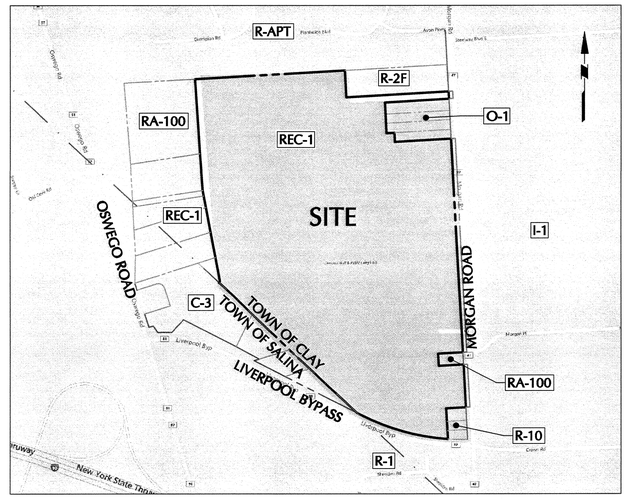
SITE PLAN APPROVAL DOCUMENTS
FOR
PROPOSED DISTRIBUTION FACILITY PROJECT
IN
TOWN OF CLAY
ONONDAGA COUNTY, NEW YORK
SECTION 114, BLOCK 1, LOT 2.3

DRAWING LIST	
DRAWING NO.	DRAWING TITLE
CS001	COVER SHEET
CS002	NOTES SHEET
CS100	OVERALL SITE PLAN
CS101	SITE PLAN (1 OF 4)
CS102	SITE PLAN (2 OF 4)
CS103	SITE PLAN (3 OF 4)
CS104	SITE PLAN (4 OF 4)
CS110	PAVEMENT PLAN
CS401	SIGNAGE AND STRIPING PLAN (1 OF 4)
CS402	SIGNAGE AND STRIPING PLAN (2 OF 4)
CS403	SIGNAGE AND STRIPING PLAN (3 OF 4)
CS404	SIGNAGE AND STRIPING PLAN (4 OF 4)
CG100	OVERALL GRADING AND DRAINAGE PLAN
CG101	GRADING AND DRAINAGE PLAN (1 OF 4)
CG102	GRADING AND DRAINAGE PLAN (2 OF 4)
CG103	GRADING AND DRAINAGE PLAN (3 OF 4)
CG104	GRADING AND DRAINAGE PLAN (4 OF 4)
CG201	STORM SEWER PROFILES (1 OF 4)
CG202	STORM SEWER PROFILES (2 OF 4)
CG203	STORM SEWER PROFILES (3 OF 4)
CG204	STORM SEWER PROFILES (4 OF 4)
CU100	OVERALL UTILITY PLAN
CU101	UTILITY PLAN (1 OF 4)
CU102	UTILITY PLAN (2 OF 4)
CU103	UTILITY PLAN (3 OF 4)
CU104	UTILITY PLAN (4 OF 4)
CU201	SANITARY SEWER PROFILES
CE100	OVERALL PHASING AND SOIL EROSION & SEDIMENT CONTROL PLAN
CE101	EROSION & SEDIMENT CONTROL PLAN (1 OF 4)
CE102	EROSION & SEDIMENT CONTROL PLAN (2 OF 4)
CE103	EROSION & SEDIMENT CONTROL PLAN (3 OF 4)
CE104	EROSION & SEDIMENT CONTROL PLAN (4 OF 4)
CE501	EROSION & SEDIMENT CONTROL DETAILS
CS500	SIGNAGE AND STRIPING DETAILS
CS501	SITE CONSTRUCTION DETAILS (1 OF 4)
CS502	SITE CONSTRUCTION DETAILS (2 OF 4)
CS503	SITE CONSTRUCTION DETAILS (3 OF 4)
CS504	SITE CONSTRUCTION DETAILS (4 OF 4)
LP100	OVERALL LANDSCAPE PLAN
LP101	LANDSCAPE PLAN (1 OF 4)
LP102	LANDSCAPE PLAN (2 OF 4)
LP103	LANDSCAPE PLAN (3 OF 4)
LP104	LANDSCAPE PLAN (4 OF 4)
LP501	LANDSCAPING NOTES & DETAILS
LL100	OVERALL LIGHTING PLAN
LL101	LIGHTING PLAN (1 OF 4)
LL102	LIGHTING PLAN (2 OF 4)
LL103	LIGHTING PLAN (3 OF 4)
LL104	LIGHTING PLAN (4 OF 4)
LL501	LIGHTING NOTES & DETAILS
VB101	BOUNDARY AND TOPOGRAPHIC SURVEY



LOCATION MAP

SCALE: 1"=500'

PROJECT CONTACTS

DEVELOPER/APPLICANT: T.C. SYRACUSE DEVELOPMENT ASSOCIATES, LLC
300 CONSHOHOCKEN STATE ROAD, SUITE 250
WEST CONSHOHOCKEN, PA 19428

PROPERTY OWNER: R H & R M AJEMIAN; ROBERTA SCHMIDT
7209 MORGAN ROAD
LIVERPOOL, NY 13090

SITE/CIVIL ENGINEER: LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES
300 KIMBALL DRIVE
PARSIPPANY, NJ 07054
(973) 560-4900

ARCHITECT: BL COMPANIES
355 RESEARCH PARKWAY
MERIDEN, CT 060545
(203) 630-1406

FIRE PROTECTION ENGINEER: HARRINGTON GROUP, INC.
10720 SIKES PLACE, SUITE 110
CHARLOTTE, NC 28277
(704)-849-0130

ADJACENT PROPERTY OWNER'S LIST TOWN OF CLAY			
SECTION	BLOCK	LOT	OWNER NAME / ADDRESS
104	3	1	Niagara Mohawk Power Corp
114	1	1	Mouloud H Meghezzi Liber 4806, Page 315
114	1	3	George D Powers Liber 4792, Page 250
114	1	4	David R Tillotson Liber 5020, Page 931
114	1	5	Shirley A Nordheim Liber 3951, Page 221
114	1	7	Vivian Schoeck
114	1	8	Shirley A Nordheim Liber 3951, Page 221
114	1	9.1	Craig M Forgette Liber 5040, Page 594
114	1	9.2	Melvin A Forget & Thelma June T Forget Liber 3951, Page 221
114	1	28.1	Ajemian Properties LLC
114	1	31	Nochols LD LLC Liber 5272, Page 493
114	1	32	Nochols LD LLC Liber 5272, Page 485
114	1	33	Nochols LD LLC Liber 5272, Page 485
114	1	34	Nochols LD LLC Liber 5272, Page 485
114	1	37	Nochols LD LLC Liber 5272, Page 485
114	1	38	Dominick L Fabrizio & Carmela Fabrizio Liber 3898, Page 247

ADJACENT PROPERTY OWNER'S LIST TOWN OF SALINA			
SECTION	BLOCK	LOT	OWNER NAME / ADDRESS
24	1	3.2	Ronald H & Richard M Ajemian
24	1	4.2	Ronald H & Richard M Ajemian
24	1	37.1	Ajemian Properties LLC
24	1	37.2	Ajemian Properties LLC
24	1	37.3	GP Portfolio Landlord #1 LLC Liber 5024, Page 107

Zoning Table - Town of Clay			
Proposed Zone: Industrial District (I-1)			
Bulk Requirements	Required (I-1)	Proposed	Complies
Proposed Use	As listed in §230-17.C.(2)	Warehouse/ Distribution	Yes
Min. Lot Area	N/A	4,772,936 SQ FT (109.57 AC)	Yes
Min. Lot Width / Frontage	200 FT*	Morgan Road: 2,163 FT Liverpool Bypass: 778 FT	Yes
Min. Lot Depth	200 FT*	1,984 FT	Yes
Max. Building Coverage	60%	17.3%	Yes
Max. Impervious Coverage	80%	43.9%	Yes
Min. Building Front Yard Setback	NYS or County Road : 200 FT Town or Private Road: 50 FT	238.6 FT	Yes
Min. Building Rear Yard Setback	75 FT**	662.2 FT	Yes
Min. Building Side Yard Setback	75 FT**	177.2 FT	Yes
Max. Building Height	N/A	85' 1"	Yes
Max. Gross Floor Area	N/A	3,783,124 SQ FT	Yes
Max. Number of Floors	N/A	5 Floors	Yes
Perimeter Landscape Strip	50% of Front Yard Depth (100 FT)	40.8 FT	No

* Required minimum lot width and required lot depth are not defined in the Industrial 1 District. The minimum lot width and depth are defined by the Highway Overlay District. Per §230-19.A.(4)(b)[2], if there is no required minimum lot width of frontage in the underlying conventional district, then lots affected by the overlay shall have a minimum frontage of 200 feet and a minimum depth of 200 feet.

** Minimum required side and rear yard setback is 25 feet per §230-17.C.(4)(b)[2] and §230-17.C.(4)(b)[3]. Per §230-17.C.(5)(b), when abutting a nonindustrial district, an additional 50 feet is added to the side and rear yard setback.

WARNING:
IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

Date	Description	No.
REVISIONS		

STATE OF NEW YORK · RICHARD BURROW · 082168 · LICENSED PROFESSIONAL ENGINEER
OCT 0 2 2019
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NY Lic. No. 082168

LANGAN
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project: PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title: COVER SHEET

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No. CS001

PROJECT NO. 100796101

Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01\SheetFiles\Site Plan Approval\100796101-CS001-0101.dwg Date: 10/2/2019 Time: 18:54 User: jsarabia Style Table: Langan.stb Layout: CS001

ABBREVIATIONS

- (TYP) – TYPICAL
- VIF – VERIFY IN FIELD
- NEC. – NECESSARY
- PROP. – PROPOSED
- EXIST. – EXISTING
- HC – HANDI-CAP
- SHT. – SHEET
- NO. – NUMBER
- TW – TOP OF WALL
- BW – BOTTOM OF WALL
- WV – WATER VALVE
- HYD – HYDRANT
- YR. – YEAR
- AC – ACRE
- SF – SQUARE FEET
- LF – LINEAR FEET
- PT – POINT OF TANGENT
- PC – POINT OF CURVATURE
- HP – HIGH POINT
- LP – LOW POINT
- VC – VERTICAL CURVE
- PVI – POINT OF VERTICAL INFLECTION
- STA – STATION
- A.D. – ALGEBRAIC DIFFERENCE
- K – CURVE COEFFICIENT
- BVCS – BEGINNING VERTICAL CURVE STATION
- BVCE – BEGINNING VERTICAL CURVE ELEVATION
- EVCS – END VERTICAL CURVE STATION
- EVCE – END VERTICAL CURVE ELEVATION
- ELEV. – ELEVATION
- EL – ELEVATION
- HORIZ. – HORIZONTAL
- VERT. – VERTICAL
- PERF. – PERFORATED
- HDPE – HIGH DENSITY POLYETHYLENE
- PVC – POLYVINYL CHLORIDE
- DIP – DUCTILE IRON PIPE
- CIP – CAST IRON PIPE
- INV – INVERT
- MIN. – MINIMUM
- ES – END SECTION
- OS – OUTLET STRUCTURE
- N.T.S. – NOT TO SCALE
- UP – UTILITY POLE
- CTGE – CABLE, TELEPHONE, GAS, ELECTRIC
- LSE – LOWEST SEWERABLE ELEVATION
- R – ARC RADIUS
- A – ARC LENGTH
- △ – CENTRAL ANGLE
- CL – CHORD LENGTH
- CB – CHORD BEARING

GENERAL NOTES

1. EXISTING BACKGROUND INFORMATION BASED ON BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED BY LANGAN ENGINEERING, DATED AUGUST 30, 2019.
2. THE CONTRACTOR SHALL CALL "DIG SAFELY NEW YORK" PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CALL 1-800-962-7962 OR 811 FOR STAKEOUT REQUESTS.
3. ALL EXISTING UTILITY LINES SHALL BE LOCATED/VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING ANY MATERIALS AND/OR STARTING ANY CONSTRUCTION.
4. THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION; AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITE WORK CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
5. THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER MAKES NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY AVAILABLE INFORMATION WHICH WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS, CORRELATE CONDITIONS WITH THE DRAWINGS AND RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL MAKE ADDITIONAL TOPOGRAPHIC SURVEYS HE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOW ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
6. THE CONTRACTOR SHALL, WHEN THEY DEEM NECESSARY, PROVIDE WRITTEN REQUESTS FOR INFORMATION (RFI) TO THE OWNER AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITE WORK ITEM. THE RFI SHALL BE IN A FORM ACCEPTABLE TO OWNER AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF 10 WORK DAYS OR ADDITIONAL REASONABLE TIME FOR A WRITTEN REPLY. THE RFI SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE WORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
7. INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO CONSTRUCTION. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO CONSTRUCTION.
8. THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.

SITE LAYOUT PLAN NOTES

1. UPON REQUEST, THE TOWN WATER DEPARTMENT SHALL LOCATE EXISTING WATER MAINS AND SERVICES, BUT SHALL NOT GUARANTEE LOCATIONS.
2. UNDERGROUND ELECTRIC SHALL BE ENCASED IN RIGID CASING FOR A MINIMUM OF 6-FEET ACROSS ALL WATER MAINS.
3. THE BUILDER SHALL FURNISH AND INSTALL 6-INCH PERFORATED PIPE ENCASED IN CRUSHED STONE BEHIND BACK OF CURB AS DIRECTED BY THE ENGINEER.
4. IT SHALL BE THE RESPONSIBILITY OF THE APPLICANT/ CONTRACTOR TO CALL IN CODE 53. NO WORK SHALL COMMENCE UNTIL A CODE 53 FIELD MARK OUT HAS BEEN PERFORMED.
5. IF BLASTING IS FOUND NECESSARY, ALL BLASTING OPERATIONS WILL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE TOWN OF CLAY TOWN CODE AS WELL AS THE NEW YORK STATE ORDINANCES GOVERNING THE USE OF EXPLOSIVES.
6. AT LEAST ONE WEEK NOTICE MUST BE GIVEN TO THE TOWN ENGINEER PRIOR TO INITIATING CONSTRUCTION ACTIVITIES SO THAT ADEQUATE INSPECTION COVERAGE MAY BE ARRANGED.
7. WHEN APPROVAL NOTIFICATIONS HAVE BEEN OBTAINED IN WRITING FROM THE OCHD AND/OR AGENCIES HAVING JURISDICTION, THE APPLICANT SHALL SCHEDULE WITH THE TOWN ENGINEER A PRE-CONSTRUCTION CONFERENCE TO BE ATTENDED BY THE TOWN, PROJECT DESIGN PROFESSIONAL, APPLICANT AND CONTRACTOR FOR THE PROJECT. ABSOLUTELY NO PROJECT CONSTRUCTION WORK MAY BEGIN UNTIL WRITTEN "APPROVAL TO CONSTRUCT" NOTIFICATION AND/OR EVIDENCE OF THE RECEIPT OF THE NOI FROM THE NYSDEC IS SUBMITTED TO THE TOWN ENGINEER, AND THE PRE-CONSTRUCTION CONFERENCE HAS TAKEN PLACE. AT THE PRE-CONSTRUCTION CONFERENCE, THE APPLICANT MUST CONFIRM TO THE TOWN ENGINEER THAT THE PROJECT DESIGN PROFESSIONAL WILL CONTINUE TO BE THE ENGINEER-OF-RECORD THROUGHOUT PROJECT CONSTRUCTION.

DEMOLITION NOTES

1. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF WORK INCLUDING BUILDINGS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, SIGNS, ETC. UNLESS INDICATED OTHERWISE ON PLANS. REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS, AND SUITABLE MATERIAL BENEATH AND FOR A DISTANCE OF 10 FEET BEYOND THE PROPOSED BUILDING FOOTPRINT INCLUDING EXTERIOR COLUMNS.
2. EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE, AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES BEFORE DEMOLITION.
3. CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATION, ORDINANCES, AND STATUTES.
4. THE DEMOLITION LIMITS DEPICTED IN THE PLANS IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE WORK.
5. UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT, OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES, OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY, OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVER, REMOVAL, ABATEMENT, OR DISPOSAL OR ASBESTOS OR OTHER HAZARDOUS MATERIALS.
6. THE CONTRACTOR SHALL DEMOLISH ALL BUILDINGS, PAVEMENT, ETC., WHERE INDICATED WITHIN THE LIMIT OF DISTURBANCE. EDGES OF PAVEMENT DEMOLITION SHALL BE SAW CUT. DEMOLISHED CONCRETE AND ASPHALT SHALL BE CRUSHED TO THE DIMENSIONS INDICATED IN THE PROJECT GEOTECHNICAL REPORT AND STOCKPILED FOR REUSE AS SITE FILL. ALL DEMOLITION AND MATERIAL REUSE SHALL BE IN ACCORDANCE WITH ENVIRONMENTAL REQUIREMENTS FOR THE SITE.
7. THE CONTRACTOR SHALL VERIFY THAT A SOIL EROSION AND SEDIMENT CONTROL PERMIT HAS BEEN OBTAINED FOR DEMOLITION ACTIVITIES. CONTRACTOR SHALL COMPLY WITH THE CONDITIONS THEREON BY INSTALLING AND MAINTAINING ALL SESC MEASURES AND MAKING REQUIRED NOTIFICATIONS.
8. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL VERIFY THAT THE UTILITY SERVICES TO BE DEMOLISHED WILL NOT AFFECT OTHER SERVICES OUTSIDE THE CONTRACT LIMIT.
9. CONTRACTOR TO VERIFY THAT ALL ENVIRONMENTAL CONCERNS (ASBESTOS, LEAD BASED PAINT, HAZMAT MATERIALS, UNDERGROUND STORAGE TANKS, TRANSFORMERS, ETC.) HAVE BEEN REMOVED PRIOR TO COMMENCEMENT OF DEMOLITION ACTIVITIES. THESE POTENTIAL CONCERNS ARE NOT SHOWN ON THIS PLAN. THE CONTRACTOR SHALL REFER TO THE ENVIRONMENTAL REPORTS AND DOCUMENTS FOR ENVIRONMENTAL CONCERN LOCATIONS AND DISPOSAL PROCEDURES.

CONSTRUCTION SEQUENCING NOTES

BULK GRADING

1. THE CONTRACTOR SHALL FLAG THE DISTURBANCE LIMITS PRIOR TO THE COMMENCEMENT OF EACH PHASE TO ENSURE OVER CLEARING DOES NOT OCCUR.
2. INSTALL TREE PROTECTION MEASURES AS INDICATED ON THE PROJECT PLANS.
3. INSTALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES WITHIN THE DISTURBANCE LIMITS.
4. REMOVE EXISTING TREES, STUMPS, VEGETATION, AND ANY STRUCTURES INDICATED TO BE REMOVED WITHIN THE DISTURBANCE LIMITS IN ACCORDANCE WITH THE PROJECT PLANS. INSPECT AND REPAIR ANY DAMAGED EROSION CONTROL MEASURES. STOCKPILE EXCESS SOIL IN THE LOCATIONS SPECIFIED ON THE PLANS.
5. THE TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED AT THE BEGINNING OF CUT AND FILL OPERATIONS. TEMPORARY DIVERSION MEASURES SHALL BE INSTALLED TO CONVEY STORMWATER RUNOFF TO THE PRACTICE.
6. AS BULK GRADING OPERATIONS PROGRESS, THE TEMPORARY SEDIMENT BASIN SHALL BE INSTALLED ALONG WITH TEMPORARY DIVERSION MEASURES TO CONVEY STORMWATER RUNOFF TO THE PRACTICE.
7. THE TEMPORARY SEDIMENT BASIN SHALL REMAIN IN PLACE UNTIL ALL SOIL DISTURBANCE ACTIVITIES HAVE BEEN COMPLETED.
8. ONCE ALL BULK GRADING ACTIVITIES HAVE BEEN COMPLETED, ANY COLLECTED SEDIMENT WITHIN THE TEMPORARY SEDIMENT BASINS SHALL BE REMOVED.
7. STABILIZE THE DISTURBED AREA PRIOR TO MOVING ONTO THE NEXT PHASE. THE BUILDING PAD WILL BE STABILIZED USING GRAVEL. THE PARKING AREA WILL BE STABILIZED USING SUBBASE MATERIAL. ALL OTHER AREAS WILL BE STABILIZED USING TEMPORARY SEED AND MULCH.

GENERAL CONSTRUCTION

1. BULK GRADING OPERATIONS SHALL OCCUR FIRST.
2. CONSTRUCT ALL SITE UTILITIES AND SERVICE CONNECTIONS AS SHOWN ON THE PROJECT PLANS. INSTALL INLET PROTECTION MEASURES AT ALL INLETS AND AT THE ENDS OF ALL EXPOSED STORMWATER PIPES AND RIP-RAP AT THE LOCATIONS SHOWN ON THE PROJECT PLANS.
3. PREPARE PAVEMENT SUBGRADE AND INSTALL SUBBASE MATERIAL. INLET PROTECTION MEASURES MAY BE REMOVED TEMPORARILY DURING THIS OPERATION, BUT NO MORE THAN 24 HOURS PRIOR TO PLACEMENT OF THE SUBBASE MATERIAL. INLET PROTECTION MEASURES SHALL BE REPLACED ONCE THE SUBBASE MATERIAL HAS BEEN INSTALLED.
4. FINALIZE PAVEMENT SUBGRADE PREPARATIONS.
5. FINISH GRADING AND STABILIZE ALL DISTURBED AREAS. ALL CATCH BASINS, DRAINAGE MANHOLES, AND DRAINAGE LINES SHALL BE CLEANED OF ANY ACCUMULATED SILT AND SEDIMENT.
6. REMOVE ALL ACCUMULATED SEDIMENT WITHIN THE TEMPORARY SEDIMENT BASINS. REMOVE THE TEMPORARY PERFORATED RISERS AND INSTALL THE PERMANENT OUTLET CONTROL STRUCTURES. FINISH GRADING THE WATER QUALITY BASINS AND BIORETENTION AREAS. ALL PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT PLANS.
7. INSTALL PROPOSED CURBING AND BINDER COURSE.
8. PLACE PAVEMENT TOP COURSE AND PAVEMENT MARKINGS, AS APPROPRIATE.
9. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES. IMMEDIATELY STABILIZE THE AREAS DISTURBED DURING THEIR REMOVAL. ESTABLISH PERMANENT VEGETATIVE COVER AND INSTALL ALL LANDSCAPING.

SPDES GENERAL PERMIT COMPLIANCE NOTES

1. THE NOTICE OF INTENT (NOI) AND SIGNED MS4 SWPPP ACCEPTANCE FORM (IF APPLICABLE) SHALL BE FILED WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC). A COPY OF THE NOI, SIGNED MS4 SWPPP ACCEPTANCE FORM (IF APPLICABLE), AND THE NOI ACKNOWLEDGEMENT SHALL BE MAINTAINED AT THE SITE IN THE LOG BOOK.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH THE FOLLOWING:
   A. THE CONTRACTOR AND HIS/HER SUBCONTRACTORS SHALL READ AND UNDERSTAND THE CONDITIONS OF THE "NYSDEC SPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES" (NYSDEC SPDES GENERAL PERMIT) IN EFFECT.
   B. THE CONTRACTOR AND HIS/HER SUBCONTRACTORS SHALL READ AND SIGN THE CERTIFICATION STATEMENT PROVIDED IN THE APPENDICES OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
   C. THE CONTRACTOR AND HIS/HER SUBCONTRACTORS SHALL IDENTIFY THE TRAINED INDIVIDUAL(S) THAT WILL BE RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF THE SWPPP. THE TRAINED INDIVIDUAL(S) SHALL READ AND SIGN THE CERTIFICATION STATEMENT PROVIDED IN THE SWPPP. A COPY OF THE SIGNED CERTIFICATION STATEMENT SHALL BE PLACED IN THE SITE LOG BOOK AND GIVEN TO THE TOWN FOR THEIR RECORDS.
   D. THE TRAINED INDIVIDUAL(S) SHALL PROVIDE DOCUMENTATION THAT HE/SHE HAS RECEIVED TRAINING IN PROPER EROSION AND SEDIMENT CONTROL PRINCIPLES FROM A SOIL AND WATER CONSERVATION DISTRICT, OR OTHER NYSDEC ENDORSED ENTITY TO THE TOWN FOR THEIR RECORDS.
   E. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS NECESSARY FOR THE WORK OUTLINED HEREIN.
   F. THE TRAINED CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF ALL STORMWATER POLLUTION PREVENTION MEASURES OUTLINED IN THE SWPPP AND PROJECT PLANS.
   G. THE CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION CONFERENCE WITH THE OWNER (AND/OR OWNER'S REPRESENTATIVES), TRAINED INDIVIDUAL(S), AND THE QUALIFIED PROFESSIONAL AT LEAST ONE WEEK PRIOR TO COMMENCEMENT OF CONSTRUCTION.
   H. THE CONTRACTOR OR OWNER SHALL HAVE THE QUALIFIED PROFESSIONAL, AS DEFINED WITHIN THE NYSDEC SPDES GENERAL PERMIT, CONDUCT AN INITIAL SITE ASSESSMENT AND CERTIFY THAT THE APPROPRIATE EROSION AND SEDIMENT CONTROL STRUCTURES AS DEPICTED ON THE PLANS HAVE BEEN ADEQUATELY INSTALLED AND IMPLEMENTED PRIOR TO COMMENCEMENT OF CONSTRUCTION. REFER TO SWPPP FOR THE INITIAL SITE ASSESSMENT GUIDELINES.
   I. THE CONTRACTOR SHALL MAINTAIN A RECORD OF ALL EROSION AND SEDIMENT CONTROL INSPECTION REPORTS AT THE SITE IN A LOG BOOK. THE SITE LOG BOOK SHALL BE MAINTAINED ON-SITE AND BE MADE AVAILABLE TO THE PERMITTING AUTHORITY.
3. ONCE CONSTRUCTION ACTIVITIES ARE COMPLETE, THE OWNER/OPERATOR SHALL HAVE A QUALIFIED PROFESSIONAL CONDUCT A FINAL SITE ASSESSMENT TO DETERMINE IF THE SITE MEETS THE FINAL STABILIZATION CRITERIA AS DEFINED WITHIN THE NYSDEC SPDES GENERAL PERMIT. IF THE SITE IS DETERMINED TO MET THE FINAL STABILIZATION CRITERIA, A NOTICE OF TERMINATION (NOT) SHALL BE COMPLETED AND SUBMITTED TO THE NYSDEC TO TERMINATE COVERAGE UNDER THE SPDES GENERAL PERMIT.

POLLUTION PREVENTION CONTROL NOTES

GOOD HOUSEKEEPING PRACTICES ARE DESIGNED TO MAINTAIN A CLEAN AND ORDERLY WORK ENVIRONMENT. GOOD HOUSEKEEPING MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS BY THOSE PARTIES INVOLVED WITH THE DIRECT CARE AND DEVELOPMENT OF THE SITE. THE FOLLOWING MEASURES SHOULD BE IMPLEMENTED TO CONTROL THE POSSIBLE EXPOSURE OF HARMFUL SUBSTANCES AND MATERIALS TO STORMWATER RUNOFF:

1. MATERIAL RESULTING FROM THE CLEARING AND GRUBBING OPERATION SHALL BE STOCKPILED AWAY FROM STORM DRAINAGE, WATER BODIES AND/OR WATERCOURSES AND SURROUNDED WITH ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES. SOIL STOCKPILE LOCATIONS SHALL BE EXPOSED NO LONGER THAN 14 DAYS BEFORE SEEDING.
2. EQUIPMENT MAINTENANCE AREAS SHALL BE PROTECTED FROM STORMWATER FLOWS AND SHALL BE SUPPLIED WITH APPROPRIATE WASTE RECEPTACLES FOR SPENT CHEMICALS, SOLVENTS, OILS, GREASES, GASOLINE, AND ANY POLLUTANTS THAT MIGHT CONTAMINATE THE SURROUNDING HABITAT AND/OR WATER SUPPLY. EQUIPMENT WASH-DOWN ZONES SHALL BE LOCATED WITHIN AREAS DRAINING TO SEDIMENT CONTROL DEVICES.
3. THE USE OF DETERGENTS FOR LARGE-SCALE (I.E., VEHICLES, BUILDINGS, PAVEMENT SURFACES, ETC.) WASHING IS PROHIBITED.
4. MATERIAL STORAGE LOCATIONS AND FACILITIES (I.E., COVERED STORAGE AREAS, STORAGE SHEDS, ETC.) SHALL BE LOCATED ON-SITE AND SHALL BE STORED ACCORDING TO THE MANUFACTURER'S STANDARDS IN A DEDICATED STAGING AREA. CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS, AND OTHER TOXIC MATERIAL MUST BE STORED IN WATERPROOF CONTAINERS. RUNOFF CONTAINING SUCH MATERIALS MUST BE COLLECTED, REMOVED FROM THE SITE, TREATED AND DISPOSED AT AN APPROVED SOLID WASTE OR CHEMICAL DISPOSAL FACILITY.
5. HAZARDOUS SPILLS SHALL BE IMMEDIATELY CONTAINED TO PREVENT SUCH POLLUTANTS FROM ENTERING THE SURROUNDING HABITAT AND/OR WATER SUPPLY. SPILL KITS SHALL BE PROVIDED ON-SITE AND SHALL BE DISPLAYED IN A PROMINENT LOCATION FOR EASE OF ACCESS AND USE. SPILLS GREATER THAN FIVE (5) GALLONS SHALL BE REPORTED TO THE NYSDEC RESPONSE UNIT AT 1-800-457-7362. IN ADDITION, A RECORD OF THE INCIDENT(S) AND/OR NOTIFICATIONS SHALL BE DOCUMENTED AND ATTACHED TO THE SWPPP.
6. PORTABLE SANITARY WASTE FACILITIES SHALL BE PROVIDED ON-SITE FOR WORKERS AND SHALL BE PROPERLY MAINTAINED.
7. DUMPSTERS AND/OR DEBRIS CONTAINERS SHALL BE LOCATED ON-SITE AND SHALL BE OF ADEQUATE SIZE TO MANAGE RESPECTIVE MATERIALS. REGULAR COLLECTION AND DISPOSAL OF WASTES SHALL OCCUR AS REQUIRED.
8. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE LOCATED A MINIMUM OF 50 FEET FROM STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATERCOURSES. EACH FACILITY SHOULD BE LOCATED AWAY FROM CONSTRUCTION TRAFFIC OR ACCESS AREAS TO PREVENT DISTURBANCE OR TRACKING. A SIGN SHOULD BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES. WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHALL BE REMOVED AND DISPOSED OF. MATERIALS USED TO CONSTRUCT THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED AND DISPOSED OF. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED AND/OR REPAIRED, SEEDED, AND MULCHED FOR FINAL STABILIZATION.
9. NON-STORMWATER COMPONENTS OF SITE DISCHARGE MUST BE CLEAN WATER. WATER USED FOR CONSTRUCTION, WHICH DISCHARGES FROM THE SITE, MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE HEALTH DEPARTMENT. WATER USED FOR CONSTRUCTION THAT DOES NOT ORIGINATE FROM AN APPROVED PUBLIC SUPPLY MUST NOT DISCHARGE FROM THE SITE. IT CAN BE RETAINED IN THE TEMPORARY SEDIMENT BASINS UNTIL IT EVAPORATES.
10. DISCHARGES FROM DEWATERING ACTIVITIES, INCLUDING DISCHARGES FROM DEWATERING TRENCHES AND EXCAVATIONS, MUST BE MANAGED BY APPROPRIATE CONTROL MEASURES.
11. WASTEWATER DISCHARGES FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS, AND OTHER CONSTRUCTION MATERIALS IS PROHIBITED.

EROSION & SEDIMENT CONTROL NOTES

1. REFER TO THE SPDES GENERAL PERMIT COMPLIANCE NOTES FOR ADDITIONAL REQUIREMENTS.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IN STRICT COMPLIANCE WITH "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", LATEST REVISIONS.
3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS. SITE PREPARATION ACTIVITIES SHALL BE PLANNED TO MINIMIZE THE SCOPE AND DURATION OF SOIL DISRUPTION. EXISTING VEGETATION SHALL BE PRESERVED AS MUCH AS IS PRACTICAL.
4. THE CONTRACTOR AND HIS/HER SUBCONTRACTOR(S) SHALL IDENTIFY THE TRAINED INDIVIDUAL THAT WILL BE RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF THE EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE DURATION OF CONSTRUCTION.
5. PERMANENT TRAFFIC CORRIDORS SHALL BE ESTABLISHED AND "ROUTES OF CONVENIENCE" SHALL BE AVOIDED. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL POINTS OF ENTRY ONTO THE PROJECT SITE.
6. DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION SHALL BE MINIMIZED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE DISCHARGES.
7. STOCKPILED TOPSOIL SHALL BE TEMPORARILY SEEDED, MULCHED, AND ENCLOSED WITH SILT FENCING. ALL GRASS SEED WILL CONTAIN AT LEAST 25 PERCENT RAPID GERMINATING PERENNIAL RYE GRASS.
8. EROSION AND SEDIMENT CONTROL INSPECTIONS:
   A. THE TRAINED INDIVIDUAL SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES ON A DAILY BASIS TO ENSURE PROPER PERFORMANCE. ANY SEDIMENT BUILD-UP SHALL BE CLEANED. ALL DAMAGES TO EROSION AND SEDIMENT CONTROLS SHALL BE REPAIRED EITHER AT THE BEGINNING OR AT THE END OF EACH WORKING DAY.
   B. THE QUALIFIED INSPECTOR SHALL CONDUCT SITE INSPECTIONS EVERY 7 DAYS DURING CONSTRUCTION. ANY DEFICIENCIES NOTED IN THE REPORTS SHALL BE CORRECTED IMMEDIATELY BY THE CONTRACTOR.
   C. IF SOIL DISTURBANCE ACTIVITIES ARE SUSPENDED FOR WINTER SHUTDOWN, TEMPORARY STABILIZATION MEASURES WILL BE APPLIED TO ALL DISTURBED AREAS. IN THIS CASE AND SUBJECT TO THE APPROVAL OF THE NYSDEC AND THE TOWN, THE FREQUENCY OF INSPECTIONS BY THE QUALIFIED PROFESSIONAL MAY BE REDUCED TO AT LEAST ONE INSPECTION EVERY 30 CALENDAR DAYS.
   D. IF NYSDEC OR THE TOWN AUTHORIZES SOIL DISTURBANCES GREATER THAN 5-ACRES, THE QUALIFIED PROFESSIONAL WILL CONDUCT AT LEAST 2 SITE INSPECTIONS, SEPARATED BY AT LEAST 2 CALENDAR DAYS, EVERY 7 CALENDAR DAYS TO ENSURE THE STABILITY AND EFFECTIVENESS OF ALL PROTECTIVE MEASURES AND PRACTICES UNTIL SUCH TIME THAT LESS THAN 5-ACRES OF SOIL REMAIN DISTURBED.
9. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST BY SPRINKLING EXPOSED SOIL AREAS PERIODICALLY WITH WATER AS REQUIRED. THE CONTRACTOR IS TO SUPPLY ALL EQUIPMENT AND WATER.
10. EARTHWORK ACTIVITIES SHALL BE CONSISTENT WITH THE PLANS. THE EARTHWORK OPERATION AREAS SHALL BE STABILIZED ON AN ONGOING BASIS WITH NO AREAS, WHICH ARE NOT CURRENTLY UNDER CONSTRUCTION, LEFT WITHOUT AT LEAST TEMPORARY COVER FOR MORE THAN 48 HOURS.
11. EROSIVE MATERIAL TEMPORARILY STOCKPILED ON THE SITE DURING THE CONSTRUCTION PROCESS SHALL BE LOCATED IN AN AREA AWAY FROM STORM DRAINAGE AND SHALL BE PROPERLY PROTECTED BY A SURROUNDING SILT FENCE BARRIER.
12. FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES IN ANY PORTION OF THE SITE, PERMANENT VEGETATION SHALL BE ESTABLISHED ON ALL EXPOSED SOILS.
13. IF CONSTRUCTION TAKES PLACE IN "WET SOILS", CURTAIN DRAINS OR SUBSURFACE DRAINAGE SHALL BE INSTALLED TO DEWATER THE SOILS. DEWATERING DISCHARGES WILL NOT BE DIRECTED INTO WETLANDS, WATER COURSES, WATER-BODIES, OR STORM SEWER SYSTEMS.
15. TEMPORARY DRAINAGE SWALES WITH A MINIMUM GRADE OF ONE PERCENT SHALL BE INSTALLED TO DIRECT RUNOFF AWAY FROM EXCAVATED AREAS. SWALES SHALL BE INSTALLED WITH STAKED AND SECURED HAY BALE BERMS TO PREVENT DOWNSTREAM SILTATION. LOCATION OF THE DRAINAGE SWALES AND HAY BALES WILL BE AT THE DIRECTION OF THE TOWN ENGINEER. SILT FENCE SHALL BE PROPERLY INSTALLED DOWN GRADE OF ALL DISTURBED AREAS. SILT FENCE SHALL BE INSTALLED ALONG CONTOURS TO FILTER SEDIMENT FROM RUNOFF. INSPECTION SHOULD BE FREQUENT AND REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED. SILT FENCE SHOULD BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
16. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WHEN ALL DISTURBED AREAS HAVE UNDERGONE FINAL STABILIZATION, UPGRADIENT SURFACES HAVE BEEN PROPERLY STABILIZED, AND ALL STORMWATER MANAGEMENT SYSTEMS ARE IN PLACE AND OPERABLE. ALL AREAS DISTURBED BY THE REMOVAL OF THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE FILLED IN, TOPSOILED, SEEDED, AND MULCHED. FINAL STABILIZATION IS ACHIEVED WHEN ALL SOIL DISTURBING ACTIVITIES ARE COMPLETED AND A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 80 PERCENT COVERAGE IS ESTABLISHED, OR EQUIVALENT STABILIZATION MEASURES, SUCH AS PLACEMENT OF MULCH OR GEOTEXTILE, IS COMPLETED ON ALL AREAS NOT PAVED OR COVERED BY PERMANENT STRUCTURES.

SOIL RESTORATION NOTES

SOIL RESTORATION SHALL BE PERFORMED IN THE DISTURBED AREAS. THE SOILS SHALL BE RESTORED AS FOLLOWS:

TYPE OF SOIL DISTURBANCE	SOIL RESTORATION REQUIREMENT	
NO SOIL DISTURBANCE	RESTORATION NO PERMITTED	
MINIMAL SOIL DISTURBANCE (E.G., CLEARING AND GRUBBING ACTIVITIES)	RESTORATION NOT REQUIRED	
AREAS WHERE TOPSOIL IS STRIPPED ONLY (NO CHANGE IN GRADE)	APPLY 6" OF TOPSOIL IN TYPE A AND B SOILS	AERATE AND APPLY 6" OF TOPSOIL IN TYPE C AND D SOILS
AREAS OF CUT OR FILL	AERATE AND APPLY 6" TOPSOIL IN TYPE A AND B SOILS	APPLY FULL SOIL RESTORATION IN TYPE C AND D SOILS
HEAVY TRAFFIC AREAS ON SITE (ESPECIALLY IN 5' TO 25' AROUND BUILDINGS BUT NOT WITHIN 5' PERIMETER AROUND FOUNDATION WALLS)	APPLY FULL RESTORATION	
AREAS WHERE RUNOFF REDUCTION AND/OR INFILTRATION PRACTICES ARE APPLIED	RESTORATION MY NOT BE REQUIRED, BUT MAY BE APPLIED TO ENHANCE THE REDUCTION SPECIFIED FOR THE APPROPRIATE PRACTICE	
REDEVELOPMENT PROJECTS	SOIL RESTORATION IS REQUIRED ON REDEVELOPMENT PROJECTS IN AREAS WHERE EXISTING IMPERVIOUS AREA WILL BE CONVERTED TO PERVIOUS AREA	

PRIOR TO APPLYING FULL SOIL RESTORATION, ALL CONSTRUCTION ACTIVITY, INCLUDING CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE, SITE CLEANUP AND TRAFFICKING, SHOULD BE FINISHED AND THE SITE CLOSED OFF TO FURTHER DISTURBANCE. FULL SOIL RESTORATION IS IMPLEMENTED IN A TWO PHASE PROCESS.

1. DEEP RIP THE AFFECTED THICKNESS OF EXPOSED SUBSOIL MATERIAL, AGGRESSIVELY FRACTURING IT BEFORE THE PROTECTED TOPSOIL IS REAPPLIED ON THE SITE.
2. DECOMPACT, SIMULTANEOUSLY THROUGH THE RESTORED TOPSOIL LAYER AND UPPER HALF OF THE AFFECTED SUBSOIL.

STABILIZATION OF DISTURBED SURFACES

1. MULCH (INCLUDING GRAVEL MULCH) – MULCH OFFERS A FAST EFFECTIVE MEANS OF STABILIZATION. THIS CAN ALSO INCLUDE ROLLED EROSION CONTROL BLANKETS.
2. SPRAY ADHESIVES – THESE ARE PRODUCTS GENERALLY COMPOSED OF POLYMERS IN A LIQUID OR SOLID FORM THAT ARE MIXED WITH WATER TO FORM AN EMULSION THAT IS SPRAYED ON THE SOIL SURFACE WITH TYPICAL HYDROSEEDING EQUIPMENT. THE MIXING RATIOS AND APPLICATION RATES WILL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR THE SPECIFIC SOILS ON THE SITE. IN NO CASE SHOULD THE APPLICATION OF THESE ADHESIVES BE MADE ON WET SOILS OR IF THERE IS A PROBABILITY OF PRECIPITATION WITHIN 48 HOURS OF ITS PROPOSED USE. MATERIAL SAFETY DATA SHEETS WILL BE PROVIDED TO ALL APPLICATORS AND OTHERS WORKING WITH THE MATERIAL.
3. POLYMER ADDITIVES – THESE POLYMERS ARE MIXED WITH WATER AND APPLIED TO THE DRIVING SURFACE BY A WATER TRUCK WITH A GRAVITY FEED DRIP BAR, SPRAY BAR OR AUTOMATED DISTRIBUTOR TRUCK. THE MIXING RATIOS AND APPLICATION RATES WILL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. INCORPORATION OF THE EMULSION INTO THE SOIL WILL BE DONE TO THE APPROPRIATE DEPTH BASED ON EXPECTED TRAFFIC. COMPACTION AFTER INCORPORATION WILL BE BY VIBRATORY ROLLER TO A MINIMUM OF 95%. THE PREPARED SURFACE SHALL BE MOIST AND NO APPLICATION OF THE POLYMER WILL BE MADE IF THERE IS A PROBABILITY OF PRECIPITATION WITHIN 48 HOURS OF ITS PROPOSED USE. MATERIAL SAFETY DATA SHEETS WILL BE PROVIDED TO ALL APPLICATORS WORKING WITH THE MATERIAL.
4. BARRIERS – WOVEN GEOTEXTILES CAN BE PLACED ON THE DRIVING SURFACE TO EFFECTIVELY REDUCE DUST THROW AND PARTICLE MIGRATION ON HAUL ROADS. STONE CAN ALSO BE USED FOR CONSTRUCTION ROADS FOR EFFECTIVE DUST CONTROL.
5. SEEDING – REFER TO LANDSCAPE PLANS AND DETAILS.

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Project: PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title: NOTES SHEET

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK
Drawing No. CS002

PROJECT NO. 100796101

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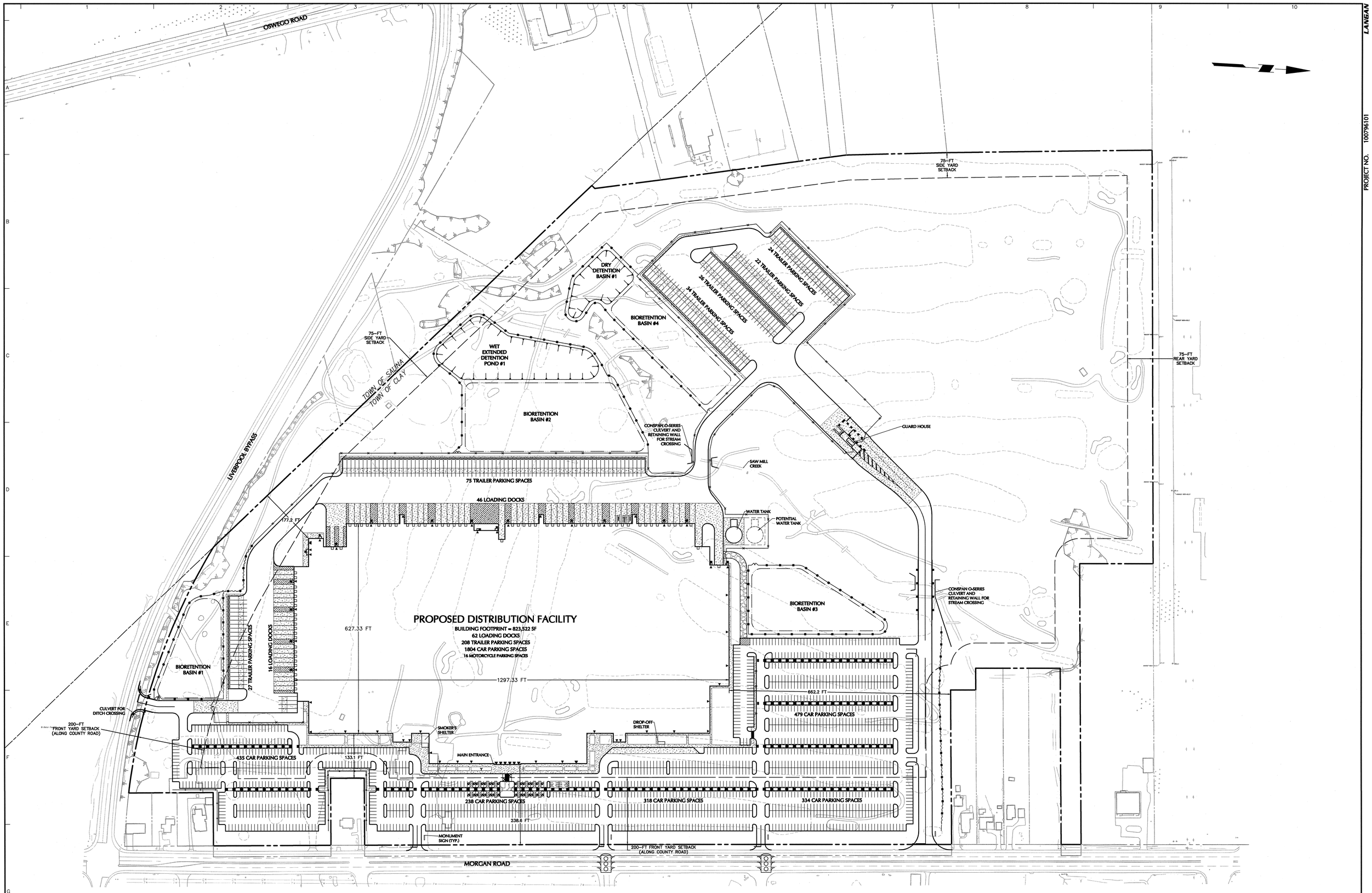

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SECTION 114. BLOCK 1, LOT 2.3
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Drawing Title
OVERALL SITE PLAN

Project No. 100796101
Date 10/02/2019
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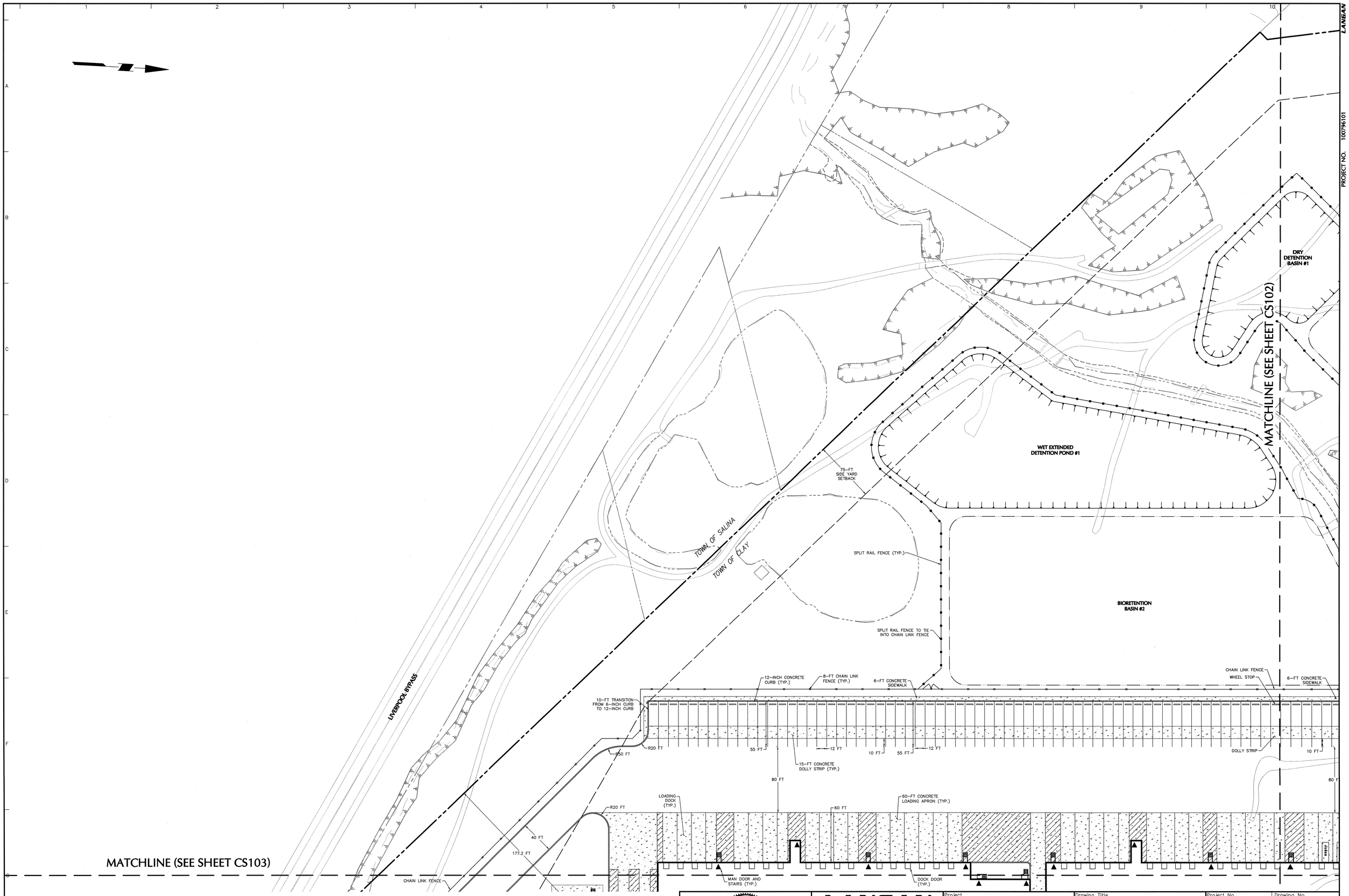

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SECTION 114. BLOCK 1, LOT 2.3
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ONONDAGA COUNTY NEW YORK

Drawing Title
SITE PLAN (1 OF 4)

Project No. 100796101
Date 10/02/2019
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Drawing No.
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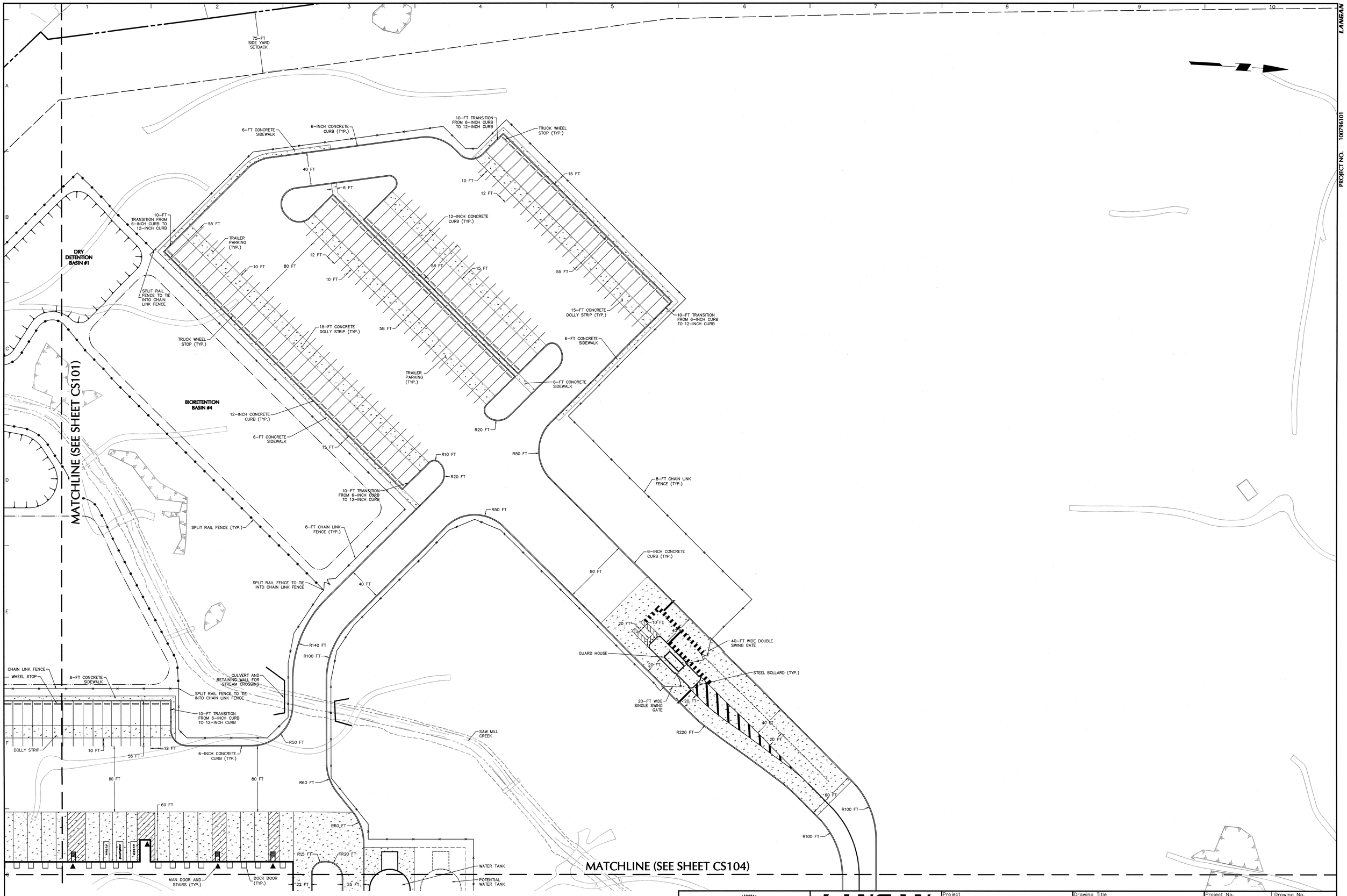

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Drawing Title
SITE PLAN (2 OF 4)

