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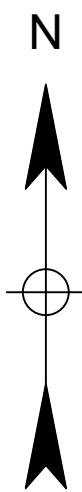
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PROPERTY OWNER

NAME: CANTERA RESIDENCES, LLC
ADDRESS: TWO NORTHFIELD PLAZA, SUITE #320, NORTHFIELD, IL 60093

DUTY TO INDEMNIFY

THE CONTRACTOR SHALL DEFEND, INDEMNIFY, KEEP SAFE AND HOLD HARMLESS THE MUNICIPALITY, OWNER AND ENGINEER, AND THEIR RESPECTIVE BOARD MEMBERS, REPRESENTATIVES, AGENTS AND EMPLOYEES, IN BOTH INDIVIDUAL AND OFFICIAL CAPACITIES, AGAINST ALL SUITS, CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES, CAUSED BY, GROWING OUT OF, OR INCIDENTAL TO THE PERFORMANCE OF WORK UNDER THE CONTRACT BY THE CONTRACTOR OR ITS SUBCONTRACTORS TO THE FULL EXTENT AS ALLOWED BY THE LAWS OF THE STATE OF ILLINOIS AND NOT BEYOND ANY EXTENT WHICH WOULD RENDER THESE PROVISIONS VOID OR UNENFORCEABLE. THIS OBLIGATION INCLUDES BUT IS NOT LIMITED TO: THE ILLINOIS LAWS REGARDING STRUCTURAL WORK [IL REV. STAT. CH. 48, PAR. 60 AT SEQ.] AND REGARDING THE PROTECTION OF ADJACENT LANDOWNERS [IL REV. STAT. CH. 17-1/2 PAR. 51 ET. SEQ.]. IN THE EVENT OF ANY SUCH INJURY [INCLUDING DEATH] OR LOSS OR DAMAGE, OF CLAIMS THEREFORE, THE CONTRACTOR SHALL GIVE PROMPT NOTICE TO THE OWNER.



CITY OF WARRENVILLE
DUPAGE COUNTY, ILLINOIS

RIVERVIEW WEST

PROPOSED 6 STORY BUILDING WITH GARAGE
WARRENVILLE, ILLINOIS

PRELIMINARY ENGINEERING

UTILITY CONTACT LIST

WARRENVILLE PUBLIC WORKS DEPARTMENT 33346 MIGNIN DR WARRENVILLE, IL 60555 PH: (630) 393-9050	DUPAGE COUNTY DIVISION OF TRANSPORTATION 421 N COUNTY FARM RD WHEATON, IL 60187 PH: (630) 407-6900
WARRENVILLE CITY HALL 35258 MANNING AVE WARRENVILLE, IL 60555 PH: (630) 393-9427	COMED 321 SWIFT RD, LDMBARD, IL 60148 PH: (800) 334-7661
WARRENVILLE FIRE PROTECTION DISTRICT FIRE PREVENTION BUREAU P.O. BOX 51 35472 BATAVIA ROAD WARRENVILLE, ILLINOIS 60555 PH: (630) 393-2175	AT&T 1000 COMMERCE DR. DAK BROOK, IL 60523 PH: (630)573-5450 NICOR 90 N FINLEY ROAD GLEN ELLYN, IL 60137 PH: (888) 642-6748

BENCHMARK

- 1) RAILROAD SPIKE IN SOUTHEAST FACE OF POWER POLE, 7" ABOVE GRADE AT SOUTHWEST CORNER OF WARRENVILLE ROAD AND WINFIELD ROAD
ELEVATION=725.47 (NAVD 88)
- 2) SQUARE CUT ON THE SOUTHWEST CORNER OF DEIHL ROAD BRIDGE OVER DUPAGE RIVER
ELEVATION=700.25 (NAVD 88)
- 3) DUPAGE COUNTY BENCHMARK W135004.
BRASS DISK LOCATED 0.2 MILES WEST ALONG WARRENVILLE ROAD FROM THE INTERSECTION OF WARRENVILLE ROAD & WINFIELD ROAD AT THE NORTHWEST END OF THE BRIDGE FOR WARRENVILLE ROAD OVER THE DUPAGE RIVER. STATION IS 31.4 FT NORTH OF THE CENTERLINE OF WARRENVILLE ROAD, 70.7 FT EAST OF POWER POLE 69299, AND 16.0 FT EAST OF THE WEST END OF THE SIDEWALK ON THE NORTH EDGE OF THE BRIDGE. MONUMENT IS FLUSH WITH THE SIDEWALK.
ELEVATION=695.79 (NAVD 88)



Formerly JULIE 1-800-892-0123



THIS CERTIFIES THAT THESE DRAWINGS HAVE BEEN REVIEWED TO THE BEST OF MY KNOWLEDGE AND THAT I BELIEVE THEY ARE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA), AND ALL CODES AND BUILDING ORDINANCES OF THE CITY OF CHICAGO, STATE OF ILLINOIS.

LICENSED ARCHITECT / LANDSCAPE ARCHITECT
LICENSED ENGINEER.

- PRELIMINARY -
FOR REVIEW ONLY

CERTIFICATION:

No.	Date	Description
1	2014-05-15	Prepared for Preliminary Engineering
2	2014-05-15	Reviewed for Preliminary Engineering
3	2014-05-15	Revised for Preliminary Engineering

PROJECT NAME:
RIVER VIEW WEST
PROPOSED 5 STORY BUILDING
113 D.U. WITH GARAGE
WARRENVILLE, ILLINOIS

OWNER:
CANTERA RESIDENCES, LLC
Two Northfield Plaza, Suite #320, Northfield, IL 60093

SHEET NO.
G-000

PRINT DATE:
2014-05-15

SHEET NAME:
Cover

Civil Engineer

 **SMP PROJECTS**
Landscape Architects & Civil Engineers

SMP Projects, PLLC
1000 Fulton Pkwy, Chicago, IL 60614
312.822.0797

DISCLAIMER:
These drawings were prepared by the undersigned professional engineer or architect, who is not responsible for the accuracy or completeness of the information provided by others. The engineer or architect does not warrant the accuracy or completeness of the information provided by others. The engineer or architect does not warrant the accuracy or completeness of the information provided by others. The engineer or architect does not warrant the accuracy or completeness of the information provided by others.

Other than drawings, the undersigned professional engineer or architect does not warrant the accuracy or completeness of the information provided by others. The engineer or architect does not warrant the accuracy or completeness of the information provided by others. The engineer or architect does not warrant the accuracy or completeness of the information provided by others.

GENERAL NOTES:

- THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ILLINOIS DEPARTMENT OF TRANSPORTATION, LATEST REVISION (HEREINAFTER REFERRED TO AS "STANDARD SPECIFICATIONS"), AND THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST REVISION (HEREINAFTER REFERRED TO AS "SSWSC1"), SHALL GOVERN CONSTRUCTION FOR THE PROPOSED IMPROVEMENTS, UNLESS SUPERCEDED BY THE CITY OF WARRENVILLE, ILLINOIS SUBDIVISION REGULATIONS AND/OR THE CITY OF WARRENVILLE BUILDING CODE, LATEST EDITIONS, AND/OR THE CITY OF WARRENVILLE STANDARD SPECIFICATIONS FOR WATERMAIN, SANITARY, SEWER AND STORM SEWER.
- IN THE EVENT OF CONFLICT, THE CITY OF WARRENVILLE STANDARD SPECIFICATIONS SHALL PREVAIL.
- THE STANDARD SPECIFICATIONS, HIGHWAY STANDARDS AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, CONSTRUCTION PLANS, AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT. INCIDENTAL ITEMS NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE CONSIDERED PART OF THIS CONTRACT.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST NOTIFY THE OWNER AND ALL AFFECTED GOVERNMENTAL AGENCIES INCLUDING, BUT NOT LIMITED TO THE THE CITY OF WARRENVILLE (COMMUNITY DEVELOPMENT, BUILDING DEPARTMENT, PUBLIC WORKS), DUPAGE COUNTY, IEPA, ETC. TO ARRANGE FOR APPROPRIATE CONSTRUCTION INSPECTION. IN ADDITION, PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, ALL REQUIRED BONDS MUST BE POSTED, PERMIT FEES PAID AND PERMITS OBTAINED AND POSTED ONSITE.
- NOTIFICATIONS
 - THE CONTRACTOR SHALL NOTIFY THE OWNER AND/OR HIS REPRESENTATIVE AND ALL AFFECTED GOVERNMENTAL AGENCIES AT LEAST THREE (3) WORKING DAYS BEFORE THE INITIAL START OF OPERATIONS OR ANY TEMPORARY STOP OR RESUMPTION OF OPERATIONS. IN ADDITION, THE CONTRACTOR SHALL NOTIFY ALL AFFECTED TESTING AND INSPECTION AGENCIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION TO PROVIDE THE REQUIRED TESTING AND INSPECTIONS.
 - THE CONTRACTOR SHALL BEAR ALL COSTS THAT RESULTS FROM THE FAILURE TO NOTIFY GOVERNMENTAL, TESTING OR INSPECTIONS AGENCIES INCLUDING, BUT NOT LIMITED TO SUSPENSIONS IN CONSTRUCTION OPERATIONS AND/OR REJECTIONS OF COMPLETED WORK.
- A COPY OF THE APPROVED STAMPED PLANS AND SPECIFICATIONS AND OTHER AGENCIES' PERMITS, I.E. COUNTY HIGHWAY, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, ETC., MUST BE KEPT ON THE JOB SITE DURING CONSTRUCTION OF THE PROJECT WORK.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY ON THE JOB.
- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE PROPER BARRICADING, SIGNAGE, WARNING DEVICES AND THE SAFE MANAGEMENT OF TRAFFIC WITHIN THE AREA OF CONSTRUCTION. ALL SUCH DEVICES AND THEIR INSTALLATION SHALL CONFORM TO THE ILLINOIS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS, LATEST EDITION AND IN ACCORDANCE WITH THE CITY OF WARRENVILLE, ILLINOIS SUBDIVISION REGULATIONS AND THE CITY OF WARRENVILLE BUILDING CODE. NAME AND EMERGENCY PHONE NUMBERS SHALL BE GIVEN TO THE CITY OF WARRENVILLE AND THE ENGINEER PRIOR TO CONSTRUCTION.
- CHANGES IN THE ENGINEERING PLANS MUST BE APPROVED BY THE ENGINEER. A WRITTEN REQUEST, ACCOMPANIED BY REVISED ENGINEERING PLANS, ARE TO BE SUBMITTED AND APPROVED BEFORE CONSTRUCTION OF CHANGES ARE STARTED.
- NO PLANS SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED FOR CONSTRUCTION. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND CONDITIONS AFFECTING THE WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. THE CONTRACTOR MUST VERIFY THE ENGINEER'S LINE AND GRADE STAKES. IF THERE ARE ANY DISCREPANCIES WITH WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT SAME TO ENGINEER BEFORE DOING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS, ERRORS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTIONS ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.
- EXISTING EASEMENTS AND RIGHT-OF-WAY LINES FOR EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHT-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITIES AND THEIR PROTECTION FROM DAMAGE DURING CONSTRUCTION. IF EXISTING UTILITY LINES OF ANY NATURE ARE FOUND TO BE IN CONFLICT WITH THE NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES (AMERITECH, COMMONWEALTH EDISON ELECTRIC COMPANY, ETC.) PRIOR TO CONSTRUCTION AND ALL UTILITIES DAMAGED AND/ OR DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER. LOCATIONS AS SHOWN ARE APPROXIMATE AND BASED UPON THE BEST AVAILABLE INFORMATION, CALL J.U.L.L.E. (800) 892-0123 FOR MAJOR UTILITY LOCATIONS.
- ALL REQUIRED TESTING OF CONSTRUCTED IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO WATERMANS, SANITARY SEWERS, STORM SEWERS, STRUCTURES, PAVEMENTS, ETC. SHALL BE THE RESPONSIBILITY AND AT THE COST OF THE CONTRACTOR.
- ALL EXISTING UTILITIES AND IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO STRUCTURES, PAVEMENTS, CURBS AND PARKWAYS DAMAGED OR REMOVED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNLESS A SPECIFIC PAY ITEM IS LISTED ON THE BID LIST.
- ANY TEMPORARY SHEETING OR BRACING FOR ANY EXCAVATIONS OR TRENCHES THAT MAY BE REQUIRED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL NOT BE CONSIDERED EXTRA WORK. IN THE EVENT THAT SOFT MATERIALS ARE ENCOUNTERED IN SEWER CONSTRUCTION, THE CONTRACTOR SHALL, UPON APPROVAL OF THE OWNER AND/OR ENGINEER) OVER-EXCAVATE TO A DEPTH OF ONE (1) FOOT BELOW THE BOTTOM OF THE PIPE AND BACKFILL WITH COMPACTED CRUSHED STONE, PROPERLY FORMED TO FIT THE BOTTOM OF THE PIPE.
- THE EXCAVATION TRENCH FOR SEWER PIPE AND STRUCTURE INSTALLATION SHALL BE KEPT DRY AT ALL TIMES DURING PIPE PLACEMENT. APPROPRIATE FACILITIES TO MAINTAIN THE DRY TRENCH SHALL BE PROVIDED BY THE CONTRACTOR AND THE COST OF SUCH SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE ITEM. PLANS FOR THE SITE DEWATERING, IF EMPLOYED, SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR DEWATERING DURING CONSTRUCTION.
- THE CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES UNTIL THEY ARE NO LONGER NEEDED. ANY STAKES DESTROYED OR DISTURBED BY THE CONTRACTOR PRIOR TO THEIR USE SHALL BE RESET BY THE DEVELOPER'S ENGINEER AT CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DEBRIS, EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE, MACHINERY, TOOLS AND OTHER MISCELLANEOUS ITEMS WHICH WERE NOT PRESENT PRIOR TO PROJECT COMMENCEMENT AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY AND ALL PERMITS NECESSARY FOR THE HAULING AND DISPOSAL REQUIRED FOR CLEAN-UP AS DIRECTED BY THE ENGINEER OR OWNER. BURNING ON THE SITE IS NOT PERMITTED.
- BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED BY THE OWNER OR HIS REPRESENTATIVE.
- CONTRACTOR SHALL REFER TO LANDSCAPE PLANS FOR COMPLETE LANDSCAPE INFORMATION.
- REFER TO SITE ELECTRICAL DRAWINGS FOR EXISTING AND PROPOSED LIGHTING AND WIRING DETAILS AND SPECIFICATIONS.

MASS GRADING:

- PRIOR TO THE COMMENCEMENT OF EARTHWORK OPERATIONS, THE SITE SHALL BE CLEARED IN ACCORDANCE WITH SECTION 201 OF THE STANDARD SPECIFICATIONS AT NO ADDITIONAL COST TO THE OWNER. CLEARING SHALL CONSIST OF THE REMOVAL AND DISPOSAL OF ALL OBSTRUCTIONS SUCH AS FENCES, WALLS, FOUNDATIONS, BUILDINGS, RUBBISH OF WHATEVER NATURE, EXISTING STRUCTURES, LOGS, SHRUBS, BUSHES, SAPLINGS, GRASS, WEEDS, OTHER VEGETATION, AND STUMPS OF LESS THAN SIX (6) INCHES IN DIAMETER. CLEARING SHALL EXTEND TO THE LIMITS OF DEVELOPMENT AND SHALL ALSO INCLUDE ALL ITEMS NOT SPECIFICALLY MARKED FOR PROTECTION.
- THE CONTRACTOR SHALL REVIEW ALL SUBSURFACE/SOILS REPORTS, PERFORM SITE INSPECTION, AND VERIFY EXISTING TOPOGRAPHIC INFORMATION. ANY DISCREPANCY IN FINDINGS/CONCLUSIONS REGARDING EXISTING SITE CONDITIONS SHALL BE RESOLVED PRIOR TO THE START OF ANY EARTHWORK OPERATIONS. COMMENCEMENT OF EARTHWORK OPERATIONS INDICATES THAT THE CONTRACTOR HAS REVIEWED ALL AVAILABLE SITE INVESTIGATION DATA AND BASED HIS BID ACCORDINGLY.
- EARTHWORK OPERATIONS, EARTH EXCAVATION AND PLACEMENT OF EMBANKMENT SHALL CONFORM TO SECTIONS 200, 202 AND 205 OF THE STANDARD SPECIFICATIONS.
- ALL GRADING OPERATIONS MUST BE CONSTRUCTED ACCORDING TO THE ELEVATIONS AND GRADES AS SHOWN ON THE PLANS OR MODIFIED BY THE ENGINEER.
- ALL EXCAVATED MATERIAL SHALL BE PLACED AND STOCKPILED ONSITE, AS SHOWN ON THE PLANS AND OUTSIDE OF FLOODPLAIN AREAS, WETLAND AREAS OR SPECIAL MANAGEMENT AREAS.
- PLACEMENT OF STRUCTURAL FILL (EARTH AND OTHER SUITABLE MATERIALS) IN ORDER TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS SHALL BE WITHIN A TOLERANCE OF 0.1 FEET. THE FILL MATERIAL SHALL BE PLACED IN LOOSE LIFTS THAT SHALL NOT EXCEED EIGHT (8) INCHES IN THICKNESS, AND THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE REQUIRED COMPACTION. EARTH MATERIAL MAY BE PLACED WITHIN THOSE PORTIONS OF THE SITE NOT REQUIRING STRUCTURAL FILL, TO WITHIN SIX (6) INCHES OF THE PLAN FINISHED GRADE ELEVATION. IN AREAS REQUIRING STRUCTURAL FILL THE EARTH MATERIAL SHALL NOT BE PLACED OVER TOPSOIL OR OTHER UNSUITABLE MATERIALS UNLESS SPECIFICALLY DIRECTED BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.

MASS GRADING (CONT'D):

- EXCESS EXCAVATED AND SURPLUS MATERIALS, IF NOT UTILIZED AS FILL OR IF DETERMINED TO BE UNSUITABLE BY THE SOILS ENGINEER, SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF OFF-SITE BY THE CONTRACTOR IN A LEGAL MANNER.
- UNSUITABLE MATERIAL SHALL BE CONSIDERED AS MATERIAL WHICH IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION, AND IS ENCOUNTERED BELOW NORMAL TOPSOIL DEPTHS AND THE PROPOSED SUBGRADE ELEVATION. THE DECISION TO REMOVE SAID MATERIAL, AND TO WHAT EXTENT, SHALL BE MADE BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.
- POSITIVE DRAINAGE MUST BE PROVIDED AT ALL TIMES IN AN ATTEMPT NOT TO AFFECT THE SUBJECT DEVELOPMENT OR TO INFRINGE UPON ADJACENT PROPERTIES. STORM WATER SHALL BE PREVENTED FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION AND TRAFFIC.
- THE UPPER TWELVE (12) INCHES OF THE SUITABLE SUBGRADE MATERIAL IN ALL AREAS THAT MAY BE SOFT DUE TO EXCESS MOISTURE CONTENT SHALL BE SCARIFIED AND COMPACTED TO THE DEGREE SPECIFIED. THIS APPLIES TO CUT AREAS AS WELL AS FILL AREAS.
- PAVEMENT:
- PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE MATERIAL, THE STREETS SHALL BE FINE GRADED TO WITHIN 0.1 FEET OF FINAL SUBGRADE ELEVATION, TO A POINT TWO (2) FEET BEYOND THE BACK OF CURB.
- THE SUBGRADE OF ALL ROADS SHALL BE GRADED AND ROLLED IN ACCORDANCE WITH SECTION 301 OF THE STANDARD SPECIFICATIONS FOR THE ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION. PARTICULAR ATTENTION IS DIRECTED TO THE REQUIREMENTS FOR THE REPLACEMENT OF SOFT AND UNSTABLE MATERIAL AS CONTAINED IN ARTICLE 202.03 EMBANKMENT SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH SECTION 205 OF SAID SPECIFICATIONS.
- SUBGRADE MATERIAL HAVING AN IBR LESS THAN 2.5 SHALL BE REMOVED AND REPLACED WITH SUITABLE FILL OR THE PAVEMENT MUST BE DESIGNED TO COMPENSATE FOR THE EXISTING SOIL CONDITIONS.
- AT LEAST ONE STANDARD DENSITY TEST (PERFORMED IN ACCORDANCE WITH AASHTO T99) SHALL BE TAKEN IN EACH FILL SECTION, WITH THE MAXIMUM DISTANCE BETWEEN TESTS OF 300 FEET. ONE STANDARD PROCTOR TEST SHALL BE TAKEN FROM EACH DIFFERENT SOURCE OF BORROWED MATERIAL, IF REQUIRED BY THE CITY OF WARRENVILLE. THE PROCTOR AND DENSITY TESTS MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE CITY OF WARRENVILLE. UPON APPROVAL OF THESE TESTS, THE CITY WILL MAKE AN INSPECTION OF THE SUBGRADE. THE SUBGRADE MUST BE APPROVED PRIOR TO PLACING ANY TYPE OF CURB AND GUTTER OR BASE MATERIAL. THE COST OF ALL TESTING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- AGGREGATE BASE COURSE MATERIAL SHALL BE TYPE B, GRADATION CA-6. THE COMPACTED THICKNESS SHALL BE AS LISTED ON THE PLANS. PRIOR TO RECEIVING ANY PRIME COAT MATERIALS, THE BASE COURSE SHALL BE PREPARED ACCORDING TO SECTION 358 OF THE STANDARD SPECIFICATIONS.
- AFTER THE AGGREGATE BASE COURSE HAS BEEN PREPARED, AND WHEN IN A DRY CONDITION, THE BITUMINOUS MATERIALS, AS SPECIFIED FOR PRIME IN ARTICLE 406.02 OF THE STANDARD SPECIFICATIONS, SHALL BE APPLIED UNIFORMLY AT A RATE OF 0.25 - 0.50 GAL/SYD. THE BITUMINOUS PRIMING MATERIAL SHALL BE PREPARED ACCORDING TO ARTICLE 403.07 AND THE METHOD OF APPLICATION SHALL BE AS SPECIFIED IN ARTICLE 403.09.
- THE BITUMINOUS CONCRETE BINDER AND SURFACE COURSE SHALL COMPLY WITH THE STATE OF ILLINOIS CLASS 1, AS SET FORTH IN SECTION 406 OF THE STANDARD SPECIFICATIONS. A TACK COAT SHALL BE APPLIED TO THE BASE COURSE AT A RATE OF 0.40 GALLONS PER SQUARE YARD.
- AFTER A BASE CURING PERIOD OF NOT MORE THAN FIVE (5) DAYS AFTER PRIMING, A BITUMINOUS CONCRETE BINDER COURSE (MIXTURE B) SHALL BE CONSTRUCTED UPON THE BASE COURSE. THE COMPACTED THICKNESS OF THE BINDER AND COMPACTED GRANULAR BASE IS LISTED ON THE PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE BASE AND BINDER COURSE ON A SAFE AND PASSABLE CONDITION UNTIL THE SAID BASE IS SURFACED. SHOULD ANY CONDITION OCCUR WHICH, IN THE JUDGEMENT OF THE ENGINEER, WOULD CONSTITUTE A HAZARD TO VEHICULAR OR PEDESTRIAN TRAFFIC, THE CONTRACTOR SHALL DO WHATEVER IS REQUIRED TO RESTORE THE ROADWAY TO A SAFE CONDITION. IF THE CONTRACTOR DOES NOT CORRECT SUCH HAZARDOUS CONDITIONS WITHIN 12 HOURS AFTER NOTIFICATION BY THE ENGINEER, THEN THE CITY OF WARRENVILLE MAY PERFORM REMEDIAL WORK AND BILL THE CHARGES TO THE CONTRACTOR.
- ALL BITUMINOUS BINDER COURSE MATERIALS MUST BE IN PLACE FOR A MINIMUM OF TEN (10) MONTHS, INCLUDING WINTER AND SPRING BEFORE THE INSTALLATION OF THE SURFACE COURSE.
- A PRIME COAT SHALL THEN BE APPLIED AT A RATE OF 0.15 GALLONS PER SQUARE YARD, AFTER WHICH BITUMINOUS SURFACE COURSE, CLASS I, MODIFIED, SHALL BE CONSTRUCTED. THE CONTRACTOR SHALL BE REQUIRED TO SEAL ANY SHRINKAGE CRACKS WHICH BECOME APPARENT WITHIN ONE (1) YEAR AFTER PLACING SURFACE COURSE. SURFACE COURSE SHALL BE OF THE THICKNESS LISTED ON THE PLANS.

