

STEEPLE HILLS 2ND ADDITION POND IMPROVEMENTS

CONSTRUCTION PLANS PLYMOUTH, MN



13605 1st Avenue N. #100
Plymouth, MN 55441 | ae-mn.com
P 763.412.4000 | F 763.412.4090
Anderson Engineering of Minnesota, LLC

POND IMPROVEMENTS

PLYMOUTH,
MINNESOTA

CITY OF PLYMOUTH
PROJECT #WR249001

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT 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.

PRINT NAME: **ADAM THIELE**

SIGNATURE:

DATE: **03/12/2024** LICENSE NO. **51317**

REVISION LOG

NO.	DATE	DESCRIPTION OF REVISIONS

PRELIMINARY

DESIGNED: CL	DRAWN: CL	CHECKED BY: AT
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DRAWING TITLE

COVER SHEET

DRAWING NO.

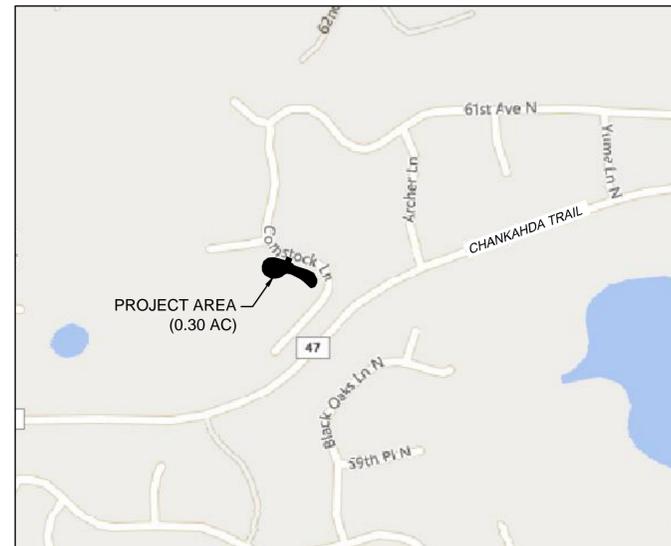
C-000

PLOTTED: 03/12/2024	COMM. NO. 17615
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PID NOs.
0511822120060 & 0511822120061



PROJECT LOCATION



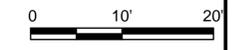
VICINITY MAP

INDEX

Sheet Number	Sheet Title
C-000	COVER SHEET
C-100	EXISTING CONDITIONS AND DEMOLITION PLAN
C-200	SITE CONSTRUCTION PLAN
C-201	CONSTRUCTION DETAILS
C-202	CONSTRUCTION DETAILS 2
L-100	SITE RESTORATION PLAN

CIVIL QUANTITIES

ITEM	SPEC. REF.	DESCRIPTION	UNIT	QUANTITY
1	2021	MOBILIZATION	LUMP SUM	1
2	2021	DEWATERING	LUMP SUM	1
3	2104	REMOVE PIPE	LIN FT	39
4	2104	REMOVE CONTROL STRUCTURE	EACH	1
5	2104	SALVAGE AND REINSTALL RIPRAP (P)	CU YD	30
6	2105	COMMON EXCAVATION (P)	CU YD	308
7	2101	CLEAR AND GRUB	LUMP SUM	1
8	2501	15" RCP STORM SEWER CL. V	LIN FT	25
9	2501	18" RCP STORM SEWER CL. V	LIN FT	23
10	2501	18" RCP FLARED END SECTION	EACH	1
11	2501	60" PRECAST CONTROL STRUCTURE AND GRATE	EACH	1
12	2511	TYPE 4 GEOTEXTILE FABRIC - NON WOVEN	SQ YD	20
13	2511	CLASS III GRANITE RIP RAP	CU YD	10
14	2575	SILT FENCE, TYPE MS	LIN FT	130
15	2575	EROSION CONTROL BLANKET CAT 20	SQ YD	720
16	2575	INLET PROTECTION	EACH	4
17	2575	SEEDING	ACRE	0.3
18	2575	SEED MIX 33-261	LBS	5
19	2575	SEED MIX 35-221	ACRE	0.01
20	2575	SEED MIX 25-131	LBS	1



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EXISTING CONDITIONS AND DEMOLITION PLAN