Project No. 100796101
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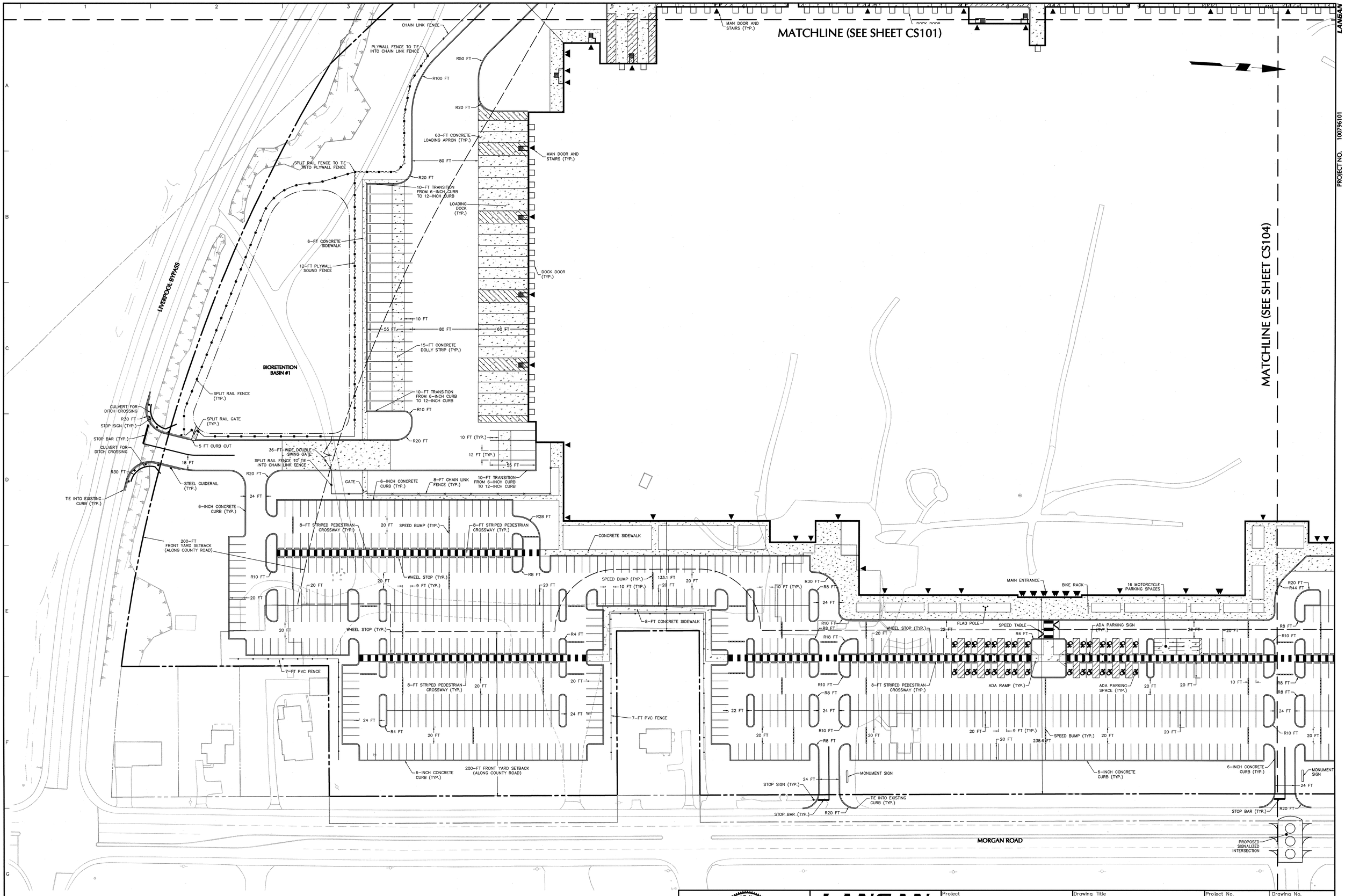

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SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
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Drawing Title
SITE PLAN (3 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By JRS
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Drawing No. CS103

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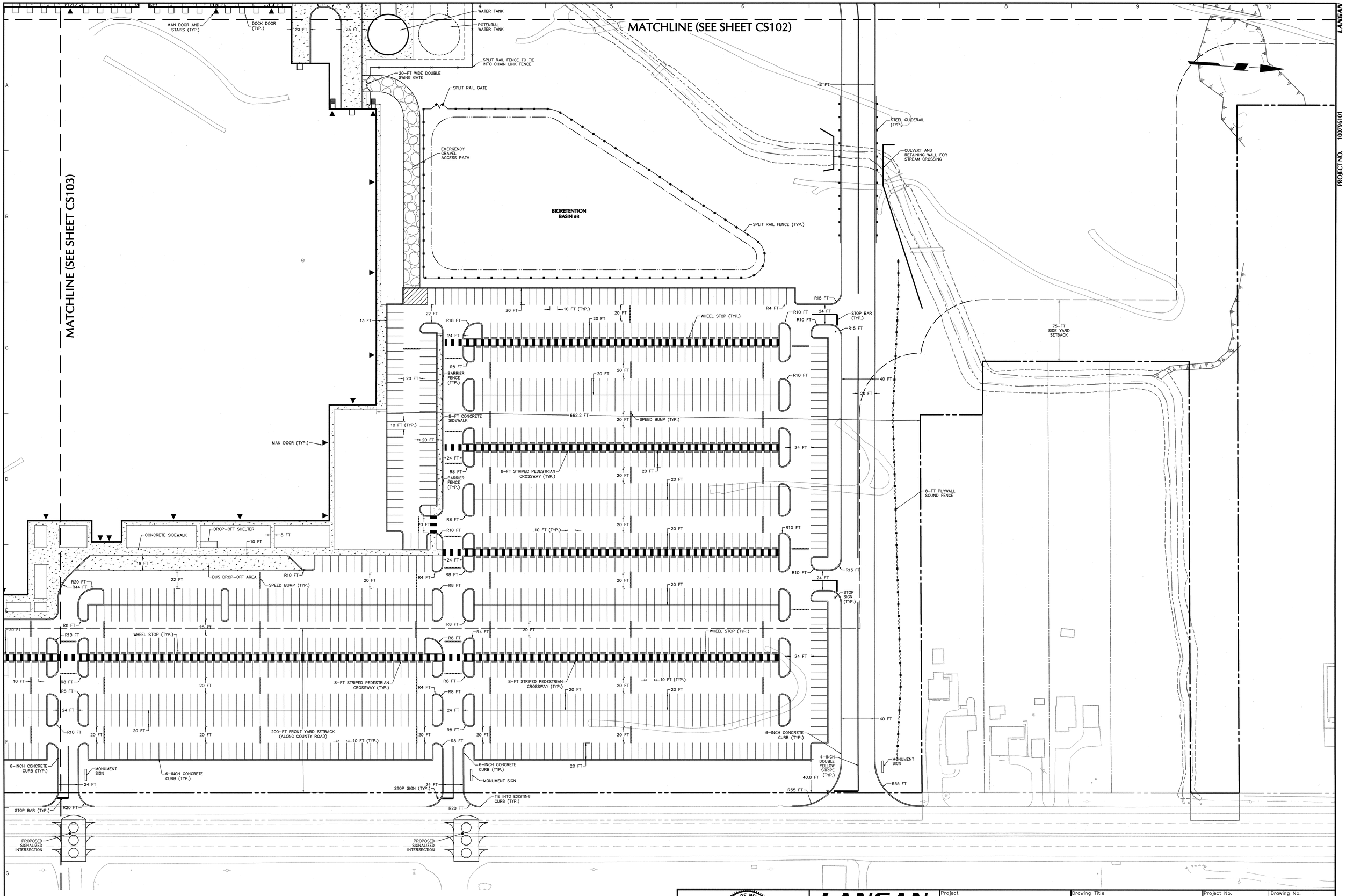

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PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
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Drawing Title
SITE PLAN (4 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By JRS
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Drawing No.
CS104

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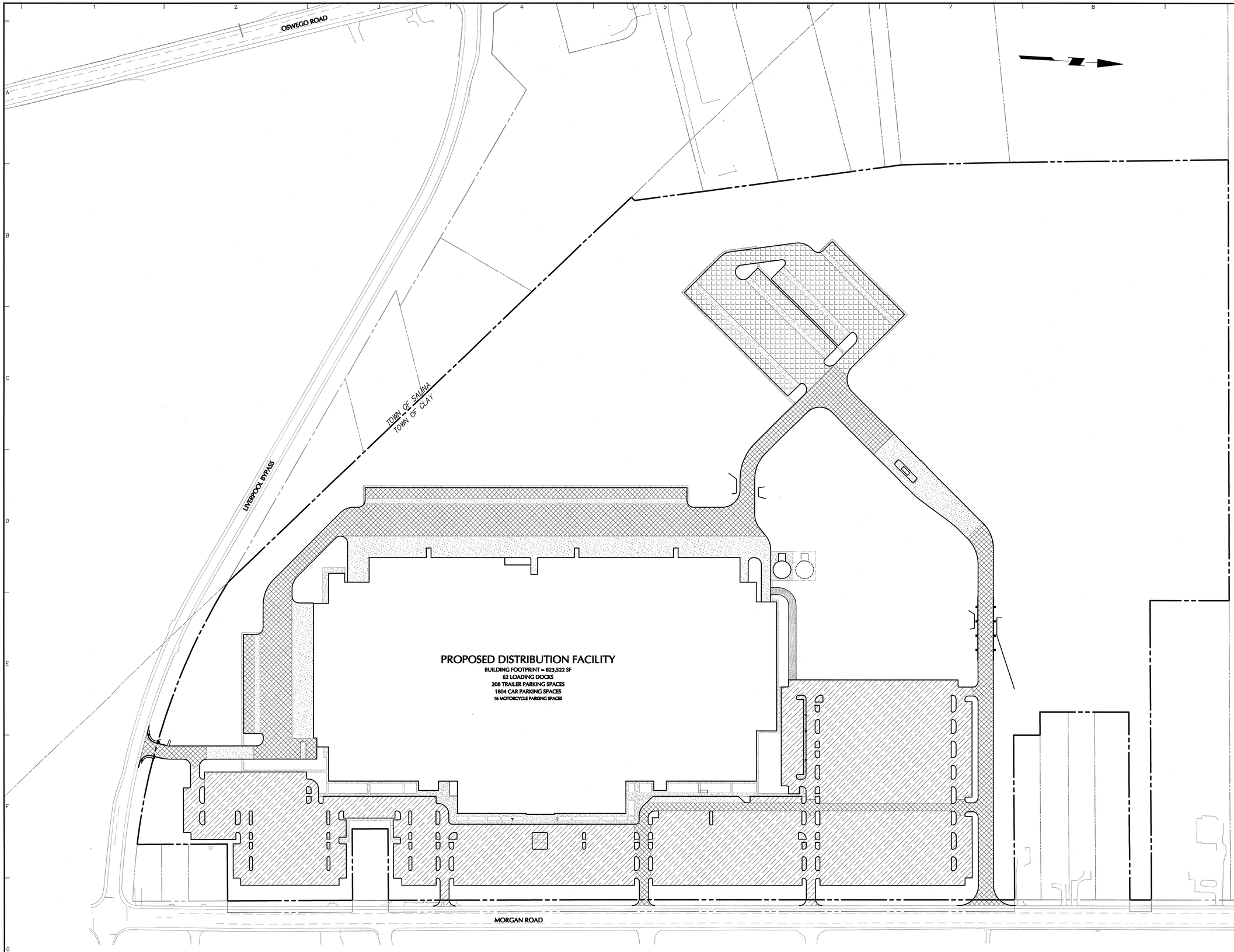

LEGEND

- CAR PARKING (LIGHT DUTY ASPHALT)
- TRAILER PARKING (HEAVY DUTY ASPHALT)
- ACCESS DRIVES AND TRUCK COURT (HEAVY DUTY ASPHALT)
- LOADING DOCK/DOLLY PAD (HEAVY DUTY CONCRETE PAVEMENT)

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NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114, BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
PAVEMENT PLAN

Project No.	100796101
Date	10/02/2019
Drawn By	JRS
Checked By	TLK
Drawing No.	CS110

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Sign Face Legend

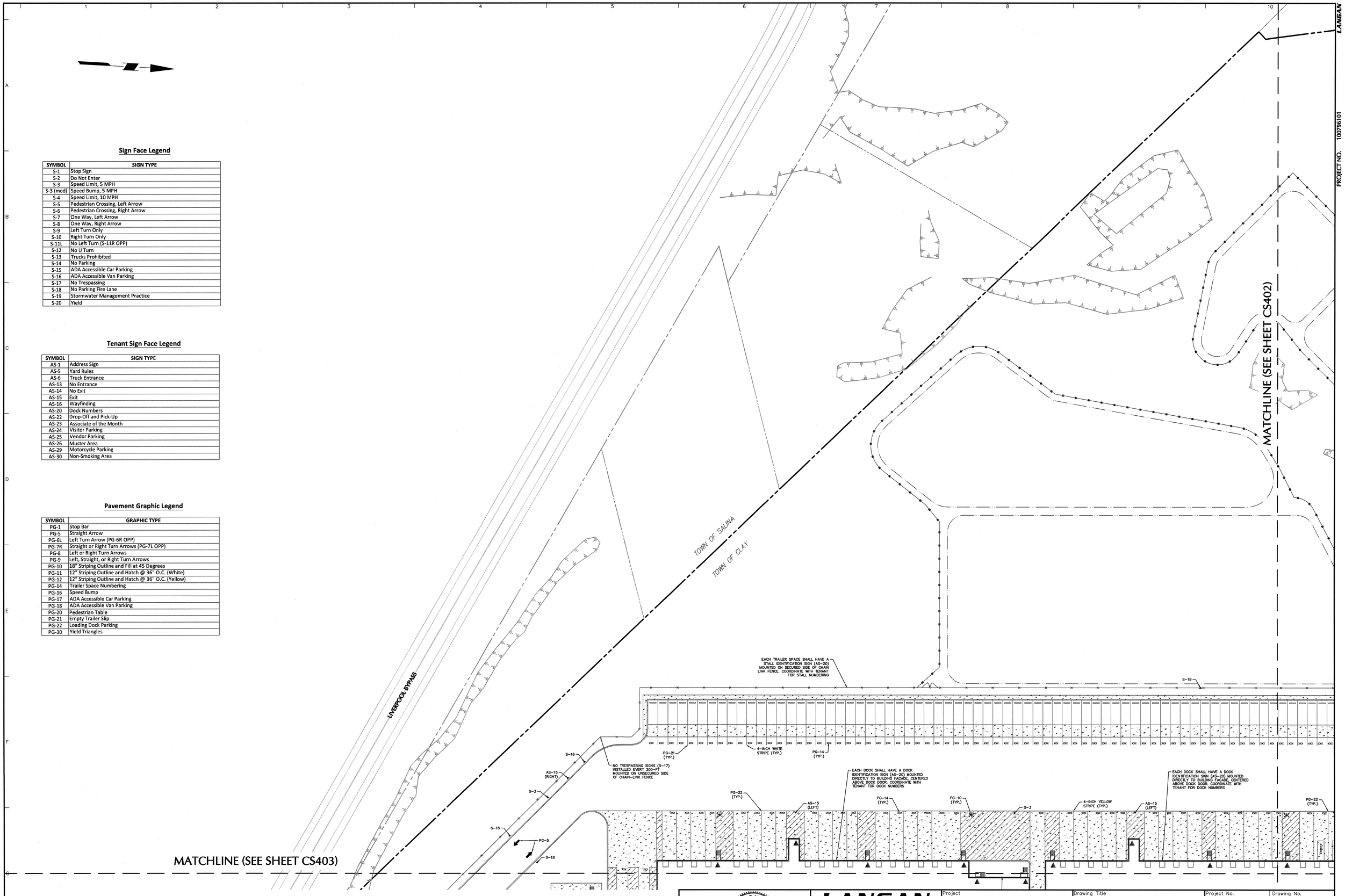
SYMBOL	SIGN TYPE
S-1	Stop Sign
S-2	Do Not Enter
S-3	Speed Limit, 5 MPH
S-3 (mod)	Speed Bump, 5 MPH
S-4	Speed Limit, 10 MPH
S-5	Pedestrian Crossing, Left Arrow
S-6	Pedestrian Crossing, Right Arrow
S-7	One Way, Left Arrow
S-8	One Way, Right Arrow
S-9	Left Turn Only
S-10	Right Turn Only
S-11L	No Left Turn (S-11R OPP)
S-12	No U Turn
S-13	Trucks Prohibited
S-14	No Parking
S-15	ADA Accessible Car Parking
S-16	ADA Accessible Van Parking
S-17	No Trespassing
S-18	No Parking Fire Lane
S-19	Stormwater Management Practice
S-20	Yield

Tenant Sign Face Legend

SYMBOL	SIGN TYPE
AS-1	Address Sign
AS-5	Yard Rules
AS-6	Truck Entrance
AS-13	No Entrance
AS-14	No Exit
AS-15	Exit
AS-16	Wayfinding
AS-20	Dock Numbers
AS-22	Drop-Off and Pick-Up
AS-23	Associate of the Month
AS-24	Visitor Parking
AS-25	Vendor Parking
AS-26	Muster Area
AS-29	Motorcycle Parking
AS-30	Non-Smoking Area

Pavement Graphic Legend

SYMBOL	GRAPHIC TYPE
PG-1	Stop Bar
PG-5	Straight Arrow
PG-6L	Left Turn Arrow (PG-6R OPP)
PG-7R	Straight or Right Turn Arrows (PG-7L OPP)
PG-8	Left or Right Turn Arrows
PG-9	Left, Straight, or Right Turn Arrows
PG-10	18" Striping Outline and Fill at 45 Degrees
PG-11	12" Striping Outline and Hatch @ 36" O.C. (White)
PG-12	12" Striping Outline and Hatch @ 36" O.C. (Yellow)
PG-14	Trailer Space Numbering
PG-16	Speed Bump
PG-17	ADA Accessible Car Parking
PG-18	ADA Accessible Van Parking
PG-20	Pedestrian Table
PG-21	Empty Trailer Slip
PG-22	Loading Dock Parking
PG-30	Yield Triangles



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PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
SIGNAGE & STRIPING PLAN (1 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No. CS401

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PROJECT NO. 100796101

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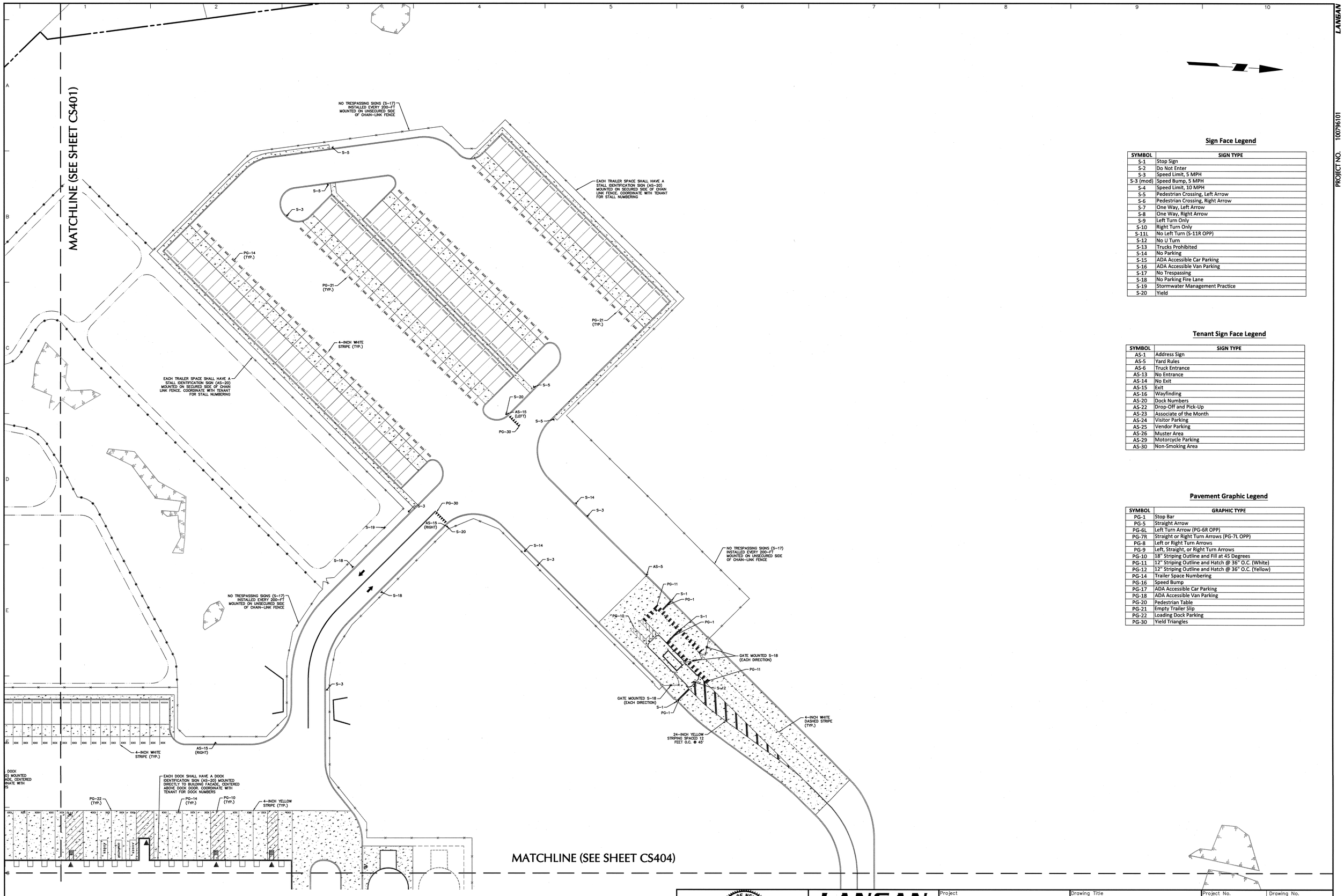

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Tenant Sign Face Legend

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Pavement Graphic Legend

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SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
SIGNAGE & STRIPING PLAN (2 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No. CS402

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PROJECT NO. 100796101

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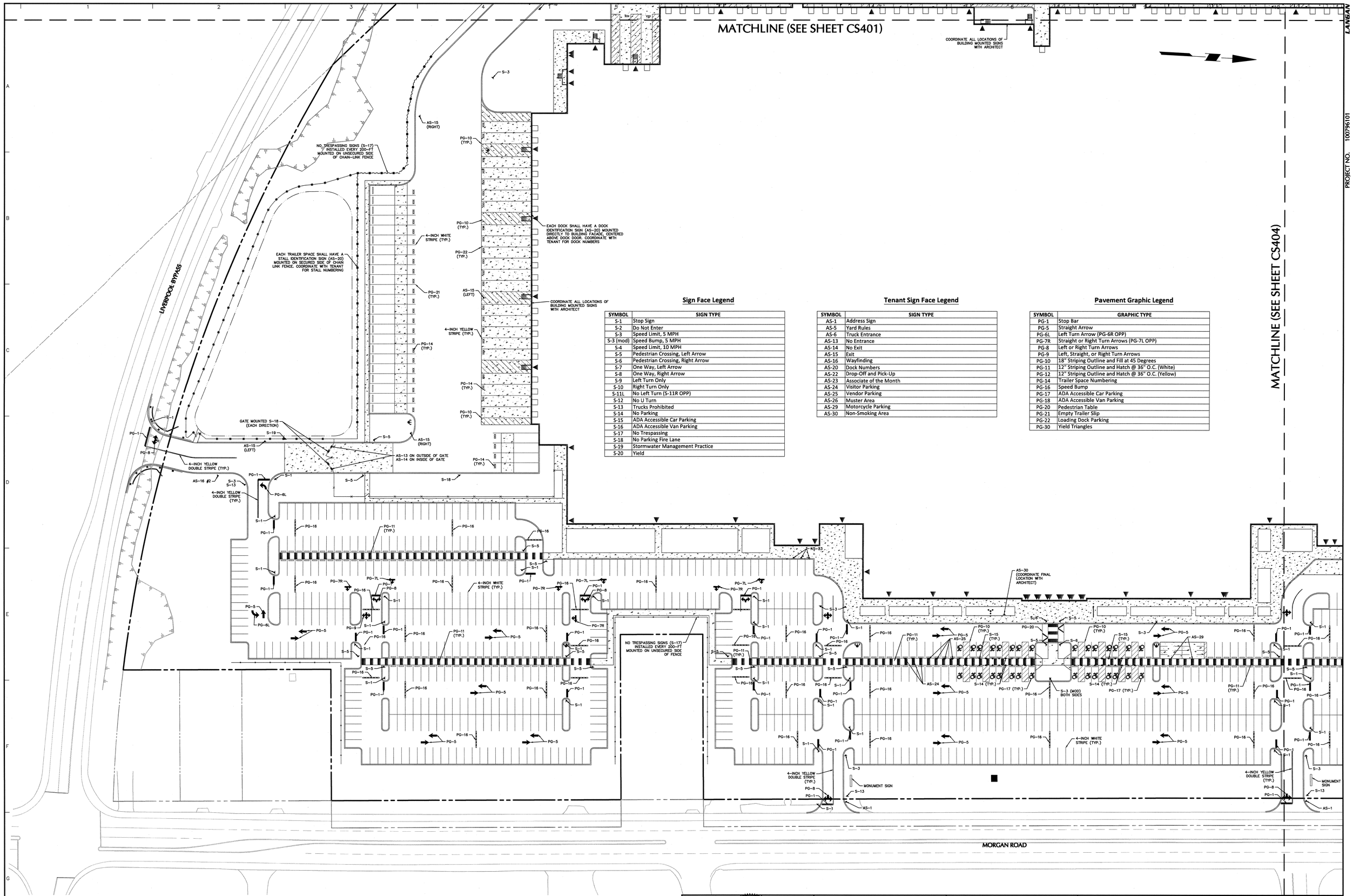

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PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
SIGNAGE & STRIPING PLAN (3 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No. CS403

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PROJECT NO. 100796101

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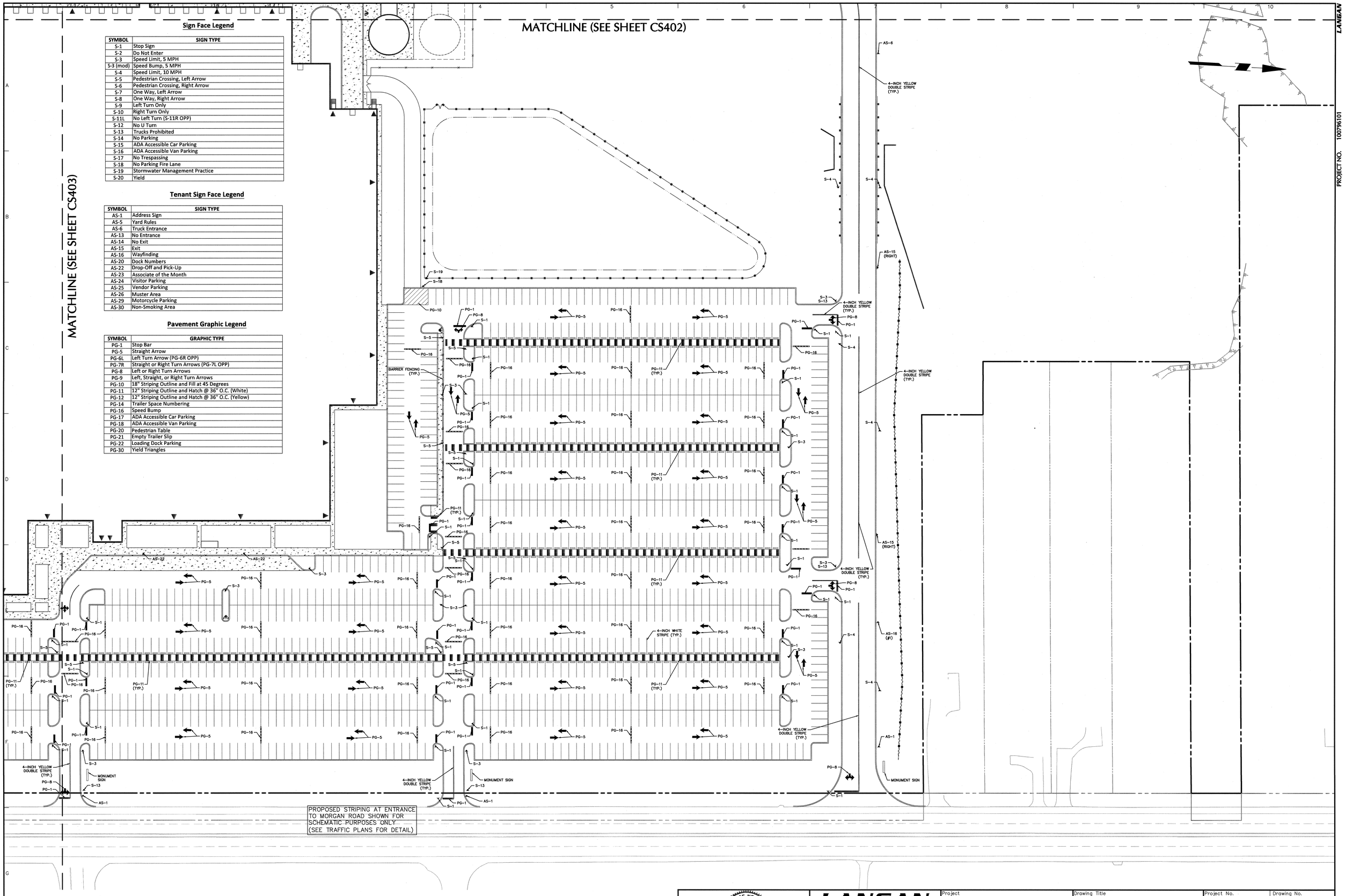

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SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title: SIGNAGE & STRIPING PLAN (4 OF 4)

Project No. 100796101
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PROJECT NO. 100796101

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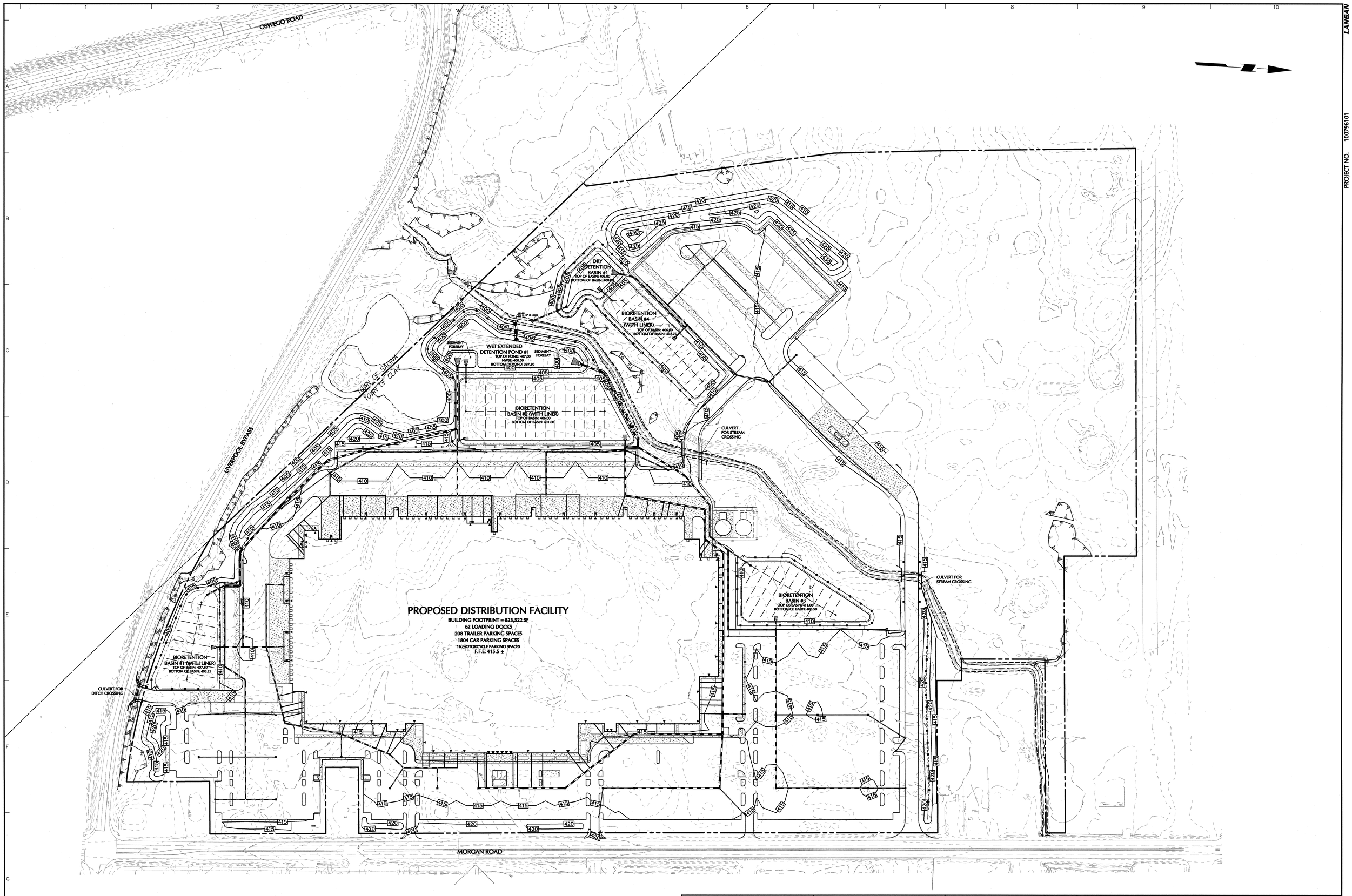

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Project: PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title: OVERALL GRADING & DRAINAGE PLAN

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No. CG100

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PROJECT NO. 100796101

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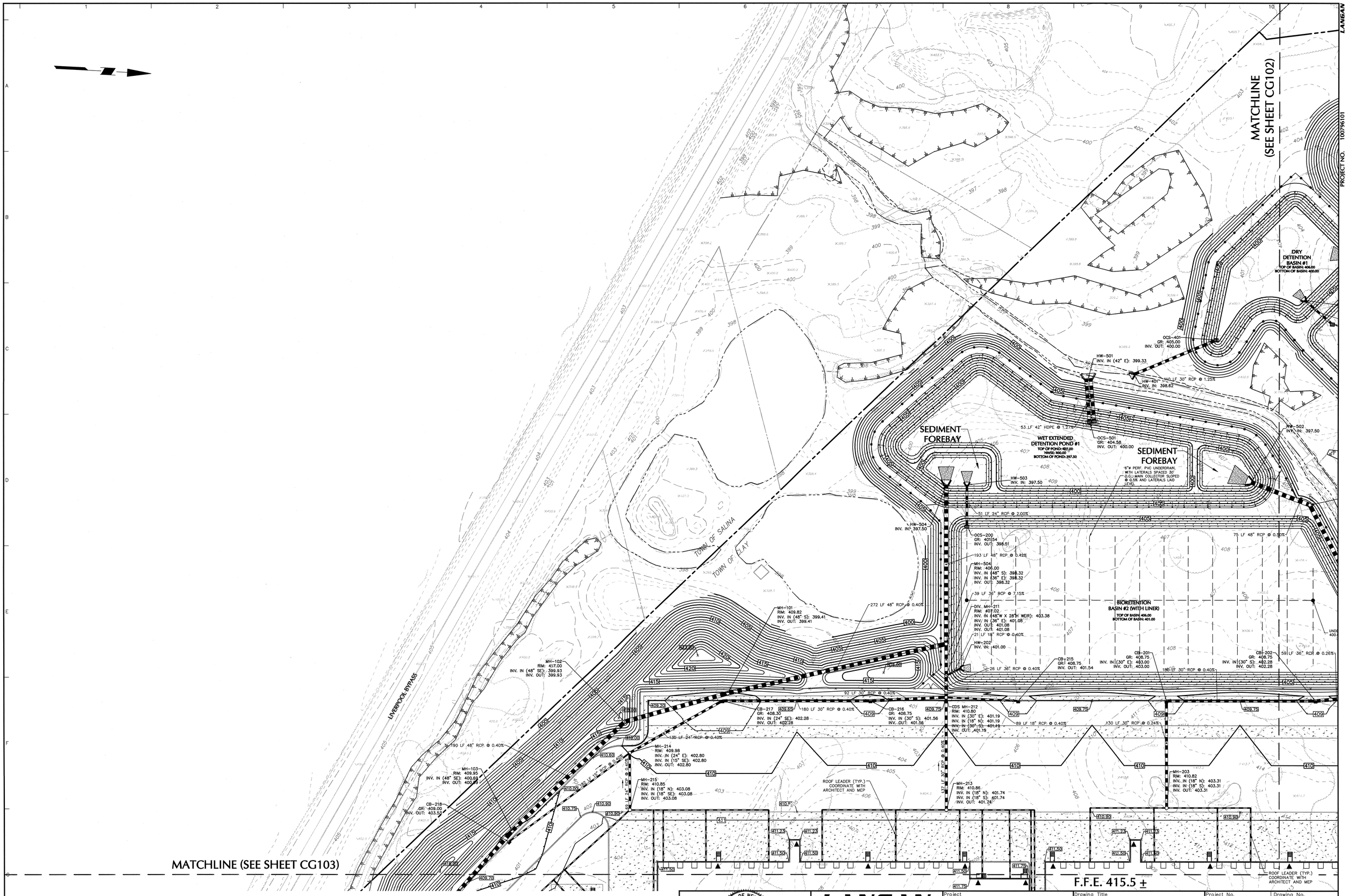

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Drawing Title
GRADING & DRAINAGE PLAN (1 OF 4)

Project No. 100796101
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Drawn By JRS
Checked By TLK

Drawing No. CG101

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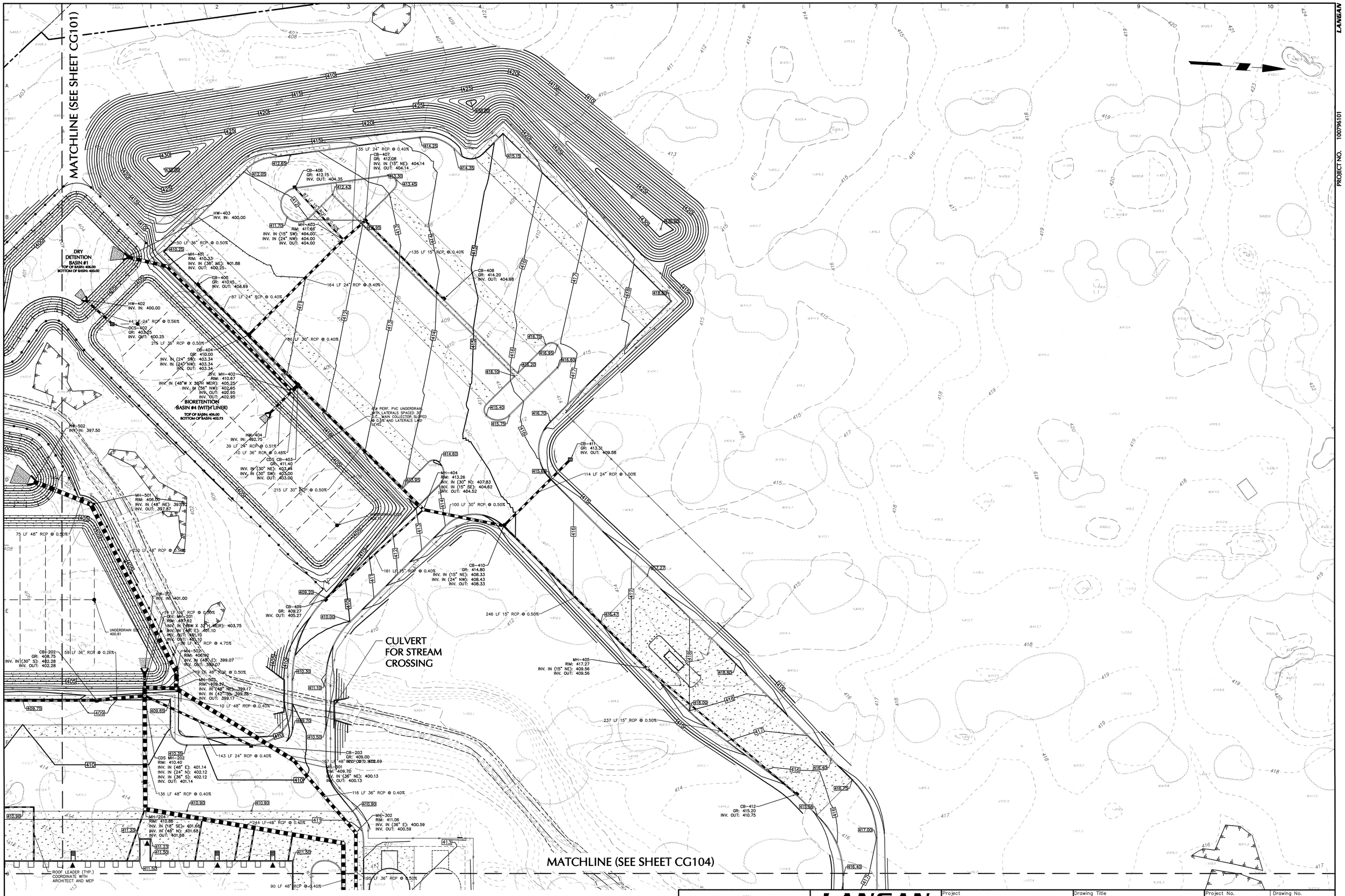

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Drawing Title
GRADING & DRAINAGE PLAN (2 OF 4)

Project No. 100796101
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Drawing No. CG102

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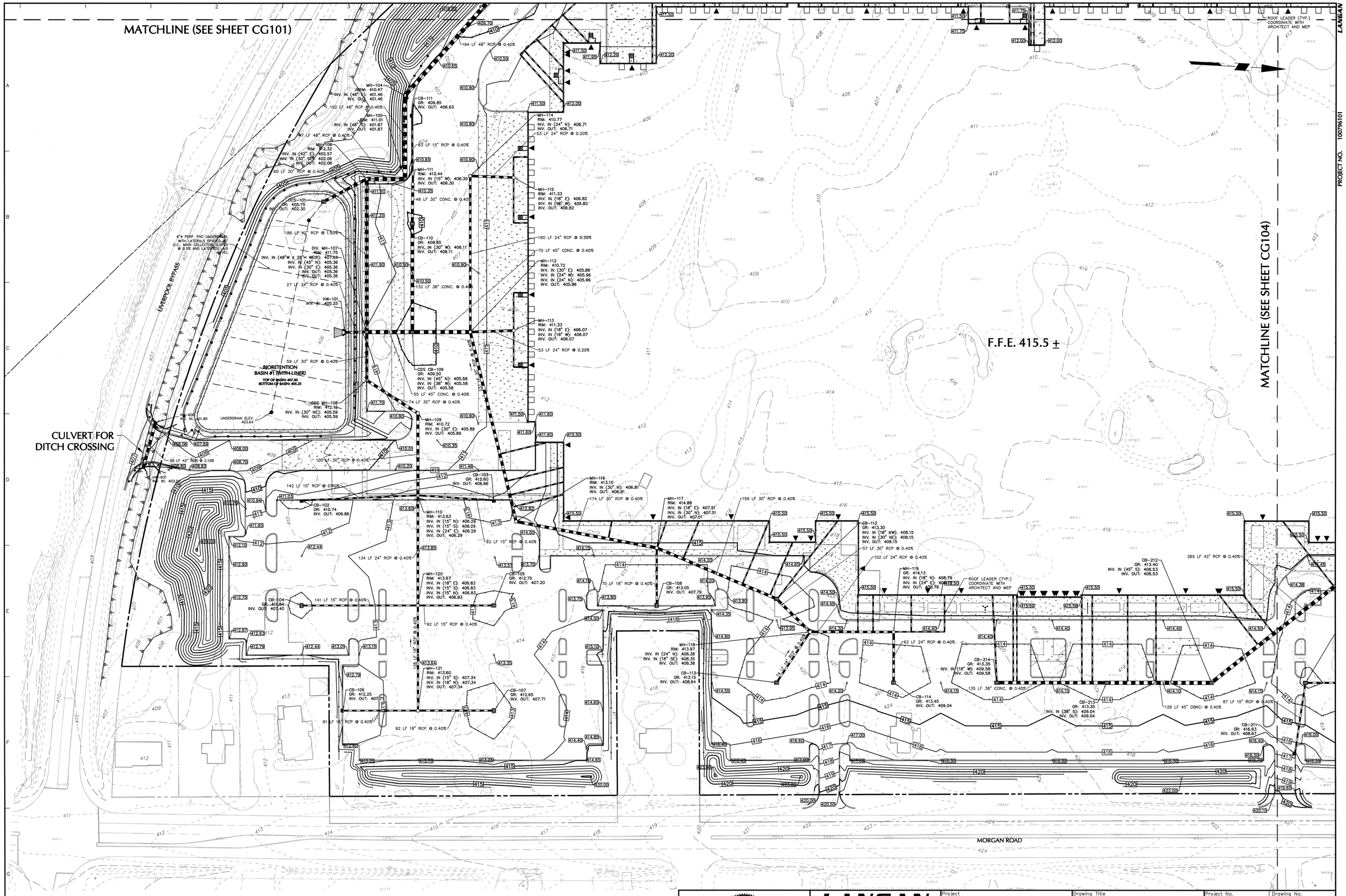

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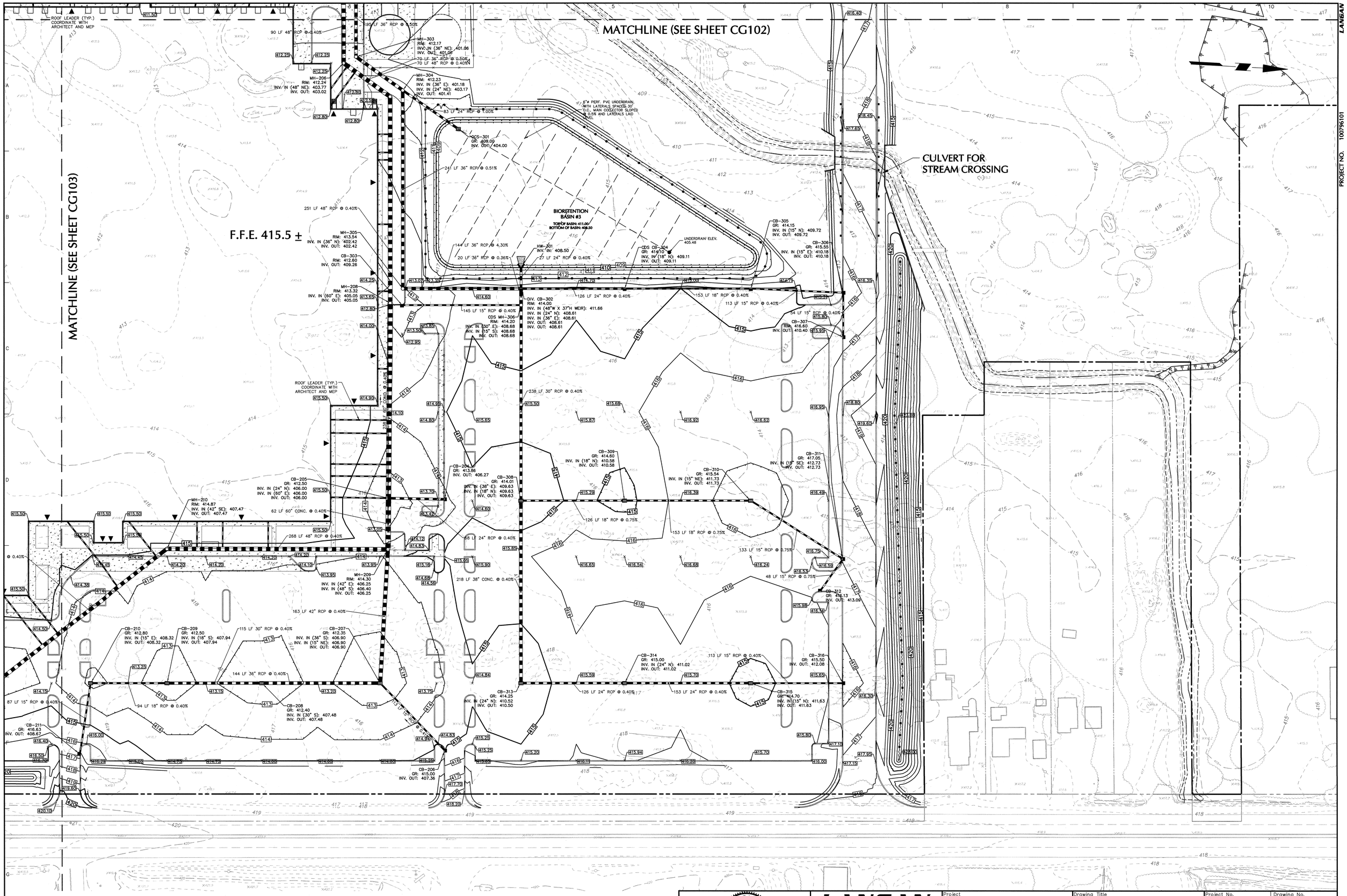

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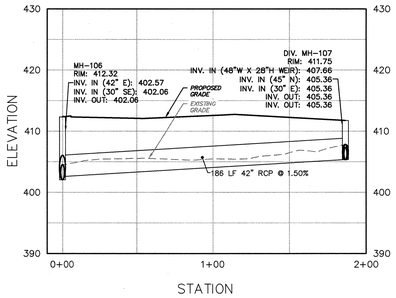
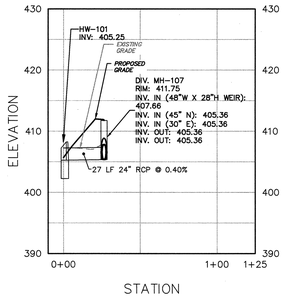
Checked By TLK

Drawing No. CG104

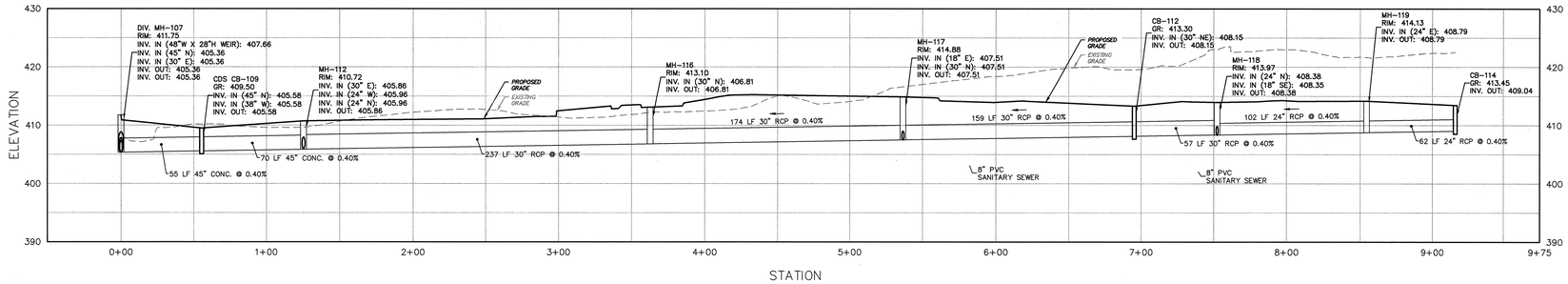
Filename: \\langan.com\data\PAR\data\100796101\Project Data\CAD\01\Sheet Files\Site Plan Approval\100796101-CG101-0101.dwg Date: 10/2/2019 Time: 17:59 User: ahartingsmith Style Table: Langan.stb Layout: CG104



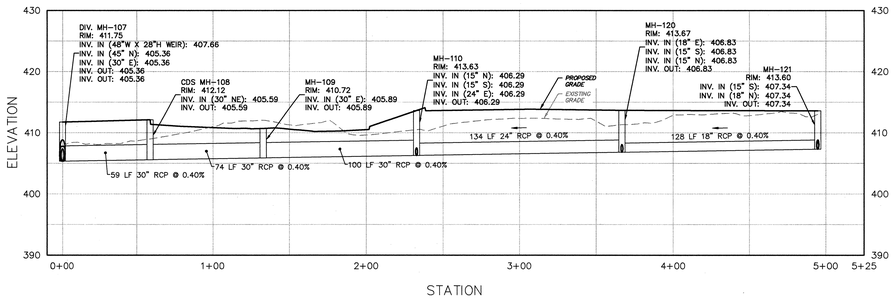
DIV. MH-107 TO MH-106 PROFILE



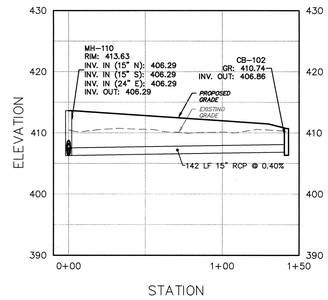
DIV. MH-107 TO HW-101 PROFILE



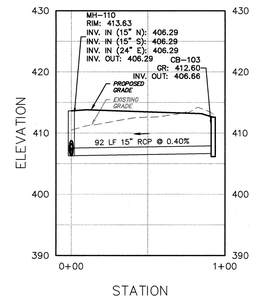
CB-114 TO DIV. MH-107 PROFILE



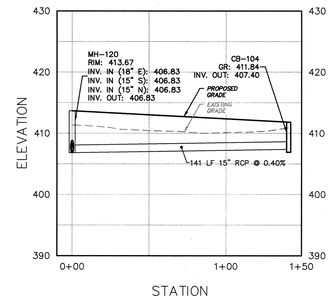
MH-121 TO DIV. MH-107 PROFILE



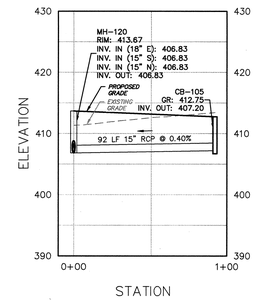
CB-102 TO MH-110 PROFILE



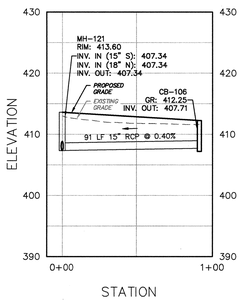
CB-103 TO MH-110 PROFILE



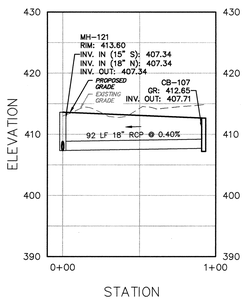
CB-104 TO MH-120 PROFILE



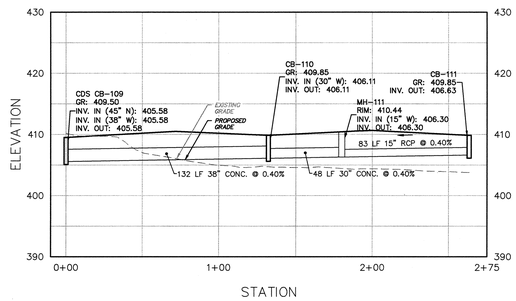
CB-105-MH-120 PROFILE



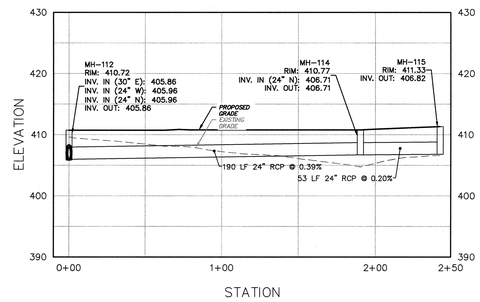
CB-106 TO MH-121 PROFILE



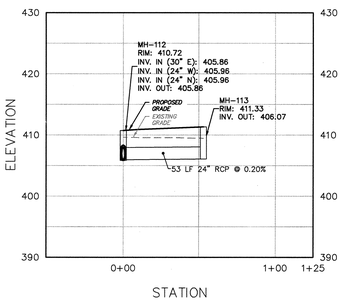
CB-107 TO MH-121 PROFILE



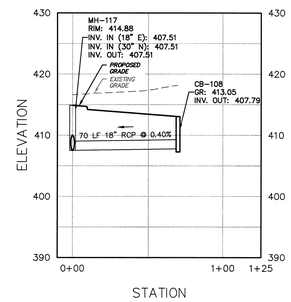
CB-111 TO CB-109 PROFILE



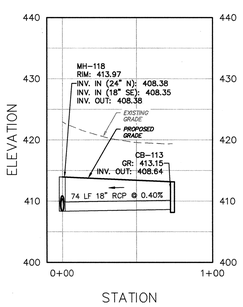
MH-115 TO MH-112 PROFILE



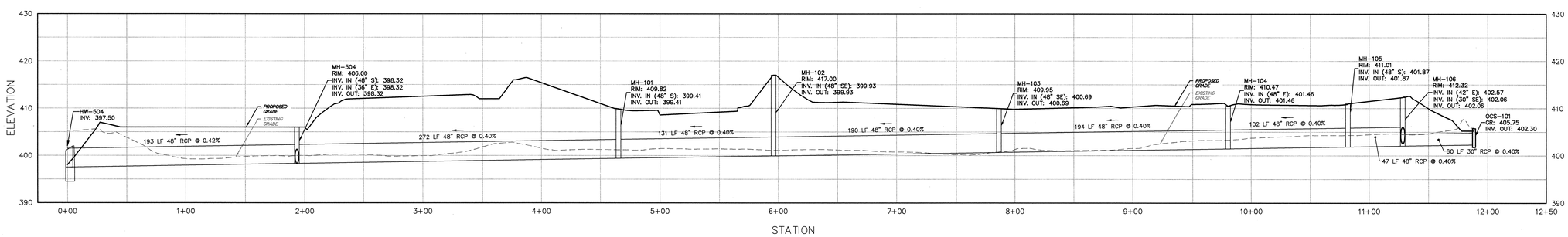
MH-113 TO MH-112 PROFILE



CB-108 TO MH-117 PROFILE



CB-113 TO MH-118 PROFILE



OCS-101 TO HW-504 PROFILE

H: SCALE: 1 INCH = 40 FEET

V: SCALE: 1 INCH = 10 FEET

Date	Description	No.
REVISIONS		

SIGNATURE — DATE SIGNED OCT 0 2 2019

RICHARD BURROW
PROFESSIONAL ENGINEER NY Lic. No. 082168

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NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project: PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title: STORM SEWER PROFILES

