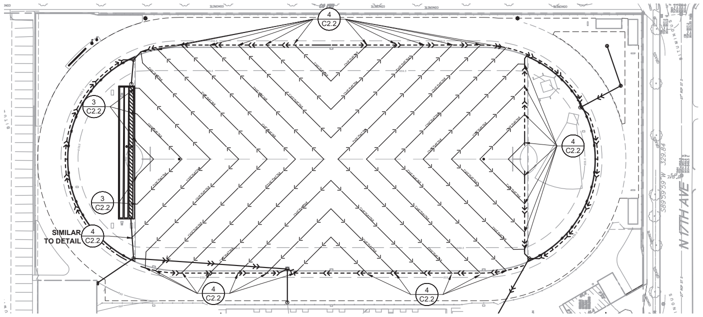


1 C1.5 **TURF FIELD FLAT DRAIN TILE PLAN**
SCALE = 1" = 50'

LEGEND

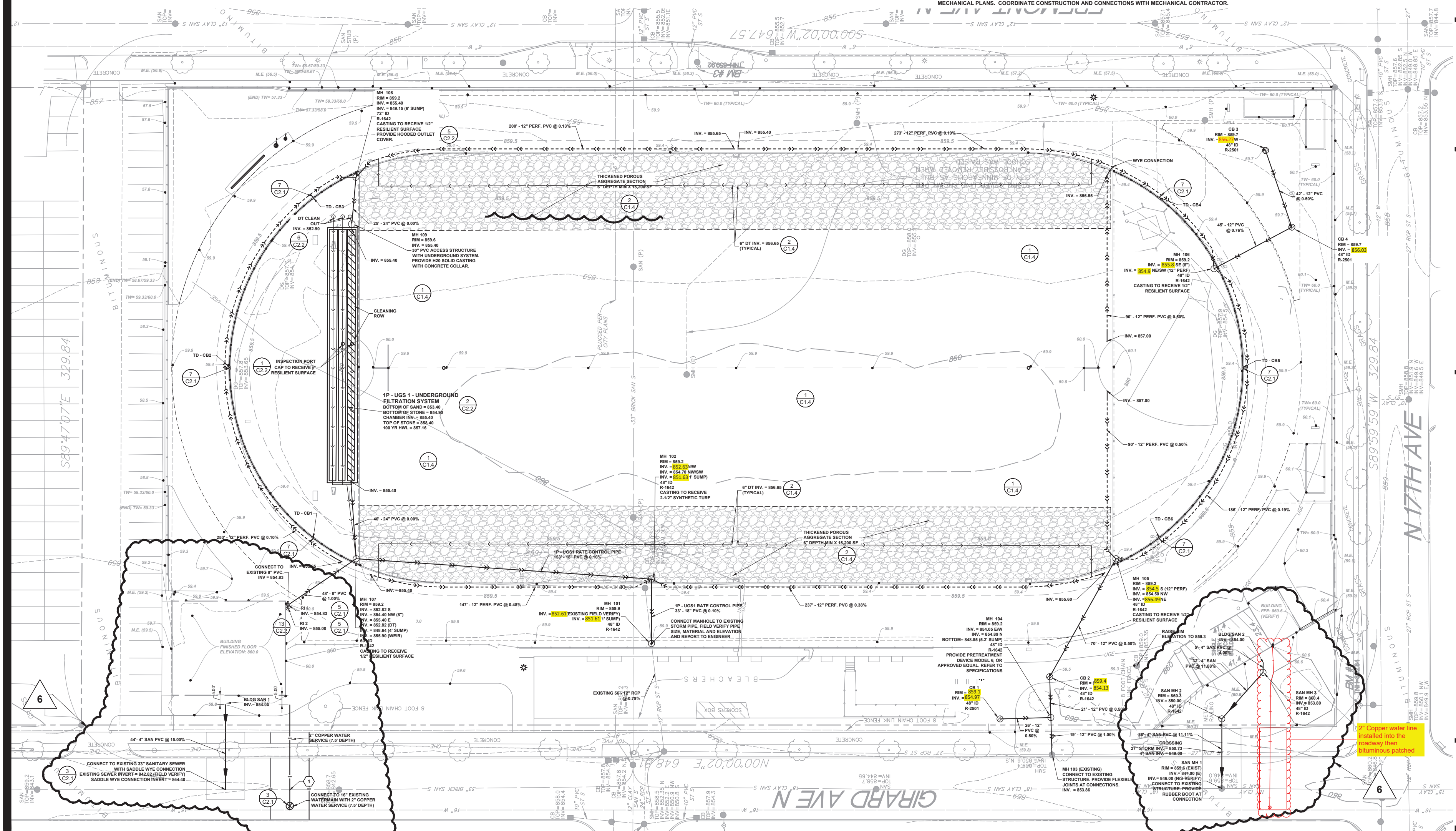
1 / C2.1	REFERENCE KEY TO SITE DETAILS DETAIL I.D NUMBER (TOP) DETAIL SHEET NUMBER (BOTTOM)
865	EXISTING CONTOUR
× 865.5	EXISTING SPOT ELEVATION
865	PROPOSED CONTOUR
65.6	PROPOSED SPOT ELEVATION ME = MATCH EXISTING TC/ BC = TOP/ BOTTOM OF CURB TW = TOP OF RETAINING WALL
	PROPOSED GRADING LIMITS
	PROPOSED STORM SEWER 3 / C2.1
	PROPOSED PERFORATED STORM SEWER 4 / C2.1
	PROPOSED DRAIN TILE 1 / C1.4
	PROPOSED MANHOLE (MH) 6 / C2.1, 5 / C2.2
	PROPOSED CATCH BASIN (CB) 5 / C2.1
	PROPOSED UNDERGROUND CHAMBERS 1 / C2.2, 2 / C2.2
1	PROVIDE MINIMUM 18" VERTICAL SEPARATION AT CROSSING - PROVIDE VERTICAL BENDS IN WATERMAIN AS REQUIRED TO ACCOMPLISH. CENTER ONE LENGTH WATERMAIN PIPE ON CROSSING.