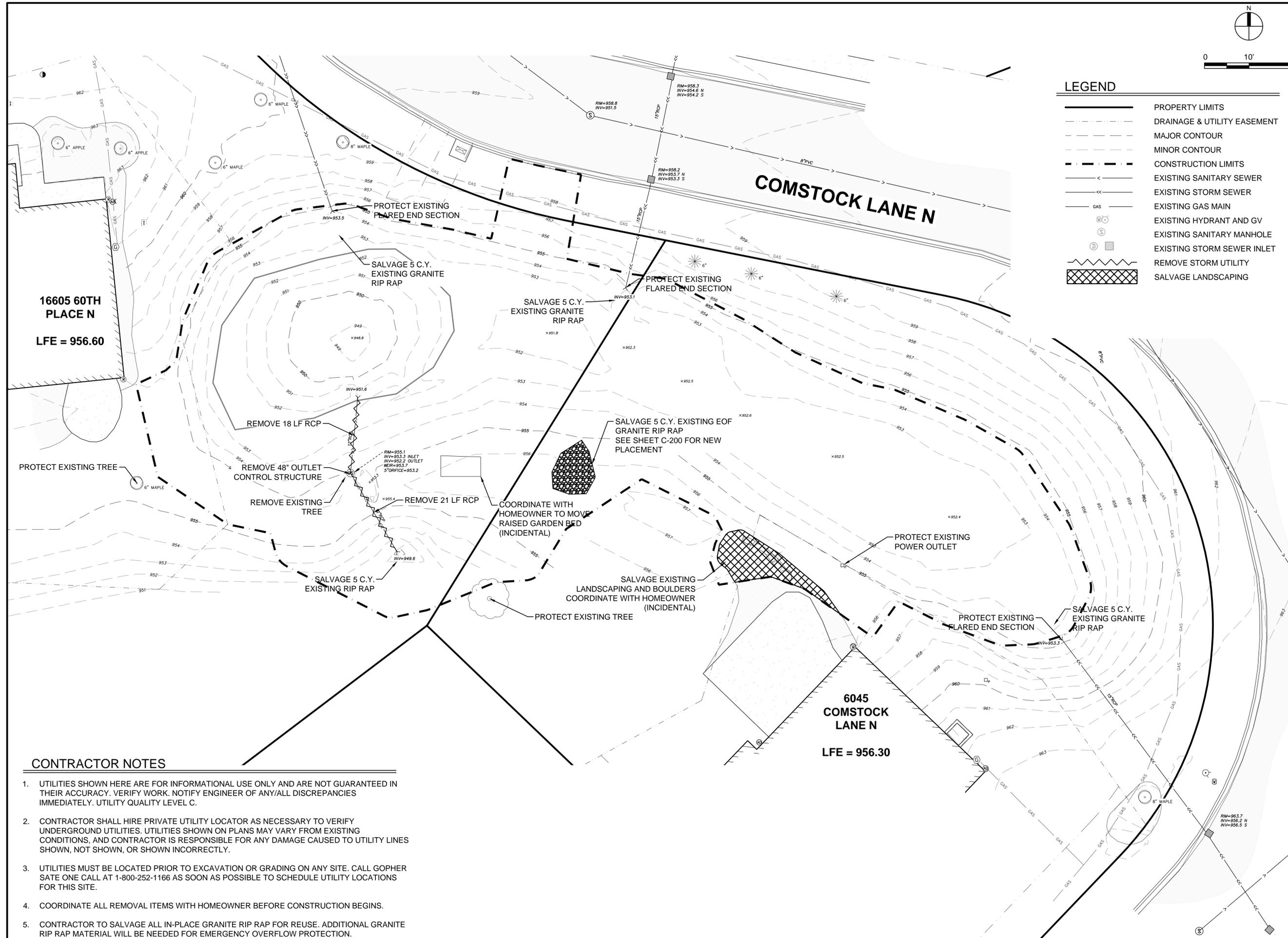
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C-100

PLOTTED: 03/12/2024	COMM. NO. 17615
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LEGEND

	PROPERTY LIMITS
	DRAINAGE & UTILITY EASEMENT
	MAJOR CONTOUR
	MINOR CONTOUR
	CONSTRUCTION LIMITS
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	EXISTING GAS MAIN
	EXISTING HYDRANT AND GV
	EXISTING SANITARY MANHOLE
	EXISTING STORM SEWER INLET
	REMOVE STORM UTILITY
	SALVAGE LANDSCAPING



CONTRACTOR NOTES

- UTILITIES SHOWN HERE ARE FOR INFORMATIONAL USE ONLY AND ARE NOT GUARANTEED IN THEIR ACCURACY. VERIFY WORK. NOTIFY ENGINEER OF ANY/ALL DISCREPANCIES IMMEDIATELY. UTILITY QUALITY LEVEL C.
- CONTRACTOR SHALL HIRE PRIVATE UTILITY LOCATOR AS NECESSARY TO VERIFY UNDERGROUND UTILITIES. UTILITIES SHOWN ON PLANS MAY VARY FROM EXISTING CONDITIONS, AND CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO UTILITY LINES SHOWN, NOT SHOWN, OR SHOWN INCORRECTLY.
- UTILITIES MUST BE LOCATED PRIOR TO EXCAVATION OR GRADING ON ANY SITE. CALL GOPHER SATE ONE CALL AT 1-800-252-1166 AS SOON AS POSSIBLE TO SCHEDULE UTILITY LOCATIONS FOR THIS SITE.
- COORDINATE ALL REMOVAL ITEMS WITH HOMEOWNER BEFORE CONSTRUCTION BEGINS.
- CONTRACTOR TO SALVAGE ALL IN-PLACE GRANITE RIP RAP FOR REUSE. ADDITIONAL GRANITE RIP RAP MATERIAL WILL BE NEEDED FOR EMERGENCY OVERFLOW PROTECTION.