Project No. 100796101
Date 10/02/2019
Drawn By AHS
Checked By RG/TLK

Drawing No. CG201

WARNING:
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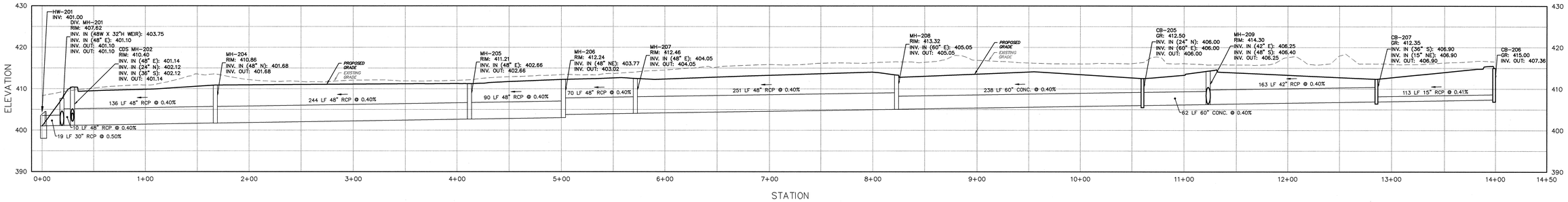
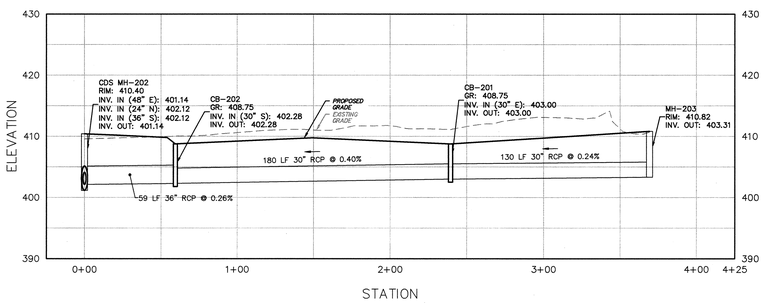
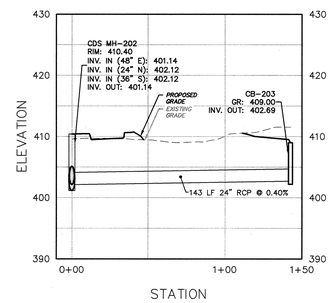


CB-206 TO HW-201 PROFILE



MH-203 TO CDS MH-202 PROFILE



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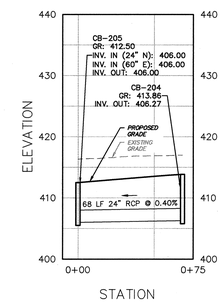
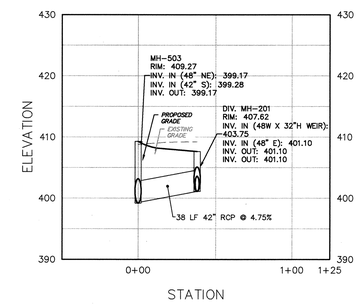
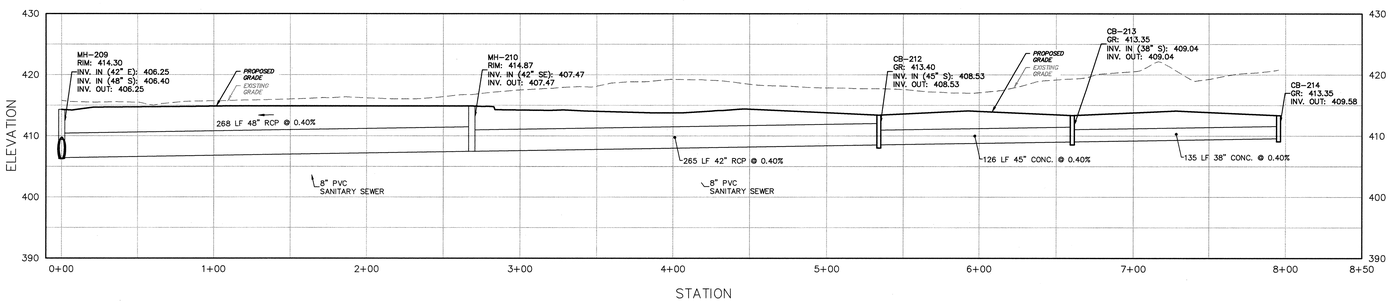


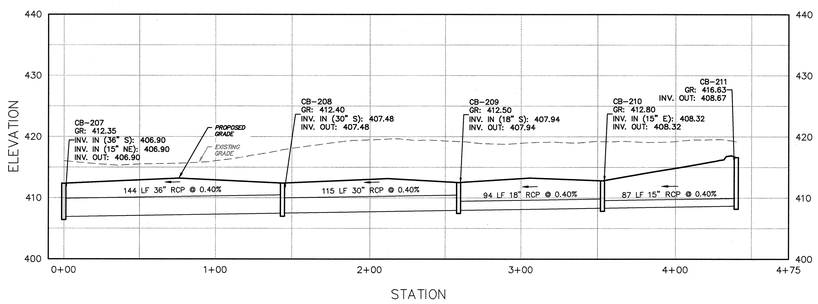
CB-204 TO CB-205 PROFILE



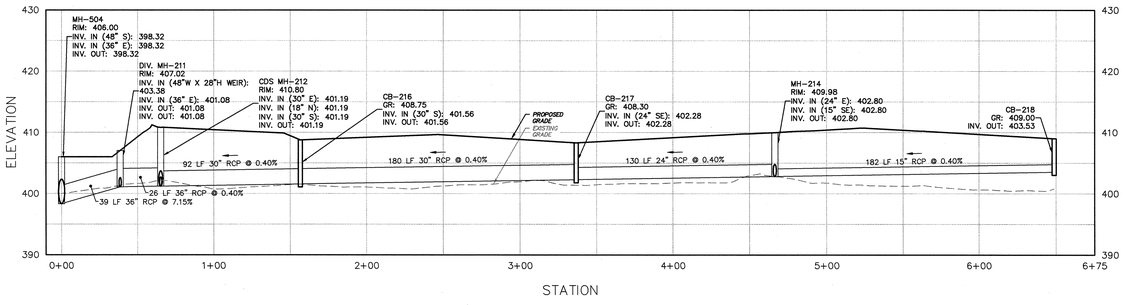
DIV. MH-201 TO MH-503 PROFILE



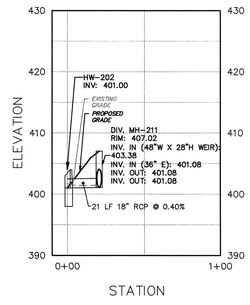
CB-214 TO MH-209 PROFILE



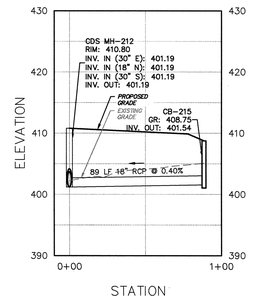
CB-211 TO CB-207 PROFILE



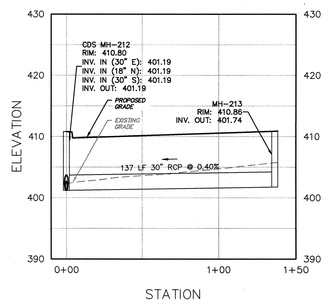
CB-218 TO MH-504 PROFILE



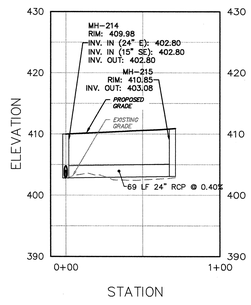
DIV. MH-211 TO HW-202 PROFILE



CB-215 TO CDS MH-212 PROFILE



MH-213 TO CDS MH-212 PROFILE



MH-215 TO MH-214 PROFILE

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Date	Description	No.
	REVISIONS	

STATE OF NEW YORK · RICHARD BURROW · 082168 · LICENSED PROFESSIONAL ENGINEER

SIGNATURE — DATE SIGNED OCT 0 2 2019

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NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project: PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114, BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title: STORM SEWER PROFILES

Project No. 100796101
Date 10/02/2019
Drawn By AHS
Checked By RC/TLK

Drawing No. CG202

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PROJECT NO. 100796101

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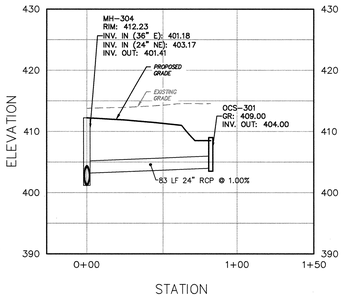
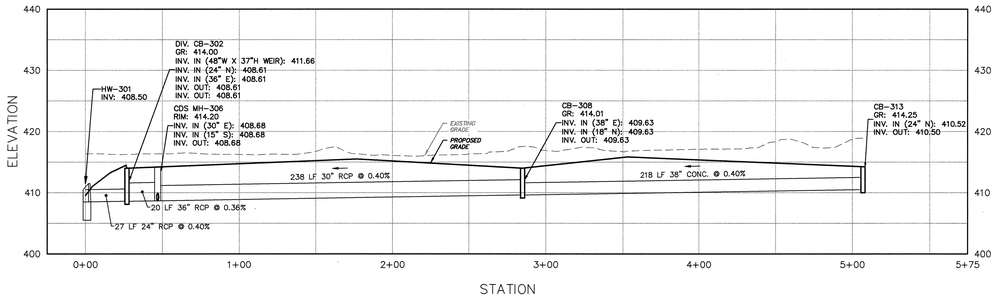
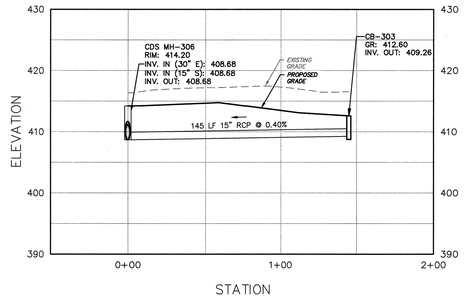


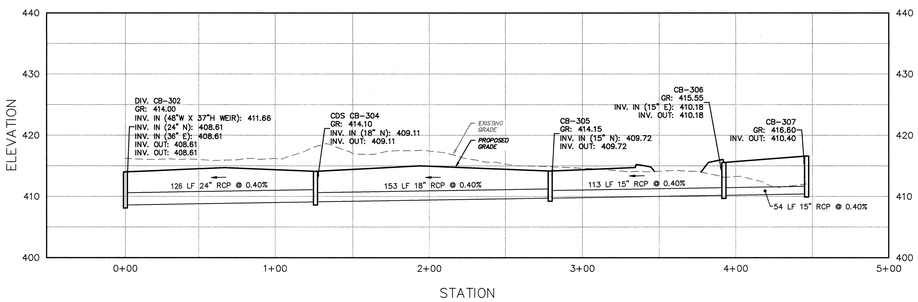
OCS-301 TO MH-304 PROFILE



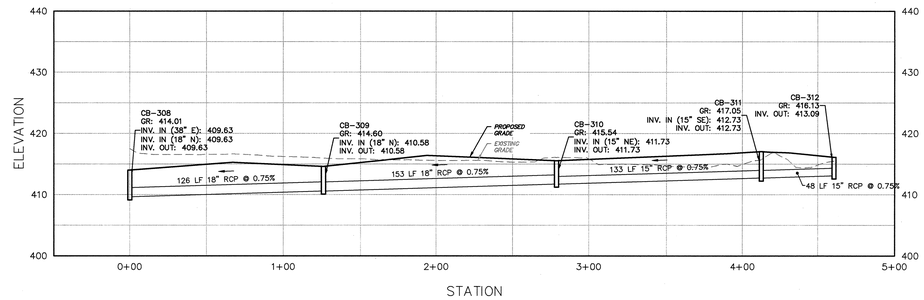
CB-313 TO HW-301 PROFILE



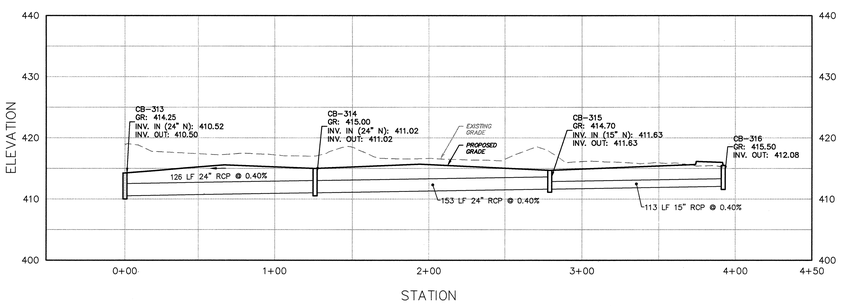
CB-303 TO CDS MH-306 PROFILE



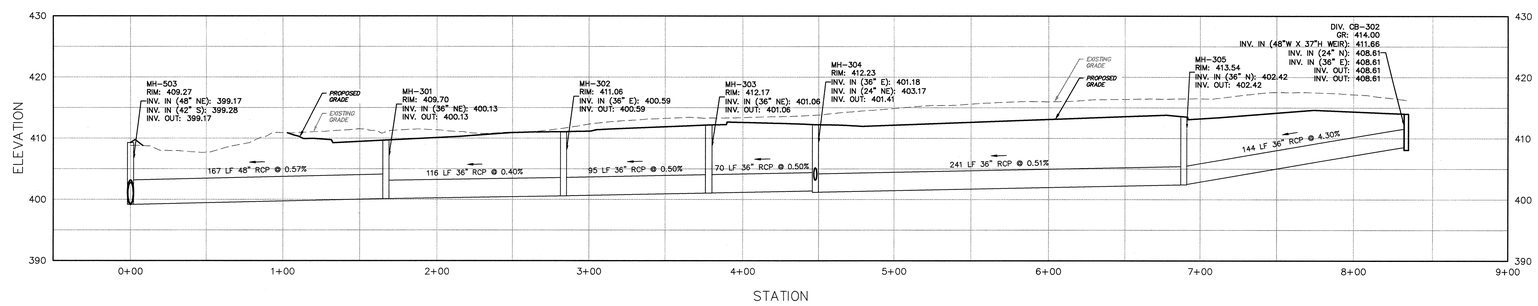
CB-307 TO DIV. CB-302 PROFILE



CB-312 TO CB-308 PROFILE



CB-316 TO CB-313 PROFILE



DIV. CB-302 TO MH-503 PROFILE

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V: SCALE: 1 INCH = 10 FEET

Date	Description	No.
REVISIONS		

STATE OF NEW YORK · RICHARD BURROW · 082168 · LICENSED PROFESSIONAL ENGINEER

SIGNATURE — DATE SIGNED OCT 0 2 2019

RICHARD BURROW
PROFESSIONAL ENGINEER NY Lic. No. 082168

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NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project: PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114, BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title: STORM SEWER PROFILES

Project No. 100796101
Date 10/02/2019
Drawn By AHS
Checked By RG/TLK

Drawing No. CG203

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PROJECT NO. 100796101

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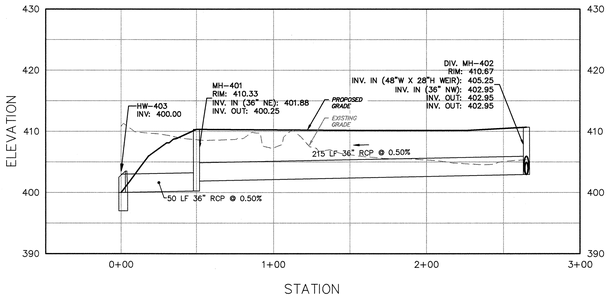
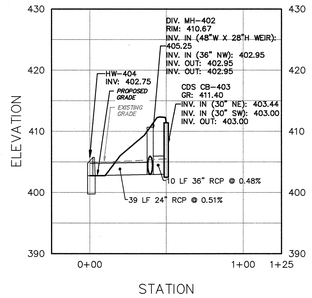
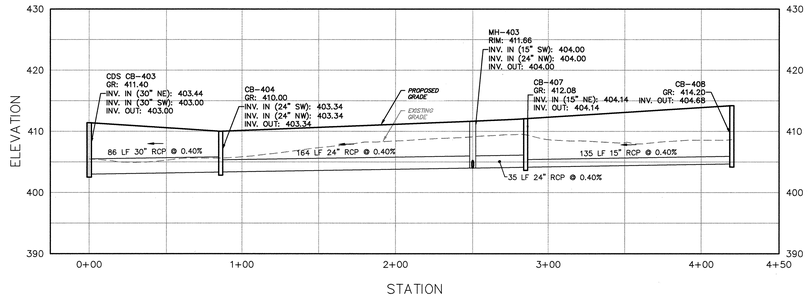


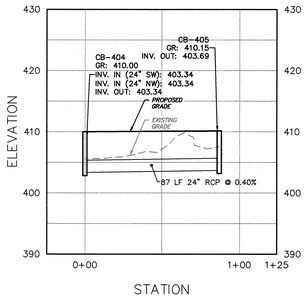
DIV. MH-402 TO HW-403 PROFILE



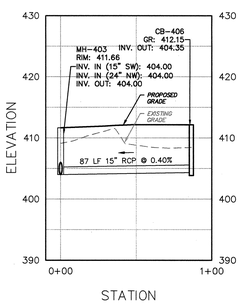
CDS CB-403 TO HW-404 PROFILE



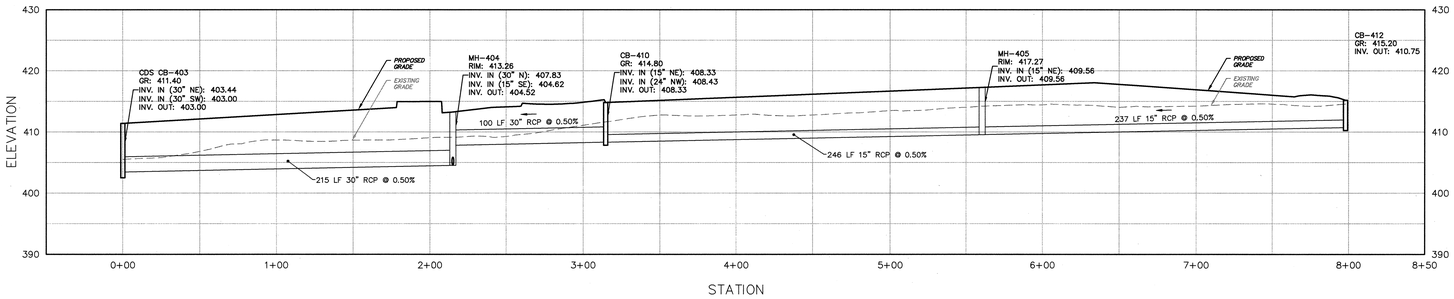
CB-408 TO CDS CB-403 PROFILE



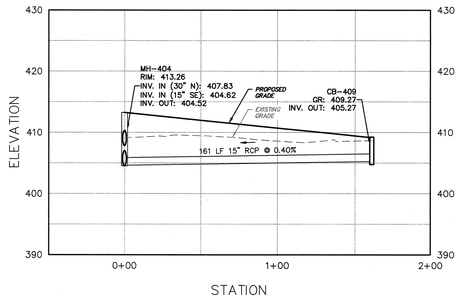
CB-405 TO CB-404 PROFILE



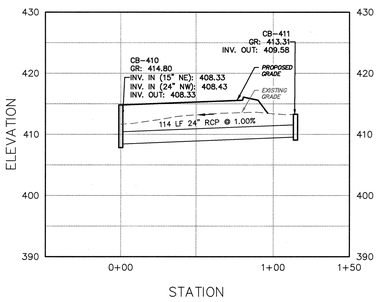
CB-406 TO MH-403 PROFILE



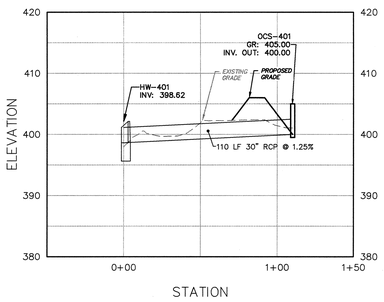
CB-412 TO CDS CB-403 PROFILE



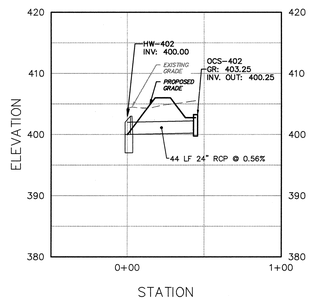
CB-409 TO MH-404 PROFILE



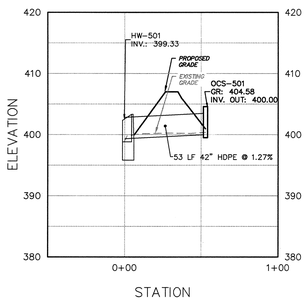
CB-411 TO CB-410 PROFILE



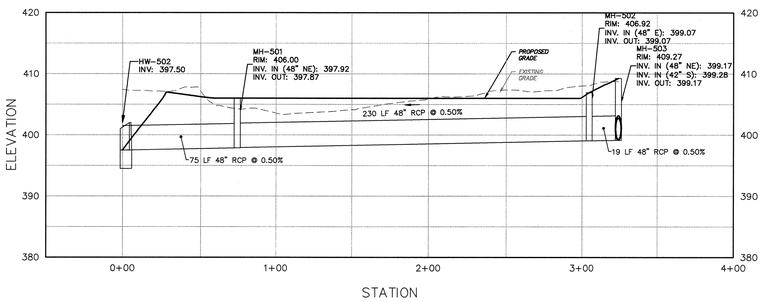
OCS-401 TO HW-401 PROFILE



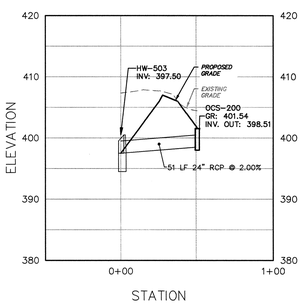
OCS-402 TO HW-402 PROFILE



OCS-501 TO HW-501 PROFILE



MH-503 TO HW-502 PROFILE



OCS-200 TO HW-503 PROFILE

WARNING:
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H: SCALE: 1 INCH = 40 FEET

V: SCALE: 1 INCH = 10 FEET

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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
STORM SEWER PROFILES

Project No. 100796101
Date 10/02/2019
Drawn By AHS
Checked By RG/TLK

Drawing No. CG204

Filename: \\langan.com\data\PAR\data\t\100796101\Project Data\CAD\01\Sheetfiles\Site Plan Approval\100796101-CG201-0101.dwg Date: 10/2/2019 Time: 17:59 User: ahartingsmith Style Table: Langan.stb Layout: CG204

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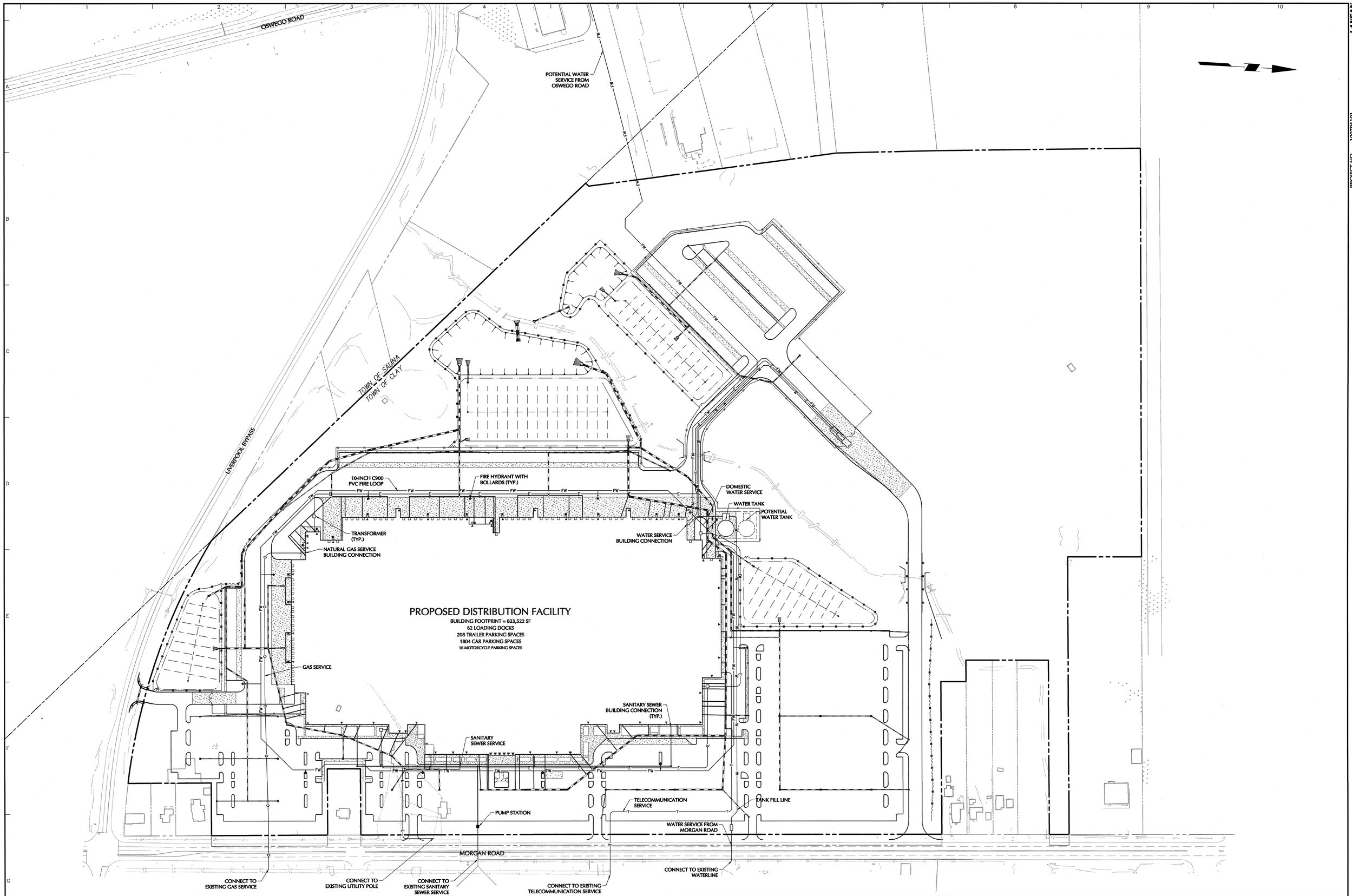
PROJECT NO. 100796101



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100 0 50 100
SCALE IN FEET

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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

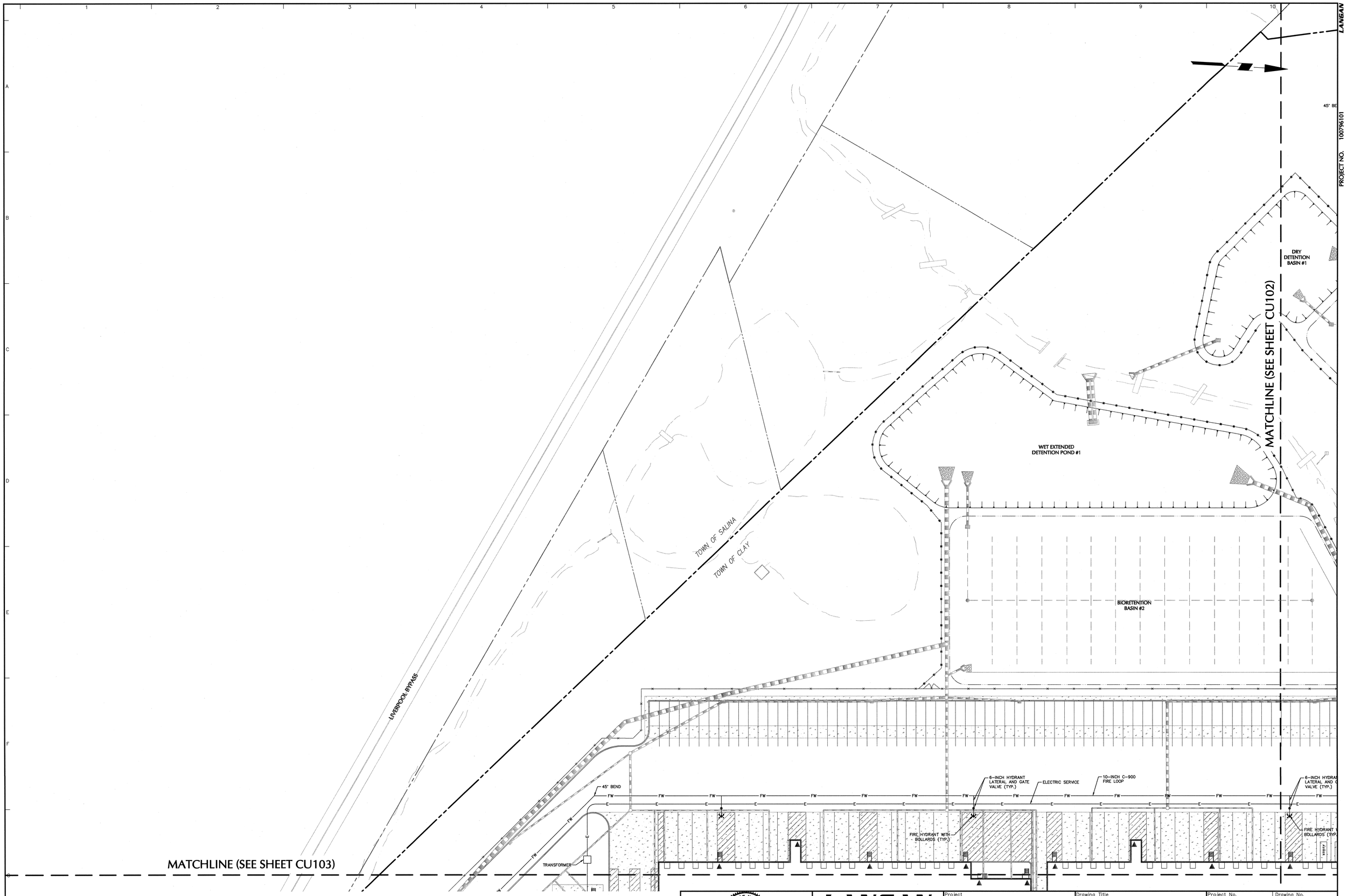
Drawing Title
OVERALL UTILITY PLAN

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No. CU100

Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01\Sheet\Plan\Site Plan Approval\100796101-CU100-0101.dwg Date: 10/2/2019 Time: 18:00 User: ahartingsmith Style Table: Langan.stb Layout: CU100

PROJECT NO. 100796101
LANGAN



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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
UTILITY PLAN (1 OF 4)

Project No.	100796101
Date	10/02/2019
Drawn By	JRS
Checked By	TLK

Drawing No.
CU101

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MATCHLINE REFER TO "ROAD INSET"

MATCHLINE (SEE SHEET CU101)

MATCHLINE (SEE SHEET CU104)

45° BEND

45° BEND

DRY DETENTION BASIN #1

BIORETENTION BASIN #4

10-INCH C900 PVC FIRE WATER SERVICE

45° BEND

45° BEND

45° BEND

1.5-INCH HDPE DR11 SANITARY FORCE MAIN

45° BEND

45° BEND

10-INCH C900 PVC FIRE WATER SERVICE

PUMP STATION #2

SAN. GUARDHOUSE CONNECTION #1
RIM: 417.75
INV. IN: 412.75
INV. OUT: 412.75

4-INCH PVC SDR35 SANITARY LATERAL

PROPOSED 4-INCH DOMESTIC WATER SERVICE INTO GUARDHOUSE

PROPOSED ELECTRIC SERVICE INTO GUARDHOUSE

6-INCH HYDRANT LATERAL AND GATE VALVE (TYP.)

10-INCH C-900 FIRE LOOP

45° BEND

FIRE HYDRANT WITH BOLLARDS (TYP.)

SANITARY FORCE MAIN TO BUILDING

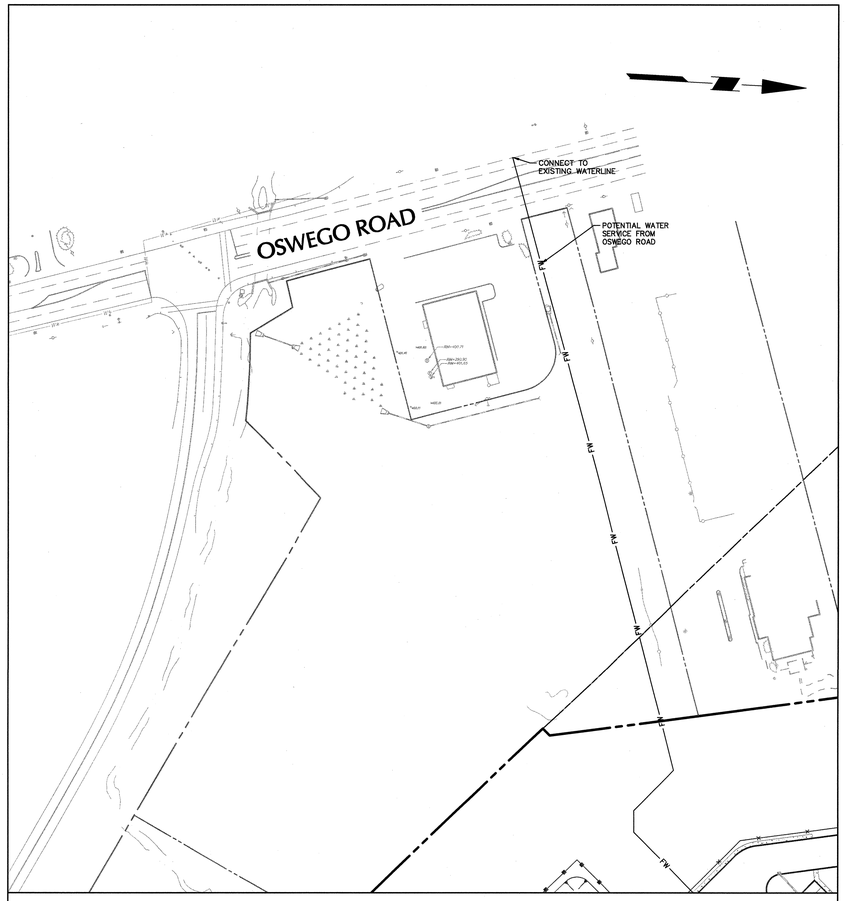
4-INCH DOMESTIC WATER SERVICE INTO BUILDING

6-INCH HYDRANT LATERAL

6-INCH GATE VALVE (TYP.)

FIRE HYDRANT WITH BOLLARDS (TYP.)

45° BEND



ROAD INSET

1" = 80'

SCALE: 1 INCH = 80 FEET

SCALE: 1 INCH = 40 FEET

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Project: PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title: UTILITY PLAN (2 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No. CU102

LANGAN
PROJECT NO. 100796101

Filename: \\langan.com\data\PAR\data\100796101\Project Data\CAD\01Sheet Files\Site Plan Approval\100796101-CU101-0101.dwg Date: 10/2/2019 Time: 18:01 User: alhartingsmith Style Table: Langan.stb Layout: CU102
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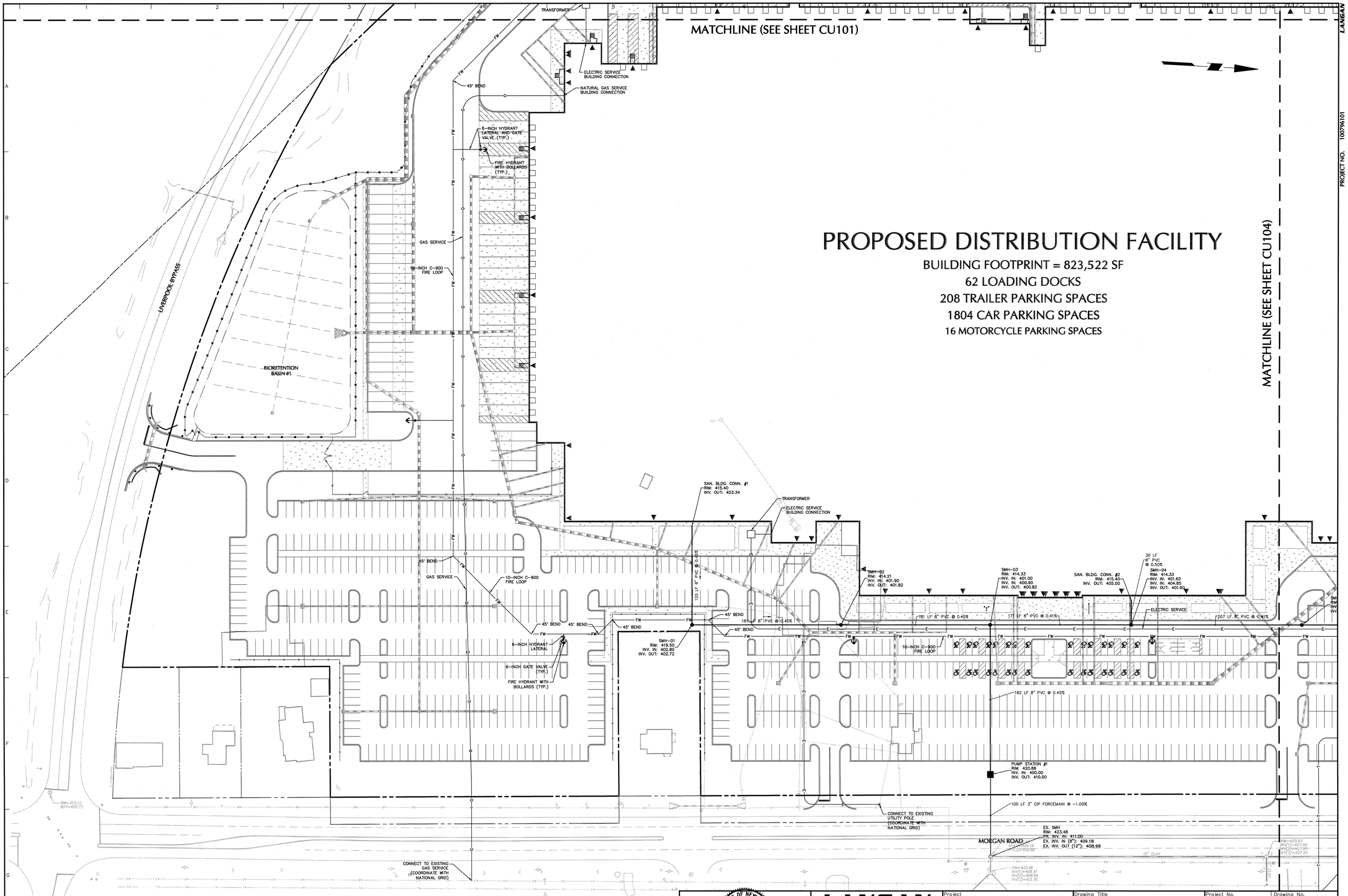

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SCALE: 1 INCH = 40 FEET

Date	Description	No.
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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114, BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
UTILITY PLAN (3 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No. CU103

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PROJECT NO. 100796101

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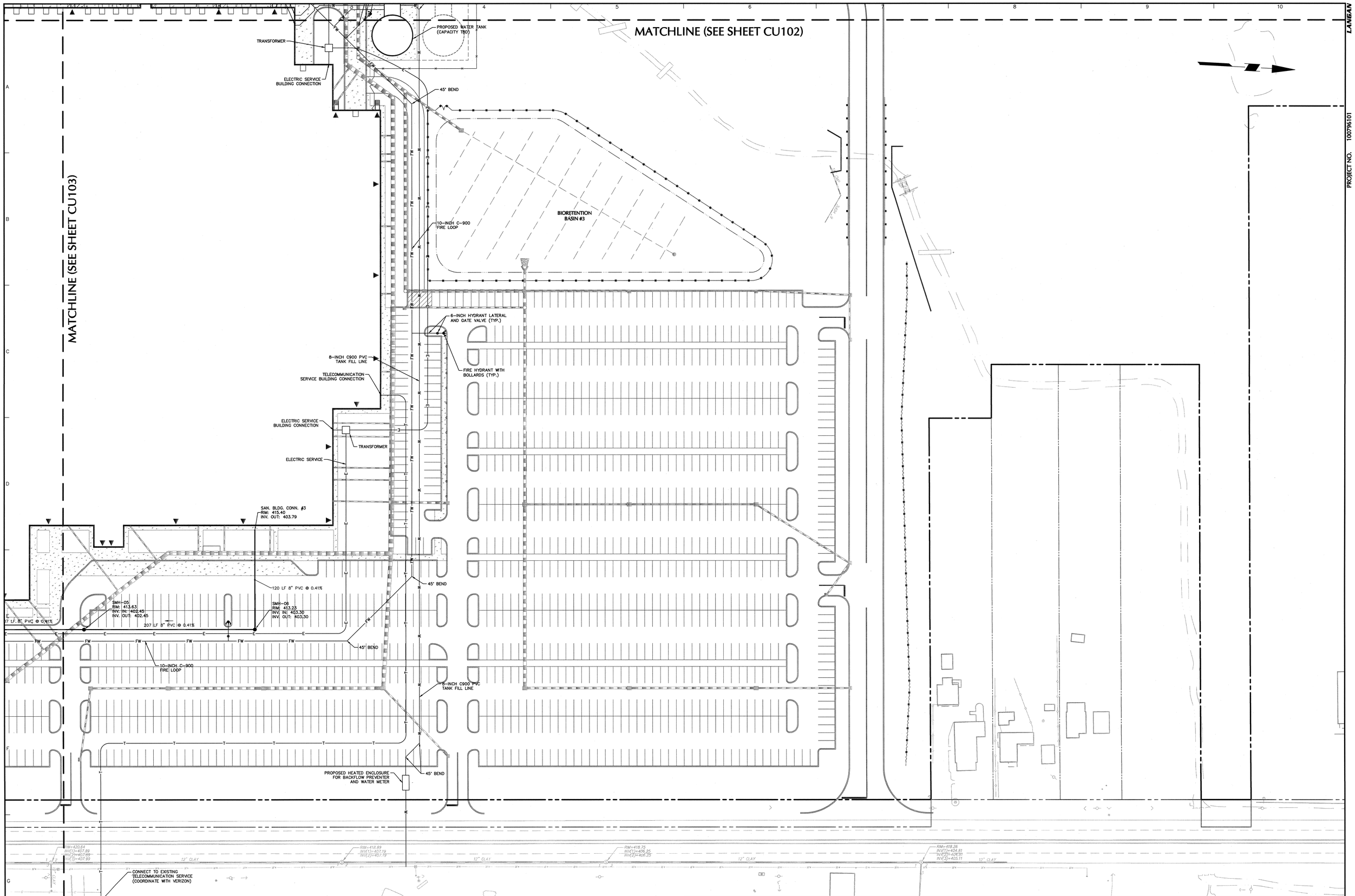

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40 0 10 25 40
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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
UTILITY PLAN (4 OF 4)

Project No. 100796101
Date 10/2/2019
Drawn By JRS
Checked By TLK

Drawing No. CU104

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PROJECT NO. 100796101

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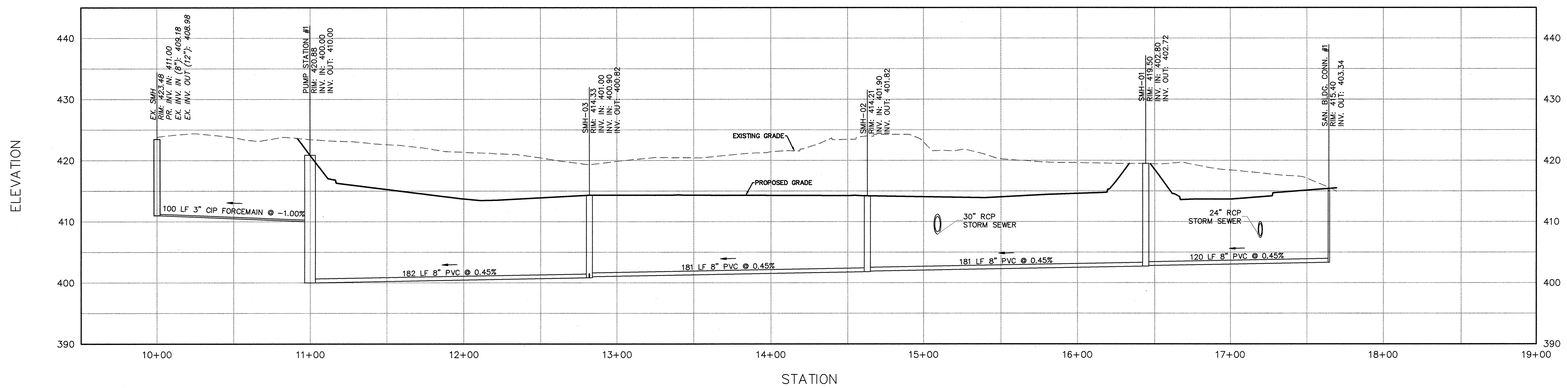
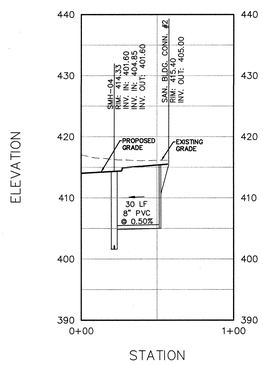


SAN. BLDG. CONNECTION #1 TO EX. SMH PROFILE



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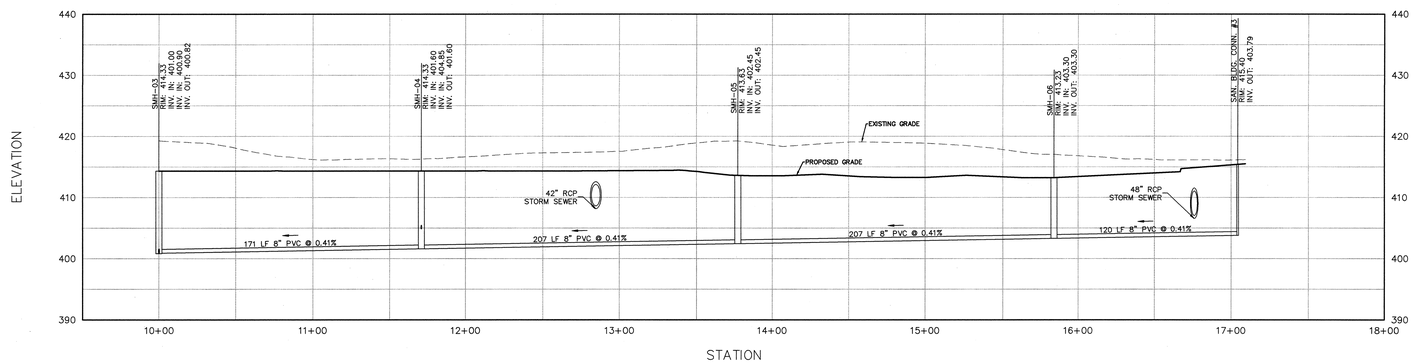

SAN. BLDG. CONNECTION #3 TO SMH-03 PROFILE

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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
SANITARY SEWER PROFILES

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No. CU201

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PROJECT NO. 100796101

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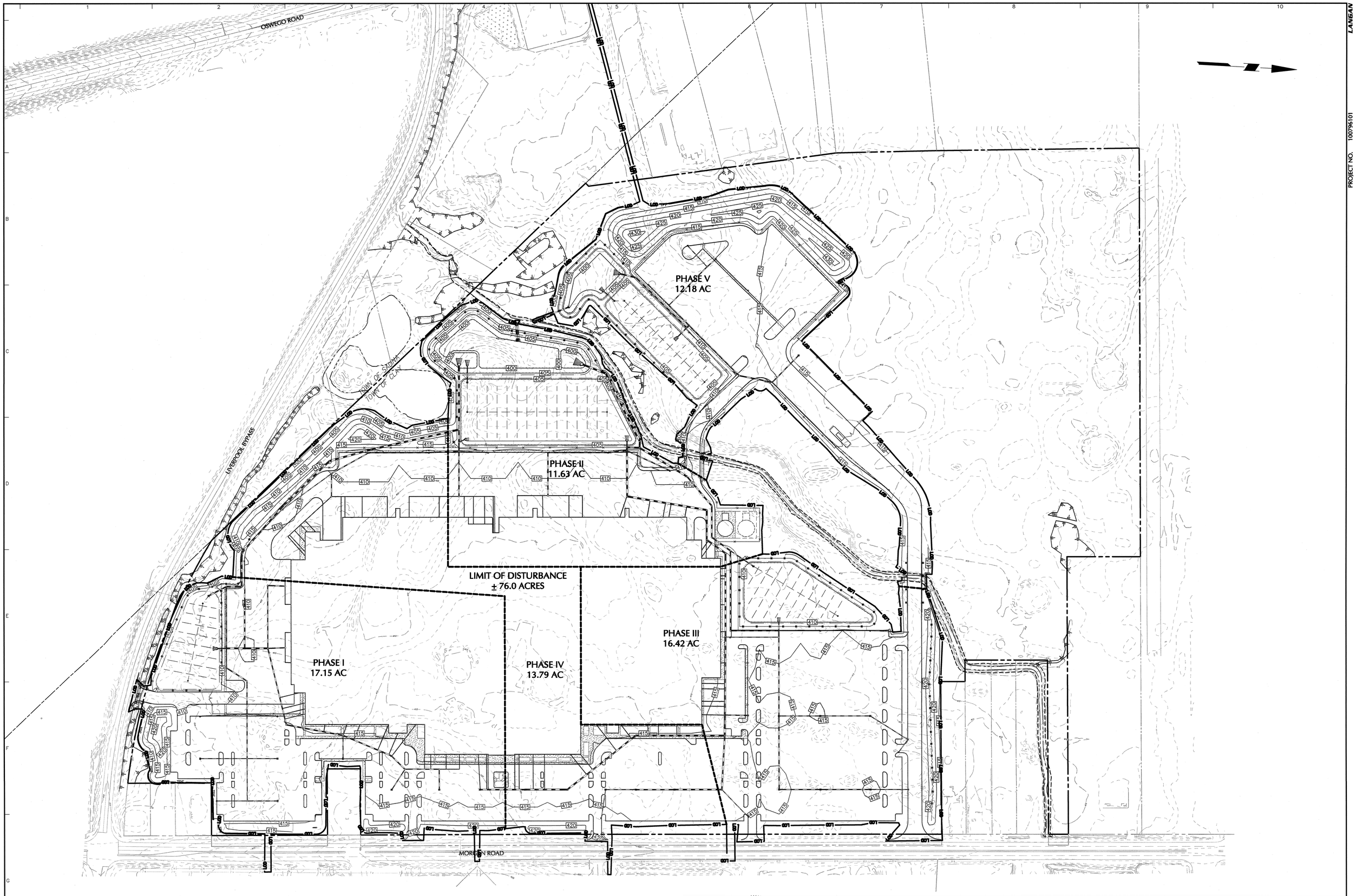

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100 0 50 100
SCALE: 1 IN = 100 FEET

Date	Description	No.
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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
OVERALL PHASING AND SOIL EROSION & SEDIMENT CONTROL PLAN

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No. CE100

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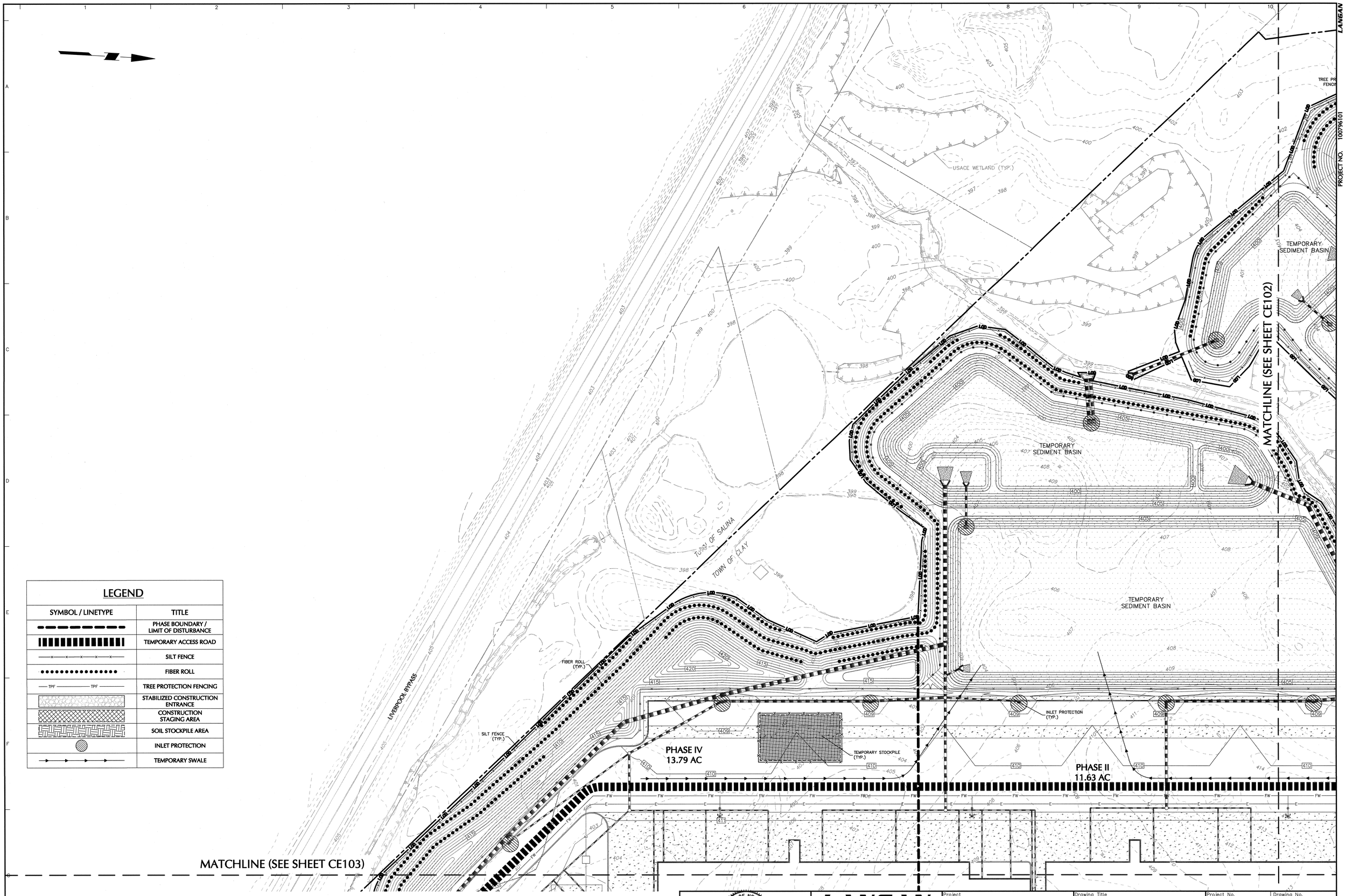
PROJECT NO. 100796101

Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01\Sheet\Sheet\Site Plan Approval\100796101-CE100-0101.dwg Date: 10/2/2019 Time: 18:02 User: ahartingsmith Style Table: Langan.stb Layout: CE100



LEGEND

SYMBOL / LINETYPE	TITLE
	PHASE BOUNDARY / LIMIT OF DISTURBANCE
	TEMPORARY ACCESS ROAD
	SILT FENCE
	FIBER ROLL
TPF TPF	TREE PROTECTION FENCING
	STABILIZED CONSTRUCTION ENTRANCE
	CONSTRUCTION STAGING AREA
	SOIL STOCKPILE AREA
	INLET PROTECTION
	TEMPORARY SWALE

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SCALE: 1 INCH = 40 FEET

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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
EROSION & SEDIMENT CONTROL PLAN (1 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No.
CE101

Filename: \\langan.com\data\PAR\data\100796101\Project Data\CAD\01\Sheet\Filed\Site Plan Approval\100796101-CE101-0101.dwg Date: 10/2/2019 Time: 18:03 User: shartingsmith Style Table: Langan.stb Layout: CE101

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MATCHLINE REFER TO "ROAD INSET"

SILT FENCE (TYP.)

FIBER ROLL (TYP.)

TREE PROTECTION FENCING (TYP.)

INLET PROTECTION (TYP.)

TEMPORARY SEDIMENT BASIN

TEMPORARY STOCKPILE (TYP.)

PHASE V
12.18 AC

TEMPORARY SEDIMENT BASIN

MATCHLINE (SEE SHEET CE101)

USACE WETLAND (TYP.)

INLET PROTECTION (TYP.)

PHASE II
11.63 AC

MATCHLINE (SEE SHEET CE104)

OSWEGO ROAD

USACE WETLAND (TYP.)