- CONCRETE CURB AND GUTTER SHALL BE CONSTRUCTED IN CONFORMANCE WITH SECTION 606 OF THE STANDARD SPECIFICATIONS AT THE LOCATIONS AND IN CONFORMANCE WITH THE DETAILS SHOWN ON THE PLANS. TWO (2) CONTINUOUS #4 BARS OF REINFORCING STEEL SHALL RUN THE ENTIRE LENGTH OF THE CURB AND GUTTER. THE CONCRETE USED THEREIN SHALL CONFORM TO STANDARD SPECIFICATIONS.
- 3/4 INCH PRE-MOLDED BITUMINOUS EXPANSION JOINTS HAVING TWO (2) 3/4 INCH DOWEL BARS SHALL BE INSTALLED AT 45 FOOT INTERVALS AND AT ALL POINTS OF CURVATURE WHERE THE RADIUS IS LESS THAN 100 FEET. THE DOWEL BARS SHALL BE 18 INCHES LONG AND SHALL BE PROPERLY GREASED AND HAVE EXPANSION CAPS. CONTRACTION JOINTS SHALL BE FORMED AT 15-FOOT INTERVALS.
- DEVELOPMENT PLANS SHALL INCLUDE SIDEWALK AND/OR CROSSWALKS AND SHALL BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE TO A MINIMUM THICKNESS OF FIVE (5) INCHES. ALL SIDEWALKS MATERIALS, CONSTRUCTION AND TESTING SHALL MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR CONTROL JOINT LOCATIONS FOR WALKS ADJACENT TO BUILDING.
- ALL EXPOSED CONCRETE WORK INCLUDING SIDEWALKS AND CURBS MUST HAVE CURING COMPOUND APPLIED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- PRIOR TO CONSTRUCTING THE BITUMINOUS SURFACE COURSE, THE BASE COURSE WILL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER. BASE AND BINDER REPAIR SHALL INCLUDE REMOVAL OF THE EXISTING BINDER, PREPARING AND PRIMING THE BASE COURSE AT THE SPECIFIED RATE AND PLACING AND COMPACTING A MINIMUM OF TWO (2) INCHES OF CLASS 1 BINDER. PRIOR TO THE CONSTRUCTION THE SURFACE COURSE THE BASE COURSE SHALL BE PREPARED TO THE SATISFACTION OF THE ENGINEER.
- THE CONSTRUCTION OF ALL PAVEMENT, CURBS AND GUTTERS, AND SIDEWALK IMPROVEMENTS, INCLUDING THE USE OF ALL MACHINERY, EQUIPMENT AND TOOLS, AND THE FURNISHING OF ALL MATERIALS, AND THE CONSTRUCTION OF ALL OTHER WORK NECESSARY TO COMPLETE THE PROPOSED IMPROVEMENTS, SHALL BE CONSTRUCTED ACCORDING TO THE REQUIREMENTS AS OUTLINED IN THE STATE'S STANDARD SPECIFICATIONS. THE MATERIAL FOR THOSE IMPROVEMENTS SHALL BE IN CONFORMANCE WITH THE APPROPRIATE SECTION OF THE STATE STANDARD SPECIFICATIONS.
- ALL EXISTING MANHOLES AND STRUCTURES SHALL BE ADJUSTED TO MEET FINISHED GRADE. THIS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL PAVING IMPROVEMENTS INSTALLED WILL BE SUBJECT TO TESTING, AS PROVIDED FOR IN THESE SPECIFICATIONS AND IN THE STANDARD SPECIFICATIONS. A COMPANY APPROVED BY DUPAGE COUNTY WILL PERFORM THE TESTING AT THE COST OF THE DEVELOPER. IF ANY IMPROVEMENTS ARE FOUND TO BE DEFECTIVE IN WORKMANSHIP OR MATERIALS, THEY SHALL BE REMOVED AND REPLACED.
- THE SUBGRADE MATERIALS MUST BE PROOF-ROLLED AND TESTED PRIOR TO ANY PAVING OR CURB IMPROVEMENTS. TESTING REPORTS MUST BE SUBMITTED TO THE CITY OF WARRENVILLE FOR REVIEW AND APPROVAL. DENSITY TESTING OF THE BASE COURSE MATERIALS IS REQUIRED. ALL TESTING REPORTS MUST BE SUBMITTED TO THE CITY OF WARRENVILLE. TESTING WILL HAVE TO PASS A PROOF ROLL OF ONE QUARTER (¼) INCH DEFLECTION.
- ALL STREETS, CURBS, GUTTERS AND SIDEWALKS WHICH ARE CONSTRUCTED WITHIN PUBLIC RIGHT-OF-WAY SHALL BE UNDER WARRANTY FOR ALL DEFECTS AND FAILURES FOR A PERIOD OF TWO (2) YEARS AFTER THE DATE OF ACCEPTANCE.
- IN PAVEMENT AREAS WHERE UNSTABLE SOILS ARE PRESENT, TERRATEX NO. 8 GEOTABRIC OR APPROVED EQUAL SHALL BE USED AT THE DISCRETION OF THE ENGINEER. PLACE THE GEOTABRIC/GEOTIRD SYSTEM IMMEDIATELY ABOVE THE STABLE PREPARED SUBGRADE AT A BASE COURSE/SUBGRADE CONTACT, AND INSTALL FOLLOWING MANUFACTURERS INSTRUCTIONS. THE CITY OF WARRENVILLE APPROVAL IS REQUIRED.
- PAVEMENT STRIPPING SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS SECTION 780. PAVEMENT STRIPPING SHALL BE PAINT. PAVEMENT STRIPPING SHALL BE 4" WHITE UNTIL OTHERWISE NOTED. HANDICAPPED PARKING STALLS SHALL BE STRIPPED AS PER ADA SPECIFICATION. SEE DETAILS.

CITY OF WARRENVILLE WATER MAIN SPECIFICATIONS

- ALL OPEN CUT WATER MAIN SHALL BE POLYVINYL CHLORIDE PLASTIC (PVC) PRESSURE PIPE PER AWWA SPECIFICATION C-900, CLASS 150 (DR-18). THE ABOVE PIPE AND FITTINGS SHALL BE FURNISHED WITH ELASTOMERIC GASKET JOINTS CONFORMING TO ASTM F477. TRENCH BACKFILL SHALL BE UTILIZED TO TWELVE INCHES (12") ABOVE THE TOP OF THE PVC WATER MAIN.
- ALL WATER MAIN INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING SHALL BE PVC PER AWWA SPECIFICATION C-900 WITH CERTALOK JOINTS. ASSEMBLY AND INSTALLATION OF PIPE SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ALL MATERIAL SPECIFICATIONS SHALL BE SUBMITTED TO THE CITY AND APPROVED PRIOR TO INSTALLATION.
- ONE ¼" DIAMETER STAINLESS STEEL WIRES OR A SOLOSHOT 845 EHS TRACER WIRE AS MANUFACTURED BY COPPERHEAD OR APPROVED EQUAL SHALL BE INSTALLED DIRECTLY OVER THE CENTER OF THE WATER MAIN IN THE TRENCH WITH A MAXIMUM SEPARATION OF FOUR INCHES (4") ABOVE THE PIPE. THE TRACER WIRE WILL BE INSTALLED WITH THE WATER MAIN AND ATTACHED TO ALL IN-LINE VALVES, HYDRANT VALVES, HYDRANTS AND SERVICE LINES TO INSURE SIGNAL CONDUCTIVITY ALONG ALL PORTIONS OF THE NEW MAIN.
- FITTINGS SHALL BE DUCTILE IRON, 250 PSI PRESSURE RATING, CEMENT MORTAR LINED WITH RESTRAINED PUSH-ON JOINT OR MECHANICAL JOINT WITH MEGALUG RETAINER GLANDS, OR APPROVED EQUAL.
- WATER MAIN BOLTS SHALL BE STAINLESS STEEL ASTM 304.
- RESTRAINED JOINTS - ALL FITTINGS SHALL HAVE RESTRAINED JOINTS. ALL WATER MAIN PIPING IN CASING SHALL HAVE RESTRAINED JOINTS. RESTRAINED JOINTS SHALL BE PUSH JOINT WITH A FIELD LOCK GASKET OR A MECHANICAL JOINT WITH MEGALUG RETAINER GLANDS, OR APPROVED EQUAL. ALL BENDS, TEES, AND DEAD END PIPING MUST BE RESTRAINED A MINIMUM OF 24" IN BOTH DIRECTIONS OF THE FITTING. THRUST CEMENT BLOCKING OF ALL FITTINGS, HYDRANTS, AND DEAD END PIPING IS REQUIRED.
- PRESSURE CONNECTIONS - PRESSURE TAPPING SLEEVES SHALL BE ALL STAINLESS STEEL.
- ALL VALVES SHALL BE RESILIENT WEDGE GATE VALVES INSTALLED IN A PRECAST CONCRETE VAULT. VALVES SHALL BE MUELLER, WATEROUS, OR CLOW MANUFACTURE. ALL BOLTS SHALL BE STAINLESS STEEL.
- VALVE VAULTS SHALL BE PRE-CAST CONCRETE UNITS. FOR WATER MAINS 8-INCH DIAMETER OR LESS, THE VAULT SHALL BE 48-INCH INSIDE DIAMETER. FOR WATER MAINS 10-INCH DIAMETER AND GREATER, THE VAULT SHALL BE 60-INCH INSIDE DIAMETER.
- FRAMES AND LIDS SHALL CONFORM TO NEENAH FOUNDRY R-1713 OR APPROVED EQUAL AND THE WORD "WATER" SHALL BE CAST IN THE COVER.
- CASING - SPACERS ALL JOINTS WITHIN THE CASING SHALL BE RESTRAINED. SPACERS SHALL BE INSTALLED ON ALL PIPE IN CASING. SPACERS SHALL BE BOLT ON STYLE WITH A SHELL MADE IN TWO SECTIONS OF HEAVY T-304 STAINLESS STEEL. CASING SHALL BE FILLED WITH PEA GRAVEL OR SAND AND SEALED AT BOTH ENDS.
- ALL DUCTILE IRON PIPES AND FITTINGS ARE REQUIRED TO BE ENCASED IN 8-MIL POLYETHYLENE CONFORMING TO AWWA C-105.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AND SUPPLY CERTIFICATION FOR ALL MATERIALS. SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE CITY BEFORE INSTALLATION.
- DEPTH OF BURY FOR WATER MAIN TO BE 5'-6" (MINIMUM).
- INSTALLATION SHALL CONFORM TO "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION.

CITY OF WARRENVILLE FIRE HYDRANT SPECIFICATIONS

- HYDRANT SHALL BE FM APPROVED AND UL LISTED, SHALL CONFORM TO AWWA C-502, AND SHALL HAVE BREAKAWAY SAFETY FLANGES.
- HYDRANTS SHALL BE MUELLER CENTURION, WATEROUS W667-250, OR CLOW MEDALLION.
- ALL BOLTS SHALL BE STAINLESS STEEL FROM AND INCLUDING THE BREAKAWAY FLANGE TO THE INLET ON THE HYDRANT SHOE.
- ALL HYDRANTS SHALL HAVE A BRONZE CROSS ARM / TOP PLATE.
- CONNECTING PIPING SHALL BE SIX-INCH (6") DIAMETER SHALL BE POLYVINYL CHLORIDE PLASTIC (PVC) PRESSURE PIPE PER AWWA SPECIFICATION C-900, CLASS 150 (DR-18). THE ABOVE PIPE AND FITTINGS SHALL BE FURNISHED WITH ELASTOMERIC GASKET JOINTS CONFORMING TO ASTM F477.
- MAIN VALVE OPENING SHALL BE FIVE AND ONE QUARTER INCH (5-1/4") IN DIAMETER, COMPRESSION TYPE, WITH A BRASS DRAIN VALVE.
- NOZZLES SHALL HAVE THREADED MALE ENDS CONFORMING TO "AMERICAN NATIONAL STANDARD FIRE HOSE CONNECTION SCREW THREADS. THE HYDRANT SHALL HAVE TWO NOZZLES OF 63 MM WHICH ARE 2 - 1/2" AND ONE PUMPER NOZZLE OF 114 MM (4-1/2") WITH CAPS AND CHAINS.
- HYDRANTS SHALL HAVE A MINIMUM WORKING PRESSURE OF 175 PSI.
- HYDRANTS SHALL OPEN IN A COUNTER-CLOCKWISE DIRECTION, AS INDICATED BY AN ARROW AND THE WORD "OPEN" ON THE DOME.
- HYDRANTS SHALL BE PAINTED A HIGH VISIBILITY RED, FACTORY APPLIED PAINT. HYDRANTS SHALL HAVE A SIX-INCH (6") AUXILIARY VALVE WITH BOX ON THE INLET PIPING. VALVE SHALL MEET WATER MAIN PIPING SPECIFICATIONS FOR THE CITY OF WARRENVILLE. AUXILIARY VALVE ATTACHED TO HYDRANT SHALL HAVE STAINLESS STEEL BOLTS AT THE FLANGE INLET.
- CONNECTION OF SIX-INCH (6") PIPING SHALL BE RESTRAINED JOINTS FROM THE TEE AT THE WATER MAIN TO THE INLET OF THE HYDRANT WITH FIELD LOCK GASKETS FOR PUSH JOINT AND MEGALUG RETAINER GLANDS, OR APPROVED EQUAL FOR MECHANICAL JOINT.

CITY OF WARRENVILLE WATER SERVICE SPECIFICATIONS

- FOR WATER SERVICES 2-INCH DIAMETER AND LESS SHALL BE TYPE "K" COPPER ONLY WITH A MINIMUM SIZE OF ONE-INCH (1") DIAMETER.
- BRASS SHALL BE MUELLER OR FORD. ALL BRASS IS PREFERRED TO HAVE COMPRESSION FITTINGS. COMPRESSION FITTINGS MUST BE OF THE STAINLESS FULL CIRCLE RING RETAINAGE. NO SET SCREWS ARE ALLOWED. FLAIR FITTING ARE ACCEPTABLE.
- B-BOXES SHALL BE OF THE ARCH PATTERN DESIGN WITH A TELESOPING ONE AND ONE QUARTER-INCH (1- 1/4") IRON PIPE UPPER SECTION, PENTAGON NUT ACCESS, ENLARGED BASE FOR 1-1/2" ROUNDWAYS AND LARGER, MANUFACTURED IN THE USA.
- TAPPING SADDLE AT MINIMUM SHALL BE EPOXY COATED DUCTILE WITH TWO STAINLESS STEEL BANDS. ALL STAINLESS STEEL SADDLES ARE ACCEPTABLE. MANUFACTURED IN USA.
- ALL REPAIR CLAMPS SHALL BE FULL CIRCLE STAINLESS STEEL.
- DEPTH OF BURY FOR WATER SERVICES TO BE 5'-6" (MINIMUM) TO 6'-6" (MAXIMUM).

CITY OF WARRENVILLE STORM SEWER SPECIFICATIONS

- ALL STORM SEWERS 18-INCH DIAMETER AND LESS SHALL BE PVC SDR26 WITH PIPES AND FITTINGS MEETING ASTM D-3034.
- ALL RCP STORM SEWERS SHALL BE INSTALLED WITH RUBBER GASKET JOINTS.
- THE MINIMUM STORM SEWER SIZE ALLOWED IN THE PUBLIC RIGHT-OF-WAY WILL BE 10-INCH DIAMETER UNLESS CONDITIONS WARRANT A SMALLER SIZE.
- ON PRIVATE PROPERTY, STORM SEWER INSTALLED TO DRAIN AN EXISTING DEPRESSIONAL AREA SHALL GENERALLY BE SIX-INCH OR EIGHT-INCH (6" OR 8") DIAMETER, UNLESS A LARGER SIZE IS SUPPORTED BY CALCULATIONS
- STORM MANHOLES AND CATCH BASINS SHALL BE PRE-CAST CONCRETE UNITS. FOR STORM SEWERS 21-INCH DIAMETER OR LESS, THE MANHOLE SHALL BE 48-INCH INSIDE DIAMETER. FOR STORM SEWERS 24-INCH THROUGH 42-INCH DIAMETER, THE MANHOLE SHALL BE 60-INCH INSIDE DIAMETER. FOR STORM SEWERS 48-INCH DIAMETER AND LARGER, THE MANHOLE SHALL BE 72-INCH INSIDE DIAMETER.
- RUNGS / STEPS SHALL BE INSTALLED IN MANHOLES UNLESS SPECIFICALLY PROHIBITED.
- THE MINIMUM SIZE STRUCTURE SHALL BE A 2-FOOT DIAMETER PRECAST CONCRETE INLET, UNLESS CONDITIONS WARRANT A DIFFERENT STRUCTURE
- FRAMES AND LIDS SHALL CONFORM TO NEENAH FOUNDRY R-1713 OR APPROVED EQUAL AND THE WORD "STORM" SHALL BE CAST IN THE COVER.
- ALLOWABLE CURB AND PARKWAY CASTINGS FOR INLETS AND CATCH BASINS:
 - WHEN A BARRIER CURB IS PRESENT, USE A NEENAH R-3275 FRAME AND GRATE (FOR 6-6.12 CURB AND GUTTER, WIDEN GUTTER SECTION TO ACCOMMODATE LARGER GRATE).
 - FOR SOME SLOPE CONDITIONS WHEN A BARRIER TYPE CURB IS PRESENT, A NEENAH R-3065-L FRAME AND GRATE MAY BE USED (FOR 6-6.12 CURB AND GUTTER, WIDEN GUTTER SECTION TO ACCOMMODATE LARGER GRATE).
 - WHEN ROLL CURB IS PRESENT, USE A NEENAH R-3501-P FRAME AND GRATE.
 - IN LAWN AREAS, USE BEEHIVE TYPE GRATE, NEENAH R-4340-B.
 - IN LAWN AREAS WHERE A LOT OF TREES ARE PRESENT, IN PUBLIC RIGHT-OF-WAY AND IN DITCHES, USE STOOL TYPE GRATE, NEENAH R-4342.
 - WHEN APPLICABLE IN PARKING LOTS OR LAWN AREAS, USE ROUND GRATE NEENAH R-2502-A.
 - ROUND GRATES WILL NOT BE ALLOWED IN THE STREET. EQUIVALENT SUBSTITUTIONS MAY BE PERMITTED, IF APPROVED BY PUBLIC WORKS.

CITY OF WARRENVILLE SANITARY SEWER SPECIFICATIONS

- ALL SANITARY SEWER AND SANITARY SEWER SERVICE PIPE SHALL BE SDR 26 ASTM D-2241 AND FITTINGS SHALL MEET THE REQUIREMENTS OF ASTM D-3139 OR EQUIVALENT. NOTE: THIS IS A PRESSURE RATED PIPE.
- SANITARY SEWER SERVICES SHALL BE A MINIMUM OF 6-INCHES IN DIAMETER.
- ALL SANITARY SEWERS SHALL BE AIR AND MANDEL TESTED, AND TELEVIEWED, INCLUDING PRIVATE COMMERCIAL LINES BETWEEN INSPECTION MANHOLE AND THE PUBLIC SANITARY SEWER. COPIES OF DVDS AND REPORTS SHALL BE PROVIDED TO THE CITY.
- SANITARY SEWER MANHOLES SHALL HAVE OPENINGS FOR THE PIPE CONNECTIONS CAST INTO THE WALL OF THE STRUCTURE. RUBBER GASKETED COUPLING (BOOT) WITH STAINLESS STEEL BANDS / RETAINERS SHALL BE PER ASTM C-923.
- WHEN CONNECTING TO AN EXISTING MANHOLE, THE HOLE MUST BE CORED AND A RUBBER GASKETED COUPLING (BOOT) WITH STAINLESS STEEL BANDS / RETAINERS SHALL BE PER ASTM C-923. THE BENCH SHALL BE REMOVED AND REPAIRED IF NECESSARY. RUBBER BOOTS/SEALS MUST BE USED WHERE PIPES ENTER MANHOLES. THE INTERNAL CONNECTION SHALL BE DRESSED UP WITH NON-SHRINK HYDRAULIC CEMENT, HYDRAULIC CEMENT, MORTAR, AND CONCRETE MUST BE OF THE STRENGTH AND WATER-TIGHTNESS QUALITY AS SPECIFIED IN THE ASTM STANDARDS
- WHEN CONNECTING A NEW SANITARY SERVICE TO AN EXISTING SANITARY SEWER MAIN WITHOUT AN EXISTING WYE, CONTACT PUBLIC WORKS TO DETERMINE WHICH ONE OF THE TWO FOLLOWING METHODS SHALL BE USED:
 - A SECTION OF THE MAIN SHALL BE CUT OUT TO INSTALL A NEW WYE. CONNECTION BETWEEN THE EXISTING SANITARY SEWER AND THE NEW WYE SHALL BE MADE WITH NON-SHEAR MISSION COUPLINGS WITH TWO STAINLESS STEEL BANDS TO A POINT WHERE THE COUPLING CANNOT SHIFT.
 - CORE THE EXISTING MAIN AND MAKE THE CONNECTION WITH AN INSERT TEE CONNECTION OR AN APPROVED EQUAL
- SANITARY MANHOLES SHALL BE PRE-CAST CONCRETE UNITS. FOR SANITARY SEWERS 18-INCH DIAMETER OR LESS, THE MANHOLE SHALL BE 48-INCH INSIDE DIAMETER. FOR SANITARY SEWERS 21-INCH DIAMETER AND LARGER, THE MANHOLE SHALL BE 60-INCH INSIDE DIAMETER.
- FRAMES AND LIDS SHALL CONFORM TO NEENAH FOUNDRY R-7113 OR APPROVED EQUAL OR OTHERWISE NOTED IN PLANS AND THE WORD "SANITARY" SHALL BE CAST IN THE COVER. THE LID SHALL BE A SELF- SEALING SOLID LID WITH WATERTIGHT GASKET AND CONCEALED PICKHOLE. ANY MANHOLE WITHIN A FLOODPLAIN SHALL HAVE A WATERTIGHT, BOLT-DOWN FRAME AND LID. NEENAH R-1916-F1 OR APPROVED EQUAL.
- ALL COMMERCIAL BUILDINGS SHALL HAVE AN INSPECTION MANHOLE.
- MANHOLE SECTIONS AND ADJUSTING RINGS SHALL BE SEALED WITH BUTYL ROPE.
- SANITARY MANHOLES SHALL HAVE A POURED CONCRETE BENCH.
- RUNGS / STEPS SHALL BE INSTALLED IN MANHOLES UNLESS SPECIFICALLY PROHIBITED.
- EXTERNAL CHIMNEY SEALS AND MACWRAP WILL BE REQUIRED WITH ALL SANITARY MANHOLES. THE FRAME, CHIMNEY, AND TOP " LIP" OF THE CONE SECTION SHALL BE REQUIRED TO BE SEALED WITH A CHIMNEY SEAL. THIS SHOULD BE OBSERVED BY THE CITY PRIOR TO BACKFILLING.
- NO GROUND WATER WILL BE ALLOWED TO ENTER THE SANITARY SEWER DURING OR AFTER CONSTRUCTION.
- NO MORE THAN TWELVE INCHES (12") OF ADJUSTING RINGS ARE ALLOWED.

STANDARD CITY OF WARRENVILLE EROSION CONTROL NOTES

- SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSTALLED AND FUNCTIONAL BEFORE THE SITE IS OTHERWISE DISTURBED. ALL RUNOFF FROM DISTURBED AREAS SHALL BE FILTERED BY SILT FENCE. IN ADDITION TO SILT FENCE, DISTURBED AREAS DRAINING MORE THAN ONE ACRE BUT FEWER THAN FIVE ACRES SHALL INCORPORATE A TEMPORARY SEDIMENT TRAP AT THE OUTFALL AND DISTURBED AREAS DRAINING MORE THAN FIVE ACRES SHALL INCORPORATE A TEMPORARY SEDIMENT BASIN AT THE OUTFALL.
- IF A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN THREE DAYS, IT SHALL BE SURROUNDED BY SILT FENCE. IF A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN 7 DAYS, IT SHALL BE PROTECTED WITH TEMPORARY SEEDING.
- ALL FLARED END SECTIONS SHALL BE PROTECTED BY SEDIMENT TRAPS AND/OR PERFORATED RISER PIPES UNTIL GROUND COVER HAS BEEN ESTABLISHED. FILTER FABRIC OR FILTER BASKETS SHALL BE INSTALLED UNDER ALL INLET AND CATCH BASIN GRATES AND SHALL BE MAINTAINED UNTIL GROUND COVER HAS BEEN ESTABLISHED.
- WATER PUMPED FROM THE SITE SHALL BE FILTERED THROUGH THE USE OF A SILT BAG ON THE END OF THE DISCHARGE HOSE.
- A SPECIFIC AREA SHALL BE DESIGNATED AS A CONCRETE WASH LOCATION AND SHALL BE SURROUNDED BY SILT FENCE.
- ALL SOIL, MUD AND CONSTRUCTION DEBRIS WASHED, TRACKED OR OTHERWISE DEPOSITED ON STREET PAVEMENT SHALL BE REMOVED IMMEDIATELY AND A WASH-DOWN FACILITY SHALL BE PROVIDED FOR ALL CONSTRUCTION VEHICLES LEAVING THE SITE.
- VEHICULAR ACCESS TO THE SITE SHALL BE RESTRICTED TO A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE. THE TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED BEFORE THE START OF CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL THE PERMANENT DRIVEWAY IS INSTALLED
- SEED WITH MULCH OR EROSION BLANKET, OR SOO, SHALL BE PLACED ON ALL DISTURBED AREAS WITHIN 7 DAYS OF TOP SOIL PLACEMENT AND FINAL GRADING. SILT FENCE SHALL REMAIN IN PLACE UNTIL A HEALTHY STAND OF GRASS HAS BEEN ESTABLISHED.

