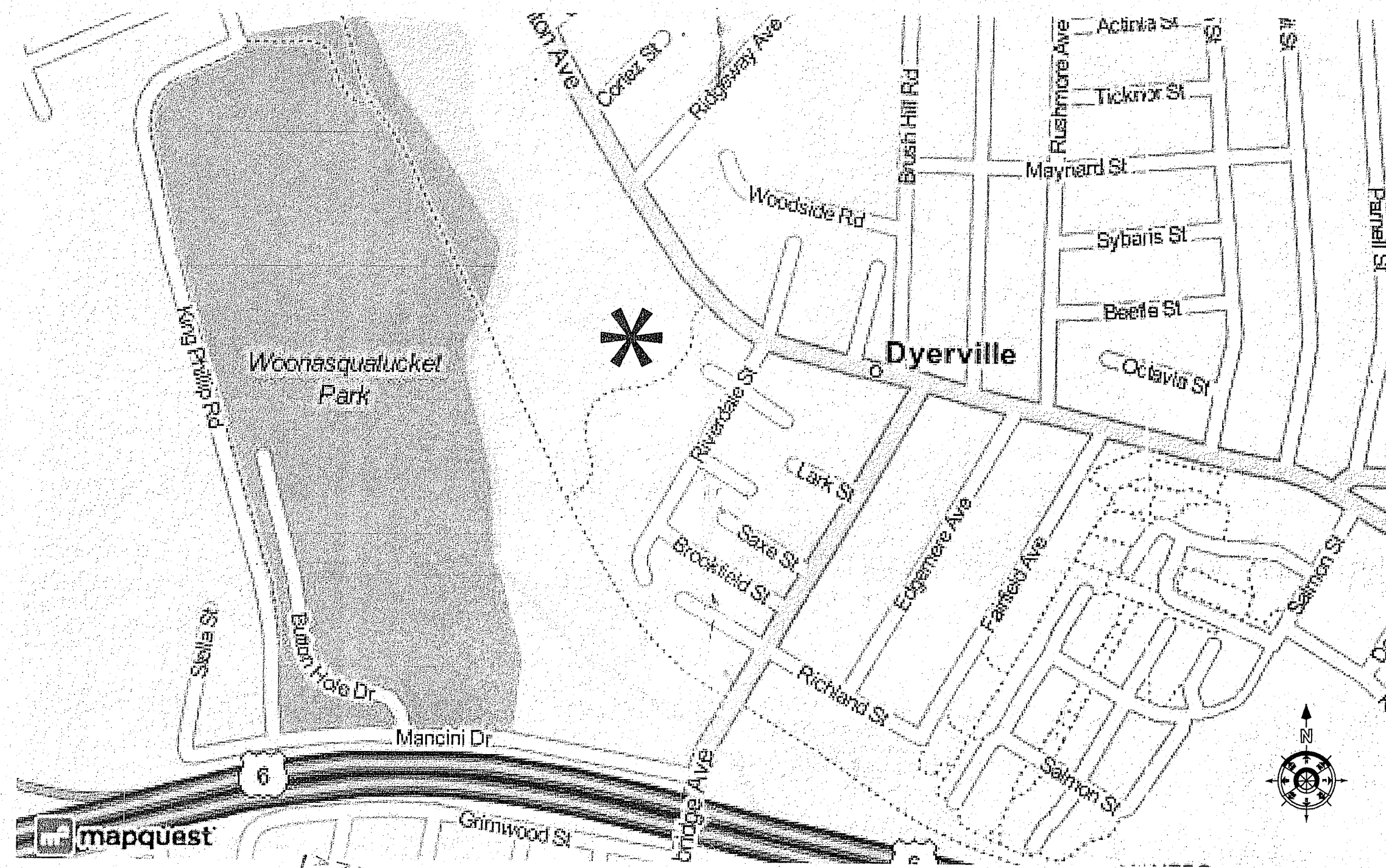
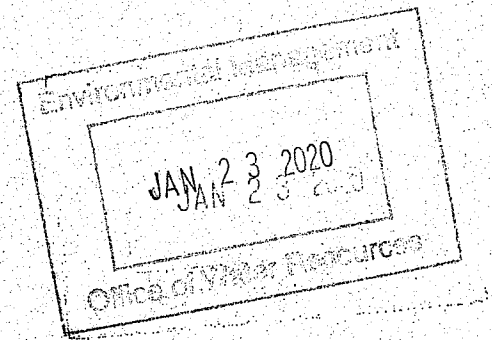