ROAD INSET

1" = 80'

SCALE: 1 INCH = 80 FEET

LEGEND

SYMBOL / LINETYPE	TITLE
	PHASE BOUNDARY / LIMIT OF DISTURBANCE
	TEMPORARY ACCESS ROAD
	SILT FENCE
	FIBER ROLL
TPF TPF	TREE PROTECTION FENCING
	STABILIZED CONSTRUCTION ENTRANCE
	CONSTRUCTION STAGING AREA
	SOIL STOCKPILE AREA
	INLET PROTECTION
	TEMPORARY SWALE

WARNING:
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Project: PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title: EROSION & SEDIMENT CONTROL PLAN (2 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No. CE102

PROJECT NO. 100796101

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MATCHLINE (SEE SHEET CE101)

PHASE IV
13.79 AC

PHASE II
11.63 AC

MATCHLINE (SEE SHEET CE104)

PHASE I
17.15 AC

PHASE IV
13.79 AC

LIVERPOOL BYPASS

TEMPORARY SEDIMENT BASIN

INLET PROTECTION (TYP.)

SILT FENCE (TYP.)

TREE PROTECTION FENCING (TYP.)

FIBER ROLL (TYP.)

TEMPORARY STOCKPILE (TYP.)

INLET PROTECTION (TYP.)

CONSTRUCTION ENTRANCE (TYP.)

INLET PROTECTION (TYP.)

MORGAN ROAD

LEGEND

SYMBOL / LINETYPE	TITLE
	PHASE BOUNDARY / LIMIT OF DISTURBANCE
	TEMPORARY ACCESS ROAD
	SILT FENCE
	FIBER ROLL
TPF TPF	TREE PROTECTION FENCING
	STABILIZED CONSTRUCTION ENTRANCE
	CONSTRUCTION STAGING AREA
	SOIL STOCKPILE AREA
	INLET PROTECTION
	TEMPORARY SWALE

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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

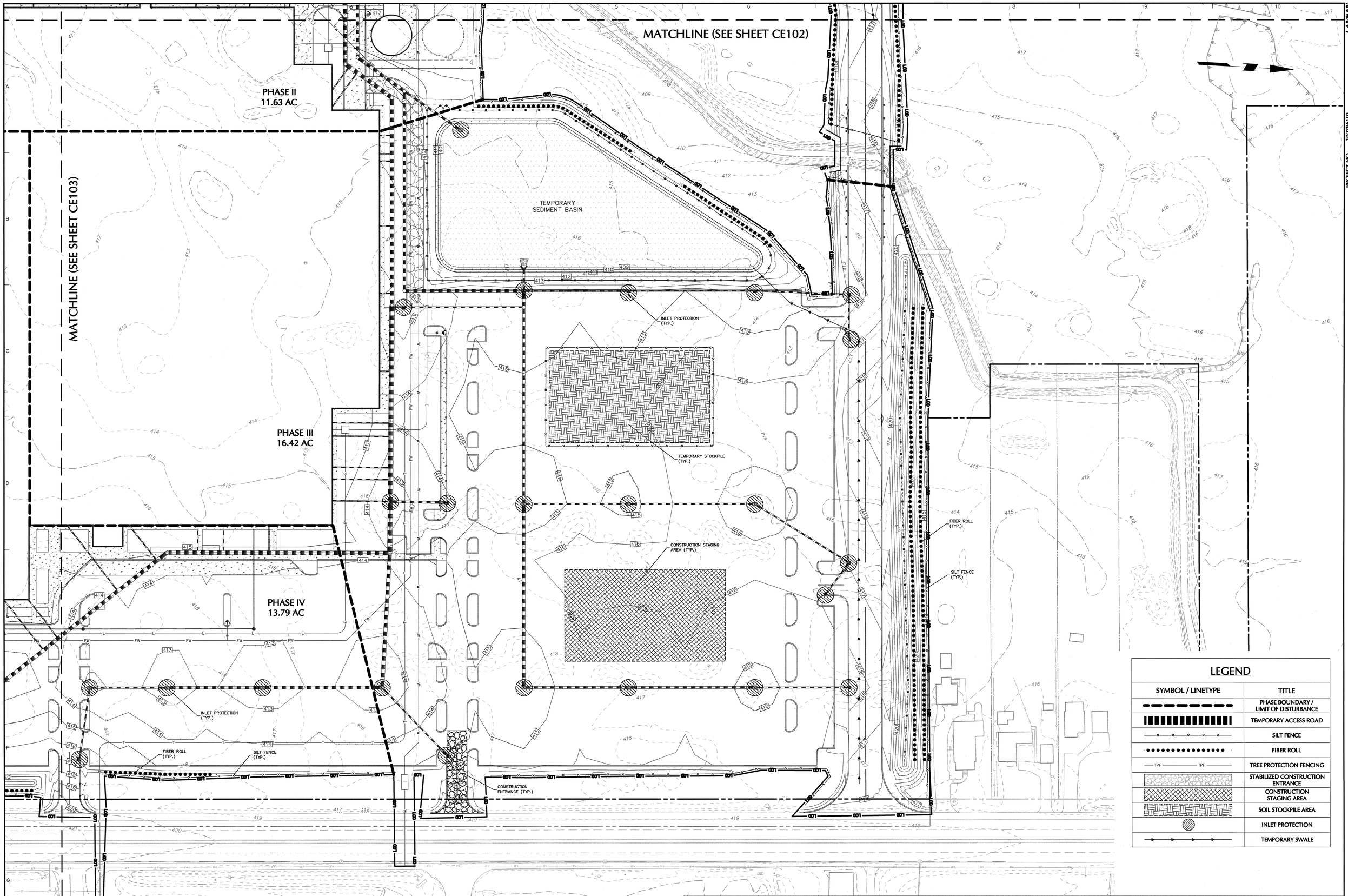
Drawing Title
EROSION & SEDIMENT CONTROL PLAN (3 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No. CE103

PROJECT NO. 100796101

Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01\SheetFiles\Site Plan Approval\100796101-CE101-0101.dwg Date: 10/2/2019 Time: 18:03 User: ahartingsmith Style Table: Langan.stb Layout: CE103



LEGEND

SYMBOL / LINETYPE	TITLE
	PHASE BOUNDARY / LIMIT OF DISTURBANCE
	TEMPORARY ACCESS ROAD
	SILT FENCE
	FIBER ROLL
TPF TPF	TREE PROTECTION FENCING
	STABILIZED CONSTRUCTION ENTRANCE
	CONSTRUCTION STAGING AREA
	SOIL STOCKPILE AREA
	INLET PROTECTION
	TEMPORARY SWALE

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SCALE: 1 INCH = 40 FEET

Date	Description	No.
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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

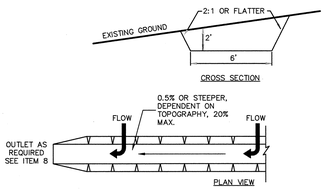
Drawing Title
EROSION & SEDIMENT CONTROL PLAN (4 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No. CE104

Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01\Sheet\Files\Site Plan Approval\100796101-CE101-0101.dwg Date: 10/2/2019 Time: 18:03 User: ahartingsmith Style Table: Langan.stb Layout: CE104

PROJECT NO. 100796101



CONSTRUCTION SPECIFICATIONS

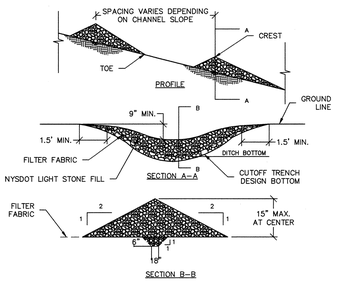
1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.
9. STABILIZATION SHALL BE AS PER THE CHART BELOW:

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	A (5 AC. OR LESS)	B (5–10 AC.)
1	0.5–3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1–5.0%	SEED AND STRAW MULCH	SEED USING JUTE OR EXCELSIOR
3	5.1–8.0%	SEED WITH JUTE OR EXCELSIOR; SOD	LINED RIP-RAP 4–8" RECYCLED CONCRETE EQUIVALENT
4	8.1–20%	LINED 4–8" RIP-RAP	ENGINEERED DESIGN

TEMPORARY DIVERSION SWALE

SCALE: NTS

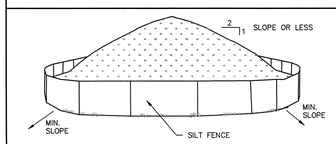


CONSTRUCTION SPECIFICATIONS:

1. STONE SHALL BE 2 TO 9 INCHES IN SIZE (NYSDOT LIGHT STONE FILL MEETS THESE REQUIREMENTS). STONE SHALL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN ON THE PLAN.
2. SET SPACING OF CHECK DAMS AS INDICATED ON PLANS.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAM ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

STONE CHECK DAM

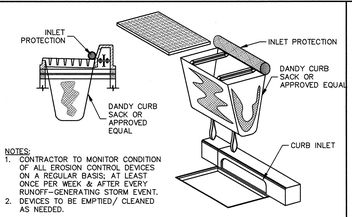
SCALE: NTS



NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1V:2H.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.
4. SEE SPECIFICATIONS FOR INSTALLATION OF SILT FENCE.
5. HAY BALES TO BE USED WHERE STOCKPILES ARE LOCATED ON PAVED AREAS.

TEMPORARY STOCKPILE

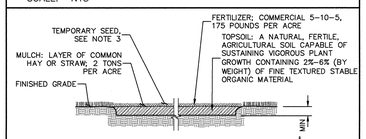
SCALE: NTS



NOTES:
1. CONTRACTOR TO MONITOR CONDITION OF ALL EROSION CONTROL DEVICES ON A REGULAR BASIS; AT LEAST ONCE PER WEEK & AFTER EVERY RUNOFF–GENERATING STORM EVENT.
2. DEVICES TO BE EMPTIED/ CLEANED AS NEEDED.

INLET PROTECTION - DANDY SACK

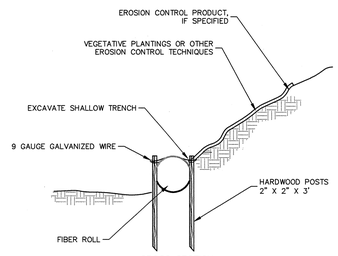
SCALE: NTS



NOTES:
1. TO BE USED ON DISTURBED SOIL AREAS THAT WILL BE LEFT EXPOSED FOR 7 DAYS OR MORE AND WILL BE RE–DISTURBED DURING CONSTRUCTION.
2. FERTILIZER OR LIME ARE NOT TYPICALLY USED FOR TEMPORARY SEEDINGS.
3. SEED MIX:
   A. IF SPRING, SUMMER OR EARLY FALL: SEED WITH ANNUAL OR PERENNIAL RYEGRASS AT A RATE OF 1 LB PER 1000 SF.
   B. IF LATE FALL OR WINTER: SEED WITH CERTIFIED "AROOSTOOK" WINTER (CEREAL RYE) AT A RATE OF 2.5 LBS PER 1000 SF.

TEMPORARY VEGETATIVE COVER

SCALE: NTS



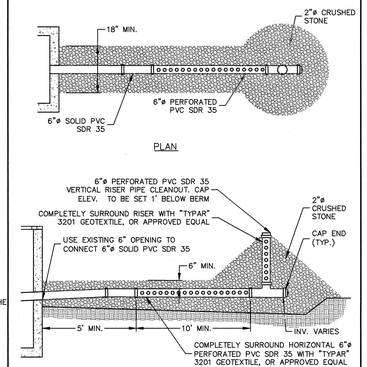
CONSTRUCTION SPECIFICATIONS:

1. EXCAVATE A SHALLOW TRENCH SLIGHTLY BELOW BASEFLOW OR A 4" TRENCH ON SLOPE CONTOURS.
2. PLACE THE ROLL IN THE TRENCH AND ANCHOR WITH 2" X 2" POSTS PLACED ON BOTH SIDES OF THE ROLL AND SPACED LATERALLY ON 2' TO 4' CENTERS. TRIM THE TOP OF THE POSTS EVEN WITH THE EDGE OF THE ROLL, IN NECESSARY.
3. NOTCH THE POSTS AND TIE TOGETHER, ACROSS THE ROLL, WITH 9 GAUGE GALVANIZED WIRE OR 2" DIAMETER BRAIDED NYLON ROPE.
4. PLACE SOIL EXCAVATED FROM THE TRENCH BEHIND THE ROLL AND HAND TAMP. PLANT WITH SUITABLE HERBACEOUS OR WOODY VEGETATION AS SPECIFIED ELSEWHERE IN THE CONTRACT DOCUMENTS. VEGETATION SHALL BE PLACED IMMEDIATELY ADJACENT TO THE ROLL TO PROMOTE ROOT GROWTH INTO THE FIBER. HERBACEOUS VEGETATION, IF SPECIFIED, SHALL BE PLANTED INTO THE FIBER ROLL.

FIBER ROLL

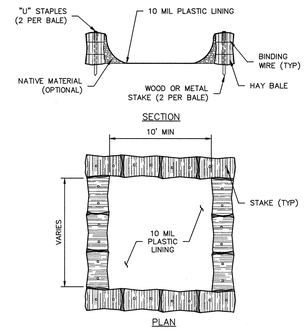
SCALE: NTS

NOTES:
1. CONTRACTOR TO USE THE 6" UNDERDRAIN OPENING IN THE OUTLET CONTROL STRUCTURE TO CONNECT TO TEMPORARY DEWATERING DEVICE. WHERE UNDERDRAINS ARE NOT REQUIRED, THE TEMPORARY 6" OPENING IN THE OUTLET CONTROL STRUCTURE SHALL BE PATCHED.



TEMPORARY SEDIMENT BASIN DEWATERING DEVICE

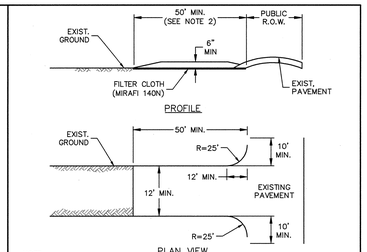
SCALE: NTS



NOTES:
1. CONCRETE WASHOUT SIGN TO BE INSTALLED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
2. REMOVE HARDEN CONCRETE WHEN WITHIN 4" FROM TOP OF STRUCTURE.
3. CONSTRUCT NEW FACILITIES ONCE CURRENT FACILITIES ARE TWO–THIRDS FULL.
4. LINERS, HAY BALES, ET.C SHALL BE INSPECTED FOR DAMAGE. ANY DAMAGE SHALL BE REPAIR PROMPTLY.

ABOVE GROUND TEMPORARY CONCRETE WASHOUT FACILITY

SCALE: NTS



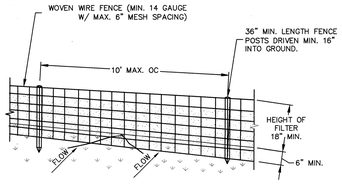
NOTE:
PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND PUBLIC R.O.W.

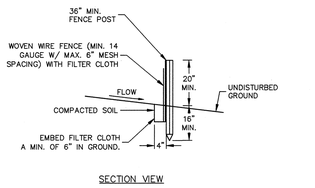
CONSTRUCTION SPECIFICATIONS

1. STONE SIZE – USE 3" STONE (NYSDOT ITEM #623.11 SIZE DESIGNATION #2, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50–FEET (EXCEPT ON SINGLE FAMILY LOT, 30–FEET MINIMUM LENGTH WOULD APPLY.)
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY–FOUR (24) FOOT IF SINGLE ENTRANCE TO SIGHT.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTR. ENTRANCE

SCALE: NTS





CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL, EITHER "T" OR "U" TYPE, OR HARDWOOD.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 14 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER–LAPPED BY SIX INCHES AND FOLDED.
4. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
5. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT THAT MEETS THE MINIMUM REQUIREMENTS SHOWN.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

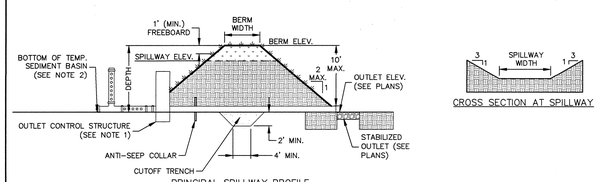
DETAIL NOTES

1. INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL ("THE BLUE BOOK").
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE DISTURBED AREA AS POSSIBLE, BUT AT LEAST 10 FEET FROM THE TOE OF A SLOPE STEEPER THAN 3H:1V, TO ALLOW FOR MAINTENANCE AND ROLL DOWN. THE AREA BEYOND THE FENCE MUST BE UNDISTURBED OR STABILIZED.
3. THE TYPE OF SILT FENCE SPECIFIED FOR EACH LOCATION ON THE PLAN SHALL NOT EXCEED THE MAXIMUM SLOPE LENGTH AND MAXIMUM FENCE LENGTH REQUIREMENTS SHOWN IN THE TABLE BELOW. IF A TYPE SILT FENCE IS NOT SPECIFIED ON THE PLANS, THE CRITERIA FOR STANDARD SILT FENCE CAN BE APPLIED.
4. SILT FENCE SHALL BE REMOVED AS SOON AS THE DISTURBED AREA HAS ACHIEVED FINAL STABILIZATION.

		SLOPE LENGTH/FENCE LENGTH (FT.)		
SLOPE	STEEPNESS	STANDARD	REINFORCED	SUPER
<2%	<50:1	300/1500	N/A	N/A
2–10%	50:1 TO 10:1	125/1000	250/2000	300/2500
10–20%	10:1 TO 5:1	100/750	150/1000	200/1000
20–33%	5:1 TO 3:1	60/500	80/750	100/1000
33–50%	3:1 TO 2:1	40/250	70/350	100/500
>50%	>2:1	20/125	30/175	50/250

SILT FENCE

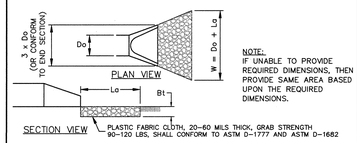
SCALE: NTS



NOTES:
1. INSTALL OUTLET CONTROL STRUCTURE. BOARD UP ORIFICES, SLOTS, AND TOP OF STRUCTURE
2. TEMPORARY SEDIMENT BASIN TO BE EXCAVATED TO THE TOP OF THE GRAVEL LAYER OF THE BIORETENTION AREA AND AQUATIC BENCH OF THE STORMWATER POND. SOIL RESTORATION TO BE PERFORMED AS NECESSARY. SOILS TO BE RESTORED SHALL BE AERATED. AERATION INCLUDES THE USE OF MACHINES SUCH AS TRACTOR–DRAWN IMPLEMENTS WITH COULTERS MAKING A NARROW SLIT IN THE SOILS, A ROLLER WITH MANY SPIKES MAKING INDENTATION IN THE SOILS, OR PRONGS WHICH FUNCTION LIKE A MINI–SUBSOILER.
3. ONCE SITE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED, THE TEMPORARY SEDIMENT BASIN SHALL BE CLEANED AND EXCAVATED FOR THE INSTALLATION OF THE BIORETENTION AREAS AND STORMWATER POND.
4. SEE SEDIMENT BASIN DEWATERING STRUCTURE FOR ADDITIONAL INFORMATION ON DEWATERING THE TEMPORARY SEDIMENT BASIN.

TEMPORARY SEDIMENT BASIN (USING OUTLET CONTROL STRUCTURES)

SCALE: NTS

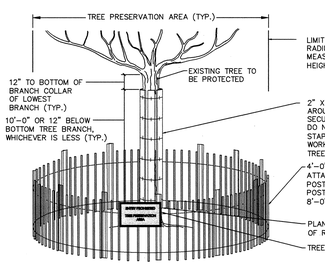


NOTE:
IF UNABLE TO PROVIDE REQUIRED DIMENSIONS, THEN PROVIDE SAME AREA BASED UPON THE REQUIRED DIMENSIONS.

Structure	pipe size (in)	Top Width of Rip Rap, $3D_o$ (ft)	Bottom Width of Rip Rap, W (ft)	Length of Rip Rap, L_t (ft)	d_{50} Rip Rap Size (in)	Rip Rap thickness (in)
HW-101	24	6.0	12.0	10	6	14
HW-201	30	7.5	14.5	12	6	14
HW-202	18	4.5	9.5	8	6	14
HW-301	24	6.0	10.0	8	6	14
HW-401	30	7.5	17.5	15	6	14
HW-402	18	4.5	11.5	10	6	14
HW-403	36	9.0	18.0	15	6	14
HW-404	24	6.0	10.0	8	6	14
HW-501	42	10.5	28.5	25	12	27
HW-502	48	12.0	24.0	20	9	20
HW-503	24	6.0	15.0	13	6	14
HW-504	48	12.0	20.0	16	9	20

RIP RAP OUTLET PROTECTION

SCALE: NTS

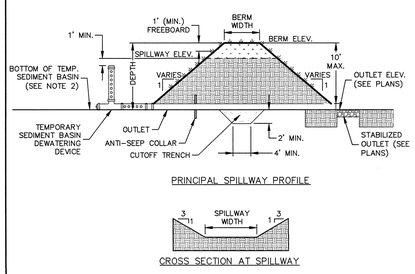


TREE PROTECTION NOTES:

1. ALL EXISTING TREES WITHIN THE LIMITS OF TREE PROTECTION FENCING SHALL BE PROTECTED THROUGHOUT THE DURATION OF WORK. THE LIMIT OF TREE PROTECTION FENCE RADIUS SHALL BE 18 TIMES THE MEASURED DIAMETER–AT–BREAST–HEIGHT (DBH), UNLESS CONDITIONS WARRANT THE FENCE TO BE LOCATED CLOSER TO THE TREE. THE PROJECT LANDSCAPE ARCHITECT TO APPROVE THE LOCATION OF ALL FENCING PRIOR TO EXCAVATION.
2. TREE PROTECTION PLANKING SHALL BE INSTALLED ON ALL EXISTING TREES ONLY WHEN WORK IS TO BE DONE WITHIN THE LIMIT OF TREE PROTECTION FENCING. REFER TO DETAIL ON THIS SHEET.
3. IF TREE PROTECTION FENCING NEEDS TO BE MOVED OR BREACHED DUE TO TEMPORARY CONSTRUCTION ACTIVITY WITHIN THE TREE PROTECTION ZONE, THE FENCING WILL BE RESET TO ITS ORIGINAL LOCATION IMMEDIATELY AFTER CONSTRUCTION WITHIN THE TREE PROTECTION ZONE IS COMPLETE.
4. TREE PROTECTION FENCING SHALL BE MAINTAINED TO PROTECT TREES AT ALL TIMES. ANY DAMAGED FENCING SHALL BE IMMEDIATELY REPLACED WHEN DAMAGED.
5. DEMOLITION WORK WITHIN THE TREE PROTECTION FENCE OF PROTECTED TREES SHALL BE PERFORMED BY NON–MECHANICAL METHODS. CONTRACTOR TO PROTECT ROOT MASS AGAINST DAMAGE DURING EXCAVATION. ANY TREE ROOTS THAT ARE DISTURBED, BROKEN, OR CUT SHALL BE PRUNED BACK WITH CLEAN SHARP TOOLS.
6. ALL TEMPORARILY EXPOSED TREE ROOTS SHALL BE COVERED WITH 2 INCHES OF SHREDDED HARDWOOD MULCH AND THOROUGHLY IRRIGATED ON A DAILY BASIS AS DIRECTED BY THE PROJECT LANDSCAPE ARCHITECT.
7. ALL WORK TO BE PERFORMED UNDER THE DIRECT SUPERVISION OF EITHER THE OWNER'S REPRESENTATIVE OR THE PROJECT LANDSCAPE ARCHITECT.

TREE PROTECTION FENCING AND TREE PLANKING

SCALE: NTS



NOTES:
1. INSTALL OUTLET CONTROL STRUCTURE. BOARD UP ORIFICES, SLOTS, AND TOP OF STRUCTURE
2. TEMPORARY SEDIMENT BASIN TO BE EXCAVATED TO THE TOP OF THE GRAVEL LAYER OF THE BIORETENTION AREA AND AQUATIC BENCH OF THE STORMWATER POND. SOIL RESTORATION TO BE PERFORMED AS NECESSARY. SOILS TO BE RESTORED SHALL BE AERATED. AERATION INCLUDES THE USE OF MACHINES SUCH AS TRACTOR–DRAWN IMPLEMENTS WITH COULTERS MAKING A NARROW SLIT IN THE SOILS, A ROLLER WITH MANY SPIKES MAKING INDENTATION IN THE SOILS, OR PRONGS WHICH FUNCTION LIKE A MINI–SUBSOILER.
3. ONCE SITE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED, THE TEMPORARY SEDIMENT BASIN SHALL BE CLEANED AND EXCAVATED FOR THE INSTALLATION OF THE BIORETENTION AREAS AND STORMWATER POND.
4. SEE SEDIMENT BASIN DEWATERING STRUCTURE FOR ADDITIONAL INFORMATION ON DEWATERING THE TEMPORARY SEDIMENT BASIN.

TEMPORARY SEDIMENT BASIN (WITH DEWATERING DEVICE)

SCALE: NTS

WARNING:
IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

Date	Description	No.
REVISIONS		

STATE OF NEW YORK · RICHARD BURROW · 082168 · LICENSED PROFESSIONAL ENGINEER

OCT 02 2019

SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NY Lic. No. 082168

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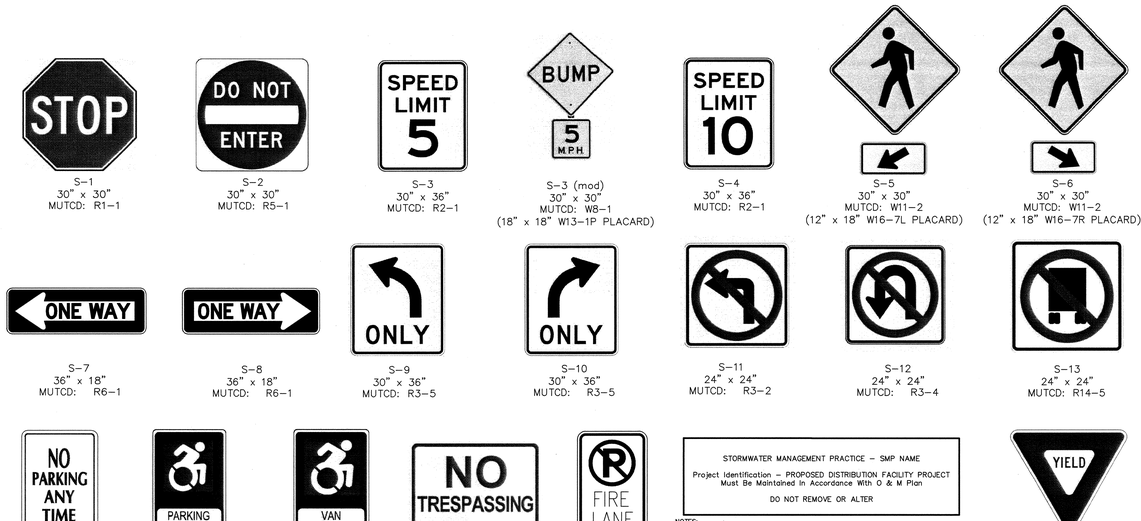
Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
SOIL EROSION AND SEDIMENT CONTROL NOTES & DETAILS

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK
Drawing No. CE501

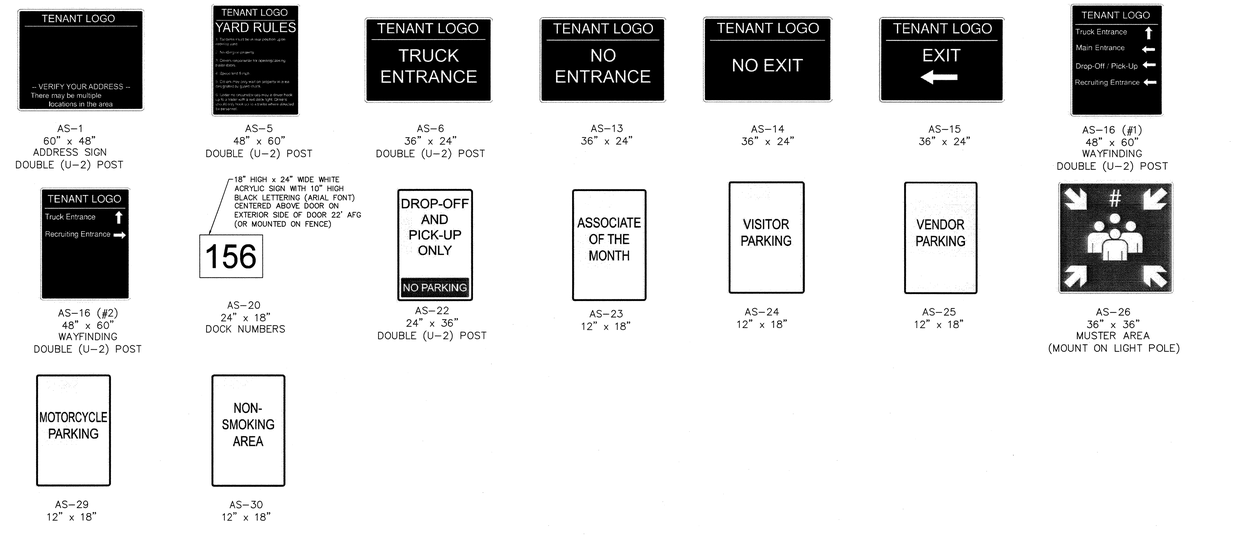
LANGAN
PROJECT NO. 100796101

Filename: \\langan.com\data\PAR\data\1\100796101\Project Data\CAD\01\Sheet\Files\Site Plan Approval\100796101-CE501-0101.dwg Date: 10/2/2019 Time: 18:04 User: ahartingsmith Style Table: Langan.stb Layout: CE501

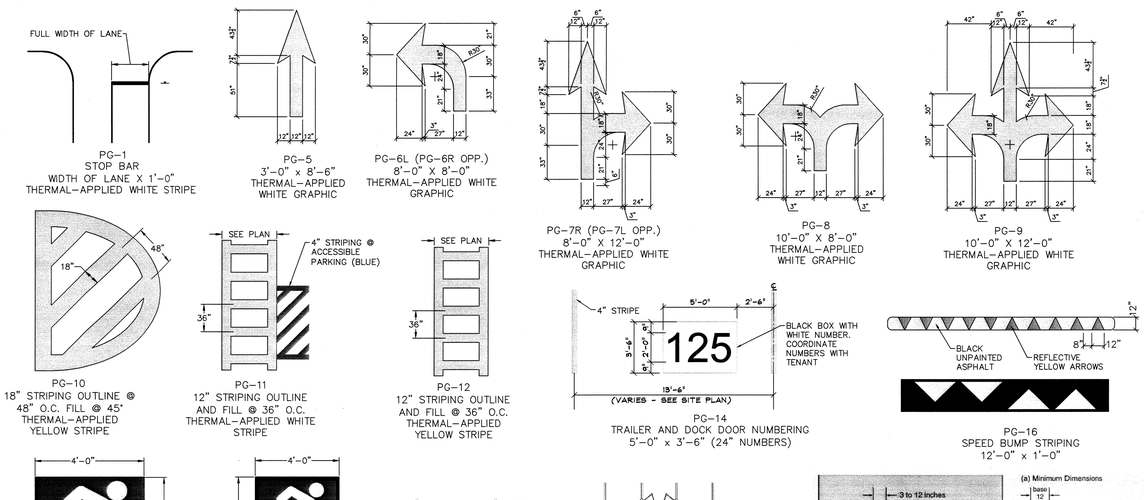


NOTES:
1. SIGNS SHALL BE ERECTED OR POSTED IN THE IMMEDIATE VICINITY OF THE STORMWATER MANAGEMENT PRACTICE. SIGN SHALL BE CONSPICUOUS AND LEGIBLE.
2. SIGNS SHALL BE MOUNTED TO A U-CHANNEL OR ONTO A PERIMETER FENCE IF PROVIDED.

SITE SIGNAGE

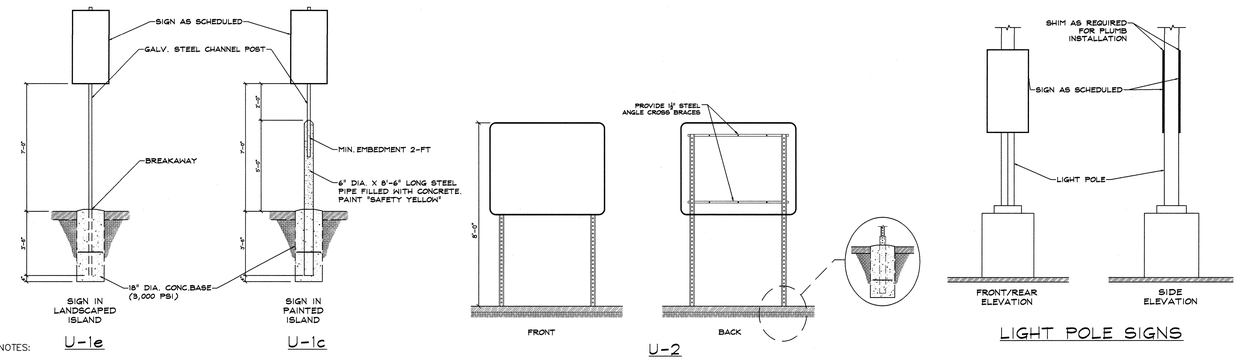


TENANT SPECIFIC SIGNAGE



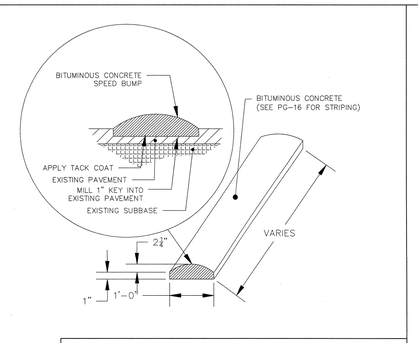
NOTES:
1. PAINTED HANDICAP SYMBOL TO BE IN ACCORDANCE W/ ADA STANDARDS.
2. STRIPING WORK SHALL BE REVIEWED AND ACCEPTED BY THE AUTHORITY HAVING JURISDICTION.

PAVEMENT GRAPHICS



NOTES:
1. SEE ATTACHED PLANS FOR SIGN LOCATIONS.
2. "U1-E" LABEL DESIGNATES SIGNS ON TOP OF COMPACTED EARTH. "U1-C" LABEL DESIGNATES SIGNS ON TOP OF CONCRETE OR ASPHALTIC PAVING. "U-2" LABEL DESIGNATES SIGNS WITH DOUBLE SUPPORTS.
3. FOR U-1E SIGNS, PROVIDE A 36" MOUNTING TUBE (2 1/4" SQUARE STEEL POST) DRIVEN TO 1" TO 2" ABOVE GRADE. THE MOUNTING TUBE IS TO BE PAIRED WITH AN 18" BREAKAWAY SUPPORT TUBE (2 1/4" SQUARE STEEL POST). THE SIGN POST SINKS TO BASE OF THE ANCHOR TUBE AND BREAKAWAY SUPPORT WITH AN ANGLE BOLT.
4. FOR U-1C SIGNS, A PEDESTAL BASE IS TO BE MARRIED TO A 2" POST. THE BASE IS SHIMMED FOR PLUMB INSTALLATION OF THE POST AND PANEL. BASE FASTENS TO CONCRETE PAVING WITH MASONRY ANCHORS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
5. U-1E AND U-1C SIGN PANELS IS TO BE INSTALLED AT 7' A.F.G. WITH THE POST EXTENDING WITHIN 2" OF THE TOP OF THE SIGN PANEL. TOP OF THE U-2 SIGN PANEL SHALL BE AT 8' A.F.G. INSTALLATION SHALL BE PLUMB, LEVEL, AND STRAIGHT.
6. SUPPORTS ARE TO BE SUFFICIENT FOR SECURE MOUNTING OF SIGN ON LIGHT POLE.
7. ALL HARDWARE SHALL BE NON-CORROSIVE. IF ADDITIONAL THICKNESS OF MATERIAL OR ADDITIONAL INTERNAL BRACING IS REQUIRED FOR SECURE INSTALLATION OR TO PROVIDE STABILITY ON LIGHT POLE, ALTERATIONS SHALL BE REFLECTED IN SHOP DRAWINGS. WIND LOADING AND DURABILITY SHALL BE TAKEN INTO ACCOUNT IN THE ENGINEERING OF THE SIGN.
8. GRAPHICS AND TYPOGRAPHY SIGN GRAPHICS ARE TO BE HEAVY DUTY '3M' REFLECTIVE VINYL FOR SIGNS ON LIGHT POLE.

SIGN POSTS



BITUMINOUS CONCRETE SPEED BUMP

SIGNAGE NOTES

1. REFER TO SIGNAGE AND STRIPING PLAN FOR LOCATION OF SIGNS AND PAVEMENT MARKINGS.
2. ALL SIGNAGE, STRIPING, AND OTHER TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN CONFORMANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
3. ALL STRIPING SHALL BE LONG LIFE EPOXY RESIN AND 4" WIDE UNLESS OTHERWISE NOTED. ALL PAVEMENT GRAPHICS SHALL BE HOT-APPLIED THERMOPLASTIC (REFLECTIVE).
4. COLOR SHALL BE WHITE ON ASPHALT AND YELLOW ON CONCRETE UNLESS OTHERWISE NOTED.
5. PROPOSED SPEED HUMPS (PG-15) AND SPEED BUMPS (PG-16) SHALL BE MADE OF ASPHALT. REMOVABLE RUBBER TRAFFIC CALMING DEVICES ARE NOT PERMITTED PER TENANT REQUIREMENTS.
6. ALL PROPOSED SIGNAGE AND STRIPING SHALL BE INSTALLED IN ACCORDANCE WITH THE TENANT FULFILLMENT WORLDWIDE REAL ESTATE SIGNAGE STANDARDS REVISION 13 DATED QUARTER 4, 2016.
7. FINAL QUANTITIES SHALL BE COORDINATED AND VERFIED IN FIELD.
8. ADDITIONAL SIGNAGE NOT SHOWN ON GRAPHICS PLAN MAY BE REQUIRED PER LOCAL CODE AND/OR AHJ. SUB-CONTRACTOR SHALL COORDINATE WITH LOCAL AHJ AND PROVIDE AS REQUIRED.
9. MOUNT SIGNAGE ACCORDING TO LOCAL CODES.
10. TYPICAL SIGN FONT IS SET IN ARIAL.

WARNING:
IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

Date	Description	No.
REVISIONS		

STATE OF NEW YORK · RICHARD BURROW · 082168 · LICENSED PROFESSIONAL ENGINEER
OCT 0 2 2019
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NY Lic. No. 082168

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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114, BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
SIGNAGE AND STRIPING DETAILS

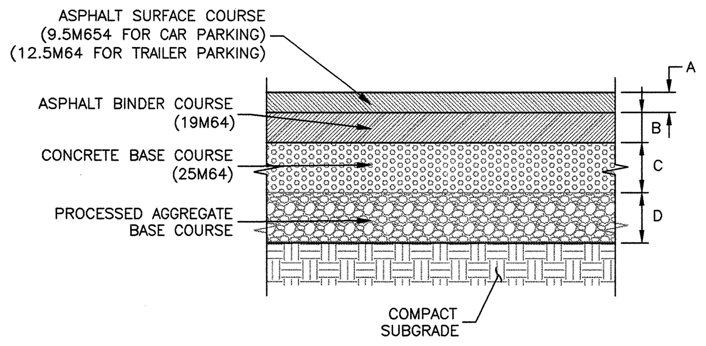
Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No. CS500

Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01\Sheet\Files\Site Plan Approval\100796101-CS500-0101.dwg Date: 10/2/2019 Time: 18:04 User: ahartingsmith Style Table: Langan.stb Layout: CS500

LANGAN
PROJECT NO. 100796101

ASPHALT SECTION	SURFACE COURSE 'A'	SURFACE COURSE 'A'	BINDER COURSE 'B'	BASE 'C'	BASE 'D'
CAR PARKING	1.5 INCHES	-	2.5 INCHES	6 INCHES	-
TRAILER PARKING	-	2 INCHES	-	4 INCHES	10 INCHES
ACCESS DRIVES & TRUCK COURTS	1.5 INCHES	-	2.5 INCHES	4 INCHES	8 INCHES



NOTES:

1. PRIOR TO PLACEMENT OF SUBBASE, THE SUBGRADE SHALL BE PROOF ROLLED TO THE GEOTECHNICAL ENGINEER'S SATISFACTION. SOFT OR UNSTABLE AREAS SHALL BE REMEDIATED AS REQUIRED BY THE GEOTECHNICAL ENGINEER.

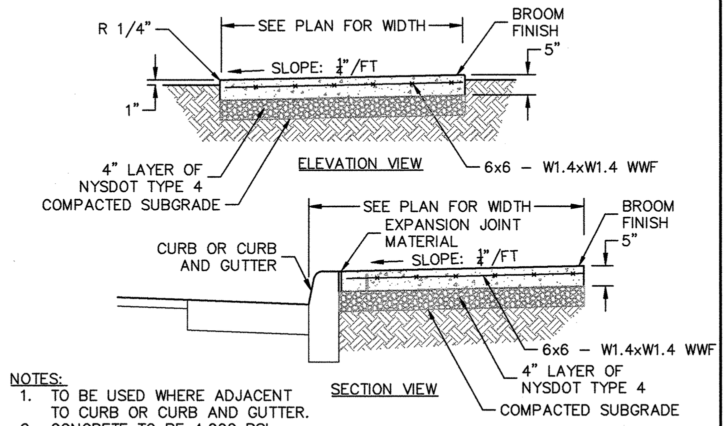
2. PRIOR TO ANY PAVING ACTIVITIES, THE SUBBASE SHALL BE PROOF ROLLED TO THE GEOTECHNICAL ENGINEER'S SATISFACTION. SOFT OR UNSTABLE AREAS SHALL BE REMEDIATED AS REQUIRED BY THE GEOTECHNICAL ENGINEER.

3. PAVING BASE COURSE SHALL BE CONSTRUCTED IN LAYERS NOT LESS THAN 2 INCHES AND NOT MORE THAN 4 INCHES THICK PER LIFT.

4. ALL AREAS TO BE PAVED SHALL BE PROOFROLLED TO THE GEOTECHNICAL ENGINEER'S SATISFACTION, WITH AT LEAST 4 PASSES OF EITHER A SMOOTH ROLLER HAVING A MINIMUM STATIC DRUM WEIGHT OF 5–TONS OR A FULLY LOADED TANDEM DUMP TRUCK. ANY SOFT AREAS SHALL BE REMOVED AND REPLACED WITH CLEAN, GRANULAR, FREE–DRAINING SOIL. FILL SHALL BE PLACED IN LOOSE LIFTS NOT TO EXCEED 12–INCHES AND SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D–1557.

ASPHALT PAVEMENT SECTION

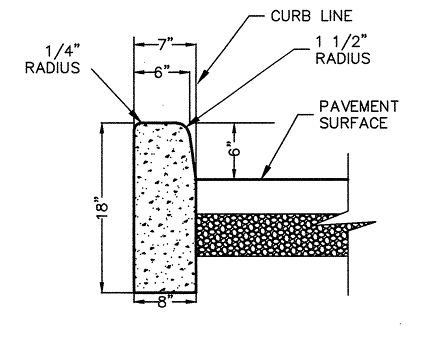
SCALE: NTS



NOTES:
1. TO BE USED WHERE ADJACENT TO CURB OR CURB AND GUTTER.
2. CONCRETE TO BE 4,000 PSI.

CONCRETE SIDEWALK

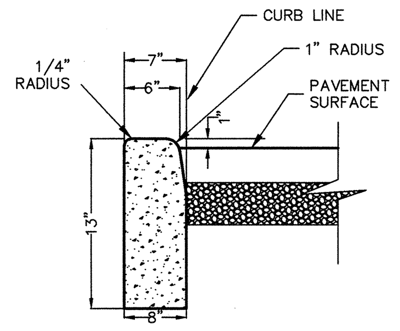
SCALE: NTS



NOTES:
1. CONCRETE SHALL BE 4,500 PSI CLASS 'B' AIR–ENTRAINED CONCRETE.
2. TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB AT 20 FOOT INTERVALS AND SHALL BE FILLED WITH PREFORMED BITUMINOUS JOINT FILLER.
3. ALL CURBS SHALL BE INSTALLED ON AN APPROVED, COMPACTED SUBGRADE.

6-INCH CONCRETE CURB

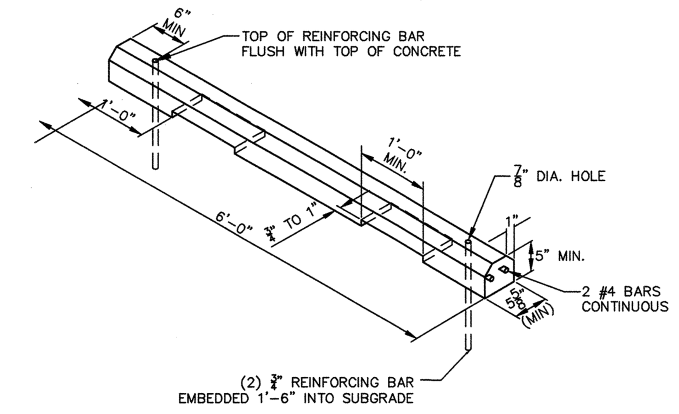
SCALE: NTS



NOTES:
1. CONCRETE SHALL BE 4,500 PSI CLASS 'B' AIR–ENTRAINED CONCRETE.
2. TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB AT 20 FOOT INTERVALS AND SHALL BE FILLED WITH PREFORMED BITUMINOUS JOINT FILLER.
3. ALL CURBS SHALL BE INSTALLED ON AN APPROVED, COMPACTED SUBGRADE.

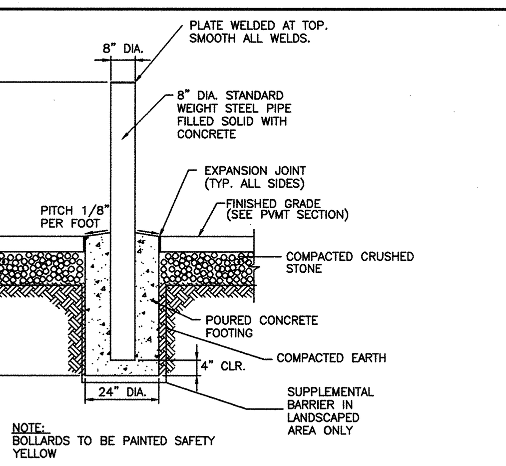
DEPRESSED CURB

SCALE: NTS



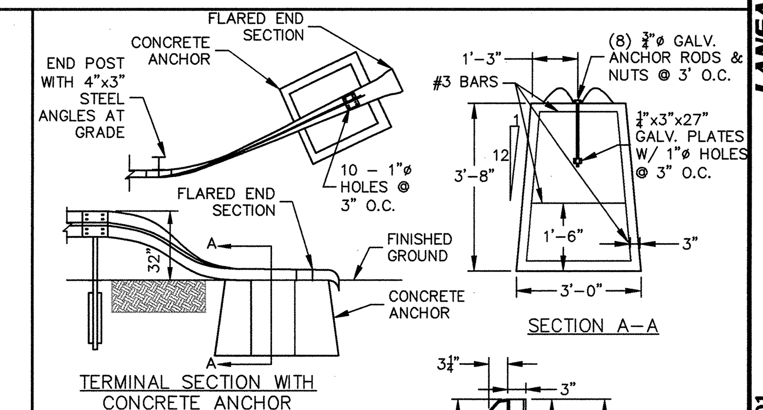
CONCRETE AUTO WHEEL STOP

SCALE: NTS

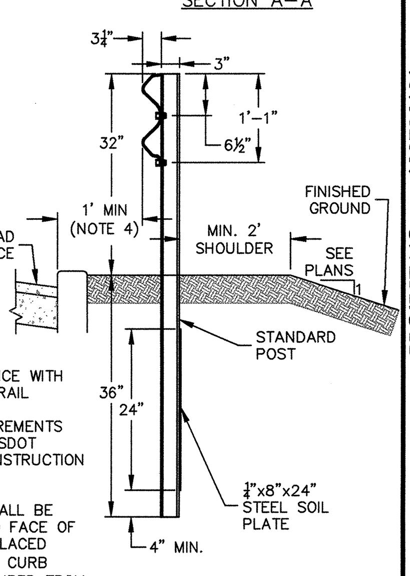


STEEL BOLLARD

SCALE: NTS



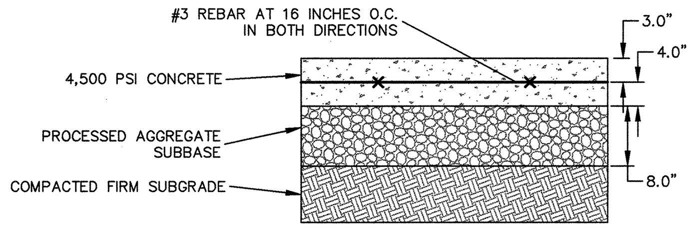
POST SPACING TABLE	
PAVEMENT ℄ RADIUS	STANDARD SPACING
>220'	12'–6"
111'–220'	6'–3"
76'–110'	4'–2"
50'–75'	3'–1½"



NOTES:
1. GUIDE RAIL SHALL BE IN ACCORDANCE WITH NYSDOT CORRUGATED BEAM GUIDE RAIL STANDARD SHEET 606–07.
2. GUIDE RAIL SHALL MEET ALL REQUIREMENTS OF THE LATEST EDITION OF THE NYSDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 710–20.
3. DIP–DOWN ENDS ARE PREFERRED.
4. THE OFFSET OF THE GUIDE RAIL SHALL BE MEASURED FROM FACE OF CURB TO FACE OF RAIL. THE RAIL MOUNTING HEIGHT PLACED BEHIND THE CURB (REGARDLESS OF CURB HEIGHT OR SPEED) SHALL BE MEASURED FROM THE PAVEMENT WHEN THE OFFSET IS 1'–0" OR LESS AND TO THE GROUND SURFACE UNDER THE FACE OF THE RAIL WHEN THE OFFSET IS GREATER THAN 1'–0".

STEEL GUIDE RAIL

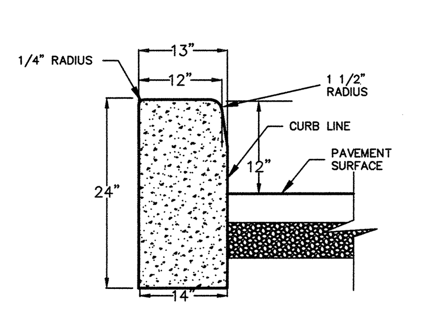
SCALE: NTS



NOTES:
1. PRIOR TO PLACEMENT OF SUBBASE, THE SUBGRADE SHALL BE PROOF ROLLED USING A VIBRATORY SMOOTH DRUM ROLLER HAVING A MINIMUM STATIC DRUM WEIGHT OF 5 TONS TO THE GEOTECHNICAL ENGINEER'S SATISFACTION. SOFT OR UNSTABLE AREAS SHALL BE REMEDIATED AS REQUIRED BY THE GEOTECHNICAL ENGINEER.
2. PRIOR TO SLAB PLACEMENT, THE SUBBASE SHALL BE COMPACTED AND THEN PROOF ROLLED USING A FULLY LOADED TRI–AXLE DUMP TRUCK TO THE GEOTECHNICAL ENGINEER'S SATISFACTION. AREAS EXHIBITING EXCESSIVE SOIL PUMPING AND ROTTING SHALL BE REMEDIATED AS REQUIRED BY THE GEOTECHNICAL ENGINEER.
3. BACKFILL TO REPLACE OVER–EXCAVATED SOFT AREAS SHALL CONSIST OF APPROVED GRANULAR FILL AND PLACED IN LOOSE LIFTS NOT TO EXCEED 12–INCHES AND SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D–1557.
4. TRANSVERSE AND LONGITUDINAL CONTROL JOINTS SHALL BE SAW CUT AT 15 FT MAXIMUM SPACING.
5. CONSTRUCTION JOINTS SHALL BE INSTALLED AT 135 FT MAXIMUM SPACING.
6. SAW CUT DEPTH SHALL BE 1.5–INCHES.
7. JOINTS IN CONCRETE PAVING SHALL BE SEALED WITH SILICONE SEALANT EQUAL TO DOW CORNING 890–SL, SELF–LEVELING.
8. CONCRETE SHALL HAVE A WATER–CEMENT RATIO OF 0.45 AND 6% AIR ENTRAINMENT.
9. CONCRETE SHALL BE WET CURED OR CURED WITH PIGMENTED ASTM C309 CURING COMPOUND AND PROTECTED MINIMUM 7 DAYS.
10. PROVIDE 1–INCH DIAMETER X 18–INCH LONG SMOOTH DOWELS SPACED 12 INCH ON CENTER AT ALL CONSTRUCTION JOINTS.
11. BROOM FINISH SHALL BE LIGHT TO MEDIUM TEXTURE.

CONCRETE PAVEMENT SECTION

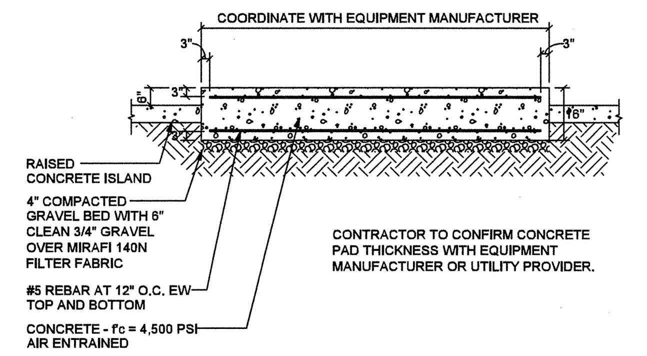
SCALE: NTS



NOTES:
1. CONCRETE SHALL BE 4,500 PSI CLASS 'B' AIR–ENTRAINED CONCRETE.
2. TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB AT 20 FOOT INTERVALS AND SHALL BE FILLED WITH PREFORMED BITUMINOUS JOINT FILLER.
3. ALL CURBS SHALL BE INSTALLED ON AN APPROVED, COMPACTED SUBGRADE.

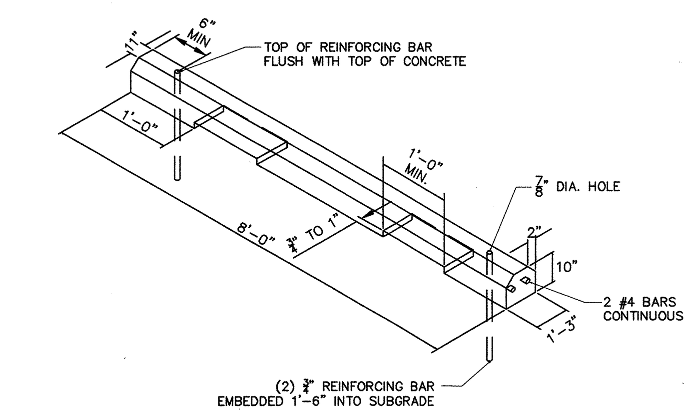
12-INCH CONCRETE CURB

SCALE: NTS



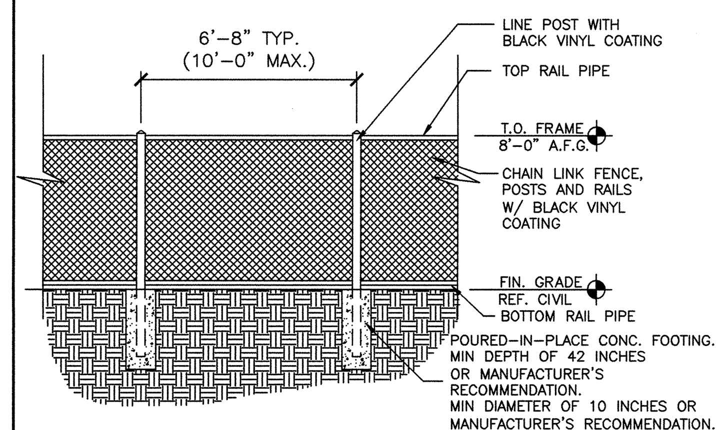
EQUIPMENT PAD

SCALE: NTS



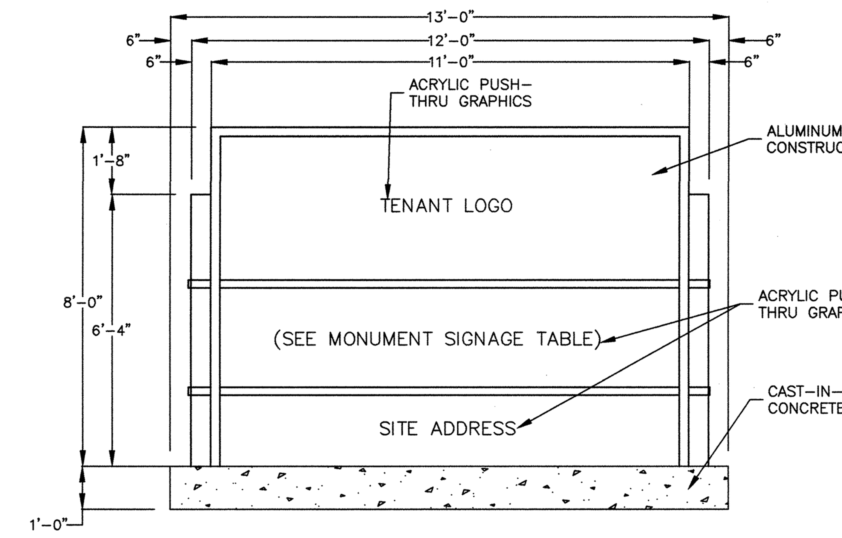
TRUCK WHEEL STOP

SCALE: NTS



CHAIN LINK FENCE

SCALE: NTS

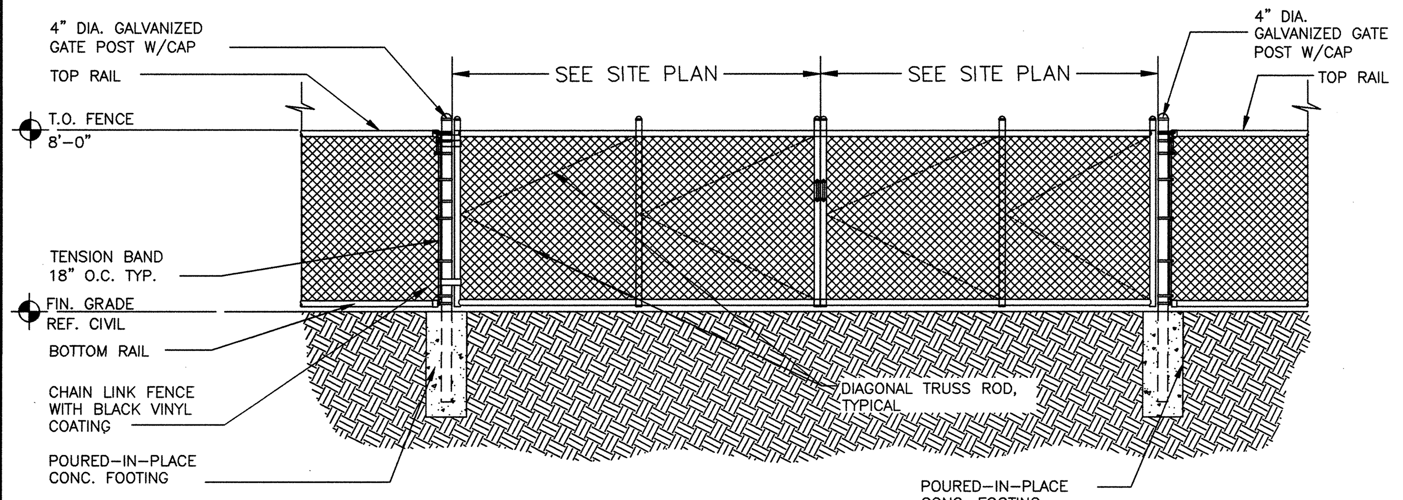


NOTE:

MONUMENT SIGNS TO BE INTERNALLY ILLUMINATED.

