATION ÉCRITE DE URBEN BLEU EST INTERDIT.

COUNTY OF UNION
BOARD OF COUNTY COMMISSIONERS

PLAYGROUND AT WARINANCO PARK
CITY OF ELIZABETH, COUNTY OF UNION, NEW JERSEY

BA#10-2026; UNION COUNTY PROJECT #2024-031

BLOCK 7601, PART OF LOT 1
ELIZABETH

UNION COUNTY, NEW JERSEY
APRIL 2026

INDEX OF SHEETS		
SHT. No.	DESCRIPTION	LATEST REVISION
1.0	COVER SHEET	
1.1	GENERAL NOTES, QUANTITIES AND LEGENDS	
2.0	SITE DEMOLITION PLAN	
3.0	LAYOUT PLAN	
4.0	GRADING AND DRAINAGE PLAN	
5.0	UTILITIES PLAN	
6.0	SOIL EROSION AND SEDIMENT CONTROL PLAN	
6.1	SOIL EROSION AND SEDIMENT CONTROL DETAILS AND NOTES	
7.0-7.1	CONSTRUCTION DETAILS	
8.0	LANDSCAPE PLAN	
9.0	FURNISHING PLAN	
9.1-9.2	FURNISHING DETAILS	

THE 2019 NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ALL AMENDMENTS, INCLUDING THE 2019 SPECIAL PROVISIONS FOR LOCAL AID PROJECTS, THERETO OR MODIFIED HEREIN SHALL GOVERN THE CONSTRUCTION OF THIS PROJECT.

GOVERNING BODY

COMMISSIONERS	JOSEPH C. BODEK, CHAIRWOMAN REBECCA WILLIAMS, VICE CHAIRMAN JAMES E. BAKER, JR., COMMISSIONER MICHELE S. DELISFORT, COMMISSIONER LOURDES M. LEON, COMMISSIONER ALEXANDER MIRABELLA, COMMISSIONER STANLEY NERON, COMMISSIONER KIMBERLY PALMIERI-MOUDED, COMMISSIONER REBECCA WILLIAMS, COMMISSIONER JOSEPH SIGNORELLO, III, COMMISIONER
CLERK OF THE BOARD	JAMES E. PELLETTIERE, RMC
COUNTY MANAGER	EDWARD T. OATMAN
DEPARTMENT OF ENGINEERING PUBLIC WORKS AND FACILITIES MANAGEMENT	JOSEPH J. POLICAY, JR., CPWM, DIRECTOR
COUNTY ENGINEER	RICARDO MATIAS, P.E., C.M.E, C.F.M.

LOCATION MAP
N.T.S
REFERENCE SOURCE:
USGS QUADRANGLES 2023 - ROSELLE & ELIZABETH

PUBLIC UTILITIES

ELECTRIC	PUBLIC SERVICE ELECTRIC & GAS COMPANY 427 WESTON CANAL ROAD SOMERSET, NJ 08873 ATTN: STEPHEN PARKER
GAS	ELIZABETHTOWN GAS COMPANY 520 GREEN LANE UNION, NJ 07083 ATTN: JOHN P. GRUENLING, P.E OR EVELYN F. GALANTE
WATER	NEW JERSEY AMERICAN WATER 1341 NORTH AVENUE PLAINFIELD, NJ 07064 ATTN: MICHAEL BANGE
TELEPHONE	VERIZON, INC. 445 GEORGES ROAD NORTH BRUNSWICK, NJ 08902 ATTN: ROBERT P. OYCO
CABLE	COMCAST CABLE OF NEW JERSEY 800 RAHWAY AVENUE UNION, NJ 07083 ATTN: GEORGE PALYCA
SEWER	CITY OF ELIZABETH DEPT. OF PUBLIC WORKS 50 WINFIELD SCOTT PLAZA ELIZABETH, NJ 07201 ATTN: JOHN F. PAPETTI JR. TEL: (908) 820-4101

LOCATION OF UTILITIES SHOWN ON THE PLANS ARE PLOTTED FROM AVAILABLE DATA ON FILE WITH THE UTILITY COMPANIES AND ARE NOT WARRANTED AS TO EXACTNESS. CONTRACTOR IS TO DETERMINE EXACT LOCATION AND DEPTH OF UTILITIES AT ALL CROSSINGS PRIOR TO CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

Colliers Engineering & Design
www.colliersengineering.com

Copyright © 2026, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS
FOR
PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design
HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	MJU	JJR/NV

PROJECT NUMBER: 24009762G
DRAWING NAME: C-COVER

SHEET TITLE: COVER SHEET

SHEET NUMBER: 1.0

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

2024\24009762G\Engineering\Site Plans\C-COVER.dwg\C-1.0-COVER By: JUSTIN.ANDERSEN

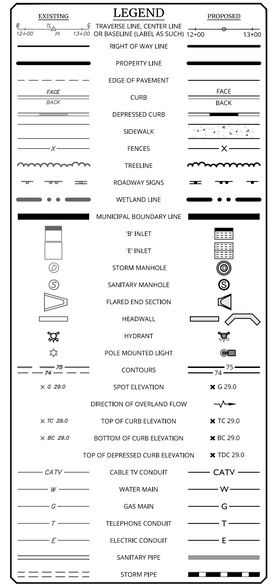
GENERAL NOTES

1. EXISTING CONDITIONS CONTAINED HEREIN ARE BASED ON A PLAN TITLED "PARTIAL TOPOGRAPHIC SURVEY" FOR PLAYGROUND AT RAHWAY RIVER PARK FOR UNION COUNTY, NEW JERSEY, BLOCK 179.01 AND A PART OF LOT 48, PREPARED BY COLLIERS ENGINEERING & DESIGN, DATED OCTOBER 24, 2024.
2. EXISTING SITE TOPOGRAPHIC INFORMATION AS SHOWN HEREON IS BASED UPON NAVD 88 (NORTH AMERICAN VERTICAL DATUM OF 1988) PER GPS OBSERVATION BY COLLIERS ENGINEERING & DESIGN, INC., UTILIZING KEYNET GPS.
3. COLLIERS ENGINEERING & DESIGN MAKES NO GUARANTEES THAT ALL UNDERGROUND UTILITIES IN THIS AREA ARE SHOWN HEREON. LOCATIONS OF SUCH UTILITIES SHOWN ARE APPROXIMATE. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/STRUCTURES. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY HAVE BEEN ENCOUNTERED, THE CONTRACTOR SHALL HAVE ALL UNDERGROUND UTILITIES FIELD-VERIFIED BY THE PROPER UTILITY COMPANIES BEFORE ANY CONSTRUCTION BEGINS.
4. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY COLLIERS ENGINEERING & DESIGN, IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK WOULD BE INHIBITED BY ANY OTHER SITE FEATURES.
5. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
6. CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES AS NECESSARY TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT TO REMAIN, AND TO PROVIDE A SAFE WORK AREA.
7. THE CONTRACTOR IS RESPONSIBLE TO CLEAR ANY AND ALL ITEMS REQUIRED TO BUILD THE PROJECT AS SHOWN ON THE PLANS. THE NOTES SHOWN ON THE PLANS MAY NOT BE ALL-INCLUSIVE. ANY ITEMS NOT SPECIFICALLY SHOWN FOR REMOVAL ON THE PLANS, BUT REQUIRED TO BUILD THE PROPOSED IMPROVEMENTS SHALL BE REMOVED AND RESET OR DISPOSED OF.
8. CONTRACTOR IS RESPONSIBLE FOR REPAIRING THE DAMAGE DONE TO ANY EXISTING ITEM DURING CONSTRUCTION SUCH AS BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. REPAIR SHALL BE EQUAL OR BETTER THAN EXISTING CONDITIONS. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION START.
9. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UTILITIES BY CONTACTING THE APPROPRIATE UTILITY COMPANIES AND CONTACTING THE NJ ONE-CALL SYSTEM (1-800-272-1000). THE LOCATION OF ALL EXISTING UTILITIES MAY NOT BE SHOWN ON THE PLANS.
10. DO NOT INTERRUPT EXISTING UTILITIES SERVING ADJACENT OCCUPIED OR OPERATING FACILITIES UNLESS AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
11. ALL OPERATIONS SHALL BE CONDUCTED SO AS TO PREVENT DAMAGE TO ADJACENT BUILDINGS, STRUCTURES, AND OTHER FACILITIES AND INJURY TO PERSONS, BOTH PEDESTRIAN AND WORKERS ALIKE.
12. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL MUNICIPAL/COUNTY/STATE REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, ETC. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN THE PRICE BID FOR "CLEARING SITE".
14. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS BY ALL OF THE PERMITTING AUTHORITIES.
15. THE OWNER/CONTRACTOR SHALL BE FAMILIAR WITH AND RESPONSIBLE FOR ANY/ALL CERTIFICATIONS, INSPECTIONS, ETC. REQUIRED BY ALL GOVERNING JURISDICTIONAL AGENCIES DURING AND AFTER CONSTRUCTION FOR SIGN-OFF AND CERTIFICATE OF OCCUPANCY ISSUANCE, INCLUDING BUT NOT LIMITED TO PROCUREMENT OF SERVICES, SCHEDULING OF FIELD OBSERVATIONS, AND COORDINATION WITH REPRESENTATIVES OF THE APPROPRIATE PARTIES.
16. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARD OF THE LOCAL GOVERNING AUTHORITY
17. SURVEY LAYOUT AND STAKEOUT SHALL BE PROVIDED BY THE CONTRACTOR FOR ALL IMPROVEMENTS. ALL WORK SHALL BE COMPLETED BY A NEW JERSEY LICENSED PROFESSIONAL LAND SURVEYOR AND ALL COSTS FOR SHALL BE INCLUDED IN THE VARIOUS ITEMS IN THE PROPOSAL. NO SEPARATE PAYMENT SHALL BE MADE FOR CONSTRUCTION LAYOUT.
18. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY COLLIERS ENGINEERING & DESIGN IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK WOULD BE INHIBITED BY ANY OTHER SITE FEATURES.
19. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. 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.
20. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL TOWN, COUNTY, STATE, AND FEDERAL LAW AND APPLICABLE CODES.
21. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
22. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS AS INDICATED IN SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR SPECIFICATIONS.
23. THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS/MEANS FOR COMPLETION OF THE WORK DEPICTED ON THESE PLANS NOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM THE SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING METHODS/ MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND NOTIFICATION OF OWNER AND ENGINEER OF RECORD WHEN A POTENTIAL CONFLICT IS IDENTIFIED.
24. THE ENGINEER IS NOT RESPONSIBLE FOR JOB SITE SAFETY, NOR HAVE THEY BEEN RETAINED FOR SUCH PURPOSES.
25. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THOSE NOTES CONTAINED THEREON, WITHOUT 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, ALL FINES OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ALL SUCH COSTS TO CORRECT ANY SUCH WORK AND FROM ALL SUCH FINES AND PENALTIES, COMPENSATION AND PUNITIVE DAMAGES AND COSTS OF ANY NATURE RESULTING THEREFROM.
26. THE CONTRACTOR IS RESPONSIBLE TO CLEAR ANY AND ALL ITEMS REQUIRED TO BUILD THE PROJECT AS SHOWN ON THE PLANS. THE NOTES SHOWN ON THE PLANS MAY NOT BE ALL-INCLUSIVE. ANY ITEMS NOT SPECIFICALLY SHOWN FOR REMOVAL ON THE PLANS, BUT REQUIRED TO BUILD THE PROPOSED IMPROVEMENTS SHALL BE REMOVED AND RESET OR DISPOSED OF.
27. DO NOT INTERRUPT EXISTING UTILITIES SERVING ADJACENT OCCUPIED OR OPERATING FACILITIES UNLESS AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
28. THE CONTRACTOR SHALL PROVIDE PROTECTION FOR THE GENERAL PUBLIC AND CONSTRUCTION WORKERS IN AND AROUND THE CONSTRUCTION AREAS, AND FOR THE ADJACENT PROPERTY AND PERSONS. ADEQUATE BARRIERS SHALL BE PROVIDED TO EXERCISE CONTROL OF SAFE INGRESS AND EGRESS AT ALL ROADWAY INTERSECTIONS. THE CONTRACTOR SHALL BARRICADE ALL UNSAFE OR INJURIOUS CONDITIONS.
29. ALL OPERATIONS SHALL BE CONDUCTED SO AS TO PREVENT DAMAGE TO ADJACENT BUILDINGS, STRUCTURES, AND OTHER FACILITIES AND INJURY TO PERSONS, BOTH PEDESTRIAN AND WORKERS ALIKE.
30. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING THE SITE TO A CLEAN, SAFE, AND PASSABLE CONDITION AT THE END OF EACH WORK DAY. NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR DAILY RESTORATION OF THE SITE. NO MATERIALS OR EQUIPMENT MAY BE STAGED IN THE WORK ZONE OVERNIGHT UNLESS SPECIFICALLY PERMITTED BY THE OWNER. A STAGING AREA MAY BE PROVIDED AT THE DISCRETION OF THE OWNER, THE LOCATION OF WHICH SHALL BE IDENTIFIED AT THE PRE-CONSTRUCTION MEETING.
31. THE CONTRACTOR SHALL MEET THE ELEVATION OF THE EXISTING PAVEMENT AND PATHWAYS AT THE LIMITS OF PROPOSED WORK.
32. ALL PROPOSED GRADES ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL GRADES , INLET ELEVATIONS, AND LOCATIONS IN THE FIELD PRIOR TO CONSTRUCTION.
33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING A SAFE ACCESS TO ALL HOMES AND BUSINESSES FOR PEDESTRIANS AND VEHICLES. IF ROAD AND/OR SIDEWALK CLOSURE IS REQUIRED TO COMPLETE THE IMPROVEMENTS, THE CONTRACTOR SHALL PROVIDE A DETOUR PLAN IN ACCORDANCE WITH MUTCD FOR REVIEW AND APPROVAL BY THE ENGINEER.
34. ALL NON-CONFORMING CURB RAMPS CONSTRUCTED BY THE CONTRACTOR SHALL BE REPLACED AS DIRECTED BY THE ENGINEER TO CONFORM WITH CURRENT ADA REQUIREMENTS AT NO ADDITIONAL COST TO THE OWNER.
35. EXCAVATIONS SHALL BE MADE SAFE IN ACCORDANCE WITH THE CURRENT REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) PURSUANT TO THE 1970 OCCUPATIONAL SAFETY AND HEALTH ACT.
36. THE TOPSOIL USED FOR THIS PROJECT SHALL BE IN STRICT CONFORMANCE TO THE PROJECT SPECIFICATIONS, ANY TOPSOIL NOT MEETING THE SPECIFICATIONS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
37. CONTRACTOR SHALL SUBMIT SEED BAG TICKETS TO THE ENGINEER FOR APPROVAL PRIOR TO PLACING SEED.
38. CONTRACTOR SHALL ESTABLISH A FULL STAND OR GRASS WITH NO BARE PATCHES, CRABGRASS, OR WEEDS.
39. NO SEPARATE PAYMENT WILL BE MADE FOR EXCAVATION, DEWATERING OR TRENCH RESTORATION REQUIRED TO INSTALL THE PIPES AND STRUCTURES SPECIFIED TO BE CONSTRUCTED. PAYMENT FOR EXCAVATION, DEWATERING, AND TRENCH RESTORATION SHALL BE INCLUDED IN THE LUMP SUM PAY ITEM "CLEARING SITE".
40. ALL PAVEMENT STRIPING, MARKINGS, REGULATORY AND WARNING SIGNS SHALL CONFORM WITH THE STANDARDS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
41. CONTRACTOR TO MAINTAIN ACCESS FOR PEDESTRIANS AND EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
42. THE 2019 NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ALL AMENDMENTS, INCLUDING THE 2019 SPECIAL PROVISIONS FOR LOCAL AID PROJECTS, THERETO OR MODIFIED HEREIN SHALL GOVERN THE CONSTRUCTION OF THIS PROJECT.
43. AFTER THE CONTRACTOR PROVIDES THE AS-BUILT FOR THE OWNER, NO SEPARATE PAYMENT WILL BE MADE FOR ANY ADDITIONAL CORRECTIVE MEASURES INCLUSIVE OF CONCRETE CURB OR COMBINATION CONCRETE CURB AND GUTTER THAT ARE DEEMED NECESSARY BY THE OWNER TO CORRECT THE GRADING TO BE AS PER THE CONTRACT PLANS. ALL COSTS SHALL BE INCLUDED IN THE VARIOUS ITEMS IN THE PROPOSAL.
44. CONTRACTOR TO EXERCISE CAUTION WHEN PERFORMING WORK ADJACENT TO EXISTING RETAINING WALLS AND LANDSCAPE STRUCTURES AND FEATURES. ANY RETAINING WALLS OR LANDSCAPE STRUCTURES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR IS ENCOURAGED TO TAKE PRE-CONSTRUCTION PHOTOGRAPHS TO AVOID INCONCLUSIVE DISPUTES DURING OR AFTER CONSTRUCTION.
45. CONTRACTOR SHALL NOT MILL IN EXCESS OF AREA TO BE PAVED WITHIN THE SAME DAY OF WORK.
46. CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE PATTERNS WHEN CONSTRUCTING OR OVERLAYING UNLESS OTHERWISE SHOWN OR DIRECTED BY THE ENGINEER. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY QUESTIONABLE DRAINAGE AREAS SO THAT FIELD ADJUSTMENTS CAN BE MADE TO ELIMINATE PONDING.
47. CONTRACTOR SHALL RESET ANY GAS AND WATER CURB VALVES AT NO ADDITIONAL COST TO THE OWNER. ALL MATERIAL AND LABOR SHALL BE PAID FOR THROUGH THE VARIOUS ITEMS IN THE PROPOSAL
48. CONTRACTOR IS RESPONSIBLE FOR COORDINATING BRINGING POWER TO ALL REQUIRED ENTITIES WITHIN THE LIMIT OF DISTURBANCE. EXISTING CONNECTIONS MAY NEED TO BE REROUTED, AND ALL IMPROVEMENTS ARE DEPICTED CONCEPTUALLY. CONTRACTOR SHALL PROVIDE A SIGNED AND SEALED ELECTRICAL PLAN SHOWING CONNECTIONS AND ROUTING OF POWER AND EXISTING UTILITIES FOR REVIEW AND APPROVAL.
49. LOCATIONS, QUANTITIES, AND SIZES OF ALL WIRING, CONDUITS, JUNCTION BOXES, PULL BOXES, METER CABINET, TRANSFORMERS, AS WELL AS LOCATIONS OF LIGHT POLES ARE DEPICTED CONCEPTUALLY. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THIS LAYOUT. THE CONTRACTOR SHALL PROVIDE AN ELECTRICAL LAYOUT AND CALCULATIONS, SIGNED AND SEALED BY AN ENGINEER LICENSED IN NEW JERSEY, FOR APPROVAL BY THE OWNER PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY COMPANY ON ALL REQUIRED AND PROPOSED LOADING INFORMATION, AMPAGE INFORMATION, VOLTAGE INFORMATION, ETC. EXACT LOCATIONS OF ALL ITEMS IN THE ELECTRICAL LAYOUT SHALL BE DETERMINED IN THE FIELD DURING CONSTRUCTION. THE ELECTRICAL LAYOUT IN THIS CONTRACT DOCUMENTS IS SCHEMATIC AND FOR INFORMATION ONLY.
50. CONTRACTOR IS REQUIRED TO COORDINATE WITH PSE&G ON ALL REQUIRED INFORMATION AND DESIGN COMPONENTS. ALL INFORMATION REQUIRED BY JCP&L AND MUSCO MUST BE PROVIDED BY THE CONTRACTOR'S LICENSED ELECTRICIAN TO JCP&L AND MUSCO ON BEHALF OF THE TOWNSHIP. EXISTING ELECTRICAL VOLTAGE, CAPACITY, ETC. IS NOT DOCUMENTED IN THESE DOCUMENTS AND WILL HAVE TO BE DETERMINED BY THE CONTRACTOR AND THEIR ELECTRICAL SUBCONTRACTOR. ALL EXISTING ELECTRICAL FEATURES NOT NEEDED FOR THE PROJECT IMPROVEMENTS SHALL BE REMOVED IN ACCORDANCE WITH THE APPROPRIATE CODE AND STANDARDS.