# WOONASQUATUCKET SKATE PARK

Providence, Rhode Island



LOCUS MAP  
not to scale



THE HONORABLE JORGE ELORZA, Mayor

MICHAEL CORREIA, City Councilman

WENDY NILSSON, Superintendent of Parks

## INDEX TO DRAWINGS:

- 1 of 11 COVER SHEET
- 2 of 11 L-1 EXISTING CONDITIONS
- 3 of 11 L-2 DEMOLITION PLAN
- 4 of 11 L-3 LAYOUT PLAN
- 5 of 11 L-4 GRADING PLAN
- 6 of 11 L-5 PLANTING PLAN
- 7 of 11 L-6 DETAILS
- 8 of 11 L-7 SECTIONS
- 9 of 11 C-01 DRAINAGE SWALE DETAIL
- 10 of 11 DR-1 PRE-DEV. SUBCATCHMENT PLAN
- 11 of 11 DR-2 POST-DEV. " "

## Landscape Architect

Gardner+Gerrish, LLC  
151 Broadway, Suite 245  
Providence, RI 02903  
401.263.3784

ISSUED FOR BID - xxx - 2019

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED MAY 7 2020 FILE # 20-028  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Wendy C. Freeman*

NO.	REVISIONS	BY	DATE

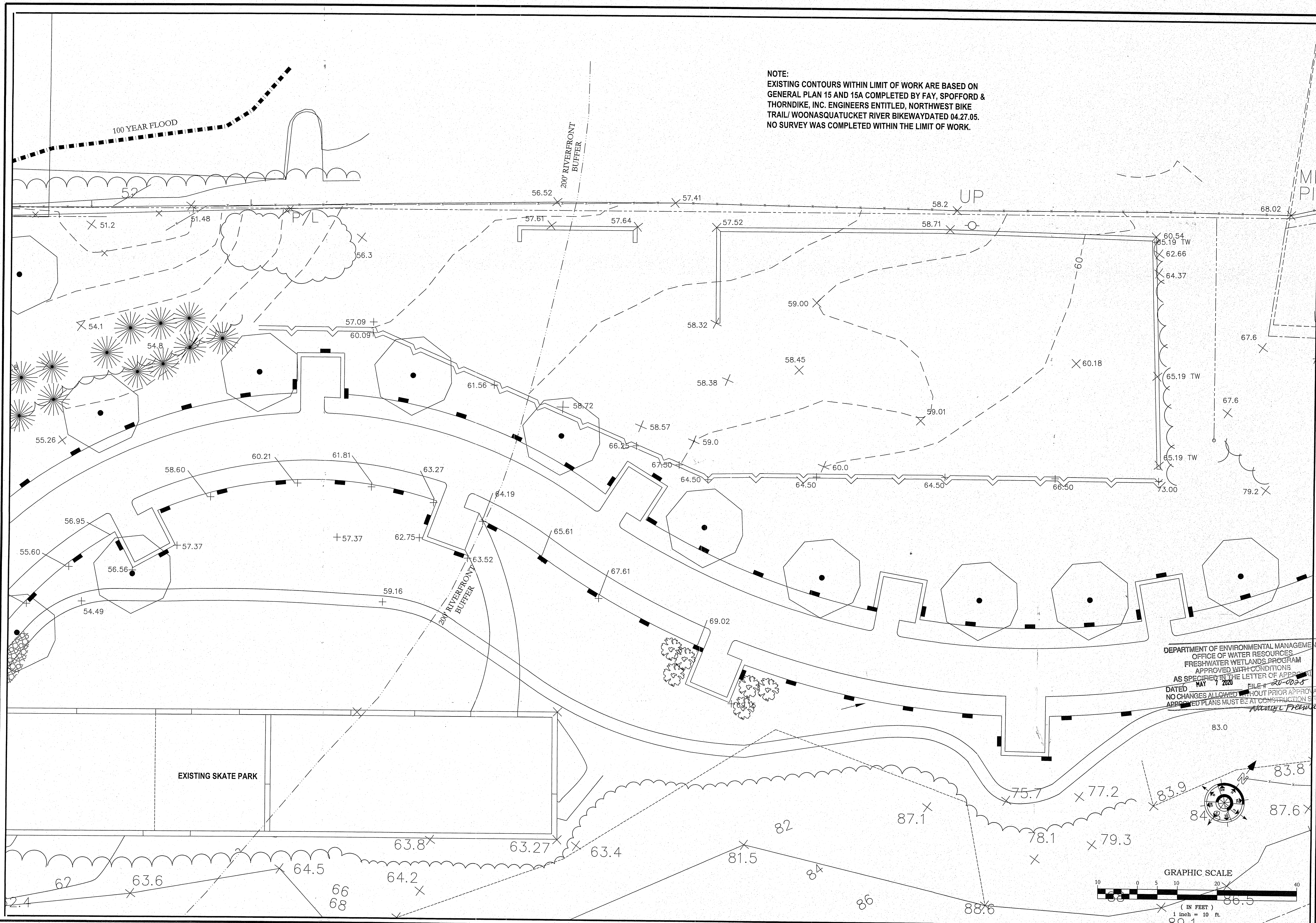
**P**

Existing Plan

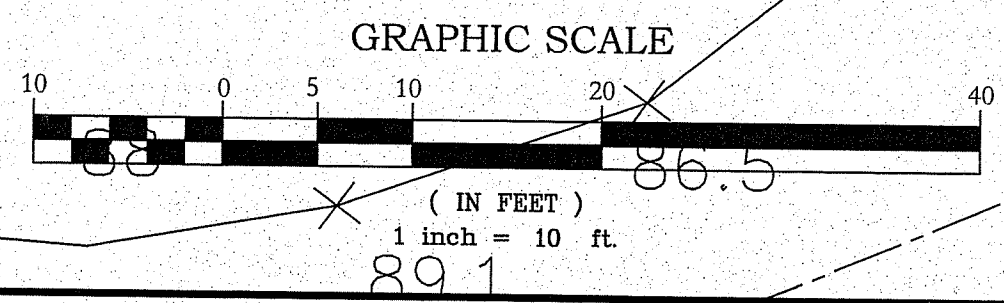
MANTON SKATEPARK  
Providence, Rhode Island

DESIGNED BY	DWG SCALE
TDG	1" = 10'
DRAWN BY	CONTRACT NO.
TDG	
CHECKED BY	DATE
TDG	07.18.19

NOTE:  
EXISTING CONTOURS WITHIN LIMIT OF WORK ARE BASED ON  
GENERAL PLAN 15 AND 15A COMPLETED BY FAY, SPOFFORD &  
THORNDIKE, INC. ENGINEERS ENTITLED, NORTHWEST BIKE  
TRAIL/ WOONASQUATUCKET RIVER BIKEWAY DATED 04.27.05.  
NO SURVEY WAS COMPLETED WITHIN THE LIMIT OF WORK.