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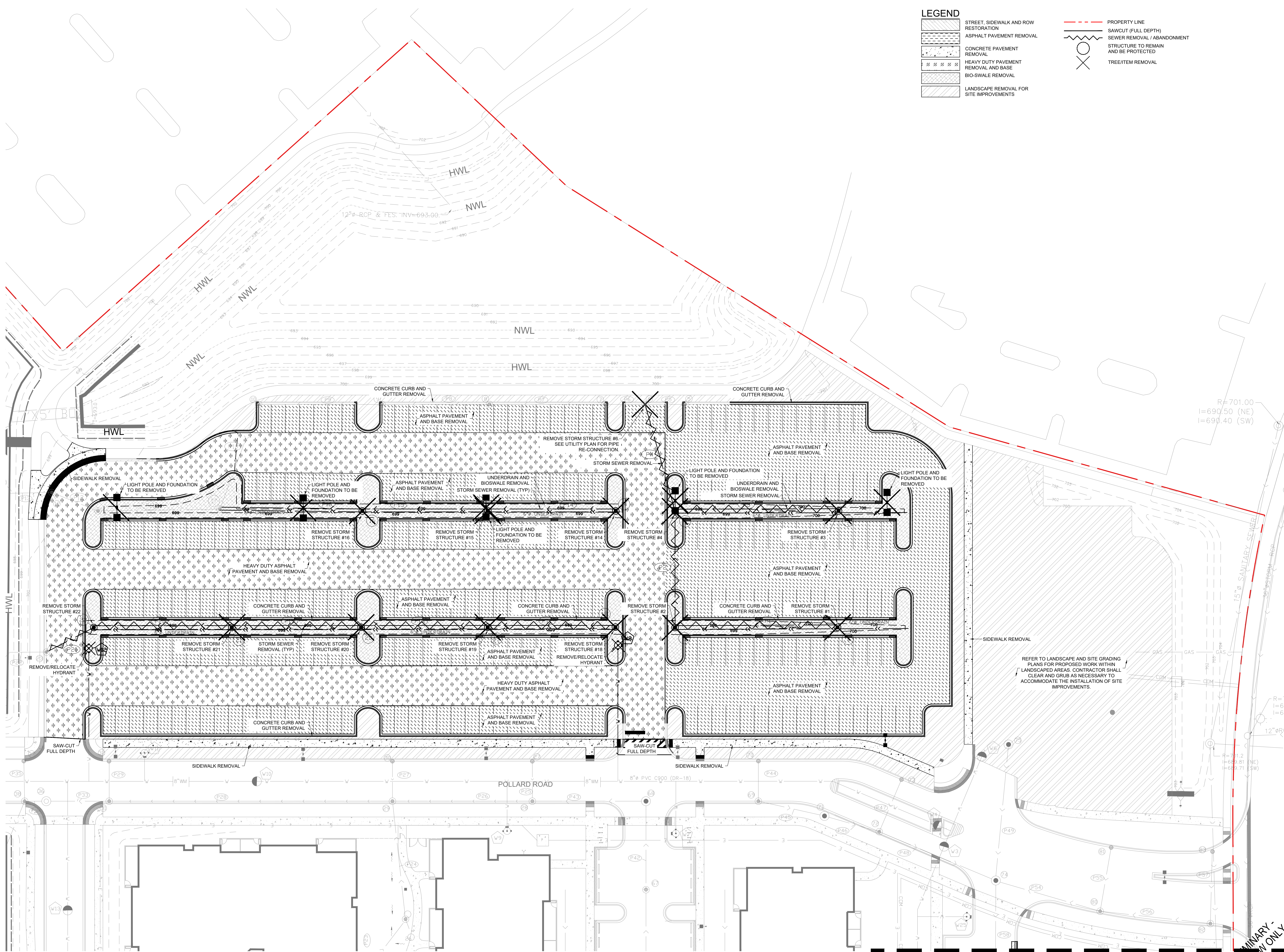


SMP Projects, PLLC
3030 Fullerton Pkwy, Chicago, IL 60614
312.822.0197

SHEET NO. **C-000**
PROJECT NAME: **RIVER VIEW WEST**
PROPOSED 5 STORY BUILDING
113 D.O.U. WITH GARAGE
WARRENVILLE, ILLINOIS
OWNER: **CANTERA RESIDENCES, LLC**
FOR REVIEW ONLY. NOT FOR CONSTRUCTION.

DATE: 2014-09-18
SHEET NAME: General Notes

- PRELIMINARY -
FOR REVIEW ONLY

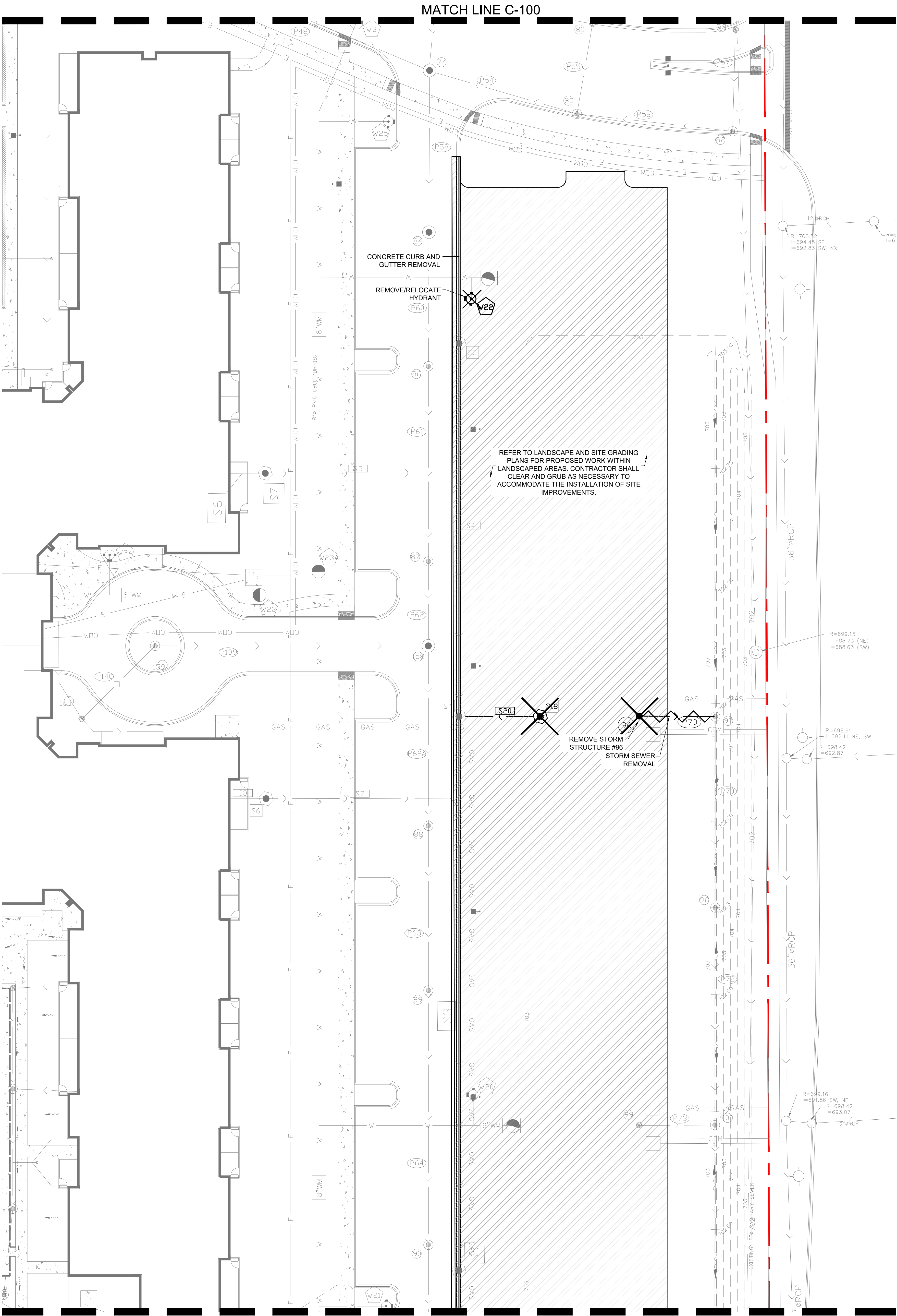


- LEGEND**
- STREET, SIDEWALK AND ROW RESTORATION
 - ASPHALT PAVEMENT REMOVAL
 - CONCRETE PAVEMENT REMOVAL
 - HEAVY DUTY PAVEMENT REMOVAL AND BASE
 - BIO-SWALE REMOVAL
 - LANDSCAPE REMOVAL FOR SITE IMPROVEMENTS

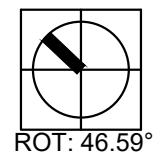
- PROPERTY LINE
- SAWCUT (FULL DEPTH)
- SEWER REMOVAL / ABANDONMENT
- STRUCTURE TO REMAIN AND BE PROTECTED
- TREE/ITEM REMOVAL

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Civil Engineer SMP PROJECTS Landscape Architects & Civil Engineers	
SMP Projects, PLLC 303 W. Fullerton Pkwy, Chicago, IL 60614 312.822.0797	
CERTIFICATION: I, the undersigned, certify that I am a duly Licensed Professional Engineer in the State of Illinois, No. 042-000000, and that I am the Engineer of Record for this project.	
PROJECT NAME: RIVER VIEW WEST PROPOSED 5 STORY BUILDING 113 D.U. WITH GARAGE	OWNER: CANTERA RESIDENCES, LLC 1000 North Dearborn Street, Suite 1000, Chicago, IL 60610
DATE: 2024-03-18 2024-03-18 2024-03-18	REVISIONS: 1. 2024-03-18: Initial Design 2. 2024-03-18: Revised for Preliminary Engineering 3. 2024-03-18: Revised for Preliminary Engineering
SHEET NO.: C-100	DATE: 2024-03-18
SHEET NAME: Site Demolition Plan	

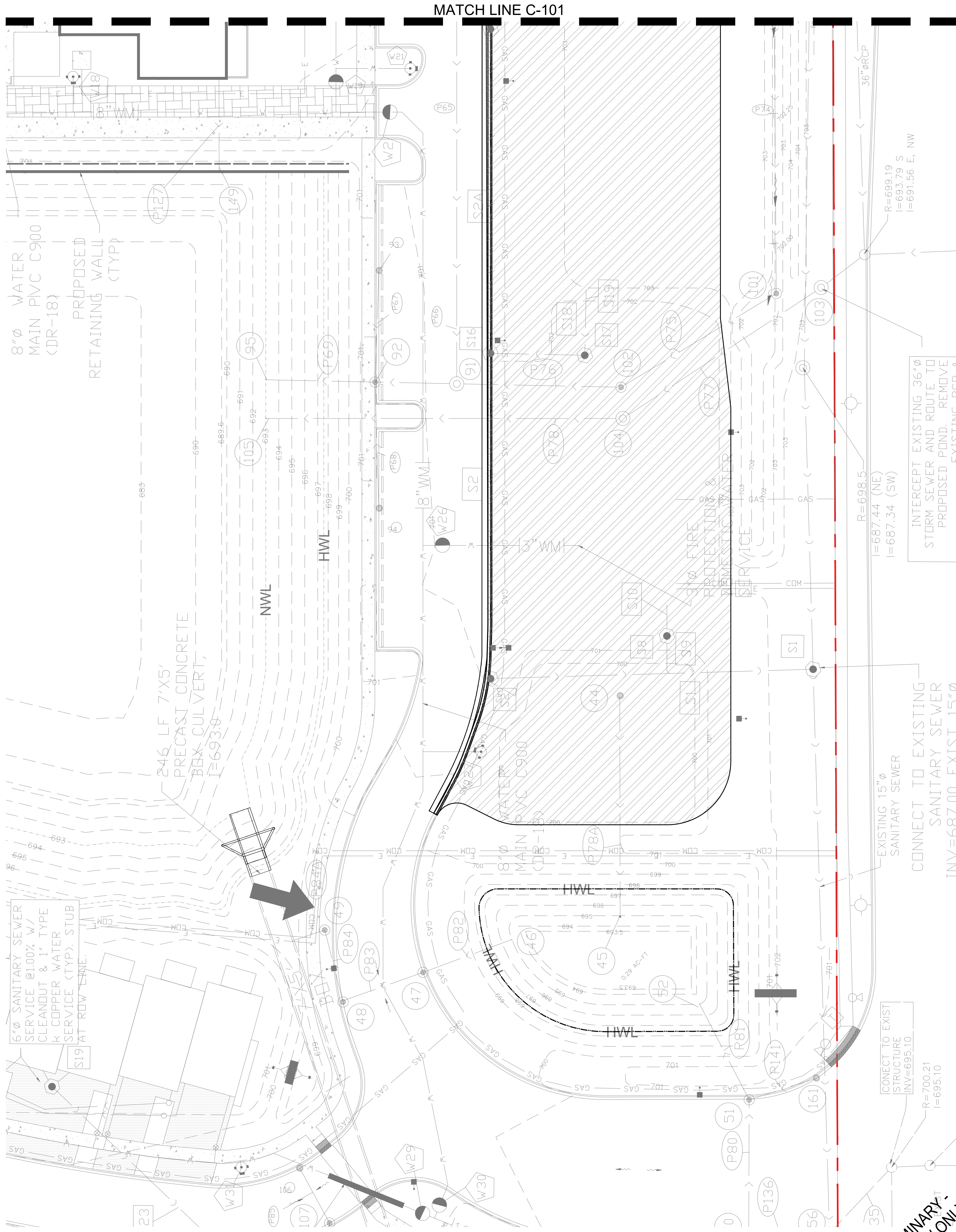
-PRELIMINARY -
FOR REVIEW ONLY



1 SITE DEMOLITION PLAN
1" = 20'-0"



0 10 20 30 40'

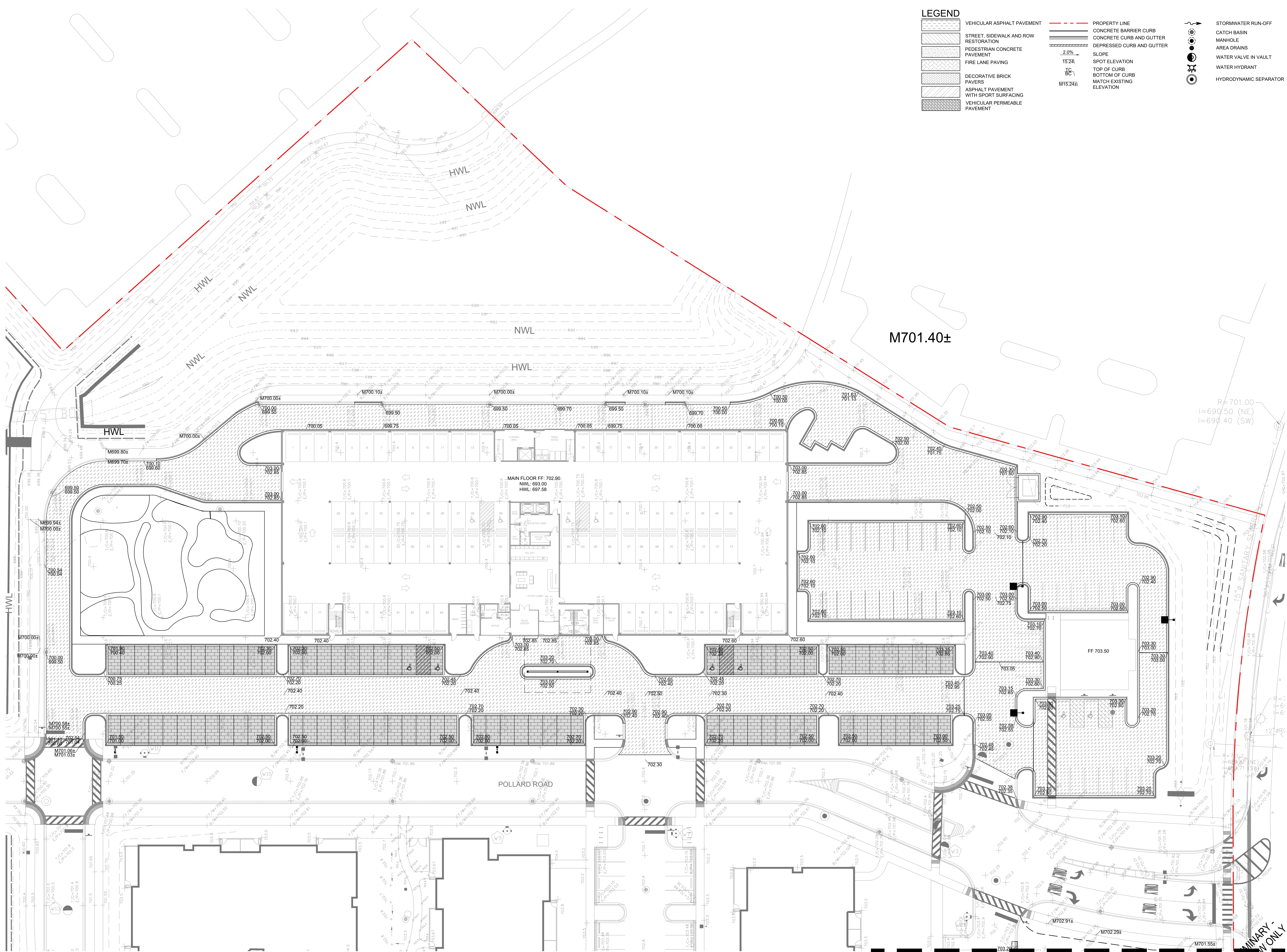


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FOR REVIEW ONLY

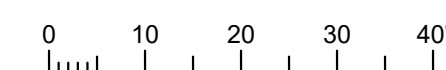
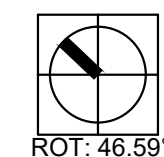
- LEGEND**
- STREET, SIDEWALK AND ROW RESTORATION
 - ASPHALT PAVEMENT REMOVAL
 - CONCRETE PAVEMENT REMOVAL
 - HEAVY DUTY PAVEMENT REMOVAL AND BASE
 - BIO-SWALE REMOVAL
 - LANDSCAPE REMOVAL FOR SITE IMPROVEMENTS

- PROPERTY LINE
- SAWCUT (FULL DEPTH) SEWER REMOVAL / ABANDONMENT
- STRUCTURE TO REMAIN AND BE PROTECTED
- TREE/ITEM REMOVAL

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Civil Engineer SMP PROJECTS Landscape Architects & Civil Engineers	
SMP Projects, PLLC 930 W. Fullerton Pkwy, Chicago, IL 60614 312.622.0797	
PROJECT NAME: RIVER VIEW WEST PROPOSED 5 STORY BUILDING 113 D.U. WITH GARAGE WILSONVILLE, ILLINOIS	CERTIFICATION: No. Date Description 1 2024-04-18 Prepared for Preliminary Engineering 2 2024-04-18 Reviewed for Preliminary Engineering 3 2025-04-18 Re-issued for Preliminary Engineering
SHEET NAME: Site Demolition Plan	OWNER: CANTERA RESIDENCES, LLC 1000 North Park Ave, Suite 100, Chicago, IL 60610
PRINT DATE: 2014-09-18	SHEET NO.: C-101



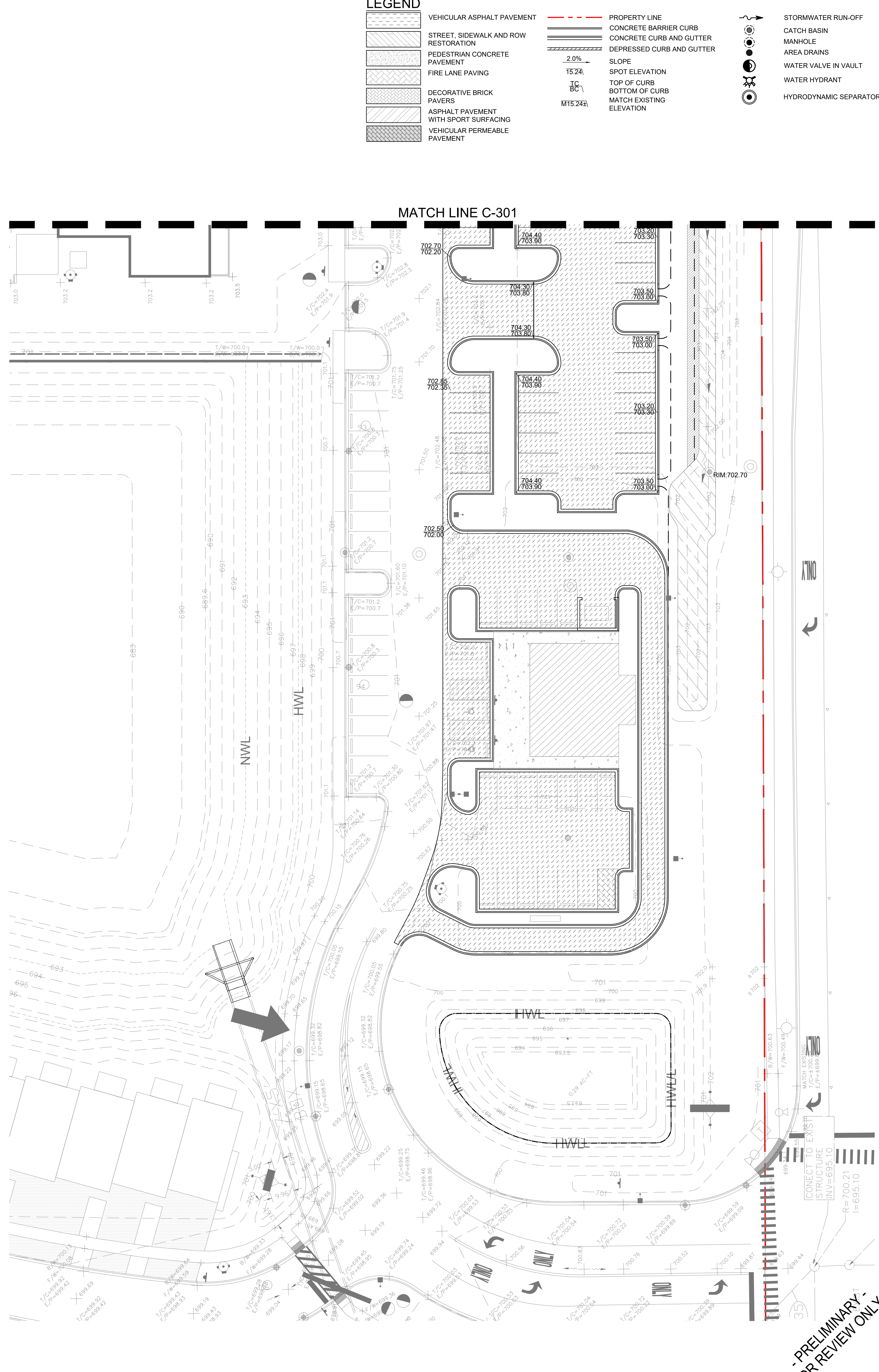
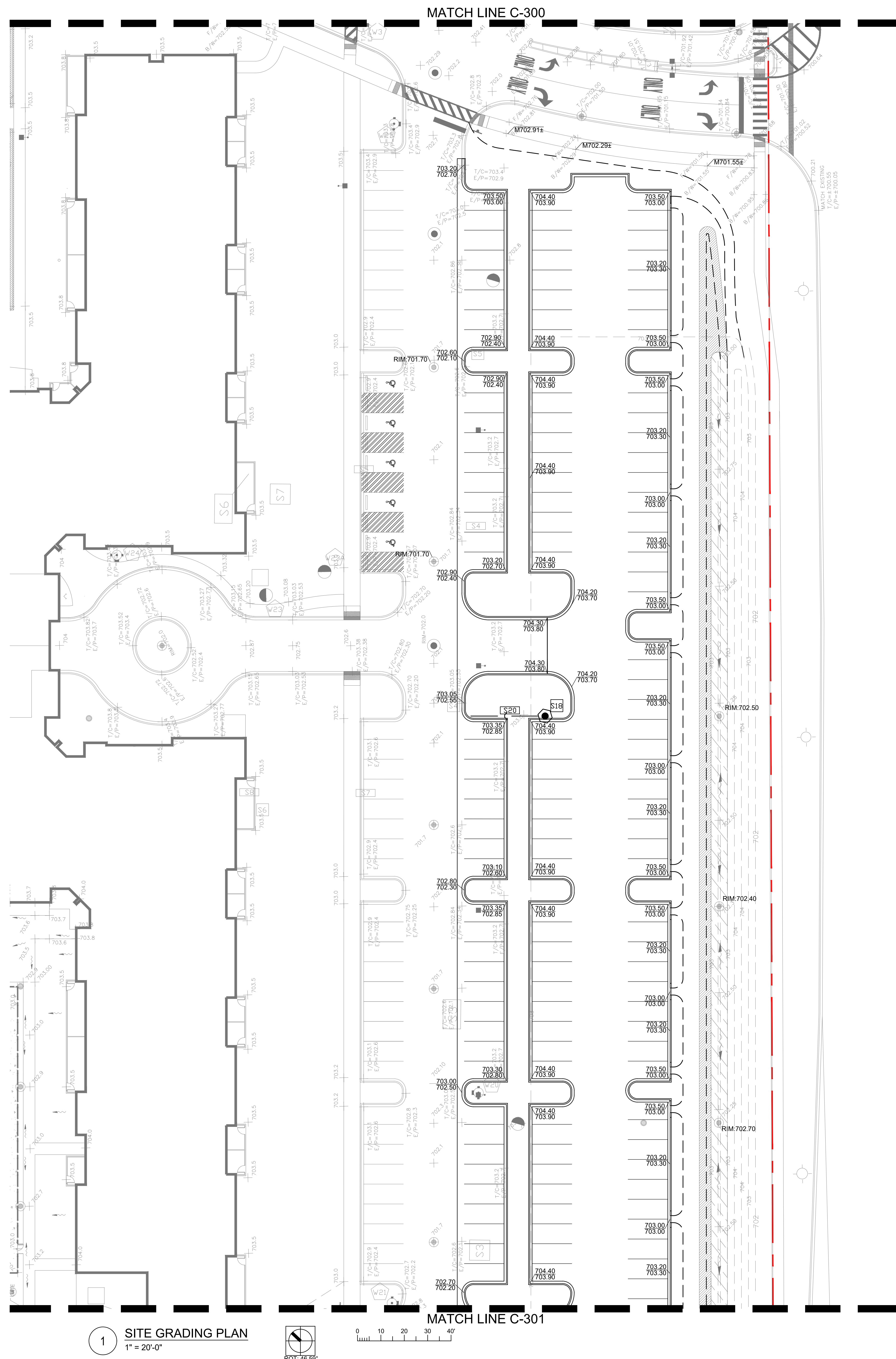
1 SITE GRADING PLAN
1" = 20'-0"



