

CHARLES RIVER
RESERVATION



dcr

CHARLES RIVER RESERVATION & PATHWAYS RESTORATION PROJECT - PHASE 3C

DEPARTMENT OF CONSERVATION AND RECREATION

DCR CONTRACT NO. PL92-017-C5A

Commonwealth of Massachusetts
Deval L. Patrick, Governor

Executive Office of Energy and Environmental Affairs
Richard K. Sullivan, Jr., Secretary

Department of Conservation and Recreation
John P. Murray, Commissioner
Michael D. Misslin, Acting Chief Engineer

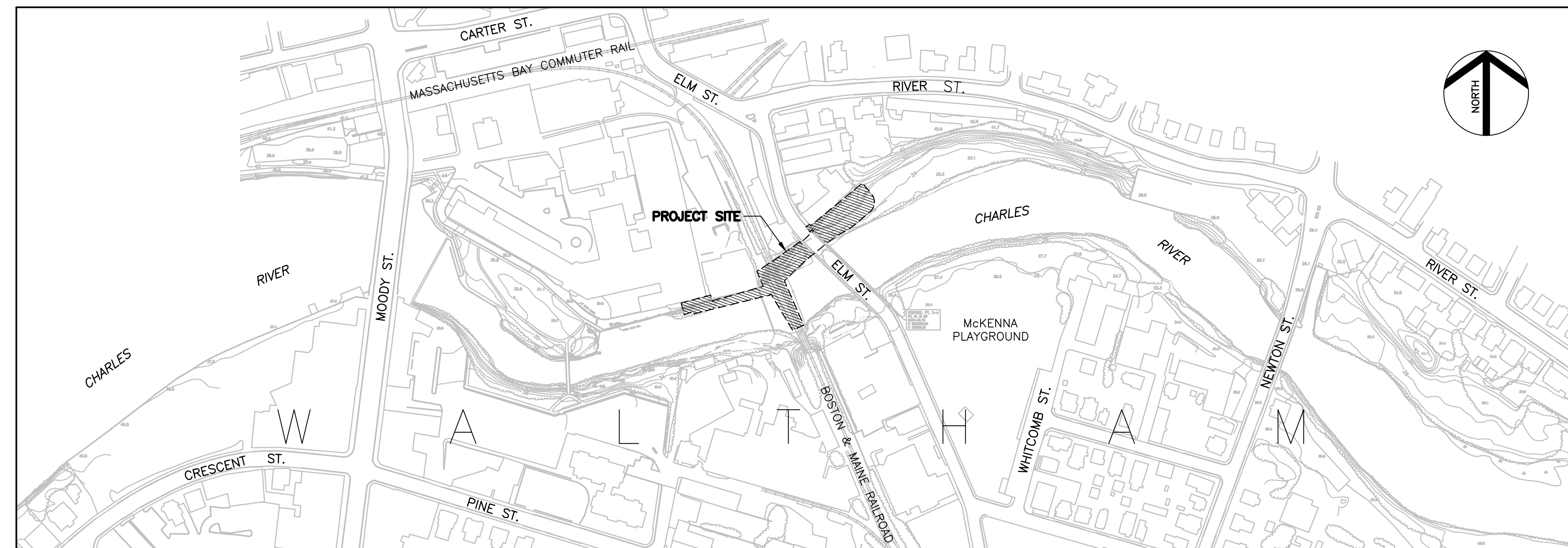


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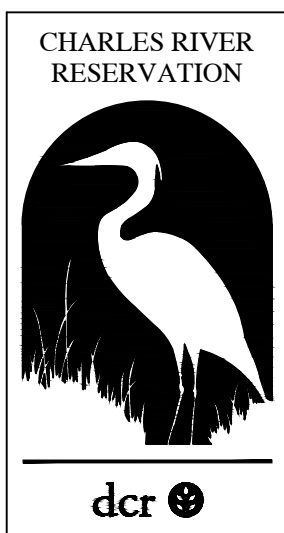
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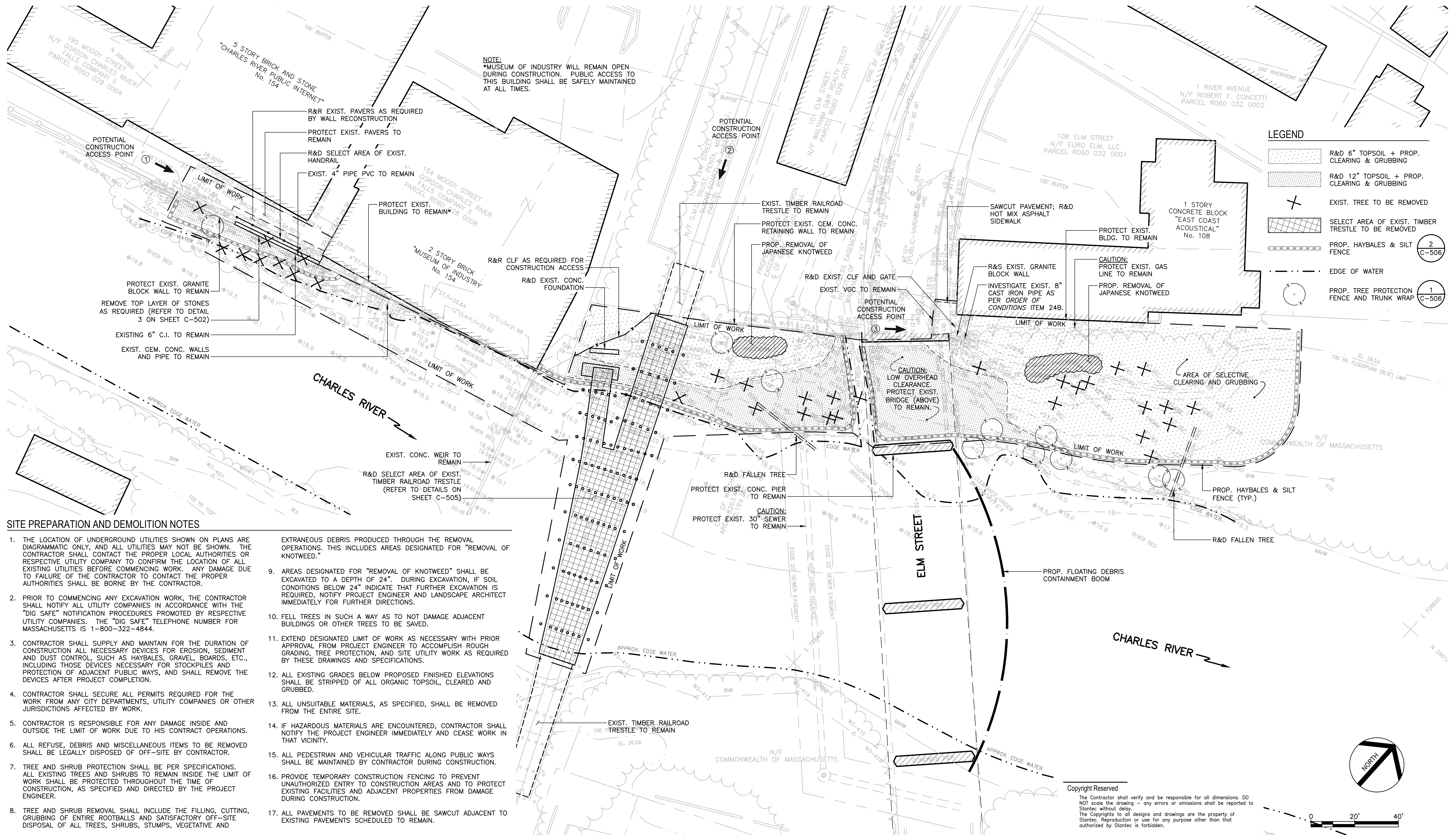
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WATERFRONT ENGINEERING

REVISIONS:	

EXISTING CONDITIONS PLAN

DESIGNED BY: R.HEADRICK
DRAWN BY: J.FALISE
CHECKED BY: R. HEADRICK
DATE: JANUARY 17, 2014
SCALE: 1" = 20'-0"

C-101



SITE PREPARATION AND DEMOLITION NOTES

- THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON PLANS ARE DIAGRAMATIC ONLY, AND ALL UTILITIES MAY NOT BE SHOWN. THE CONTRACTOR SHALL CONTACT THE PROPER LOCAL AUTHORITIES OR RESPECTIVE UTILITY COMPANY TO CONFIRM THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. ANY DAMAGE DUE TO FAILURE OF THE CONTRACTOR TO CONTACT THE PROPER AUTHORITIES SHALL BE BORNE BY THE CONTRACTOR.
- PRIOR TO COMMENCING ANY EXCAVATION WORK, THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN ACCORDANCE WITH THE "DIG SAFE" NOTIFICATION PROCEDURES PROMOTED BY RESPECTIVE UTILITY COMPANIES. THE "DIG SAFE" TELEPHONE NUMBER FOR MASSACHUSETTS IS 1-800-322-4844.
- CONTRACTOR SHALL SUPPLY AND MAINTAIN FOR THE DURATION OF CONSTRUCTION ALL NECESSARY DEVICES FOR EROSION, SEDIMENT AND DUST CONTROL, SUCH AS HAYBALES, GRAVEL, BOARDS, ETC., INCLUDING THOSE DEVICES NECESSARY FOR STOCKPILES AND PROTECTION OF ADJACENT PUBLIC WAYS, AND SHALL REMOVE THE DEVICES AFTER PROJECT COMPLETION.
- CONTRACTOR SHALL SECURE ALL PERMITS REQUIRED FOR THE WORK FROM ANY CITY DEPARTMENTS, UTILITY COMPANIES OR OTHER JURISDICTIONS AFFECTED BY WORK.
- CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE INSIDE AND OUTSIDE THE LIMIT OF WORK DUE TO HIS CONTRACT OPERATIONS.
- ALL REFUSE, DEBRIS AND MISCELLANEOUS ITEMS TO BE REMOVED SHALL BE LEGALLY DISPOSED OF OFF-SITE BY CONTRACTOR.
- TREE AND SHRUB PROTECTION SHALL BE PER SPECIFICATIONS. ALL EXISTING TREES AND SHRUBS TO REMAIN INSIDE THE LIMIT OF WORK SHALL BE PROTECTED THROUGHOUT THE TIME OF CONSTRUCTION, AS SPECIFIED AND DIRECTED BY THE PROJECT ENGINEER.
- TREE AND SHRUB REMOVAL SHALL INCLUDE THE FILLING, CUTTING, GRUBBING OF ENTIRE ROOTBALLS AND SATISFACTORY OFF-SITE DISPOSAL OF ALL TREES, SHRUBS, STUMPS, VEGETATIVE AND

- EXTRANEOUS DEBRIS PRODUCED THROUGH THE REMOVAL OPERATIONS. THIS INCLUDES AREAS DESIGNATED FOR "REMOVAL OF KNOTWEED."
- AREAS DESIGNATED FOR "REMOVAL OF KNOTWEED" SHALL BE EXCAVATED TO A DEPTH OF 24". DURING EXCAVATION, IF SOIL CONDITIONS BELOW 24" INDICATE THAT FURTHER EXCAVATION IS REQUIRED, NOTIFY PROJECT ENGINEER AND LANDSCAPE ARCHITECT IMMEDIATELY FOR FURTHER DIRECTIONS.
- FELL TREES IN SUCH A WAY AS TO NOT DAMAGE ADJACENT BUILDINGS OR OTHER TREES TO BE SAVED.
- EXTEND DESIGNATED LIMIT OF WORK AS NECESSARY WITH PRIOR APPROVAL FROM PROJECT ENGINEER TO ACCOMPLISH ROUGH GRADING, TREE PROTECTION, AND SITE UTILITY WORK AS REQUIRED BY THESE DRAWINGS AND SPECIFICATIONS.
- ALL EXISTING GRADES BELOW PROPOSED FINISHED ELEVATIONS SHALL BE STRIPPED OF ALL ORGANIC TOPSOIL, CLEARED AND GRUBBED.
- ALL UNSUITABLE MATERIALS, AS SPECIFIED, SHALL BE REMOVED FROM THE ENTIRE SITE.
- IF HAZARDOUS MATERIALS ARE ENCOUNTERED, CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY AND CEASE WORK IN THAT VICINITY.
- ALL PEDESTRIAN AND VEHICULAR TRAFFIC ALONG PUBLIC WAYS SHALL BE MAINTAINED BY CONTRACTOR DURING CONSTRUCTION.
- PROVIDE TEMPORARY CONSTRUCTION FENCING TO PREVENT UNAUTHORIZED ENTRY TO CONSTRUCTION AREAS AND TO PROTECT EXISTING FACILITIES AND ADJACENT PROPERTIES FROM DAMAGE DURING CONSTRUCTION.
- ALL PAVEMENTS TO BE REMOVED SHALL BE SAWCUT ADJACENT TO EXISTING PAVEMENTS SCHEDULED TO REMAIN.

NOTE:
 *MUSEUM OF INDUSTRY WILL REMAIN OPEN DURING CONSTRUCTION. PUBLIC ACCESS TO THIS BUILDING SHALL BE SAFELY MAINTAINED AT ALL TIMES.

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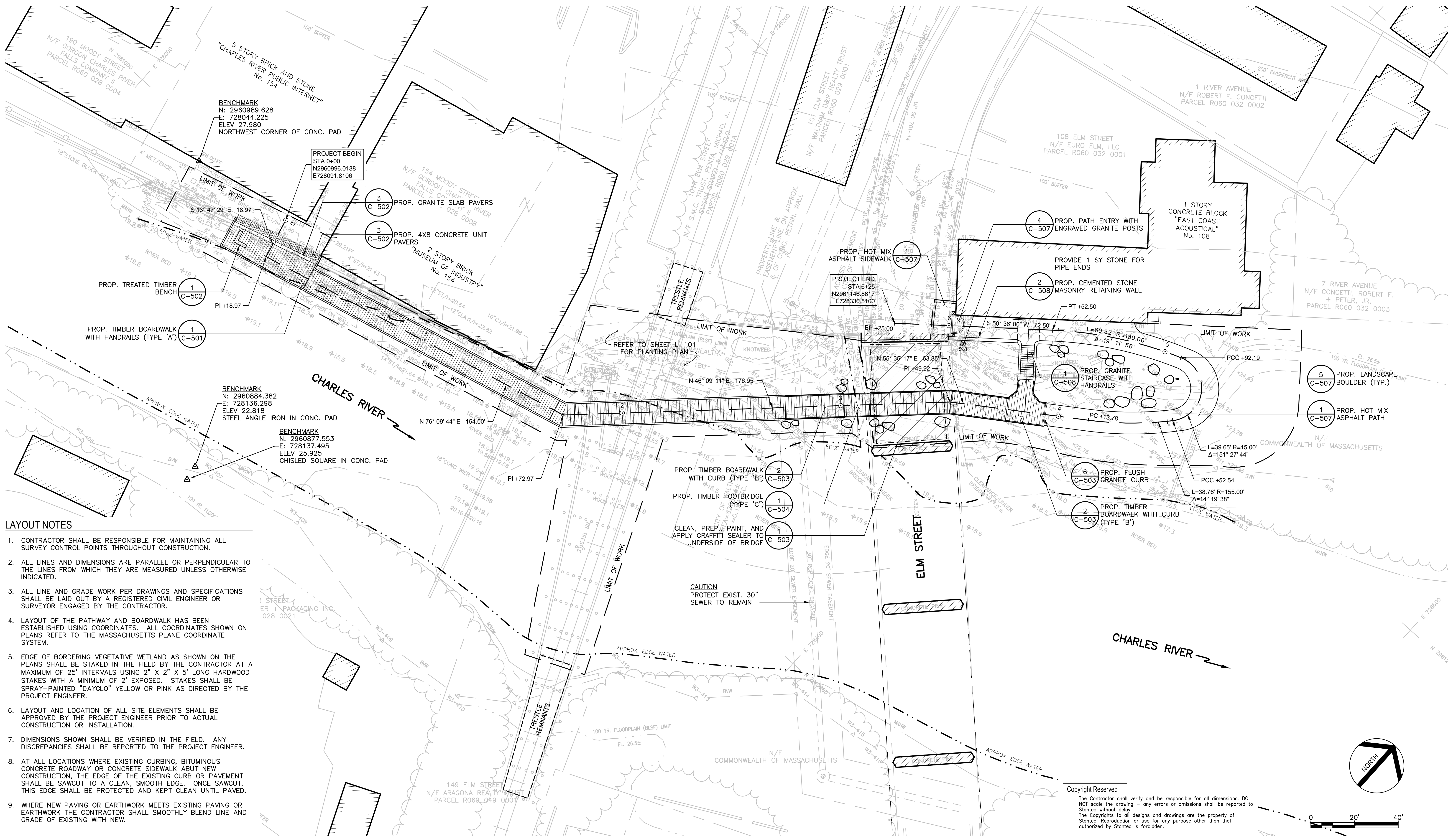
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REVISIONS:	

SITE PREP. AND DEMOLITION PLAN	
DESIGNED BY:	R. HEADRICK
DRAWN BY:	J. FALISE
CHECKED BY:	R. HEADRICK
DATE:	JANUARY 17, 2014
SCALE:	1" = 20'-0"

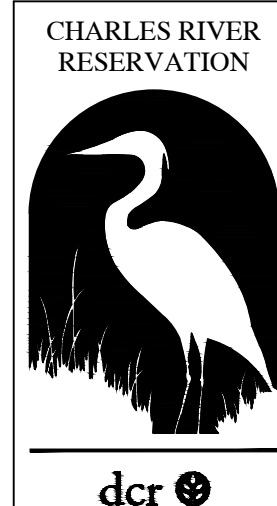
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LAYOUT NOTES

- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL SURVEY CONTROL POINTS THROUGHOUT CONSTRUCTION.
- ALL LINES AND DIMENSIONS ARE PARALLEL OR PERPENDICULAR TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED.
- ALL LINE AND GRADE WORK PER DRAWINGS AND SPECIFICATIONS SHALL BE LAID OUT BY A REGISTERED CIVIL ENGINEER OR SURVEYOR ENGAGED BY THE CONTRACTOR.
- LAYOUT OF THE PATHWAY AND BOARDWALK HAS BEEN ESTABLISHED USING COORDINATES. ALL COORDINATES SHOWN ON PLANS REFER TO THE MASSACHUSETTS PLANE COORDINATE SYSTEM.
- EDGE OF BORDERING VEGETATIVE WETLAND AS SHOWN ON THE PLANS SHALL BE STAKED IN THE FIELD BY THE CONTRACTOR AT A MAXIMUM OF 25' INTERVALS USING 2" X 2" X 5' LONG HARDWOOD STAKES WITH A MINIMUM OF 2' EXPOSED. STAKES SHALL BE SPRAY-PAINTED "DAYGLO" YELLOW OR PINK AS DIRECTED BY THE PROJECT ENGINEER.
- LAYOUT AND LOCATION OF ALL SITE ELEMENTS SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO ACTUAL CONSTRUCTION OR INSTALLATION.
- DIMENSIONS SHOWN SHALL BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE REPORTED TO THE PROJECT ENGINEER.
- AT ALL LOCATIONS WHERE EXISTING CURBING, BITUMINOUS CONCRETE ROADWAY OR CONCRETE SIDEWALK ABUT NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAWCUT TO A CLEAN, SMOOTH EDGE. ONCE SAWCUT, THIS EDGE SHALL BE PROTECTED AND KEPT CLEAN UNTIL PAVED.
- WHERE NEW PAVING OR EARTHWORK MEETS EXISTING PAVING OR EARTHWORK THE CONTRACTOR SHALL SMOOTHLY BLEND LINE AND GRADE OF EXISTING WITH NEW.

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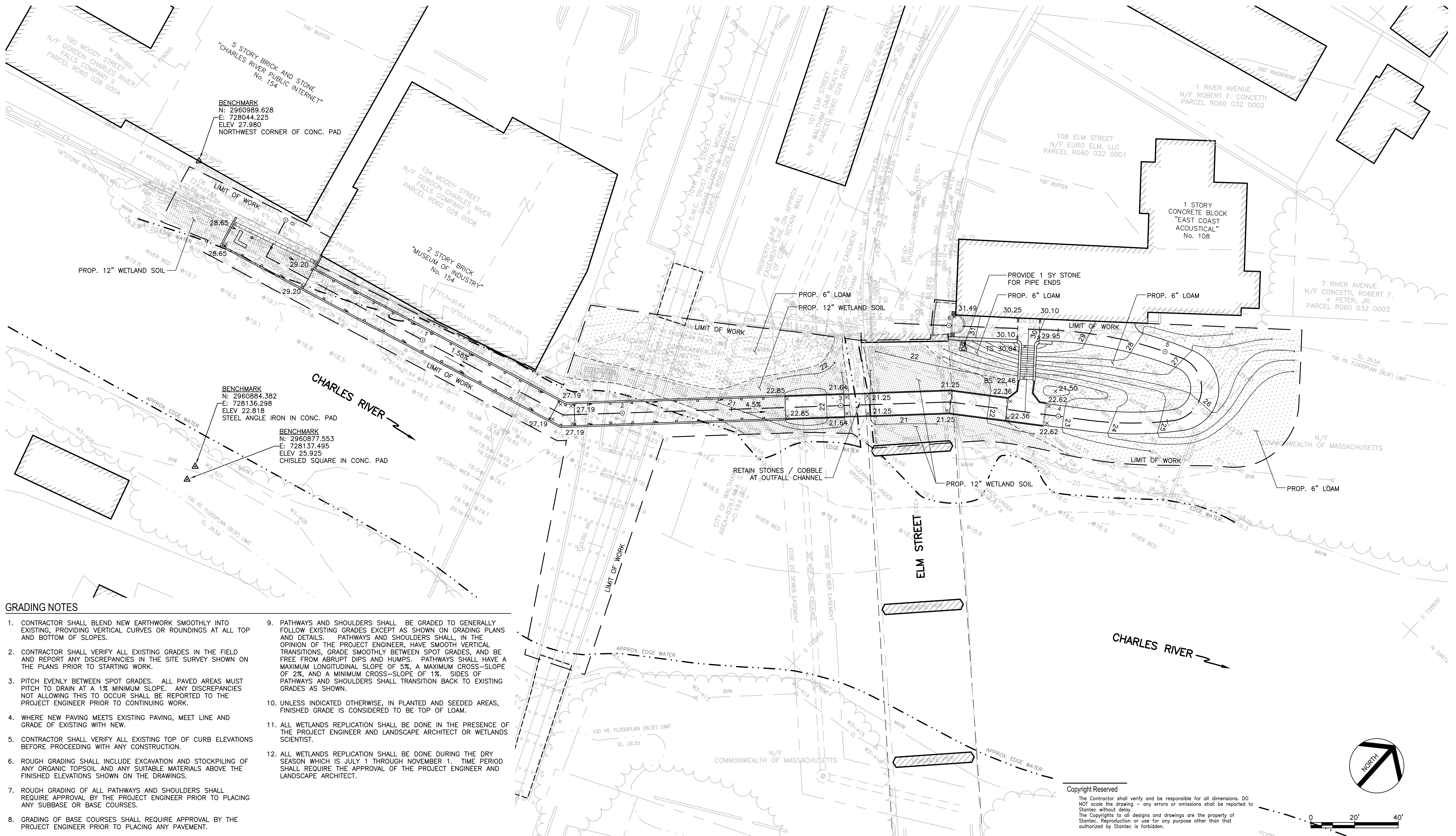
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REVISIONS:	

SITE LAYOUT AND MATERIALS PLAN	
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DRAWN BY:	J. FALISE
CHECKED BY:	R. HEADRICK
DATE:	JANUARY 17, 2014
SCALE:	1" = 20'-0"

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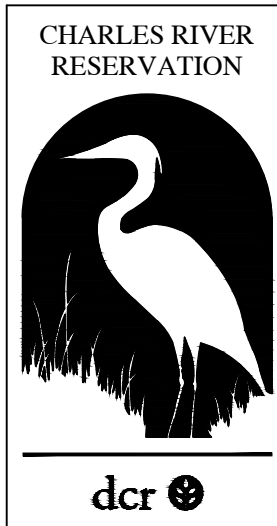
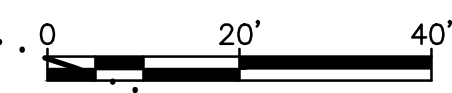


GRADING NOTES

- CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDINGS AT ALL TOP AND BOTTOM OF SLOPES.
- CONTRACTOR SHALL VERIFY ALL EXISTING GRADES IN THE FIELD AND REPORT ANY DISCREPANCIES IN THE SITE SURVEY SHOWN ON THE PLANS PRIOR TO STARTING WORK.
- PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A 1% MINIMUM SLOPE. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE PROJECT ENGINEER PRIOR TO CONTINUING WORK.
- WHERE NEW PAVING MEETS EXISTING PAVING, MEET LINE AND GRADE OF EXISTING WITH NEW.
- CONTRACTOR SHALL VERIFY ALL EXISTING TOP OF CURB ELEVATIONS BEFORE PROCEEDING WITH ANY CONSTRUCTION.
- ROUGH GRADING SHALL INCLUDE EXCAVATION AND STOCKPILING OF ANY ORGANIC TOPSOIL AND ANY SUITABLE MATERIALS ABOVE THE FINISHED ELEVATIONS SHOWN ON THE DRAWINGS.
- ROUGH GRADING OF ALL PATHWAYS AND SHOULDERS SHALL REQUIRE APPROVAL BY THE PROJECT ENGINEER PRIOR TO PLACING ANY SUBBASE OR BASE COURSES.
- GRADING OF BASE COURSES SHALL REQUIRE APPROVAL BY THE PROJECT ENGINEER PRIOR TO PLACING ANY PAVEMENT.
- PATHWAYS AND SHOULDERS SHALL BE GRADED TO GENERALLY FOLLOW EXISTING GRADES EXCEPT AS SHOWN ON GRADING PLANS AND DETAILS. PATHWAYS AND SHOULDERS SHALL, IN THE OPINION OF THE PROJECT ENGINEER, HAVE SMOOTH VERTICAL TRANSITIONS, GRADE SMOOTHLY BETWEEN SPOT GRADES, AND BE FREE FROM ABRUPT DIPS AND HUMPS. PATHWAYS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5%, A MAXIMUM CROSS-SLOPE OF 2%, AND A MINIMUM CROSS-SLOPE OF 1%. SIDES OF PATHWAYS AND SHOULDERS SHALL TRANSITION BACK TO EXISTING GRADES AS SHOWN.
- UNLESS INDICATED OTHERWISE, IN PLANTED AND SEEDING AREAS, FINISHED GRADE IS CONSIDERED TO BE TOP OF LOAM.
- ALL WETLANDS REPLICATION SHALL BE DONE IN THE PRESENCE OF THE PROJECT ENGINEER AND LANDSCAPE ARCHITECT OR WETLANDS SCIENTIST.
- ALL WETLANDS REPLICATION SHALL BE DONE DURING THE DRY SEASON WHICH IS JULY 1 THROUGH NOVEMBER 1. TIME PERIOD SHALL REQUIRE THE APPROVAL OF THE PROJECT ENGINEER AND LANDSCAPE ARCHITECT.