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0 10' 20'



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SITE CONSTRUCTION PLAN

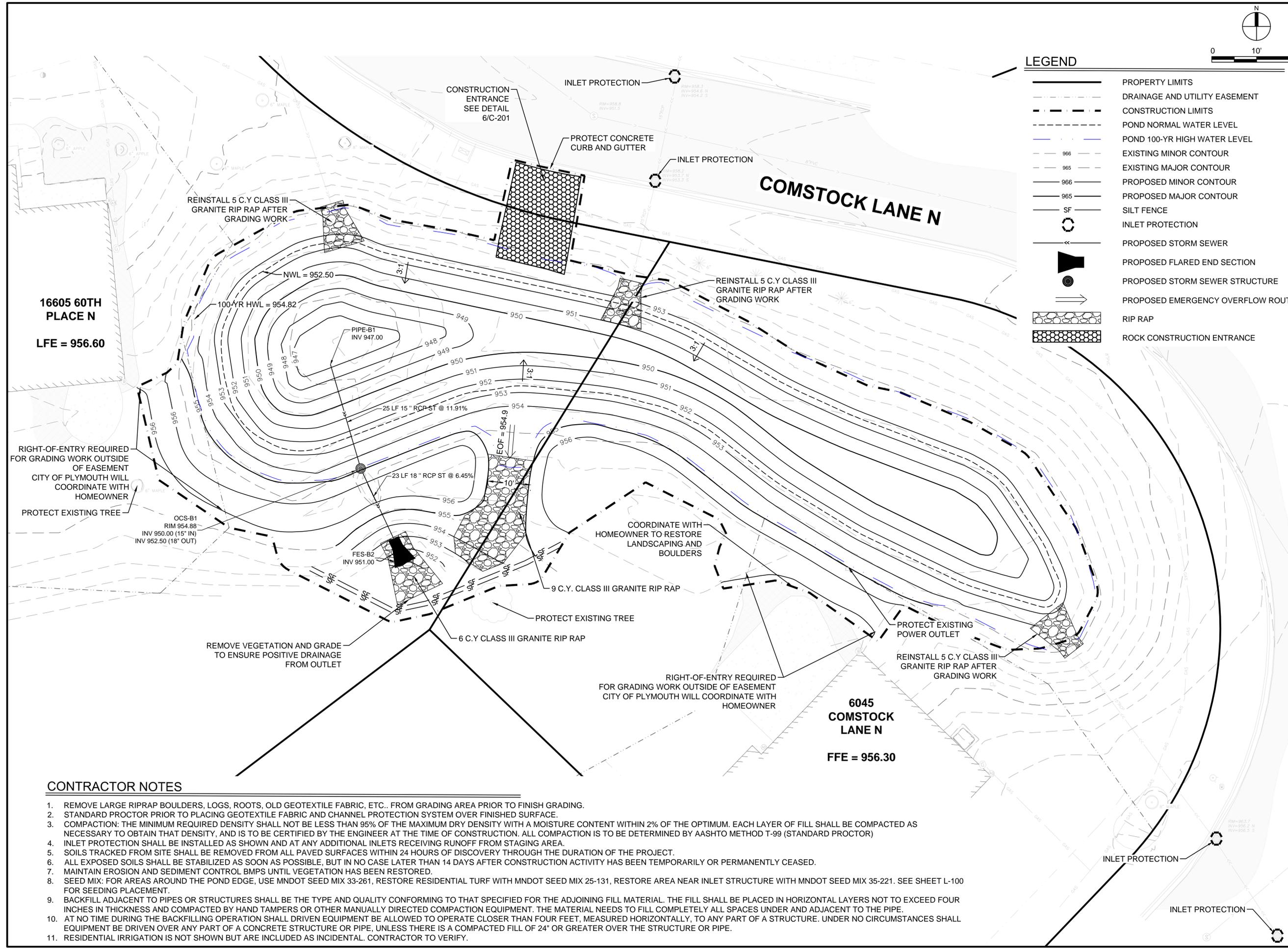
DRAWING NO.