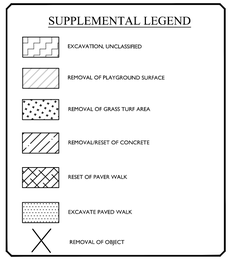
DISTRIBUTION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITIES
1	MOBILIZATION	LS	1
2	SOIL EROSION AND SEDIMENT CONTROL MEASURES	LS	1
3	CLEARING SITE	LS	1
4	EXCAVATION UNCLASSIFIED, BORROW EXCAVATION, AND GRADING	LS	1
5	3/4" CLEAN STONE	CY	444
6	HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK	SY	88
7	1" X 12" PERF. HIGH DENSITY POLYETHYLENE PIPE	LF	854
8	8" PERF. HIGH DENSITY POLYETHYLENE PIPE	LF	230
9	FILTER FABRIC, NON WOVEN GEOTEXTILE	SY	1,907
10	8" CLEANOUT	UN	2
11	10" PVC PIPE	LF	13
12	YARD INLET	UN	1
13	RECONSTRUCTED INLET, TYPE 'A', USING EXISTING CASTING	UN	1
14	RECONSTRUCTED MANHOLE, USING EXISTING CASTING	UN	1
15	4' HIGH ALUMINUM PICKET FENCE	LF	527
16	4' HIGH ALUMINUM SINGLE SELF CLOSING GATE, BLACK	UN	1
17	4' HIGH ALUMINUM DOUBLE SELF CLOSING GATE, BLACK	UN	2
18	CONCRETE SIDEWALK, 4" THICK	SY	217
19	CONCRETE PAD, REINFORCED, 6" THICK	SY	13
20	12" X 15" X 18" FLUSH CONCRETE CURB	LF	566
21	RESET PAVER WALK	SY	104
22	PARK BENCH	UN	16
23	POURED-IN-PLACE PLAYGROUND SURFACE	SF	17,164
24	RELOCATION OF EXISTING PARK SIGN BOARD & COMMUNICATION BOARD	LS	1
25	RELOCATION OF EXISTING TREE SWING SET	LS	1
26	RELOCATION OF EXISTING PLAYGROUND EQUIPMENT	LS	1
27	RELOCATION OF EXISTING GRILL AND PICNIC TABLE	LS	1
28	HARMONIC CHIMES (SET OF 7)	UN	1
29	CANTATA CHIMES	UN	1
30	CONCERT TRIO	UN	1
31	ROXALL SEE SAW	UN	1
32	SENSORY COVER CLIMBER - SQUARE	UN	1
33	INCLUSIVE WHIRL - NATURAL	UN	1
34	ROCKIN ROBIN	UN	1
35	MODERN CITY M SERIES 2	UN	1
36	SHADE 10' CANTILEVER UMBRELLA	UN	1
37	SWING SEATS - SET OF 8 - BELT SEATS (4), ADAPTIVE SEAT (1), 5-12 ZERO-G CHAIR (1), TOT SEATS (2)	UN	1
38	FOUR BAY SWING SHADE	UN	1
39	CUSTOM POWERSCAPE 2-5 UNIT	UN	1
40	CUSTOM POWERSCAPE 5-12 UNIT	UN	1
41	PLAYGROUND INSTALLATION	LS	1
42	GREEN ACRES SIGN	UN	1
43	SITE UTILITY IMPROVEMENTS - WATER SITE WORK	LS	1
44	SITE UTILITY IMPROVEMENTS - SANITARY SITE WORK	LS	1
45	SITE UTILITY IMPROVEMENTS - ELECTRICAL SITE WORK	LS	1
46	SITE UTILITY IMPROVEMENTS - BATHROOM SITE WORK	LS	1
47	BASIC SINGLE RESTROOM BUILDING - NON SELF CLEANING	LS	1
48	TOPSOIL SPREADING, 5" THICK	SY	1,725
49	FERTILIZING AND SEEDING, TYPE A-4	SY	1,725
50	STRAW MULCHING	SY	1,725
51	MISCELLANOUS ITEMS (IF & WHERE DIRECTED)	ALL	1
A1	BASIC SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE - NON SELF CLEANING	LS	1
A2	DEDUCTION OF ITEM 47	LS	-1
B1	SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE AND EXTRA STORAGE ROOM - NON SELF CLEANING	LS	1
B2	DEDUCTION OF ITEM 47	LS	-1
C1	SINGLE RESTROOM BUILDING WITH ADULT CHANGING TABLE AND EXTRA STORAGE ROOM - SELF CLEANING	LS	1
C2	DEDUCTION OF ITEM 47	LS	-1

LEGEND



SUPPLEMENTAL LEGEND



Colliers Engineering & Design
www.colliersengineering.com

Copyright © 2026, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design
HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	MJU	JJR/NV

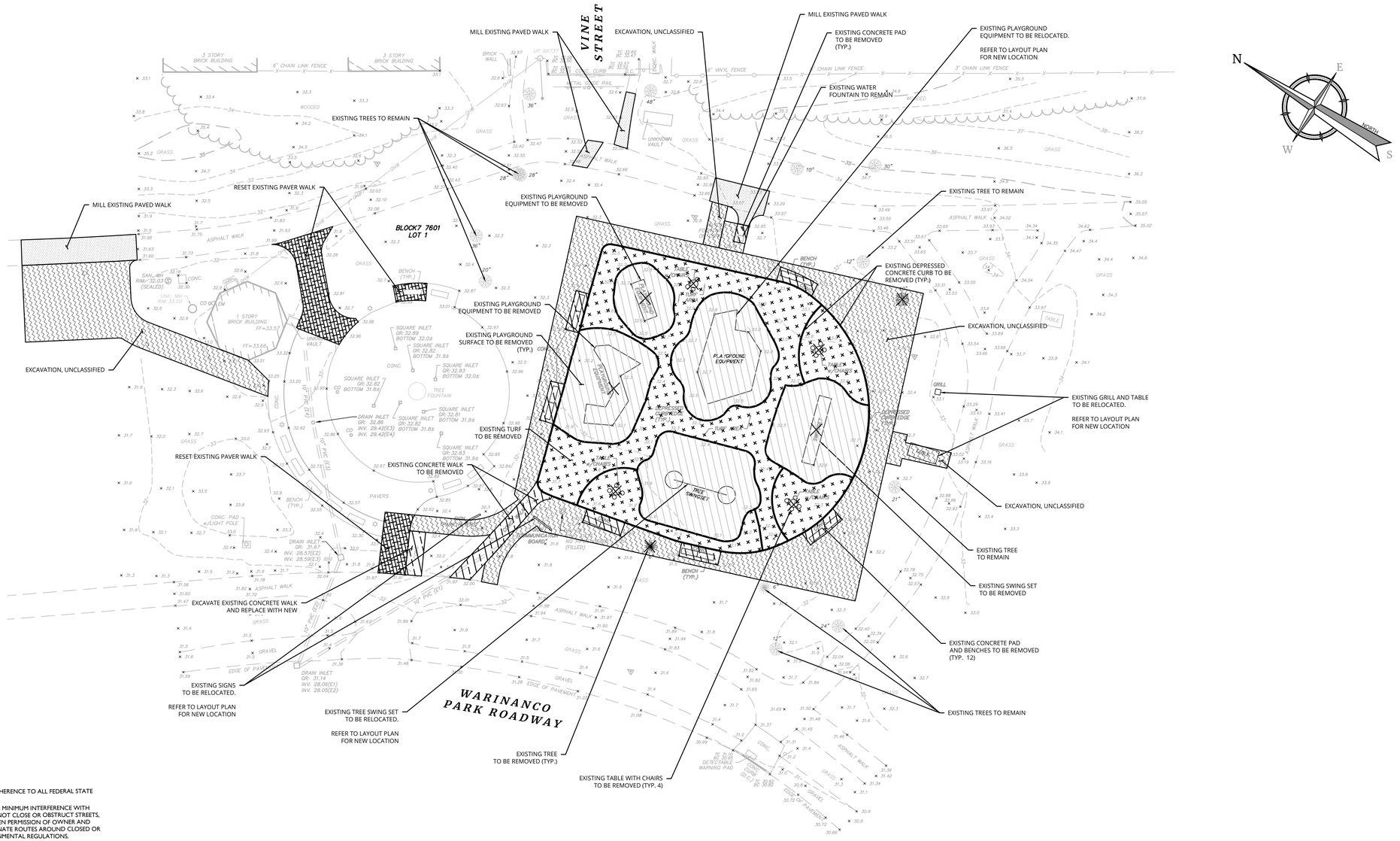
PROJECT NUMBER: 24009762G
DRAWING NAME: C-CVER

SHEET TITLE: GENERAL NOTES, QUANTITIES AND LEGENDS

SHEET NUMBER: C-1.1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

2024\24009762G\Engineering\Site Plans\C-CVER.dwg|C1.1-NOTES By: JUSTIN.ANDERSEN



DEMOLITION NOTES

ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN STRICT ADHERENCE TO ALL FEDERAL STATE AND LOCAL REGULATIONS.

1. CONDUCT DEMOLITION SERVICES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER OCCUPIED FACILITIES WITHOUT PRIOR WRITTEN PERMISSION OF OWNER AND ANY APPLICABLE GOVERNMENTAL AUTHORITIES. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS, IF REQUIRED BY APPLICABLE GOVERNMENTAL REGULATIONS.
2. USE WATERING, TEMPORARY ENCLOSURES, AND OTHER SUITABLE METHODS, AS NECESSARY TO LIMIT THE AMOUNT OF DUST AND DIRT RISING AND SCATTERING IN THE AIR. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. RETURN ALL ADJACENT AREAS TO THE CONDITIONS EXISTING PRIOR TO THE START OF WORK.
3. ACCOMPLISH AND PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE UNAUTHORIZED ENTRY OF PERSONS AT ANY TIME.
4. COMPLETELY FILL BELOW GRADE AREAS AND VOIDS RESULTING FROM THE DEMOLITION OF STRUCTURES AND FOUNDATIONS WITH SOIL MATERIALS CONSISTING OF STONE, GRAVEL, AND SAND, FREE FROM DEBRIS, TRASH, FROZEN MATERIALS, ROOTS, AND OTHER ORGANIC MATTER. STONES USED WILL NOT BE LARGER THAN 6 INCHES IN DIMENSION. MATERIAL FROM DEMOLITION MAY NOT BE USED AS FILL. PRIOR TO PLACEMENT OF FILL MATERIALS, UNDERTAKE ALL NECESSARY ACTION IN ORDER TO ENSURE THAT AREAS TO BE FILLED ARE FREE OF STANDING WATER, FROST, FROZEN MATERIAL, TRASH, AND DEBRIS. PLACE FILL MATERIALS IN HORIZONTAL LAYERS NOT EXCEEDING 6 INCHES IN LOOSE DEPTH AND COMPACT EACH LAYER AT PLACEMENT TO 95% OPTIMUM DENSITY. GRADE THE SURFACE TO MEET ADJACENT CONTOURS AND TO PROVIDE SURFACE DRAINAGE.
5. REMOVE FROM THE DESIGNATED SITE, AT THE EARLIEST POSSIBLE TIME, ALL DEBRIS, RUBBISH, SALVAGEABLE ITEMS, HAZARDOUS, AND COMBUSTIBLE SERVICES. REMOVED MATERIALS MAY NOT BE STORED, SOLD, OR BURNED ON THE SITE. REMOVAL OF HAZARDOUS AND COMBUSTIBLE MATERIALS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PROCEDURES AS AUTHORIZED BY THE FIRE DEPARTMENT OR OTHER APPROPRIATE REGULATORY AGENCIES AND AUTHORITIES.
6. BEFORE THE COMMENCEMENT OF THE DESIGNATED DEMOLITION, MARK FOR POSITION ALL UTILITIES AND PROTECT ALL ACTIVE LINES. CLEARLY IDENTIFY BEFORE THE COMMENCEMENT OF DEMOLITION SERVICES THE REQUIRED INTERRUPTION OF ACTIVE SYSTEMS THAT MAY AFFECT OTHER PARTIES, AND NOTIFY ALL APPLICABLE UTILITY COMPANIES TO ENSURE THE CONTINUATION OF SERVICE.
7. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THAT ALL PROCEDURES ARE TO BE IN ACCORDANCE WITH STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS NECESSARY.
8. THE ITEM CLEARING SITE SHALL ALSO INCLUDE THE REMOVAL OF ALL ROOTS, UNDERGROWTH, DEAD TREES, STUMPS, GRASS, ROOT MAT, AND VEGETATION NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS.
9. THE ITEM "RELOCATION OF EXISTING PARK SIGNS" SHALL INCLUDE EXCAVATION, LABOR, FOUNDATIONS, RE-INSTALLATION AND ANY OTHER RELATED ITEMS RELATED TO THE RELOCATION OF THE EXISTING PARK SIGNS MARKED ON THE PLANS.
10. THE ITEM "RELOCATION OF EXISTING TREE SWING SET" SHALL INCLUDE EXCAVATION, LABOR, FOUNDATIONS, RE-INSTALLATION, TEMPORARY PLACEMENT OF EQUIPMENT, AND ANY OTHER RELATED ITEMS REGARDING THE RELOCATION OF THE EXISTING SWING SET MARKED ON THE PLANS.
11. THE ITEM "RELOCATION OF EXISTING PLAYGROUND EQUIPMENT" SHALL INCLUDE EXCAVATION, LABOR, FOUNDATIONS, TEMPORARY PLACEMENT OF EQUIPMENT, RE-INSTALLATION AND ANY OTHER RELATED ITEMS REGARDING THE RELOCATION OF THE EXISTING PLAYGROUND EQUIPMENT MARKED ON THE PLANS.
12. THE ITEM "RELOCATION OF EXISTING GRILL AND PICNIC TABLE" SHALL INCLUDE EXCAVATION, LABOR, FOUNDATIONS, RE-INSTALLATION AND ANY OTHER RELATED ITEMS REGARDING THE RELOCATION OF THE EXISTING GRILL AND PICNIC TABLE MARKED ON THE PLANS.
13. COORDINATION FOR THE REMOVAL/SALVAGE OF PLAYGROUND EQUIPMENT & BENCHES IS TO BE COORDINATED BETWEEN THE CONTRACTOR AND THE COUNTY PRIOR TO DEMOLITION. ALL COORDINATION/LABOR/MATERIALS ASSOCIATED WITH IT SHALL BE PAID FOR IN CLEARING SITE PAY ITEM.

SUPPLEMENTAL LEGEND

- EXCAVATION, UNCLASSIFIED
- REMOVAL OF PLAYGROUND SURFACE
- REMOVAL OF GRASS TURF AREA
- REMOVAL/RESET OF CONCRETE
- RESET OF PAVER WALK
- EXCAVATE PAVED WALK
- REMOVAL OF OBJECT

20 0 20 40

SCALE : 1" = 20'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Colliers Engineering & Design

www.colliersengineering.com

Copyright © 2025. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design

HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950

COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

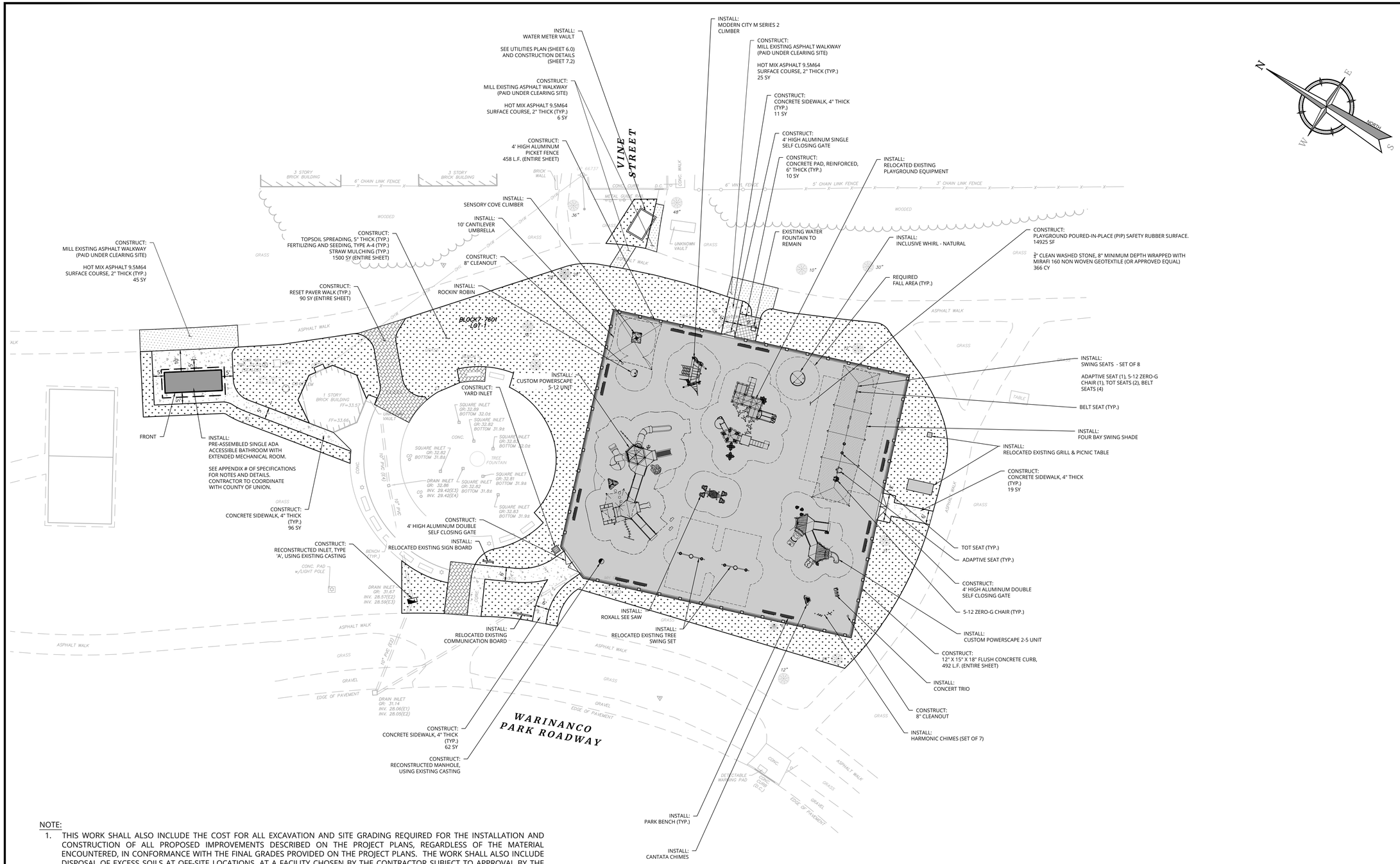
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	MJU	JJR/NV

PROJECT NUMBER: 24009762G
DRAWING NAME: C-DEMO

SHEET TITLE: SITE DEMOLITION PLAN

SHEET NUMBER: 2.0

2024\24009762G\Engineering\Site Plans\C-DEMO.dwg|C-2.0-DEMOLITION By: JUSTIN.ANDERSEN



NOTE:

1. THIS WORK SHALL ALSO INCLUDE THE COST FOR ALL EXCAVATION AND SITE GRADING REQUIRED FOR THE INSTALLATION AND CONSTRUCTION OF ALL PROPOSED IMPROVEMENTS DESCRIBED ON THE PROJECT PLANS, REGARDLESS OF THE MATERIAL ENCOUNTERED, IN CONFORMANCE WITH THE FINAL GRADES PROVIDED ON THE PROJECT PLANS. THE WORK SHALL ALSO INCLUDE DISPOSAL OF EXCESS SOILS AT OFF-SITE LOCATIONS. AT A FACILITY CHOSEN BY THE CONTRACTOR SUBJECT TO APPROVAL BY THE OWNER. THE COST OF LOADING, TRANSPORT, AND TIPPING FEE IF ANY IS DEEMED TO BE INCLUDED IN THE VARIOUS ITEMS IN THE PROPOSAL. THE WORK SHALL ALSO INCLUDE IMPORT OF CLEAN FILL AS NEEDED TO DEVELOP THE PROPOSED IMPROVEMENTS. THE COST OF LOADING, TRANSPORT, AND TIPPING FEE IF ANY IS DEEMED TO BE INCLUDED IN THE VARIOUS ITEMS IN THE PROPOSAL.
2. CONTRACTOR'S BID COST IS TO BE BASED ON THE BASIS OF DESIGN PRODUCTS AND STANDARDS NOTED IN THE CONTRACT DOCUMENTS. CONTRACTOR SHALL NOT SUBMIT BID BASED ON ANY ANTICIPATED SUBSTITUTION REQUESTS. ANY SUBSTITUTION REQUESTS OR REQUESTS FOR CONSIDERATION OF AS EQUAL PRODUCTS WILL ONLY BE EVALUATED WITH A REQUISITE VALUE ENGINEERING PROPOSAL FOR REVIEW AND APPROVAL BY THE ENGINEER."
3. CONTRACTOR'S BID COST IS TO BE BASED ON THE BASIS OF DESIGN PRODUCTS AND STANDARDS NOTED IN THE CONTRACT DOCUMENTS. CONTRACTOR SHALL NOT SUBMIT BID BASED ON ANY ANTICIPATED SUBSTITUTION REQUESTS. ANY SUBSTITUTION REQUESTS OR REQUESTS FOR CONSIDERATION OF AS EQUAL PRODUCTS WILL ONLY BE EVALUATED WITH A REQUISITE VALUE ENGINEERING PROPOSAL FOR REVIEW AND APPROVAL BY THE ENGINEER.
4. CONTRACTOR SHALL JET, CLEAN AND CONFIRM CONDITION AND LOCATION/DIRECTION SIZE OF SYSTEM UPSTREAM PRIOR TO CONSTRUCTION OF PARK - PAID FOR THROUGH CLEARING SITE.
5. MANHOLES & ALL CLEANOUTS ON POUR IN PLACE SURFACE SHALL HAVE AN ACCESS RING TO ENSURE STEEL RIM IS NOT EXPOSED. SHALL BE PROTECTED AND CAPPED BY A SECTION OF REMOVABLE POUR IN PLACE SURFACE.
6. REFER TO LANDSCAPE PLANS FOR ADDITIONAL DETAIL AND NOTES ON PAVERS, FENCING, FURNISHING, AND PLANTINGS.
7. GREEN ACRES SIGN SHALL BE MOUNTED AND VISIBLE DURING CONSTRUCTION.
8. PARK BENCHES SHALL BE PERMANENTLY INSTALLED WITH CONCRETE FOOTINGS AND NOT BE MOVABLE.