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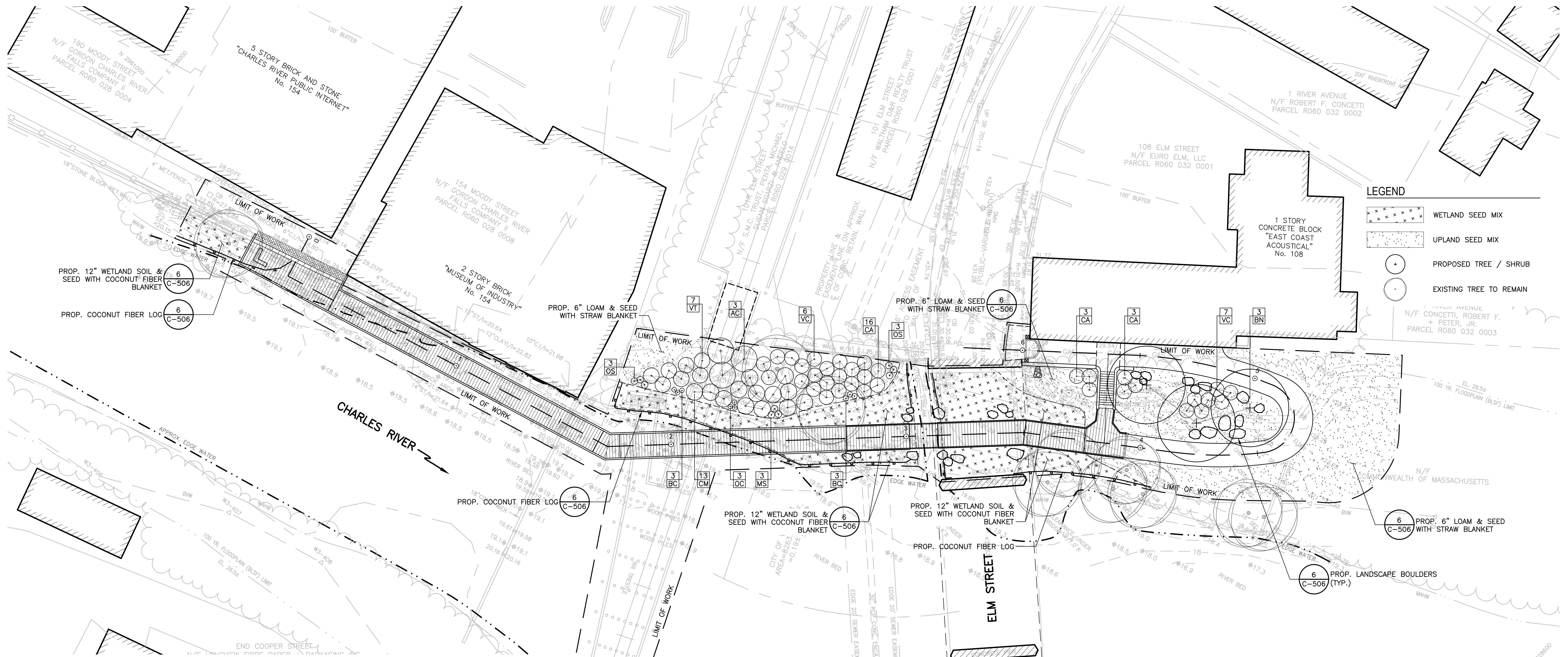
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WATERFRONT ENGINEERING

REVISIONS:	

GRADING AND UTILITIES PLAN

DESIGNED BY: R.HEADRICK
DRAWN BY: J.FALISE
CHECKED BY: R. HEADRICK
DATE: JANUARY 17, 2014
SCALE: 1" = 20'-0"

C-104



LEGEND

- WETLAND SEED MIX
- UPLAND SEED MIX
- PROPOSED TREE / SHRUB
- EXISTING TREE TO REMAIN

N/F CONNETTI, ROBERT F. + PETER, JR. PARCEL R060 032 0003

PLANTING NOTES

1. ALL NEW PLANT MATERIAL SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. IN ADDITION, ALL NEW PLANT MATERIAL FOR THE PROJECT SHALL BE OF SPECIMEN QUALITY.
2. ALL NEW PLANTS TO BE BALLED AND BURLAPPED OR CONTAINER-GROWN, UNLESS OTHERWISE NOTED ON PLANT LIST.
3. IF DISCREPANCIES EXIST BETWEEN THE NUMBER OF PLANTS DRAWN ON THE PLANTING PLANS AND THE NUMBER OF PLANTS IN THE PLANT LIST, THE PLANS SHALL GOVERN.
4. THE CONTRACTOR SHALL SUPPLY ALL NEW PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON THE DRAWINGS.
5. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES SHALL BE MADE WITH PLANTS OF EQUIVALENT OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE ONLY AS APPROVED BY THE PROJECT ENGINEER AND LANDSCAPE ARCHITECT.
6. ALL NEW PLANTS SHALL BE TAGGED AND APPROVED BY THE PROJECT ENGINEER AND LANDSCAPE ARCHITECT AT THE NURSERY PRIOR TO DIGGING OR DELIVERY TO SITE.
7. CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING UTILITY LINES PRIOR TO PLANTING AND SHALL REPORT ANY CONFLICTS TO THE PROJECT ENGINEER.
8. STAKE LOCATION OF ALL PROPOSED PLANTING FOR APPROVAL BY THE PROJECT ENGINEER AND LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF PLANTING.
9. NEW PLANT MATERIAL BRANCHING AND ROOTS SHALL BEAR THE SAME RELATIONSHIP TO GRADE AS THEY BORE TO PREVIOUS GRADE AT THE NURSERY.
10. ALL PLANT BEDS TO RECEIVE THREE INCHES (3") OF WOOD FIBER MULCH PER SPECIFICATIONS.
11. WITH THE EXCEPTION OF WETLAND AREAS, CONTRACTOR SHALL PREPARE ALL SHRUB AND TREE PLANTING PITS TO A MINIMUM DEPTH OF TWENTY-FOUR INCHES (24") WITH PLANTING SOIL.
12. IN WETLAND AREAS, CONTRACTOR SHALL PROVIDE TWELVE INCHES (12") OF DESIGNATED WETLAND PLANTING SOIL, AMENDED WITH LEAF COMPOST AS PER SPECIFICATIONS.
13. UPLAND SEED AREAS SHALL RECEIVE SIX INCHES (6") OF LOAM MEASURED AFTER COMPACTION PRIOR TO SEEDING.

PLANTING SCHEDULE

QTY.	ID	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS
TREES					
3	BN	BETULA NIGRA	RIVER BIRCH	8-10' CLUMP	B&B
SHUBS					
3	AC	AMELANCHIER CANADENSIS	SHADBUSH	6-7' CLUMP	B&B
22	CA	CLETHRA ALNIFOLIA	SUMMERSWEET	2-3' HT.	
13	CM	CORNUS AMOMUM	SILKY DOGWOOD	2-3' HT.	
13	VC	VACCINIUM CORYMBOSUM	HIGHBUSH BLUEBERRY	3-4' HT.	
7	VT	VIBURNUM TRILOBUM	CRANBERRY VIBURNUM	4-5' HT.	
FERNS					
3	MS	MATTEUCIA STRUTHIOPERIS	OSTRICH FERN	C.G. #1	
3	OC	OSMUNDA CINNAMOMEA	CINNAMON FERN	C.G. #1	
6	OS	ONOCLEA SENSIBILIS	SENSITIVE FERN	C.G. #1	
PERENNIALS					
6	BC	BOEHMERIA CYLINDRICA	FALSE NETTLE	C.G. #1	

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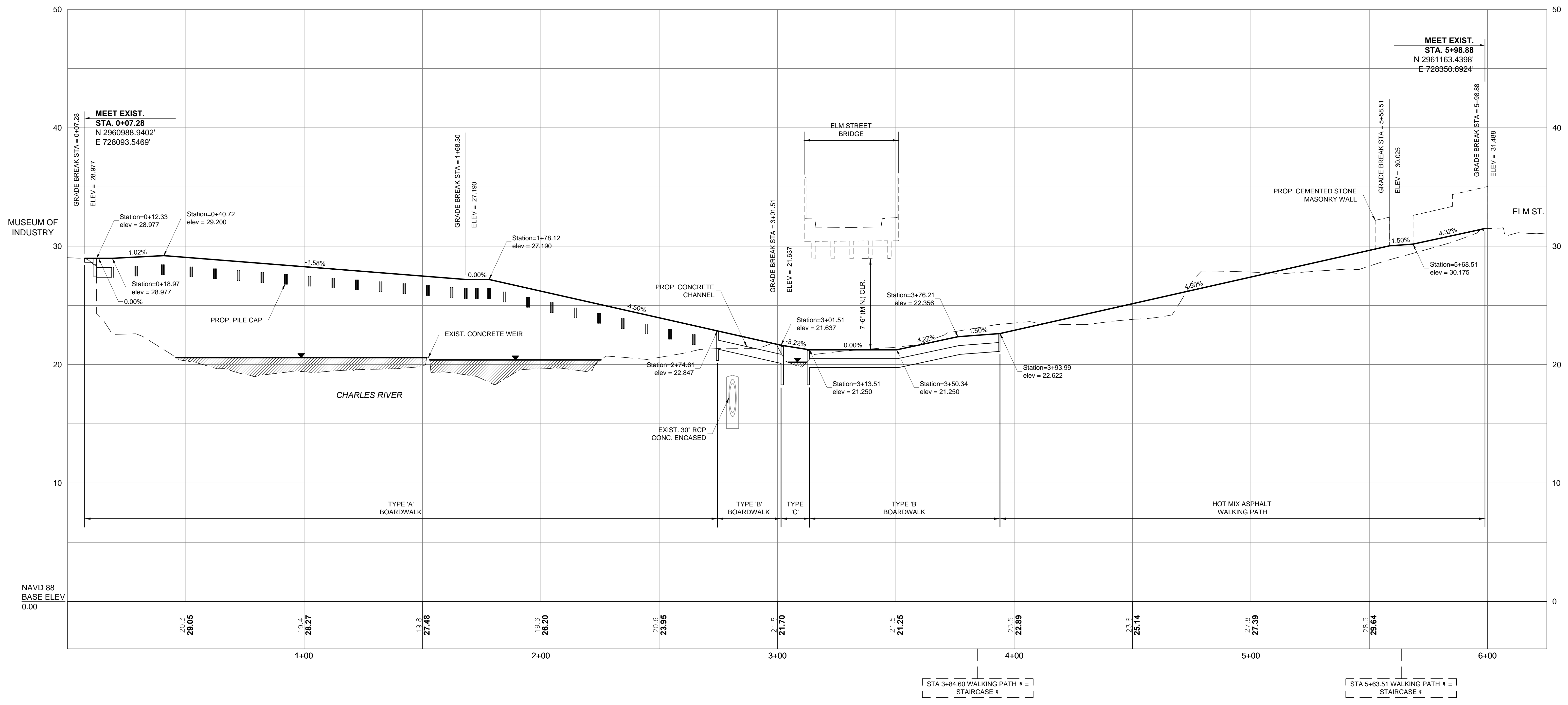
REVISIONS:

NO.	DESCRIPTION	DATE

PLANTING PLAN

DESIGNED BY:	R. HEADRICK
DRAWN BY:	J. FALISE
CHECKED BY:	R. HEADRICK
DATE:	JANUARY 17, 2014
SCALE:	1" = 20'-0"

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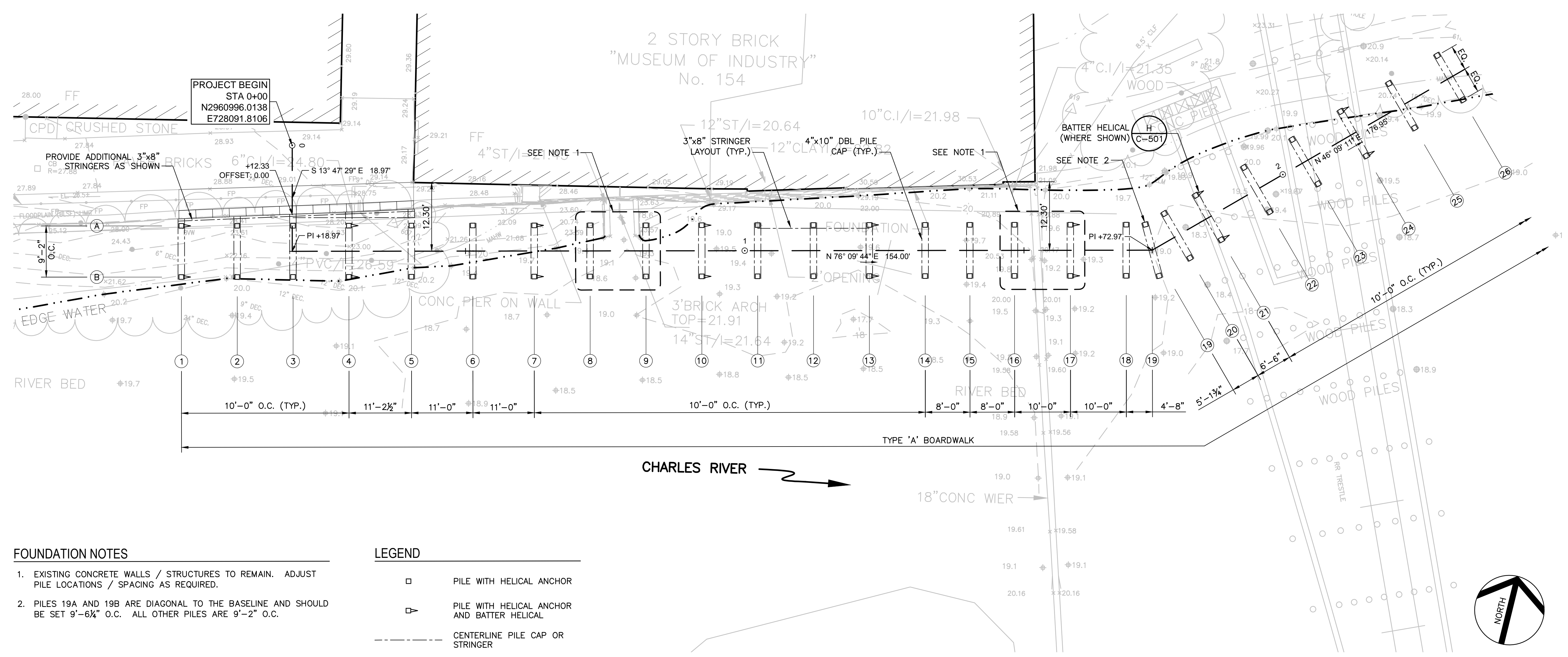
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REVISIONS:	

PROFILE	
DESIGNED BY:	R. HEADRICK
DRAWN BY:	J. FALISE
CHECKED BY:	R. HEADRICK
DATE:	JANUARY 17, 2014
SCALE:	AS SHOWN

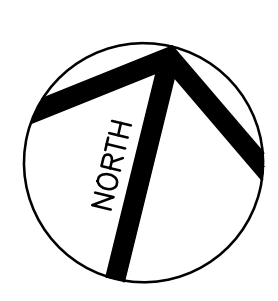
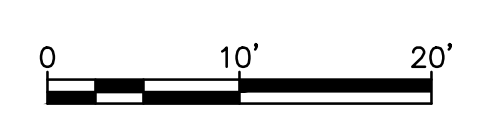
C-301



- FOUNDATION NOTES**
- EXISTING CONCRETE WALLS / STRUCTURES TO REMAIN. ADJUST PILE LOCATIONS / SPACING AS REQUIRED.
 - PILES 19A AND 19B ARE DIAGONAL TO THE BASELINE AND SHOULD BE SET 9'-6 1/4" O.C. ALL OTHER PILES ARE 9'-2" O.C.

- LEGEND**
- PILE WITH HELICAL ANCHOR
 - ▷ PILE WITH HELICAL ANCHOR AND BATTER HELICAL
 - CENTERLINE PILE CAP OR STRINGER

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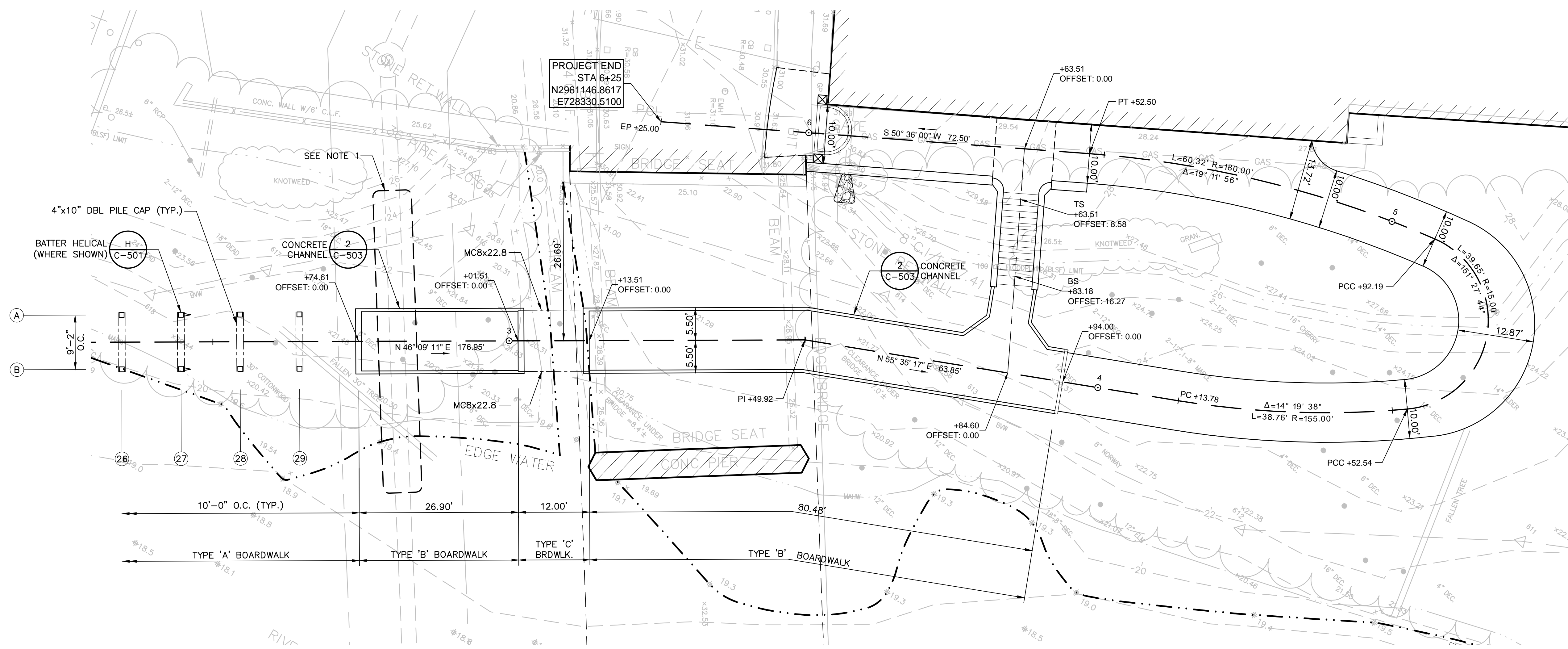
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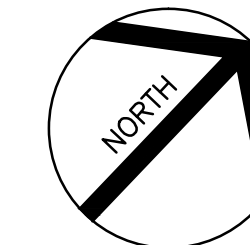
FOUNDATION LAYOUT	
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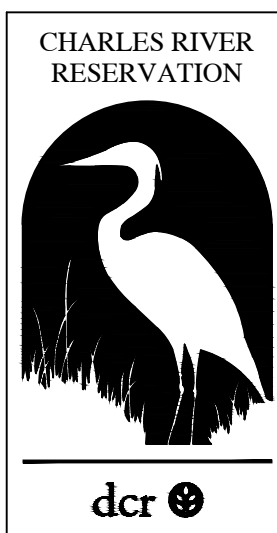
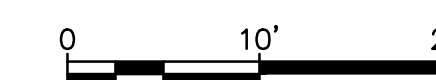
FOUNDATION NOTES

1. CONTRACTOR SHALL LOCATE AND PROTECT 30" UNDERGROUND SEWER LINE THROUGHOUT CONSTRUCTION.



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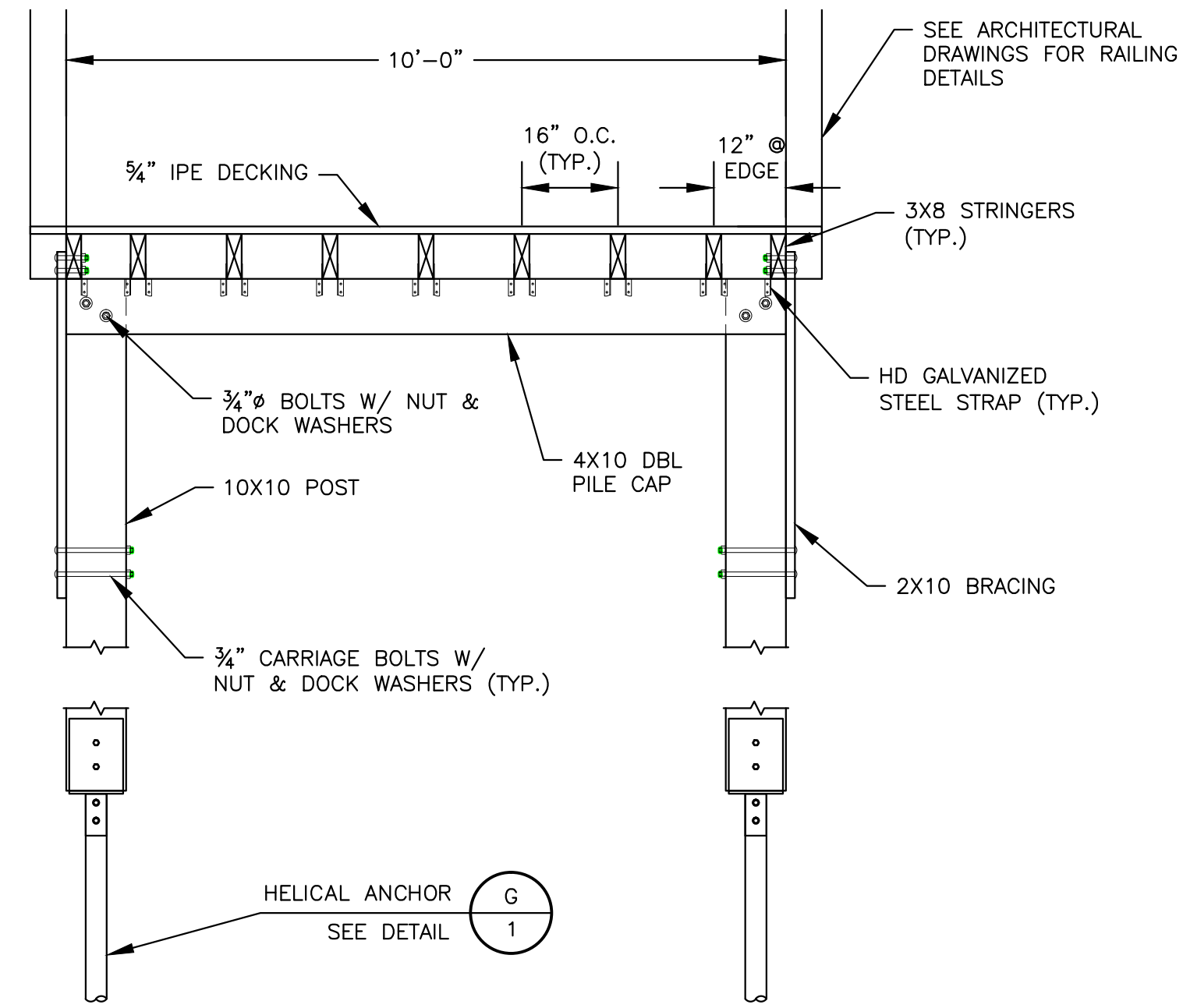
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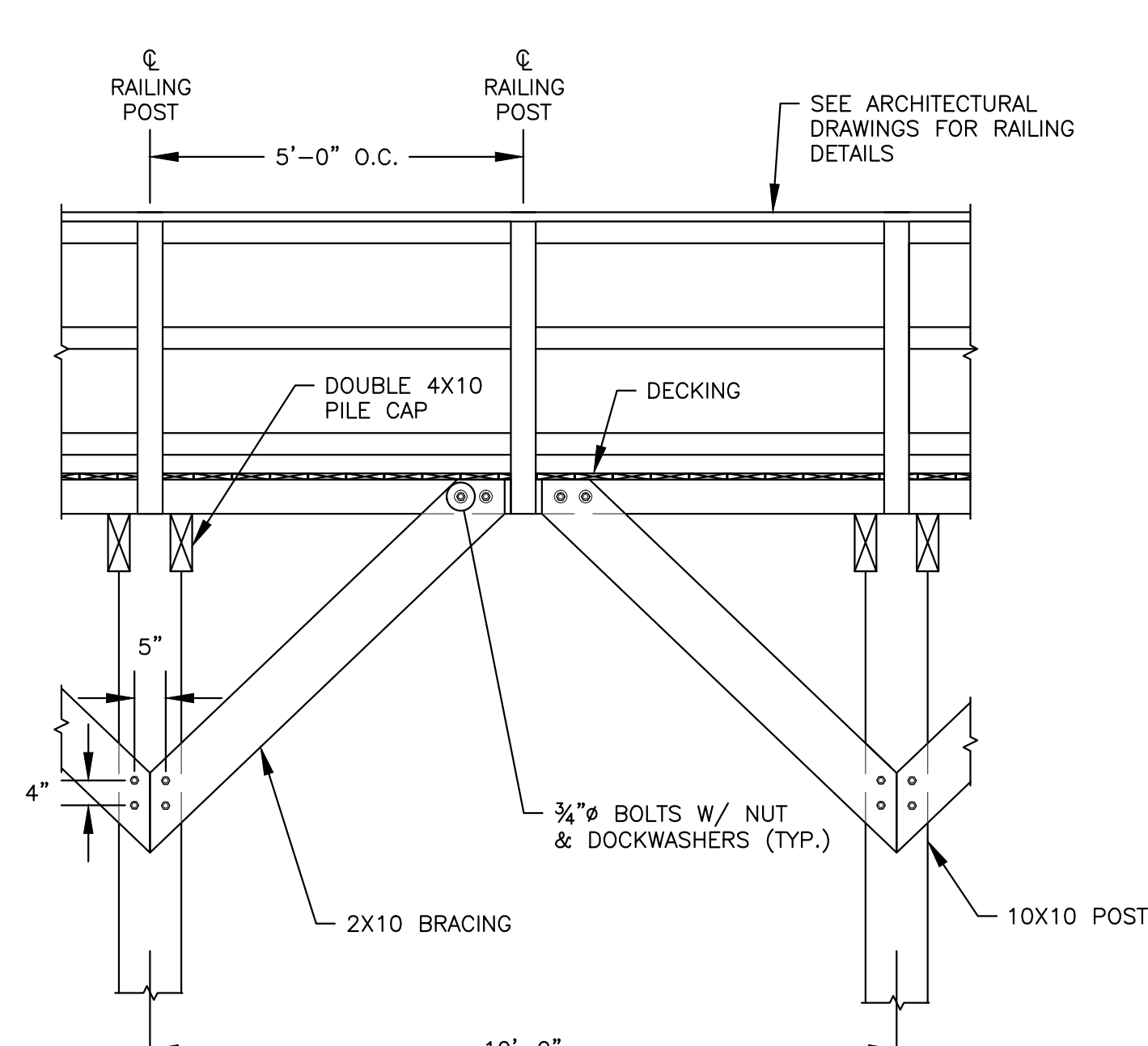
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DESIGNED BY:	R. HEADRICK
DRAWN BY:	J. FALISE
CHECKED BY:	R. HEADRICK
DATE:	JANUARY 17, 2014
SCALE:	1" = 10'-0"

