

**GENERAL (CONT.)**

**CITY OF CLEVELAND CONCRETE**  
 WHENEVER ANY NOTES, DETAILS, OR SPECIFICATIONS IN THIS PLAN SET INCLUDE REFERENCES TO "CITY OF CLEVELAND CONCRETE MIX" OR "CLEVELAND 650" OR SIMILAR TERMS, THOSE ITEMS SHOULD INSTEAD USE ODOT CLASS QC 1 CONCRETE PER C&MS 499.

**BENCHING OF FOUNDATION SLOPES**  
 ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN 203.05. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF 203.05.

**MONUMENT ASSEMBLIES**  
 CONSTRUCT MONUMENT ASSEMBLIES IN ACCORDANCE WITH THE DETAILS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AT THE LOCATIONS SHOWN ON SHEET 16 / 66 OF THE RW PLANS.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS WORK:

**ITEM 623 - PRIMARY PROJECT CONTROL MONUMENT, TYPE B 45 EACH**

**AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS**

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 100 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND THE ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO FILE A NEW FORM 7460-1, ADVISING THE FAA THAT AN AERONAUTICAL STUDY IS BEING RESUBMITTED AND THAT AN ALTERATION TO THE ORIGINAL SUBMISSION IS REQUESTED. THE CONTRACT SHALL REFERENCE THE APPROPRIATE AERONAUTICAL STUDY NUMBER FROM THE FOLLOWING LIST:

OBJECT	STUDY NUMBER	STATUS
BRIDGE 9 CRANE	2024-AGL-11781-OE	WIP
BRIDGE 10 CRANE	2024-AGL-11782-OE	WIP
BRIDGE 11 CRANE	2024-AGL-11783-OE	WIP
BRIDGE 12 CRANE	2024-AGL-11784-OE	WIP
BRIDGE 13 CRANE	2024-AGL-11785-OE	WIP
BRIDGE 14 CRANE	2024-AGL-11786-OE	WIP
ODOT LIGHT TOWER CN1-1	2024-AGL-17499-OE	DNH
ODOT LIGHT TOWER CN1-2	2024-AGL-17498-OE	DNH
ODOT LIGHT TOWER CN1-5	2024-AGL-17492-OE	DNH
ODOT LIGHT TOWER CN1-6	2024-AGL-17491-OE	DNH
ODOT LIGHT TOWER CN1-7	2024-AGL-17505-OE	DNH
ODOT LIGHT TOWER CN2-1	2024-AGL-17493-OE	DNH
ODOT LIGHT TOWER CN2-2	2024-AGL-17494-OE	DNH
ODOT LIGHT TOWER CN3-1	2024-AGL-17495-OE	DNH
ODOT LIGHT TOWER CN3-2	2024-AGL-17496-OE	DNH
ODOT LIGHT TOWER CN3-3	2024-AGL-17497-OE	DNH
ODOT LIGHT TOWER CN3-4	2024-AGL-17504-OE	DNH
ODOT LIGHT TOWER CN3-6	2024-AGL-17503-OE	DNH
ODOT LIGHT TOWER CN4-1	2024-AGL-17504-OE	DNH
ODOT LIGHT TOWER CN4-2	2024-AGL-17501-OE	DNH
ODOT LIGHT TOWER CN4-4	2024-AGL-17500-OE	DNH
ODOT LIGHT TOWER CR1-1	2024-AGL-17490-OE	DNH
ODOT LIGHT TOWER CR1-2	2024-AGL-17487-OE	DNH
ODOT LIGHT TOWER CR1-3	2024-AGL-17489-OE	DNH
ODOT LIGHT TOWER CR1-7	2024-AGL-17506-OE	DNH
ODOT LIGHT TOWER CR1-8	2024-AGL-17488-OE	DNH

WIP = WORK IN PROGRESS  
 DNH = DETERMINATION OF NO HAZARD TO AIR NAVIGATION

**AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS**

NOTIFY THE ODOT OFFICE OF AVIATION WHEN RESUBMITTING FAA FORM 7460-1. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND THE ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

FAA APPROVAL MAY TAKE UP TO 45 DAYS. ALL SUBMISSIONS SHALL BE DIRECTED TO THESE OFFICES:

FEDERAL AVIATION ADMINISTRATION  
 SOUTHWEST REGIONAL OFFICE  
 OBSTRUCTION EVALUATION GROUP  
 10101 HILLWOOD PARKWAY  
 FORT WORTH, TX 76177  
 FAX: (817) 222-5920  
 HTTP://CEAAA.FAA.GOV

OHIO DEPARTMENT OF TRANSPORTATION  
 OFFICE OF AVIATION  
 2829 WEST DUBLIN-GRANVILLE ROAD  
 COLUMBUS, OHIO 43235  
 OHIO.AIRPORT.PROTECTION@DOT.OHIO.GOV

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PRIVATE-USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT, AT MAXIMUM OPERATING HEIGHT, SHALL EXCEED A HEIGHT OF 100 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, COORDINATION WITH THE AIRPORT OWNER AND THE ODOT OFFICE OF AVIATION WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. FOR PRIVATE USE AIRPORTS OR HELIPORTS, COORDINATE WITH THE AIRPORT OWNER AND THE ODOT OFFICE OF AVIATION.

NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL COORDINATION IS MET AND DOCUMENTATION HAS BEEN FURNISHED TO THE PROJECT ENGINEER. IF COORDINATION IS NOT OBTAINED, THEN THE PROJECT ENGINEER WILL HAVE THE AUTHORITY TO PROVIDE RESTRICTIONS AS REQUIRED.

ST. VINCENT CHARITY HOSPITAL HELPIAD  
 2351 EAST 22ND STREET,  
 CLEVELAND, OHIO 44115  
 (216) 363-2691 EXT. 1

**FENCE LENGTHS**

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH ITEM 607.

**ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING**  
 CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

- SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
- EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO SECTION 204.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS).
- IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.
- COMPACT THE SUBGRADE ACCORDING TO C&MS 204.03.

**ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING**

4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO C&MS 204.06.

5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO C&MS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.

6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO C&MS 204.06 TO VERIFY STABILITY.

7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204, EXCAVATION OF SUBGRADE.

**ITEM 206 - CEMENT STABILIZED SUBGRADE**

THE CEMENT STABILIZED SUBGRADE IS REQUIRED AS PART OF THE STRUCTURAL DESIGN OF THE PAVEMENT. ANY CHANGES TO THE STABILIZATION MAY REQUIRE ADDITIONAL PAVEMENT THICKNESS. CONTACT THE OFFICE OF PAVEMENT ENGINEERING PRIOR TO ANY NON-PERFORMANCE OR CHANGES TO THE CEMENT STABILIZED SUBGRADE.

**COOPERATION BETWEEN CONTRACTORS**

THE CONTRACTOR SHALL COOPERATE AND COORDINATE OPERATIONS WITH THE CONTRACTORS ON OTHER PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THIS CONTRACT INCLUDING BUT NOT LIMITED TO:

- CUY-490-0.00 (PID 107408)
- CUY-77-11.11 (PID 21788)
- CUY-77-11.21 (PID 105743)
- CUY-77-15.46 (PID 119380)
- CUY-90-19.77/VAR RAMPS (PID 119642)
- CARNEGIE AVENUE REHABILITATION PHASE 3 - E 9TH TO E 55TH

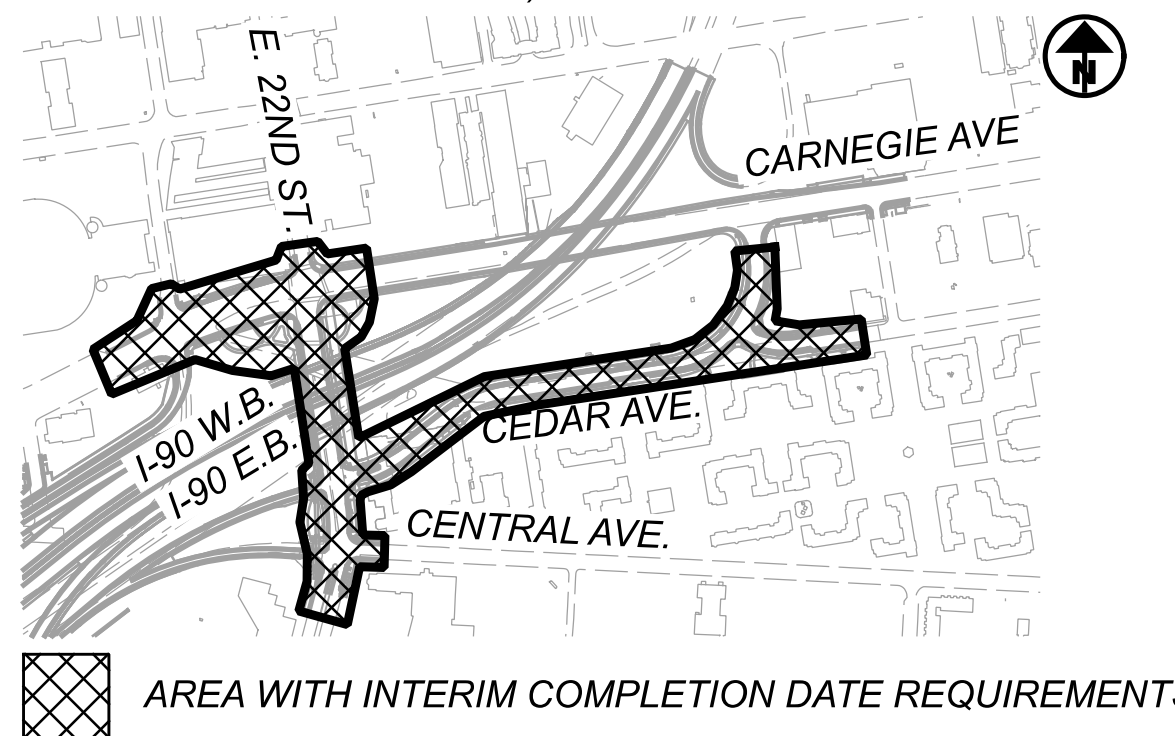
NO WAIVER OF ANY PROVISIONS OF 105.08 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS IS INTENDED.

**CONTRACTORS EQUIPMENT AND OPERATION**

ALL VEHICLES AND EQUIPMENT MUST BE EQUIPPED WITH AT LEAST ONE FLASHING, ROTATING, OR OSCILLATING AMBER LIGHT THAT IS VISIBLE IN ALL DIRECTIONS OF TRAFFIC FOR AT LEAST ONE QUARTER MILE, DAY OR NIGHT. THIS INCLUDES TRUCKS HAULING ASPHALT AND CONCRETE. UNLESS BEHIND CONCRETE BARRIER, THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC ONLY.

**INTERIM COMPLETION DATE**

FOR THE CITY STREET NETWORK SHOWN BELOW (CARNEGIE, CEDAR, E 22ND AND MIDTOWN CONNECTOR), ALL WORK, INCLUDING LANDSCAPE, HARDSCAPE, AND BRIDGE AESTHETICS, SHALL BE COMPLETE BY OCTOBER 31, 2028. UPON ODOT'S FINAL ACCEPTANCE OF THIS AREA, THE 24 MONTH LANDSCAPE GUARANTEE PERIOD (PAID AS PART OF ITEM SPECIAL - CLEVELAND PLANTING) SHALL BEGIN.



**ROADWAY**

**CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL**

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

**ITEM 202 - BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN**

THIS ITEM SHALL MEET ALL THE SPECIFICATIONS OF ITEM 202 EXCEPT THAT THE EXISTING BRIDGE TERMINAL ASSEMBLY TO BE REMOVED IS BARRIER DESIGN.

**ITEM 202 - BUILDING DEMOLISHED (103-13-019 / 320-WL)**

THIS ITEM SHALL CONSIST OF THE DEMOLITION OF THE PARKING LOT SECURITY BOOTH AND DECK ON PARCEL 103-13-019 / 320-WL.

**ITEM 202 - BUILDING DEMOLISHED, AS PER PLAN (103-26-003 / 303)**

SIGNIFICANT EXCAVATION IS PROPOSED ON SITE 103-26-003 / 303, LOCATION OF FORMER INDEPENDENT TOWEL BUILDING. BUILDING WAS DEMOLISHED IN ACCORDANCE WITH ODOT 202, AND FOUNDATIONS ARE LIKELY PRESENT BENEATH GROUND LEVEL FOR THE ENTIRE BUILDING FOOTPRINT. IN THE EVENT STRUCTURES ARE ENCOUNTERED, THE CONTRACTOR SHALL REMOVE ALL STRUCTURES WITHIN THE LIMITS OF EXCAVATION PER C&MS 202, PAID UNDER THIS LUMP SUM PAY ITEM.

**ITEM 202 - BUILDING DEMOLISHED, AS PER PLAN (103-26-003 / 303) LS**

- ITEM 202 - REMOVAL MISC: BILLBOARD**
- ITEM 202 - REMOVAL MISC: BOLLARD**
- ITEM 202 - REMOVAL MISC: DELINEATOR CURB**
- ITEM 202 - REMOVAL MISC: PORTABLE BARRIER**
- ITEM 202 - REMOVAL MISC: UTILITY POLE**
- ITEM 202 - REMOVAL MISC.: PAY BOX**

REMOVE AND DISPOSE OF THESE ITEMS ACCORDING TO ITEM 202. BACKFILL ANY CAVITIES CREATED BY THE REMOVAL PER 202.02.

**ITEM 202 - REMOVAL MISC: BURIED TRACK**

IT IS ANTICIPATED THAT OLD STREETCAR TRACKS ARE BURIED UNDER THE EXISTING ASPHALT ON CEDAR AVENUE AND EAST 22ND STREET AND WILL REQUIRE REMOVAL AS PART OF THIS PROJECT. THE EXACT LOCATION, LIMITS, AND TYPE OF TRACK IS UNKNOWN.

THE UNIT PRICE PER FOOT FOR THIS ITEM SHALL INCLUDE THE REMOVAL AND DISPOSAL OF THE FULL DEPTH OF TRACK. PAYMENT WILL INCLUDE REMOVAL OF BRICK PAVERS, UNDERDRAINS, TIES AND ANGLES OR OTHER HARDWARE, RAIL, BALLAST AND THE BASE, COMPLETE.

ANY PART OF THE TRACK WHICH IS BELOW THE PROPOSED SUBGRADE SHALL BE REMOVED AND BACKFILLED PER CMS 202.02. ANY ADDITIONAL EXCAVATION OR EMBANKMENT REQUIRED BETWEEN THE BOTTOM OF THE TRACK BASE AND THE PROPOSED SUBGRADE WILL ALSO BE INCLUDED IN THE UNIT PRICE PER FOOT FOR THIS ITEM.

THE FOLLOWING CONTINGENCY ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. PAYMENT FOR ACTUALLY COMPETED AND ACCEPTED QUANTITIES SHALL BE MADE AT THE CONTRACT UNIT PRICE BID FOR:

**ITEM 202 - REMOVAL MISC: BURIED TRACK 1,000 FT**

**ITEM 202 - REMOVAL MISC: CONCRETE STRUCTURES**  
 REMOVE AND DISPOSE OF REINFORCED CONCRETE PAD (864 CY) AND VAULT 5' DEEP (6' X 4' PRECAST) ACCORDING TO ITEM 202. BACKFILL ANY CAVITIES CREATED BY THE REMOVAL PER 202.02.

DESIGN AGENCY
<b>Michael Baker INTERNATIONAL</b>
DESIGNER
JTH
REVIEWER
KGJ 05/10/24
PROJECT ID
82382
SHEET
74
TOTAL
2696

**ROADWAY (CONT.)  
ITEM SPECIAL - UTILITY TEST HOLE**

WHERE PLANS INDICATE OTHER UTILITIES ARE IN CLOSE PROXIMITY OF A NEW DRAINAGE STRUCTURE, SIGNAL POLE FOUNDATION / PEDESTAL, LIGHT POLE / TOWER FOUNDATION, AND/OR SIGN FOUNDATION, THE ENGINEER MAY DECIDE TO EXCAVATE TO CONFIRM THE STRUCTURE / FOUNDATION CAN BE PLACED WITHOUT INTERFERENCE. IF INTERFERENCE IS FOUND, THE STRUCTURE / FOUNDATION LOCATION OR TYPE IS TO BE REVISED, AS DIRECTED BY THE ENGINEER.

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DRAINAGE CONDUITS AND STRUCTURES ARE PROPOSED IN CLOSE PROXIMITY TO EXISTING TELECOMMUNICATIONS AND GAS FACILITIES ALONG E. 18TH AND E. 14TH STREETS; TEST HOLES SHALL BE PERFORMED AT LOCATIONS WHERE THESE EXISTING AND PROPOSED FACILITIES INTERSECT BETWEEN E. 18TH ST. STA. 24+27 AND E. 14TH ST. NB STA. 54+00.

ONCE THE TEST HOLE IS COMPLETE, THE EXCAVATION SHALL BE BACKFILLED AND SURFACE RESTORED. NO PAYMENT FOR UTILITY TEST HOLE WILL BE GIVEN WITHOUT PRIOR APPROVAL FROM THE ENGINEER. PAYMENT FOR ALL LABOR, MATERIALS, EQUIPMENT AND OTHER INCIDENTALS, INCLUDING BACKFILL, COMPACTION AND SURFACE RESTORATION SHALL BE AT THE CONTRACT UNIT PRICE BID FOR ITEM SPECIAL - UTILITY TEST HOLE.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

**ITEM SPECIAL - UTILITY TEST HOLE 40 EACH**

**ITEM SPECIAL - PERMITS**

IN THE CITY OF CLEVELAND, ALL STREET PERMITS MUST BE OBTAINED FROM THE DIVISION OF ASSESSMENTS AND LICENSES PRIOR TO BEGINNING ANY WORK WITHIN THE CITY OF CLEVELAND RIGHT-OF-WAY. PERMITS INCLUDE BUT ARE NOT LIMITED TO STREET OPENING PERMIT, OVERLOAD PERMIT, OBSTRUCTION PERMIT AND/OR SIDEWALK PERMIT AND MAY BE OBTAINED THROUGH THE FOLLOWING CONTACT:

CITY OF CLEVELAND, DEPARTMENT OF FINANCE  
DIVISION OF ASSESSMENTS AND LICENSES  
601 LAKESIDE AVENUE, ROOM 122  
CLEVELAND, OHIO 44114  
PHONE: (216) 664-2174  
E-MAIL: DALPERMITS@CITY.CLEVELAND.OH.US

ALL STREET OPENING REPAIRS, CURB REPAIRS, AND/OR SIDEWALK REPAIRS EITHER INCIDENTAL TO THE PROJECT OR PART OF THE PROJECT MUST BE PERFORMED IN ACCORDANCE TO CITY OF CLEVELAND STANDARDS. A COPY OF THE STANDARDS CAN BE OBTAINED ON-LINE UNDER THE "FORMS AND PUBLICATIONS" TAB OF THE OFFICE OF CAPITAL PROJECTS WEBSITE OR FROM THE DIVISION OF ENGINEERING AND CONSTRUCTION BY CALLING (216) 664-2381.

ALL STREET PERMITS, FEES, AND CHARGES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THEIR ASSOCIATED COST SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR THIS ITEM. THE COST BELOW MAY NOT BE FULLY INCLUSIVE OF ALL PERMIT FEES REQUIRED TO BE PAID. NOTE THAT CLEVELAND WATER DEPARTMENT CHARGES ARE PAID UNDER A SEPARATE ITEM.

FOR BIDDING PURPOSES, FEES AND CHARGES WILL BE ESTIMATED BY THE CITY OF CLEVELAND DIVISION OF ENGINEERING AND CONSTRUCTION ON BEHALF OF THE DIVISION OF ASSESSMENTS AND LICENSES (DAL).

THE ASSIGNED RECORD NUMBER FOR THIS PROJECT IS STP25-00610. THE AWARDED CONTRACTOR SHALL CONTACT DAL AS DESCRIBED ABOVE, USING THE ASSIGNED STP NUMBER FOR REFERENCE. THE CONTRACTOR SHALL PROVIDE DAL WITH THEIR CERTIFICATE OF INSURANCE (COI) MEETING THE CITY OF CLEVELAND REQUIREMENTS. UPON SUBMITTAL OF THE COI AND RECEIPT OF PAYMENT, DAL WILL ISSUE THE PERMIT.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

**ITEM SPECIAL - PERMITS LS**

**ENVIRONMENTAL**

**ARCHAEOLOGICAL SITES / HISTORIC PROPERTIES  
ADJACENT TO RIGHT-OF-WAY**

AS A RESULT OF A CULTURAL RESOURCE SURVEY, ARCHAEOLOGICALLY OR HISTORICALLY SENSITIVE AREAS HAVE BEEN IDENTIFIED ADJACENT TO THE PROPOSED RIGHTS-OF-WAY. THESE ARCHAEOLOGICALLY OR HISTORICALLY SENSITIVE AREAS HAVE BEEN DENOTED ON MAPPING THAT IS AVAILABLE FOR REVIEW AT THE STATE HISTORIC PRESERVATION OFFICE, (OHIO HISTORICAL SOCIETY, 800 EAST 17TH AVENUE, COLUMBUS, OHIO 43211-2474), ODOT'S OFFICE OF ENVIRONMENTAL SERVICES, AND THE DISTRICT 12 OFFICE (5500 E 98TH ST, GARFIELD HEIGHTS, OH 44125) THESE IDENTIFIED AREAS CANNOT BE USED FOR BORROW AREAS, WASTE, OR ANY OTHER PROJECT RELATED ACTIVITIES, SUCH AS TEMPORARY OFF-SITE STORAGE OR FIELD OFFICE PLACEMENT, PORTABLE PLANT LOCATIONS, ETC., UNLESS PRIOR APPROVAL IS OBTAINED, IN WRITING, FROM THE OHIO HISTORIC PRESERVATION OFFICE IN COLUMBUS.

**CONSTRUCTION NOISE**

NOISE SENSITIVE RECEPTORS (AS DEFINED IN THE NOISE TECHNICAL REPORT: PID 82382 CUY-90-16.28 CCG3A; 2/6/23) WILL ALSO BE SUBJECTED TO NOISE IMPACTS ASSOCIATED WITH THE CONSTRUCTION PHASE OF THE PROPOSED PROJECT. CONSTRUCTION NOISE WILL GENERATE TEMPORARY NOISE IMPACTS ON ADJACENT AND NEARBY PROPERTIES, PARTICULARLY THOSE IN RESIDENTIAL LAND USE. CONSTRUCTION NOISE WILL BE EMITTED INTERMITTENTLY BY A RANGE OF CONSTRUCTION EQUIPMENT AT VARYING LEVELS OF INTENSITY BASED ON THE TYPES OF OPERATIONS BEING PERFORMED AND THE NUMBER OF PIECES OF EQUIPMENT IN OPERATION AT ANY GIVEN TIME. DEPENDING ON PROJECT CIRCUMSTANCES, OPTIONS ARE AVAILABLE TO MINIMIZE THE TEMPORARY ADVERSE NOISE IMPACTS, INCLUDING THE PROPER MAINTENANCE OF EQUIPMENT, MOST NOTABLY ADEQUATE LUBRICATION, AND NON-LEAKING MUFFLERS, EQUIPMENT RESTRICTION MODIFICATIONS TO REDUCE NOISE EMISSIONS AND RESTRICT THE USE OF CERTAIN EQUIPMENT BY LOCATION AND TIME OF DAY, CONTROLLING NON-CONSTRUCTION TRAFFIC BY LIMITING HEAVY TRUCK MOVEMENTS ON RESIDENTIAL STREETS, MAXIMIZING THE DISTANCE BETWEEN EQUIPMENT AND RECEPTORS WHERE POSSIBLE AND, ENCLOSING OR SCREENING NOISY ACTIVITIES OR STATIONARY EQUIPMENT. THE CONTRACTOR WILL BE REQUIRED TO ADHERE TO ANY AND ALL FEDERAL, STATE, AND LOCAL NOISE CONTROLS OR ORDINANCES IN EFFECT WITHIN THE PROJECT LIMITS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MONITOR CONSTRUCTION NOISE AND BE AWARE OF VIOLATIONS OF THE MAXIMUM ALLOWABLE NOISE LEVELS. CONSIDERATION OF CONSTRUCTION NOISE MINIMIZATION AND MITIGATION (AS NECESSARY) IS REQUIRED PURSUANT TO CFR772.19. ADDITIONAL INFORMATION ON CONSTRUCTION NOISE CAN BE ACCESSED IN THE FHWA CONSTRUCTION NOISE HANDBOOK (FHWA-HEP-06-015) AND THE ROADWAY CONSTRUCTION NOISE MODEL (RCNM) VERSION 2.0.

DURING CONSTRUCTION, THE PROJECT TEAM WILL BE BOTH PROACTIVE AND REACTIVE WITH RESPECT TO CONSTRUCTION NOISE. THIS WILL BE ACCOMPLISHED THROUGH:

EQUIPMENT SELECTION

OFTEN THERE IS A VARIETY OF EQUIPMENT AVAILABLE TO THE CONTRACTOR TO PERFORM A PARTICULAR TASK. WHERE NOISE SENSITIVE RECEPTORS ARE PRESENT, SPECIFIC CONSIDERATION WILL BE GIVEN TO THE SELECTION OF EQUIPMENT TO BE UTILIZED. THIS MAY INCLUDE: THE AGE OF THE EQUIPMENT AS NEWER EQUIPMENT TYPICALLY EMPLOYS NEW TECHNOLOGY WITH RESPECT TO EMISSIONS AND NOISE, IF SHIELDING OR ENGINE ENCLOSURES ARE STANDARD, SIZE APPROPRIATENESS AND POWER SOURCE (GAS/DIESEL, ELECTRIC/SOLAR, PNEUMATIC, HYDRAULIC).

EQUIPMENT MAINTENANCE

THE CONTRACTOR WILL HAVE AN ESTABLISHED MAINTENANCE PROGRAM FOR THEIR EQUIPMENT FLEET. THEY WILL ENSURE THAT NECESSARY MAINTENANCE/REPAIRS ARE PERFORMED BEFORE PUTTING EQUIPMENT INTO SERVICE.

**CONSTRUCTION NOISE (CONT.)**

EQUIPMENT MAINTENANCE (CONT.)

THEY WILL ALSO BE PULLED OUT OF SERVICE TO ADDRESS DEFICIENCIES IDENTIFIED DURING OPERATION. WHEN NOISE SENSITIVE RECEPTORS ARE PRESENT, SPECIFIC ATTENTION WILL BE GIVEN TO THE MUFFLER SYSTEMS ON ALL COMBUSTION ENGINES, AS THAT IS OFTEN A PRIMARY SOURCE OF CONSTRUCTION NOISE.

STORAGE AND STAGING AREAS

IDENTIFICATION OR ACQUISITION OF LOCATIONS/PROPERTIES THAT PROVIDE SEPARATION FROM SENSITIVE RECEPTORS.

SCREENING / SHIELDING / BARRIERS

HAVING SOMETHING BETWEEN THE SOURCE AND THE RECEPTOR IS AN EFFECTIVE MITIGATION TECHNIQUE AND CAN TAKE ON MANY FORMS. THE PROJECT TEAM WILL TAKE ADVANTAGE OF EXISTING FEATURES WHERE PRACTICAL TO MINIMIZE THE IMPACTS OF CONSTRUCTION NOISE ON RECEPTORS. THIS WILL INCLUDE BRIDGES, BERMS, RETAINING WALLS, BUILDINGS AND NOISE WALLS. ADDITIONALLY, TEMPORARY FEATURES ALREADY NECESSARY FOR PERFORMING THE WORK LIKE STOCKPILES AND TOOL TRAILERS CAN ALSO BE BY STRATEGICALLY UTILIZED TO ASSIST IN THIS EFFORT. LASTLY, IT MAY BE NECESSARY TO CONSTRUCT TEMPORARY FEATURES SUCH AS HAY BALES SPECIFICALLY FOR THIS PURPOSE.

SCHEDULING OF WORK

IF NOT DICTATED DURING DESIGN, THE CONTRACTOR WILL GIVE CONSIDERATION TO NOISE SENSITIVE RECEPTORS WHEN SCHEDULING WORK. THIS MAY INCLUDE: TIME OF DAY, DAY OF WEEK, NUMBER OF CONSECUTIVE HOURS/DAYS, SPECIAL EVENTS AND NUMBER OF CREWS. WITH A PROJECT OF THIS MAGNITUDE, THERE WILL ALSO BE OPPORTUNITIES TO SCHEDULE CONCURRENT OPERATIONS IN THE SAME TIMEFRAME TO REDUCE THE OVERALL DURATION OF EXPOSURE, WITH POTENTIALLY MINIMAL INCREASE IN INTENSITY.

EDUCATION OF STAFF

THE PROJECT STAFF WILL BE EDUCATED ON THE NOISE SENSITIVE RECEPTORS. THIS WILL INCLUDE NOT ONLY THEIR LOCATION, BUT ALSO THE TYPE (RESIDENT, SCHOOL, BUSINESS, ETC.), HOURS OF OPERATION AND ANY PRIOR CONCERNS COMMUNICATED.

COMMUNICATION PLAN

AS PART OF THE PROJECT'S OVERALL COMMUNICATION PLAN, THERE WILL BE A PROTOCOL ESTABLISHED TO NOTIFY THE PUBLIC, RECEIVE CONCERNS/COMPLAINTS AND PROVIDE RESPONSES AND/OR RESOLUTIONS. IT WILL CLEARLY PROVIDE CONTACT INFORMATION TO SUBMIT ELECTRONICALLY OR VIA PHONE. ALL NOISE RELATED COMPLAINTS WILL BE INVESTIGATED BY PROJECT PERSONNEL.

THE CITY OF CLEVELAND DEPARTMENT OF PUBLIC SAFETY APPROVED THE CONSTRUCTION NOISE VARIANCE REQUEST SUBMITTED FOR THIS PROJECT WITH THE FOLLOWING CONDITIONS:

THE WORK WILL BE PERFORMED AT THE APPROVED LOCATION (THE I-90/I-77 CENTRAL INTERCHANGE) ONLY AND WITHIN THE SPECIFIED TIME FRAME (APRIL 2026 THROUGH JUNE 2032) OUTLINED.

THE CITY OF CLEVELAND DEPARTMENT OF PUBLIC SAFETY AND COUNCILPERSON FOR THE RESPECTIVE WARDS SHALL BE NOTIFIED AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY CHANGES RELATIVE TO THE DATES AND HOURS OF OPERATIONS AS REFERENCED IN THE APPROVAL LETTER.

THE CITY OF CLEVELAND DEPARTMENT OF PUBLIC SAFETY AND COUNCILPERSON FOR THE RESPECTIVE WARDS SHALL BE NOTIFIED AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF THE USE OF HEAVY EQUIPMENT OTHER THAN THOSE MENTIONED IN THE APPROVAL LETTER.

THE CITY OF CLEVELAND DEPARTMENT OF PUBLIC SAFETY AND COUNCILPERSON FOR THE RESPECTIVE WARDS SHALL RECEIVE A SEVENTY-TWO (72) HOUR NOTICE ON THE SPECIFIC DATES/TIMES THIS PROJECT WILL BEGIN OUTSIDE.

**ASBESTOS ABATEMENT BRIDGE DEMOLITION**

A LICENSED ASBESTOS HAZARD EVALUATION SPECIALIST INSPECTED THE BRIDGE STRUCTURES SCHEDULED FOR DEMOLITION; THE ASBESTOS INSPECTION DETERMINED THAT ASBESTOS IS PRESENT AND REQUIRES ABATEMENT ON THE BRIDGE STRUCTURES LISTED BELOW. NO ASBESTOS WAS IDENTIFIED ON CEDAR AVENUE (CUY-90-1681 | SFN 1807862).

- CARNEGIE AVENUE (CUY-90-1692 | SFN 1807897)
- E. 22ND STREET (CUY-90-1676 | SFN 1807838)
- E5 (CUY-90-1640 | SFN 1807773)
- E6 (CUY-77-1593 | SFN 1806939)
- E7 (CUY-77-1597L | SFN 1807919)
- E8 (CUY-90-1651L | SFN 1807900)
- E9 (CUY-90-1651R | SFN 1807803)
- E10 (CUY-77-1575 SN | SFN 1806912)

THE DISTRICT ENVIRONMENTAL COORDINATOR OR PROJECT ENGINEER SHALL MAKE THE ASBESTOS INSPECTION REPORT AVAILABLE TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING AND THEY SHALL SUBMIT THE NOTIFICATION OF DEMOLITION & RENOVATION FORM AND APPLICABLE FEES 10 DAYS PRIOR TO CONSTRUCTION, WHICH CONTAINS THE QUANTITIES AND LOCATIONS OF THE ASBESTOS CONTAINING MATERIALS.

THE CONTRACTOR SHALL ENSURE THAT THE ABATEMENT, TRANSPORT, AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL IS CONDUCTED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS. THE CONTRACTOR SHALL ENSURE THAT ALL DOCUMENTATION RELATED TO THE ABATEMENT, TRANSPORT, AND DISPOSAL OF ASBESTOS CONTAINING MATERIALS IS SUBMITTED TO THE PROJECT ENGINEER OR DISTRICT ENVIRONMENTAL COORDINATOR FOR RECORD KEEPING WITHIN 2 WEEKS OF COMPLETION.

IT IS POSSIBLE THAT THERE MAY BE NON-VISIBLE OR PREVIOUSLY UNIDENTIFIED ACM ENCOUNTERED DURING CONSTRUCTION. ANY MATERIAL SUSPECTED OF CONTAINING ASBESTOS SHALL BE EVALUATED BY A CERTIFIED ASBESTOS EVALUATION SPECIALIST TO DETERMINE WHETHER THE MATERIAL ACTUALLY CONTAINS ASBESTOS. IF IT DOES, THEN THE ACM SHALL BE REMOVED AS DESCRIBED ABOVE.

BASIS OF PAYMENT

THE CONTRACTOR SHALL FURNISH ALL THE LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PROPERLY ABATE, TRANSPORT, AND DISPOSE OF ASBESTOS CONTAINING MATERIALS IN A LANDFILL LICENSED BY THE LOCAL HEALTH DEPARTMENT AND PERMITTED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY - DIVISION OF AIR POLLUTION CONTROL TO ACCEPT ASBESTOS CONTAINING MATERIAL. PAYMENT FOR THIS WORK SHALL BE MADE AT THE BID PRICE OF LUMP SUM.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

- ITEM SPECIAL - WORK INVOLVING ASBESTOS CONTAINING MATERIALS (CARNEGIE AVENUE, CUY-90-1692, SFN 1807897) LS**
- ITEM SPECIAL - WORK INVOLVING ASBESTOS CONTAINING MATERIALS (E. 22ND STREET, CUY-90-1676, SFN 1807838) LS**
- ITEM SPECIAL - WORK INVOLVING ASBESTOS CONTAINING MATERIALS (E5, CUY-90-1640, SFN 1807773) LS**
- ITEM SPECIAL - WORK INVOLVING ASBESTOS CONTAINING MATERIALS (E6, CUY-77-1593, SFN 1806939) LS**
- ITEM SPECIAL - WORK INVOLVING ASBESTOS CONTAINING MATERIALS (E7, CUY-77-1597L, SFN 1807919) LS**
- ITEM SPECIAL - WORK INVOLVING ASBESTOS CONTAINING MATERIALS (E8, CUY-90-1651L, SFN 1807900) LS**
- ITEM SPECIAL - WORK INVOLVING ASBESTOS CONTAINING MATERIALS (E9, CUY-90-1651R, SFN 1807803) LS**
- ITEM SPECIAL - WORK INVOLVING ASBESTOS CONTAINING MATERIALS (E10, CUY-77-1575 SN, SFN 1806912) LS**

DESIGN AGENCY
<b>Michael Baker INTERNATIONAL</b>
DESIGNER
JTH
REVIEWER
KGJ 05/10/24
PROJECT ID
82382
SHEET
77
TOTAL
2696

**DRAINAGE (CONT.)**

**ITEM SPECIAL - MISCELLANEOUS METAL**  
 EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIAL SHALL MEET ITEM 611 OF THE SPECIFICATIONS AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

**ITEM SPECIAL - MISCELLANEOUS METAL 10,000 LB**

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE EXPENSE OF THE CONTRACTOR.

**TEMPORARY DRAINAGE ITEMS**

TEMPORARY DRAINAGE ITEMS LABELED ON THE MAINTENANCE OF TRAFFIC PLAN ARE ITEMIZED ON THE MOT PLANS AND CARRIED TO THE GENERAL SUMMARY.

**POST CONSTRUCTION STORM WATER TREATMENT**

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

**MANUFACTURED WATER QUALITY STRUCTURE**

THIS PLAN UTILIZES MANUFACTURED WATER QUALITY STRUCTURES FOR WATER QUALITY TREATMENT. AREAS HAVE BEEN SHOWN IN THE PLANS FOR PLACEMENT OF AN OFF-LINE SYSTEM. PAYMENT FOR THESE DEVICES SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR ITEM 895, MANUFACTURED WATER QUALITY STRUCTURE, TYPE 4.

**EXTENDED DETENTION BASIN**

THIS PLAN UTILIZES EXTENDED DETENTION BASIN(S) FOR FLOW RESTRICTION. DETENTION BASINS MAY BE USED AS SEDIMENT CONTROL DEVICES DURING CONSTRUCTION. FOLLOWING STABILIZATION OF THE TRIBUTARY AREA, FINAL GRADING OF THE DETENTION BASIN MUST MATCH THE PLANS. THE DETENTION BASIN OUTLET STRUCTURE FOR CONSTRUCTION SEDIMENT CONTROL MUST BE REMOVED AND THE OUTLET STRUCTURE MUST BE MADE TO MATCH THE DESIGN SHOWN IN THE PLANS.

**ITEM SPECIAL - GAS VALVE BOX ADJUSTED TO GRADE**

ADJUST GAS OR OTHER UTILITY VALVES, INCLUDING MONITORING WELLS, TO GRADE. COORDINATE WITH UTILITY OWNER PRIOR TO PERFORMING WORK. REPLACE DAMAGED CASTINGS IN KIND.

THIS ITEM IS PAID ON A UNIT PRICE BASIS AND INCLUDES ALL LABOR AND MATERIALS TO PERFORM THE WORK AS DESCRIBED.

**SURFACE DRAINAGE CONTINGENCY**

EVERY EFFORT HAS BEEN MADE TO PROVIDE FOR ADEQUATE CURB INLETS AND PIPE TO PROPERLY ACCOUNT FOR THE SURFACE DRAINAGE. IN THE EVENT THAT ISOLATED LOW AREAS DEVELOP DURING CONSTRUCTION OF THE PROJECT, THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED TO BE USED AS DIRECTED BY THE ENGINEER:

**ITEM 611 - 12" CONDUIT, TYPE B, 706.08 & 706.12 2,000 FT**  
**ITEM 611 - 15" CONDUIT, TYPE B, 706.08 & 706.12 200 FT**  
**ITEM 611 - CATCH BASIN, NO. 2-2B, AS PER PLAN 4 EACH**  
**ITEM 611 - CATCH BASIN, NO. 3A, AS PER PLAN 4 EACH**  
**ITEM 611 - MANHOLE, NO. 3, AS PER PLAN 4 EACH**

**PAVEMENT**

**CONTRACTION AND/OR EXPANSION JOINTS**

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN CONTRACTION AND EXPANSION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. IN ALL CASES, THE PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES INCLUDING THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS IS IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2 AND THE SPECIFICATIONS.

**CONTRACTION JOINTS IN CONCRETE PAVEMENT OR BASE WIDENING**

WHERE NEW CONCRETE IS PLACED ADJACENT TO EXISTING CONCRETE, PROVIDE CONTRACTION JOINTS IN THE NEW CONCRETE TO FORM CONTINUOUS JOINTS WITH THOSE IN THE EXISTING CONCRETE.

THE MAXIMUM DISTANCE BETWEEN THE JOINTS IN THE NEW CONCRETE ARE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2, IF NECESSARY, ADDITIONAL JOINTS MAY BE PROVIDED IN THE NEW CONCRETE AT APPROXIMATELY EQUAL INTERVALS BETWEEN EXISTING JOINTS THAT EXCEED THE MAXIMUM SPACING.

**PART-WIDTH CONSTRUCTION**

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1. CONSTRUCT LONGITUDINAL JOINTS PER CMS 401.08(D).

**MEDIAN AND/OR CURBING ON APPROACH SLABS**

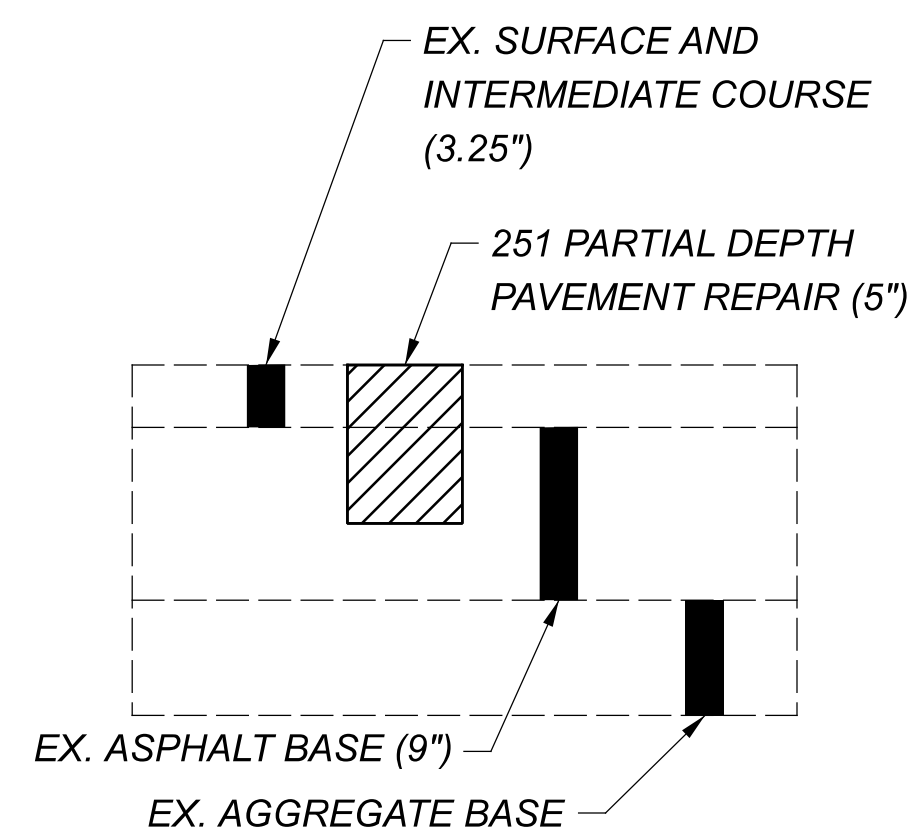
WITHIN THE LIMITS OF THE APPROACH SLAB, TRANSITION THE SHAPE OF THE MEDIAN AND/OR CURBING ON APPROACH SLABS FROM THE STANDARD SECTION ON THE APPROACHES TO THE SECTION USED ON THE BRIDGE.

**ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442)**

THE PLANS CALL FOR RESURFACING THE I.R. 90 PAVEMENT BETWEEN THE INNERBELT BRIDGES AND THE ONTARIO STREET BRIDGES AND BETWEEN THE ONTARIO STREET BRIDGES AND THE EAST 9TH STREET BRIDGES. QUANTITIES HAVE BEEN PROVIDED IN THE PAVEMENT SUBSUMMARY FOR THIS WORK.

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER TO REPAIR ANY PAVEMENT DEFICIENCIES IN THESE AREAS. SEE DETAIL BELOW FOR A TYPICAL PAVEMENT BUILDUP. THE QUANTITY IS BASED ON AN ASSUMED DEPTH OF FIVE (5) INCHES. FINAL DEPTH IS TO BE DETERMINED BY THE ENGINEER.

**ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442) 180 CY**



SEE FULL DETAIL ON SHEET 1432A

**ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 1, CLASS QC1, AS PER PLAN A**

**ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 1, CLASS QC1, AS PER PLAN B**

THIS ITEM SHALL CONSIST OF REPLACING EXISTING PAVEMENT PER ITEM 255 AND THE NOTES BELOW AND DETAILS ON SHEET 1432A.

EXISTING CONCRETE PAVEMENT THICKNESS MAY VARY FROM THAT SHOWN ON THE TYPICAL SECTIONS BY PLUS TWO INCHES OR MINUS ONE INCH. NO ADJUSTMENT IN PAYMENT FOR THIS ITEM SHALL BE MADE PROVIDING THAT THE AVERAGE PAVEMENT THICKNESS IS WITHIN ONE INCH OF THE THICKNESS SHOWN ON THE TYPICAL SECTIONS. ADDITIONAL COMPENSATION SHALL BE MADE BY CHANGE ORDER FOR THE MATERIAL COST OF CONCRETE ONLY WHEN THE AVERAGE THICKNESS EXCEEDS THE ONE INCH MAXIMUM TOLERANCE ABOVE. THE VOLUME OF CONCRETE PAID FOR SHALL BE BASED UPON THE AMOUNT OF CONCRETE ADDITIONAL ABOVE THE ONE INCH TOLERANCE LIMIT.

THE CONTRACTOR SHALL SAW THROUGH THE REMAINING ASPHALT OVERLAY AFTER THE PAVEMENT PLANING OPERATION. THE CONTRACTOR SHALL REMOVE THE EXISTING OVERLAY AND RIGID PAVEMENT WITH CARE SO AS TO NOT DISTURB THE ADJACENT REMAINING CONCRETE PAVEMENT AND OVERLAY.

IF, AFTER REMOVAL OF THE RIGID PAVEMENT THE ENGINEER DETERMINES THAT THE SUBBASE OR SUBGRADE HAS FAILED OR IS PUMPING, THE ENGINEER WILL DIRECT THE CONTRACTOR TO EXCAVATE THE UNSUITABLE MATERIAL AND REPLACE IT WITH COMPACTED 304 AGGREGATE. QUANTITIES OF ITEM 203 - EXCAVATION AND ITEM 304 - AGGREGATE BASE HAVE BEEN PROVIDED TO REPAIR SAID FAILED SUBBASE OR SUBGRADE AREAS.

PAVEMENT REPAIR LESS THAN OR EQUAL TO TEN (10) FEET IN LENGTH SHALL BE PAID FOR UNDER "FULL DEPTH RIGID PAVEMENT REMOVAL AND REPLACEMENT, TYPE 1, CLASS QC1, AS PER PLAN, A". PAVEMENT REPAIRS GREATER THAN TEN (10) FEET IN LENGTH SHALL BE PAID FOR UNDER "FULL DEPTH RIGID PAVEMENT REMOVAL AND REPLACEMENT, TYPE 1, CLASS QC1, AS PER PLAN B".

ITEM	UNIT	DESCRIPTION
255	SY	FULL DEPTH RIGID PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 1, CLASS QC1, AS PER PLAN A
255	SY	FULL DEPTH RIGID PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 1, CLASS QC1, AS PER PLAN B
255	FT	FULL DEPTH PAVEMENT SAWING
203	CY	EXCAVATION
304	CY	AGGREGATE BASE

FOR ESTIMATED QUANTITIES, SEE SHEET 167

**ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 1, CLASS QC1, AS PER PLAN C**

ALL REQUIREMENTS OF C&MS 255 SHALL APPLY EXCEPT THE DOWEL BARS, DEFORMED BARS, AND TIEBARS SHALL BE INSTALLED PER THE DETAILS SHOWN ON CITY OF CLEVELAND SCD CONC 1.

IN ADDITION TO THE REQUIREMENTS ABOVE, APPLY THE OTHER REQUIREMENTS FOR ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 1, CLASS QC1, AS PER PLAN A AND B.

**ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN**

THIS ITEM IS INTENDED FOR USE AS DIRECTED BY THE ENGINEER FOR PARTIAL DEPTH PAVEMENT REPAIRS TO CITY STREETS.

PAVEMENT REPAIRS SHALL BE COMPLETED USING THE FOLLOWING ITEMS:

- ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M
- ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)



**ITEM 305 - 9" CONCRETE BASE, CLASS QC 1P, AS PER PLAN**  
**ITEM 451 - 12" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN**  
**ITEM 452 - 10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN**

ALL REQUIREMENTS OF C&MS 305, 451, AND 452 SHALL APPLY EXCEPT THE DOWEL BARS, DEFORMED BARS, AND TIEBARS SHALL BE INSTALLED PER THE DETAILS SHOWN ON CITY OF CLEVELAND SCD CONC 1.

**ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M**

THE COARSE VIRGIN AGGREGATE FOR THIS ITEM SHALL CONSIST OF A BLEND OF 60% MIN. AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE.

**ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), AS PER PLAN, PG64-22**

PAVING BETWEEN THE MEDIAN BARRIERS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN FROM THE HIGH SIDE BARRIER TO LOW SIDE BARRIER.

**ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN, PG76-22M**

THE COARSE VIRGIN AGGREGATE FOR THIS ITEM SHALL BE LIMITED TO A BLEND OF AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO AND LIMESTONE. THE CONTRACTOR SHALL USE A MINIMUM 60% OF ACBFS OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE. AT LEAST 50% OF FINE VIRGIN AGGREGATE FOR THIS ITEM SHALL BE LIMITED TO ACBFS OR TRAP ROCK FROM ONTARIO.

TABLE 442.02-2 APPLIES EXCEPT NO. 4 SIEVE REQUIREMENTS ARE 52 TO 60 TOTAL PERCENT PASSING. FOR THE NO. 4 SIEVE DO NOT EXCEED 63 IN PRODUCTION.

WHEN ACBFS IS USED FOR A FRACTION OF THE COARSE AGGREGATE, PROVIDE A TOTAL ASPHALT BINDER CONTENT GREATER THAN OR EQUAL TO 6.2 PERCENT. IF ACBFS MAKES UP 100% OF THE COARSE AGGREGATE, APPLY THE BINDER CONTENT REQUIREMENTS OF C&MS 442.

**ITEM SPECIAL - PRESSURE RELIEF JOINT, TYPE B**

THIS ITEM SHALL MEET ALL THE SPECIFICATIONS OF ITEM 451. SEE SCD AS-2-15 AND SCD BP-2.4 FOR DETAILS.