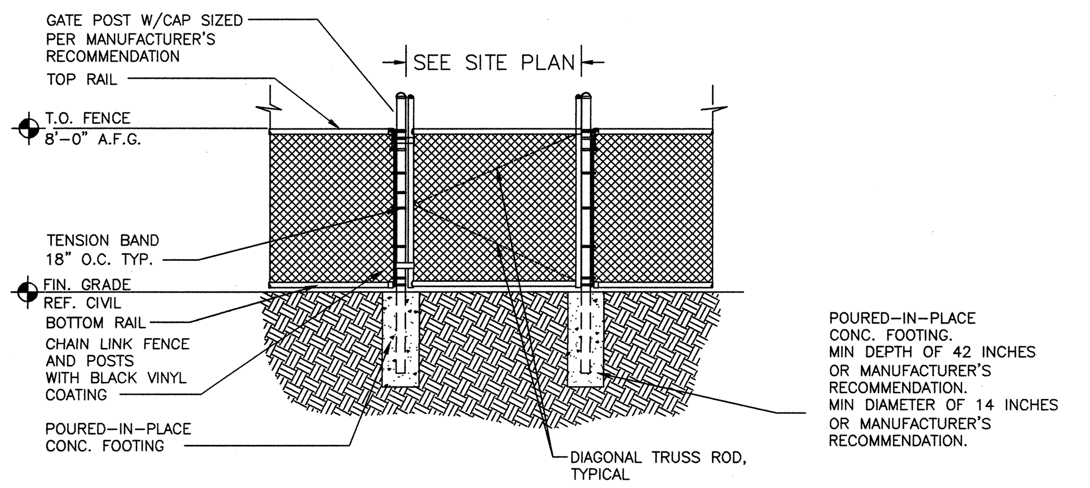
MONUMENT SIGN

SCALE: NTS



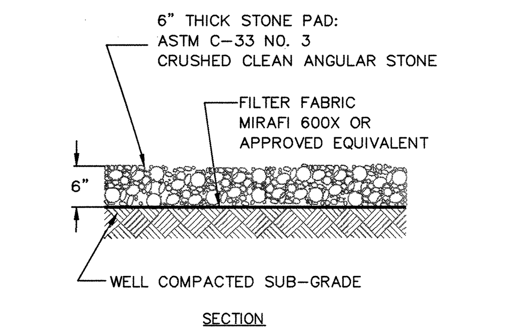
DOUBLE SWING GATE

SCALE: NTS



SWING GATE

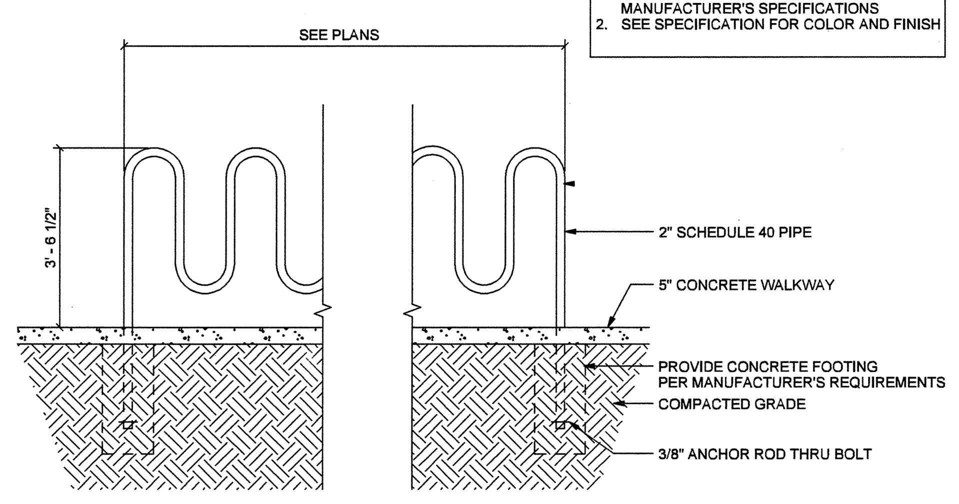
SCALE: NTS



GRAVEL ACCESS ROAD

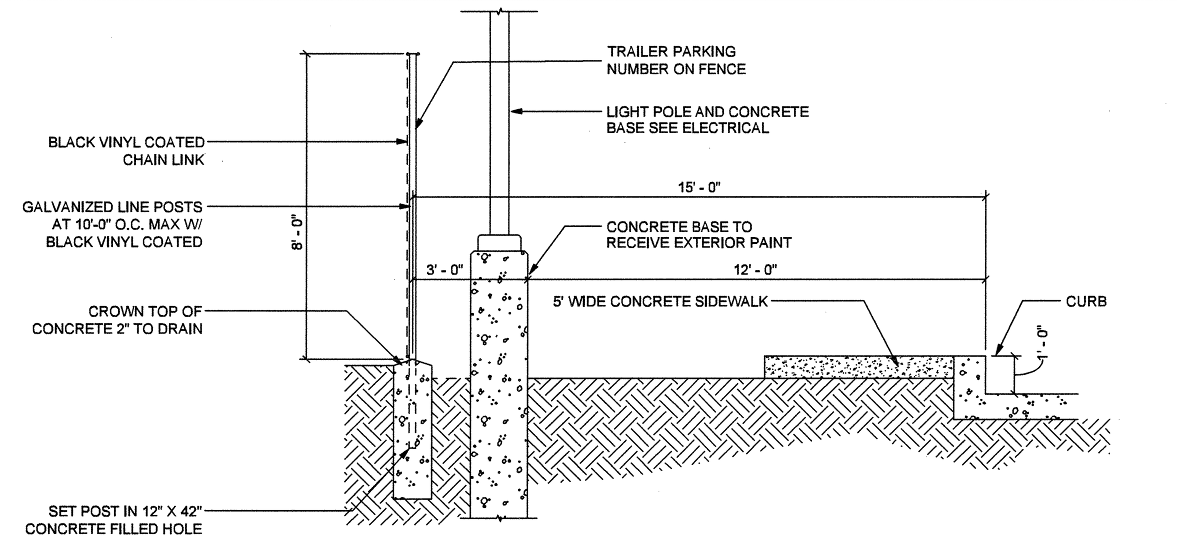
SCALE: NTS

NOTE:
1. INSTALL BIKE RAKE ACCORDING TO MANUFACTURER'S SPECIFICATIONS
2. SEE SPECIFICATION FOR COLOR AND FINISH



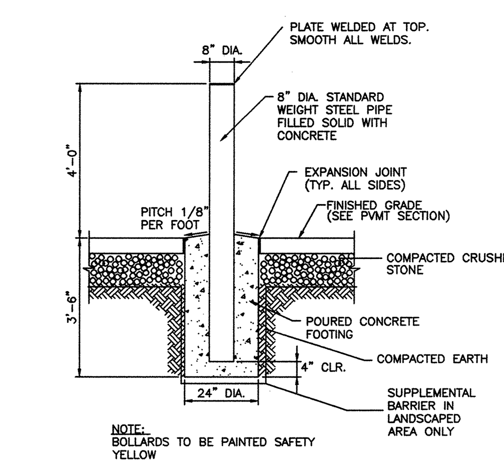
MADRAX BIKE RACK (HW238-17-IG)

SCALE: NTS



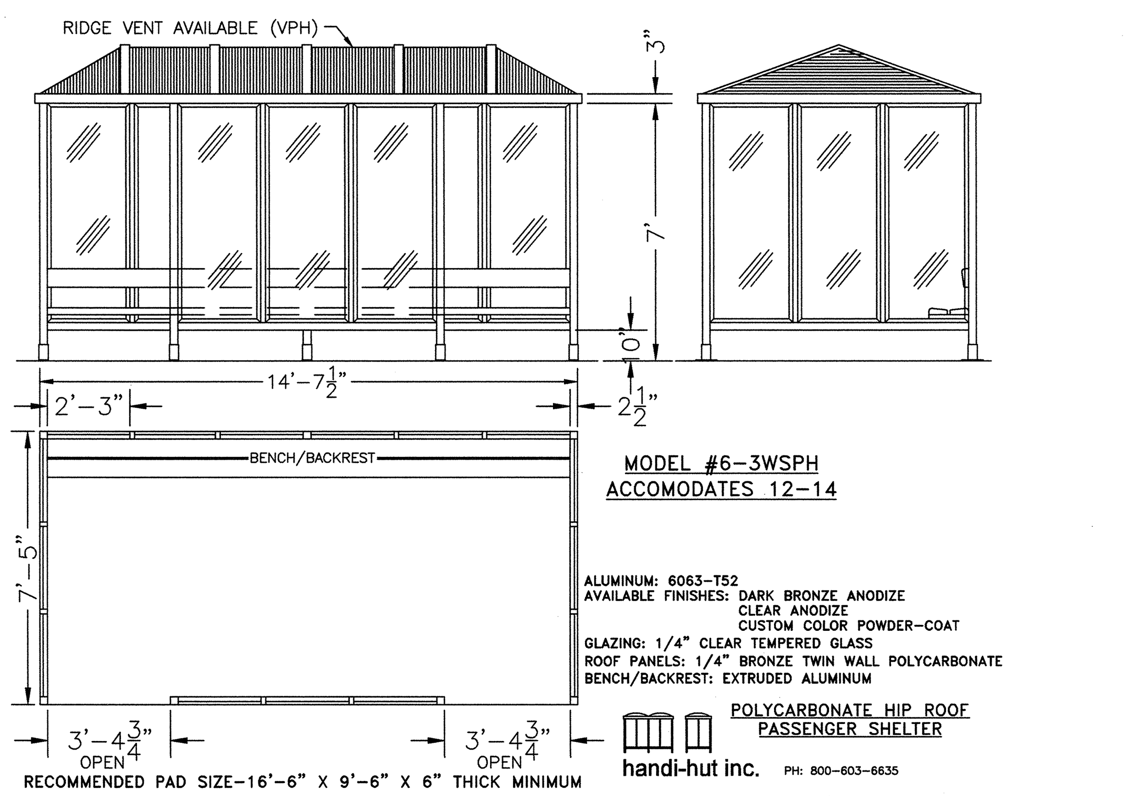
FENCE AT TRAILER PARKING

SCALE: NTS



STEEL BOLLARD

SCALE: NTS



MODEL #6–3WSPH
ACCOMODATES 12–14

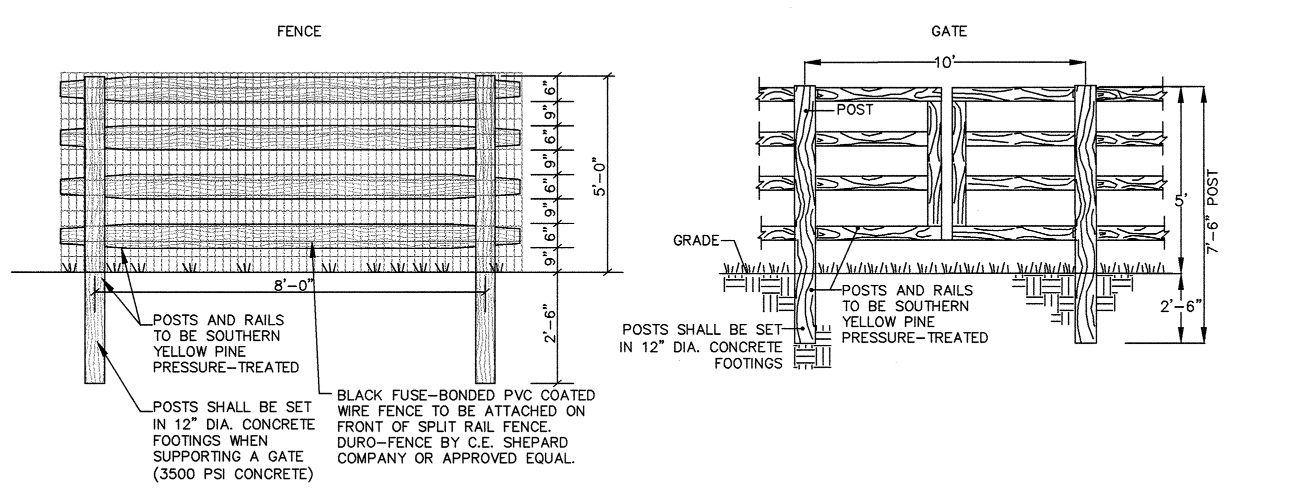
ALUMINUM: 6063–T52
AVAILABLE FINISHES: DARK BRONZE ANODIZE
CLEAR ANODIZE
CUSTOM COLOR POWDER–COAT
GLAZING: 1/4" CLEAR TEMPERED GLASS
ROOF PANELS: 1/4" BRONZE TWIN WALL POLYCARBONATE
BENCH/BACKREST: EXTRUDED ALUMINUM

POLYCARBONATE HIP ROOF PASSENGER SHELTER

handi-hut inc. PH: 800–603–6635

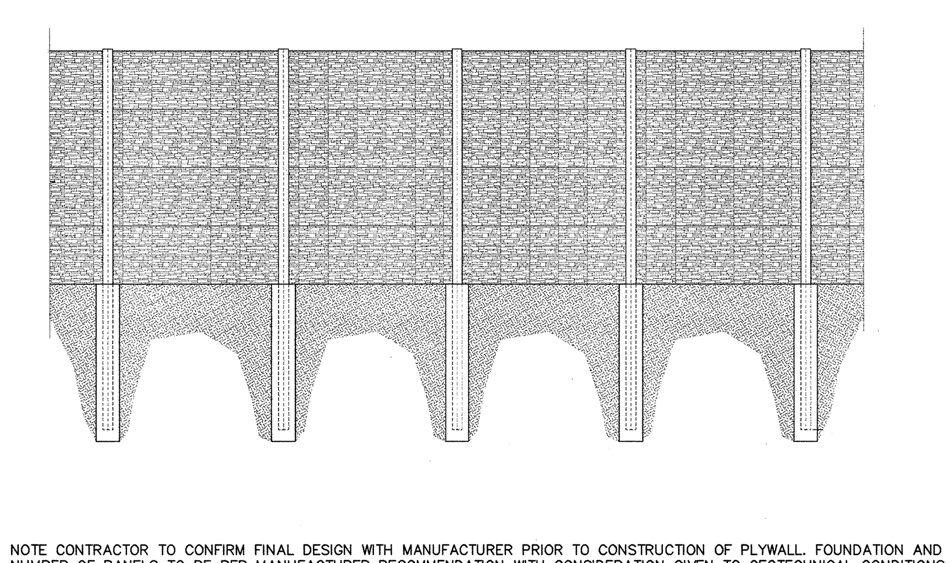
HANDI-HUT SHELTER

SCALE: NTS



SPLIT RAIL FENCE AND GATE

SCALE: NTS



NOTE CONTRACTOR TO CONFIRM FINAL DESIGN WITH MANUFACTURER PRIOR TO CONSTRUCTION OF PLYWALL. FOUNDATION AND NUMBER OF PANELS TO BE PER MANUFACTURER RECOMMENDATION WITH CONSIDERATION GIVEN TO GEOTECHNICAL CONDITIONS ONSITE.

PLYWALL®

8' Wide X 12' High

STANDARD DRAWING (40 psf) rev: 01-6-06

PANEL DETAILS

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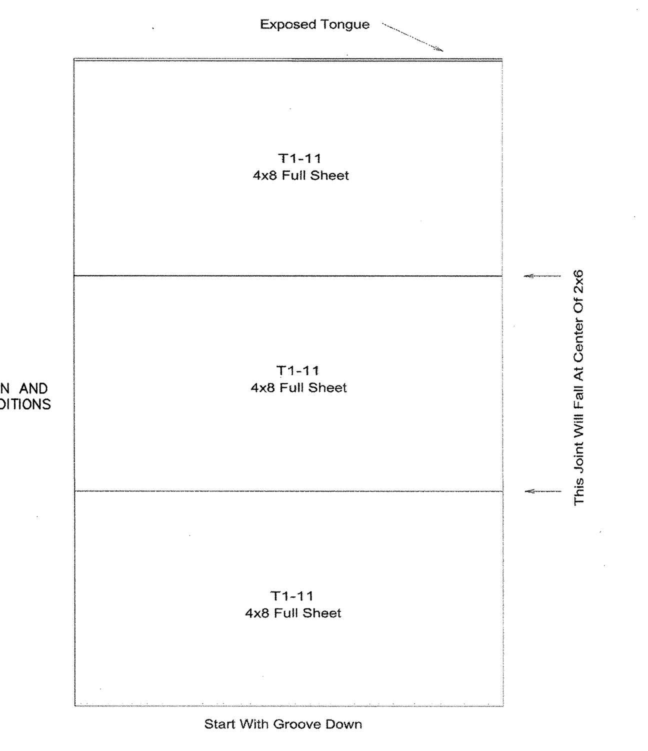
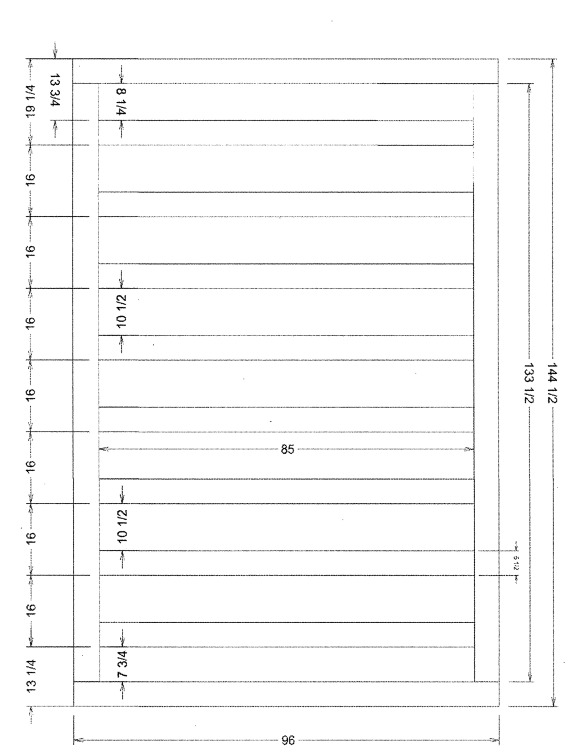


Plywood Scheme



8 Wide by 12 High 2x6 Flat Frame

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PLYWALL

SCALE: NTS

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Date	Description	No.
REVISIONS		

SIGNATURE — OCT 0 2 2019 — DATE SIGNED
STATE OF NEW YORK — RICHARD BURROW — 082168 — LICENSED PROFESSIONAL ENGINEER
RICHARD BURROW
PROFESSIONAL ENGINEER NY Lic. No. 082168

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NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project: PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY — NEW YORK

Drawing Title: SITE CONSTRUCTION DETAILS (1 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

Drawing No. CS501

Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01\SheetFiles\Site Plan Approval\100796101-CS501-0101.dwg Date: 10/2/2019 Time: 18:04 User: ahartingsmith Style Table: Langan.stb Layout: CS501

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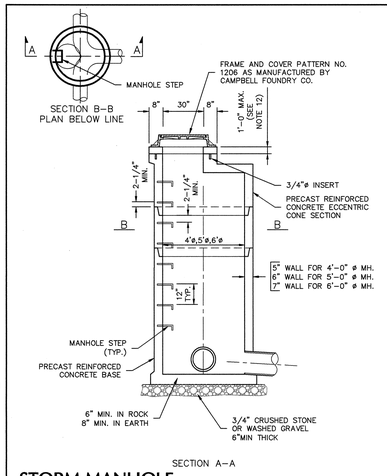
LANGAN PROJECT NO. 100796101



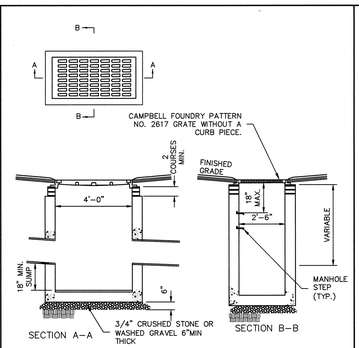
STORM MANHOLE NOTES

1. THE DEPTH OF THE INVERT CHANNEL SHALL BE EQUAL TO 3/4 OF THE DIAMETER OF THE SEWER.
2. THE SHELF SHALL SLOPE TOWARD THE INVERT CHANNEL AT A RATE OF 1" PER FOOT.
3. TYPE "B" MANHOLES (SHALLOW TYPE) TO BE PROVIDED WHERE REQUIRED BY DEPTH CONDITIONS.
4. FOR MANHOLES HAVING 5' DIA. AND 6' DIA. BASE, REDUCTION IN DIA. TO 4' SHALL START AT THE FIRST JOINT ABOVE THE UPPERMOST PIPE CONNECTION TO WALL WHERE DEPTH IS SUFFICIENT.
5. ALL MANHOLE FRAMES SHALL BE BOLTED TO THE CONE SECTION WITH 2–3/4" DIA. BOLTS WITH WASHERS AND NUTS. BOLTS TO BE AT 180° ON BOLT CIRCLE.
6. ALL CONCRETE SHALL BE 4000 PSI MINIMUM.
7. ENTIRE OUTSIDE SURFACE OF MANHOLE SHALL RECEIVE TWO COATS OF BITUMINOUS COATING. KOPPERS 300M PENNOXY TAR 32–B–4, OR APPROVED EQUAL.
8. INSTALL 2 LAYERS OF PLASTIC PREFORMED JOINT SEALANT BETWEEN ALL SECTIONS & UNDER FRAME.
9. MANHOLE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ASTM C478.
10. STEPS TO ALUMINUM ALLOY WITH DEPRESSED TREAD. STEEL REINFORCED POLYPROPYLENE IS OPTIONAL. (SEE DETAIL–ALUMINUM MANHOLE STEP AND POLYPROPYLENE MANHOLE STEP)
11. 4' DIA. MANHOLE – 8" TO 15" PIPES
    5' DIA. MANHOLE – 16" TO 27" PIPES
    6' DIA. MANHOLE – 30" TO 48" PIPES
12. WHEN TWO OR MORE GRADE ADJUSTMENT RINGS ARE USED, A WATERTIGHT PVC CONNECTOR SHALL BE INSTALLED BETWEEN THE FRAME AND THE CONE. CONNECTOR SHALL BE WATER–LOK CONNECTOR BFA ANTI–FLOATING BY A–LOK PRODUCTS INC. OR APPROVED EQUAL.
13. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER'S APPROVAL.
14. SOIL CONDITIONS BELOW STRUCTURE DEEMED UNSUITABLE BY THE FIELD ENGINEER SHALL BE EXCAVATED TO A SUITABLE MATERIAL OR A MAXIMUM OF TWO ADDITIONAL FEET AND BACKFILLED WITH 3/4" CLEAN CRUSHED STONE.

PIPE SIZE RANGE	WIDTH (I.D.)
8" TO 15" PIPES	4'–0"ø
16" TO 27" PIPES	5'–0"ø
30" TO 48" PIPES	6'–0"ø
60" PIPES	7'–0"ø

STORM MANHOLE

SCALE: NTS

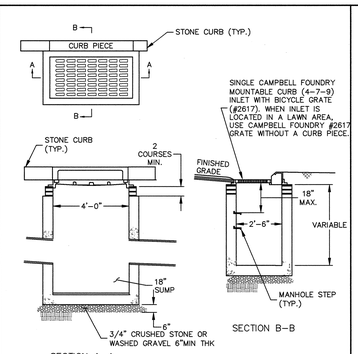


NOTES:

1. THE CONTRACTOR SHALL SUBMIT SHOP DWGS. FOR EACH STRUCTURE FOR THE ENGINEERS REVIEW PRIOR TO FABRICATION.
2. STRUCTURE SHALL BE CERTIFIED AS CONFORMING TO ASTM–C913 LATEST REVISION.
3. STEPS NOT REQUIRED FOR STRUCTURES LESS THAN 4' DEEP.
4. FOR STRUCTURES WITH PIPE DIAMETERS EXCEEDING MAXIMUMS, PROVIDE CONCRETE SLAB AS NOTED.
5. STRUCTURAL DESIGN (WALL AND SLAB THICKNESS AND ALL REINFORCING) BY PRECASTER AND SHALL MEET STATE DEPARTMENT OF TRANSPORTATION STANDARDS AND SUPPORT HS–20 LOADING AS REQUIRED

DRAIN INLET

SCALE: NTS

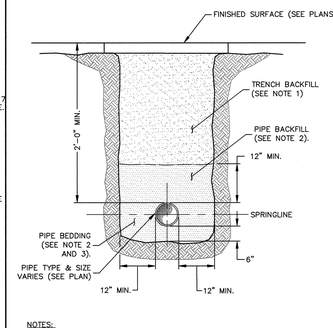


NOTES:

1. THE CONTRACTOR SHALL SUBMIT SHOP DWGS. FOR EACH STRUCTURE FOR THE ENGINEERS APPROVAL PRIOR TO FABRICATION.
2. STRUCTURE SHALL BE CERTIFIED AS CONFORMING TO ASTM–C913 LATEST REVISION.
3. STEPS NOT REQUIRED FOR STRUCTURES LESS THAN 4' DEEP.
4. FOR STRUCTURES WITH PIPE DIAMETERS EXCEEDING MAXIMUMS, PROVIDE CONCRETE SLAB AS NOTED.
5. STRUCTURAL DESIGN (WALL AND SLAB THICKNESS AND ALL REINFORCING) BY PRECASTER AND SHALL MEET STATE DEPARTMENT OF TRANSPORTATION STANDARDS AND SUPPORT HS–20 LOADING AS REQUIRED

CATCH BASIN

SCALE: NTS

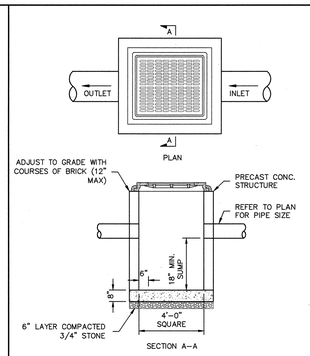


NOTES:

1. PREDOMINATELY GRANULAR FILL MATERIAL. MAX. PARTICLE SIZE 4". COMPACT IN MAX. 8" LOOSE LIFTS TO 95% MODIFIED PROCTOR DENSITY USING ONSITE MATERIALS.
2. MIXTURE OF CRUSHED STONE AND GRAVEL, FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS AND ELONGATED PARTICLES. MAX. PARTICLE SIZE ¾". COMPACT IN MAX. 6" LOOSE LIFTS.
3. WHEN IN LEDGE, USE AASHTO NO. 67 OR EQUAL PROCESSED SAND AND GRAVEL FREE OF DEBRIS, CLAY LUMPS, ORGANIC, OR OTHER DELETERIOUS MATERIAL. COMPACT TO THE SPRINGLINE IN MAX. 6" LOOSE LIFTS.
4. TRENCHING SHALL BE IMPLEMENTED IN ACCORDANCE WITH O.S.H.A. STANDARDS.

DRAINAGE PIPE TRENCH

SCALE: NTS

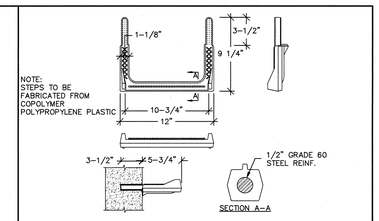


NOTES:

1. 4000 PSI CONCRETE SHALL BE USED.
2. FRAME AND GRATE TO BE CAMPBELL FOUNDRY CASTING NUMBER 22532.
3. PROVIDE LADDER RUNGS AT 12" CENTER TO CENTER.
4. WHEN THE DEPTH OF AN INLET EXCEEDS 10 FEET AS MEASURED FROM TOP OF GRATE TO INVERT, WALLS BELOW A DEPTH OF 8 FEET SHALL BE 12" THICK AND THE DEPTH OF FOUNDATION INCREASED TO 12".

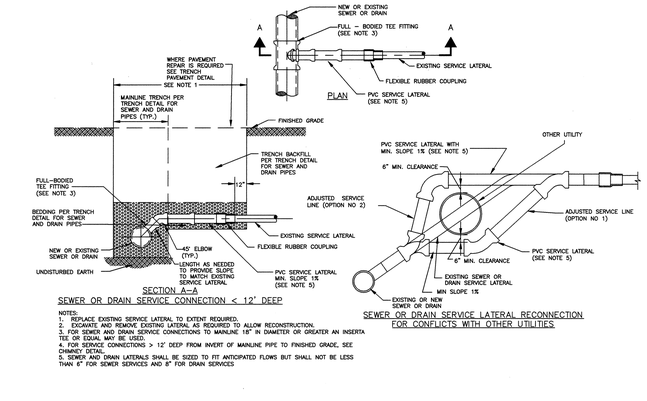
OVERSIZED DRAINAGE INLET

SCALE: NTS



POLYPROPYLENE MANHOLE STEP

SCALE: NTS

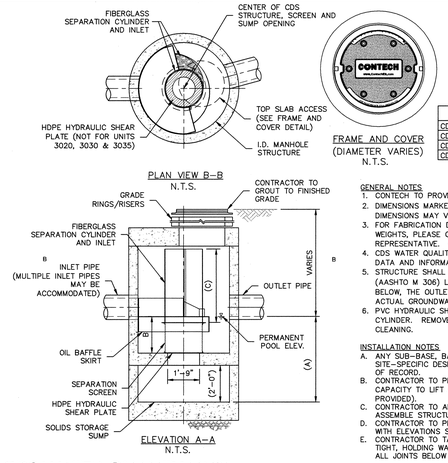


NOTES:

1. REPLACE EXISTING SERVICE LATERAL TO EXTENT REQUIRED.
2. EXCAVATE AND REMOVE EXISTING LATERAL AS REQUIRED TO ALLOW RECONSTRUCTION.
3. FULL BODIED TEE FITTINGS FOR SEWER AND DRAIN SERVICE CONNECTIONS TO MAINLINE 18" IN DIAMETER OR GREATER AN INSERTA TEE FOR EQUAL MAY BE USED.
4. FOR SEWER AND DRAIN SERVICE CONNECTIONS > 12' DEEP FROM INVERT OF MAINLINE PIPE TO FINISHED GRADE, SEE CHIMNEY DETAIL.
5. SEWER AND DRAIN LATERALS SHALL BE SIZED TO FIT ANTICIPATED FLOWS BUT SHALL NOT BE LESS THAN 6" FOR SEWER SERVICES AND 8" FOR DRAIN SERVICES

ROOF LEADER CONNECTION

SCALE: NTS



ID	UNIT	I.D.	A	B	C
CDS MH–208	CDS2025–5	6'–0"	6'–9"	4'–1"	4'–0"
CDS MH–209	CDS2025–5	6'–0"	6'–9"	4'–1"	4'–0"
CDS MH–403A	CDS3035–6	6'–0"	6'–9"	4'–1"	4'–0"
CDS MH–501	CDS3030–6	6'–0"	6'–9"	4'–1"	4'–0"

GENERAL NOTES

1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES

A. ANY SUB–BASE, BACKFILL DEPTH, AND/OR ANTI–FLOTATION PROVISIONS ARE SITE–SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

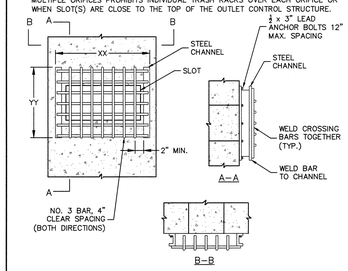
CDS WATER QUALITY UNIT

SCALE: NTS

TYPICAL TRASH RACK DIMENSIONS TABLE		
ORIFICE/SLOT	XX (IN)	YY (IN)
12"Lx6"H SLOT	20	14
14"Lx6"H SLOT	24	14
18"Lx6"H SLOT	26	14
24"Lx6"H SLOT	32	14
26"Lx6"H SLOT	34	14
26"Lx8"H SLOT	34	16
30"Lx6"H SLOT	38	14
32"Lx8"H SLOT	42	16
34"Lx6"H SLOT	46	14

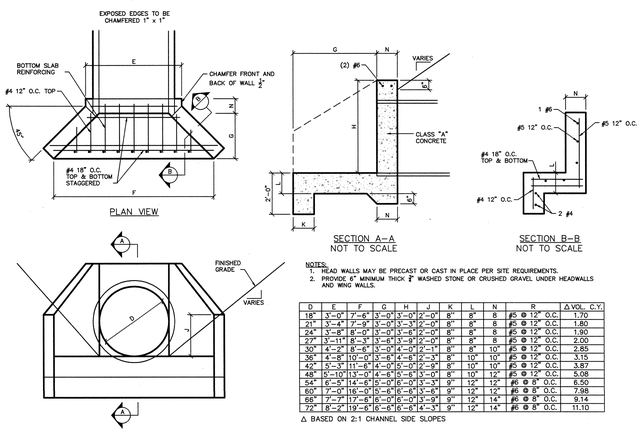
NOTE:

1. DIMENSION XX CAN BE ADJUSTED WHEN THE SEPARATION DISTANCE BETWEEN MULTIPLE ORIFICES PROHIBITS INDIVIDUAL TRASH RACKS OVER EACH ORIFICE OR WHEN SLOT(S) ARE CLOSE TO THE TOP OF THE OUTLET CONTROL STRUCTURE.



OUTLET STRUCTURE TRASH RACK

SCALE: NTS



NOTES:

1. HEAD WALLS MAY BE PRECAST OR CAST IN PLACE PER SITE REQUIREMENTS.
2. PROVIDE 6" MINIMUM THICK ¾" WASHED STONE OR CRUSHED GRAVEL UNDER HEADWALLS AND WING WALLS.

D	E	F	G	H	J	K	L	N	R	Δ VOL. C.Y.
18"	3'–0"	7'–6"	3'–0"	3'–0"	2'–0"	8"	8"	8	#5 @ 12" O.C.	1.70
21"	3'–4"	7'–9"	3'–0"	3'–3"	2'–0"	8"	8"	8	#5 @ 12" O.C.	1.80
24"	3'–8"	8'–0"	3'–0"	3'–6"	2'–0"	8"	8"	8	#5 @ 12" O.C.	1.90
27"	3'–11"	8'–3"	3'–6"	3'–9"	2'–0"	8"	8"	8	#5 @ 12" O.C.	2.00
30"	4'–2"	8'–6"	3'–0"	4'–0"	2'–1"	8"	8"	10"	#5 @ 12" O.C.	2.85
36"	4'–8"	10'–0"	3'–6"	4'–6"	2'–3"	8"	10"	10"	#5 @ 12" O.C.	3.15
42"	5'–3"	11'–6"	4'–0"	5'–0"	2'–9"	8"	10"	10"	#5 @ 12" O.C.	3.87
48"	5'–10"	13'–0"	4'–6"	5'–6"	3'–0"	8"	10"	12"	#5 @ 12" O.C.	5.08
54"	6'–5"	14'–6"	5'–0"	6'–0"	3'–3"	9"	12"	12"	#6 @ 8" O.C.	6.50
60"	7'–0"	16'–0"	5'–6"	6'–6"	3'–6"	9"	12"	12"	#6 @ 8" O.C.	7.98
66"	7'–7"	17'–6"	6'–0"	7'–0"	3'–9"	9"	12"	14"	#6 @ 8" O.C.	9.14
72"	8'–2"	19'–6"	6'–6"	7'–6"	4'–3"	9"	12"	14"	#6 @ 8" O.C.	11.10

Δ BASED ON 2:1 CHANNEL SIDE SLOPES

CONCRETE HEADWALL

SCALE: NTS

WARNING:
IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

Date	Description	No.
REVISIONS		

STATE OF NEW YORK · RICHARD BURROW · 082168 · LICENSED PROFESSIONAL ENGINEER

OCT 0 2 2019

SIGNATURE — DATE SIGNED

RICHARD BURROW
PROFESSIONAL ENGINEER NY Lic. No. 082168

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NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project: PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

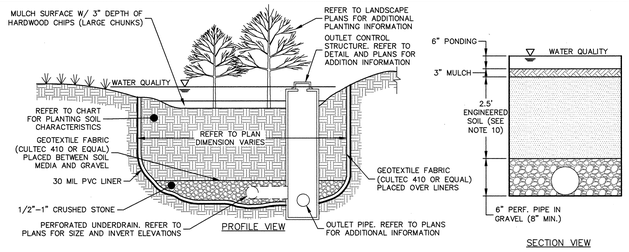
Drawing Title: SITE CONSTRUCTION DETAILS (2 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK

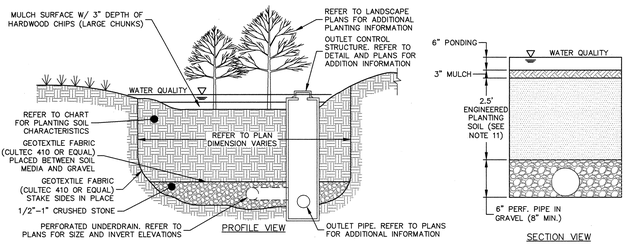
Drawing No. CS502

LANGAN
PROJECT NO. 100796101

Filename: \\langan.com\data\PAR\data\100796101\Project Data\CAD\01\Sheet\Fleet\Site Plan Approval\100796101-CS501-0101.dwg Date: 10/2/2019 Time: 18:04 User: shartingsmith Style Table: Langan.stb Layout: CS502



BIORETENTION WITH UNDERDRAIN AND LINER



BIORETENTION WITH UNDERDRAIN

CONSTRUCTION SEQUENCE:

1. STAKE THE LIMITS AND PROVIDE OFFSETS OF THE PROPOSED BIORETENTION AREA AND SET ACCESSIBLE REFERENCE ELEVATIONS, AS NEEDED.
2. INSTALL EROSION AND SEDIMENT CONTROL MEASURES CONSISTENT WITH OVERALL DEVELOPMENT E&S PLAN.
3. STABILIZE THE GRADING AROUND THE PROPOSED AREA AND DIVERT RUNOFF AWAY FROM THE PROPOSED EXCAVATIONS.
4. EXCAVATE THE BIORETENTION AREA TO THE PROPOSED LINES AND GRADES SHOWN ON THE SITE PLANS, AND SCARIFY THE EXISTING SOIL SURFACES, TAKING CARE NOT TO COMPACT THE IN-SITU SOILS.
5. INSTALL THE UNDERDRAIN SYSTEM AND OVERFLOW STRUCTURES. INSTALL THE FABRIC ON THE SIDEWALLS AND STAKE IN PLACE.
6. BACKFILL THE EXCAVATIONS WITH THE SOIL MIXTURE AS SHOWN ON THE PLANS AND SPECIFIED HEREIN.
7. FINISH GRADING THE SURFACE OF THE BIORETENTION AREA. LEAVE ROOM FOR 3-INCHES OF WOOD CHIP MULCH.
8. PRESOAK THE PLANTING MIXTURE PRIOR TO PLACEMENT OF PLANTING STOCK. ALLOW THE SOIL MIXTURE TO SETTLE NATURALLY BEFORE PLACING THE PLANTS.
9. PLANT VEGETATION WITHIN THE BIORETENTION AREA AS SPECIFIED IN THE PLANTING NOTES AND LANDSCAPE PLANS.
10. MULCH THE SURFACE WITH NOT MORE THAN 3-INCHES OF SINGLE PASS, HARDWOOD MULCH. REMOVE TEMPORARY SEDIMENT CONTROLS AND ANY ENTRANCE BLOCKS TO THE BIORETENTION AREA AFTER ACCEPTANCE BY THE DESIGN PROFESSIONAL AND THE LOCAL REGULATORY AUTHORITY.

BIORETENTION AREA

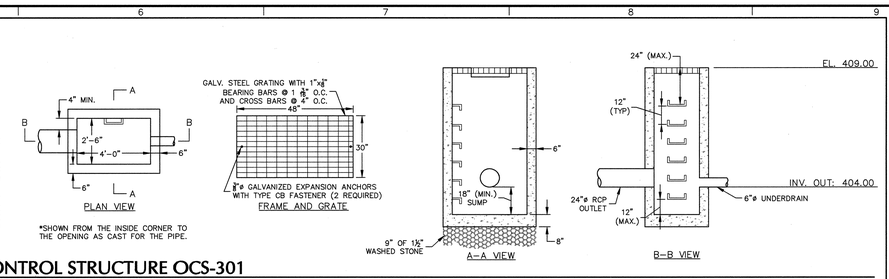
TREATMENT OF STORMWATER RUNOFF IS ACCOMPLISHED IN THE PROPOSED BIORETENTION AREAS BY MEANS OF INFILTRATION USING PLANTING SOILS. PLANTINGS OF NATIVE VEGETATION WITHIN THE BIORETENTION AREA MAINTAIN THE INFILTRATIVE CAPACITY OF THE SYSTEM, PROVIDE SOIL STABILIZATION, AND THE ATTENUATE NUTRIENTS AND OTHER CONTAMINANTS. MANAGEMENT ACTIONS INCLUDE THE FOLLOWING:

1. ALL BIORETENTION BASINS SHALL BE BUILT IN ACCORDANCE WITH NYSDEC STORMWATER MANAGEMENT DESIGN MANUAL INCLUDING APPENDIX C.
2. ANNUAL INSPECTION AND REPAIR OF OR REPLACEMENT OF TREATMENT COMPONENTS.
3. TWICE PER YEAR (SPRING AND FALL) INSPECT TREES AND SHRUBS TO EVALUATE HEALTH. REMOVE AND REPLACE DEAD OR DYING PLANTS, AND PRUNE DISEASED OR BROKEN PLANTS.
4. TREATMENT OF DISEASED VEGETATION WITH APPROPRIATE LOW-TOXICITY CHEMICALS (HERBICIDES, PESTICIDES).
5. WEED ANNUALLY AND PRUNE SHRUB VEGETATION UNTIL VEGETATION IS ESTABLISHED TO IMPROVE APPEARANCE.
6. REPLACE MULCH TO COVER EXPOSED SOIL AREA. REMOVE AND REPLACE MULCH EVERY TWO TO THREE YEARS. MULCH DEPTH NOT TO EXCEED 3-INCHES.
7. SAMPLE SOIL FOR FERTILITY EVERY THREE YEARS. ADDITION OF LIMESTONE ONE OR TWO TIMES PER YEAR TO MAINTAIN PROPER PH IS RECOMMENDED. FIELD OR LABORATORY TESTING FOR PH IS ACCEPTABLE.
8. CHECK BASIN FOR SEDIMENT BUILD UP AND REMOVE SEDIMENT IF GREATER THAN ONE INCH.
9. CHECK BASIN AFTER STORM EVENT TO ENSURE THAT IT DEWATERS PROPERLY (DRAINS WITHIN 48-HOURS).
10. CHECK OUTLET OVERFLOW FOR EVIDENCE OF BLOCKAGE AND SOIL EROSION AT DISCHARGE POINTS. CLEAN BLOCKAGES AS REQUIRED AND STABILIZE EROSIVE AREAS AS NEEDED.
11. SOIL PARAMETERS:

PARAMETER	VALUE
pH RANGE	5.2 TO 7.0
ORGANIC MATTER	1.5 TO 4.0%
MAGNESIUM	35 LBS/AC (MIN.)
PHOSPHORUS	75 LBS/AC (MIN.)
POTASSIUM	85 LBS/AC (MIN.)
SOLUBLE SALTS	500 PPM
CLAY	10 TO 25%
SILT	30 TO 35%
SAND	35 TO 60%

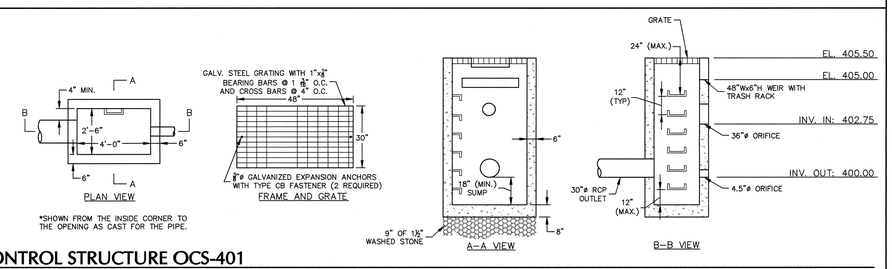
BIORETENTION

SCALE: NTS



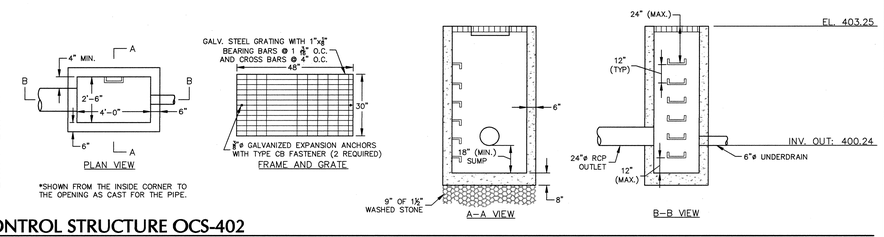
POND OUTLET CONTROL STRUCTURE OCS-301

SCALE: NTS



POND OUTLET CONTROL STRUCTURE OCS-401

SCALE: NTS



POND OUTLET CONTROL STRUCTURE OCS-402

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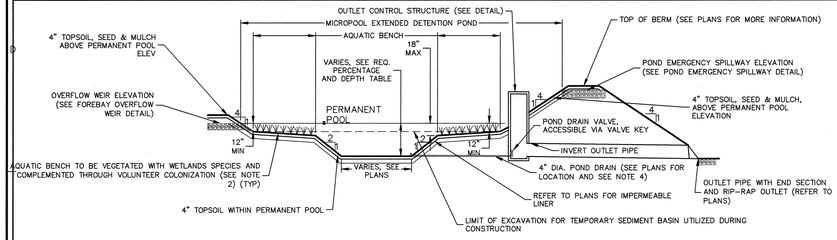
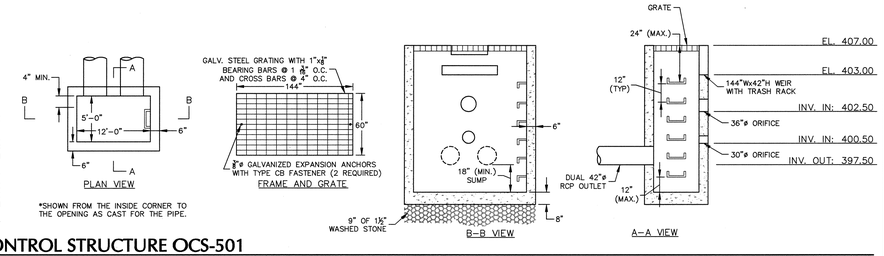


NOTES:
1. 30MM PVC LINER SHALL BE USED AS IMPERMEABLE LINING
2. REFER TO LANDSCAPING PLANS FOR POND PLANTING INFORMATION.
3. SEE OUTLET CONTROL STRUCTURE TABLE FOR ELEVATIONS AND SIZES OF INLET ORIFICES, INLET SLOTS, AND OUTLET PIPE. SEE OUTLET CONTROL STRUCTURE DETAILS FOR ADDITIONAL INFORMATION.
4. IF POND DRAINS ARE NOT SHOWN ON THE PLANS, THEN THE PONDS SHALL BE PUMPED OUT FOR ANY MAINTENANCE BELOW THE PERMANENT POOL ELEVATION.
5. PROPOSED STORMWATER PONDS SHALL BE UTILIZED AS TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION.

STORMWATER POND

SCALE: NTS



POND OUTLET CONTROL STRUCTURE OCS-501

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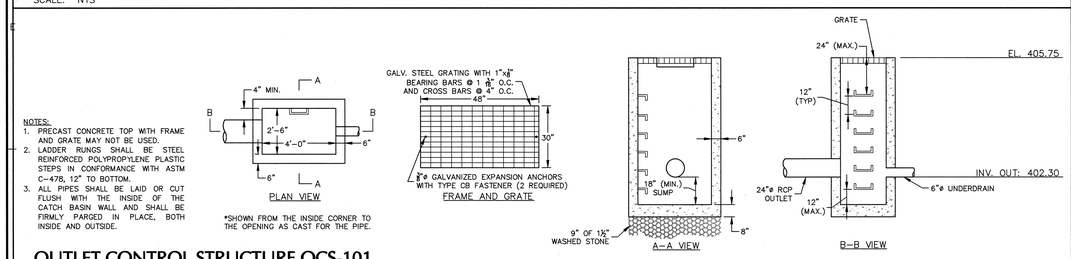
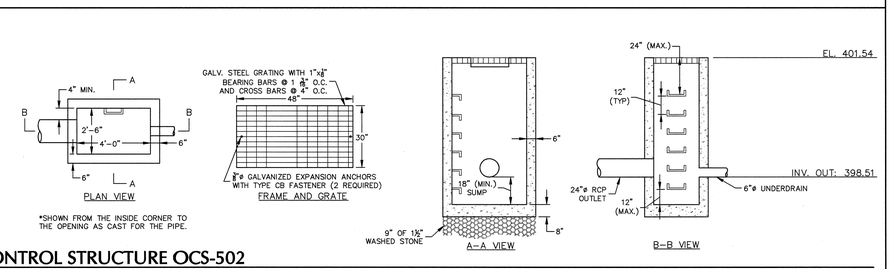


OUTLET CONTROL STRUCTURE OCS-101

SCALE: NTS



POND OUTLET CONTROL STRUCTURE OCS-502

SCALE: NTS

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Date	Description	No.
	REVISIONS	

STATE OF NEW YORK · RICHARD BURROW · 082168 · LICENSED PROFESSIONAL ENGINEER
OCT 0 2 2019
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NY Lic. No. 082168

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NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project: PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title: SITE CONSTRUCTION DETAILS (3 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK
Drawing No. CS503

LANGAN
PROJECT NO. 100796101

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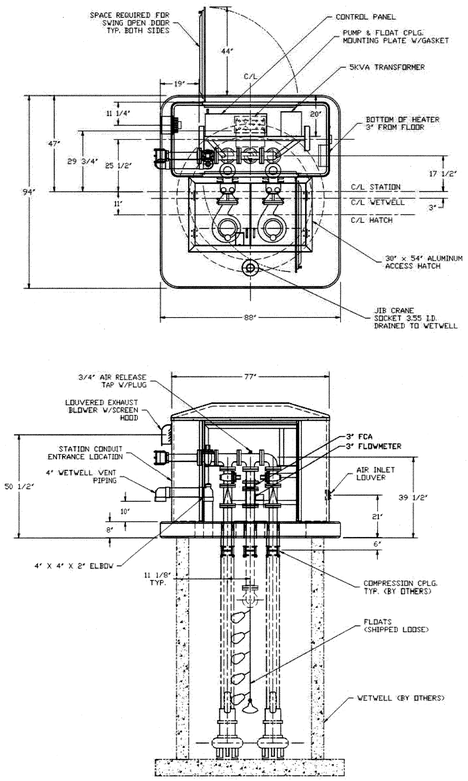
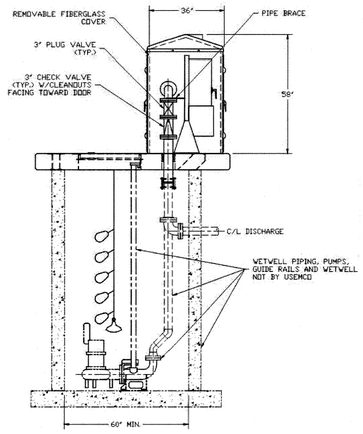
Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01\SheetFiles\Site Plan Approval\100796101-CS501-0101.dwg Date: 10/2/2019 Time: 18:04 User: ahartingsmith Style Table: Langan.stb Layout: CS503



PAINT REQUIREMENTS:
PIPING EXTERIOR AND STEEL SURFACES APPLY 6 MILS EPOXY ENAMEL



STANDARD:

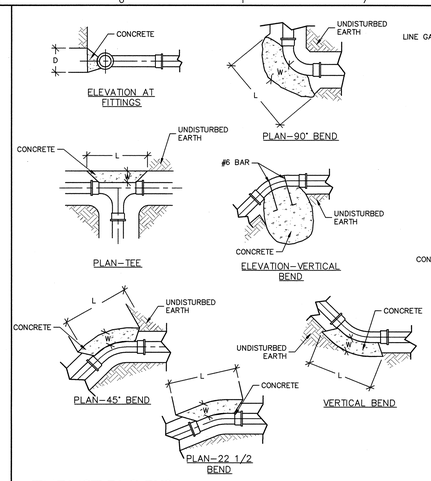
PIPING 3"
BASE: 88" X 94"
WETWELL: 60"
HATCH: 30" X 54"

OPTIONS:

EM = EMERGENCY BYPASS
MM = MAGMETER (KROHNE)

PRELIMINARY

PUMP STATION
SCALE: NTS



BASIS:

2,000 LB/SQ.FT. SOIL RESISTANCE
250 PSI WATER PRESSURE
CORRECTION FACTORS FOR OTHER SOILS:

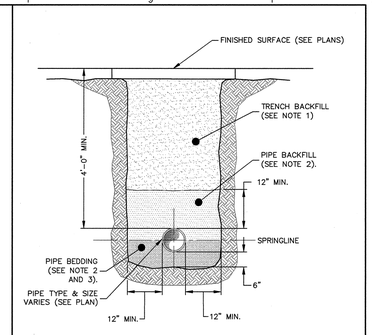
SOFT CLAY	4
SAND	2
SAND & GRAVEL	1.33
SHALE	0.4

NOTES:
1. IF SOFT MATERIALS ARE ENCOUNTERED, THE THRUST BLOCKS SIZES SHALL BE ADJUSTED ACCORDINGLY.
2. CONCRETE TO BE 5,000 PSI.