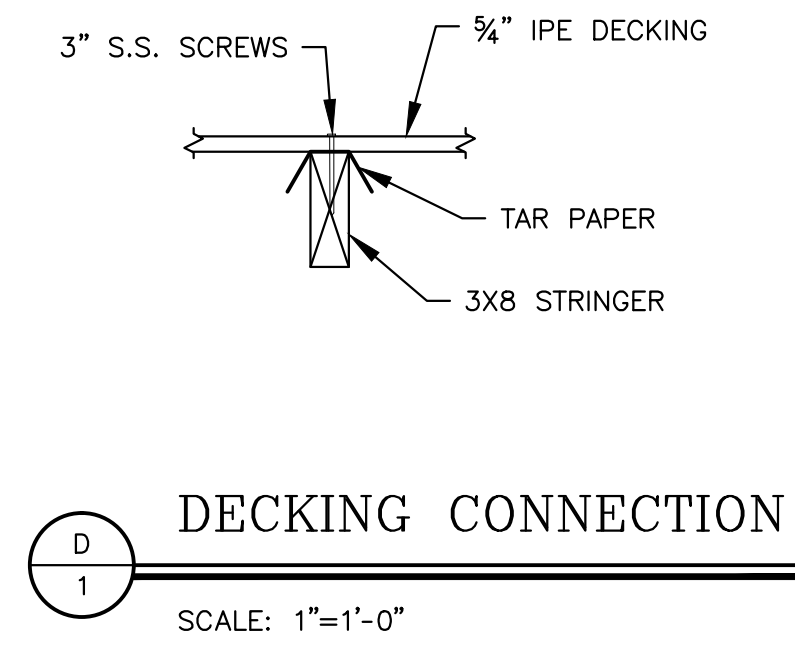
C-402



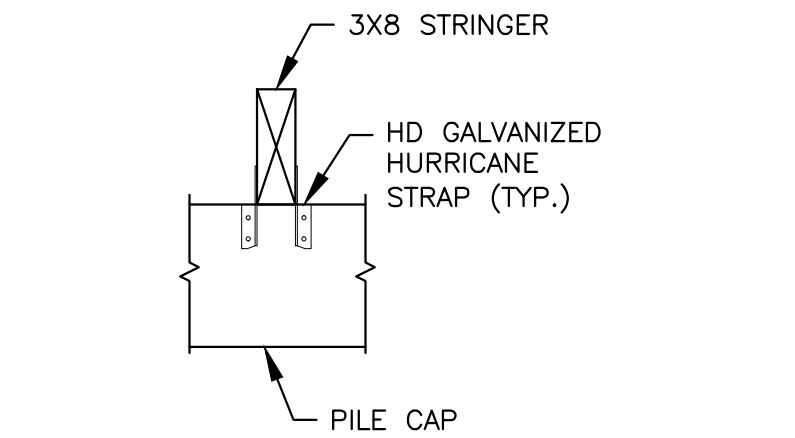
B
1
TYPE A BOARDWALK SECTION
SCALE: 1/2"=1'-0"



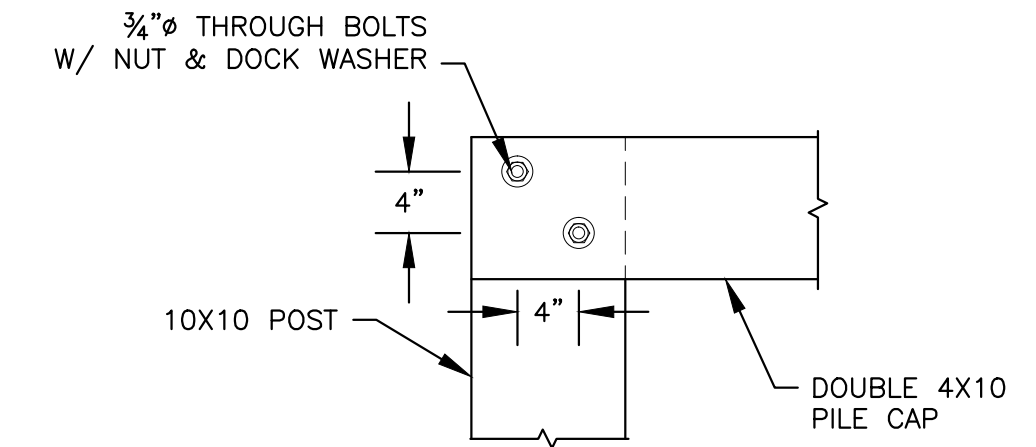
C
1
BOARDWALK ELEVATION
SCALE: 1/2"=1'-0"



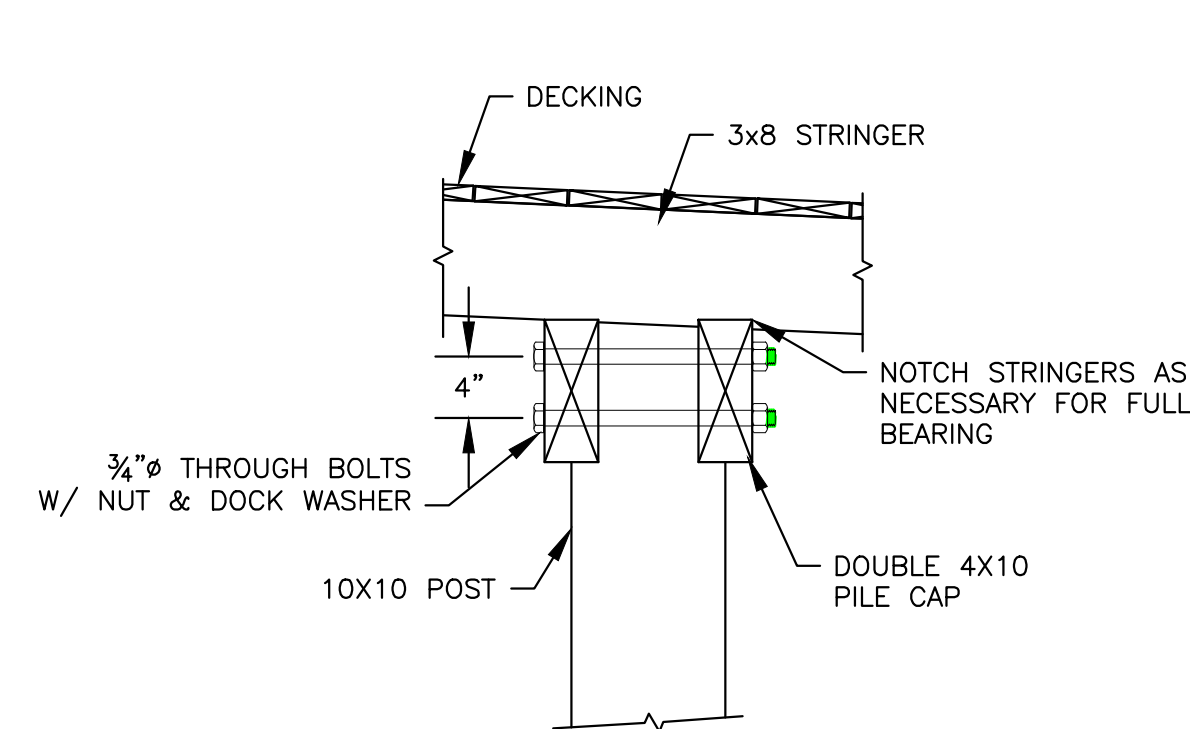
D
1
DECKING CONNECTION
SCALE: 1"=1'-0"



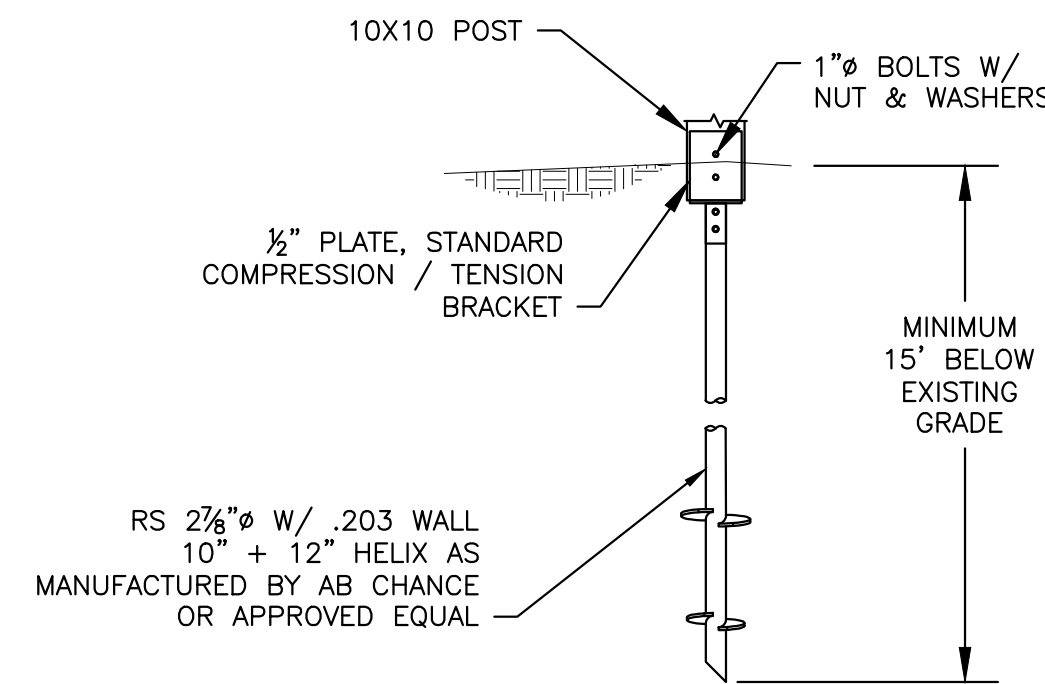
E
1
STRINGER CONNECTION
SCALE: 1"=1'-0"



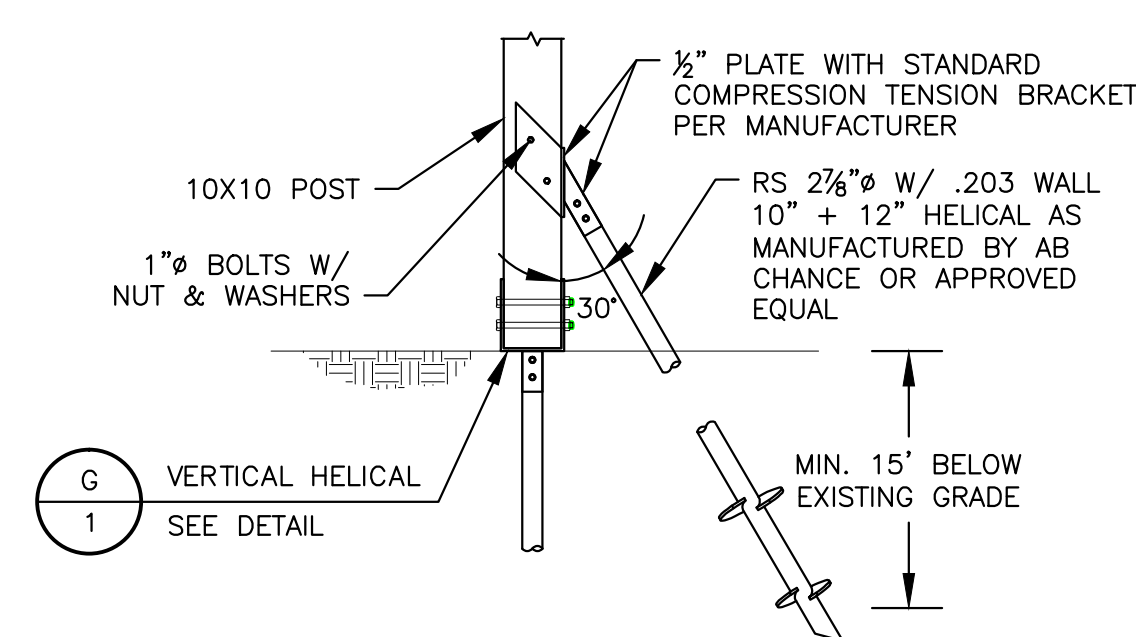
F
1
PILE CAP CONNECTION
SCALE: 1"=1'-0"



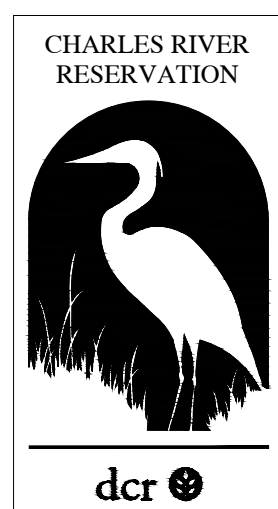
F
501
PILE CAP CONNECTION
SCALE: 1"=1'-0"



G
1
HELICAL DETAIL
SCALE: 3/8"=1'-0"



H
1
BATTER HELICAL
SCALE: 3/8"=1'-0"



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DEPARTMENT OF CONSERVATION AND RECREATION**

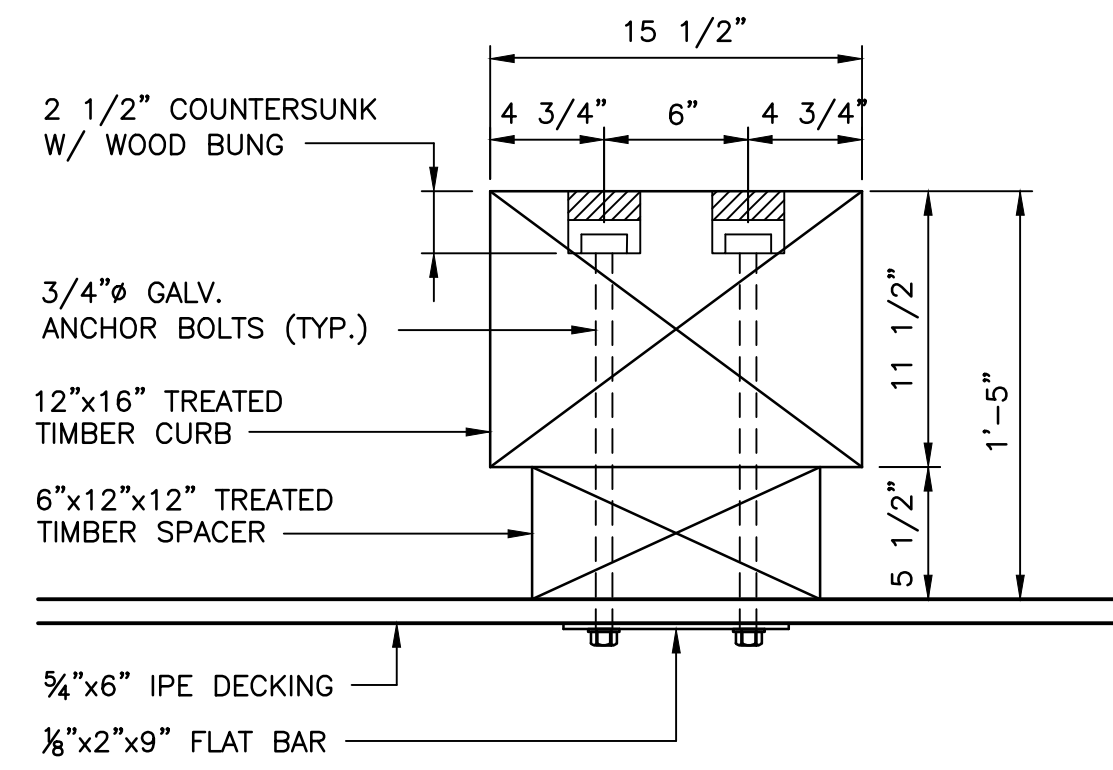
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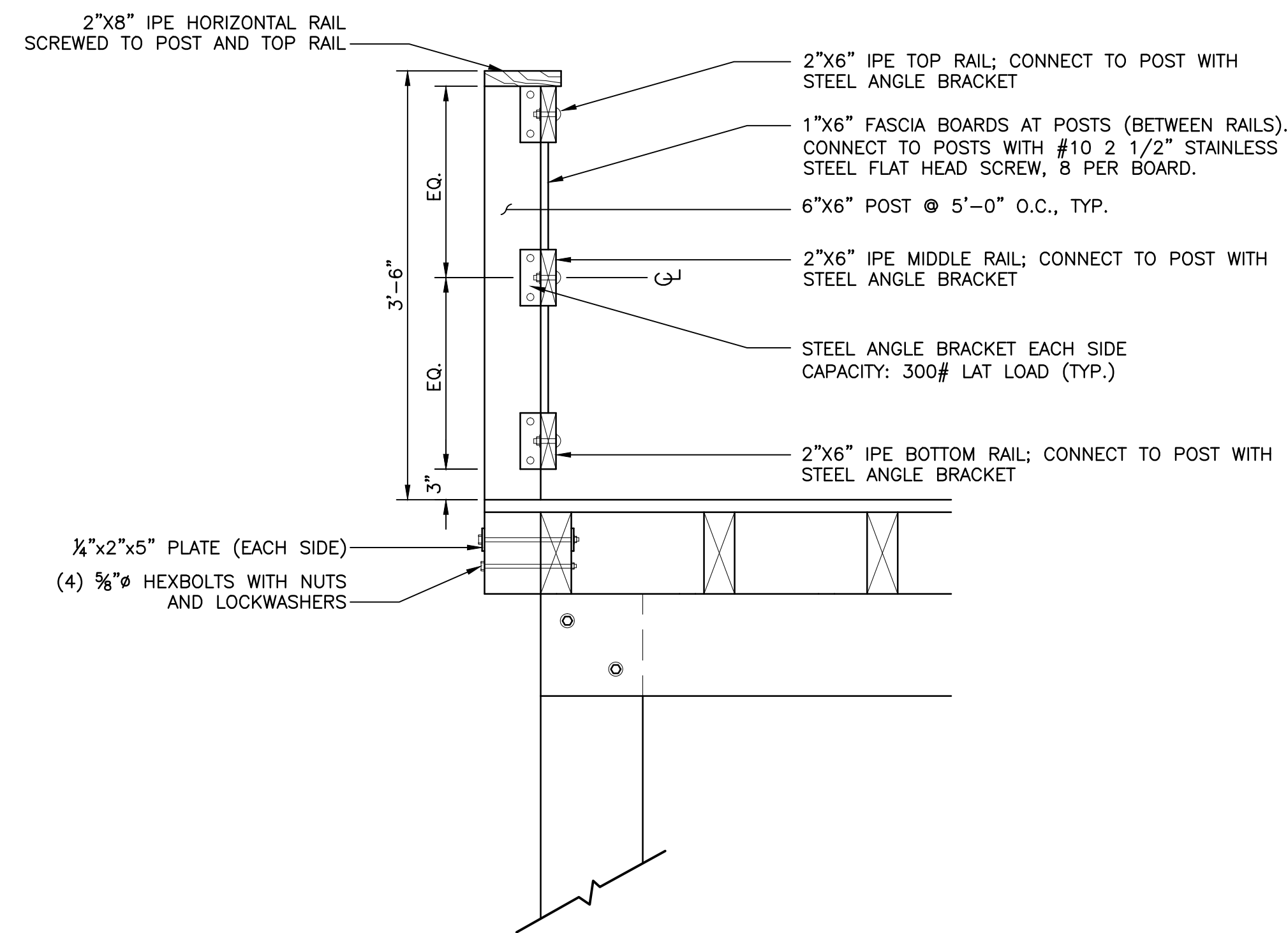
REVISIONS:	

BOARDWALK DETAILS	
DESIGNED BY: BAP	
DRAWN BY: JSF	
CHECKED BY: ---	
DATE: JANUARY, 2014	C-501
SCALE: AS SHOWN	

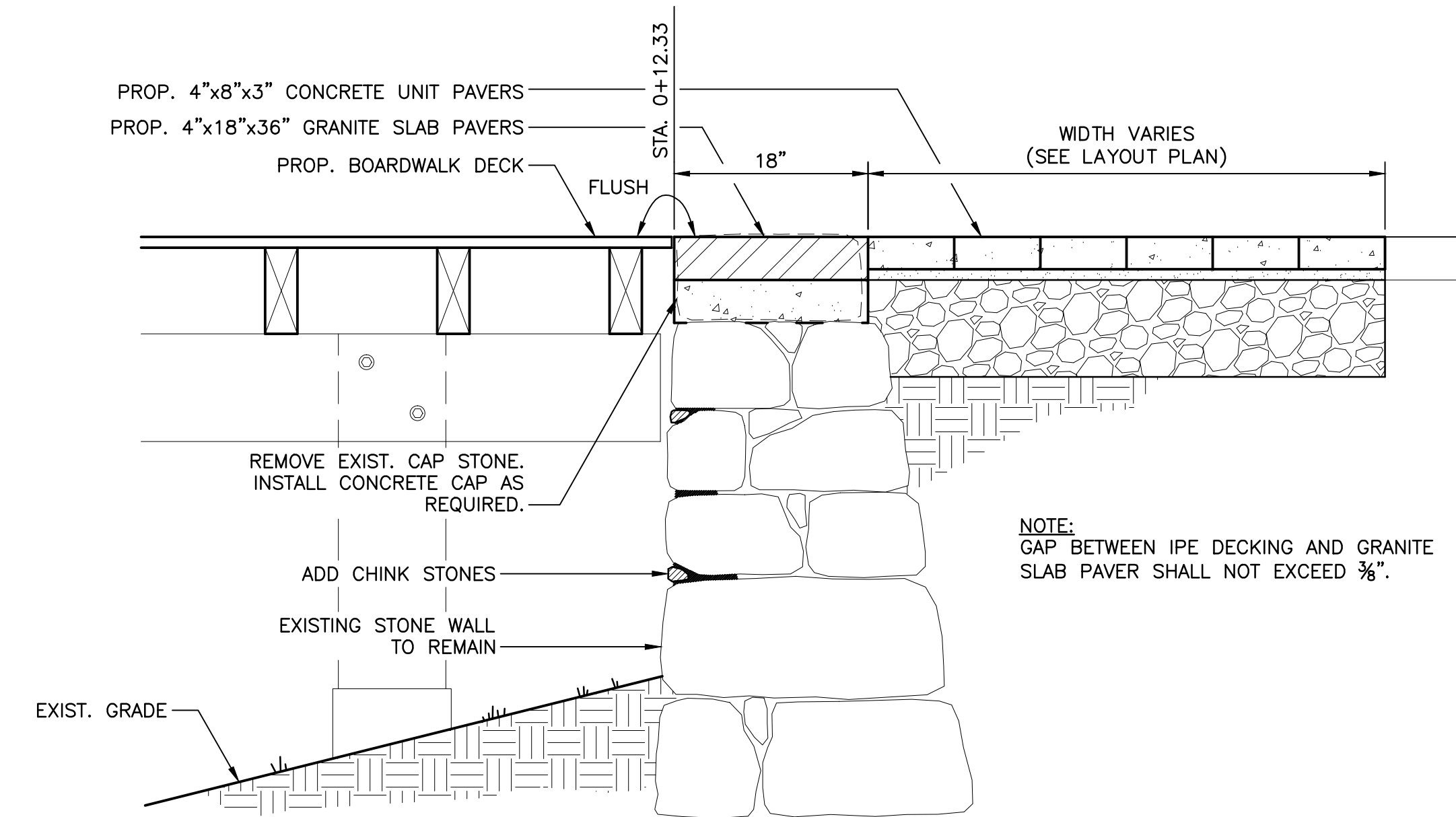


NOTE:
PROVIDE 4' OFFSET FROM
ADJACENT HANDRAILS.

