

EXISTING STRUCTURE

THE EXISTING STRUCTURE IS A THREE SPAN TIMBER BRIDGE WITH SPAN LENGTHS OF 120'-4", 120'-4", AND 120'-4". THE EXISTING CLEAR ROADWAY WIDTH IS 12'-0" WITH 6'-18" BASED SIDEWALKS ON BOTH THE EAST AND WEST SIDES. THE BRIDGE WAS BUILT IN 1976. THE EXISTING STONE ABUTMENT SHALL REMAIN IN PLACE. THE BRIDGE WAS BUILT IN 1976.

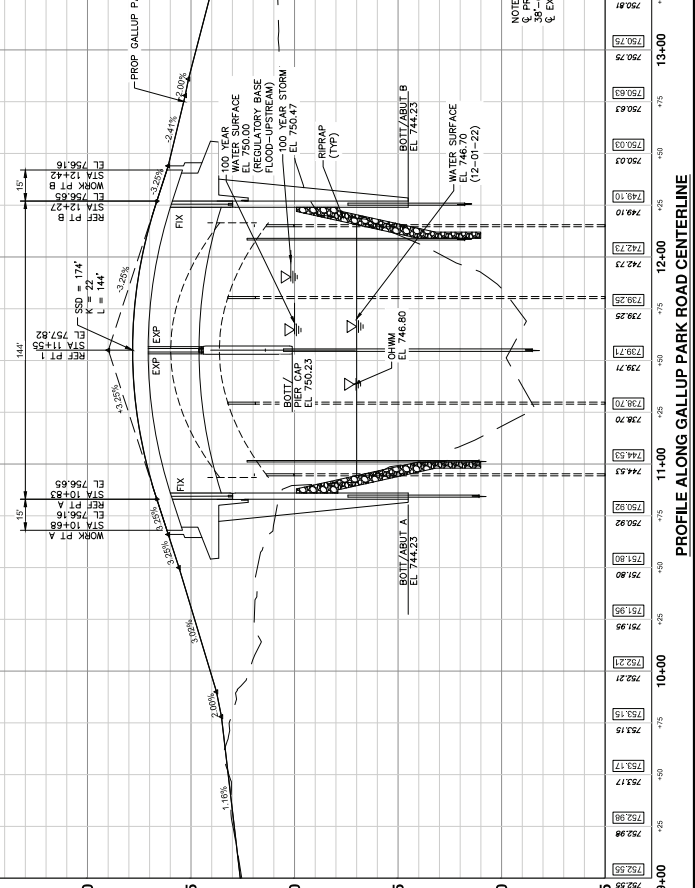
REFERENCE POINT COORDINATES

REF PT	NORTH	EAST	ELEV
A	283358.42	1330328.00	756.65
1	283404.24	1330357.19	757.82
B	283490.05	1330346.38	756.65
WORK PT	NORTH	EAST	ELEV
a	283344.71	1330321.92	756.16
b	283563.75	1330392.45	756.16

NOTES

- THE WORK COVERED BY THESE PLANS INCLUDES MAINTAINING TRAFFIC, CONSTRUCTION OF THE PROPOSED BRIDGE, PLACING RIPRAP TO THE LIMITS SHOWN ON THESE PLANS, AND THE REMOVAL OF ALL EXISTING UTILITIES AND ROAD PLANS THAT ARE A PART OF THIS CONTRACT.
- THE CONTRACTOR SHALL LOCATE ALL ACTIVE UNDERGROUND UTILITIES PRIOR TO STARTING WORK AND SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.
- THE GROUND ADJACENT TO THE STRUCTURE SHALL BE GRADED BY THE CONTRACTOR TO PROVIDE DRAINAGE.
- GALLUP PARK DRIVE TRAFFIC IS TO BE MAINTAINED ALONG THE EXISTING GALLUP PARK BRIDGE WHILE THE PROPOSED BRIDGE IS BEING CONSTRUCTED.
- PLAN ELEVATIONS REFER TO NAVD83 DATUM.
- THE WATER LEVEL IS SUBJECT TO CHANGE. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINATION OF WATER LEVELS THAT MAY EXIST DURING CONSTRUCTION.
- MEASURES SHALL BE TAKEN TO PREVENT DEBRIS FROM FALLING FROM THE STRUCTURE INTO THE WATER COURSE. IF DEBRIS FALLS INTO THE WATERWAY, IT SHALL BE REMOVED IMMEDIATELY. SINCE DISTURBANCE OF THE WATERWAY, MEASURES MUST BE EFFECTIVE. REMOVAL OF DEBRIS WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN BID ITEM "STRUCTURES, REM".
- TEMPORARILY STORED EXCAVATED MATERIAL SHALL BE STORED ON AN UPLAND SITE, AND SHALL NOT BE ALLOWED TO ERODE INTO THE WATERCOURSE.
- SOIL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE UTILIZED ON THIS PROJECT TO EFFECTIVELY REDUCE ACCELERATED SOIL EROSION AND SEDIMENTATION. SEE ROAD CONSTRUCTION PLAN FOR DETAILS.

SITUATION PLAN



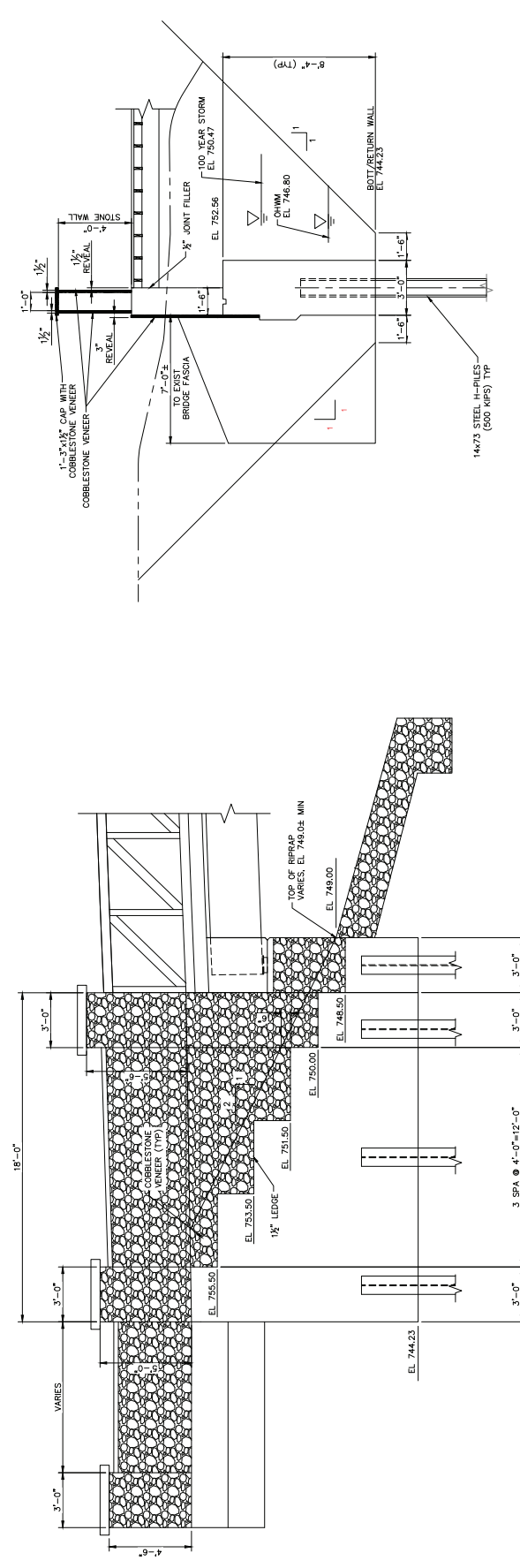
REV	ISSUED FOR BID	DESCRIPTION
AS	DATE	06-29-23
DR	DATE	
CHK	DATE	
APP	DATE	

CITY OF ANN ARBOR
 COMMUNITY SERVICES
 NON-POLITICAL
 PARKS AND RECREATION
 500 STATE STREET
 ANN ARBOR, MI 48106-2157
 www.a2gov.org

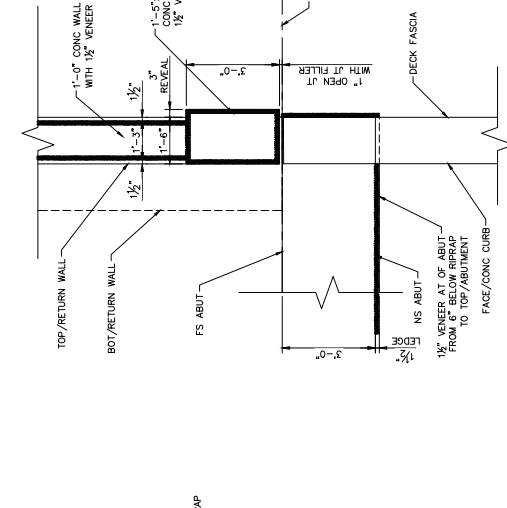


CITY OF ANN ARBOR - COMMUNITY SERVICES - PARKS AND RECREATION
 GALLUP PARK VEHICLE AND PEDESTRIAN BRIDGE
 DESIGN - BRIDGE REPLACEMENT PLANS
 GENERAL PLAN OF STRUCTURE

DATE PLOTTED: 06/29/23
 SHEET NO: 11
 DRAWING NO: 23-05-01
 30 OF 45
 v1.0
 Approved

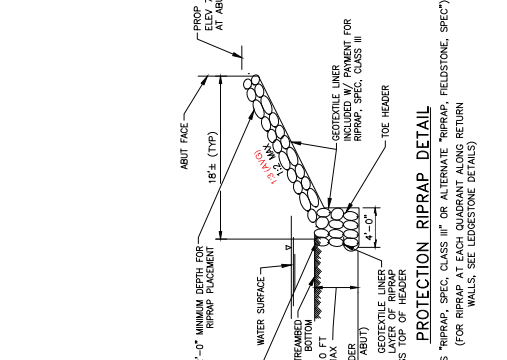


TYPICAL RETURN WALL SECTION
 SOUTHEAST RETURN WALL SHOWN

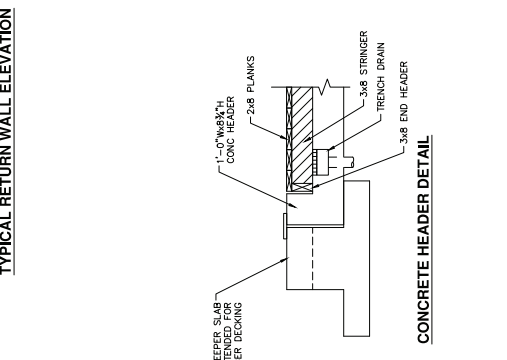


PARTIAL PLAN

TYPICAL RETURN WALL ELEVATION



PROTECTION RIPRAP DETAIL

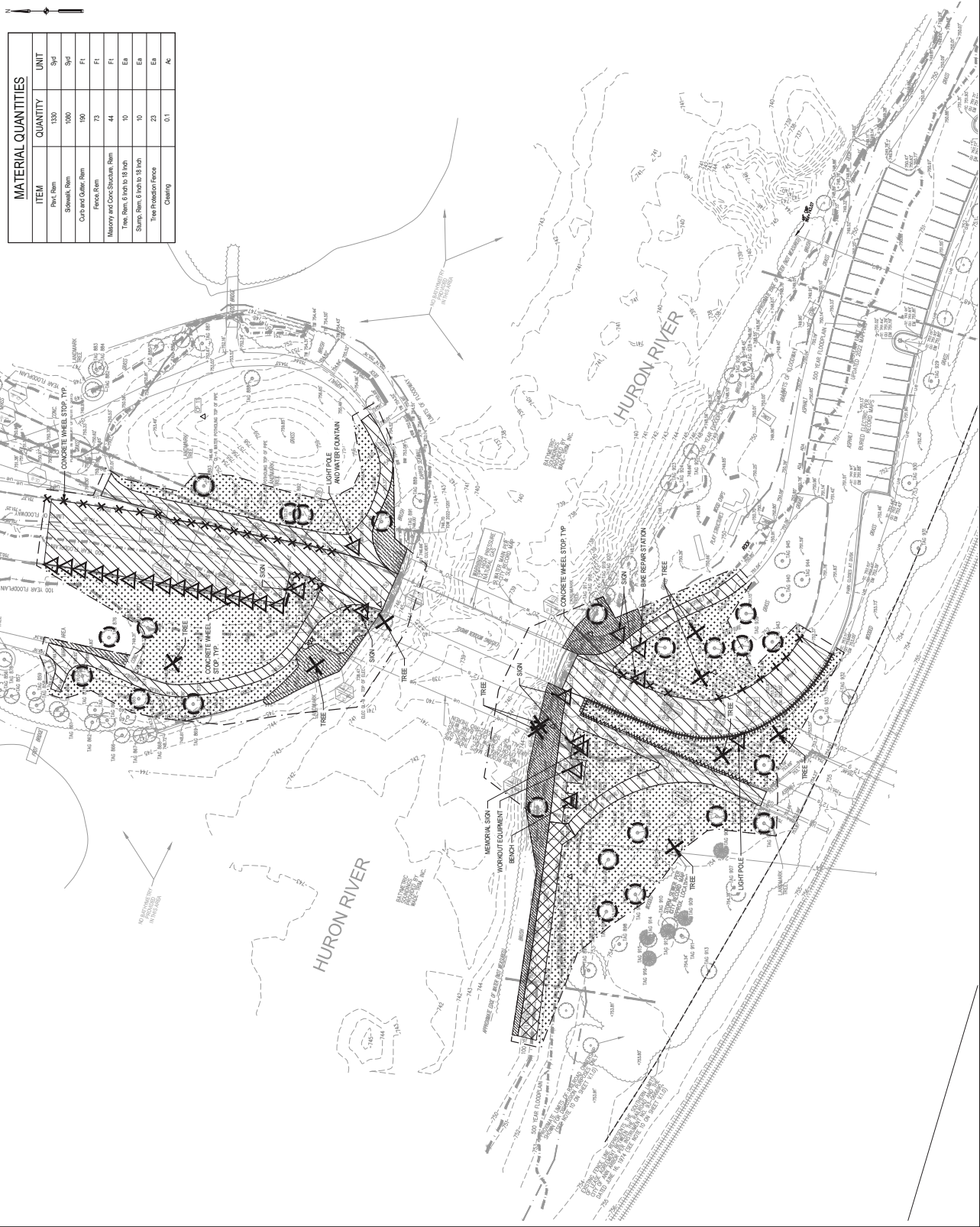


CONCRETE HEADER DETAIL



MATERIAL QUANTITIES

ITEM	QUANTITY	UNIT
Pave. Rem.	1330	Syd
Stripwalk Rem.	1000	Syd
Curb and Gutter Rem.	100	Ft
Fence Rem.	73	Ft
Masonry and Concrete Retain. Rem.	44	Ln
Tree Rem. 8 inch to 18 inch	10	EA
Tree Protection Fence	10	EA
Clearing	0.1	Ac