Colliers
Engineering & Design
www.colliersengineering.com
Copyright © 2026. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.
Doing Business as MASER CONSULTING
PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS
VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design
HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	MJU	JJR/NV

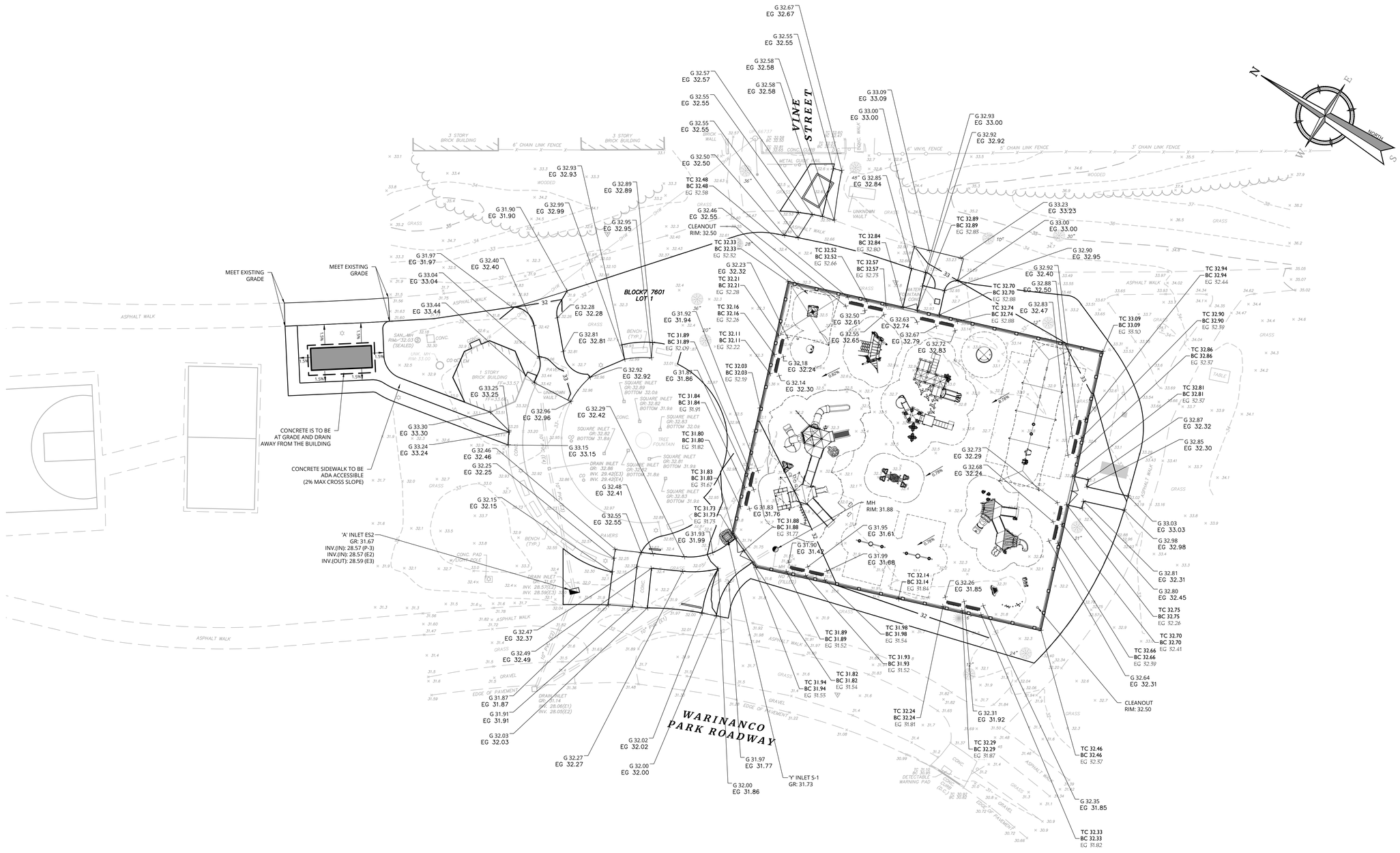
PROJECT NUMBER:	DRAWING NAME:
24009762G	C-LAYT

SHEET TITLE:
LAYOUT PLAN

SHEET NUMBER:
3.0

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

2026\24009762G\Engineering\Site Plans\C-LAYT.dwg|C-3.0-LAYOUT By:JUSTIN.ANDERSEN



2026/24009762/Engineering/Site Plan/C-GRAD.dwg/C-4.0 GRADING By: JUSTIN.ANDERSEN

Colliers
Engineering & Design

www.colliersengineering.com

Copyright © 2025. Colliers Engineering & Design. All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, revised, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design
HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	MJU	JJR/NV

PROJECT NUMBER:	DRAWING NAME:
24009762G	C-GRAD

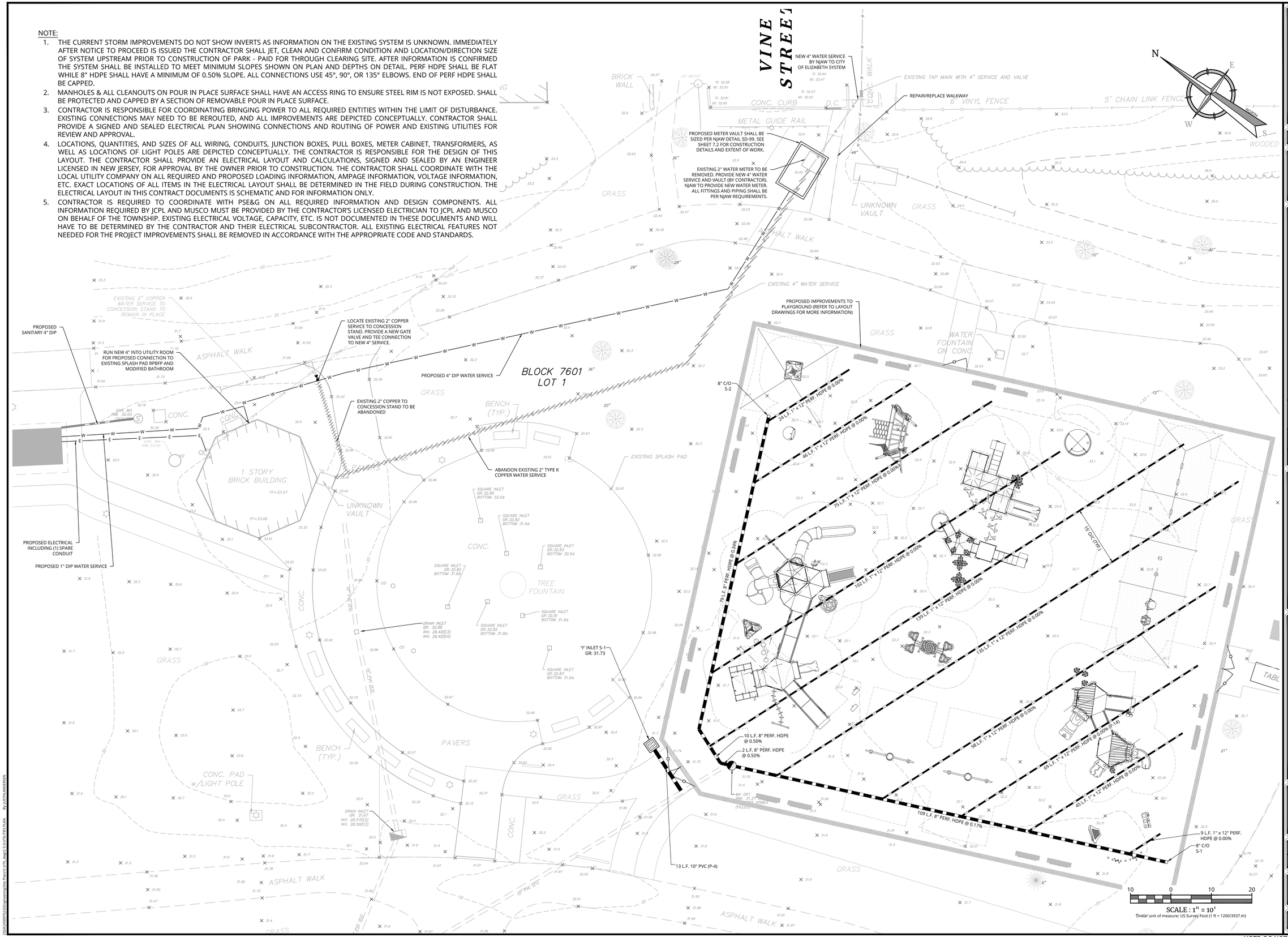
SHEET TITLE:
GRADING AND DRAINAGE PLAN

SHEET NUMBER:
4.0

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

NOTE:

1. THE CURRENT STORM IMPROVEMENTS DO NOT SHOW INVERTS AS INFORMATION ON THE EXISTING SYSTEM IS UNKNOWN. IMMEDIATELY AFTER NOTICE TO PROCEED IS ISSUED THE CONTRACTOR SHALL JET, CLEAN AND CONFIRM CONDITION AND LOCATION/DIRECTION SIZE OF SYSTEM UPSTREAM PRIOR TO CONSTRUCTION OF PARK - PAID FOR THROUGH CLEARING SITE. AFTER INFORMATION IS CONFIRMED THE SYSTEM SHALL BE INSTALLED TO MEET MINIMUM SLOPES SHOWN ON PLAN AND DEPTHS ON DETAIL. PERF HDPE SHALL BE FLAT WHILE 8" HDPE SHALL HAVE A MINIMUM OF 0.50% SLOPE. ALL CONNECTIONS USE 45°, 90°, OR 135° ELBOWS. END OF PERF HDPE SHALL BE CAPPED.
2. MANHOLES & ALL CLEANOUTS ON POUR IN PLACE SURFACE SHALL HAVE AN ACCESS RING TO ENSURE STEEL RIM IS NOT EXPOSED. SHALL BE PROTECTED AND CAPPED BY A SECTION OF REMOVABLE POUR IN PLACE SURFACE.
3. CONTRACTOR IS RESPONSIBLE FOR COORDINATING BRINGING POWER TO ALL REQUIRED ENTITIES WITHIN THE LIMIT OF DISTURBANCE. EXISTING CONNECTIONS MAY NEED TO BE REROUTED, AND ALL IMPROVEMENTS ARE DEPICTED CONCEPTUALLY. CONTRACTOR SHALL PROVIDE A SIGNED AND SEALED ELECTRICAL PLAN SHOWING CONNECTIONS AND ROUTING OF POWER AND EXISTING UTILITIES FOR REVIEW AND APPROVAL.
4. LOCATIONS, QUANTITIES, AND SIZES OF ALL WIRING, CONDUITS, JUNCTION BOXES, PULL BOXES, METER CABINET, TRANSFORMERS, AS WELL AS LOCATIONS OF LIGHT POLES ARE DEPICTED CONCEPTUALLY. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THIS LAYOUT. THE CONTRACTOR SHALL PROVIDE AN ELECTRICAL LAYOUT AND CALCULATIONS, SIGNED AND SEALED BY AN ENGINEER LICENSED IN NEW JERSEY, FOR APPROVAL BY THE OWNER PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY COMPANY ON ALL REQUIRED AND PROPOSED LOADING INFORMATION, AMPAGE INFORMATION, VOLTAGE INFORMATION, ETC. EXACT LOCATIONS OF ALL ITEMS IN THE ELECTRICAL LAYOUT SHALL BE DETERMINED IN THE FIELD DURING CONSTRUCTION. THE ELECTRICAL LAYOUT IN THIS CONTRACT DOCUMENTS IS SCHEMATIC AND FOR INFORMATION ONLY.
5. CONTRACTOR IS REQUIRED TO COORDINATE WITH PSE&G ON ALL REQUIRED INFORMATION AND DESIGN COMPONENTS. ALL INFORMATION REQUIRED BY JCPL AND MUSCO MUST BE PROVIDED BY THE CONTRACTOR'S LICENSED ELECTRICIAN TO JCPL AND MUSCO ON BEHALF OF THE TOWNSHIP. EXISTING ELECTRICAL VOLTAGE, CAPACITY, ETC. IS NOT DOCUMENTED IN THESE DOCUMENTS AND WILL HAVE TO BE DETERMINED BY THE CONTRACTOR AND THEIR ELECTRICAL SUBCONTRACTOR. ALL EXISTING ELECTRICAL FEATURES NOT NEEDED FOR THE PROJECT IMPROVEMENTS SHALL BE REMOVED IN ACCORDANCE WITH THE APPROPRIATE CODE AND STANDARDS.



NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

2024\24009762G\Engineering\Site Plans\C-UTIL.dwg|C-5 UTILITIES PLAN By: JUSTIN.ANDERSEN

Colliers Engineering & Design

www.colliersengineering.com

Copyright © 2026. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design

HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	MJU	JJR/NV

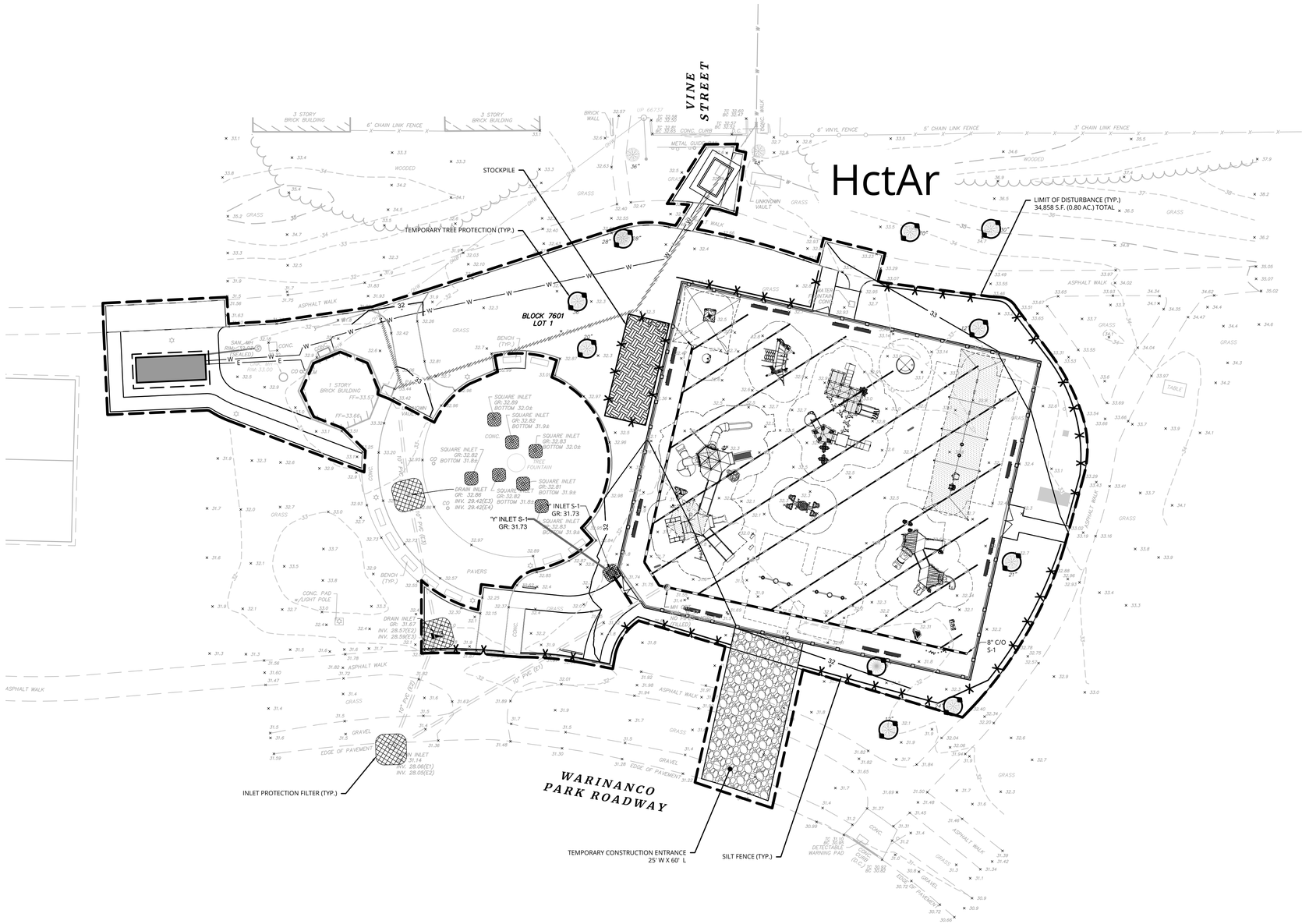
PROJECT NUMBER:	DRAWING NAME:
24009762G	C-UTIL

SHEET TITLE:

UTILITIES PLAN

SHEET NUMBER:

5.0



SOIL COMPACTION EXEMPTION NOTE:

AS DETERMINED BY THE STATE POLICY MAP, THE PROJECT AREA FALLS WITHIN THE METROPOLITAN PLANNING AREA (PA-1), UNDER EXISTING CONDITIONS, THE SITE IS NOT COVERED IN WOODY VEGETATION NOR REGROWTH. IN ACCORDANCE WITH THE NEW JERSEY STANDARD FOR LAND GRADING (REVISED 2017), NON WOODY VEGETATED PA-1 AREAS FALL UNDER THE SOIL COMPACTION EXEMPTION LIST AS A "URBAN REDEVELOPMENT" AND IS DEFINED BY NJDEP AS "PREVIOUSLY DEVELOPED".

20 0 20 40

SCALE : 1" = 20'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

Colliers Engineering & Design

www.colliersengineering.com

Copyright © 2025. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design
HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	MJU	JJR/NV

PROJECT NUMBER:	DRAWING NAME:
24009762G	C-SESC

SHEET TITLE:

SOIL EROSION & SEDIMENT CONTROL PLAN

SHEET NUMBER:

6.0

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

2024/24009762G/Engineering/Site Plans/C-SESC.dwg|C-6.0-SOIL EROSION PLAN By:JUSTIN.ANDERSEN

SOMERSET-UNION SOIL CONSERVATION DISTRICT NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
2. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE **THAN 14 DAYS** AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO NJ STATE STANDARDS.
3. PERMANENT VEGETATION SHALL BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL SEEDING IS ESTABLISHED.
4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NJ STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, 7TH EDITION LAST REVISED JULY 2017.
5. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS, IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS OR PRELIMINARY GRADING.
6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING ALL CRITICAL AREAS SUBJECT TO EROSION (I.E.: STEEP SLOPES, ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO THE NJ STATE STANDARDS.
7. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E.: SLOPES GREATER THAT 3:1).
8. TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A 50'X30'X6"PAD OF 1 1/2" OR 2" STONE, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
9. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING 48 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY.
10. AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES.
11. IN THAT NJSA 4:24-39 ET SEQ., REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES, ALL SITE WORK FOR SITE PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS, WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.
12. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
13. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RECERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT NJ STATE SOIL EROSION & SEDIMENT CONTROL STANDARDS.
14. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN OWNERSHIP.
15. MULCHING TO THE NJ STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL REPORT OF COMPLIANCE. CONDITIONALS ARE ONLY ISSUED WHEN THE SEASON PROHIBITS SEEDING.
16. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS CLEAN DURING LIFE OF CONSTRUCTION PROJECT.
17. THE DEVELOPER SHALL BE RESPONSIBLE FOR REMEDIATING ANY EROSION OR SEDIMENT PROBLEMS THAT ARISE AS A RESULT OF ONGOING CONSTRUCTION AT THE REQUEST OF THE SOMERSET-UNION SOIL CONSERVATION DISTRICT.
18. HYDRO SEEDING IS A TWO- STEP PROCESS. THE FIRST STEP INCLUDES SEED, FERTILIZER, LIME, ETC., ALONG WITH MINIMAL AMOUNTS OF MULCH TO PROMOTE CONSISTENCY, GOOD SEED TO SOIL CONTACT, AND GIVE A VISUAL INDICATION OF COVERAGE. UPON COMPLETION OF SEEDING OPERATION, HYDRO-MULCH SHOULD BE APPLIED AT A RATE OF 1500 LBS. PER ACRE IN SECOND STEP. THE USE OF HYDRO-MULCH, AS OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE NJ STANDARDS.