C-200

PLOTTED: 03/12/2024	COMM. NO. 17615
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LEGEND

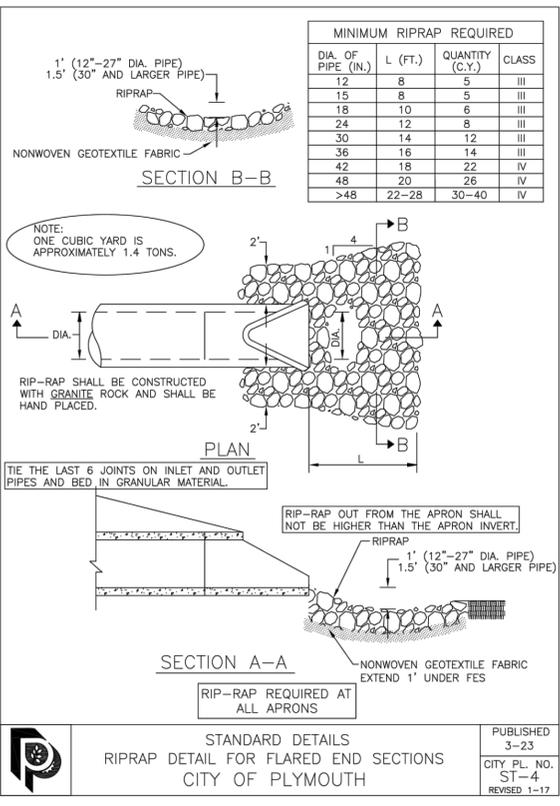
- PROPERTY LIMITS
- DRAINAGE AND UTILITY EASEMENT
- CONSTRUCTION LIMITS
- POND NORMAL WATER LEVEL
- POND 100-YR HIGH WATER LEVEL
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- SILT FENCE
- INLET PROTECTION
- PROPOSED STORM SEWER
- PROPOSED FLARED END SECTION
- PROPOSED STORM SEWER STRUCTURE
- PROPOSED EMERGENCY OVERFLOW ROUTE
- RIP RAP
- ROCK CONSTRUCTION ENTRANCE



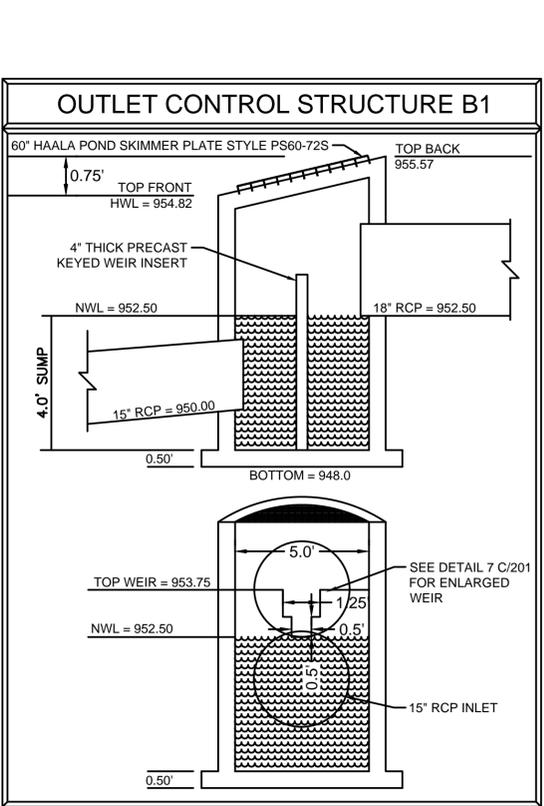
CONTRACTOR NOTES

- REMOVE LARGE RIPRAP BOULDERS, LOGS, ROOTS, OLD GEOTEXTILE FABRIC, ETC.. FROM GRADING AREA PRIOR TO FINISH GRADING.
- STANDARD PROCTOR PRIOR TO PLACING GEOTEXTILE FABRIC AND CHANNEL PROTECTION SYSTEM OVER FINISHED SURFACE.
- COMPACTION: THE MINIMUM REQUIRED DENSITY SHALL NOT BE LESS THAN 95% OF THE MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN 2% OF THE OPTIMUM. EACH LAYER OF FILL SHALL BE COMPACTED AS NECESSARY TO OBTAIN THAT DENSITY, AND IS TO BE CERTIFIED BY THE ENGINEER AT THE TIME OF CONSTRUCTION. ALL COMPACTION IS TO BE DETERMINED BY AASHTO METHOD T-99 (STANDARD PROCTOR)
- INLET PROTECTION SHALL BE INSTALLED AS SHOWN AND AT ANY ADDITIONAL INLETS RECEIVING RUNOFF FROM STAGING AREA.
- SOILS TRACKED FROM SITE SHALL BE REMOVED FROM ALL PAVED SURFACES WITHIN 24 HOURS OF DISCOVERY THROUGH THE DURATION OF THE PROJECT.
- ALL EXPOSED SOILS SHALL BE STABILIZED AS SOON AS POSSIBLE, BUT IN NO CASE LATER THAN 14 DAYS AFTER CONSTRUCTION ACTIVITY HAS BEEN TEMPORARILY OR PERMANENTLY CEASED.
- MAINTAIN EROSION AND SEDIMENT CONTROL BMPs UNTIL VEGETATION HAS BEEN RESTORED.
- SEED MIX: FOR AREAS AROUND THE POND EDGE, USE MNDOT SEED MIX 33-261, RESTORE RESIDENTIAL TURF WITH MNDOT SEED MIX 25-131, RESTORE AREA NEAR INLET STRUCTURE WITH MNDOT SEED MIX 35-221. SEE SHEET L-100 FOR SEEDING PLACEMENT.
- BACKFILL ADJACENT TO PIPES OR STRUCTURES SHALL BE THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE ADJOINING FILL MATERIAL. THE FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED FOUR INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR OTHER MANUALLY DIRECTED COMPACTION EQUIPMENT. THE MATERIAL NEEDS TO FILL COMPLETELY ALL SPACES UNDER AND ADJACENT TO THE PIPE.
- AT NO TIME DURING THE BACKFILLING OPERATION SHALL DRIVEN EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN FOUR FEET, MEASURED HORIZONTALLY, TO ANY PART OF A STRUCTURE. UNDER NO CIRCUMSTANCES SHALL EQUIPMENT BE DRIVEN OVER ANY PART OF A CONCRETE STRUCTURE OR PIPE, UNLESS THERE IS A COMPACTED FILL OF 24" OR GREATER OVER THE STRUCTURE OR PIPE.
- RESIDENTIAL IRRIGATION IS NOT SHOWN BUT ARE INCLUDED AS INCIDENTAL. CONTRACTOR TO VERIFY.