**CITY STREET CONTINGENCY**

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USED AS DIRECTED BY THE ENGINEER FOR ANY UNANTICIPATED WORK ALONG CITY STREETS:

<b>ITEM 452 - 10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN</b>	<b>775 SY</b>
<b>ITEM 608 - 6" CONCRETE WALK, AS PER PLAN</b>	<b>4,500 SF</b>
<b>ITEM 608 - CURB RAMP, AS PER PLAN</b>	<b>475 SF</b>
<b>ITEM 609 - CURB, TYPE 6</b>	<b>750 FT</b>

DESIGN AGENCY	
DESIGNER	Michael Baker International
REVIEWER	JTH
PROJECT ID	82382
SHEET	80
TOTAL	2696

SHEET NUMBER													PARTICIPATION			ALT (X)	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET		
122	427	428	429	442	447	457	459						01/IMS /04	02/IMS /10	03/IMS /08									
													LS				832	15010	LS		<b>EROSION CONTROL (CONT.)</b>			
													2400000				832	30000	2400000	EACH		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE		
							31						31				836	10000	31	SY		EROSION CONTROL		
																						SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1		
																						<b>ENVIRONMENTAL/REMEDATION</b>		
													755				SPECIAL	690E65000	755	TON		WORK INVOLVING NON-REGULATED MATERIALS		78
													7550				SPECIAL	690E65016	7550	TON		WORK INVOLVING PETROLEUM CONTAMINATED SOIL		78
													105000				SPECIAL	690E65022	105000	GAL		WORK INVOLVING NON-REGULATED WATER		78
													42000				SPECIAL	690E65024	42000	GAL		WORK INVOLVING REGULATED WATER		78
													LS				SPECIAL	690E98400	LS			WORK INVOLVING ASBESTOS CONTAINING MATERIALS (CARNEGIE AVENUE, CUY-90-1692, SFN 1807897)		77
													LS				SPECIAL	690E98400	LS			WORK INVOLVING ASBESTOS CONTAINING MATERIALS (E. 22ND STREET, CUY-90-1676, SFN 1807838)		77
													LS				SPECIAL	690E98400	LS			WORK INVOLVING ASBESTOS CONTAINING MATERIALS (E5, CUY-90-1640, SFN 1807773)		77
													LS				SPECIAL	690E98400	LS			WORK INVOLVING ASBESTOS CONTAINING MATERIALS (E6, CUY-77-1593, SFN 1806939)		77
													LS				SPECIAL	690E98400	LS			WORK INVOLVING ASBESTOS CONTAINING MATERIALS (E7, CUY-77-1597L, SFN 1807919)		77
													LS				SPECIAL	690E98400	LS			WORK INVOLVING ASBESTOS CONTAINING MATERIALS (E8, CUY-90-1651L, SFN 1807900)		77
													LS				SPECIAL	690E98400	LS			WORK INVOLVING ASBESTOS CONTAINING MATERIALS (E9, CUY-90-1651R, SFN 1807803)		77
													LS				SPECIAL	690E98400	LS			WORK INVOLVING ASBESTOS CONTAINING MATERIALS (E10, CUY-E14TH-0002SN, SFN 1806912)		77
																						<b>DRAINAGE</b>		
													8.5				602	20000	8.5	CY		CONCRETE MASONRY		
													25609				605	11110	25609	FT		6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC		
													3700				605	11111	3700	FT		6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN		79
													5200				605	12211	5200	FT		6" DEEP PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN		79
																	605	13300	2236	FT		6" UNCLASSIFIED PIPE UNDERDRAINS		
																	605	14020	40888	FT		6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC		
													3620				611	01500	3620	FT		6" CONDUIT, TYPE F		
													3579				611	04400	3579	FT		12" CONDUIT, TYPE B		
													5431				611	04400	5431	FT		12" CONDUIT, TYPE B, 706.08 & 706.12		
													270				611	04400	270	FT		12" CONDUIT, TYPE B, 748.01		
													5				611	04600	5	FT		12" CONDUIT, TYPE C		
													150				611	04600	150	FT		12" CONDUIT, TYPE C, 706.08 & 706.12		
													46				611	04900	46	FT		12" CONDUIT, TYPE D		
													2913				611	05900	2913	FT		15" CONDUIT, TYPE B		
													193				611	05900	193	FT		15" CONDUIT, TYPE B, 706.02, CLASS V		
																	611	05900	1182	FT		15" CONDUIT, TYPE B, 706.08 & 706.12		
													774				611	05901	774	FT		15" CONDUIT, TYPE B, AS PER PLAN		1163
													2566				611	06100	2566	FT		15" CONDUIT, TYPE C		
													145				611	06100	145	FT		15" CONDUIT, TYPE C, 706.08 & 706.12		
													51				611	06101	51	FT		15" CONDUIT, TYPE C, AS PER PLAN		1163
													134				611	06700	134	FT		15" CONDUIT, TYPE F, 707.05 TYPE C, 707.21, OR 707.33		
													742				611	07400	742	FT		18" CONDUIT, TYPE B		
													19				611	07400	19	FT		18" CONDUIT, TYPE B, 707.35		
													228				611	07600	228	FT		18" CONDUIT, TYPE C		
													138				611	08200	138	FT		18" CONDUIT, TYPE F, 707.05 TYPE C, 707.21, OR 707.33		
													484				611	08900	489	FT		21" CONDUIT, TYPE B		
													466				611	10400	511	FT		24" CONDUIT, TYPE B		
													225				611	10400	225	FT		24" CONDUIT, TYPE B, 706.02, CLASS V		
													5				611	10400	5	FT		24" CONDUIT, TYPE B, 706.08 & 706.12		
													257				611	10600	257	FT		24" CONDUIT, TYPE C		
													65				611	11900	65	FT		27" CONDUIT, TYPE B		
													147				611	13400	147	FT		30" CONDUIT, TYPE B		
													197				611	13600	197	FT		30" CONDUIT, TYPE C		
													626				611	25200	626	FT		66" CONDUIT, TYPE B, 706.02 & 706.11		
													472				611	52902	472	FT		34" X 53" CONDUIT, TYPE B, 706.04		
													90				611	96600	90	FT		CONDUIT, BORED OR JACKED, 15" TYPE B		78
													90				611	96600	90	FT		CONDUIT, BORED OR JACKED, 66" TYPE B, 706.02 & 706.11		78
													246				611	96600	246	FT		CONDUIT, BORED OR JACKED, 66" TYPE C, 706.02 & 706.11		78
													7				611	98150	7	EACH		CATCH BASIN, NO. 3		
													33				611	98151	33	EACH		CATCH BASIN, NO. 3, AS PER PLAN		1169
													10				611	98180	10	EACH		CATCH BASIN, NO. 3A		

DESIGN AGENCY	
DESIGNER	KJM
REVIEWER	KGJ 05/22/24
PROJECT ID	82382
SHEET TOTAL	405 2696

SHEET NUMBER										PARTICIPATION			ALT (X)	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
122	427	435	442	443	447	457	470	1399		01/IMS /04	02/IMS /10	03/IMS /08							
	4				37					41				611	98181	41	EACH	CATCH BASIN, NO. 3A, AS PER PLAN	1168
1			5							6				611	98370	6	EACH	CATCH BASIN, NO. 6	
			3							3				611	98371	3	EACH	CATCH BASIN, NO. 6, AS PER PLAN	1166
			2		1					3				611	98371	3	EACH	CATCH BASIN, NO. 6, AS PER PLAN 2	1163
			1							1				611	98371	1	EACH	CATCH BASIN, NO. 6, AS PER PLAN 3	1172
			8							8				611	98410	8	EACH	CATCH BASIN, NO. 8	
				2	1					3				611	98411	3	EACH	CATCH BASIN, NO. 8, AS PER PLAN 2	1163
				1						1				611	98450	1	EACH	CATCH BASIN, NO. 2-2A	
					1					1				611	98451	1	EACH	CATCH BASIN, NO. 2-2A, AS PER PLAN 2	1163
14				7						21				611	98470	21	EACH	CATCH BASIN, NO. 2-2B	
	4				5					9				611	98471	9	EACH	CATCH BASIN, NO. 2-2B, AS PER PLAN	1171
				1	4					5				611	98471	5	EACH	CATCH BASIN, NO. 2-2B, AS PER PLAN 2	1163
				6						6				611	98504	6	EACH	CATCH BASIN, NO. 2-2C	
				2						2				611	98511	2	EACH	CATCH BASIN, NO. 2-3, AS PER PLAN 2	1163
					2					2				611	98630	2	EACH	CATCH BASIN ADJUSTED TO GRADE	
					1					1				611	98634	1	EACH	CATCH BASIN RECONSTRUCTED TO GRADE	
				8						8				611	99100	8	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1	
				1						1				611	99104	1	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C	
				4						4				611	99110	4	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C1	
				5						5				611	99111	5	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C1, AS PER PLAN	1173
				9						9				611	99114	9	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D	
				3						3				611	99115	3	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D, AS PER PLAN	1164
				1						1				611	99115	1	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D, AS PER PLAN 2	1163
15				22						37				611	99574	37	EACH	MANHOLE, NO. 3	
	4				27					31				611	99575	31	EACH	MANHOLE, NO. 3, AS PER PLAN	1170
				5	4					9				611	99575	9	EACH	MANHOLE, NO. 3, AS PER PLAN 2	1163
				5						5				611	99575	5	EACH	MANHOLE, NO. 3, AS PER PLAN 3	1163
				1						1				611	99586	1	EACH	MANHOLE, NO. 3 WITH 108" BASE I.D. AND 12" WEIR	
		73		3	16					92				611	99654	92	EACH	MANHOLE ADJUSTED TO GRADE	
								2		2				611	99655	2	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN, WATER MANHOLE	1384
				1	1					2				611	99660	2	EACH	MANHOLE RECONSTRUCTED TO GRADE	
				2						2				611	99661	2	EACH	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	1163
				2	1					3				611	99661	3	EACH	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN 2	1163
		23								23				SPECIAL	611E99700	23	EACH	GAS VALVE BOX ADJUSTED TO GRADE	80
						7				7				611	99710	7	EACH	PRECAST REINFORCED CONCRETE OUTLET	
	10000									10000				SPECIAL	611E99820	10000	LB	MISCELLANEOUS METAL	80
				3						3				611	99900	3	EACH	DRAINAGE STRUCTURE, MISC.: FLOW RESTRICTOR OUTLET	1161
488				501						989				839	29000	989	FT	TRENCH DRAIN, TYPE A WITH STANDARD GRATE	
				1						1				895	10040	1	EACH	MANUFACTURED WATER QUALITY STRUCTURE, TYPE 4	79
					459					459				899	10001	459	FT	CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 6 EGG-SHAPED	1365
					656					656				899	10001	656	FT	CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 7 EGG-SHAPED	1365
					413					413				899	10001	413	FT	CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 10 EGG-SHAPED	1365
					270					270				899	10001	270	FT	CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 11 EGG-SHAPED	1365
					595					595				899	10001	595	FT	CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 12 EGG-SHAPED	1365
																		<b>PAVEMENT</b>	
	480									480				251	01030	480	CY	PARTIAL DEPTH PAVEMENT REPAIR (442)	80
	400									400				251	01031	400	CY	PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN	80
							1000			1000				252	01500	1000	FT	FULL DEPTH PAVEMENT SAWING	
	64786									64786				254	01000	64786	SY	PAVEMENT PLANING, ASPHALT CONCRETE (1.5")	
	38540									38540				254	01000	38540	SY	PAVEMENT PLANING, ASPHALT CONCRETE (3")	
	56010							15080		71090				254	01000	71090	SY	PAVEMENT PLANING, ASPHALT CONCRETE (3.25")	
	2800									2800				255	11001	2800	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 1, CLASS QC1, AS PER PLAN A	80
	2800									2800				255	11001	2800	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 1, CLASS QC1, AS PER PLAN B	80
	3850									3850				255	11001	3850	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 1, CLASS QC1, AS PER PLAN C	80
							54			54				301	56000	54	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
								26792		26792				302	56000	26792	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
								24105		24105				304	20000	24105	CY	AGGREGATE BASE	
								36530		36530				305	13011	36530	SY	9" CONCRETE BASE, CLASS QC 1P, AS PER PLAN	80
	14303							31348		45651				407	20000	45651	GAL	NON-TRACKING TACK COAT	

DESIGN AGENCY  
**Michael Baker**  
 INTERNATIONAL  
 DESIGNER  
 KJM  
 REVIEWER  
 KGJ 05/22/24  
 PROJECT ID  
 82382  
 SHEET TOTAL  
 406 2696

SHEET NUMBER													PARTICIPATION			ALT (X)	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
427	428	443	470	1399	1839							01/IMS /04	02/IMS /10	03/IMS /08								
			13									13			441	50000	13	CY	<b>PAVEMENT (CONT.)</b> ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22			
1340			1262									2602			441	50101	2602	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M	80		
1870			1773									3643			441	50300	3643	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)			
			76									76			441	70201	76	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), AS PER PLAN, PG64-22	80		
			40									40			441	70500	40	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)			
			55									55			441	70700	55	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449), (DRIVEWAYS)			
			7043									7043			442	00100	7043	CY	ANTI-SEGREGATION EQUIPMENT			
2330			3971									6301			442	10001	6301	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN, PG76-22M	80		
2720			4756									7476			442	10100	7476	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446)			
64												64			442	22101	64	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG70-22M	85		
			685									685			451	16011	685	SY	12" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN	80		
					676							676			451	20000	676	SY	REINFORCED CONCRETE PAVEMENT, MISC.: INTEGRALLY COLORED CONCRETE CROSSWALK	1825		
			61.00									61.00			SPECIAL	451E31000	61.00	FT	PRESSURE RELIEF JOINT, TYPE B	80		
			337									337			452	09010	337	SY	4" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P			
			1231									1231			452	12010	1231	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P			
			15514									15514			452	14010	15514	SY	10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P			
775												775			452	14011	775	SY	10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN	80		
1000												1000			452	19200	1000	SY	NON-REINFORCED CONCRETE PAVEMENT, MISC.: SURCHARGE FOR CLASS MS CONCRETE	87		
			51									51			609	12000	51	FT	COMBINATION CURB AND GUTTER, TYPE 2			
			2587									2587			609	14000	2587	FT	CURB, TYPE 2-A			
			67									67			609	24000	67	FT	CURB, TYPE 4-A			
			1766									1766			609	24510	1766	FT	CURB, TYPE 4-C			
750			14012									14762			609	26000	14762	FT	CURB, TYPE 6			
			46									46			609	33200	46	FT	CURB, TYPE 10-B			
			366									366			609	72000	366	SY	CONCRETE MEDIAN			
	1.28											1.28				618	40600	1.28	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	76	
				3666								3666				202	98200	3666	FT	<b>WATER WORK</b> REMOVAL MISC.: WATER MAIN REMOVED 24" AND UNDER	1376	
				476								476				202	98200	476	FT	REMOVAL MISC.: WATER MAIN REMOVED OVER 24"	1376	
		71										71				638	06713	71	FT	30" STEEL PIPE ENCASEMENT, OPEN CUT, AS PER PLAN	1163	
				15								15				638	10701	15	EACH	FIRE HYDRANT REMOVED AND DISPOSED OF, AS PER PLAN	1376	
				49								49				638	10801	49	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	1384	
				1								1				638	11201	1	EACH	METER, SETTING, STOP AND CHAMBER, AS PER PLAN (CLEVELAND WATER)	1428	
				909								909				SPECIAL	638E20172	909	FT	12" WATER MAIN DIP CLASS 52 BOLTLESS RESTRAINED JOINTS AND FITTINGS (CLEVELAND WATER)	1376	
				427								427				SPECIAL	638E20174	427	FT	12" WATER MAIN DIP CLASS 52 PUSH ON JOINTS AND FITTINGS (CLEVELAND WATER)	1376	
				289								289				SPECIAL	638E20292	289	FT	24" WATER MAIN DIP CLASS 52 BOLTLESS RESTRAINED JOINTS AND FITTINGS (CLEVELAND WATER)	1378	
				252								252				SPECIAL	638E20294	252	FT	24" WATER MAIN DIP CLASS 52 PUSH ON JOINTS AND FITTINGS (CLEVELAND WATER)	1378	
				291								291				SPECIAL	638E20336	291	FT	30" WATER MAIN DIP CLASS 52 BOLTLESS RESTRAINED JOINTS AND FITTINGS (CLEVELAND WATER)	1378	
				1225								1225				SPECIAL	638E20338	1225	FT	30" WATER MAIN DIP CLASS 52 PUSH ON JOINTS AND FITTINGS (CLEVELAND WATER)	1378	
				40								40				SPECIAL	638E20480	40	FT	48" STEEL PIPE ENCASEMENT, BORED OR JACKED (CLEVELAND WATER)	1385	
				2								2				SPECIAL	638E20580	2	EACH	10" CUTTING IN SLEEVE (CLEVELAND WATER)	1383	
				5								5				SPECIAL	638E20586	5	EACH	12" GATE VALVE WITH VALVE BOX (CLEVELAND WATER)	1381	
				4								4				SPECIAL	638E20596	4	EACH	12" CUTTING IN SLEEVE (CLEVELAND WATER)	1383	
				3								3				SPECIAL	638E20598	3	EACH	12" CUTTING IN SLEEVE, VALVE WITH VALVE BOX (CLEVELAND WATER)	1383	
				3								3				SPECIAL	638E20746	3	EACH	2" AIR RELEASE VALVE WITH VALVE BOX (CLEVELAND WATER)	1383	
				14								14				SPECIAL	638E20750	14	EACH	6" FIRE HYDRANT, COMPLETE (CLEVELAND WATER)	1383	
				1								1				SPECIAL	638E20762	1	EACH	FIRE HYDRANT SERVICE LINE EXTENDED AND ADJUSTED TO GRADE (CLEVELAND WATER)	1419	
				177								177				SPECIAL	638E20770	177	FT	1" COPPER WATER SERVICE LINE (CLEVELAND WATER)	1384	
				587								587				SPECIAL	638E20794	587	FT	REMOVE WATER SERVICE CONNECTION (CLEVELAND WATER)	1376	
				10								10				SPECIAL	638E20842	10	FT	EXTEND 1-1/2" COPPER WATER SERVICE CONNECTION (CLEVELAND WATER)	1418	
				31								31				SPECIAL	638E20844	31	FT	INSTALL 1-1/2" COPPER WATER SERVICE CONNECTION (CLEVELAND WATER)	1384	
				4								4				SPECIAL	638E20894	4	EACH	1" CORPORATION STOP (CLEVELAND WATER)	1384	
				2								2				SPECIAL	638E20896	2	EACH	1-1/2" CORPORATION STOP (CLEVELAND WATER)	1384	
				1								1				SPECIAL	638E21002	1	EACH	INSTALL 1" METER SETTING, COMPLETE (CLEVELAND WATER)	1384	
				3								3				638	98000	3	EACH	WATER WORK, MISC.: 12" EXPANSION VALVE (BRIDGE)	1378	
				2								2				638	98000	2	EACH	WATER WORK, MISC.: 24" EXPANSION VALVE (BRIDGE)	1380	
				3								3				638	98000	3	EACH	WATER WORK, MISC.: 24" VALVE ASSEMBLY COMPLETE (CLEVELAND WATER)	1381	
				1								1				638	98000	1	EACH	WATER WORK, MISC.: 30" CUTTING IN SLEEVE (CLEVELAND WATER)	1380	

DESIGN AGENCY	
<b>Michael Baker</b> INTERNATIONAL	
DESIGNER	KJM
REVIEWER	KGJ 05/22/24
PROJECT ID	82382
SHEET	407
TOTAL	2696

SHEET NUMBER													PARTICIPATION			ALT (X)	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
428	1399	1400	1688	1689								01/IMS /04	02/IMS /10	03/IMS /08								
																					<b>WATER WORK (CONT.)</b>	
2	2											2			638	98000	2	EACH	WATER WORK, MISC.: 30" VALVE ASSEMBLY COMPLETE (CLEVELAND WATER)	1381		
	2											2			638	98000	2	EACH	WATER WORK, MISC.: 36" CUTTING IN SLEEVE (CLEVELAND WATER)	1380		
300000												300000			638	98000	300000	EACH	WATER WORK, MISC.: CLEVELAND WATER DEPARTMENT CHARGES	1374		
	3											3			638	98000	3	EACH	WATER WORK, MISC.: CONCRETE PIER	1426		
	2											2			638	98000	2	EACH	WATER WORK, MISC.: SLEEVE FOR ABUTMENT WALL - 12" DIP LINE (CLEVELAND WATER)	1429		
	2											2			638	98000	2	EACH	WATER WORK, MISC.: SLEEVE FOR ABUTMENT WALL - 24" STEEL LINE (CLEVELAND WATER)	1429		
	2											2			638	98000	2	EACH	WATER WORK, MISC.: STEEL TO DIP TRANSITION (CLEVELAND WATER)	1429		
		507										507			638	98600	507	FT	WATER WORK, MISC.: 12" INSULATION FOR BRIDGE (CLEVELAND WATER)	1381		
		354										354			638	98600	354	FT	WATER WORK, MISC.: 24" INSULATION FOR BRIDGE (CLEVELAND WATER)	1381		
		354										354			638	98600	354	FT	WATER WORK, MISC.: 24" POLYURETHANE COATED CEMENT LINED STEEL	1380		
																					<b>LIGHTING</b>	
			2									2			202	75704	2	EACH	REMOVAL OF EXISTING CONTROL CENTER AND FOUNDATION			
			2									2			202	75800	2	EACH	DISCONNECT EXISTING CIRCUIT			
			12	154								166			625	00450	166	EACH	CONNECTION, FUSED PULL APART			
				77								77			625	00460	77	EACH	CONNECTION, UNFUSED PULL APART			
			15									15			625	00470	15	EACH	CONNECTION, UNFUSED BOLTED			
			123	84								207			625	00480	207	EACH	CONNECTION, UNFUSED PERMANENT			
			4									4			625	10494	4	EACH	LIGHT POLE, LOW MAST, ALM50			
			2									2			625	10494	2	EACH	LIGHT POLE, LOW MAST, ATLM50			
				44								44			625	10500	44	EACH	LIGHT POLE, MISC.: 15' ROUND TAPERED FIBERGLASS STREETLIGHT	1686		
				33								33			625	10500	33	EACH	LIGHT POLE, MISC.: 30' ROUND TAPERED FIBERGLASS STREETLIGHT	1686		
				32								32			625	10614	32	EACH	LIGHT POLE ANCHOR BOLTS ON STRUCTURE			
			1									1			625	11000	1	EACH	LIGHT TOWER, BB80			
2			2									2			625	11200	2	EACH	LIGHT TOWER, BB100			
			1									1			625	11300	1	EACH	LIGHT TOWER, BB110			
			3									3			625	12000	3	EACH	LIGHT TOWER, BBB80			
			8									8			625	12200	8	EACH	LIGHT TOWER, BBB100			
2			1									1			625	12400	1	EACH	LIGHT TOWER, BBB120			
			1									1			625	12900	1	EACH	LIGHT TOWER, BBBB60			
			1									1			625	13100	1	EACH	LIGHT TOWER, BBBB90			
			2									2			625	13200	2	EACH	LIGHT TOWER, BBBB100			
			1									1			625	13500	1	EACH	LIGHT TOWER, MISC.: TOWER LIGHTING RING WITH 4 LUMINAIRE MOUNTS	1685		
				58								58			625	14000	58	EACH	LIGHT POLE FOUNDATION, 24" X 6' DEEP			
			2									2			625	14200	2	EACH	LIGHT POLE FOUNDATION, 24" X 10' DEEP			
			4									4			625	14307	4	EACH	MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN	1685		
			2									2			625	15000	2	EACH	LIGHT TOWER FOUNDATION, 36" X 15' DEEP			
			10									10			625	15100	10	EACH	LIGHT TOWER FOUNDATION, 36" X 20' DEEP			
			4									4			625	15200	4	EACH	LIGHT TOWER FOUNDATION, 36" X 25' DEEP			
			1									1			625	15400	1	EACH	LIGHT TOWER FOUNDATION, 42" X 25' DEEP			
			1									1			625	15700	1	EACH	LIGHT TOWER FOUNDATION, MISC.: 42" X 20' DEEP	1685		
			2									2			625	15700	2	EACH	LIGHT TOWER FOUNDATION, MISC.: 48" X 25' DEEP	1685		
				30556	16375							46931			625	23200	46931	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE			
					49071							49071			625	23304	49071	FT	NO. 8 AWG 600 VOLT DISTRIBUTION CABLE			
					159							159			625	23308	159	FT	DISTRIBUTION CABLE, MISC.: NO. 4 / 0 AWG 2400 VOLT DISTRIBUTION CABLE	1686		
				900								900			625	23400	900	FT	NO. 10 AWG POLE AND BRACKET CABLE			
					4950							4950			625	23410	4950	FT	NO. 12 AWG POLE AND BRACKET CABLE			
				7444								7444			625	24320	7444	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES			
					1796							1796			625	25012	1796	FT	CONDUIT, 3/4", 725.051			
				1304	1123							2427			625	25300	2427	FT	CONDUIT, 1-1/2", 725.04			
				116								116			625	25404	116	FT	CONDUIT, 2-1/2", 725.04			
					8541							8541			625	25408	8541	FT	CONDUIT, 2", 725.051			
				712								712			625	25504	712	FT	CONDUIT, 3", 725.051			
					43							43			625	25802	43	FT	CONDUIT, CONCRETE ENCASED, 2", 725.051			
					132							132			625	25803	132	FT	CONDUIT, CONCRETE ENCASED, AS PER PLAN (2-2" CONDUIT, 725.051)	1686		
					1974							1974			625	25803	1974	FT	CONDUIT, CONCRETE ENCASED, AS PER PLAN (4-2" CONDUIT, 725.051)	1686		
				3876								3876			625	25902	3876	FT	CONDUIT, JACKED OR DRILLED, 725.04, 3"			
2				63								63			625	26253	63	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN (CPP LED COBRA HEAD)	1686		
				64								64			625	26263	64	EACH	LUMINAIRE, HIGH MAST, SOLID STATE (LED), AS PER PLAN (480V)	1685		
				6								6			625	26273	6	EACH	LUMINAIRE, LOW MAST, SOLID STATE (LED), AS PER PLAN (480V)	1685		

DESIGN AGENCY

Michael Baker  
INTERNATIONAL

DESIGNER

KJM

REVIEWER

KGJ 05/22/24

PROJECT ID

82382

SHEET TOTAL

408 2696

CUY-90-16.28 (CCG3A)

MODEL: Sheet07 PAPER: 34x22 (in.) DATE: 9/12/2025 TIME: 3:00:29 PM USER: Joseph.Hogan  
p:\mb-us-pw\benley.com\mb-us-pw-03\Documents\Cleveland\_OH01\_Projects\ODOT\District12\28232400-Engineering\Roadway\Sheets\82382\_CG001.dgn

SHEET NUMBER													PARTICIPATION			ALT (X)	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
1688	1689	1782										01/IMS /04	02/IMS /10	03/IMS /08								
										<b>LIGHTING (CONT.)</b>												
23												23			625	27503	23	EACH	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN (480V)	1685		
1												1			625	27503	1	EACH	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN (480V, CROSS FRAME MOUNTED)	1685		
	17											17			625	27503	17	EACH	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN (CPP LED WALLPACK)	1686		
	51											51			625	27551	51	EACH	LUMINAIRE, DECORATIVE, AS PER PLAN (15' POLES)	1686		
	33											33			625	27551	33	EACH	LUMINAIRE, DECORATIVE, AS PER PLAN (30' POLES)	1686		
5990	4691											10681			625	29000	10681	FT	TRENCH			
	8											8			625	29900	8	EACH	JUNCTION BOX			
4												4			625	29930	4	EACH	MEDIAN JUNCTION BOX			
26												26			625	30700	26	EACH	PULL BOX, 725.08, 18"			
8	4											12			625	30706	12	EACH	PULL BOX, 725.08, 24"			
4												4			625	30731	4	EACH	PULL BOX, 725.08, 48", TYPE 1, AS PER PLAN	1685		
	10											10			625	31510	10	EACH	PULL BOX REMOVED			
17												17			625	31511	17	EACH	PULL BOX REMOVED, AS PER PLAN	1685		
	13											13			625	31600	13	EACH	PULL BOX, MISC.: 6" X 6" PULL BOX	1687		
	87											87			625	31600	87	EACH	PULL BOX, MISC.: 13" X 24" PULL BOX	1687		
1												1			625	31600	1	EACH	PULL BOX, MISC.: 18" PULL BOX ADJUSTED TO GRADE	1685		
46	113											159			625	32000	159	EACH	GROUND ROD			
6												6			625	33000	6	EACH	STRUCTURE GROUNDING SYSTEM			
2	3											5			625	34001	5	EACH	POWER SERVICE, AS PER PLAN	1684		
2												2			625	34450	2	EACH	CONTROL CENTER CABINET, COMPLETE			
	1											1			625	34451	1	EACH	CONTROL CENTER CABINET, COMPLETE, AS PER PLAN	1687		
5990	4691											10681			625	36010	10681	FT	UNDERGROUND WARNING/MARKING TAPE			
11	7											18			625	37101	18	EACH	SERVICE TO UNDERPASS LIGHTING, AS PER PLAN	1684		
LS												LS			SPECIAL	625E40000	LS		MAINTAIN EXISTING LIGHTING	1684		
20												20			SPECIAL	625E40010	20	EACH	REPLACEMENT OF EXISTING LIGHTING UNIT	1684		
21												21			625	75350	21	EACH	LIGHT TOWER REMOVED			
	96											96			625	75400	96	EACH	LIGHT POLE REMOVED			
	20											20			625	75500	20	EACH	LIGHT POLE FOUNDATION REMOVED			
	10											10			625	75506	10	EACH	LUMINAIRE REMOVED			
2												2			625	75510	2	EACH	POWER SERVICE REMOVED			
21												21			625	75540	21	EACH	LIGHT TOWER FOUNDATION REMOVED			
	10											10			625	75801	10	EACH	DISCONNECT CIRCUIT, AS PER PLAN	1687		
1												1			625	98000	1	EACH	LIGHTING, MISC.: RELOCATE EX. CONTROL CENTER	1685		
7	19											26			625	98000	26	EACH	LIGHTING, MISC.: TEST NEW CIRCUIT	1684		
	1503											1503			632	69300	1503	FT	POWER CABLE, 3 CONDUCTOR, NO. 4 AWG			
	53											53			632	89300	53	EACH	WOOD POLE			
										<b>ELECTRICAL</b>												
	13704											13704			625	23308	13704	FT	DISTRIBUTION CABLE, MISC.: 500KCMIL 15KV CU WITH CONCENTRIC NEUTRAL	1778		
	5311											5311			625	23308	5311	FT	DISTRIBUTION CABLE, MISC.: 556KCMIL 15KV SPACER CABLE WITH 0052 AWA MESSENGER	1778		
	6528											6528			625	25721	6528	FT	CONDUIT, AS PER PLAN, 5", 725.04	1787		
	272											272			625	25803	272	FT	CONDUIT, CONCRETE ENCASED, AS PER PLAN (2-5" CONDUIT, 725.051)	1777		
	368											368			625	25803	368	FT	CONDUIT, CONCRETE ENCASED, AS PER PLAN (5-5" CONDUIT, 725.051)	1777		
	391											391			625	25803	391	FT	CONDUIT, CONCRETE ENCASED, AS PER PLAN (7-5" CONDUIT, 725.051)	1777		
	652											652			625	25803	652	FT	CONDUIT, CONCRETE ENCASED, AS PER PLAN (9-5" CONDUIT, 725.051)	1777		
	8325											8325			625	25911	8325	FT	CONDUIT CLEANED AND CABLES REMOVED, AS PER PLAN	1787		
	30											30			625	32001	30	EACH	GROUND ROD, AS PER PLAN	1779		
	196											196			625	98000	196	EACH	LIGHTING, MISC.: 15KV IN-LINE SPLICE	1777		
	12											12			625	98000	12	EACH	LIGHTING, MISC.: 24" SPACER CABLE TANGENT BRACKET	1779		
	1											1			625	98000	1	EACH	LIGHTING, MISC.: DEAD-END ASSEMBLY	1779		
	1											1			625	98000	1	EACH	LIGHTING, MISC.: DOUBLE DEAD-END ASSEMBLY	1779		
	4											4			625	98000	4	EACH	LIGHTING, MISC.: JOINT-USE CONDUIT RISER	1779		
	18											18			625	98000	18	EACH	LIGHTING, MISC.: JOINT-USE MESSENGER ASSEMBLY	1779		
	24											24			625	98000	24	EACH	LIGHTING, MISC.: PRIMARY CONDUIT RISER	1779		
	24											24			625	98000	24	EACH	LIGHTING, MISC.: SPACER CABLE DEADEND ASSEMBLY	1779		
	26											26			625	98000	26	EACH	LIGHTING, MISC.: SPACER CABLE TO SPACER CABLE DOUBLE DEADEND ASSEMBLY	1779		
	1											1			625	98000	1	EACH	LIGHTING, MISC.: TWO-WAY BUCK	1779		
	1538											1538			632	69350	1538	FT	POWER CABLE, MISC.: NO. 2 / 0 AWG CU 15KV OPEN WIRE	1778		
	1											1			632	89300	1	EACH	WOOD POLE (40' CLASS III)			

GENERAL SUMMARY - 7

DESIGN AGENCY

Michael Baker INTERNATIONAL

DESIGNER KJM

REVIEWER KGJ 05/22/24

PROJECT ID 82382

SHEET TOTAL 409 2696

SHEET NUMBER										PARTICIPATION			ALT (X)	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET	
125	1455	1485	1678	1782						01/IMS /04	02/IMS /10	03/IMS /08								
				1						1				632	89300	1	EACH	ELECTRICAL (CONT.)		
				17						17				632	89300	17	EACH	WOOD POLE (45' CLASS III)		
				4						4				632	89300	4	EACH	WOOD POLE (50' CLASS III)		
				3						3				632	89300	3	EACH	WOOD POLE (55' CLASS II)		
				2						2				632	89300	2	EACH	WOOD POLE (55' CLASS III)		
				2						2				632	89300	2	EACH	WOOD POLE (70' CLASS H3)		
				67						67				632	89401	67	EACH	WOOD POLE (80' CLASS H6)	1779	
																		TRAFFIC SURVEILLANCE		
			61							61				625	25408	61	FT	CONDUIT, 2", 725.051		
			8108							8108				625	25410	8108	FT	CONDUIT, 2", 725.052		
			32							32				625	25504	32	FT	CONDUIT, 3", 725.051		
			984							984				625	25908	984	FT	CONDUIT, JACKED OR DRILLED, 725.052, 2"		
			989							989				625	29000	989	FT	TRENCH		
			1							1				625	30700	1	EACH	PULL BOX, 725.08, 18"		
			3							3				625	32000	3	EACH	GROUND ROD		
			989							989				625	36010	989	FT	UNDERGROUND WARNING/MARKING TAPE		
			70							70				632	68300	70	FT	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG		
			500							500				632	69300	500	FT	POWER CABLE, 3 CONDUCTOR, NO. 4 AWG		
			1							1				632	70001	1	EACH	POWER SERVICE, AS PER PLAN 3	1676	
			2							2				633	67100	2	EACH	CABINET FOUNDATION		
			1							1				633	67201	1	EACH	CONTROLLER WORK PAD, AS PER PLAN	1676	
			8							8				809	00530	8	EACH	ITS JUNCTION BOX, 17x24x6 INCHES		
			9							9				809	02000	9	EACH	32" ITS PULL BOX WITH PAD AND STANDARD LID ASSEMBLY, TYPE 2		
			12128							12128				809	23100	12128	FT	MICRO-DUCT INNERDUCT, 14 / 10		
			1							1				809	60000	1	EACH	CCTV IP-CAMERA SYSTEM, PTZ		
			2							2				809	60070	2	EACH	CCTV IP-CAMERA SYSTEM, WRONG WAY DETECTION		
			1							1				809	61090	1	EACH	CCTV LOWERING UNIT		
			350							350				809	64550	350	FT	ETHERNET CABLE, OUTDOOR-RATED		
			2							2				809	65000	2	EACH	ITS CABINET - GROUND MOUNTED		
			1							1				809	65990	1	EACH	ITS DEVICE, MISC.: REMOVAL OF EXISTING CCTV AND LOWERING UNIT	1676	
			1							1				809	65990	1	EACH	ITS DEVICE, MISC.: REMOVAL OF EXISTING CCTV POLE	1676	
			4							4				809	65990	4	EACH	ITS DEVICE, MISC.: REMOVAL OF EXISTING POLE-MOUNTED ITS CABINET	1676	
			LS							LS				809	70000	LS		MAINTAINING ITS DURING CONSTRUCTION		
																		TRAFFIC SURVEILLANCE ALTERNATES		
			1							1				X	809	61040	1	EACH	CCTV POLE, 70' TALL, CONCRETE (ALTERNATE 1)	
			1							1				X	809	61040	1	EACH	CCTV POLE, 70' TALL, STEEL (ALTERNATE 2)	
																		TRAFFIC CONTROL		
	44									44					620	00500	44	EACH	DELINEATOR, POST GROUND MOUNTED	
	946									946					621	00100	946	EACH	RPM	
		32								32					625	32000	32	EACH	GROUND ROD	
			38							38					626	00102	38	EACH	BARRIER REFLECTOR, TYPE 1 (BI-DIRECTIONAL)	
			166							166					626	00102	166	EACH	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	
	14									14					626	00110	14	EACH	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL)	
	103									103					626	00110	103	EACH	BARRIER REFLECTOR, TYPE 2 (ONE-WAY)	
		2037.3								2037.3					630	02100	2037.3	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
		2479.6								2479.6					630	03100	2479.6	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
		491.0								491.0					630	04101	491.0	FT	GROUND MOUNTED SUPPORT, NO. 4 POST, AS PER PLAN	1449
			386.4							386.4					630	06400	386.4	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, S4X7.7	
			34.0							34.0					630	06500	34.0	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W6X9	
			40.0							40.0					630	07000	40.0	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W8X18	
48.6		54.8								103.4					630	07500	103.4	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W10X22	
		176.2								176.2					630	07600	176.2	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W10X12	
			1.0							1.0					630	08002	1.0	FT	ONE WAY SUPPORT, NO. 2 POST	
12.5										12.5					630	08004	12.5	FT	ONE WAY SUPPORT, NO. 3 POST	
		36.1								36.1					630	08100	36.1	FT	ONE WAY SUPPORT, NO. 4 POST	
		148								148					630	08600	148	EACH	SIGN POST REFLECTOR	
			2							2					630	09000	2	EACH	BREAKAWAY STRUCTURAL BEAM CONNECTION	
			4							4					630	72340	4	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-12.31, DESIGN 12	

DESIGN AGENCY  
**Michael Baker INTERNATIONAL**

DESIGNER  
KJM

REVIEWER  
KGJ 05/22/24

PROJECT ID  
82382

SHEET TOTAL  
410 2696

SHEET NUMBER														PARTICIPATION			ALT (X)	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
120	125	1455	1468	1485	1493							01/IMS /04	02/IMS /10	03/IMS /08									
				6								6			630	72410	6	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-15.116, DESIGN 1				
				6								6			630	72420	6	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-15.116, DESIGN 2				
				1								1			630	72430	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-15.116, DESIGN 3				
				1								1			630	72550	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-16.22, DESIGN 13				
	26			61								87			630	75000	87	EACH	SIGN ATTACHMENT ASSEMBLY				
				2								2			630	79100	2	EACH	SIGN HANGER ASSEMBLY, MAST ARM				
				112								112			630	79500	112	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED				
				18								18			630	79604	18	EACH	SIGN SUPPORT ASSEMBLY, BRIDGE MOUNTED, TYPE 2				
	146.0			4044.7								4190.7			630	80100	4190.7	SF	SIGN, FLAT SHEET				
				899.5								899.5			630	80200	899.5	SF	SIGN, GROUND MOUNTED EXTRUSHEET				
	1026.0			7235.5								8261.5			630	80224	8261.5	SF	SIGN, OVERHEAD EXTRUSHEET				
	781.3											781.3			630	80300	781.3	SF	SIGN, TEMPORARY OVERLAY				
				6								6			630	80501	6	EACH	SIGN, DOUBLE FACED, STREET NAME, AS PER PLAN	1449			
				5								5			630	84010	5	EACH	CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TYPE TC-21.50				
	2			4								6			630	84500	6	EACH	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION				
				27								27			630	84510	27	EACH	RIGID OVERHEAD SIGN SUPPORT FOUNDATION				
	1				229							230			630	84900	230	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL				
					5							5			630	85000	5	EACH	REMOVAL OF GROUND MOUNTED SIGN AND STORAGE				
					2							2			630	85100	2	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION				
					14							14			630	85400	14	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL				
					198							198			630	86002	198	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL				
				2								2			630	86010	2	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND REERECTION				
	2				28							30			630	86102	30	EACH	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL				
					1							1			630	86270	1	EACH	REMOVAL OF GROUND MOUNTED PIPE SUPPORT AND STORAGE				
	5											5			630	87000	5	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE				
	5											5			630	87100	5	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND REERECTION				
	20				69							89			630	87400	89	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL				
					248							248			630	87500	248	EACH	REMOVAL OF POLE MOUNTED SIGN AND DISPOSAL				
					1							1			630	87510	1	EACH	REMOVAL OF POLE MOUNTED SIGN AND STORAGE				
					3							3			630	87520	3	EACH	REMOVAL OF POLE MOUNTED SIGN AND REERECTION				
					18							18			630	89702	18	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL				
					1							1			630	89804	1	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-15.115				
	33											33			630	89894	33	EACH	REMOVAL OF TEMPORARY OVERLAY SIGN AND DISPOSAL				
	4											4			630	89898	4	EACH	REMOVAL OF TEMPORARY OVERLAY SIGN AND STORAGE				
95970												95970			642	30000	95970	FT	REMOVAL OF PAVEMENT MARKING				
70												70			642	30020	70	EACH	REMOVAL OF PAVEMENT MARKING				
				1.33								1.33			644	00100	1.33	MILE	EDGE LINE, 4"				
1.96		7.62										9.58			644	00104	9.58	MILE	EDGE LINE, 6"				
0.46			2.04									2.50			644	00200	2.50	MILE	LANE LINE, 4"				
2.20		3.69										5.89			644	00204	5.89	MILE	LANE LINE, 6"				
												1.77			644	00300	1.77	MILE	CENTER LINE				
0.04		0.17		1.56								5882			644	00400	5882	FT	CHANNELIZING LINE, 8"				
517				5365								10173			644	00404	10173	FT	CHANNELIZING LINE, 12"				
1153		9020										1161			644	00500	1161	FT	STOP LINE				
				1161								4401			644	00620	4401	FT	CROSSWALK LINE, 12"				
				4348																			
												1219			644	00621	1219	FT	CROSSWALK LINE, 12", AS PER PLAN	1449			
				1219								4153			644	00700	4153	FT	TRANSVERSE/DIAGONAL LINE				
	74			1466								1573			644	00720	1573	FT	CHEVRON MARKING				
				473								581			644	00900	581	SF	ISLAND MARKING				
				581								2960			644	01200	2960	FT	PARKING LOT STALL MARKING				
				2960																			
	16			136								162			644	01300	162	EACH	LANE ARROW				
				2								2			644	01350	2	EACH	LANE REDUCTION ARROW				
												11			644	01360	11	EACH	WRONG WAY ARROW				
												2			644	01370	2	EACH	TWO WAY LEFT TURN ARROW				
	257			3053								3310			644	01500	3310	FT	DOTTED LINE, 4"				
	2449											4869			644	01510	4869	FT	DOTTED LINE, 6"				
												1448			644	01514	1448	FT	DOTTED LINE, 8"				
				1448								1365			644	01520	1365	FT	DOTTED LINE, 12"				
												6			644	01630	6	EACH	BIKE LANE SYMBOL MARKING				
				6																			

DESIGN AGENCY	
DESIGNER	KJM
REVIEWER	KGJ 05/22/24
PROJECT ID	82382
SHEET TOTAL	411 2696

MODEL: Sheet-10 PAPER: 34x22 (in.) DATE: 9/12/2025 TIME: 3:00:36 PM USER: Joseph.Hogan  
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SHEET NUMBER														PARTICIPATION			ALT (X)	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
1455	1468	1642									01/IMS /04	02/IMS /10	03/IMS /08										
											<b>TRAFFIC CONTROL (CONT.)</b>												
	4										4			644	19000	4	EACH	SHARED LANE MARKING					
	38										38			644	50300	38	FT	PAVEMENT MARKING, MISC.: BIKE LANE CROSSWALK	1449				
	1034										1034			644	60000	1034	SF	GREEN COLORED PAVEMENT FOR BIKE LANES					
	0.14										0.14			646	10000	0.14	MILE	EDGE LINE, 4"					
1.90											1.90			646	10010	1.90	MILE	EDGE LINE, 6"					
	0.42										0.42			646	10100	0.42	MILE	LANE LINE, 4"					
1.48											1.48			646	10110	1.48	MILE	LANE LINE, 6"					
	0.35										0.35			646	10200	0.35	MILE	CENTER LINE					
	241										241			646	10300	241	FT	CHANNELIZING LINE, 8"					
3018											3018			646	10310	3018	FT	CHANNELIZING LINE, 12"					
	33										33			646	10400	33	FT	STOP LINE					
	56										56			646	10510	56	FT	CROSSWALK LINE, 12"					
310	188										498			646	10600	498	FT	TRANSVERSE/DIAGONAL LINE					
222											222			646	10620	222	FT	CHEVRON MARKING					
	5										5			646	20300	5	EACH	LANE ARROW					
2687											2687			646	20504	2687	FT	DOTTED LINE, 6"					
	4										4			646	20600	4	EACH	BIKE LANE SYMBOL MARKING					
	2										2			646	20650	2	EACH	SHARED LANE MARKING					
	876										876			646	60100	876	SF	GREEN COLORED PAVEMENT FOR BIKE LANES					
											<b>TRAFFIC SIGNALS</b>												
	4										4			625	00480	4	EACH	CONNECTION, UNFUSED PERMANENT					
	756										756			625	25408	756	FT	CONDUIT, 2", 725.051					
	448										448			625	25504	448	FT	CONDUIT, 3", 725.051					
	152										152			625	25604	152	FT	CONDUIT, 4", 725.051					
	4010										4010			625	25802	4010	FT	CONDUIT, CONCRETE ENCASED, 4", 725.051					
	675										675			625	25910	675	FT	CONDUIT CLEANED AND CABLES REMOVED					
	2824										2824			625	29000	2824	FT	TRENCH					
	447										447			625	29400	447	FT	TRENCH IN PAVED AREA					
	12										12			625	30510	12	EACH	PULL BOX, 725.06, SIZE 4					
	28										28			625	30530	28	EACH	PULL BOX, 725.06, SIZE 18					
	65										65			625	32000	65	EACH	GROUND ROD					
	3271										3271			625	36011	3271	FT	UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN	1638				
	58										58			630	79101	58	EACH	SIGN HANGER ASSEMBLY, MAST ARM, AS PER PLAN	1638				
	4										4			630	79500	4	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED					
	254.0										254.0			630	80100	254.0	SF	SIGN, FLAT SHEET					
	30										30			630	80511	30	EACH	SIGN, STREET NAME, AS PER PLAN	1638				
	4										4			632	04000	4	EACH	VEHICULAR SIGNAL HEAD, MISC.: (LED), 3-SECTION, 8" LENS, 1-WAY, POLYCARBONATE, YELLOW (BICYCLE)	1640				
	87										87			632	05006	87	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, YELLOW					
	12										12			632	05086	12	EACH	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, YELLOW					
	56										56			632	20731	56	EACH	PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN	1640				
	62										62			632	20750	62	EACH	ACCESSIBLE PEDESTRIAN PUSHBUTTON					
	103										103			632	25000	103	EACH	COVERING OF VEHICULAR SIGNAL HEAD					
	56										56			632	25010	56	EACH	COVERING OF PEDESTRIAN SIGNAL HEAD					
	8775										8775			632	40300	8775	FT	SIGNAL CABLE, 3 CONDUCTOR, NO. 14 AWG					
	8775										8775			632	40500	8775	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG					
	10250										10250			632	40700	10250	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG					
	30										30			632	64010	30	EACH	SIGNAL SUPPORT FOUNDATION					
	28										28			632	64020	28	EACH	PEDESTAL FOUNDATION					
	8										8			632	64950	8	EACH	TEST HOLE PERFORMED					
	450										450			632	68200	450	FT	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG					
	450										450			632	69200	450	FT	POWER CABLE, 2 CONDUCTOR, NO. 4 AWG					
	7										7			632	70001	7	EACH	POWER SERVICE, AS PER PLAN 2	1639				
	9										9			632	70200	9	EACH	CONDUIT RISER, 1" DIAMETER					
	10										10			632	72111	10	EACH	SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 4, AS PER PLAN	1640				
	8										8			632	72131	8	EACH	SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 12, AS PER PLAN	1640				
	8										8			632	72141	8	EACH	SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 13, AS PER PLAN	1640				
	2										2			632	72151	2	EACH	SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 14, AS PER PLAN	1640				
	2										2			632	86121	2	EACH	STRAIN POLE, TYPE TC-81.11, DESIGN 8, AS PER PLAN	1640				
	14										14			632	89901	14	EACH	PEDESTAL, 8', TRANSFORMER BASE, AS PER PLAN	1640				

GENERAL SUMMARY - 10

DESIGN AGENCY

**Michael Baker**  
INTERNATIONAL

DESIGNER  
**KJM**

REVIEWER  
**KGJ 05/22/24**

PROJECT ID  
**82382**

SHEET TOTAL  
412 | 2696

CUY-90-16.28 (CCG3A)

