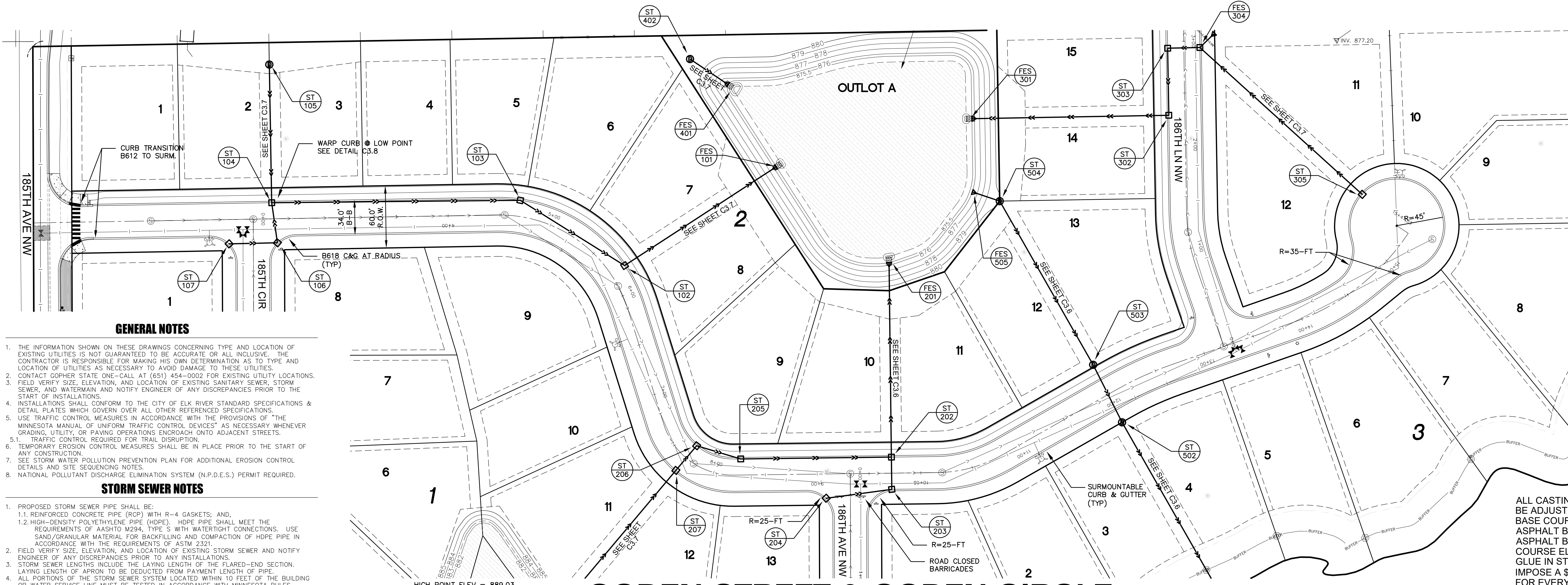


**LEGEND**

- EXISTING STORM SEWER
- EXISTING WATER MAIN
- - - EXISTING SANITARY SEWER
- - - EXISTING STORM MANHOLE
- EXISTING CATCH BASIN
- EXISTING FLARED-END SECTION
- EXISTING GATE VALVE
- EXISTING HYDRANT
- EXISTING SANITARY SEWER MANHOLE
- EXISTING WETLAND
- PROPOSED WATER PIPE
- PROPOSED SANITARY SEWER PIPE
- PROPOSED STORM SEWER PIPE
- PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED FLARED-END SECTION
- PROPOSED GATE VALVE
- PROPOSED HYDRANT
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED OUTFALL STABILIZATION (ARTICULATED BLOCK - E.G. FLEXAMAT OR APPROVED EQUAL)
- SOIL BORING (NTI, LLC)