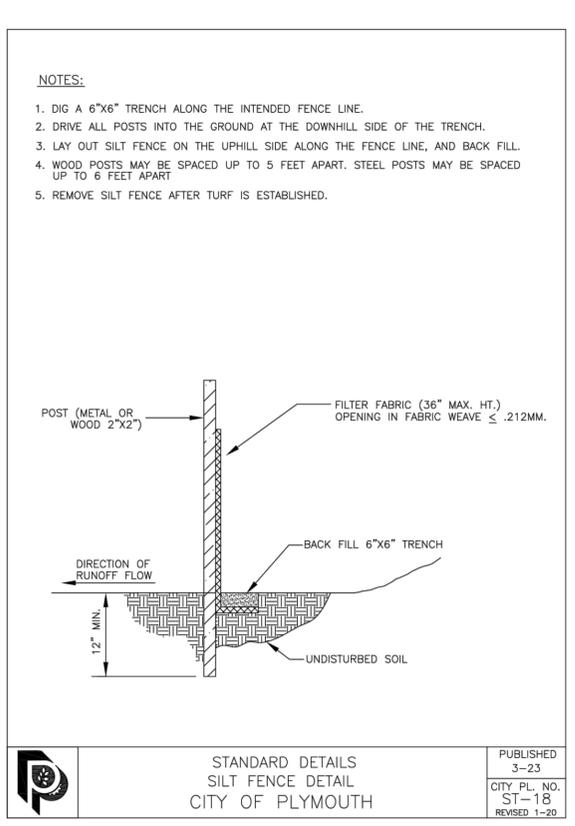
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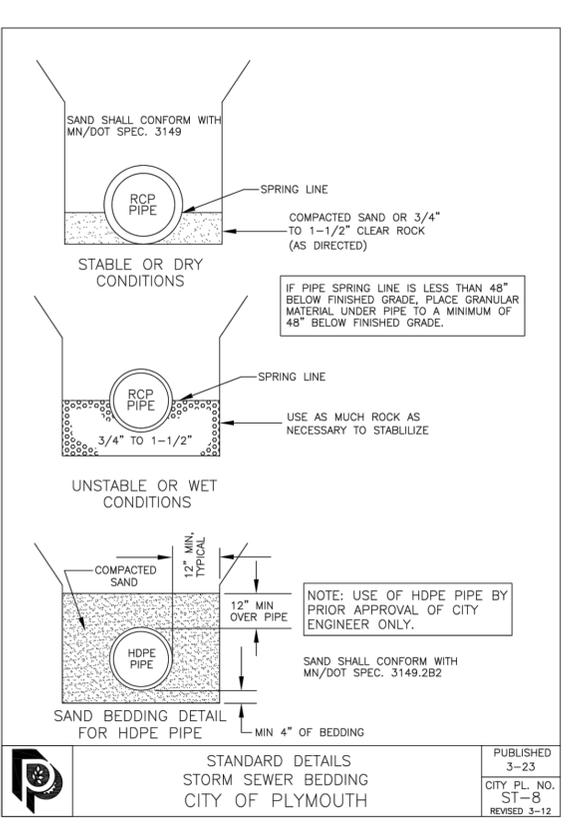
1 RIPRAP DETAIL FOR FLARED END SECTIONS
SCALE:NTS