MODEL: Sheet11 PAPER: 34x22 (in.) DATE: 9/12/2025 TIME: 3:00:38 PM USER: Joseph.Hogan  
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SHEET NUMBER														PARTICIPATION			ALT (X)	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
429	1642	1806	1839							01/IMS /04	02/IMS /10	03/IMS /08											
										<b>TRAFFIC SIGNALS (CONT.)</b>													
	14									14				632	90010	14	EACH	PEDESTAL, MISC.: PEDESTAL 15', TRANSFORMER BASE	1640				
	8									8				632	90101	8	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN	1638				
	7									7				633	65511	7	EACH	CABINET, TYPE TS-2, AS PER PLAN	1641				
	7									7				633	67100	7	EACH	CABINET FOUNDATION					
	6									6				633	67200	6	EACH	CONTROLLER WORK PAD					
	7									7				809	69123	7	EACH	ATC CONTROLLER, AS PER PLAN	1641				
																		<b>TRAFFIC SIGNALS ALTERNATES 1</b>					
	7									7				X	633	45001	7	EACH	GPS (GLOBAL POSITIONING SYSTEM) CLOCK ASSEMBLY, AS PER PLAN (GENERIC) (ALTERNATE 1)	1641			
	7									7				X	633	45001	7	EACH	GPS (GLOBAL POSITIONING SYSTEM) CLOCK ASSEMBLY, AS PER PLAN (ELTEC) (ALTERNATE 2)	1641			
																		<b>TRAFFIC SIGNALS ALTERNATES 2</b>					
	20									20				X	809	69101	20	EACH	STOP LINE RADAR DETECTION, AS PER PLAN (GENERIC) (ALTERNATE 1)	1638			
	20									20				X	809	69101	20	EACH	STOP LINE RADAR DETECTION, AS PER PLAN (ITERIS) (ALTERNATE 2)	1638			
																		<b>LANDSCAPING</b>					
			75							75					511	53010	75	CY	CLASS QC1 CONCRETE, MISC.: GATEWAY MONUMENT SIGN	1827			
			LS							LS					607	98200	LS		FENCE, MISC.: BRIDGE 13 SCREEN WALL PANELS	1832-1835			
			LS							LS					607	98200	LS		FENCE, MISC.: GATEWAY MONUMENT SIGN SCREEN WALL PANELS	1832			
			961							961					608	98000	961	SF	WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK 1)	1825			
			743							743					608	98000	743	SF	WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK 2)	1825			
			110							110					608	98000	110	SF	WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK 3)	1825			
			1847							1847					608	98000	1847	SF	WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK 4)	1825			
	243									243					661	00501	243	CY	MULCH, AS PER PLAN	1804			
	48400									48400					661	31000	48400	GAL	LANDSCAPE WATERING				
	9									9					661	40100	9	EACH	DECIDUOUS TREE, 2-1/2" CALIPER, AMERICAN SYCAMORE (POC)				
	5									5					661	40100	5	EACH	DECIDUOUS TREE, 2-1/2" CALIPER, BUR OAK (QMA)				
	7									7					661	40100	7	EACH	DECIDUOUS TREE, 2-1/2" CALIPER, CHINESE ELM (ULM)				
	15									15					661	40100	15	EACH	DECIDUOUS TREE, 2-1/2" CALIPER, CHINKAPIN OAK (QMU)				
	11									11					661	40100	11	EACH	DECIDUOUS TREE, 2-1/2" CALIPER, GREEN VASE ZELKOVA (ZSE)				
	18									18					661	40100	18	EACH	DECIDUOUS TREE, 2-1/2" CALIPER, KENTUCKY COFFEETREE (GDI)				
	1									1					661	40100	1	EACH	DECIDUOUS TREE, 2-1/2" CALIPER, LITTLELEAF LINDEN (TCO)				
	19									19					661	40100	19	EACH	DECIDUOUS TREE, 2-1/2" CALIPER, OHIO BUCKEYE (AGL)				
	18									18					661	40100	18	EACH	DECIDUOUS TREE, 2-1/2" CALIPER, SCARLET OAK (QCO)				
	12									12					661	40100	12	EACH	DECIDUOUS TREE, 2-1/2" CALIPER, SOMERSET RED MAPLE (ARS)				
	10									10					661	40100	10	EACH	DECIDUOUS TREE, 2-1/2" CALIPER, THORNLESS HONEYLOCUST (GTR)				
	6									6					661	50160	6	EACH	EVERGREEN TREE, 8' HEIGHT, AMERICAN HOLLY (IOK)				
	26									26					661	50160	26	EACH	EVERGREEN TREE, 8' HEIGHT, AMERICAN HOLLY (IOP)				
	72									72					661	50160	72	EACH	EVERGREEN TREE, 8' HEIGHT, EASTERN REDCEDAR (JVI)				
	58									58					661	50160	58	EACH	EVERGREEN TREE, 8' HEIGHT, PITCH PINE (PRI)				
	53									53					661	99900	53	EACH	PLANTING, MISC.: FLOWERING TREE, 2-1/2" CALIPER, CRABAPPLE SP. (MAL)	1824			
	128									128					661	99900	128	EACH	PLANTING, MISC.: FLOWERING TREE, 2-1/2" CALIPER, EASTERN REDBUD (CCN)	1824			
	43									43					661	99900	43	EACH	PLANTING, MISC.: FLOWERING TREE, 2-1/2" CALIPER, FLOWERING DOGWOOD (CFL)	1824			
	90									90					661	99900	90	EACH	PLANTING, MISC.: FLOWERING TREE, 2-1/2" CALIPER, GREEN HAWTHORN (CVI)	1824			
	33									33					661	99900	33	EACH	PLANTING, MISC.: FLOWERING TREE, 2-1/2" CALIPER, IVORY SILK JAPANESE TREE LILAC (SRE)	1824			
	36									36					661	99900	36	EACH	PLANTING, MISC.: FLOWERING TREE, 2-1/2" CALIPER, KWANZAN FLOWERING CHERRY (PSE)	1824			
	88									88					661	99900	88	EACH	PLANTING, MISC.: FLOWERING TREE, 6-8' HEIGHT, AUTUMN BRILLIANCE SERVICEBERRY (ACA)	1824			
	14									14					661	99900	14	EACH	PLANTING, MISC.: FLOWERING TREE, 6-8' HEIGHT, COMMON WITCH HAZEL (HVI)	1824			
	196									196					661	99900	196	EACH	PLANTING, MISC.: SHRUB, 3 GALLON, SHORE JUNIPER (JCB)	1824			
			9							9					SPECIAL	680E14550	9	EACH	TRASH RECEPTACLE	1826			
			1							1					SPECIAL	680E43100	1	EACH	COMPLETE IRRIGATION SYSTEM	1836			
2										2					SPECIAL	690E98000	2	EACH	BRICK 1 PAVER MOCK UP	1826			
2										2					SPECIAL	690E98000	2	EACH	BRICK 2 PAVER MOCK UP	1826			
2										2					SPECIAL	690E98000	2	EACH	BRICK 3 PAVER MOCK UP	1826			
2										2					SPECIAL	690E98000	2	EACH	BRICK 4 PAVER MOCK UP	1826			
1										1					SPECIAL	690E98000	1	EACH	BRIDGE 13 ARCHITECTURAL CONCRETE MIX MOCK UP	1829			
1										1					SPECIAL	690E98000	1	EACH	BRIDGE 13 PLANTER MOCK UP	1831			
1										1					SPECIAL	690E98000	1	EACH	BRIDGE 13 SCREEN WALL MOCK UP	1833			
1										1					SPECIAL	690E98000	1	EACH	GATEWAY MONUMENT SIGN ARCHITECTURAL CONCRETE MIX MOCK UP	1829			
1										1					SPECIAL	690E98000	1	EACH	GATEWAY MONUMENT SIGN SCREEN WALL MOCK UP	1833			
			21							21					SPECIAL	690E98000	21	EACH	GATEWAY SIGN ALUMINUM LETTERS	1827			

GENERAL SUMMARY - 11

DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
REVIEWER	KJM
PROJECT ID	KGJ 05/22/24
SHEET TOTAL	413   2696

SHEET NUMBER													PARTICIPATION			ALT (X)	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
120	427	428	429	435	489	1839						01/IMS /04	02/IMS /10	03/IMS /08								
			2									2				SPECIAL	690E98000	2	EACH	LANDSCAPING (CONT.)	1825	
						24						24				SPECIAL	690E98000	24	EACH	INTEGRALLY COLORED CONCRETE CROSSWALK MOCK UP	1826	
						159						159				SPECIAL	690E98000	159	EACH	PARK BENCH	1826	
						70						70				SPECIAL	690E98000	70	EACH	SCREEN WALL COVER PLATE	1826	
			9									9				SPECIAL	690E98000	9	EACH	SKATE GUARD	1798	
																SPECIAL	690E98000	9	EACH	TREE PROTECTION		
			320									320				SPECIAL	690E98100	320	FT	AIR KNIFE EXCAVATION	1798	
						1118						1118				SPECIAL	690E98100	1118	FT	METAL EDGING	1826	
			LS									LS				SPECIAL	690E98400	LS		CLEVELAND PLANTING	1804	
						LS						LS				SPECIAL	690E98400	LS		PLANTER WATERPROOFING SYSTEM	1830	
						29						29				SPECIAL	690E98700	29	CY	PLANTING SOIL FOR BRIDGE 13 PARAPET PLANTERS	1799	
						174						174				SPECIAL	690E98700	174	CY	PLANTING SOIL FOR BRIDGE 13 TREE PLANTERS	1799	
																				<b>RETAINING WALLS</b>		
																				RETAINING WALL AC ESTIMATED QUANTITIES	1178	
																				RETAINING WALL AD ESTIMATED QUANTITIES	1195	
																				RETAINING WALL AE ESTIMATED QUANTITIES	1210	
																				RETAINING WALL AF ESTIMATED QUANTITIES	1221	
																				RETAINING WALL AG ESTIMATED QUANTITIES	1233	
																				RETAINING WALL AH ESTIMATED QUANTITIES	1244	
																				RETAINING WALL AI ESTIMATED QUANTITIES	1253	
																				RETAINING WALL AJ ESTIMATED QUANTITIES	1265	
																				RETAINING WALL N ESTIMATED QUANTITIES	1274	
																				RETAINING WALL S ESTIMATED QUANTITIES	1286	
																				RETAINING WALL T ESTIMATED QUANTITIES	1303	
																				RETAINING WALL Y ESTIMATED QUANTITIES	1313	
																				RETAINING WALL Z ESTIMATED QUANTITIES	1322	
																				RAMP A3 BARRIER MOMENT SLAB ESTIMATED QUANTITIES	1335	
																				MEDIAN BARRIER MOMENT SLAB ESTIMATED QUANTITIES	1342	
																				RAMP A2 OVERHEAD SIGN TRUSS ESTIMATED QUANTITIES	1356	
																				RAMP B6 OVERHEAD SIGN TRUSS ESTIMATED QUANTITIES	1362	
																				STRUCTURE REMOVED		
																				PORTIONS OF STRUCTURE REMOVED		
																				<b>BUILDING DEMOLITION</b>		
																				BUILDING DEMOLISHED (103-13-019 / 320-WL)	74	
																				BUILDING DEMOLISHED, AS PER PLAN (103-26-003 / 303)	74	
																				<b>STRUCTURE OVER 20 FOOT SPAN</b>		
																				STRUCTURE CUY-77-1587 (SFN-1806910   BRIDGE 9) ESTIMATED QUANTITIES	1884	
																				STRUCTURE CUY-90-1653L (SFN-1807901   BRIDGE 10) ESTIMATED QUANTITIES	2041	
																				STRUCTURE CUY-90-1653R (SFN-1807804   BRIDGE 11) ESTIMATED QUANTITIES	2090	
																				STRUCTURE CUY-90-1652S (SFN-1807806   BRIDGE 12) ESTIMATED QUANTITIES	2134	
																				STRUCTURE CUY-90-1678 (SFN-1807839   BRIDGE 13) ESTIMATED QUANTITIES	2188-2189	
																				STRUCTURE CUY-90-1696 (SFN-1807898   BRIDGE 14) ESTIMATED QUANTITIES	2291-2292	
																				STRUCTURE CUY-90-1640 (SFN-1807773   BRIDGE E5) ESTIMATED QUANTITIES	2371	
																				STRUCTURE CUY-77-1593L (SFN-1806939   BRIDGE E6) ESTIMATED QUANTITIES	2378	
																				STRUCTURE CUY-E14th-0002SN (SFN-1806912   BRIDGE E10) ESTIMATED QUANTITIES	2381	
																				<b>MAINTENANCE OF TRAFFIC</b>		
																				LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	87	
																				INCREASED BARRIER DELINEATION	85	
																				WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	84	
																				DETOUR SIGNING		
																				WORK ZONE INCREASED PENALTIES SIGN	83	
																				REPLACEMENT SIGN	83	
																				WORK ZONE CROSSOVER LIGHTING SYSTEM	85	
																				WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	84	
																				BARRIER REFLECTOR, TYPE 1 (ONE WAY)	85	
																				OBJECT MARKER, ONE WAY	85	
																				OBJECT MARKER, TWO WAY	85	
																				MAINTAINING TRAFFIC, MISC.: PARTIAL TEMPORARY TRAFFIC SIGNAL	87	
																				MAINTAINING TRAFFIC, MISC.: TEMPORARY TRAFFIC SIGNAL	85	

DESIGN AGENCY	
<b>Michael Baker</b>	
INTERNATIONAL	
DESIGNER	KJM
REVIEWER	KGJ 05/22/24
PROJECT ID	82382
SHEET	414
TOTAL	2696

SHEET NUMBER													PARTICIPATION			ALT (X)	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
120	428	429	435									01/IMS /04	02/IMS /10	03/IMS /08								
										<b>MAINTENANCE OF TRAFFIC (CONT.)</b>												
	200											200			614	18601	200	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	83		
1.04	0.50											1.54			614	20000	1.54	MILE	WORK ZONE LANE LINE, CLASS I, 4"			
8.75	2.50											11.25			614	20010	11.25	MILE	WORK ZONE LANE LINE, CLASS I, 6"			
2.03	0.50											2.53			614	21000	2.53	MILE	WORK ZONE CENTER LINE, CLASS I			
3.39	1.00											4.39			614	22000	4.39	MILE	WORK ZONE EDGE LINE, CLASS I, 4"			
18.26	4.50											22.76			614	22010	22.76	MILE	WORK ZONE EDGE LINE, CLASS I, 6"			
2864	650											3514			614	23000	3514	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8"			
34686	8750											43436			614	23010	43436	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12"			
14515	3650											18165			614	24000	18165	FT	WORK ZONE DOTTED LINE, CLASS I			
581	150											731			614	25000	731	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I			
706	175											881			614	26000	881	FT	WORK ZONE STOP LINE, CLASS I			
657	175											832			614	27010	832	FT	WORK ZONE CROSSWALK LINE, CLASS I, 12"			
92	25											117			614	30000	117	EACH	WORK ZONE ARROW, CLASS I			
1	1											2			614	31000	2	EACH	WORK ZONE WORD ON PAVEMENT, 72", CLASS I			
4	1											5			614	98200	5	EACH	WORK ZONE PAVEMENT MARKING, MISC.: SHARED LANE MARKING	84		
										<b>INCIDENTALS</b>												
30133												LS			615	10000	LS		ROADS FOR MAINTAINING TRAFFIC			
	2285											30133			615	20000	30133	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	84		
	150											2285			616	10000	2285	MGAL	WATER			
57669												150			616	20000	150	TON	CALCIUM CHLORIDE			
												57669			622	41011	57669	FT	PORTABLE BARRIER, 50", AS PER PLAN	84		
3			1150									3			622	41060	3	EACH	DUAL PORTABLE BARRIER TRANSITION/TERMINATION			
2054												1150			622	41101	1150	FT	PORTABLE BARRIER, UNANCHORED, AS PER PLAN	76		
												2054			622	41111	2054	FT	PORTABLE BARRIER, ANCHORED, AS PER PLAN	84		
			190									190			622	41111	190	FT	PORTABLE BARRIER, ANCHORED, AS PER PLAN 2	76		
		64										64			829	00100	64	SNMT	WORK ZONE EGRESS WARNING SYSTEM	84		
		648										648			896	00010	648	SNMT	PORTABLE NON-INTRUSIVE TRAFFIC SENSOR, CLASS I			
		216										216			896	00020	216	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN			
										<b>INCIDENTALS</b>												
												LS			108	10000	LS		CPM PROGRESS SCHEDULE			
												21000			SPECIAL	111E10100	21000	EACH	DEPARTMENTS SHARE FACILITATED PARTNERING COSTS	PN 111		
												LS			614	11000	LS		MAINTAINING TRAFFIC	81		
	72											72			619	16021	72	MNTH	FIELD OFFICE, TYPE C, AS PER PLAN	80A		
												LS			623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING			
												LS			624	10000	LS		MOBILIZATION			

DESIGN AGENCY	
<b>Michael Baker</b> INTERNATIONAL	
DESIGNER	KJM
REVIEWER	KGJ 05/22/24
PROJECT ID	82382
SHEET	415
TOTAL	2696

**CUY-90-16.28 (CCG3A)**

MODEL: Sheet01\_PAPER(SIZE: 34x22 (in.)) DATE: 9/12/2025 TIME: 3:14:09 PM USER: Joseph.Hogan  
 p:\mb-us-pw-bentley.com\mb-us-pw-03\Documents\Drainage\Sheets\82382\_DS101.dgn

REF NO.	SHEET NO.	STATION		SIDE	CFN	611												611																					
		FROM	TO			12" CONDUIT, TYPE B, 706.08 & 706.12	12" CONDUIT, TYPE B, 748.01	12" CONDUIT, TYPE C, 706.08 & 706.12	15" CONDUIT, TYPE B, 706.08 & 706.12	15" CONDUIT, TYPE C, 706.08 & 706.12	21" CONDUIT, TYPE B	24" CONDUIT, TYPE B, 706.08 & 706.12	66" CONDUIT, TYPE B, 706.02 & 706.11	CONDUIT, BORED OR JACKED, 66" TYPE B, 706.02 & 706.11	CONDUIT, BORED OR JACKED, 66" TYPE C, 706.02 & 706.11	CATCH BASIN, NO. 3, AS PER PLAN	CATCH BASIN, NO. 3A, AS PER PLAN	CATCH BASIN, NO. 6, AS PER PLAN 2	CATCH BASIN, NO. 8, AS PER PLAN 2	CATCH BASIN, NO. 2-2A, AS PER PLAN 2	CATCH BASIN, NO. 2-2B, AS PER PLAN	CATCH BASIN, NO. 2-2B, AS PER PLAN 2	CATCH BASIN ADJUSTED TO GRADE	CATCH BASIN RECONSTRUCTED TO GRADE	MANHOLE, NO. 3, AS PER PLAN	MANHOLE, NO. 3, AS PER PLAN 2	MANHOLE ADJUSTED TO GRADE	MANHOLE RECONSTRUCTED TO GRADE	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN 2	CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 6 EGG-SHAPED	CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 7 EGG-SHAPED	CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 10 EGG-SHAPED	CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 11 EGG-SHAPED	CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 12 EGG-SHAPED				
D-600	1094	RAMP A3	585+34.70																																				
D-601	1094	RAMP A3	585+77.14	RAMP A3	585+34.70	LT	1996167																																
D-628	1095	E. 14TH ST. NB	54+74.78	E. 14TH ST. NB	55+12.06	RT		41																															
D-629	1095	E. 14TH ST. NB	54+94.00	E. 14TH ST. NB	55+12.20	LT/RT		36																															
D-627	1095	E. 14TH ST. NB	55+12.06	E. 14TH ST. NB	55+12.20	RT		32																															
D-626	1095	E. 14TH ST. NB	55+12.20	E. 14TH ST. NB	56+15.10	RT		103																															
D-624	1095	E. 14TH ST. NB	55+63.53	E. 14TH ST. NB	56+15.10	RT		61																															
D-623	1095	E. 14TH ST. NB	56+15.10	E. 14TH ST. NB	56+15.10	RT		32																															
D-622	1095	E. 14TH ST. NB	56+15.10	E. 14TH ST. NB	57+00.00	RT																																	
D-621	1095	E. 14TH ST. NB	57+00.00	E. 14TH ST. NB	57+00.00	RT		41																															
D-620	1095	E. 14TH ST. NB	57+00.00	E. 14TH ST. SB	36+57.73	RT/LT																																	
D-711	1095	E. 14TH ST. NB	57+58.70			RT																																	
D-710	1095	E. 14TH ST. NB	57+67.45	E. 14TH ST. NB	57+58.70	RT																																	
D-401	1095	E. 14TH ST. NB	57+78.00	E. 14TH ST. NB	57+67.45	RT																																	
D-616	1095	INTERIM E. 14TH ST. SB	208+25.00	INTERIM E. 14TH ST. SB	208+65.00	LT/RT		43																															
D-614	1095	INTERIM E. 14TH ST. SB	208+65.00	INTERIM E. 14TH ST. SB	208+65.00	LT/RT		15																															
D-613	1095	INTERIM E. 14TH ST. SB	208+65.00	E. 14TH ST. SB	36+57.73	RT/LT		89																															
D-610	1095	INTERIM E. 14TH ST. SB	209+01.00	E. 14TH ST. SB	36+41.31	LT																																	
D-602	1095	E. 14TH ST. SB	36+41.31	RAMP A3	585+77.14	LT	1996168																																
D-612	1095	E. 14TH ST. SB	36+46.94	E. 14TH ST. SB	36+57.73	RT/LT		20																															
D-611	1095	E. 14TH ST. SB	36+57.73	E. 14TH ST. SB	36+41.31	LT																																	
D-280	1096	I.R. 90 EB	193+29.00			RT																																	
D-265	1096	I.R. 90 WB	193+57.00			LT																																	
D-291	1097	RAMP B6	1617+74.70			RT																																	
D-462	1097	RAMP B6A	1806+14.32	E. 22ND ST.	31+06.00	LT/RT																																	
D-730	1098	CARNEGIE AVE.	57+00.00	CARNEGIE AVE.	57+05.00	RT		23																															
D-739	1098	CARNEGIE AVE.	57+05.00			RT																																	
D-731	1098	CARNEGIE AVE.	57+30.00	CARNEGIE AVE.	57+05.00	RT		34																															
D-750	1098	MIDTOWN CONNECTOR	502+50.00	MIDTOWN CONNECTOR	502+50.60	LT																																	
D-780	1098	MIDTOWN CONNECTOR	502+50.00	MIDTOWN CONNECTOR	504+00.00	CL/LT		153																															
D-782	1098	MIDTOWN CONNECTOR	502+50.60	MIDTOWN CONNECTOR	502+50.00	LT/CL		20																															
D-752	1098	MIDTOWN CONNECTOR	502+50.60	MIDTOWN CONNECTOR	502+50.00	RT/CL		20																															
D-781	1098	MIDTOWN CONNECTOR	504+00.00			LT																																	
D-733	1099	CARNEGIE AVE.	57+30.00	CARNEGIE AVE.	57+42.24	LT/RT		47																															
D-732	1099	CARNEGIE AVE.	57+42.24			RT																																	
D-736	1099	CARNEGIE AVE.	57+85.00	CARNEGIE AVE.	57+90.05	LT/RT		47																															
D-734	1099	CARNEGIE AVE.	57+85.00	CARNEGIE AVE.	57+90.05	RT		23																															
D-735	1099	CARNEGIE AVE.	57+90.05			RT																																	
D-737	1099	CARNEGIE AVE.	58+35.00	CARNEGIE AVE.	57+90.05	LT/RT		65																															
D-738	1099	CARNEGIE AVE.	58+89.00	CARNEGIE AVE.	58+35.00	LT		54																															
D-700	1101	CARNEGIE AVE.	37+61.19	CARNEGIE AVE.	37+61.12	RT		7																															
D-400	1102	CARNEGIE AVE.	40+90.00	CARNEGIE AVE.	40+91.00	RT																																	
D-707	1102	CARNEGIE AVE.	40+91.00	CARNEGIE AVE.	40+93.55	RT		8																															
TOTALS CARRIED TO SHEET 447								1014	30	104	313	-	-	-	235	90	-	11	9	-	-	1	3	1	-	-	12	1	2	2	1	-	-	-	-	-			

LOCAL DRAINAGE SUBSUMMARY - 1

DESIGN AGENCY

**Michael Baker INTERNATIONAL**

DESIGNER MJB

REVIEWER KGJ 05/22/24

PROJECT ID 82382

SHEET TOTAL  
444 2696

REF NO.	SHEET NO.	STATION				SIDE	CFN	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	899	899	899	899	899			
		FROM		TO				611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	899	899	899	899	899	
		FT	FT	FT	FT			FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT
D-703	1102	E. 14TH ST. NB	59+00.00	E. 14TH ST. NB	59+86.61	RT	89																											
D-701A	1102	E. 14TH ST. NB	59+86.61	E. 14TH ST. NB	60+48.95	RT	63																											
D-740	1102	E. 14TH ST. NB	60+48.95			RT																												
D-701	1102	E. 14TH ST. SB	39+65.20	E. 14TH ST. NB	59+86.61	LT/RT	59																											
D-708	1102	E. 18TH ST.	23+00.00	CENTRAL AVE. CONNECTOR	600+58.32	RT																												
D-705	1102	E. 18TH ST.	23+67.73	E. 18TH ST.	23+84.75	RT		38																										
D-704	1102	E. 18TH ST.	23+84.75			RT																												
D-706	1102	E. 18TH ST.	24+24.97	E. 18TH ST.	23+84.75	RT		46																										
D-709	1102	CENTRAL AVE. CONNECTOR	600+58.32			RT																												
D-702	1102	CENTRAL AVE. CONNECTOR	601+00.52	CENTRAL AVE. CONNECTOR	600+58.32	LT/RT	45																											
D-712	1102	CENTRAL AVE. CONNECTOR	601+00.52	CENTRAL AVE. CONNECTOR	600+58.32	RT	43																											
D-717	1102	CENTRAL AVE. CONNECTOR	601+79.03			LT																												
D-311	1103	RAMP A1	306+18.83	RAMP A1	306+30.44	LT	25																											
D-310	1103	RAMP A1	306+30.44	RAMP A1	306+32.37	LT							5																					
D-309	1103	RAMP A1	306+49.63	RAMP A1	306+30.44	LT	21																											
D-307	1103	RAMP A1	306+67.00	RAMP A1	306+30.44	LT																												
D-314	1103	RAMP A1	307+00.00	RAMP A1	306+67.00	LT																												
D-302	1103	RAMP A1	309+00.00	RAMP A1	307+00.00	LT	200																											
D-313	1104	CARNEGIE AVE.	48+95.00	CARNEGIE AVE.	49+86.11	RT																												
D-330	1104	CARNEGIE AVE.	49+86.11			RT		101																										
D-313A	1104	CARNEGIE AVE.	49+97.62	CARNEGIE AVE.	49+86.11	RT		49																										
D-714	1104	CARNEGIE AVE.	51+60.68			LT																												
D-771	1104	CARNEGIE AVE.	52+33.00	CARNEGIE AVE.	52+33.14	LT																												
D-713	1104	CARNEGIE AVE.	52+33.14	CARNEGIE AVE.	51+60.68	LT	75																											
D-715	1104	CARNEGIE AVE.	52+45.14	CARNEGIE AVE.	52+81.82	RT	37																											
D-783	1104	CARNEGIE AVE.	52+81.82	E. 22ND ST.	36+29.47	RT/LT	61																											
D-728	1104	E. 22ND ST.	36+29.47	E. 22ND ST.	36+29.47	LT/RT	38																											
D-727	1104	E. 22ND ST.	36+29.47	E. 22ND ST.	36+29.47	RT	17																											
D-720	1104	E. 22ND ST.	36+29.47			RT																												
D-716	1105	CARNEGIE AVE.	53+78.43			RT																												
D-726	1105	CARNEGIE AVE.	54+38.53	CARNEGIE AVE.	53+78.43	RT	65																											
D-729	1105	CARNEGIE AVE.	54+45.63	CARNEGIE AVE.	53+78.43	LT/RT	80																											
D-724	1105	E. 22ND ST.	27+80.99			RT																												
D-723	1105	E. 22ND ST.	28+40.00	E. 22ND ST.	27+80.99	LT/RT	63																											
D-551	1108	RAMP H5	988+84.24	E. 14TH ST. NB	53+36.24	RT/LT	1996438																											
D-550A	1108	RAMP H6	1188+19.75	COMMUNITY COLLEGE AVE	54+40.18	LT																												
D-604	1108	E. 14TH ST. NB	53+36.24	INTERIM E. 14TH ST. SB	206+90.46	LT	1996439																											
D-634	1108	E. 14TH ST. NB	53+50.00	E. 14TH ST. NB	53+36.24	RT/LT																												
D-630	1108	E. 14TH ST. NB	53+60.00	E. 14TH ST. NB	53+36.24	LT																												
D-635	1108	E. 14TH ST. NB	53+85.00	E. 14TH ST. NB	53+50.00	RT																												
D-636A	1108	E. 14TH ST. NB	54+33.59	E. 14TH ST. NB	53+36.24	RT/LT																												
D-603	1108	INTERIM E. 14TH ST. SB	206+90.46	E. 14TH ST. SB	36+41.31	LT																												
<b>TOTALS CARRIED TO SHEET 447</b>							<b>1027</b>	<b>215</b>	<b>19</b>	<b>209</b>	<b>145</b>	<b>5</b>	<b>-</b>	<b>251</b>	<b>-</b>	<b>246</b>	<b>9</b>	<b>12</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>3</b>	<b>6</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

CONDUIT, BORED OR JACKED, 66" TYPE B, 706.02 & 706.11

CONDUIT, BORED OR JACKED, 66" TYPE C, 706.02 & 706.11

CATCH BASIN, NO. 3, AS PER PLAN

CATCH BASIN, NO. 3A, AS PER PLAN

CATCH BASIN, NO. 6, AS PER PLAN 2

CATCH BASIN, NO. 8, AS PER PLAN 2

CATCH BASIN, NO. 2-2A, AS PER PLAN 2

CATCH BASIN, NO. 2-2B, AS PER PLAN

CATCH BASIN, NO. 2-2B, AS PER PLAN 2

CATCH BASIN ADJUSTED TO GRADE

CATCH BASIN RECONSTRUCTED TO GRADE

MANHOLE, NO. 3, AS PER PLAN

MANHOLE, NO. 3, AS PER PLAN 2

MANHOLE ADJUSTED TO GRADE

MANHOLE RECONSTRUCTED TO GRADE

MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN

MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN 2

CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 6 EGG-SHAPED

CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 7 EGG-SHAPED

CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 10 EGG-SHAPED

CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 11 EGG-SHAPED

CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 12 EGG-SHAPED

LOCAL DRAINAGE SUBSUMMARY - 2

DESIGN AGENCY	
DESIGNER	MJB
REVIEWER	KGJ 05/22/24
PROJECT ID	82382
SHEET TOTAL	445 2696

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REF NO.	SHEET NO.	STATION				SIDE	CFN	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	899	899	899	899	899			
		FROM	TO					12" CONDUIT, TYPE B, 706.08 & 706.12	12" CONDUIT, TYPE B, 748.01	12" CONDUIT, TYPE C, 706.08 & 706.12	15" CONDUIT, TYPE B, 706.08 & 706.12	15" CONDUIT, TYPE C, 706.08 & 706.12	21" CONDUIT, TYPE B	24" CONDUIT, TYPE B, 706.08 & 706.12	66" CONDUIT, TYPE B, 706.02 & 706.11	CONDUIT, BORED OR JACKED, 66" TYPE B, 706.02 & 706.11	CONDUIT, BORED OR JACKED, 66" TYPE C, 706.02 & 706.11	CATCH BASIN, NO. 3, AS PER PLAN	CATCH BASIN, NO. 3A, AS PER PLAN	CATCH BASIN, NO. 6, AS PER PLAN 2	CATCH BASIN, NO. 8, AS PER PLAN 2	CATCH BASIN, NO. 2-2A, AS PER PLAN 2	CATCH BASIN, NO. 2-2B, AS PER PLAN	CATCH BASIN, NO. 2-2B, AS PER PLAN 2	CATCH BASIN ADJUSTED TO GRADE	CATCH BASIN RECONSTRUCTED TO GRADE	MANHOLE, NO. 3, AS PER PLAN	MANHOLE, NO. 3, AS PER PLAN 2	MANHOLE ADJUSTED TO GRADE	MANHOLE RECONSTRUCTED TO GRADE	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN 2	CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 6 EGG-SHAPED	CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 7 EGG-SHAPED	CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 10 EGG-SHAPED	CURED-IN-PLACE PIPE LINER, AS PER PLAN, NO. 11 EGG-SHAPED
							FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	
D-632	1108	E. 14TH ST. SB	205+73.93	E. 14TH ST. NB	53+36.24	LT					80							1																		
D-631	1108	E. 14TH ST. SB	206+25.00	E. 14TH ST. NB	53+36.24	LT					46																									
D-550	1108	COMMUNITY COLLEGE AVE.	54+40.18	RAMP H5	988+84.24	LT/RT									140																					
D-405	1109	CENTRAL AVE.	25+72.00	E. 22ND ST.	30+64.59	RT/LT	89																													
D-406	1109	CENTRAL AVE.	25+80.00	CENTRAL AVE.	25+72.00	LT/RT	41																													
D-906	1109	E. 22ND ST.	28+96.00	E. 22ND ST.	29+27.84	RT	46																													
D-907	1109	E. 22ND ST.	29+14.00	E. 22ND ST.	29+17.34	LT	5																													
D-904	1109	E. 22ND ST.	29+92.69	E. 22ND ST.	30+13.00	RT	21																													
D-902	1109	E. 22ND ST.	29+97.05	E. 22ND ST.	30+23.00	LT		25																												
D-905	1109	E. 22ND ST.	29+98.78	E. 22ND ST.	30+26.37	RT	31																													
D-903	1109	E. 22ND ST.	30+03.57	E. 22ND ST.	30+13.00	LT/RT	16																													
D-909	1109	E. 22ND ST.	30+13.00	E. 22ND ST.	30+16.53	RT	5																													
D-908	1109	E. 22ND ST.	30+23.00	E. 22ND ST.	30+27.98	LT	5																													
D-293	1109	E. 22ND ST.	30+26.37			RT																														
D-292	1109	E. 22ND ST.	30+64.59			LT																														
D-901	1109	E. 22ND ST.	30+99.20			RT	14																													
D-900	1109	E. 22ND ST.	31+00.00	E. 22ND ST.	31+06.00	LT/RT	45																													
D-294	1109	E. 22ND ST.	31+06.00			RT																														
D-412	1111	RAMP IB5	1712+10.02			LT																														
D-327	1112	RAMP A2	409+73.48	RAMP A2	409+89.06	LT																														
D-328	1112	RAMP A2	409+89.06	RAMP A2	409+93.75	LT			22																											
D-323	1112	RAMP IJ3	96+45.40	E. 14TH ST. NB XOVER	251+96.37	RT/LT																														
D-651	1114	E. 14TH ST. NB XOVER	253+16.81	E. 14TH ST. NB XOVER	251+96.37	RT/LT																														
D-650	1114	INTERIM E. 14TH ST. NB	254+18.32	INTERIM E. 14TH ST. NB	254+15.59	RT																														
D-652	1114	INTERIM E. 14TH ST. SB	200+93.06	RAMP IH4	17+61.02	LT	169																													
D-751	1116	CARNEGIE AVE.	63+72.00	CARNEGIE AVE.	64+43.91	RT	72																													
D-753	1116	CARNEGIE AVE.	64+15.00	CARNEGIE AVE.	64+49.98	LT	36																													
D-754	1116	CARNEGIE AVE.	64+43.91	CARNEGIE AVE.	64+49.98	RT																														
D-755	1116	CARNEGIE AVE.	64+44.13	CARNEGIE AVE.	64+43.91	RT	10																													
D-756	1116	CARNEGIE AVE.	64+49.98	CARNEGIE AVE.	64+43.91	LT/RT	59																													
D-757	1116	CARNEGIE AVE.	65+10.00	CARNEGIE AVE.	65+11.87	LT/RT	59																													
D-821	1116	CARNEGIE AVE.	65+11.87	CARNEGIE AVE.	65+11.87	RT																														
D-760	1116	CARNEGIE AVE.	65+88.07	CARNEGIE AVE.	65+11.87	RT	77																													
D-758	1116	CARNEGIE AVE.	65+95.43	CARNEGIE AVE.	65+11.87	LT/RT	101																													
D-822	1116	MIDTOWN CONNECTOR	512+25.00	MIDTOWN CONNECTOR	513+00.00	LT/RT	78																													
D-812	1116	MIDTOWN CONNECTOR	512+99.00	MIDTOWN CONNECTOR	513+00.00	LT/RT	25																													
D-814	1116	MIDTOWN CONNECTOR	512+99.00	MIDTOWN CONNECTOR	513+00.00	RT	20																													
D-813	1116	MIDTOWN CONNECTOR	513+00.00	CARNEGIE AVE.	65+11.87	RT	122																													
D-770	1117	E. 28TH ST.	13+05.22			LT																														
D-773	1117	E. 28TH ST.	13+07.99			RT																														
D-772	1117	E. 28TH ST.	13+29.74			RT																														

TOTALS CARRIED TO SHEET 447

DESIGN AGENCY

**Michael Baker INTERNATIONAL**

DESIGNER

MJB

REVIEWER

KGJ 05/22/24

PROJECT ID

82382

SHEET

446

TOTAL

2696

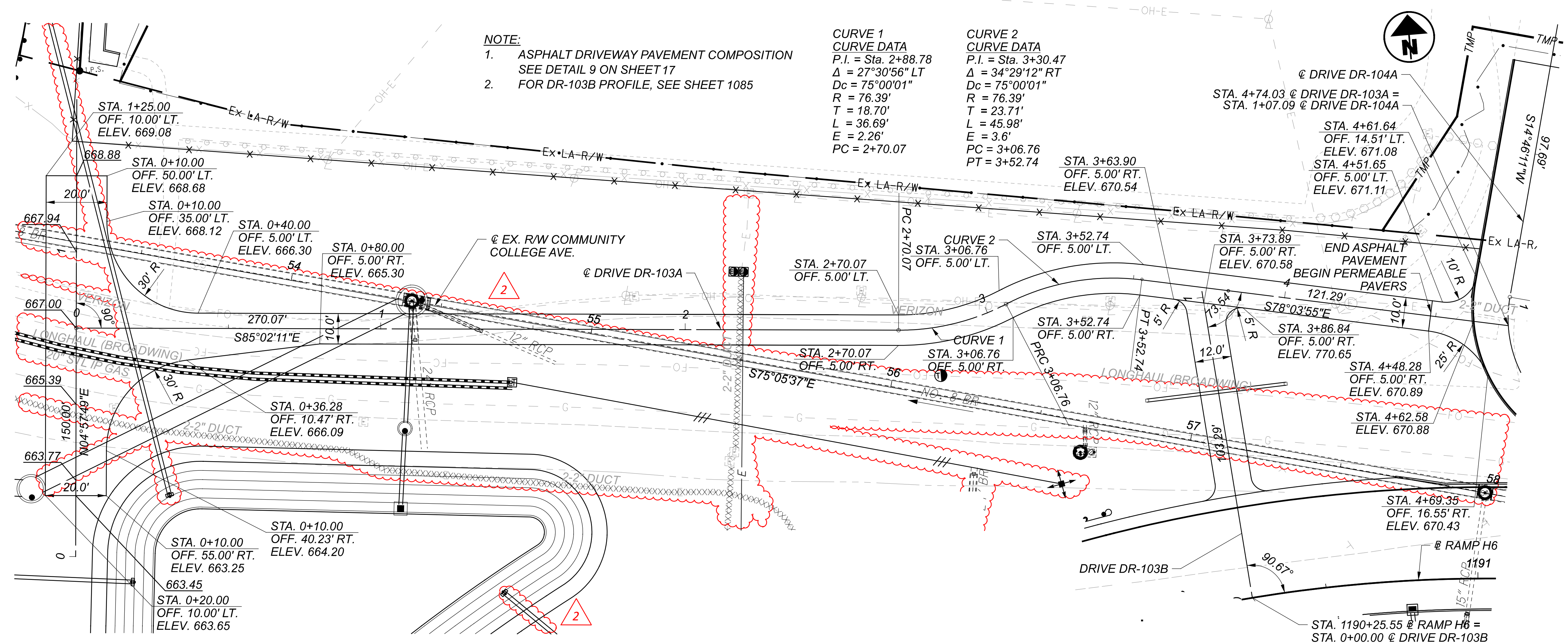
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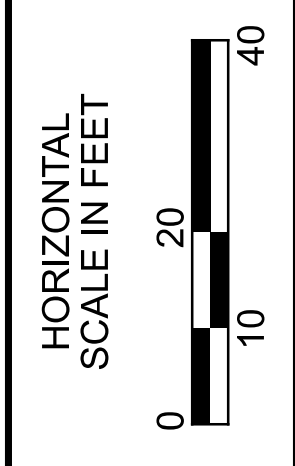
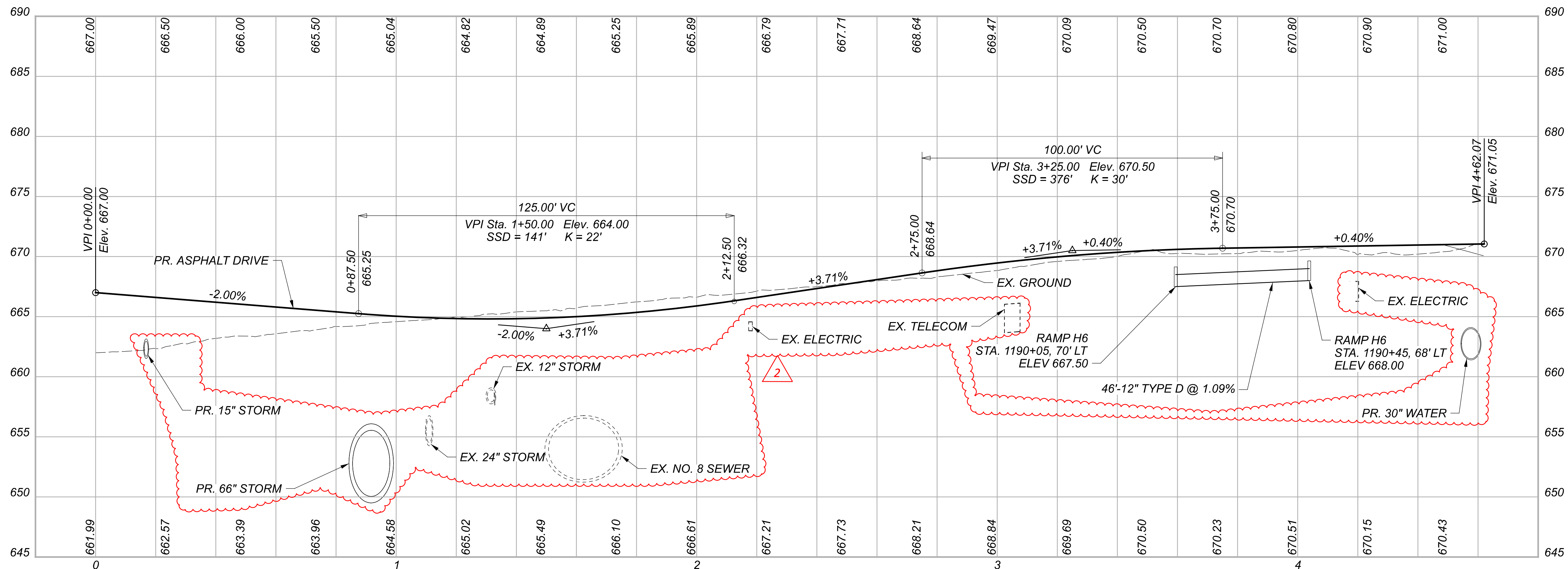
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		FROM	TO	FT	FT			FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT									
D-811	1118	MIDTOWN CONNECTOR	507+62.56	MIDTOWN CONNECTOR	508+21.07	RT		62																																										
D-810	1118	MIDTOWN CONNECTOR	507+63.21	MIDTOWN CONNECTOR	508+21.07	LT/RT		62																																										
D-820	1119	MIDTOWN CONNECTOR	508+21.07			RT																																												
D-823	1119	MIDTOWN CONNECTOR	509+99.64	MIDTOWN CONNECTOR	510+51.28	RT		58																																										
D-824	1119	MIDTOWN CONNECTOR	510+51.28			RT																																												
D-816	1119	CEDAR AVE.	400+67.59	CEDAR AVE.	400+80.05	RT/CL		19																																										
D-815	1119	CEDAR AVE.	400+75.46	CEDAR AVE.	400+80.05	LT/CL		23																																										
D-817	1119	CEDAR AVE.	400+80.05	CEDAR AVE.	402+12.96	CL/RT																																												
D-819	1119	CEDAR AVE.	402+12.96			RT																																												
D-818	1119	CEDAR AVE.	402+16.24	CEDAR AVE.	402+12.96	RT		20																																										
CS-1	1366	RAMP A2	414+35.48	RAMP IB5	1712+10.02	RT/LT																																												
CS-2	1366	E. 14TH ST. NB XOVER	251+96.37	RAMP A2	414+35.48	LT/RT																																												
CS-3	1367	RAMP H5	978+89.90	E. 14TH ST. NB XOVER	251+96.37	RT/LT																																												
CS-4	1367	E. 22ND ST.	14+15.87	RAMP H5	978+89.90	RT																																												
CS-5	1368	I.R. 90 EB	193+29.00	I.R. 90 WB	193+57.00	RT/LT																																												
CS-6	1368	I.R. 90 EB	194+52.58	I.R. 90 EB	193+29.00	RT																																												
CS-7	1368	I.R. 90 WB	193+57.00	CENTRAL AVE. CONNECTOR	600+58.32	LT/RT																																												
CS-8	1368	RAMP B6	1617+74.40	I.R. 90 EB	194+52.58	RT																																												
CS-9	1368	E. 22ND ST.	30+64.87	RAMP B6	1617+74.70	LT/RT																																												
TOTALS FROM THIS SHEET								244	-	-	132	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TOTALS FROM SHEET								1014	30	104	313	-	-	-	235	90	-	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TOTALS FROM SHEET								1027	215	19	209	145	5	-	251	90	-	-	9	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS FROM SHEET								1146	25	27	328	-	-	5	140	-	-	-	11	12	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS CARRIED TO GENERAL SUMMARY								3431	270	150	982	145	5	5	626	90	246	33	37	1	1	1	5	4	2	1	27	4	16	1	2	1	459	656	413	270	595													

LOCAL DRAINAGE SUBSUMMARY - 4

DESIGN AGENCY	<b>Michael Baker</b> INTERNATIONAL
DESIGNER	MJB
REVIEWER	KGJ 05/22/24
PROJECT ID	82382
SHEET TOTAL	447 2696



TYPICAL SECTION

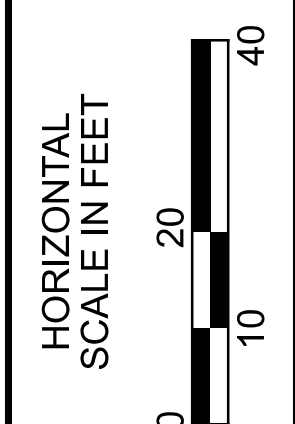
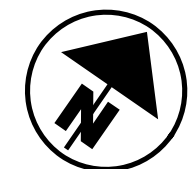
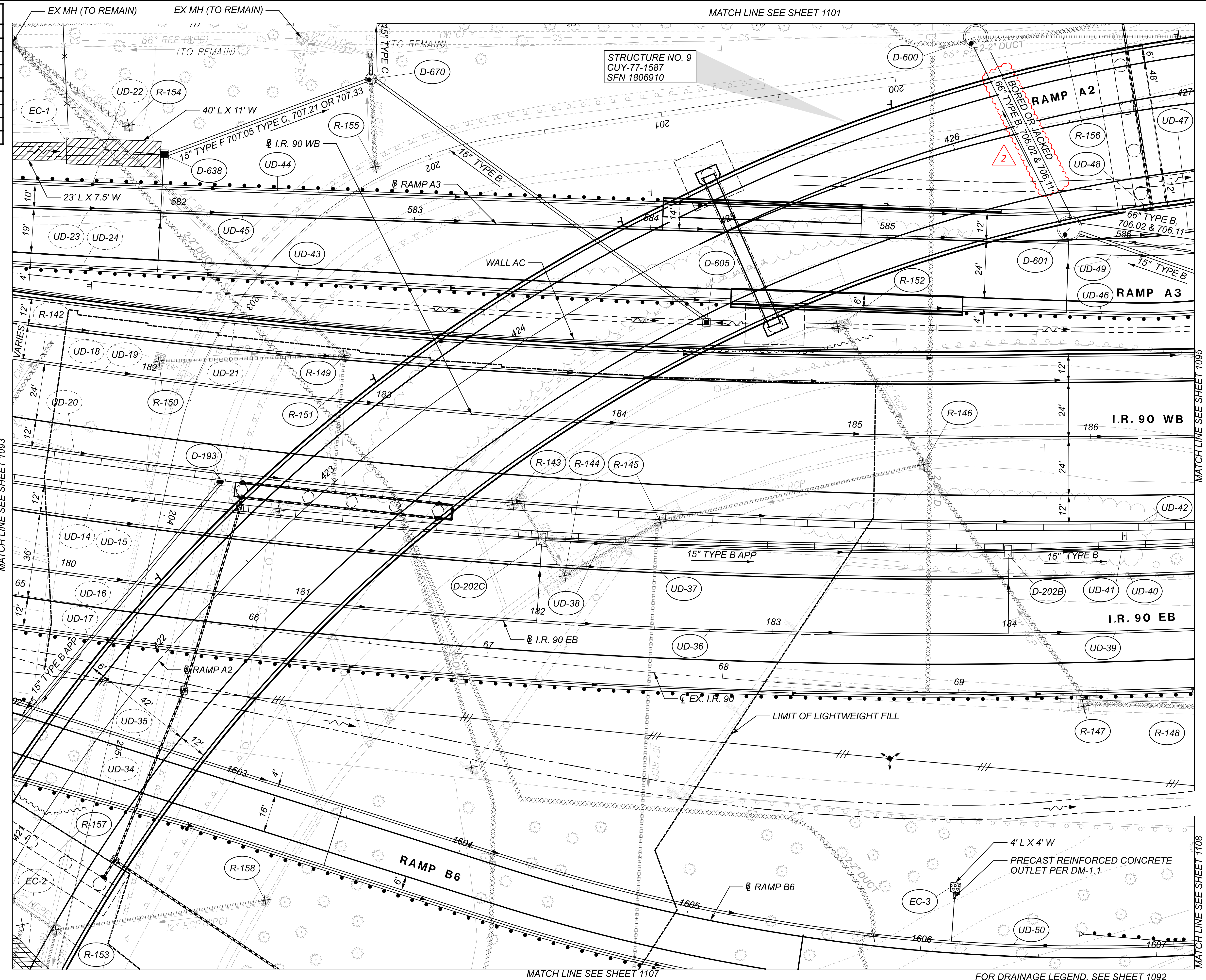


PLAN AND PROFILE - DRIVE DR-103A  
 DRIVE DR-104A - STA. 1+07.09

DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	KJM
REVIEWER	KGJ 05/22/24
PROJECT ID	82382
SHEET	TOTAL
1084	2696