1 TREATED TIMBER BENCH
SCALE: 1 1/2" = 1'-0"

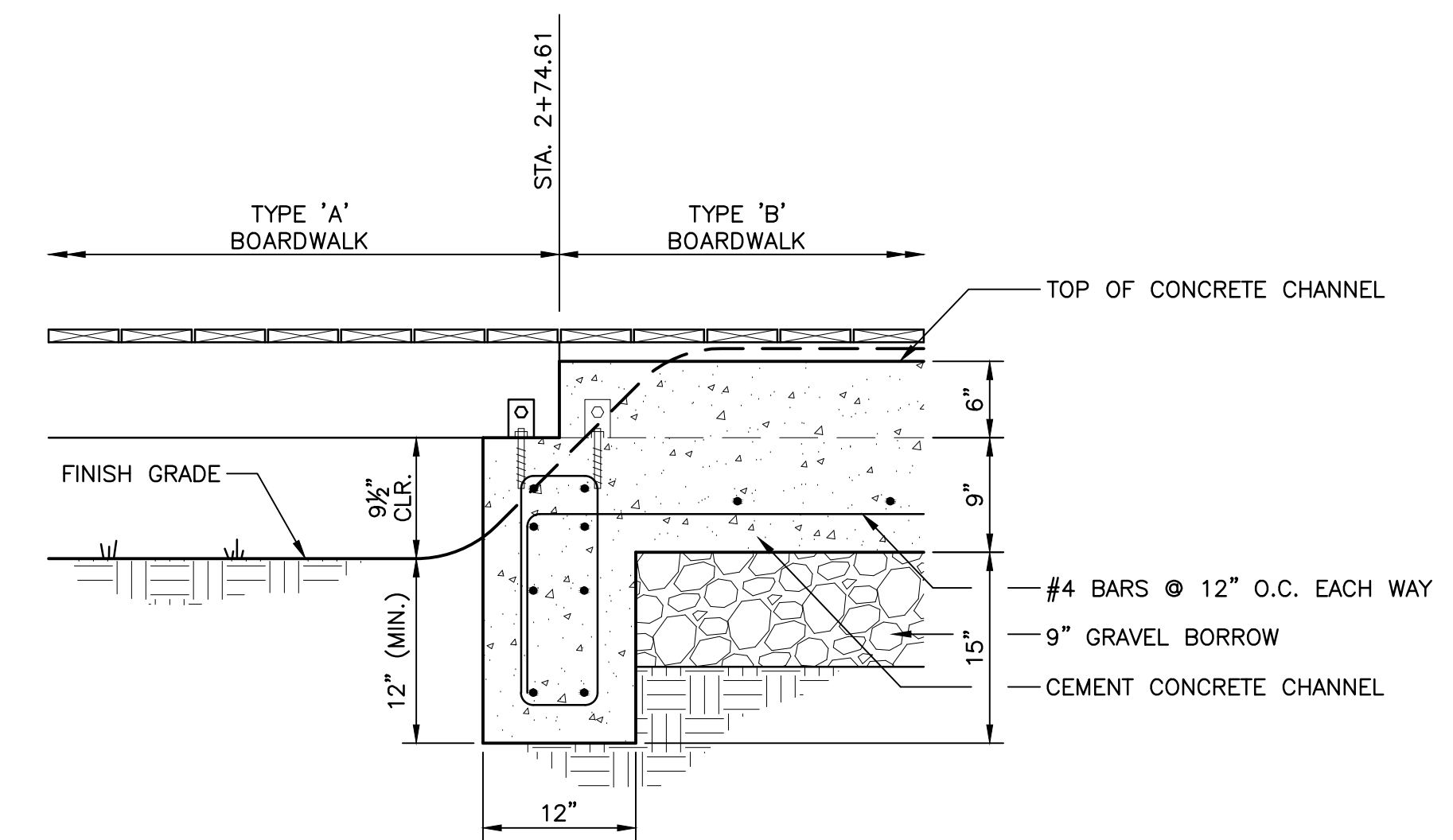


2 TREATED TIMBER HANDRAIL
SCALE: 1" = 1'-0"



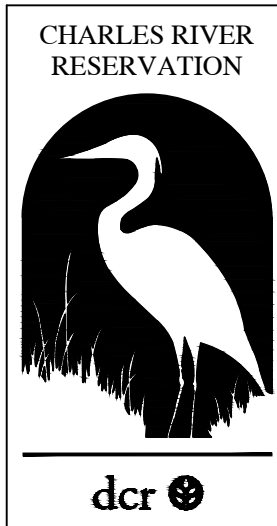
NOTE:
GAP BETWEEN IPE DECKING AND GRANITE
SLAB PAVER SHALL NOT EXCEED 3/8".

3 TYPE 'A' BOARDWALK / PATH INTERFACE
SCALE: 1" = 1'-0"



4 TYPE 'A' / TYPE 'B' BOARDWALK INTERFACE
SCALE: 1" = 1'-0"

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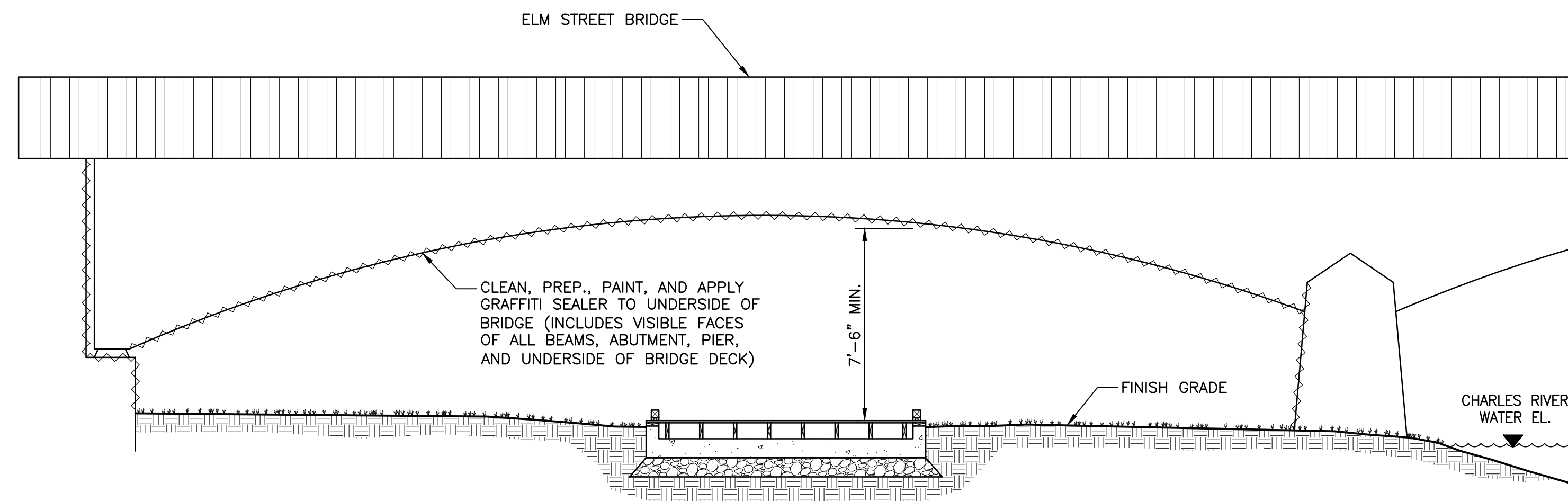
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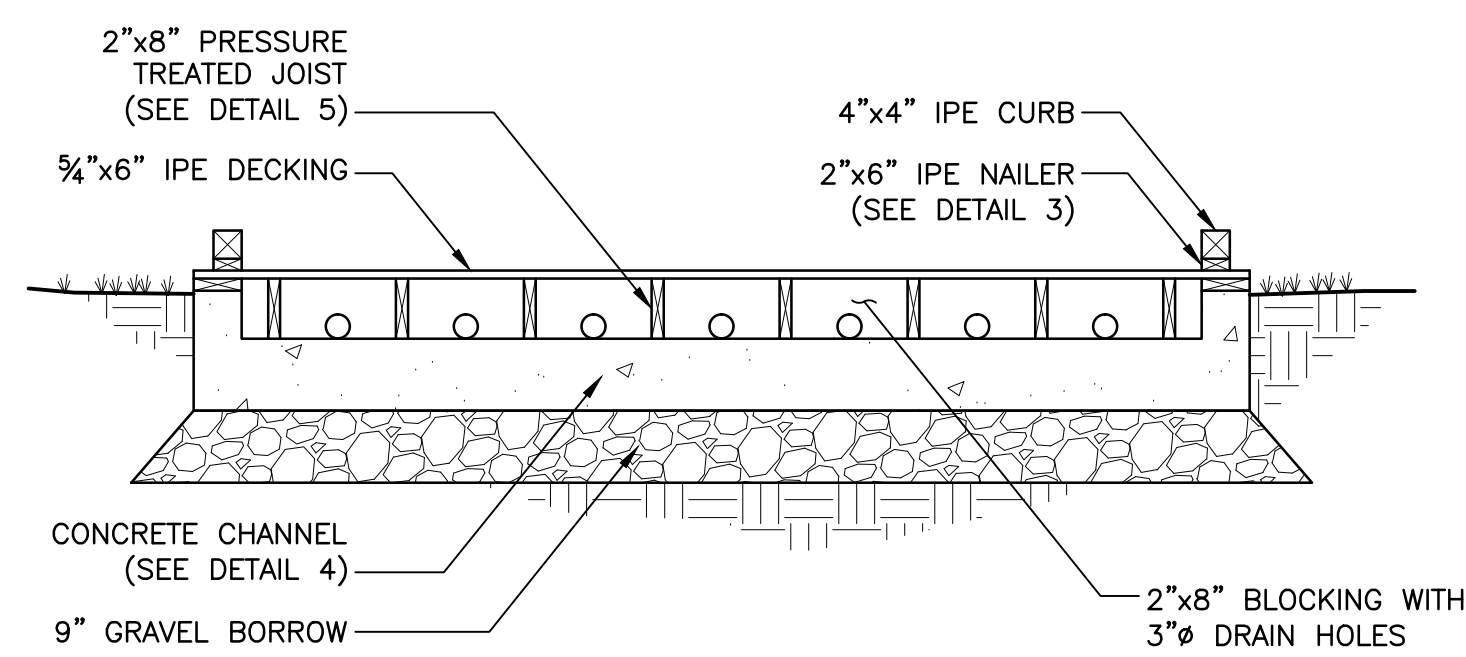
REVISIONS:	

TYPE 'A' BOARDWALK DETAILS	
DESIGNED BY:	R. HEADRICK
DRAWN BY:	J. FALISE
CHECKED BY:	R. HEADRICK
DATE:	JANUARY 17, 2014
SCALE:	AS SHOWN

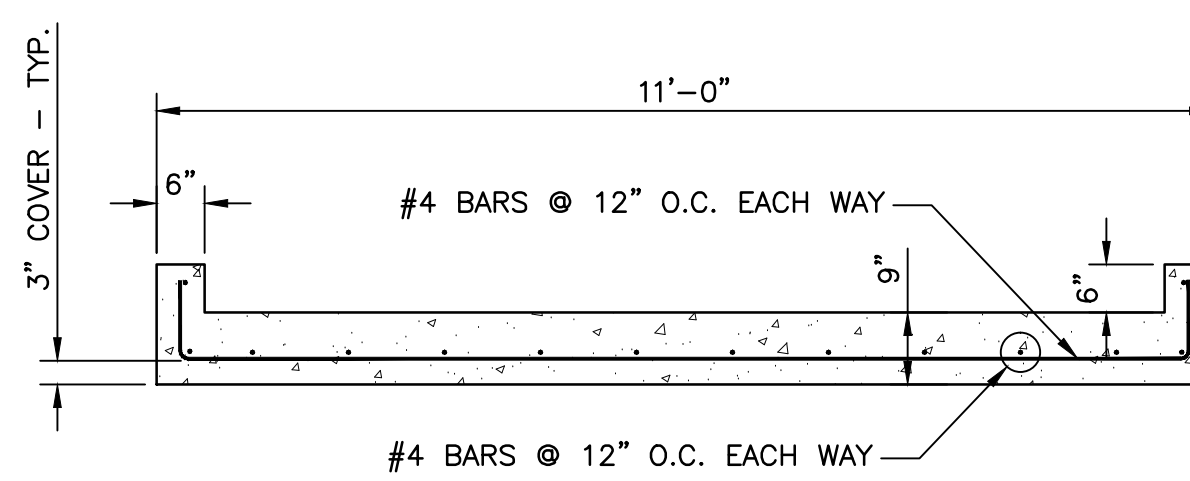
C-502



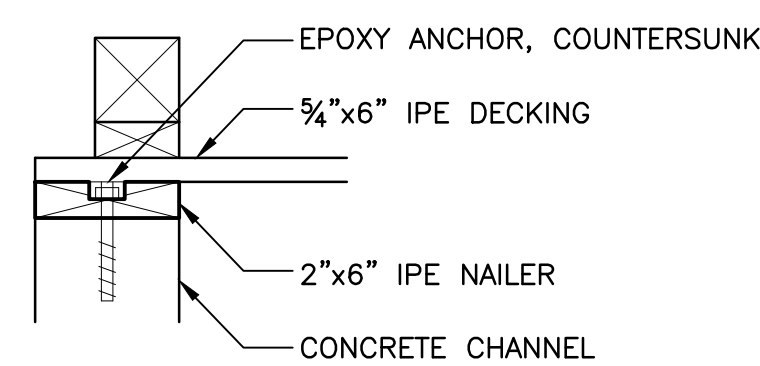
1 TYPE 'B' BOARDWALK BELOW ELM ST. BRIDGE
SCALE: 1/4" = 1'-0"



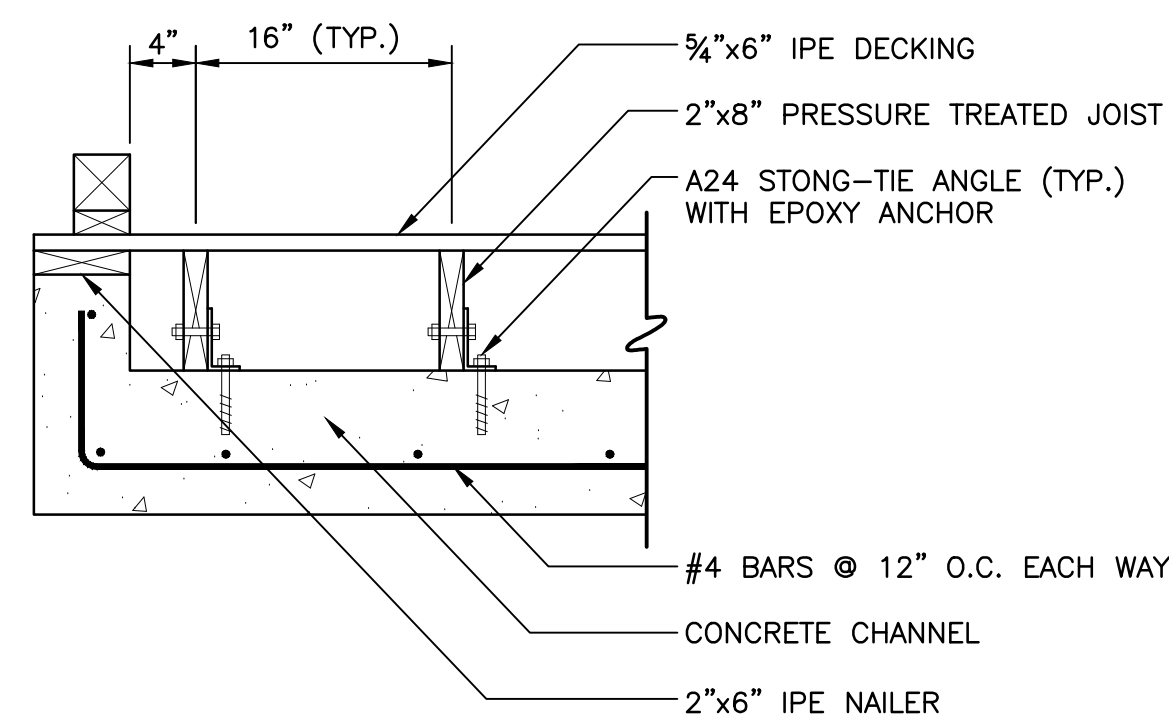
2 TYPE 'B' BOARDWALK
SCALE: 1/2" = 1'-0"



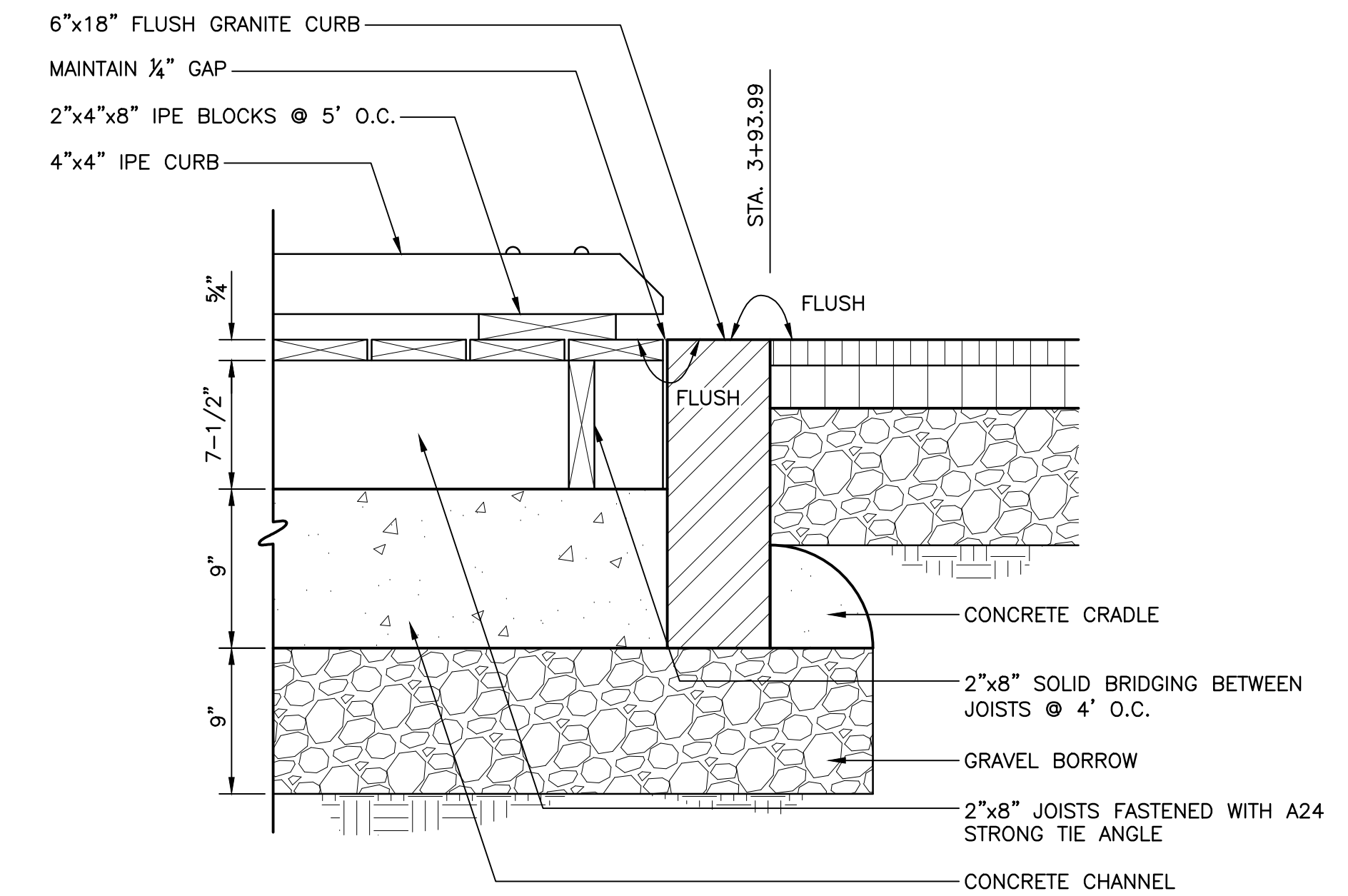
4 CONCRETE CHANNEL
SCALE: 1/2" = 1'-0"



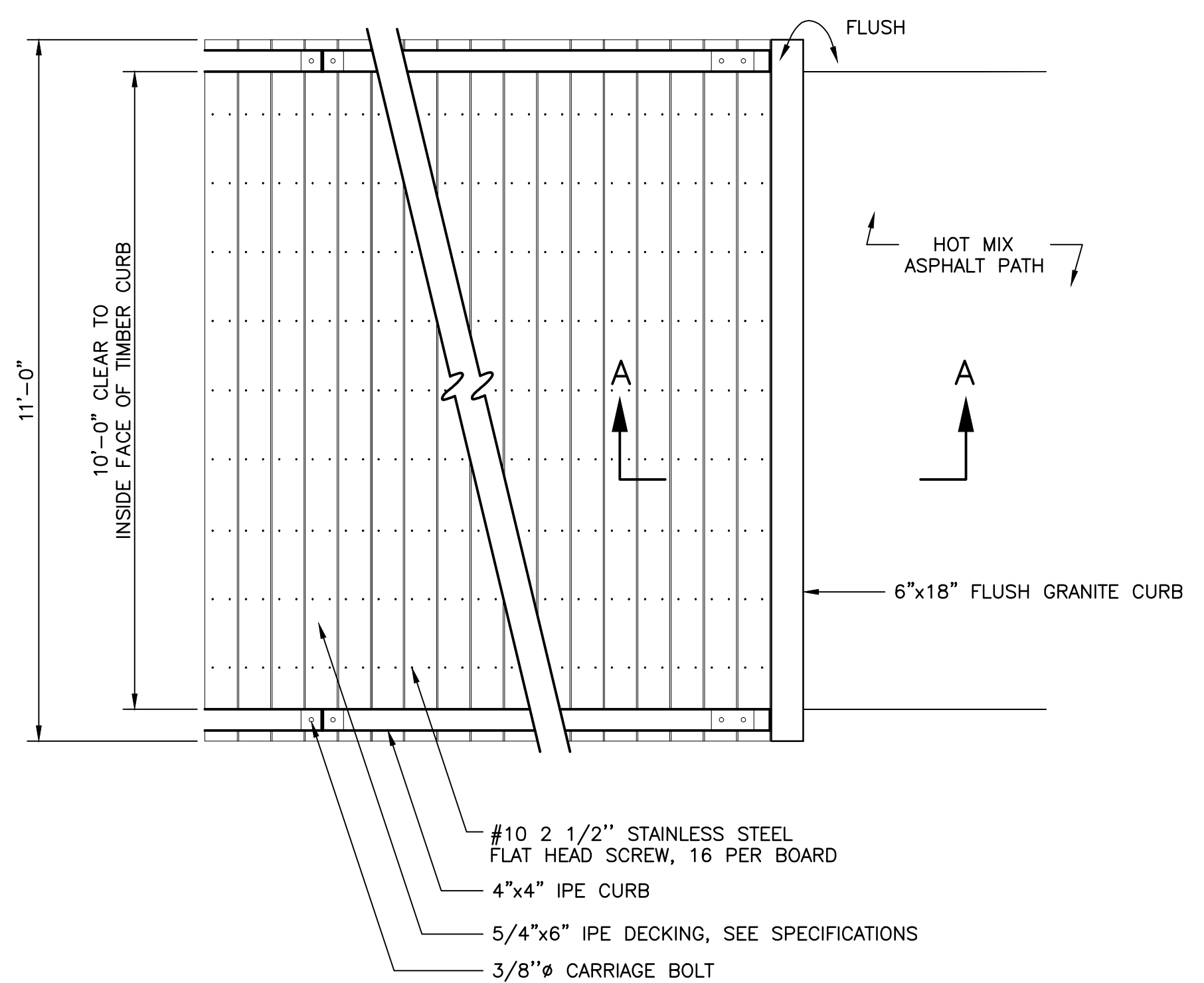
3 2"x6" NAILER
SCALE: 1-1/2" = 1'-0"



5 JOIST CONNECTION
SCALE: 1" = 1'-0"



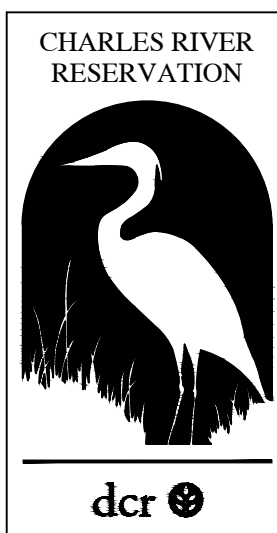
SECTION A-A
SCALE: 1-1/2" = 1'-0"