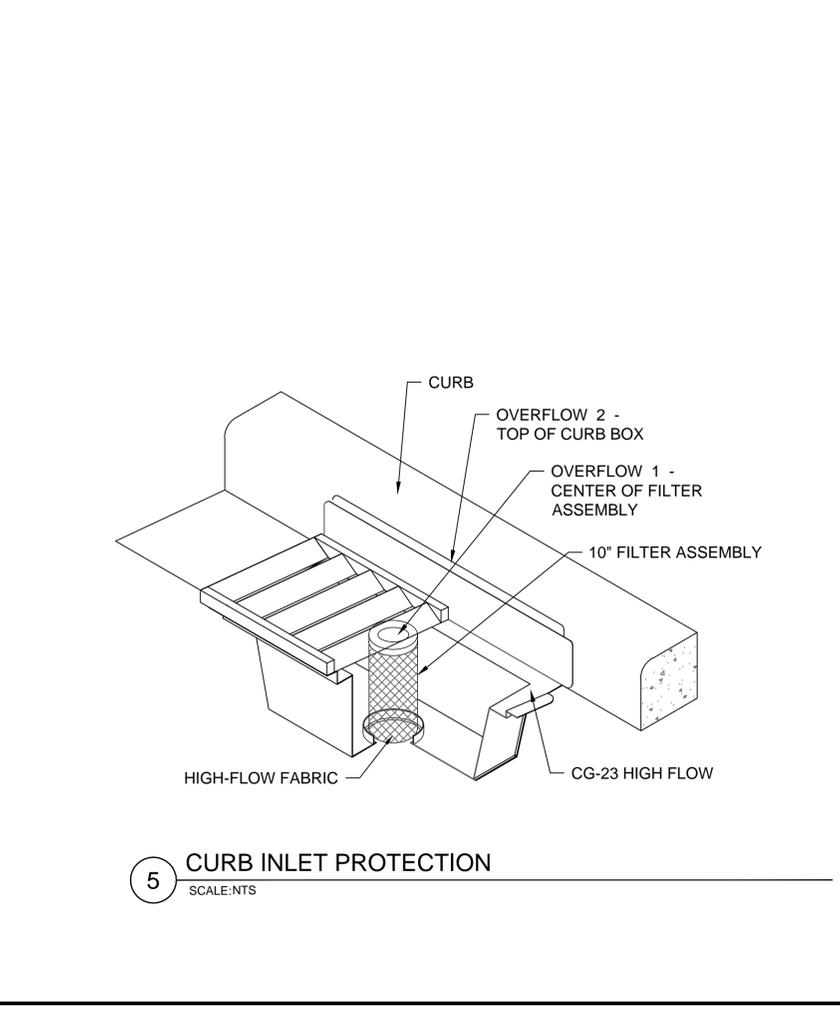
2 SKIMMER STRUCTURE
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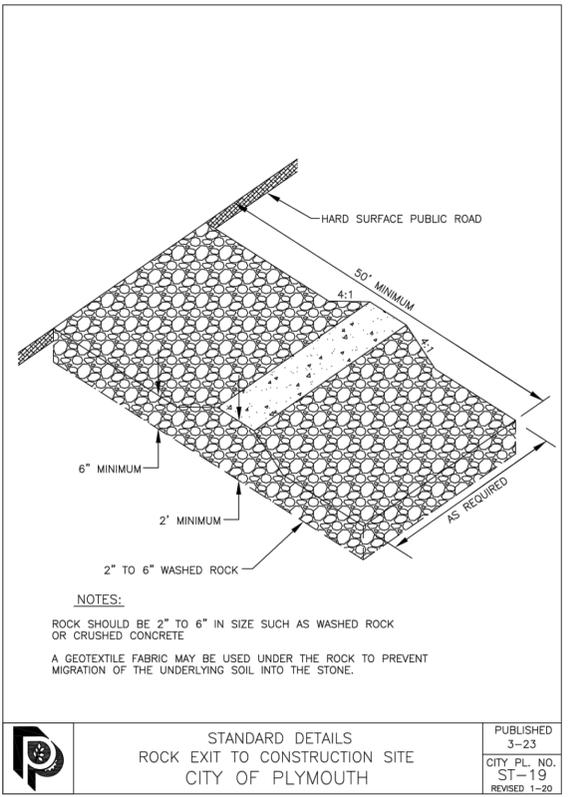
3 SILT FENCE
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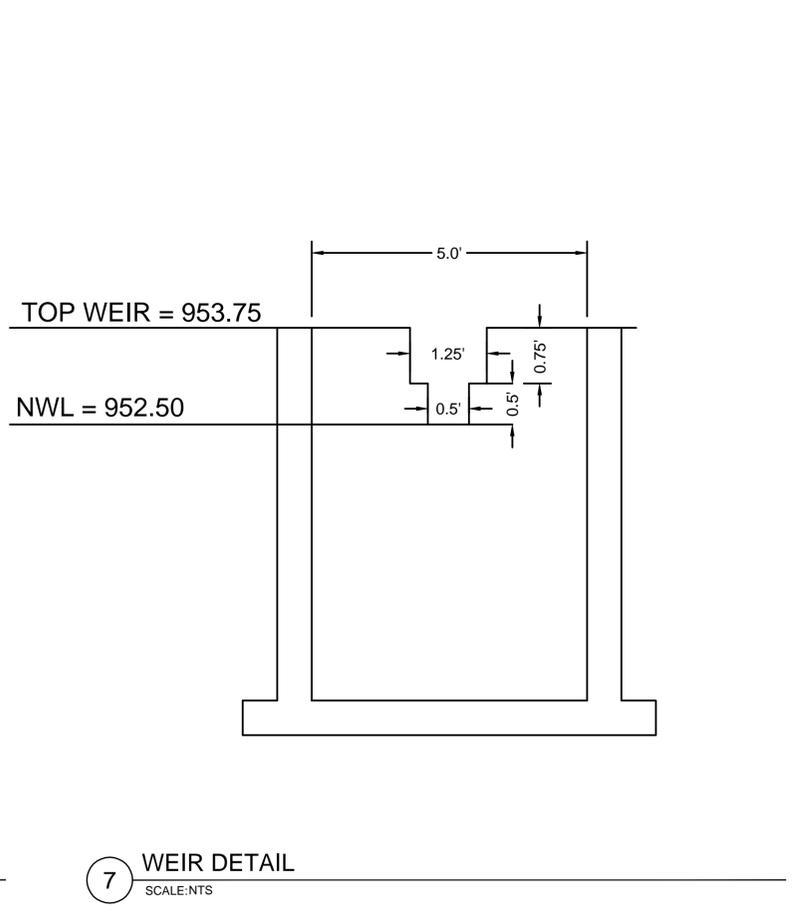
4 STORM SEWER BEDDING
SCALE:NTS