NOTES

1. REFER TO SHEET G1.0 - TITLE SHEET FOR GENERAL NOTES.
2. ALL SANITARY SEWER PIPE SHALL BE PVC PIPE (ASTM D 2665, SCHEDULE 40), UNLESS OTHERWISE NOTED. SANITARY SEWER INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM D2321.
3. STORM SEWER PIPE (NON-PERFORATED) SHALL BE PVC PIPE (ASTM D3034, SDR 35), UNLESS OTHERWISE NOTED. PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321.
4. ALL WATERMAIN SHALL BE AWWA C900, CAST IRON OD, DR 18, PVC PIPE INSTALLED IN ACCORDANCE WITH ASTM D2321. ALL WATERMAIN SHALL HAVE MINIMUM 8'-0" BURY (TOP OF PIPE TO FINISH GRADE).
5. FLEXIBLE JOINTS AT STORM SEWER PIPE CONNECTIONS TO STRUCTURES:
   a. IN ACCORDANCE WITH MINNESOTA PLUMBING CODE, PROVIDE FLEXIBLE JOINTS AT ALL PIPE CONNECTIONS TO ALL STORM SEWER STRUCTURES.
   b. ACCEPTABLE MANUFACTURERS / PRODUCTS:
   i. ....
   ii. ....
   ij. OR APPROVED EQUAL.
4. REFER TO SHEET C1.6, EROSION CONTROL PLAN (SWPPP), FOR EROSION CONTROL PROTECTION.
5. ALL DRAINTILE, EXCEPT FLAT TILE UNDER SYNTHETIC TURF, SHALL BE PVC A-2000, UNLESS OTHERWISE NOTED.
6. LOCATE ALL EXISTING UTILITIES, VERIFY LOCATION, SIZE AND INVERT ELEVATION OF ALL EXISTING UTILITIES. VERIFY LOCATIONS, SIZES AND ELEVATIONS OF SAME BEFORE BEGINNING CONSTRUCTION.
7. REFER TO ELECTRICAL SHEETS FOR PROVISION OF BLANK CONDUITS BETWEEN/ IN COMM BOXES. COORDINATE AS REQUIRED.
8. WATERMAIN SHALL BE INSTALLED AT LEAST 10 FEET HORIZONTALLY FROM ANY MANHOLE, CATCH BASIN, STORM SEWER, SANITARY SEWER, DRAINTILE OR OTHER POTENTIAL SOURCE FOR CONTAMINATION PER MINNESOTA PLUMBING CODE. THIS ISOLATION DISTANCE SHALL BE MEASURED FROM THE OUTER EDGE OF THE PIPE TO THE OUTER EDGE OF THE CONTAMINATION SOURCE (OUTER EDGE OF STRUCTURES OR PIPING OR SIMILAR).
9. ANY MANHOLE, CATCH BASIN, STORM SEWER, SANITARY SEWER, DRAINTILE OR OTHER POTENTIAL SOURCE FOR CONTAMINATION SHALL BE INSTALLED AT LEAST 10 FEET HORIZONTALLY FROM ANY WATERMAIN PER MINNESOTA PLUMBING CODE. THIS ISOLATION DISTANCE SHALL BE MEASURED FROM THE OUTER EDGE OF THE PIPE TO THE OUTER EDGE OF THE CONTAMINATION SOURCE (OUTER EDGE OF STRUCTURES OR PIPING OR SIMILAR).
10. PRIOR TO CONSTRUCTION OF PROPOSED BUILDING UTILITY SERVICES (STORM, SANITARY SEWER, WATERMAIN), VERIFY ALL PROPOSED BUILDING UTILITY SERVICE PIPE SIZES, LOCATIONS AND ELEVATIONS WITH MECHANICAL PLANS. COORDINATE CONSTRUCTION AND CONNECTIONS WITH MECHANICAL CONTRACTOR.