**CROSS REFERENCES**

STRUCTURE	SHEET
D-193	1132
D-202B	1155
D-202C	1155
D-600	1150
D-601	1150
D-605	1154
D-638	1151
D-670	1154

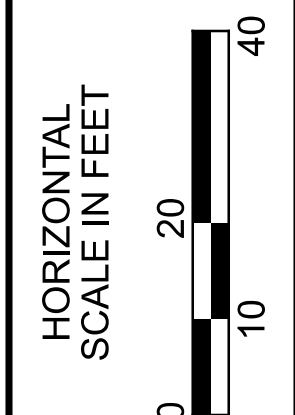
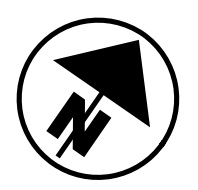
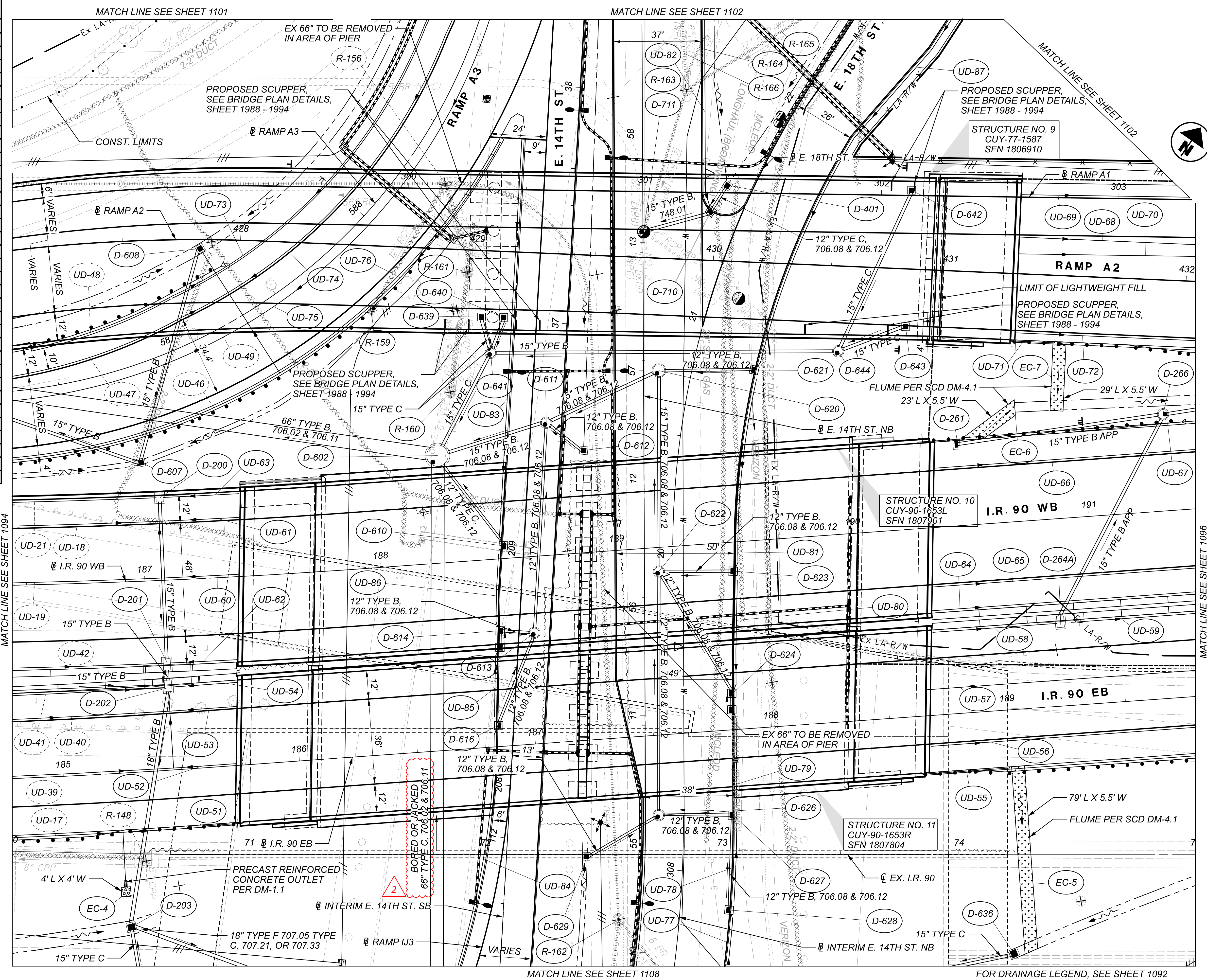


**DRAINAGE PLAN  
SHEET 2 OF 28**

DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	BJT
REVIEWER	KGJ 05/22/24
PROJECT ID	82382
SHEET	TOTAL
1094	2696

FOR DRAINAGE LEGEND, SEE SHEET 1092

CROSS REFERENCES	
STRUCTURE	SHEET
D-200	1151
D-201	1151
D-202	1151
D-203	1151
D-261	1122
D-264A	1122
D-266	1122
D-401	1142
D-602	1149
D-607	1152
D-608	1152
D-610	1153
D-611	1153
D-612	1154
D-613	1151
D-614	1154
D-616	1151
D-620	1153
D-621	1153
D-622	1153
D-623	1154
D-624	1152
D-626	1153
D-627	1153
D-628	1153
D-629	1153
D-636	1150
D-639	1151
D-640	1151
D-641	1152
D-642	1152
D-643	1152
D-644	1152
D-710	1141



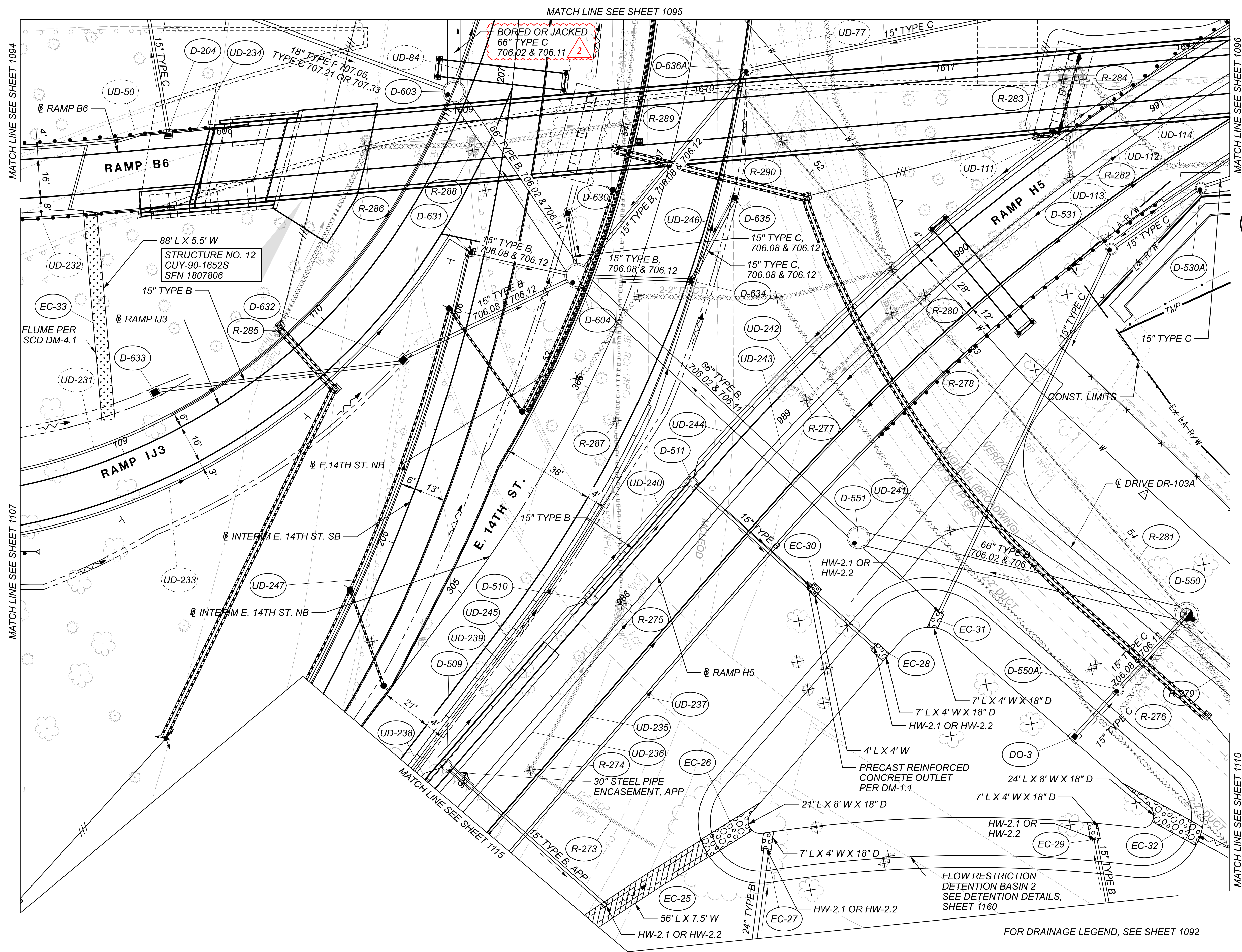
DRAINAGE PLAN  
SHEET 3 OF 28

DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	BJT
REVIEWER	KGJ 05/22/24
PROJECT ID	82382
SHEET	TOTAL
1095	2696

FOR DRAINAGE LEGEND, SEE SHEET 1092

**CROSS REFERENCES**

STRUCTURE	SHEET
D-204	1155
D-509	1137
D-510	1137
D-511	1137
D-530A	1138
D-531	1138
D-550	1149
D-551	1149
D-603	1149
D-604	1149
D-630	1154
D-631	1155
D-632	1155
D-633	1155
D-634	1150
D-635	1150
D-636A	1150



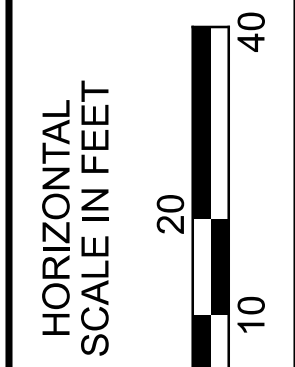
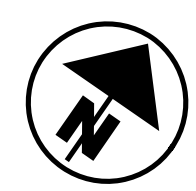
MATCH LINE SEE SHEET 1094

MATCH LINE SEE SHEET 1107

MATCH LINE SEE SHEET 1095

MATCH LINE SEE SHEET 1096

MATCH LINE SEE SHEET 1110



**DRAINAGE PLAN  
SHEET 16 OF 28**

DESIGN AGENCY



DESIGNER  
BJT

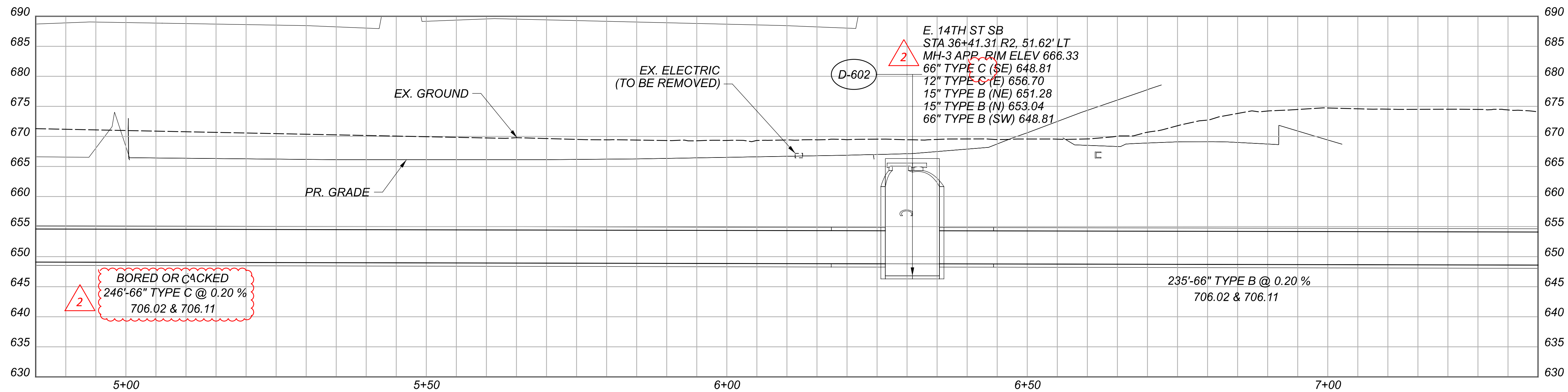
REVIEWER  
KGJ 05/22/24

PROJECT ID  
82382

SHEET TOTAL  
1108 2696

FOR DRAINAGE LEGEND, SEE SHEET 1092

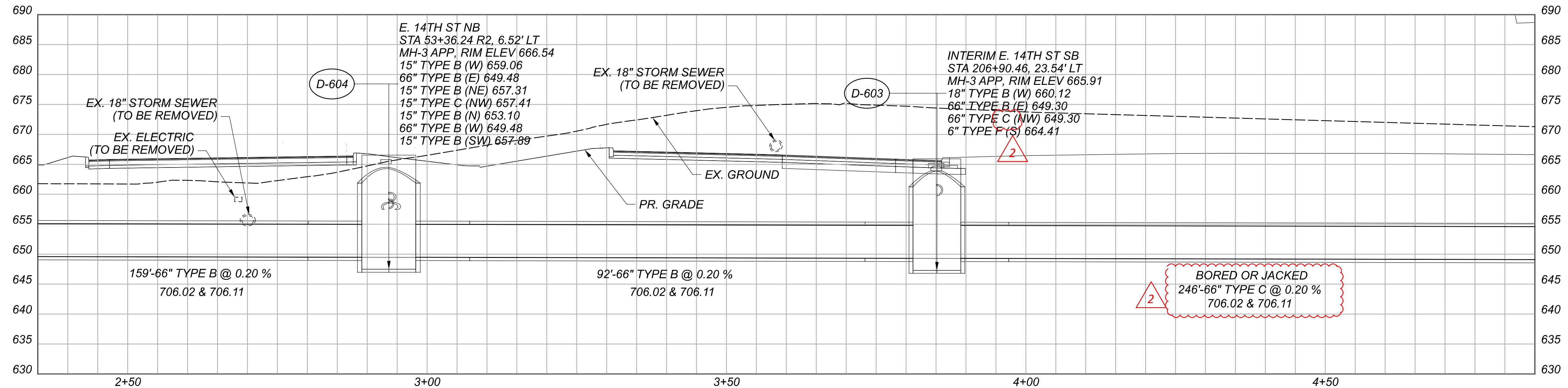
MATCHLINE B-B  
SEE ABOVE



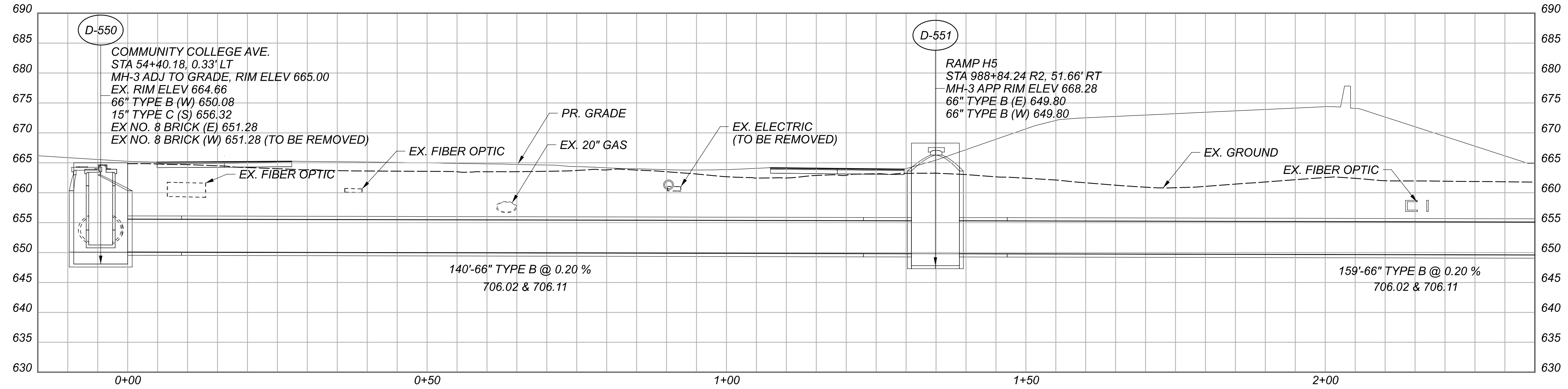
**CROSS REFERENCES**

STRUCTURE	SHEET
D-550	1108
D-551	1108
D-602	1095
D-603	1108
D-604	1108

MATCHLINE A-A  
SEE ABOVE



MATCHLINE B-B  
SEE BELOW



MATCHLINE A-A  
SEE BELOW

STORM SEWER PROFILES  
E. 14TH ST.

DESIGN AGENCY

Michael Baker  
INTERNATIONAL

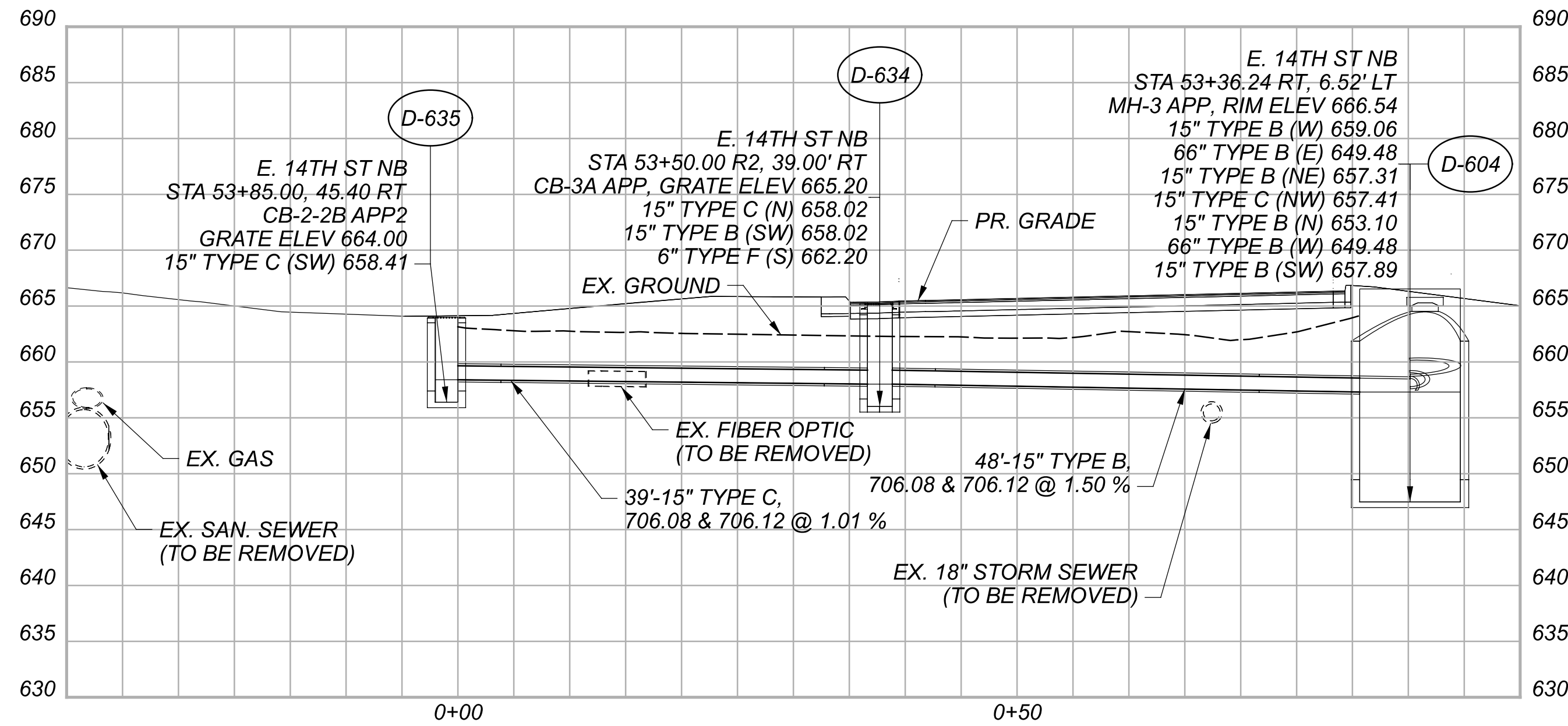
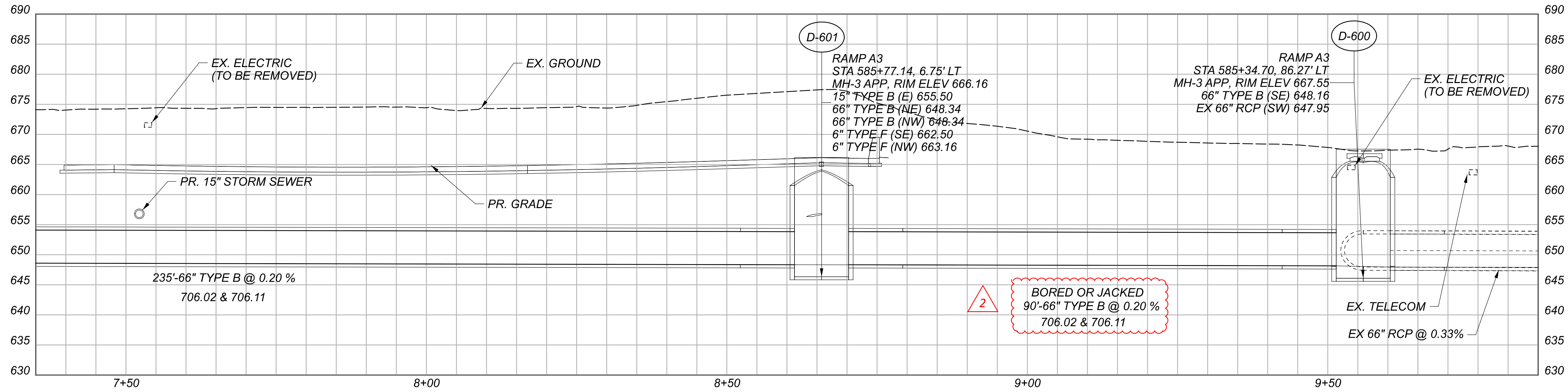
DESIGNER  
BJT

REVIEWER  
KGJ 05/22/24

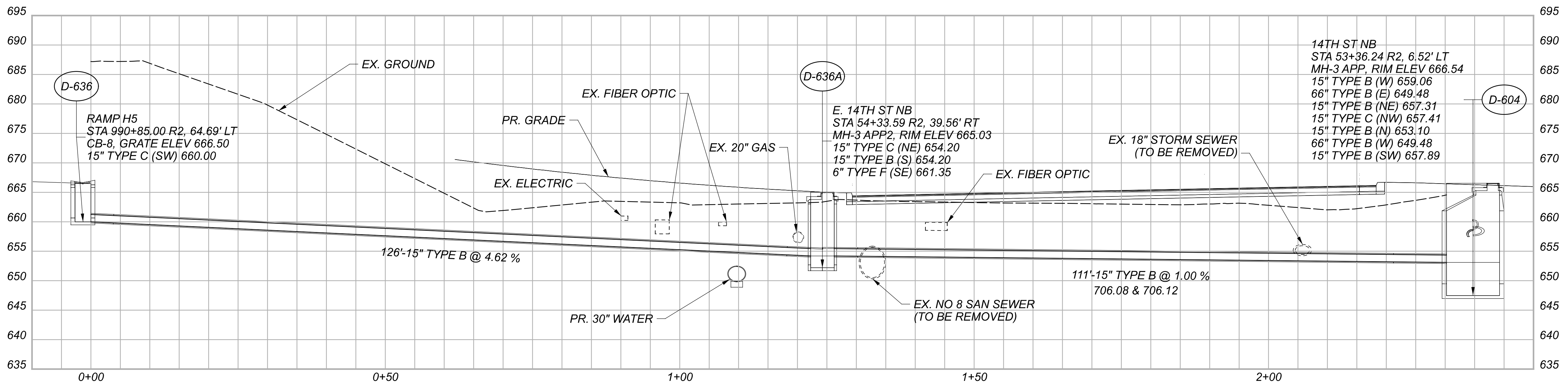
PROJECT ID  
82382

SHEET TOTAL  
1149 2696

MATCHLINE C-C  
 SEE SHEET 1149

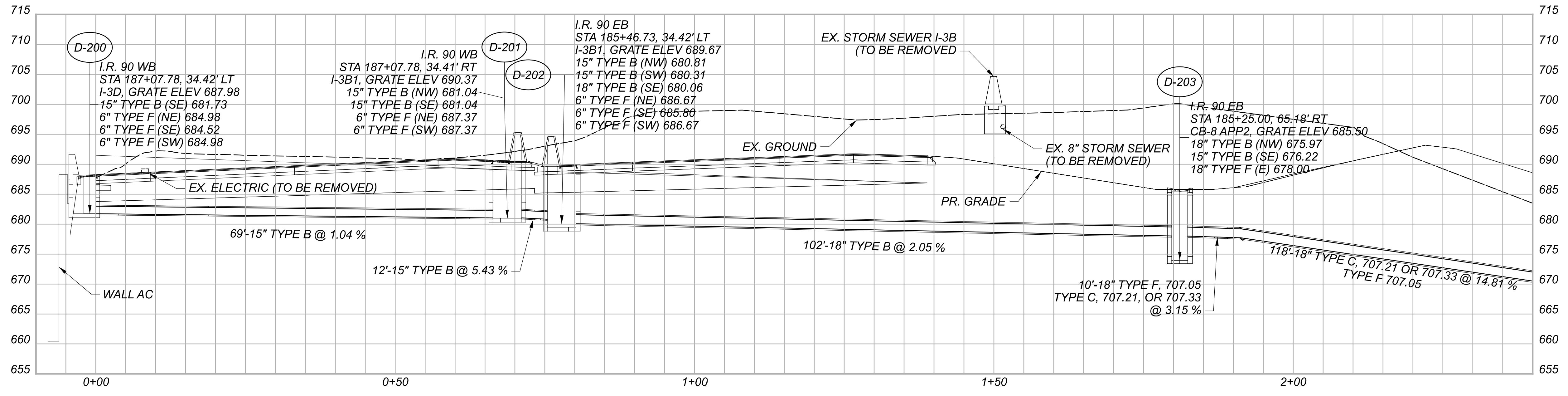


CROSS REFERENCES	
STRUCTURE	SHEET
D-600	1094
D-601	1094
D-634	1108
D-635	1108
D-636	1095
D-636A	1108



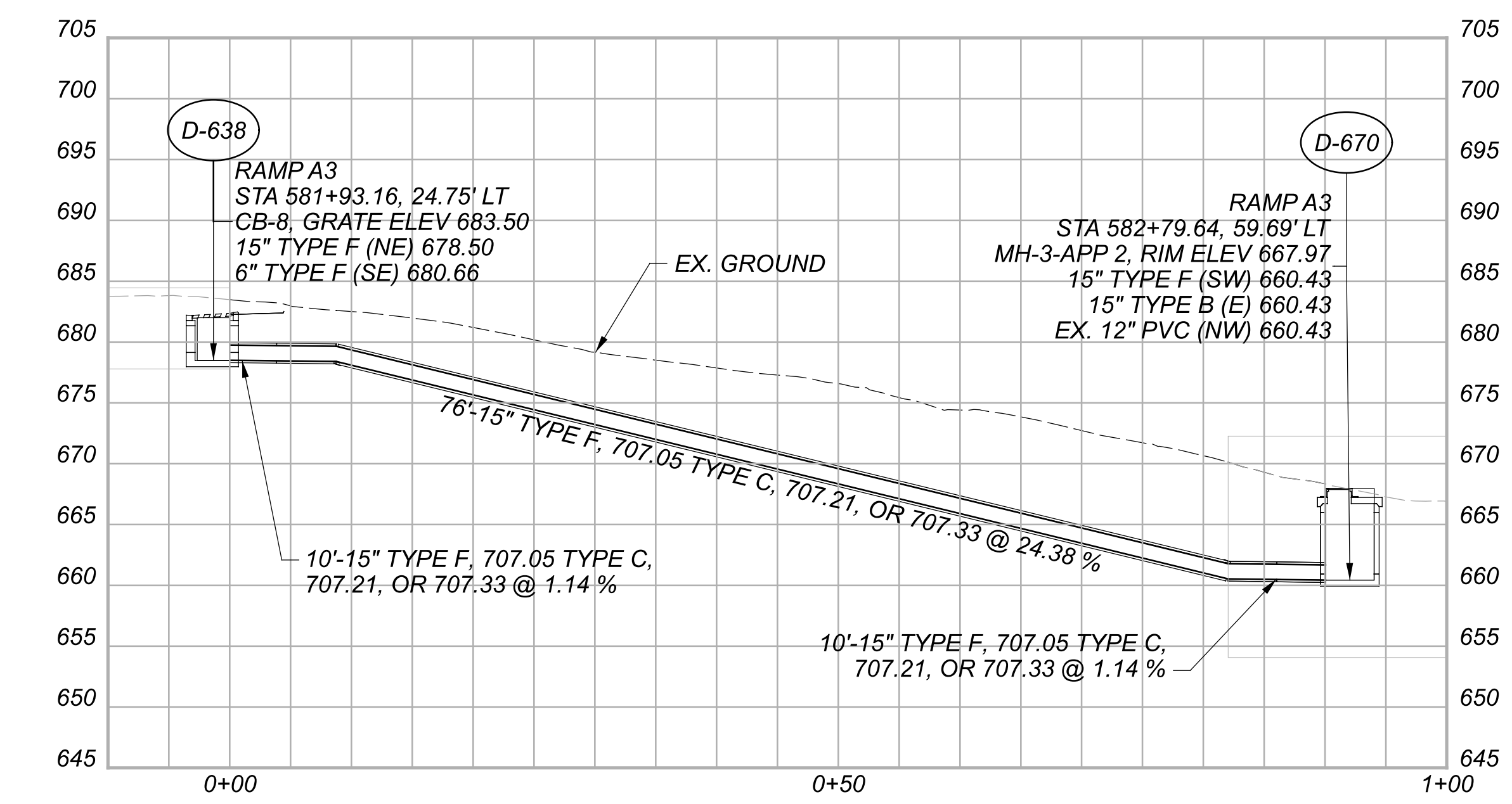
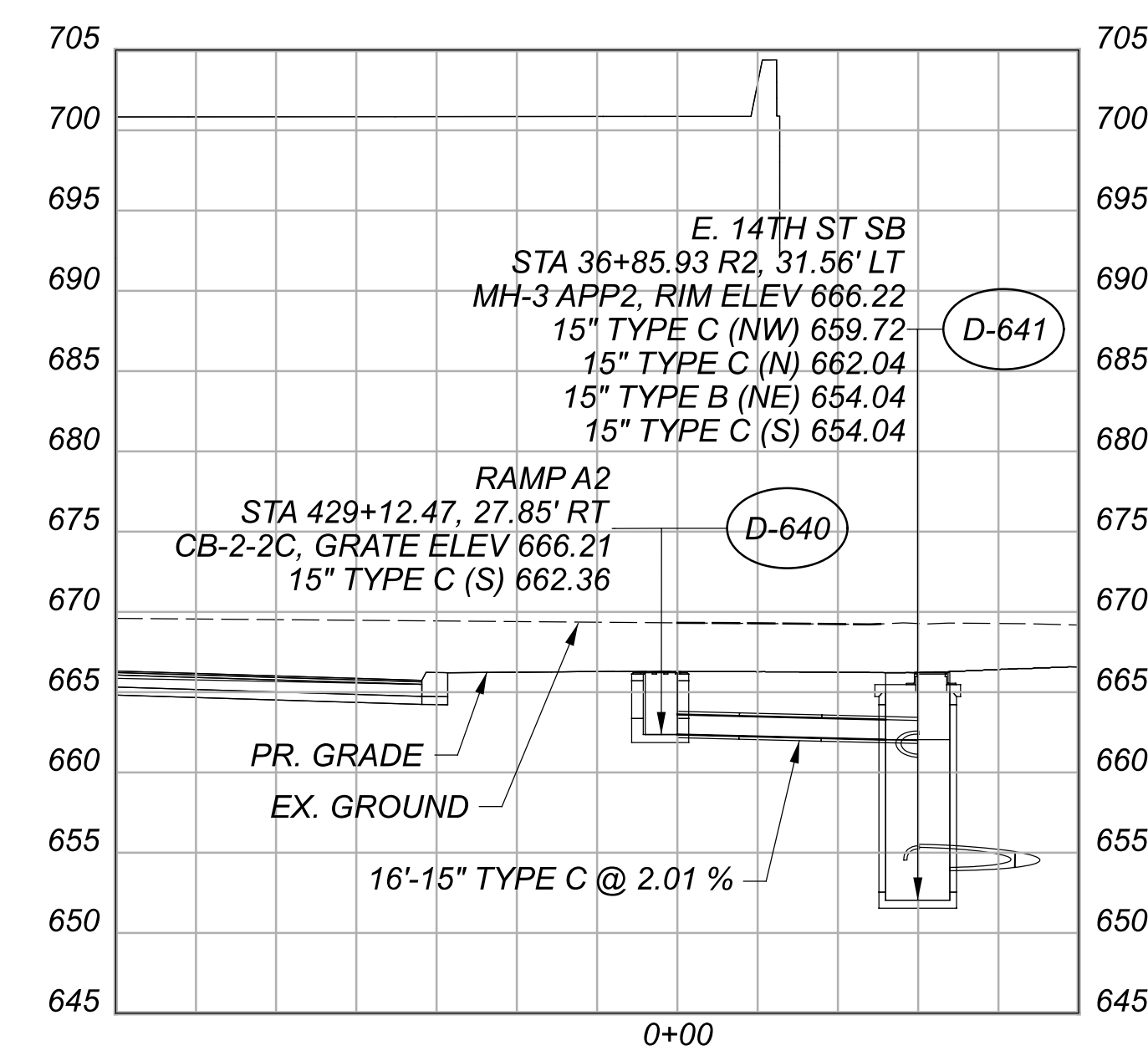
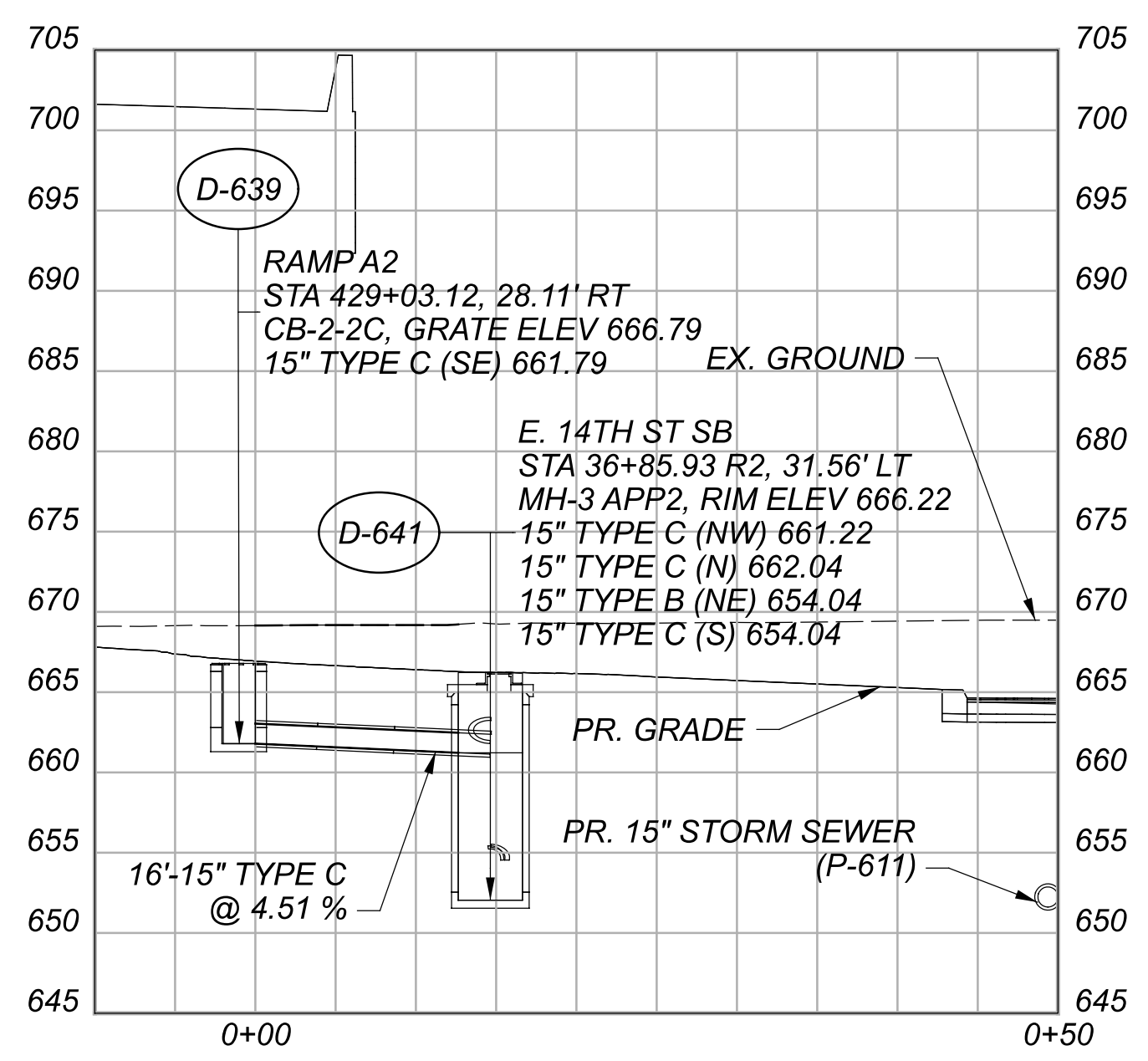
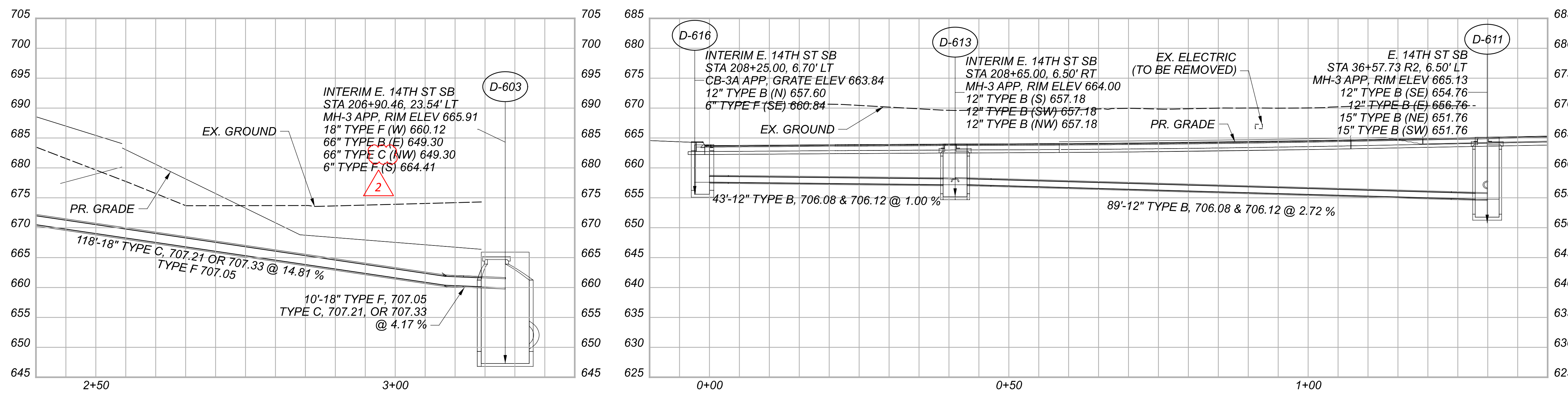
STORM SEWER PROFILES  
 E. 14TH ST.

DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER	BJT
REVIEWER	KGJ 05/22/24
PROJECT ID	82382
SHEET	TOTAL
1150	2696



MATCHLINE A-A  
SEE BELOW

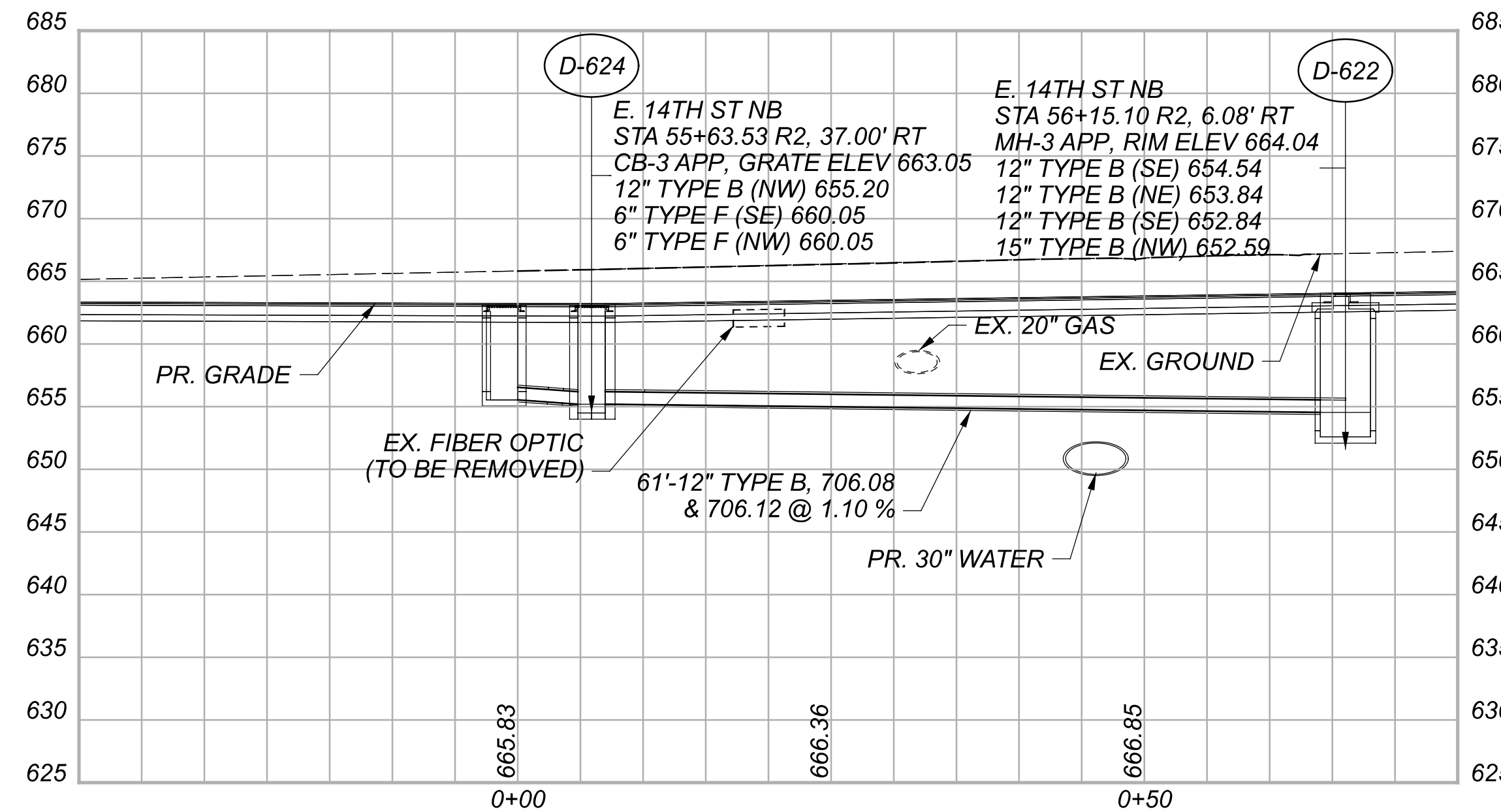
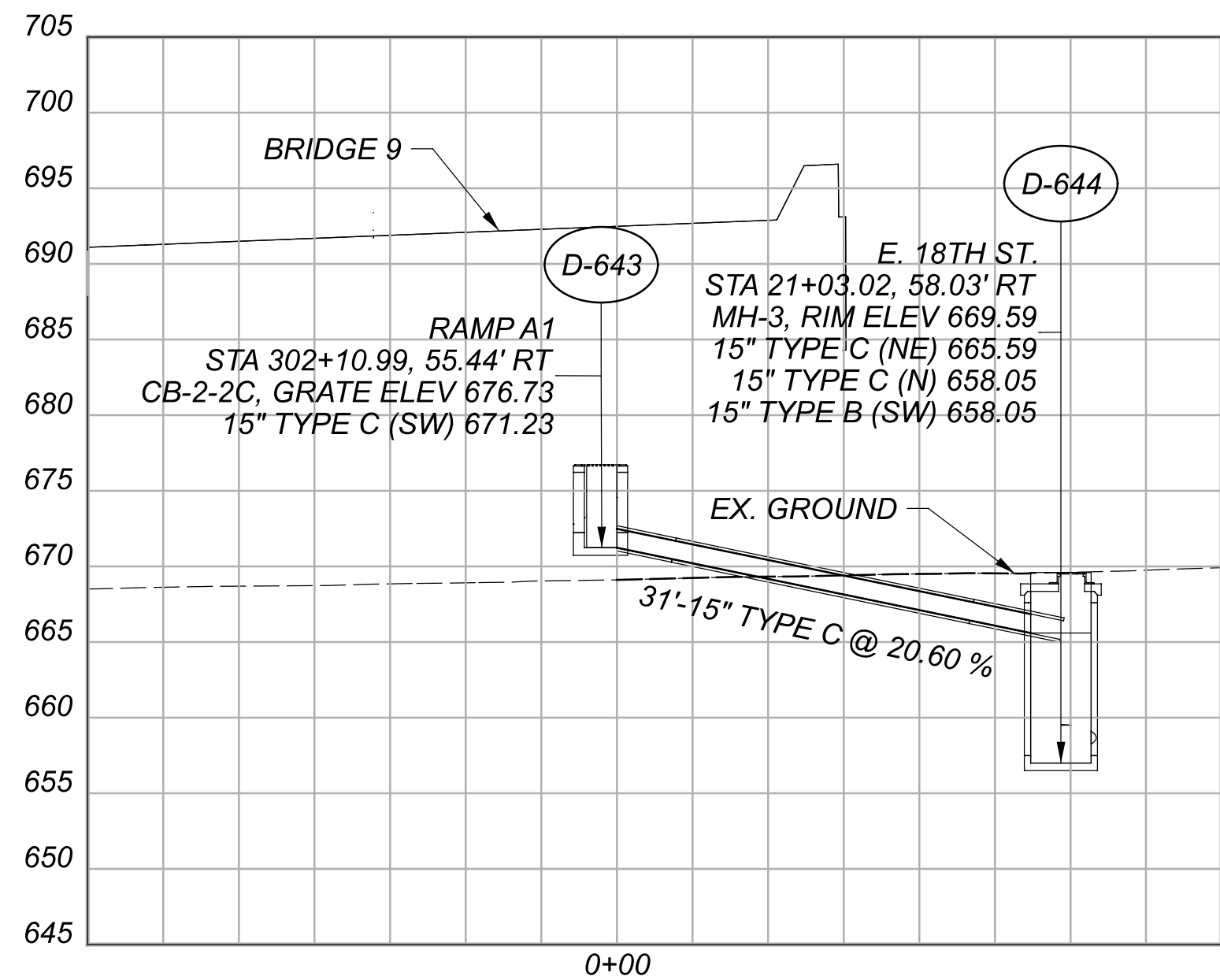
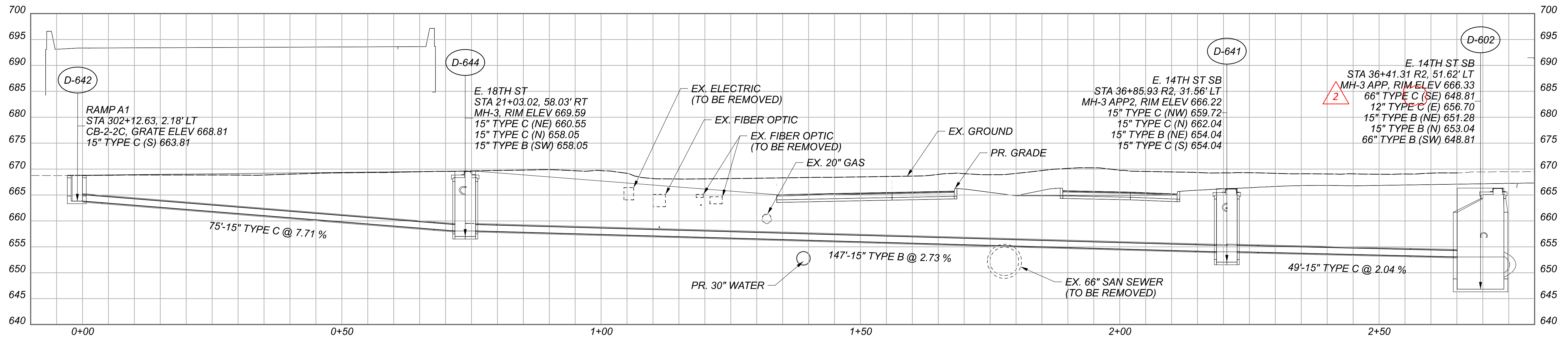
MATCHLINE A-A  
SEE ABOVE



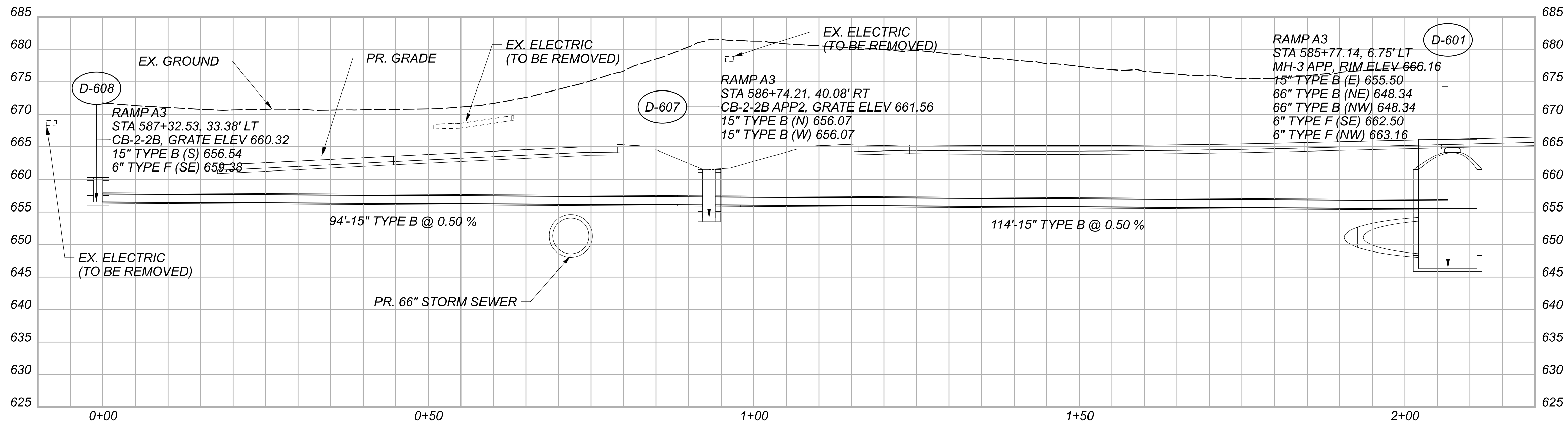
CROSS REFERENCES	
STRUCTURE	SHEET
D-200	1095
D-201	1095
D-202	1095
D-203	1095
D-613	1095
D-616	1095
D-638	1094
D-639	1095
D-640	1095

DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	BJT
REVIEWER	KGJ 05/22/24
PROJECT ID	82382
SHEET	1151
TOTAL	2696

STORM SEWER PROFILES  
E. 14TH ST.



CROSS REFERENCES	
STRUCTURE	SHEET
D-607	1095
D-608	1095
D-624	1095
D-641	1095
D-642	1095
D-643	1095
D-644	1095



STORM SEWER PROFILES  
 E. 14TH ST.