DUST CONTROL

DUST CONTROL METHODS:

1. APPLY MULCHES OR VEGETATIVE COVER AS PER NJ SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
2. TILL AND ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART AND SPRING-TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
3. SPRINKLE THE SITE UNTIL THE SURFACE IS WET.
4. ERECT BARRIERS SUCH AS SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL TO CONTROL AIR CURRENTS AND SOIL BLOWING.
5. APPLY CALCIUM CHLORIDE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. NOT SUITABLE ON STEEPER SLOPES NEAR THE STREAMS OR POTENTIALLY ACCUMULATE AROUND PLANTS.
6. COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.
7. USE SPRAY-ON ADHESIVE ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS. MATERIALS AS FOLLOWS:

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300
POLYACRYLAMIDE (PAM) - SPRAY ON POLYACRYLAMIDE (PAM) - DRY SPREAD	APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS. MAY ALSO BE USED AS AN ADDITIVE TO SEDIMENT BASINS TO FLOCCULATE AND PRECIPITATE SUSPENDED COLLOIDS. SEE SEDIMENT BASIN STANDARD, P. 26-1		
ACIDULATED SOY BEAN SOAP STICK	NONE	COARSE SPRAY	1200

CONSTRUCTION SEQUENCE

IMPLEMENTATION OF SOIL EROSION & SEDIMENT CONTROL MEASURES INCLUDING:	1 WEEK
- SILT FENCE	
- INLET FILTER	
- CONSTRUCTION DRIVEWAY	
- INSTALL TEMPORARY CONSTRUCTION FENCE AND GATES	
CONSTRUCT IMPROVEMENTS	
- SITE CLEARING, GRADING, AND EXCAVATION	4 WEEKS
- GRADE PLAYGROUND AREA, CONSTRUCT PLAYGROUND SURFACE, AND INSTALL PLAYGROUND AMENITIES AND RELOCATED PARK SIGNS	2 WEEKS
- GRADE SIDEWALKS, BATHROOM CONCRETE PAD, AND ASPHALT PATHWAYS	2 WEEKS
- INSTALL NEW WATER LINE AND VAULT	1 WEEK
- INSTALL PRE-ASSEMBLED BATHROOM AND CONNECT UTILITIES	1 WEEK
- ESTABLISH FINISH GRADES. CONDUCT SOIL COMPACTION TESTING AS REQUIRED, OR SCARIFY/TILL 6" MINIMUM DEPTH OF SUBSOIL IN THE LANDSCAPED AND LAWN AREA.	2 WEEKS
- CONSTRUCT CONCRETE SIDEWALK	1 WEEK
- PERMANENT VEGETATIVE COVERAGE & SITE RESTORATION	2 WEEKS
- REMOVAL OF SOIL EROSION & SEDIMENT CONTROL MEASURES	1 WEEK
TOTAL ESTIMATED PROJECT DURATION: 16 WEEKS	

NOTES:

1. THIS SEQUENCE OF CONSTRUCTION IS FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY AND SHALL NOT BE USED FOR ANY OTHER PURPOSE.
2. THE CONTRACTOR SHALL BRING APPLICABLE SURFACES TO SUBGRADE AND STABILIZE AS PER DETAILS TO CONTROL STORMWATER RUNOFF.

STANDARD FOR VEGETATIVE COVER

1. SITE PREPARATION
   A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.
   B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.
   C. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO AN AVERAGE DEPTH OF 5 INCHES, MINIMUM OF 4 INCHES, FIRMED IN PLACE IS REQUIRED. ALTERNATIVE DEPTHS MAY BE CONSIDERED WHERE SPECIAL REGULATORY AND/OR INDUSTRY DESIGN STANDARDS ARE APPROPRIATE SUCH AS ON GOLF COURSES, SPORTS FIELDS, LANDFILL CAPPING ETC. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.
   D. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.
2. SEEDBED PREPARATION
   A. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SITE SPECIFIC SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (HTTP://NJAES.RUTGERS.EDU/COUNTY/).
      a. FOR TEMPORARY SEEDING: FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. LIMESTONE SHALL BE APPLIED AT THE RATE OF 2 TONS OR 4,000 LBS PER ACRE UNLESS SOIL TESTING INDICATES OTHERWISE.
      b. FOR PERMANENT SEEDING: FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING. LIMESTONE SHALL BE APPLIED AT THE RATE OF 2 TONS OR 4,000 LBS PER ACRE UNLESS SOIL TESTING INDICATES OTHERWISE.
   B. WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.
   C. HIGH ACID PRODUCING 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 OF 5 OR MORE BEFORE INITIATING SEEDBED PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.
   D. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, 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.). SEE "SOIL DECOMPACTION AND TESTING REQUIREMENTS".
   E. REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION AND OTHER DEBRIS SUCH AS WIRE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.
3. SEEDING
   A. TEMPORARY SEEDING SPECIFICATIONS - TEMPORARY VEGETATIVE COVER SHALL CONSIST OF PERENNIAL RYEGRASS APPLIED UNIFORMLY AT A RATE OF 1.0 POUNDS PER 1,000 SQ.FT. (100 LBS/ACRE), OR A MIXTURE FROM TABLE 7-2 OF THE STANDARDS APPROVED BY THE SOIL CONSERVATION DISTRICT.
   B. PERMANENT SEEDING SPECIFICATIONS - SELECT AN APPROVED MIXTURE FROM THOSE LISTED BELOW, AN APPROVED MIXTURE FROM TABLE 4-3 OF THE STANDARDS, OR USE A MIXTURE RECOMMENDED BY RUTGERS COOPERATIVE EXTENSION OR NATURAL RESOURCES CONSERVATION SERVICE WHICH IS APPROVED BY THE SOIL CONSERVATION DISTRICT. SEED GERMINATION SHALL HAVE BEEN TESTED WITHIN 12 MONTHS OF THE PLANTING DATE. NO SEED SHALL BE ACCEPTED WITH A GERMINATION TEST DATE MORE THAN 12 MONTHS OLD UNLESS RETESTED. SEED SHALL BE APPLIED AS NOTED BELOW WITHIN THE DATES SPECIFIED IN THE STANDARDS.
      1. LAWN AREAS:

MIX #13 (WELL TO MODERATELY DRAINED SOIL):	
HARD FESCUE AND/OR	
CHEWING FESCUE AND/OR	
STRONG CREEPING RED FESCUE	175 LBS/ACRE
PERENNIAL RYEGRASS	45 LBS/ACRE
KENTUCKY BLUE GRASS (BLEND)	45 LBS/ACRE
MIX #15 (WELL TO MODERATELY DRAINED SOIL):	
HARD FESCUE	130 LBS/ACRE
CHEWING FESCUE	45 LBS/ACRE
STRONG CREEPING RED FESCUE	45 LBS/ACRE
PERENNIAL RYEGRASS	10 LBS/ACRE
MIX #16 (POORLY DRAINED SOIL)	
ROUGH BLUEGRASS	90 LBS/ACRE
STRONG CREEPING RED FESCUE	130 LBS/ACRE

OPTIMUM SEEDING DATES:
8/15 - 10/15 (ZONE 6b)

ACCEPTABLE SEEDING DATES:
3/1 - 4/30 (ZONE 6b)

SUMMER SEEDING DATES * :
5/1 - 8/14 (ZONE 6b, 7a, 7b)

* NOTE: SUMMER SEEDING SHOULD ONLY BE CONDUCTED WHEN THE SITE IS IRRIGATED. MIXES INCLUDING WHITE CLOVER REQUIRE THAT AT LEAST SIX WEEKS OF GROWING SEASON REMAIN AFTER SEEDING TO ENDURE ESTABLISHMENT BEFORE FREEZING CONDITIONS.

2. DETENTION BASINS:

MIX #9:	
DEERTONGUE	20 LBS/ACRE
REDTOP	2 LBS/ACRE
WILD RYE (ELYMUS)	15 LBS/ACRE
SWITCHGRASS	25 LBS/ACRE

OPTIMUM SEEDING DATES:
3/1 - 4/30 (Zone 6b);

C. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING 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 WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF 1/4 TO 1/2 INCH BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE-TEXTURED SOIL.

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

E. 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 (ALSO SEE SECTION 4 - MULCHING BELOW). HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.

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

   A. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, 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 A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

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

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

   1. PEG AND TWINE - DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL 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 EACH PEG WITH TWO OR MORE ROUND TURNS.
   2. MULCH NETTINGS - STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.

STABILIZATION WITH MULCH ONLY

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.

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.

2. PROTECTIVE MATERIALS

A. UNROTTEN SMALL-GRAIN STRAW, AT 2.0 TO 2.5 TONS PER ACRE, IS SPREAD UNIFORMLY AT 90 TO 115 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN. OTHER MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT. THE APPROVED RATES ABOVE HAVE BEEN MET WHEN THE MULCH COVERS THE GROUND COMPLETELY UPON VISUAL INSPECTION, I.E. THE SOIL CANNOT BE SEEN BELOW THE MULCH.

B. SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE USED UNDER SUITABLE CONDITIONS AND IN QUANTITIES AS RECOMMENDED BY THE MANUFACTURER.

C. WOOD-FIBER OR PAPER-FIBER MULCH HYDROSEEDER IN QUANTITIES/APPLICATION RATES AS RECOMMENDED BY MANUFACTURER.

D. MULCH NETTING, SUCH AS PAPER JUTE, EXCELSIOR, COTTON, OR PLASTIC, MAY BE USED.

E. WOODCHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED. WOODCHIPS WILL NOT BE USED ON AREAS WHERE FLOWING WATER COULD WASH THEM INTO AN INLET AND PLUG IT.

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

A. PEG AND TWINE - DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL 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 EACH PEG WITH TWO OR MORE ROUND TURNS.

B. MULCH NETTING - STAPLE PAPER, COTTON, OR PLASTIC NETTINGS OVER MULCH. USE DEGRADABLE NETTING IN AREAS TO BE MOWED. NETTING IS USUALLY AVAILABLE IN ROLLS 4 FEET WIDE AND UP TO 300 FEET LONG.

C. CRIMPER MULCH ANCHORING COULTER TOOL - A TRACTOR-DRAWN IMPLEMENT ESPECIALLY DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE. THIS PRACTICE AFFORDS MAXIMUM EROSION CONTROL, BUT ITS USE IS LIMITED TO THE SLOPES UPON WHICH THE TRACTOR CAN OPERATE SAFELY. SOIL PENETRATION SHOULD BE ABOUT 3 TO 4 INCHES. ON A SLOPING LAND, THE OPERATION SHOULD BE ON THE CONTOUR.

D. LIQUID MULCH-BINDERS

1. 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.
2. USE ONE OF THE FOLLOWING:
   a. ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS THAT MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANE NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTO-TOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. VEGETABLE BASED GELS SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER.
   b. SYNTHETIC BINDERS - HIGH POLYMERS 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 AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.
3. CRIMPER (MULCH ANCHORING COULTER 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 REQUIRED.
4. LIQUID MULCH-BINDERS - MAY BE USED TO ANCHOR SALT HAY, HAY OR STRAW MULCH.
   a. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.
   b. USE ONE OF THE FOLLOWING:
      1) 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 MEMBRANE NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURF GRASS. 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 STATE.
      2) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND, FOLLOWING APPLICATION OF MULCH, DRYING AND CURING, SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. BINDER SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

      NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

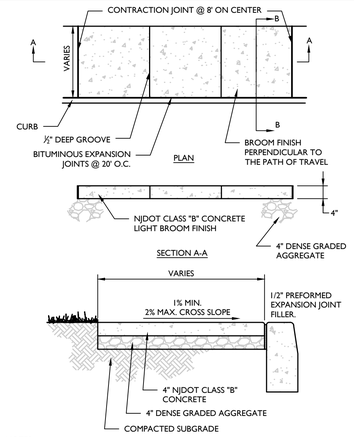
B. WOOD-FIBER OR PAPER-FIBER MULCH - SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. MULCH SHALL NOT BE MIXED IN THE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

C. PELLETIZED MULCH - COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS, AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS/1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE ESPECIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEED- SEED FREE MULCH IS DESIRED, OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE. APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

5. IRRIGATION (WHERE FEASIBLE):
   IF SOIL MOISTURE IS DEFICIENT SUPPLY NEW SEEDING WITH ADEQUATE WATER (A MINIMUM OF 1/4 INCH APPLIED UP TO 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.

6. TOPDRESSING:
   NO FOLLOW-UP TOPDRESSING IS MANDATORY UNLESS WHERE GROSS NITROGEN DEFICIENCY EXISTS IN THE SOIL TO THE EXTENT THAT FAILURE MAY DEVELOP. IN THAT INSTANCE, TOPDRESS WITH 10-10-10 OR EQUIVALENT AT 300 LB PER ACRE OR 7 LB PER 1,000 SF EVERY 3 TO 5 WEEKS UNTIL THE GROSS NITROGEN DEFICIENCY IN THE TURF IS AMELIORATED.

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 RATES IN TABLE 4-2 ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT

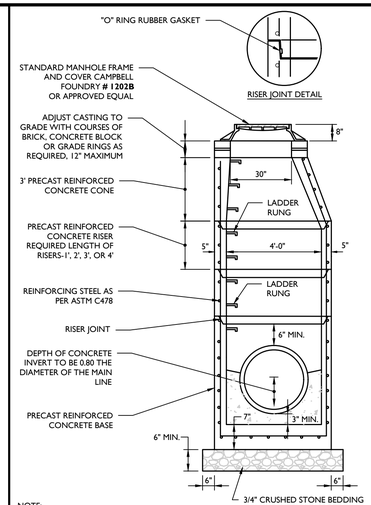


NOTES:

1. ½" EXPANSION JOINT FILLER INSTALLED BETWEEN THE CURB AND CONCRETE SIDEWALK AT 10' MAXIMUM SPACING, RECESS TO ¼" FROM THE TOP OF SIDEWALK.
2. ½" CONTRACTION JOINTS INSTALLED AT AN INTERVAL 24 TO 30 TIMES THE THICKNESS OF THE SLAB, TO A DEPTH OF ¼ OF THE THICKNESS OF THE SLAB, RECESS TO ¼" FROM THE TOP OF SIDEWALK, FOR THE FULL WIDTH OF THE SIDEWALK. SCORE A ¼" GROOVED JOINT HALF WAY BETWEEN THE CONTRACTION JOINTS.
3. JOINT FILLER SHALL CONFORM TO AASHTO M-33. SURFACE OF CONCRETE SHALL BE BROOM FINISH. ROUND EDGES USING AN EDGING TOOL WITH A ¼" RADIUS.
4. CONCRETE SIDEWALK SHALL BE CONSTRUCTED PER THE LATEST ADA REQUIREMENTS.

CONCRETE SIDEWALK (NEXT TO CURB) DETAIL

NOT TO SCALE MCNJ-SITE-PVMT-2000 08/01/20

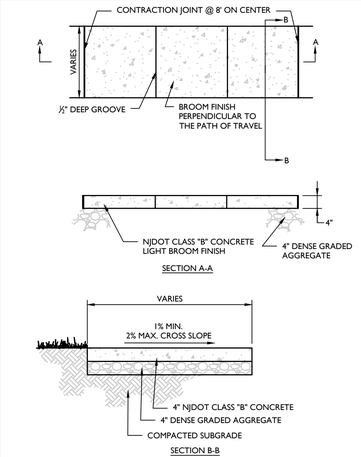


NOTE:

1. IN ACID SOILS, TWO COATS OF BITUMASTIC WATER PROOFING SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATION.
2. ALL CONCRETE TO BE NJDOT CLASS "B".
3. MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH HS-25 LOADING REQUIREMENTS.

PRECAST CONCRETE STORM MANHOLE 4' DIA. DETAIL

NOT TO SCALE MCNJ-UTIL-STRM-1600 07/01/21

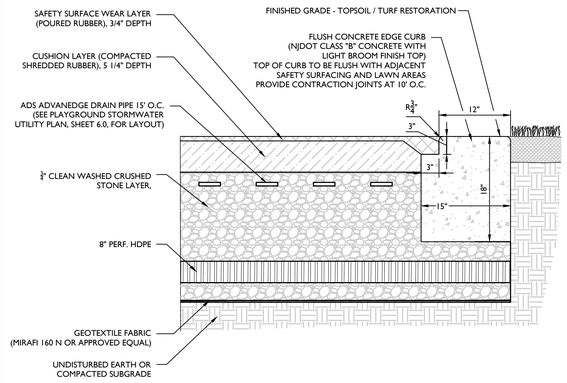


NOTES:

1. ½" CONTRACTION JOINTS INSTALLED AT AN INTERVAL 24 TO 30 TIMES THE THICKNESS OF THE SLAB, TO A DEPTH OF ¼ OF THE THICKNESS OF THE SLAB, RECESS TO ¼" FROM THE TOP OF SIDEWALK, FOR THE FULL WIDTH OF THE SIDEWALK. SCORE A ¼" GROOVED JOINT HALF WAY BETWEEN THE CONTRACTION JOINTS.
2. JOINT FILLER SHALL CONFORM TO AASHTO M-33. SURFACE OF CONCRETE SHALL BE BROOM FINISH. ROUND EDGES USING AN EDGING TOOL WITH A ¼" RADIUS.
3. CONCRETE SIDEWALK SHALL BE CONSTRUCTED PER THE LATEST ADA REQUIREMENTS.

CONCRETE SIDEWALK DETAIL

NOT TO SCALE MCNJ-SITE-PVMT-2001 08/01/20

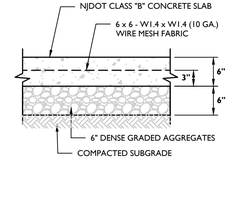


NOTE:

1. COLOR OF RUBBERIZED SURFACE SHALL BE A STANDARD COLOR AND SELECTED BY OWNER DURING SUBMITTAL PHASE.
2. SURFACE TO BE INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS.
3. THE TOTAL DEPTH OF THE SAFETY SURFACE SHALL BE INSTALLED IN STRICT ACCORDANCE AND CONFORMITY TO THE MANUFACTURER'S DRAWINGS AND THE SPECIFICATION REQUIREMENTS. THE THICKNESS OF THE IMPACT LAYER WILL BE INSTALLED ACCORDING TO THE FALL HEIGHT(S) OF THE PLAY EQUIPMENT. THESE REQUIREMENTS MUST BE VERIFIED IN THE FIELD PRIOR TO STARTING THE INSTALLATION OF THE IMPACT LAYER HEIGHT).