PLAN

6 TYPE 'B' BOARDWALK / PATH INTERFACE
SCALE: AS SHOWN

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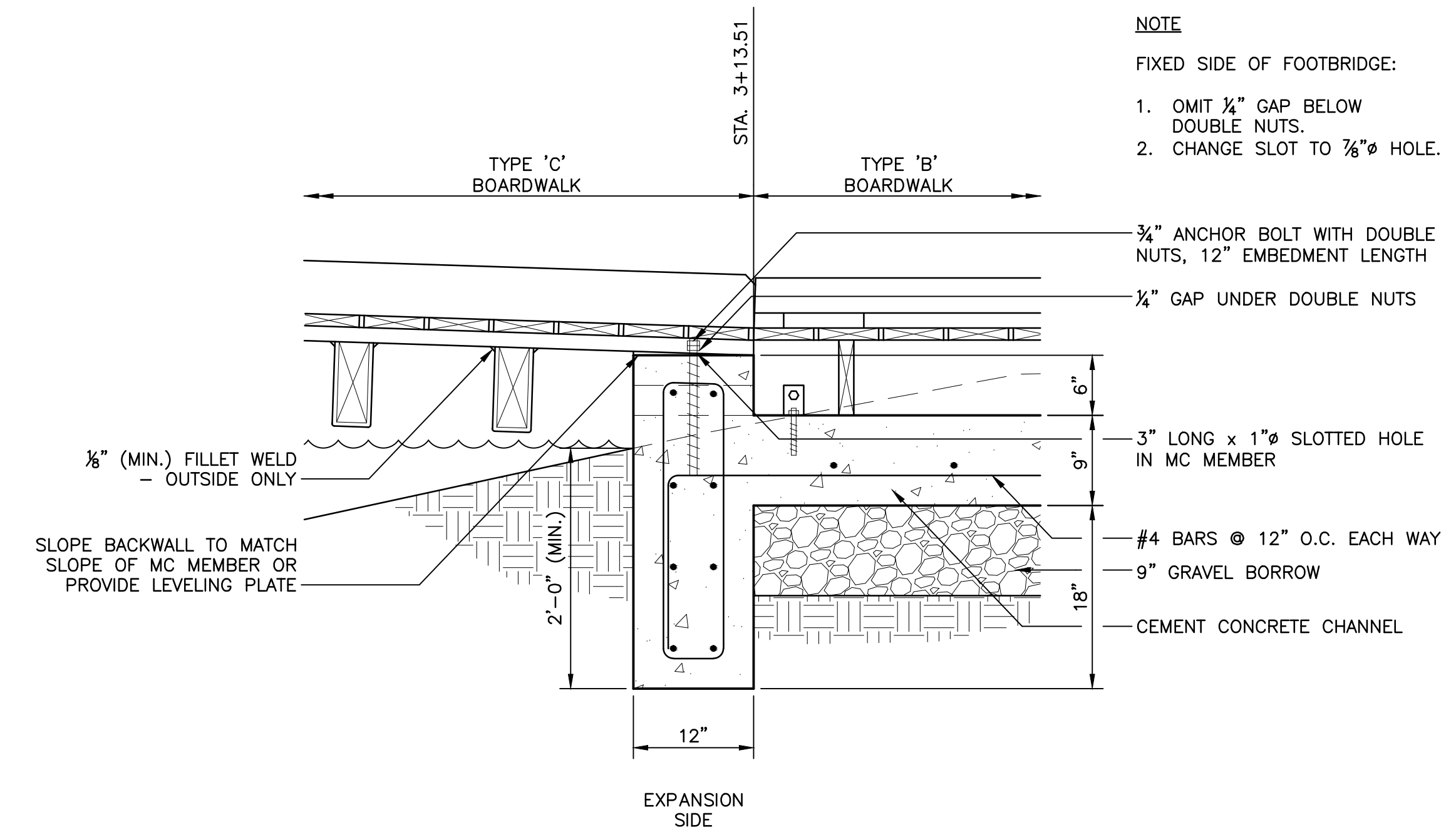
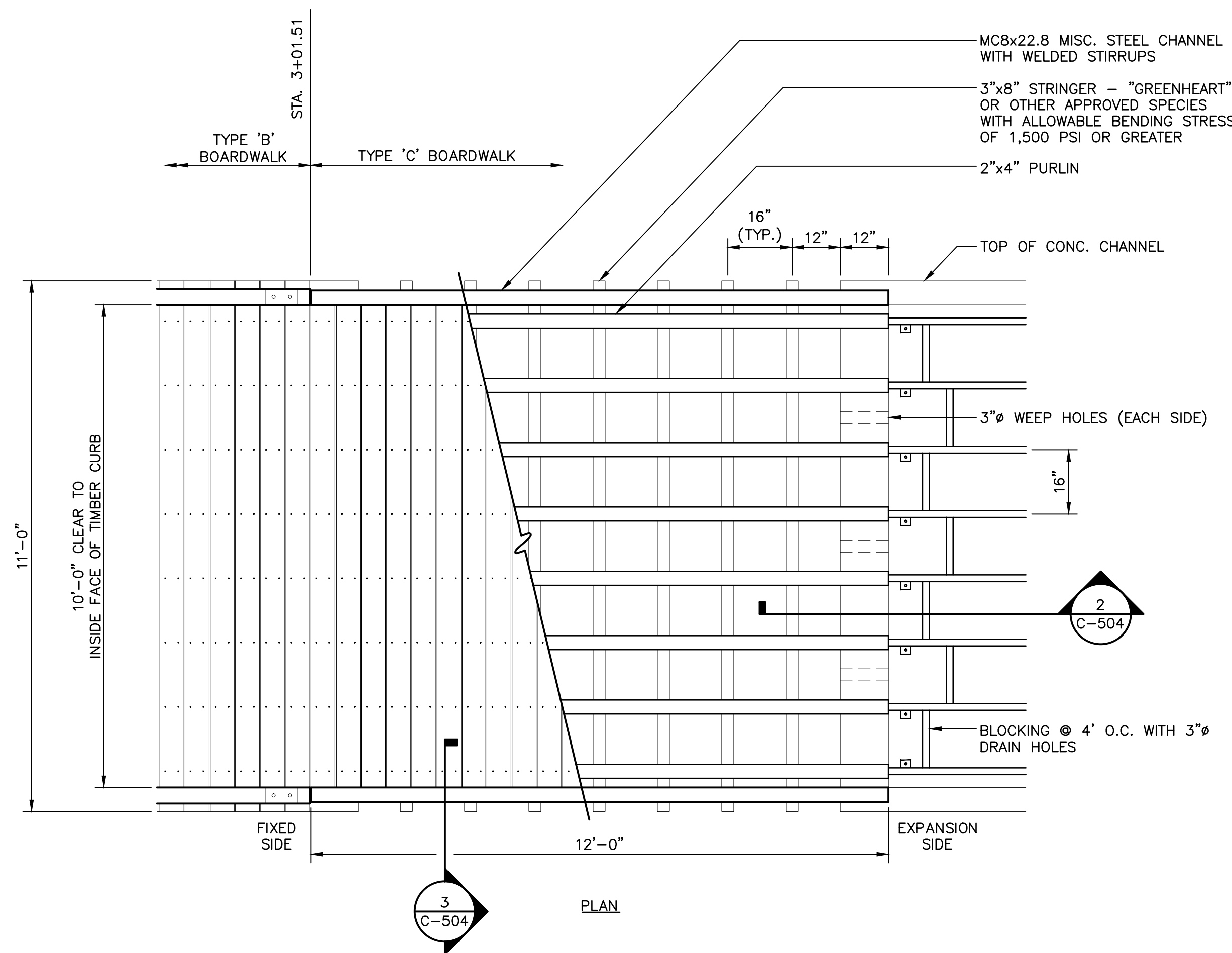
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REVISIONS:	

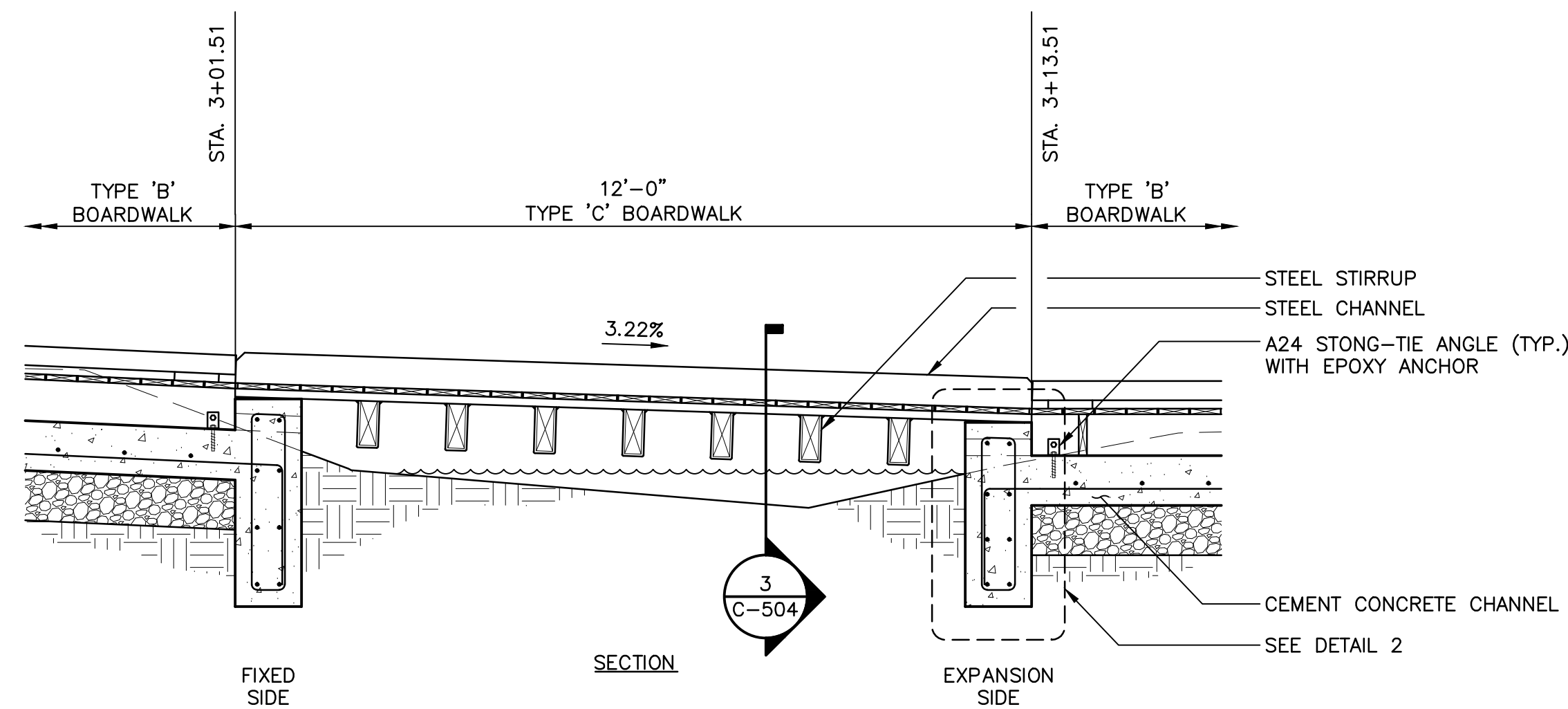
TYPE 'B' BOARDWALK DETAILS

DESIGNED BY: R. HEADRICK
DRAWN BY: J. FALISE
CHECKED BY: R. HEADRICK
DATE: JANUARY 17, 2014
SCALE: AS SHOWN

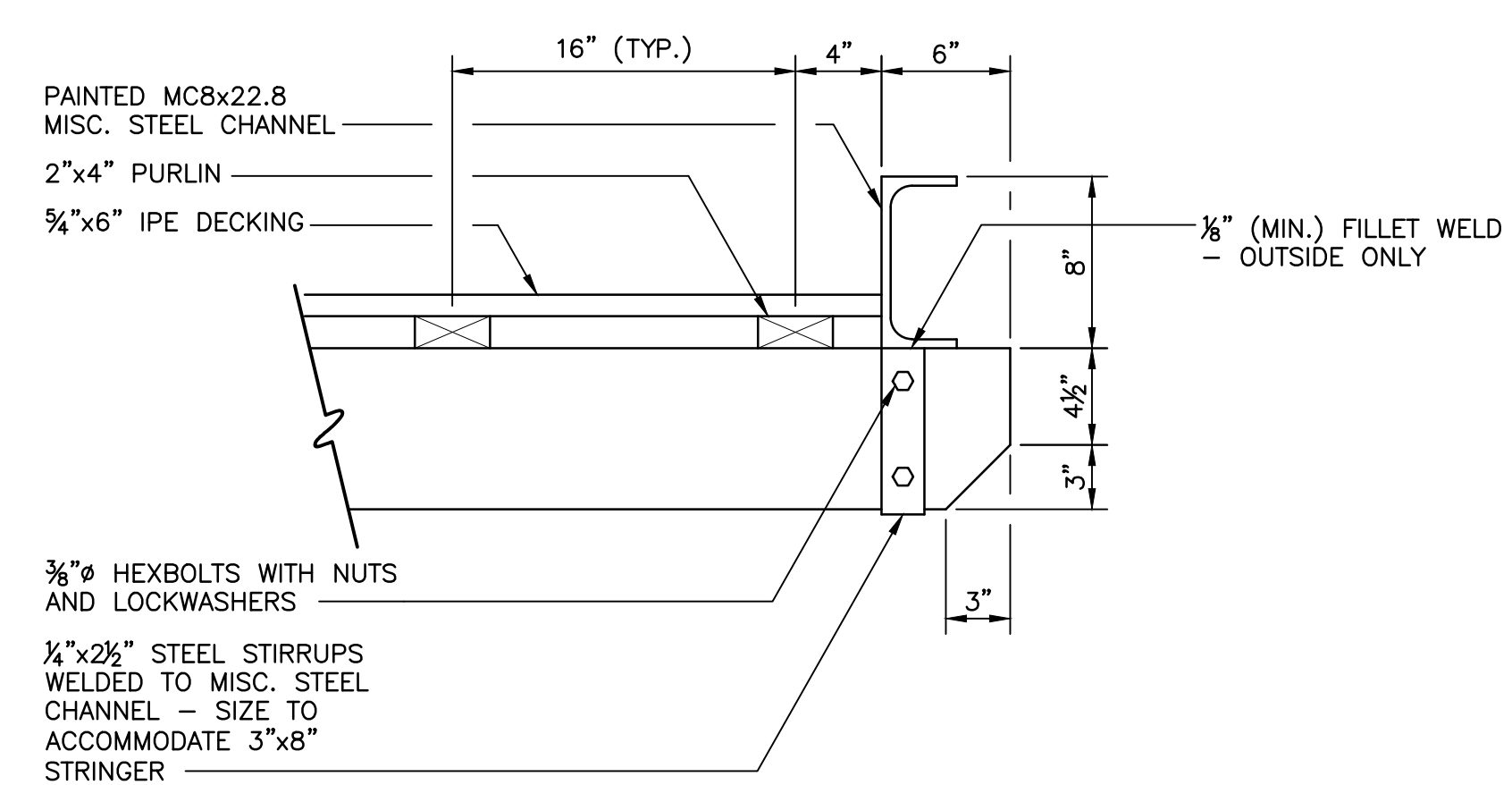
C-503



2 TYPE 'B' / TYPE 'C' BOARDWALK INTERFACE
 SCALE: 1" = 1'-0"



1 TYPE 'C' BOARDWALK (FOOTBRIDGE)
 SCALE: 1/2" = 1'-0"



3 STEEL CHANNEL AT FOOTBRIDGE
 SCALE: 1-1/2" = 1'-0"

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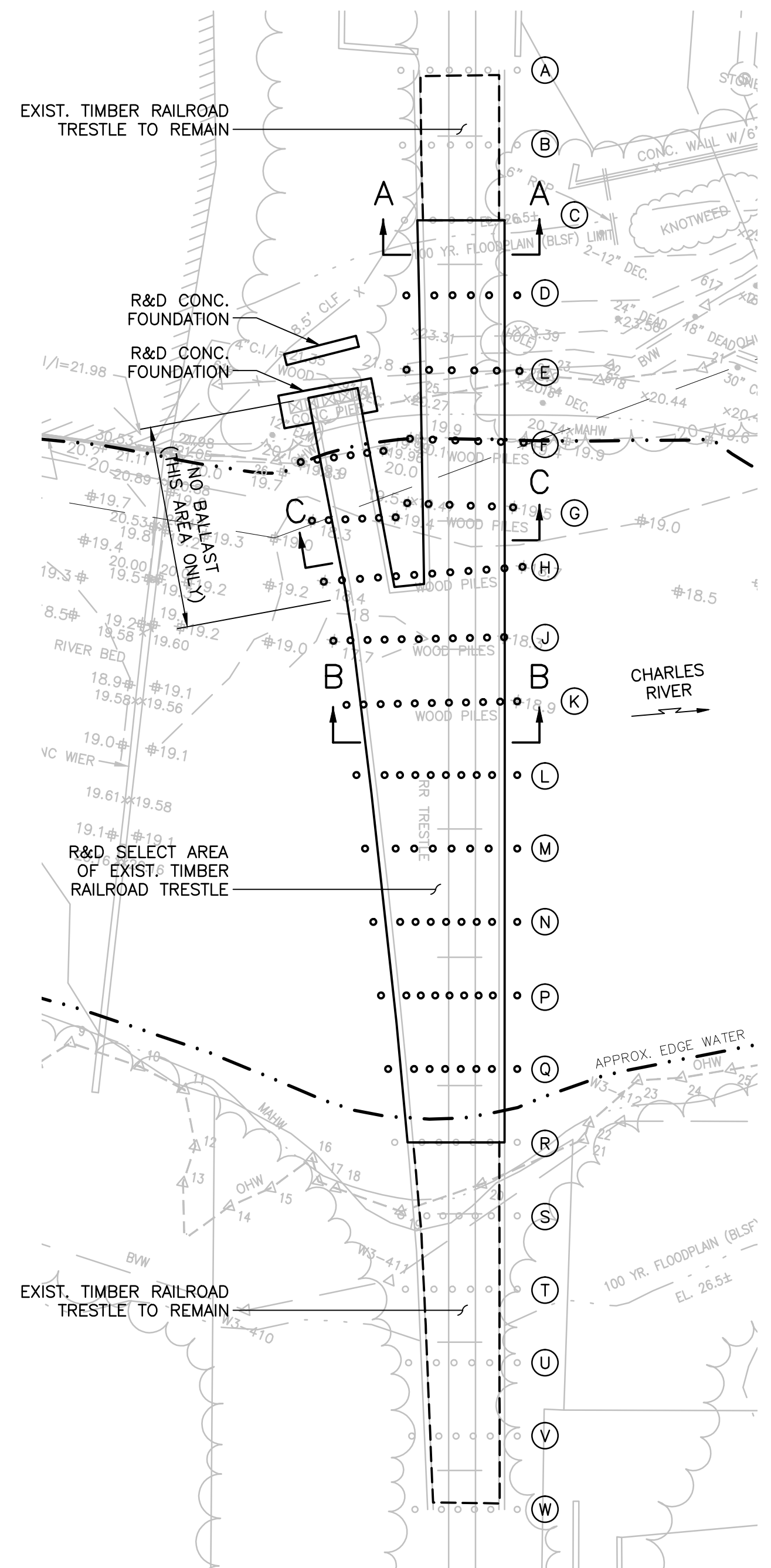
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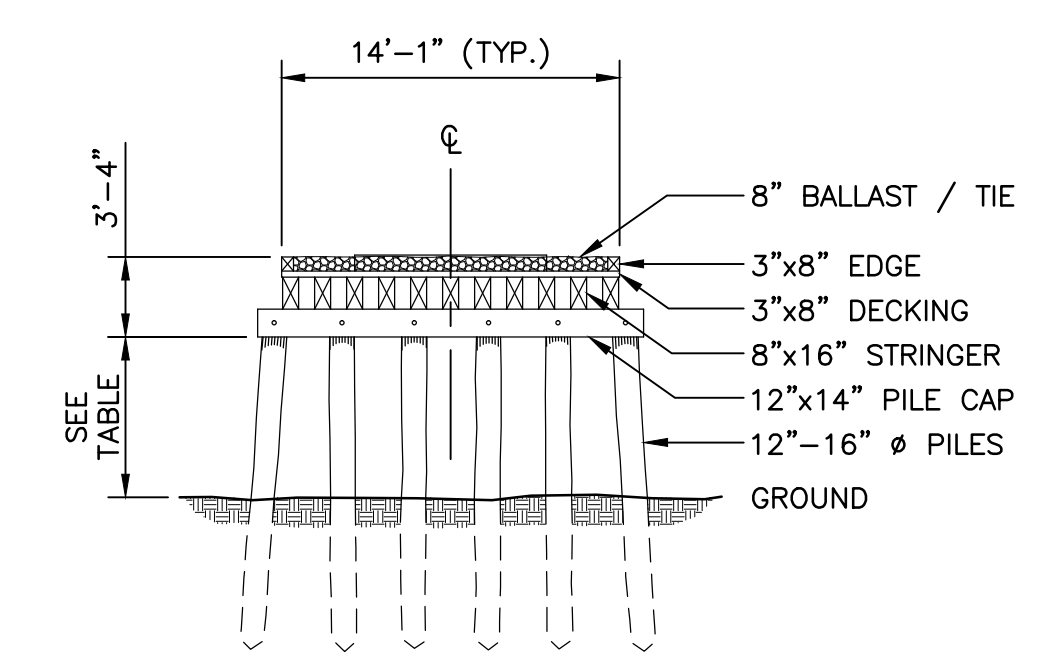
REVISIONS:	

TYPE 'C' BOARDWALK DETAILS	
DESIGNED BY:	R. HEADRICK
DRAWN BY:	J. FALISE
CHECKED BY:	R. HEADRICK
DATE:	JANUARY 17, 2014
SCALE:	AS SHOWN
C-504	

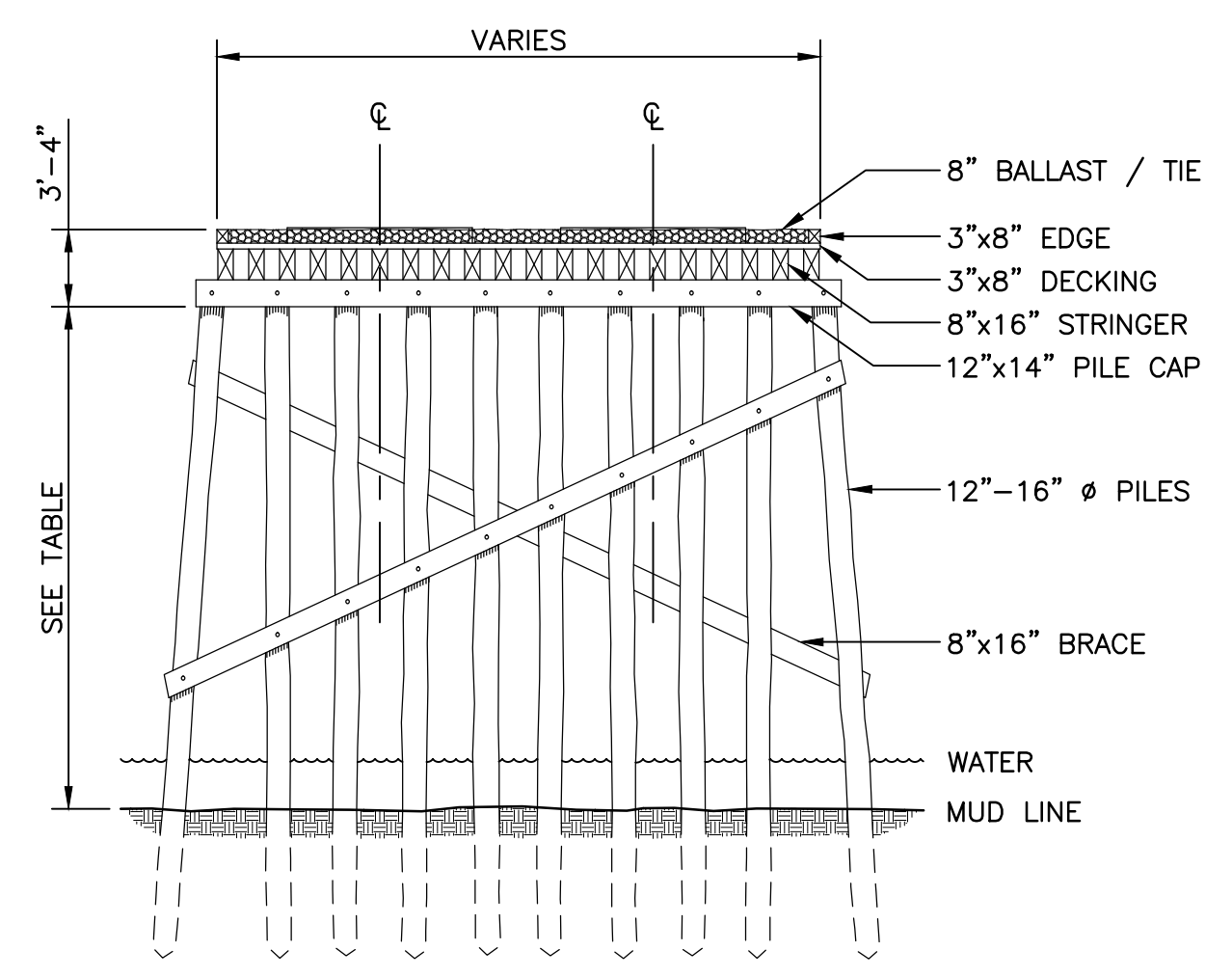


PLAN
SCALE: 1"=20'