SITE DEMOLITION NOTES

- CONTRACTOR SHALL COORDINATE USE OF THE SITE AND HOURS OF CONSTRUCTION WITH THE CITY OF ANN ARBOR.
- THE CONTRACTOR AND SUB CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND SHALL BE RESPONSIBLE FOR OBTAINING APPROVAL FROM ALL FEDERAL, STATE AND LOCAL AGENCIES, UNLESS OTHERWISE NOTED ON THE DRAWING.
- THE CONTRACTOR SHALL REMOVE AND SALVAGE ITEMS TO BE DEMOLISHED AND SALVAGED AS NOTED ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL OTHER ITEMS TO BE SALVAGED FROM DAMAGE. ALL MATERIALS ARE TO BE SALVAGED AND STORED ON SITE UNTIL THEY ARE TO BE SALVAGED.
- AND RETURNED TO THE CITY OF ANN ARBOR.
- REMOVE CONCRETE CURBS TO BE REPAIRED.
- COORDINATE WORK ON THE DRAWING WITH SOILS EXPERTS AND REMOVAL OF EXISTING GRAVEL, STONE AND/OR TOPSOIL FOR REUSE MUST BE SEPARATED BY TYPE AND REPLACED WITH IDENTICAL MATERIALS. EXISTING MATERIALS TO BE REUSED OR STOCKPILED FOR REUSE WILL BE ALLOWED.
- EXISTING LANDSCAPING TO BE SALVAGED SHALL INCLUDE:
- STUMP AND ROOT REMOVAL. TREES AND PLANTINGS IDENTIFIED ON THE DRAWING SHALL BE REMOVED AND PLANTINGS IDENTIFIED AS TO BE SALVAGED SHALL BE IDENTIFIED AND PROTECTED. TRANSFERRING WILL BE PERFORMED UTILIZING APPROPRIATELY TRAINED PERSONNEL AND LOCALIZED EQUIPMENT BY THE OWNER.
- EXISTING EQUIPMENT (E.g. TRACTOR, BACKHOE, EXCAVATOR OR OTHER EQUIPMENT) SHALL NOT BE ALLOWED.
- TREES AND PLANTINGS NOT IDENTIFIED BY CITY OF ANN ARBOR TO BE SALVAGED SHALL BE REMOVED AND PLANTINGS IDENTIFIED TO REMAIN CONTRACTOR RESPONSIBLE FOR PROTECTION AND REPAIR DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND MAINTAINING ALL PLANTINGS TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND MAINTAINING ALL PLANTINGS TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND MAINTAINING ALL PLANTINGS TO REMAIN.
- MATERIALS TO BE REMOVED SHALL BE PLACED IN CONSTRUCTION PILES TO BE REMOVED BY THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING APPROVAL FROM THE CITY OF ANN ARBOR FOR THE LOCATION AND CONSTRUCTION OF CONSTRUCTION PILES.
- CONSTRUCTION PILES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ANN ARBOR SPECIFICATIONS AND SHALL BE APPROVED AND SEaled BY THE CITY OF ANN ARBOR BEFORE CONSTRUCTION BEGINS.
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LEGEND

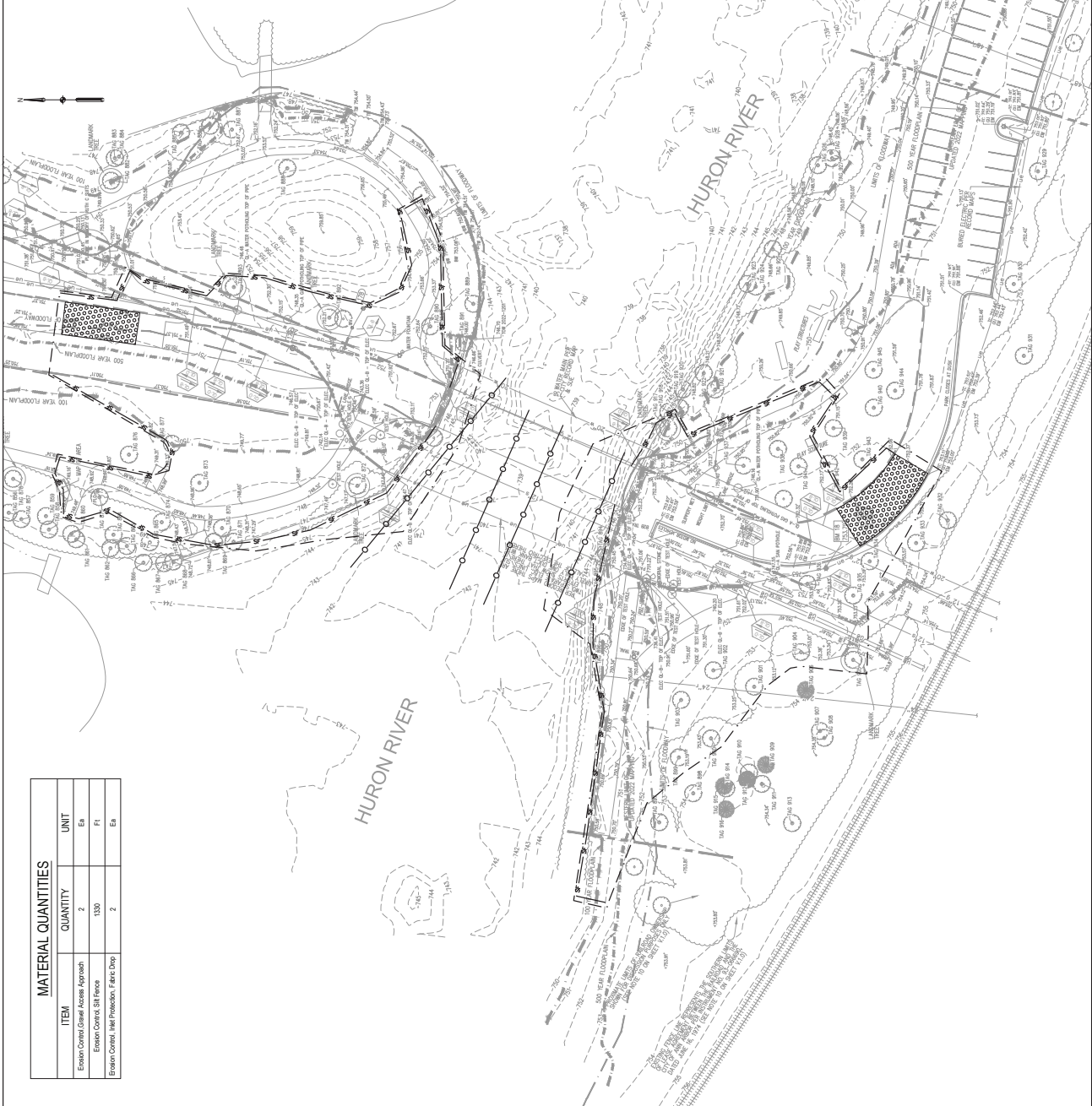
- PAVE. REM.
- INCL. AS2 BASE
- REMOVE CONCRETE PAVEMENT
- REMOVE CONCRETE PAVEMENT
- REMOVE TOPSOIL
- CLEARING
- FENCE REM.
- REMOVE STRUCTURE REM.
- REMOVE STONE WALL
- REMOVE TREE OR ITEM ASSOCIATED
- CURB AND GUTTER REM.
- TREE PROTECTION FENCE
- RELOCATE ITEM AS NOTED AND SHOWN ON LAYOUT PLAN
- LIMIT OF WORK

LEGEND

- 5' - EROSION CONTROL Silt Fence
- EROSION CONTROL Gravel Access Approach
- TURBIDITY CURTAIN SEE BRIDGE PLANS
- LIMIT OF WORK

SHEET NOTES

- GENERAL NOTES**
- LOCATION OF CONSTRUCTION FENCE AND ENTRANCE GATES TO BE TO TOTAL DISTURBED AREA - 1.13 ACRES
 - CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES
 - CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES
- SOIL EROSION AND SEDIMENTATION CONTROL SEQUENCE**
- IN ACCORDANCE WITH AVAILABLE 1000 PROXIMA CONTROL UNDER THE AUTHORITY OF PART 70, SOIL EROSION AND SEDIMENTATION CONTROL OF THE NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT, 1990 P.45.0 AS AMENDED AND SPECIFICATIONS, THE FOLLOWING GENERAL CONDITIONS APPLY TO ANY EARTH CHANGE AUTHORIZED BY THIS DOCUMENT:
- DESIGN, CONSTRUCT, AND COMPLETE THE EARTH CHANGE IN A MANNER THAT LIMITS THE EXPOSED AREA OF DISTURBED LAND OR THE REMOTE SEDIMENT CAUSED BY ACCELERATED SOIL EROSION FROM THE EXPOSED AREA.
 - TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED TO CONVEY WATER AROUND, THROUGH OR FROM THE EXPOSED AREA TO PREVENT SOIL EROSION AND SEDIMENTATION.
 - INSTALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES BEFORE OR UPON COMMENCEMENT OF THE EARTH CHANGE.
 - TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE EARTH CHANGE AND THE VEGETATION ON THE PROPER PLACEMENT, GRADING, OR COVERING OF SOIL TO ENSURE ITS RESISTANCE TO SOIL EROSION, SLIDING, OR OTHER EARTH CHANGES WITHIN FIVE (5) CALENDAR DAYS AFTER FINAL GRADING.
 - COMPLETE PERMANENT SOIL EROSION CONTROL MEASURES FOR THE EARTH CHANGE WITHIN FIVE (5) CALENDAR DAYS AFTER FINAL GRADING.
 - MAINTAIN TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IN PLACE AND THE AREAS IS STABILIZED.
 - CONTRACTOR TO MAINTAIN SSC CONTROLS UNTIL LANDSCAPES ARE COMPLETED AND FINAL SSC INSPECTION WITH APPROVAL HAS BEEN COMPLETED.
 - THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING LANDSCAPING PLANS THROUGHOUT THE PROJECT.
- SOIL EROSION AND SEDIMENTATION CONTROL GENERAL NOTES**
- ACCORDING TO MICHIGAN PART 70 ADMINISTRATIVE RULE 100.1, A SOIL EROSION AND SEDIMENTATION CONTROL PLAN IS REQUIRED FOR ALL CONSTRUCTION SITES WITH OVER ONE (1) ACRE OF EARTH CHANGE. FORMAL SSC PLANS NOT REQUIRED FOR SITES DISTURBING LESS THAN ONE (1) ACRE OF EARTH CHANGE.
 - THIS SITE WILL BE APPROXIMATELY 1.13 ACRES. THE NEAREST WATERS OF THE STATE (LAKES, STREAMS, WETLANDS, ETC.) THE EARTH CHANGE FOR THIS PROJECT IS APPROXIMATELY 1.13 ACRES. THE NEAREST WATERS OF THE STATE (LAKES, STREAMS, WETLANDS, ETC.) THE EARTH CHANGE FOR THIS PROJECT IS APPROXIMATELY 1.13 ACRES.
 - CONSEQUENTLY, A FORMAL SSC PLAN IS REQUIRED.
 - DURING CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM MAINTENANCE ON THE STORM WATER SYSTEM.
 - EROSION AND SEDIMENTATION CONTROL WORK TO CONFORM TO STANDARDS AND SPECIFICATIONS OF THE CITY OF ANN ARBOR.