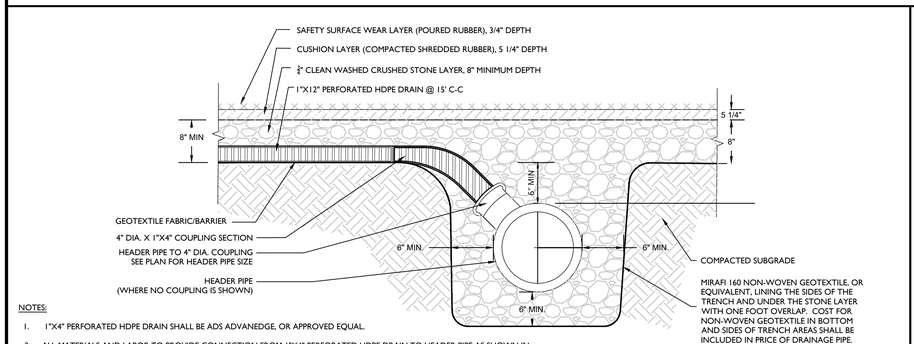
RUBBER SURFACE AND CURBING DETAIL

NOT TO SCALE



CONCRETE PAD DETAIL

NOT TO SCALE MCNJ-SITE-PVMT-2100 08/01/20

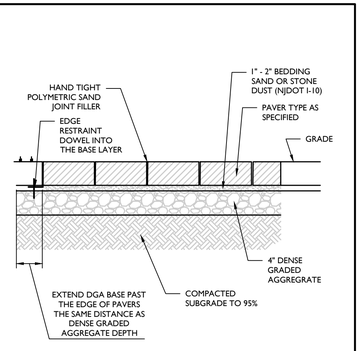


NOTES:

1. 1"X4" PERFORATED HDPE DRAIN SHALL BE ADS ADVANEDGE, OR APPROVED EQUAL.
2. ALL MATERIALS AND LABOR TO PROVIDE CONNECTION FROM 1"X4" PERFORATED HDPE DRAIN TO HEADER PIPE AS SHOWN IN DETAIL ABOVE SHALL BE INCLUDED IN PRICE PER LINEAR FOOT OF 4" PERFORATED HIGH DENSITY POLYETHYLENE PIPE.

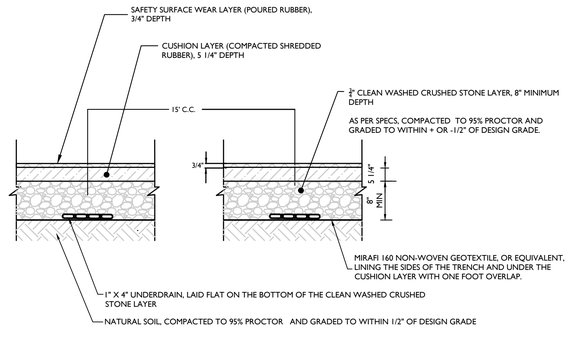
FLAT PIPE AND HEADER PIPE CONNECTION DETAIL

NOT TO SCALE



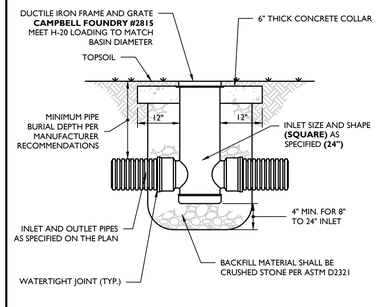
TYPICAL STANDARD PAVER SECTION DETAIL

NOT TO SCALE MCNJ-SITE-PVMT-2600 05/01/17



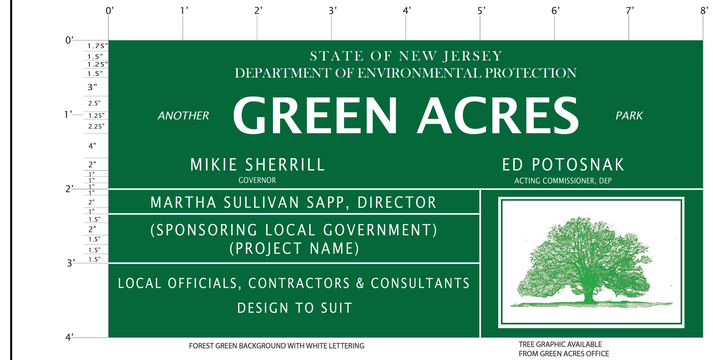
FLAT DRAIN / PLAYGROUND SECTION DETAIL

NOT TO SCALE



YARD DRAIN (NYLOPLAST) DETAIL

NOT TO SCALE MCNJ-UTIL-STRM-1800 05/01/17



FOREST GREEN BACKGROUND WITH WHITE LETTERING

TREE GRAPHIC AVAILABLE FROM GREEN ACRES OFFICE

GREEN ACRES SIGN DETAIL

NOT TO SCALE GNRL-DTLS-STND-GRID 08/12/21

Colliers Engineering & Design

www.colliersengineering.com

Copyright © 2026. Colliers Engineering & Design All Rights Reserved. This drawing and all of the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design

HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	MJU	JJR/NV

PROJECT NUMBER:	DRAWING NAME:
24009762G	C-DTLS

SHEET TITLE:

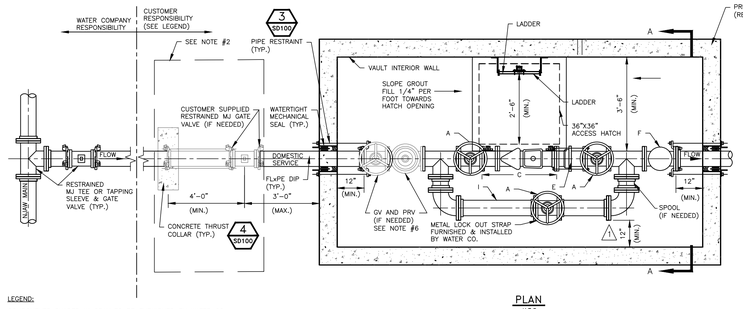
CONSTRUCTION DETAILS

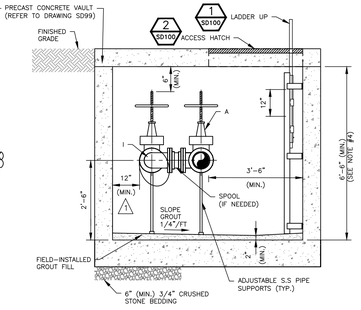
SHEET NUMBER:

7.0

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

By: JUSTIN.ANDERSEN
2024\24009762G\Engineering\Site Plans\C-DTLS.dwg|C-7.0-DETAILS





LEGEND:

COMPONENTS SHADED IN GRAY TO BE FURNISHED BY WATER CO.

A- OS&Y GATE VALVE WITH FLANGED ENDS (FURNISHED & INSTALLED BY CUSTOMER)

C- DOMESTIC COMPOUND METER ASSEMBLY- METERS WITH FLANGED ENDS (FURNISHED BY WATER CO., INSTALLED BY CUSTOMER)

E- DISMANTLING JOINT TO HAVE FLANGED ENDS WITH JOINT RESTRAINT (FURNISHED & INSTALLED BY CUSTOMER)

F- SWING CHECK WITH FLANGED ENDS (FURNISHED & INSTALLED BY CUSTOMER)

I- BYPASS SIZE SHALL BE NO GREATER THAN ONE STANDARD PIPE SIZE SMALLER THAN DOMESTIC SERVICE SIZE AND SHALL HAVE METAL STRAP FOR LOCKING OUT BYPASS VALVE (STRAP FURNISHED & INSTALLED BY WATER CO.)

BACKFLOW DEVICE:

A BACKFLOW DEVICE IS REQUIRED BY THE NJDEP. THE BACKFLOW DEVICE IS FURNISHED & INSTALLED BY CUSTOMER. THE BACKFLOW DEVICE CANNOT BE INSTALLED INSIDE THE VAULT OR ANY CONFINED SPACE. IT MAY BE INSTALLED IN AN INSULATED HEATED ABOVEGROUND ENCLOSURE OR INSIDE THE BUILDING. THE BACKFLOW DEVICE MUST BE PLACED BEFORE THE FIRST CONNECTION. IF IN BUILDING, LOCATION MUST BE APPROVED BY NJAW PRIOR TO ANY INSTALLATION. REFER TO DRAWING 0201-0601-SD94.

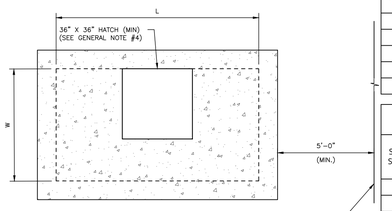
NOTES:

1. VAULTS ARE REQUIRED BY NJAW FOR LARGE METERS (3" & LARGER) AND ARE TO BE FURNISHED AND INSTALLED BY CUSTOMER. ACCESS TO VAULT VIA ALUMINUM 36"x36" BILCO PCM-4 TYPE, FLUSH, WATERTIGHT SIDEWALK DOOR W/ LADDER UP SAFETY POST OR EQUIVALENT. PLASTIC ENCASED STEEL OR ALUMINUM LADDER RUNGS CENTERED AT ONE FOOT (1') MUST BE PROVIDED. AREA AROUND VAULT MUST BE COMPLETELY WATERPROOFED. USE SOLID FLANGE & RODDING ON VALVES. ALL VAULT AND PIPING CONSTRUCTION IS SUBJECT TO WATER COMPANY APPROVAL PRIOR TO SERVICE.
2. IF VAULT IS >20 FEET FROM NJAW SHUTOFF VALVE, CUSTOMER IS REQUIRED TO FURNISH & INSTALL AN ADDITIONAL RESTRAINED MECHANICAL JOINT GATE VALVE & VALVE BOX WITHIN 3 FEET OF THE VAULT. IF VAULT IS <20 FEET FROM NJAW SHUTOFF VALVE, CUSTOMER SHALL INSTALL A SOLID, GASKETED, MECHANICAL JOINT SLEEVE RESTRAINED WITH WEDGE ACTION RESTRAINING GLANDS WITHIN 3 FEET OF VAULT.
3. EXTERIOR VALVES & FITTINGS SHALL BE RESTRAINED WITH WEDGE ACTION RESTRAINING GLANDS, THRUST COLLARS AND/OR 304 STAINLESS STEEL RODS/NUTS AND CLAMPS.
4. BASED ON THE LARGEST SIZE GATE VALVE REQUIRED, THE MINIMUM VAULT HEIGHT (INTERIOR DIMENSION) SHALL BE AS FOLLOWS:

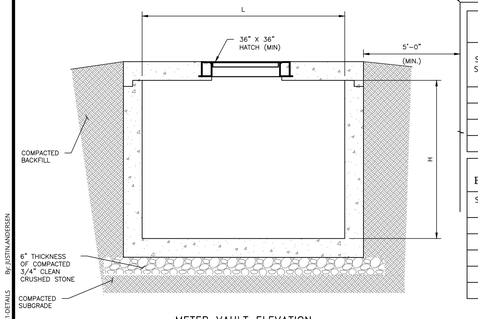
GV SIZE	VAULT HEIGHT
3" TO 8"	6'-6"
10"	7'-0"
12"	7'-6"

5. VAULT PIPING TO BE DUCTILE IRON MEETING ANSI/AWWA C115/A21.15, OR TYPE K DRAWN (HARD) TEMPER COPPER MEETING ASTM-B88. THE USE OF FLANGED COUPLING ADAPTERS IS STRICTLY PROHIBITED.
6. THE CUSTOMER MUST INSTALL A WATER PRESSURE REDUCING VALVE WHERE REQUIRED BY STATE OF NEW JERSEY PLUMBING CODE. INSTALLATION RECOMMENDED WHERE AVERAGE PRESSURE IS GREATER THAN 80 PSI. WHERE A PRV IS REQUIRED IT SHALL BE PRECEEDED BY AN ADDITIONAL OS&Y GATE VALVE.

DOMESTIC SERVICE METER VAULT DETAIL
NJAW STANDARD DETAIL SD 90



METER VAULT PLAN



METER VAULT ELEVATION

INTERIOR DIMENSIONS FOR FIRE & DOMESTIC METER VAULT (DWG SD89)						
Service Size (in)	Without PRV Assembly			With PRV Assembly		
	Length (ft)	Width (ft)	Height (ft)	Length (ft)	Width (ft)	Height (ft)
3	10.00	8.00	6.50	11.00	8.00	6.50
4	11.00	9.00	6.50	13.00	9.00	6.50
6	12.00	9.00	6.50	15.00	9.00	6.50
8	13.00	10.00	6.50	16.00	10.00	6.50
10	16.00	10.00	7.00	19.00	10.00	7.00

INTERIOR DIMENSIONS FOR FIRE & DOMESTIC METER VAULT (DWG SD90)						
Service Size (in)	Without PRV Assembly			With PRV Assembly		
	Length (ft)	Width (ft)	Height (ft)	Length (ft)	Width (ft)	Height (ft)
3	10.00	7.00	6.50	11.00	7.00	6.50
4	11.00	7.00	6.50	13.00	7.00	6.50
6	12.00	8.00	6.50	15.00	8.00	6.50
8	13.00	8.00	6.50	16.00	8.00	6.50
10	16.00	8.00	7.00	19.00	8.00	7.00

INTERIOR DIMENSIONS FOR FIRE & DOMESTIC METER VAULT (DWG SD92)						
Service Size (in)	Without PRV Assembly			With PRV Assembly		
	Length (ft)	Width (ft)	Height (ft)	Length (ft)	Width (ft)	Height (ft)
4	12.00	7.00	6.50	14.00	7.00	6.50
6	14.00	8.00	6.50	15.00	8.00	6.50
8	15.00	8.00	6.50	18.00	8.00	6.50
10	18.00	8.00	7.00	21.00	8.00	7.00

INTERIOR DIMENSIONS FOR FIRE METER VALUT (DWG SD91)			
Service Size	Length (ft)	Width (ft)	Height (ft)
3	7.00	7.00	6.50
4	7.00	7.00	6.50
6	8.00	7.00	6.50
8	9.00	7.00	6.50
10	9.00	8.00	7.00

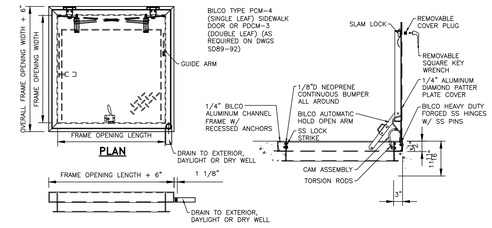
METER VAULT
NJAW STANDARD DETAIL SD 99

CONCRETE STRUCTURE NOTES:

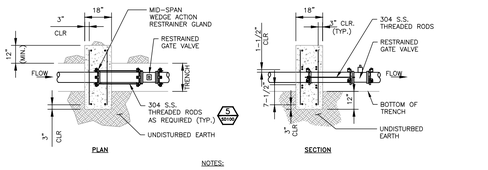
1. PRECAST CONCRETE METER VAULT SHALL BE DESIGNED FOR THE FOLLOWING CONDITIONS STATED BELOW (1.1 THROUGH 1.5). SUBMIT CALCULATIONS TO NEW JERSEY AMERICAN WATER FOR REVIEW. ALL CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE CONSTRUCTION IS TO TAKE PLACE.
   1.1. STRUCTURE FILLED TO TOP WITH NO EXTERNAL SOIL PRESSURE.
   1.2. STRUCTURE EMPTY WITH SOIL BACKFILL TO FINISHED GRADE. ASSUME SOIL DRY DENSITY AT 95 LBS/C.F. ASSUME SOIL SATURATED TO FINISHED GRADE.
   1.3. STRUCTURE SHALL NOT FLOAT WITH SATURATED SOIL TO FINISHED GRADE. ASSUME SOIL LOAD ON CONCRETE LIP AT 32 LBS/C.F. A SAFETY FACTOR OF 1.5 SHALL BE PROVIDED IN THE FLOATATION CALCULATIONS.
   1.4. SOIL BEARING PRESSURE OF 2,500 PSF.
   1.5. EFFECTS OF ALL VERTICAL LOADS ANTICIPATED ON THE FINISHED STRUCTURE SHALL BE INCLUDED IN THE ANALYSIS AND DESIGN, LOADING FROM PIPING AND EQUIPMENT, HOIST, SUPERSTRUCTURES, SNOW, H-20 LIVE LOAD, AND ACTUAL DEPTH OF SOIL COVER SHALL BE INCLUDED.
2. THE EXTERIOR OF ALL PRECAST PRODUCTS SHALL BE COATED WITH TWO COATS OF BITUMASTIC PAINT, 16 TO 20 MIL DFT, TO FINISHED GRADE. USE PROMASTIC 900 COAL TAR WATERPROOFING MANUFACTURED BY PROGUARD COATING, INC., OR APPROVED EQUAL.
3. ALL ALUMINUM IN CONTACT WITH CONCRETE SHALL BE PAINTED WITH 2 COATS OF COAL TAR EPOXY OR ISOLATED FROM THE CONCRETE WITH 1/8" THICK NEOPRENE PADDING. ALL STEEL THRUST RESTRAINT ANGLES SHALL BE WIRE BRUSHED AND PAINTED WITH 2 COATS OF COAL TAR EPOXY.
4. ALL CONCRETE ANCHORS AND HARDWARE SHALL BE STAINLESS STEEL.
5. PROVIDE COMMON KEYED LOCKS FOR ALL HATCHES, PANELS, DOORS AND QUICK DISCONNECT CAPS ASSOCIATED WITH THIS PROJECT.
6. ALL STRUCTURES SHALL BE WATERTIGHT.
7. DUAL SEAL II GASKETS DISTRIBUTED BY DUAL SEAL CORP., OR APPROVED EQUAL, SHALL MEET ASTM C923 REQUIREMENTS.
8. JOINTS IN STRUCTURE SHALL BE SEALED WITH BITUMEN CONSEAL CS-102-B JOINT SEALANT MATERIAL MANUFACTURED BY CONCRETE SEALANTS, INC AND MEET FEDERAL SPECIFICATION SS-S-00210 (210-A).
9. CONCRETE STRUCTURES SHALL MEET THE REQUIREMENTS OF ASTM C478. DESIGN SHALL FOLLOW ACI 318-14 USING LOAD FACTOR DESIGN.
10. CONCRETE: f'c = 4,000 PSI AT 28 DAYS. TYPE III CEMENT. AIR ENTRAINMENT 7% ± 2%. ASTM C33 NO. 57 OR NO. 67 COARSE AGGREGATE.
11. REINFORCEMENT: WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. BAR REINFORCEMENT SHALL BE GRADE 60, CONFORMING TO ASTM A615.
12. VERTICAL BAR REINFORCEMENT REQUIRED BETWEEN BASE SLAB AND FIRST VERTICAL SECTION OF STRUCTURE.

GENERAL NOTES

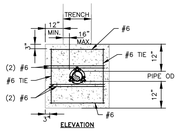
1. THE VAULT DIMENSIONS NOTED ABOVE ARE APPROXIMATE MINIMUM REQUIREMENTS BASED ON THE EQUIPMENT AND LAYOUTS SHOWN ON DRAWINGS SD89 THROUGH SD92.
2. THE DESIGN ENGINEER SHALL MAKE HIS OWN DETERMINATION TO ENSURE THAT THE REQUIRED CLEARANCES NOTED ON THE METER VAULT DRAWINGS ARE ACHIEVED BASED ON THE ACTUAL SERVICE SIZE(S), EQUIPMENT AND FITTINGS PROPOSED.
3. THE TABLES PROVIDED ABOVE ARE BASED ON THE LARGEST SERVICE SIZE ENTERING THE METER VAULT.
4. THE MINIMUM ACCEPTABLE ACCESS HATCH SIZE IS 36" X 36". FOR MULTI-USE SERVICE SIZES 8" AND LARGER, A SECOND 48" X 72" HATCH SHALL BE PROVIDED AND CENTERED ABOVE THE MULTI-USE METER ASSEMBLY. THE HATCH TYPE(S) & INSTALLATION LOCATION(S) SHALL BE AS SHOWN ON DRAWINGS SD89 THROUGH SD92, UNLESS OTHERWISE APPROVED BY NJAW.
5. ACCESS INTO THE VAULT SHALL BE VIA AN OSHA COMPLIANT ALUMINUM LADDER EQUIPPED WITH AN APPROVED LADDER UP DEVICE.
6. THE FLOOR OF THE VAULT SHALL BE SLOPED TOWARDS THE HATCH TO ALLOW FOR PUMP OUT SHOULD THE NEED ARISE. GROUT FILL SHALL BE PLACED ON TOP OF THE PRECAST BASE AND SLOPED AT ¼" PER FOOT TOWARDS THE HATCH OPENING. MINIMUM GROUT THICKNESS SHALL BE 2".



ACCESS HATCH DETAIL 2 SD100
N.T.S.



5 SD100



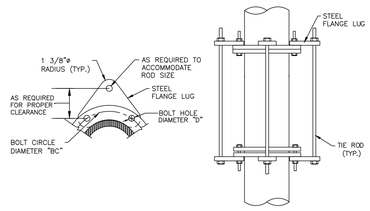
NOTES:

1. PLACE THRUST COLLAR ON ONE FULL LENGTH OF PIPE.
2. LAST JOINT OF PIPE WITH THRUST COLLAR TO BE RESTRAINED MECHANICAL JOINT PIPE.
3. PLACE WEDGE ACTION RESTRAINER GLAND JOINT RESTRAINT 4 FEET FROM VAULT INLET SHUTOFF VALVE.
4. CONCRETE SHALL BE A MINIMUM OF 3000 PSI.
5. REINFORCING BARS SHALL BE DEFORMED BARS AND TIED TOGETHER.
6. BACKFILL & COMPACT IN 6" LAYERS.
7. TRENCH BOTTOM WIDTH IN AT THRUST COLLAR LOCATION SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR PIPE PLACEMENT. MAX. TRENCH WIDTH = PIPE O.D.+2 FT.