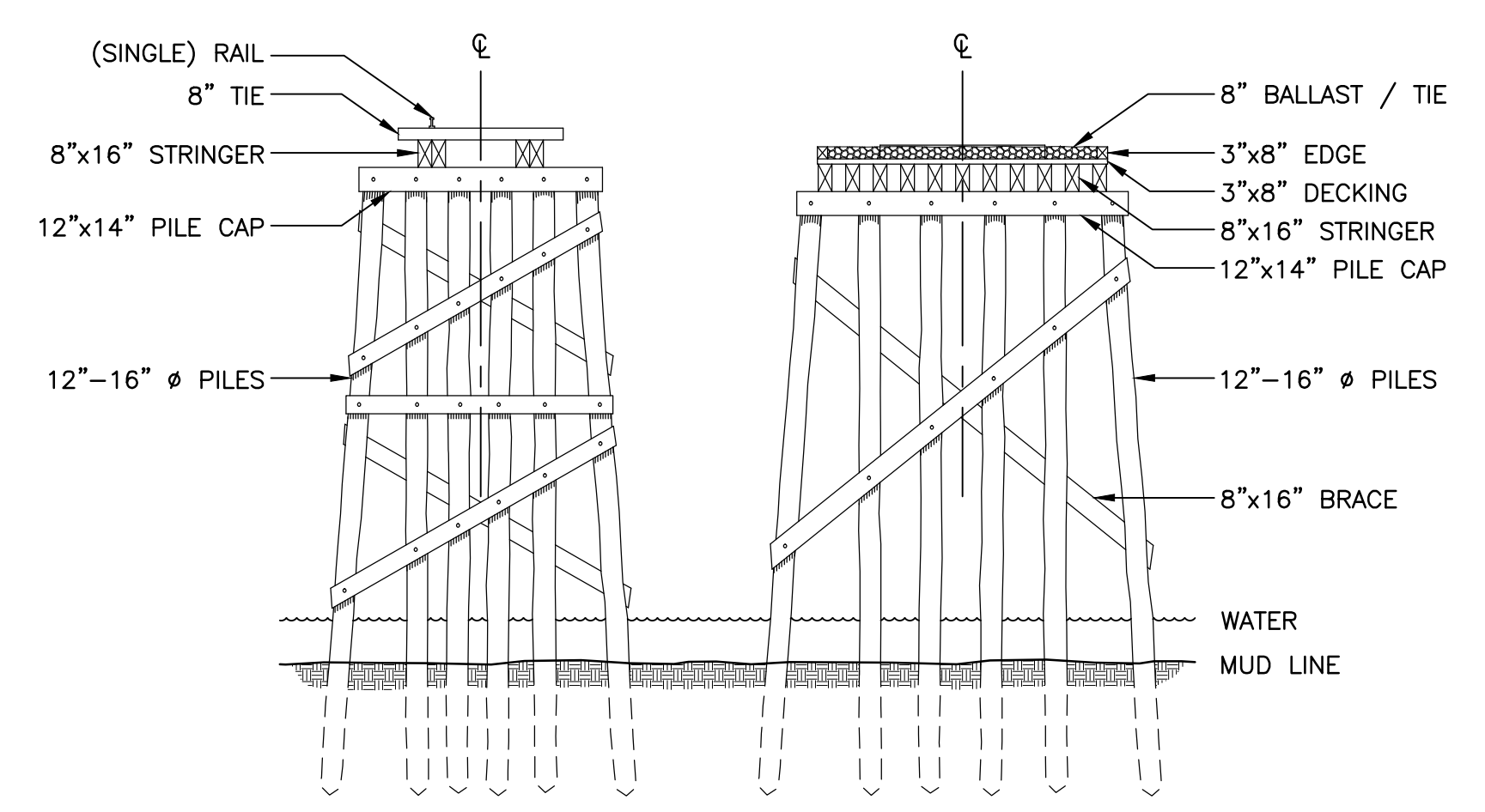
TIMBER RAILROAD TRESTLE			
BENT	PILE COUNT	APPROX. HT.	NOTES
A	6	1'-6"	RETAIN
B	6	5'-0"	RETAIN
C	6	9'-0"	RETAIN
D	6	13'-0"	R&D
E	11	17'-0"	R&D
F	12	21'-0"	R&D
G	12	21'-0"	R&D
H	12	21'-0"	R&D
J	11	21'-0"	R&D
K	10	21'-0"	R&D
L	10	21'-0"	R&D
M	8	21'-0"	R&D
N	9	21'-0"	R&D
P	9	21'-0"	R&D
Q	8	21'-0"	R&D
R	7	21'-0"	RETAIN
S	7	21'-0"	RETAIN
T	6	18'-0"	RETAIN
U	6	14'-0"	RETAIN
V	6	10'-0"	RETAIN
W	6	3'-0"	RETAIN



SECTION A-A
SCALE: 1/8"=1'-0"



SECTION B-B
SCALE: 1/8"=1'-0"



SECTION C-C
SCALE: 1/8"=1'-0"

1 EXISTING TIMBER RAILROAD TRESTLE - TO BE REMOVED
SCALE: AS SHOWN

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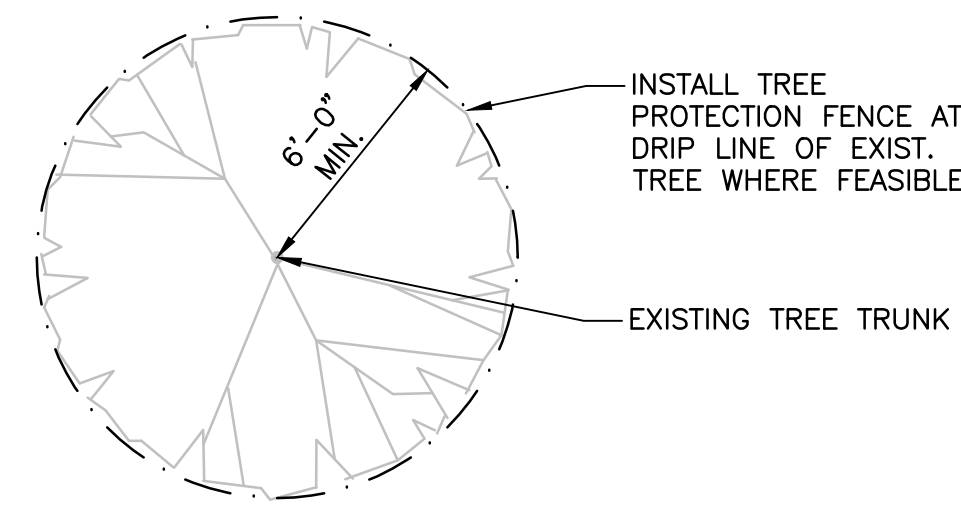
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WATERFRONT ENGINEERING

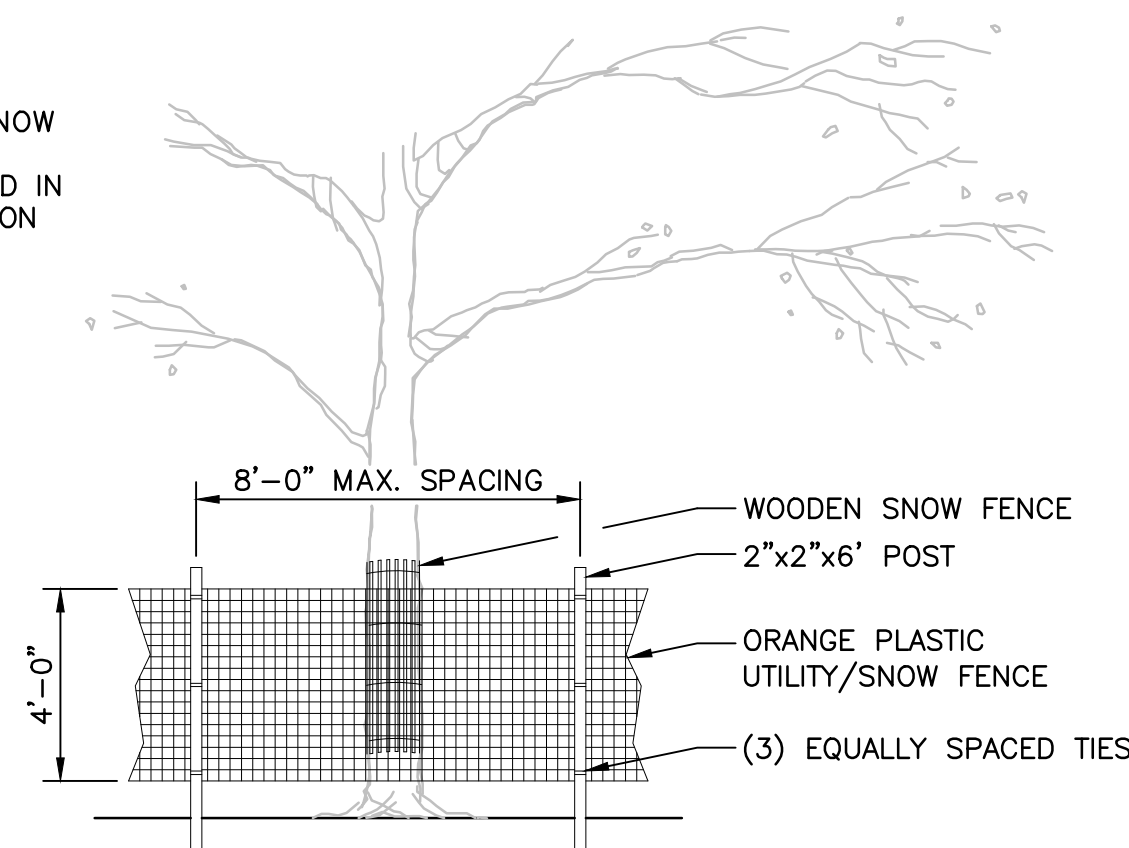
REVISIONS:	

TRESTLE DEMOLITION DETAILS	
DESIGNED BY:	R. HEADRICK
DRAWN BY:	J. FALISE
CHECKED BY:	R. HEADRICK
DATE:	JANUARY 17, 2014
SCALE:	AS SHOWN

C-505



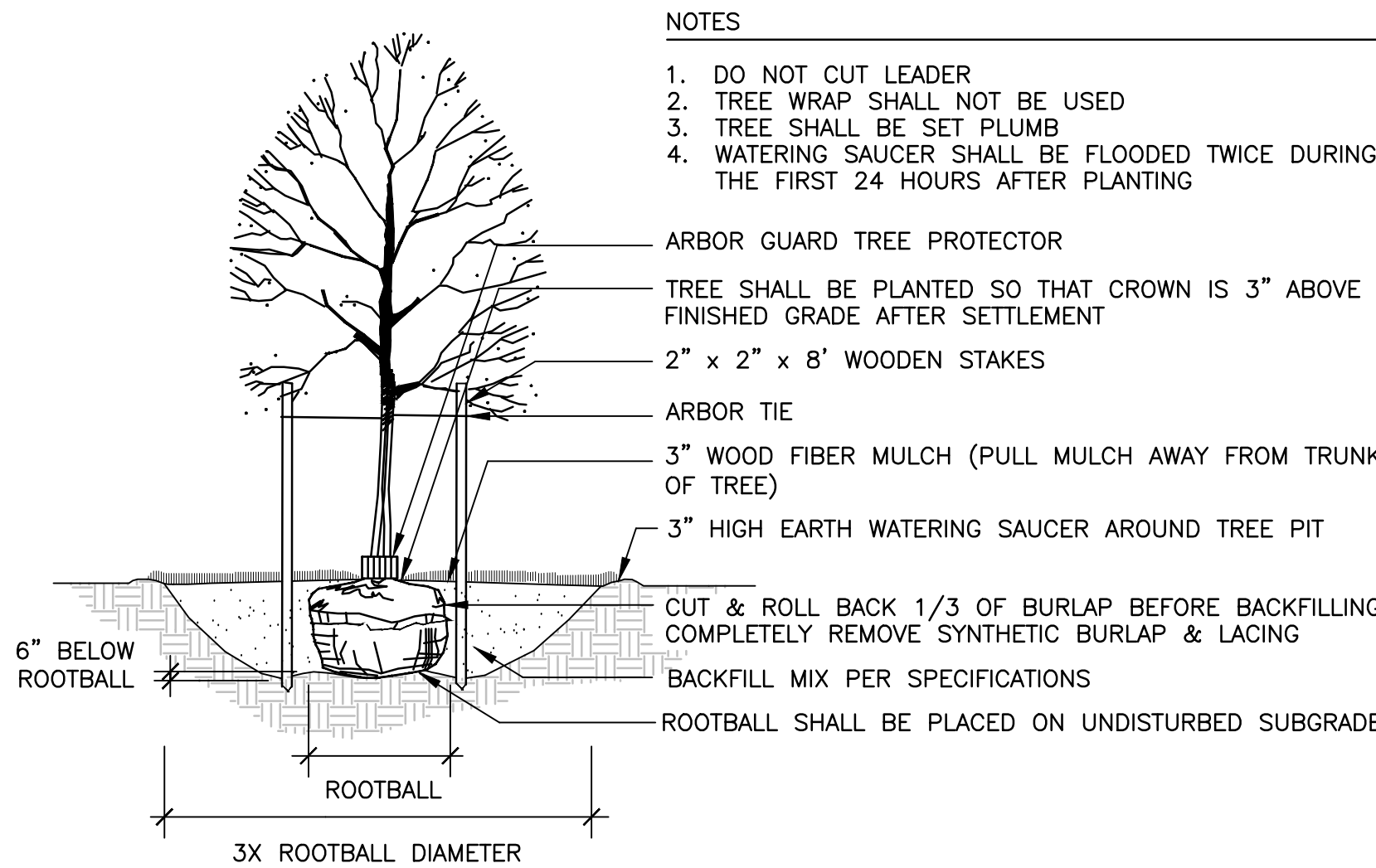
PLAN



ELEVATION

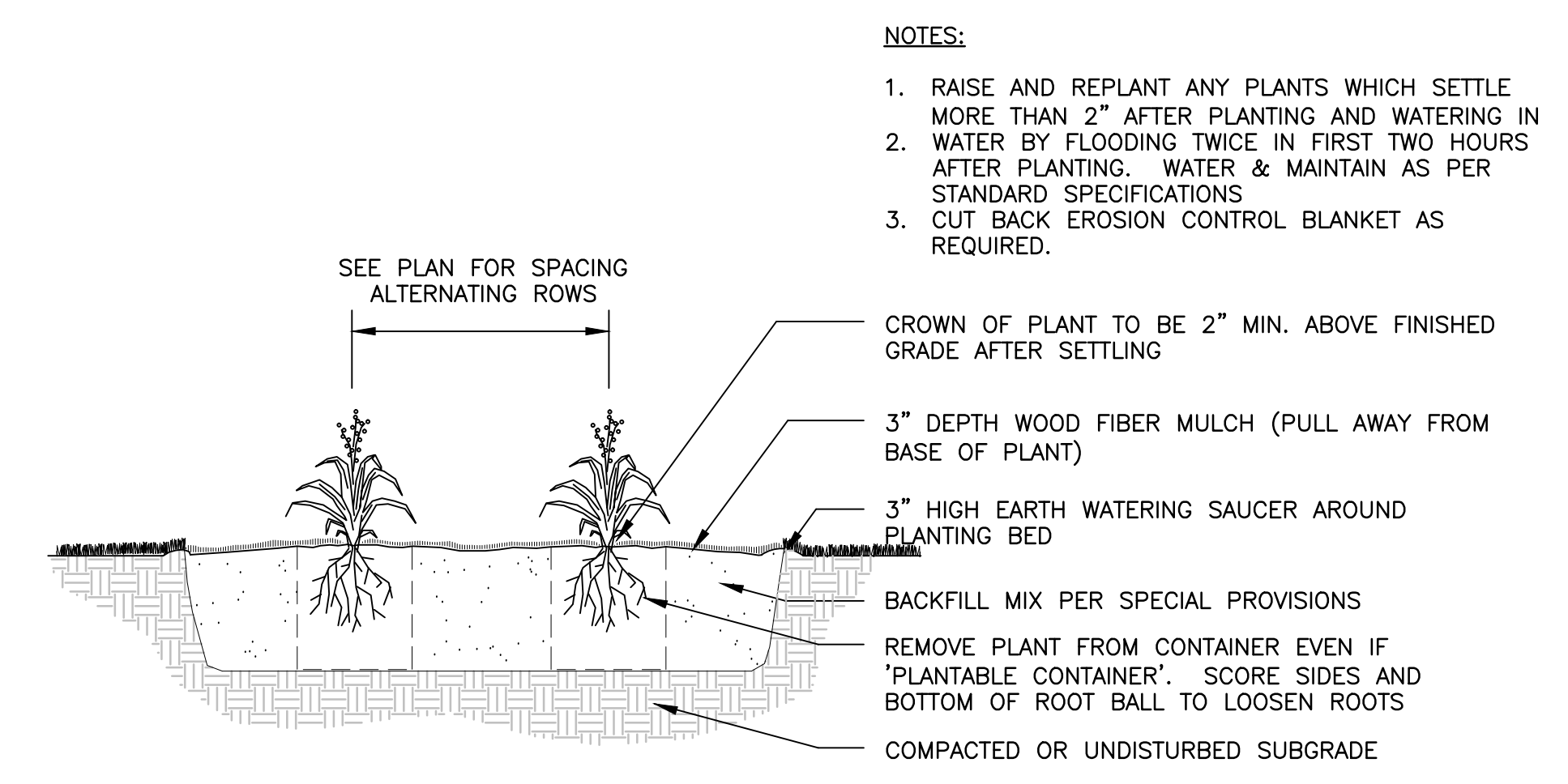
NOTE:
ALL TREE TRUNKS SHALL BE WRAPPED TWICE WITH WOODEN SNOW FENCE PRIOR TO CONSTRUCTION. THIS FENCE SHALL BE MAINTAINED IN GOOD CONDITION UNTIL COMPLETION OF CONSTRUCTION.

1 TREE PROTECTION
NOT TO SCALE



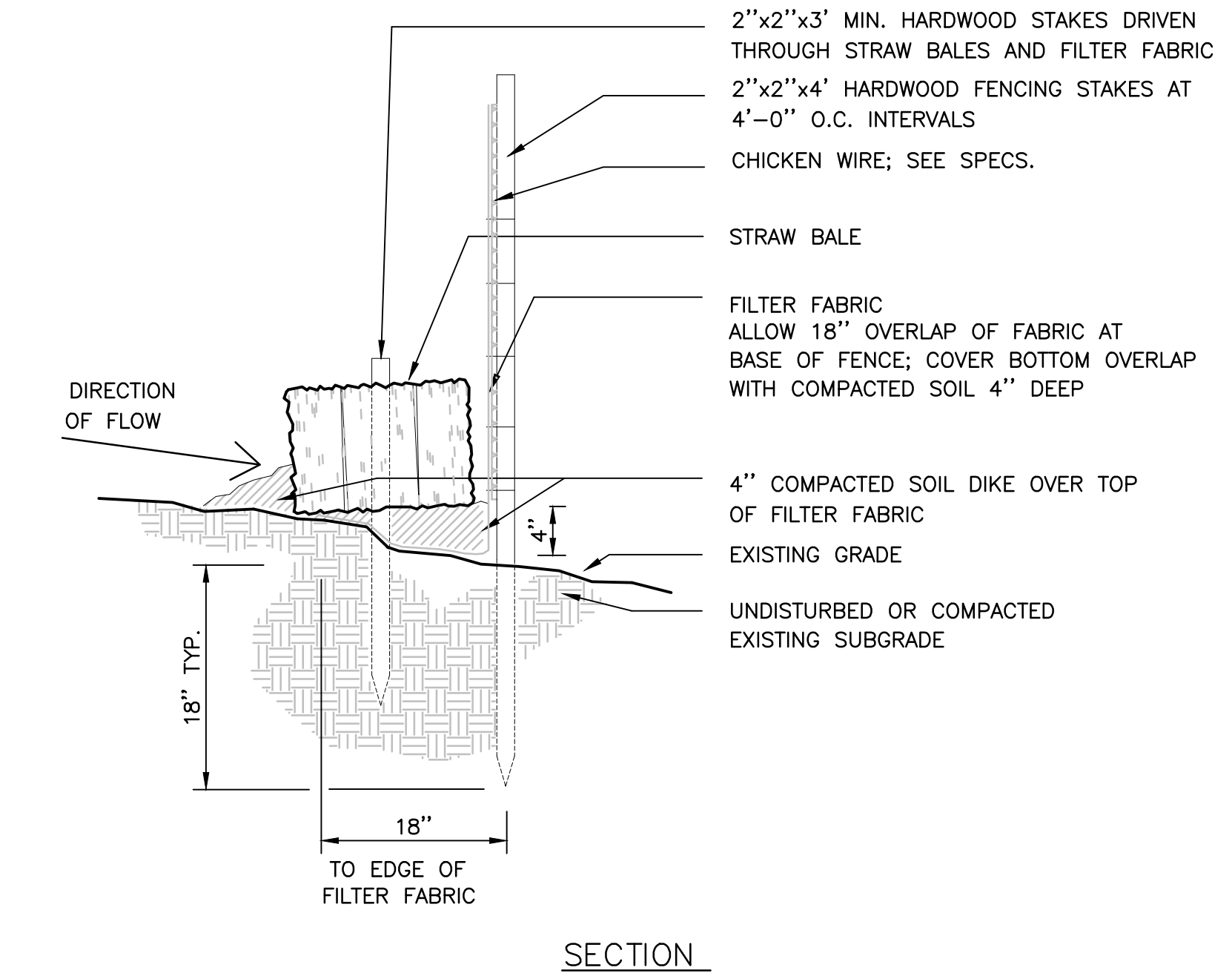
- NOTES:
- DO NOT CUT LEADER
 - TREE WRAP SHALL NOT BE USED
 - TREE SHALL BE SET PLUMB
 - WATERING SAUCER SHALL BE FLOODED TWICE DURING THE FIRST 24 HOURS AFTER PLANTING

3 DECIDUOUS TREE PLANTING
NOT TO SCALE



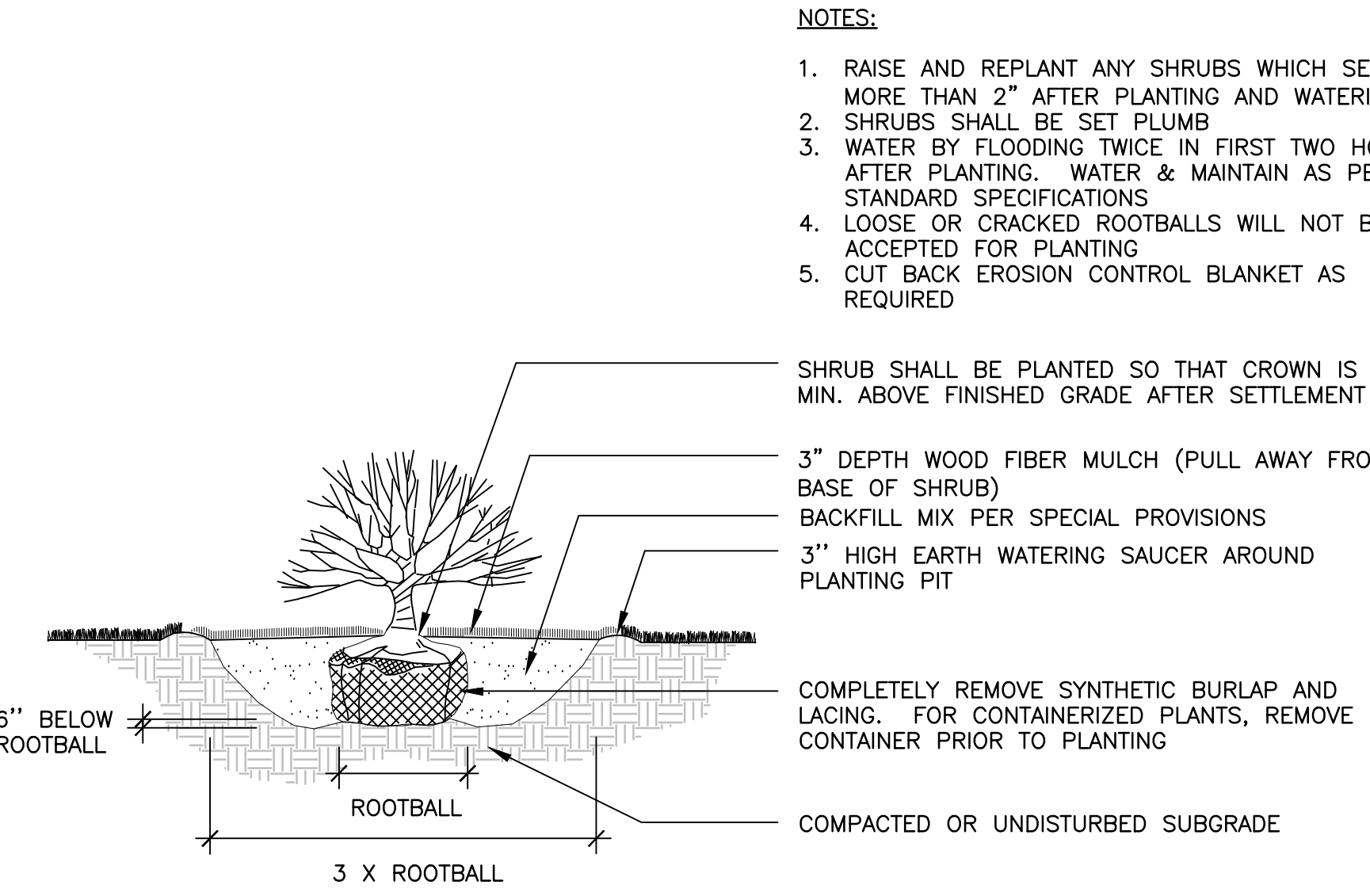
- NOTES:
- RAISE AND REPLANT ANY PLANTS WHICH SETTLE MORE THAN 2" AFTER PLANTING AND WATERING IN
 - WATER BY FLOODING TWICE IN FIRST TWO HOURS AFTER PLANTING. WATER & MAINTAIN AS PER STANDARD SPECIFICATIONS
 - CUT BACK EROSION CONTROL BLANKET AS REQUIRED.