DESIGN AGENCY

**Michael Baker**  
 INTERNATIONAL

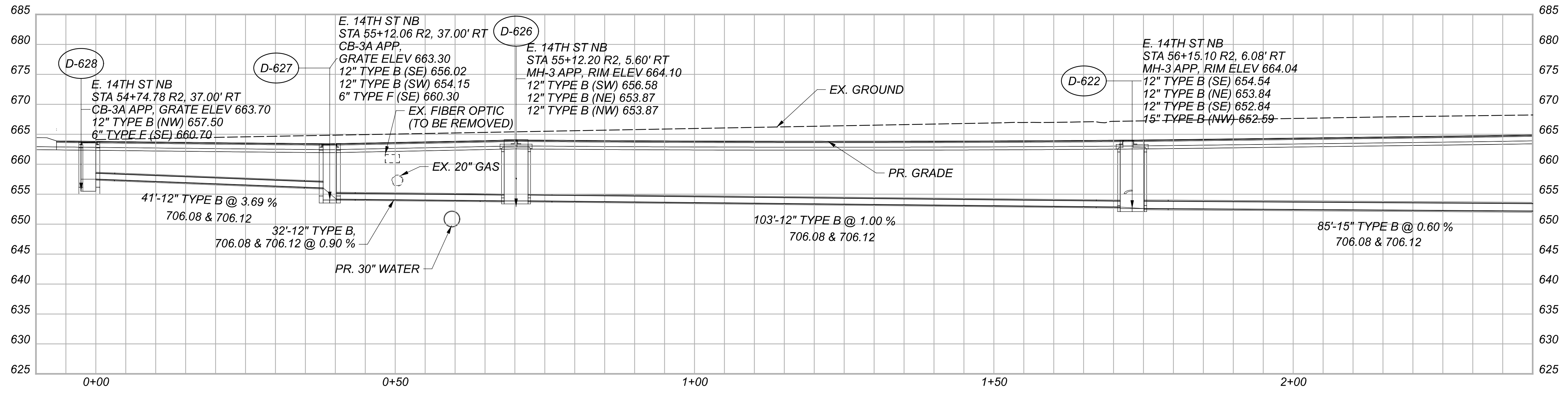
DESIGNER  
 BJT

REVIEWER  
 KGJ 05/22/24

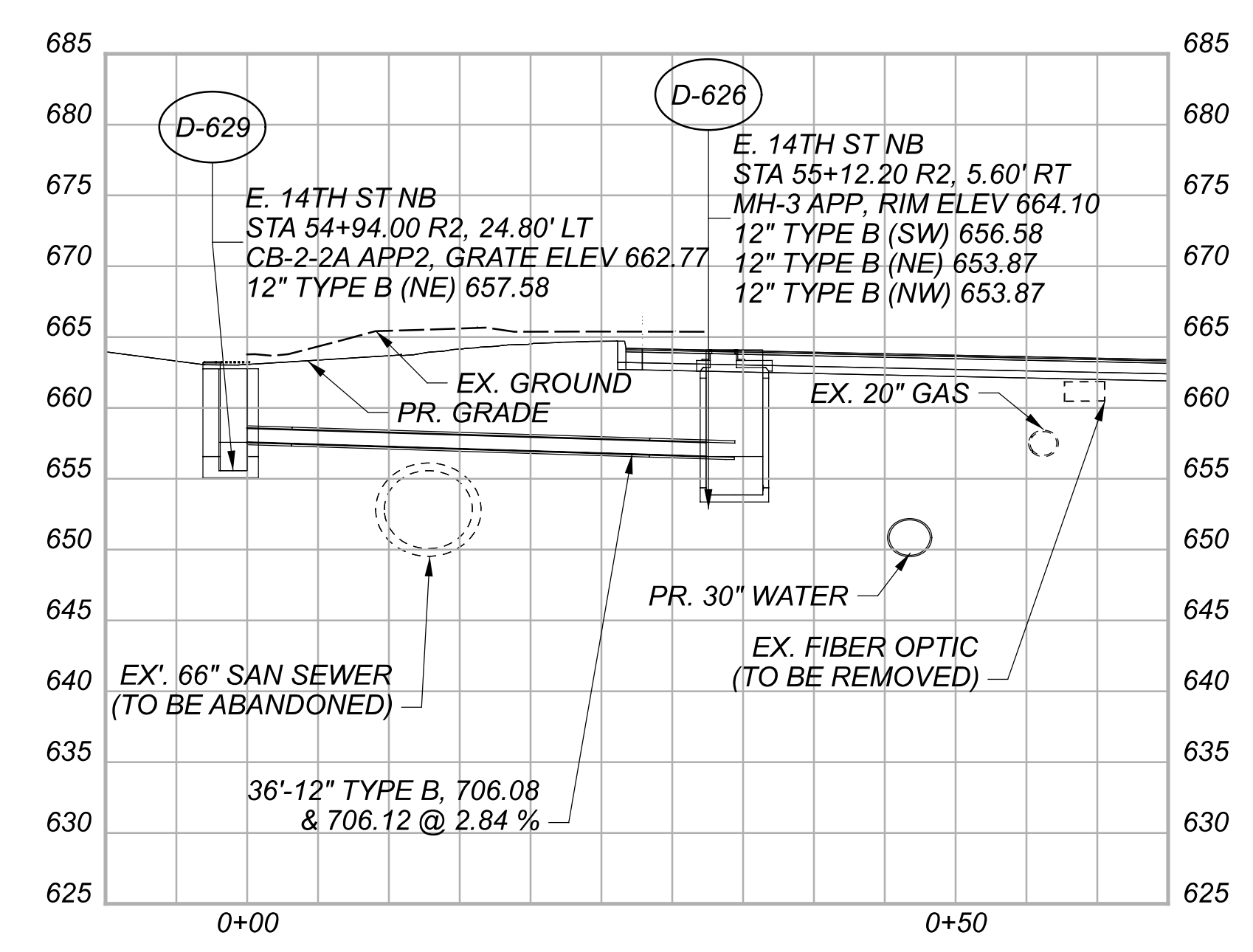
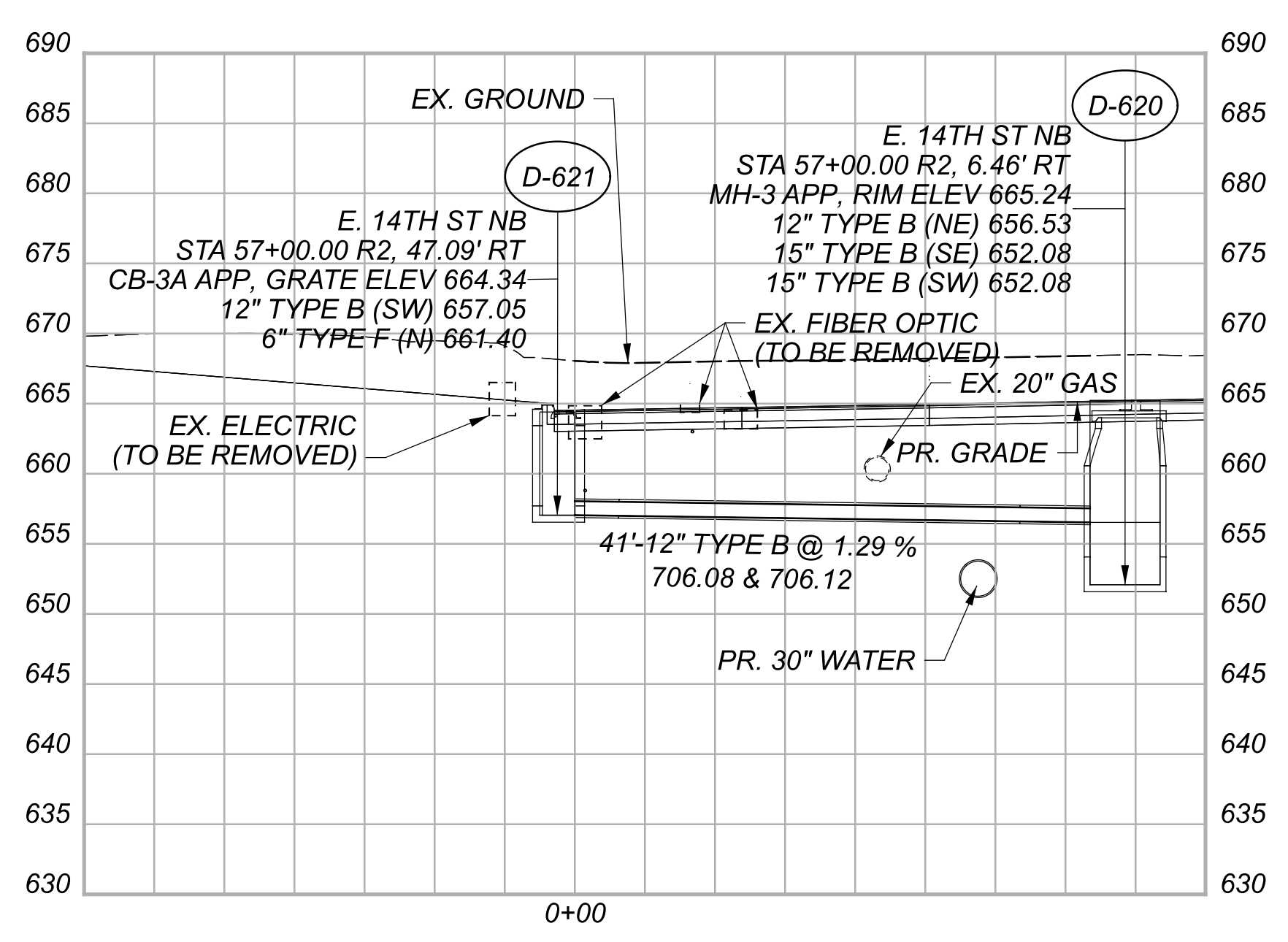
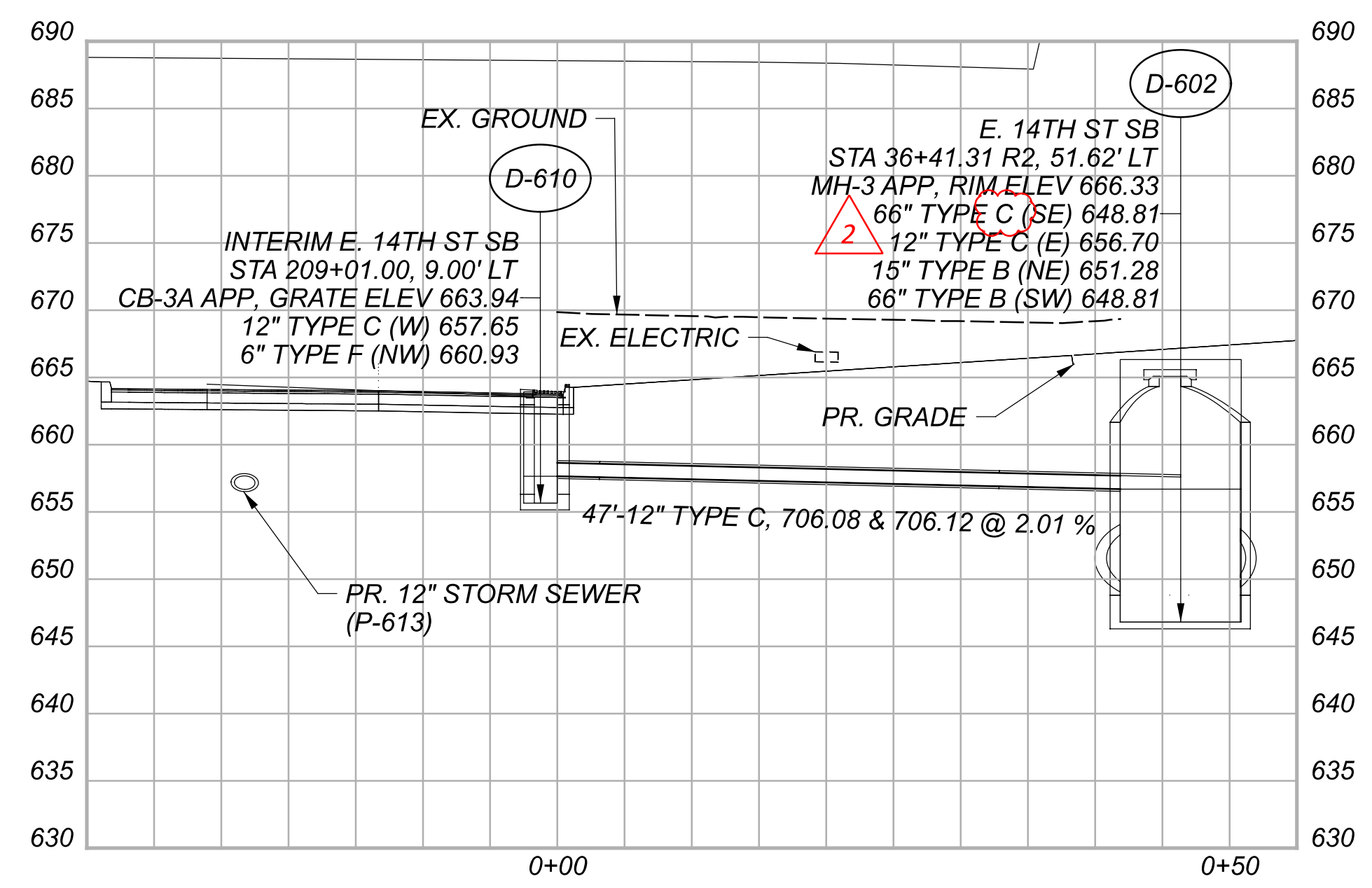
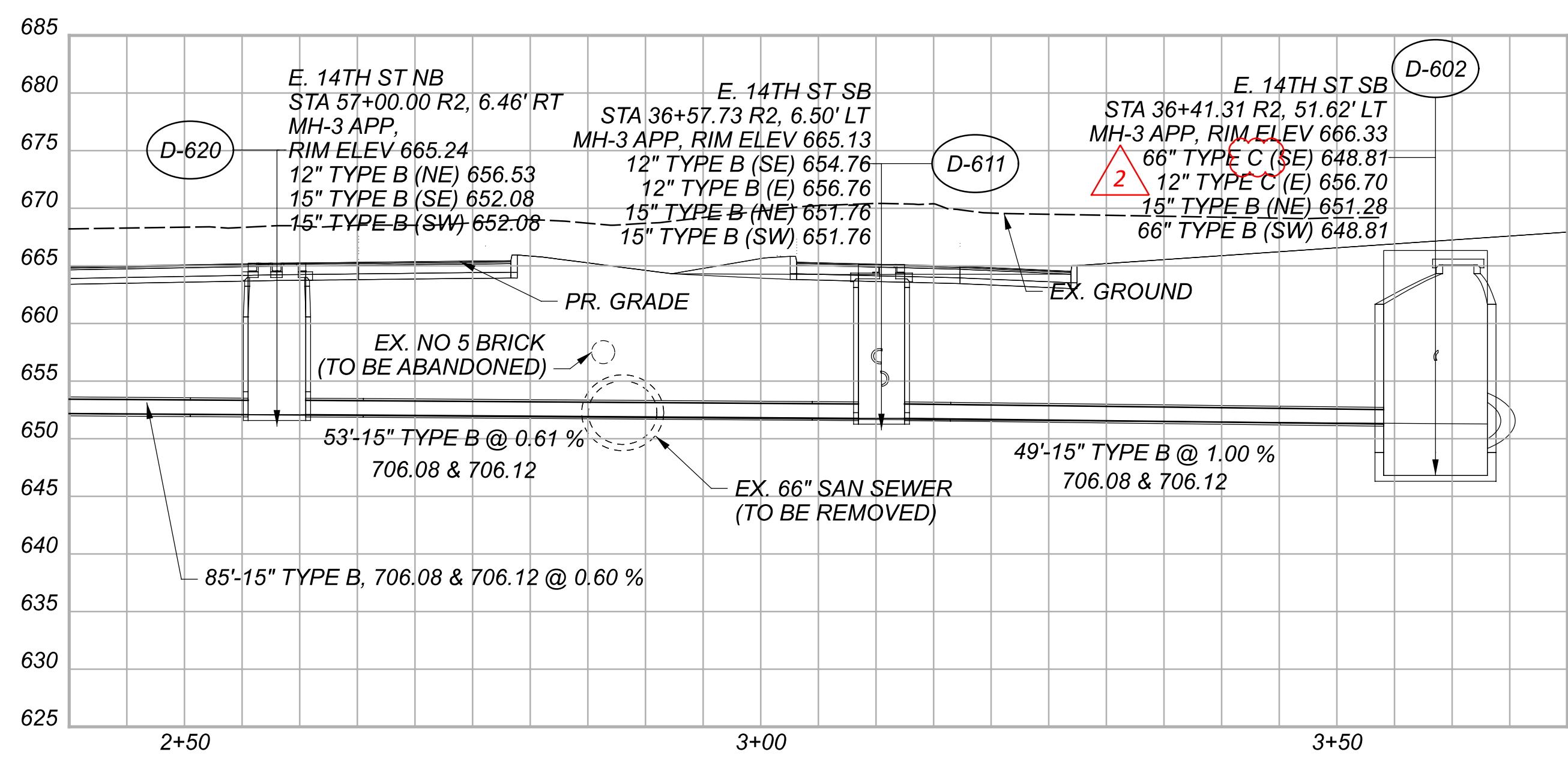
PROJECT ID  
 82382

SHEET TOTAL  
 1152 2696

MATCHLINE A-A  
SEE ABOVE



MATCHLINE A-A  
SEE BELOW

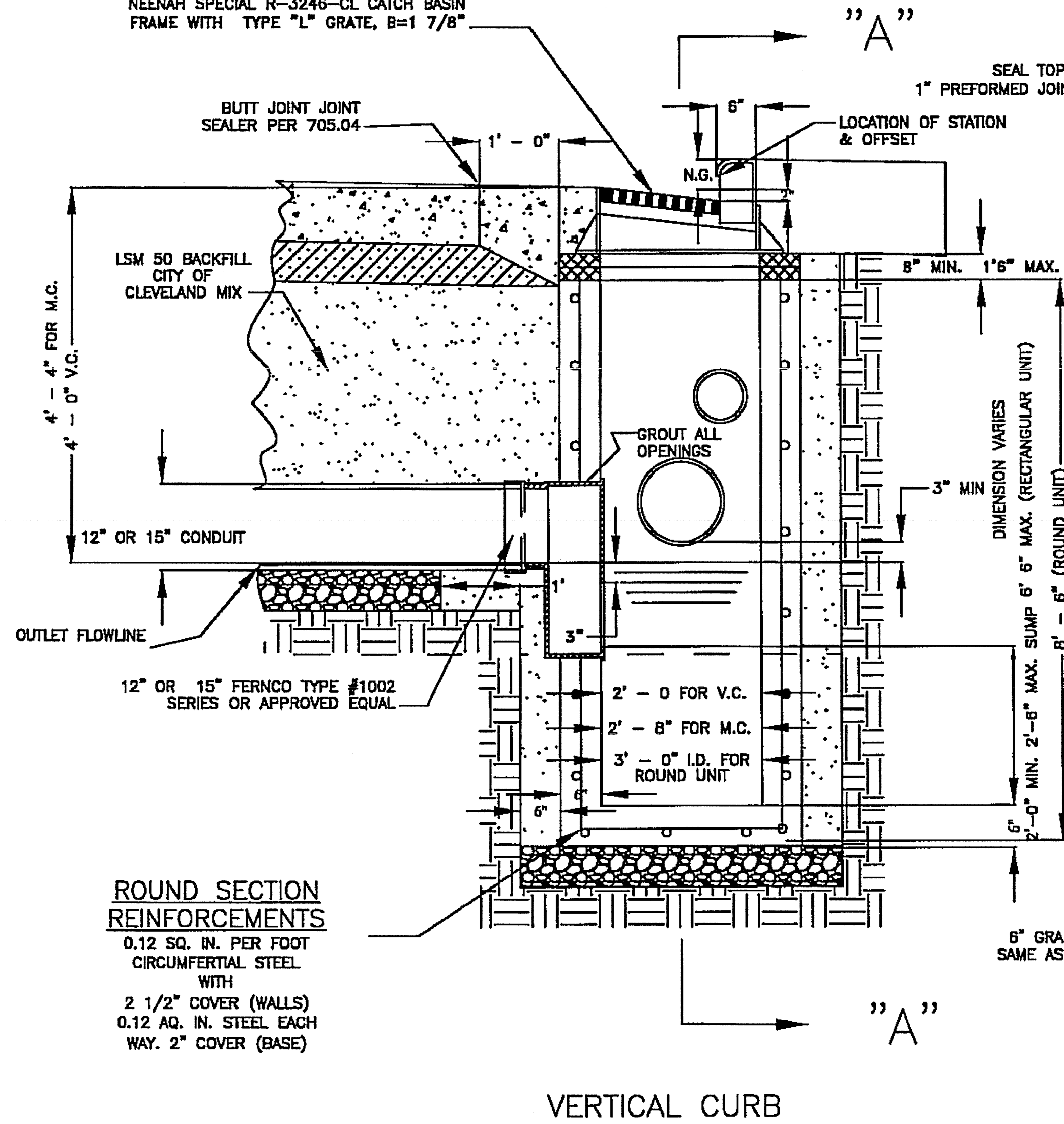


CROSS REFERENCES	
STRUCTURE	SHEET
D-610	1095
D-611	1095
D-620	1095
D-621	1095
D-622	1095
D-626	1095
D-627	1095
D-628	1095
D-629	1095

DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	BJT
REVIEWER	KGJ 05/22/24
PROJECT ID	82382
SHEET	TOTAL
1153	2696

STORM SEWER PROFILES  
E. 14TH ST.

EAST JORDON IRONWORKS INC. CAT. No. 7035  
 WITH TYPE M2 GRATE AND TYPE T1 BACK OR  
 APPROVED EQUAL  
 NEEHAH SPECIAL R-3246-CL CATCH BASIN  
 FRAME WITH TYPE "L" GRATE, B=1 7/8"

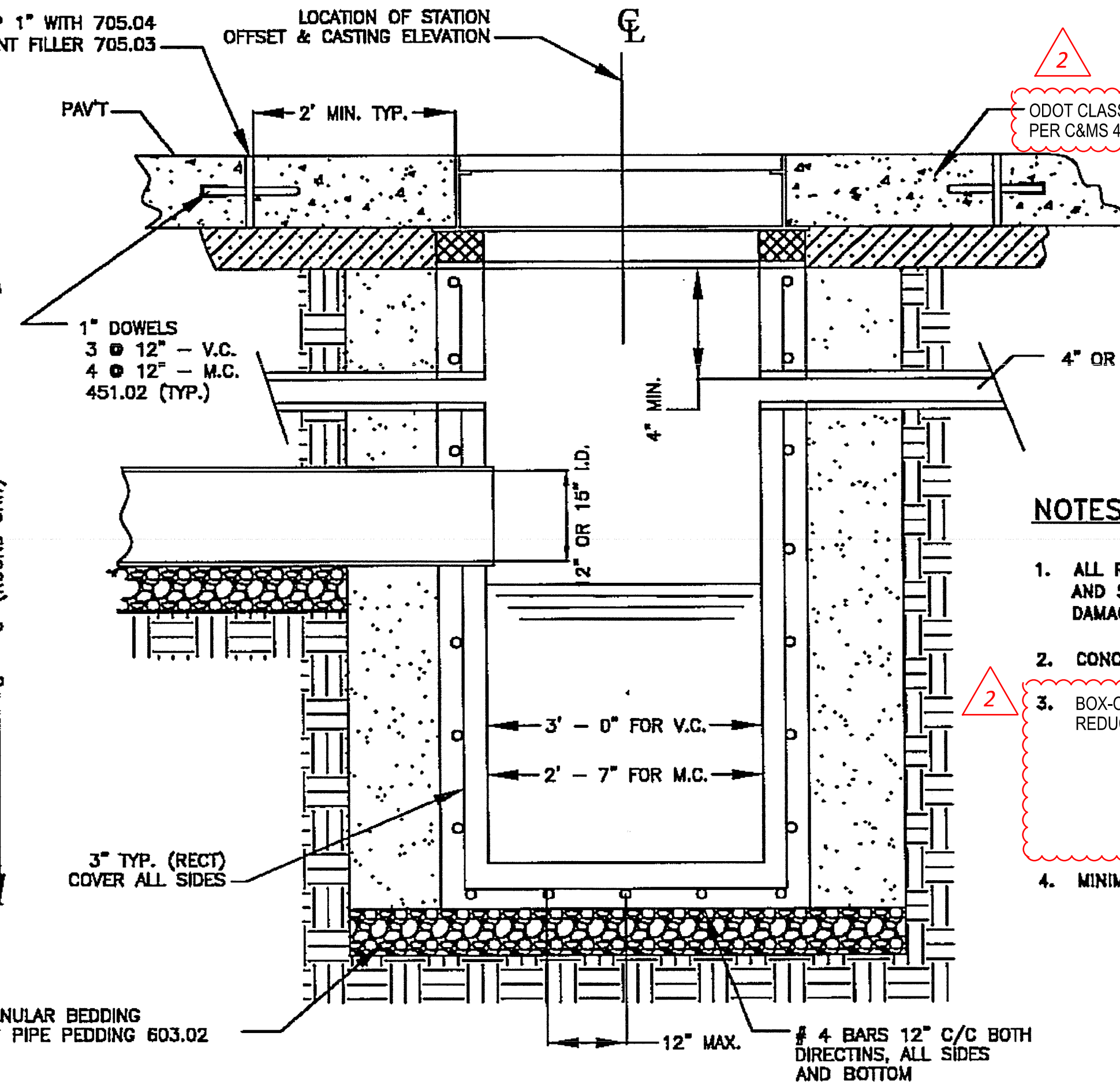


**ROUND SECTION REINFORCEMENTS**  
 0.12 SQ. IN. PER FOOT CIRCUMFERTIAL STEEL WITH  
 2 1/2" COVER (WALLS)  
 0.12 AQ. IN. STEEL EACH WAY. 2" COVER (BASE)

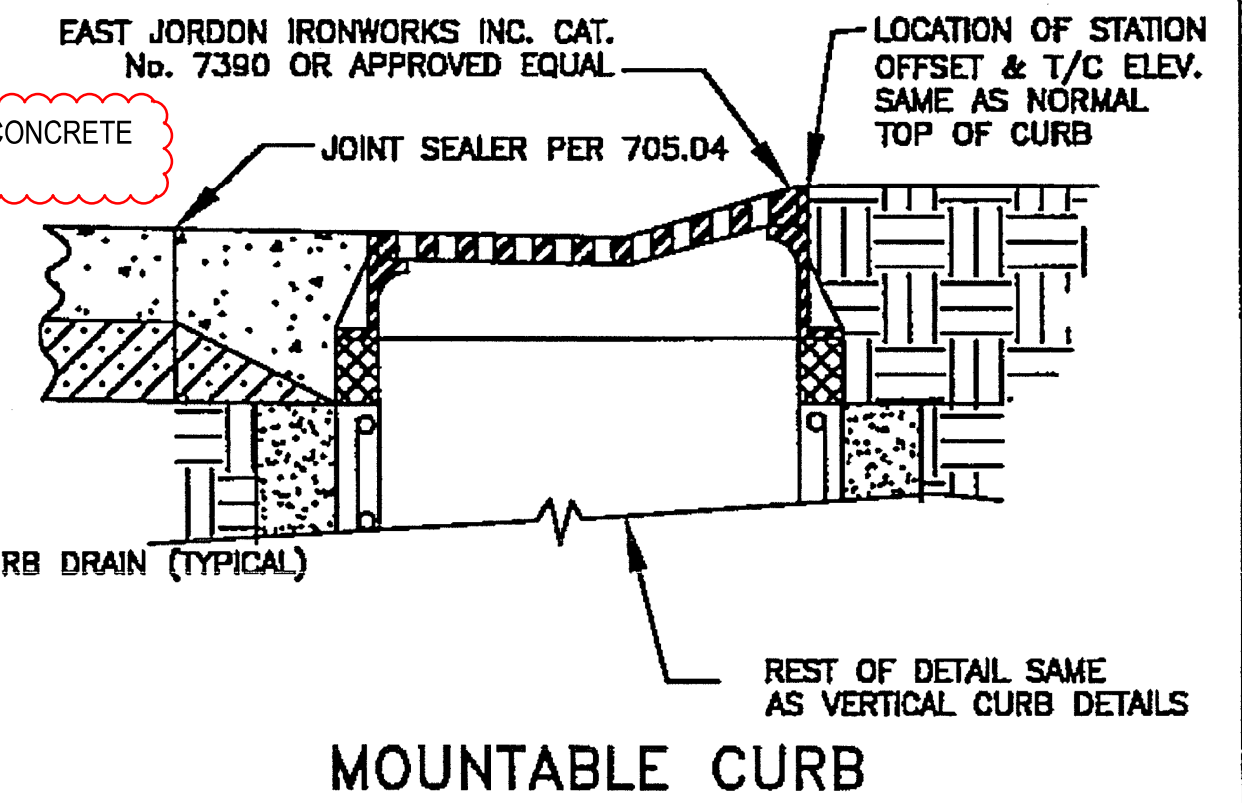
**ALTERNATE BASIN SHAPE**

A ROUND PRECAST CONCRETE UNIT MAY BE USED IN LIEU OF RECTANGULAR UNIT. THE ROUND SECTION SHALL BE 36" I.D. UNIT WITH INTEGRAL BASE AND PRECAST TOP TRANSITION SECTION (ROUND TO RECTANGULAR) TO FIT CASTING BEING USED. THE TRANSITION UNIT REQUIRES A # 5 REBAR AT CORNERS OF THE RECTANGULAR SHAPED SECTION AND 3 X 8 W6 X W5 WELDED WIRE FABRIC IN VERTICAL SECTION. ALSO, IF APPROVED BY THE ENGINEER, 8" THICK MASONRY WALL MAY BE USED IN LIEU OF PRECAST UNITS.

NOTE: IF PRECAST CATCH BASIN IS CONSTRUCTED IN TWO PIECES THE JOINT BETWEEN UNITS MUST BE A PERMIUM JOINT, PER 706.11.



**LEGEND**  
 V.C. = VERTICAL CURB  
 M.C. = MOUNTABLE CURB  
 T/C = TOP OF CASTING  
 N.G. = NORMAL GUTTER



**NOTES**

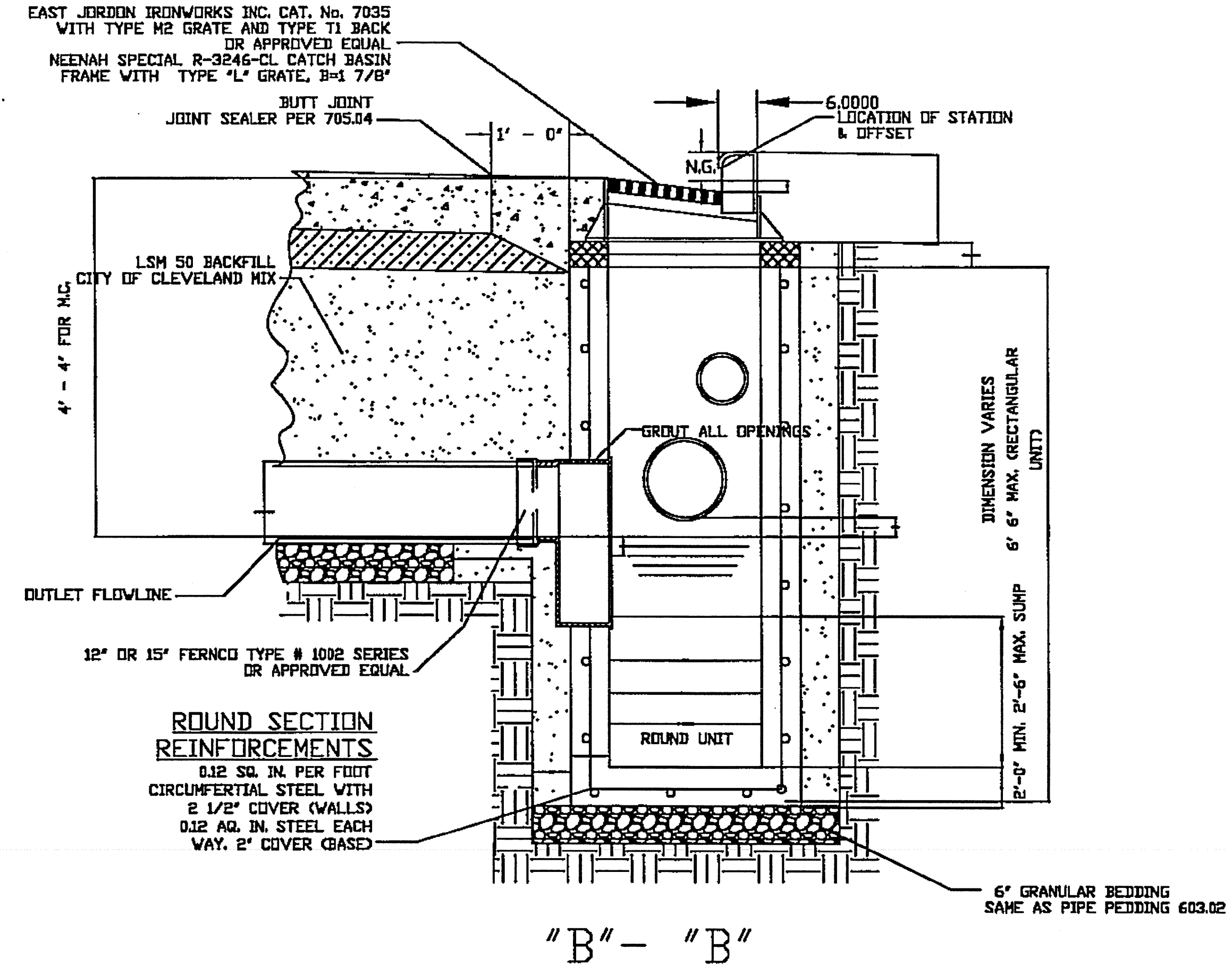
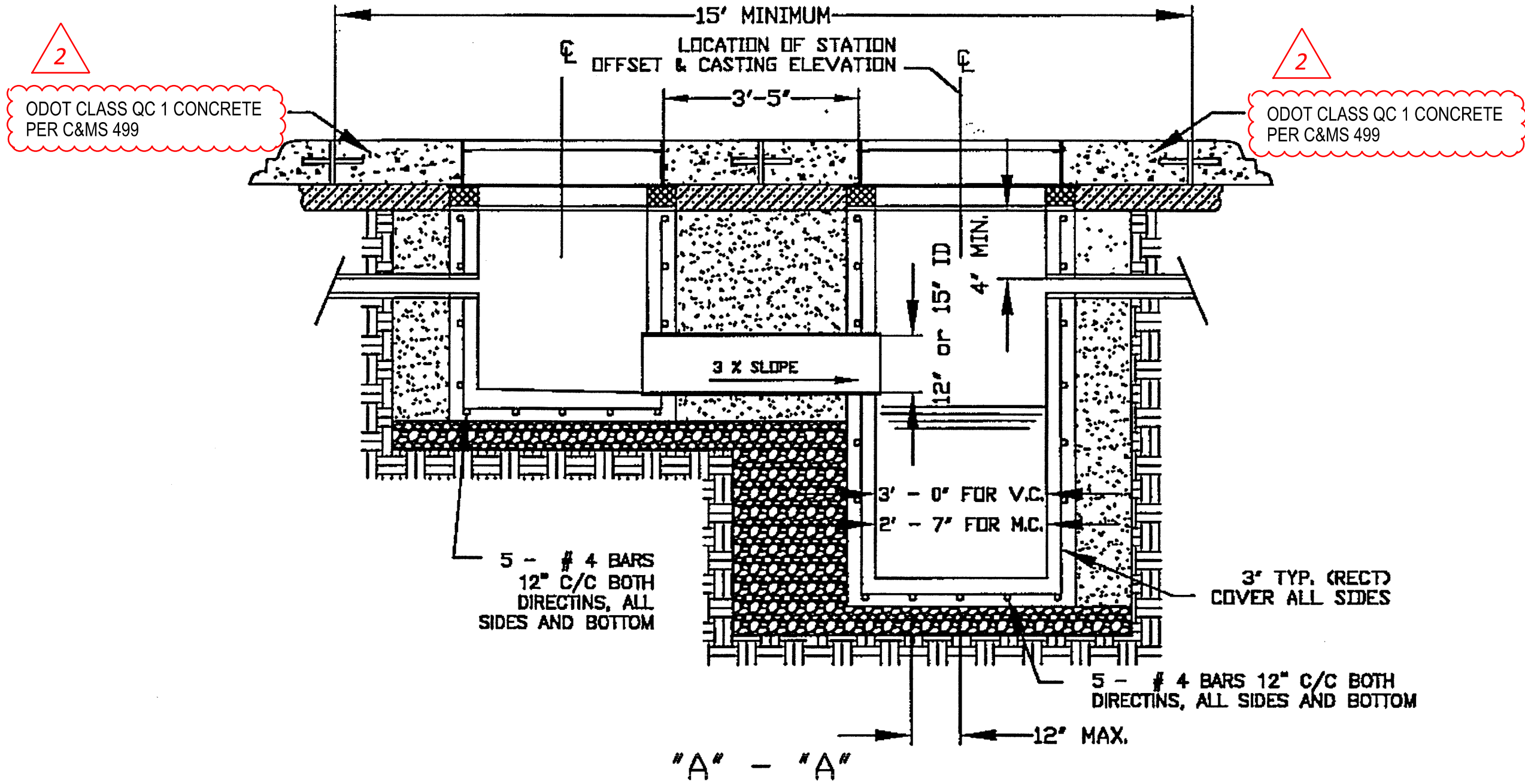
- ALL REINFORCING SHALL BE # 4 DEFORMED BARS, AS PER ODOT 709, AND SUFFICIENT TO PERMIT SHIPPING AND PLACEMENT WITHOUT DAMAGE TO DECTANGULAR SHAPE.
- CONCRETE SHALL BE ODOT 499 CLASS QC 1 4000 PSI IN 28 DAYS.
- BOX-OUT SHALL BE CONSIDERED INCIDENTAL TO THE CATCH BASIN. THERE WILL BE NO REDUCTION IN PAVEMENT OR CURB QUANTITY BECAUSE OF THE BOX-OUT OR CASTING.
- MINIMUM WALL THICKNESS 8" CAST IN PLACE AND 6" FOR PRECAST.

CITY OF CLEVELAND  
 DEPARTMENT OF PUBLIC SERVICE  
 DIVISION OF ENGINEERING & CONSTRUCTION  
 JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE  
 STANDARD CONSTRUCTION DRAWING  
 STANDARD DETAIL FOR  
 RECTANGULAR CATCH BASIN  
 NOT TO SCALE

REVISED BY: R. PLIODZINSKAS DATE: 4/8/08  
 SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

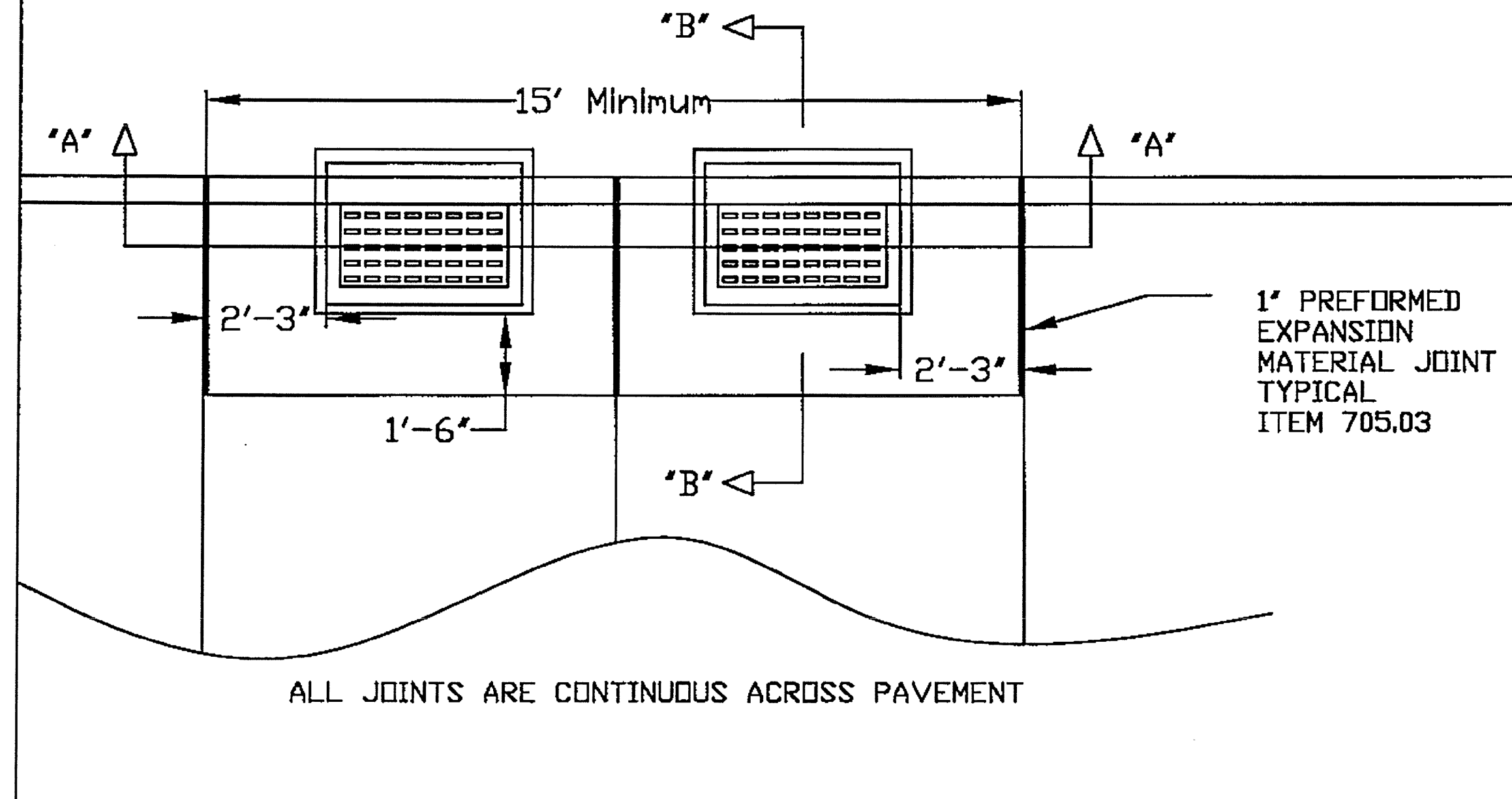
APPROVED: *[Signature]* DATE: 7-8-08  
 COMMISSIONER OF ENGINEERING & CONSTRUCTION

SHEET 1/7 26



**NOTES**

1. THE CATCH BASIN SHALL BE SET AT THE LOW POINT OF A SAG VERTICAL CURVE OR AT THE POINT WHERE THE GRADE OF THE STREET CHANGES FROM NEGATIVE TO POSITIVE OR DOWNSTREAM FROM THE INLET BASIN.
2. THE CONCRETE BETWEEN THE CASTINGS SHALL BE SLOPED TO MATCH THE SLOPE OF THE CASTINGS.
3. REFER TO SHEET 1168 FOR FULL DETAILS AND DIMENSIONS.
4. PIPE BETWEEN BASINS SHALL BE EXTRA STRENGTH VCP PIPE AND IS INCLUDED IN THE BID ITEM FOR CB-3 APP.
5. DWEL SPACING AND SIZE SHALL BE AS FOLLOWS:  
 1\"/>



**CITY OF CLEVELAND**  
 DIVISION OF ENGINEERING & CONSTRUCTION  
 JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE  
 STANDARD CONSTRUCTION DRAWING  
 DETAILS FOR  
 TWIN BASIN - CB-3  
 NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS      DATE: 4/8/08  
 SUBMITTED BY: W. MCLAUGHLIN      DATE: 4/8/08

APPROVED: *[Signature]* DATE: 7-8-08  
 COMMISSIONER OF ENGINEERING & CONSTRUCTION

SHEET 3/7      28

Main table with columns: REF NO., SHEET NO., STATION (FROM/TO), SIDE, and 31 columns of descriptions. Includes rows for various work items like 'REMOVAL MISC.: WATER MAIN REMOVED' and 'SPECIAL - 12" WATER MAIN DIP CLASS'. Includes summary rows for '12" WATER - CROSSOVER' and '30" WATER'.

Summary table with columns: SHEET (1387) and TOTAL (2696). Includes sections for DESIGN AGENCY (Michael Baker INTERNATIONAL), DESIGNER (SMP), REVIEWER (SM 05/15/24), and PROJECT ID (82382).