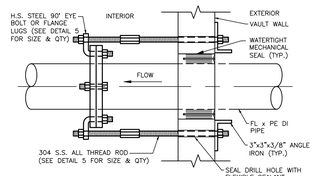
THRUST COLLAR DETAIL 4 SD100
N.T.S.

THE ROD SIZING			
NOMINIAL PIPE SIZE	# OF RODS	ROD SIZE	LUG THICKNESS
3	2	3/4	3/4
4	2	3/4	3/4
6	4	3/4	3/4
8	4	1	1
10	6	1	1
12	6	1 1/8	1 1/8

NOTE: MAX. PRESSURE 300 PSI

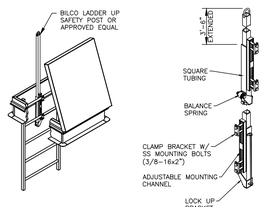


TIE ROD RESTRAINT DETAIL 5 SD100
N.T.S.



PLAN

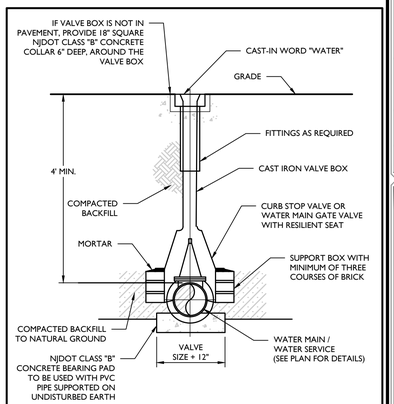
VAULT PIPE RESTRAINT DETAIL 3 SD100
N.T.S.



NOTE:

1. CLAMP BRACKET MAY BE REVERSED TO ACCOMMODATE RUNG SIZES OF 3/4" TO 1 1/4" WITH STANDARD 2" BOLTS FURNISHED. LARGER RUNGS WILL REQUIRE LONGER BOLTS.

LADDER UP SAFETY POST DETAIL 1 SD100
N.T.S.



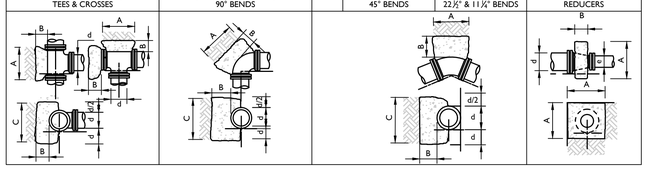
NOTES:

1. VALVE BOX SHOULD HAVE EXTENSION IF WATER MAIN OR SERVICE IS PLACED DEEPER THAN 5 FEET.
2. CURB STOP VALVE BOX SHALL BE MUELLER EXTENSION TYPE WITH ARCH PATTERN BASE, OR APPROVED EQUAL.
3. WATER MAIN VALVE BOX SHALL BE SCREW TYPE ADJUSTABLE MODE, **FIGURE # 4905-22 AS MANUFACTURED BY BINGHAM & TAYLOR OR APPROVED EQUAL.**

WATER VALVE BOX DETAIL

NOT TO SCALE MCNJ-UTIL-WATR-16001 05/01/17

MINIMUM SIZE OF CONCRETE THRUST BLOCKS																	
d	A	B	C	d	A	B	C	d	A	B	C	A	B	C	d x e	A	B
6"	2'-0"	8"	1'-3"	6"	2'-6"	8"	1'-3"	6"	1'-6"	6"	1'-3"	1'-6"	8"	1'-3"	6" x 4"	1'-6"	1'-0"
8"	2'-6"	8"	1'-6"	8"	3'-0"	8"	1'-6"	8"	1'-6"	8"	1'-9"	1'-6"	8"	1'-9"	8" x 4"	2'-0"	1'-0"
10"	3'-0"	10"	2'-0"	10"	3'-6"	10"	2'-0"	10"	2'-3"	10"	2'-0"	1'-6"	10"	2'-0"	10" x 6"	2'-4"	1'-3"
12"	3'-6"	10"	2'-6"	12"	3'-9"	10"	2'-9"	12"	2'-6"	10"	2'-6"	1'-6"	10"	2'-6"	10" x 8"	2'-6"	1'-6"
TEES & CROSSES				90° BENDS				45° BENDS				22½° & 11¼° BENDS			REDUCERS		

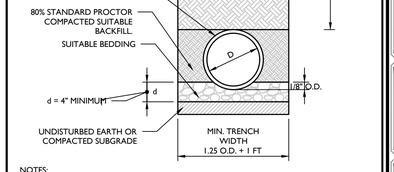


NOTES:

1. ALL HORIZONTAL BENDS SHALL HAVE CONCRETE THRUST BLOCKS WITH MINIMUM BEARING AREAS AGAINST UNDISTURBED SOIL AND NO JOINT SHALL BE COVERED WITH CONCRETE.
2. BEARING AREAS ARE BASED UPON UNDISTURBED SOIL WITH A MINIMUM BEARING CAPACITY OF 0.5 TONS PER SQUARE FOOT. FOR A LESSER SOIL BEARING CAPACITY THESE AREAS SHALL BE INCREASED ACCORDINGLY.
3. THRUST BLOCKS SHALL BE POURED DIRECTLY AGAINST TRENCH WALLS AND SHALL BE NJDOT CLASS "B" CONCRETE.
4. DETAILS FOR SUPPORTS AND BRACING FOR VERTICAL BENDS FOR 12" DIAMETER OR LARGER SHALL BE APPROVED BY THE AUTHORITY PRIOR TO CONSTRUCTION.

THRUST BLOCKS DETAIL

NOT TO SCALE MCNJ-UTIL-WATR-1400 05/01/17



NOTES:

1. ALL PIPE SYSTEMS AND BACKFILL SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C600.
2. WATER MAIN PIPE SHALL BE CEMENT LINED DUCTILE IRON PIPE (DIP) PRESSURE **CLASS 150**, THICKNESS **CLASS 52** WITH ASPHALTIC EPOXY TYPE COATING.
3. SUITABLE BACKFILL MATERIAL SHALL BE SAND, GRAVEL, OR 3/4" CRUSHED STONE.

DIP WATER PIPE BEDDING (TYPE 4) DETAIL

NOT TO SCALE MCNJ-UTIL-WATR-1900 05/01/17

Colliers Engineering & Design

www.colliersengineering.com

Copyright © 2026. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design
HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	MJU	JJR/NV

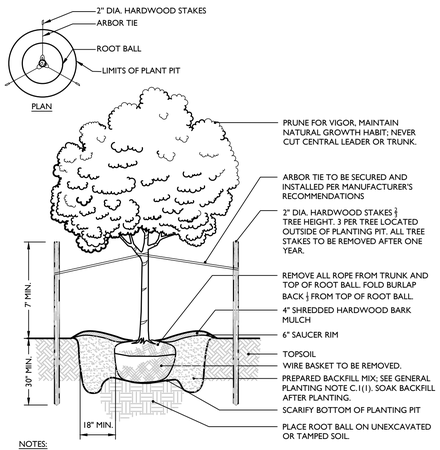
PROJECT NUMBER: 24009762G
DRAWING NAME: C-DTLS

SHEET TITLE: CONSTRUCTION DETAILS

SHEET NUMBER: 7.1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

2024\24009762G\Engineering\Site Plans\C-DTLS.dwg|C-7.1-DETAILS By: JUSTIN.ANDERSEN



NOTES:

1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
3. WHEN TAGGING TREES AT THE NURSERY MARK THE NORTH SIDE OF THE TREE AND WHEN INSTALLING ROTATE TREE TO FACE NORTH WHENEVER POSSIBLE.

1

DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE CELS-PLNT-TREE-1000 05/01/25

NEW JERSEY LANDSCAPE PLAN NOTES

A. GENERAL

1. THIS PLAN SHALL BE USED FOR LANDSCAPE PLANTING PURPOSES ONLY. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES AND STRUCTURES. NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR LOCATION CONFLICTS PRIOR TO PLANTING INSTALLATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITIES MARKOUTS AND COMPLIANCE WITH ALL FEDERAL, STATE, OR LOCAL CODES, LAWFUL ORDERS OR REGULATIONS GOVERNING UPON THIS WORK.
3. OWNER OR HIS/HER REPRESENTATIVE SHALL BE NOTIFIED PRIOR TO BEGINNING PLANTING OPERATIONS.

B. PLANT MATERIAL

1. PLANT MATERIAL:
   - 1.1. PLANT MATERIAL SHALL CONFORM WITH THE STANDARDS SET FORTH IN THE "ANSI Z60.1(LATEST ADDITION) 'AMERICAN STANDARD FOR NURSERY STOCK' AS PUBLISHED BY AMERICANHORT IN REGARD TO QUALITY, SIZE OF PLANTING, SPREAD OF ROOTS, SIZE OF ROOTBALL, AND BRANCHING PATTERN AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
   - 1.2. PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS, AND FREE FROM DEFECTS, INJURY, DISEASE, AND/OR INFESTATION, WITH ROOT BALLS INTACT.
   - 1.3. ALL PLANTS MUST BE HARDY UNDER CLIMATE CONDITIONS THAT EXIST AT THE PROJECT SITE AND GROWN AT NURSERY AT SAME HARDINESS ZONE AS THE PROJECT LOCATION.
   - 1.4. ALL PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AT THE NURSERY. THE PLANT MATERIAL SHALL BE PLANTED AT THE SAME LEVEL WHEN PLANTED.
   - 1.5. PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY TO THE SITE. IN THE EVENT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO PROTECT THE PLANT MATERIAL FROM DAMAGE PRIOR TO INSTALLATION.
   - 1.6. THE LANDSCAPE ARCHITECT OR OWNER SHALL HAVE THE RIGHT, AT ANY STAGE OF THE OPERATION, TO REJECT ANY AND ALL PLANT MATERIAL WHICH IN THEIR OPINION DOES NOT MEET THE REQUIREMENTS OF THESE PLANS.
2. PLANT QUANTITIES: THE LANDSCAPE PLAN SHOULD TAKE PRECEDENCE OVER THE PLANT SCHEDULE IF ANY PLANT DISCREPANCIES OCCUR. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY PLANT QUANTITY DISCREPANCIES PRIOR TO PLACING ORDERS.
3. PLANT SIZE: THE CONTRACTOR SHALL FURNISH PLANT MATERIAL IN THE CALIPER, HEIGHT, SIZE OR SPREAD INDICATED IN THE PLANT SCHEDULE.
4. SUBSTITUTIONS: NO PLANT SUBSTITUTIONS SHALL BE PERMITTED WITH REGARD TO SIZE, SPECIES, OR VARIETY WITHOUT WRITTEN PERMISSIONS OF THE MUNICIPALITY, LANDSCAPE ARCHITECT, OR OWNER. WRITTEN PROOF OF THE PLANT MATERIAL UNAVAILABILITY MUST BY DOCUMENTED BY THE CONTRACTOR.
5. GUARANTEE: PLANT MATERIAL SHALL BE GUARANTEED FOR **ONE (1) YEAR** AFTER THE DATE OF FINAL ACCEPTANCE. ANY PLANT MATERIAL THAT IS DEAD, DYING, DEFOLIATING, AND/OR LOST MORE THAN 50% OF ITS NATURAL FORM WITHIN THAT TIME PERIOD SHALL BE REMOVED, INCLUDING STUMP, AND REPLACED WITH A SIMILAR SIZE AND SPECIES AT THE EXPENSE OF THE CONTRACTOR WITHIN **ONE YEAR OR ONE GROWING SEASON**. TREE STAKES AND ARBOR TIES SHALL BE REMOVED AT THE END OF THE GUARANTEE PERIOD. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANT MATERIALS, LAWN, AND SEEDING AREAS (INCLUDING, BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, AND REMOVAL OF STAKES) UNTIL FINAL ACCEPTANCE BY THE OWNER.

C. TOPSOIL REQUIREMENTS:

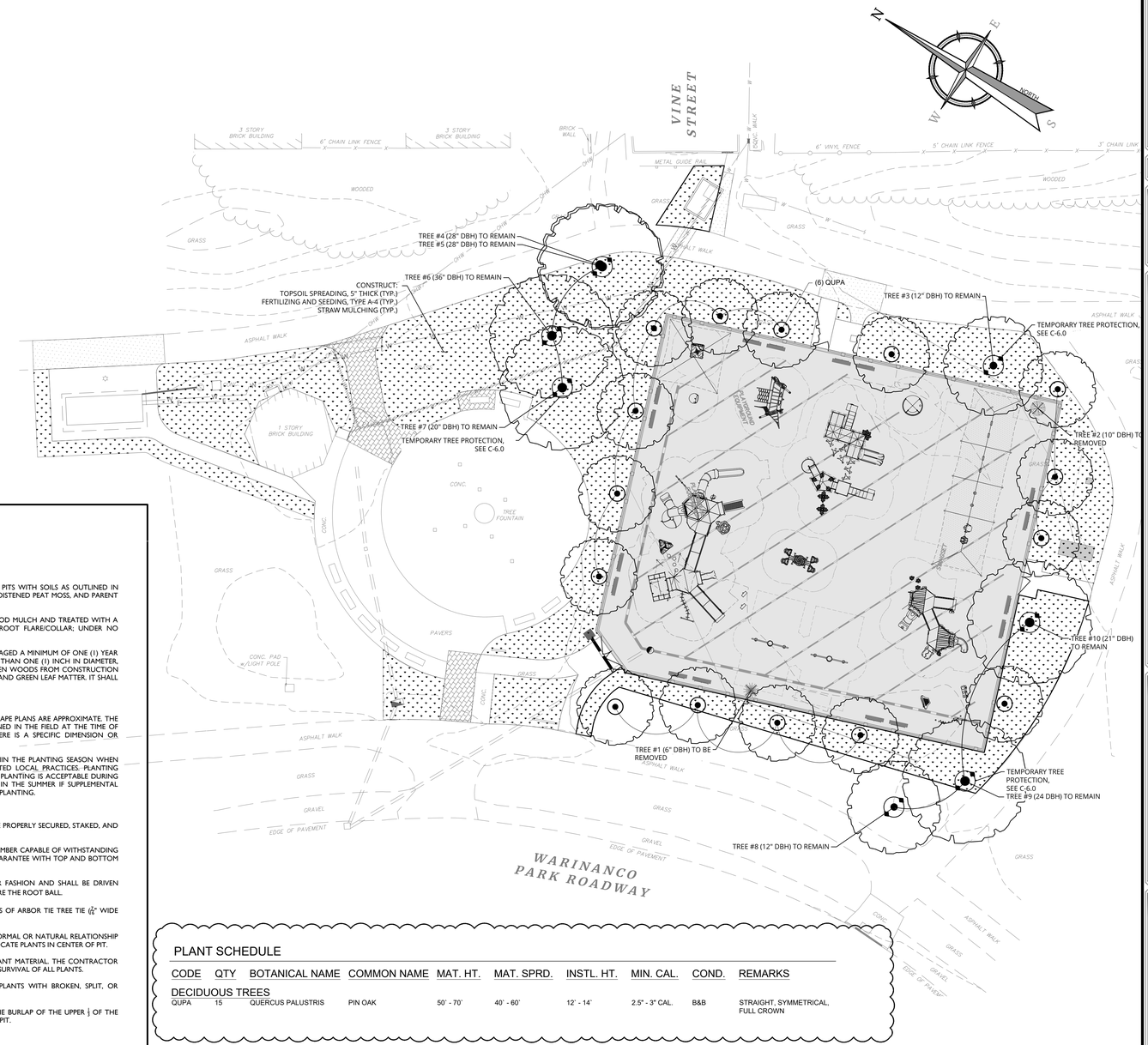
1. TOPSOIL REQUIREMENTS: SEE **NJDOT SECTION 917** FOR REFERENCE AND SOIL ADDITIVES.
   - 1.1. UNACCEPTABLE TOPSOIL SOURCES: DO NOT OBTAIN TOPSOIL FROM THE FOLLOWING SOURCES: AREAS CONTAINING CHEMICALLY CONTAMINATED SOILS; AREAS FROM WHICH THE ORIGINAL SURFACE HAS BEEN STRIPPED OR COVERED OVER, SUCH AS BORROW PITS, OPEN MINES, DEMOLITION SITES, DUMPS, LANDFILLS. NO TOPSOIL FROM WET EXCAVATION OR ACID PRODUCING SOILS.
   - 1.2. TOPSOIL SHALL BE UNIFORM QUALITY, FREE FROM HARD CLODS, STIFF CLAY, HARD PAN, SODS, LARGE STONE, CEMENT, ASH, SLAG, CONCRETE, TAR, BOARDS, CHIPS, MULCH, OR ANY OTHER UNDESIRABLE MATERIALS. NO TOPSOIL SHALL BE DELIVERED IN A FROZEN OR MUDDY CONDITION.
   - 1.3. TOPSOIL PH REQUIREMENTS ARE AS FOLLOWS: PH < 4.1 TOPSOIL IS UNACCEPTABLE. 4.1 ≤ PH < 5.8 ADD PULVERIZED LIME TO INCREASE THE PH TO 6.5 BEFORE USE. 5.8 ≤ PH < 7.0 TOPSOIL IS ACCEPTABLE. NO REMEDIATION NEEDED. 7.0 ≤ PH < 7.2 DECREASE PH TO AT LEAST 6.8 BEFORE USE. PH ≥ 7.2 TOPSOIL IS UNACCEPTABLE.
   - 1.4. ORGANIC CONTENT. ENSURE THAT TOPSOIL HAS A MINIMUM ORGANIC CONTENT OF 2.75% BY WEIGHT. IF THE ORGANIC CONTENT IS LESS THAN 2.75%, INCREASE THE ORGANIC CONTENT BY ADDING SOIL ADDITIVES AT A RATE NECESSARY TO ATTAIN THE MINIMUM ORGANIC CONTENT. THE ORGANIC CONTENT SHALL NOT EXCEED 8% BY WEIGHT AND SHALL BE SAMPLED IN ACCORDANCE WITH THE ASSOCIATION OF AGRICULTURAL CHEMISTS.
   - 1.5. GRADATION/PARTICLE SIZE. PROVIDE TOPSOIL CONFORMING TO THE PARTICLE SIZE REQUIREMENTS IN TABLE **917.01-2** AND THAT HAS NO MORE THAN 20 PERCENT RETAINED ON A NO. 10 SIEVE WHEN MECHANICALLY GRADED. THE DEPARTMENT WILL DETERMINE THE PARTICLE SIZE DISTRIBUTION FOR THE PORTION OF THE TOPSOIL PASSING THE NO. 10 SIEVE USING HYDROMETER ANALYSIS ACCORDING TO AASHTO T 88. SAND (2.0 MM TO 0.05 MM) 40 - 80% COMPOSITION. SILT (0.05 MM TO 0.005 MM) 0 - 30% COMPOSITION. CLAY (0.005 MM AND SMALLER) 10 - 30% COMPOSITION.
2. PREPARATION OF SUBGRADE:
   - 2.1. HOLLOWS, DEPRESSIONS, AND GULLIES SHALL BE FILLED WITH ACCEPTABLE SANDY LOAM AS OUTLINED ABOVE OR SOIL AS DESCRIBED HEREON: SOIL TO BE ONE PART EACH OF TOPSOIL, MOISTENED PEAT MOSS, AND PARENT MATERIAL.
   - 2.2. LOOSEN SUBSOIL BY SCARIFYING, RIPPING OR TILLING USING DISKS, HARROWS OR OTHER SUITABLE EQUIPMENT TO A DEPTH OF 4"-6" IMMEDIATELY BEFORE PLACING ANY TOPSOIL. REPEAT IN AREAS WHERE SEED OR PLANTINGS ARE PROPOSED AND THERE HAS BEEN COMPACTED SOIL.
3. TESTING AND APPROVAL OF SOILS:
   - 3.1. THE CONTRACTOR SHALL SUBMIT A CERTIFIED REPORT SHOWING THE ANALYSIS OF REPRESENTATIVE SAMPLES OF TOPSOIL. TESTING SHALL BE PERFORMED BY **RUTGERS COOPERATIVE RESEARCH & EXTENSION TESTING LABORATORIES** OR EQUIVALENT AS APPROVED BY STATE AND LOCAL REGULATIONS. PRICE BID SHALL INCLUDE ALL INSPECTION AND LABORATORY FEES.