4"x4" AREA - FOR CITY PURPOSES

0 10 20


MH 108
RIM = 859.2
INV. = 855.40
INV. = 849.15 (6' SUMP)
72" ID
R-1642
CASTING TO RECEIVE 1/2" RESILIENT SURFACE
PROVIDE HOODED OUTLET COVER.
200' - 12" PERF. PVC @ 0.13%
273' - 12" PERF. PVC @ 0.19%
THICKENED POROUS AGGREGATE SECTION 6" DEPTH MIN X 15,200 SF
WYE CONNECTION
CB 3
RIM = 859.7
INV. = 856.27W
48" ID
R-2501
TD - CB3
TD - CB4
25' - 24" PVC @ 0.00%
MH 109
RIM = 859.6
INV. = 855.40
30" PVC ACCESS STRUCTURE WITH UNDERGROUND SYSTEM. PROVIDE H20 SOLID CASTING WITH CONCRETE COLLAR.
DT CLEAN OUT
INV. = 852.90
6" DT INV. = 856.65 (TYPICAL)
CB 4
RIM = 859.7
INV. = 856.03
48" ID
R-2501
MH 106
RIM = 859.2
INV. = 855.8 SE (8")
INV. = 854.9 NE/SW (12" PERF)
48" ID
R-1642
CASTING TO RECEIVE 1/2" RESILIENT SURFACE
CLEANING ROW
90' - 12" PERF. PVC @ 0.50%
INSPECTION PORT CAP TO RECEIVE 1" RESILIENT SURFACE
TD - CB2
TD - CB5
1P - UGS 1 - UNDERGROUND FILTRATION SYSTEM
BOTTOM OF SAND = 853.40
BOTTOM OF STONE = 854.90
CHAMBER INV. = 855.40
TOP OF STONE = 858.40
100 YR HWL = 857.16
MH 102
RIM = 859.2
INV. = 852.63 W
INV. = 854.70 NW/SW
INV. = 851.63 (1' SUMP)
48" ID
R-1642
CASTING TO RECEIVE 2-1/2" SYNTHETIC TURF
TD - CB1
TD - CB6
40' - 24" PVC @ 0.00%
1P - UGS1 RATE CONTROL PIPE 153' - 18" PVC @ 0.10%
CONNECT TO EXISTING 8" PVC.
INV. = 854.83
MH 107
RIM = 859.2
INV. = 852.82 S
INV. = 854.40 NW (8")
INV. = 855.40 E
INV. = 852.62 (DT)
INV. = 848.64 (4' SUMP)
INV. = 855.90 (WEIR)
CASTING TO RECEIVE 1/2" RESILIENT SURFACE
147' - 12" PERF. PVC @ 0.46%
MH 101
RIM = 859.9
INV. = 852.61 EXISTING FIELD VERIFY
INV. = 851.61 (1' SUMP)
48" ID
R-1642
1P - UGS1 RATE CONTROL PIPE 33' - 18" PVC @ 0.10%
CONNECT MANHOLE TO EXISTING STORM PIPE, FIELD VERIFY PIPE SIZE, MATERIAL AND ELEVATION AND REPORT TO ENGINEER.
237' - 12" PERF. PVC @ 0.38%
MH 105
RIM = 859.2
INV. = 854.5 S (12" PERF)
INV. = 854.50 NW
INV. = 856.49 NE
48" ID
R-1642
CASTING TO RECEIVE 1/2" RESILIENT SURFACE
MH 104
RIM = 859.2
INV. = 854.05 E/W
INV. = 854.89 N
BOTTOM = 848.85 (5.2' SUMP)
48" ID
R-1642
PROVIDE PRETREATMENT DEVICE MODEL 6, OR APPROVED EQUAL. REFER TO SPECIFICATIONS
CB 2
RIM = 859.4
INV. = 854.13
48" ID
R-1642
CB 1
RIM = 859.1
INV. = 854.97
48" ID
R-2501
EXISTING 56' - 12" RCP @ 0.79%
BLDG SAN 1
INV. = 854.00
44' - 4" SAN PVC @ 15.00%
2" COPPER WATER SERVICE (7.5' DEPTH)
CONNECT TO EXISTING 33" SANITARY SEWER WITH SADDLE WYE CONNECTION
EXISTING SEWER INVERT = 842.82 (FIELD VERIFY)
SADDLE WYE CONNECTION INVERT = 844.40
CONNECT TO 16" EXISTING WATERMAIN WITH 2" COPPER WATER SERVICE (7.5' DEPTH)
BLEACHERS
8 FOOT CHAIN LINK FENCE
GIRARD AVE N
N 17TH AVE
S89°47'07"E 329.84
S89°59'59"W 329.84
MH 103 (EXISTING)
CONNECT TO EXISTING STRUCTURE. PROVIDE FLEXIBLE JOINTS AT CONNECTIONS.
INV. = 853.86
SAN MH 1
RIM = 859.6 (EXIST)
INV. = 847.00 (E)
INV. = 846.00 (N/S VERIFY)
CONNECT TO EXISTING STRUCTURE. PROVIDE RUBBER BOOT AT CONNECTION
SAN MH 2
RIM = 860.3
INV. = 850.00
48" ID
R-1642
SAN MH 3
RIM = 860.4
INV. = 853.80
48" ID
R-1642
BLDG SAN 2
INV. = 854.00
27" STORM INV. = 850.73
4" SAN INV. = 849.00
2" Copper water line installed into the roadway then bituminous patched
6

UTILITY PLAN

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 Engineer under the laws of the State of Minnesota.
DAVID A. REY
Reg. No. 40180 Date 04/05/2019

ANDERSON - JOHNSON ASSOCIATES, INC.
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NORTH ATHLETIC FIELD
801 Fremont Ave N
MINNEAPOLIS, MN 55411

SPECIAL SCHOOL DISTRICT No. 1
MINNEAPOLIS, MINNESOTA