5 PERENNIAL PLANTING
NOT TO SCALE



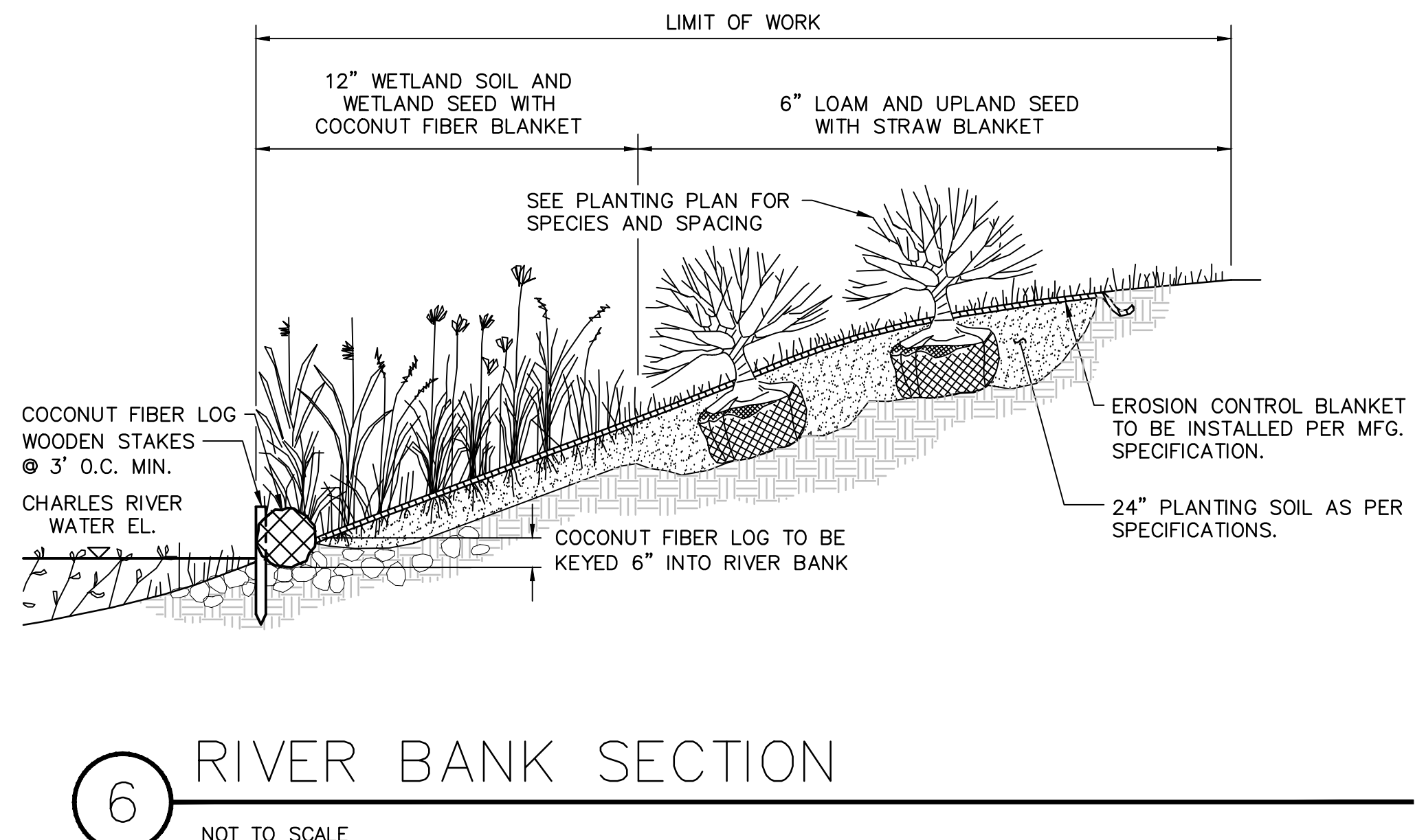
SECTION

2 STRAW BALE DIKE WITH SILT FENCE
NOT TO SCALE



- NOTES:
- RAISE AND REPLANT ANY SHRUBS WHICH SETTLE MORE THAN 2" AFTER PLANTING AND WATERING IN
 - SHRUBS SHALL BE SET PLUMB
 - WATER BY FLOODING TWICE IN FIRST TWO HOURS AFTER PLANTING. WATER & MAINTAIN AS PER STANDARD SPECIFICATIONS
 - LOOSE OR CRACKED ROOTBALLS WILL NOT BE ACCEPTED FOR PLANTING
 - CUT BACK EROSION CONTROL BLANKET AS REQUIRED

4 SHRUB PLANTING
NOT TO SCALE



6 RIVER BANK SECTION
NOT TO SCALE

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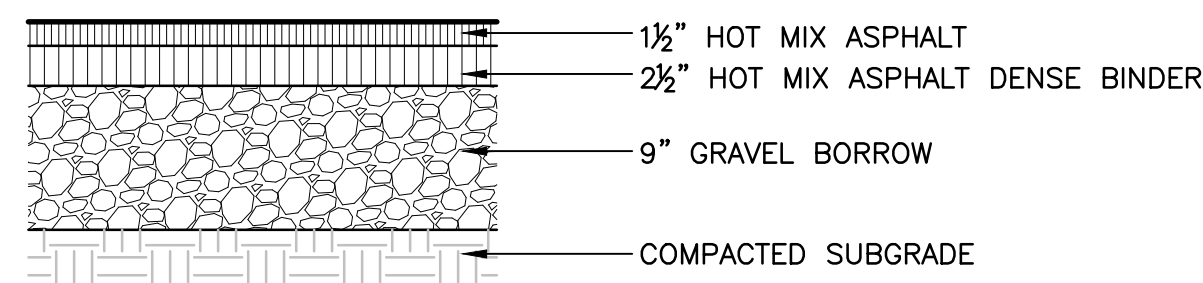
BOURNE CONSULTING ENGINEERING
WATERFRONT ENGINEERING

REVISIONS:		

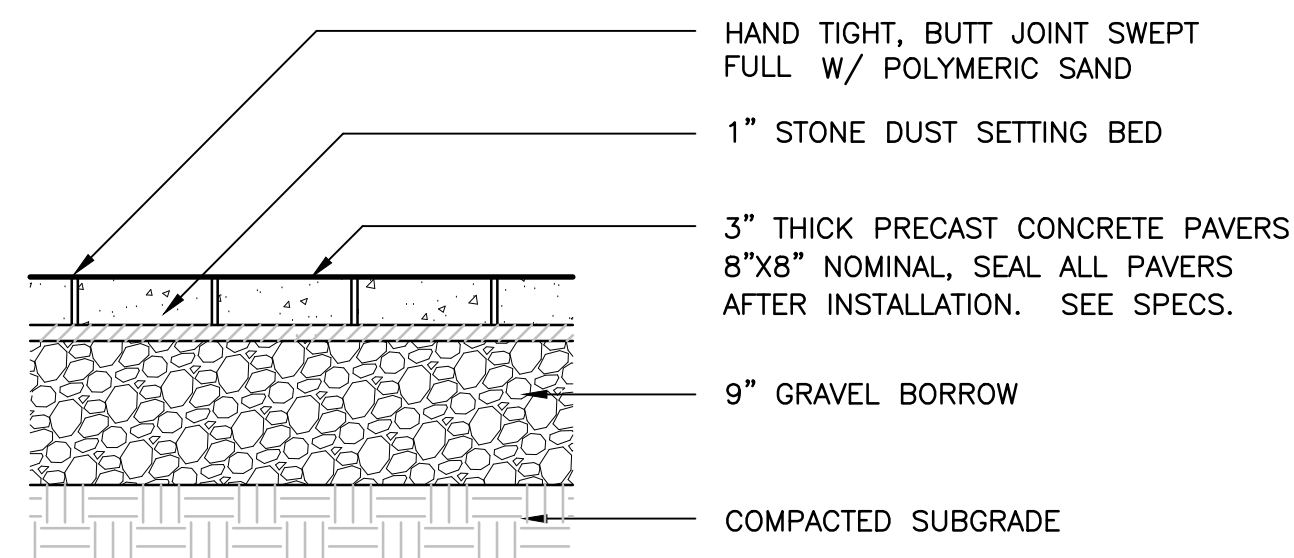
SITE DETAILS		C-506
DESIGNED BY:	R.HEADRICK	
DRAWN BY:	J.FALISE	
CHECKED BY:	R. HEADRICK	
DATE:	JANUARY 17, 2014	
SCALE:	AS SHOWN	

NOTE

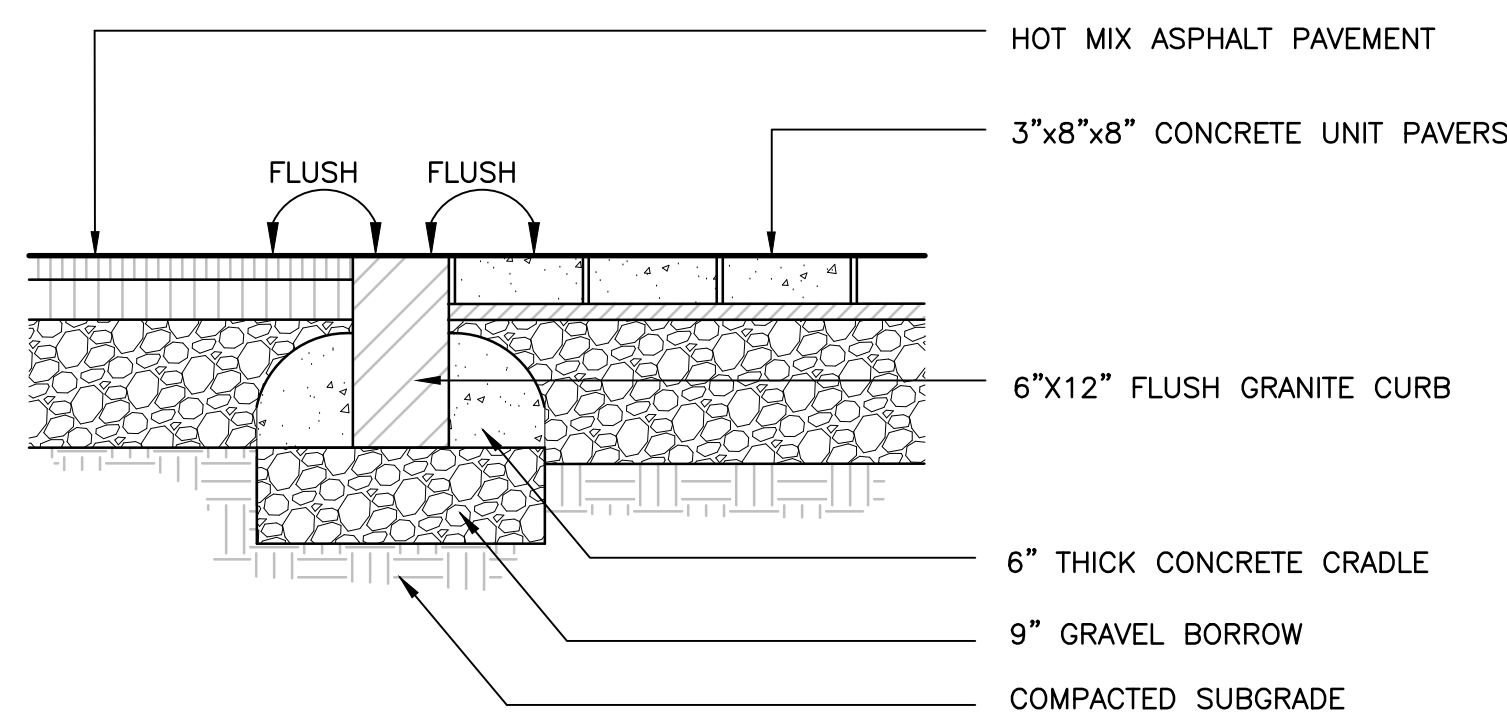
ALL EDGES TO BE FORMED, SAWCUT, OR TAMPED.



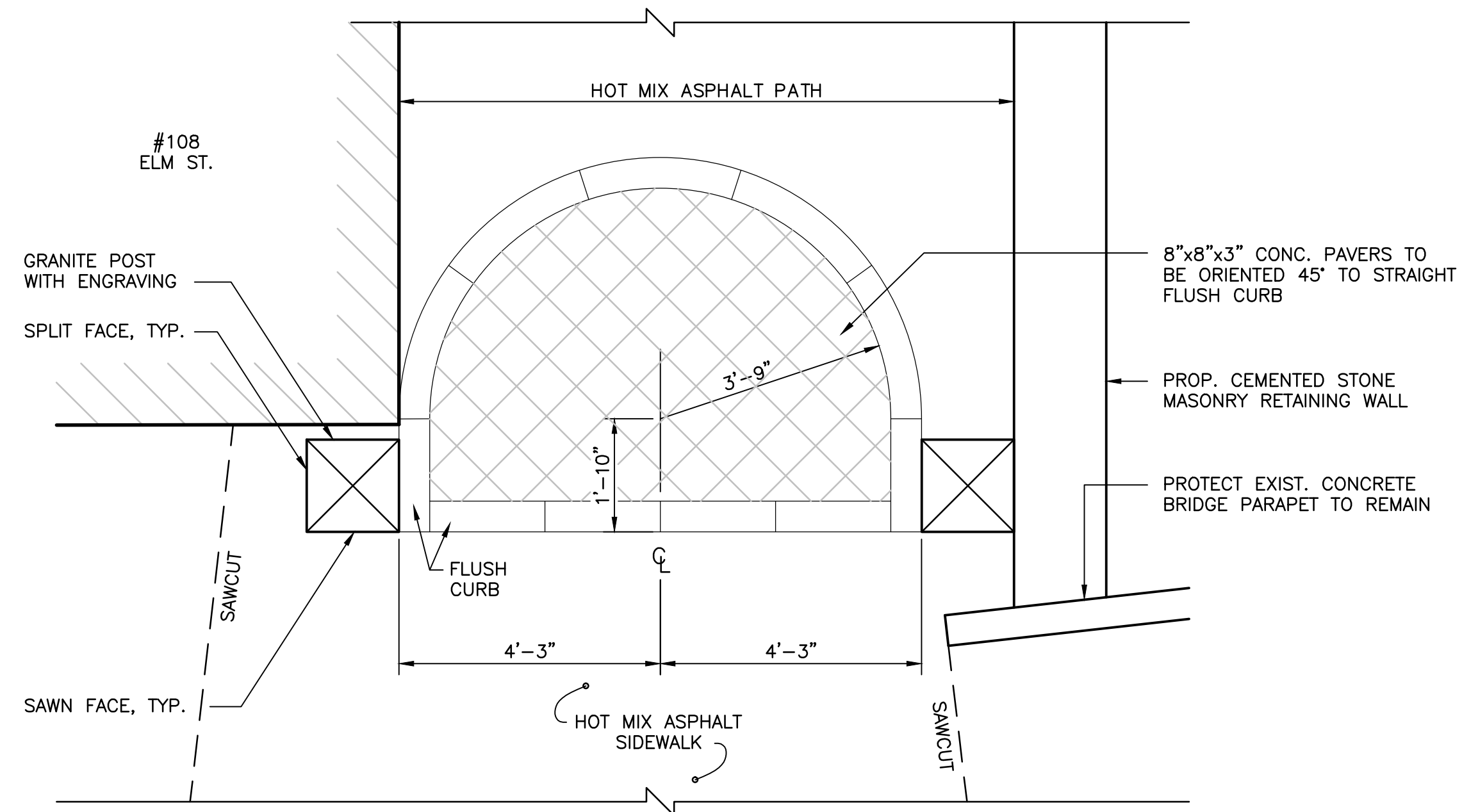
1 HOT MIX ASPHALT PAVEMENT
SCALE: 1" = 1'-0"



2 CONCRETE UNIT PAVERS @ ELM ST.
SCALE: 1" = 1'-0"



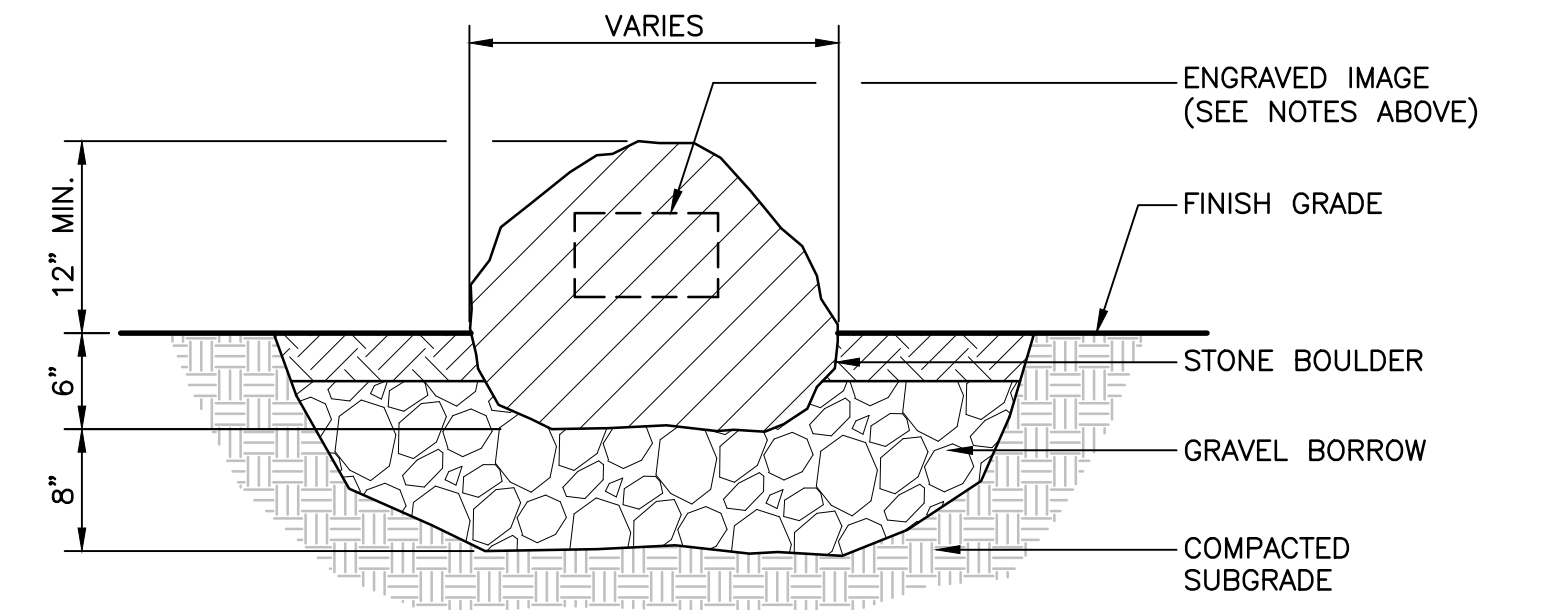
3 FLUSH GRANITE CURB @ ELM ST.
SCALE: 1" = 1'-0"



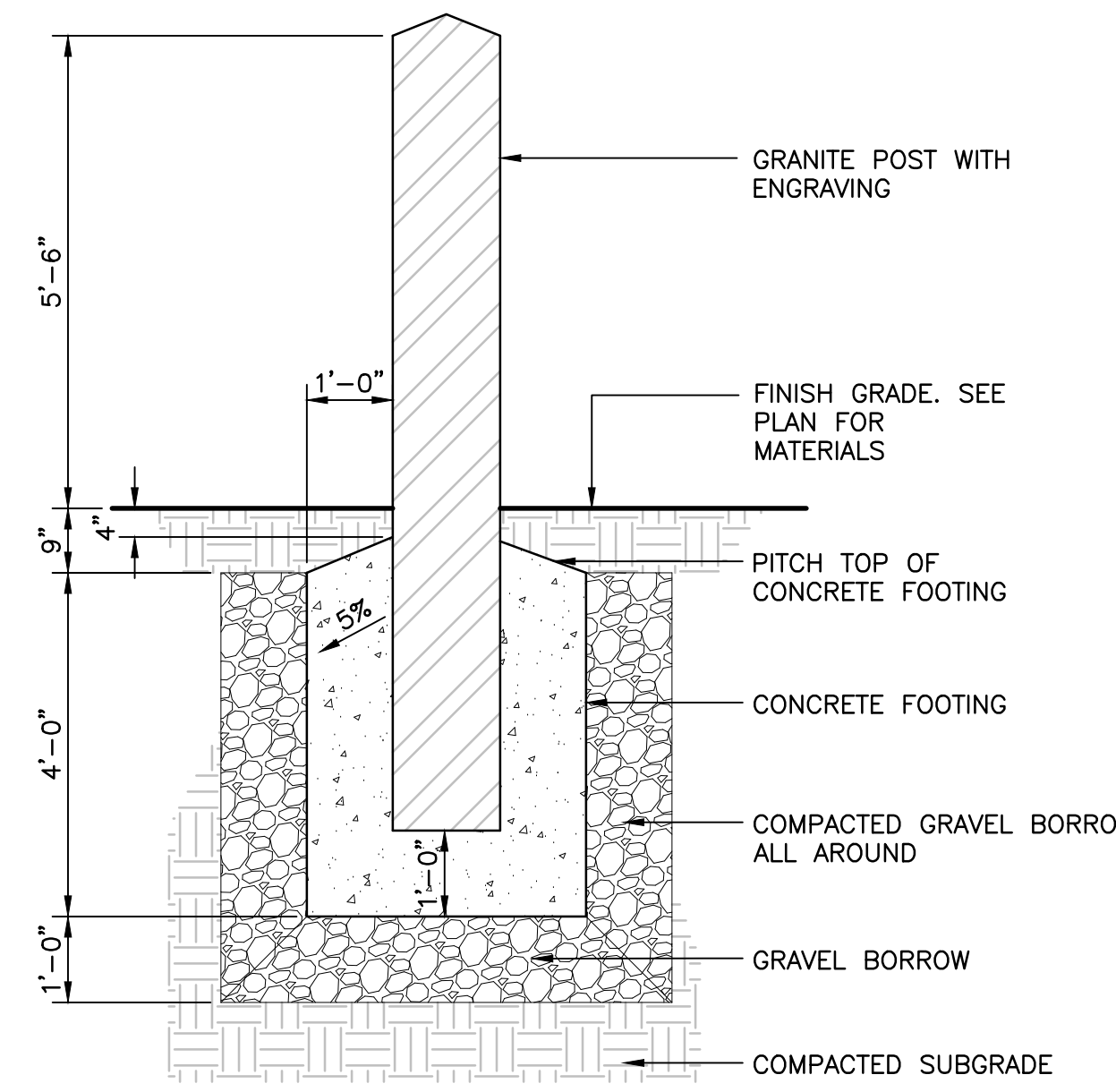
4 PATH ENTRY @ ELM ST.
SCALE: 1/2" = 1'-0"

NOTES

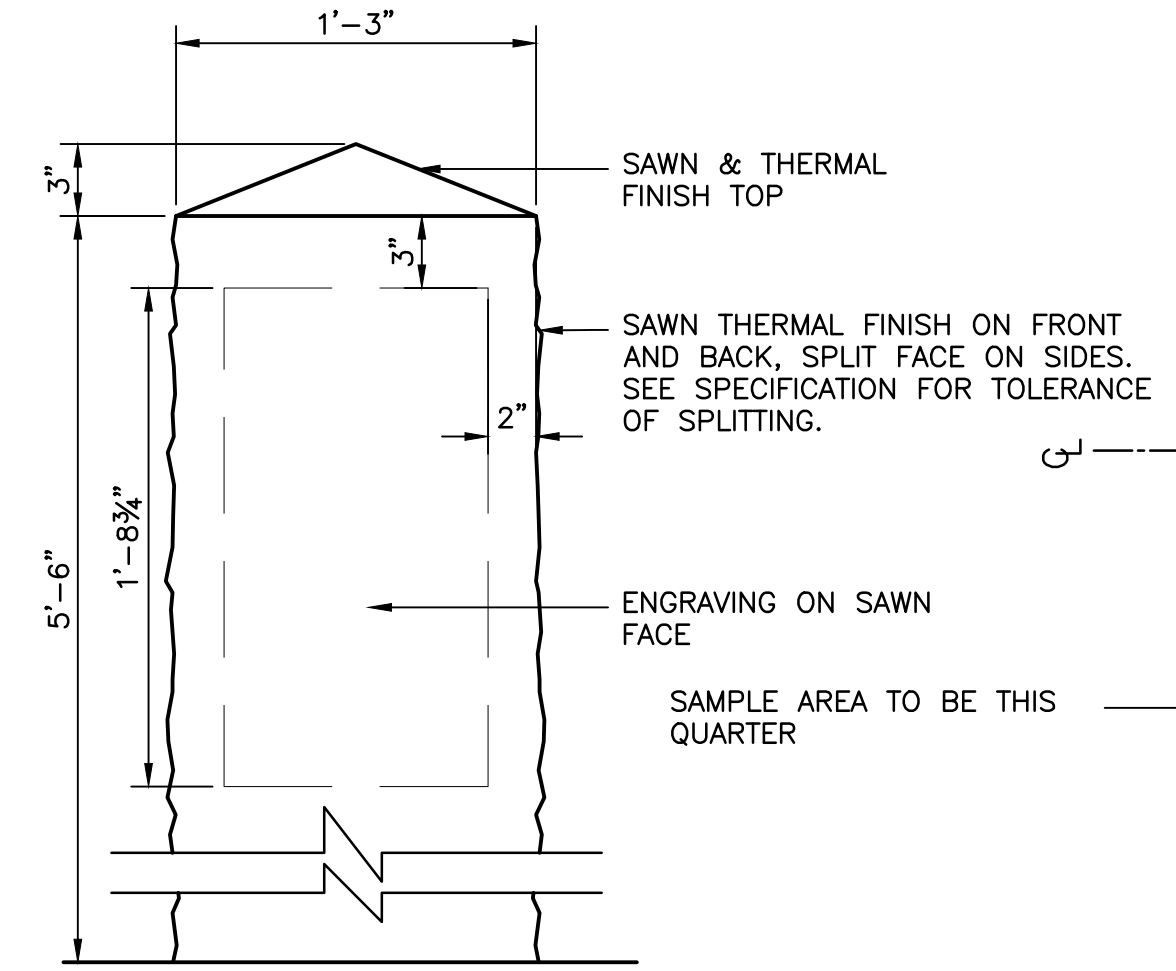
- (1) SELECT BOULDER (TO BE CHOSEN BY THE LANDSCAPE ARCHITECT) SHALL RECEIVE AN ENGRAVED IMAGE.
- ARTWORK FOR ENGRAVED BOULDER TO BE PROVIDED BY THE LANDSCAPE ARCHITECT.
- LOCATION OF ENGRAVED BOULDER TO BE APPROVED BY THE LANDSCAPE ARCHITECT



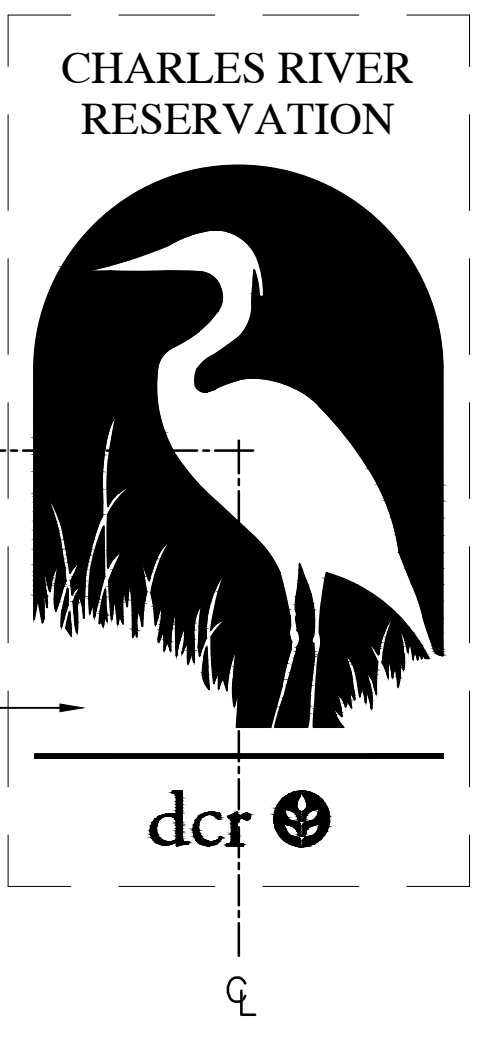
5 LANDSCAPE BOULDER
SCALE: 1" = 1'-0"



SECTION
SCALE: 1" = 1'-0"



ELEVATION
SCALE: 1-1/2" = 1'-0"



GRANITE ENGRAVING DETAIL
NO SCALE

NOTES

- WHITE AREA INDICATES LIGHT SANDBLASTED SURFACE.
- BLACK AREA INDICATES RECESSED AREA WITH DEEP SAND-BLASTED SURFACE WITH DARK GRAY LITHOCHROME. SEE SPECS.
- FULL SIZE TEMPLATE TO BE PROVIDED BY LANDSCAPE ARCHITECT.
- SAMPLE REQUIRED SEE SPECIFICATION.
- BIRD GRAPHIC SHALL BE MIRROR IMAGE ON OPPOSITE PILLAR AT ENTRIES; BIRDS SHALL FACE EACH OTHER.