WATER WORK SUBSUMMARY - 1L

REF NO.	SHEET NO.	STATION		SIDE	638	638	638	BENDS AND BRANCHES																											
		FROM	TO		WATER WORK, MISC.: 12" INSULATION FOR BRIDGE (CLEVELAND WATER)	WATER WORK, MISC.: 24" INSULATION FOR BRIDGE (CLEVELAND WATER)	WATER WORK, MISC.: 24" POLYURETHANE COATED CEMENT LINED STEEL	FOR INFORMATION ONLY	12" X 10" REDUCER	12" X 11.25° BEND	12" X 12" TEE	12" X 22.5° BEND	12" X 45° BEND	20" X 12" REDUCER	24" X 11.25° BEND	24" X 12" TEE	24" X 22.5° BEND	24" X 24" TEE	24" X 45° BEND	24" X 6" REDUCING TEE	30" X 11.25° BEND	30" X 20" REDUCING TEE	30" X 22.5° BEND	30" X 24" REDUCER	30" X 30" CUT IN TEE	30" X 45° BEND	30" X 5.625° BEND	36" X 30" CUT IN TEE	COUPON TEST STATION	ISOLATION TEST STATION	THRUST BLOCK				
		FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	
		CARNEGIE AVE.																																	
W-1	628	48+08.43	48+08.43	RT																															
W-2	628	49+45.49	49+45.49	RT																															
W-3	628	49+64.93	49+64.93	LT																															
W-4	628	49+82.74	49+82.74	LT																															
W-5	628	49+86.44	49+86.44	LT																															
W-6	628	50+02.29	50+02.29	RT																															
W-7	628	50+34.55	50+34.55	RT																															
RW-1	630	51+72.68	51+72.68	RT																															
W-8	630	53+16.55	53+16.55	LT																															
W-9	630	53+33.71	53+33.71	LT																															
RW-2	630	53+34.17	53+46.54	LT																															
W-10	630	53+52.39	53+52.39	LT																															
RW-3	630	54+37.50	54+37.50	RT																															
W-11	630	54+65.98	54+65.98	LT																															
W-12	630	55+13.99	55+13.99	RT																															
W-13	630	55+42.24	55+42.24	RT																															
W-14	630	55+45.95	55+45.95	LT																															
W-15	636	66+08.73	66+08.73	RT																															
W-16	636	67+36.95	67+36.95	RT																															
W-17	636	67+51.53	67+51.53	RT																															
W-18	636	68+13.06	68+13.06	RT																															
W-19	636	68+43.98	68+43.98	RT																															
W-20	636	68+65.50	68+65.50	LT																															
W-21	636	68+68.79	68+68.79	LT																															
W-22	636	69+04.59	69+04.59	RT																															
W-23	636	69+18.34	69+18.34	RT																															
W-24	665	37+47.12	37+47.12	RT																															
W-25	665	37+86.66	37+86.66	RT																															
RW-4	665	37+91.64	37+91.64	RT																															
W-26	665	39+31.16	39+31.16	RT																															
W-27	665	39+45.02	39+45.02	RT																															
		12" WATER - CROSSOVER																																	
W-28	1401	140+00.00	140+23.55	CL																															
W-29	1401	140+23.55	140+32.31	CL																															
W-30	1401	140+29.31	140+29.31	CL																															
		30" WATER																																	
W-31	1401	103+00.00	103+63.66	CL																															
W-32	1401	103+63.66	104+01.66	CL																															
W-33	1401	104+01.66	104+32.99	CL																															
W-34	1401	104+32.99	104+75.21	CL																															
		TOTALS CARRIED TO SHEET		1400	-	-	-	-	-	1	2	1	1	-	-	-	-	-	-	1	5	-	-	-	-	1	-	1	1						

DESIGN AGENCY

**Michael Baker  
INTERNATIONAL**

DESIGNER  
SMP

REVIEWER  
SM 05/15/24

PROJECT ID  
82382

SHEET TOTAL  
1388 2696

WATER WORK SUBSUMMARY - 1R





REF NO.	SHEET NO.	STATION		SIDE	202	202	203	611	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	
		FROM	TO																																					
		FT	FT																																					SY
		CENTRAL AVE. CONNECTOR																																						
RW-7	1406	601+41.73	604+20.07	RT	315																																			
RW-8	1406	601+51.69	601+51.69	RT																																				
W-72	1406	601+58.00	601+58.00	RT																																				
RW-9	1406	601+65.96	601+65.96	RT																																				
RW-10	1406	601+73.55	601+73.55	RT																																				
RW-11	1406	601+92.84	601+92.84	RT																																				
RW-12	1406	601+96.90	601+96.90	RT																																				
RW-13	1406	602+24.47	602+24.47	RT					1																															
RW-14	1406	602+34.12	602+34.12	RT																																				
RW-15	1406	602+35.88	602+35.88	RT																																				
RW-16	1406	602+39.31	602+39.31	RT																																				
		12" WATER - CENTRAL AVE.																																						
W-73	1406	150+00.00	150+15.97	CL													16																							
RW-17	1406	150+00.00	151+59.81	CL	160														1																					
W-74	1406	150+02.50	150+02.50	CL																																				
W-75	1406	150+15.97	150+95.56	CL												80																								
W-76	1406	150+95.56	151+59.81	CL													64																							
W-77	1406	151+27.56	151+27.56	CL																																				
		CENTRAL AVE. CONNECTOR																																						
RW-18	1407	602+74.91	602+74.91	RT																																				
RW-19	1407	603+34.97	603+34.97	RT																																				
RW-20	1407	603+76.65	603+76.65	RT																																				
RW-21	1407	603+79.25	603+79.25	RT																																				
		E. 19TH ST.																																						
RW-22	1407	1+93.03	3+85.00	LT/RT	193																																			
RW-23	1407	2+35.69	2+35.69	RT					1																															
W-78	1407	3+85.00	3+85.00	LT																																				
W-79	1407	3+94.49	3+94.49	RT																																				
		CENTRAL AVE. CONNECTOR																																						
W-80	1408	220+00.00	220+66.54	CL																																				
W-81	1408	220+16.50	220+16.50	CL																																				
W-82	1408	220+66.54	221+30.01	CL																																				
		E. 22ND ST.																																						
RW-24	1408	29+59.91	32+40.16	LT																																				
RW-25	1408	30+48.84	37+06.74	RT/LT	693																																			
RW-26	1408	30+72.93	36+96.29	RT/LT	695																																			
W-83	1408	202+15.50	202+71.50	LT	56																																			
W-84	1408	203+00.00	203+39.00	CL																																				
W-85	1408	203+38.50	203+38.50	CL																																				
		TOTALS CARRIED TO SHEET			1399	2112	277	-	-	2	-	-	-	136	80	106	63	-	-	-	2	2	2	-	-	2	1	-	293	10	-	-	-	-	-	2	1	-	-	-

DESIGN AGENCY	
<b>Michael Baker International</b>	
DESIGNER	SMP
REVIEWER	SM
	05/15/24
PROJECT ID	82382
SHEET	1391
TOTAL	2696

WATER WORK SUBSUMMARY - 3L







CUY-90-16.28 (CCG3A)

MODEL: Sheet05 PAPER(SIZE: 34x22 (in.)) DATE: 9/9/2025 TIME: 11:52:29 AM USER: Joseph.Hogan  
 p:\mb-us-pw\benley.com\mb-us-pw-03\Documents\Cleveland\_OH101\_Protects\ODOT\District12\23232400-Engineering\Utilities\Sheets\82382\_US201.dgn

REF NO.	SHEET NO.	STATION		SIDE	DESCRIPTION																										638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638							
		FROM	TO		FT	FT	SY	EACH	EACH	EACH	EACH	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	FT	FT	FT	EACH																											EACH	EACH	EACH	EACH	EACH	EACH	EACH
		12" WATER - CARNEGIE AVE.																																																													
W-116	1411	401+20.00	401+20.00	CL																																																											
W-117	1411	401+20.00	401+31.72	CL						12																																																					
RW-32	1411	401+20.00	402+71.84	CL/LT	152																																																										
W-118	1411	401+31.72	402+04.00	CL							72																																																				
RW-33	1411	401+42.50		LT																																																											
W-119	1411	401+42.50	401+42.50	LT																																																											
W-120	1411	401+51.28	401+51.28	RT																																																											
RW-34	1411	401+85.72		LT																																																											
W-121	1411	401+85.72	401+85.72	LT																																																											
W-122	1411	402+04.00	402+20.01	CL						16																																																					
W-123	1411	402+20.00	402+20.00	CL																																																											
W-124	1411	402+20.01	402+50.00	CL							30																																																				
RW-35	1411	402+23.28		LT																																																											
W-125	1411	402+23.28	402+23.28	LT																																																											
W-126	1411	402+50.00	407+57.00	CL						507																																																					
RW-36	1411	402+54.08		LT																																																											
W-127	1411	402+54.08	402+54.08	LT																																																											
RW-37	1411	402+71.84	405+86.75	LT	315																																																										
W-128	1411	402+93.00	402+93.00	CL																																																											
W-129	1411	403+28.22	403+28.22	LT								1																																																			
		CARNEGIE AVE.																																																													
W-130	1412	65+19.86	65+19.86	RT																																																											
W-131	1412	65+45.75	65+45.75	RT																																																											
W-132	1412	65+86.65	65+86.65	RT																																																											
		12" WATER - CARNEGIE AVE.																																																													
W-133	1412	405+13.00	405+13.00	CL																																																											
RW-38	1412	405+86.45	405+86.45	RT								1																																																			
RW-39	1412	405+86.75	408+90.52	LT/CL	301																																																										
W-134	1412	407+12.00	407+12.00	CL																																																											
W-135	1412	407+57.00	408+16.72	CL									60																																																		
W-136	1412	408+16.72	408+58.72	CL																																																											
W-137	1412	408+58.72	408+79.52	CL																																																											
W-138	1412	408+69.82	408+69.82	RT																																																											
RW-40	1412	408+75.63	408+75.63	RT																																																											
W-139	1412	408+79.52	408+85.52	CL																																																											
W-140	1412	408+85.52	408+90.52	CL																																																											
W-141	1412	408+90.52	408+90.52	CL																																																											
		MIDTOWN CONNECTOR																																																													
RW-41	1414	503+11.08	504+01.15	LT	107																																																										
RW-42	1414	503+31.27	503+60.06	LT																																																											
TOTALS CARRIED TO SHEET				1399	875	-	-	-	2	4	-	-	583	188	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																										

WATER WORK SUBSUMMARY - 5L

DESIGN AGENCY	<b>Michael Baker INTERNATIONAL</b>
DESIGNER	SMP
REVIEWER	SM 05/15/24
PROJECT ID	82382
SHEET	TOTAL
1395	2696



**CUY-90-16.28 (CCG3A)**

MODEL: Sheet06 PAPER(S)SIZE: 34x22 (in.) DATE: 9/9/2025 TIME: 11:52:39 AM USER: Joseph.Hogan  
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REF NO.	SHEET NO.	STATION		SIDE	ITEM DESCRIPTIONS																											
		FROM	TO		202	202	203	611	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	
		FT	FT		SY	EACH	EACH	EACH	EACH	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
MIDTOWN CONNECTOR (CONT)																																
RW-43	1414	503+37.30	503+95.17	LT	83																											
RW-44	1414	503+37.66	503+37.66	LT				1																								
W-142	1414	503+97.62	503+97.62	LT																												
RW-45	1415	505+51.83	505+51.83	LT				1																								
W-143	1415	506+71.80	506+71.80	LT																												
W-144	1415	508+11.81	508+11.81	RT																												
W-145	1415	508+13.65	508+13.65	LT																												
W-146	1415	508+13.81	508+13.81	RT																												
RW-46	1415	508+17.17	508+17.17	LT				1																								
W-147	1415	508+34.24	508+34.24	LT																												
W-148	1415	508+60.47	508+60.47	LT																												
W-149	1415	509+52.79	509+52.79	LT																												
W-150	1415	509+80.89	509+80.89	LT																												
W-151	1415	509+81.22	509+81.22	LT																												
W-152	1416	401+03.41	401+03.41	LT																												
W-153	1416	401+04.62	401+04.62	LT																												
W-154	1416	402+05.64	402+05.64	LT																												
W-155	1416	510+32.55	510+32.55	LT																												
W-156	1416	510+33.31	510+33.31	LT																												
RW-47	1416	510+63.49	510+72.98	RT																												
RW-48	1416	510+77.10	510+86.80	RT																												
RW-49	1416	510+78.68	510+78.68	RT				1																								
CEDAR AVE.																																
RW-50	1416	400+45.42	401+67.57	RT/LT	133																											
RW-51	1416	402+52.77	402+52.77	LT				1																								
W-157	1416	402+71.61	402+71.61	LT																												
W-158	1416	402+96.77	402+96.77	LT																												
W-159	1416	402+96.83	402+96.83	LT																												
W-160	1416	403+26.60	403+26.60	LT																												
W-161	1416	403+26.62	403+26.62	LT																												
12" WATER - CEDAR AVE.																																
W-162	1416	303+00.00	303+06.00	CL																												
W-163	1416	303+06.00	303+25.07	CL																												
W-164	1416	303+25.07	303+97.75	CL																												
W-165	1416	303+97.75	304+36.07	CL																												
W-166	1416	303+98.75	303+98.75	LT																												
W-167	1416	304+36.07	304+37.07	CL																												
<b>TOTALS CARRIED TO SHEET</b>					1399	216	-	-	-	5	16	-	-	-	-	-	-	-	-	1	1	-	5	-	-	40	-	-	-	-	-	

REMOVAL MISC.: WATER MAIN REMOVED 24" AND UNDER  
 REMOVAL MISC.: WATER MAIN REMOVED OVER 24"  
 ROADWAY, MISC.: REINFORCED TURF  
 MANHOLE ADJUSTED TO GRADE, AS PER PLAN; WATER MANHOLE  
 FIRE HYDRANT REMOVED AND DISPOSED OF, AS PER PLAN  
 VALVE BOX ADJUSTED TO GRADE, AS PER PLAN  
 METER, SETTING, STOP AND CHAMBER, AS PER PLAN (CLEVELAND WATER)  
 SPECIAL - 12" WATER MAIN DIP CLASS 52 BOLTLESS RESTRAINED JOINTS AND FITTINGS (CLEVELAND WATER)  
 SPECIAL - 12" WATER MAIN DIP CLASS 52 PUSH ON JOINTS AND FITTINGS (CLEVELAND WATER)  
 SPECIAL - 24" WATER MAIN DIP CLASS 52 BOLTLESS RESTRAINED JOINTS AND FITTINGS (CLEVELAND WATER)  
 SPECIAL - 24" WATER MAIN DIP CLASS 52 PUSH ON JOINTS AND FITTINGS (CLEVELAND WATER)  
 SPECIAL - 30" WATER MAIN DIP CLASS 52 BOLTLESS RESTRAINED JOINTS AND FITTINGS (CLEVELAND WATER)  
 SPECIAL - 30" WATER MAIN DIP CLASS 52 PUSH ON JOINTS AND FITTINGS (CLEVELAND WATER)  
 SPECIAL - 48" STEEL PIPE ENCASEMENT, BORED OR JACKED (CLEVELAND WATER)  
 SPECIAL - 10" CUTTING IN SLEEVE (CLEVELAND WATER)  
 SPECIAL - 12" GATE VALVE WITH VALVE BOX (CLEVELAND WATER)  
 SPECIAL - 12" CUTTING IN SLEEVE (CLEVELAND WATER)  
 SPECIAL - 12" CUTTING IN SLEEVE, VALVE WITH VALVE BOX (CLEVELAND WATER)  
 SPECIAL - 2" AIR RELEASE VALVE WITH VALVE BOX (CLEVELAND WATER)  
 SPECIAL - 6" FIRE HYDRANT, COMPLETE (CLEVELAND WATER)  
 SPECIAL - FIRE HYDRANT SERVICE LINE EXTENDED AND ADJUSTED TO GRADE (CLEVELAND WATER)  
 SPECIAL - 1" COPPER WATER SERVICE LINE (CLEVELAND WATER)  
 SPECIAL - REMOVE WATER SERVICE CONNECTION (CLEVELAND WATER)  
 SPECIAL - EXTEND 1-1/2" COPPER WATER SERVICE CONNECTION (CLEVELAND WATER)  
 SPECIAL - INSTALL 1-1/2" COPPER WATER SERVICE CONNECTION (CLEVELAND WATER)  
 SPECIAL - 1" CORPORATION STOP (CLEVELAND WATER)  
 SPECIAL - 1-1/2" CORPORATION STOP (CLEVELAND WATER)  
 SPECIAL - INSTALL 1" METER SETTING, COMPLETE (CLEVELAND WATER)  
 WATER WORK, MISC.: 12" EXPANSION VALVE (BRIDGE)  
 WATER WORK, MISC.: 24" EXPANSION VALVE (BRIDGE)  
 WATER WORK, MISC.: 24" VALVE ASSEMBLY COMPLETE (CLEVELAND WATER)  
 WATER WORK, MISC.: 30" CUTTING IN SLEEVE (CLEVELAND WATER)  
 WATER WORK, MISC.: 30" VALVE ASSEMBLY COMPLETE (CLEVELAND WATER)  
 WATER WORK, MISC.: 36" CUTTING IN SLEEVE (CLEVELAND WATER)  
 WATER WORK, MISC.: CONCRETE PIER  
 WATER WORK, MISC.: SLEEVE FOR ABUTMENT WALL - 12" DIP LINE (CLEVELAND WATER)  
 WATER WORK, MISC.: SLEEVE FOR ABUTMENT WALL - 24" STEEL LINE (CLEVELAND WATER)  
 WATER WORK, MISC.: STEEL TO DIP TRANSITION (CLEVELAND WATER)

638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638
638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638

DESIGN AGENCY	
<b>Michael Baker</b> INTERNATIONAL	
DESIGNER	
SMP	
REVIEWER	
SM 05/15/24	
PROJECT ID	
82382	
SHEET	TOTAL
1397	2696

**WATER WORK SUBSUMMARY - 6L**

REF NO.	SHEET NO.	STATION		SIDE	BENDS AND BRANCHES FOR INFORMATION ONLY																												
					WATER WORK, MISC.: 12" INSULATION FOR BRIDGE (CLEVELAND WATER)				WATER WORK, MISC.: 24" INSULATION FOR BRIDGE (CLEVELAND WATER)				WATER WORK, MISC.: 24" POLYURETHANE COATED CEMENT LINED STEEL																				
					FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
FROM	TO																																
		MIDTOWN CONNECTOR (CONT)																															
RW-43	1414	503+37.30	503+95.17	LT																													
RW-44	1414	503+37.66	503+37.66	LT																													
W-142	1414	503+97.62	503+97.62	LT																													
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W-143	1415	506+71.80	506+71.80	LT																													
W-144	1415	508+11.81	508+11.81	RT																													
W-145	1415	508+13.65	508+13.65	LT																													
W-146	1415	508+13.81	508+13.81	RT																													
RW-46	1415	508+17.17	508+17.17	LT																													
W-147	1415	508+34.24	508+34.24	LT																													
W-148	1415	508+60.47	508+60.47	LT																													
W-149	1415	509+52.79	509+52.79	LT																													
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W-152	1416	401+03.41	401+03.41	LT																													
W-153	1416	401+04.62	401+04.62	LT																													
W-154	1416	402+05.64	402+05.64	LT																													
W-155	1416	510+32.55	510+32.55	LT																													
W-156	1416	510+33.31	510+33.31	LT																													
RW-47	1416	510+63.49	510+72.98	RT																													
RW-48	1416	510+77.10	510+86.80	RT																													
RW-49	1416	510+78.68	510+78.68	RT																													
		CEDAR AVE.																															
RW-50	1416	400+45.42	401+67.57	RT/LT																													
RW-51	1416	402+52.77	402+52.77	LT																													
W-157	1416	402+71.61	402+71.61	LT																													
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W-159	1416	402+96.83	402+96.83	LT																													
W-160	1416	403+26.60	403+26.60	LT																													
W-161	1416	403+26.62	403+26.62	LT																													
		12" WATER - CEDAR AVE.																															
W-162	1416	303+00.00	303+06.00	CL																													
W-163	1416	303+06.00	303+25.07	CL																													
W-164	1416	303+25.07	303+97.75	CL																													
W-165	1416	303+97.75	304+36.07	CL																													
W-166	1416	303+98.75	303+98.75	LT																													
W-167	1416	304+36.07	304+37.07	CL																													
TOTALS CARRIED TO SHEET 1400					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

DESIGN AGENCY  
**Michael Baker**  
 INTERNATIONAL  
 DESIGNER  
 SMP  
 REVIEWER  
 SM 05/15/24  
 PROJECT ID  
 82382  
 SHEET TOTAL  
 1398 2696



REF NO.	SHEET NO.	STATION		SIDE	638	638	638	BENDS AND BRANCHES																												
		FROM	TO		WATER WORK, MISC.: 12" INSULATION FOR BRIDGE (CLEVELAND WATER)	WATER WORK, MISC.: 24" INSULATION FOR BRIDGE (CLEVELAND WATER)	WATER WORK, MISC.: 24" POLYURETHANE COATED CEMENT LINED STEEL	FOR INFORMATION ONLY																												
					FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH			
TOTALS FROM THIS SHEET					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TOTALS FROM SHEET 1388					-	-	-	-	-	1	2	1	1	-	-	-	-	-	1	5	-	-	-	-	1	-	1	1								
TOTALS FROM SHEET 1390					-	-	-	-	2	-	4	-	-	-	-	-	3	-	11	-	1	1	2	-	6	1	-									
TOTALS FROM SHEET 1392					-	-	-	2	-	1	8	-	-	-	1	-	2	-	-	-	1	-	-	-	-	2	-									
TOTALS FROM SHEET 1394					-	354	354	1	-	-	1	1	-	1	1	5	1	6	1	-	-	-	-	-	2	1	-									
TOTALS FROM SHEET 1396					507	-	-	-	-	-	8	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS FROM SHEET 1398					-	-	-	-	-	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS CARRIED TO GENERAL SUMMARY					507	354	354	3	2	2	25	8	1	1	1	6	1	8	1	3	1	16	1	1	1	2	1	8	5	1						

WATER WORK SUBSUMMARY - 7R

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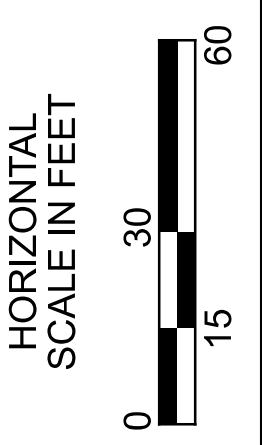
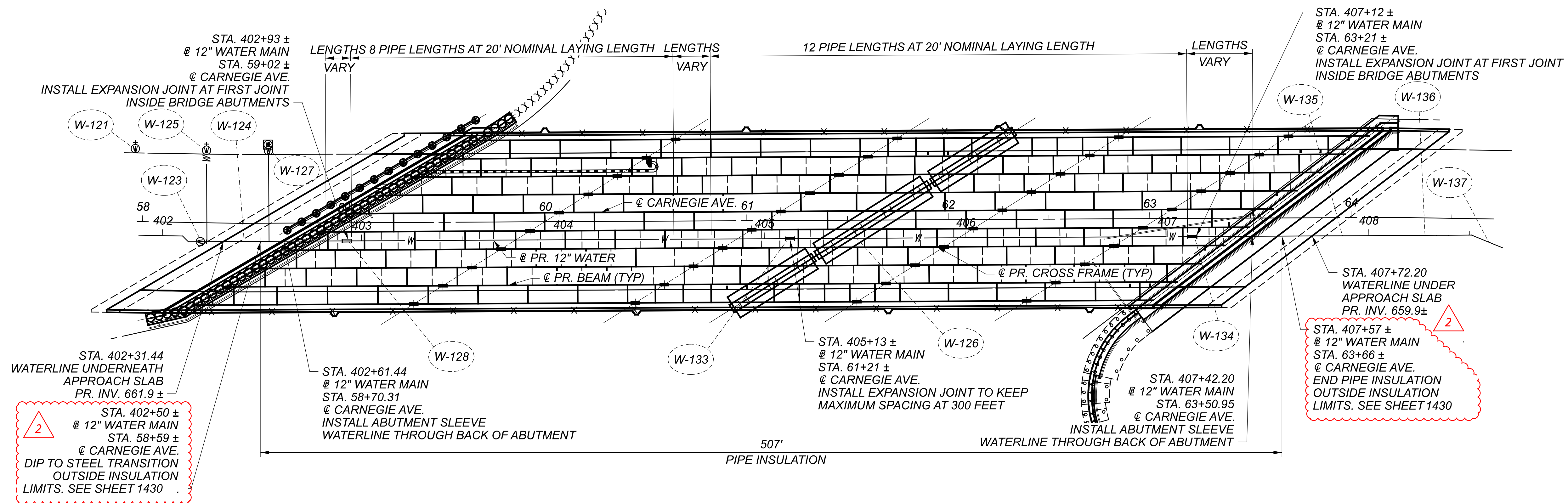
DESIGN AGENCY  
**Michael Baker INTERNATIONAL**

DESIGNER  
 SMP

REVIEWER  
 SM 05/15/24

PROJECT ID  
 82382

SHEET TOTAL  
 1400 2696



**WATER WORK PLAN - CARNEGIE AVE.  
 BRIDGE 14 ENLARGEMENT PLAN**

DESIGN AGENCY

**Michael Baker  
INTERNATIONAL**

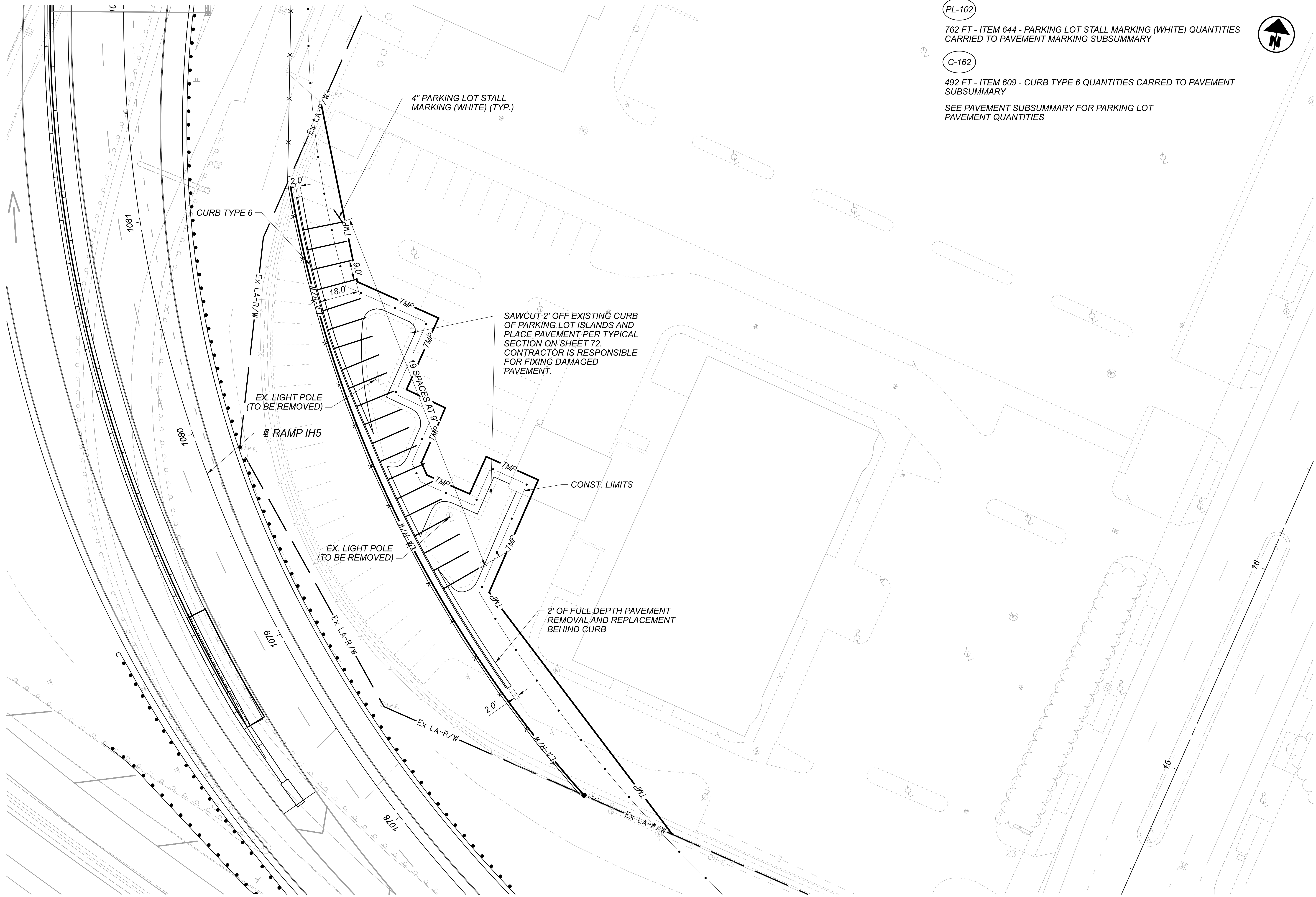
DESIGNER  
SMP

REVIEWER  
SM 05/15/24

PROJECT ID  
82382

SHEET	TOTAL
1413	2696

**NOTE:**  
 CONTRACTOR TO PROVIDE A LAYOUT PLAN  
 FOR THE WATERMAIN PRIOR TO  
 COMMENCING WORK ON THE BRIDGE



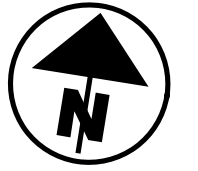
PL-102

762 FT - ITEM 644 - PARKING LOT STALL MARKING (WHITE) QUANTITIES CARRIED TO PAVEMENT MARKING SUBSUMMARY

C-162

492 FT - ITEM 609 - CURB TYPE 6 QUANTITIES CARRIED TO PAVEMENT SUBSUMMARY

SEE PAVEMENT SUBSUMMARY FOR PARKING LOT PAVEMENT QUANTITIES



PARKING DETAIL  
 2554 E. 22 ST.

DESIGN AGENCY

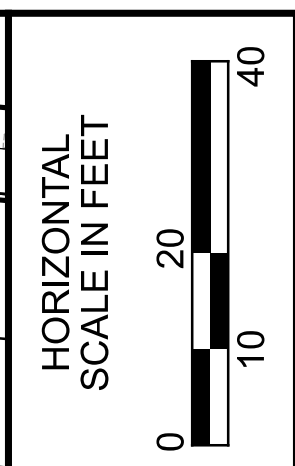
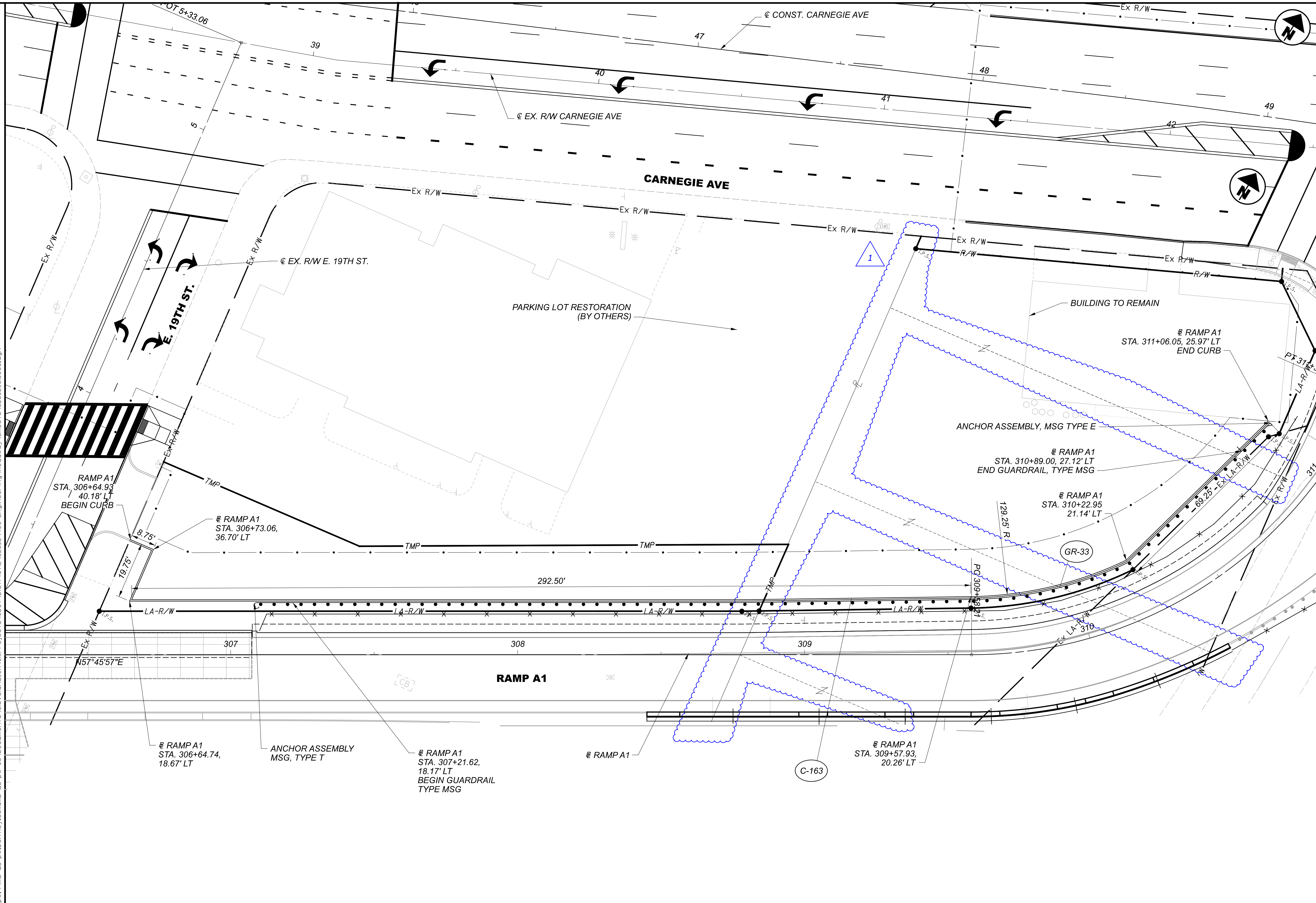
Michael Baker INTERNATIONAL

DESIGNER  
KJM

REVIEWER  
KGJ 05/22/24

PROJECT ID  
82382

SHEET	TOTAL
1447	2696



**PARKING LOT DETAIL**  
**1910 CARNEGIE AVE.**

DESIGN AGENCY	<b>Michael Baker INTERNATIONAL</b>
DESIGNER	CRK
REVIEWER	GSH 05/22/24
PROJECT ID	82382
SHEET TOTAL	1448 2696

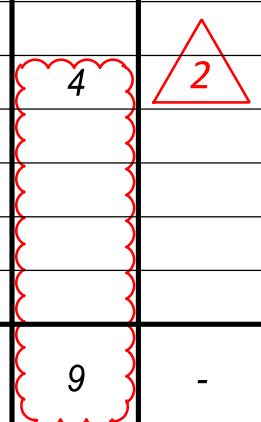
SHEET NUMBER															ITEM	CARRIED TO GENERAL SUMMARY	UNIT	DESCRIPTION			
1684	1685	1692	1693	1694	1695	1696	1697	1698	1699	1700	1701	1702	1703								
				1		1												202	2	EACH	REMOVAL OF EXISTING CONTROL CENTER AND FOUNDATION
				1		1												202	2	EACH	DISCONNECT EXISTING CIRCUIT
						2		8		2								625	12	EACH	CONNECTION, FUSED PULL APART
		3				6		6										625	15	EACH	CONNECTION, UNFUSED BOLTED
		24		33		12		12		27		15						625	123	EACH	CONNECTION, UNFUSED PERMANENT
						1		3										625	4	EACH	LIGHT POLE, LOW MAST, ALM50
								1		1								625	2	EACH	LIGHT POLE, LOW MAST, ATLM50
																		625	1	EACH	LIGHT TOWER, BB80
																		625	2	EACH	LIGHT TOWER, BB100
																		625	1	EACH	LIGHT TOWER, BB110
2		1		1														625	3	EACH	LIGHT TOWER, BBB80
																		625	8	EACH	LIGHT TOWER, BBB100
2		1		1		2		1		2		1						625	1	EACH	LIGHT TOWER, BBB120
																		625	1	EACH	LIGHT TOWER, BBB60
										1								625	1	EACH	LIGHT TOWER, BBBB90
																		625	2	EACH	LIGHT TOWER, BBBB100
																		625	1	EACH	LIGHT TOWER, MISC.: TOWER LIGHTING RING WITH 4 LUMINAIRE MOUNTS
								1		1								625	2	EACH	LIGHT POLE FOUNDATION, 24" X 10' DEEP
						1		3										625	4	EACH	MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN
		2																625	2	EACH	LIGHT TOWER FOUNDATION, 36" X 15' DEEP
		1		2		2				3		2						625	10	EACH	LIGHT TOWER FOUNDATION, 36" X 20' DEEP
										1		2						625	4	EACH	LIGHT TOWER FOUNDATION, 36" X 25' DEEP
																		625	1	EACH	LIGHT TOWER FOUNDATION, 42" X 25' DEEP
		1																625	1	EACH	LIGHT TOWER FOUNDATION, MISC.: 42" X 20' DEEP
		1		1														625	2	EACH	LIGHT TOWER FOUNDATION, MISC.: 48" X 25' DEEP
				3111		7047		8286		6228		4930		954				625	30556	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE
						150		600				150						625	900	FT	NO. 10 AWG POLE AND BRACKET CABLE
	175	2078		1861		795		497		1642		396						625	7444	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES
			383		160		179		554		28							625	1304	FT	CONDUIT, 1-1/2", 725.04
									116									625	116	FT	CONDUIT, 2-1/2", 725.04
																		625	712	FT	CONDUIT, 3", 725.051
			544		939		668		406		1074		245					625	3876	FT	CONDUIT, JACKED OR DRILLED, 725.04, 3"
			14	2	9		6		3		21		11					625	2	EACH	LUMINAIRE, HIGH MAST, SOLID STATE (LED), AS PER PLAN (480V)
							1		4		1							625	6	EACH	LUMINAIRE, LOW MAST, SOLID STATE (LED), AS PER PLAN (480V)
			6		2		5		9		1							625	23	EACH	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN (480V)
																		625	1	EACH	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN (480V, CROSS FRAME MOUNTED)
				1968		1000		755		296		1696		275				625	5990	FT	TRENCH
				1				3										625	4	EACH	MEDIAN JUNCTION BOX
				8		4		5		4		4		1				625	26	EACH	PULL BOX, 725.08, 18"
				1		3				2		2		2				625	8	EACH	PULL BOX, 725.08, 24"
																		625	4	EACH	PULL BOX, 725.08, 48", TYPE 1, AS PER PLAN
																		625	17	EACH	PULL BOX REMOVED, AS PER PLAN
																		625	1	EACH	PULL BOX, MISC.: 18" PULL BOX ADJUSTED TO GRADE
																		625	46	EACH	GROUND ROD
																		625	6	EACH	STRUCTURE GROUNDING SYSTEM
																		625	2	EACH	POWER SERVICE, AS PER PLAN
																		625	2	EACH	CONTROL CENTER CABINET, COMPLETE
				1968		1000		755		296		1696		275				625	5990	FT	UNDERGROUND WARNING/MARKING TAPE
			3		2		2		3		1							625	11	EACH	SERVICE TO UNDERPASS LIGHTING, AS PER PLAN
LS																		SPECIAL	LS		MAINTAIN EXISTING LIGHTING
20																		SPECIAL	20	EACH	REPLACEMENT OF EXISTING LIGHTING UNIT
																		625	21	EACH	LIGHT TOWER REMOVED
																		625	2	EACH	POWER SERVICE REMOVED
																		625	21	EACH	LIGHT TOWER FOUNDATION REMOVED
																		625	1	EACH	LIGHTING, MISC.: RELOCATE EX. CONTROL CENTER
																		625	7	EACH	LIGHTING, MISC.: TEST NEW CIRCUIT







SHEET NO.	STATION		SIDE	POLE/PULL BOX NO.	ITEMS																														
					ITEMS												ITEMS																		
					FROM	TO	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	
					CONDUIT, 1-1/2", 725.04	CONDUIT, 2-1/2", 725.04	CONDUIT, 3", 725.051	CONDUIT, JACKED OR DRILLED, 725.04, 3"	LUMINAIRE - HIGH MAST, SOLID STATE (LED), AS PER PLAN (480V)	LUMINAIRE - LOW MAST, SOLID STATE (LED), AS PER PLAN (480V)	LUMINAIRE - UNDERPASS, SOLID STATE (LED), AS PER PLAN (480V)	LUMINAIRE - UNDERPASS, SOLID STATE (LED), AS PER PLAN (480V)	TRENCH	MEDIAN JUNCTION BOX	PULL BOX, 725.08, 18"	PULL BOX, 725.08, 24"	PULL BOX, 725.08, 48", TYPE 1, AS PER PLAN	PULL BOX REMOVED, AS PER PLAN	PULL BOX, MISC.: 18" PULL BOX ADJUSTED TO GRADE	GROUND ROD	STRUCTURE GROUNDING SYSTEM	POWER SERVICE, AS PER PLAN	CONTROL CENTER CABINET, COMPLETE	UNDERGROUND WARNING/MARKING TAPE	SERVICE TO UNDERPASS LIGHTING, AS PER PLAN	LIGHT TOWER REMOVED	POWER SERVICE REMOVED	LIGHT TOWER FOUNDATION REMOVED	LIGHTING, MISC.: RELOCATE EX. CONTROL CENTER	LIGHTING, MISC.: TEST NEW CIRCUIT					
					FT	FT	FT	FT	EACH	EACH	EACH	EACH	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	EACH	EACH	EACH	EACH	EACH	EACH						
1716	I.R. 90 WB	175+03		LT	RL-2																														
1716	I.R. 90 WB	179+92		LT	RL-3																														
1716	I.R. 90 WB	180+94		LT	RL-4																														
1716	I.R. 90 WB	181+31		LT	RL-5																														
1716	I.R. 90 WB	185+06		LT	RL-6																														
1716	RAMP A2	420+67		RT	RL-7																														
1716	RAMP IB5	1711+18		RT	RL-8																														
1716	RAMP B6	1605+80		LT	RL-9																														
1717	I.R. 90 EB	186+12		RT	PB-CN7																														
1717	I.R. 90 EB	186+12	I.R. 90 WB	188+40	RT/LT	PB-CN7 TO PB-CN6																													
1717	I.R. 90 WB	186+15		LT	PB-CN4																														
1717	I.R. 90 WB	186+15	I.R. 90 WB	186+24	LT	PB-CN4 TO CN1-4	125																												
1717	I.R. 90 WB	186+15	I.R. 90 WB	187+97	LT	PB-CN4 TO PB-CN5																													
1717	I.R. 90 WB	186+24		LT	CN1-4																														
1717	I.R. 90 WB	187+97		LT	PB-CN5																														
1717	I.R. 90 WB	187+97	I.R. 90 WB	188+33	LT	PB-CN5 TO PB-CN27																													
1717	I.R. 90 WB	187+97	I.R. 90 WB	188+40	LT	PB-CN5 TO PB-CN6																													
1717	I.R. 90 WB	188+33		LT	PB-CN27																														
1717	I.R. 90 WB	188+33	I.R. 90 WB	189+67	LT	PB-CN27 TO PB-CN15																													
1717	I.R. 90 WB	188+40		LT	PB-CN6																														
1717	I.R. 90 WB	188+40	I.R. 90 WB	188+54	LT	PB-CN6 TO CN1-3	35																												
1717	I.R. 90 WB	188+54		LT	CN1-3																														
1717	I.R. 90 WB	189+67		LT	CC-CN																														
1717	I.R. 90 WB	189+67		LT	PB-CN15																														
1717	I.R. 90 WB	189+67	I.R. 90 WB	189+67	LT	PB-CN15 TO CC-CN																													
1717	I.R. 90 WB	189+67	I.R. 90 WB	190+28	LT	PB-CN15 TO CN1-1																													
1717	I.R. 90 WB	190+28		LT	CN1-1																														
1717	I.R. 90 WB	190+28	I.R. 90 WB	191+80	LT	CN1-1 TO PB-CN14																													
1717	I.R. 90 WB	191+80		LT	PB-CN14																														
1717	I.R. 90 WB	191+80	I.R. 90 WB	194+75	LT	PB-CN14 TO CN1-2																													
1717	I.R. 90 WB	194+75		LT	CN1-2																														
1717	RAMP B6					CUY-90-1652S																													
1717	RAMP IJ3	109+85		LT	PB-CN17																														
1717	RAMP IJ3	109+85		RT	PB-CN18																														
1717	RAMP IJ3	109+85	RAMP IJ3	109+85	LT/RT	PB-CN17 TO PB-CN18																													
1717	RAMP IJ3	109+85	I.R. 90 EB	186+12	LT/RT	PB-CN17 TO PB-CN7																													
1717	RAMP IJ3	109+85	RAMP H5	986+32	RT/LT	PB-CN18 TO CN3-1																													
1717	I.R. 90 EB					CUY-90-1653R																													
1717	I.R. 90 EB	187+14		RT	PB-CR11																														
1717	I.R. 90 EB	187+14	I.R. 90 EB	187+92	RT	PB-CR11 TO PB-CR1																													
1717	I.R. 90 EB	187+25		RT	CR1-7																														
1717	I.R. 90 EB	187+25	I.R. 90 EB	187+14	RT	CR1-7 TO PB-CR11																													
1717	I.R. 90 EB	187+92		RT	PB-CR1																														
1717	I.R. 90 EB	187+92	I.R. 90 EB	188+88	RT	PB-CR1 TO PB-CR3																													
TOTALS CARRIED TO GENERAL SUMMARY																																			
					160	-	-	939	9	-	2	-	1000	-	4	3	4	1	-	6	2	1	1	1000	2	6	1	6	-	4					



ODOT LIGHTING SUBSUMMARY - 2R

DESIGN AGENCY  
**Michael Baker INTERNATIONAL**

DESIGNER  
**CRK**

REVIEWER  
 SED 05/22/24

PROJECT ID  
 82382

SHEET TOTAL  
 1695 | 2696



MODEL: Sheet03 PAPER: 34x22 (in.) DATE: 9/12/2025 TIME: 1:40:00 PM USER: Joseph.Hogan  
 p:\mb-us-pw-bentley.com\mb-us-pw-03\Documents\Cleveland\_OH\01\_P\Projects\ODOT\District12\23282400-Engineering\Lighting\Sheets\82382\_L5051.dgn

SHEET NO.	STATION				SIDE	POLE/PULL BOX NO.																																	
							FROM	TO																															
							FT	FT	CONDUIT, 1-1/2", 725.04	CONDUIT, 2-1/2", 725.04	CONDUIT, 3", 725.051	CONDUIT, JACKED OR DRILLED, 725.04, 3"	LUMINAIRE, HIGH MAST, SOLID STATE (LED), AS PER PLAN (480V)	LUMINAIRE, LOW MAST, SOLID STATE (LED), AS PER PLAN (480V)	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN (480V)	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN (480V, CROSS FRAME MOUNTED)	TRENCH	MEDIAN JUNCTION BOX	PULL BOX, 725.08, 18"	PULL BOX, 725.08, 24"	PULL BOX, 725.08, 48", TYPE 1, AS PER PLAN	PULL BOX REMOVED, AS PER PLAN	PULL BOX, MISC.: 18" PULL BOX ADJUSTED TO GRADE	GROUND ROD	STRUCTURE GROUNDING SYSTEM	POWER SERVICE, AS PER PLAN	CONTROL CENTER CABINET, COMPLETE	UNDERGROUND WARNING/MARKING TAPE	SERVICE TO UNDERPASS LIGHTING, AS PER PLAN	LIGHT TOWER REMOVED	POWER SERVICE REMOVED	LIGHT TOWER FOUNDATION REMOVED	LIGHTING, MISC.: RELOCATE EX. CONTROL CENTER	LIGHTING, MISC.: TEST NEW CIRCUIT					
1717	I.R. 90 EB	187+92	RAMP IH6	1188+48	RT/LT	PB-CR1 TO PB-CR2				275																													
1717	I.R. 90 EB	188+88			RT	PB-CR3							1												1														
1717	I.R. 90 EB	188+88	I.R. 90 EB	188+95	RT	PB-CR3 TO CR1-4	32																																
1717	I.R. 90 EB	188+88	I.R. 90 EB	191+69	RT	PB-CR3 TO PB-CR12								333											333														
1717	I.R. 90 EB	188+95			RT	CR1-4				1																													
1717	I.R. 90 EB	188+95	I.R. 90 EB	188+99	RT	CR1-4 TO CR1-5	6																																
1717	I.R. 90 EB	188+99			RT	CR1-5				1																													
1717	I.R. 90 EB	188+99	I.R. 90 EB	189+08	RT	CR1-5 TO CR1-6	30																																
1717	I.R. 90 EB	189+08			RT	CR1-6				1																													
1717	I.R. 90 EB	191+69			RT	PB-CR12							1																										
1717	I.R. 90 EB	191+69	I.R. 90 EB	191+81	RT	PB-CR12 TO PB-CR4																																	
1717	I.R. 90 EB	191+81			RT	PB-CR4																																	
1717	I.R. 90 EB	191+81	I.R. 90 EB	192+53	RT	PB-CR4 TO CR1-3								72												72													
1717	I.R. 90 EB	192+53			RT	CR1-3																																	
1717	I.R. 90 EB	192+53	I.R. 90 EB	193+76	RT	CR1-3 TO PB-CR5					3			122											2														
1717	I.R. 90 EB	193+76			RT	PB-CR5																																	
1717	I.R. 90 EB	193+76	I.R. 90 EB	196+10	RT	PB-CR5 TO PB-CR13								228																									
1717	I.R. 90 WB					CUY-90-1653L																																	
1717	I.R. 90 EB	186+91			RT	RL-10																																	
1717	I.R. 90 EB	187+19			RT	RL-11																																	
1717	I.R. 90 EB	187+76			RT	RL-12																																	
1717	I.R. 90 EB	188+25			RT	RL-13																																	
1717	I.R. 90 EB	192+38			RT	RL-14																																	
1717	I.R. 90 EB	192+84			LT	RL-15																																	
1717	I.R. 90 EB	192+96			LT	RL-16																																	
1717	I.R. 90 WB	187+36			LT	RL-17																																	
1717	I.R. 90 WB	188+79			LT	RL-18																																	
1718	I.R. 90 EB	196+10			LT	PB-CR6																																	
1718	I.R. 90 EB	196+10			RT	PB-CR13									1																								
1718	I.R. 90 EB	196+10	I.R. 90 EB	196+10	RT/LT	PB-CR13 TO PB-CR6																																	
1718	I.R. 90 EB	196+10	I.R. 90 EB	196+50	RT	PB-CR13 TO CR1-2																																	
1718	I.R. 90 EB	196+10	I.R. 90 EB	197+73	LT	PB-CR6 TO PB-CR7																																	
1718	I.R. 90 EB	196+50			RT	CR1-2																																	
1718	I.R. 90 EB	197+73			LT	PB-CR7																																	
1718	I.R. 90 EB	197+73	I.R. 90 WB	199+50	LT	PB-CR7 TO CR1-1																																	
1718	I.R. 90 EB	197+73	I.R. 90 EB	199+58	LT	PB-CR7 TO PB-CR8																																	
1718	I.R. 90 EB	199+58			LT	PB-CR8																																	
1718	I.R. 90 EB	199+58	I.R. 90 EB	199+74	RT/LT	PB-CR8 TO CR1-11	17																																
1718	I.R. 90 EB	199+58	I.R. 90 EB	201+30	LT	PB-CR8 TO CR2-1																																	
1718	I.R. 90 EB	199+58	I.R. 90 WB	201+56	LT/RT	PB-CR8 TO CR1-13	44																																
1718	I.R. 90 EB	199+74			LT	CR1-11																																	
1718	I.R. 90 EB	199+74	I.R. 90 EB	200+24	LT	CR1-11 TO CR1-12	50																																
1718	I.R. 90 EB	200+24			LT	CR1-12																																	
1718	I.R. 90 EB	201+30			LT	CR2-1																																	
1718	I.R. 90 EB	201+30	INTERIM I.R. 90 EB	3004+20	LT	CR2-1 TO CR2-2																																	
TOTALS CARRIED TO GENERAL SUMMARY							179	-	-	668	6	1	5	-	755	3	5	-	-	5	-	5	1	-	-	755	2	3	1	3	-	-							

CUY-90-16.28 (CCG3A)

MODEL: Sheet04\_PAPER(SIZE: 34x22 (in.)) DATE: 9/12/2025 TIME: 1:40:05 PM USER: Joseph.Hogan  
 p:\mbs-us-pw-bentley.com\mb-us-pw-03\Documents\ODOT\District12\282382\400-Engineering\Lighting\Sheets\82382\_L5001.dgn

SHEET NO.	STATION			SIDE	POLE/PULL BOX NO.	202																											
						REMOVAL OF EXISTING CONTROL CENTER AND FOUNDATION	DISCONNECT EXISTING CIRCUIT	CONNECTION, FUSED PULL APART	CONNECTION, UNFUSED BOLTED	CONNECTION, UNFUSED PERMANENT	LIGHT POLE, LOW MAST, ALM60	LIGHT POLE, LOW MAST, ATLM50	LIGHT TOWER, BB80	LIGHT TOWER, BB100	LIGHT TOWER, BB110	LIGHT TOWER, BBB80	LIGHT TOWER, BBB100	LIGHT TOWER, BBB120	LIGHT TOWER, BBBB60	LIGHT TOWER, BBBB90	LIGHT TOWER, BBBB100	LIGHT TOWER, MISC.: TOWER LIGHTING RING WITH 4 LUMINAIRE MOUNTS	LIGHT TOWER FOUNDATION, 24" X 10' DEEP	MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN	LIGHT TOWER FOUNDATION, 36" X 15' DEEP	LIGHT TOWER FOUNDATION, 36" X 20' DEEP	LIGHT TOWER FOUNDATION, 36" X 25' DEEP	LIGHT TOWER FOUNDATION, 42" X 25' DEEP	LIGHT TOWER FOUNDATION, MISC.: 42" X 20' DEEP	LIGHT TOWER FOUNDATION, MISC.: 48" X 25' DEEP	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	NO. 10 AWG POLE AND BRACKET CABLE	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES
						EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT
FROM	TO																																
1718	I.R. 90 WB	198+89		LT	CC-CR																												
1718	I.R. 90 WB	199+50		LT	CR1-1																												
1718	I.R. 90 WB	199+50	I.R. 90 WB	198+89	LT	CR1-1 TO CC-CR																											
1718	I.R. 90 WB	199+50	I.R. 90 WB	201+60	LT	CR1-1 TO PB-CR14																											
1718	I.R. 90 WB	201+56		RT	CR1-13																												
1718	I.R. 90 WB	201+56	I.R. 90 WB	202+23	RT	CR1-13 TO CR1-14																											
1718	I.R. 90 WB	201+60		LT	PB-CR14																												
1718	I.R. 90 WB	201+60	I.R. 90 WB	201+75	LT	PB-CR14 TO CR1-9																											
1718	I.R. 90 WB	201+75		LT	CR1-9																												
1718	I.R. 90 WB	201+75	I.R. 90 WB	202+35	LT	CR1-9 TO CR1-10																											
1718	I.R. 90 WB	202+23		RT	CR1-14																												
1718	I.R. 90 WB	202+35		LT	CR1-10																												
1718	E. 22ND ST.					CUY-90-1678																											
1718	I.R. 90 EB	197+02		RT	RL-19																												
1718	I.R. 90 WB	200+72		RT	RL-20																												
1718	RAMPA 2	438+45		LT	RL-21																												
1719	INTERIM I.R. 90 EB	3004+20		LT	CR2-2																												
1719	INTERIM I.R. 90 EB	3004+20	INTERIM I.R. 90 EB	3006+45	LT	CR2-2 TO CR2-3																											
1719	INTERIM I.R. 90 EB	3006+25		RT	PB-CR9																												
1719	INTERIM I.R. 90 EB	3006+25	INTERIM I.R. 90 EB	3008+00	RT	PB-CR9 TO CR2-4																											
1719	INTERIM I.R. 90 EB	3006+45		LT	CR2-3																												
1719	INTERIM I.R. 90 EB	3006+45	INTERIM I.R. 90 EB	3006+25	LT/RT	CR2-3 TO PB-CR9																											
1719	INTERIM I.R. 90 EB	3006+45	INTERIM I.R. 90 EB	3010+46	LT	CR2-3 TO CR3-5																											
1719	INTERIM I.R. 90 EB	3006+45	INTERIM I.R. 90 WB	4005+78	LT	CR2-3 TO PB-CR10																											
1719	INTERIM I.R. 90 EB	3008+00		RT	CR2-4																												
1719	INTERIM I.R. 90 EB	3008+00	INTERIM I.R. 90 EB	3008+92	RT	CR2-4 TO PB-CR15																											
1719	INTERIM I.R. 90 EB	3008+92		RT	PB-CR15																												
1719	INTERIM I.R. 90 EB	3008+92	INTERIM I.R. 90 EB	3009+25	RT	PB-CR15 TO CR2-5																											
1719	INTERIM I.R. 90 EB	3009+25		RT	CR2-5																												
1719	INTERIM I.R. 90 EB	3009+25	INTERIM I.R. 90 EB	3009+90	RT	CR2-5 TO CR2-6																											
1719	INTERIM I.R. 90 EB	3009+90		RT	CR2-6																												
1719	INTERIM I.R. 90 EB	3010+46		LT	CR3-5																												
1719	INTERIM I.R. 90 WB	4005+78		LT	PB-CR10																												
1719	INTERIM I.R. 90 WB	4005+78	INTERIM I.R. 90 WB	4006+90	LT	PB-CR10 TO CR3-1																											
1719	INTERIM I.R. 90 WB	4006+90		LT	CR3-1																												
1719	INTERIM I.R. 90 WB	4006+90	INTERIM I.R. 90 WB	4007+51	LT	CR3-1 TO CR3-2																											
1719	INTERIM I.R. 90 WB	4007+51		LT	CR3-2																												
1719	INTERIM I.R. 90 WB	4007+51	INTERIM I.R. 90 WB	4008+30	LT	CR3-2 TO CR3-3																											
1719	INTERIM I.R. 90 WB	4007+51	INTERIM I.R. 90 WB	4008+56	LT/RT	CR3-2 TO CR3-4																											
1719	INTERIM I.R. 90 WB	4008+30		LT	CR3-3																												
1719	INTERIM I.R. 90 WB	4008+56		RT	CR3-4																												
1719	CARNEGIE AVE.					CUY-90-1696																											
1719	INTERIM I.R. 90 EB	3012+77		RT	CC-CAR																												
TOTALS CARRIED TO GENERAL SUMMARY						-	-	8	6	12	3	1	-	-	-	-	1	-	-	-	-	1	3	-	-	1	-	-	-	6228	600	497	