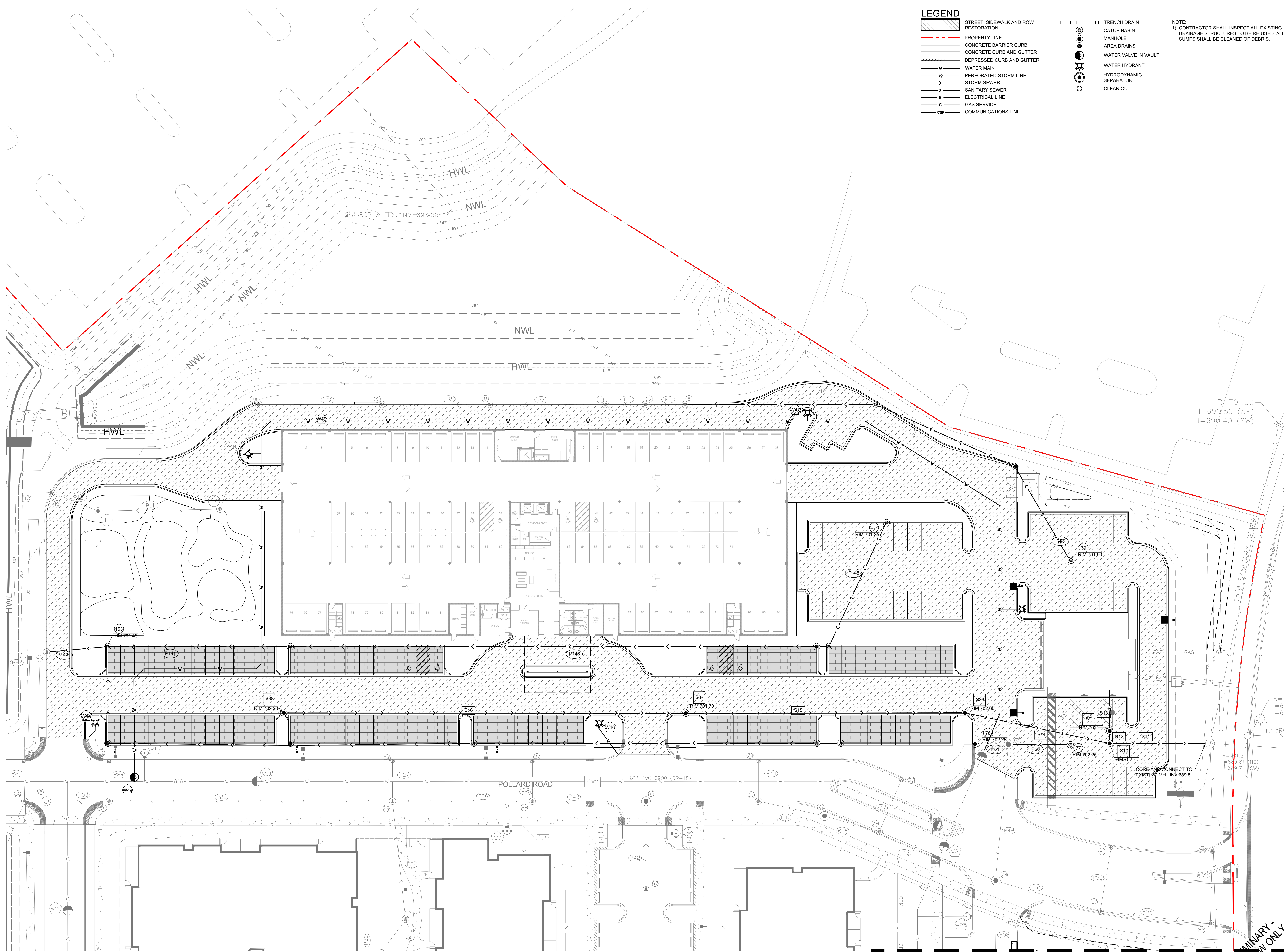
- LEGEND**
- | | | | |
|--|---------------------------------------|--|---------------------------|
| | VEHICULAR ASPHALT PAVEMENT | | PROPERTY LINE |
| | STREET, SIDEWALK AND ROW RESTORATION | | CONCRETE BARRIER CURB |
| | PEDESTRIAN CONCRETE PAVEMENT | | CONCRETE CURB AND GUTTER |
| | FIRE LANE PAVING | | DEPRESSED CURB AND GUTTER |
| | DECORATIVE BRICK PAVERS | | SLOPE |
| | ASPHALT PAVEMENT WITH SPORT SURFACING | | SPOT ELEVATION |
| | VEHICULAR PERMEABLE PAVEMENT | | TOP OF CURB |
| | | | BOTTOM OF CURB |
| | | | MATCH EXISTING ELEVATION |
- STORMWATER RUN-OFF | | CATCH BASIN || | MANHOLE | | AREA DRAINS |
| | WATER VALVE IN VAULT | | WATER HYDRANT |
| | HYDRODYNAMIC SEPARATOR | | |

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Civil Engineer SMP PROJECTS Landscape Architects & Civil Engineers	
SMP Projects, PLLC 1301 S. Fullerton Pkwy, Chicago, IL 60614 312.823.0797	
CERTIFICATION: No. Date Description 1 2024-04-18 Prepared by: [Name] 2 2024-04-18 Reviewed by: [Name] 3 2024-04-18 Rechecked by: [Name]	
PROJECT NAME: RIVER VIEW WEST PROPOSED 5 STORY BUILDING 113 D.U. WITH GARAGE WILMINGTON, ILLINOIS	OWNER: CANTERA RESIDENCES, LLC 1000 N. Lake Shore Drive, Suite 1000, Chicago, IL 60611
SHEET NAME: Site Grading Plan	DATE: 2024-04-18

-PRELIMINARY-
FOR REVIEW ONLY



NO.		PROJECT NAME:		CERTIFICATION:	
C-301		RIVER VIEW WEST		No. / User / Date / Description	
DATE:		2014-09-18		1. 2014-01-08 Issued for Preliminary Engineering	
				2. 2015-01-08 Issued for Preliminary Engineering	
				3. 2015-04-26 Re-issued for Preliminary Engineering	
		RIVER VIEW WEST PARK WITH GARAGE VARGEN, ARIZONA			
		OWNER:			
		CANTERA RESIDENCES, LLC			
		Two Hundred Four, Suite #200, Westfield, IL 60090			
		Selling Plan			

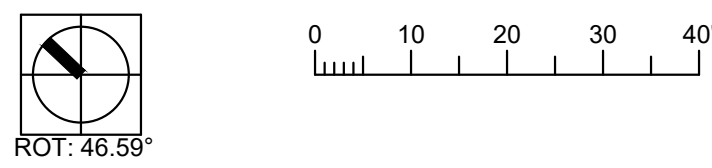


- LEGEND**
- STREET, SIDEWALK AND ROW RESTORATION
 - PROPERTY LINE
 - CONCRETE BARRIER CURB
 - CONCRETE CURB AND GUTTER
 - DEPRESSED CURB AND GUTTER
 - WATER MAIN
 - PERFORATED STORM LINE
 - STORM SEWER
 - SANITARY SEWER
 - ELECTRICAL LINE
 - GAS SERVICE
 - COMMUNICATIONS LINE

- TRENCH DRAIN
- CATCH BASIN
- MANHOLE
- AREA DRAINS
- WATER VALVE IN VAULT
- WATER HYDRANT
- HYDRODYNAMIC SEPARATOR
- CLEAN OUT

NOTE:
1) CONTRACTOR SHALL INSPECT ALL EXISTING DRAINAGE STRUCTURES TO BE RE-USED. ALL SUMPS SHALL BE CLEANED OF DEBRIS.

1 SITE UTILITY PLAN
1" = 20'-0"



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Civil Engineer
SMP PROJECTS
Landscaping Architecture & Civil Engineers

SMP Projects, PLLC
1300 W. Fullerton Pkwy, Chicago, IL 60614
312.822.0797

CERTIFICATION:

No.	Date	Description
1	2024-04-18	Issued for Preliminary Engineering
2	2024-04-18	Revised for Preliminary Engineering
3	2024-04-18	Revised for Preliminary Engineering

PROJECT NAME:
RIVER VIEW WEST
PROPOSED 5 STORY BUILDING
113 D.U. WITH GARAGE
WHEATON, ILLINOIS

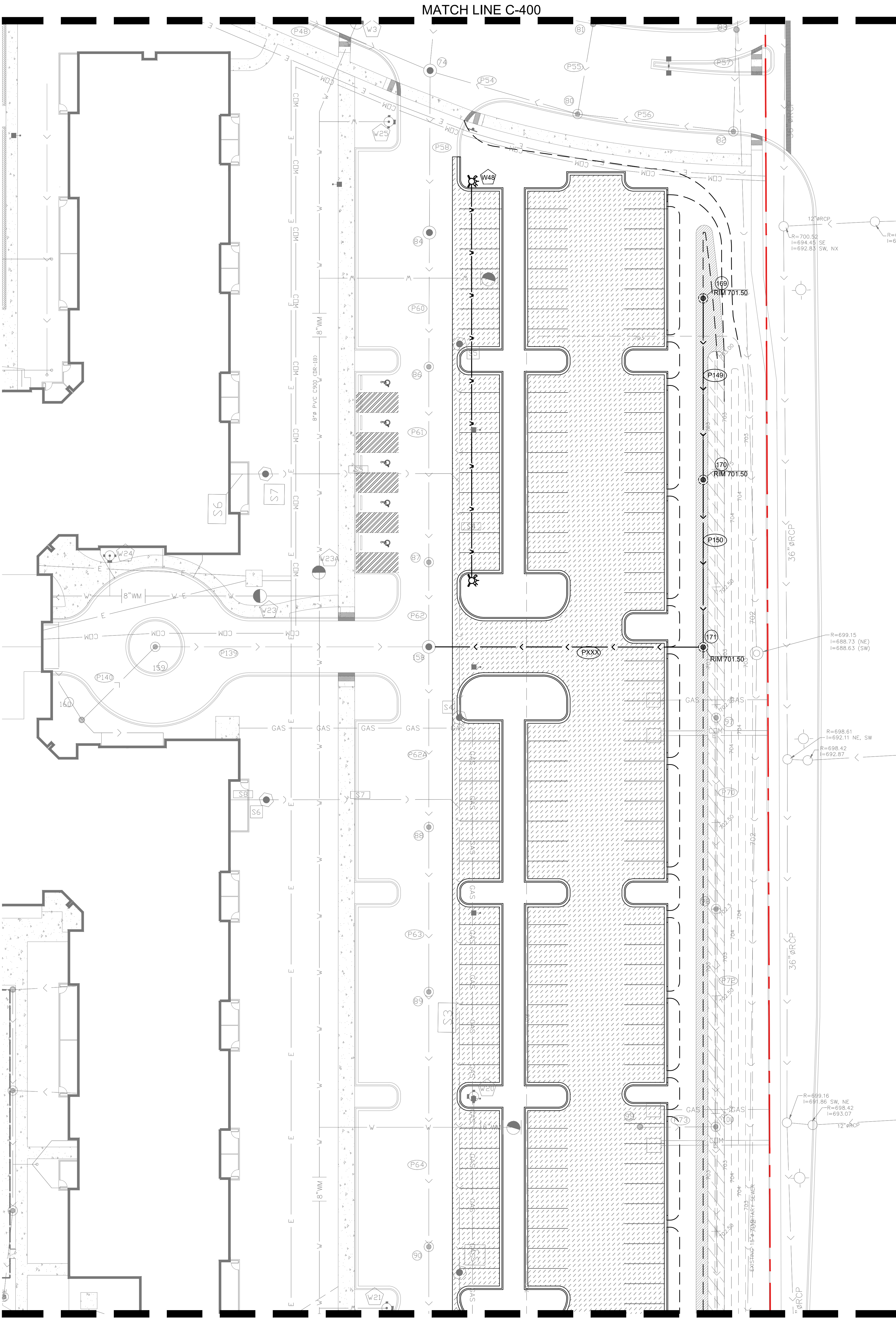
OWNER:
CANTERA RESIDENCES, LLC
1000 N. Lake Shore Drive, Suite 1000, Chicago, IL 60611

SHEET NAME:
Site Utility Plan

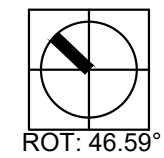
PRINT DATE:
2014-09-18

SHEET NO.:
C-400

-PRELIMINARY-
FOR REVIEW ONLY

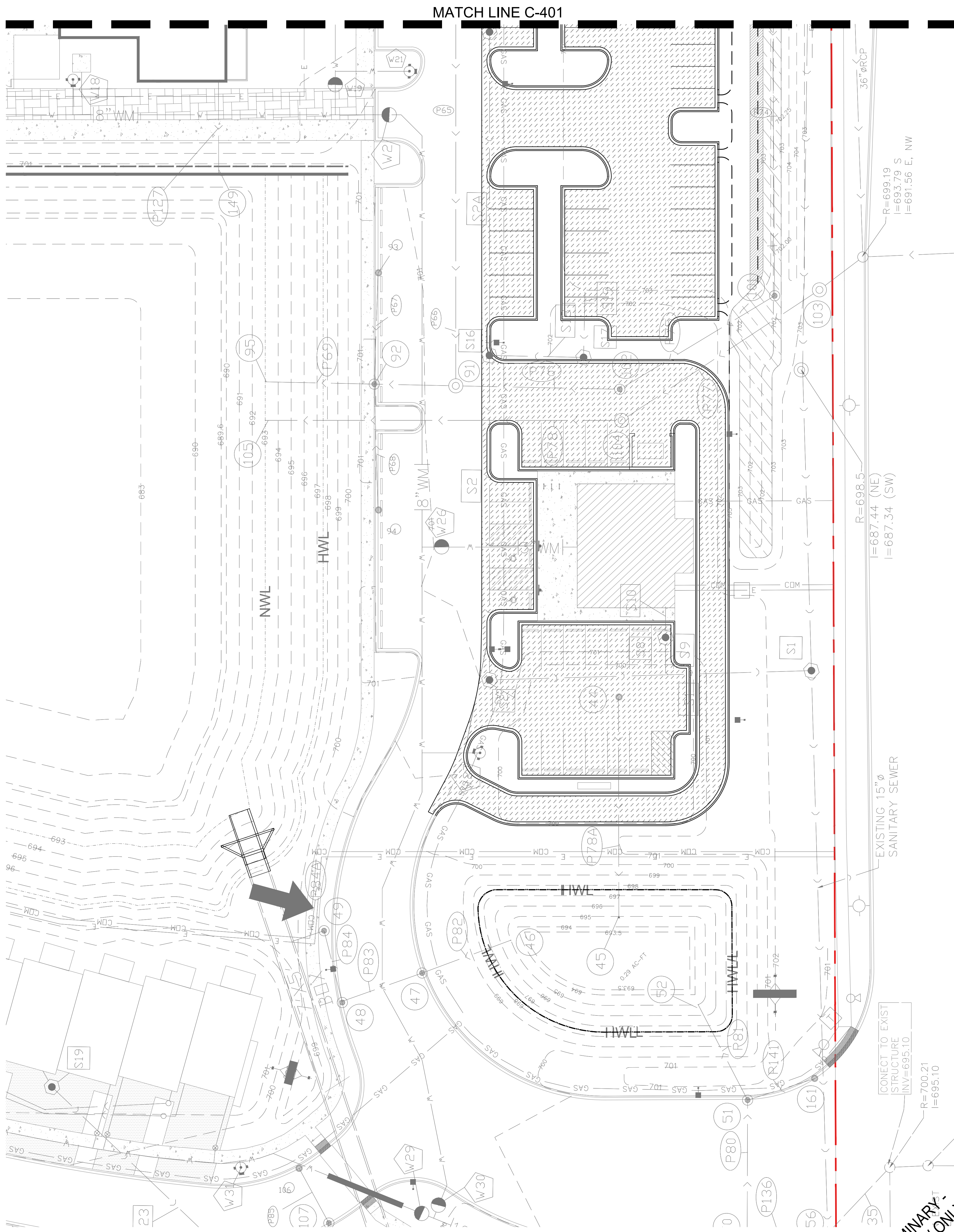


1 SITE UTILITY PLAN
1" = 20'-0"



0 10 20 30 40'

MATCH LINE C-401



MATCH LINE C-400

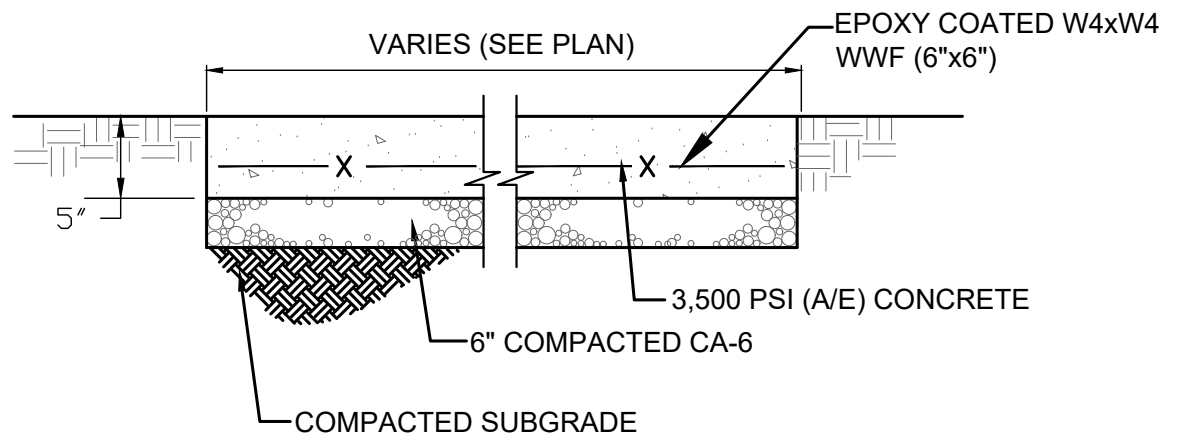
PRELIMINARY
FOR REVIEW ONLY

- LEGEND**
- STREET, SIDEWALK AND ROW RESTORATION
 - PROPERTY LINE
 - CONCRETE BARRIER CURB
 - CONCRETE CURB AND GUTTER
 - DEPRESSED CURB AND GUTTER
 - WATER MAIN
 - PERFORATED STORM LINE
 - STORM SEWER
 - SANITARY SEWER
 - ELECTRICAL LINE
 - GAS SERVICE
 - COMMUNICATIONS LINE

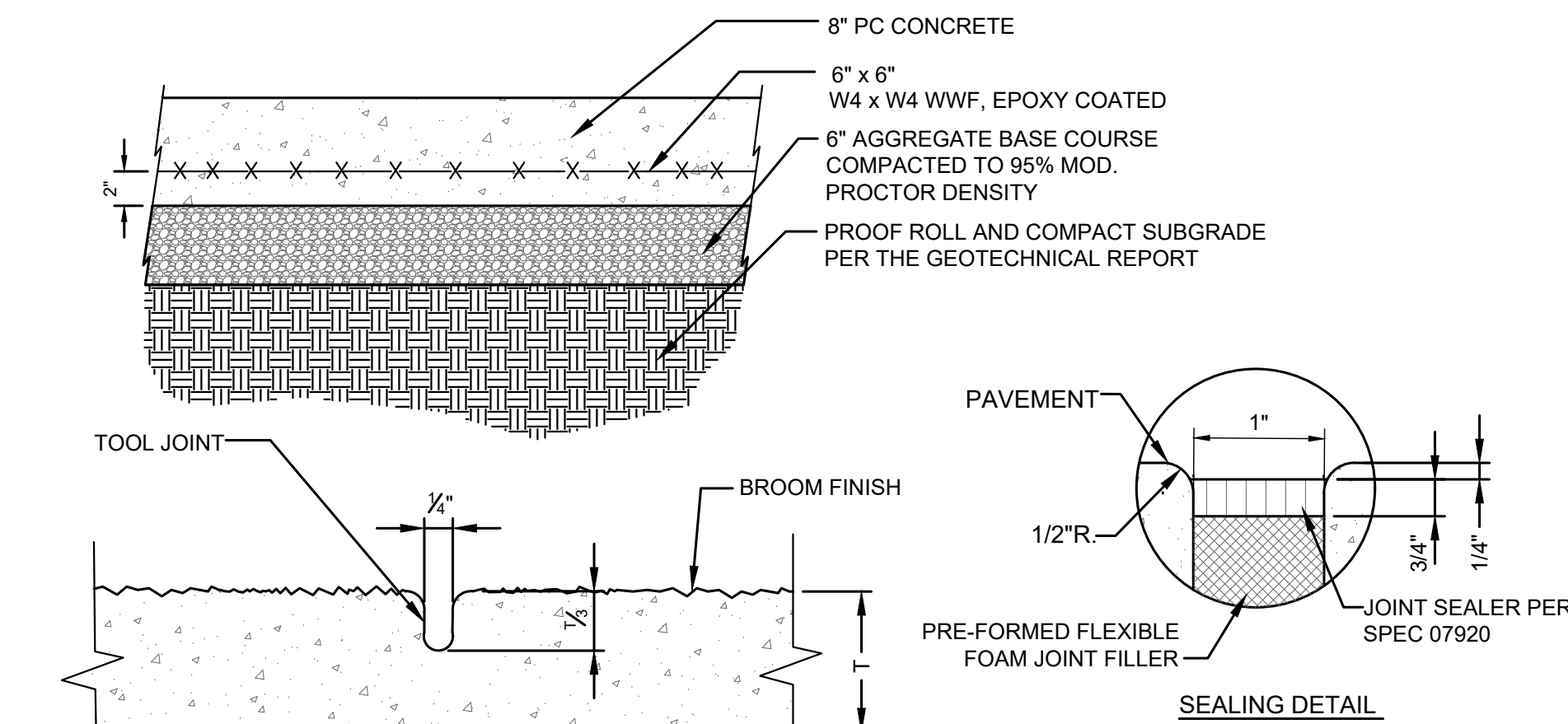
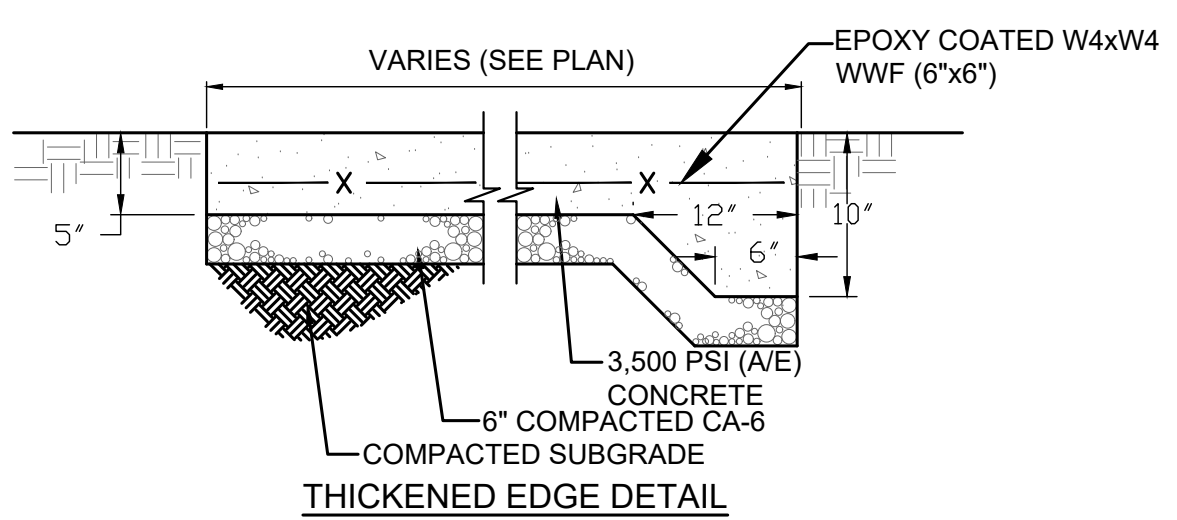
- TRENCH DRAIN
- CATCH BASIN
- MANHOLE
- AREA DRAINS
- WATER VALVE IN VAULT
- WATER HYDRANT
- HYDRODYNAMIC SEPARATOR
- CLEAN OUT

NOTE:
1) CONTRACTOR SHALL INSPECT ALL EXISTING DRAINAGE STRUCTURES TO BE RE-USED. ALL SUMPS SHALL BE CLEANED OF DEBRIS.