D. PLANTING PROCEDURES

1. PLANTING BEDS:
   - 1.1. PROVIDE PLANTING PITS AS INDICATED ON PLANTING DETAILS. BACKFILL PLANTING PITS WITH SOILS AS OUTLINED IN SECTION C PRIOR. BACKFILL SOIL TO BE AT MINIMUM ONE PART EACH OF TOPSOIL, MOISTENED PEAT MOSS, AND PARENT MATERIAL.
   - 1.2. PLANTING BEDS SHALL RECEIVE **FOUR (4) INCHES** OF DOUBLE SHREDDED HARDWOOD MULCH AND TREATED WITH A PRE-EMERGENT HERBICIDE. NO MULCH SHALL COME IN DIRECT CONTACT WITH ROOT FLARE/COLLAR; UNDER NO CIRCUMSTANCES SHALL THE ROOT CROWN BE BURIED.
   - 1.3. MULCH SHALL BE DOUBLE SHREDDED GROUND HARDWOOD BARK MULCH, SHALL BE AGED A MINIMUM OF ONE (1) YEAR FOR PARTIAL DECOMPOSITION, SHALL BE SCREENED TO EXCLUDE PARTICLES LARGER THAN ONE (1) INCH IN DIAMETER, SHALL BE COMPOSED OF BARK AND HAVE A LOW WOOD CONTENT WITH NO HIDDEN WOODS FROM CONSTRUCTION DEBRIS, PALLETS, AND/OR PRESSURE TREATED LUMBER, AND BE FREE OF WEEDS, SEEDS, AND GREEN LEAF MATTER. IT SHALL BE NATURALLY DARK BROWN IN COLOR. NO DIED MULCH WILL BE ACCEPTED.
   - 1.4. SHRUB MASSES SHALL BE PLANTED IN CONTINUOUS MULCHED BEDS.
2. PLANT LOCATIONS: THE LOCATION OF ALL PLANT MATERIAL INDICATED ON THE LANDSCAPE PLANS ARE APPROXIMATE. THE FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BEDLINES SHALL BE DETERMINED IN THE FIELD AT THE TIME OF INSTALLATION FOLLOWING THE BASIC INTENT OF THE APPROVED PLANS, UNLESS THERE IS A SPECIFIC DIMENSION OR LOCATION SHOWN.
3. PLANTING DATES: PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICES. PLANTING SEASONS ARE DEFINED AS MARCH 15 THROUGH MAY 15 AND SEPT 15 THROUGH NOV 15. PLANTING IS ACCEPTABLE DURING THE WINTER MONTHS IF WEATHER PERMITS AND THE GROUND IS NOT FROZEN, AND IN THE SUMMER IF SUPPLEMENTAL WATERING IS PROVIDED. SOIL MUST BE FROST FREE, FRIABLE, AND NOT MUDDY AT TIME OF PLANTING.
4. PLANTING METHODS:
   - 4.1. TREES SHALL BE SUPPORTED IMMEDIATELY AFTER PLANTING. PLANT MATERIAL SHALL BE PROPERLY SECURED, STAKED, AND PLANTED IN CONFORMANCE WITH THE TYPICAL PLANTING DETAILS.
     - 4.1.1. STAKES SHALL BE EIGHT TO TEN FEET LONG, OF SOUND, DURABLE UNFINISHED LUMBER CAPABLE OF WITHSTANDING ABOVEGROUND AND UNDERGROUND CONDITIONS DURING THE PERIOD OF GUARANTEE WITH TOP AND BOTTOM DIMENSIONS OF TWO INCHES BY TWO INCHES IN DIAMETER
     - 4.1.2. THREE STAKES SHALL BE EQUALLY SPACED ABOUT THE TREE IN A TRIANGULAR FASHION AND SHALL BE DRIVEN VERTICALLY INTO THE GROUND 2½ TO 3 FEET IN A MANNER THAT DOES NOT INJURE THE ROOT BALL.
     - 4.1.3. TREES SHALL BE FASTENED TO EACH STAKE AT A HEIGHT OF FIVE FEET BY MEANS OF ARBOR TIE TREE TIE (½" WIDE RECOMMENDED FOR TREES UP TO 2½ INCHES IN CALIPER).
   - 4.2. SET PLANTS PLUMB AND STRAIGHT. SET AT SUCH LEVEL THAT AFTER SETTLEMENT A NORMAL OR NATURAL RELATIONSHIP TO THE CROWN OF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE PLANTS IN CENTER OF PIT.
   - 4.3. AT TIME OF INSTALLATION, THE CONTRACTOR SHALL WATER NEWLY INSTALLED PLANT MATERIAL. THE CONTRACTOR SHALL PROVIDE REGULAR WATERING TO ENSURE THE ESTABLISHMENT, GROWTH, AND SURVIVAL OF ALL PLANTS.
   - 4.4. B&B PLANTS SHALL BE HANDLED FROM THE BOTTOM OF THE ROOTBALL ONLY. PLANTS WITH BROKEN, SPLIT, OR DAMAGED ROOTBALLS SHALL BE REJECTED.
   - 4.5. CORD BINDING OF ALL B&B PLANTS SHALL BE CUT AND REMOVED, ALONG WITH THE BURLAP OF THE UPPER ⅓ OF THE ROOT BALL. ALL WIRE BASKETS ARE TO BE REMOVED PRIOR TO BACKFILLING PLANTING PIT.

E. MAINTENANCE

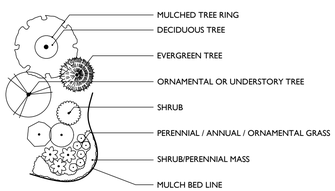
1. PRUNING:
   - 1.1. EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH AMERICAN STANDARD FOR NURSERY STOCK TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL DEAD WOOD OR SUCKERS AND ALL BROKEN OR BADLY BRUISED BRANCHES SHALL BE REMOVED. PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS.
   - 1.2. SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESS SHOULD NOT BE BRANCHED LOWER THAN 7'-0" ABOVE GRADE. PLANT MATERIAL LOCATED WITHIN SIGHT TRIANGLE EASEMENTS SHALL NOT EXCEED A MATURE HEIGHT OF 30" ABOVE THE ELEVATION OF THE ADJACENT CURB. STREET TREES PLANTED IN SIGHT TRIANGLE EASEMENTS SHALL BE PRUNED TO NOT TO HAVE BRANCHES BELOW 7'-0".
   - 1.3. THE CENTRAL LEADER SHALL NOT BE CUT OR DAMAGED.
2. LAWN AREAS:
   - 2.1. THE LANDSCAPE CONTRACTOR SHALL TEST THE SOIL TO CONFIRM SUITABILITY FOR THE PROPOSED SEED MIX AND SUPPLEMENT AS REQUIRED TO MEET THE REQUIRED PH & NUTRIENT LEVELS.
   - 2.2. ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEED UNLESS OTHERWISE INDICATED ON THE LANDSCAPE PLANS. SEED SHALL BE IN ACCORDANCE WITH THE LAWN SEED MIX NOTES AND THE SOIL EROSION AND SEDIMENT CONTROL DISTRICT'S SEED SPECIFICATIONS AS NOTED ON THE SOIL EROSION AND SEDIMENT CONTROL DETAILS SHEET.
   - 2.3. SOD, IF SPECIFIED, SHALL CONSIST OF A STATE CERTIFIED MIXTURE. ALL DISTURBED AREAS INDICATED AS LAWN OR SOD SHALL BE TOPSOILED, LIMED, AND FERTILIZED & FINE GRADED PRIOR TO LAWN INSTALLATION.
3. EXISTING VEGETATION: EXISTING TREES AND SHRUBS TO BE PRESERVED ON SITE SHALL BE PROTECTED AGAINST CONSTRUCTION DAMAGE BY SNOW FENCING. FENCING SHALL BE PLACED OUTSIDE THE INDIVIDUAL TREE CANOPY. TREES TO REMAIN SHALL BE IDENTIFIED IN THE FIELD PRIOR TO COMMENCEMENT OF CONSTRUCTION. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION, GRADING, OR CLEARING. EXISTING VEGETATION BEING PRESERVED AND LOCATED AT THE EDGE OF THE NEW TREELINE SHALL BE PRUNED AND TRIMMED TO REMOVE ALL DEAD, DAMAGED, OR DISEASED BRANCHES.
4. SITE CLEANUP: PLANTING DEBRIS (WIRE, TWINE, RUBBERHOSE, BACKFILL, ETC.) SHALL BE REMOVED FROM THE SITE AFTER PLANTING IS COMPLETE. THE PROPERTY IS TO BE LEFT IN A NEAT, ORDERLY CONDITION IN ACCORDANCE WITH ACCEPTED PLANTING PRACTICES.



PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	MAT. HT.	MAT. SPRD.	INSTL. HT.	MIN. CAL.	COND.	REMARKS
DECIDUOUS TREES									
QUPA	15	QUERCUS PALUSTRIS	PIN OAK	50' - 70'	40' - 60'	12' - 14'	2.5" - 3" CAL.	B&B	STRAIGHT, SYMMETRICAL, FULL CROWN

LANDSCAPE LEGEND



NOTES:
1. LANDSCAPE SYMBOLS ON THE PLAN VARY AND MAY DEVIATE FROM THE LANDSCAPE LEGEND SYMBOLS SHOWN ABOVE.

HATCH & SEED MIX KEY



FERTILIZING AND SEEDING, TYPE A-4 (TYP.)
NOTE: SEE CIVIL PLANS FOR SEED MIX SPECS

GENERAL NOTES

1. THIS SHEET IS TO BE USED FOR LANDSCAPE PURPOSES ONLY.
2. REFER TO CIVIL SITE PLANS FOR ADDITIONAL GENERAL NOTES.

LANDSCAPE PLAN NOTES

1. REFER TO THIS SHEET FOR GENERAL PLANTING NOTES AND LANDSCAPE DETAILS.
2. REFER TO THIS SHEET FOR PLANT SCHEDULES.
3. PLANT LOCATIONS INDICATED ON THE LANDSCAPE PLAN ARE APPROXIMATE; ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO SITE CONDITIONS.
4. THE LANDSCAPE PLAN SHALL TAKE PRECEDENCE OVER THE PLANT SCHEDULE SHOULD ANY PLANT MATERIAL DISCREPANCIES OCCUR.
5. LAWN AREAS SHALL BE STABILIZED WITH SEED UNLESS OTHERWISE INDICATED ON THE PLAN. REFER TO THE LAWN SEED MIX NOTES ON THE LANDSCAPE DETAILS SHEET AND THE SOIL EROSION AND SEDIMENT CONTROL PLAN FOR APPROVED SEED MIXTURES.
6. SOD SHALL BE A BLEND OF TURFGRASS SPECIES SUITABLE TO THE PROJECT LOCATION AND LOCALLY AVAILABLE.
7. ALL SHADE TREES PLANTED ADJACENT TO PEDESTRIAN WALKWAYS, VEHICLE ACCESSES, OR WITHIN A SIGHT TRIANGLE OR SIGHT EASEMENT SHALL BE BRANCHED A MINIMUM OF 7'-00" ABOVE GRADE AND/OR APPROPRIATELY PRUNED TO BE 7'-00" ABOVE GRADE. ALL SHRUBS WITHIN A SIGHT TRIANGLE OR SIGHT EASEMENT SHALL NOT EXCEED 30" ABOVE THE ELEVATION OF THE ADJACENT CURB AND ARE TO BE APPROPRIATELY PRUNED.

TREE PRUNING NOTES

1. ALL PRUNING OF EXISTING TREES SHALL BE PERFORMED BY AN INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) CERTIFIED ARBORIST, UTILIZING THE NATURAL TARGET PRUNING METHOD.
2. ALL PRUNING SHALL FOLLOW ISA'S TREE PRUNING GUIDELINES OR THE MOST RECENT ANSI A300 PRUNING STANDARDS, AND ANSI Z133.1 SAFETY STANDARDS.
3. SELECTIVE DIRECTIONAL PRUNING SHALL BE UTILIZED AND TOPPING OR DEADHEADING OF TREES SHALL BE PROHIBITED.
4. ANY TREES LOCATED UNDER OR ADJACENT TO OVERHEAD UTILITY WIRES SHALL BE PRUNED BY AN ISA CERTIFIED ARBORIST WHO MEETS ANSI AND OSHA STANDARDS IN THE SPECIAL TECHNIQUES NEEDED TO WORK SAFELY AROUND ENERGIZED LINES.
5. IT IS RECOMMENDED THAT THE CONTRACTOR CONTACT A UTILITY COMPANY REPRESENTATIVE, PRIOR TO PERFORMING ANY TREE PRUNING WORK NEAR AN OVERHEAD POWER LINE.

20 0 20 40

SCALE : 1" = 20'

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Colliers Engineering & Design
www.colliersengineering.www.com

Copyright © 2026. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design
HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

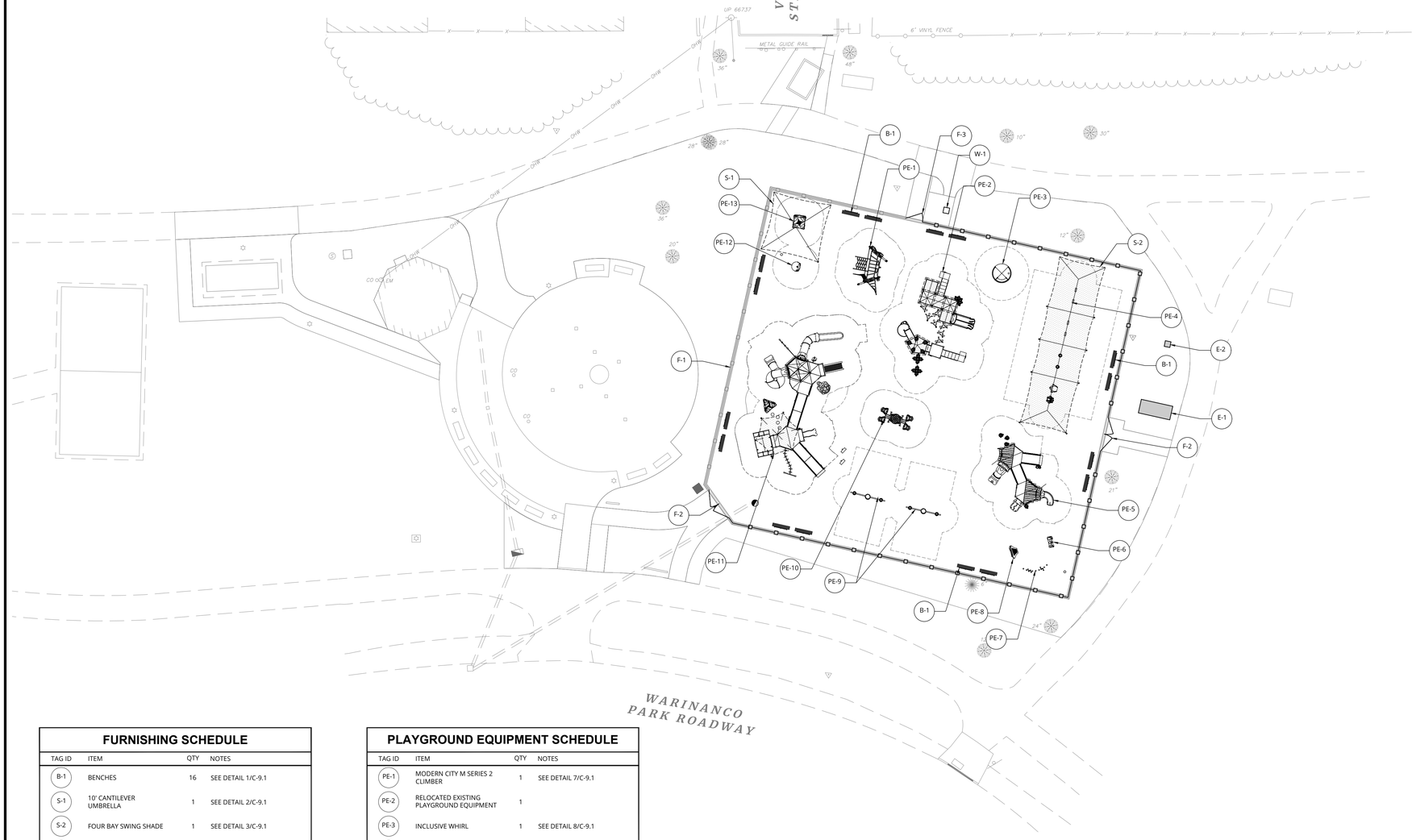
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	AU	MKB

PROJECT NUMBER: 24009762G
DRAWING NAME: C-LAND

SHEET TITLE: LANDSCAPE PLAN

SHEET NUMBER: 8.0

2024\24009762G\Engineering\Site Plan\C-LAND.dwg C-LAND By: JUSTIN.LANDERSEN



FURNISHING SCHEDULE

TAG ID	ITEM	QTY	NOTES
B-1	BENCHES	16	SEE DETAIL 1/C-9.1
S-1	10' CANTILEVER UMBRELLA	1	SEE DETAIL 2/C-9.1
S-2	FOUR BAY SWING SHADE	1	SEE DETAIL 3/C-9.1
E-1	RELOCATED EXISTING TABLE	1	
E-1	RELOCATED EXISTING GRILL	1	
F-1	4' HIGH ALUMINUM PICKET FENCE	492 L.F.	SEE DETAIL 4/C-9.1
F-2	4' HIGH ALUMINUM DOUBLE SELF CLOSING PICKET GATE	2	SEE DETAIL 5/C-9.1
F-3	4' HIGH ALUMINUM SINGLE SELF CLOSING PICKET GATE	1	SEE DETAIL 6/C-9.1
W-1	EXISTING WATER FOUNTAIN	1	

PLAYGROUND EQUIPMENT SCHEDULE

TAG ID	ITEM	QTY	NOTES
PE-1	MODERN CITY M SERIES 2 CLIMBER	1	SEE DETAIL 7/C-9.1
PE-2	RELOCATED EXISTING PLAYGROUND EQUIPMENT	1	
PE-3	INCLUSIVE WHIRL	1	SEE DETAIL 8/C-9.1
PE-4	SWING SEATS - SET OF 8 - ADAPTIVE SEAT (1), - 5-12 ZERO-G CHAIR (1) - TOT SEATS (2) - BELT SEATS (4)	1	SEE DETAIL 9/C-9.1
PE-5	CUSTOM POWERSCAPE 2-5 UNIT	1	SEE DETAIL 1/C-9.2
PE-6	CONCERT TRIO	1	SEE DETAIL 2/C-9.2
PE-7	HARMONIC CHIMES	1	SEE DETAIL 3/C-9.2
PE-8	CANTATA CHIMES	1	SEE DETAIL 4/C-9.2
PE-9	RELOCATED EXISTING TREE SWING SET	1	
PE-10	ROXALL SEE SAW	1	SEE DETAIL 5/C-9.2
PE-11	CUSTOM POWERSCAPE 5-12 UNIT	1	SEE DETAIL 6/C-9.2
PE-12	ROCKIN' ROBIN	1	SEE DETAIL 7/C-9.2
PE-13	SENSORY COVE CLIMBER	1	SEE DETAIL 8/C-9.2

GENERAL NOTES:

1. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT & OWNER OF ANY DISCREPANCIES BETWEEN PLAN AND SITE CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
2. DO NO SCALE DRAWINGS, USE DIMENSIONS SHOWN.
3. ALL DIMENSIONS TO BE VERIFIED IN FIELD
4. ALL DIMENSIONS ARE TAKEN PARALLEL TO OR PERPENDICULAR FROM FEATURES SHOWN UNLESS OTHERWISE NOTED.
5. LAYOUT AND ALIGNMENT OF ARBORS, COLUMNS, FENCING, FIXED SEATING, EDGING AND OTHER STRUCTURAL ELEMENTS ASSOCIATED WITH LANDSCAPE TO BE VERIFIED IN THE FIELD AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
6. CONTRACTOR IS RESPONSIBLE FOR ENGAGING NJ LICENSED STRUCTURAL ENGINEER TO REVIEW, STAMP, AND SIGN ALL SHOP DRAWINGS RELATED TO STRUCTURAL ELEMENTS.