THRUST BLOCK SCHEDULE

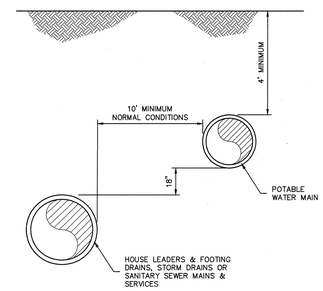
PIPE SIZE	TEE L	TEE D	22 1/2 L	22 1/2 D	45 L	45 D	90 L	90 D	W
6"	18"	15"	15"	12"	15"	12"	15"	15"	21"
8"	2'	18"	18"	12"	18"	12"	2'	18"	2'

THRUST BLOCKS
SCALE: NTS



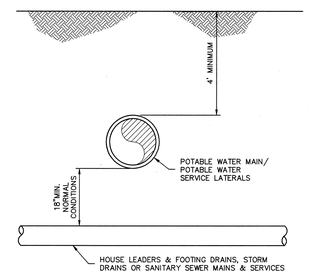
NOTES:
1. PREDOMINATELY GRANULAR FILL MATERIAL. MAX. PARTICLE SIZE 4". COMPACT IN MAX. 8" LOOSE LIFTS TO 95% MODIFIED PROCTOR DENSITY USING ONSITE MATERIALS.
2. MIXTURE OF CRUSHED STONE AND GRAVEL, FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS AND ELONGATED PARTICLES. MAX. PARTICLE SIZE ¾". COMPACT IN MAX. 6" LOOSE LIFTS.
3. WHEN IN LEDGE, USE AASHTO NO. 67 OR EQUAL PROCESSED SAND AND GRAVEL FREE OF DEBRIS, CLAY LUMPS, ORGANIC, OR OTHER DELETERIOUS MATERIAL. COMPACT TO THE SPRINGLINE IN MAX. 6" LOOSE LIFTS.
4. TRENCHING SHALL BE IMPLEMENTED IN ACCORDANCE WITH O.S.H.A. STANDARDS.
5. THIS DETAIL APPLIES TO GRAVITY PIPES AND FORCEMAINS (FOR THIS PROJECT ONLY).

SEWER PIPE TRENCH
SCALE: NTS



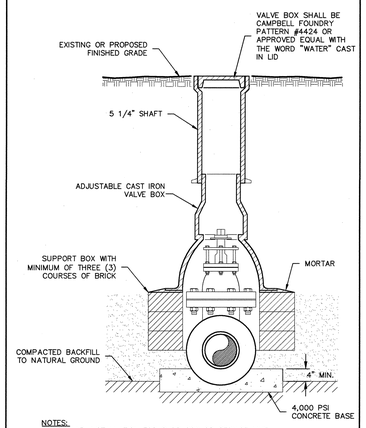
NOTE:
WHERE A 10' MINIMUM HORIZONTAL SEPARATION CANNOT BE OBTAINED DUE TO FIELD CONDITIONS, THE VERTICAL CLEAR DISTANCE SHALL BE A MINIMUM OF 18". HOWEVER, AN EXCEPTION TO THE 10' MINIMUM HORIZONTAL SEPARATION REQUIRES SEPARATE APPROVAL OF THE COUNTY HEALTH DEPARTMENT.

SEPARATION OF WATER MAIN AND SEWER PARALLEL INSTALLATION
SCALE: NTS



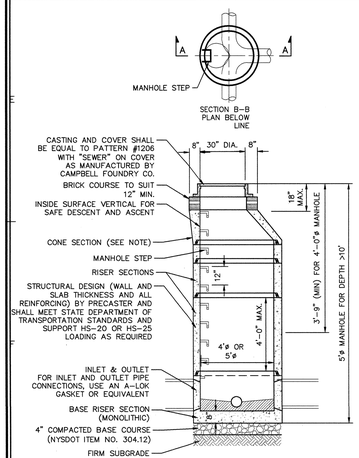
NOTE:
WATER MAINS PASSING UNDER SEWERS SHALL HAVE A VERTICAL CLEARANCE OF 18" MINIMUM BETWEEN THE SEWER AND WATER MAIN, AND THE SEWER SHALL BE SUPPORTED AS DIRECTED BY THE ENGINEER. AS REQUIRED, ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE, THIS APPLIES WHEN THE WATER IS ABOVE OR BELOW THE SEWER. WHERE AN 18" SEPARATION CANNOT BE OBTAINED DUE TO FIELD CONDITIONS, SEPARATE APPROVAL OF THE COUNTY HEALTH DEPARTMENT SHALL BE REQUIRED.

SEPARATION OF WATER MAIN AND SEWER CROSSING
SCALE: NTS



NOTES:
1. SIMILAR INSTALLATION FOR CURB BOX OR SERVICE LINE.
2. REFER TO PLAN FOR SIZE AND LOCATION.
3. VALVES TO BE MUELLER.

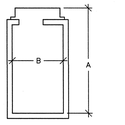
VALVE BOX
SCALE: NTS



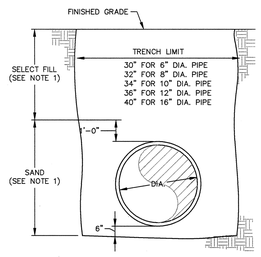
SANITARY MANHOLE NOTES

1. THE DEPTH OF THE INVERT CHANNEL SHALL BE EQUAL TO 3/4 OF THE DIAMETER OF THE SEWER.
2. THE SHELF SHALL SLOPE TOWARD THE INVERT CHANNEL AT A RATE OF 1" PER FOOT.
3. TYPE "B" MANHOLES (SHALLOW TYPE) TO BE PROVIDED WHERE REQUIRED BY DEPTH CONDITIONS.
4. SEE THE SPECIFICATIONS FOR LENGTH OF PIPE CONNECTIONS TO MANHOLE.
5. ALL CONCRETE SHALL BE 4000 PSI MINIMUM.
6. ENTIRE OUTSIDE SURFACE OF MANHOLE SHALL RECEIVE TWO COATS OF BITUMINOUS COATING. KOPPERS 300M PENNOXY TAR 32-8-4, OR APPROVED EQUAL.
7. INSTALL 2 LAYERS OF PLASTIC PREFORMED JOINT SEALANT BETWEEN ALL SECTIONS & UNDER FRAME.
8. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR MANHOLE IN ACCORDANCE WITH SPECIFICATIONS.
9. 4' DIA. MANHOLE -- FROM 8" TO 30" PIPES
10. UNLESS OTHERWISE SPECIFIED, SANITARY SEWER MANHOLES SHALL HAVE LETTERS "SEWER", AND STORM DRAIN MANHOLES SHALL HAVE LETTERS "DRAIN" CAST ON THE COVERS.
11. THE PRECAST CONCRETE STRUCTURE SHALL COMPLY WITH ASTM SPECIFICATIONS C478.
12. ALL SANITARY SEWER MANHOLES ARE TO BE CONSTRUCTED WITH THE COMPRESSION TYPE RESILIENT SEAL ASSEMBLY EQUAL TO "OMEGA CONCRETE PRODUCTS INC.".
13. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH AND CONSTRUCT THE PROPER SIZE STRUCTURE INCLUDING THE NECESSARY OPENINGS TO ACCOMMODATE THE WORK, AS SHOWN ON THE PLANS OR ORDERED BY THE ENGINEER, AT NO ADDITIONAL COST.
14. ALL NECESSARY PATCHING SHALL BE ACCOMPLISHED WITH A NON-SHRINK CEMENT MORTAR GROUT EQUAL TO "SIKA-SET" AS MANUFACTURED BY THE SIKA CHEMICAL CORPORATION.

DEPTH "A"	WIDTH "B"
< 10'-0"	4'-0"ø
> 10'-0"	5'-0"ø



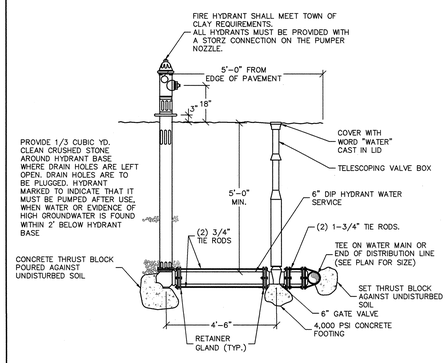
SANITARY MANHOLE
SCALE: NTS



NOTES:

1. SELECT FILL
   SHALL BE MATERIAL FREE FROM CINDERS, ASHES, REFUSE, VEGETABLE OR ORGANIC MATTER, BOULDERS, ROCKS AND STONES, ASPHALT, OR ANY OTHER MATERIAL DEEMED UNSUITABLE BY THE ENGINEER. STONES NOT GREATER THAN 8 INCHES IN THEIR GREATEST DIMENSION MAY BE USED, UNLESS OTHERWISE SPECIFIED, BUT MAY NOT COMPRISE MORE THAN 1% BY VOLUME OF THE BACKFILL MATERIAL.
2. SAND BACKFILL TO 1 FOOT ABOVE TOP OF PIPE, IN A WET OR ROCK TRENCH, GRAVEL MAY BE SPECIFIED BY THE ENGINEER IN LIEU OF SAND.

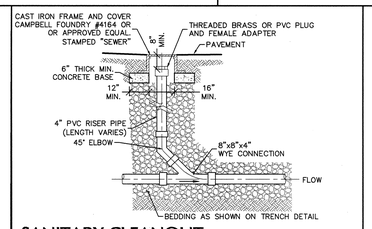
TRENCH DETAIL FOR WATER MAIN
SCALE: NTS



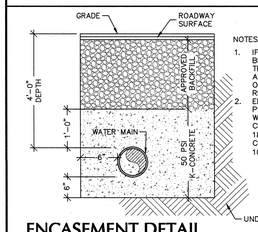
NOTES:

1. PUMPER OUTLET SHALL FACE STREET; HOSE OUTLETS SHALL BE PARALLEL TO STREET.
2. PLUMBNESS OF HYDRANT TO BE CHECKED IN TWO DIRECTIONS, 90 APART.
3. RODDING SHALL CONSIST OF TWO 3/4" THREADED RODS CAREFULLY COATED WITH BITUMASTIC PAINT. RODDING MAY BE OMITTED BETWEEN THE MAIN AND LATERAL VALVE ONLY WHERE A TAPPING VALVE OR HYDRANT VALVE ANCHORING TEE IS USED.
4. 1-1/2" STONE SHALL BE PLACED AROUND THE HYDRANT FROM THE BOTTOM OF THE TRENCH, BUT AT LEAST 6" BELOW THE BASE OF THE HYDRANT TO 6" ABOVE THE WASTE OPENING AND TO A DISTANCE OF 12" AROUND THE ELBOW.
5. THE HYDRANT LEAD SHALL BE A MINIMUM OF 6" IN DIAMETER. AUXILIARY VALVES SHALL BE INSTALLED ON ALL HYDRANT LEADS.
6. HYDRANT DRAINS SHOULD BE PLUGGED. WHEN THE DRAINS ARE PLUGGED THE BARRELS MUST BE PUMPED DRY AFTER USE DURING FREEZING WEATHER. A 3" BLACK CIRCLE SHALL BE PAINTED DIRECTLY UNDER THE PUMPER OUTLET.
7. WHERE HYDRANT DRAIN ARE NOT PLUGGED, A GRAVEL POCKET OR DRY WELL SHALL BE PROVIDED UNLESS NATURAL SOILS WILL PROVIDE ADEQUATE DRAINAGE.
8. HYDRANT DRAINS SHALL NOT BE CONNECTED OR LOCATED WITHIN 10' OF SANITARY SEWERS, STORM SEWERS OR STORM DRAINS.
9. HYDRANT DRAINS, WHERE ALLOWED, MUST BE ABOVE THE SEASONAL GROUND WATER TABLE.

FIRE HYDRANT
SCALE: NTS



SANITARY CLEANOUT
SCALE: NTS



NOTES

1. IF SEPARATION CANNOT BE MET, OTHER THAN THOSE SHOWN ON THE APPROVED DRAWINGS, OCDOH APPROVAL IS REQUIRED.
2. ENCASE WATERMAIN IN 50 PSI CONCRETE IN AREAS WHERE VERTICAL CLEARANCE IS LESS THAN 18" AND HORIZONTAL CLEARANCE IS LESS THAN 10'.

ENCASEMENT DETAIL
SCALE: NTS

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Date	Description	No.
	REVISIONS	

STATE OF NEW YORK · RICHARD BURROW · 082168 · LICENSED PROFESSIONAL ENGINEER
SIGNATURE — DATE SIGNED OCT 02 2019
RICHARD BURROW
PROFESSIONAL ENGINEER NY Lic. No. 082168

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NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project: PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title: SITE CONSTRUCTION DETAILS (4 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By JRS
Checked By TLK
Drawing No. CS504

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PROJECT NO. 100796101

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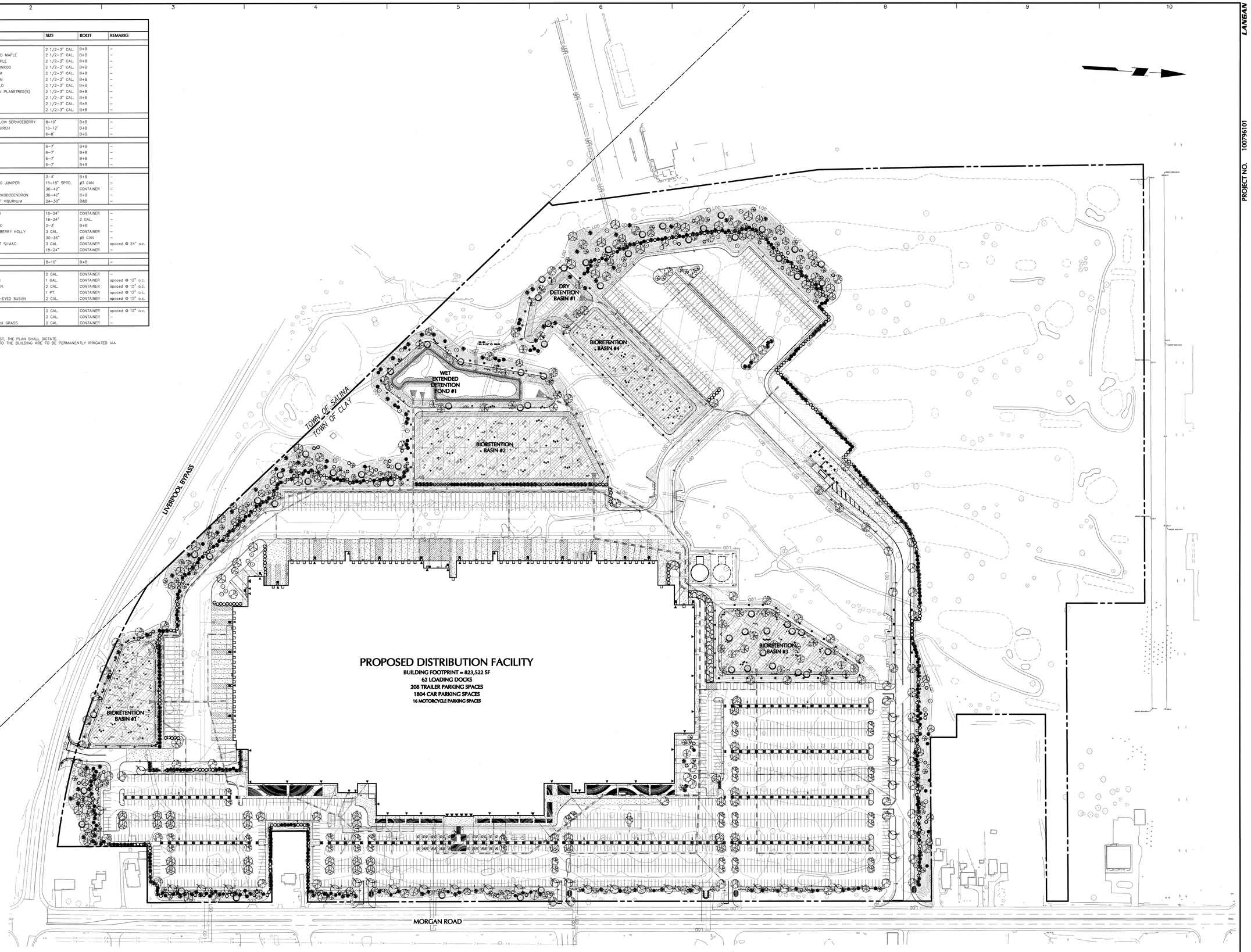
PLANT SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
SHADE TREE(S)						
AFA	8	ACER X FREEMANII "ARMSTRONG"	FREEMAN MAPLE	2 1/2–3" CAL.	B+B	–
AROG	43	ACER RUBRUM "OCTOBER GLORY"	OCTOBER GLORY RED MAPLE	2 1/2–3" CAL.	B+B	–
ASB	44	ACER SACCHARUM BONFIRE	BONFIRE SUGAR MAPLE	2 1/2–3" CAL.	B+B	–
GBM	29	GINKGO BILOBA "MAGYAR'	MAGYAR UPRIGHT GINKGO	2 1/2–3" CAL.	B+B	–
LSR	39	LIQUIDAMBAR STYRACIFLUA "ROTUNDILOBA"	SEEDLESS SWEETGUM	2 1/2–3" CAL.	B+B	–
LST	2	LIQUIDAMBAR STYRACIFLUA	AMERICAN SWEETGUM	2 1/2–3" CAL.	B+B	–
NS	41	NYSSA SYLVATICA	SOURGUM OR TUPELO	2 1/2–3" CAL.	B+B	–
PXAB	29	PLATANUS X ACERIFOLIA "BLOODGOOD'	BLOODGOOD LONDON PLANETREE(S)	2 1/2–3" CAL.	B+B	–
QC	58	QUERCUS COCCINEA	SCARLET OAK	2 1/2–3" CAL.	B+B	–
QP	21	QUERCUS PALUSTRIS	PIN OAK	2 1/2–3" CAL.	B+B	–
TA	1	TILIA AMERICANA	BASSWOOD	2 1/2–3" CAL.	B+B	–
ORNAMENTAL TREE(S)						
AC	60	AMELANCHIER CANADENSIS	MULTI STEM SHADBLOW SERVICEBERRY	8–10'	B+B	–
BND	20	BETULA NIGRA "DURA HEAT"	DURA HEAT RIVER BIRCH	10–12'	B+B	–
CV	92	CHIONANTHUS VIRGINICUS	WHITE FRINGETREE	6–8'	B+B	–
EVERGREEN TREE(S)						
ABC	270	ABIES CONCOLOR	WHITE FIR	6–7'	B+B	–
PIAB	318	PICEA ABIES	NORWAY SPRUCE	6–7'	B+B	–
PO	48	PICEA OMORIKA	SERBIAN SPRUCE	6–7'	B+B	–
PP	223	PICEA PUNGENS	COLORADO SPRUCE	6–7'	B+B	–
EVERGREEN SHRUB(S)						
JCS	12	JUNIPERUS CHINENSIS "SPARTAN'	SPARTAN JUNIPER	3–4'	B+B	–
JHBC	40	JUNIPERUS HORIZONTALIS "BLUE CHIP'	BLUE CHIP CREEPING JUNIPER	15–18" SPRD.	#3 CAN	–
KLOR	67	KALMIA LATIFOLIA "OSTBO RED"	MOUNTAIN LAUREL	36–42"	CONTAINER	–
RCRE	120	RHODODENDRON CATAMBIENSE "ROSEUM ELEGANS'	ROSEUM ELEGANS RHODODENDRON	36–42"	B+B	–
VRC	43	VIBURNUM X RHYTIDOPHYLLUM "CREE"	"CREE" LEATHERLEAF VIBURNUM	24–30"	B&B	–
DECIDUOUS SHRUB(S)						
CAH	366	CLETHRA ALNIFOLIA "HUMMINGBIRD'	SWEET PEPPERBUSH	18–24"	CONTAINER	–
CO	165	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	18–24"	2 GAL.	–
CS	167	CORNUS SERICEA (FORMERLY STOLONIFERA)	RED OSIER DOGWOOD	2–3'	B+B	–
IVRS	30	ILEX VERTICILLATA "RED SPRITE"	RED SPRITE WINTERBERRY HOLLY	3 GAL.	CONTAINER	–
LB	204	LINDERA BENZOIN	SPICEBUSH	30–36"	#5 CAN	–
RAG	395	RHUS AROMATICA "GRO LOW'	GRO LOW FRAGRANT SUMAC	3 GAL.	CONTAINER	spaced @ 24" o.c.
RKO	24	ROSA "KNOCKOUT"	KNOCKOUT ROSE	18–24"	CONTAINER	–
DECIDUOUS CONIFER(S)						
TD	62	TAXODIUM DISTICHUM	BALD CYPRESS	8–10'	B+B	–
PERENNIAL(S)						
AMH	287	AMSONIA HUBRICHTII	BLUE STAR	2 GAL.	CONTAINER	–
AMM	1066	ALLIUM "MILLENIUM"	ORNAMENTAL ONION	1 GAL.	CONTAINER	spaced @ 12" o.c.
ANPD	1334	ASTER NOVAE–ANGLIAEA "PURPLE DOME"	PURPLE DOME ASTER	2 GAL.	CONTAINER	spaced @ 15" o.c.
LM	1352	LIROPE MUSCARI "BIG BLUE"	BIG BLUE LILYTURF	1 PT.	CONTAINER	spaced @ 12" o.c.
RFG	168	RUDBECKIA FULGIDA "GOLDSTURM"	GOLDSTURM/BLACK–EYED SUSAN	2 GAL.	CONTAINER	spaced @ 15" o.c.
ORNAMENTAL GRASS(ES)						
BG	1718	BOUTELOUA GRACILIS "BLONDE AMBITION"	BLUE GRAMA	2 GAL.	CONTAINER	spaced @ 12" o.c.
MC	367	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	2 GAL.	CONTAINER	–
PVS	354	PANICUM VIRGATUM "SHENANDOAH'	SHENANDOAH SWITCH GRASS	2 GAL.	CONTAINER	–

NOTE:
1. IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE.
2. ALL BERMS AND LAWNS, AND ALL DECORATIVE PLANTING BEDS AND LAWNS ADJACENT TO THE BUILDING ARE TO BE PERMANENTLY IRRIGATED VIA UNDERGROUND SPRINKLER SYSTEM.



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NOTE: REFER TO LP501 FOR LANDSCAPE NOTES AND DETAILS.

100 0 50 100
SCALE IN FEET

Date	Description	No.
	REVISIONS	

SIGNATURE MICHAEL SEMINI DATE SIGNED
REGISTERED LANDSCAPE ARCHITECT
NY Lic. No. LA 001901–1

OCT 02 2019

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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
OVERALL LANDSCAPE PLAN

Project No. 100796101
Date 10/02/2019
Drawn By YZ
Checked By DB

Drawing No.
LP100

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PROJECT NO. 100796101

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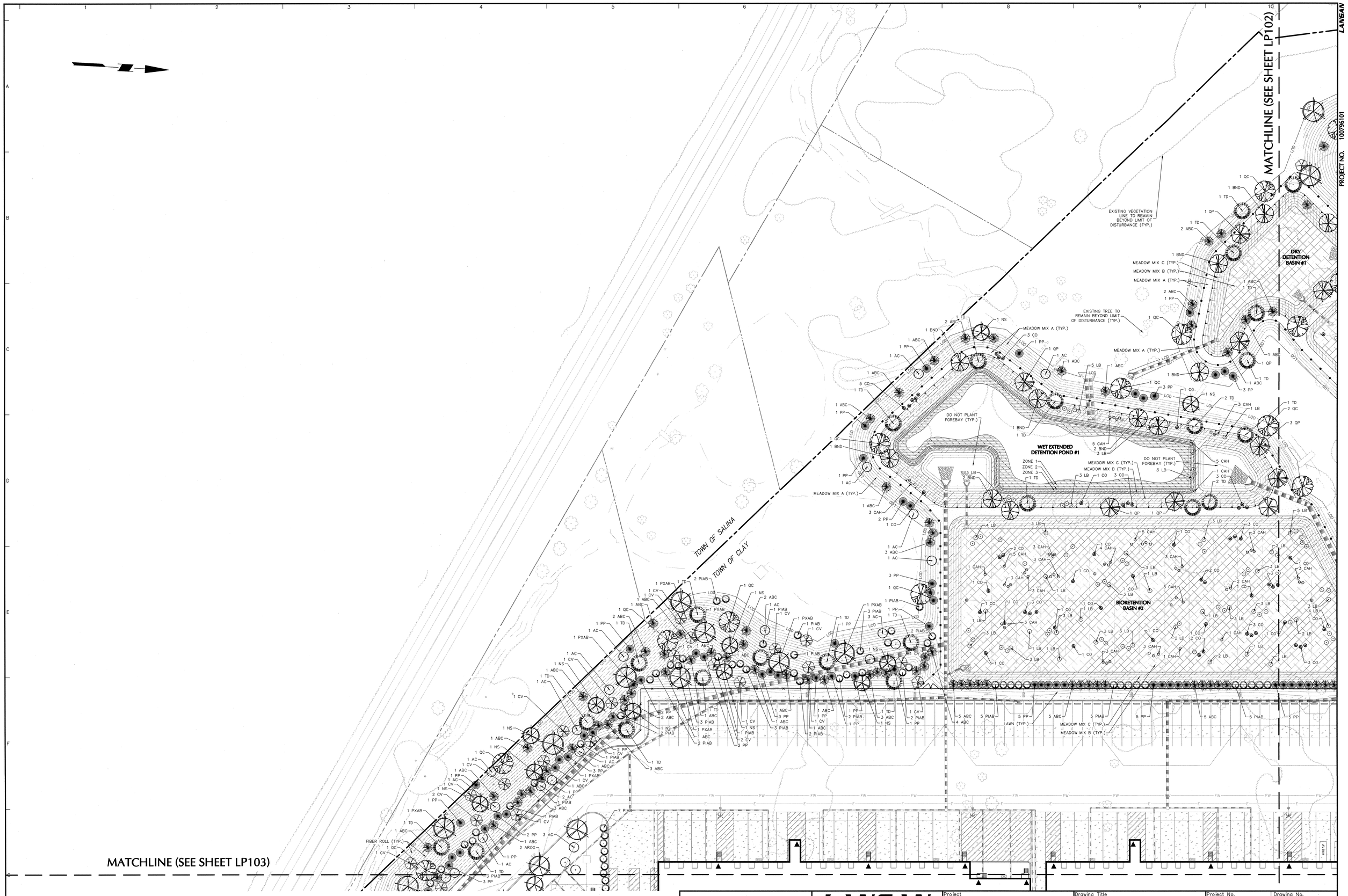

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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
LANDSCAPE PLAN (1 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By YZ
Checked By DB

Drawing No.
LP101

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Date	Description	No.
	REVISIONS	

LICENSED LANDSCAPE ARCHITECT
MICHAEL SZUCHOLA
No. 001901-1
STATE OF NEW YORK

SIGNATURE MICHAEL SZUCHOLA DATE SIGNED OCT 02 2019
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NY Lic. No. LA 001901-1

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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
LANDSCAPE PLAN (2 OF 4)

Project No. 100796101
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Checked By DB

Drawing No.
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PROJECT NO. 100796101

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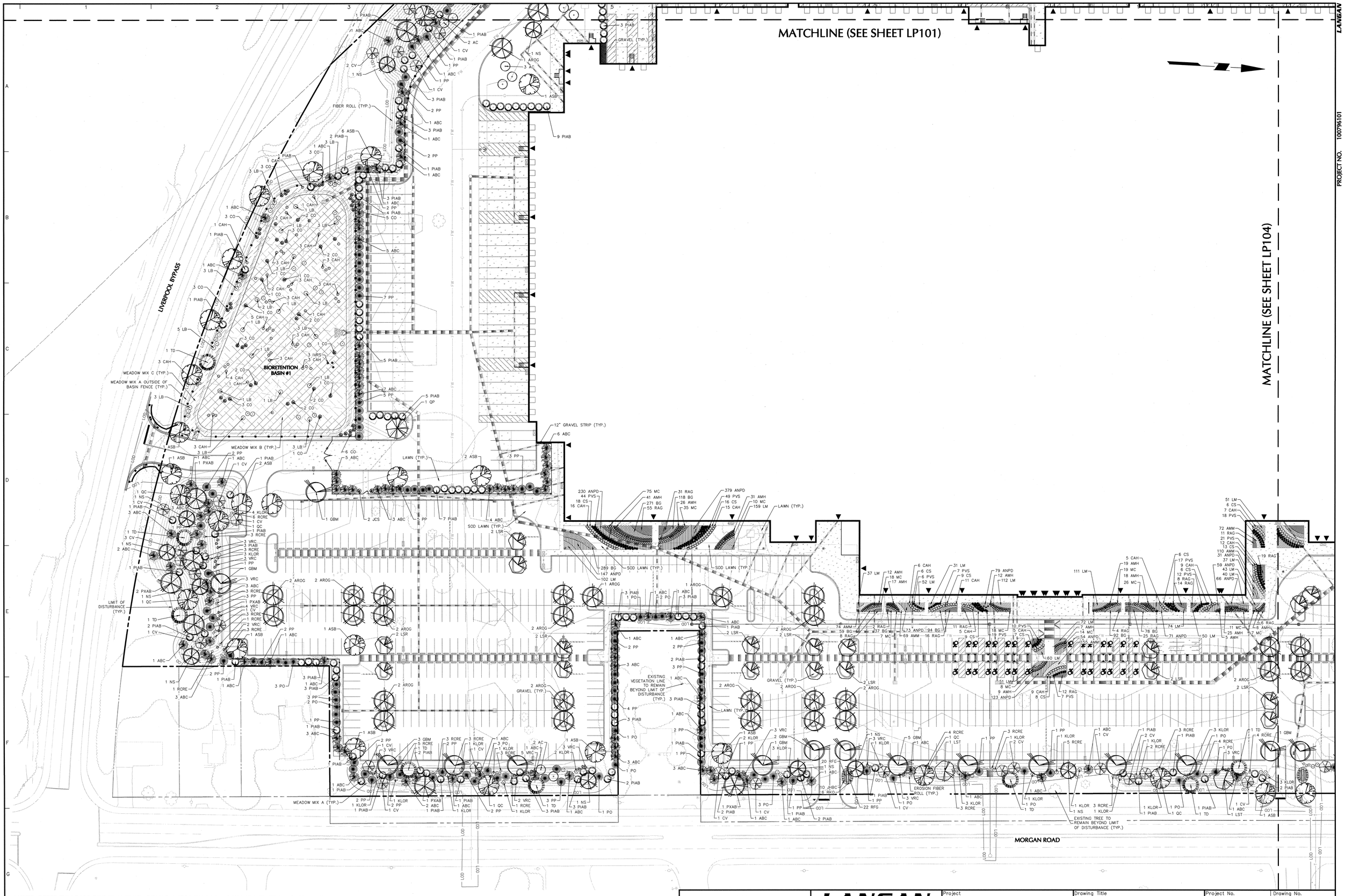

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SCALE: 1 INCH = 40 FEET

Date	Description	No.
REVISIONS		

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Project
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SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
LANDSCAPE PLAN (3 OF 4)

Project No. 100796101
Date 10/02/2019
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Drawing No. LP103

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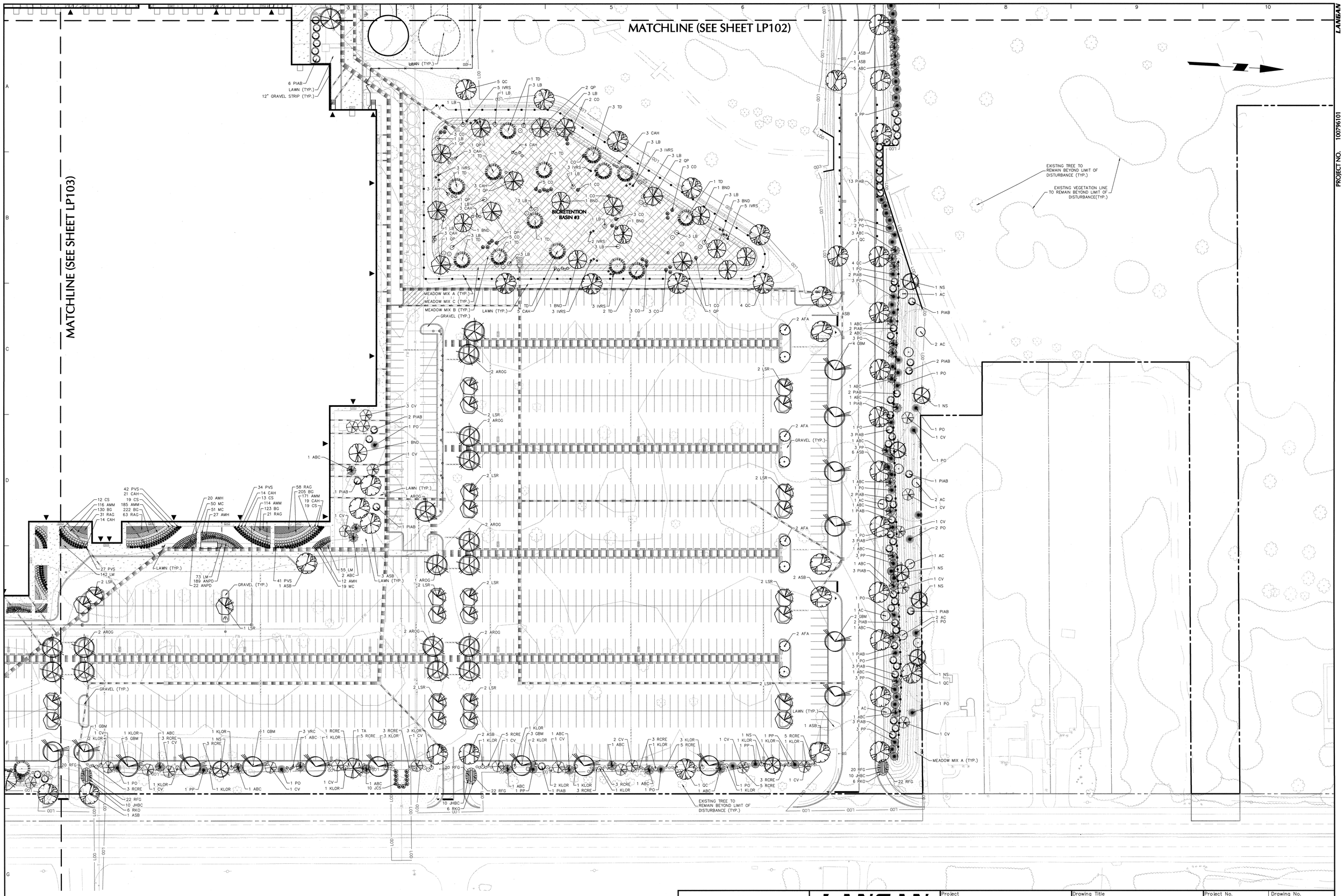
PROJECT NO. 100796101



NOTE: REFER TO LP100 FOR PLANT SCHEDULE, LP501 FOR LANDSCAPE NOTES AND DETAILS.

WARNING:
IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

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SCALE: 1 INCH = 40 FEET

Date	Description	No.
	REVISIONS	

SIGNATURE MICHAEL P. BARNA, R.L.A. DATE SIGNED OCT 02 2019
REGISTERED LANDSCAPE ARCHITECT
NY Lic. No. LA 001901-1

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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
LANDSCAPE PLAN (4 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By YZ
Checked By DB

Drawing No. LP104

Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01\Sheet\Site Plan Approval\100796101-LP101-0101.dwg Date: 10/2/2019 Time: 18:06 User: shartingsmith Style Table: Langan.stb Layout: LP104

PROJECT NO. 100796101

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GENERAL LANDSCAPE PLANTING NOTES:

PLANTING MATERIALS

1. NAMES OF PLANTS AS DESCRIBED ON THIS PLAN CONFORM TO THOSE GIVEN IN "STANDARDIZED PLANT NAMES", 1942 EDITION PREPARED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE. NAMES OF PLANT VARIETIES NOT INCLUDED THEREIN CONFORM TO NAMES GENERALLY ACCEPTED IN NURSERY TRADE.
2. STANDARDS FOR TYPE, SPREAD, HEIGHT, ROOT BALL AND QUALITY OF NEW PLANT MATERIAL SHALL BE IN ACCORDANCE WITH GUIDELINES AS SET FORTH IN THE "AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN. PLANT MATERIAL SHALL HAVE NORMAL HABIT OF GROWTH AND BE HEALTHY, VIGOROUS, AND FREE FROM DISEASES AND INSECT INFESTATION.
3. NEW PLANT MATERIAL SHALL BE NURSERY GROWN UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE SET PLUMB AND SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING. PLANT MATERIAL OF THE SAME SPECIES AND SPECIFIED AS THE SAME SIZE SHOULD BE SIMILAR IN SHAPE, COLOR AND HABIT. THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REJECT PLANT MATERIAL THAT DOES NOT CONFORM TO THE TYPICAL OR SPECIFIED HABIT OF THAT SPECIES.
4. THE CONTRACTOR SHALL NOT MAKE SUBSTITUTIONS. IF THE SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, THE CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY TO THE LANDSCAPE ARCHITECT AND OWNER TOGETHER WITH A WRITTEN PROPOSAL FOR USE OF AN EQUIVALENT MATERIAL.
5. THE LANDSCAPE ARCHITECT MAY REVIEW PLANT MATERIALS AT THE SITE, BEFORE PLANTING, FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, SIZE, AND QUALITY. THE LANDSCAPE ARCHITECT RETAINS THE RIGHT TO FURTHER REVIEW PLANT MATERIALS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEM, INSECTS, INJURIES, AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. THE CONTRACTOR SHALL REMOVE REJECTED PLANT MATERIALS IMMEDIATELY FROM PROJECT SITE AS DIRECTED BY THE LANDSCAPE ARCHITECT OR OWNER.

PLANTING SOILS

1. REUSE SURFACE SOILS STOCKPILED ON SITE, VERIFYING COMPLIANCE WITH PLANTING SOIL AND TOPSOIL CRITERIA IN THIS SPECIFICATION THROUGH TESTING. CLEAN SURFACE SOIL OF ALL ROOTS, PLANTS, SOD, AND GRAVEL OVER 1" IN DIAMETER AND DELETERIOUS MATERIALS. IF ON-SITE SOILS ARE TO BE USED FOR PROPOSED PLANTING, THE CONTRACTOR SHALL DEMONSTRATE, THROUGH SOIL TESTING, THAT ON-SITE SOILS MEET THE SAME CRITERIA AS INDICATED IN NOTES PLANS AND SPECIFICATIONS
2. SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN TOPSOIL AND PLANTING SOIL QUANTITIES ARE INSUFFICIENT. OBTAIN SOIL DISPLACED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 4" DEEP. DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS, MARSHES OR CONTAMINATED SITES.
3. A MINIMUM 18" DEPTH SHALL BE PROVIDED FOR ALL TREES AND LARGE SHRUBS; MINIMUM 12" DEPTH SHALL BE PROVIDED FOR GROUNDCOVERS, HERBACEOUS AND MEADOW OR ORNAMENTAL GRASS AREAS AND A MINIMUM 6" LAYER SHALL BE INSTALLED IN ALL LAWN AREAS. TOPSOIL AND PLANTING SOIL DEPTH INDICATED ON PLANS AND PLANTING DETAILS AND NARRATIVE SPECIFICATIONS SHALL GOVERN DEPTH WHEN PROVIDED.
4. WHERE PLANTING AREAS ARE PROPOSED FOR FORMER PAVED OR GRAVEL AREAS, BEDS SHALL BE EXCAVATED TO A MINIMUM 30" DEPTH AND, AT A MINIMUM, BE BACKFILLED WITH BOTTOM LAYER OF SANDY LOAM (ORGANIC CONTENT LESS THAN 2%) OVER WHICH TOPSOIL AND PLANTING SOILS WILL BE PLACED AT DEPTHS INDICATED IN PLANS, DETAILS AND NOTES.
5. IF THE QUANTITY OF SOILS FROM THE SITE IS NOT ADEQUATE TO FILL PLANTING AREAS TO A DEPTH INDICATED IN PLANS AND DETAILS, TOPSOIL AND PLANTING SOILS TO DETERMINE IF THE MATERIALS ARE CONDUCIVE TO SUSTAINING PROPOSED PLANTINGS SHOULD BE FURNISHED BY THE CONTRACTOR. TOPSOIL AND PLANTING SOILS SHALL BE FREE OF BROKEN GLASS, PAINT CHIPS, PLASTIC, DELETERIOUS MATERIALS, ROOTS, WEEDS, BOULDERS, COBBLES AND GRAVEL OVER 1? IN DIAMETER AND COMPLY WITH THE FOLLOWING CRITERIA:
   - –SOILS SHALL MEET ALL APPLICABLE SOIL REMEDIATION STANDARDS
   - –ORGANIC CONTENT: 2–5% IN NATIVE SOILS; UP TO 10% IN AMENDED SOILS
   - –SOLUBLE SALTS: LESS THAN 0.5 MM HOS/CM
   - –SOIL PH: 4.5–7% TO BE AMENDED PER SOIL TEST RESULTS
   - –PHYSICAL (SIEVE) ANALYSIS/ SOIL TEXTURE
     SAND: 40–60% SILT: 25–60%CLAY: 5–20%
   - –NOT MORE THAN 1% OF MATERIAL SHALL BE RETAINED BY A #4 SIEVE.
6. ALL PLANTING SOILS SHALL BE SUBMITTED FOR TESTING TO THE STATE COOPERATIVE EXTENSION SERVICE, OR APPROVED EQUAL, PRIOR TO DELIVERY TO THE SITE. CONTRACTOR SHALL FURNISH SOIL SAMPLES AND SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER AT A RATE OF ONE SAMPLE PER 500 CUBIC YARDS TO ENSURE CONSISTENCY ACROSS THE TOTAL VOLUME OF PLANTING SOIL REQUIRED. TEST RESULTS SHALL EVALUATE FOR ALL CRITERIA LISTED IN THIS SPECIFICATION. IF TESTING AGENCY DETERMINES THAT THE SOILS ARE DEFICIENT IN ANY MANNER AND MAY BE CORRECTED BY ADDING AMENDMENTS, THE CONTRACTOR SHALL FOLLOW STATED RECOMMENDATIONS FOR SOIL IMPROVEMENT AND FURNISH SUBMITTALS FOR ALL AMENDMENTS PRIOR TO DELIVERY OF SOIL TO THE PROJECT SITE.
7. IF SOIL ORGANIC CONTENT IS INADEQUATE, SOIL SHALL BE AMENDED WITH COMPOST OR ACCEPTABLE, WEED FREE, ORGANIC MATTER. ORGANIC AMENDMENT SHALL BE WELL COMPOSTED, PH RANGE OF 6–8; MOISTURE CONTENT 35–55% BY WEIGHT 100% PASSING THROUGH 1" SIEVE; SOLUBLE SALT CONTENT LESS THAN 0.5 MM HOS/CM; MEETING ALL APPLICABLE ENVIRONMENTAL CRITERIA FOR CLEAN FILL; FREE OF BROKEN GLASS, PAINT CHIPS, PLASTIC, DELETERIOUS MATERIALS, ROOTS, WEEDS, BOULDERS, COBBLES AND GRAVEL OVER 1" IN DIAMETER
8. SCARIFY AND/OR TILL ALL COMPACTED SUBSOILS PRIOR TO ADDING PLANTING SOIL OR TOPSOIL. PLANTING SOILS AND TOPSOIL SHALL BE PLACED IN 12–18? LIFTS AND WATER THOROUGHLY BEFORE INSTALLING NEXT LIFT. NO SOILS SHALL BE PLACED IN A FROZEN OR MUDDY CONDITION.

DELIVERY, STORAGE, AND HANDLING

1. PACKAGED MATERIALS: PACKAGED MATERIALS SHALL BE DELIVERED IN CONTAINERS SHOWING WEIGHT, ANALYSIS, AND NAME OF MANUFACTURER. MATERIALS SHALL BE PROTECTED FROM DETERIORATION DURING DELIVERY, AND WHILE STORED AT SITE.
2. TREES AND SHRUBS: THE CONTRACTOR SHALL PROVIDE TREES AND SHRUBS DUG FOR THE GROWING SEASON FOR WHICH THEY WILL BE PLANTED. DO NOT PRUNE PRIOR TO DELIVERY UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OR DESTROY NATURAL SHAPE. PROVIDE PROTECTIVE COVERING DURING TRANSIT. DO NOT DROP OR BREAK BALLED STOCK DURING DELIVERY OR HANDLING.
3. ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOT BALL WRAPPING AND BINDING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED FROM THE TOP OF THE BALL AT THE TIME OF PLANTING, IF THE PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, THE WIRE BASKET SHALL BE CUT AND FOLDED DOWN 8" INTO THE PLANTING HOLE. WITH CONTAINER-GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE ROOT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO LOCATIONS.
4. THE CONTRACTOR SHALL HAVE TREES AND SHRUBS DELIVERED TO SITE AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN 6 HOURS AFTER DELIVERY, THE CONTRACTOR SHALL SET TREES AND SHRUBS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE AND KEEP ROOTS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE.

INSTALLATION

1. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY AND SEWER LINES PRIOR TO THE START OF EXCAVATION ACTIVITIES. NOTIFY THE PROJECT ENGINEER AND OWNER IMMEDIATELY OF ANY CONFLICTS WITH PROPOSED PLANTING LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE.
2. THE CONTRACTOR TO STAKE OUT PLANTING LOCATIONS, FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND/OR OWNER BEFORE PLANTING WORK BEGINS. THE LANDSCAPE ARCHITECT AND/OR OWNER SHALL DIRECT THE CONTRACTOR IN THE FINAL PLACEMENT OF ALL PLANT MATERIAL AND LOCATION OF PLANTING BEDS TO ENSURE COMPLIANCE WITH DESIGN INTENT UNLESS OTHERWISE INSTRUCTED.
3. NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR PROJECT ENGINEER.
4. ALL LANDSCAPED AREAS TO BE CLEARED OF ROCKS, STUMPS, TRASH AND OTHER UNSIGHTLY DEBRIS. ALL FINE GRADED AREAS SHOULD BE HAND RAKED SMOOTH ELIMINATING ANY CLUMPS AND UNEVEN SURFACES PRIOR TO PLANTING OR MULCHING.
5. ALL PLANT MATERIAL SHALL BE INSTALLED AS PER DETAILS, NOTES AND CONTRACT SPECIFICATIONS. THE LANDSCAPE ARCHITECT MAY REVIEW INSTALLATION AND MAINTENANCE PROCEDURES.
6. THE CONTRACTOR SHALL KEEP AREA CLEAN DURING DELIVERY AND INSTALLATION OF PLANT MATERIALS. REMOVE AND DISPOSE OF OFF-SITE ANY ACCUMULATED DEBRIS OR UNUSED MATERIALS. REPAIR DAMAGE TO ADJACENT AREAS CAUSED BY LANDSCAPE INSTALLATION OPERATIONS.
7. AFTER PLANT IS PLACED IN TREE PIT LOCATION, ALL TWINE HOLDING ROOT BALL TOGETHER SHOULD BE COMPLETELY REMOVED AND THE BURLAP SHOULD BE PULLED DOWN SO 1/3 OF THE ROOT BALL IS EXPOSED. SYNTHETIC BURLAP SHOULD BE COMPLETELY REMOVED AFTER INSTALLATION.
8. MULCH SHALL BE 1– TO 2-INCH DIAMETER RIVER STONE. WOOD MULCH SHALL NOT BE ACCEPTED.MULCH SHOULD NOT BE PILED UP AROUND THE TRUNK OF ANY PLANT MATERIAL. NO MULCH OR TOPSOIL SHOULD BE TOUCHING THE BASE OF THE TRUNK ABOVE THE ROOT COLLAR.
9. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR AS REQUIRED BY SITE AND WEATHER CONDITIONS TO MAINTAIN VIGOROUS AND HEALTHY PLANT GROWTH.
10. AFTER COMPLETION OF A PROJECT, ALL EXPOSED GROUND SURFACES THAT ARE NOT PAVED WITHIN THE CONTRACT LIMIT LINE, AND THAT ARE NOT COVERED BY LANDSCAPE PLANTING OR SEEDING AS SPECIFIED, SHALL BE COVERED BY A SHREDDED HARDWOOD BARK OR APPROVED EQUAL MULCH THAT WILL PREVENT SOIL EROSION AND THE EMANATION OF DUST.
11. TREES MAY BE STAKED AT LANDSCAPE CONTRACTOR'S DISCRETION. CURRENT HORTICULTURAL PRACTICE DOES NOT RECOMMEND STAKING TREES EXCEPT IN CONDITIONS WHERE TREES ARE SUBJECT TO BLOW DOWNS DUE TO SOIL CONDITIONS, HEAVY PREVAILING WINDS OR A HIGH RATIO OF TOP GROWTH TO ROOT BALL. IF STAKING IS DEEMED NECESSARY BY CONTRACTOR, STAKE AND GUYS SHOULD BE LOCATED AND FLAGGED IN A MANNER TO PREVENT TRIPPING HAZARDS. WIRES OR GUYS SHALL BE LOCATED AND COVERED SO AS NOT TO PULL OR DAMAGE BRANCHES AND SHALL BE REMOVED AT THE END OF THE GUARANTEE PERIOD.

GUARANTEE

1. NEW PLANT MATERIAL SHALL BE GUARANTEED TO BE ALIVE AND IN VIGOROUS GROWING CONDITION FOR A PERIOD OF ONE YEAR FOLLOWING ACCEPTANCE BY THE OWNER. PLANT MATERIAL FOUND TO BE UNHEALTHY, DYING OR DEAD DURING THIS PERIOD, SHALL BE REMOVED AND REPLACED IN KIND BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
2. ALL SCREENING AND REQUIRED LANDSCAPE PLANTINGS SHALL BE MAINTAINED FOR THE LIFE OF THE USE AND SHALL BE REPLACED OR RESTORED AS NECESSARY IN ORDER TO MAINTAIN THEIR EFFECTIVENESS. ANY LOSSES DUE TO STORM DAMAGE, DISEASE OR OTHER FACTORS SHALL BE REPLACED IN KIND WITHIN A PERIOD OF NOT MORE THAN SIX MONTHS.

LAWN SEED MIX:

1. PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 2" DIAMETER.
2. THE FOLLOWING SEED MIX SHALL BE SOWN AT THE RATES AS DEPICTED:

RED FESCUE	1 1/2 LBS./1,000 SF
PERENNIAL RYEGRASS	1 LBS./1,000 SF
KENTUCKY BLUEGRASS	1 1/2 LBS./1,000 SF
SPREADING FESCUE	1 LBS./1,000 SF

3. SEEDED LAWN AREAS SHALL BE MULCHED TO PRESERVE SOIL MOISTURE AND PREVENT EROSION DURING THE ESTABLISHMENT PERIOD UNTIL A STAND OF COVER IS ACCEPTED BY THE OWNER. STANDARD MULCH MAY INCLUDE HYDROMULCH, SALT HAY OR SMALL GRAIN STRAW ANCHORED WITH TACKIFIER AS NECESSARY. AREAS PRONE TO EROSION SHALL BE PROTECTED AS NECESSARY WITH BIODEGRADABLE EROSION CONTROL MATERIALS IN ADDITION TO THE STANDARD MULCH. ALL MULCH MATERIALS AND HYDROSEED/MULCH MIX MUST BE REMOVED FROM ANY ADJACENT STRUCTURES, PAVING OR VEHICLES IMMEDIATELY.
4. SEEDING DATES FOR THIS MIXTURE SHALL BE AS FOLLOWS:
   SPRING: APRIL 1 – MAY 31
   FALL: AUGUST 16 – OCTOBER 31
5. GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL AN ACCEPTABLE STAND OF COVER IS ESTABLISHED BY OWNER.

WARNING:
IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

SOD SPECIFICATIONS:

1. WHERE INDICATED ON THE LANDSCAPE PLANS IN AND AROUND CAR PARKING AREAS, PEDESTRIAN ENTRANCES AT THE BUILDING AND OTHER PEDESTRIAN SPACES.
2. SOD IS TO BE A FESCUE/BLUEGRASS BLEND APPROXIMATELY 70/30%. SOD IS TO BE INDIGENOUS TO THE AREA AND BE FURNISHED BY A REPUTABLE GROWER WITH A MINIMUM 5 YEARS EXPERIENCE.
3. PRIOR TO SODDING ALL AREAS ARE TO BE TOPSOILED, FINE GRADED, RAKED, WATERED LIGHTLY, AND FERTILIZED WITH A STARTER FERTILIZER.
4. ALL STONES GREATER THAN 2" DIAMETER SHALL BE REMOVED.
5. SOD TO BE INSTALLED PERPENDICULAR TO ALL SLOPED AREAS. SOD STRIPS TO BE LAID OUT SO JOINTS ARE NOT CLOSER THAN ONE FOOT (1'-0") FROM EACH OTHER.
6. SOD IS TO BE WATERED AT A RATE OF AT LEAST ONE AND A HALF INCHES ($1\frac{1}{2}$") PER WEEK UNTIL ROOT MASS MENDS WITH SOIL. AFTER THIS HAS OCCURRED NORMAL WATERING OF AT LEAST ONE INCH (1") PER WEEK IS TO COMMENCE.
7. ALL SOD AREAS ARE TO BE ROLLED IF ANY HEAVING OR DEPRESSIONS OCCUR.

LAWN WATERING SCHEDULE

THE FOLLOWING WATERING SCHEDULE COVERS ROUGHLY 8 WEEKS TO ESTABLISH A HEALTHY STAND OF GRASS FROM SEED. THE CONTRACTOR SHALL BE OBLIGATED TO ENSURE A HEALTHY STAND OF GRASS AT THE END OF THE MAINTENANCE/BOND PERIOD. ANY BARE OR DEAD AREAS IN THE LAWN SHALL BE PREPARED, RESEEDED AND REESTABLISHED PRIOR TO THE END OF THE MAINTENANCE/BOND PERIOD AND TO THE SATISFACTION OF THE PROJECT LANDSCAPE ARCHITECT AND THE OWNER.

IMPORTANT ASPECTS TO ATTAINING AND SUSTAINING A HEALTHY STAND OF GRASS ARE THE INSTALLATION OF TOPSOIL, SEED BED PREPARATION, ATTAINING OPTIMAL pH FOR THE INTENDED PLANT SPECIES, FERTILIZING, MULCH COVERING, AND SUFFICIENT WATERING PER THESE NOTES AND/OR PROJECT SPECIFICATIONS.

1. SEEDING SHALL BE DONE DURING THE SEASONS SPECIFIED IN THE LAWN SEED MIX NOTES AND/OR PROJECT SPECIFICATIONS.
2. AFTER THE SEEDBED IS PREPARED, SEED IS INSTALLED, AND MULCH IS APPLIED, WATER LIGHTLY TO KEEP THE TOP 2 INCHES OF SOIL CONSISTENTLY MOIST, NOT SATURATED. AT NO TIME SHOULD WATER BE APPLIED TO THE POINT OF RUNOFF OR THE DISPLACEMENT OF SEED.
3. DEPENDING ON SOIL TEMPERATURES, IT MAY TAKE SEVERAL WEEKS FOR GERMINATION TO OCCUR. DIFFERENT SPECIES WITHIN THE MIX GERMINATE AT DIFFERENT TIMES AND THEREFORE CONTRACTOR SHOULD CONTINUE THE LIGHT WATERING, AS DESCRIBED ABOVE, UNTIL THERE IS AT LEAST 2 INCHES OF GROWTH THROUGHOUT.
4. AT THIS POINT, WATERING FREQUENCY MAY BE REDUCED TO EVERY 3 TO 5 DAYS. WATER SHALL BE APPLIED TO WET A 6 INCH MINIMUM SOIL DEPTH TO PROMOTE HEALTHY DEEP ROOTS.
5. BEGIN MOWING ONCE PER WEEK AFTER THE GRASS HAS REACHED 3 INCHES HEIGHT. MOW TO A HEIGHT OF NO LESS THAN 2–½ INCHES. AFTER 2 TO 3 WEEKS OF MOWING, CONTINUE TO WATER TO A 6 INCH MINIMUM SOIL DEPTH AS NECESSARY PER WEATHER CONDITIONS, AND SOIL MOISTURE SENSORS IF APPLICABLE.

MEADOW SEEDING NOTES:

1. MEADOW SEED MIX A ERNST SEED MIX ERNMX-156 "LOW-GROWING WILDFLOWER/GRASS MIX"

34.69% FESTUCA OVINA	SHEEP FESCUE
31.74% LOLIUM MULTIFLORUM	ANNUAL RYEGRASS
6.35% ANTHOXANTHUM ODORATUM	SWEET VERNAL GRASS
0.22% CICHORIUM INTYBUS	BLUE CHICORY
9.52% HESPERIS MATRONALIS	DAME'S ROCKET
6.96% CHAMAECRISTA FASCICULATA	PARTRIDGE PEA
4.76% ACHILLEA MILLEFOLIUM	WHITE YARROW
4.76% CHRYSANTHEMUM LEUCANTHEMUM	OX EYE DAISY
0.10% ASTER PRENANTHOIDES	ZIGZAG ASTER
0.40% VERBENA HASTATA	BLUE VERVAIN
0.25% ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED
0.25% LIATRIS SPICATA	SPIKED GAYFEATHER

NOTES:
1. SEED AT A RATE OF 20 LBS./ACRE OF 100% PURE LIVE SEED.
2. FOR SPRING SEEDING, APPLY A NURSE CROP OF OATS AT A RATE OF 30 LBS./ ACRE.
3. FOR FALL SEEDING, APPLY A NURSE CROP OF WINTER RYE AT A RATE OF 30 LBS./ ACRE.