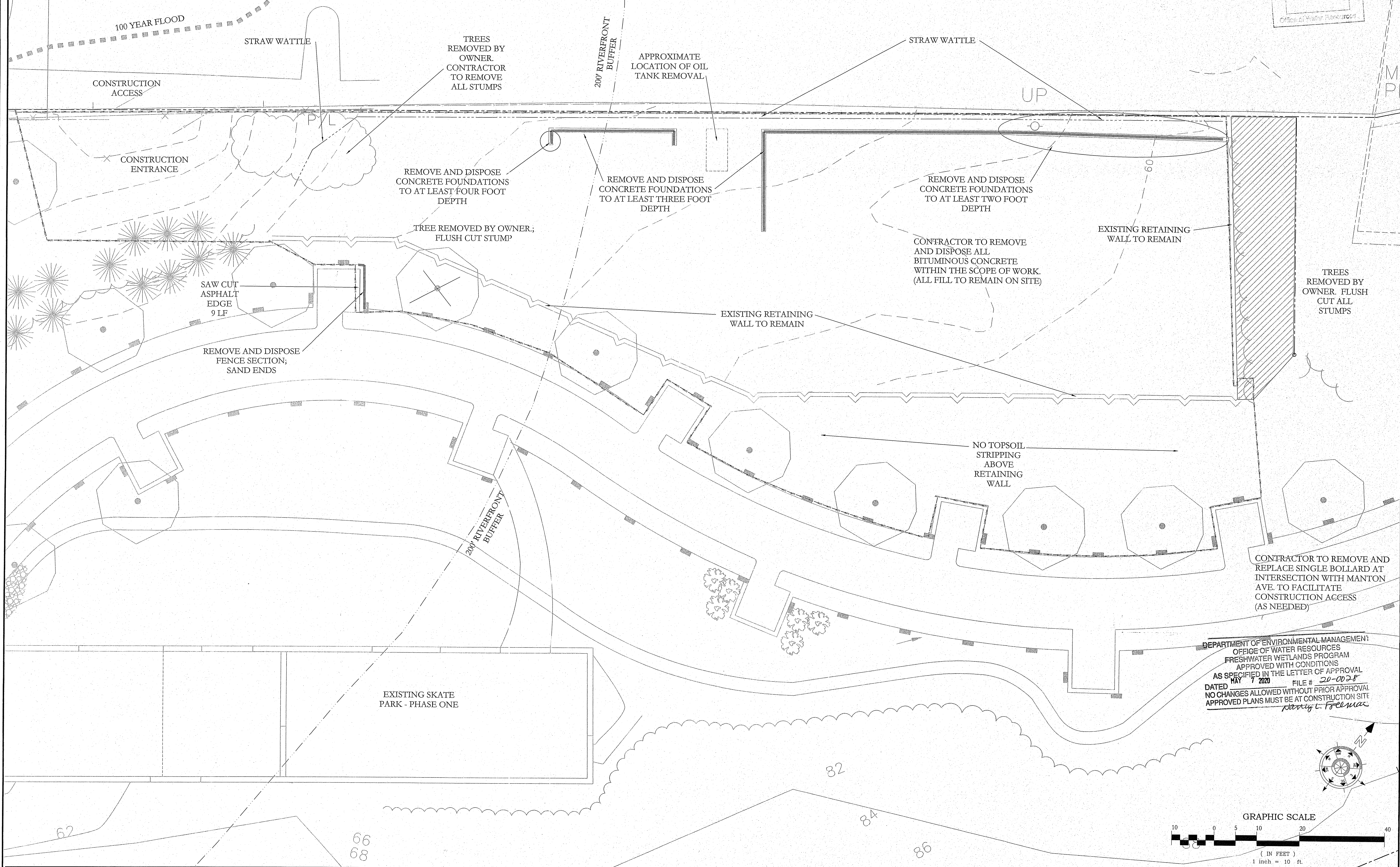


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# Woonasquatucket Skate Park

## Providence, Rhode Island



CONTRACTOR TO PROVIDE AND MAINTAIN AT LEAST 100 LF OF STRAW WATTLE AT SITE FOR EROSION CONTROL.

JAN 23 2020  
Office of Water Resources

CONSTRUCTION ACCESS

STRAW WATTLE

TREES REMOVED BY OWNER. CONTRACTOR TO REMOVE ALL STUMPS

200' RIVERFRONT BUFFER

APPROXIMATE LOCATION OF OIL TANK REMOVAL

STRAW WATTLE

UP

CONSTRUCTION ENTRANCE

REMOVE AND DISPOSE CONCRETE FOUNDATIONS TO AT LEAST FOUR FOOT DEPTH

REMOVE AND DISPOSE CONCRETE FOUNDATIONS TO AT LEAST THREE FOOT DEPTH

REMOVE AND DISPOSE CONCRETE FOUNDATIONS TO AT LEAST TWO FOOT DEPTH

EXISTING RETAINING WALL TO REMAIN

CONTRACTOR TO REMOVE AND DISPOSE ALL BITUMINOUS CONCRETE WITHIN THE SCOPE OF WORK. (ALL FILL TO REMAIN ON SITE)