6 GRANITE POST WITH ENGRAVED LOGO
SCALE: AS SHOWN

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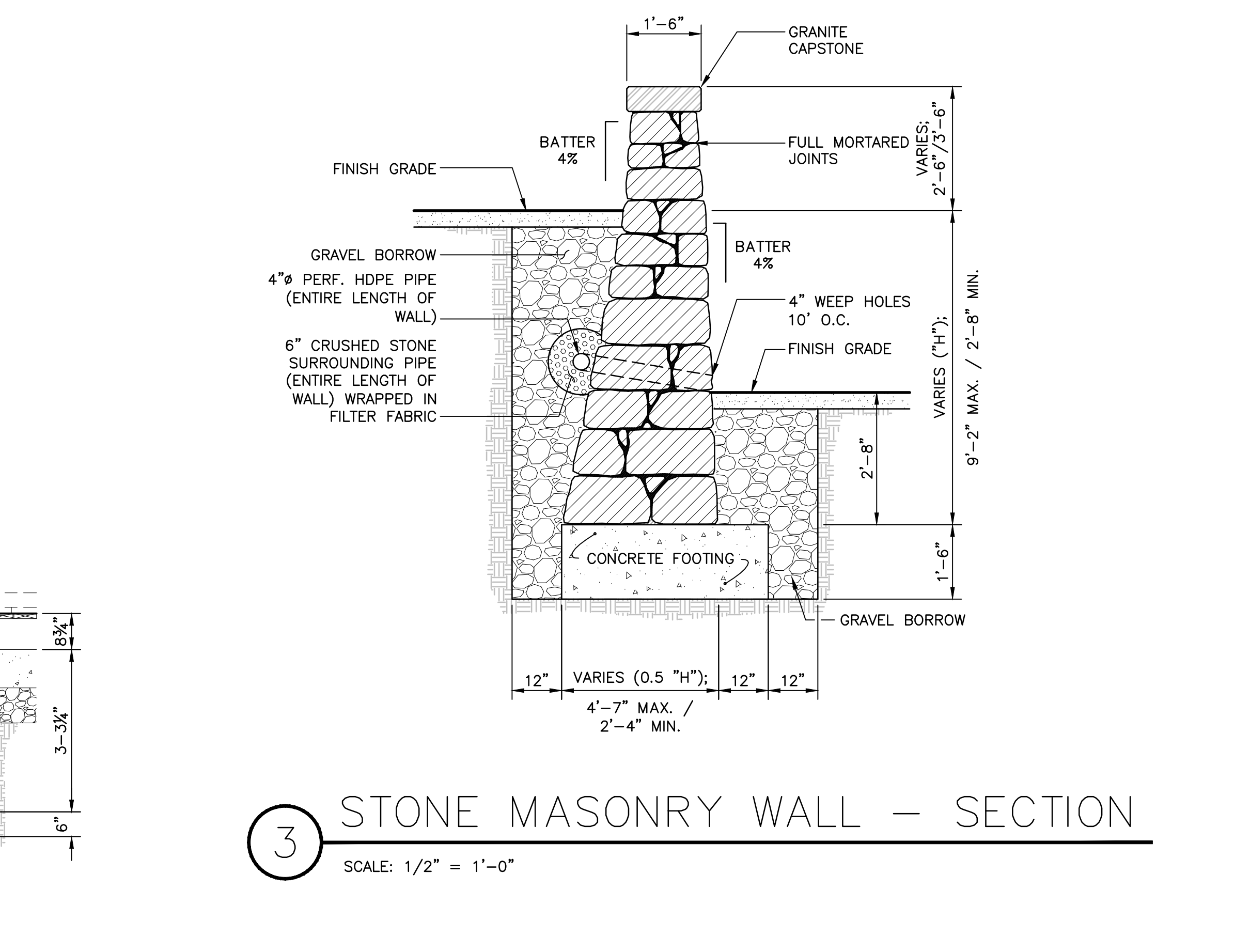
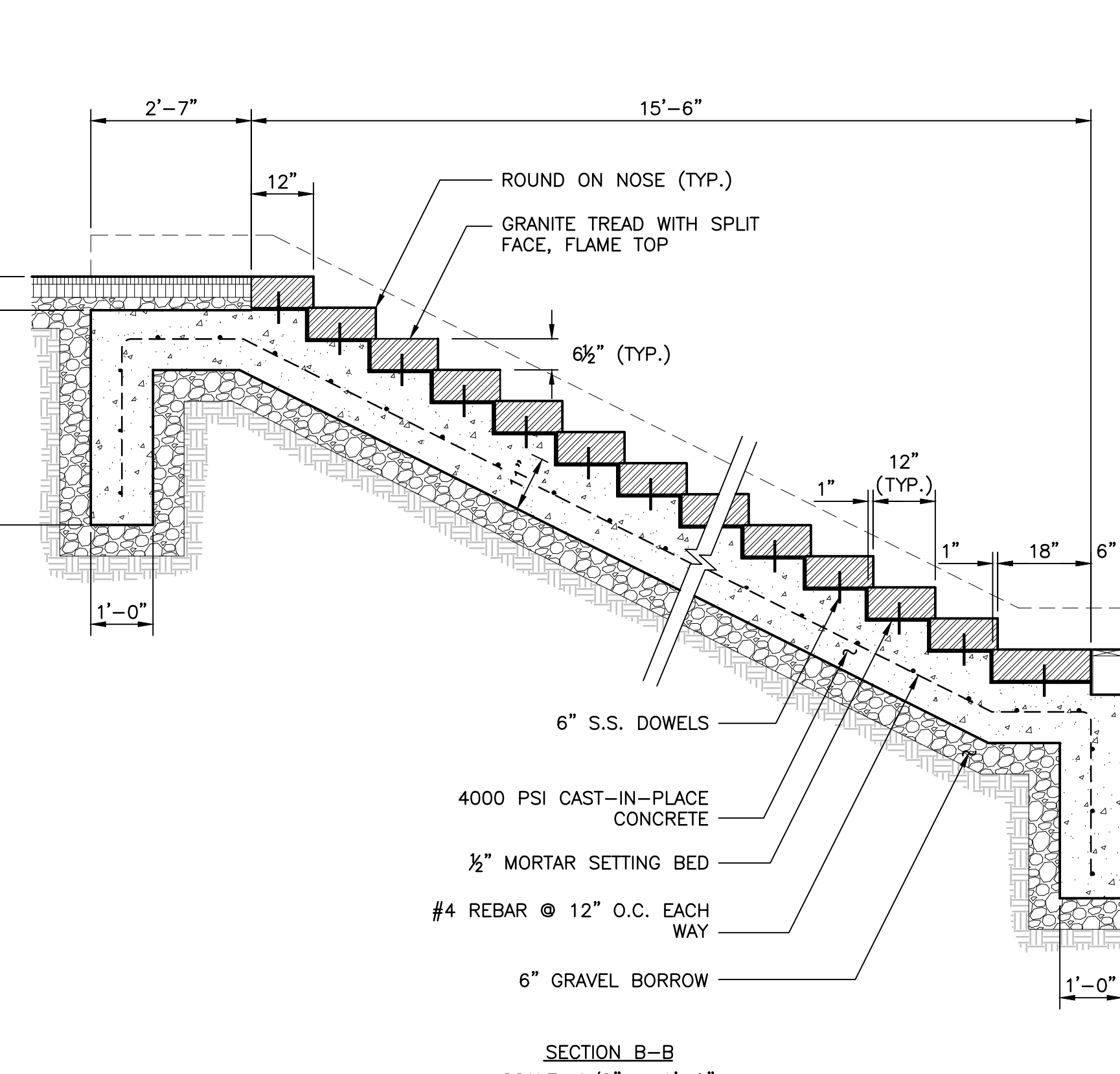
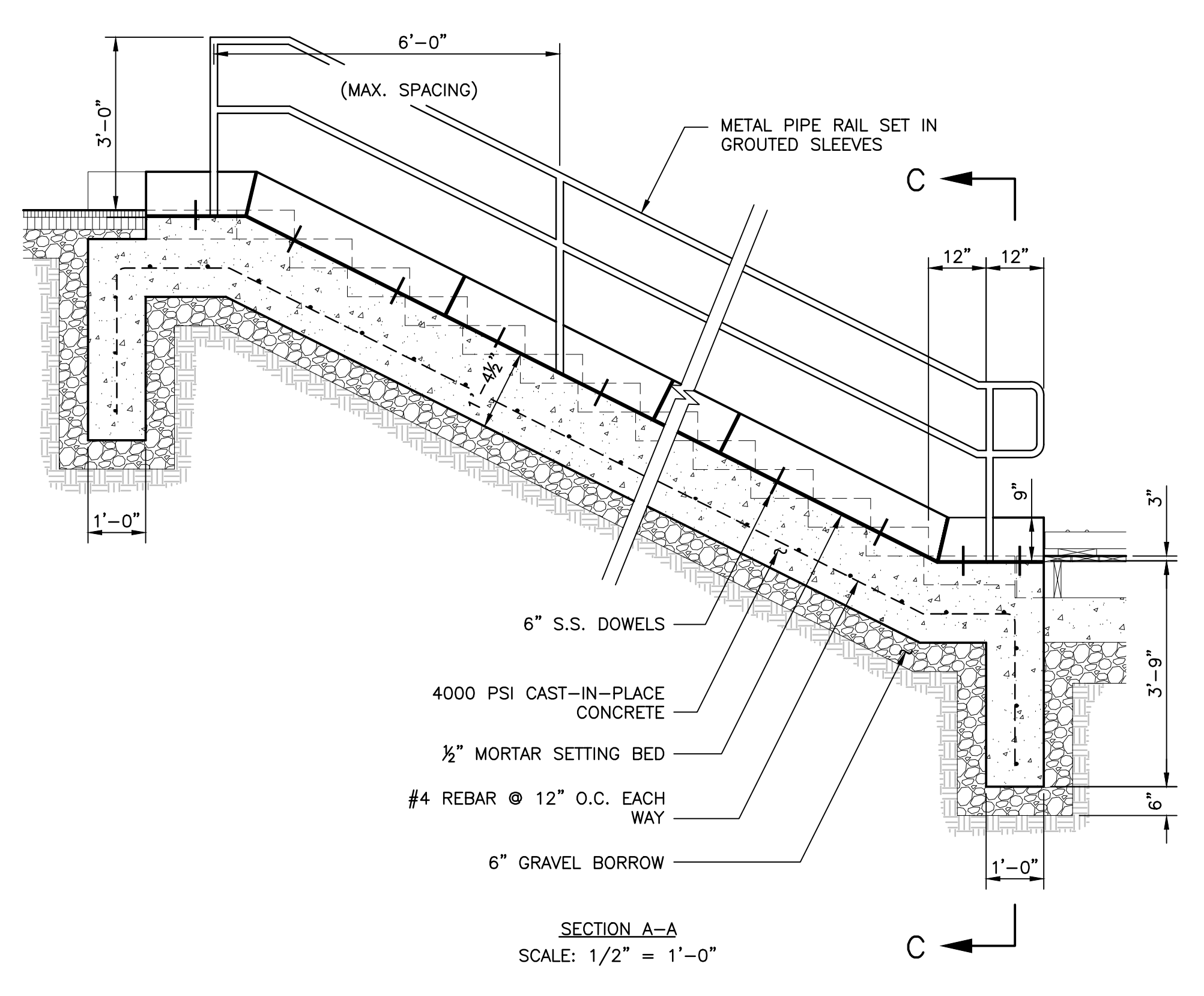
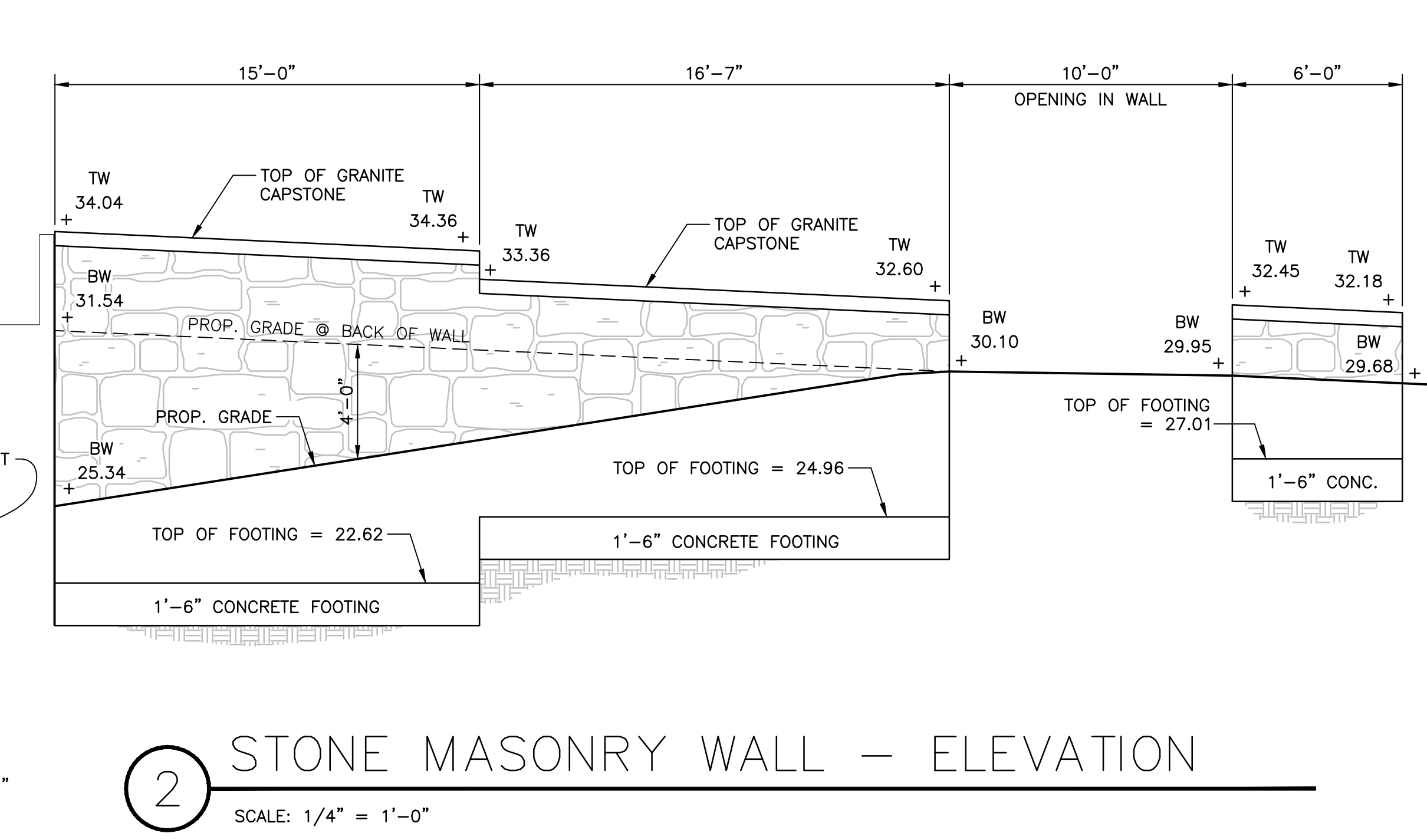
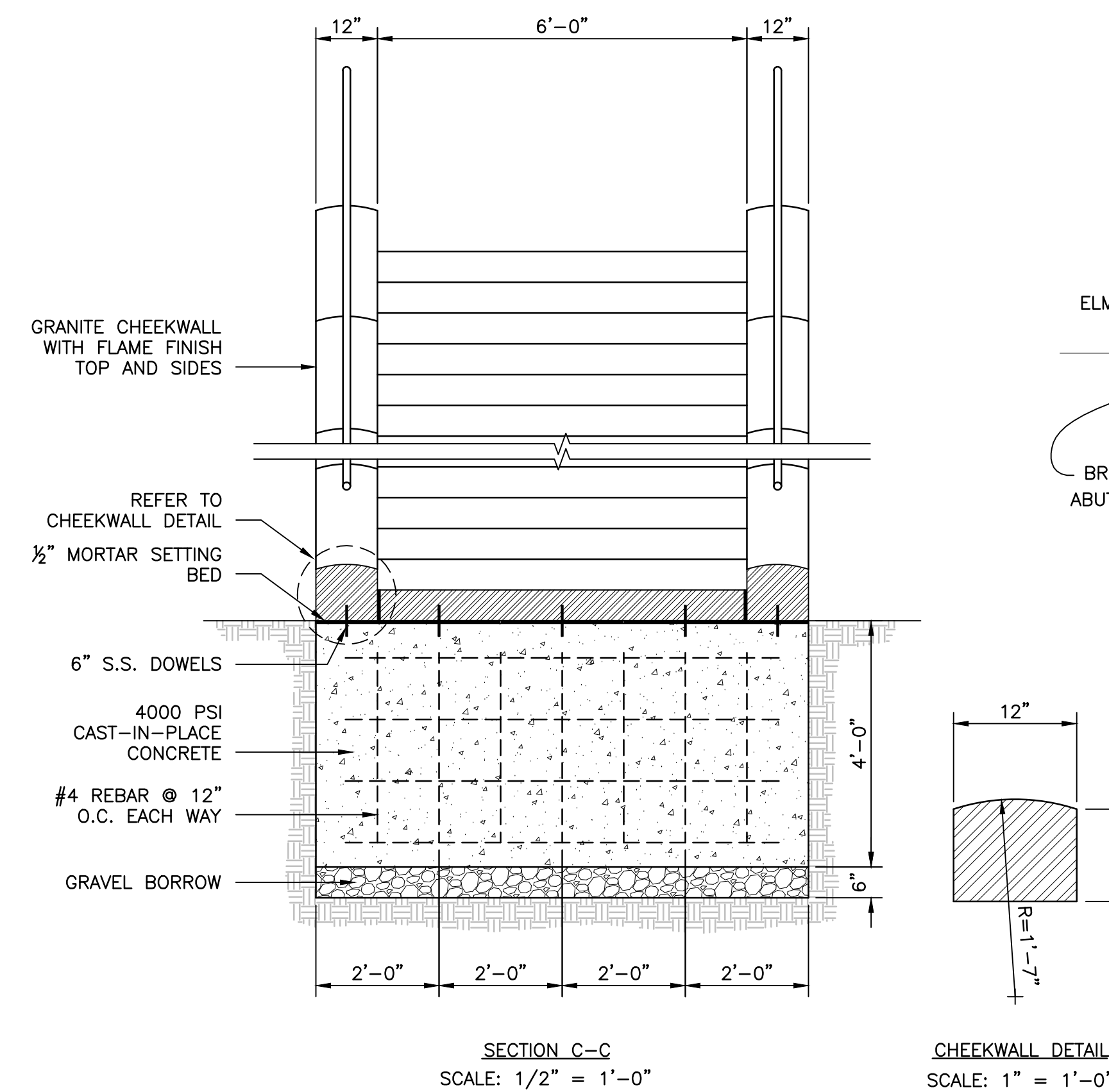
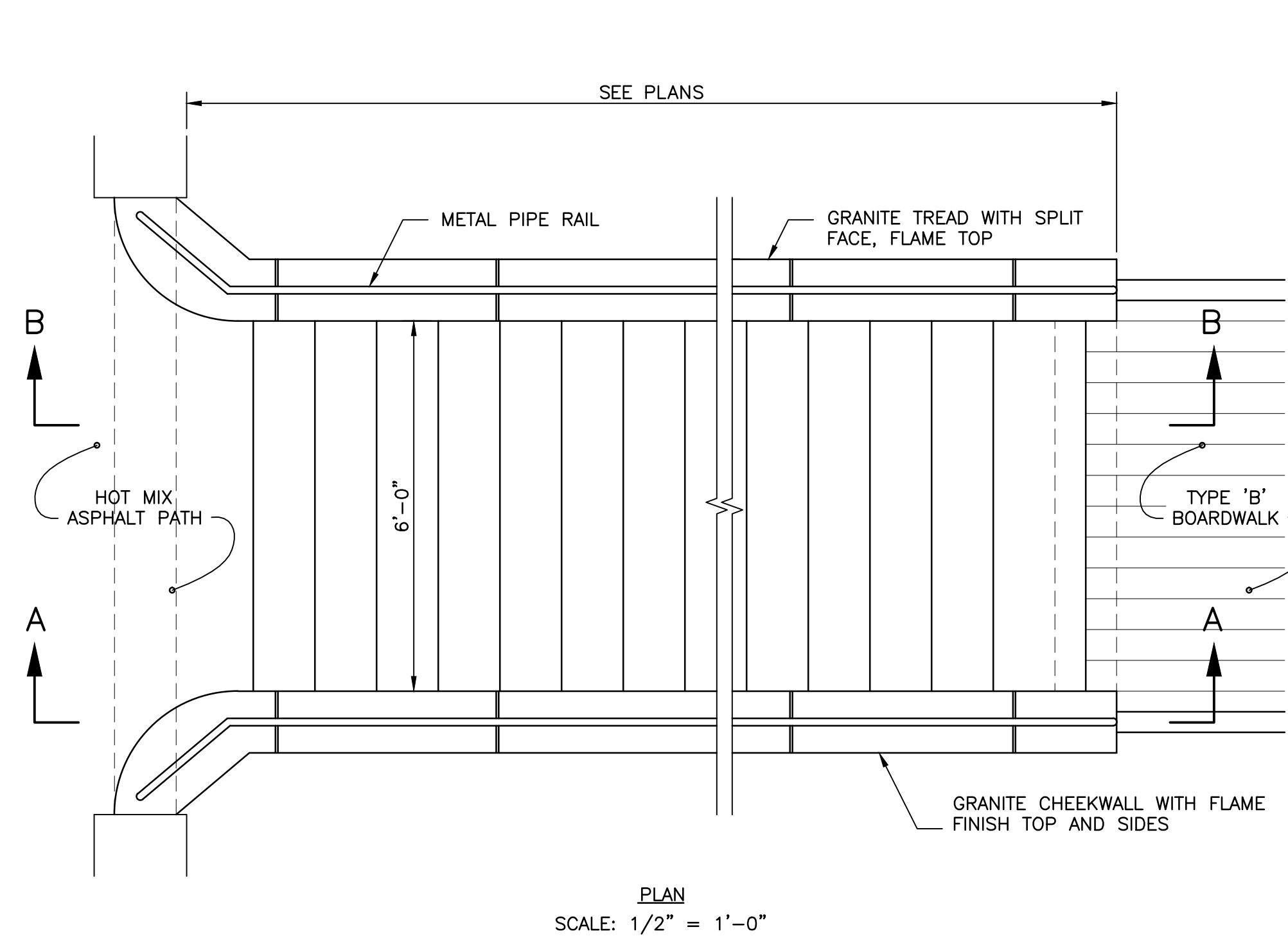
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STRUCTURAL ENGINEERING
CIVIL ENGINEERING
PERMITTING

BOURNE CONSULTING ENGINEERING
WATERFRONT ENGINEERING

REVISIONS:		

SITE DETAILS		C-507
DESIGNED BY:	R. HEADRICK	
DRAWN BY:	J. FALISE	
CHECKED BY:	R. HEADRICK	
DATE:	JANUARY 17, 2014	
SCALE:	AS SHOWN	



1 GRANITE STAIRCASE WITH METAL PIPE HANDRAILS
SCALE: AS SHOWN

3 STONE MASONRY WALL - SECTION
SCALE: 1/2" = 1'-0"

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CHARLES RIVER RESERVATION & PATHWAYS
RESTORATION PROJECT - PHASE 3C
DEPARTMENT OF CONSERVATION AND RECREATION

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