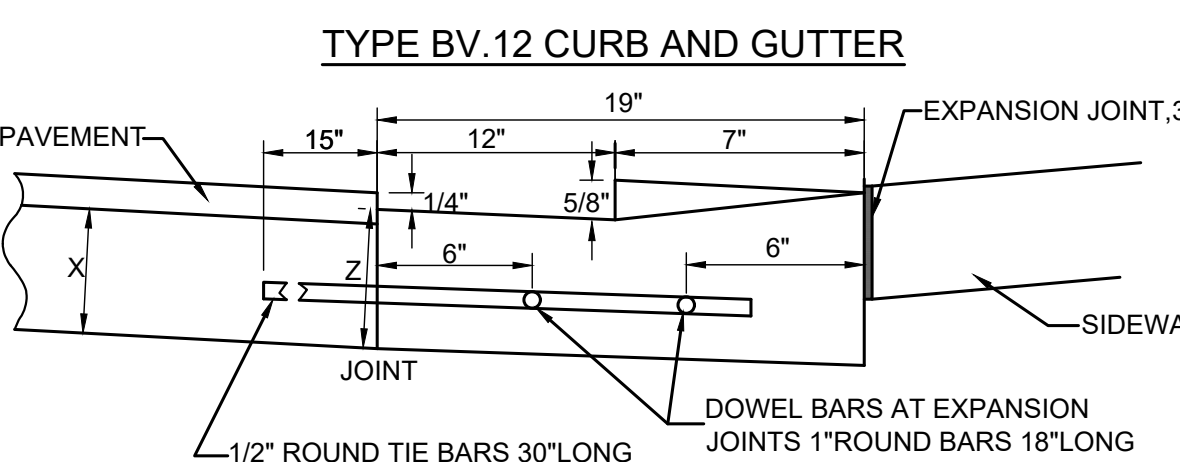
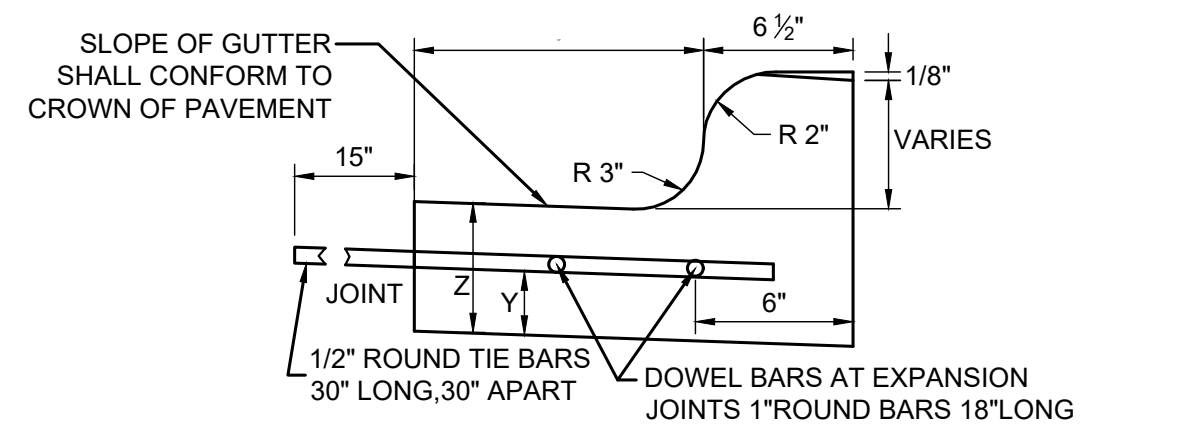
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Civil Engineer SMP PROJECTS Landscape Architects & Civil Engineers	
SMP Projects, PLLC 900 W. Fullerton Pkwy, Chicago, IL 60614 312.822.0797	
CERTIFICATION: No. Date Description 1 2024-04-18 Reviewed for Engineering 2 2024-04-18 Reviewed for Engineering 3 2024-04-18 Reviewed for Engineering	
PROJECT NAME: RIVER VIEW WEST PROPOSED 5 STORY BUILDING 113 D.U. WITH GARAGE MARENGO, ILLINOIS	
OWNER: CANTERA RESIDENCES, LLC 1000 N. Lake Shore Drive, Suite 1000, Chicago, IL 60611	DATE: 2014-09-18
PRINT DATE: 2014-09-18	SHEET NAME: Site Utility Plan



- NOTE:
1. WELDED WIRE FABRIC ONLY USED WITHIN LIMITS OF PROPERTY LINE. CONCRETE FINISH SHALL BE BROOM FINISHED UNLESS OTHERWISE SPECIFIED IN PLANS.
 2. PROVIDE CONTROL JOINTS 5' O.C., UNLESS OTHERWISE SHOWN ON DRAWINGS.
 3. PROVIDE EXPANSION JOINTS 50' O.C., WHERE PAVEMENT ABUTS OTHER PAVEMENTS, CURBS, BUILDINGS, AND UTILITY STRUCTURES AND AS SHOWN ON DRAWING.



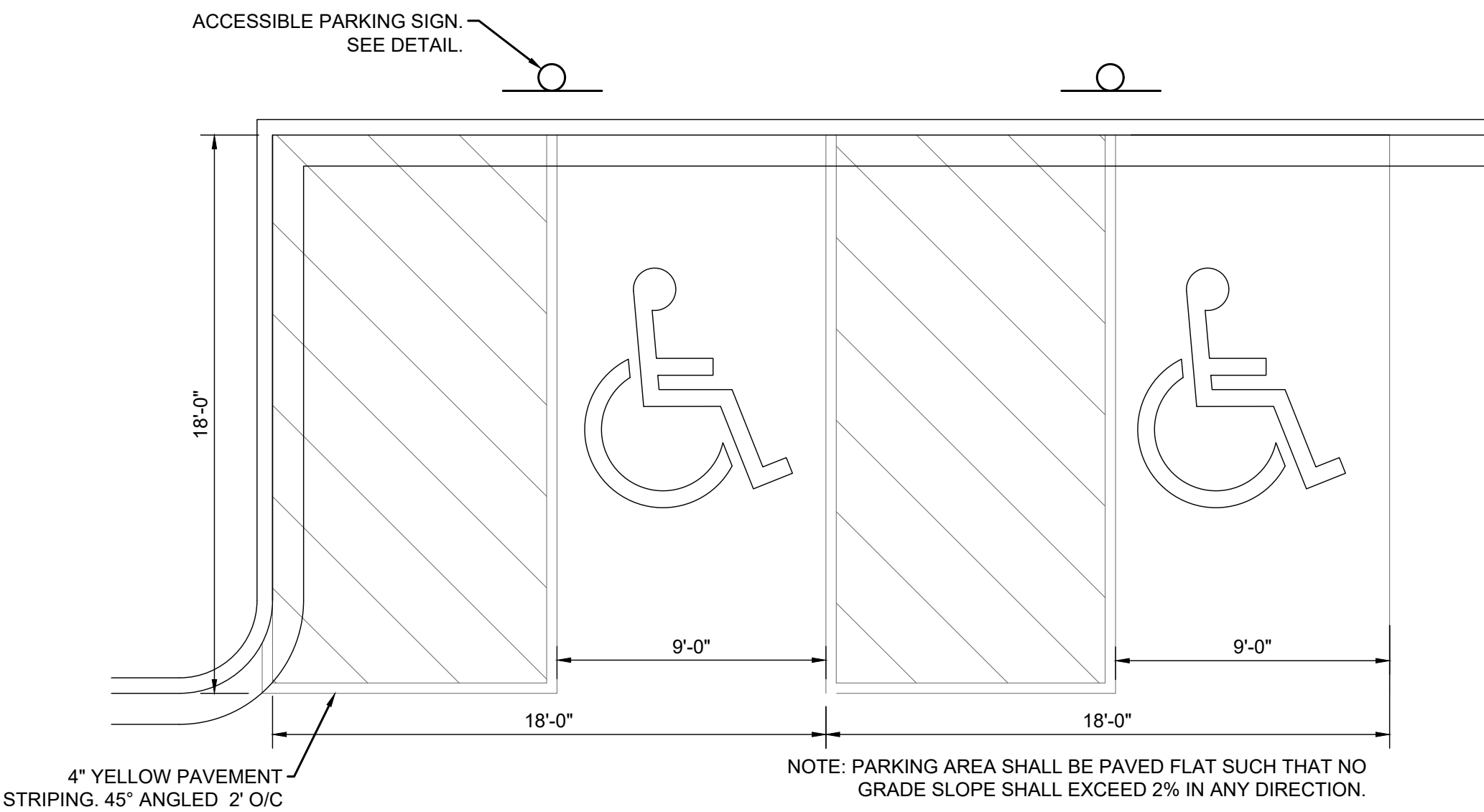
- NOTES:
1. PROVIDE CONTRACTION JOINT EVERY 10' O.C. OR AS NOTED ON PLANS.
 2. PROVIDE EXPANSION JOINT AS NOTED ON PLANS.



- NOTES:
1. TRANSVERSE JOINTS OF A TYPE SIMILAR TO THAT USED IN THE ADJACENT PAVEMENT SHALL BE INSTALLED AND ALIGNED WITH THE JOINTS IN THE ADJACENT PAVEMENT.
 2. 1" THICK EXPANSION JOINTS COMPOSED OF BITUMINOUS PREFORMED JOINT FILLER SHALL BE INSTALLED IN THE CURB AND/OR GUTTER AT POINTS OF CURVATURE AND AT CONSTRUCTION JOINTS.
 3. WHEN CURB & GUTTER IS CONSTRUCTED ADJACENT TO A FLEXIBLE BASE, TRACTION JOINTS SHALL ALSO BE PLACED BETWEEN EXPANSION JOINTS AT DISTANCES NOT EXCEEDING 20 FEET.
 4. ALL TIE BARS SHALL BE CORRUGATED AND ALL DOWEL BARS SHALL BE SMOOTH.
 5. ALL TIE BARS AND DOWEL BARS ARE TO BE EPOXY COATED.

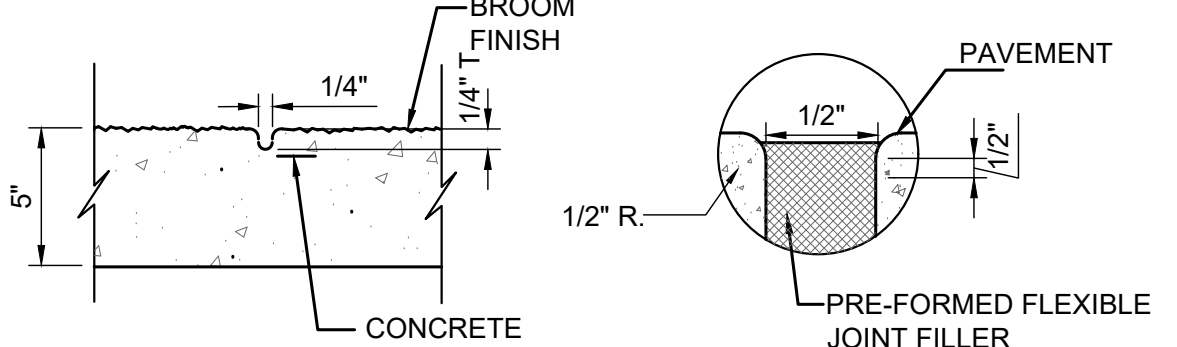
3 CONCRETE CURB AND GUTTER

NTS



8 ADA PARKING LAYOUT AND STRIPING

NTS

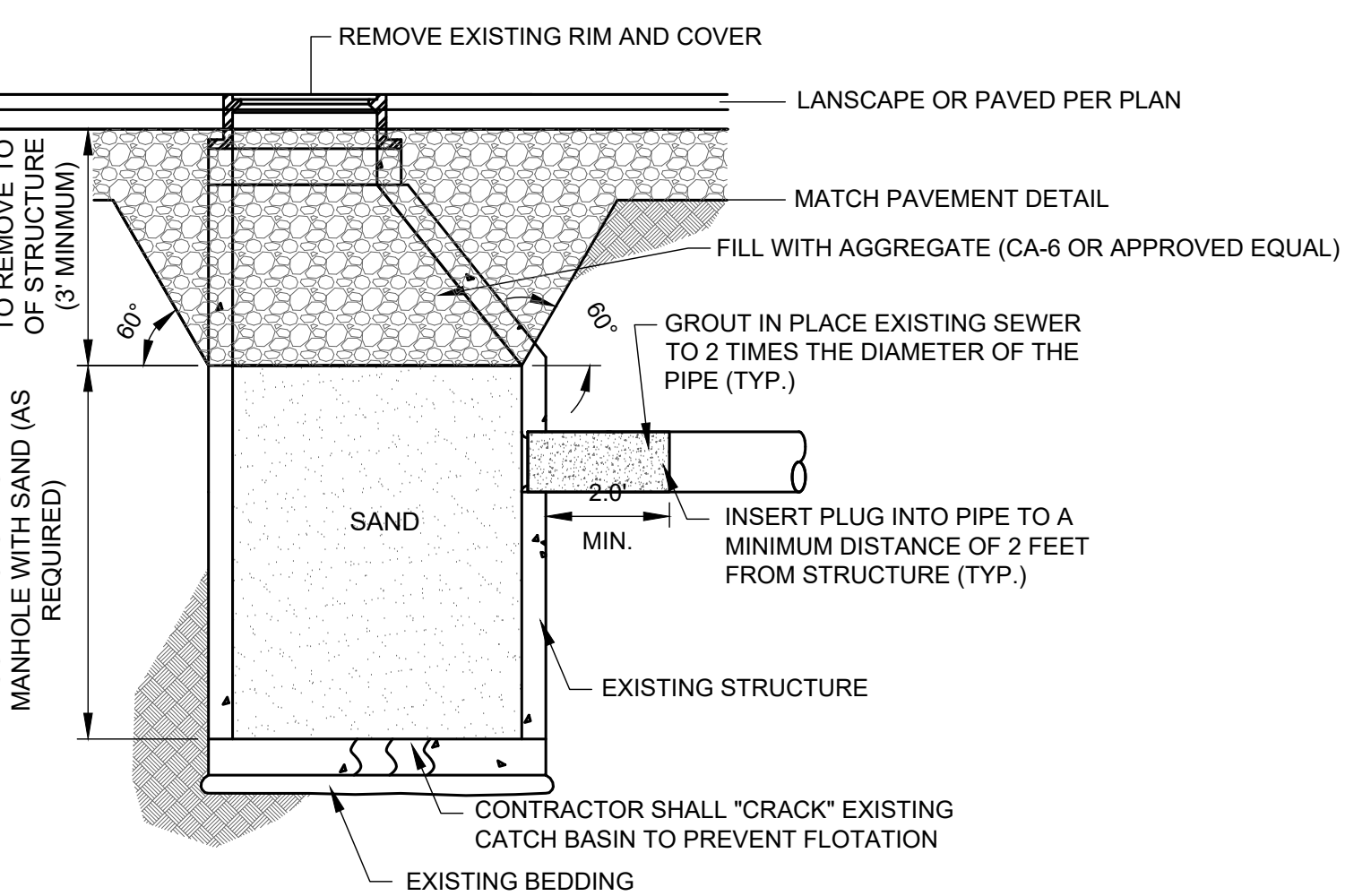


5 STRUCTURE AND PIPE ABANDONMENT

N.T.S.

1 CONCRETE SIDEWALK

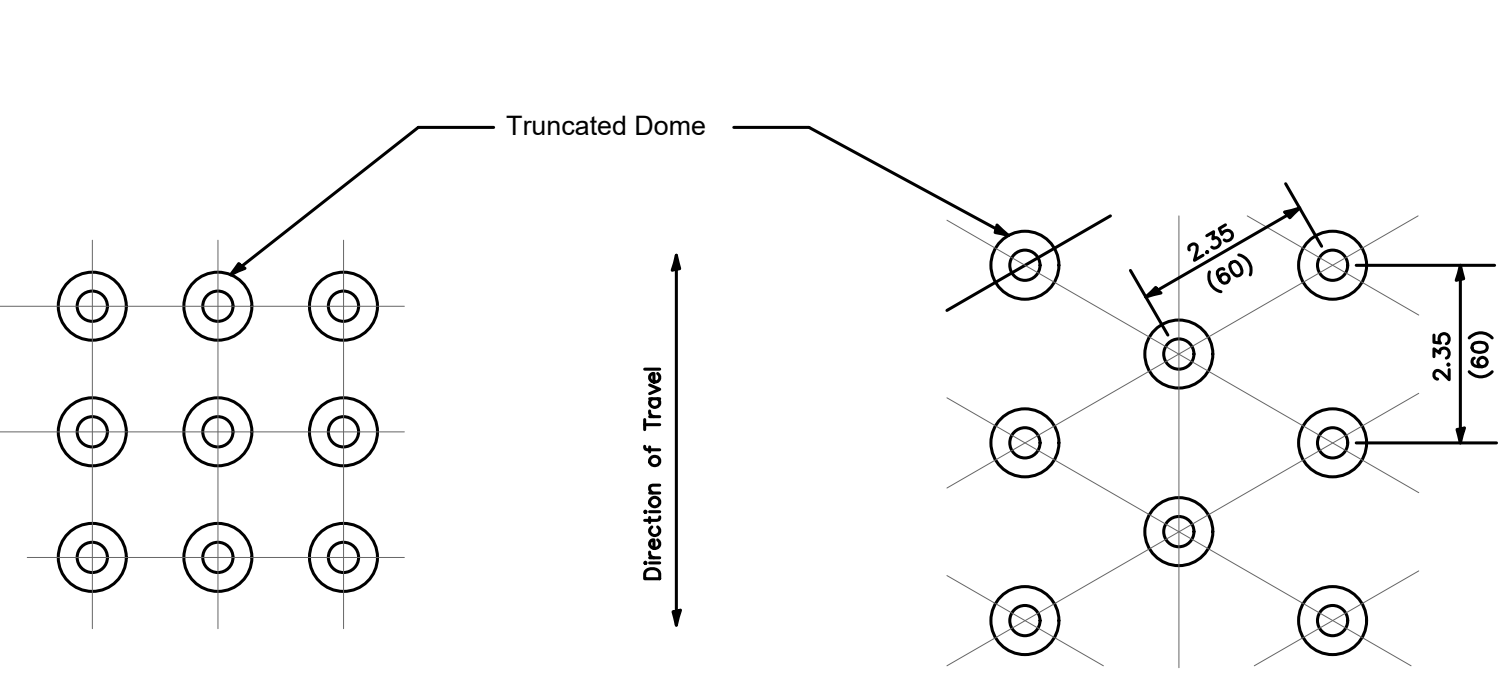
NTS



- NOTES:
1. ABANDONMENT OF THE EXISTING CATCH BASIN / MANHOLE AND PIPING SHALL BE COMPLETED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE OWNER.
 2. ANY MATERIAL SHALL BE REMOVED AND DISPOSED BY THE CONTRACTOR.
 3. THE SAND WILL BE PLACED IN TWELVE INCH LIFTS AND COMPACTED TO A MINIMUM DENSITY OF 95 PERCENT OF STANDARD PROCTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE DENSITY TESTS IF REQUIRED BY THE OWNER.
 4. THE METHOD OF CRACKING THE BOTTOM OF THE MANHOLE SHALL BE APPROVED BY THE CO PRIOR THIS WORK.
 5. VERIFY GROUTED PIPE PRIOR TO FILLING CATCH BASIN / MANHOLE.
 6. GROUT TO BE NON-SHRINK CONCRETE AT LEAST 2-FEET LONG.

5 STRUCTURE AND PIPE ABANDONMENT

N.T.S.