5 CURB INLET PROTECTION
SCALE:NTS



6 ROCK CONSTRUCTION ENTRANCE
SCALE:NTS



7 WEIR DETAIL
SCALE:NTS

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DRAWING TITLE
CONSTRUCTION DETAILS

DRAWING NO.
C-201

PLOTTED: 03/12/2024	COMM. NO. 17615
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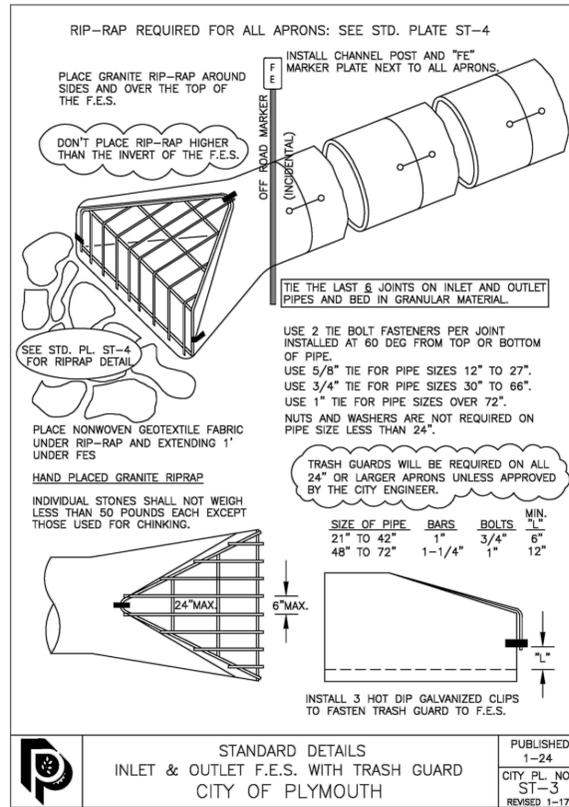
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CONSTRUCTION
DETAILS 2

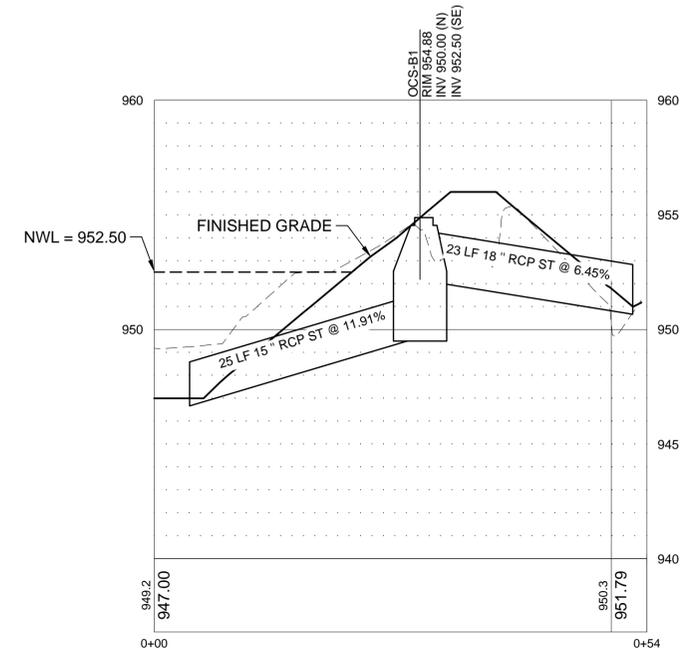
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C-202