MATERIAL QUANTITIES		
ITEM	QUANTITY	UNIT
Erosion Control Gravel Access Approach	2	Ea
Erosion Control Silt Fence	1330	Ft
Erosion Control Inlet Protection Fabric Drop	2	Ea

CITY OF ANN ARBOR
 PUBLIC SERVICES
 150 EAST WASHINGTON STREET
 ANN ARBOR, MI 48106-1607
 P.O. BOX 9848
 ANN ARBOR, MI 48106-9848
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SCALE PLAN: 1" = 30'
 DRAWING NO.: 14310
 SHEET NO.: 15 OF 55

GALLUP PARK BRIDGE AND SITE IMPROVEMENTS
 SOIL EROSION & SEDIMENTATION CONTROL PLAN

1. LOCATION OF CONSTRUCTION FENCE AND ENTRANCE GATES TO BE TO TOTAL DISTURBED AREA - 1.13 ACRES
 2. CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES
 3. CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES

1. EROSION AND SEDIMENTATION FROM WORK ON THIS SITE TO BE AREAS OR WATERWAYS. WATERWAYS INCLUDE BOTH NATURAL AND MANMADE (DITCHES, STREAMS, STORM DRAINS, RIVERS, LAKES AND CANALS).
 2. CONTRACTOR TO APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES TO ALL AREAS OF DISTURBED EARTH TO PREVENT SOIL EROSION AND SEDIMENTATION FROM STABILIZATION OF SLOPES, DITCHES, AND OTHER EARTH CHANGES HAVE TAKEN PLACE.
 3. BEFORE THE WORK TO BE DONE BY THE CONTRACTOR AS REQUIRED TO ENSURE PROGRESSIVE STABILIZATION OF DISTURBED EARTH.
 4. CONSTRUCTION SHALL BE APPLIED AS A PERIMETER DEFENSE AGAINST DOWNSTREAM STORM WATER INLETS, CATCH BASINS AND MANHOLES.
 5. INSTALL TEMPORARY VALETS AT ALL ADJACENT AND DOWNSTREAM STORM WATER INLETS, CATCH BASINS AND MANHOLES.
 6. PERIOD: IF A FULFILLMENT IS ANTICIPATED WITHIN THE CONSTRUCTION PERIOD, ALL VALETS SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
 7. INSTALL AN ANTI-TRACKING PAD AT THE SITE ENTRY AND EXITS IF THERE IS A POTENTIAL FOR TRACKOUT TO OCCUR FROM THE DISTURBED AREA.
 8. EXISTING ROADS FROM THE SITE DUE TO CONSTRUCTION SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR.
 9. SPILLAGE MUST REMAIN ON SITE OVERNIGHT OR IF THE WEATHER THE DAY WITH WATER REPLENTIAL MATERIAL TO PREVENT EROSION AND/OR MASSIVE SILT FLOWBACK AND TRACKOUT FROM THE SITE.
 10. OTHER CONTROL MEASURES APPROPRIATE TO THE SITE CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
 11. STOPPLES AS POSSIBLE DURING THE COURSE OF THE PROJECT.
 12. AREAS WHOSE EROSION AND SEDIMENTATION CONTROL MEASURES HAVE BEEN DAMAGED OR DESTROYED SHALL BE REPAIRED IMMEDIATELY.
 13. THE CONTRACTOR SHALL MAINTAIN DRAINAGE CONTROL THROUGHOUT THE CONSTRUCTION PERIOD.
 14. CONCRETE WASHOUT SHALL NOT BE USED FOR DRAINAGE CONTROL.
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 20. CONCRETE WASHOUT SHALL NOT BE USED FOR DRAINAGE CONTROL.

SITE LAYOUT NOTES

- VERIFY THE QUANTITIES REPRESENTED IN THIS DRAWING AGAINST THE QUANTITIES LISTED IN THE PERMITS AND ANY OTHER DOCUMENTS PRIOR TO THE START OF WORK. DURING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS PRIOR TO STARTING WORK. SHALL CAREFULLY BE NOTIFIED AND WILL INTERPRET THE INTENT OF THE CONTRACT DOCUMENTS.
- PRIOR TO THE COMMENCEMENT OF WORK, VERIFY LOCATIONS AND DEPTHS OF ALL EXISTING UTILITIES AND RECORD THEM ON THE SITE PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF TREE PROTECTION DURING PROJECT DURATION.
- PROTECT EXISTING LANDSCAPING, CONTRACTOR RESPONSIBLE FOR SUCH UTILITIES CAUSED AS A RESULT OF CONSTRUCTION.

PROVIDE DEDUCT ALTERNATE FOR 2 MIN. DEPTH MICHIGAN BOULDERS (MIXED LIMESTONE, GRANITE AND BSALT), 18" TO 30" EN LIEU OF LEGGESTONE & BEDDING AGGREGATE AT NORTHEAST, SOUTHWEST AND SOUTHEAST BANKS.

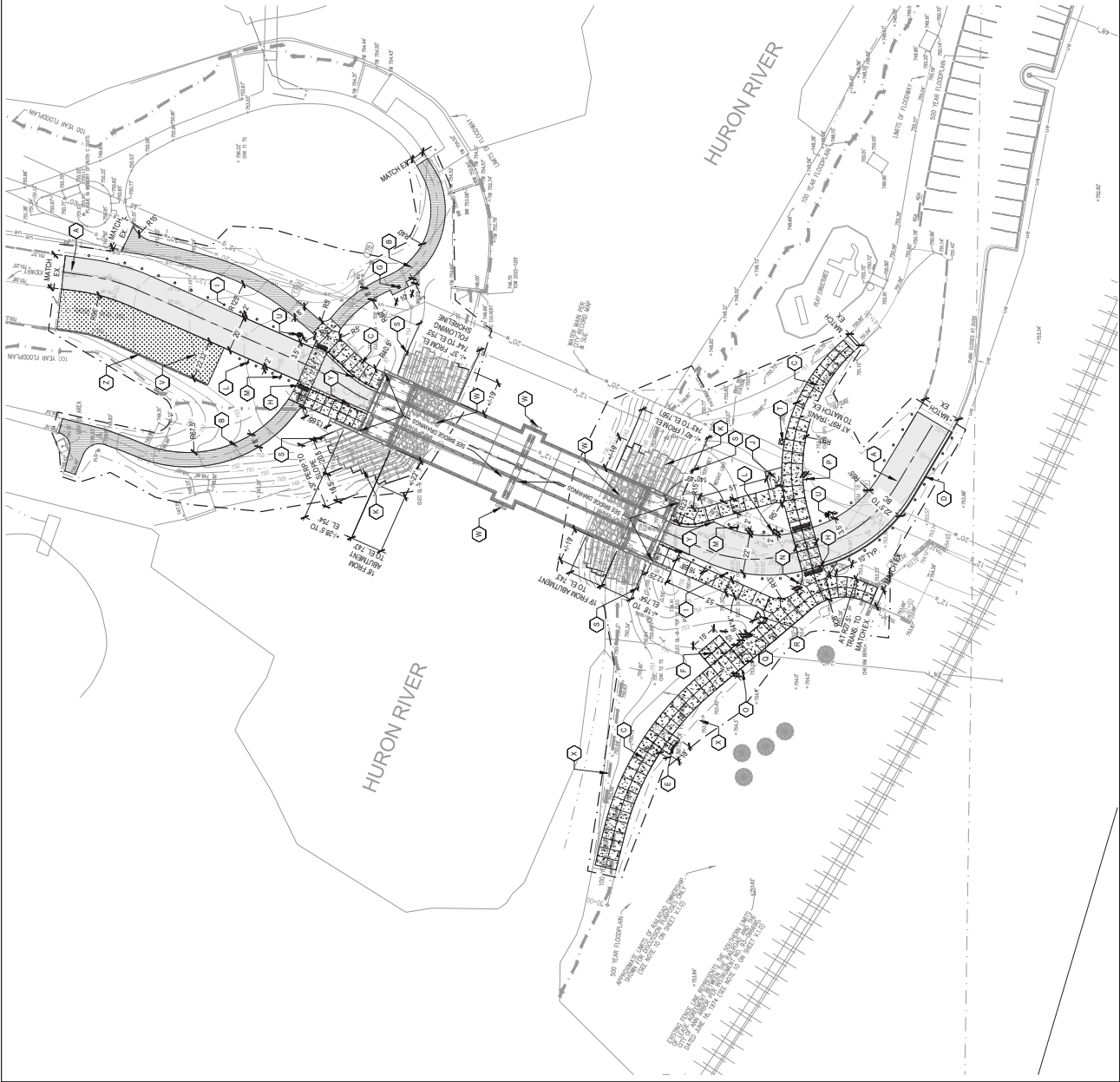
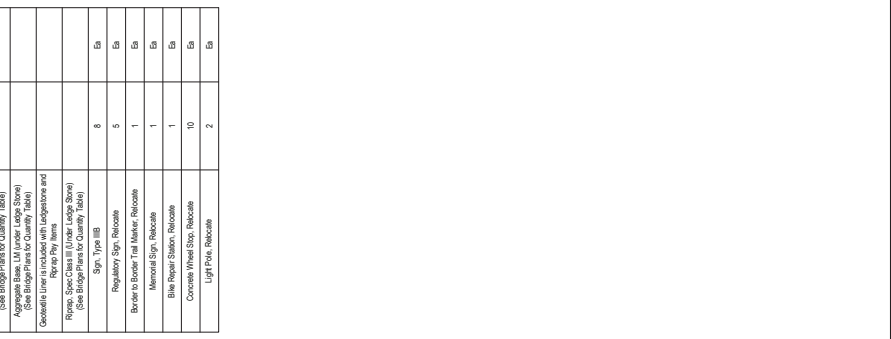
LEGEND

(A)	ASPHALT PAVEMENT - HEAVY DUTY
(B)	ASPHALT PAVEMENT
(C)	PORT. CONC. SIDEWALK CONC. SEE FUTURE LOCATIONS
(D)	CURB AND GUTTER CONC.
(E)	BENCH RELOCATE
(F)	WORKOUT EQUIPMENT RELOCATE
(G)	WATER FOUNTAIN RELOCATE
(H)	DETECTABLE WARNING SURFACE
(I)	BOLLARD, WOOD
(J)	FUTURE KIOSK
(K)	LEDGE STONE BANK REPAIR/RECONSTRUCTION (SEE BRIDGE CONTRACT DOCUMENTS FOR DETAILS) (SEE BRIDGE CONTRACT DOCUMENTS FOR DETAILS) (SEE BRIDGE CONTRACT DOCUMENTS FOR DETAILS)
(L)	CONCRETE WHEEL STOP RELOCATE
(M)	REGULATORY SIGN RELOCATE
(N)	REGULATORY SIGN RELOCATE
(O)	REGULATORY SIGN RELOCATE
(P)	REGULATORY SIGN RELOCATE
(Q)	REGULATORY SIGN RELOCATE
(R)	REGULATORY SIGN RELOCATE
(S)	REGULATORY SIGN RELOCATE
(T)	BIKE REPAIR STATION RELOCATE
(U)	LIGHT POLE RELOCATE
(V)	AGGREGATE SURFACE (SEE 6 INCH RPP/PP) (SEE BRIDGE CONTRACT DOCUMENTS FOR QUANTITY TABLE)
(W)	LIMIT OF WORK
(X)	STRAIGHT CURB CONC. CONCRETE WHEEL STOP RELOCATE
(Y)	CONCRETE WHEEL STOP RELOCATE
(Z)	CONTROL LIGHT
(AA)	EXPANSION JOINT

MATERIAL QUANTITIES

ITEM	QUANTITY	UNIT
HMA SEAL	53	Ton
HMA SEAL	53	Ton
HMA SEAL	123	Ton
Aggregate Base, 6 inch	975	SY
Aggregate Base, 8 inch	48	SY
Aggregate Base, 10 inch	762	SY
Aggregate Base, 12 inch	232	SY
Concrete, Normal Finish	48	SY
Sidewalk, Conc. 6 inch	647	SF
Curb and Gutter, Conc. 12" wide	107	LF
Straight Curb, Conc. 12" wide	128	LF
Bench, Relocate	1	EA
Workout Equipment, Relocate	1	EA
Water Fountain, Relocate	1	EA
Detectable Warning Surface	32	LF
Bollard, Wood	49	EA
Ledge Stone Bank Reinforcement, 12 inch (See Bridge Plans for Quantity Table)	6	EA
Concrete Wheel Stop, Relocate (See Bridge Plans for Quantity Table)	5	EA
Regulatory Sign, Relocate	1	EA
Border to Border 1st Marker, Relocate	1	EA
Memorial Sign, Relocate	1	EA
Bike Repair Station, Relocate	1	EA
Concrete Wheel Stop, Relocate	10	EA
Light Pole, Relocate	2	EA

PROVIDE DEDUCT ALTERNATE FOR 2 MIN. DEPTH MICHIGAN BOULDERS (MIXED LIMESTONE, GRANITE AND BSALT), 18" TO 30" EN LIEU OF LEGGESTONE & BEDDING AGGREGATE AT NORTHEAST, SOUTHWEST AND SOUTHEAST BANKS.



City of Ann Arbor
Public Services - Engineering

REV.	DESCRIPTION	DATE	BY	CHECKED
01	ISSUED FOR RFP	02-28-23	DA	DA

14310
DRAWING NO.
SCALE PLAN
SHEET NO.

CITY OF ANN ARBOR
PUBLIC SERVICES - ENGINEERING
GALLUP PARK BRIDGE AND
SITE IMPROVEMENTS

ANN ARBOR, MI 48106-1647
www.a2gov.org

19 OF 55
SHEET NO.

MARKS/ISSUES v.1.0
Issued: 02/28/23
Expire: 01/11/2028

NOTE:
• GEOTEXTILE FABRIC TO FULLY WRAP TOP, ALL SIDES OF AGGREGATE AND BETWEEN STONES.
• REINFORCEMENT AT RPPRAP TOE.
• NATURAL STONE (2" HEIGHT, 48" MIN. DEPTH, WIDTH TO VARY FROM 24" - 60") SEE BRODGE PLANS FOR QUANTITY TABLE.
• NATURAL STONE (2" HEIGHT, 42" MIN. DEPTH, WIDTH TO VARY FROM 24" - 60") SEE BRODGE PLANS FOR QUANTITY TABLE.
• NATURAL STONE (2" HEIGHT, 48" MIN. DEPTH, WIDTH TO VARY FROM 24" - 60") SEE BRODGE PLANS FOR QUANTITY TABLE.
• GEOTEXTILE LINER (INCLUDED WITH LEDGE STONE AND RPPRAP RIV ITEMS)
• AGGREGATE BASE (SEE BRODGE PLANS FOR QUANTITY TABLE)
• COMPACTED SUBGRADE
• HEAVY RPPRAP @ 10% TRENCH PAD FOR AS RPPRAP SPEC. CLASS III (SEE BRODGE PLANS FOR QUANTITY TABLE)
• HEAVY RPPRAP @ 10% TRENCH UNDER EAST SIDE OF SOUTHEAST LEDGE STONE PAD FOR AS RPPRAP SPEC. CLASS III (SEE BRODGE PLANS FOR QUANTITY TABLE)
• LAWN AREA