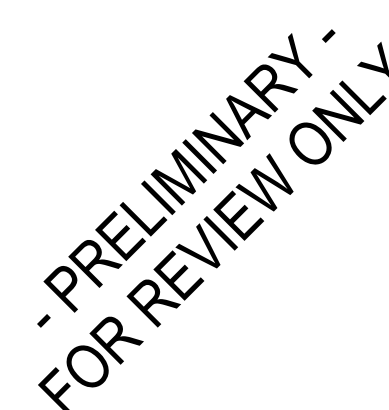
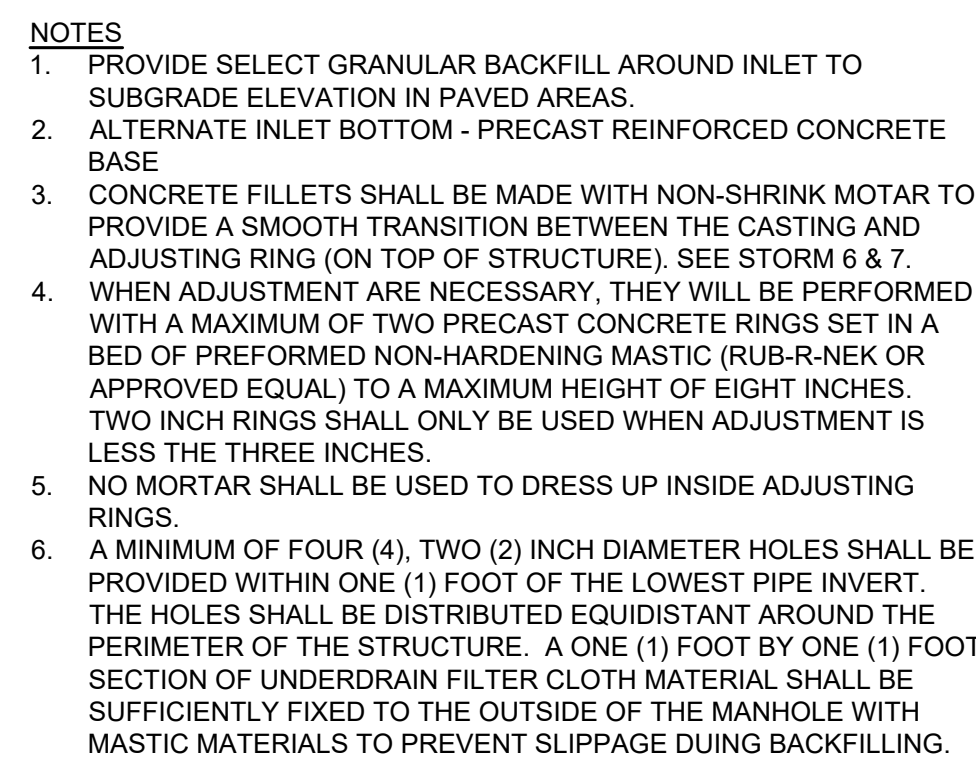
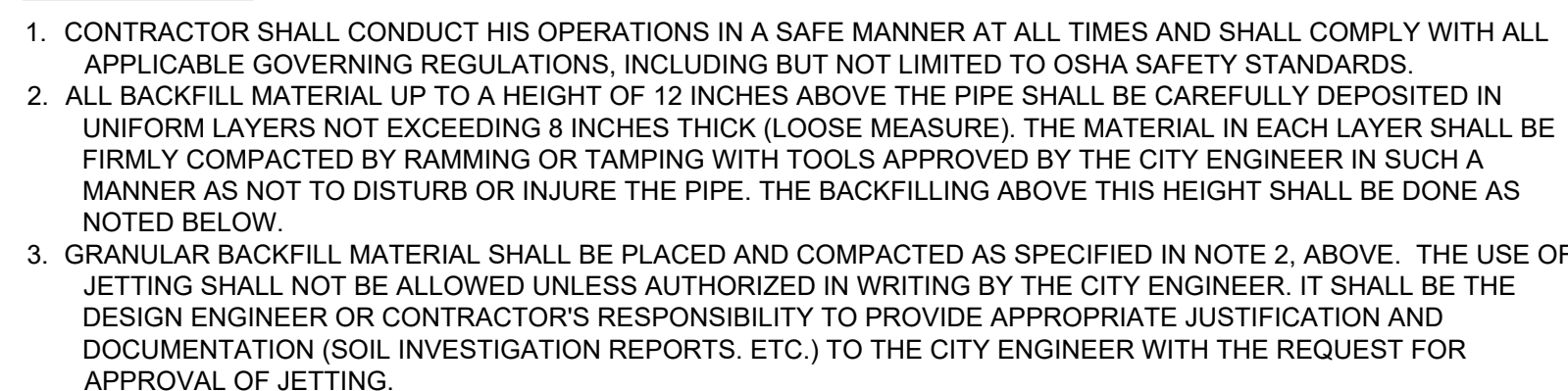


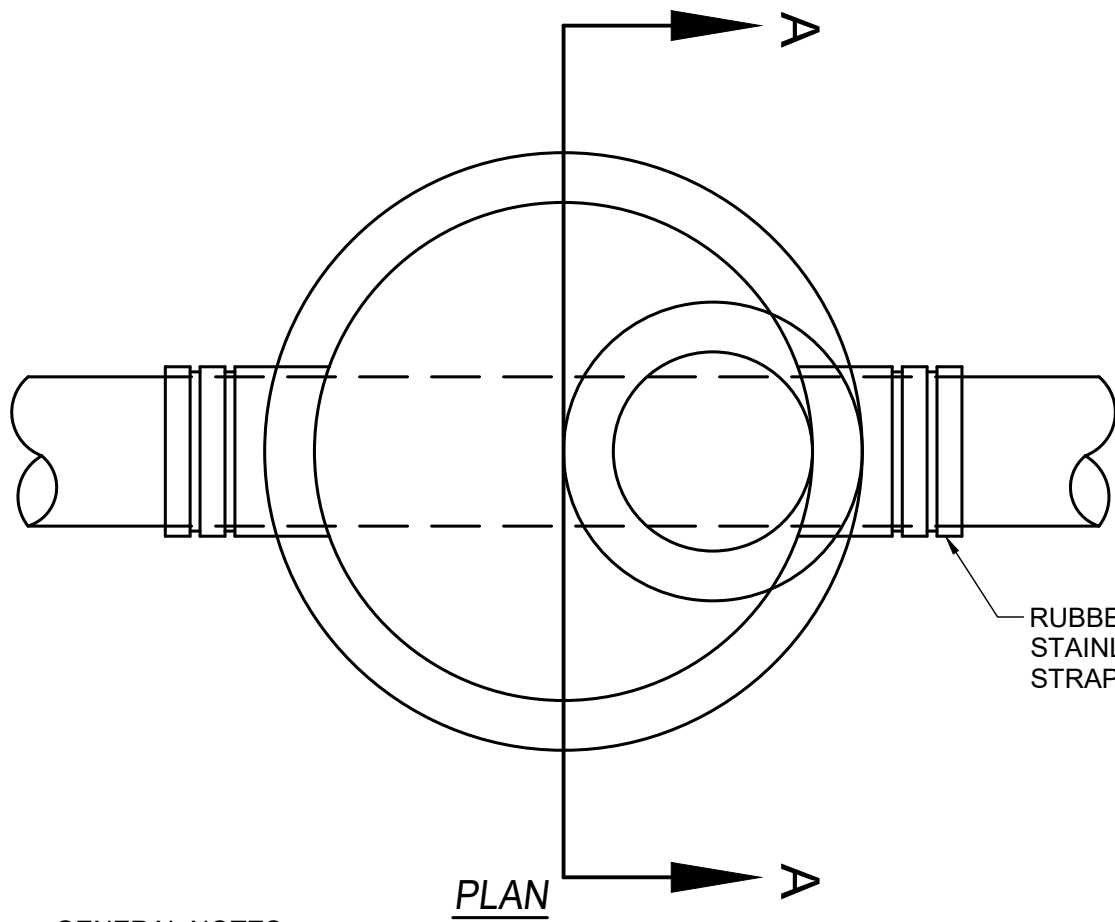
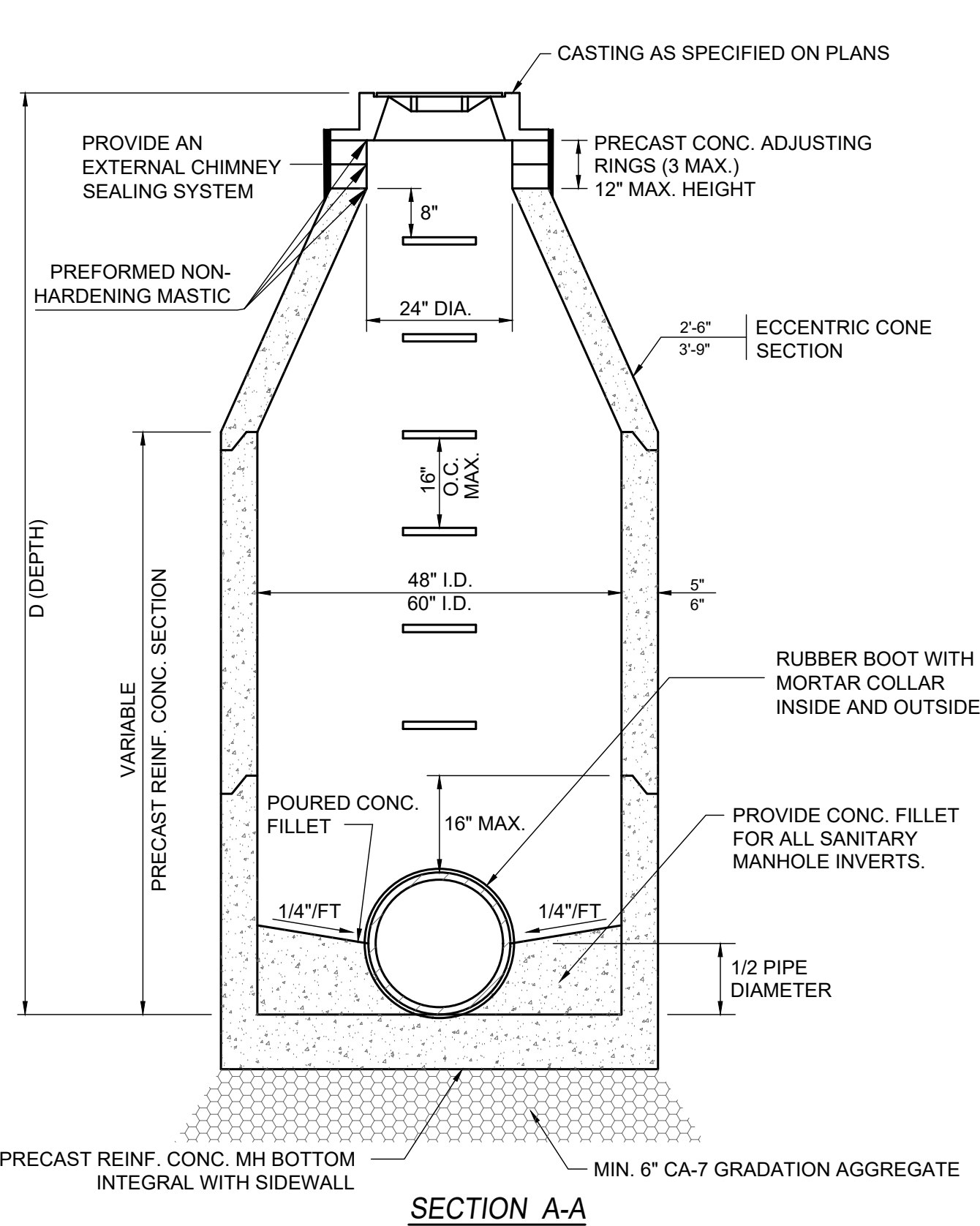
10 DETECTABLE WARNING TILE

NTS

10 DETECTABLE WARNING TILE

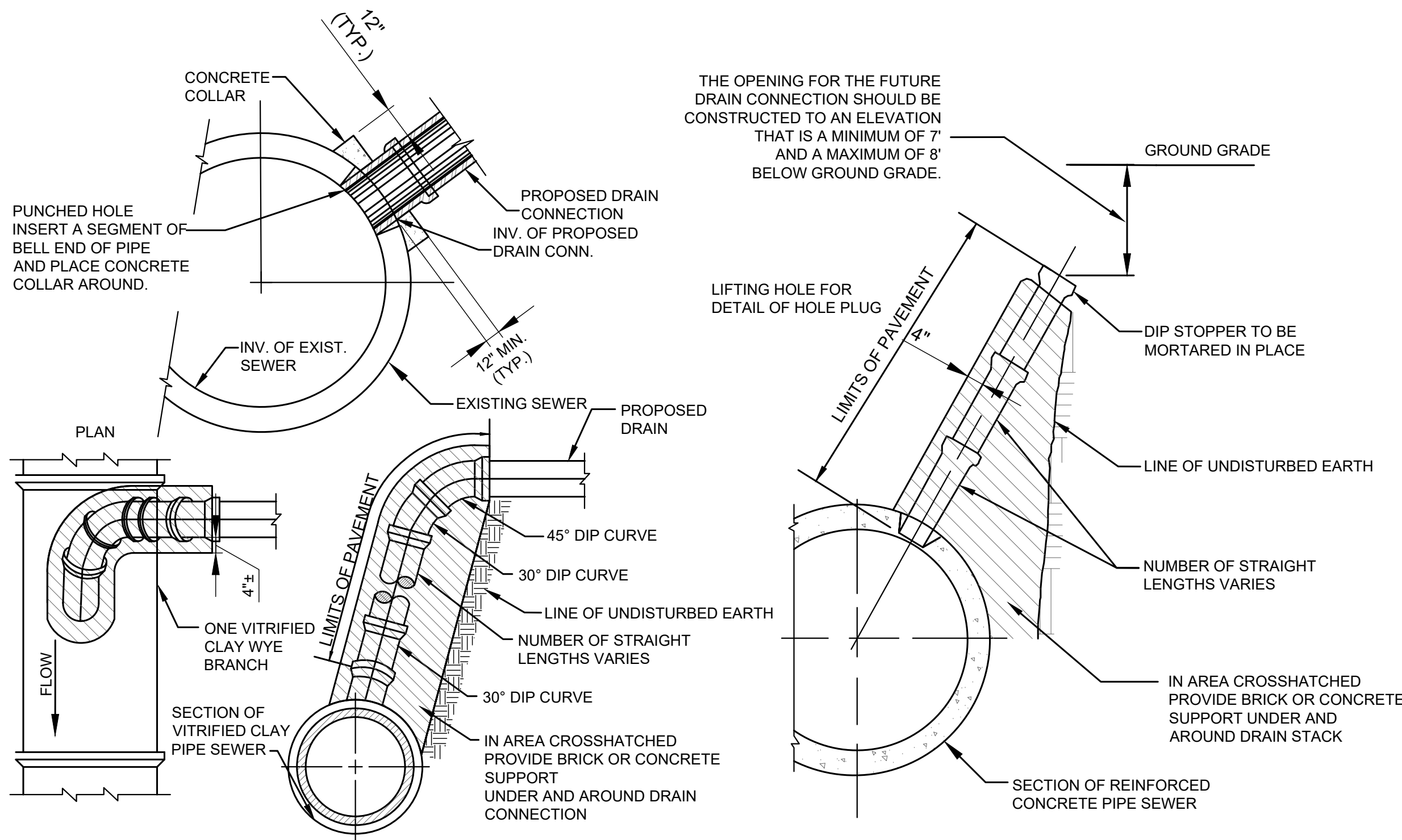
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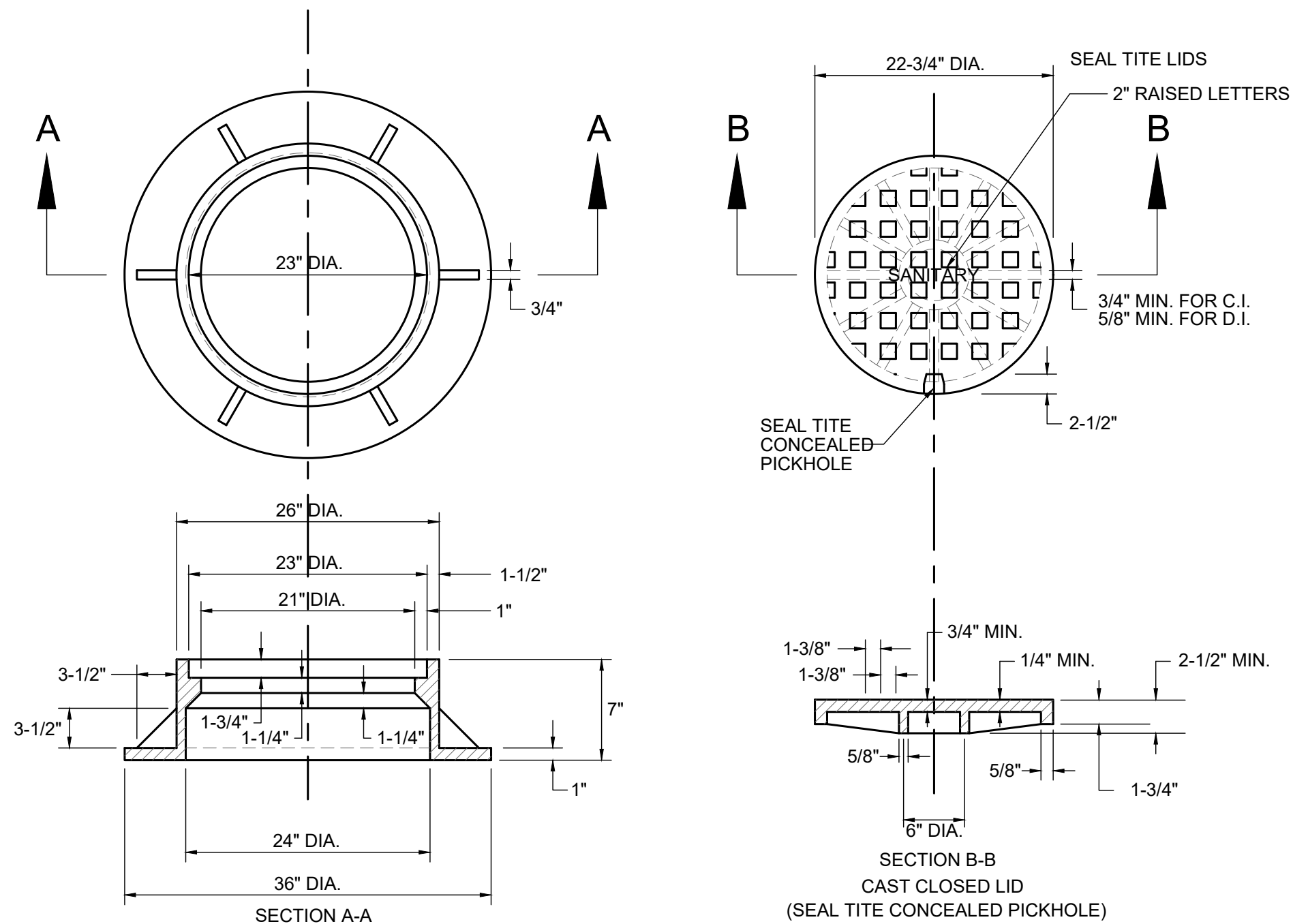


- GENERAL NOTES**
1. PROVIDE PRECAST REINFORCED CONCRETE BARREL AND RISER SECTION CONCRETE BLOCK CONSTRUCTION IS NOT PERMITTED.
 2. PROVIDE SELECT GRANULAR BACKFILL AROUND MANHOLE TO SUBGRADE ELEVATION IN PAVED AREAS. MATERIAL SHALL MEET THE REQUIREMENT OF IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" COARSE AGGREGATE CA-7 GRADATION UP TO 12" FROM THE BOTTOM OF THE PAVEMENT, THEN PLACE CA-6 FROM 12" BELOW THE BOTTOM OF PAVEMENT TO THE TOP OF THE TRENCH, OR AS OTHERWISE DIRECTED BY THE ENGINEER.
 3. APPLY A CONTINUOUS LAYER OF NON-HARDENING PREFORMED BITUMINOUS MASTIC MATERIAL (RUB-R-NEK OR EZ STICK) TO EACH JOINT TO PREVENT INFLOW.
 4. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MAXIMUM OF THREE PRECAST CONCRETE RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. EACH RING AND THE FRAME SHALL BE SET ON A BED OF PREFORMED NON-HARDENING MASTIC (RUB-R-NEK OR APPROVED EQUAL).
 5. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT.
 6. MORTAR SHALL NOT BE USED TO DRESS UP ADJUSTING RINGS AND/OR FRAME.
 7. ONLY PLASTIC POLYMER STEPS SHALL BE USED.
 8. WHEN MANHOLE DEPTH IS OVER 12 FEET, THE THICKNESS OF THE BASE SHALL BE A MINIMUM OF 8 INCHES. WHEN MANHOLE DEPTH IS LESS THAN 12 FEET, THE THICKNESS SHALL BE A MINIMUM OF 6 INCHES.
 9. DRESS UP INTERIOR JOINTS WITH THE HYDRAULIC CEMENT.
 10. SANITARY MANHOLES SHALL BE CONSTRUCTED WITH A CHIMNEY SEALING SYSTEM BY CRETEX OR AN EQUAL APPROVED BY THE CITY, WHEN IN PAVEMENT OR SUBJECT TO INUNDATION.