PLOTTED: 03/12/2024	COMM. NO. 17615
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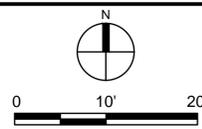
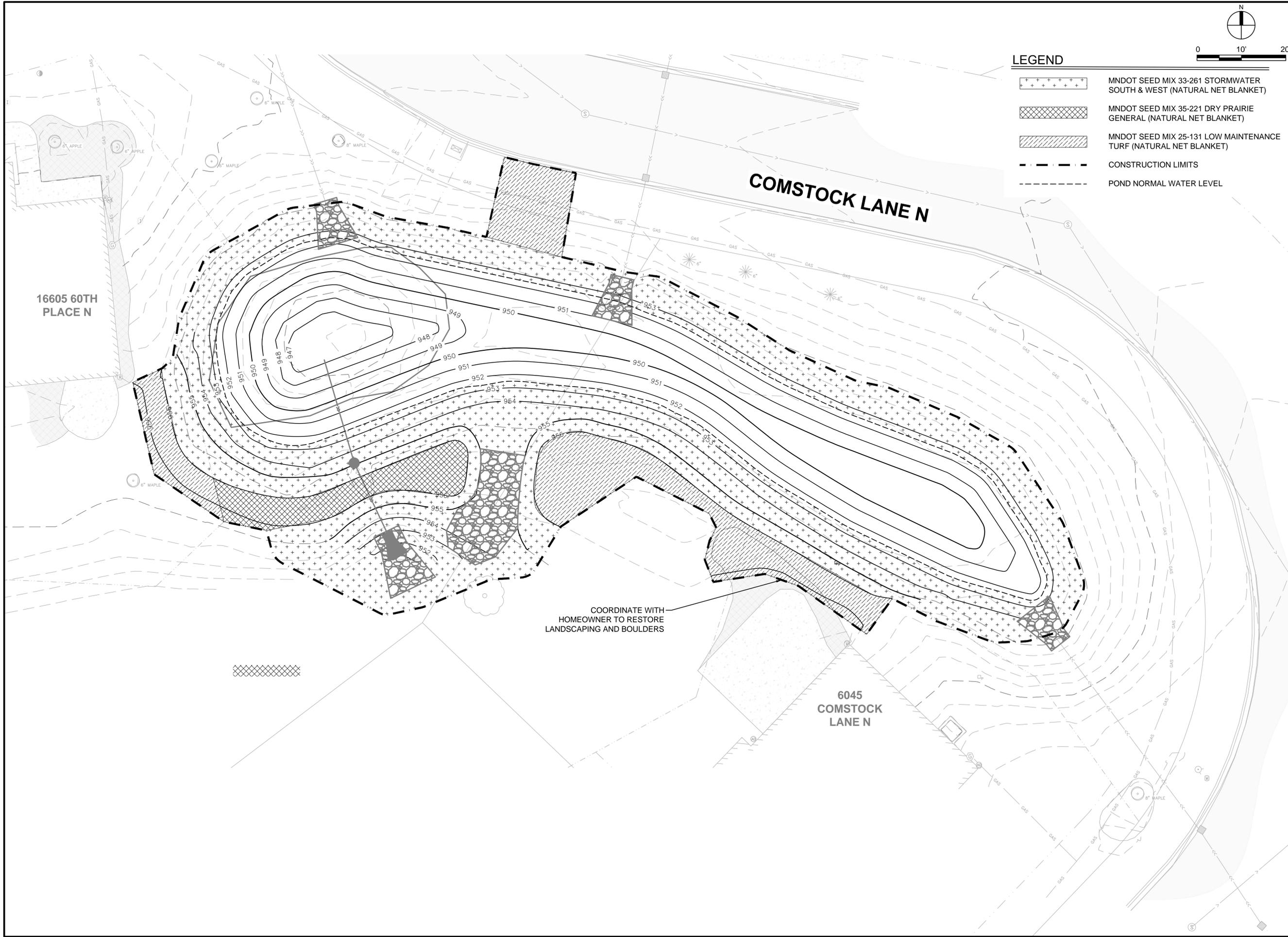


1 INLET & OUTLET FLARED END SECTION WITH TRASH GUARD
 SCALE: NTS



2 POND OUTLET TO WETLAND
 SCALE: 1" = 10'

Mar 11, 2024 - 3:31pm - c:\city - 17615 - 22x34 - TitleBlock - 17615 - base - 17615 - site - 17615 - g - base - 17615 - u - base - 17615 - Restoration.dwg



LEGEND

-  MNDOT SEED MIX 33-261 STORMWATER SOUTH & WEST (NATURAL NET BLANKET)
-  MNDOT SEED MIX 35-221 DRY PRAIRIE GENERAL (NATURAL NET BLANKET)
-  MNDOT SEED MIX 25-131 LOW MAINTENANCE TURF (NATURAL NET BLANKET)
-  CONSTRUCTION LIMITS
-  POND NORMAL WATER LEVEL



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DRAWING TITLE

SITE RESTORATION PLAN

DRAWING NO.

L-100

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