NOTE:
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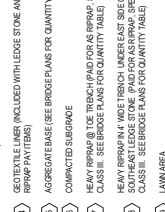
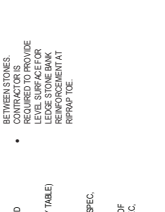
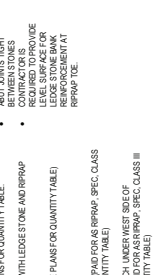
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• COMPACTED SUBGRADE
• HEAVY RPPRAP @ 10% TRENCH PAD FOR AS RPPRAP SPEC. CLASS III (SEE BRODGE PLANS FOR QUANTITY TABLE)
• HEAVY RPPRAP @ 10% TRENCH UNDER EAST SIDE OF NORTHEAST LEDGE STONE PAD FOR AS RPPRAP SPEC. CLASS III (SEE BRODGE PLANS FOR QUANTITY TABLE)
• LAWN AREA

NOTE:
• GEOTEXTILE FABRIC TO FULLY WRAP TOP, ALL SIDES OF AGGREGATE AND BETWEEN STONES.
• REINFORCEMENT AT RPPRAP TOE.
• NATURAL STONE (2" HEIGHT, 48" MIN. DEPTH, WIDTH TO VARY FROM 24" - 60") SEE BRODGE PLANS FOR QUANTITY TABLE.
• NATURAL STONE (2" HEIGHT, 42" MIN. DEPTH, WIDTH TO VARY FROM 24" - 60") SEE BRODGE PLANS FOR QUANTITY TABLE.
• NATURAL STONE (2" HEIGHT, 48" MIN. DEPTH, WIDTH TO VARY FROM 24" - 60") SEE BRODGE PLANS FOR QUANTITY TABLE.
• GEOTEXTILE LINER (INCLUDED WITH LEDGE STONE AND RPPRAP RIV ITEMS)
• AGGREGATE BASE (SEE BRODGE PLANS FOR QUANTITY TABLE)
• COMPACTED SUBGRADE
• HEAVY RPPRAP @ 10% TRENCH PAD FOR AS RPPRAP SPEC. CLASS III (SEE BRODGE PLANS FOR QUANTITY TABLE)
• HEAVY RPPRAP @ 10% TRENCH UNDER WEST SIDE OF NORTHWEST LEDGE STONE PAD FOR AS RPPRAP SPEC. CLASS III (SEE BRODGE PLANS FOR QUANTITY TABLE)
• LAWN AREA

NOTE:
• GEOTEXTILE FABRIC TO FULLY WRAP TOP, ALL SIDES OF AGGREGATE AND BETWEEN STONES.
• REINFORCEMENT AT RPPRAP TOE.
• NATURAL STONE (2" HEIGHT, 48" MIN. DEPTH, WIDTH TO VARY FROM 24" - 60") SEE BRODGE PLANS FOR QUANTITY TABLE.
• NATURAL STONE (2" HEIGHT, 42" MIN. DEPTH, WIDTH TO VARY FROM 24" - 60") SEE BRODGE PLANS FOR QUANTITY TABLE.
• NATURAL STONE (2" HEIGHT, 48" MIN. DEPTH, WIDTH TO VARY FROM 24" - 60") SEE BRODGE PLANS FOR QUANTITY TABLE.
• GEOTEXTILE LINER (INCLUDED WITH LEDGE STONE AND RPPRAP RIV ITEMS)
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• LAWN AREA

NOTE:
• GEOTEXTILE FABRIC TO FULLY WRAP TOP, ALL SIDES OF AGGREGATE AND BETWEEN STONES.
• REINFORCEMENT AT RPPRAP TOE.
• NATURAL STONE (2" HEIGHT, 48" MIN. DEPTH, WIDTH TO VARY FROM 24" - 60") SEE BRODGE PLANS FOR QUANTITY TABLE.
• NATURAL STONE (2" HEIGHT, 42" MIN. DEPTH, WIDTH TO VARY FROM 24" - 60") SEE BRODGE PLANS FOR QUANTITY TABLE.
• NATURAL STONE (2" HEIGHT, 48" MIN. DEPTH, WIDTH TO VARY FROM 24" - 60") SEE BRODGE PLANS FOR QUANTITY TABLE.
• GEOTEXTILE LINER (INCLUDED WITH LEDGE STONE AND RPPRAP RIV ITEMS)
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• COMPACTED SUBGRADE
• HEAVY RPPRAP @ 10% TRENCH PAD FOR AS RPPRAP SPEC. CLASS III (SEE BRODGE PLANS FOR QUANTITY TABLE)
• HEAVY RPPRAP @ 10% TRENCH UNDER WEST SIDE OF NORTHWEST LEDGE STONE PAD FOR AS RPPRAP SPEC. CLASS III (SEE BRODGE PLANS FOR QUANTITY TABLE)
• LAWN AREA



1 SOUTHEAST RIVER BANK - LEDGE STONE BANK REINFORCEMENT

2 SOUTHWEST RIVER BANK - LEDGE STONE BANK REINFORCEMENT

3 NORTHEAST RIVER BANK - LEDGE STONE BANK REINFORCEMENT

4 NORTHWEST RIVER BANK - LEDGE STONE BANK REINFORCEMENT

1 SOUTHEAST RIVER BANK - LEDGE STONE BANK REINFORCEMENT

2 SOUTHWEST RIVER BANK - LEDGE STONE BANK REINFORCEMENT

3 NORTHEAST RIVER BANK - LEDGE STONE BANK REINFORCEMENT

4 NORTHWEST RIVER BANK - LEDGE STONE BANK REINFORCEMENT

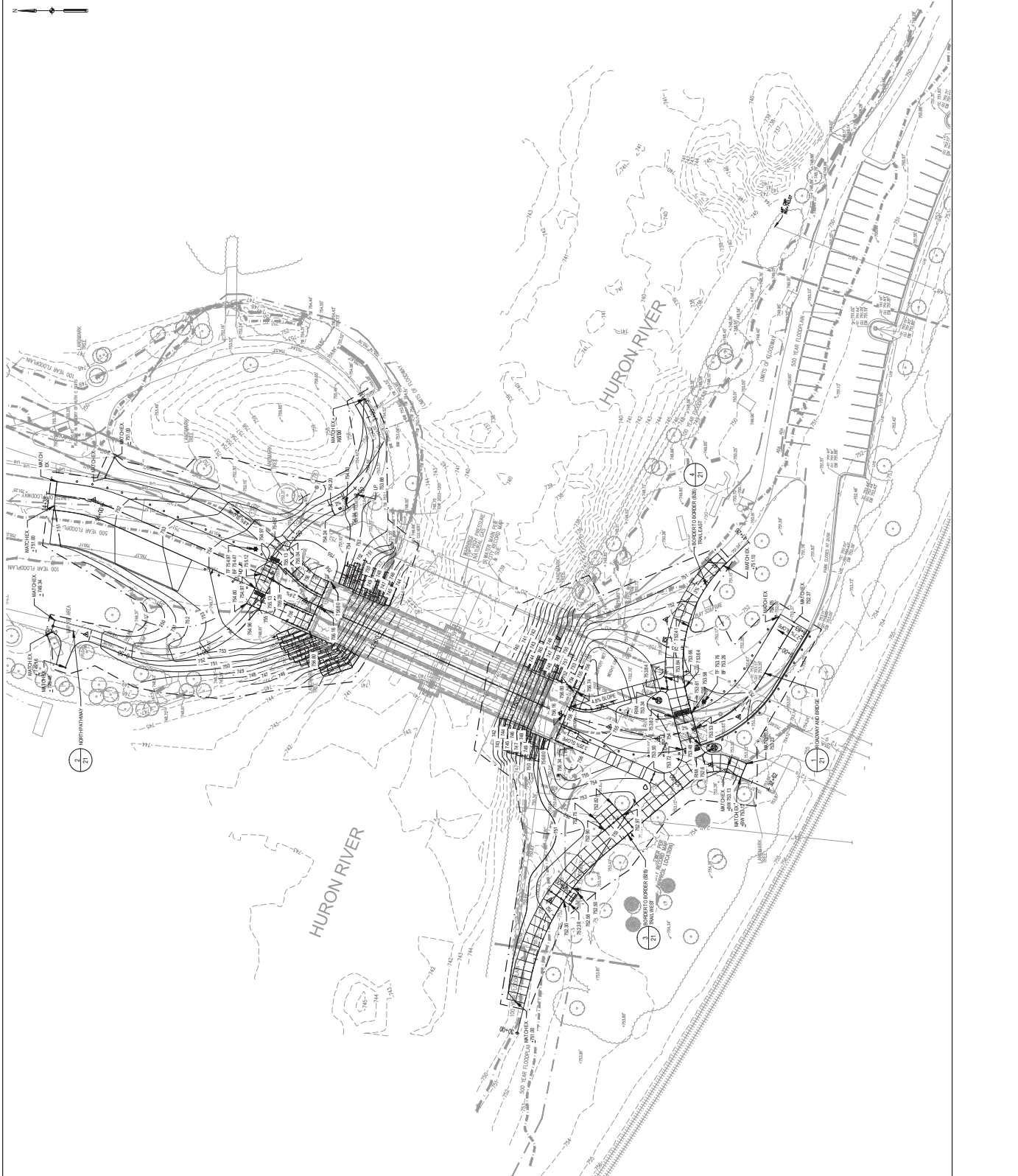
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		08-28-23	DA	DA

SITE GRADING NOTES

1. PROVIDE POSITIVE DRAINAGE TO EXISTING AND PROPOSED DRAINAGE STRUCTURES.
2. TRANSITION FROM PROPOSED TO EXISTING GRADES OVER 10' AS SHOWN SHALL BE PROVIDED WITH A 5% SLOPE TO EXISTING GRADE.
3. THE PROJECT WILL REQUIRE AN RESC GRADING PERMIT FROM THE CITY OF ANN ARBOR.
4. 100 YEAR FLOODPLAIN - CUT & FILL CALCULATION
5. NORTH SIDE = 17000 CUBIC YARDS (FILL)
6. SOUTH SIDE = 18100 CUBIC YARDS (FILL)
7. NET = 10100 CUBIC YARDS (FILL)

LEGEND

TC 100.00	TOP OF CURB
BC 100.00	BOTTOM OF CURB
RM 100.00	RM ELEVATION
HP 100.00	HIGH POINT
LP 100.00	LOW POINT
SP 100.00	SPOT ELEVATION
TF 100.00	TOP OF FOUNDATION
BF 100.00	BOTTOM OF FOUNDATION
SW	SWALE LINE
PO	PROPOSED CONTOUR
EO	EXISTING CONTOUR