2. MEADOW SEED MIX B – NEW ENGLAND WETMIX
   (AS SUPPLIED BY NEW ENGLAND WETLAND PLANTS INC; PHONE: 413-548-8000)

FOX SEDGE (CAREX VULPINOIDEA),
LURID SEDGE (CAREX LURIDA),
BLUNT BROOM SEDGE (CAREX SCOPARIA),
BLUE VERVAIN (VERBENA HASTATA),
FOWL BLUEGRASS (POA PALUSTRIS),
HOP SEDGE (CAREX LUPULINA),
GREEN BULRUSH (SCIRPUS ATROVIRENS),
CREEPING SPIKE RUSH (ELEOCHARIS PALUSTRIS),
FRINGED SEDGE (CAREX CRINITA),
SOFT RUSH (JUNCUS EFFUSUS),
SPOTTED JOE PYE WEED (EUPATORIUM MACULATUM),
RATTLESNAKE GRASS (GLYCERIA CANADENSIS),
SWAMP ASTER (ASTER PUNICEUS),
BLUEFLAG (IRIS VERSICOLOR),
SWAMP MILKWEED (ASCLEPIAS INCARNATA),
SQUARE STEMMED MONKEY FLOWER (MIMULUS RINGENS)

NOTES:
1. SEED AT A RATE OF 18 LBS./ACRE.
2. FOR SPRING SEEDING, APPLY A NURSE CROP OF OATS AT A RATE OF 20 LBS./ACRE.
3. FOR FALL SEEDING, APPLY A NURSE CROP OF BARLEY AT A RATE OF 20 LBS./ACRE.

3. MEADOW SEED MIX C – NEW ENGLAND WILDFLOWER MIX
   (AS SUPPLIED BY NEW ENGLAND WETLAND PLANTS INC; PHONE: 413-548-8000)

LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM),
RED FESCUE (FESTUCA RUBRA),
INDIAN GRASS (SORGHASTRUM NUTANS),
PARTRIDGE PEA (CHAMAECRISTA FASCICULATA),
CANADA WILD RYE (ELYMUS CANADENSIS),
VIRGINIA WILD RYE (ELYMUS VIRGINICUS),
BLUE VERVAIN (VERBENA HASTATA),
BUTTERFLY MILKWEED (ASCLEPIAS TUBEROSA),
NARROWLEAFED BLUE EYED GRASS (SISYRINCHIUM ANGUSTIFOLIUM),
BLACK EYED SUSAN (RUDBECKIA HIRTA),
NEW ENGLAND ASTER (SYMPHYOTRICHUM NOVAE-ANGLIAE),
SPIKED GAYFEATHER/ MARSH BLAZING STAR (LIATRIS SPICATA),
STARVED/CALICO ASTER (ASTER LATERIFLORUS/SYMPHYOTRICHUM LATERIFLORUM),
EARLY GOLDENROD (SOLIDAGO JUNCEA),
HOLLOW-STEM JOE PYE WEED (EUPATORIUM FISTULOSUM/EUTROCHIUM FISTULOSUM)

NOTES:
1. SEED AT A RATE OF 23 LBS./ACRE.
2. FOR SPRING SEEDING, APPLY A NURSE CROP OF OATS AT A RATE OF 20 LBS./ACRE.
3. FOR FALL SEEDING, APPLY A NURSE CROP OF BARLEY AT A RATE OF 20 LBS./ACRE.

GENERAL SEEDING NOTES:

1. SEEDING SHALL TAKE PLACE IN THE SPRING (APRIL 1 TO JUNE 1) OR THE FALL (SEPTEMBER 1 TO OCTOBER 1).
2. ELIMINATE UNWANTED VEGETATION PRIOR TO SEEDING USING A BROAD-SPECTRUM NON-SELECTIVE HERBICIDE PER MANUFACTURER'S SPECIFICATIONS.
3. IT IS RECOMMENDED THAT CONTRACTOR INSTALL SEED MIXTURE USING A NO-TILL TRUAX-TYPE DRILL WHERE APPLICABLE.
4. CONTINUOUS MOISTURE FOR 4–6 WEEKS MUST BE INSURED TO ALLOW PROPER GERMINATION.

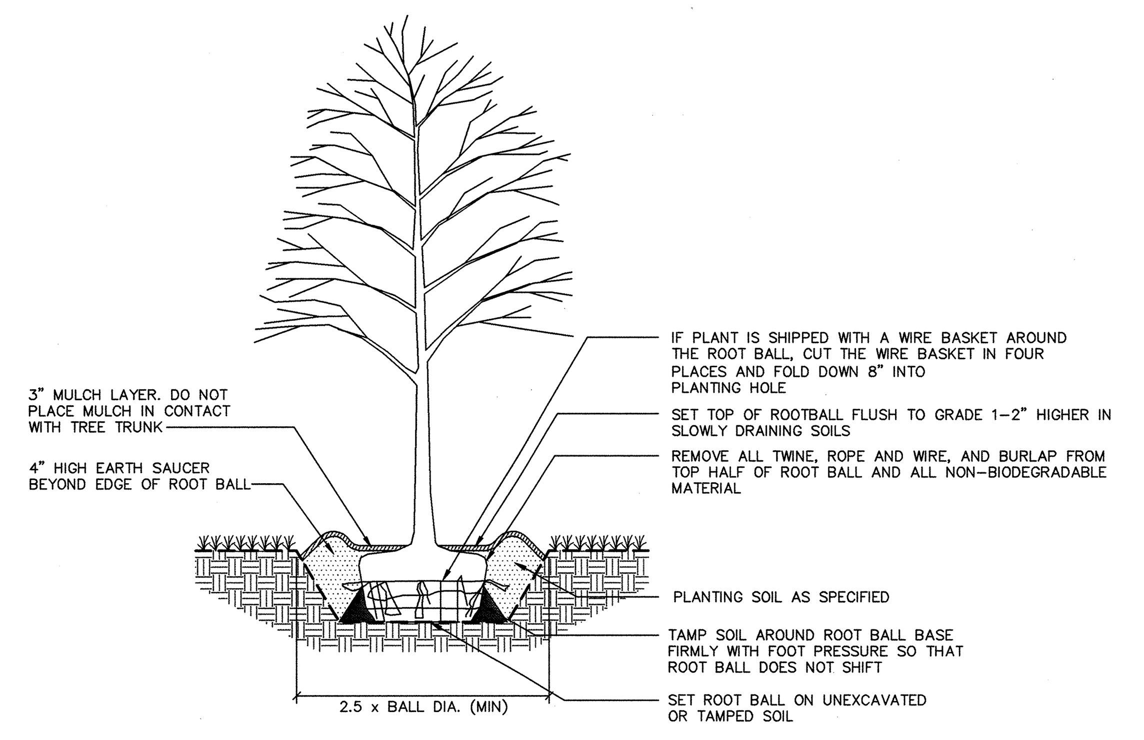
WEED CONTROL/MAINTENANCE NOTES:

1. DURING THE ESTABLISHMENT YEAR, CONTRACTOR SHALL MOW SEEDING IF WEED HEIGHT EXCEEDS MEADOW MIX HEIGHT. MOW AT A HEIGHT OF 8"-10". DO NO MOW CLOSE, AS SOME OF THE MEADOW MIX MAY BE DAMAGED.
2. AFTER THE FIRST GROWING SEASON, AND IF MEADOW MIX IS WELL ESTABLISHED, THE MEADOW MIX SHALL BE MOWED ONLY ONCE ANNUALLY. ANNUAL MAINTENANCE MOWING SHALL BE DONE IN LATE WINTER DURING THE MONTH OF MARCH.
3. MOW IN WETLAND AND WETLAND TRANSITION AREAS DURING DRIER SITE CONDITIONS WHEN SOIL DISTURBANCE WILL NOT OCCUR. MAINTENANCE FOR WETLAND AND WETLAND TRANSITION AREAS SHALL OCCUR DURING LATE SUMMER (JULY 1 TO AUGUST 15) WHEN THE WATER TABLE IS USUALLY AT ITS LOWEST POINT OF THE YEAR. DO NOT MOW IN WETLAND OR WETLAND TRANSITION AREAS ESTABLISHMENT OF MEADOW MIX.

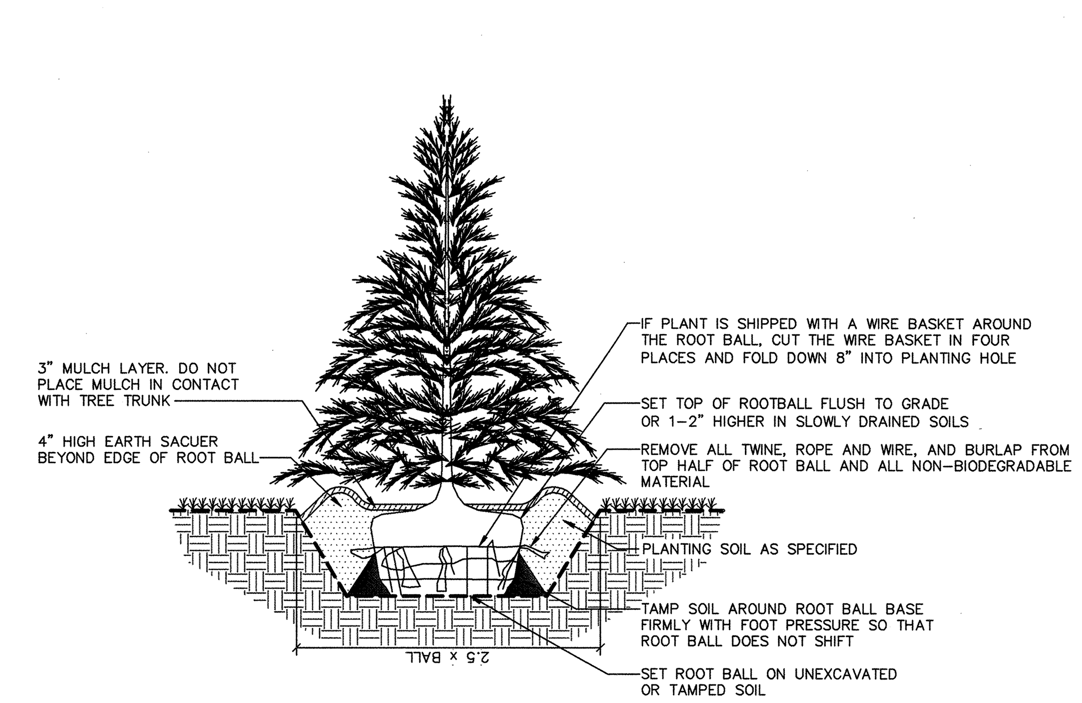
WET POND NOTES

CONSTRUCTION PROCESS:

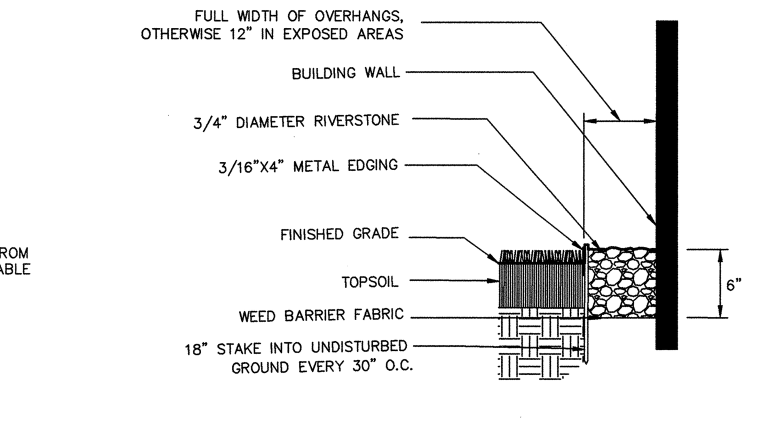
1. PREPARE FINAL PONDSCAPING AND GRADING PLANS OF THE STORMWATER WETLAND. AT THIS TIME ORDER WETLAND PLANT STOCK FROM AQUATIC NURSERIES.
2. ONCE THE STORMWATER WETLAND COLUMN HAS BEEN EXCAVATED, THE WETLAND SHOULD BE GRADED TO CREATE THE MAJOR INTERNAL FEATURES (POOL, AQUATIC BENCH, DEEP-WATER CHANNELS, ETC).
3. TOP SOIL AND/OR WETLAND MULCH IS ADDED TO THE STORMWATER WETLAND EXCAVATION. SINCE DEEP SUBSOILS OFTEN LACK THE NUTRIENTS AND ORGANIC MATTER TO SUPPORT VIGOROUS PLANT GROWTH, THE ADDITION OF MULCH OR TOPSOIL IS IMPORTANT. IF IT IS AVAILABLE, WETLAND MULCH IS PREFERABLE TO TOPSOIL. AFTER THE MULCH OR TOPSOIL HAS BEEN ADDED, THE STORMWATER WETLAND NEEDS TO BE GRADED TO ITS FINAL ELEVATIONS. ALL WETLAND FEATURES ABOVE THE NORMAL POOL SHOULD BE STABILIZED TEMPORARILY. SEE SOIL EROSION AND SEDIMENT CONTROL PLAN FOR SEED SPECIFICATION.
4. AFTER GRADING TO FINAL ELEVATIONS, THE POND DRAIN SHOULD BE CLOSED AND THE POOL ALLOWED TO FILL. USUALLY NOTHING SHOULD BE DONE TO THE STORMWATER WETLAND FOR SIX TO NINE MONTHS OR UNTIL THE NEXT PLANTING SEASON. A GOOD DESIGN RECOMMENDATION IS TO EVALUATE THE WETLAND ELEVATION DURING A STANDING PERIOD OF APPROXIMATELY SIX MONTHS. DURING THIS TIME THE STORMWATER WETLAND CAN EXPERIENCE STORM FLOWS AND INUNDATION, SO THAT IT CAN BE DETERMINED WHERE THE PONDSCAPING ZONES ARE LOCATED AND WHETHER OR NOT THE FINAL GRADE AND MICROTOPOGRAPHY WILL PERSIST OVERTIME.
5. BEFORE PLANTING THE STORMWATER WETLAND DEPTHS SHOULD BE MEASURED TO THE NEAREST INCH TO CONFIRM PLANTING DEPTH. THE PONDSCAPE PLAN MAY BE MODIFIED AT THIS TIME TO REFLECT ALTERED DEPTHS OR AVAILABILITY OF PLANT STOCK. ZONES SHOULD BE STAKED OUT AT THE APPROPRIATE LEVELS PRIOR TO PLANTING UNDER THE SUPERVISION OF LANDSCAPE ARCHITECT OR WETLAND SCIENTIST.
6. EROSION CONTROLS SHOULD BE STRICTLY APPLIED DURING THE STANDING AND PLANTING PERIODS. ALL AREAS ABOVE THE NORMAL POOL ELEVATION SHOULD BE VEGETATIVELY STABILIZED DURING THE STANDING PERIOD, USUALLY WITH HYDROSEEDING.



1 DECIDUOUS TREE PLANTING
NTS

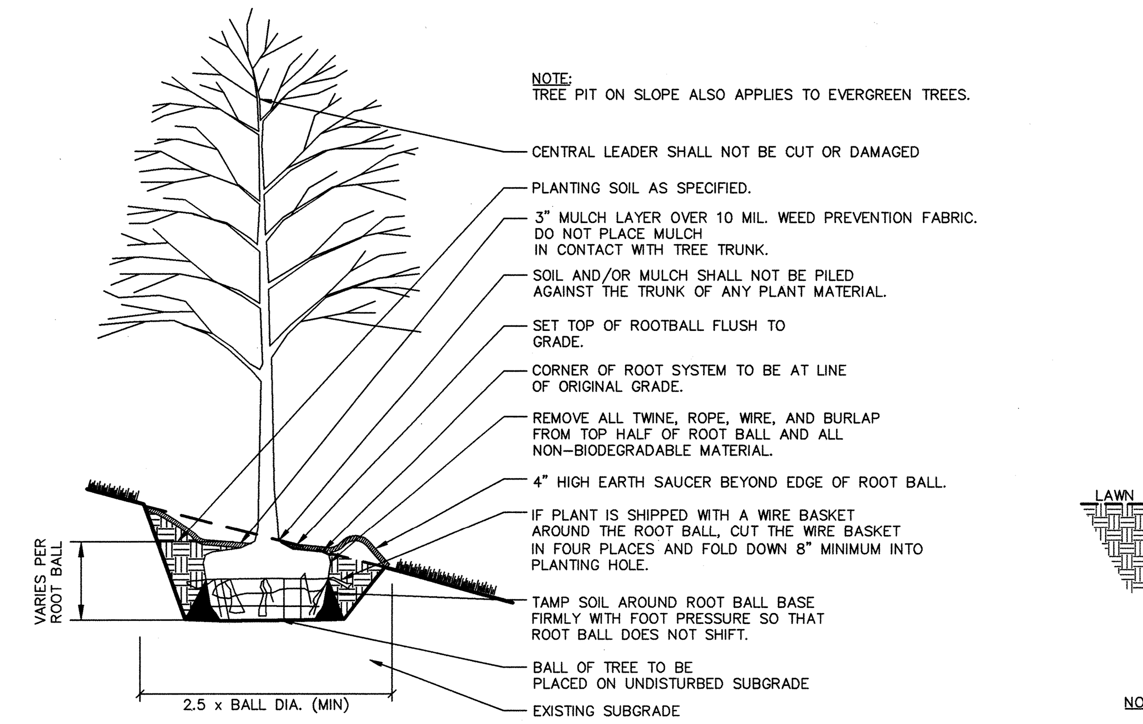


2 EVERGREEN TREE PLANTING
NTS



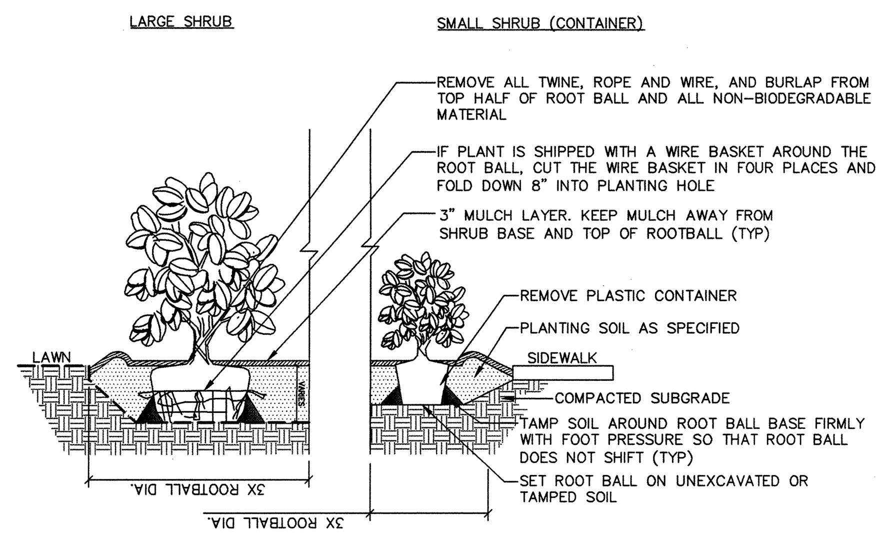
NOTES: RIVERSTONE TO BE INSTALLED WHERE PLANTINGS OR LAWN MEET BUILDING WALLS AND UNDER BUILDING OVERHANGS WHERE SHOWN ON THE LANDSCAPE PLANS.

3 12" GRAVEL STRIP DETAIL
NTS



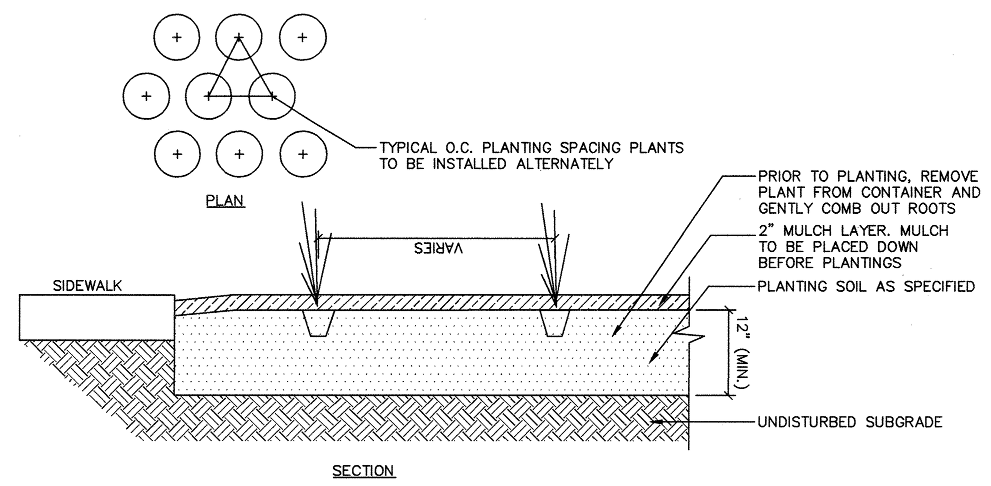
NOTE: TREE STAKING SHOULD BE CONSIDERED FOR TREES PLANTED ON SLOPES GREATER THAN 3:1 AND/OR ON WINDY SITES PER THE FOLLOWING: STAKE TREES WITH (1.5" X 1.5" X 6') CEDAR OR PRESSURE TREATED STAKES (2 PER TREE). STAKES SHALL BE PLACED ON EITHER SIDE OF THE TREE PERPENDICULAR TO THE SLOPE AND ARE TO BE DRIVEN OUTSIDE OF THE ROOT BALL. SECURE STAKES TO TREE USING 2 ARBORTIES BY LOOPING TIES AROUND TREE AND NAILING TO CEDAR STAKES. FOLLOW MANUFACTURER'S RECOMMENDATIONS. ARBORTIES, OR APPROVED EQUAL, AT GEMPLERS 1-800-332-6744 OR GEMPLERS.COM. ALL STAKING MATERIALS SHALL BE REMOVED FOLLOWING THE PLANT GUARANTEE PERIOD.

4 TREE ON SLOPE
NTS



NOTES:
1. ALL SHRUBS TO BE SET PLUMB.
2. REFER TO LANDSCAPE PLAN FOR SPACING OF INDIVIDUAL PLANTS.
3. REMOVE ALL WIRE, PLASTIC, TAGS OR SYNTHETIC MATERIAL FROM PLANTS PRIOR TO PLANTING.

5 SHRUB PLANTING
NTS



NOTES:
1. PLANTS ARE TO BE SPACED EQUIDISTANT FROM EACH OTHER.
2. REFER TO PLAN AND SCHEDULE FOR SPACING OF INDIVIDUAL PLANTS.
3. REMOVE ALL WIRE, PLASTIC, TAGS OR SYNTHETIC MATERIAL FROM PLANTS PRIOR TO PLANTING.

6 GRASSES AND GROUNDCOVER PLANTING
NTS

WET POND NOTES

7. THE STORMWATER WETLAND SHOULD BE DE-WATERED AT LEAST THREE DAYS BEFORE PLANTING, AS A DRY WETLAND IS EASIER TO PLANT THAN A WET ONE.
8. DURING THE INITIAL PLANTING PRECAUTIONS SHOULD BE UNDERTAKEN TO PREVENT AND PROHIBIT ANIMALS FROM GRAZING UNTIL PLANT COMMUNITIES ARE WELL ESTABILISHED. SUCH PRECAUTIONS COULD BE DEER FENCING, MUSKRAT TRAPPING, PLANTING AFTER SEASONAL BIRD MIGRATIONS OR ATTRACTING BIRDS OF PREY AND BATS TO CONTROL NUTRIA POPULATIONS.

OPERATIONS AND MAINTENANCE NOTES:

1. CONSTRUCTED STORMWATER WETLANDS REQUIRE CONSIDERABLE ROUTINE MAINTENANCE, BUT DO NOT REQUIRE LARGE, INFREQUENT SEDIMENT REMOVAL UNLIKE CONVENTIAL POND SYSTEMS THAT REQUIRE RELATIVELY MINOR ROUTINE MAINTENANCE AND EXPENSIVE SEDIMENT REMOVAL AT INFREQUENT INTERVALS.
2. CAREFUL OBSERVATION OF THE SYSTEM OVER TIME IS REQUIRED IN THE FIRST THREE YEARS AFTER CONSTRUCTION. WITHIN THE FIRST GROWING SEASON OR UNTIL IT IS DETERMINED THAT THE SYSTEM IS ESTABLISHED, FREQUENT INSPECTIONS WILL BE REQUIRED, POSSIBLY BIWEEKLY OR MONTHLY BASIS. FOLLOWING THIS, TWICE A YEAR INSPECTIONS ARE NEEDED DURING BOTH THE GROWING AND NON-GROWING SEASON. DATA GATHERED DURING THESE INSPECTIONS SHOULD BE RECORDED, MAPPED AND ASSESSED. THE FOLLOWING OBSERVATIONS SHOULD BE MADE DURING THE INSPECTIONS:
   a. TYPES AND DISTRIBUTION OF DOMINANT WETLAND PLANTS IN THE MARSH.
   b. THE PRESENCE AND DISTIRBUTION OF PLANTED WETLAND SPECIES; THE PRESENCE AND DISTRIBUTION OF VOLUNTEER WETLAND SPECIES; SIGNS THAT VOLUNTEER SPECIES ARE REPLACING THE PLANTED WETLAND SPECIES.
   c. PERCENTAGE OF UNVEGETATED STANDING WATER (EXCLUDING THE DEEP WATER CELLS WHICH ARE NOT SUITABLE FOR EMERGENT PLANT GROWTH).
   d. THE MAXIMUM ELEVATION AND THE VEGETATIVE CONDITION IN THIS ZONE, IF THE DESIGN ELEVATION OF THE NORMAL POOL IS BEING MAINTAINED FOR WETLANDS WITH EXTENDED ZONES.
   e. STABILITY OF THE ORIGINAL DEPTH ZONES AND THE MOCROTOPOGRAPHIC FEATURES.
   f. ACCUMULATION OF SEDIMENT IN THE FOREBAY AND MICROPOOL.
   g. SURVIVAL RATE OF PLANTS IN THE WETLAND BUFFER.
   h. SHALLOW MARSH AND EXTENDED DETENTION WETLAND DESIGNS INCLUDE FOREBAYS TO TRAP SEDIMENT BEFORE REACHING THE WETLAND. THEREFORE BAYS SHOULD BE CLEANED OUT EVERY YEAR.
   i. CLEAN OUTS AND DISCHARGE LOCATIONS SHOULD BE INSPECTED MORE FREQUENTLY. INSPECTIONS FOR THEM COULD COINCIDE WITH ABOVE NORMAL OR EXTENDED PERIOD RAINFALL, RATHER THAN JUST INCREASING THE INSPECTION INTERVALS. THUS, IF THERE ARE PERIODS OF DROUGHT OR SMALL INFREQUENT EVENTS IT WOULD NOT BE NECESSARY FOR AN INSPECTION.
3. THE OWNER OF THE PROPERTY SHALL BE THE RESPONSIBLE AGENT FOR THE STORMWATER MANAGEMENT FACILITIES ON SAID PROPERTY.

PLANT LIST: WET EXTENDED DETENTION POND (#1)

ZONE 1: 6'-1' PERMANENT WATER – EXCLUDES DEEP POOL AREA

8,035 SF

QTY.	BOTANICAL NAME	COMMON NAME	ROOT	SPACING
893	NYMPHAEA ODORATA	WATER LILY	TUBERS	18" O.C.
2,008	SAGGITARIA LATIFOLIA	DEEP WATER DUCK POTATO	2" PLUG	12" O.C.
893	POTAMOGETON PECTINATUS	SAGO POND PLANT	TUBERS	18" O.C.
892	VALLISNERIA AMERICANA	WILD CELERY	TUBERS	18" O.C.
TOTAL 4,686				

ZONE 2: 12"-6" WATER

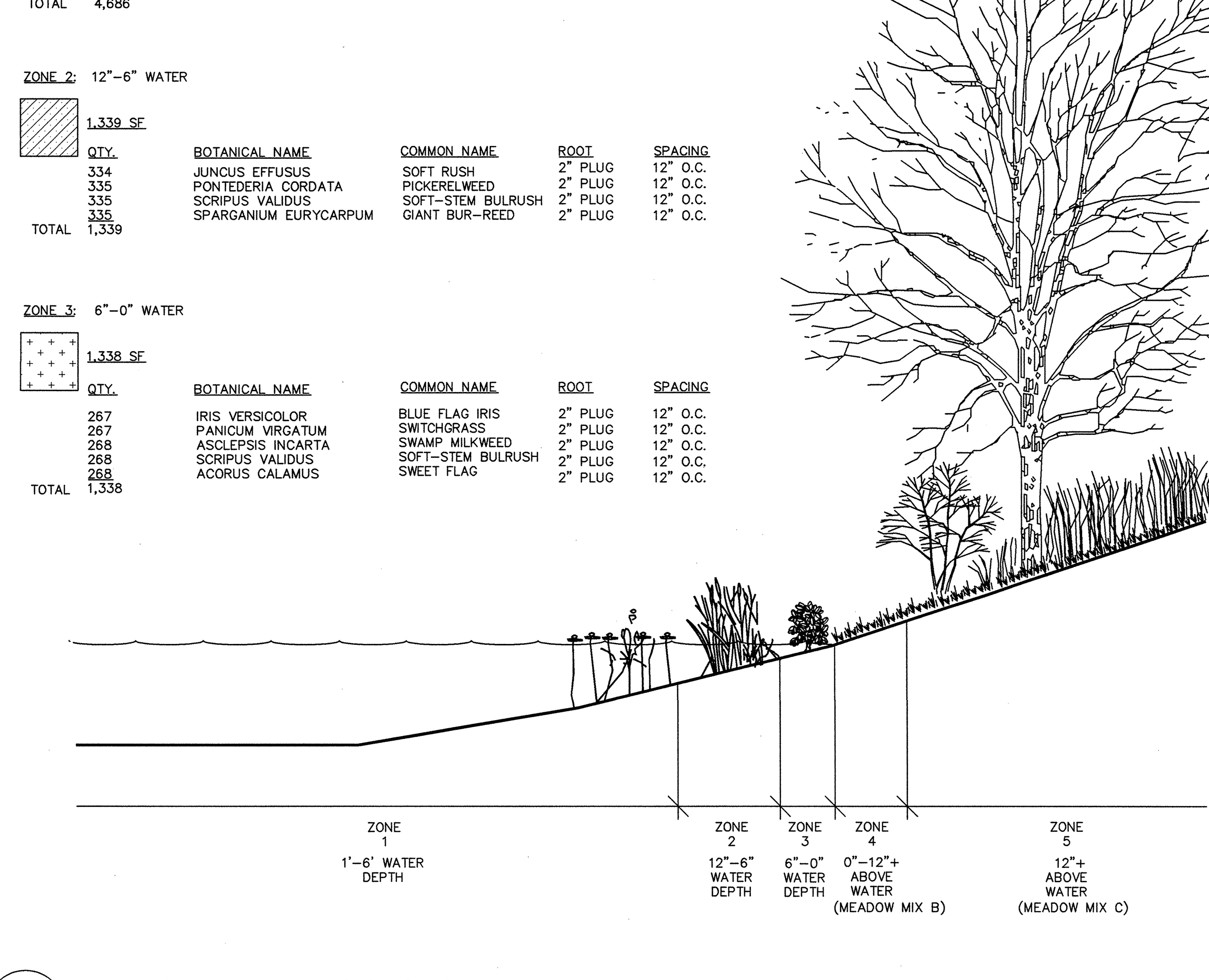
1,339 SF

QTY.	BOTANICAL NAME	COMMON NAME	ROOT	SPACING
334	JUNCUS EFFUSUS	SOFT RUSH	2" PLUG	12" O.C.
335	PONTEDERIA CORDATA	PICKERELWEED	2" PLUG	12" O.C.
335	SCRIPUS VALIDUS	SOFT-STEM BULRUSH	2" PLUG	12" O.C.
335	SPARGANIUM EURYCARPUM	GIANT BUR-REED	2" PLUG	12" O.C.
TOTAL 1,339				

ZONE 3: 6"-0" WATER

1,338 SF

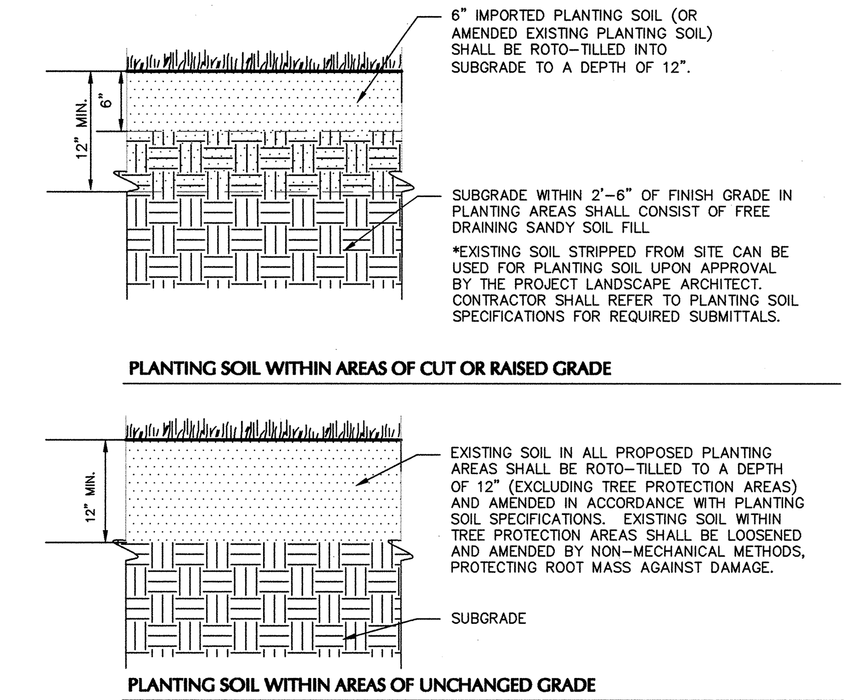
QTY.	BOTANICAL NAME	COMMON NAME	ROOT	SPACING
267	IRIS VERSICOLOR	BLUE FLAG IRIS	2" PLUG	12" O.C.
267	PANICUM VIRGATUM	SWITCHGRASS	2" PLUG	12" O.C.
268	ASCLEPSIS INCARTA	SWAMP MILKWEED	2" PLUG	12" O.C.
268	SCRIPUS VALIDUS	SOFT-STEM BULRUSH	2" PLUG	12" O.C.
268	ACORUS CALAMUS	SWEET FLAG	2" PLUG	12" O.C.
TOTAL 1,338				



7 WET POND PLANTING SECTION
NTS

GENERAL NOTE:

DUE TO GENERAL CONSTRUCTION ACTIVITIES AND ADJACENT SITE COMPACTION REQUIREMENTS, SUBGRADE SOILS WITHIN PROPOSED PLANTING AREAS TEND TO BECOME HIGHLY COMPACTED. IN ORDER TO CREATE A HEALTHY GROWTH MEDIUM TO ALLOW PROPOSED PLANTINGS TO ESTABLISH A VIGOROUS ROOT MASS, THIS SUBGRADE SOIL MUST UNDERGO A RESTORATION PROCESS. IN ADDITION, IMPORTED OR AMENDED EXISTING SOILS SHALL BE MIXED WITH SUBGRADE SOILS WHERE THEY MEET IN ORDER TO CREATE A TRANSITIONAL GRADIENT TO ALLOW FOR PROPER DRAINAGE.



NOTES:
1. CONTRACTOR IS RESPONSIBLE TO SEND SAMPLES OF EXISTING SOILS INTENDED FOR USE IN PLANTING AREAS (1 PER 500 CY.) TO TESTING LABORATORY OR UNIVERSITY COOPERATIVE EXTENSION FOR TESTING. ALL TESTING COSTS ARE AT THE CONTRACTOR'S EXPENSE.
2. RECYCLED CRUSHED CONCRETE AND ASPHALT MILLINGS SHALL NOT BE PLACED WITHIN 2'-6" OF FINISH GRADE IN PROPOSED LANDSCAPE AREAS.
3. IMPORTED FILL SHALL CONTAIN NO CONTAMINATION IN EXCEEDENCE OF THE APPLICABLE STATE ENVIRONMENTAL STANDARDS AND MEET THE ENVIRONMENTAL REQUIREMENTS FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF COMPLIANCE PRIOR TO DELIVERY OF ANY FILL TO THE SITE.
4. CONTRACTOR TO LIGHTLY COMPACT ALL PLACED PLANTING SOILS AND RAISE GRADES ACCORDINGLY TO ALLOW FOR FUTURE SETTLEMENT OF PLANTING SOILS (TYP.)
5. NO STONES, WOOD CHIPS, OR DEBRIS LARGER THAN 1/2" SHALL BE ACCEPTABLE WITHIN PLANTING AREAS.

8 PLANTING SOIL
NTS

Date	Description	No.
REVISIONS		

SIGNATURE MICHAEL SZURA RLA
REGISTERED LANDSCAPE ARCHITECT
NY Lic. No. LA 001901-1
OCT 0 2 2019
DATE SIGNED

LANGAN
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NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
LANDSCAPE NOTES AND DETAILS

Project No. 100796101
Date 10/02/2019
Drawn By YZ
Checked By DB
Drawing No. LP501

LANGAN PROJECT NO. 100796101

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Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01\SheetFiles\Site Plan Approval\100796101-LP501-0101.dwg Date: 10/2/2019 Time: 18:06 User: ahartingsmith Style Table: Langan.stb Layout: LP501

SITE LIGHTING SCHEDULE - POLE MOUNTED

SYMBOL	KEY	QTY.	FIXTURE MANUFACTURER	FIXTURE MODEL	FIXTURE DESCRIPTION	FIXTURE MOUNTING HEIGHT	LAMP	OPTICS	LUMENS	LLF	IES FILE	FIXTURE CATALOGUE NO.	POLE MANUFACTURER	POLE DESCRIPTION	POLE LENGTH	POLE CATALOGUE NO.
	A	5	ETON LIGHTING	GALLEON LED	POLE MOUNTED SINGLE AREA LIGHT FIXTURE; COLOR – BLACK	40'–0"	LED	TYPE SLR	5,604	0.90	GLEON–AF–01–LED–E1–SLR.IES	GLEON–AF–01–LED–VOLTS–SLR–BK	ETON LIGHTING	ROUND TAPERED STEEL; COLOR – BLACK	37'–0"	RTS–9–A–39–S–Y–N–1–G–V (FACTORY CUT)
	B	3	ETON LIGHTING	GALLEON LED	POLE MOUNTED SINGLE AREA LIGHT FIXTURE; COLOR – BLACK	40'–0"	LED	TYPE SLL	5,604	0.90	GLEON–AF–01–LED–E1–SLL.IES	GLEON–AF–01–LED–VOLTS–SLL–BK	ETON LIGHTING	ROUND TAPERED STEEL; COLOR – BLACK	37'–0"	RTS–9–A–39–S–Y–N–1–G–V (FACTORY CUT)
	C	7	ETON LIGHTING	GALLEON LED	POLE MOUNTED SINGLE AREA LIGHT FIXTURE; COLOR – BLACK	40'–0"	LED	TYPE SL2 WITH HOUSE SIDE SHIELD	10,087	0.90	GLEON–AF–02–LED–E1–SL2–HSS.IES	GLEON–AF–02–LED–VOLTS–SL2–BK–HSS	ETON LIGHTING	ROUND TAPERED STEEL; COLOR – BLACK	37'–0"	RTS–9–A–39–S–Y–N–1–G–V (FACTORY CUT)
	D	9	ETON LIGHTING	GALLEON LED	POLE MOUNTED SINGLE AREA LIGHT FIXTURE; COLOR – BLACK	40'–0"	LED	TYPE T3R	18,580	0.90	GLEON–AF–03–LED–E1–T3R.IES	GLEON–AF–03–LED–VOLTS–T3R–BK	ETON LIGHTING	ROUND TAPERED STEEL; COLOR – BLACK	37'–0"	RTS–9–A–39–S–Y–N–1–G–V (FACTORY CUT)
	E	4	ETON LIGHTING	GALLEON LED	POLE MOUNTED SINGLE AREA LIGHT FIXTURE; COLOR – BLACK	40'–0"	LED	TYPE T4FT	24,710	0.90	GLEON–AF–04–LED–E1–T4FT.IES	GLEON–AF–04–LED–VOLTS–T4FT–BK	ETON LIGHTING	ROUND TAPERED STEEL; COLOR – BLACK	37'–0"	RTS–9–A–39–S–Y–N–1–G–V (FACTORY CUT)
	F	6	ETON LIGHTING	GALLEON LED	POLE MOUNTED SINGLE AREA LIGHT FIXTURE; COLOR – BLACK	40'–0"	LED	TYPE SL3	24,564	0.90	GLEON–AF–04–LED–E1–SL3.IES	GLEON–AF–04–LED–VOLTS–SL3–BK	ETON LIGHTING	ROUND TAPERED STEEL; COLOR – BLACK	37'–0"	RTS–9–A–39–S–Y–N–1–G–V (FACTORY CUT)
	G	2	ETON LIGHTING	GALLEON LED	POLE MOUNTED SINGLE AREA LIGHT FIXTURE; COLOR – BLACK	40'–0"	LED	TYPE T2R	25,015	0.90	GLEON–AF–04–LED–E1–T2R.IES	GLEON–AF–04–LED–VOLTS–T2R–BK	ETON LIGHTING	ROUND TAPERED STEEL; COLOR – BLACK	37'–0"	RTS–9–A–39–S–Y–N–1–G–V (FACTORY CUT)
	H	2	ETON LIGHTING	GALLEON LED	POLE MOUNTED SINGLE AREA LIGHT FIXTURE; COLOR – BLACK	40'–0"	LED	TYPE T2	29,865	0.90	GLEON–AF–05–LED–E1–T2.IES	GLEON–AF–05–LED–VOLTS–T2–BK	ETON LIGHTING	ROUND TAPERED STEEL; COLOR – BLACK	37'–0"	RTS–9–A–39–S–Y–N–1–G–V (FACTORY CUT)
	I	5	ETON LIGHTING	GALLEON LED	POLE MOUNTED SINGLE AREA LIGHT FIXTURE; COLOR – BLACK	40'–0"	LED	TYPE T4W	29,543	0.90	GLEON–AF–05–LED–E1–T4W.IES	GLEON–AF–05–LED–VOLTS–T4W–BK	ETON LIGHTING	ROUND TAPERED STEEL; COLOR – BLACK	37'–0"	RTS–9–A–39–S–Y–N–1–G–V (FACTORY CUT)
	J	12	ETON LIGHTING	GALLEON LED	POLE MOUNTED SINGLE AREA LIGHT FIXTURE; COLOR – BLACK	40'–0"	LED	TYPE T4FT	29,929	0.90	GLEON–AF–05–LED–E1–T4FT.IES	GLEON–AF–05–LED–VOLTS–T4FT–BK	ETON LIGHTING	ROUND TAPERED STEEL; COLOR – BLACK	37'–0"	RTS–9–A–39–S–Y–N–1–G–V (FACTORY CUT)
	K	2	ETON LIGHTING	GALLEON LED	POLE MOUNTED SINGLE AREA LIGHT FIXTURE; COLOR – BLACK	40'–0"	LED	TYPE 5WQ	37,499	0.90	GLEON–AF–06–LED–E1–5WQ.IES	GLEON–AF–06–LED–VOLTS–5WQ–BK	ETON LIGHTING	ROUND TAPERED STEEL; COLOR – BLACK	37'–0"	RTS–9–A–39–S–Y–N–1–G–V (FACTORY CUT)
	L	2	ETON LIGHTING	GALLEON LED	POLE MOUNTED SINGLE AREA LIGHT FIXTURE; COLOR – BLACK	40'–0"	LED	TYPE 5MQ	61,893	0.90	GLEON–AF–10–LED–E1–5MQ.IES	GLEON–AF–10–LED–VOLTS–5MQ–BK	ETON LIGHTING	ROUND TAPERED STEEL; COLOR – BLACK	37'–0"	RTS–9–A–39–S–Y–N–1–G–V (FACTORY CUT)
	M	25	ETON LIGHTING	GALLEON LED	POLE MOUNTED TWIN AREA LIGHT FIXTURE; COLOR – BLACK	40'–0"	LED	TYPE 5WQ	50,248	0.90	GLEON–AF–08–LED–E1–5WQ.IES	GLEON–AF–08–LED–VOLTS–5WQ–BK	ETON LIGHTING	ROUND TAPERED STEEL; COLOR – BLACK	37'–0"	RTS–9–A–39–S–Y–N–2–G–V (FACTORY CUT)
(1) (2)	N	2	ETON LIGHTING	GALLEON LED	POLE MOUNTED TWIN AREA LIGHT FIXTURE; COLOR – BLACK	40'–0"	LED	TYPE SLR WITH OPTICS ROTATED TO FACE THE CURB	52,965	0.90	GLEON–AF–10–LED–E1–SLR.IES	GLEON–AF–10–LED–VOLTS–SLR–BK (1) R90, (2) L90	ETON LIGHTING	ROUND TAPERED STEEL; COLOR – BLACK	37'–0"	RTS–9–A–39–S–Y–N–2–G–V (FACTORY CUT)
(1) (2)	O	2	ETON LIGHTING	GALLEON LED	POLE MOUNTED TWIN AREA LIGHT FIXTURE; COLOR – BLACK	40'–0"	LED	TYPE SLL WITH OPTICS ROTATED TO FACE THE CURB	59,271	0.90	GLEON–AF–10–LED–E1–SLL.IES	GLEON–AF–10–LED–VOLTS–SLL–BK (1) R90, (2) L90	ETON LIGHTING	ROUND TAPERED STEEL; COLOR – BLACK	37'–0"	RTS–9–A–39–S–Y–N–2–G–V (FACTORY CUT)

NOTES:
1. REFER TO ELECTRICAL DRAWINGS FOR SITE LIGHTING VOLTAGES.
2. CONTRACTOR TO CONFIRM CONTROLS SYSTEM REQUIRED BY THE OWNER AND PER CODE. BID PRICING SHALL INCLUDE CONTROLS SYSTEM
3. ALL POLES, EXCEPT FOR FIXTURE TYPE V, SHALL RECEIVE FACTORY INSTALLED VIBRATION DAMPENERS.

SITE LIGHTING SCHEDULE - WALL MOUNTED

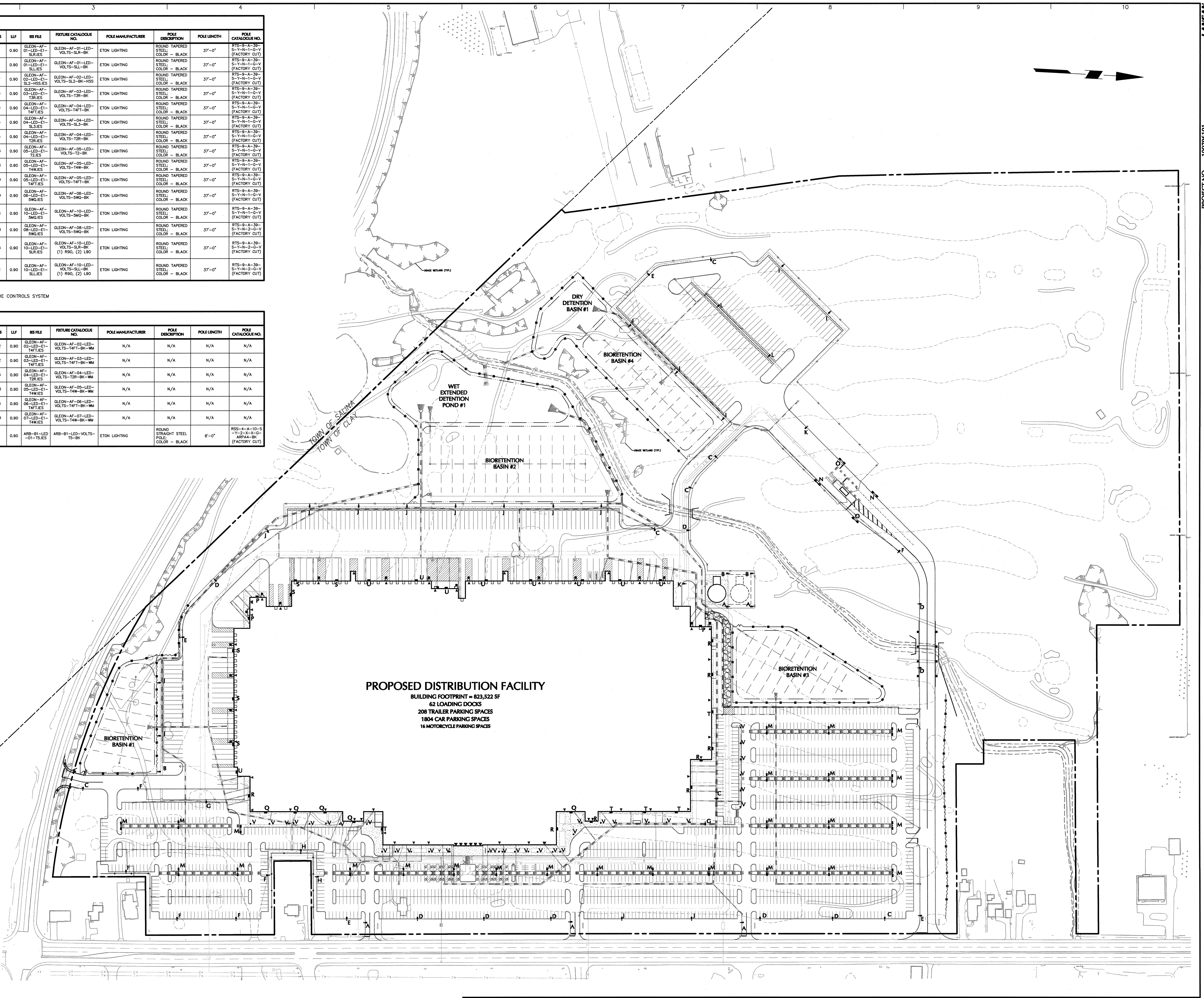
SYMBOL	KEY	QTY.	FIXTURE MANUFACTURER	FIXTURE MODEL	FIXTURE DESCRIPTION	FIXTURE MOUNTING HEIGHT	LAMP	OPTICS	LUMENS	LLF	IES FILE	FIXTURE CATALOGUE NO.	POLE MANUFACTURER	POLE DESCRIPTION	POLE LENGTH	POLE CATALOGUE NO.
	P	5	ETON LIGHTING	GALLEON LED	WALL MOUNTED AREA LIGHT FIXTURE; COLOR – BLACK	25'–0" ABOVE FFE	LED	TYPE T4FT	12,252	0.90	GLEON–AF–02–LED–E1–T4FT.IES	GLEON–AF–02–LED–VOLTS–T4FT–BK–WM	N/A	N/A	N/A	N/A
	Q	5	ETON LIGHTING	GALLEON LED	WALL MOUNTED AREA LIGHT FIXTURE; COLOR – BLACK	25'–0" ABOVE FFE	LED	TYPE T4FT	18,282	0.90	GLEON–AF–03–LED–E1–T4FT.IES	GLEON–AF–03–LED–VOLTS–T4FT–BK–WM	N/A	N/A	N/A	N/A
	R	8	ETON LIGHTING	GALLEON LED	WALL MOUNTED AREA LIGHT FIXTURE; COLOR – BLACK	25'–0" ABOVE FFE	LED	TYPE T2R	25,015	0.90	GLEON–AF–04–LED–E1–T2R.IES	GLEON–AF–04–LED–VOLTS–T2R–BK–WM	N/A	N/A	N/A	N/A
	S	6	ETON LIGHTING	GALLEON LED	WALL MOUNTED AREA LIGHT FIXTURE; COLOR – BLACK	25'–0" ABOVE FFE	LED	TYPE T4W	29,543	0.90	GLEON–AF–05–LED–E1–T4W.IES	GLEON–AF–05–LED–VOLTS–T4W–BK–WM	N/A	N/A	N/A	N/A
	T	5	ETON LIGHTING	GALLEON LED	WALL MOUNTED AREA LIGHT FIXTURE; COLOR – BLACK	25'–0" ABOVE FFE	LED	TYPE T4FT	35,815	0.90	GLEON–AF–06–LED–E1–T4FT.IES	GLEON–AF–06–LED–VOLTS–T4FT–BK–WM	N/A	N/A	N/A	N/A
	U	8	ETON LIGHTING	GALLEON LED	WALL MOUNTED AREA LIGHT FIXTURE; COLOR – BLACK	25'–0" ABOVE FFE	LED	TYPE T4W	42,769	0.90	GLEON–AF–07–LED–E1–T4W.IES	GLEON–AF–07–LED–VOLTS–T4W–BK–WM	N/A	N/A	N/A	N/A
	V	34	ETON LIGHTING	INVUE – ARBOR POST TOP	ARCHITECTURAL STYLE POLE MOUNTED SINGLE PEDESTRIAN LIGHT FIXTURE; COLOR – BLACK	10'–0"	LED	TYPE 5	2,311	0.90	ARB–B1–LED–D1–T5.IES	ARB–B1–LED–VOLTS–T5–BK	ETON LIGHTING	ROUND STRAIGHT STEEL POLE; COLOR – BLACK	8'–0"	RSS–4–A–10–S–Y–2–X–X–G–ARPA4–BK (FACTORY CUT)

NOTE:
1. REFER TO ELECTRICAL DRAWINGS FOR SITE LIGHTING VOLTAGES.

STATISTICS

DESCRIPTION	AVG.	MAX.	MIN.	MAX./MIN.	AVG./MIN.
BUILDING PERIMETER	4.0fc	8.8fc	1.0fc	8.8:1	4.0:1
CAR PARKING LOTS	3.4fc	5.8fc	1.5fc	3.9:1	2.3:1
DRIVE	1.6fc	2.7fc	0.5fc	5.4:1	3.3:1
ENTRY DRIVES	1.7fc	8.5fc	0.6fc	14.2:1	2.8:1
GUARD SHACKS	17.1fc	24.1fc	10.1fc	2.4:1	1.7:1
PEDESTRIAN AREA	4.2fc	10.1fc	3.0fc	3.4:1	1.4:1
LOADING DOCKS	3.3fc	6.6fc	1.7fc	3.9:1	1.9:1
PERIMETER FENCE	1.7fc	19.6fc	0.4fc	49.0:1	4.3:1
OPEN TRUCK YARD 1	1.3fc	5.4fc	0.7fc	7.7:1	1.9:1
OPEN TRUCK YARD 2	1.5fc	12.3fc	0.9fc	13.7:1	1.7:1
OPEN TRUCK YARD 3	1.0fc	3.9fc	0.6fc	6.5:1	1.7:1
TRAILER STORAGE	1.5fc	3.1fc	1.0fc	3.1:1	1.5:1

NOTES:
1. LIGHT PHOTOMETRY AND CALCULATIONS FOR EXISTING AND ADJACENT LIGHTING TO REMAIN ARE NOT INCLUDED IN THE ABOVE STATISTICS.