20 0 20 40

SCALE : 1'' = 20'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

Colliers Engineering & Design

www.colliersengineering.com

Copyright © 2025. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design
HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	NDV	CRG/MKB

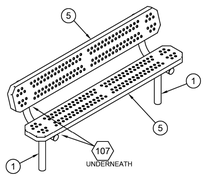
PROJECT NUMBER: 24009762G
DRAWING NAME: C-FURN

SHEET TITLE: FURNISHING PLAN

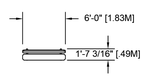
SHEET NUMBER: 9.0

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

2024\24009762G\Engineering\Site Plans\C-FURN.dwg|C-9.0-FURNISHING By: JUSTIN.ANDERSEN



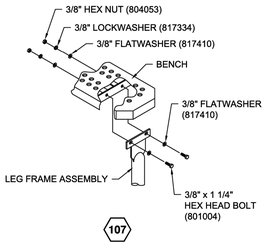
28009/28012
28009 SHOWN



28009/28010

= INSTALLATION DETAIL

= PARTS LIST REFERENCE

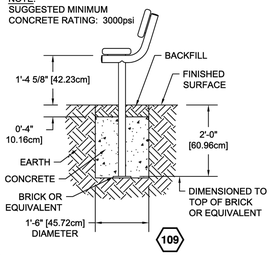


PARTS LIST

REF. NO.	DESCRIPTION	NUMBER REQUIRED 28008	28009	28010	28011	28012	28013	PART NUMBER
1	Leg Ass'y, In-Ground	0	2	0	0	2	0	152099
2	Leg Ass'y, Portable	2	0	0	2	0	0	157851
3	Leg Ass'y, Surface Mount	0	0	2	0	0	2	157704
4	Horizontal Support	1	0	1	0	0	0	157796
4	Horizontal Support	0	0	0	1	0	1	159450
5	6' Punched Bench, Coated	2	2	2	0	0	0	160893
5	6' Punched Bench, Coated	0	0	0	2	2	2	165505
	Hardware Complete	0	1	0	0	1	0	157867
	Hardware Complete	1	0	0	1	0	0	157868
	Hardware Complete	0	0	1	0	0	1	157869
	1/2" x 2-3/4" Wedge Anchor	0	0	4	0	0	4	800074*
	3/8" x 1-1/4" Hex Head Bolt	8	8	8	8	8	8	801004*
	3/8" x 2-3/4" Hex Head Bolt	2	0	2	2	0	2	801010*
	1/2" Lockwasher	0	0	4	0	0	4	817342*
	3/8" Flatwasher	16	16	16	16	16	16	817410*
	3/8" Lockwasher	10	10	10	10	10	10	817334*
	3/8" Hex Nut	8	8	8	8	8	8	804053*

Unless Otherwise Specified, All Units of Measure are Each
** Included in Hardware*

NOTE:
SUGGESTED MINIMUM CONCRETE RATING: 3000psi



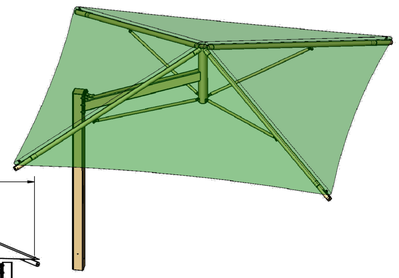
MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: 6' PARK BENCH
PRODUCT ID: 28009
FINISHES: FORESTER COLOR PALETTE
MOUNTING: IN GROUND FOUNDATIONS. CONTRACTOR SHALL PROVIDE FOUNDATION DESIGN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY.

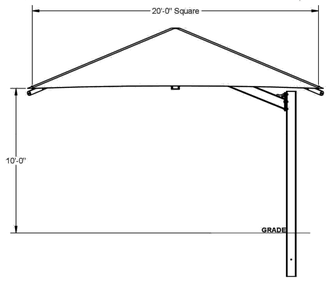
1 NOT TO SCALE

BENCH DETAILS

CANTILEVER UMBRELLA SHADE
20' x 20' x 10'
MODEL #:
CU202010G (With Glide Elbows)
CU202010N (Without Glide Elbows)

REF.#	PART DESCRIPTION	QTY.
1	Column - 8" Sq. w/ Mounting Plate	1
2	Cantilever Arm/Crown - 6"x8"-Ø6.6"-Ø3 1/2"	1
3	Rafter - Ø 3 1/2" Swaged w/ Adjustment Plate	4
4	Strut - Ø 1 7/8" Rigid	4
5	Canopy - 20' x 20' w/ Cable Insert	1
6	Hardware Kit	1





MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: 10' CANTILEVER UMBRELLA
PRODUCT ID: QR1196
FINISHES: FORESTER COLOR PALETTE
MOUNTING: CONTRACTOR SHALL PROVIDE FOUNDATION DESIGN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY.

2 NOT TO SCALE

10' CANTILEVER UMBRELLA DETAILS

GTShade

SWING SHADE FRAME - 4 BAY | 5194

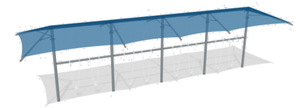
Keep your playground swings cool and comfortable with our Swing Shade Frame! The fabric shade is designed to block up to 97% of harmful UV rays and is available in all of our fabric colors to complement your playground.

SPECIFICATIONS

Use Zone:	58'-7" x 30'-9" (17.86m x 9.37m)
Age Ranges:	2 to 5 Years 5 to 12 Years 2 to 5 or 5 to 12 Years
Fall Height:	8' (2.44 m)

DESIGN FEATURES

- Provides cool, comfortable shade for swinging play areas
- Available in 1,2, 3, or 4-bay configurations
- Choose from any of our shade fabric colors to complement your play area



MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: SWING SHADE FRAME - 4 BAY
PRODUCT ID: 5194
FINISHES: FORESTER COLOR PALETTE
MOUNTING: CONTRACTOR SHALL PROVIDE FOUNDATION DESIGN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY.

3 NOT TO SCALE

FOUR BAY SWING SHADE

ECHELON PLUS® | 3-RAIL PANELS | 4" AIR SPACE

FLUSH BOTTOM | 8' PANEL LENGTH *(91.75" actual width)* **| 19 PICKETS PER PANEL | ASSEMBLY REQUIRED**

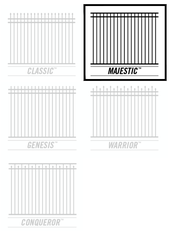
PANEL	ITEM NUMBER	WEIGHT	STOCKING
3'	1AB☒⊗3368FR1	23 lbs	⦸
3½'	1AB☒⊗3428FR1	25 lbs	⦸
4'	**1AB☒⊗3488FR1**	**26 lbs**	⦸
5'	1AB☒⊗3608FR1	29 lbs	⦸
6'	1AB☒⊗3728FR1	32 lbs	⦸

☒ = ***FENCE STYLES AVAILABLE*** | **C** = Classic **M** = Majestic **G** = Genesis **W** = Warrior **K** = Conqueror

⊗ = ***COLOR OPTIONS AVAILABLE*** | **B** = Black **N** = Bronze **W** = White

⦸ = ***NON-STOCKED PRODUCT***
For details, see Ameristar's Sales Policy in the catalog guide.

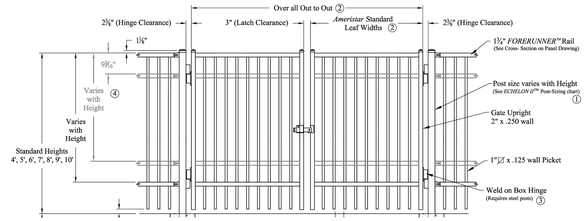
NOTE: Classic, Majestic, Genesis & Warrior styles are IBC compliant.



MANUFACTURER: AMERISTAR (OR APPROVED EQUAL)
PRODUCT: ECHELON PLUS, 4' HIGH 3-RAIL PANNEL ALUMINUM FENCE
PRODUCT ID: 1AMB3488FR1
FINISHES: BLACK POWDER COATED OR TO BE DEFINED BY MUNICIPALITY
MOUNTING: SURFACE MOUNTED TO CONCRETE CURB.

4 NOT TO SCALE

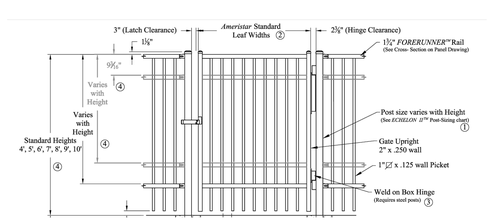
4' HIGH ALUMINUM PICKET FENCE DETAILS



MANUFACTURER: AMERISTAR (OR APPROVED EQUAL)
PRODUCT: 4' HIGH 3-RAIL ALUMINUM DOUBLE SELF CLOSING GATE
PRODUCT ID: ECHELON II MAJESTIC 3-RAIL DOUBLE GATE
FINISHES: BLACK POWDER COATED OR TO BE DEFINED BY MUNICIPALITY
MOUNTING: SURFACE MOUNTED TO CONCRETE CURB.

5 NOT TO SCALE

4' HIGH ALUMINUM DOUBLE SELF CLOSING PICKET GATE DETAILS



MANUFACTURER: AMERISTAR (OR APPROVED EQUAL)
PRODUCT: 4' HIGH 3-RAIL ALUMINUM SINGLE SELF CLOSING GATE
PRODUCT ID: ECHELON II MAJESTIC 3-RAIL SINGLE GATE
FINISHES: BLACK POWDER COATED OR TO BE DEFINED BY MUNICIPALITY
MOUNTING: SURFACE MOUNTED TO CONCRETE CURB.

6 NOT TO SCALE

4' HIGH ALUMINUM SINGLE SELF CLOSING PICKET GATE DETAILS

ModernCity

MODERN CITY M SERIES MCM2NI | MCM2NI

MCM2NI is a multi-sided, multi-user climber constructed of all steel materials for maximum strength and durability. With multiple climbing types and varying levels of challenge, this is a versatile addition to your Modern City play area.

SPECIFICATIONS

Use Zone:	28'-1" x 22'-11" (8.56m x 6.98m)
Age Ranges:	5 to 12 Years
Fall Height:	9' (2.74 m)

ACCESSIBILITY

Ground Level:	2
Types:	2

DESIGN FEATURES

- Designed for modular design
- Combine play activities for an exciting and challenging play space
- Pairs with V and X Series
- Constructed of durable, recyclable materials and backed by the industry's leading warranty



MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: MODERN CITY M SERIES 2 CLIMBER
PRODUCT ID: MCM2NI
FINISHES: FORESTER COLOR PALETTE
MOUNTING: CONTRACTOR SHALL PROVIDE FOUNDATION DESIGN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY.

7 NOT TO SCALE

MODERN CITY M SERIES 2 CLIMBER DETAILS

GTEvents

INCLUSIVE WHIRL | 6262

The Inclusive Whirl provides ease of access for people of all abilities with its ground-level, zero-entry design. It features seating, a large platform surface that exceeds the ADA requirements, and handrails for users to grasp while spinning.

SPECIFICATIONS

Use Zone:	18'-6" x 18'-6" (5.64m x 5.64m)
Age Ranges:	2 to 5 Years 5 to 12 Years 2 to 5 or 5 to 12 Years
Fall Height:	4' (1.22 m)

DESIGN FEATURES

- Zero entry universal design provides easy access for all users
- Fully compliant with ADA/DOJ guidelines for accessibility
- Available in three color combinations: Basic (#6262), Natural (#6263) and Playful (#6264)
- Must be installed with unitary surfacing



MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: INCLUSIVE WHIRL
PRODUCT ID: 6262
FINISHES: FORESTER COLOR PALETTE
MOUNTING: CONTRACTOR SHALL PROVIDE FOUNDATION DESIGN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY.

8 NOT TO SCALE

INCLUSIVE WHIRL DETAILS



MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: 5-12 ZERO-G
PRODUCT ID: 5287
QUANTITY: 4
FINISHES: FORESTER COLOR PALETTE



MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: 5-12 ZERO-G
PRODUCT ID: 5376
QUANTITY: 1
FINISHES: FORESTER COLOR PALETTE



MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: BELT SEAT 8'
PRODUCT ID: 5293
QUANTITY: 2
FINISHES: FORESTER COLOR PALETTE



MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: TOT SEAT 8'
PRODUCT ID: 5294
QUANTITY: 1
FINISHES: FORESTER COLOR PALETTE

MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: ADAPTIVE SWING SEAT 8'
PRODUCT ID: 5294
QUANTITY: 1
FINISHES: FORESTER COLOR PALETTE

9 NOT TO SCALE

SWING SEATS - SET OF 8 DETAILS

Colliers Engineering & Design

www.colliersengineering.com

Copyright © 2025. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, revised, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design
HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	NDV	CRG/MKB

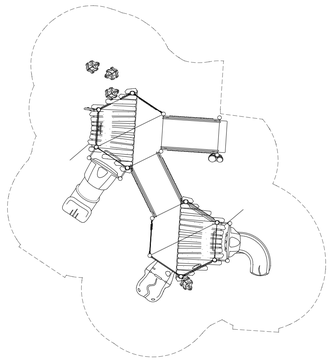
PROJECT NUMBER: 24009762G
DRAWING NAME: C-FURN

SHEET TITLE: FURNISHING DETAILS

SHEET NUMBER: 9.1

2024\24009762G\Engineering\Site Plans\C-FURN.dwg|C9.1 FURNISHING DETAILS By:JUSTIN.ANDERSEN

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: CUSTOM POWERSCAPE 2-5 UNIT
PRODUCT ID: ----
FINISHES: FORESTER COLOR PALETTE
MOUNTING: CONTRACTOR SHALL PROVIDE FOUNDATION DESIGN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY.

1 NOT TO SCALE

CUSTOM POWERSCAPE 2-5 UNIT DETAILS

GTEvents

CONCERT TRIO | 3259

Concert, Melody, and Cantata are angled at 35° for a comfortable experience for everyone. HDPE plastic frame available in all standard colors to match your playground equipment.

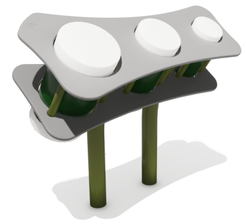
SPECIFICATIONS

Age Ranges:	2 to 5 Years 5 to 12 Years 2 to 5 or 5 to 12 Years
Number of Children:	4

DESIGN FEATURES

- Creative outlet that encourages social interaction and imaginary play
- Develops gross motor skills
- Inclusive, accessible design for all children age 2-5

dustry's best warranty



MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: CONCERT TRIO
PRODUCT ID: 3259
FINISHES: FORESTER COLOR PALETTE
MOUNTING: CONTRACTOR SHALL PROVIDE FOUNDATION DESIGN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY.

2 NOT TO SCALE

CONCERT TRIO DETAILS

GTEvents

HARMONIC CHIMES - SET OF 3 | 4676

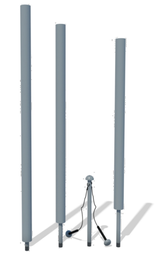
GT Symphony™ is a collection of precision-tuned musical instruments designed in partnership with Freenotes™ Harmony Park, a PlayCore Company. Add a symphony of inclusive music to your GameTime playground!

SPECIFICATIONS

Age Ranges:	2 to 5 or 5 to 12 Years

DESIGN FEATURES

- Music is an inherently inclusive activity that encourages social and creative play.
- It enhances cognitive skill and reduces anxiety.
- Plus, it's a lot of fun for children and adults of all abilities!
- Our new GT Symphony™ collection makes beautiful music easy to make on the playground.



MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: HARMONIC CHIMES
PRODUCT ID: 4676
FINISHES: FORESTER COLOR PALETTE
MOUNTING: CONTRACTOR SHALL PROVIDE FOUNDATION DESIGN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY.

3 NOT TO SCALE

HARMONIC CHIMES DETAILS

GTEvents

CANTATA CHIMES | 3256

Concert, Melody, and Cantata are angled at 35° for a comfortable experience for everyone. HDPE plastic frame available in all standard colors to match your playground equipment.

SPECIFICATIONS

Age Ranges:	2 to 5 Years 5 to 12 Years 2 to 5 or 5 to 12 Years

DESIGN FEATURES

- 11 resonated aluminum tubes produce rich, soothing tones
- Precision tuned to a pentatonic (five-note) scale to prevent wrong notes and help every user feel confident
- Available with adaptive mallet



MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: CANTATA CHIMES
PRODUCT ID: 3256
FINISHES: FORESTER COLOR PALETTE
MOUNTING: CONTRACTOR SHALL PROVIDE FOUNDATION DESIGN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY.

4 NOT TO SCALE

CANTATA CHIMES DETAILS

GTEvents

ROXALL SEE SAW | 6245

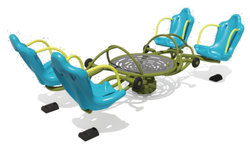
With high backs and side rails, each of the four seats on this innovative see-saw are designed to accommodate users of all abitilies as they enjoy the rocking motion with their friends.

SPECIFICATIONS

Use Zone:	17'-4" x 23'-6" (5.28m x 7.16m)
Age Ranges:	5 to 12 Years
Fall Height:	4' (1.22 m)
Number of Children:	4

DESIGN FEATURES

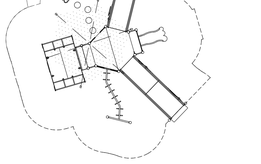
- Inclusive see-saw activity for up to five users
- High back seats with side rails provide additional support for children of all abilities
- Center saucer is at transfer height for users with mobility devices



MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: ROXALL SEE SAW
PRODUCT ID: 6245
FINISHES: FORESTER COLOR PALETTE
MOUNTING: CONTRACTOR SHALL PROVIDE FOUNDATION DESIGN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY.

5 NOT TO SCALE

ROXALL SEE SAW DETAILS



MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: CUSTOM POWERSCAPE 5-12 UNIT
PRODUCT ID: ----
FINISHES: FORESTER COLOR PALETTE
MOUNTING: CONTRACTOR SHALL PROVIDE FOUNDATION DESIGN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY.

6 NOT TO SCALE

CUSTOM POWERSCAPE 5-12 UNIT DETAILS

GTEvents | PlayTrails

ROCKIN' ROBIN | 38020

The Rockin' Robin rocks front-to-back to promote vestibular stimulation and social interaction as children work to rock themselves or others using the built in handholds.

SPECIFICATIONS

Use Zone:	15'-9" x 15'-3" (4.8m x 4.65m)
Age Ranges:	2 to 5 Years 5 to 12 Years 2 to 5 or 5 to 12 Years
Fall Height:	5' (1.52 m)

DESIGN FEATURES

- Designed with soft, curved edges
- Comfortable seating for children and adults to promote intergenerational play
- Promotes vestibular stimulation and social skills as children work together to rock front-to-back
- Built in drainage prevents water pooling and tamper-resistant hardware provides maintenance ease
- ADA compliant for 18" transfer if accessible routes are available



MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: ROCKING' ROBIN
PRODUCT ID: 38020
FINISHES: FORESTER COLOR PALETTE
MOUNTING: CONTRACTOR SHALL PROVIDE FOUNDATION DESIGN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY.

7 NOT TO SCALE

ROCKIN' ROBIN DETAILS

GTEvents

SENSORY COVE CLIMBER (SQUARE) | 6249

Children use the Sensory Cove Climber as a quiet space to rest, relax, and gather with friends. It's the perfect place to observe play from a distance until you are ready to join in, or it could act as a sensory-relief area.

SPECIFICATIONS

Use Zone:	16'-2" x 16'-8" (4.93m x 5.08m)
Age Ranges:	2 to 5 Years 5 to 12 Years 2 to 5 or 5 to 12 Years
Fall Height:	6' (1.83 m)
Number of Children:	35 to 40

DESIGN FEATURES

- Adds a freestanding climbing element to any place space
- Comfortable nook offers kids a place to relax and observe
- Complements the look and style of our PrimeTime Umbra roof system
- Constructed of durable, recyclable materials and backed by the industry's leading warranty



MANUFACTURER: GAMETIME (OR APPROVED EQUAL)
PRODUCT: SENSORY COVE CLIMBER
PRODUCT ID: 6249
FINISHES: FORESTER COLOR PALETTE
MOUNTING: CONTRACTOR SHALL PROVIDE FOUNDATION DESIGN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY.

8 NOT TO SCALE

SENSORY COVE CLIMBER DETAILS

Colliers Engineering & Design
www.colliersengineering.com

Copyright © 2025. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as MASER CONSULTING

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

Joseph R. Venezia
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE45473
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500

CONSTRUCTION PLANS

FOR

PLAYGROUND AT WARINANCO PARK

BLOCK 7601
PART OF LOT 1

CITY OF ELIZABETH
UNION COUNTY
NEW JERSEY

Colliers Engineering & Design
HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/13/2026	NDV	CRG/MKB

PROJECT NUMBER: 24009762G
DRAWING NAME: C-FURN

SHEET TITLE: FURNISHING DETAILS

SHEET NUMBER: 9.2

2024\24009762G\Engineering\Site Plans\C-FURN.dwg|C-9.2-FURNISHING DETAILS By: JUSTIN.ANDERSEN

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.