CITY OF ANN ARBOR PUBLIC SERVICES
 201 EAST MAIN STREET
 ANN ARBOR, MI 48107-0627
 www.aajob.org

GALLUP PARK BRIDGE AND SITE IMPROVEMENTS
 SITE GRADING PLAN

DRAWING NO. 14310
 SCALE PLAN: 1" = 20'
 SHEET NO. 20 OF 55

AWARD NUMBER: 14-0
 Issue Date: 11/17/2023
 Engineer: Oviatt/11/17/2023



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01		08-28-23		

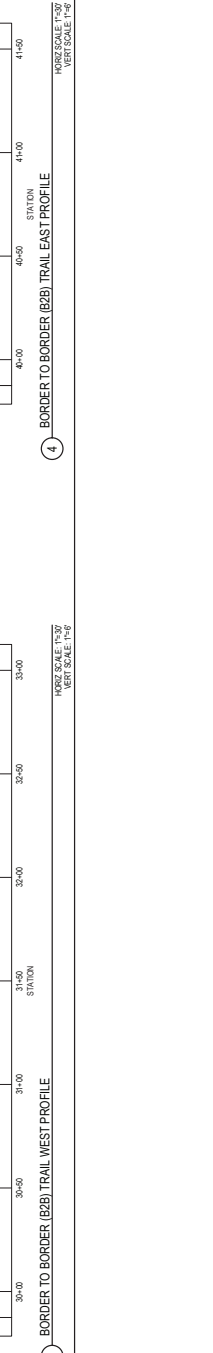
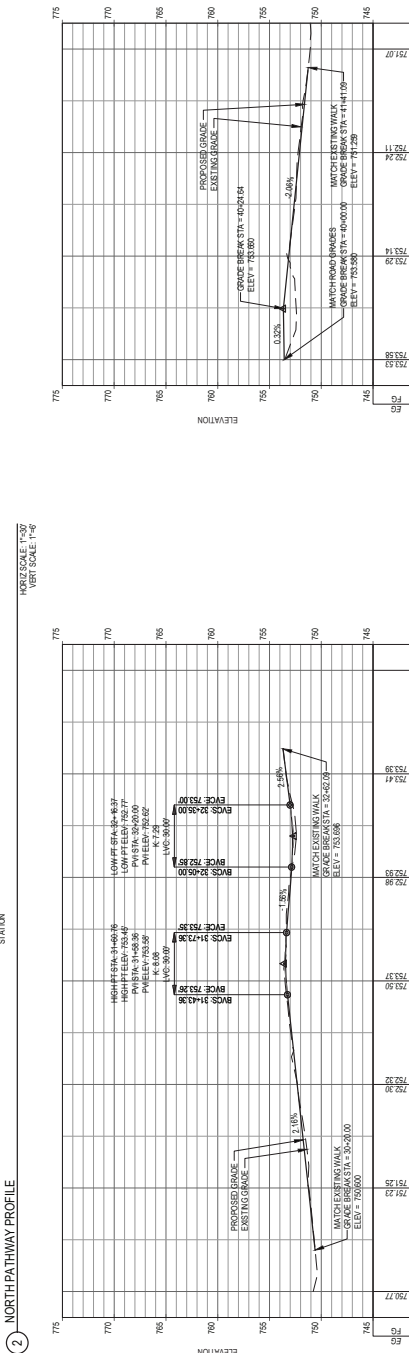
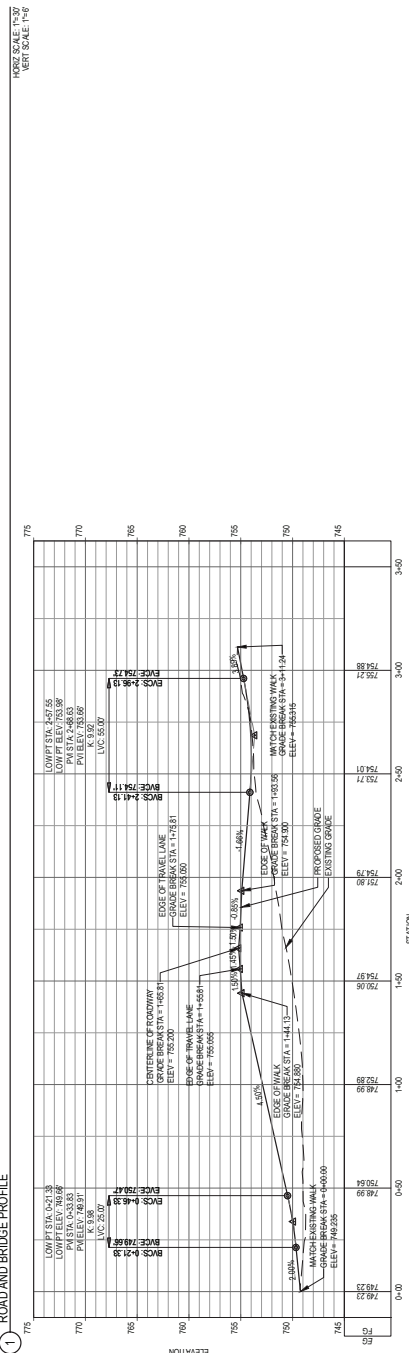
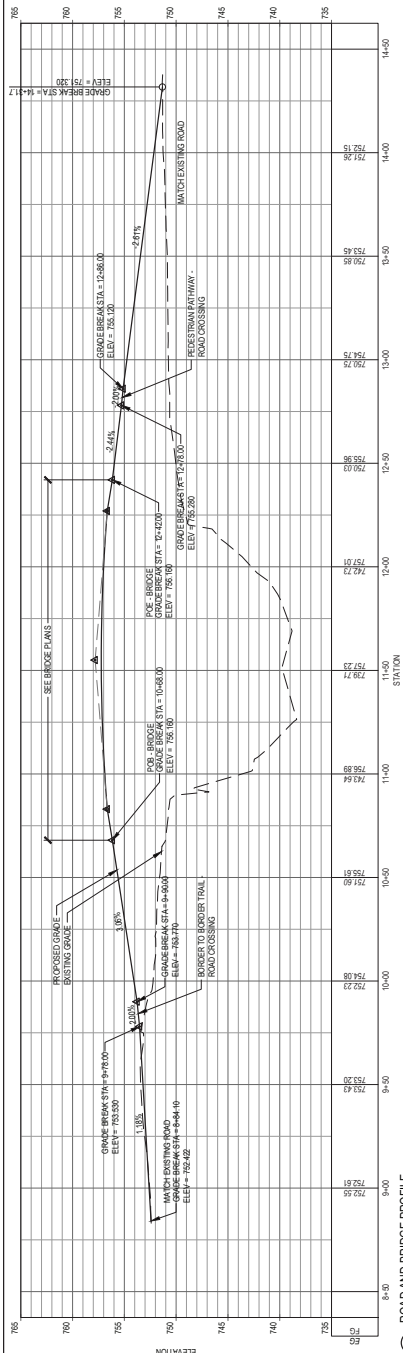
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CITY OF ANN ARBOR
 PUBLIC SERVICES
 201 EAST HURON STREET
 ANN ARBOR, MI 48107-0647
 www.a2gov.org

GALLUP PARK BRIDGE AND
 SITE IMPROVEMENTS
 ROADWAY AND PATHWAY PROFILES

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
 SCALE PLAN
 DRAWING NO. 14310
 SHEET NO. 21 OF 55

ANSI/ISO 9001
 Issued On: 11/17/2023
 Expires On: 11/17/2026





DATE	BY	CHECKED	DESCRIPTION
08-28-23	NO	EA	ISSUED FOR BIDS

CITY OF ANN ARBOR
 PUBLIC SERVICES
 201 EAST MAIN STREET
 ANN ARBOR, MI 48107-0427
 www.aajob.org



**GALLUP PARK BRIDGE AND
 SITE IMPROVEMENTS**
 STORM SEWER PLAN

DRAWING NO. 14310
 SCALE: PLAN, 1" = 30'
 SHEET NO. 22 OF 55

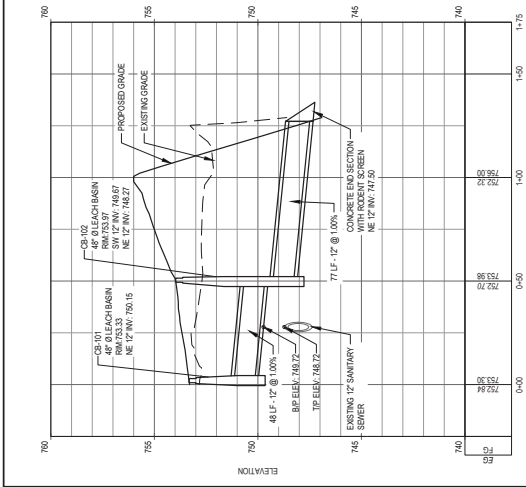
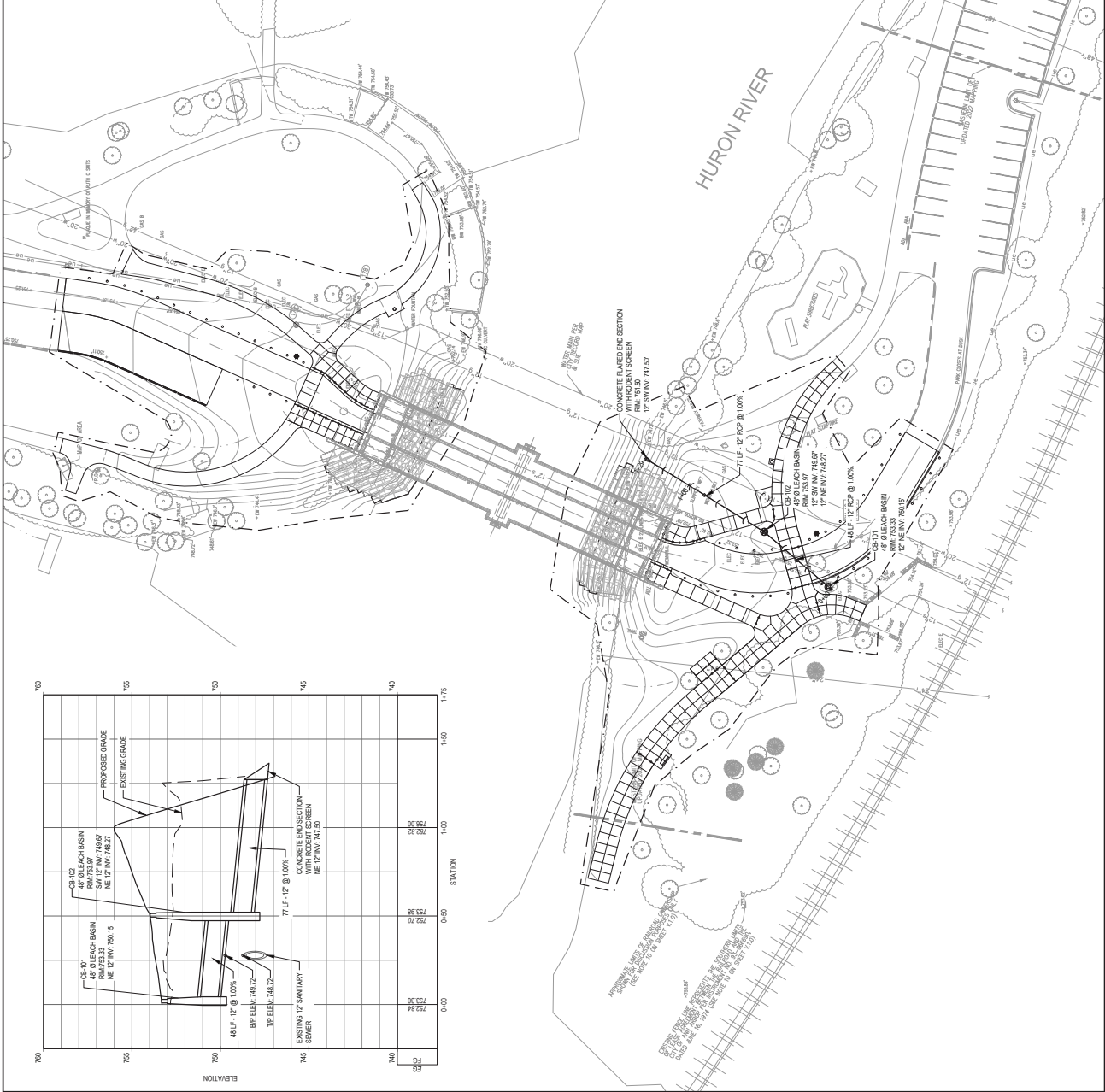
AWR/MS/2023/1.10
 Issued: 08/11/2023
 Engineer: Ovi:11172033

- ### SHEET NOTES
- PRIOR TO THE COMMENCEMENT OF WORK, VERIFY THAT THE PROPOSED WORK WILL NOT AFFECT UTILITIES THAT MAY BE AFFECTED BY CONSTRUCTION AND TAKE RESPONSIBILITY FOR DAMAGES TO SUCH UTILITIES CAUSED AS A RESULT OF CONSTRUCTION.
 - SECURE ALL NECESSARY PERMITS AND NOTIFY ALL UTILITY COMPANIES OF THE PROJECT. ADHERE TO ALL REGULATIONS, ORDINANCES, AND REQUIREMENTS OF ALL AFFECTED AGENCIES AND FEDERAL, STATE, AND LOCAL LAWS.
 - THE PROJECT SHALL CONFORM TO THE CITY OF ANN ARBOR PUBLIC SERVICES STANDARD SPECIFICATIONS.
 - ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
 - COORDINATE WORK OF SUBCONTRACTORS AND ALL OTHER CONTRACTORS TO ENSURE ORDERLY AND EFFICIENT COMPLETION OF ALL WORK.
 - THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT CONSTITUTE AN ACKNOWLEDGMENT OF THE CITY OF ANN ARBOR STANDARD SPECIFICATIONS.
 - THIS PROJECT WILL REQUIRE AN ISDLE FLOODPLAIN PERMIT.

- ### LEGEND
- STRUCTURE ABUTMENT
 - CONCRETE END SECTION WITH INDOLENT SCREEN
 - CONCRETE END SECTION WITH INDOLENT SCREEN
 - 12" RCP @ 100%
 - 12" SWANK @ 1.50'
 - REFER TO CDDT 2023

MATERIAL QUANTITIES

ITEM	QUANTITY	UNIT
D Structure, 48 inches	2	Ea
Sewer, 12" RCP @ 100%	125	R
Concrete End Section, 12 inch	1	Ea
D Structure Cover, Type G	2	Ea