2

DESIGN AGENCY  
**Michael Baker INTERNATIONAL**  
 DESIGNER  
 CRK  
 REVIEWER  
 SED 05/22/24  
 PROJECT ID  
 82382  
 SHEET TOTAL  
 1698 2696

ODOT LIGHTING SUBSUMMARY - 4L





CUY-90-16.28 (CCG3A)

MODEL: Sheet05 PAPER: 34x22 (in.) DATE: 9/12/2025 TIME: 1:40:20 PM USER: Joseph.Hogan p:\mb-us-pw-bentley.com\mb-us-pw-03\Documents\ODOT\District12\23282400-Engineering\Lighting\Sheets\82382\_L5051.dgn

SHEET NO.	STATION		SIDE	POLE/PULL BOX NO.	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	
	FROM	TO			FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
1719	INTERIM I.R. 90 EB	3013+05		EX. PB													1													
1719	INTERIM I.R. 90 EB	3013+05	INTERIM I.R. 90 EB	3012+77	RT	EX. PB TO CC-CAR		712				356									356									
1719	INTERIM I.R. 90 EB	3013+30			RT	EX. 100' TOWER			4																					
1719	INTERIM I.R. 90 EB	3005+09			RT	RL-22																			1		1			
1719	INTERIM I.R. 90 EB	3009+39			RT	RL-23																		1		1				
1719	INTERIM I.R. 90 WB	4009+16			LT	RL-24																		1		1				
1721	RAMP A2	406+79			LT	CN3-6			3														2							
1721	RAMP A2	406+79	RAMP A2	408+50	LT	CN3-6 TO PB-CN12						174											174							
1721	RAMP A2	408+50			LT	PB-CN12								1																
1721	RAMP A2	408+50	RAMP IH4	14+10	LT	PB-CN12 TO CN3-5			188																					
1721	RAMP H5	1076+04			RT	RL-25																								
1721	RAMP H5	1076+93			RT	RL-26								1												1		1		
1722	RAMP A2	414+02			LT	CN4-2			4														2							
1722	RAMP A2	414+02	RAMP A2	414+09	LT/RT	CN4-2 TO PB-CN26						159											159							
1722	RAMP A2	414+02	RAMP A2	416+84	LT	CN4-2 TO PB-CN11						309											309							
1722	RAMP A2	414+09			RT	PB-CN26								1												1				
1722	RAMP A2	414+09	RAMP A2	414+20	RT	PB-CN26 TO CN4-3	28																							
1722	RAMP A2	414+20			RT	CN4-3					1																			
1722	RAMP A2	416+84			LT	PB-CN11								1																
1722	RAMP A2	416+84	RAMP A2	417+00	LT/RT	PB-CN11 TO CN4-1			220																					
1722	RAMP A2	416+84	RAMP IB5	1711+72	LT/RT	PB-CN11 TO CN4-4			256																					
1722	RAMP A2	417+00			RT	CN4-1			4														2							
1722	RAMP A2	417+00	RAMP IH4	18+69	RT/LT	CN4-1 TO PB-CN10			298																					
1722	RAMP IB5	1711+72			RT	CN4-4			3														2							
1722	RAMP IH4	14+10			LT	CN3-5				1													1							
1722	RAMP IH4	14+10	RAMP IH4	15+67	LT	CN3-5 TO CN3-4						174											174							
1722	RAMP IH4	15+67			LT	CN3-4			3														2							
1722	RAMP IH4	15+67	RAMP IH4	16+23	LT	CN3-4 TO PB-CN13			112																					
1722	RAMP IH4	16+23			LT	PB-CN13								1																
1722	RAMP IH4	16+23	RAMP IH4	18+69	LT	PB-CN13 TO PB-CN10						300											300							
1722	RAMP A2	414+02			LT	RL-27																								
1722	RAMP A2	416+51			RT	RL-28											1										1		1	
1722	RAMP IB5	1711+48			LT	RL-29											1													
1722	RAMP IB5	1711+56			LT	RL-30											1													
1722	RAMP IH4	15+58			LT	RL-31																					1		1	
1722	RAMP IJ3	99+30			RT	RL-32																								
1722	RAMP IJ3	101+10			RT	RL-33											1													
1722	RAMP IJ3	101+36			RT	RL-34											1									1		1		
1723	RAMP IH4	18+69			LT	PB-CN10										1														
1723	RAMP IH4	18+69	RAMP IH4	19+93	LT	PB-CN10 TO PB-CN9						125											125							
1723	RAMP IH4	19+93			LT	PB-CN9																								
1723	RAMP IH4	19+93	RAMP IH4	19+97	LT	PB-CN9 TO CN3-2						22											22							
1723	RAMP IH4	19+93	RAMP H5	984+99	LT	PB-CN9 TO PB-CN20						77											77							
TOTALS CARRIED TO GENERAL SUMMARY					28	-	712	1074	21	1	1	-	1696	-	4	2	-	6	1	11	-	-	-	1696	1	7	-	7	-	-

ODOT LIGHTING SUBSUMMARY - 5R

DESIGN AGENCY	
<b>Michael Baker INTERNATIONAL</b>	
DESIGNER	CRK
REVIEWER	SED
PROJECT ID	82382
SHEET	TOTAL
1701	2696

MODEL: Sheet06 PAPER SIZE: 34x22 (in.) DATE: 9/12/2025 TIME: 1:40:24 PM USER: Joseph.Hogan  
 p:\mb-us-pw.bentley.com\mb-us-pw-03\Documents\ODOT\District12\23282400-Engineering\Lighting\Sheets\82382\_L\_S001.dgn

SHEET NO.	STATION		SIDE	POLE/PULL BOX NO.	202	202	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625				
					REMOVAL OF EXISTING CONTROL CENTER AND FOUNDATION	DISCONNECT EXISTING CIRCUIT	CONNECTION, FUSED PULL APART	CONNECTION, UNFUSED BOLTED	CONNECTION, UNFUSED PERMANENT	LIGHT POLE, LOW MAST, ALUM60	LIGHT POLE, LOW MAST, ATLM50	LIGHT TOWER, BB80	LIGHT TOWER, BB100	LIGHT TOWER, BB110	LIGHT TOWER, BBB80	LIGHT TOWER, BBB100	LIGHT TOWER, BBB120	LIGHT TOWER, BBBB60	LIGHT TOWER, BBBB80	LIGHT TOWER, BBBB100	LIGHT TOWER, MISC.; TOWER LIGHTING RING WITH 4 LUMINAIRE MOUNTS	LIGHT POLE FOUNDATION, 24" X 10' DEEP	MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN	LIGHT TOWER FOUNDATION, 36" X 15' DEEP	LIGHT TOWER FOUNDATION, 36" X 20' DEEP	LIGHT TOWER FOUNDATION, 36" X 25' DEEP	LIGHT TOWER FOUNDATION, 42" X 25' DEEP	LIGHT TOWER FOUNDATION, MISC.; 42" X 20' DEEP	LIGHT TOWER FOUNDATION, MISC.; 48" X 25' DEEP	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	NO. 10 AWG POLE AND BRACKET CABLE	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES				
	EACH	EACH			EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	DEEP	DEEP	FT	FT	FT	FT	FT			
1723	RAMP IH4	19+93	RAMP IH6	1184+00	LT/RT	PB-CN9 TO CN3-3																														
1723	RAMP IH4	19+97			LT	CN3-2																														
1723	RAMP H5	984+99			LT	PB-CN20																														
1723	RAMP H5	984+99	RAMP H5	985+41	LT	PB-CN20 TO PB-CN19							1																							
1723	RAMP H5	985+41			LT	PB-CN19																														
1723	RAMP H5	985+41	RAMP H5	986+32	LT	PB-CN19 TO CN3-1																														
1723	RAMP H5	986+32			LT	CN3-1									1																					
1723	RAMP IH6	1184+00			RT	CN3-3																														
1723	RAMP IH6	1188+48			LT	PB-CR2																														
1723	RAMP IH6	1188+48	RAMP IH6	1189+75	LT	PB-CR2 TO CR1-8																														
1723	RAMP IH6	1189+75			LT	CR1-8																														
1723	RAMP IH4	19+97			LT	RL-35																														
1723	RAMP IH6	1188+89			LT	RL-36																														
1723	RAMP IH6	1188+91			LT	RL-37																														
1723	RAMP IH6	1189+01			LT	RL-38																														
1723	RAMP IH6	1189+62			LT	RL-39																														
1723	RAMP IH6	1189+63			RT	RL-40																														
TOTALS CARRIED TO GENERAL SUMMARY																																				

ODOT LIGHTING SUBSUMMARY - 6L

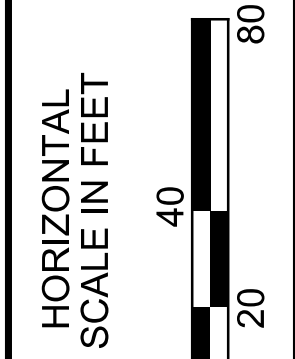
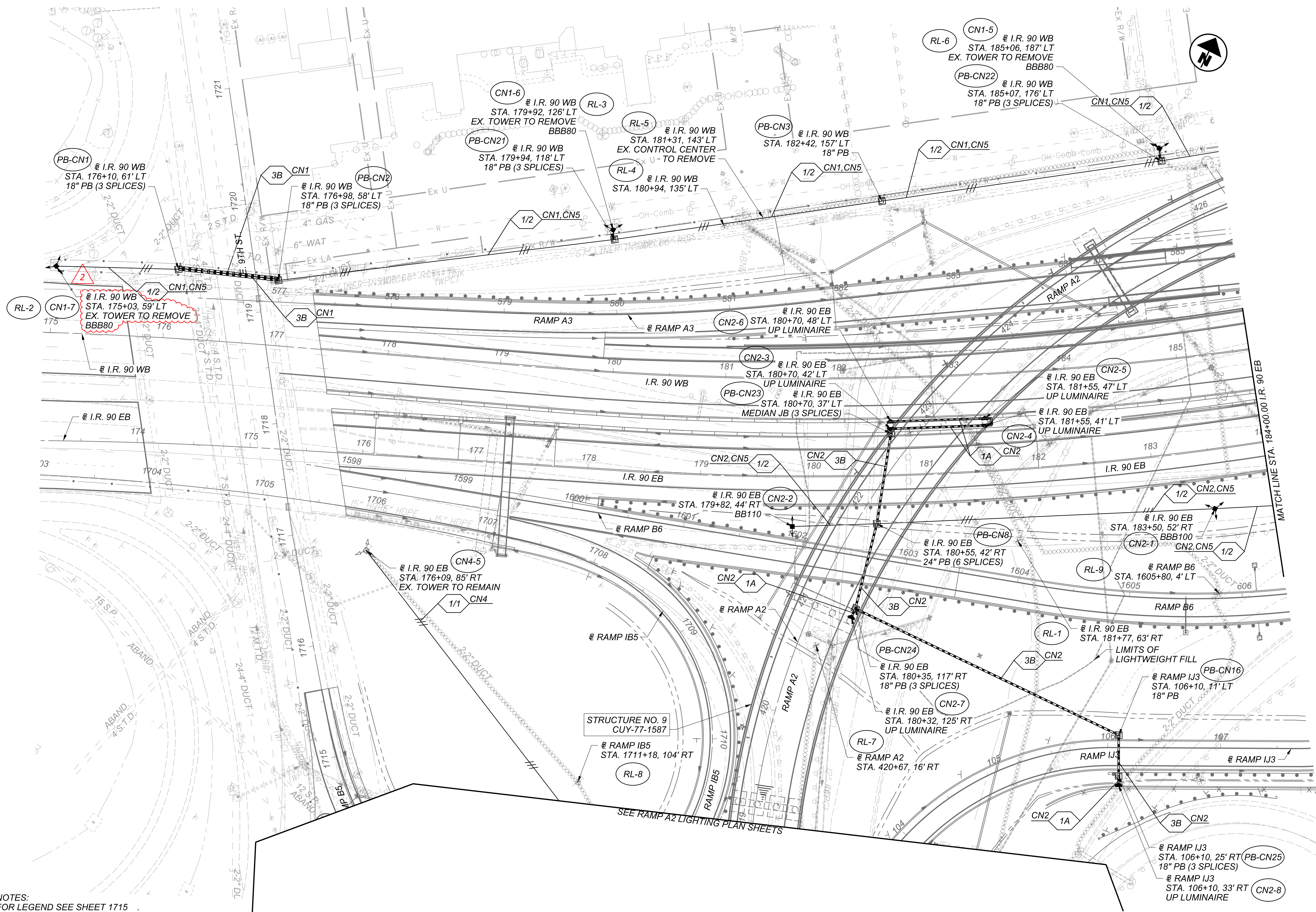
DESIGN AGENCY	
<b>Michael Baker</b> INTERNATIONAL	
DESIGNER	CRK
REVIEWER	SED 05/22/24
PROJECT ID	82382
SHEET	TOTAL
1702	2696

SHEET NO.	STATION		SIDE	POLE/PULL BOX NO.	625																											
	FROM	TO			CONDUIT, 1-1/2", 725.04	CONDUIT, 2-1/2", 725.04	CONDUIT, 3", 725.051	CONDUIT, JACKED OR DRILLED, 725.04, 3"	LUMINAIRE, HIGH MAST, SOLID STATE (LED), AS PER PLAN (480V)	LUMINAIRE, LOW MAST, SOLID STATE (LED), AS PER PLAN (480V)	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN (480V)	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN (480V, CROSS FRAME MOUNTED)	TRENCH	MEDIAN JUNCTION BOX	PULL BOX, 725.08, 18"	PULL BOX, 725.08, 24"	PULL BOX, 725.08, 48", TYPE 1, AS PER PLAN	PULL BOX REMOVED, AS PER PLAN	PULL BOX, MISC.: 18" PULL BOX ADJUSTED TO GRADE	GROUND ROD	STRUCTURE GROUNDING SYSTEM	POWER SERVICE, AS PER PLAN	CONTROL CENTER CABINET, COMPLETE	UNDERGROUND WARNING/MARKING TAPE	SERVICE TO UNDERPASS LIGHTING, AS PER PLAN	LIGHT TOWER REMOVED	POWER SERVICE REMOVED	LIGHT TOWER FOUNDATION REMOVED	LIGHTING, MISC.: RELOCATE EX. CONTROL CENTER	LIGHTING, MISC.: TEST NEW CIRCUIT		
					FT	FT	FT	FT	EACH	EACH	EACH	EACH	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	EACH	EACH	EACH	EACH	EACH	EACH			
1723	RAMP IH4	19+93	RAMP IH6	1184+00	LT/RT																											
1723	RAMP IH4	19+97			LT																											
1723	RAMP H5	984+99			LT																											
1723	RAMP H5	984+99	RAMP H5	985+41	LT																											
1723	RAMP H5	985+41			LT																											
1723	RAMP H5	985+41	RAMP H5	986+32	LT																											
1723	RAMP H5	986+32			LT																											
1723	RAMP IH6	1184+00			RT																											
1723	RAMP IH6	1188+48			LT																											
1723	RAMP IH6	1188+48	RAMP IH6	1189+75	LT																											
1723	RAMP IH6	1189+75			LT																											
1723	RAMP IH4	19+97			LT																											
1723	RAMP IH6	1188+89			LT																											
1723	RAMP IH6	1188+91			LT																											
1723	RAMP IH6	1189+01			LT																											
1723	RAMP IH6	1189+62			LT																											
1723	RAMP IH6	1189+63			RT																											
TOTALS CARRIED TO GENERAL SUMMARY																																
						-	-	-	245	11	-	-	-	275	-	1	2	-	4	-	8	-	-	-	275	-	2	-	2	-	-	

ODOT LIGHTING SUBSUMMARY - 6R

DESIGN AGENCY	<b>Michael Baker INTERNATIONAL</b>
DESIGNER	CRK
REVIEWER	SED 05/22/24
PROJECT ID	82382
SHEET TOTAL	1703 2696

NOTES:  
1. FOR LEGEND SEE SHEET 1715



ODOT LIGHTING PLAN - I.R. 90 EB  
BEGIN TO STA. 184+00.00

DESIGN AGENCY

Michael Baker INTERNATIONAL

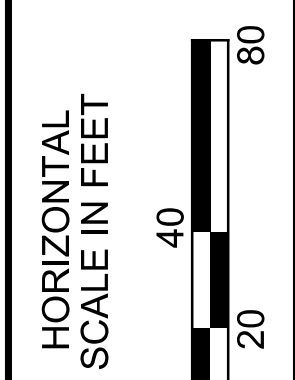
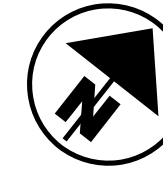
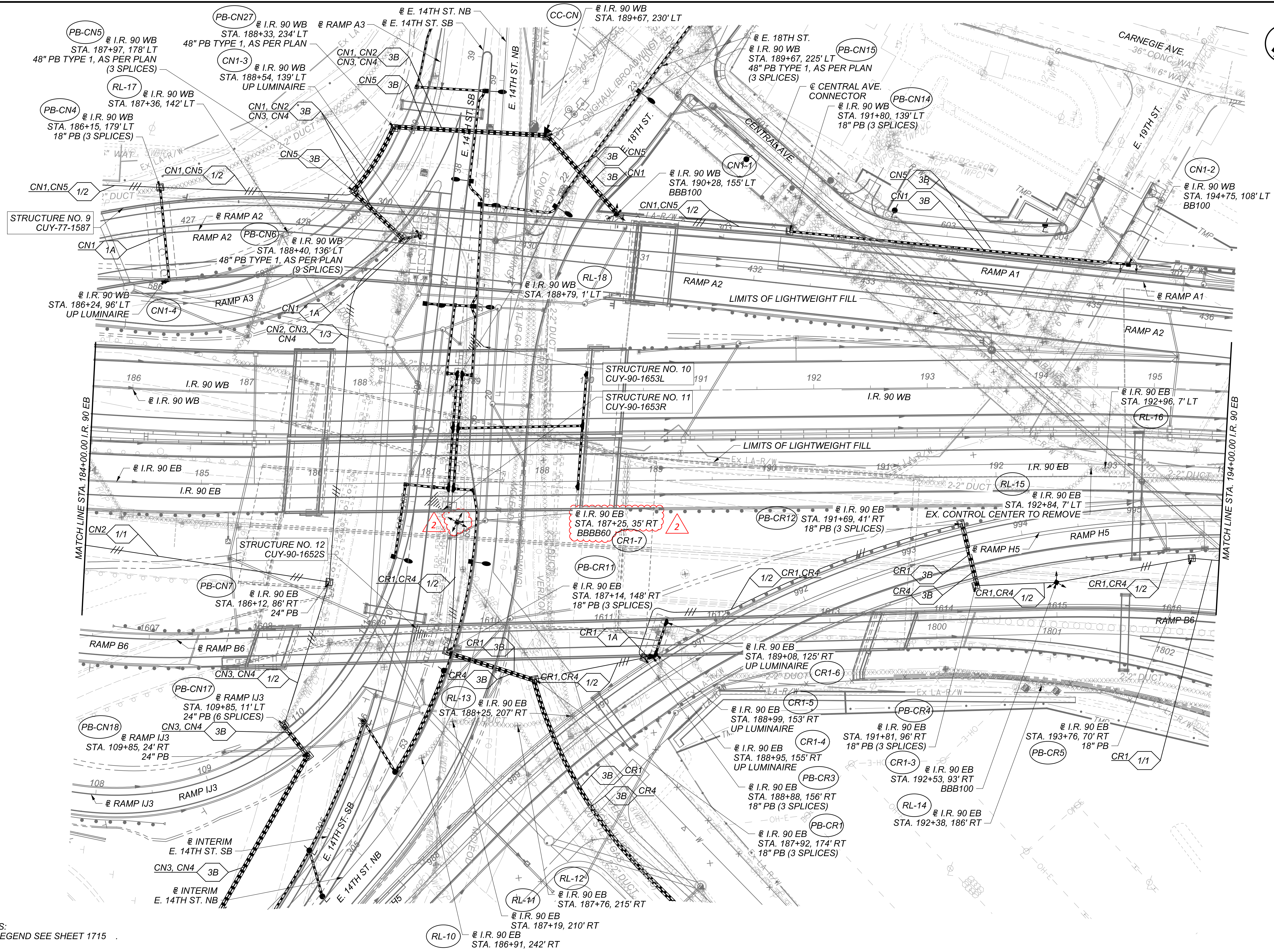
DESIGNER  
JLD

REVIEWER  
SM 05/22/24

PROJECT ID  
82382

SHEET	TOTAL
1716	2696

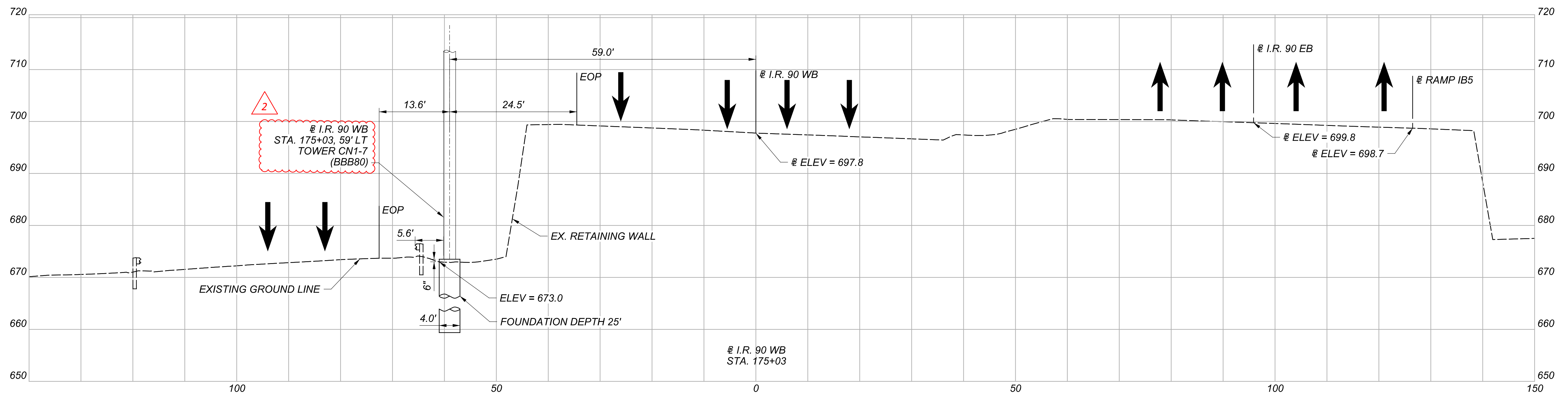
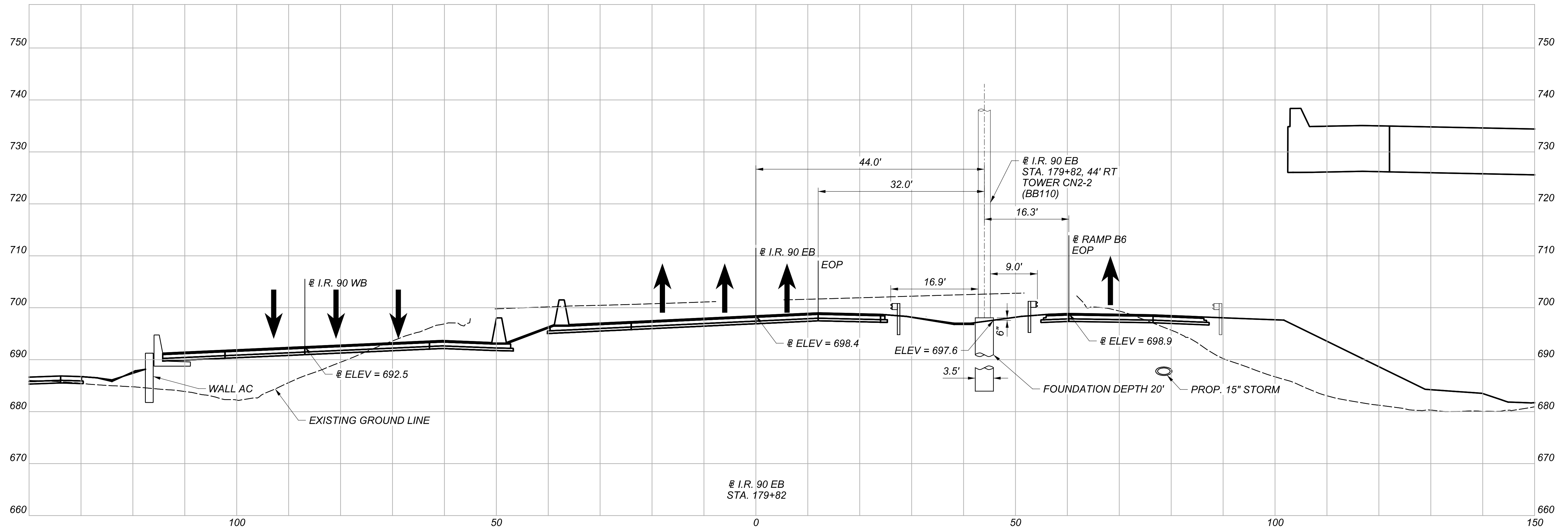
NOTES:  
1. FOR LEGEND SEE SHEET 1715



ODOT LIGHTING PLAN - I.R. 90 EB  
STA. 184+00.00 TO STA. 194+00.00

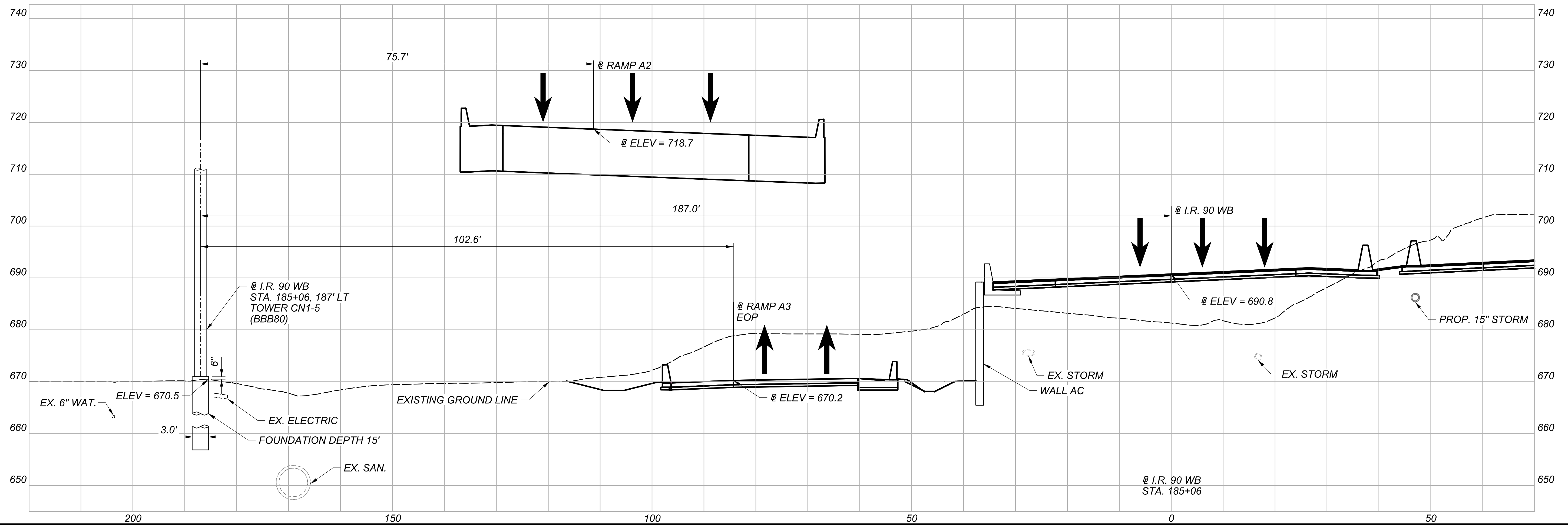
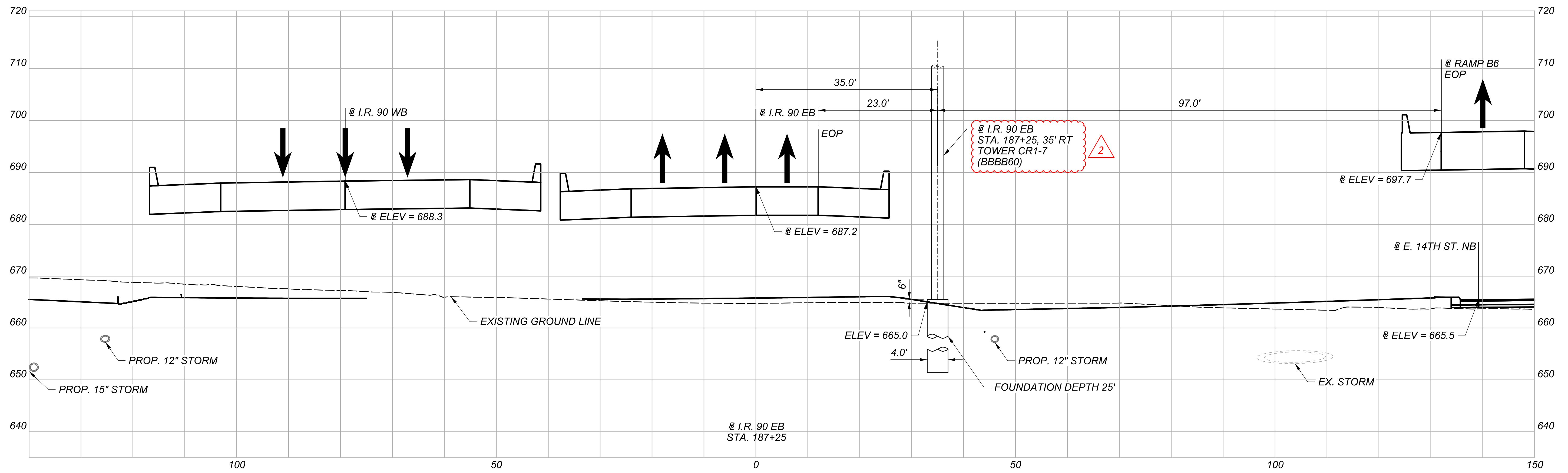
DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	JLD
REVIEWER	SM 05/22/24
PROJECT ID	82382
SHEET TOTAL	1717 2696

CUY-90-16.28 (CCG3A)  
 MODEL: Sheet PAPER: 34x22 (in.) DATE: 9/10/2025 TIME: 12:42:30 PM USER: Steven.Demor  
 p:\mb-us-pw\ben\ty.com\mb-us-pw-03\Documents\Cleveland\_OH\LOL\Projects\ODOT\Dist\12\82382\400-Engineering\Lighting\Sheets\82382.LD\01.dgn



TOWER ELEVATION VIEWS  
 TOWERS CN1-7 & CN2-2

DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	SED
REVIEWER	JLD 05/03/24
PROJECT ID	82382
SHEET TOTAL	1760   2696



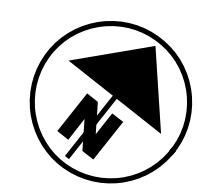
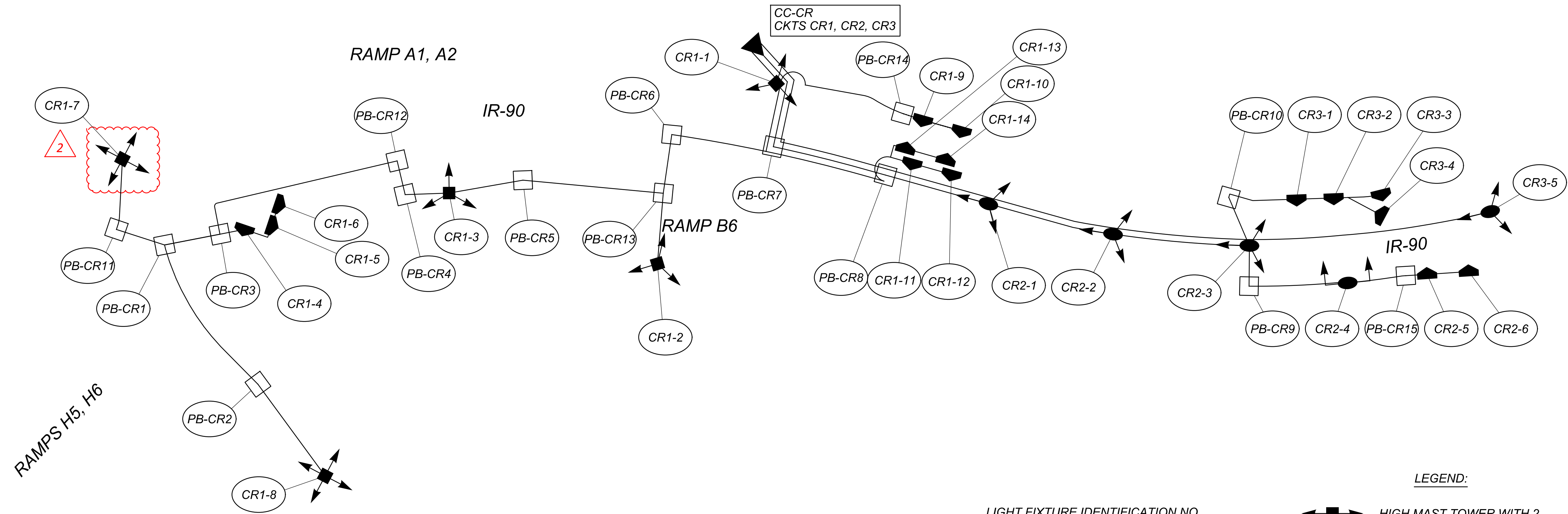
TOWER ELEVATION VIEWS  
TOWERS CN1-5 & CR1-7

DESIGN AGENCY	
<b>Michael Baker</b> INTERNATIONAL	
DESIGNER	SED
REVIEWER	JLD 05/03/24
PROJECT ID	82382
SHEET	TOTAL
1762	2696

LIGHT TOWER SCHEDULE											
NO.	TOWER		LOCATION			ELEV. (FT) (NOTE 2)	DETAILS			REFERENCE BORINGS	
	HEIGHT (FT)	NO. OF LUMINAIRES		ALIGNMENT	STATION		OFFSET	DIA. (IN)	REINF. BARS (NOTE 3)		LENGTH (FT) (NOTE 1)
		SYM	ASYM								
CONTROL CENTER CR (CARNEGIE AVE)											
CR1-7	60	4		I.R. 90 EB	187+25	35' RT	665.5	48	16 #9	25	B-078-0-14/B-078-1-20
CR1-2	100	3		I.R. 90 EB	196+50	185' RT	673.1	36	16 #9	20	B-084-0-14/B-162-0-14
CR1-8	100	4		RAMP IH6	1189+75	50' LT	672.3	36	16 #9	20	B-114-0-14
CR1-3	100	3		I.R. 90 EB	192+53	93' RT	671.2	36	16 #9	20	B-083-0-14/B-161-0-14
CR1-1	100	3		I.R. 90 WB	199+50	65' LT	659.0	36	16 #9	25	B-151-0-14
CONTROL CENTER CN (CENTRAL AVE CONNECTOR)											
CN1-7	80	3		I.R. 90 WB	175+03	59' LT	673.5	48	16 #9	25	B-094-0-14/B-164-0-14
CN1-6	80	3		I.R. 90 WB	179+92	126' LT	672.8	36	16 #9	15	B-165-0-14/B-166-0-14
CN1-5	80	3		I.R. 90 WB	185+06	187' LT	671.0	36	16 #9	15	B-142-3-20
CN2-1	100	3		I.R. 90 EB	183+50	52' RT	690.8	36	16 #9	20	B-077-0-14/B-076-2-20
CN2-2	110	2		I.R. 90 EB	179+82	44' RT	698.1	42	16 #9	20	B-076-1-20/B-140-0-14
CN3-1	100	3		RAMP H5	986+32	110' LT	676.2	36	16 #9	25	B-129-1-20/B-120-2-20
CN3-2	80	2		RAMP IH4	19+97	112' LT	676.1	36	16 #9	20	B-152-0-14
CN3-3	100	2		RAMP IH6	1184+00	26' RT	674.0	36	16 #9	25	B-116-0-14/B-120-1-20
CN1-2	100	2		I.R. 90 WB	194+75	108' LT	669.7	36	16 #9	20	B-148-0-14
CN1-1	100	3		I.R. 90 WB	190+28	155' LT	668.6	36	16 #9	20	B-144-0-14
CN4-4	100	3		RAMP IB5	1711+72	81' RT	692.4	36	16 #9	20	B-139-1-20
CN4-2	90	4		RAMP A2	414+02	116' LT	677.3	36	16 #9	20	B-136-0-14/B-138-0-14
CN4-1	100	4		RAMP A2	417+00	180' RT	679.1	36	16 #9	20	B-152-1-20
CN3-6	100	3		RAMP A2	406+79	40' LT	680.6	36	16 #9	25	B-132-0-14
CN3-4	120	3		RAMP IH4	15+67	63' LT	675.0	42	16 #9	25	B-104-0-14/B-119-0-14

**NOTES:**

1. LENGTH OF DRILLED SHAFT IS FROM TOP OF FOUNDATION.
2. ELEVATION IS 6 INCHES ABOVE THE FINAL GROUND SURFACE (EXISTING OR PROPOSED) AT TOWER FOUNDATION.
3. SEE STANDARD DRAWING HL-20.21 FOR ADDITIONAL REINFORCING STEEL DETAILS. REINFORCING STEEL SHALL BE ITEM 509, GRADE 60. CONCRETE SHALL BE QC 1 OR QC MISC.



HORIZONTAL SCALE IN FEET  
 0 NTS

CIRCUIT SCHEMATIC & CONTROL CENTER DATA - CONTROL CENTER CR

**LEGEND:**

LIGHT FIXTURE IDENTIFICATION NO.  
 CR# ##  
 CONTROL CENTER CIRCUIT NO. POLE NO. WITHIN CIRCUIT

PULL BOX / JUNCTION BOX IDENTIFICATION NO.  
 PB-CR#  
 PULL BOX / JUNCTION BOX PULL BOX / JUNCTION BOX NO. WITHIN CIRCUIT (SEE NOTE 2) CONTROL CENTER

HIGH MAST TOWER WITH 2 LED SYMMETRIC LUMINAIRES  
 HIGH MAST TOWER WITH 2 LED SYMMETRIC LUMINAIRES WITH 180 DEGREE SHIELDS  
 HIGH MAST TOWER WITH 3 LED SYMMETRIC LUMINAIRES  
 HIGH MAST TOWER WITH 4 LED SYMMETRIC LUMINAIRES  
 LOW MAST POLE WITH 1 LED SYMMETRIC LUMINAIRE  
 LOW MAST POLE WITH 1 LED SYMMETRIC LUMINAIRE WITH 180 DEGREE SHIELDS

UNDERPASS LED WALLPACK FIXTURE  
 CONTROL CENTER  
 PULL BOX / JUNCTION BOX  
 DISTRIBUTION CABLE

CONTROL CENTER DATA									
CONTROL CENTER	LINE VOLTAGE (VOLTS)	CONNECTED LOAD (KVA)	SERVICE ENTRANCE CABLE (AWG)	ENCLOSURE RATING (AMPS)	CIRCUIT NO.	CIRCUIT LOAD (AMPS)	CIRCUIT FUSE SIZE (AMPS)	CIRCUIT CABLE SIZE (AWG)	MAINTAINING AGENCY
CR	240V / 480V (SINGLE PHASE, 3-WIRE)	13.13	4	60	1	20.7	30	4	ODOT
					2	4.85	20	4	
					3	1.81	20	4	

NOTES:  
 1) "CIRCUIT CABLE SIZE" REFERS TO THE WIRE AWG COMING OUT OF THE CONTROL CENTER FOR EACH CIRCUIT.

CONTACT OHIO UTILITIES PROTECTION SERVICE, TWO WORKING DAYS PRIOR TO START OF CONSTRUCTION. IN OHIO, CALL TOLL FREE 1-800-362-2764. IT'S THE LAW.

UTILITIES SHOWN ARE FROM BEST AVAILABLE RECORDS AND FIELD INVESTIGATION, AND ARE NOT NECESSARILY COMPLETE OR EXACT. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN ON THIS PLAN OR NOT.

ALL POWER CONDUIT RUNS ARE TO BE CONSTRUCTED BY USING 2", 4", 5", OR 6" PVC TYPE EB CONDUITS, AS DEPICTED ON THE PLANS, ENCASED WITH A 3" CONCRETE ENVELOPE AND 2" SPACING BETWEEN CONDUITS, UNLESS OTHERWISE NOTED ON THE PLANS OR SPECIFICATIONS. THE CONCRETE ENVELOPE IS TO BE 4000PSI (CITY OF CLEVELAND CONCRETE MIX).

A RUGGED POLYETHYLENE MATERIAL WARNING TAPE CAPABLE OF RESISTING HIGH OR LOW PH CONDITIONS MUST BE PLACED ABOVE THE ELECTRICAL CONDUIT BANK. THIS WARNING TAPE IS TO BE SIX INCHES WIDE, RED IN COLOR, AND IMPRINTED WITH THE WORDS, "DANGER - BURIED HIGH VOLTAGE CABLES BELOW". THIS TAPE IS TO BE PLACED 6" ABOVE THE NEWLY INSTALLED DUCT BANK. THIS SHALL CONFORM WITH THE STANDARDS AS SET BY OHIO UTILITIES PROTECTION SERVICE. WARNING TAPE PAYMENT INCLUDED IN APPROPRIATE CONDUIT, PAY ITEM.

AS AN OPTION, CONTRACTOR MAY ELECT TO ENCASE CPP'S CONDUITS IN RED CONCRETE. BOTH METHODS ARE APPROVED BY CLEVELAND PUBLIC POWER AND ARE RECOMMENDED BY OHIO UTILITIES PROTECTION SERVICE. PAYMENT FOR TINTED DUCT CONCRETE, OR TINTED CONCRETE PROTECTIVE SLABS INCLUDED IN APPROPRIATE CONDUIT PAY ITEM.

THE TOP OF THE CONCRETE ENCASED CONDUIT SHALL BE INSTALLED AT A MINIMUM DEPTH OF 3'-0" BELOW THE EXISTING AND/OR PROPOSED GRADES. THE TOTAL TRENCH DEPTH WILL BE BASED UPON THE CONDUIT FORMATION. SEE DRAWINGS ISSUED BY CLEVELAND PUBLIC POWER FOR DETAILS.

VERTICAL AND HORIZONTAL CURVES SHALL HAVE A MINIMUM RADIUS OF NO LESS THAN 30 FEET. THESE CURVES ARE TO BE CONDUITS AS NOTED CONSTRUCTED BY USING THE APPROPRIATE 5" COUPLINGS, AND ASSOCIATED CHORD LENGTHS AS SHOWN ON THE CONDUIT CURVE CONSTRUCTION CHART. ANY OTHER CURVE DESIGN, FIELD CHANGES, OR THE USE OF PREFORMED RADIUS BENDS MUST BE APPROVED BY THE ENGINEERING DEPARTMENT OF CLEVELAND PUBLIC POWER.

ALL MANHOLES OUTSIDE WALLS AND CONDUIT RUNS ARE TO HAVE A MINIMUM CLEARANCE OF 5' (FACE TO FACE), HORIZONTALLY FROM ALL WATER LINES. VERTICAL CLEARANCE SHALL BE AT A MINIMUM OF 1'-6". CLEARANCE BETWEEN OTHER UTILITIES SHALL BE 1 FOOT, UNLESS NOTED OTHERWISE. CPP'S DUCT BANK SHALL CROSS OVER OR UNDER OTHER UTILITIES AT AN ANGLE OF NO MORE THAN 45°.

ANY CONDUIT RUNS THAT ARE CROSSING ANY STEAM LINES SHALL HAVE A MINIMUM CLEARANCE OF 5', OR BE INSTALLED PER THE CPP ENGINEERING DEPARTMENT. IN THE EVENT THAT THIS CAN'T BE ACCOMPLISHED, NOTIFY THE ENGINEERING DEPARTMENT OF CLEVELAND PUBLIC POWER PRIOR TO THE INSTALLATION OF CONDUITS.

EACH NEWLY CONSTRUCTED MANHOLE SHALL BE FREE OF ALL FOREIGN OBJECTS AND DEBRIS. THE CONTRACTOR SHALL ALSO PROVIDE A PULLING LINE IN EACH OF THE NEW CONDUITS. ALL MANHOLE COVERS SHOULD BE INSCRIBED WITH THE CLEVELAND PUBLIC POWER LOGO "CPP".

THE CONTRACTOR SHALL PROVIDE CLEVELAND PUBLIC POWER WITH AS-BUILT PLANS OF THE NEWLY INSTALLED CONDUIT SYSTEM, SHOWING BOTH VERTICAL AND HORIZONTAL LOCATIONS. THESE LOCATIONS SHALL BE AT 50' INTERVALS. ALL ELEVATIONS ARE TO BE BASED ON HORIZONTAL AND VERTICAL STATE PLANE COORDINATES. PAYMENT INCLUDED IN APPROPRIATE CONDUIT PAY ITEM. IN ADDITION, THE CONTRACTOR SHALL PROVIDE AS-BUILTS OF THE MANHOLES, INCLUDING AS-BUILTS PHOTOGRAPHS OF ALL INTERIOR SURFACES ( WALLS, FLOOR, CEILING).

**BACKFILL MATERIAL AND BACKFILLING PROCEDURES**

FOR ALL BACKFILL UNDER ROADWAY PAVEMENT, REFER TO FLOWABLE FILL SPECIFICATIONS IN THIS SHEET. FOR ALL OTHER LOCATIONS, THE BACKFILL MATERIAL USED SHALL BE CRUSHED LIMESTONE OR GRAVEL AS PER ODOT ITEM 304-AGGREGATE BASE. CRUSHED AIR-COOLED SLAG MEETING #304 GRADATION MAY BE USED WITH PRIOR WRITTEN APPROVAL OF THE ENGINEER. THE USE OF SAND OR #57 AGGREGATE AS A PREMIUM BACKFILL IS PROHIBITED. SAND MAY ONLY BE USED AS INDICATED ON THE PLAN DETAILS FOR ITEMS SUCH AS CONDUIT COVER. THE SAND MATERIAL SHALL BE NATURAL RIVER OR BANK SAND; FREE OF SILT, CLAY, LOAM, FRIABLE OR SOLUBLE MATERIALS AND ORGANIC MATTER. THE BACKFILL SHALL BE INSTALLED IN 4 INCH (4") LIFTS AND COMPACTED USING MECHANICAL MEANS ONLY. COMPACT TO WITHIN 12" OF SUBGRADE

AND EACH LAYER OF BACKFILL TO 95% MAXIMUM DRY DENSITY AS DETERMINED BY STANDARD PROCTOR TEST (ASTM D698). THE USE OF WATER FOR COMPACTION IS PROHIBITED, E.G. FLOODING OR PUDDLING. SAND USED AS EMBANKMENT CONSTRUCTION AND AS BACKFILL AROUND STRUCTURES SHALL BE ODOT ITEM 203- EMBANKMENT OR MEETING THE REQUIREMENTS OF 703 - SPECIAL BACKFILL MATERIAL OF THE SECTION.

EMPLOY A PLACEMENT METHOD THAT DOES NOT DISTURB OR DAMAGE CONDUIT ENCASEMENT.

DO NOT BACKFILL OVER WET, FROZEN OR UNSTABLE SUBGRADE SURFACES.

**FLOWABLE FILL SPECIFICATION FOR UTILITY TRENCHES**

**PART I CERTIFICATE OF COMPLIANCE**

MATERIAL MUST COME FROM A PLANT WITH A CURRENT CERTIFICATE OF COMPLIANCE DEMONSTRATING THE ABILITY OF THE MIX DESIGN TO MEET THE SPECIFIED REQUIREMENTS. CERTIFICATES IN EXCESS OF ONE YEAR WILL NOT BE ACCEPTED. CERTIFICATES MUST CONTAIN THE NAME OF SUPPLIER, DATE, CONTRACT NUMBER AND MIX DESIGN DATA ON EACH DELIVERY TICKET.

**PART II MATERIALS**

ALL MATERIALS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS STATED HERIN.

1. CEMENT SHALL BE ASTM C-150 TYPE I.
2. THE USE OF FLY ASH IS STRICTLY PROHIBITED.
3. FINE AGGREGATE SHALL CONFORM TO ODOT SPECIFICATION 703.03. FINE AGGREGATE FOR MORTAR OR GROUT. (ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS MOST CURRENT EDITION). THE USE OF SPENT FOUNDRY SAND OR CORE SAND IS STRICTLY PROHIBITED.

**PART III PERFORMANCE ENHANCING ADMIXTURE**

AN AIR-ENHANCING ADMIXTURE SHALL BE INCORPORATED IN THE MIX THAT WILL HAVE THE EFFECT OF LOWERING THE WATER/CEMENT RATIO TO BETWEEN 95 AND 105 LBS/CUBIC FOOT. THE AIR ENTRAINED CONTENT FOR THE MIX SHALL BE 30% TO ELIMINATE/MINIMIZE THE EXCESSIVE WATER AND SEGREGATION. COMPRESSIVE STRENGTHS SHALL HAVE A RANGE OF 50 PSI TO 80 PSI AT 28 DAYS WILL BE REQUIRED IF ADDITIONAL EXCAVATION BY MACHINE OR HAND IS REQUIRED.

**SPECIFICATIONS**

ALL WORK IN THIS CONTRACT SHALL CONFORM TO THE LATEST STATE OF OHIO DEPARTMENT OF TRANSPORTATION (ODOT) CONSTRUCTION AND MATERIALS SPECIFICATIONS, NATIONAL ELECTRIC SAFETY CODE FOR INSTALLATION BEFORE METER, NATIONAL ELECTRIC CODE FOR INSTALLATION AFTER METER AND OSHA REQUIREMENTS, EXCEPT WHERE LOCAL REGULATIONS ARE MORE STRINGENT, IN WHICH CASE LOCAL REGULATIONS SHALL GOVERN.

**SCOPE OF WORK**

- A. THE CONTRACTOR SHALL RELOCATE OR REMOVE ALL CLEVELAND PUBLIC POWER (CPP) FACILITIES AS INDICATED ON THE PLANS AND/OR AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PROPERLY COMPLETED, INCLUDING INCIDENTALS, AS SHOWN ON THE DRAWINGS AND HEREINAFTER SPECIFIED.
- B. THE MAJOR ITEMS OF WORK TO BE FURNISHED AND INSTALLED BY THE CONTACTOR SHALL BE AS FOLLOWS.