**GENERAL NOTES**

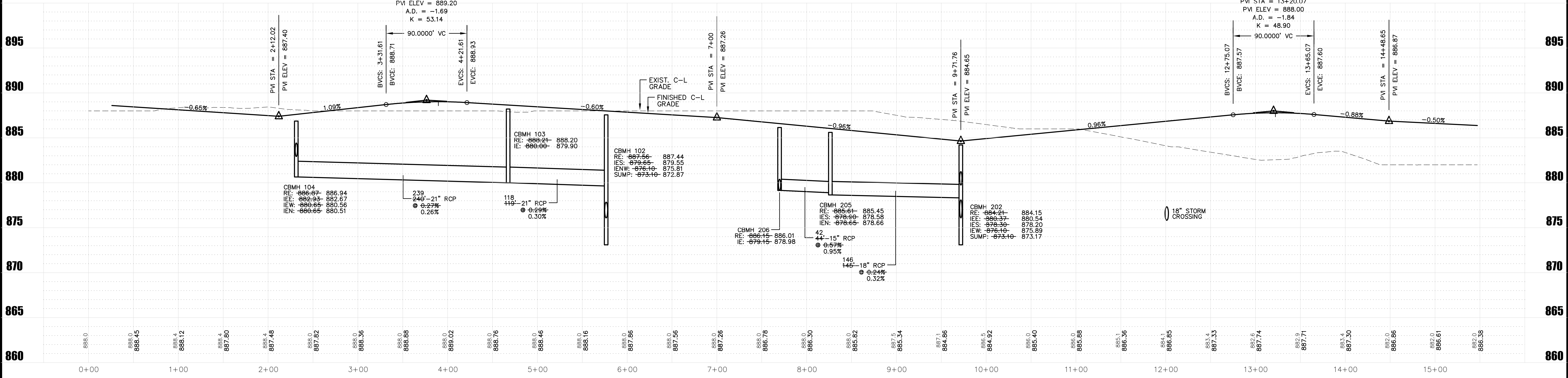
1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
2. CONTACT GOPHER STATE ONE-CALL AT (651) 454-0002 FOR EXISTING UTILITY LOCATIONS.
3. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING SANITARY SEWER, STORM SEWER, AND WATERMAIN AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS.
4. INSTALLATIONS SHALL CONFORM TO THE CITY OF ELK RIVER STANDARD SPECIFICATIONS & DETAIL PLATES WHICH GOVERN OVER ALL OTHER REFERENCED SPECIFICATIONS.
5. USE TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH THE PROVISIONS OF "THE MINNESOTA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AS NECESSARY WHENEVER GRADING, UTILITY, OR PAVING OPERATIONS ENDOURCH ONTO ADJACENT STREETS.
- 5.1. TRAFFIC CONTROL REQUIRED FOR TRAIL DISRUPTION.
6. TEMPORARY EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE START OF ANY CONSTRUCTION.
7. SEE STORM WATER POLLUTION PREVENTION PLAN FOR ADDITIONAL EROSION CONTROL DETAILS AND SITE SEQUENCING NOTES.
8. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (N.P.D.E.S.) PERMIT REQUIRED.

**STORM SEWER NOTES**

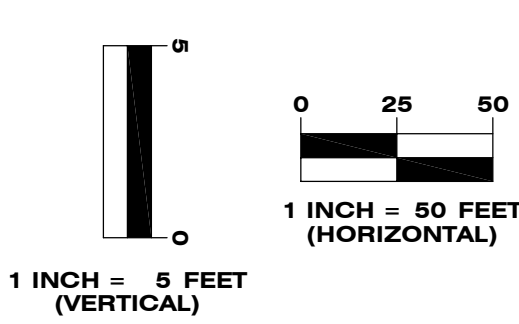
1. PROPOSED STORM SEWER PIPE SHALL BE:
  - 1.1. REINFORCED CONCRETE PIPE (RCP) WITH R-4 GASKETS; AND,
  - 1.2. HIGH-DENSITY POLYETHYLENE PIPE (HDPE). HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE S WITH WATERTIGHT CONNECTIONS. USE SAND/GRAVULAR MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321.
2. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
3. STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED-END SECTION. LAYING LENGTH OF APRON TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
4. ALL PORTIONS OF THE STORM SEWER SYSTEM LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED IN ACCORDANCE WITH MINNESOTA RULES, CHAPTER 4714, SECTION 1109.0.

ALL CASTINGS (MANHOLES AND VALVE BOXES) MUST BE ADJUSTED TO 1/2" BELOW THE FINISHED ASPHALT BASE COURSE ELEVATION BEFORE PAVING OF THE ASPHALT BASE. NO CUTS WILL BE ALLOWED IN THE ASPHALT BASE. ADJUSTMENTS TO MEET FINAL WEAR COURSE ELEVATIONS WILL BE ACCOMPLISHED USING GLUE IN STEEL ADJUSTING RINGS. THE CITY WILL IMPOSE A \$1000/PATCH CHARGE TO THE DEVELOPER FOR EVERY PATCH LOCATION (NEEDED FOR CASTING ADJUSTMENT OR OTHER PAVEMENT REPAIR) IN THE BASE COURSE BITUMINOUS PAVEMENT.

**OGDEN STREET & OGDEN CIRCLE**



**PLOWE**  
ENGINEERING, INC.  
6776 LAKE DRIVE  
SUITE 110  
LINO LAKES, MN 55014  
PHONE: (651) 361-8210  
FAX: (651) 361-8701



**RIVERPLACE**  
**SECOND ADDITION**  
ELK RIVER, MINNESOTA  
PLAN/PROFILE  
STORM SEWER & STREETS

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

*Adam Finkel*  
ADAM FINKEL  
DATE: 07.29.2020 LIC. NO. 43963

DATE	REVISION DESCRIPTION
6-15-18	CITY REVIEW COMMENTS; CONSTRUCTION PLANS
7-11-18	FINAL PLAT SUBMITTAL
8-7-18	GRADES ADJ.
7-11-19	FINAL PLANS
7-29-20	RECORD DRAWINGS

DRAWN BY: A.G.  
DESIGN BY: A.G.  
CHKD BY: C.W.P.  
PROJ. NO. 18-1747

**C3.4**