DATE	BY	CHKD	DESCRIPTION
09-26-23	DA	DA	ISSUED FOR PERMITS

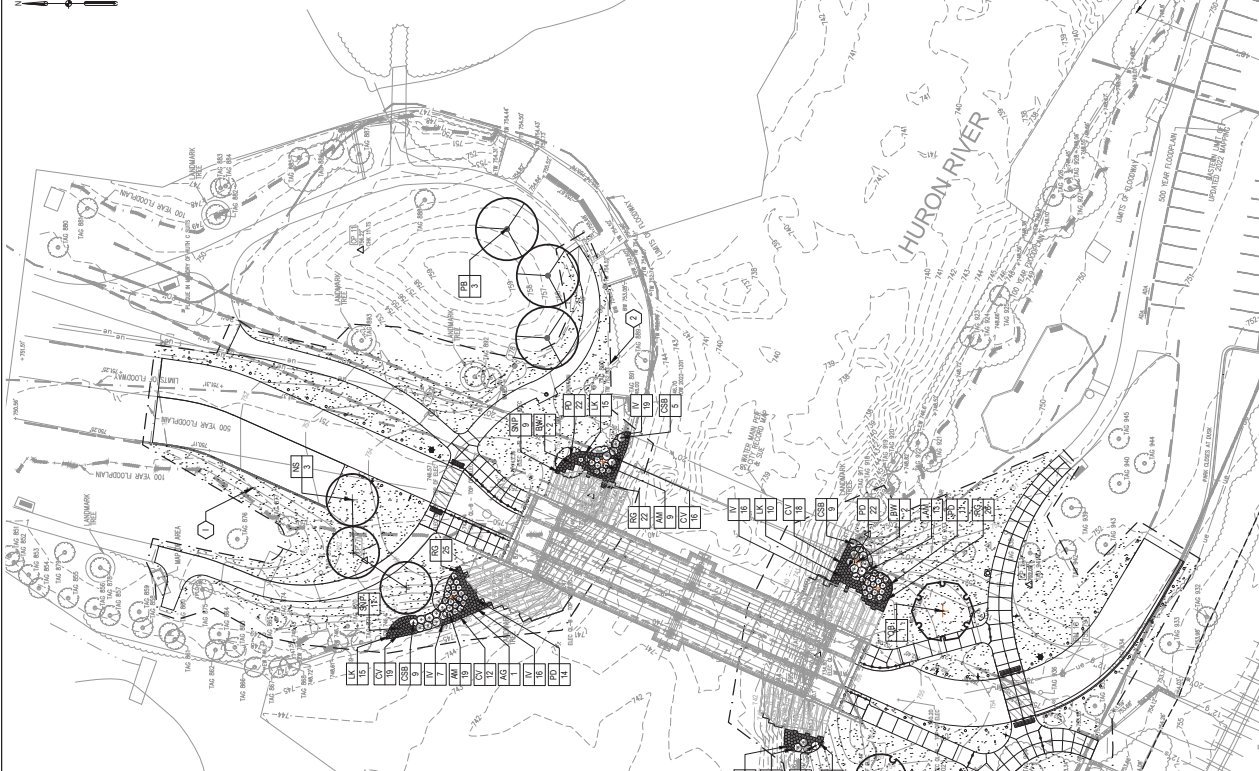


SITE LANDSCAPE NOTES

- CONTRACTOR SHALL VERIFY ALL MEASUREMENTS IN THE FIELD.
- EXISTING UTILITIES, SEE EXISTING UTILITY DATA SHOWN FOR REFERENCE ONLY AND MAY NOT SHOW ALL EXISTING UTILITIES OR OWNER'S REPRESENTATIVE CONTACTS ARE FOUND.
- ALL UTILITIES SHALL BE PROTECTED BY A 36" DIA. CONCRETE CAST-IN-PLACE PROTECTIVE PIPE WITH 18" DIA. CONCRETE CAST-IN-PLACE PROTECTIVE RINGS. ONLY AS DIRECTED BY CITY OF ANN ARBOR OR LANDSCAPE ARCHITECT.
- EXISTING LANDSCAPING PROTECT EXISTING LANDSCAPING TO REMAIN. CONTRACTOR TO ASSUME RESPONSIBILITY FOR DAMAGE TO EXISTING LANDSCAPING DURING CONSTRUCTION. PROTECT EXISTING TREES, SHRUBS, OR GRASSES BY INSTALLING PROTECTIVE BARRIERS OR SKINNING OF ROOTS OR BRANCHES. BRUSHES OF BARK, BRANCHES, TWIGS, AND OTHER DEBRIS SHALL BE REMOVED AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE. MAINTAIN EXISTING TREE MULLCH BANKS. ANY LANDSCAPING TO REMAIN SHALL BE REPAIRED/REPLACED AT NO ADDITIONAL COST TO OWNER.
- REPAIR ALL LAWN AREAS THAT ARE DAMAGED BY THE WORK WITH REPAIRED LAWN MIX AT NO ADDITIONAL COST TO THE OWNER. DIVISION 02 SECTION 021000, SOIL AND AGGREGATES, AND TOPSOIL REQUIREMENTS OF SECTION 021000, LAWS AND GRASSES, SHALL APPLY TO ALL REPAIRED AREAS. REPAIR SHALL ALSO BE REPAIRED WITH SAME SEED MIX AT NO ADDITIONAL COST.
- TOPSOIL - ALL AREAS NOTED AS LAWS OR NOT OTHERWISE NOTED SHALL BE TESTED AND AMENDED PER SOIL TESTING CRITERIA OUTLINED IN SECTION 02000, LAWS AND GRASSES.
- ALL PLANT BEDS SHALL RECEIVE A MINIMUM OF 12" OF PLANTING MIX AND 1/2" OF MULCH. MULCH SHALL BE APPLIED TO ALL PERSONAL ORNAMENTAL GRASS AND COVER BEES.
- THE LAYOUT OF ALL PLANTING BEDS, TREES, AND SHRUBS SHALL BE STATED BY THE CONTRACTOR PRIOR TO ANY PLANT INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT. LAYOUT SHALL ALSO INCLUDE PERSONAL GRASSES BY SPECIES, FLAGGING, STAKES, OR PAINT MAY BE USED TO DELINEATE PLANTING AREAS. CONTRACTOR SHALL MAKE ANY NECESSARY ADJUSTMENTS TO MAKE ANY NECESSARY ADJUSTMENTS NECESSARY AT NO ADDITIONAL COST TO THE OWNER.
- GRAVEL AND MULCH BEDS CONTRACTOR TO RESTORE DAMAGED GRAVEL AND MULCH BEDS TO ORIGINAL CONDITION AFTER PROJECT WORKING. CONTRACTOR SHALL BE RESPONSIBLE FOR THE WORKING STATE. LEAVEN AND MULCH BEDS SHALL BE REPAIRED TO ORIGINAL CONDITION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR. REPAIR SHALL BE REPAIRED AT NO COST TO OWNER. REPAIR SHALL BE REPAIRED WITH SAME TYPE AND SPECIFICATIONS TO USE SPECIFICATIONS WITHIN DIVISION 02. MULCHING OF STOCKPILES FOR REFUSE WILL BE ALLOWED.
- ALL PLANT BEDS TO BE MULCHED WITH 2" SHREDDED BARK MULCH PER SPECIFICATIONS AND DETAILS.
- PLANT MIX AND MULCH SHALL NOT BE PLACED ABOVE THE ROOT COLLAR OF THE PLANT. THE ROOT COLLAR OF THE PLANT SHALL BE PRESERVED.

LEGEND

- PROPOSED TREE: (+)
- PROPOSED PLANTING: (⊕)
- LAWN: (shaded area)
- LIMIT OF WORK: (dashed line)



PLANT SCHEDULE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	FORM	REMARKS
AR	1	AMELANCHIER BRANCHED	AUTUMN RED LANCE OLE SERVICE BERRY	2.5" CAL	B&B	FULL WELL BRANCHED
BW	4	BETULA PAPERELLA	WHITESPINE GRAY BIRCH	8" HT	B&B	FULL WELL BRANCHED
AR	3	ACER RUBRA	RED SUNSET MAPLE	3" CAL	B&B	FULL WELL BRANCHED
NS	3	NYSSA SYLVATICA	THURLO	3" CAL	B&B	FULL WELL BRANCHED
PS	3	PLATANUS ACERIFOLIA	LONDON PLANE TREE	3" CAL	B&B	FULL WELL BRANCHED
QB	1	QUERCUS BICOLO	SWAMP WHITE OAK	3" CAL	B&B	FULL WELL BRANCHED
SC	1	SCYRUS MALVA	LOW SPRAWLING BLACK CHERRY	18" SQ	CONT	FULL WELL BRANCHED
CB	27	CORNUS SERICEA	BAW EYS RED TWIG DOGWOOD	24" SQ	CONT	FULL WELL BRANCHED
PERENNIALS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	FORM	SPACING
CV	85	CAREX VULPINOIDEA	FOX SEDGE	#1	CONT	18" O.C.
IV	68	IRIS VIRGINICA	BLUE FLAG IRRS	#1	CONT	18" O.C.
LK	40	LAMINA SPICATA	WOLF BERRY	#1	CONT	18" O.C.
PD	96	PENSTEMON DIGITALIS	BEARD TONGUE	#1	CONT	18" O.C.
RG	27	RUDEBECKIA ALGIDA	SUNFLOWER	#1	CONT	18" O.C.
SMP	26	STYMPHYLOCHLOA MONAHE	PURPLE COLE	#1	CONT	18" O.C.

MATERIAL QUANTITIES

ITEM	QUANTITY	UNIT
Existing Plants - see Plant Schedule above		EA
Shredded bark Mulch, 2 inch	10	CY
Seedbed Lawn	3069	SY
Planting Mixes, 12 inch	99	CY
Topsoil	340	CY

NO.	DATE	BY	CHECKED	DESCRIPTION
06-29-23	AS	DR	CS	ISSUED FOR BID

ANN ARBOR, MI 48107-0674
 2025/06/29 10:00 AM
 CITY OF ANN ARBOR
 COMMUNITY SERVICES
 PARKS AND RECREATION
 GENERAL PLAN OF SITE

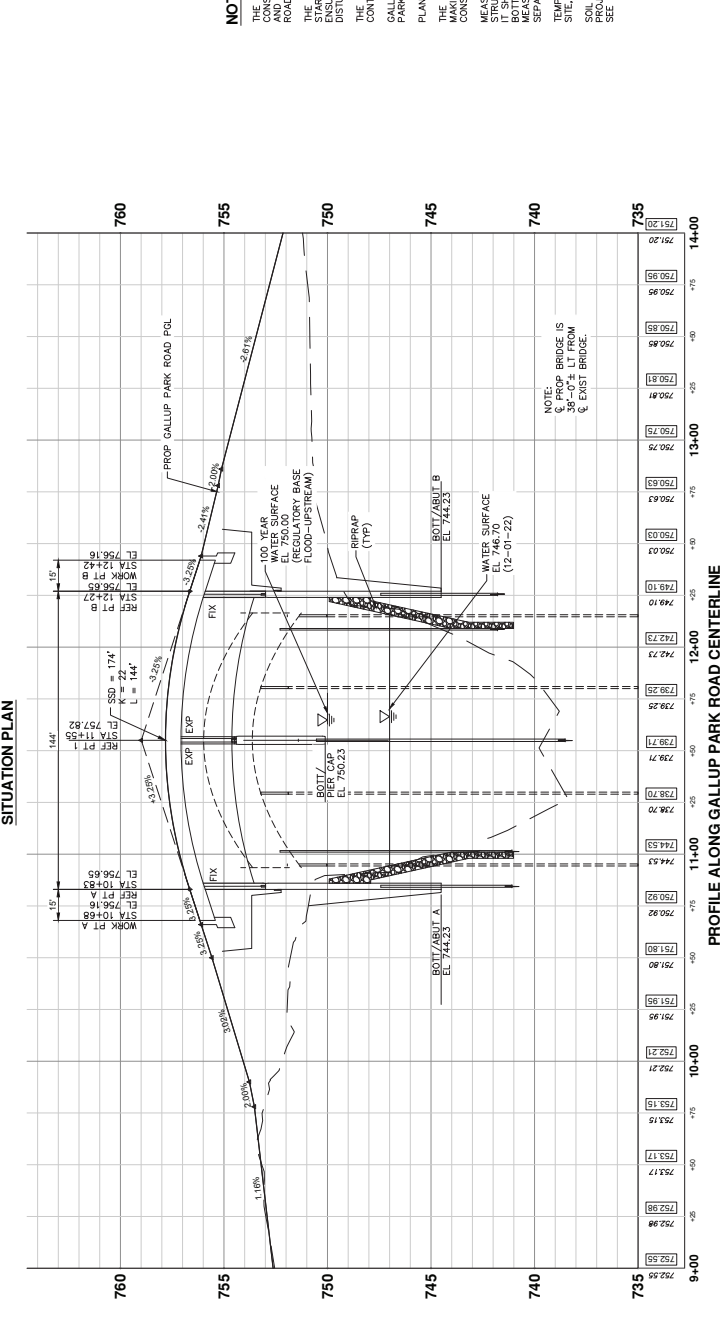
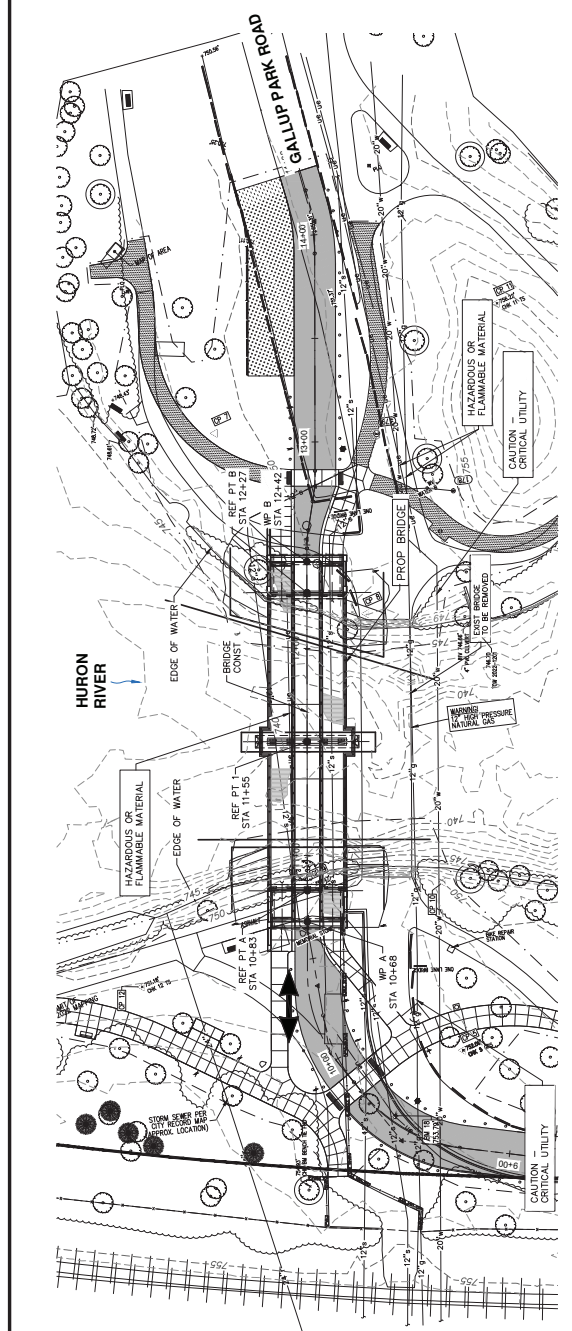
GALLUP PARK VEHICLE AND PEDESTRIAN BRIDGE
 DESIGN - BRIDGE REPLACEMENT PLANS
 DRAWING NO. 23 OF 55
 SHEET NO.

EXISTING STRUCTURE

THE EXISTING STRUCTURE IS A THREE SPAN TIMBER BRIDGE WITH SPAN LENGTHS OF 120'-4", 120'-4", AND 120'-4". THE EXISTING CLEAR ROADWAY WIDTH IS 12'-0" WITH 6'-18" BASED SIDEWALKS ON BOTH THE EAST AND WEST SIDES. THE EXISTING BRIDGE WAS BUILT IN 1976.