1 SANITARY MANHOLE
NTS

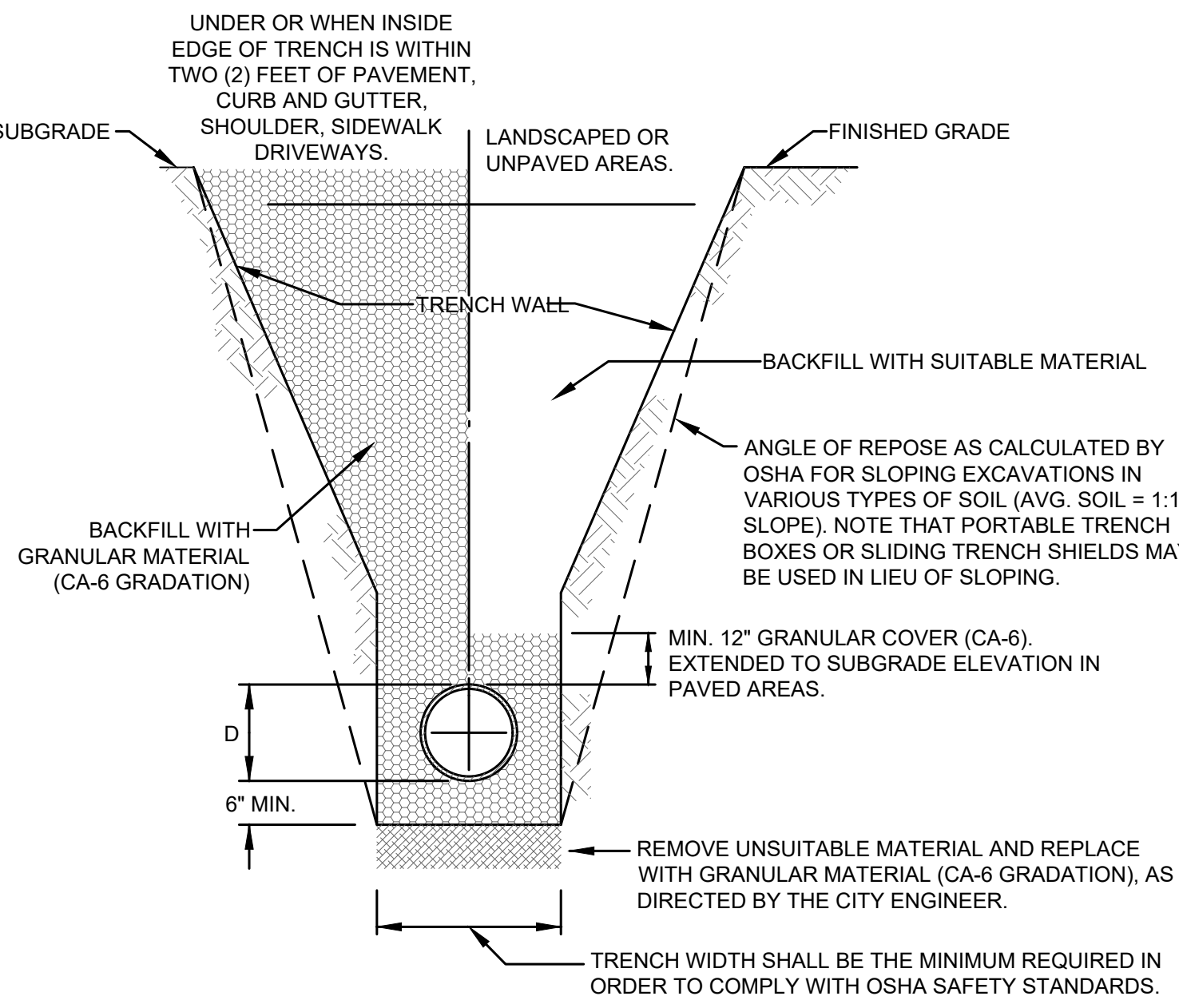


2 SEWER CONNECTION
N.T.S.



3 SANITARY MANHOLE FRAME AND LID
N.T.S.

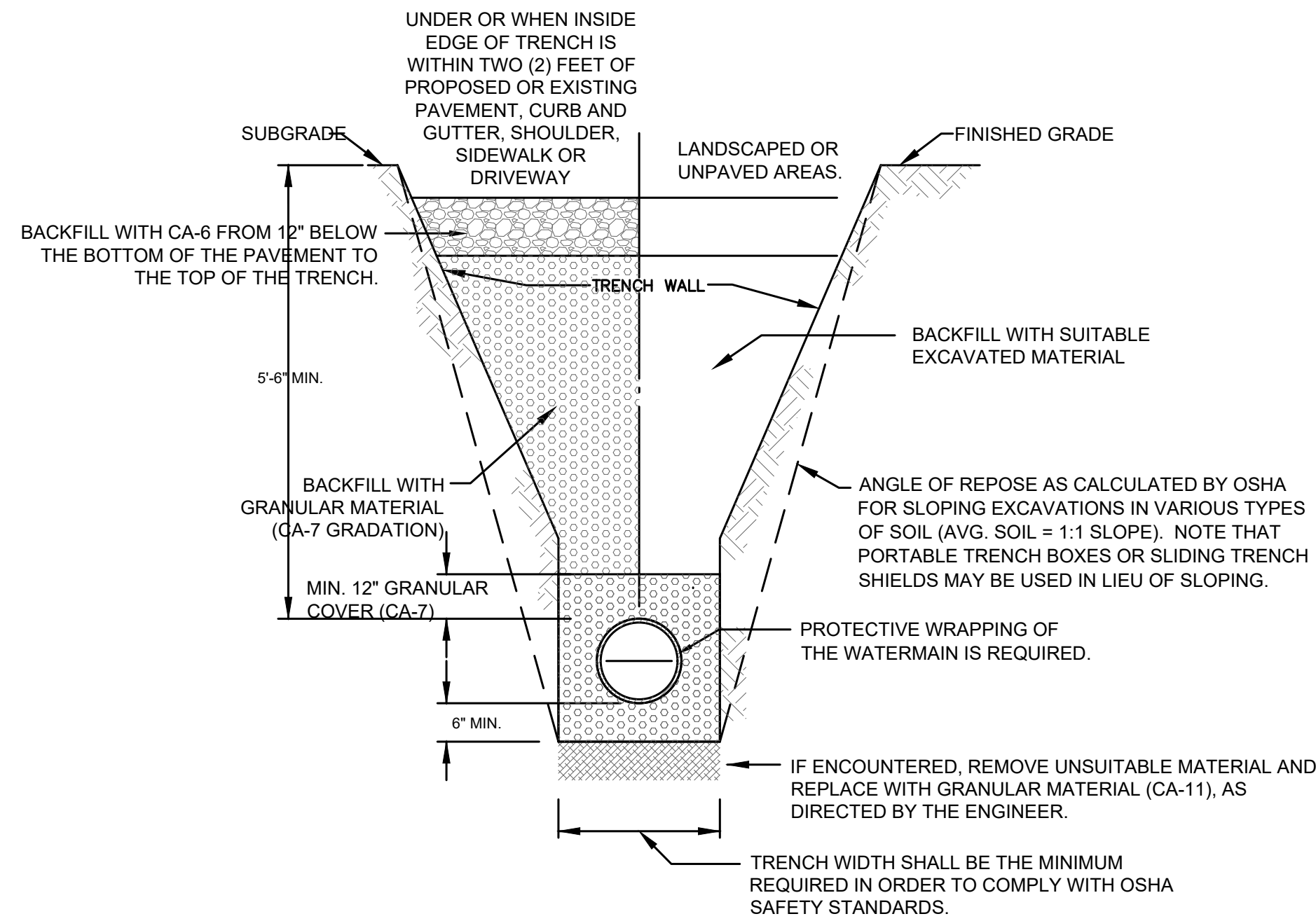
- GENERAL NOTES**
1. CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A SAFE MANNER AT ALL TIMES AND SHALL COMPLY WITH ALL APPLICABLE GOVERNING REGULATIONS, INCLUDING BUT NOT LIMITED TO OSHA SAFETY STANDARDS.
 2. ALL BACKFILL MATERIAL UP TO A HEIGHT OF 12 INCHES ABOVE THE PIPE SHALL BE CAREFULLY DEPOSITED IN UNIFORM LAYERS NOT EXCEEDING 8 INCHES THICK (LOOSE MEASURE). THE MATERIAL IN EACH LAYER SHALL BE FIRMLY COMPACTED BY RAMMING OR TAMPING WITH TOOLS APPROVED BY THE CITY ENGINEER IN SUCH A MANNER AS NOT TO DISTURB OR INJURE THE PIPE. THE BACKFILLING ABOVE THIS HEIGHT SHALL BE DONE AS NOTED BELOW.
 3. GRANULAR BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED AS SPECIFIED IN NOTE 2, ABOVE. THE USE OF JETTING SHALL NOT BE ALLOWED UNLESS AUTHORIZED IN WRITING BY THE CITY ENGINEER. IT SHALL BE THE DESIGN ENGINEER OR CONTRACTOR'S RESPONSIBILITY TO PROVIDE APPROPRIATE JUSTIFICATION AND DOCUMENTATION (SOIL INVESTIGATION REPORTS, ETC.) TO THE CITY ENGINEER WITH THE REQUEST FOR APPROVAL OF JETTING.
 4. BACKFILL MATERIAL CONSISTING OF SUITABLE EXCAVATED MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING TWELVE (12) INCHES THICK (LOOSE MEASURE) AND EACH LAYER SHALL BE COMPACTED BY RAMMING OR TAMPING TO ACHIEVE THE REQUIRED COMPACTION. JETTING OF THIS MATERIAL MAY BE PERMITTED WHEN AUTHORIZED IN WRITING BY THE CITY ENGINEER. IT SHALL BE THE DESIGN ENGINEER OR THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT APPROPRIATE JUSTIFICATION AND DOCUMENTATION (SOIL INVESTIGATION REPORTS, ETC.) TO THE CITY ENGINEER WITH THE REQUEST FOR APPROVAL OF JETTING.
 5. GRANULAR MATERIAL FOR BACKFILL AND BEDDING SHALL BE GRAVEL, CRUSHED GRAVEL OR STONE MEETING THE REQUIREMENTS OF THE IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" FOR COARSE AGGREGATE (CA-6 GRADATION).
 6. THE BEDDING THICKNESS SHALL BE EQUAL TO ONE-QUARTER (1/4) OF THE OUTSIDE DIAMETER OF THE PIPE BUT NOT LESS THAN SIX (6) INCHES.



4 SANITARY SEWER TRENCH
NTS

DISCLAIMER: This drawing was prepared by SMP Projects, LLC for the project described herein. It is not to be used for any other project without the written consent of SMP Projects, LLC. The user of this drawing assumes all liability for any and all consequences of its use.		Civil Engineer SMP PROJECTS Landscape Architects & Civil Engineers		SMP Projects, PLLC 10301 Fullerton Pkwy, Chicago, IL 60614 312.823.0797	
PROJECT NAME: RIVER VIEW WEST PROPOSED 5 STORY BUILDING 113 D.U. WITH GARAGE WILMINGTON, ILLINOIS		OWNER: CANTERA RESIDENCES, LLC 1000 N. LAUREL AVE., SUITE 100, CHICAGO, IL 60610		DATE: 2014-09-18	
NO. 1 2 3		DATE 2014-09-18 2014-09-18 2014-09-18		DESCRIPTION Initial Design Revised for Preliminary Engineering Revised for Preliminary Engineering	
SHEET NAME: Civil Details		PRINT DATE: 2014-09-18		CERTIFICATION:	

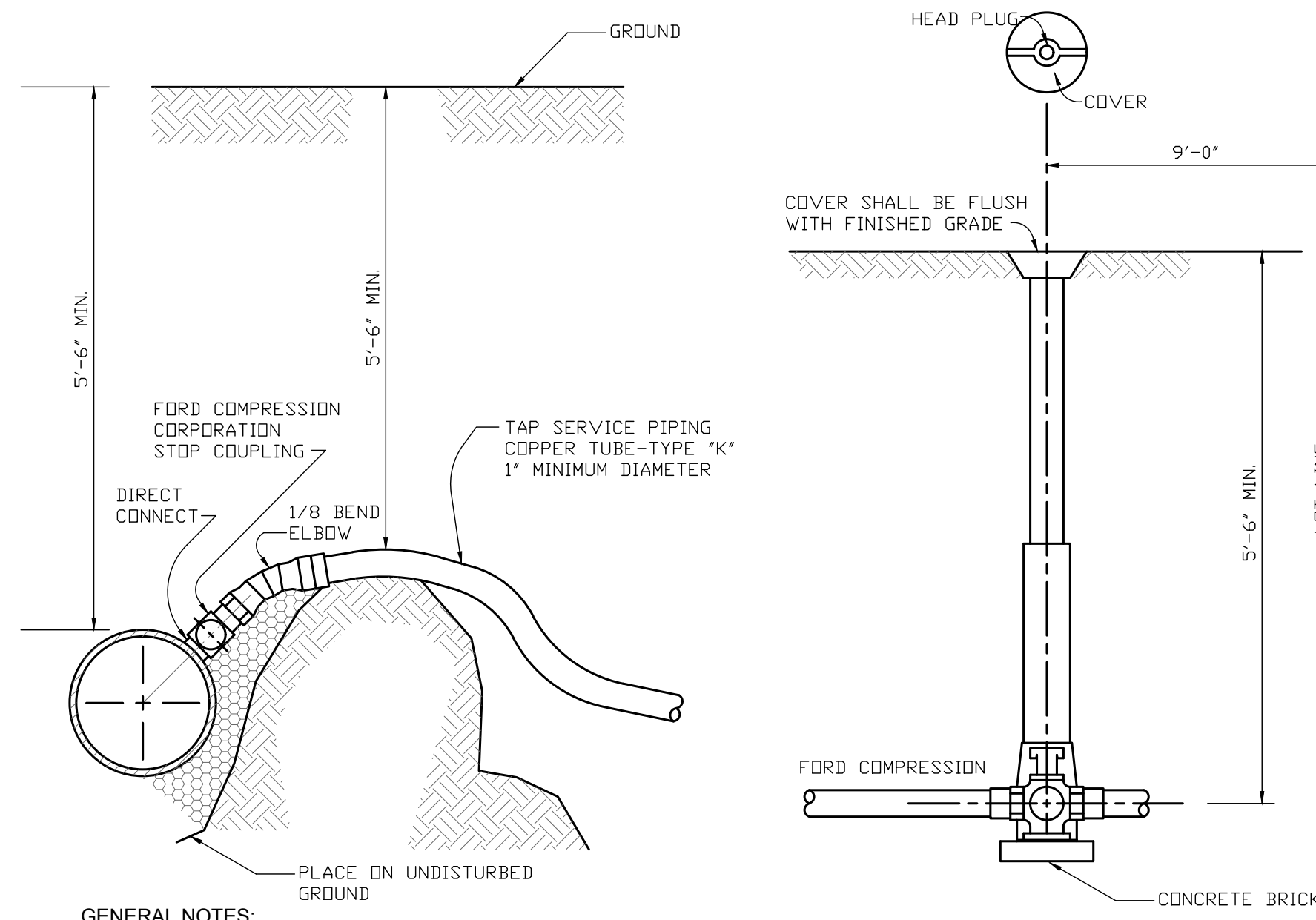
- PRELIMINARY -
FOR REVIEW ONLY



GENERAL NOTES:

- CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A SAFE MANNER AT ALL TIMES AND SHALL COMPLY WITH ALL APPLICABLE COVERING REGULATIONS, INCLUDING BUT NOT LIMITED TO OSHA SAFETY STANDARDS.
- ALL BACKFILL MATERIAL UP TO A HEIGHT OF 12 INCHES ABOVE THE PIPE SHALL BE CAREFULLY DEPOSITED IN UNIFORM LAYERS NOT EXCEEDING 8 INCHES THICK (LOOSE MEASURE). THE MATERIAL IN EACH LAYER SHALL BE FIRMLY COMPACTED BY RAMMING OR TAMPING IN SUCH A MANNER AS NOT TO DISTURB OR INJURE THE PIPE. THE BACKFILLING ABOVE THIS HEIGHT SHALL BE DONE AS NOTED BELOW.
- GRANULAR BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED AS SPECIFIED IN NOTE 2, ABOVE. THE USE OF JETTING SHALL NOT BE ALLOWED.
- BACKFILL MATERIAL CONSISTING OF SUITABLE EXCAVATED MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING TWELVE (12) INCHES THICK (LOOSE MEASURE) AND EACH LAYER SHALL BE COMPACTED BY RAMMING OR TAMPING TO ACHIEVE THE REQUIRED COMPACTION.

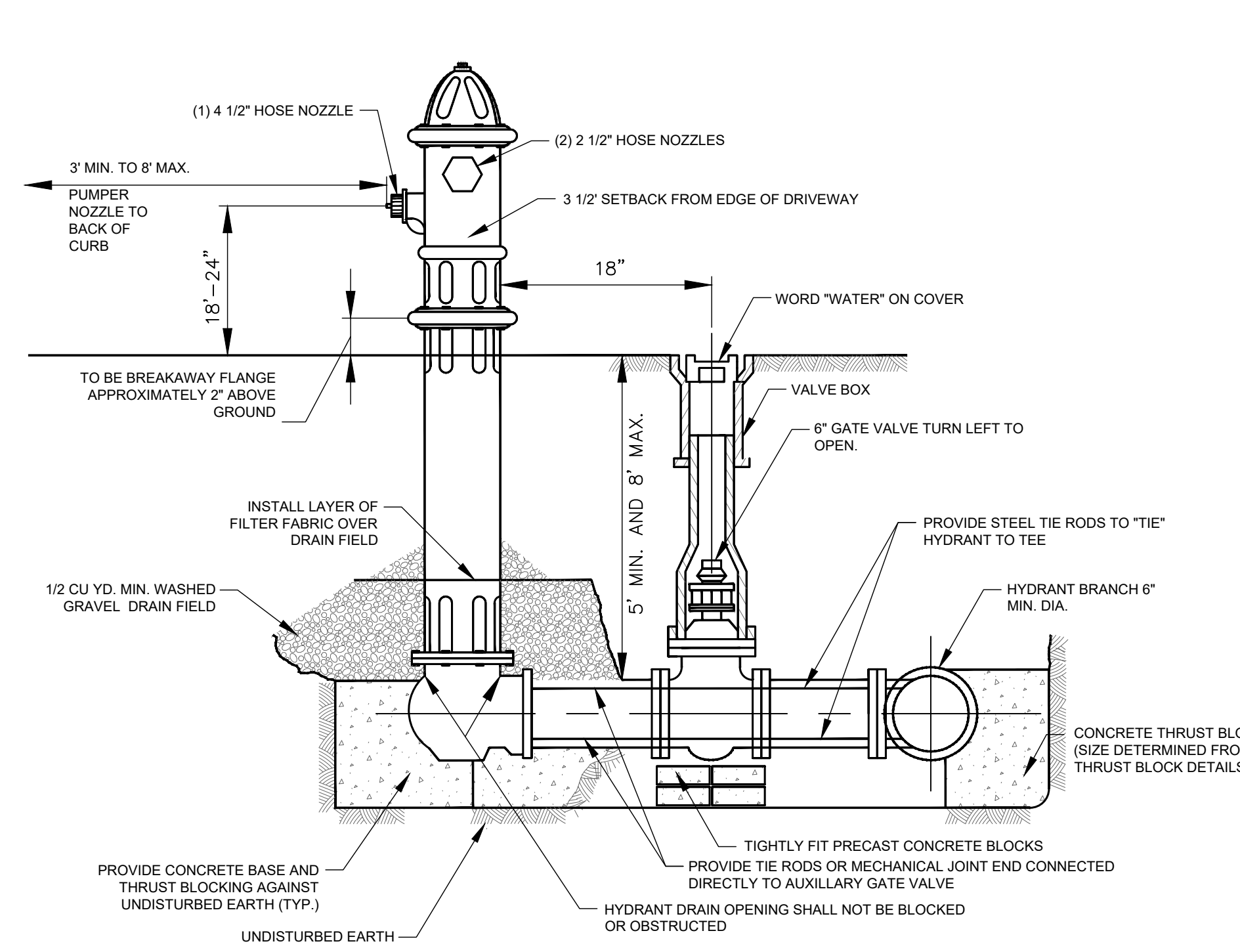
1 WATER MAIN TRENCH
NTS



GENERAL NOTES:

- WATER SERVICE LINE SHALL BE TYPE K COPPER MANUFACTURED IN ACCORDANCE WITH ASTM B88 AND B251 OR APPROVED EQUAL.
- FOR 1\"/>

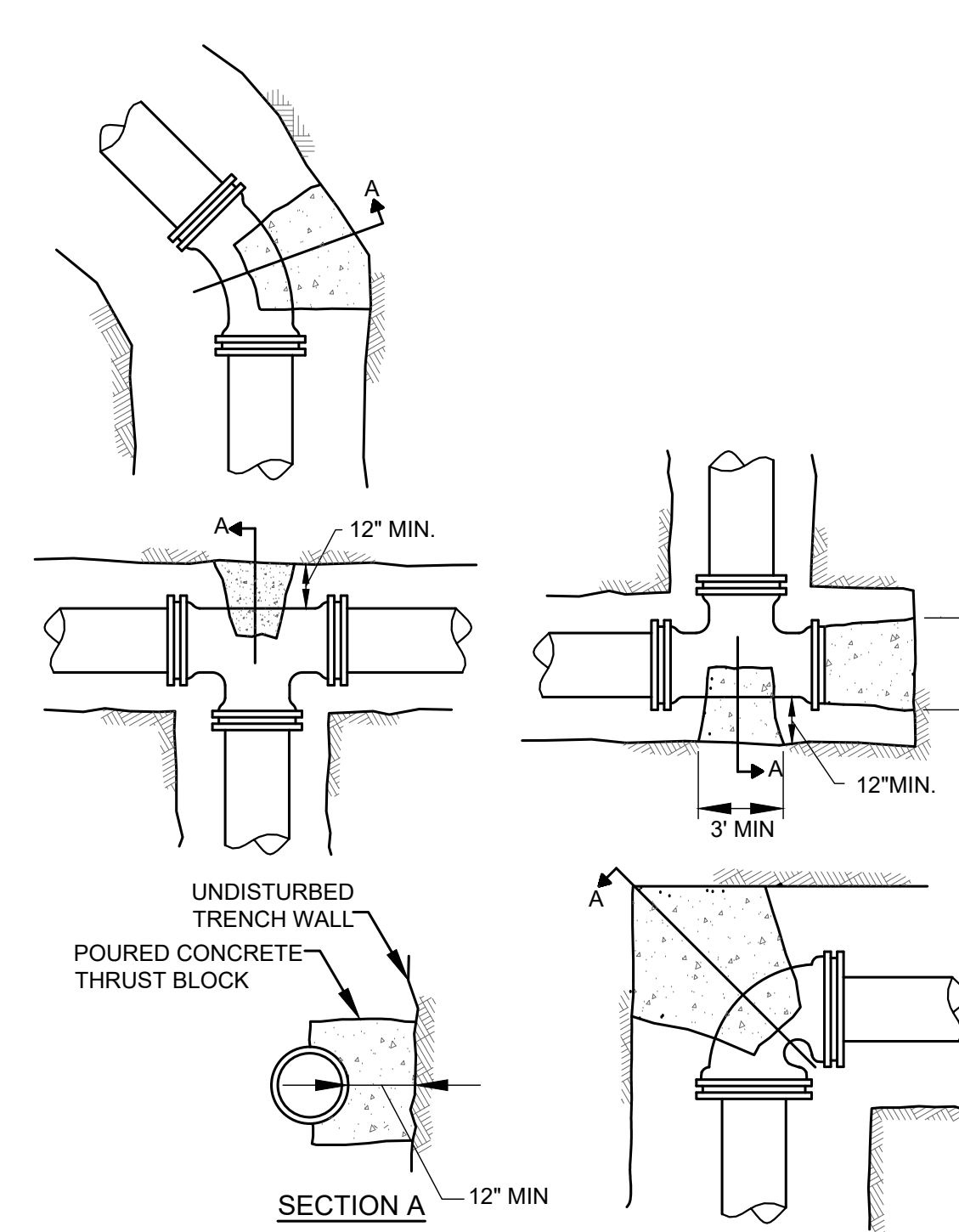
2 WATER SERVICE CONNECTION
NTS



GENERAL NOTES:

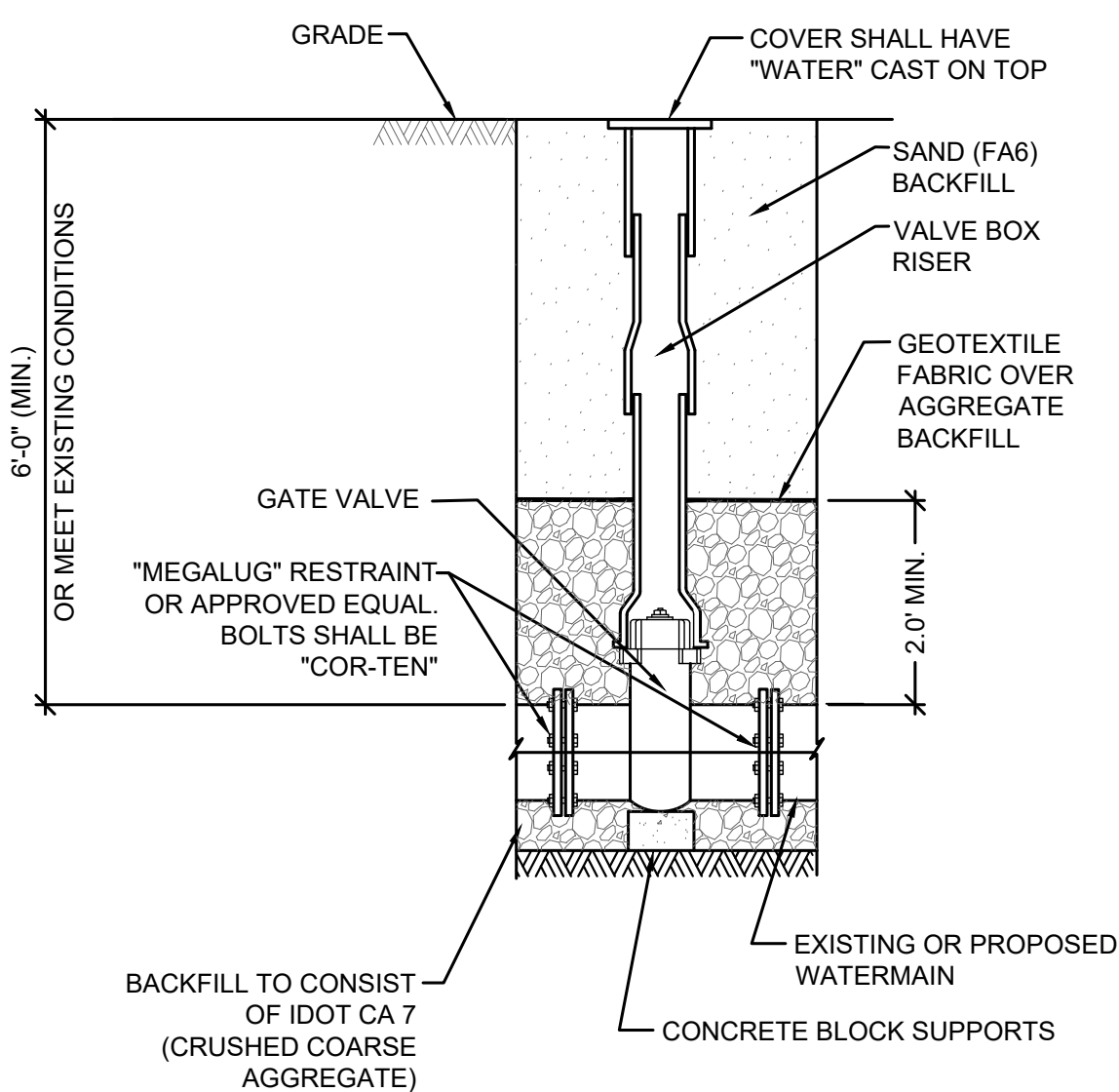
- ALL HYDRANTS ARE TO BE SUPPLIED WITH A 6\"/>

3 FIRE HYDRANT ASSEMBLY
NTS



- THRUST BLOCKING IS USED TO PREVENT MOVEMENT OF LINES UNDER PRESSURE BENDS, TEES, CAPS, VALVES, HYDRANTS, AND AT POINTS SPECIFIED BY THE ENGINEER. CONCRETE SHALL BE CLASS SI AND BE A MINIMUM OF TWELVE (12) INCHES THICK PLUS THE SIZE OF THE WATERMAIN. IT SHALL BE PLACED BETWEEN UNDISTURBED GROUND AND FITTINGS. FITTINGS WILL BE ACCESSIBLE FOR REPAIRS. THRUST BLOCK SHALL BE PLACED AT BENDS OF 11-1/4 DEGREES OR MORE. THE AREA OF BEARING SHALL BE SUFFICIENT TO RESIST THE APPLIED FORCES. USE OF 90 DEGREE BENDS REQUIRE APPROVAL FROM THE ENGINEER PRIOR TO INSTALLATION.
- USE OF WOOD MATERIAL FOR THRUST BLOCKING IS PROHIBITED.