WORK BY CONTRACTOR (E. 22ND ST.)

THE CONTRACTOR SHALL PROVIDE TEMPORARY PRIMARY ELECTRIC FACILITIES TO RE-ROUTE POWER OFF THE 22ND STREET BRIDGE DURING THE DEMOLITION AND REPLACEMENT OF THE BRIDGE. FOLLOWING CONSTRUCTION OF THE NEW BRIDGE, PERMANENT UNDERGROUND FACILITIES WILL BE PLACED ON THE BRIDGE, THE TEMPORARY FACILITIES WILL BE REMOVED AND PERMANENT CONNECTIONS MADE. THIS WORK INCLUDES:

- FURNISHING AND INSTALLING CONCRETE ENCASED PVC AND FRE DUCT BANKS OF VARIOUS ARRANGEMENTS.
- INSTALLING TEMPORARY WOODEN POWER POLES AND OVERHEAD ELECTRICAL CABLE SPANS OVER INTERSTATE 90.
- INSTALLING ELECTRICAL CABLES IN DUCTS AND INSTALLING CABLE ID TAGS
- INSTALLING DUCT BANK SYSTEM ACROSS BRIDGE INCLUDING BEAM SUPPORT SYSTEM
- TESTING ELECTRICAL SYSTEM
- FURNISHING AND INSTALLING ELECTRICAL VAULT/MANHOLE RACKING SYSTEMS WITHIN VAULTS OR MANHOLES.
- FURNISHING AND INSTALLING ELECTRICAL SPLICES, TRAINING AND BONDING WITHIN VAULTS OR MANHOLES.
- COORDINATING WITH CPP AND ITS CONTRACTORS
- REMOVAL OF EXISTING ELECTRICAL CABLES.

WORK BY CONTRACTOR (CARNEGIE AVE.)

THE CONTRACTOR SHALL PROVIDE TEMPORARY PRIMARY ELECTRIC FACILITIES TO RE-ROUTE POWER OFF THE CARNEGIE AVENUE BRIDGE DURING THE DEMOLITION AND REPLACEMENT OF THE BRIDGE. FOLLOWING CONSTRUCTION OF THE NEW BRIDGE, PERMANENT UNDERGROUND FACILITIES WILL BE PLACED ON THE BRIDGE, THE TEMPORARY FACILITIES WILL BE REMOVED AND PERMANENT CONNECTIONS MADE. THIS WORK INCLUDES:

- FURNISHING AND INSTALLING CONCRETE ENCASED PVC AND FRE DUCT BANKS OF VARIOUS ARRANGEMENTS.
- INSTALLING TEMPORARY WOODEN POWER POLES AND OVERHEAD ELECTRICAL CABLE SPANS OVER INTERSTATE 90.
- INSTALLING ELECTRICAL CABLES IN DUCTS AND INSTALLING CABLE ID TAGS
- INSTALLING DUCT BANK SYSTEM ACROSS BRIDGE INCLUDING BEAM SUPPORT SYSTEM
- TESTING ELECTRICAL SYSTEM
- FURNISHING AND INSTALLING ELECTRICAL VAULT/MANHOLE RACKING SYSTEMS WITHIN VAULTS OR MANHOLES.
- FURNISHING AND INSTALLING ELECTRICAL SPLICES, TRAINING AND BONDING WITHIN VAULTS OR MANHOLES.
- COORDINATING WITH CPP AND ITS CONTRACTORS
- REMOVAL OF EXISTING ELECTRICAL CABLES.

WORK BY CPP

- ENERGIZING ELECTRICAL SYSTEM
- DE-ENERGIZING OF EXISTING ELECTRICAL CABLES WITHIN DUCTS

ALONG PORTIONS OF THE CORRIDOR THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE EXISTING UNDERGROUND ELECTRICAL SERVICE UNTIL COMPLETION AND ACTIVATION OF THE PROPOSED UNDERGROUND POWER SYSTEM. THE CONTRACTOR SHALL COORDINATE THE DETAILS OF THIS WORK WITH CPP.

**CABLE MARKING**

FEEDER CABLE LOCATION IN CONDUIT BANK SHALL BE ASSIGNED BY CPP. EACH CABLE UPON ENTERING AND LEAVING MANHOLES SHALL BE MARKED WITH TAGS, INDICATING THE FEEDER NUMBER AND CABLE SIZE. THE LETTER SIZE SHALL BE A MINIMUM OF 1/2 IN., 1 IN. HIGH IS PREFERRED.

**SUBMITTALS**

IN ADDITION TO THE REQUIREMENTS OF CMS105 THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL EQUIPMENT AND MATERIAL FURNISHED AND REQUIRED TO PERFORM THE WORK.

**DEFINITIONS**

WHENEVER IN THESE SPECIFICATIONS OR IN ANY DOCUMENT OR INSTRUCTIONS ON CONSTRUCTION WHERE THESE SPECIFICATIONS GOVERN, THE FOLLOWING TERMS (OR PRONOUNS IN PLACE OF THEM) ARE USED, THE INTENT AND MEANING SHALL BE INTERPRETED AS FOLLOWS:

THE CITY OR THE CITY OF CLEVELAND, IS THE DIRECTOR OF THE CITY OF CLEVELAND DEPARTMENT OF PUBLIC UTILITIES.

**STATUS OF CITY INSPECTOR**

INSPECTORS AS DESIGNATED BY THE CITY OF CLEVELAND SHALL BE AUTHORIZED TO INSPECT ALL WORK DONE AND MATERIALS FURNISHED. SUCH INSPECTING MAY EXTEND TO ALL OR ANY PART OF THE WORK, AND TO THE PREPARATION OR MANUFACTURE OF THE MATERIALS TO BE USED IN THE WORK. THE CITY INSPECTOR AS DESIGNATED BY THE DIRECTOR OF PUBLIC UTILITIES SHALL GIVE WORK INSTRUCTIONS THROUGH THE PROJECT ENGINEER.

**ITEM 625 - CONDUIT, CONCRETE ENCASED, AS PER PLAN (XX) - 5" PVC**

A. WORK INCLUDED

THE CONTRACTOR SHALL FURNISH ALL MATERIALS FOR AND SHALL PROPERLY CONSTRUCT AND CONNECT TO MANHOLES, AS SHOWN ON THE PLANS OR AS DIRECTED, ALL NON-REINFORCED AND REINFORCED CONCRETE-ENCASED PVC (EB) CONDUIT AS REQUIRED FOR THE PROPER COMPLETION OF THE WORK INCLUDED UNDER THIS CONTRACT. ALL CONDUITS SHALL BE ENCASED IN CONCRETE UNLESS NOTED OTHERWISE.

B. CONDUIT AND FITTINGS

1. POLYVINYL CHLORIDE (PVC) EB 20 CONDUIT SHALL CONFORM TO THE UL651 STANDARDS, 5 INCH INSIDE DIAMETER WITH CONCRETE ENCASEMENT AS DETAILED ON PLANS, COUPLINGS SHALL BE SOCKET TYPE, END BELLS AT MANHOLE ENTRANCE, 5 DEGREE SWEEPS, 11-1/4 DEGREE TO 90 DEGREES INCLUDING FILED DEGREES ANGLE COUPLINGS, STANDARD COUPLINGS, VARIOUS BENDS AND PLUGS OR CAPS TO CLOSE UNUSED CONDUITS, SHALL BE MADE OF THE SAME MATERIAL AS THE

CONDUIT. CONDUIT SPACERS SHALL BE AS SHOWN IN THE PLAN DETAILS. CONCRETE BLOCK SPACERS WILL NOT BE ACCEPTED. CONTRACTOR SHALL CONTACT CPP BEFORE CONCRETE ENCASEMENT ANY BENDS IN CONDUITS

2. FIBERGLASS REINFORCED EPOXY CONDUIT SHALL CONFORM TO UL 1684 AND UL1684A. FIBERGLASS CONDUIT SHALL HAVE A MINIMUM WALL THICKNESS OF 0.095". FIBERGLASS CONDUIT SHALL HAVE 5 INCH INSIDE DIAMETER EITHER CONCRETE ENCASED OR RACK MOUNTED AS INDICATED ON THE DRAWINGS. COUPLINGS SHALL HAVE BELL ON ONE END AND A SPIGOT ON THE OTHER END. ALL COUPLINGS SHALL BE MADE OF THE SAME MATERIAL. EXPANSION FITTINGS SHALL BE PROVIDED ON ALL EXPOSED CONDUIT RUNS.

**C. CONCRETE**

CONCRETE USED FOR ENCASEMENT OF CONDUITS SHALL CONFORM TO ODOT CLASS QC 1 PER C&MS 499.

**D. INSTALLATION**

CONDUIT SHALL BE INSTALLED BY THE BUILT-UP METHOD WITH JOINTS IN ADJACENT DUCTS STAGGERED. NECESSARY SPACERS SHALL BE PLACED NO GREATER THAN 8-FEET INTERVALS TO HOLD DUCTS IN THE DESIRED CONFIGURATION, WITH THE DUCT BANK BRACED SECURELY TO KEEP IT FROM SHIFTING AND FLOATING WHILE CONCRETE IS POURED. SEALER COMPOUND FURNISHED BY THE CONDUIT AND EACH SECTION SHALL BE TAPPED SECURELY INTO PLACE IN THE PREVIOUS COUPLING TO OBTAIN JOINTS THAT ARE TIGHT AND LEAK-PROOF.

1. CONCRETE SHALL BE WORKED INTO THE SPACES BETWEEN DUCTS SO THAT THE CONDUIT BANK IS EFFECTIVELY ENCASED IN CONCRETE WITHOUT VOIDS OR EMPTY SPACES. REINFORCING RODS SHALL BE INSTALLED AS REQUIRED AND WHERE SHOWN ON THE PLANS.

2. CONDUIT WHICH IS CUT TO FIT SHORT SECTIONS SHALL BE DEBURRED ON THE DUCT END AND THE END OF THE BELL SHALL BE REAMED IN THE INSIDE DIAMETER FOR EACH ENTRY OF THE DUCT INTO COUPLING TO PRODUCE THE SAME JOINTING CONDITIONS AS PROVIDED BY FACTORY-MADE CONDUIT SECTIONS.

3. THE END BELLS SHALL BE GROUTED IN PLACE.

**E. BACKFILLING**

REFER TO NOTES "BACKFILL MATERIAL AND BACKFILLING PROCEDURES" AND "FLOWABLE FILL SPECIFICATION FOR UTILITY TRENCHES".

**F. MEASUREMENT**

THE NUMBER OF FEET OF CONDUIT TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF FEET FURNISHED AND PLACED AND ACCEPTED IN ACCORDANCE WITH THESE SPECIFICATIONS, AS MEASURED ALONG THE AXIS OF THE CONDUIT LINE, INCLUDING FITTINGS.

**G. PAYMENT**

THE FOOTAGE MEASURED AS PROVIDED ABOVE SHALL BE AID FOR AT THE CONTRACTOR PRICE BID PER FOOT UNDER ITEM 625 AS DESCRIBED BELOW, CLASSIFIED AS TO SIZE AND TYPE, WHICH PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR EXCAVATING AND FOR FURNISHING, HAULING, PLACING THE CONDUIT, FITTINGS, CAPPING, SPACERS, CONCRETE, REINFORCING STEEL, SHEETING AND BRACING, BACKFILL, PLASTIC CAUTION TAPE (OR RED TINTED CONCRETE), INCIDENTAL CONCRETE, REMOVAL OF ALL SURPLUS EXCAVATION AND DISCARDED MATERIAL, BREAKING AND RESTORATION OF EXISTING MANHOLE WALLS AND ALL LABOR EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

THESE ITEMS AS MEASURED AS PROVIDED ABOVE SHALL BE PAID FOR UNDER:

ITEM	UNIT	DESCRIPTION
625	FT	CONDUIT, CONCRETE ENCASED, AS PER PLAN, (XX)-5" PVC
625	FT	CONDUIT, CONCRETE ENCASED, AS PER PLAN, (XX) -5" FRE
625	FT	CONDUIT, RACK MOUNTED, AS PER PLAN, (XX) -5" FRE

DESIGN AGENCY



DESIGNER  
JCS

REVIEWER  
WH 05/17/24

PROJECT ID  
82382

SHEET TOTAL  
1777 2696

ESTIMATED QUANTITIES										
PARTICIPATION	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPER.	GENERAL	REF. SHEET
02/IMS/10	202	11203	LS	-	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	4/50
02/IMS/10	202	22900	112	SY	APPROACH SLAB REMOVED				112	
02/IMS/10	202	32800	300	SY	CONCRETE SLOPE PROTECTION REMOVED				300	
02/IMS/10	503	11101	LS	-	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	LS				4/50
02/IMS/10	503	21300	LS	-	UNCLASSIFIED EXCAVATION				LS	
02/IMS/10	505	11100	LS	-	PILE DRIVING EQUIPMENT MOBILIZATION				LS	
02/IMS/10	507	00500	5770	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	5770				
02/IMS/10	507	00550	6095	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	6095				
02/IMS/10	507	00600	3135	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN		3135			
02/IMS/10	507	00650	3300	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED		3300			
02/IMS/10	509	10000	228033	LB	EPOXY COATED STEEL REINFORCEMENT	35588	27931	164514		
02/IMS/10	509	30020	4453	FT	NO. 4 GFRP DEFORMED BARS			4453		
02/IMS/10	509	30040	4606	FT	NO. 6 GFRP DEFORMED BARS			4606		
02/IMS/10	511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	2				
02/IMS/10	511	34446	606	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			606		
02/IMS/10	511	34451	111	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN			111		5/50
02/IMS/10	511	41012	78	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		78			
02/IMS/10	511	44113	119	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING, AS PER PLAN	119				5/50
02/IMS/10	511	46512	235	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	168	67			
02/IMS/10	512	10001	240	SY	SEALING OF CONCRETE SURFACES, AS PER PLAN, PERMANENT GRAFFITI PROTECTION	171	69			5/50
02/IMS/10	512	10101	1005	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	126	191	557	131	5/50
02/IMS/10	512	33000	18	SY	TYPE 2 WATERPROOFING	3			15	
02/IMS/10	513	10280	548522	LB	STRUCTURAL STEEL MEMBERS, LEVEL 4			548522		
02/IMS/10	513	20000	5760	EACH	WELDED STUD SHEAR CONNECTORS			5760		
02/IMS/10	514	00060	29332	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			29332		
02/IMS/10	514	00066	29332	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			29332		
02/IMS/10	516	10011	148	FT	ARMORLESS PREFORMED JOINT SEAL, AS PER PLAN				148	5/50
02/IMS/10	516	13600	100	SF	1" PREFORMED EXPANSION JOINT FILLER				100	
02/IMS/10	516	13900	143	SF	2" PREFORMED EXPANSION JOINT FILLER				143	
02/IMS/10	516	14200	152	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL			152		
02/IMS/10	516	44201	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (BEARING: 1'-2" x 1'-5" x 3 1/16", LOAD PLATE: 1'-3" x 1'-6" x 1 1/2" AND 1'-7" x 11" x 1 1/2")	16				28/50
02/IMS/10	516	44201	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (BEARING: 1'-6" x 2'-0 1/2" x 3 3/8", BEVELED LOAD PLATE: 1'-7" x 2'-1 1/2")		8			29/50
02/IMS/10	518	21200	147	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	147				
02/IMS/10	518	40000	197	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	197				
02/IMS/10	518	40010	59	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	59				
02/IMS/10	523	20001	3	EACH	DYNAMIC LOAD TESTING, AS PER PLAN	2	1			4/50
02/IMS/10	523	20501	3	EACH	RESTRIKE, AS PER PLAN	2	1			4/50
02/IMS/10	526	30011	504	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN				504	5/50
02/IMS/10	526	90031	152	FT	TYPE C INSTALLATION, AS PER PLAN				152	5/50
02/IMS/10	601	21000	1263	SY	CONCRETE SLOPE PROTECTION	1263				

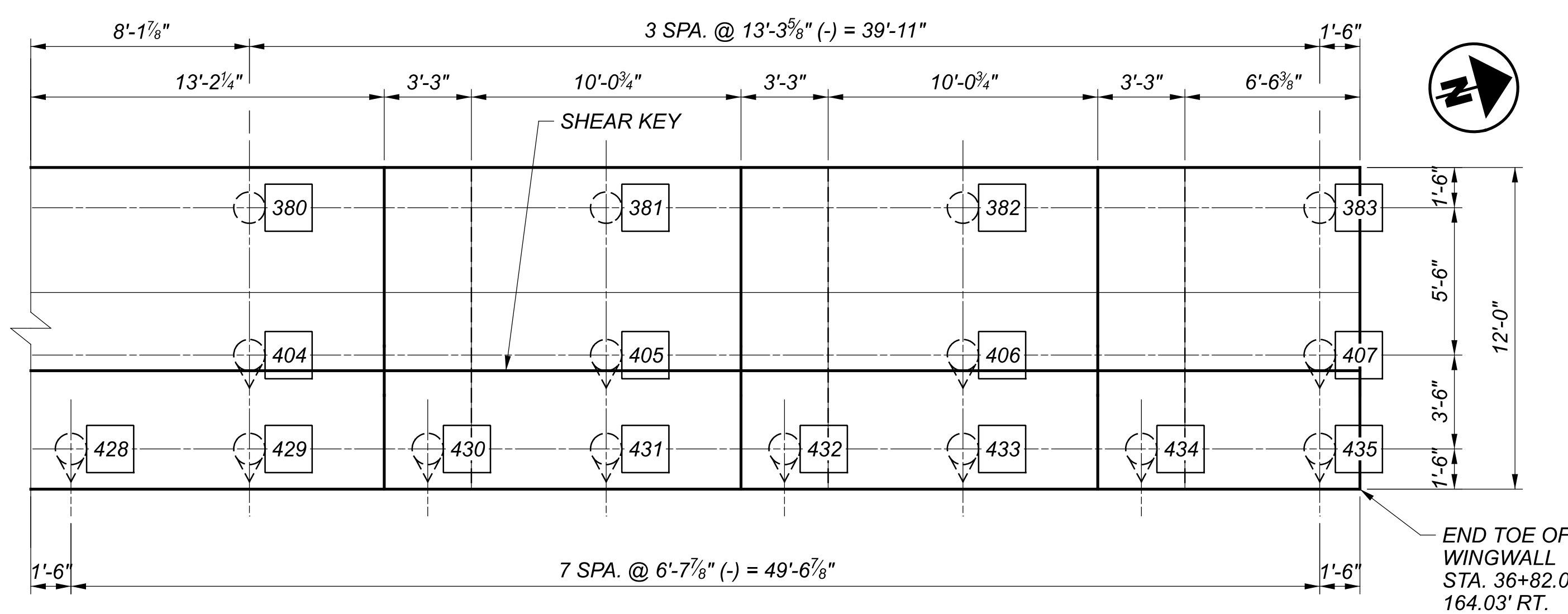
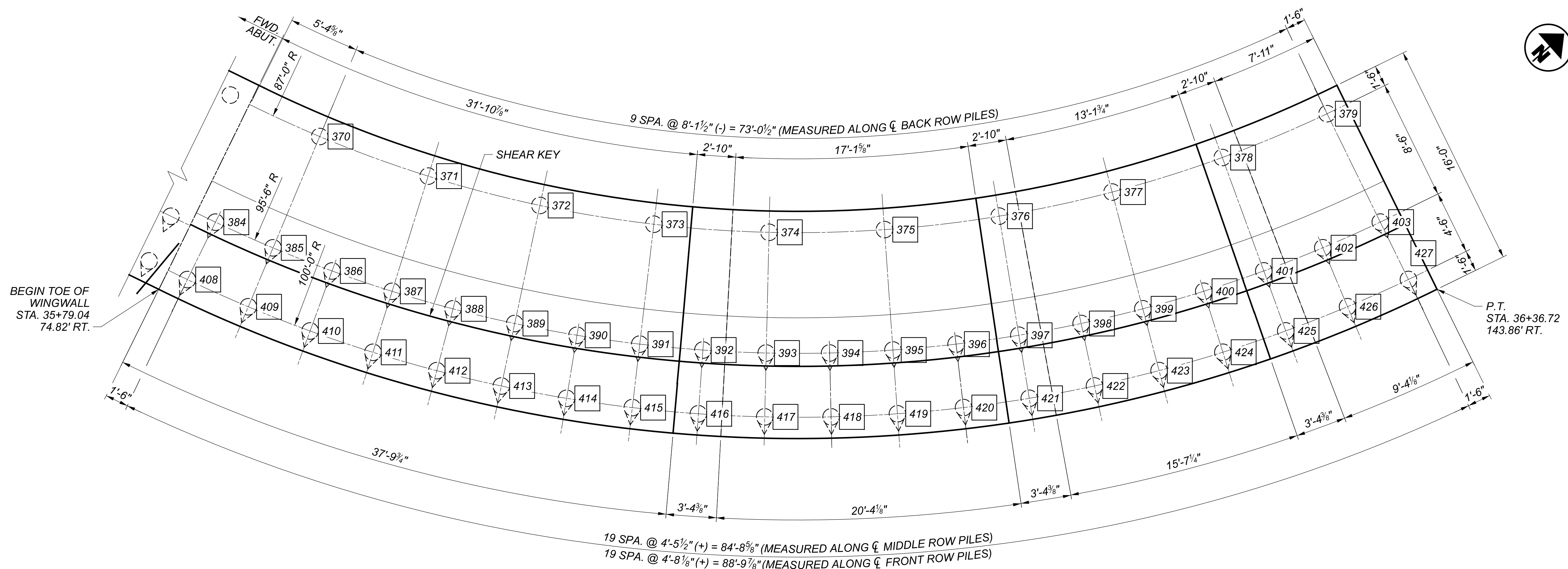
**NOTES:**

- ITEM 513 STRUCTURAL STEEL MEMBERS, LEVEL 4: THIS TOTAL WEIGHT IS BASED ON THE USE OF TYPE A CROSSFRAMES. PROVIDE THE UNIT COST FOR STRUCTURAL STEEL USING THE TOTAL WEIGHT PROVIDED, REGARDLESS OF ANY CHANGE TO THE TOTAL WEIGHT RESULTING FROM THE SELECTION OF TYPE B OR TYPE C CROSSFRAMES IN LIEU OF TYPE A.

ESTIMATED QUANTITIES  
 CUY-90-1653L (BRIDGE 10)  
 I.R. 90 WB OVER CR-721 (E. 14TH ST.)

SFN	1807901
DESIGN AGENCY	
<b>B&amp;N</b>	burgessniple.com
DESIGNER	DBH
CHECKER	BCS
REVIEWER	DWL
	05/24/22
PROJECT ID	82382
SUBSET	TOTAL
6	50
SHEET	TOTAL
2041	2696





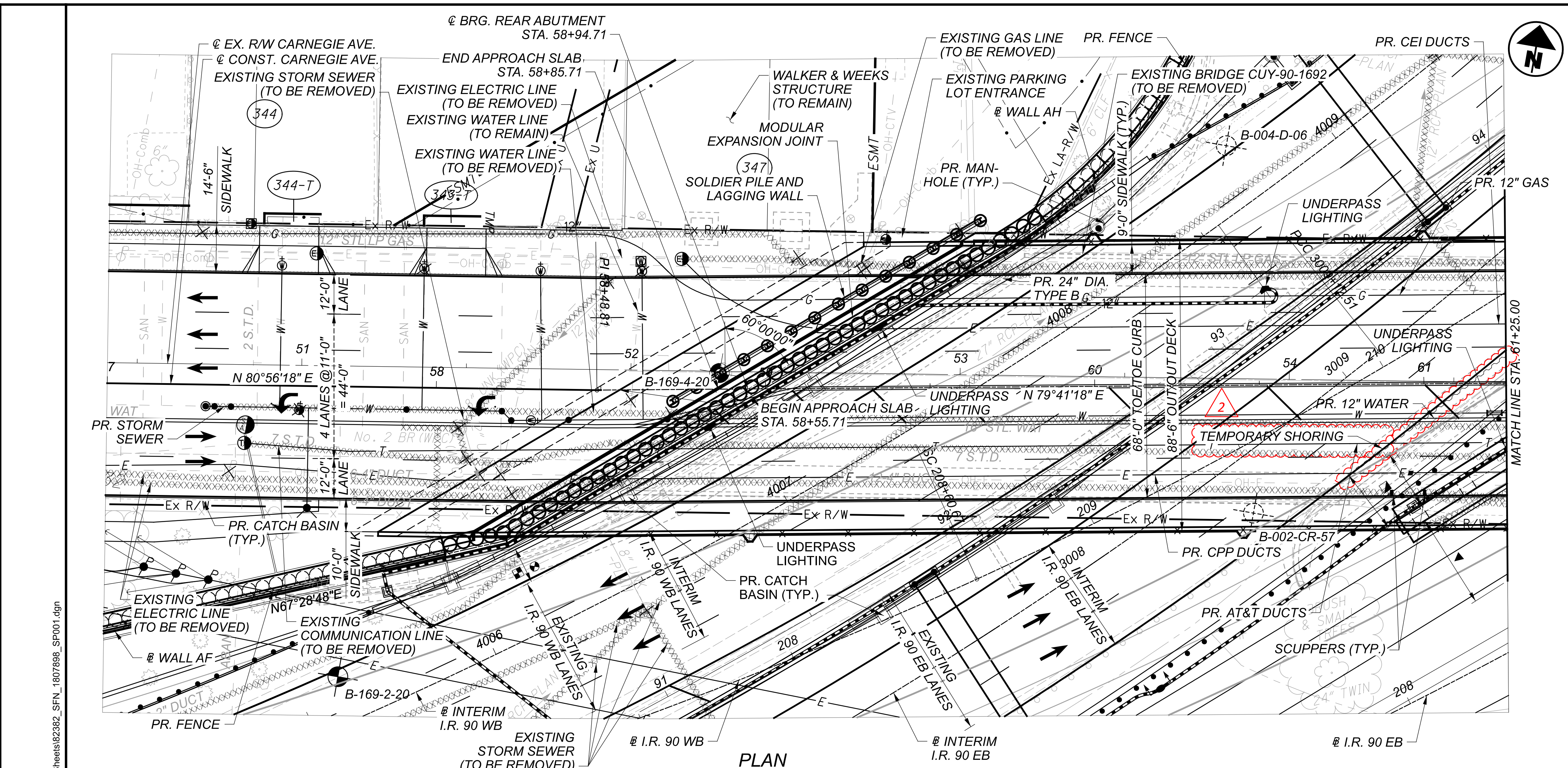
PILE SCHEDULE			
SUBSTRUCTURE UNIT	PILE DIAMETER	ORDER LENGTH	CUTOFF ELEVATION
FORWARD RIGHT WINGWALL FOOTING (370 THRU 435)	14"	2 70.00	VARIES

LEGEND

- # INDICATES PROPOSED PILE NUMBER
- INDICATES VERTICAL PILE
- ⊙ INDICATES BATTERED PILE

FORWARD RIGHT WINGWALL FOUNDATION PLAN  
 CUY-90-1678 (BRIDGE 13)  
 CR-710 (E. 22ND ST.) OVER I.R. 90

SFN	1807839
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
REVIEWER	
PROJECT ID	82382
SUBSET	TOTAL
33	99
SHEET	TOTAL
2214	2696



BENCHMARK DATA			
BM #62 STA.	41+38.42	ELEV.	672.11, OFFSET 75.42 LT., RR SPIKE
BM #64 STA.	58+35.86	ELEV.	671.25, OFFSET 47.90 LT., RR SPIKE
BM #65 STA.	66+35.73	ELEV.	668.92, OFFSET 38.62 RT., RR SPIKE
BM #73 STA.	49+25.90	ELEV.	671.90, OFFSET 31.86 LT., CUT CROSS

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET 4 / 2696

**NOTES**  
 EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.  
 DESIGN TRAFFIC:  
 2015 ADT = 25,700    2015 ADTT = TBD  
 2035 ADT = 30,500    2035 ADTT = TBD  
 DIRECTIONAL DISTRIBUTION = 0.56

- LEGEND**
- [Hatched Area] TO BE REMOVED
  - [Circle with Crosshair] HISTORIC BORING LOCATION
  - [Circle with Dot] INSTRUMENTED BORING LOCATION
  - [Circle with Star] PROJECT BORING LOCATION

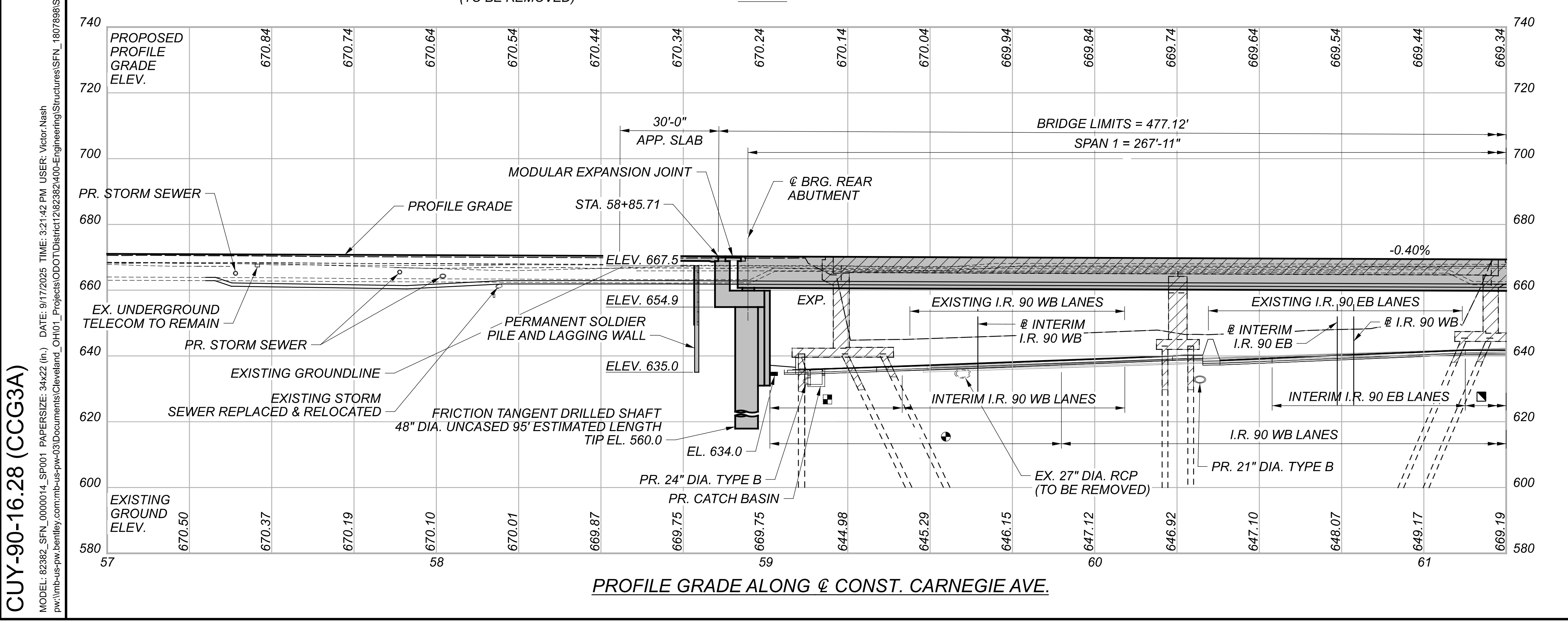
FOR MINIMUM VERTICAL CLEARANCE LOCATION, SEE SITE PLAN 2 OF 2  
 FOR MINIMUM HORIZONTAL CLEARANCE LOCATION, SEE SITE PLAN 2 OF 2  
 FOR PROFILE LOCATIONS OF ▲, ▼ AND ▼ SEE SITE PLAN 2 OF 2

EXISTING STRUCTURE
TYPE: TWO SPAN CONTINUOUS STEEL PLATE GIRDER BRIDGE WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: 98'-0 1/2"± AND 92'-4 3/8"± C/C BEARINGS ALONG @ CONST. CARNEGIE AVE.
ROADWAY: 56'-0"± TOE/TOE CURB WITH TWO 8'-3"± SIDEWALKS
LOADING: CF = 2000 (51)
SKEW: VARIES
WEARING SURFACE: LATEX MODIFIED CONCRETE OVERLAY
APPROACH SLABS: 25'-0"± (AS-1-54)
ALIGNMENT: TANGENT
CROWN: 0.016± FT/FT
STRUCTURE FILE NUMBER: 1807897
DATE BUILT: 1958 (OVERLAY 1987)
DISPOSITION: TO BE REPLACED

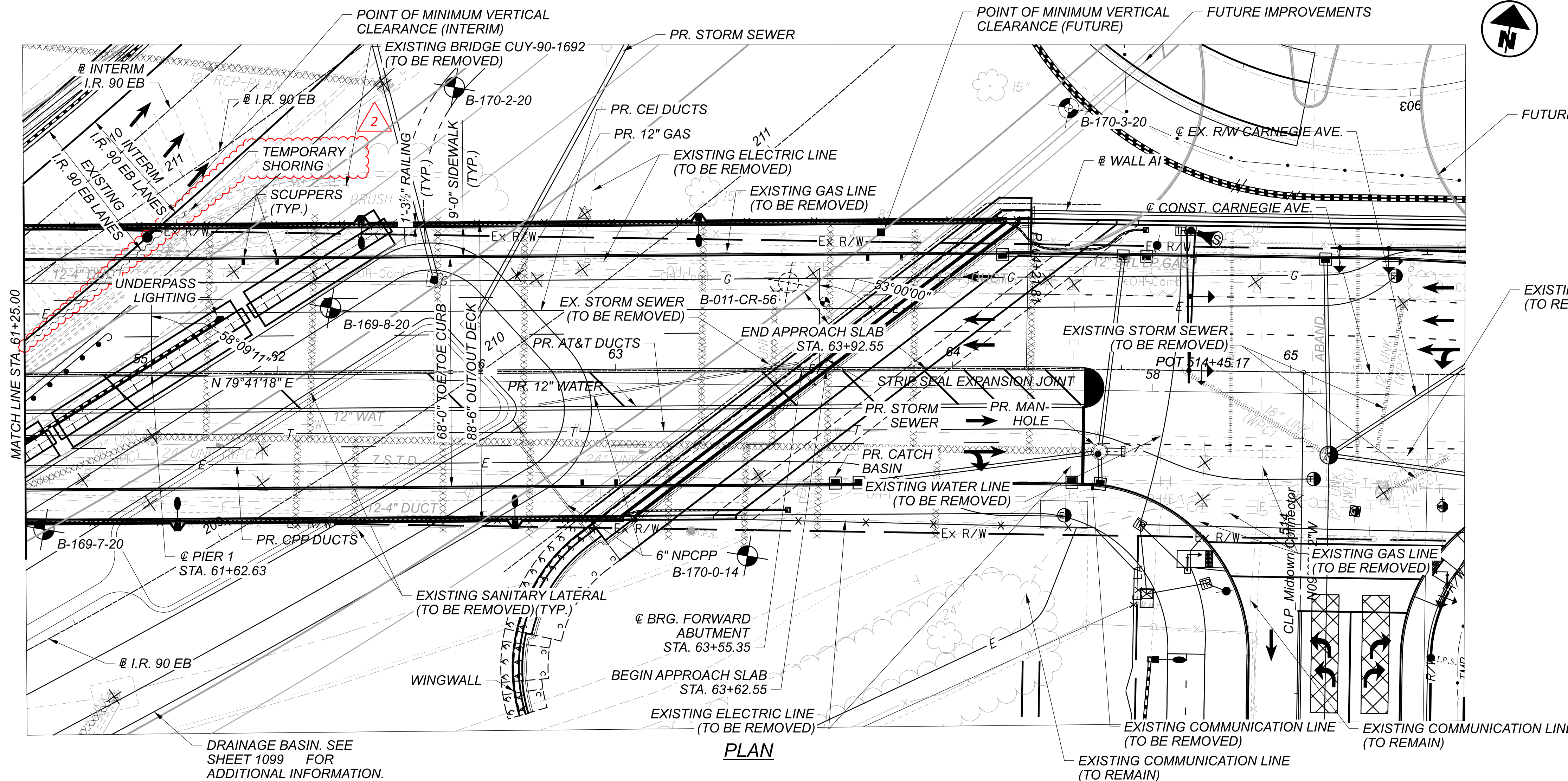
PROPOSED STRUCTURE
TYPE: TWO SPAN CONTINUOUS STEEL PLATE GIRDER, WITH COMPOSITE REINFORCED CONCRETE DECK, SUPPORTED ON A TANGENT DRILLED SHAFT ABUTMENT, A REINFORCED CONCRETE ABUTMENT AND CAP AND COLUMN PIER
SPANS: 267'-11" & 192'-8 5/8" C/C BRGS. ALONG @ CONST. CARNEGIE AVE.
ROADWAY: 68'-0" TOE/TOE CURB WITH TWO 9'-0" SIDEWALKS
LOADING: HL93, PEDESTRIAN LL, AND 60 PSF FUTURE WEARING SURFACE (FWS)
SKEW: VARIES LEFT FORWARD
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLABS: 30'-0" LONG (AS-1-15, AS-2-15) TYPE B INSTALLATION
ALIGNMENT: TANGENT
CROWN: 0.02 FT/FT
DECK AREA: 41,987 SF
SFN: 1807898
COORDINATES: LATITUDE 41°29'57.61" N LONGITUDE 81°40'19.52" W

SITE PLAN (1 OF 2)  
 CUY-90-1696 (BRIDGE 14)  
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN	1807898
DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	ZES
CHECKER	DBW
REVIEWER	KAG
PROJECT ID	82382
SUBSET	1
TOTAL	90
SHEET	2281
TOTAL	2696



CUY-90-16.28 (CCG3A)  
 MODEL: 82382\_SFN\_000014.SFN01 PAPER SIZE: 34x22 (in.) DATE: 9/17/2025 TIME: 3:21:42 PM USER: Victor.Nash  
 p:\mb-us-pw-bentley.com\mb-us-pw-03\Documents\Cleveland\_OH\01\_P\Projects\ODOT\District12\23232400-Engineering\Structures\SFN\_1807898\_SFN\_1807898\_SFN01.dgn



PLAN

LEGEND

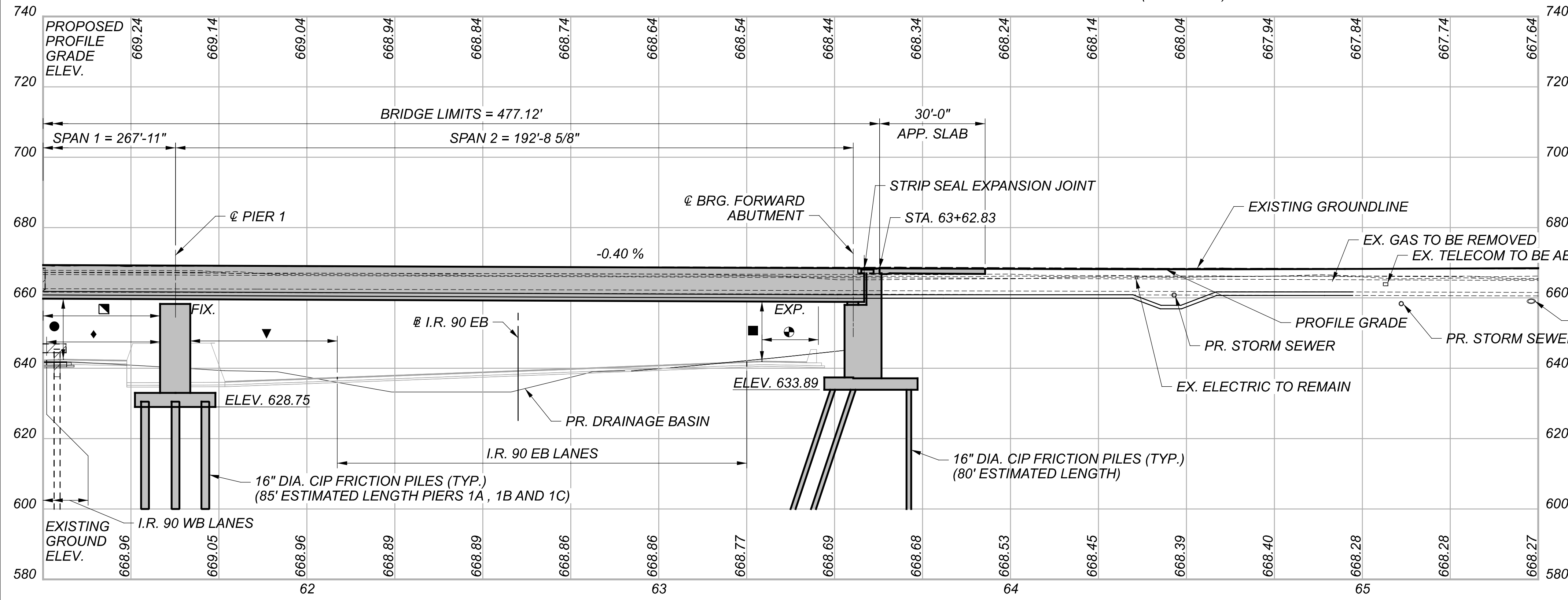
- TO BE REMOVED
- HISTORIC BORING LOCATION
- INSTRUMENTED BORING LOCATION
- PROJECT BORING LOCATION
- 15'-6" REQUIRED MINIMUM VERTICAL CLEARANCE
- 16'-0" PREFERRED MINIMUM VERTICAL CLEARANCE
- 15'-7" ACTUAL MINIMUM VERTICAL CLEARANCE (INTERIM)
- 15'-6" REQUIRED MINIMUM VERTICAL CLEARANCE
- 16'-0" PREFERRED MINIMUM VERTICAL CLEARANCE
- 16'-0" ACTUAL MINIMUM VERTICAL CLEARANCE (FUTURE)

HORIZONTAL CLEARANCES			
LOCATION	REQUIRED	ACTUAL	PHASE
	11'-8"	11'-9"	FUTURE
	13'-8"	18'-3"	FUTURE
	13'-8"	18'-6"	FUTURE
	13'-8"	20'-1"	INTERIM

FOR PLAN LOCATIONS OF , AND SEE SITE PLAN 1 OF 2

MINIMUM HORIZONTAL CLEARANCES			
LOCATION	REQUIRED CLEAR ZONE	ACTUAL	PHASE
	30'-0"	20'-8"*	FUTURE
	30'-0"	14'-1"*	INTERIM
	30'-0"	18'-3"*	FUTURE
	30'-0"	18'-6"*	FUTURE
	30'-0"	20'-1"*	INTERIM

\* BARRIER PROTECTION REQUIRED FOR PLAN LOCATIONS OF , AND SEE SITE PLAN 1 OF 2



PROFILE GRADE ALONG @ CONST. CARNEGIE AVE.

SFN	1807898
DESIGN AGENCY	
DESIGNER/CHECKER	Michael Baker INTERNATIONAL
DESIGNER	ZES
CHECKER	DBW
REVIEWER	KAG 12/26/23
PROJECT ID	82382
SUBSET	2
TOTAL	90
SHEET	2282
TOTAL	2696



**ESTIMATED QUANTITIES**

CALCULATED BY: ZES      DATE: 03/20/24  
 CHECKED BY: DAF      DATE: 05/15/24

PARTICIPATION	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTR.	GENERAL	SHEET REF.
2	02/IMS/10	202	11003	LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	15-18
	02/IMS/10	503	11100	LS	COFFERDAMS AND EXCAVATION BRACING				LS	
	02/IMS/10	503	21101	CY	UNCLASSIFIED EXCAVATION, AS PER PLAN	7,516	3,326			6
	02/IMS/10	505	11100	LS	PILE DRIVING EQUIPMENT MOBILIZATION				LS	
	02/IMS/10	506	11101	LS	STATIC LOAD TEST, AS PER PLAN				LS	8
	02/IMS/10	507	00400	2	490	FT	2		490	7
	02/IMS/10	507	00700	19,355	FT	19,355				
	02/IMS/10	507	00750	20,530	FT	20,530				
	02/IMS/10	509	10000	742,913	LB				742,913	
	02/IMS/10	510	10000	800	EACH				800	
	02/IMS/10	511	34447	1,320	CY			1,320		8
	02/IMS/10	511	34451	137	CY			137		8
	02/IMS/10	511	42012	307	CY		307			
	02/IMS/10	511	44112	835	CY	835				
	02/IMS/10	511	45602	794	CY				794	
	02/IMS/10	511	46512	738	CY	336	290		112	
	02/IMS/10	511	51513	242	CY			242		8
	02/IMS/10	511	53010	243	CY	243				9
	02/IMS/10	511	71200	13,986	SF	13,986				9
	02/IMS/10	511	71200	5,945	SF		5,945			9
	02/IMS/10	511	71200	2,851	SF			2,851		9
	02/IMS/10	512	10001	688	SY				688	7
	02/IMS/10	512	10050	2,142	SY				2,142	
	02/IMS/10	512	10101	2,563	SY				2,563	6
	02/IMS/10	513	10201	13,000	LB			13,000		7
	02/IMS/10	513	10280	4,419,100	LB			4,419,100		
	02/IMS/10	513	20000	8,872	EACH			8,872		
	02/IMS/10	514	00060	157,200	SF			157,200		
	02/IMS/10	514	00067	157,200	SF			157,200		6
	02/IMS/10	516	11210	145	FT			145		
	02/IMS/10	SPECIAL	516E12400	173	FT			173		79
	02/IMS/10	516	42000	130	EACH				130	33
	02/IMS/10	518	12200	8	EACH				8	

ESTIMATED QUANTITIES (1 OF 2)  
 CUY-90-1696 (BRIDGE 14)  
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPER/SIZE: 34x22 (in.) DATE: 9/17/2025 TIME: 12:57:12 PM USER: Joseph.Hogan  
 pwc:\mb-us-pw-bentley.com\mb-us-pw-03\Documents\Cleveland\_OH\01\_P\Projects\ODOT\District12\82382\400-Engineering\Structures\SFN\_1807898\_Sheet\SFN\_1807898\_S0001.dgn

SFN	1807898
DESIGN AGENCY	
<b>Michael Baker</b>	<b>INTERNATIONAL</b>
DESIGNER	CHECKER
DBW	MKB
REVIEWER	
KAG	12/26/23
PROJECT ID	82382
SUBSET	TOTAL
11	90
SHEET	TOTAL
2291	2696

ESTIMATED QUANTITIES

CALCULATED BY: ZES DATE: 03/20/24  
 CHECKED BY: DAF DATE: 05/15/24

PARTICIPATION	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTR.	GENERAL	SHEET REF.
02/IMS/10	518	20000	888	SY	PREFABRICATED GEOCOMPOSITE DRAIN				888	
02/IMS/10	518	21200	618	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC				618	
02/IMS/10	518	40000	907	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	907				
02/IMS/10	518	40010	658	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	658				
02/IMS/10	518	43300	185	FT	6" PIPE DOWNSPOUT, INCLUDING SPECIALS	101	84			
02/IMS/10	523	20001	4	EACH	DYNAMIC LOAD TESTING, AS PER PLAN				4	4
02/IMS/10	523	20501	2	EACH	RESTRIKE, AS PER PLAN				2	4
02/IMS/10	524	94803	238	FT	DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK, AS PER PLAN				238	8
02/IMS/10	524	94901	4,750	FT	DRILLED SHAFTS, 48" DIAMETER, AS PER PLAN				4,750	5
02/IMS/10	524	95100	2	EACH	DRILLED SHAFTS, MISC.: 48" DIAMETER, THROUGH OBSTRUCTIONS				2	5
02/IMS/10	524	95100	2	EACH	DRILLED SHAFTS, MISC.: BI DIRECTIONAL TESTING OF DRILLED SHAFTS				2	7
02/IMS/10	524	95100	1	EACH	DRILLED SHAFTS, MISC.: CSL TESTING, 48" DIA. SHAFT				1	7
02/IMS/10	524	95100	1	EACH	DRILLED SHAFTS, MISC.: DEMONSTRATION DRILLED SHAFT				1	7
02/IMS/10	524	95100	3	EACH	DRILLED SHAFTS, MISC.: HIGH STRAIN DYNAMIC TESTING OF DRILLED SHAFTS				3	7
02/IMS/10	526	30010	592	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")				592	
02/IMS/10	SPECIAL	530E00200	LS		STRUCTURES: PRECONSTRUCTION/POST CONSTRUCTION CONDITION SURVEY				LS	4-5
02/IMS/10	SPECIAL	530E00200	LS		STRUCTURES: VIBRATION MONITORING				LS	4
02/IMS/10	SPECIAL	530E00600	1,349	SF	STRUCTURES: PERMANENT SHORING PRECAST CONCRETE LAGGING				1,349	6
02/IMS/10	SPECIAL	530E00600	1,516	SF	STRUCTURES: PERMANENT SHORING TIMBER LAGGING				1,516	7-8
02/IMS/10	607	39910	1,180	FT	VANDAL PROTECTION FENCE, 8' STRAIGHT, COATED FABRIC				1,180	
02/IMS/10	625	25920	478	FT	CONDUIT, MISC.: 12" GAS CONDUIT INSTALLATION			478		9
02/IMS/10	625	25920	2,863	FT	CONDUIT, MISC.: AT&T 4" CONDUIT INSTALLATION			2,863		9
02/IMS/10	625	25920	5,726	FT	CONDUIT, MISC.: CEI 4" CONDUIT INSTALLATION			5,726		9
02/IMS/10	625	25920	5,726	FT	CONDUIT, MISC.: CPP 4" CONDUIT INSTALLATION			5,726		9
02/IMS/10	SPECIAL	690E98000	36	EACH	ROLLER SUPPORTS (GAS LINE)				36	9
02/IMS/10	SPECIAL	690E98000	29	EACH	UTILITY SUPPORTS (AT&T DUCTS)				29	9
02/IMS/10	SPECIAL	690E98000	29	EACH	UTILITY SUPPORTS (CEI DUCTS)				29	9
02/IMS/10	SPECIAL	690E98000	29	EACH	UTILITY SUPPORTS (CPP DUCTS)				29	9
02/IMS/10	SPECIAL	690E98000	31	EACH	UTILITY SUPPORTS (WATER LINE)				31	9
02/IMS/10	866	00101	14	EACH	GROUND ANCHOR, AS PER PLAN, 159 KIP MAX LOAD TEST (SOLIDER PILE AND LAGGING WALL)				14	10
02/IMS/10	866	00101	100	EACH	GROUND ANCHOR, AS PER PLAN, 159 KIP MAX LOAD TEST (TANGENT WALL)				100	10
02/IMS/10	866	00400	6	EACH	PERFORMANCE TEST				6	
02/IMS/10	866	00500	6	EACH	EXTENDED CREEP TEST				6	
02/IMS/10	869	00100	30	EACH	HIGH LOAD MULTI-ROTATIONAL (HLMR) BEARINGS				30	

ESTIMATED QUANTITIES (2 OF 2)  
 CUY-90-1696 (BRIDGE 14)  
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN	1807898
DESIGN AGENCY	
<b>Michael Baker</b>	<b>INTERNATIONAL</b>
DESIGNER	CHECKER
DBW	MKB
REVIEWER	
KAG	12/26/23
PROJECT ID	82382
SUBSET	TOTAL
12	90
SHEET	TOTAL
2292	2696