REFERENCE POINT COORDINATES

REF PT	NORTH	EAST	ELEV
A	283358.42	1330328.00	756.65
1	283404.24	1330357.19	757.82
B	283480.05	1330386.38	756.65
NORTH		EAST	ELEV
WORK PT			
a	283344.71	1330321.92	756.16
b	283563.75	1330392.45	756.16



NOTES

THE WORK COVERED BY THESE PLANS INCLUDES MAINTAINING TRAFFIC, CONSTRUCTION OF THE PROPOSED BRIDGE, PLACING RIRRAP TO THE LIMITS SHOWN ON THESE PLANS, AND MAINTAINING TRAFFIC THROUGH THE RIRRAP. ROAD PLANS THAT ARE A PART OF THIS CONTRACT.

THE CONTRACTOR SHALL LOCATE ALL ACTIVE UNDERGROUND UTILITIES PRIOR TO STARTING WORK AND SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.

THE GROUND ADJACENT TO THE STRUCTURE SHALL BE GRADED BY THE CONTRACTOR TO PROVIDE DRAINAGE.

GALLUP PARK DRIVE TRAFFIC IS TO BE MAINTAINED ALONG THE EXISTING GALLUP PARK BRIDGE WHILE THE PROPOSED BRIDGE IS BEING CONSTRUCTED.

PLAN ELEVATIONS REFER TO NAVD83 DATUM.

THE WATER LEVEL IS SUBJECT TO CHANGE. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINATION OF WATER LEVELS THAT MAY EXIST DURING CONSTRUCTION.

MEASURES SHALL BE TAKEN TO PREVENT DEBRIS FROM FALLING FROM THE STRUCTURE INTO THE WATER COURSE. IF DEBRIS FALLS INTO THE WATERWAY, IT SHALL BE REMOVED IMMEDIATELY. SINCE DISTURBANCE OF THE WATERWAY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF DEBRIS. MEASURES MUST BE EFFECTIVE. REMOVAL OF DEBRIS WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN BID ITEM "STRUCTURES, REM".

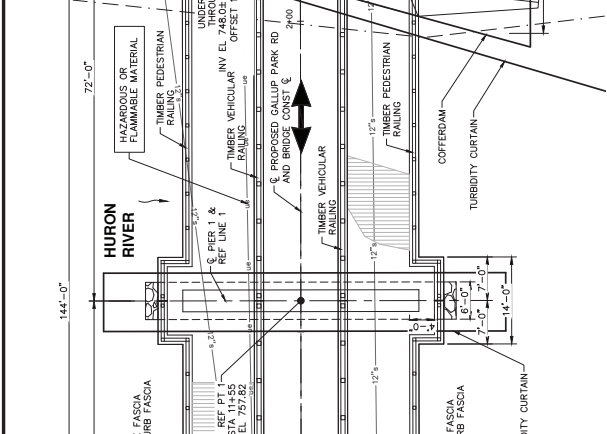
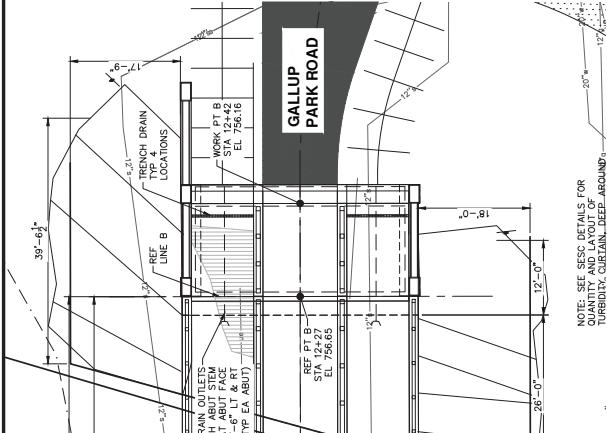
TEMPORARILY STORED EXCAVATED MATERIAL SHALL BE STORED ON AN UPLAND SITE, AND SHALL NOT BE ALLOWED TO ERODE INTO THE WATERCOURSE.

SOIL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE UTILIZED ON THIS PROJECT TO EFFECTIVELY REDUCE ACCELERATED SOIL EROSION AND SEDIMENTATION. SEE ROAD CONSTRUCTION PLAN FOR DETAILS.



MISCELLANEOUS QUANTITIES

ITEM	QUANTITY	UNIT
Structures, Rem	1	LSM
Excavation, Gen	366	Cyd
Excavation, CP	366	Cyd
Formwork, Shoring, CP	8253	Sq Ft
Formwork, Shoring, S/S	8253	Sq Ft
Concrete Coating	8253	Sq Ft
Underdrain, 6 in. x 4 in.	292	Lf
Underdrain, 4 in.	102	Lf
Vertical Manhole, 4 in.	1	LSM
Vertical Manhole, 6 in.	1	LSM
Concrete Temperature Protection	522	Cyd



RIPRAP CHANNEL PROTECTION QUANTITIES

Item	Option A Quantity	Option B Quantity	Unit
Riprap, Spec. Class III	455	455	Syd
Riprap, Feldstone, Spec	300	300	Ton
Leaky Stone Bank Reinforcement, 12 inch	23	5	Cyd
Leaky Stone Bank Reinforcement, 24 inch	170	55	Cyd
Aggregate Base, 1/2" (1)	231	231	Cyd

OPTION A QUANTITY NOTE: QUANTITY IS BASED ON THE HURON RIVER CHANNEL PROTECTION FROM DECK FASCIA TO DECK FASCIA UNDER THE BRIDGE AND AROUND PIER PILES. LEDGE STONE BANK REINFORCEMENT IS PLACED AT EACH QUADRANT PER THE DIMENSIONS SHOWN IN THE PLAN.

OPTION B QUANTITY NOTE: QUANTITY IS BASED ON THE HURON RIVER CHANNEL PROTECTION FROM DECK FASCIA TO DECK FASCIA UNDER THE BRIDGE AND AROUND PIER PILES TO THE DIMENSIONS SHOWN IN THE PLAN. LEDGE STONE BANK REINFORCEMENT IS PLACED AT EACH QUADRANT PER THE DIMENSIONS SHOWN IN THE PLAN. RIPRAP, FELDSTONE SPEC IS PLACED AT THE SOUTHWEST, SOUTHEAST AND NORTHEAST QUADRANTS PER THE DIMENSIONS SHOWN IN THE PLAN.

NOTES

THE DESIGN OF THIS STRUCTURE IS BASED ON THE CURRENT AASHTO LRFD BRIDGE DESIGN SPECIFICATION HL-93 LOADING. LIVE LOAD PLUS DYNAMIC LOAD ALLOWANCE DEFLECTION DOES NOT EXCEED 1/1000 OF SPAN LENGTH.

THE DESIGN OF THE DECK IS BASED UP ON THE STRIP METHOD AS DEFINED IN THE CURRENT AASHTO LRFD BRIDGE DESIGN SPECIFICATION, UTILIZING HL-93 LOADING.

WIND RESISTIVE MEASURES SHOWN ON THESE PLANS, THERE IS NO PROTECTION AGAINST WIND-INDUCED VIBRATION. THE ESTIMATED CONTRACTION SCOUR DEPTH IS CALCULATED TO BE 2 FEET (EL. 736.00) AND TOTAL SCOUR OF 6 FEET (EL. 732.00), AT ABUTMENT B (NORTH) AND 4 FT (EL. 734.00), AT PIER 1. THE ESTIMATED CONTRACTION SCOUR IS CALCULATED TO BE 2 FEET (EL. 736.00) AND TOTAL SCOUR DEPTH OF 6 FEET (EL. 732.00). THESE DEPTHS ARE BASED ON A 100-YEAR RUNOFF EVENT. THESE DEPTHS ARE BASED ON A 100-YEAR RUNOFF EVENT.

RIPRAP IS TO BE PLACED AT THE BASE OF EACH PIER AND AT THE ABUTMENTS. RIPRAP IS TO BE PLACED AT THE BASE OF EACH PIER AND AT THE ABUTMENTS. RIPRAP IS TO BE PLACED AT THE BASE OF EACH PIER AND AT THE ABUTMENTS.

FALSE DECORATIVE AREAS SHALL INCLUDE THE CLEAR SPAN AREAS BOUNDED BY EACH DECK FASCIA. THE ESTIMATED AREA IS 9925 SQUARE FEET DURING CONSTRUCTION.

SUMMARY OF HYDRAULIC ANALYSIS

FLOOD DATA	EXISTING		PROPOSED		CHANGE IN WHEEL	
	DISCHARGE (CFS)	ELEV. AT US FACE (FT)	DISCHARGE (CFS)	ELEV. AT US FACE (FT)		FROM US FACE TO US FACE (FT)
10-YEAR	5000	748.80	5385	748.78	5.82	850.33
50-YEAR	7400	749.59	7780	749.88	7.73	897.51
100-YEAR	8000	750.62	8409	750.47	8.60	1017.48
500-YEAR	11000	752.29	11300	752.08	9.34	1177.73

PROPOSED BRIDGE AND BELOW-GROUND CONDUIT IS 150 SQUARE FEET.

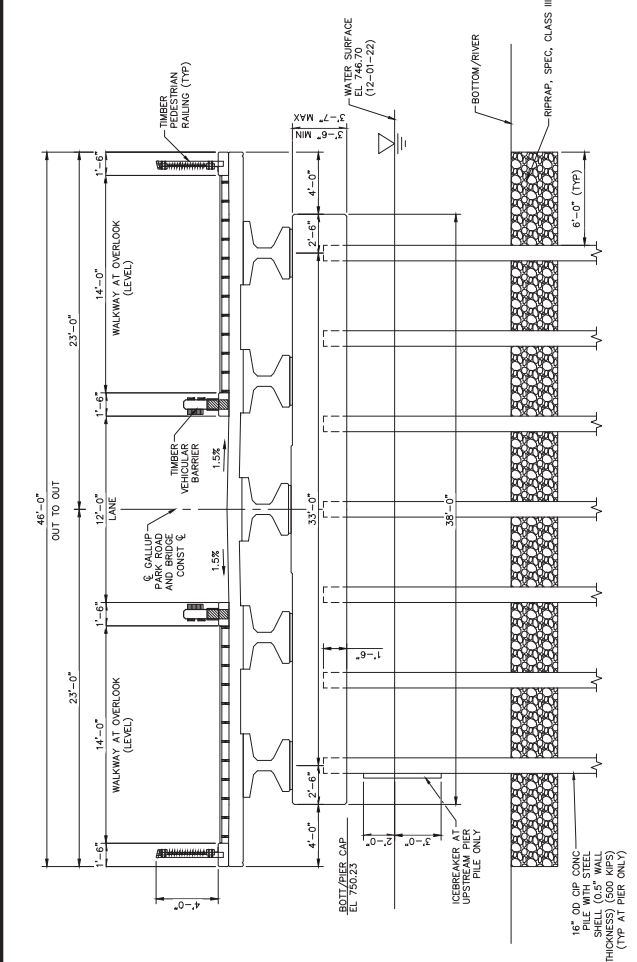
- THE EXISTING BRIDGE HAS A LOW FLOOD CHORD IS 1220 SF.
- EXISTING OVERTOPPING ELEVATION IS 743.03 FT.
- PROPOSED OVERTOPPING ELEVATION IS 757.74 FT.
- EXISTING OVERTOPPING ELEVATION IS 743.03 FT.
- THE WATER SURFACE AND/OR ENERGY GRADE ELEVATIONS SHOWN ON HYDRAULIC TABLE ARE TO BE USED FOR ESTABLISHING A REGULATORY FLOODPLAIN. THESE ELEVATIONS ARE NOT TO BE USED FOR ESTABLISHING A REGULATORY FLOODPLAIN. THESE ELEVATIONS ARE NOT TO BE USED FOR ESTABLISHING A REGULATORY FLOODPLAIN.
- THE WATER SURFACE AND/OR ENERGY GRADE ELEVATIONS SHOWN ON HYDRAULIC TABLE ARE TO BE USED FOR ESTABLISHING A REGULATORY FLOODPLAIN. THESE ELEVATIONS ARE NOT TO BE USED FOR ESTABLISHING A REGULATORY FLOODPLAIN.