4 THRUST BLOCK
NTS

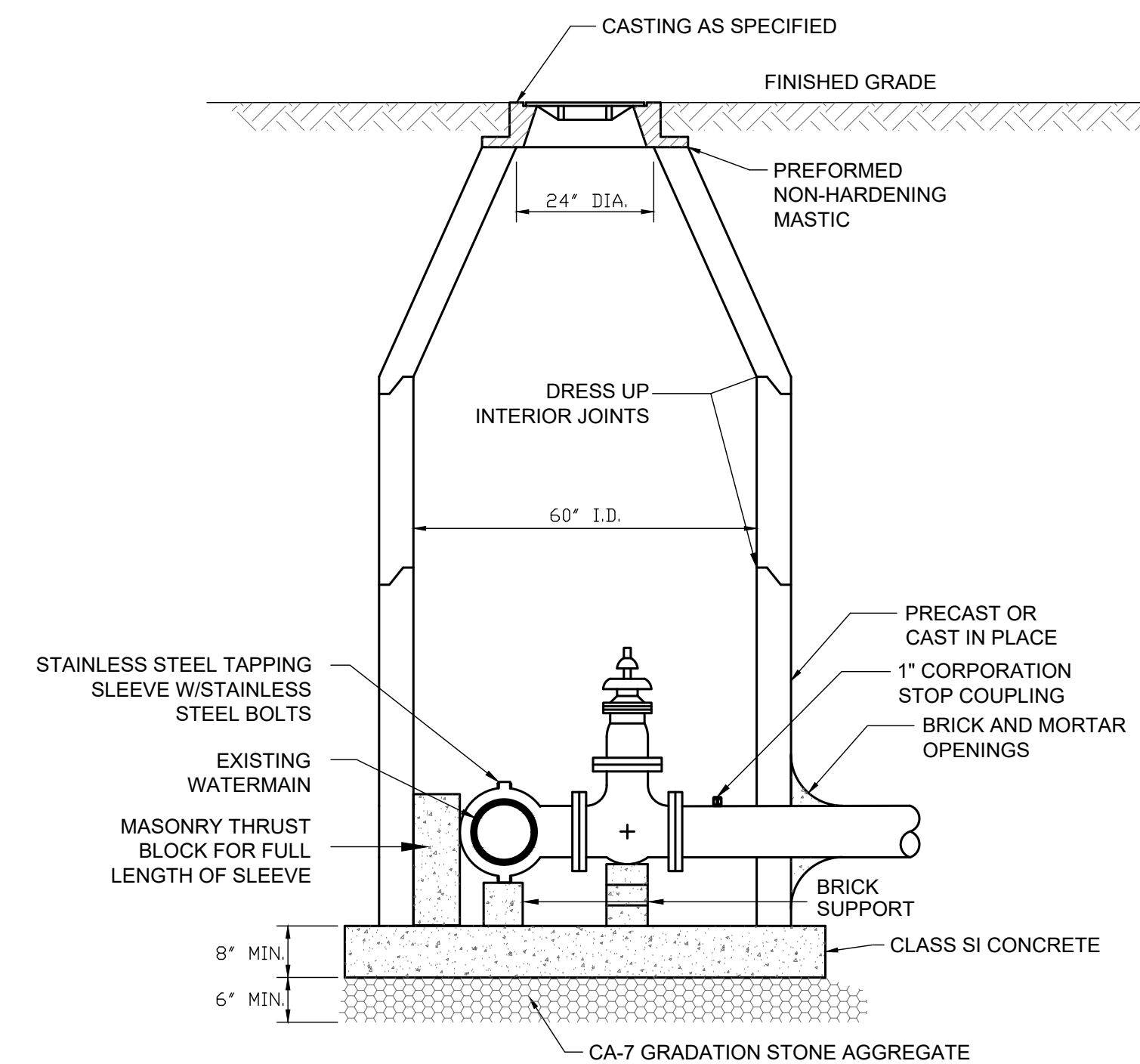
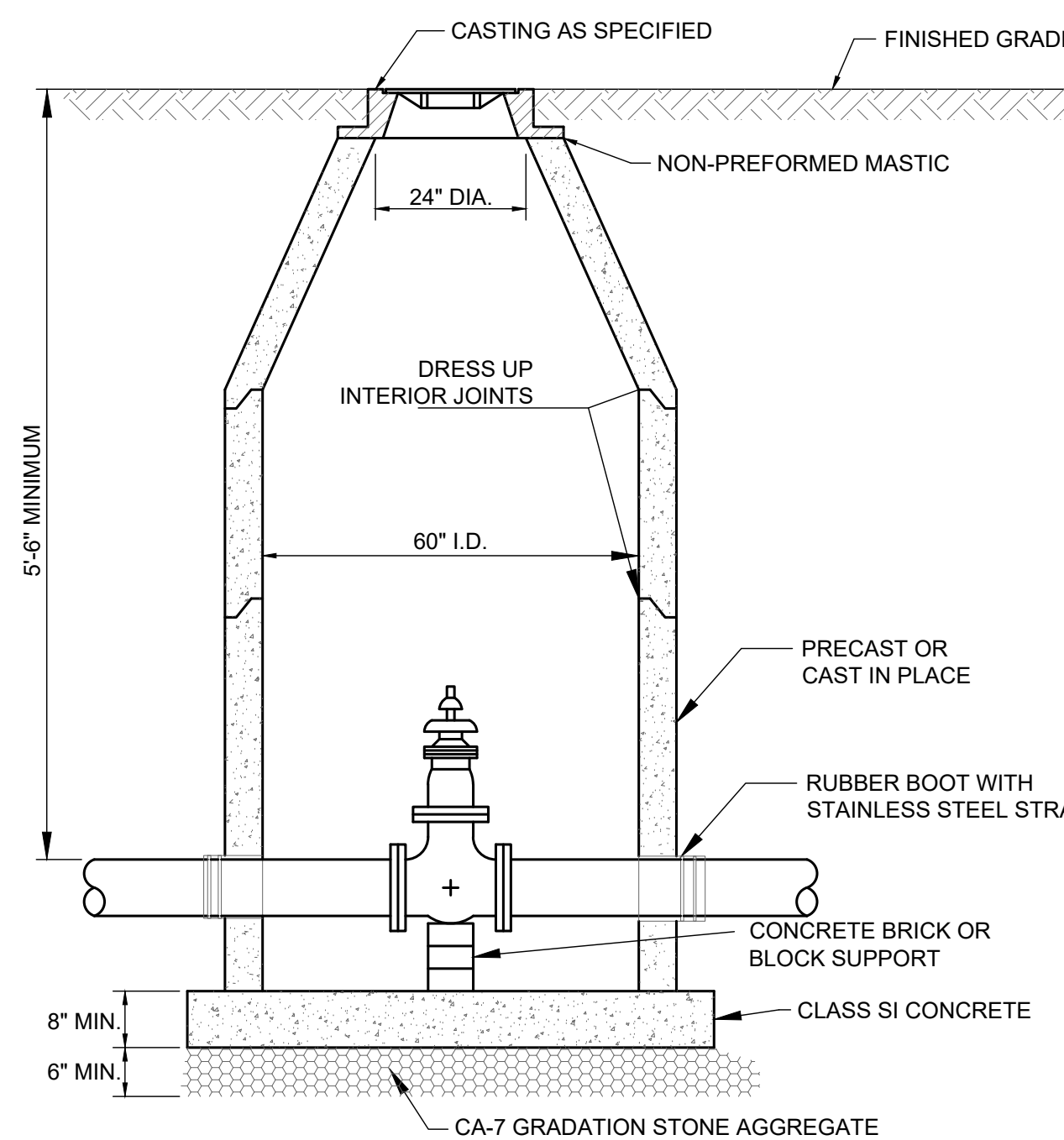


5 VALVE BOX
N.T.S.

GENERAL NOTES:

- PROVIDE PRECAST REINFORCED CONCRETE BARREL AND RISER SECTION.
- PROVIDE TRENCH BACKFILL IN PAVED AREAS, CA-7 GRADATION, AROUND MANHOLE TO 12\"/>

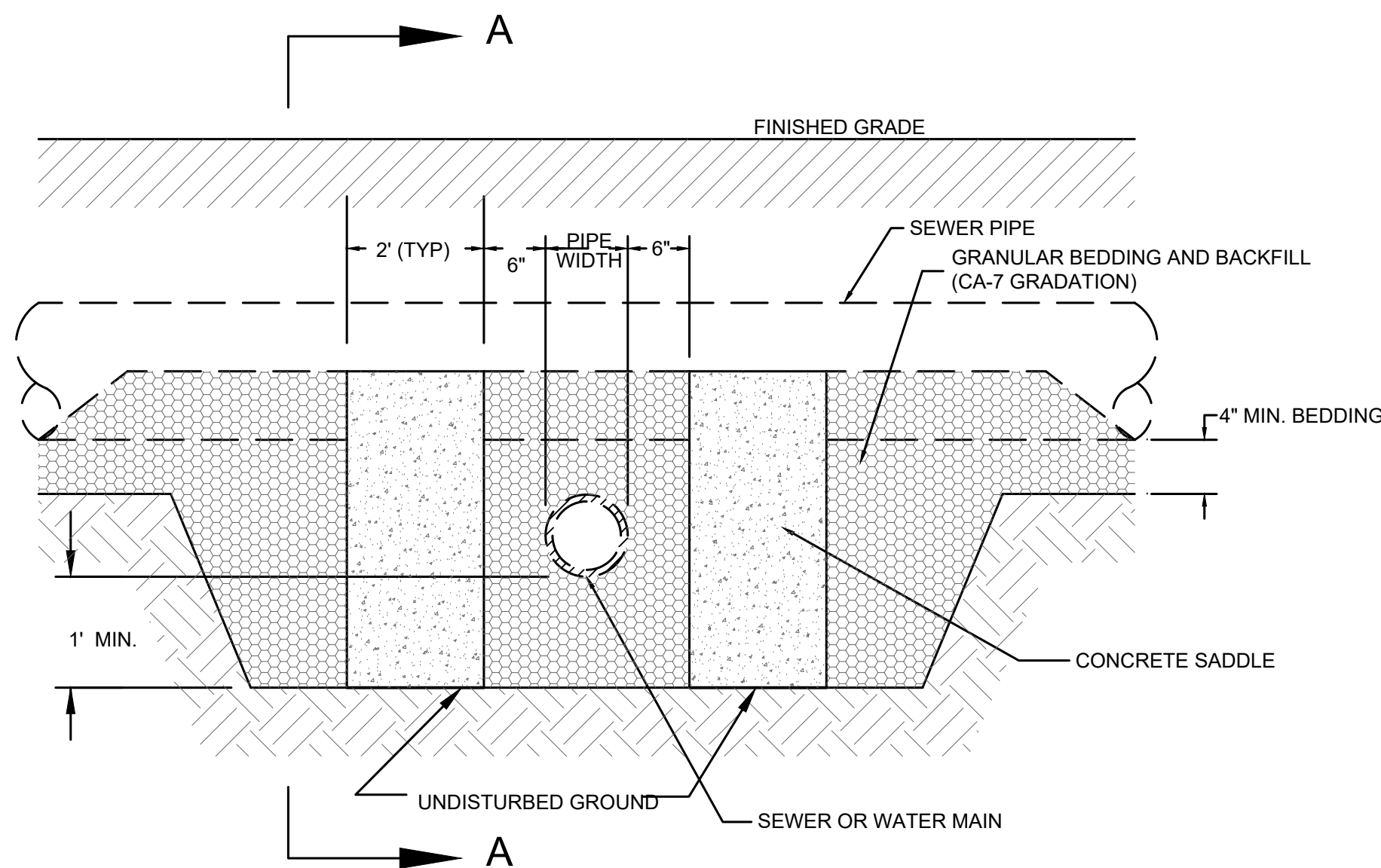
6 WATER VALVE VAULT
N.T.S.



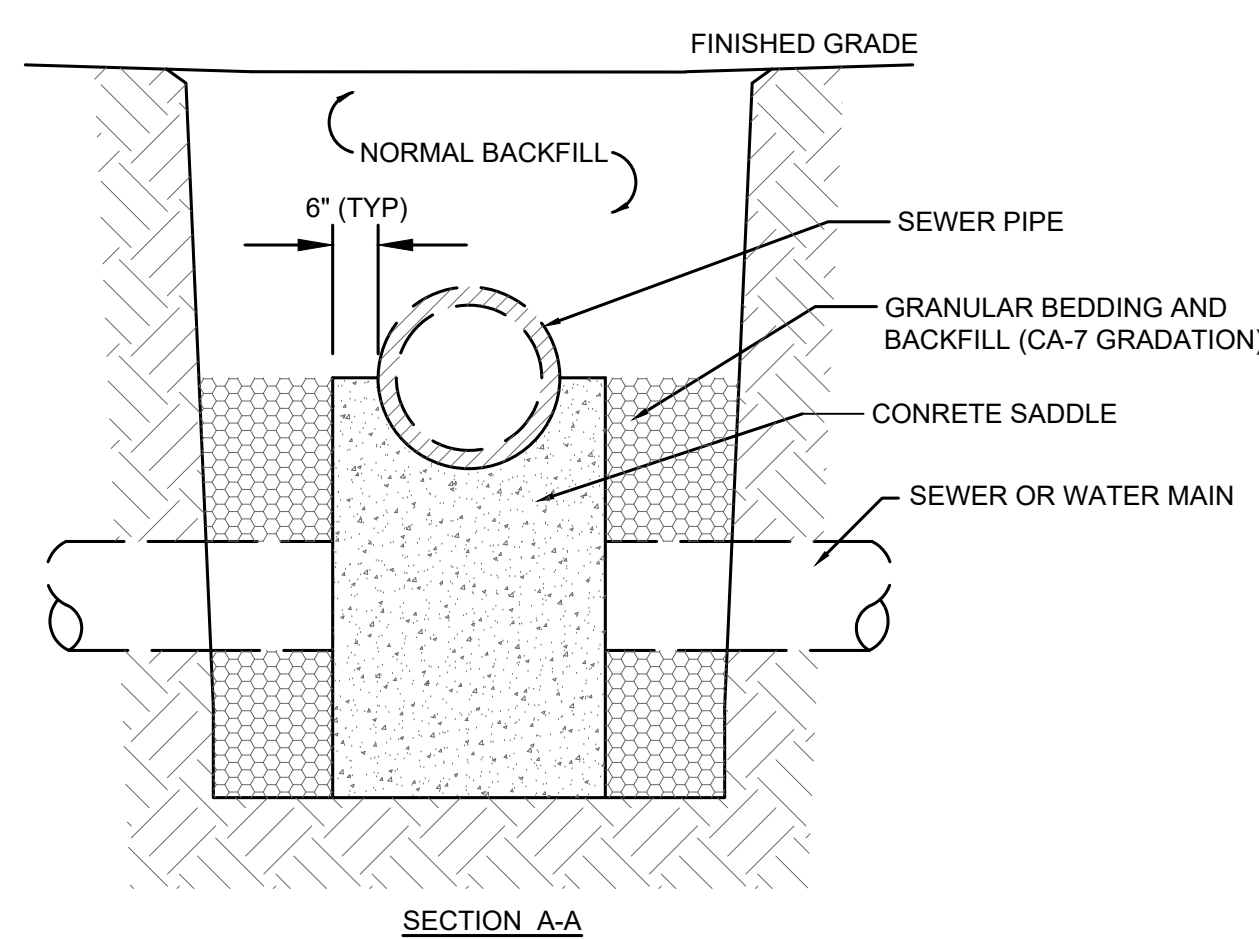
GENERAL NOTES:

- PROVIDE PRECAST REINFORCED CONCRETE BARREL AND RISER SECTION. CONCRETE BLOCK CONSTRUCTION IS NOT PERMITTED.
- PROVIDE TRENCH BACKFILL AROUND MANHOLE TO SUBGRADE ELEVATION IN PAVED AREAS. MATERIAL SHALL MEET THE REQUIREMENT OF IDOT \"STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION\" COARSE AGGREGATE CA-7 GRADATION UP TO 12\"/>

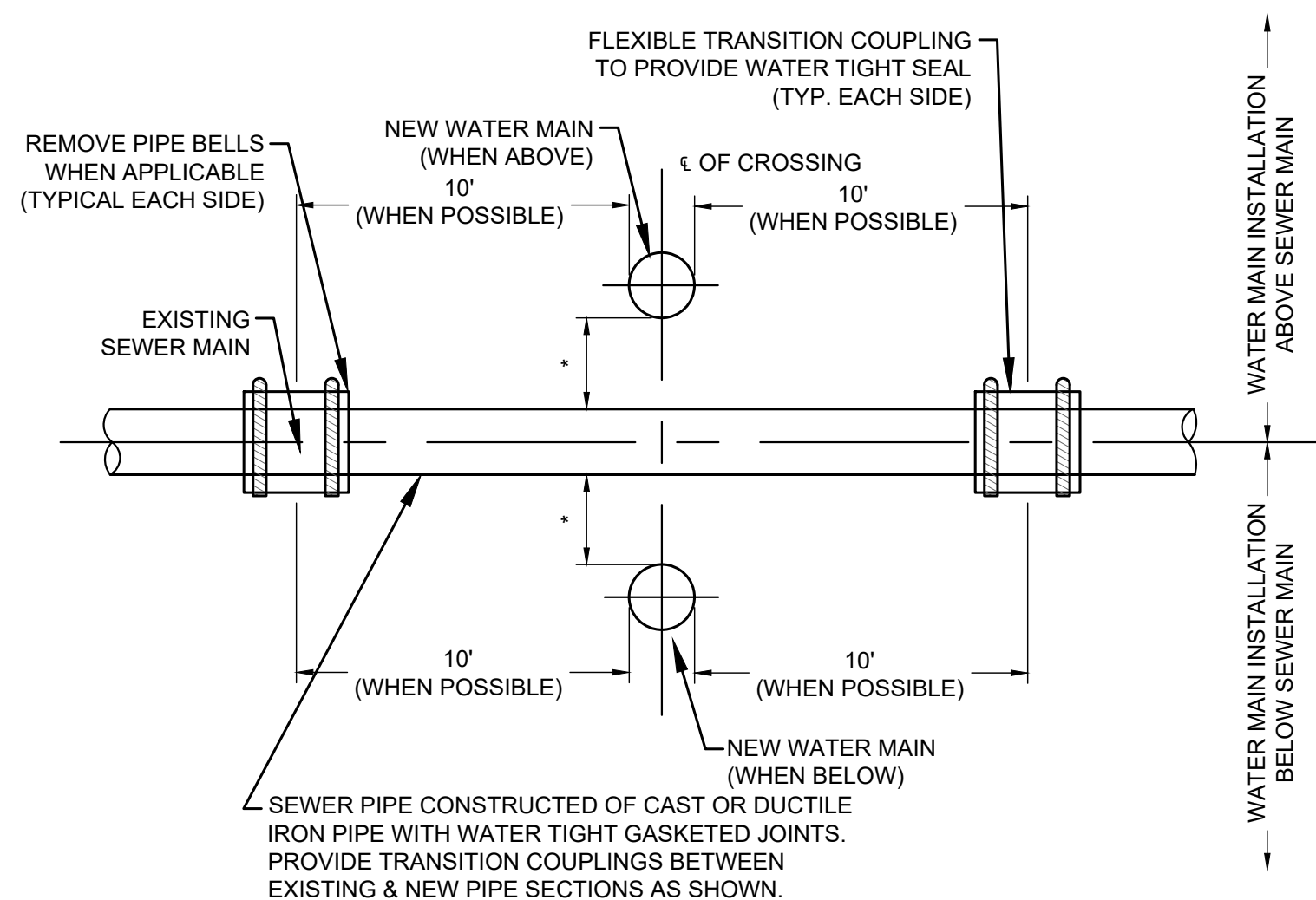
7 WATER PRESSURE CONNECTION IN VAULT
N.T.S.



8 CONCRETE SADDLE SUPPORT
N.T.S.



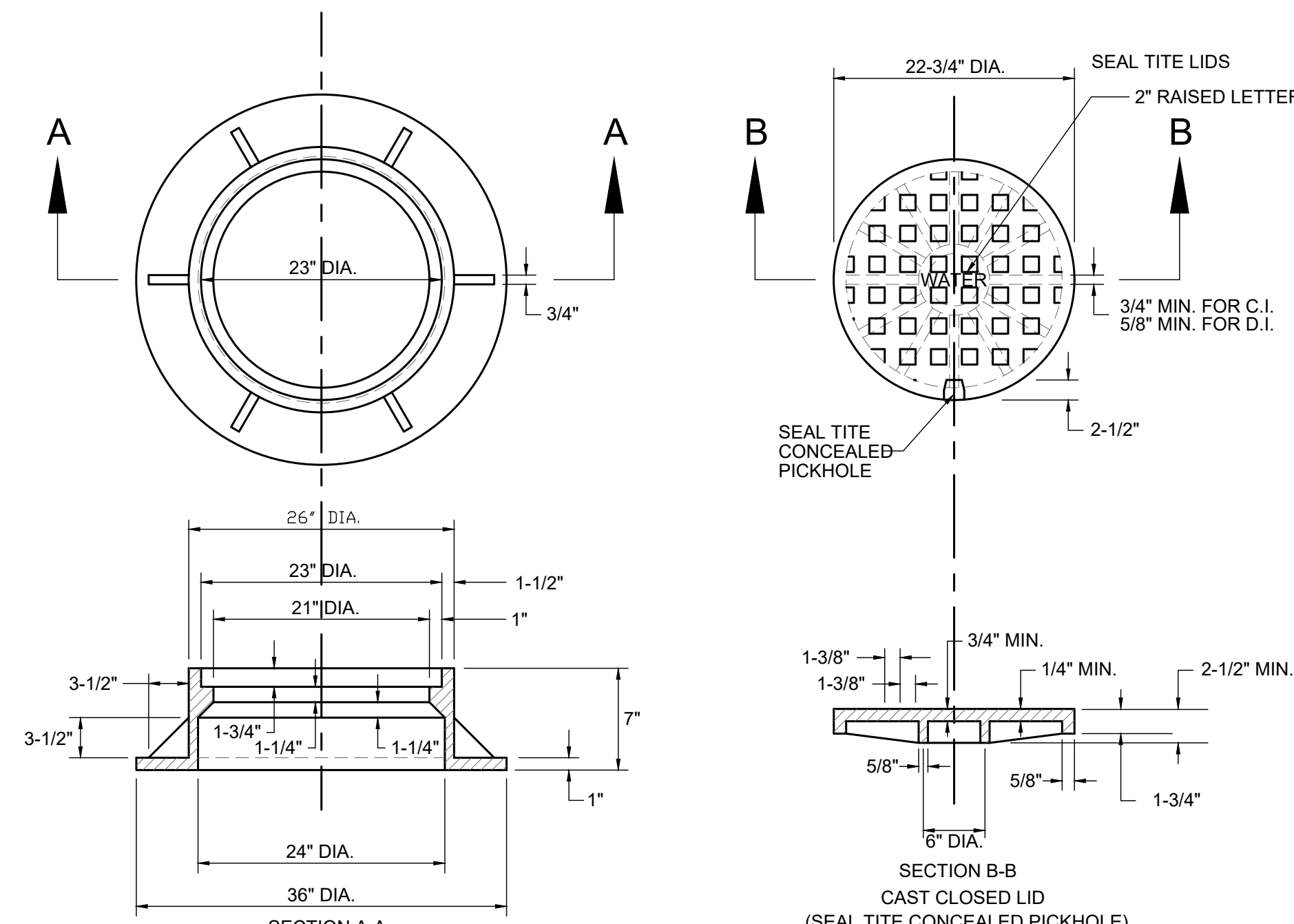
SECTION A-A



NOTE:

- (*) WHEN DISTANCE IS LESS THAN 18\"/>

9 SEPARATION BETWEEN WATER AND SEWER MAINS
NTS



GENERAL NOTES:

- DUCTILE IRON CASTING SHALL BE TESTED IN ACCORDANCE WITH FEDERAL SPECIFICATIONS.
- ALL FRAMES AND COVERS SHALL HAVE A MACHINED HORIZONTAL AND VERTICAL BEARING SURFACES. PICK HOLES IN THE COVER SHALL NOT BE OPEN.
- THE MANHOLE COVERS SHALL BE STAMPED WITH \"WATER\".
- DIMENSIONS FOR CASTINGS ARE COMPARABLE TO EAST JORDAN 1022 OR NEENAH FOUNDRY 1772.
- WATERPROOF, BOLT DOWN FRAME AND COVER SHALL BE USED IN ANY LOCATION SUBJECT TO INUNDATION. (NEENAH FOUNDRY 1022 WT OR APPROVED EQUAL).
- LIDS SHALL BE \"WATERTITE\" OR \"SELF-SEALING\" WITH A FACTORY INSTALLED GASKET.

10 WATER VALVE VAULT FRAME AND LID
N.T.S.

CERTIFICATION:

No.	Date	Description
1	2014-05-15	Issue for Review
2	2014-05-15	Revised for Preliminary Engineering
3	2014-05-15	Revised for Preliminary Engineering

PROJECT NAME:	RIVER VIEW WEST
PROPOSED:	5 STORY BUILDING
LOCATION:	113 D. U. WITH GARAGE
DESIGNER:	WARRICKVILLE, ILLINOIS
OWNER:	CANTERA RESIDENCES, LLC
DATE:	2014-05-15

SHEET NAME:	C-503
PRINT DATE:	2014-05-15
SHEET NAME:	Civil Details

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Civil Engineer
SMP PROJECTS
Landscaping Architecture & Civil Engineering

SMP Projects, PLLC
303 W. Fullerton Pkwy., Chicago, IL 60614
312.823.0797

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