100 0 50 100
SCALE IN FEET

WARNING:
IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

Date	Description	No.
	REVISIONS	

SIGNATURE MICHAEL SZURLA — OCT 0 2 2019 DATE SIGNED
REGISTERED LANDSCAPE ARCHITECT
NY Lic. No. LA 001901-1

LANGAN
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
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Parsippany, NJ 07054
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NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

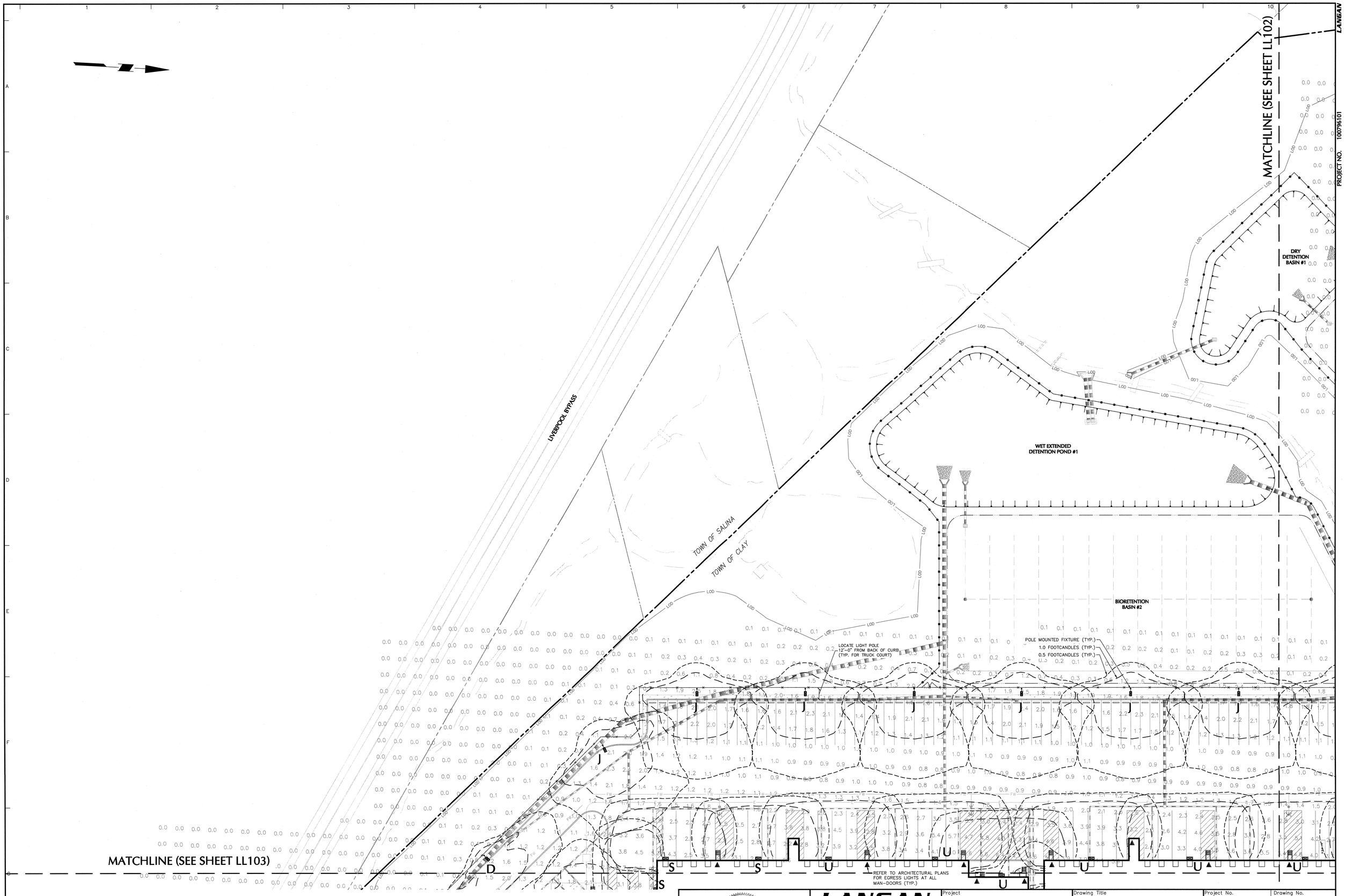
Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
OVERALL LIGHTING PLAN

Project No.	Drawing No.
100796101	LL100
Date: 10/02/2019	
Drawn By: GR	
Checked By: DB	

LANGAN PROJECT NO. 100796101

Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01\SheetFiles\Site Plan Approval\100796101-LL100-0101.dwg Date: 10/2/2019 Time: 18:45 User: ahartingsmith Style Table: Langan.stb Layout: LL100
© 2019 Langan



NOTE: REFER TO LL100 FOR SITE LIGHTING SCHEDULES AND STATISTICS, LL501 FOR LIGHTING NOTES AND DETAILS.

40 0 10 25 40
SCALE: 1 INCH = 40 FEET

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Date	Description	No.
	REVISIONS	

REGISTERED LANDSCAPE ARCHITECT MICHAEL SZUPLEWSKI OCT 0 2 2019 NY LIC. NO. LA 001901-1
SIGNATURE MICHAEL SZUPLEWSKI, RLA DATE SIGNED
REGISTERED LANDSCAPE ARCHITECT
NY Lic. No. LA 001901-1

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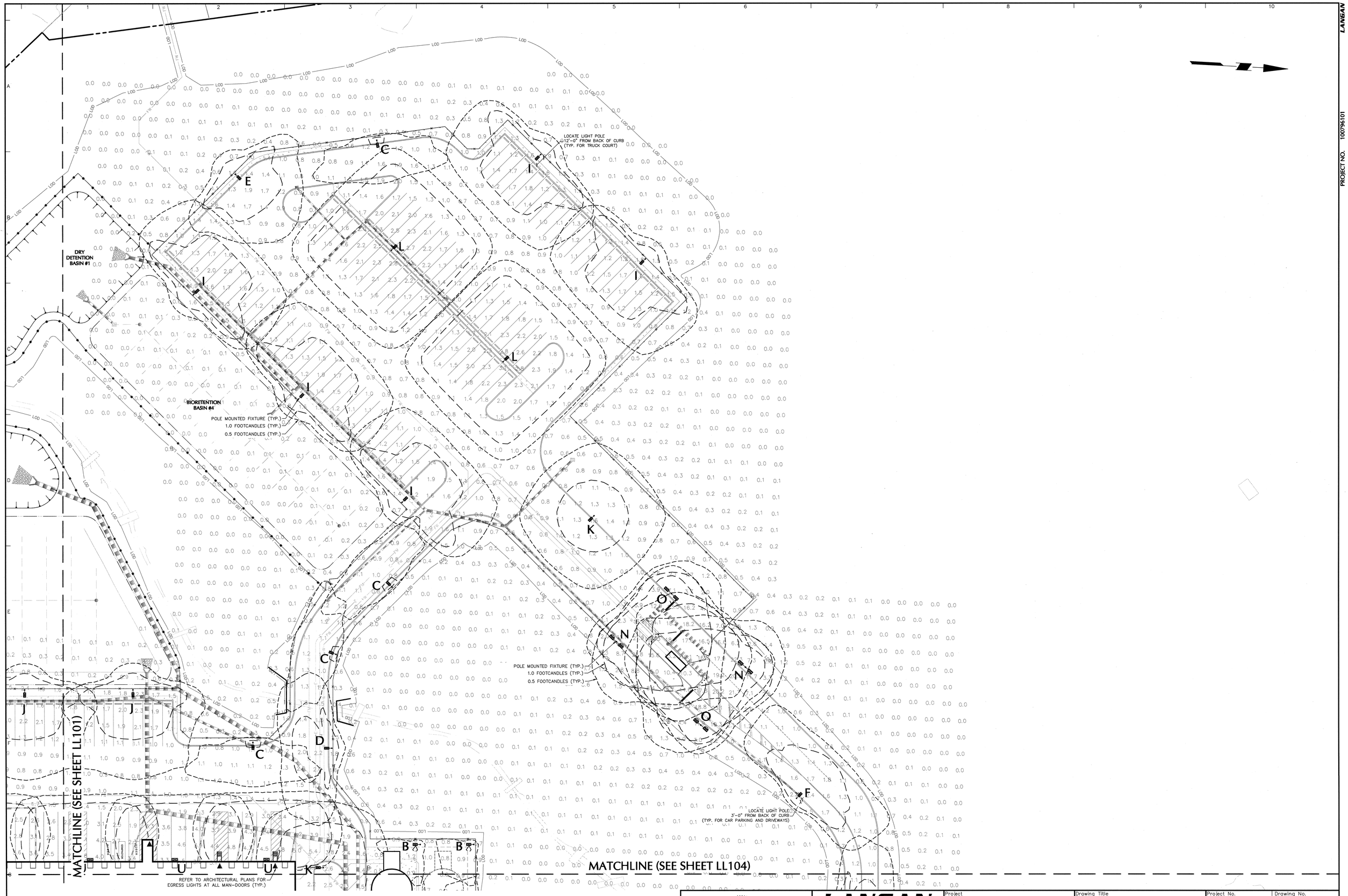
Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
LIGHTING PLAN (1 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By GR
Checked By DB
Drawing No. LL101

Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01\SheetFiles\Site Plan Approval\100796101-LL101-0101.dwg Date: 10/2/2019 Time: 18:08 User: ahartingsmith Style Table: Langan.stb Layout: LL101



NOTE: REFER TO LL100 FOR SITE LIGHTING SCHEDULES AND STATISTICS, LL501 FOR LIGHTING NOTES AND DETAILS.

SCALE: 1 INCH = 40 FEET

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Date	Description	No.
	REVISIONS	

SIGNATURE MICHAEL E. MARK RLA DATE SIGNED OCT 0 2 2019
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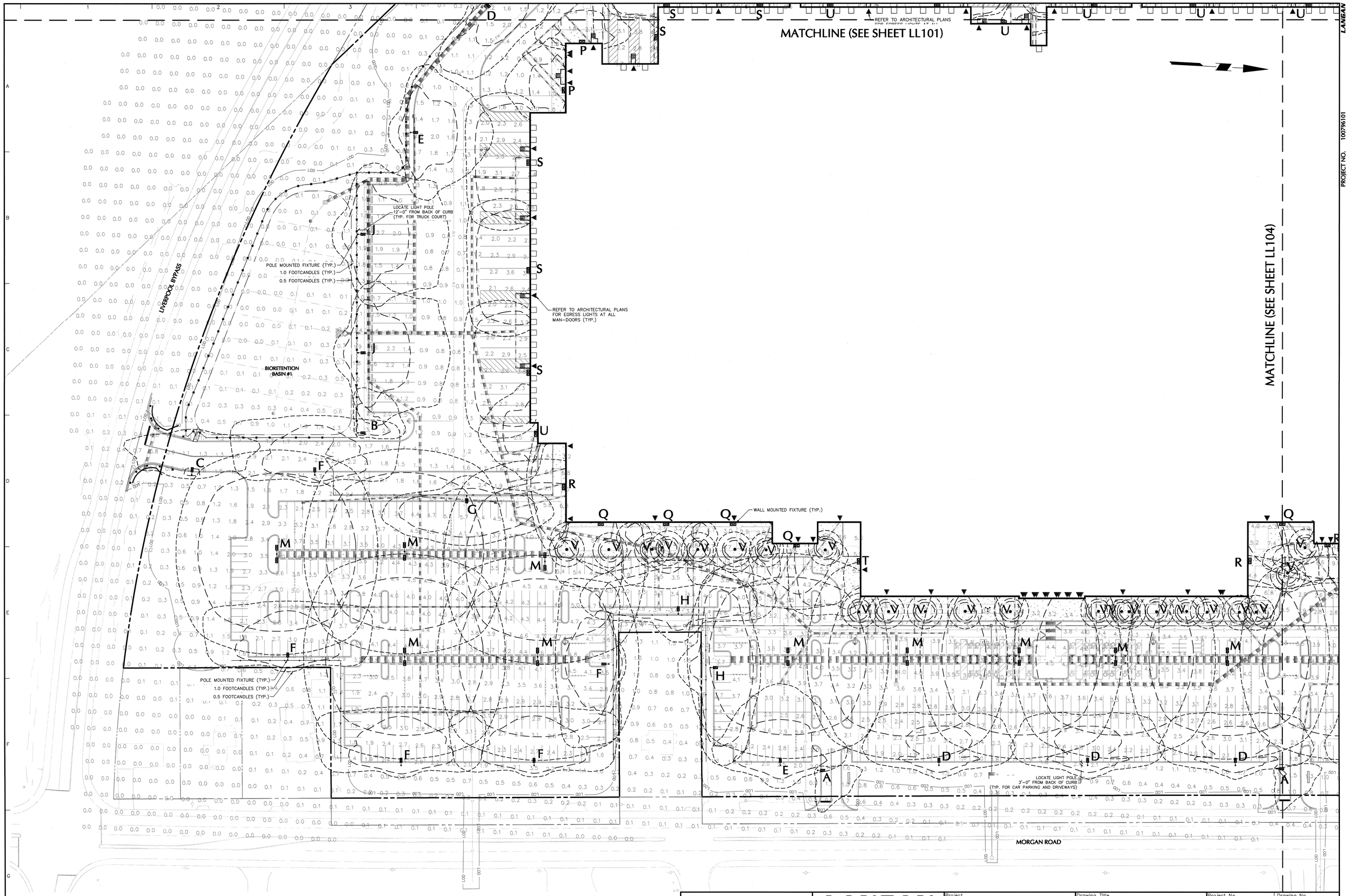
Project: PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114, BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title: LIGHTING PLAN (2 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By GR
Checked By DB
Drawing No. LL102

Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01SheetFiles\Site Plan Approval\100796101-LL101-0101.dwg Date: 10/2/2019 Time: 18:08 User: ahartingsmith Style Table: Langan.stb Layout: LL102

PROJECT NO. 100796101
LANGAN



NOTE: REFER TO LL100 FOR SITE LIGHTING SCHEDULES AND STATISTICS, LL501 FOR LIGHTING NOTES AND DETAILS.

40 0 10 25 40
SCALE: 1 INCH = 40 FEET

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Date	Description	No.
REVISIONS		

SIGNATURE MICHAEL A. HARTINGSMITH REGISTERED LANDSCAPE ARCHITECT NY Lic. No. LA 001901-1 DATE SIGNED OCT 02 2019

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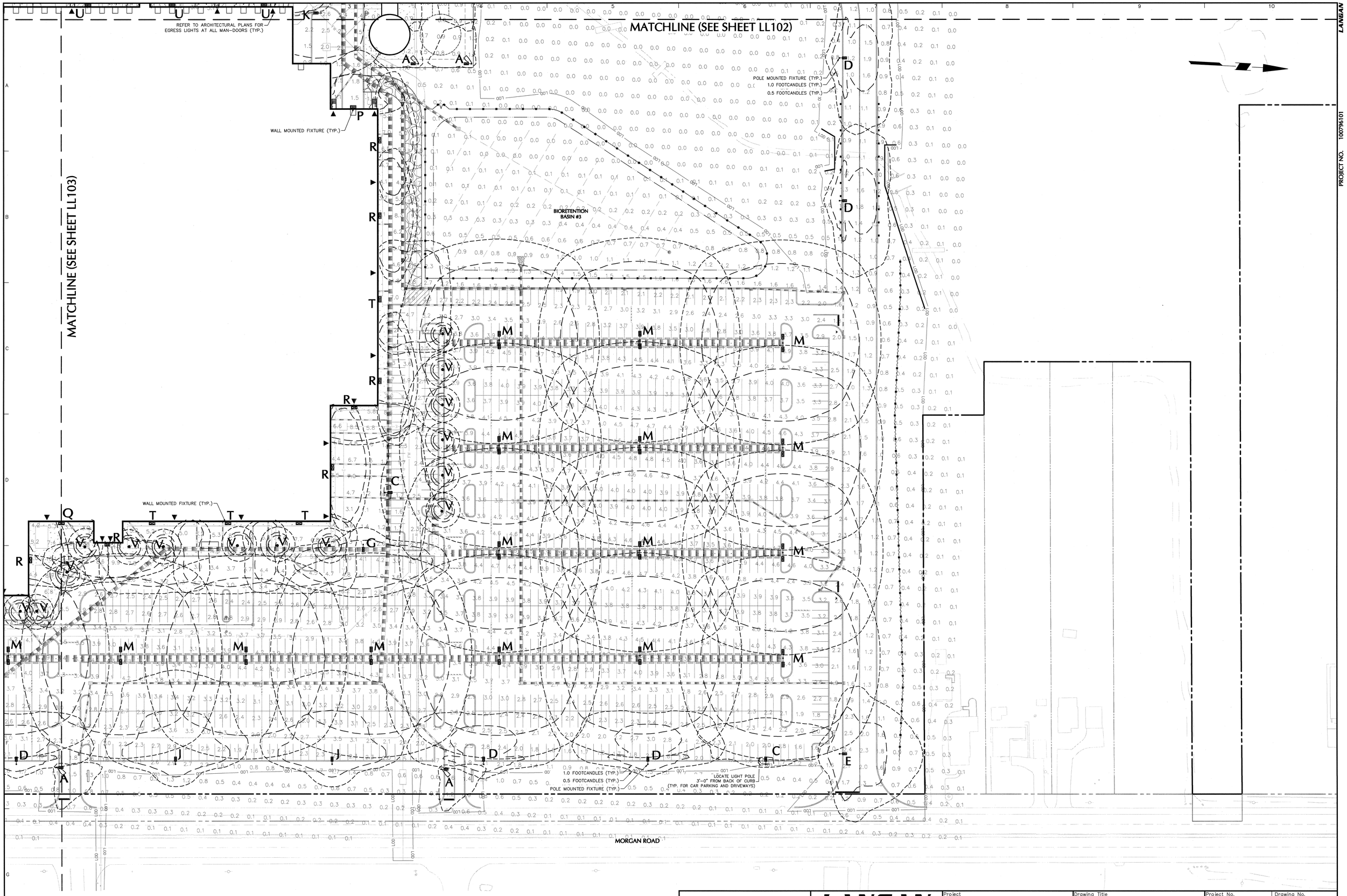
Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
LIGHTING PLAN (3 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By GR
Checked By DB

Drawing No. LL103

Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01\SheetFiles\Site Plan Approval\100796101-LL101-0101.dwg Date: 10/2/2019 Time: 18:08 User: ahartingsmith Style Table: Langan.stb Layout: LL103



NOTE: REFER TO LL100 FOR SITE LIGHTING SCHEDULES AND STATISTICS, LL501 FOR LIGHTING NOTES AND DETAILS.

40 0 10 25 40
SCALE: 1 INCH = 40 FEET

WARNING:
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Date	Description	No.
	REVISIONS	

SIGNATURE MICHAEL L. SCHWARTZ DATE SIGNED OCT 0 2 2019
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Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
LIGHTING PLAN (4 OF 4)

Project No. 100796101
Date 10/02/2019
Drawn By GR
Checked By DB

Drawing No. LL104

Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01\Sheet\Files\Site Plan Approval\100796101-LL101-0101.dwg Date: 10/2/2019 Time: 18:08 User: ahartingsmith Style Table: Langan.stb Layout: LL104

PROJECT NO. 100796101

LIGHTING NOTES:

GENERAL

1. POINT-BY-POINT CALCULATIONS PROVIDED WITHIN HAVE BEEN PREPARED IN ACCORDANCE TO IESNA STANDARDS AND IN CONSIDERATION OF THE VARIABLES WITHIN THESE NOTES AND SITE LIGHTING SCHEDULE. THE VALUES SHOWN ON THE PLANS ARE NOT AN INDICATION OF THE INITIAL LIGHT INTENSITIES OF THE LAMPS. THESE VALUES ARE AN APPROXIMATION OF THE MAINTAINED INTENSITIES DELIVERED TO THE GROUND PLANE USING INDUSTRY STANDARD LIGHT LOSS FACTORS (LLF) WHICH COVER LAMP DEGRADATION AND NATURAL BUILDUP/ DIRT DEGRADATION ON THE FIXTURE LENS. THE LIGHTING PLAN IS DESIGNED WITH AN INDUSTRY STANDARD LLF IN ACCORDANCE WITH GUIDANCE AS PROVIDED BY IESNA. MINOR VARIATIONS IN TOPOGRAPHY, PHYSICAL OBSTRUCTIONS, AMBIENT OR ADJACENT LIGHT SOURCES AND/OR OTHER POTENTIAL IMPACTS HAVE NOT BEEN INCLUDED IN THESE CALCULATIONS. THEREFORE, AS-BUILT LIGHT INTENSITIES MAY VARY, IN EITHER DIRECTION, FROM WHAT IS EXPLICITLY PORTRAYED WITHIN THESE DRAWINGS.NO GUARANTEE OF LIGHT LEVELS IS EXPRESSED OR IMPLIED BY THE POINT BY POINT CALCULATIONS SHOWN ON THESE PLANS.
2. LIGHT LEVEL POINT SPACING IS 20 FT. LEFT TO RIGHT AND 20 FT. TOP TO BOTTOM. POINT BY POINT CALCULATIONS ARE BASED ON THE LIGHT LOSS FACTOR AS STATED IN THE LIGHTING SCHEDULE.
3. ALL LIGHTING IS TO BE FULL CUT-OFF.

COMPLIANCE

3. ALL SITE LIGHTING RELATED WORK AND MATERIALS SHALL COMPLY WITH CITY, COUNTY, AND OTHER APPLICABLE GOVERNING AUTHORITY REQUIREMENTS.
4. LIGHTING LAYOUT COMPLIES WITH THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA) SAFETY STANDARDS FOR LIGHT LEVELS.

COORDINATION

5. CONTRACTOR TO COORDINATE POWER SOURCE WITH LIGHT FIXTURES TO ENSURE ALL SITE LIGHTING IS OPERATING EFFECTIVELY, EFFICIENTLY AND SAFELY.
6. REFER TO ELECTRIFICATION PLAN FOR PROVIDING ADEQUATE POWER FOR SITE LIGHTING.
7. CONTRACTOR TO COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE DRILLING POLE BASES.
8. INSTALLATION OF ALL LIGHTING FIXTURES, POLES, FOOTINGS, AND FEEDER CABLE TO BE COORDINATED WITH ALL SITE WORK TRADES TO AVOID CONFLICT WITH FINISHED AND PROPOSED WORK.
9. CONTRACTOR TO COORDINATE INSTALLATION OF UNDERGROUND FEEDER CABLE FOR EXTERIOR LIGHTING WITH EXISTING AND PROPOSED UTILITIES, SITE DRAINAGE SYSTEMS, AND PAVING. CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE SHOULD ANY UTILITIES, NOT SHOWN ON THE PLANS, BE FOUND DURING EXCAVATIONS.

POLES AND FOOTINGS

10. PROVIDE A CONCRETE BASE FOR EACH LIGHT POLE AT THE LOCATIONS INDICATED ON THE CONSTRUCTION DRAWINGS AND/OR IN ACCORDANCE WITH PROJECT PLANS AND SPECIFICATIONS RELATING DIRECTLY TO CAST-IN-PLACE CONCRETE. THE USE OF ALTERNATE LIGHTING FOUNDATIONS, SUCH AS PRECAST, MAY CHANGE THE SIZING AND REINFORCEMENT REQUIREMENTS FROM THOSE SHOWN ON THESE PLANS. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO ORDERING ANY SUBSTITUTED PRODUCTS.
11. CONTRACTOR SHALL EXAMINE AND VERIFY THAT SOIL CONDITIONS ARE SUITABLE TO SUPPORT LOADS EXERTED UPON THE FOUNDATIONS DURING EXCAVATION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY UNSATISFACTORY CONDITIONS.
12. POLE FOUNDATIONS SHALL NOT BE POURED IF FREE STANDING WATER IS PRESENT IN EXCAVATED AREA.
13. ALL POLES HIGHER THAN 25 FT. SHALL BE EQUIPPED WITH FACTORY INSTALLED VIBRATION DAMPENERS.

WALL MOUNTED FIXTURES

14. CONTRACTOR TO COORDINATE INSTALLATION OF ALL THE WALL MOUNTED FIXTURES AND ELECTRICAL CONNECTIONS TO SITE STRUCTURE(S) WITH BUILDING MEP, ARCHITECT, AND/OR OWNER.
15. INSTALLATION AND ELECTRICAL CONNECTIONS FOR WALL MOUNTED FIXTURES TO BE COORDINATED WITH ARCHITECTURAL, STRUCTURAL, UTILITY AND SITE PLANS AND TO BE IN ACCORDANCE WITH ALL APPLICABLE CODES.

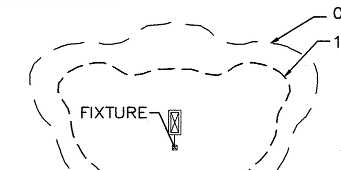
ADJUSTMENT AND INSPECTION

16. CONTRACTOR TO OPERATE EACH LUMINAIRE AFTER INSTALLATION AND CONNECTION. INSPECT FOR IMPROPER CONNECTIONS AND OPERATION.
17. CONTRACTOR TO AIM AND ADJUST ALL LUMINAIRES TO PROVIDE ILLUMINATION LEVELS AND DISTRIBUTION AS INDICATED ON THE CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR OWNER.
18. CONTRACTOR TO CONFIRM THAT LIGHT FIXTURES, TILT ANGLE AND AIMING MATCH SPECIFICATIONS ON THE PLANS.

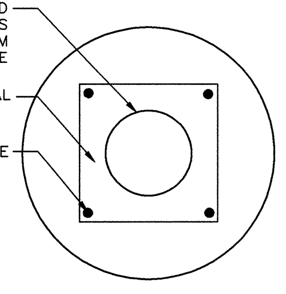
REQUIREMENTS FOR ALTERNATES

19. ALL LIGHTING SUBSTITUTIONS MUST BE MADE WITHIN 14 DAYS PRIOR TO THE BID DATE TO PROVIDE AMPLE TIME FOR REVIEW AND TO ISSUE AN ADDENDUM INCORPORATING THE SUBSTITUTION WITH THE FOLLOWING REQUIREMENTS:
    A. ANY SUBSTITUTION TO LIGHTING FIXTURES, POLES, ETC. MUST BE APPROVED BY THE OWNER, ENGINEER AND TENANTS. ANY COST ASSOCIATED WITH REVIEW AND/OR APPROVAL OF THE SUBSTITUTIONS SHALL BE ENTIRELY BORNE BY THE CONTRACTOR
    B. COMPUTER PREPARED PHOTOMETRIC LAYOUT OF THE PROPOSED LIGHTED AREA WHICH INDICATES, BY ISOFOOTCANDLE, THE SYSTEM'S PERFORMANCE.
    C. A PHOTOMETRIC REPORT FROM A NATIONAL INDEPENDENT TESTING LABORATORY WITH REPORT NUMBER, DATE, FIXTURE CATALOG NUMBER, LUMINAIRE AND LAMP SPECIFICATIONS; IES CALCULATIONS, POINT BY POINT FOOT CANDLE PLAN, STATISTIC ZONES SHOWING AVERAGE, MAXIMUM, MINIMUM AND UNIFORMITY RATIOS, SUMMARY, ISOLUX PLOT, AND CATALOGUE CUTS. CATALOGUE CUTS MUST IDENTIFY OPTICS, LAMP TYPE, DISTRIBUTION TYPE, REFLECTOR, LENS, BALLASTS, WATTAGE, VOLTAGE, FINISH HOUSING DESCRIPTION AND ALL OTHER PERTINENT INFORMATION.
    D. POLE MANUFACTURER AASHTO CALCULATIONS INDICATING THE POLE AND ANCHOR BOLTS BEING SUBMITTED ARE CAPABLE OF SUPPORTING THE POLE AND FIXTURE SYSTEMS BEING UTILIZED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
    E. THE UNDERWRITERS LABORATORY LISTING AND FILE NUMBER FOR THE SPECIFIC FIXTURE(S) TO BE UTILIZED.
    F. A COLOR PHOTOGRAPH THAT CLEARLY SHOWS THE REPLACEMENT FIXTURE POLE MOUNTED, THE FIXTURE'S COLOR, FINISH, AND PHYSICAL CHARACTERISTICS.

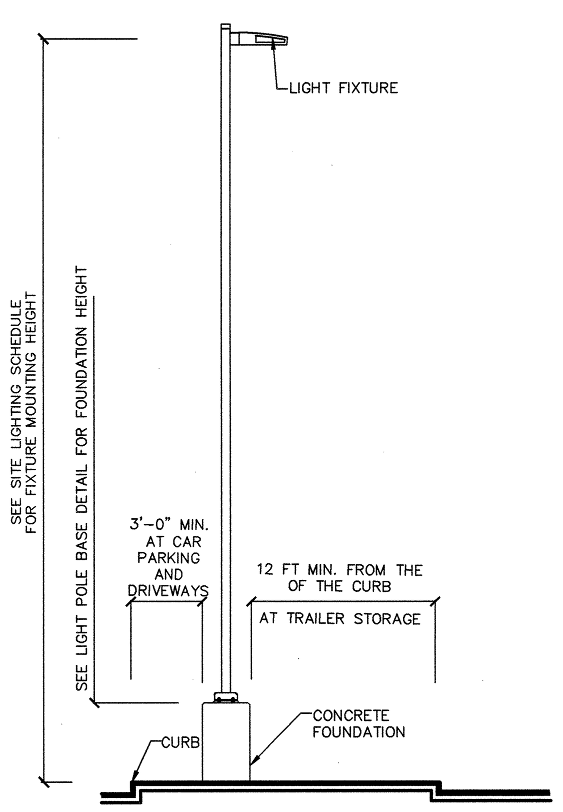
PHOTOMETRIC LIGHTING TEMPLATE:



NOTE: THE PHOTOMETRIC TEMPLATE REPRESENTS LIGHT THROW FOR EACH INDIVIDUAL FIXTURE AND DOES NOT REPRESENT LIGHT COMING FROM OTHER SOURCES.



PLAN



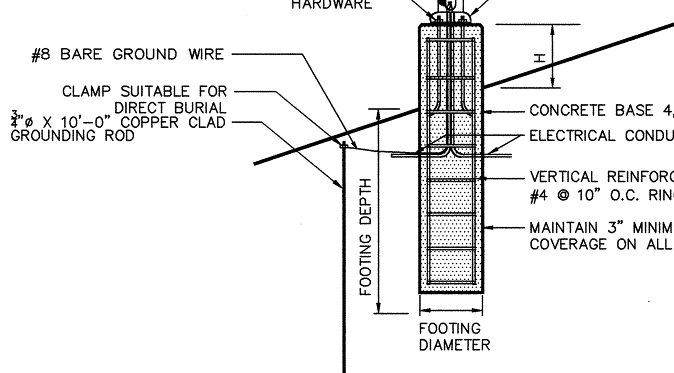
SECTION

NOTE:

1. ALL POLES, EXCEPT FOR FIXTURE TYPE 'V' TO RECEIVE FACTORY INSTALLED VIBRATION DAMPENERS.

1 LIGHT FIXTURE AND BASE
NTS

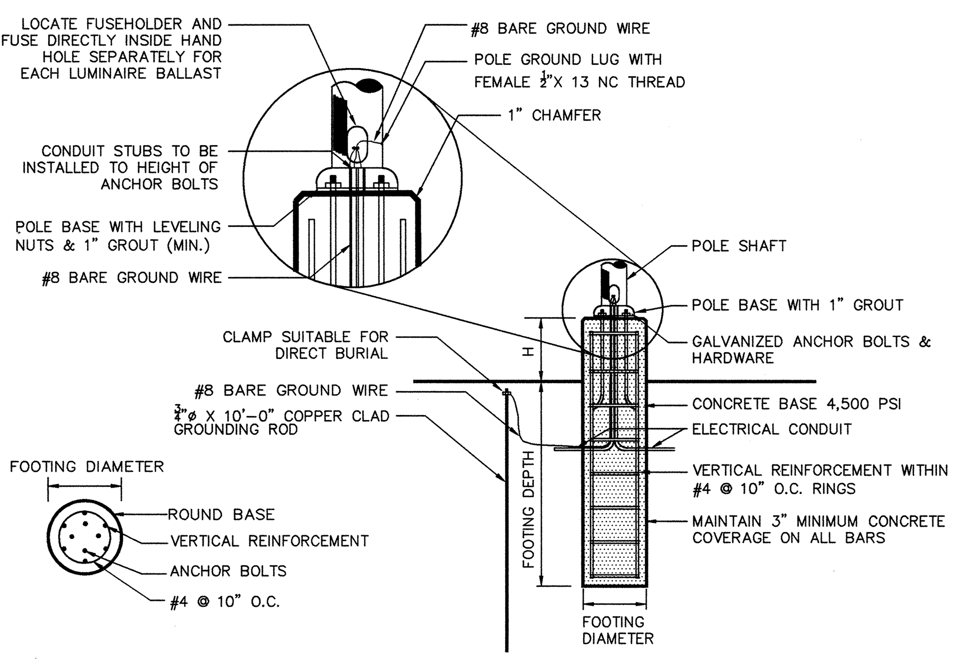
NOTES:
EXPOSED HEIGHT OF POLE BASE (H) SHALL BE MEASURED ON THE UPHILL SIDE OF A SLOPE. FOOTING DEPTH (D) SHALL BE MEASURED ON THE DOWNHILL SIDE OF A SLOPE. AN ADDITIONAL VARIABLE HEIGHT (V) WILL BE BASED ON THE SLOPE ON WHICH THE POLE BASE IS LOCATED. CONTRACTOR TO CALCULATE FULL LENGTH OF EACH POLE BASE REQUIRED ON SLOPES (H+D+V = TOTAL BASE LENGTH)



POLE BASE ON SLOPE

MOUNTING HEIGHT	FOOTING DEPTH	FOOTING DIAMETER	VERTICAL REINFORCEMENT	'H'
40'-0"	7'-6"	2'-6"	8 #6 BARS	3'-0" EXPOSED CONCRETE BASE
10'-0"	4'-6"	2'-0"	8 #5 BARS	AT GRADE

2 POLE BASE
NTS



NOTES:

1. SHAFT CAP, ARMS, BASE FLANGE, ANCHOR BOLTS, LEVELING NUTS, CONNECTION HARDWARE, BOLT COVERS, HANDHOLE COVER, AND BOLT CIRCLE TEMPLATE SHALL BE FURNISHED BY POLE MANUFACTURER.
2. EACH STANDARD TO BE PROTECTED AGAINST LIGHTNING WITH AN INTERCONNECTED GROUND ROD. THIS ROD SHALL BE BONDED PER SECTION NUMBER 250-86, N.E.C.
3. CONTRACTOR TO ENSURE CONCRETE POLE BASES ARE POURED / PLACED ABSOLUTELY VERTICAL & LEVEL.
4. POLE BASE SHALL BE ONE CONTINUOUS POUR. EXPOSED PORTION OF BASE SHALL BE HAND-RUBBED SMOOTH.
5. CONTRACTOR TO COMPACT SUBGRADE AROUND POLE BASE PER EARTHWORK SPECIFICATIONS / GEOTECH REPORT.
6. THE INFORMATION ILLUSTRATED IN THE LIGHT POLE FOUNDATION DETAIL HAS BEEN PROVIDED FOR GENERAL REFERENCE AND PRELIMINARY COST ESTIMATE PURPOSES. LIGHT POLE FOUNDATIONS SHOULD BE DESIGNED AND DETAILED BY A LICENSED STRUCTURAL ENGINEER BASED ON EXISTING SOIL CONDITIONS, LOCAL DESIGN STANDARDS AND MANUFACTURERS RECOMMENDATIONS.
7. CONCRETE BASES SHALL NOT BE PAINTED.
8. CONTRACTOR TO CONFIRM GROUNDING SYSTEM WITH PROJECT MEP PRIOR TO BID.

McGraw-Edison

Catalog #		Type
Project		
Comments		Date
Prepared by		

DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

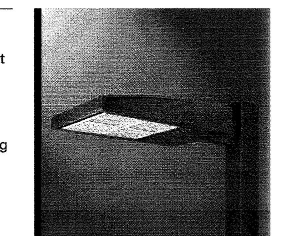
Optics
Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K CCT.

Electrical
LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

Mounting
STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. QUICK MOUNT ARM: Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Finish
Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty
Five-year warranty.



GLEON
GALLEON LED

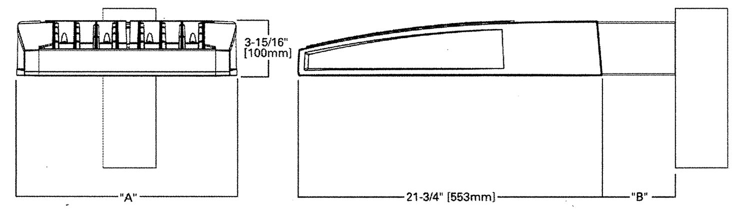
1-10 Light Squares
Solid State LED

AREA/SITE LUMINAIRE

LumenSafe Technology CLICK HERE

WaveLinx

DIMENSIONS



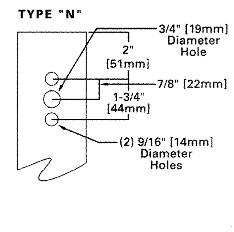
DIMENSION DATA

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length [1]	Weight with Arm (lbs.)	EPA with Arm [2] (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.

DRILLING PATTERN

TYPE "N"



CERTIFICATION DATA
3G Vibration Rated
DesignLights Consortium® Qualified*
IP66 Rated
ISO 9001
LM79 / LM80 Compliant
UL/cUL Wet Location Listed

ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120V-277V 50/60Hz
347V, 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)

EATON Powering Business Worldwide

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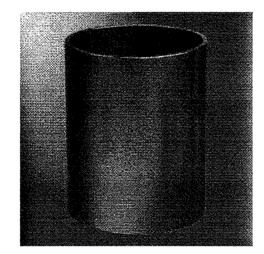
TD500020EN
July 23, 2019 2:40 PM

3 AREA LIGHT FIXTURE
NTS

Steel Poles

Catalog #		Type
Project		
Comments		Date
Prepared by		



RTS ROUND
TAPERED STEEL

FEATURES
- ASTM Grade steel base plate with ASTM A366 base cover
- Hand hole assembly 3" x 5" on RTS poles
- 20'-50' mounting heights
- Drilled or tenon (specify)

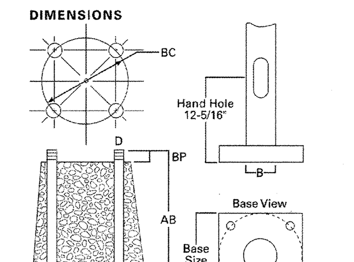
ORDERING INFORMATION

SAMPLE NUMBER: RTS8A30SF2XXG

Product Family	Shaft Size (Inches)[1]	Wall Thickness (Inches)	Mounting Height (Feet)	Base Type	Finish	Mounting Type	Number and Location of Arms	Arm Lengths (Feet)	Options (Add as Suffix)
RTS=Round Tapered Steel	6=6" 7=7" 8=8" 9=9" Steel; 6-3/4" Aluminum 0=10"	A=0.120" D=0.180"	20=20' 25=25' 30=30' 35=35' 39=39' 45=45' 50=50'	S=Square Steel Base	F=Dark Bronze G=Galvanized Steel J=Summit White K=Carbon Bronze L=Dark Platinum P=Primer Powder Coat R=Hartford Green S=Silver T=Graphite Metallic V=Grey W=White X=Custom Color Y=Black	2=2-3/8" O.D. Tenon (4" Long) 3=3-1/2" O.D. Tenon (5" Long) 4=4" O.D. Tenon (6" Long) 5=3" O.D. Tenon (4" Long) 6=2-3/8" O.D. Tenon (6" Long) 7=4" O.D. Tenon (10" Long) A=Type A Drilling C=Type C Drilling E=Type E Drilling F=Type F Drilling G=Type G Drilling J=Type J Drilling K=Type K Drilling M=Type M Drilling R=Type R Drilling S=Standard Upsweep Arm Z=Type Z Drilling	1=Single 2=2 at 180° 3=Triple[2] 4=4 at 90° 5=2 at 90° 6=3 at 90° 7=2 at 120° X=None	X=None	A=1/2" Tapped Hub (Specify location desired) B=3/4" Tapped Hub (Specify location desired) C=Convenience Outlet[3] E=GFCI Convenience Outlet[3] G=Ground Lug H=Additional Hand Hole[4] L=Drilled for Bumper Glitter V=Vibration Dampener

NOTES: 1. All shaft sizes nominal. 2. Square poles are 3 at 90°, round poles are 3 at 120°. 3. Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise. Receptacle not included, provision only. 4. Additional hand hole is located 12" below pole top and 90° from standard hand hole location, unless otherwise specified.

DIMENSIONS



WARNING: Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to pole white paper WP513001EN for additional support information. Before installing, make sure proper anchor bolts and templates are obtained. The use of unauthorized accessories such as banners, signs, cameras or pennants for which the pole was not designed voids the pole warranty and may result in pole failure causing serious injury or property damage. Information regarding total loading capacity can be supplied upon request. The pole warranty is void unless poles are used and installed as a complete pole and luminaire combination. This warranty specifically excludes failure as the result of a third party act or omission, misuse, unanticipated uses, fatigue failure or similar phenomena resulting from induced vibration, harmonic oscillation or resonance associated with movement of air currents around the product.

Specifications and dimensions subject to change without notice. Consult your lighting representative at Eaton or visit www.eaton.com/lighting for available options, accessories and ordering information.

EATON Powering Business Worldwide

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2015-12-09 13:40:46

4 LIGHT POLE
NTS

Invue

Catalog #		Type
Project		
Comments		Date
Prepared by		

DESCRIPTION

The Invue Arbor post top brings architectural style to area/site and pedestrian scale applications. Its dayform appearance brings a desired organic look into the urban environment. WaveStream™ LED Optics provide a uniform pixelation free image, managing glare while providing high levels of visibility.

SPECIFICATION FEATURES

Construction
Two-piece IP66 rated housing is cast from low copper content corrosion resistant aluminum, maintaining strength and precision to sustain long term dayform appearance. ANSI C136.31 testing compliance prevents damage from installation generated vibration. External hardware and casting seams are minimized to enhance appearance.

Optics
Specifically designed for pedestrian applications, WaveStream LED optical waveguide technology produces both symmetric NEMA type V and asymmetric NEMA II, III, IV distributions. The waveguide is manufactured from precision injection molded acrylic resulting in a pixelation free optical image for improved glare control and visual comfort. Luminaire efficacy's measure up to 100 lm/w for 4000K (+/- 275K) CCT at 70 CRI (min), optional 3000K CCT at 80 CRI is also available.

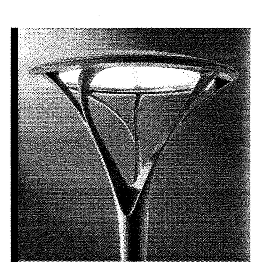
Electrical
LED driver(s) are directly mounted to upper housing thermal pad for optimal thermal performance. Standard 0-10V dimming drivers and Eaton's proprietary surge protection module are designed to withstand 10kV of transient line surge. Drivers operate at 120-277V 50/60Hz with 347V/60Hz or 480V/60Hz operation optional. Suitable for ambient temperature applications as low as -40°C (40°F) to 40°C (104°F). Limited high ambient options allow for 50°C operation.

Controls
The Arbor LED luminaire control options are designed to be simple and cost-effective ASHRAE and California Title 24 compliant solutions. The ANSI C136.41 compliant NEMA 7-PIN receptacle enables wireless dimming when used with compatible photocontrol. An integrated dimming and occupancy sensor is a standalone control option available in on/ off (MS) and bi-level dimming (MS/DIM) operation. The optional LumaWatt Pro™ system is best described as a peer-to-peer wireless network of luminaire-integral sensors that operate in accordance with programmable profiles. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication. See control options page for more details.

Mounting
Fitter assembly mounts over 2-3/8" O.D. tenon and is secured via six concealed stainless steel set screws. Design of fitter provides seamless transition to 3" O.D. round pole top. Additional mounting accessories include a single fixture arm mount, twin fixture arm mount and wall mount arm. Additional pole mount accessories mount to a 3" x 4" long tenon for 4" - 5" O.D. poles tops. For existing 2-3/8" tenons an adapter is shipped standard.

Finish
Eaton utilizes premium ultra-weatherable TGIC based polyester powder coatings that are specifically formulated to withstand extended outdoor exposure. The powders are formulated exclusively for Eaton to serve functionally as well as decorative. Good film appearance combinded with excellent mechanical an exterior exposure qualities display greater than twice as much gloss retention. RAL and custom color matches available. Finish is compliant with ASTM B117 3000hr salt spray standard.

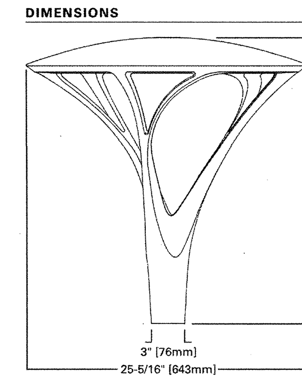
Warranty
Five-year warranty.



ARB ARBOR
POSTTOP

DECORATIVE LUMINAIRE

DIMENSIONS



CERTIFICATION DATA
UL/cUL Listed
ANSI C136.31 1.5G Vibration Tested
IEG 60529 IP66 Housing
ASTM B117 SaH Spray Tested
ASTM A3560 Low Cooper Alloy
RoHS
ISO 9001
Dark Sky Approved (3000K CCT and warmer only)
DesignLights Consortium® Qualified*

ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz, 347V/60Hz, 480V/60Hz
40°C Ambient Temperature Rating
As low as -40°C (-40°F) minimum temperature
*See MINIMUM TEMPERATURE table

EPA
Effective Projected Area: (Sq. Ft.) 0.9

Approximate Net Weight:
37 lbs. [16.8 kgs.]

EATON Powering Business Worldwide

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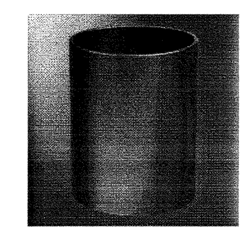
TD516018EN
July 23, 2019 9:31 AM

5 PEDESTRIAN LIGHT FIXTURE
NTS

Steel Poles

Catalog #		Type
Project		
Comments		Date
Prepared by		



RSS ROUND
STRAIGHT STEEL

FEATURES
- ASTM Grade steel base plate with ASTM A366 base cover
- Hand hole assembly 3" x 5" on 5" and 6" poles, 2" x 4" on 4" poles
- 10'-30' mounting heights
- Drilled or tenon (specify)

DESIGN CONSIDERATIONS

Wind induced vibrations resulting from steady, unidirectional winds and other aerodynamic forces, as well as vibration and coefficient of height factors for non-grounded mounted installations (e.g., installations on bridges or buildings) are not included in this document. The information contained herein is for general guidance only and is not a replacment for professional judgement. Consult with a professional, and local and federal standards, before ordering to ensure product is appropriate for the intended purpose and installation location. Also, please review Eaton's Light Pole White Paper for risk factors and design considerations. Learn more.

Specifications and dimensions subject to change without notice. Consult your lighting representative at Eaton or visit www.eaton.com/lighting for available options, accessories and ordering information.

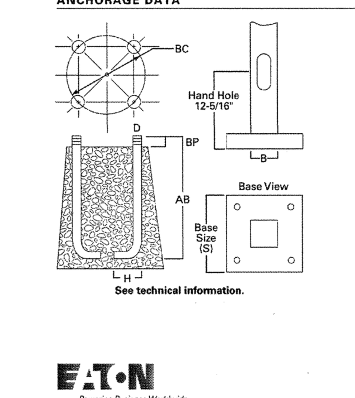
ORDERING INFORMATION

SAMPLE NUMBER: RSS4A20SF2XG

Product Family	Shaft Size (Inches)[1]	Wall Thickness (Inches)	Mounting Height (Feet)	Base Type	Finish	Mounting Type	Number and Location of Arms	Arm Lengths (Feet)	Options (Add as Suffix)
RSS=Round Straight Steel	4=4" 5=5" 6=6"	A=0.120" [6] M=0.188"	10=10' 15=15' 20=20' 25=25' 30=30'	S=Square Steel Base	F=Dark Bronze G=Galvanized Steel J=Summit White K=Carbon Bronze L=Dark Platinum R=Hartford Green S=Silver T=Graphite Metallic V=Grey W=White X=Custom Color Y=Black	2=2-3/8" O.D. Tenon (4" Long) 3=3-1/2" O.D. Tenon (5" Long) 4=4" O.D. Tenon (6" Long) 9=3" O.D. Tenon (4" Long) 6=2-3/8" O.D. Tenon (6" Long) 7=4" O.D. Tenon (10" Long) A=Type A Drilling C=Type C Drilling E=Type E Drilling F=Type F Drilling G=Type G Drilling J=Type J Drilling K=Type K Drilling M=Type M Drilling N=Type N Drilling S=Standard Upsweep Arm Z=Type Z Drilling	1=Single 2=2 at 180° 3=Triple[2] 4=4 at 90° 5=2 at 90° 6=3 at 90° 7=2 at 120° X=None	X=None 2=2' 3=2.5' 4=4' 6=6' 8=8'	A=1/2" Tapped Hub[3] B=3/4" Tapped Hub[3] C=Convenience Outlet[4] E=GFCI Convenience Outlet[4] G=Ground Lug H=Additional Hand Hole[5] V=Vibration Dampener

NOTES: 1. All shaft sizes nominal. 2. Square poles are 3 at 90°, round poles are 3 at 120°. 3. Tapped Hub is located 5' below the pole top and on the same side of pole as hand hole, unless specified otherwise. 4. Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise. Receptacle not included, provision only. 5. Additional hand hole is located 12" below pole top and 90° from standard hand hole location, unless otherwise specified. 6. Available in 4" shaft size only.

ANCHORAGE DATA



Pole	Template Number	Bolt Number	Bolt Circle (inches)	Number of Bolts	Bolt Size (inches)
RSS4	TMP4	AB1	11	4	3/4 x 25 x 3
RSS5	TMP4	AB1	11	4	3/4 x 25 x 3
RSS6	TMP5	AB3	12.5	4	1 x 36 x 4

EATON Powering Business Worldwide

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June 28, 2019 4:01 PM

6 PEDESTRIAN LIGHT POLE
NTS

WARNING:
IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

Date	Description	No.
REVISIONS		

STATE OF NEW YORK · RICHARD BURROW · 082168 · LICENSED PROFESSIONAL ENGINEER

SIGNATURE — OCT 0 2 2019 DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NY Lic. No. 082168

LANGAN
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NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project
PROPOSED DISTRIBUTION FACILITY PROJECT
SECTION 114. BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY NEW YORK

Drawing Title
LIGHTING NOTES AND DETAILS

Project No. 100796101
Date 10/02/2019
Drawn By GR
Checked By DB
Drawing No. LL501

LANGAN PROJECT NO. 100796101

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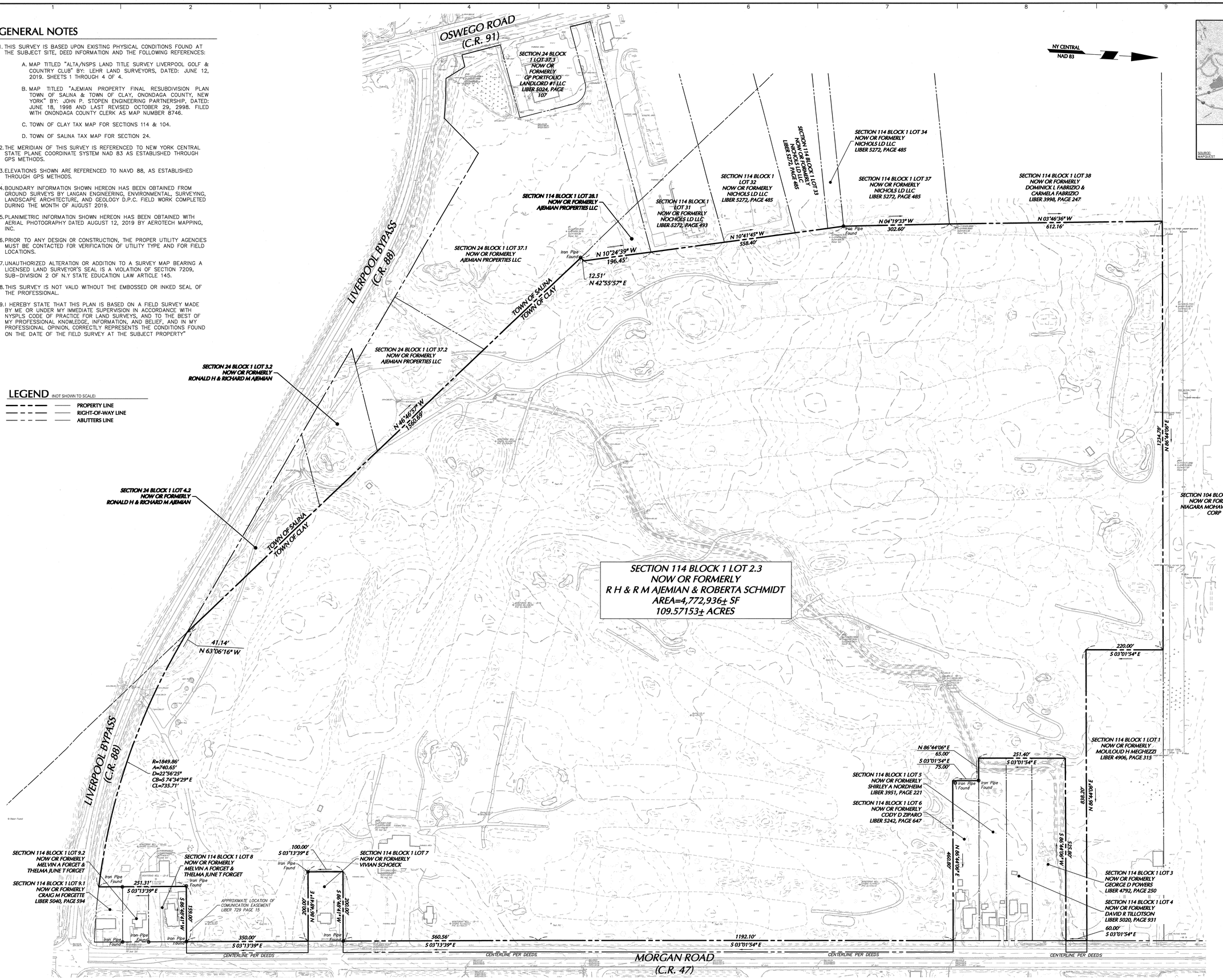
Filename: \\langan.com\data\PAR\data1\100796101\Project Data\CAD\01\SheetFiles\Site Plan Approval\100796101-LL501-0101.dwg Date: 10/2/2019 Time: 18:08 User: ahartingsmith Style Table: Langan.stb Layout: LL501

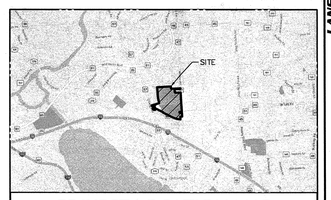
GENERAL NOTES

1. THIS SURVEY IS BASED UPON EXISTING PHYSICAL CONDITIONS FOUND AT THE SUBJECT SITE, DEED INFORMATION AND THE FOLLOWING REFERENCES:
   - A. MAP TITLED "ALTA/NSPS LAND TITLE SURVEY LIVERPOOL GOLF & COUNTRY CLUB" BY: LEHR LAND SURVEYORS, DATED: JUNE 12, 2019. SHEETS 1 THROUGH 4 OF 4.
   - B. MAP TITLED "AJEMIAN PROPERTY FINAL RESUBDIVISION PLAN TOWN OF SALINA & TOWN OF CLAY, ONONDAGA COUNTY, NEW YORK" BY: JOHN P. STOPEN ENGINEERING PARTNERSHIP, DATED: JUNE 18, 1998 AND LAST REVISED OCTOBER 29, 2998. FILED WITH ONONDAGA COUNTY CLERK AS MAP NUMBER 8746.
   - C. TOWN OF CLAY TAX MAP FOR SECTIONS 114 & 104.
   - D. TOWN OF SALINA TAX MAP FOR SECTION 24.
2. THE MERIDIAN OF THIS SURVEY IS REFERENCED TO NEW YORK CENTRAL STATE PLANE COORDINATE SYSTEM NAD 83 AS ESTABLISHED THROUGH GPS METHODS.
3. ELEVATIONS SHOWN ARE REFERENCED TO NAVD 88, AS ESTABLISHED THROUGH GPS METHODS.
4. BOUNDARY INFORMATION SHOWN HEREON HAS BEEN OBTAINED FROM GROUND SURVEYS BY LANGAN ENGINEERING, ENVIRONMENTAL, SURVEYING, LANDSCAPE ARCHITECTURE, AND GEOLOGY D.P.C. FIELD WORK COMPLETED DURING THE MONTH OF AUGUST 2019.
5. PLANIMETRIC INFORMATION SHOWN HEREON HAS BEEN OBTAINED WITH AERIAL PHOTOGRAPHY DATED AUGUST 12, 2019 BY AEROTECH MAPPING, INC.
6. PRIOR TO ANY DESIGN OR CONSTRUCTION, THE PROPER UTILITY AGENCIES MUST BE CONTACTED FOR VERIFICATION OF UTILITY TYPE AND FOR FIELD LOCATIONS.
7. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF N.Y STATE EDUCATION LAW ARTICLE 145.
8. THIS SURVEY IS NOT VALID WITHOUT THE EMBOSSED OR INKED SEAL OF THE PROFESSIONAL.
9. I HEREBY STATE THAT THIS PLAN IS BASED ON A FIELD SURVEY MADE BY ME OR UNDER MY IMMEDIATE SUPERVISION IN ACCORDANCE WITH NYSPLS CODE OF PRACTICE FOR LAND SURVEYS, AND TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION, AND BELIEF, AND IN MY PROFESSIONAL OPINION, CORRECTLY REPRESENTS THE CONDITIONS FOUND ON THE DATE OF THE FIELD SURVEY AT THE SUBJECT PROPERTY"

LEGEND (NOT SHOWN TO SCALE)

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- ABUTTERS LINE





PROJECT LOCATION MAP
SCALE: NOT TO SCALE
SOURCE: MAPQUEST

STATE OF NEW YORK · ANDREW G. IVES · 050794 · LICENSED LAND SURVEYOR

Date	Description	No.

REVISIONS

8/30/2019
ANDREW G. IVES — DATE SIGNED
PROFESSIONAL LAND SURVEYOR
NY STATE LIC. No. 50794

LANGAN
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Project
PROJECT EAGLE
SECTION 114, BLOCK 1, LOT 2.3
TOWN OF CLAY
ONONDAGA COUNTY — NEW YORK

Drawing Title
BOUNDARY AND TOPOGRAPHIC SURVEY

Project No. 100796101	Drawing No. VB101
Date AUGUST 30, 2019	
Drawn By AMK	
Checked By AGI	Sheet 1 of 1

PROJECT NO. 100796101

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