WORK THIS SHEET WITH SHEET 17 FOR LIMITS AND TYPE OF RIPRAP

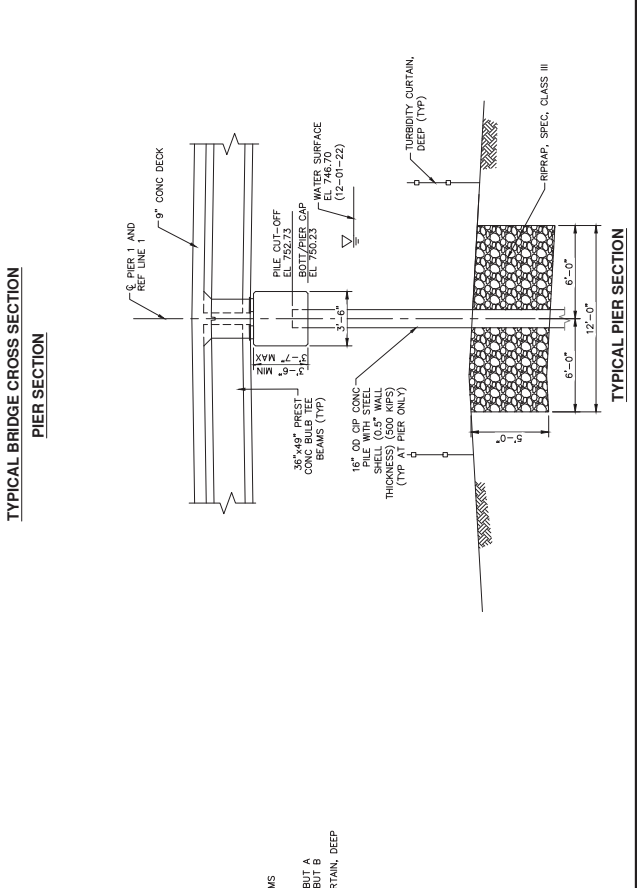
REV.	ISSUED FOR	DESCRIPTION
	FOR BIDDING	GENERAL PLAN OF STRUCTURE



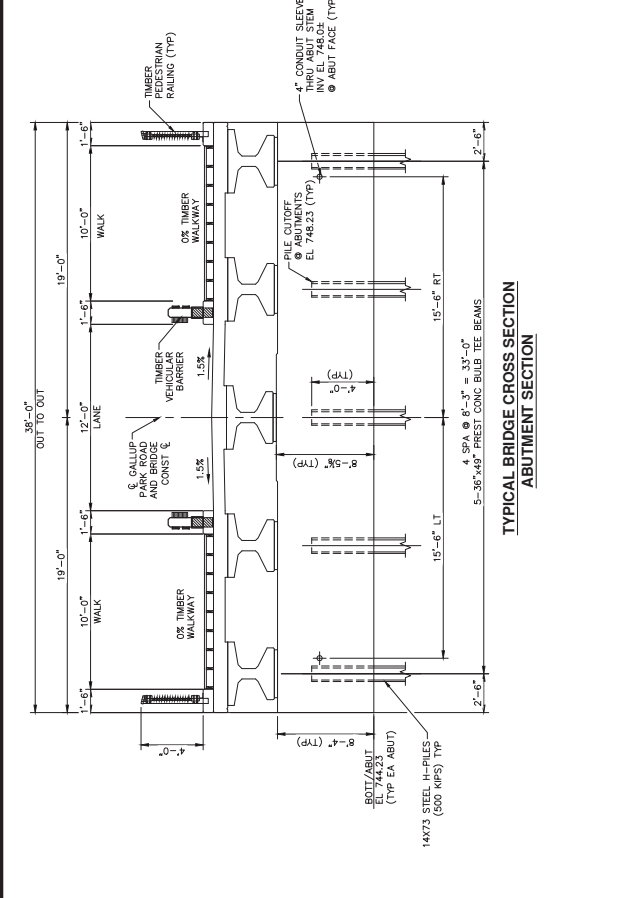
CITY OF ANN ARBOR - COMMUNITY SERVICES - PARKS AND RECREATION
 GALLUP PARK VEHICLE AND PEDESTRIAN BRIDGE
 DESIGN - BRIDGE REPLACEMENT PLANS
 GENERAL PLAN OF STRUCTURE
 DRAWING NO. 11172003
 SCALE
 SHEET NO. 28 OF 55



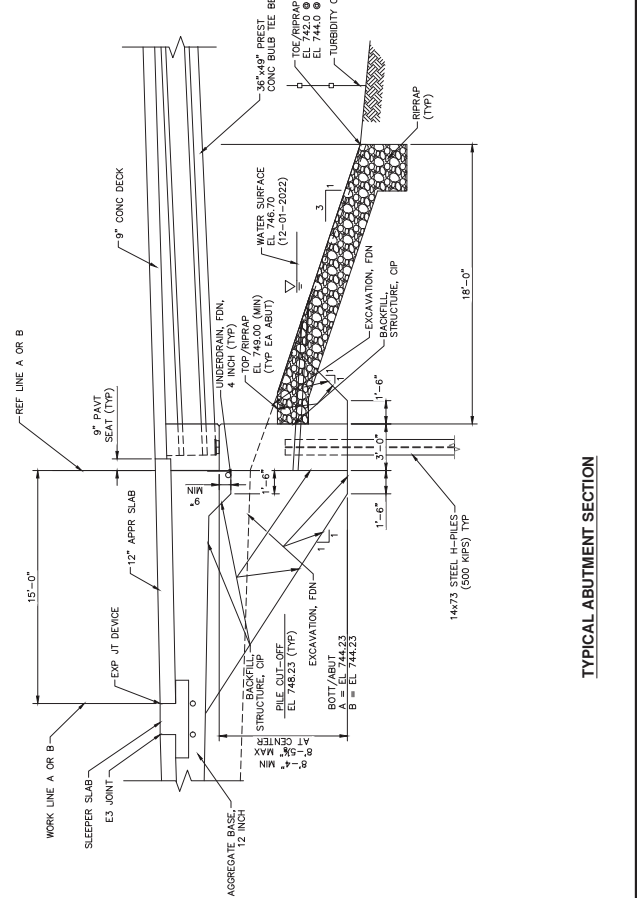
TYPICAL BRIDGE CROSS SECTION ABUTMENT SECTION



TYPICAL BRIDGE CROSS SECTION PIER SECTION



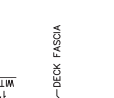
TYPICAL ABUTMENT SECTION



TYPICAL PIER SECTION

NO.	DATE	BY	DESCRIPTION
06-29-23	AS	DRAM	CHECKED
		RSB	ISSUED FOR BID

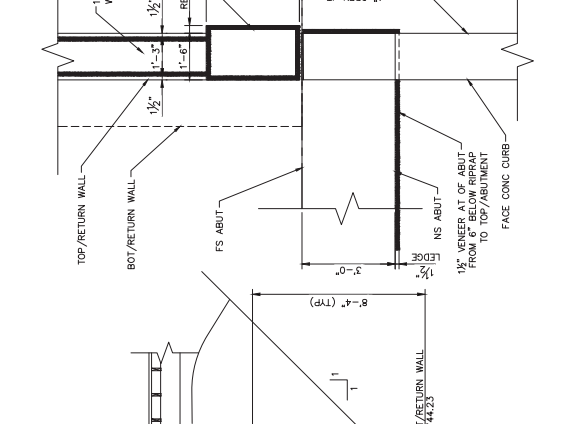
CITY OF ANN ARBOR
COMMUNITY SERVICES
PLANNING AND RECREATION
391 EAST MAIN STREET
ANN ARBOR, MI 48107-0002
www.ann-arbor.org/plans



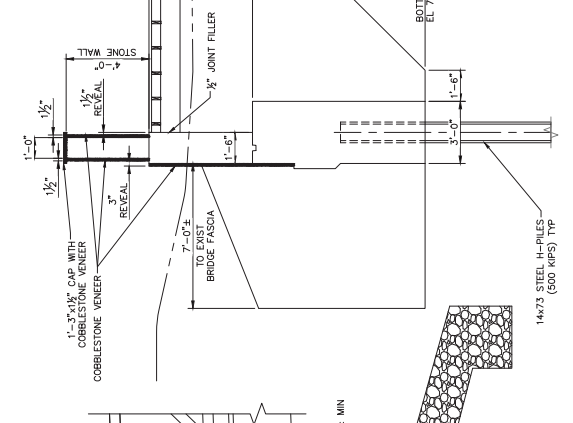
GENERAL PLAN OF STRUCTURE
DESIGN - BRIDGE REPLACEMENT PLANS
GALLUP PARK VEHICLE AND PEDESTRIAN BRIDGE

DRAWING NO.
SCALE
SHEET NOS.
30 OF 55

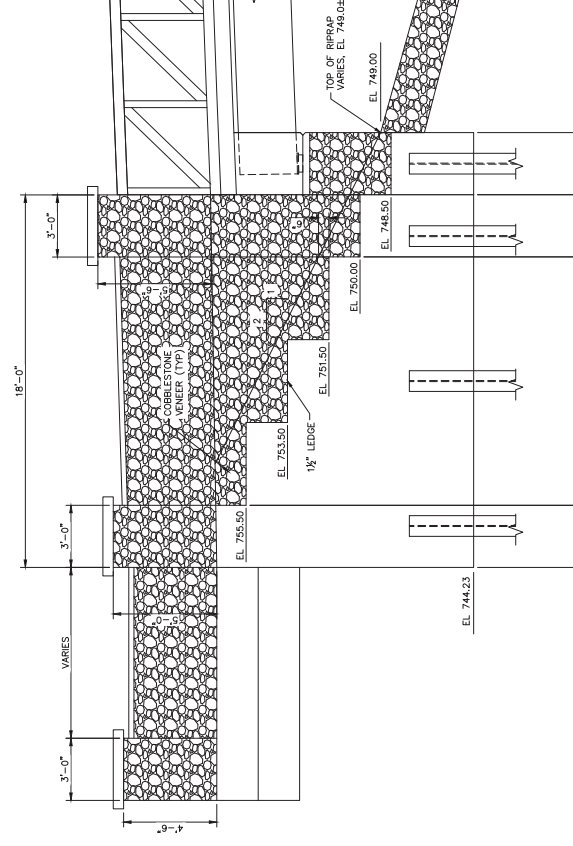
ANN ARBOR, MI 48107-0002
Issued On: 11/17/2023
Project On: 11/17/2023



PARTIAL PLAN



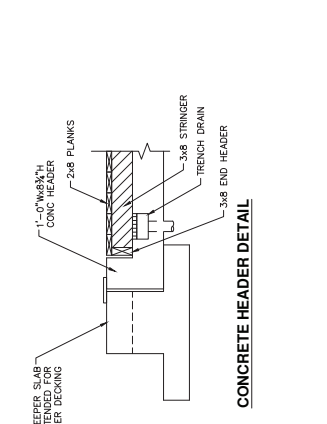
TYPICAL RETURN WALL SECTION
SOUTHEAST RETURN WALL SHOWN



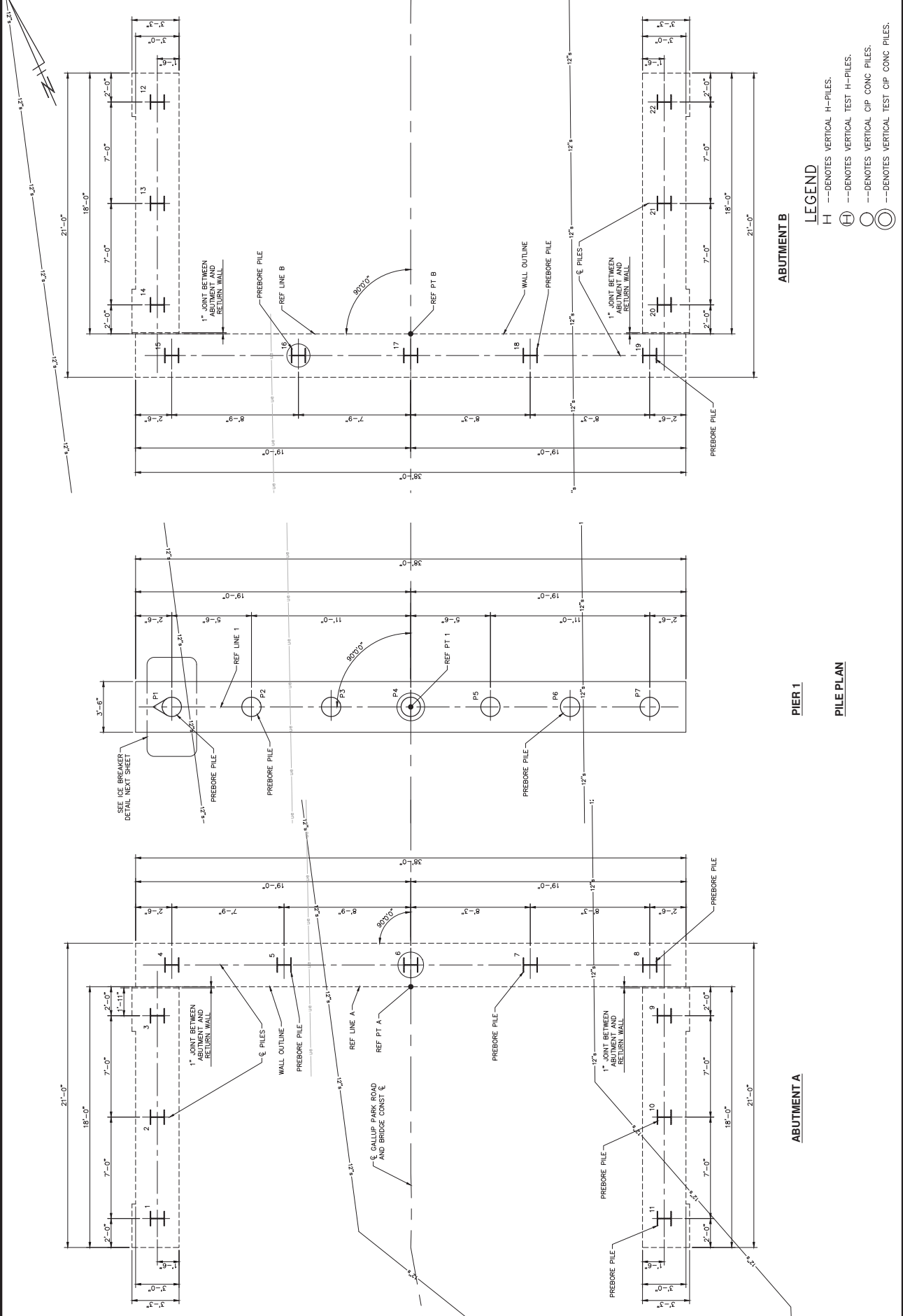
TYPICAL RETURN WALL ELEVATION



PROTECTION RIPRAP DETAIL
(PAID FOR AS "RIPRAP, SPEC. CLASS III" OR ALTERNATE "RIPRAP, FIELDSTONE, SPEC")
(FOR RIPRAP AT EACH QUADRANT ALONG RETURN WALLS, SEE LEDGESTONE DETAILS)



CONCRETE HEADER DETAIL



LEGEND
 H --- DENOTES VERTICAL H-PILES.
 ○ --- DENOTES VERTICAL TEST H-PILES.
 ○ --- DENOTES VERTICAL CIP CONC PILES.
 ○ --- DENOTES VERTICAL TEST CIP CONC PILES.

ABUTMENT B

PIER 1

PILE PLAN

ABUTMENT A