TREES REMOVED BY OWNER. FLUSH CUT ALL STUMPS

TREE REMOVED BY OWNER; FLUSH CUT STUMP

EXISTING RETAINING WALL TO REMAIN

SAW CUT ASPHALT EDGE 9 LF

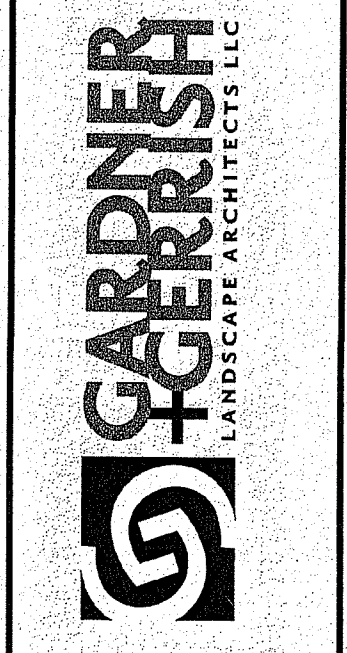
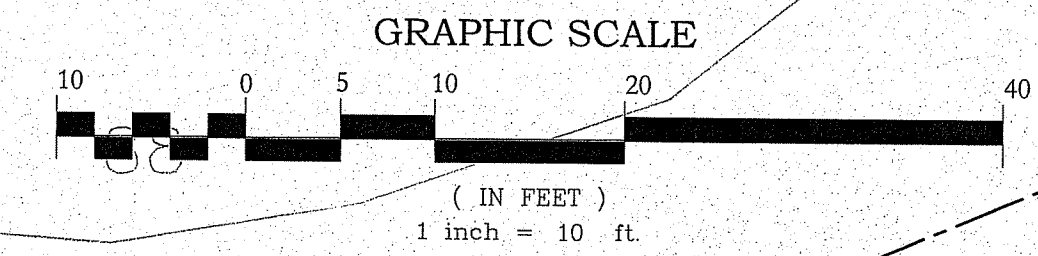
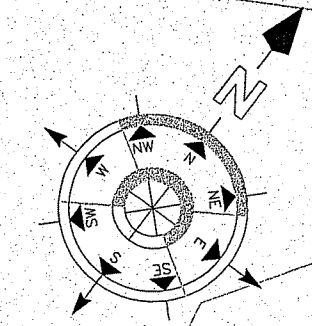
REMOVE AND DISPOSE FENCE SECTION; SAND ENDS

NO TOPSOIL STRIPPING ABOVE RETAINING WALL

CONTRACTOR TO REMOVE AND REPLACE SINGLE BOLLARD AT INTERSECTION WITH MANTON AVE. TO FACILITATE CONSTRUCTION ACCESS (AS NEEDED)

EXISTING SKATE PARK - PHASE ONE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
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AS SPECIFIED IN THE LETTER OF APPROVAL  
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APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Kevin L. Felma*



NO.	REVISIONS	BY	DATE

**P**

Demolition Plan

MANTON SKATEPARK  
Providence, Rhode Island

DESIGNED BY	DWG SCALE
TDG	1" = 10'
DRAWN BY	CONTRACT NO
TDG	
CHECKED BY	DATE
TDG	07.18.19

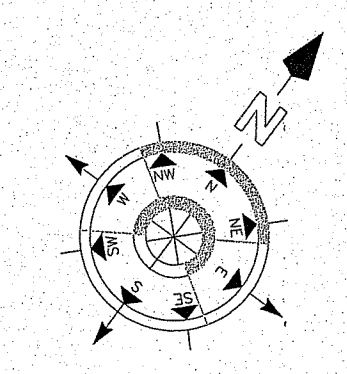
L-2  
Sheet 3 of 11

# Woonasquatucket Skate Park

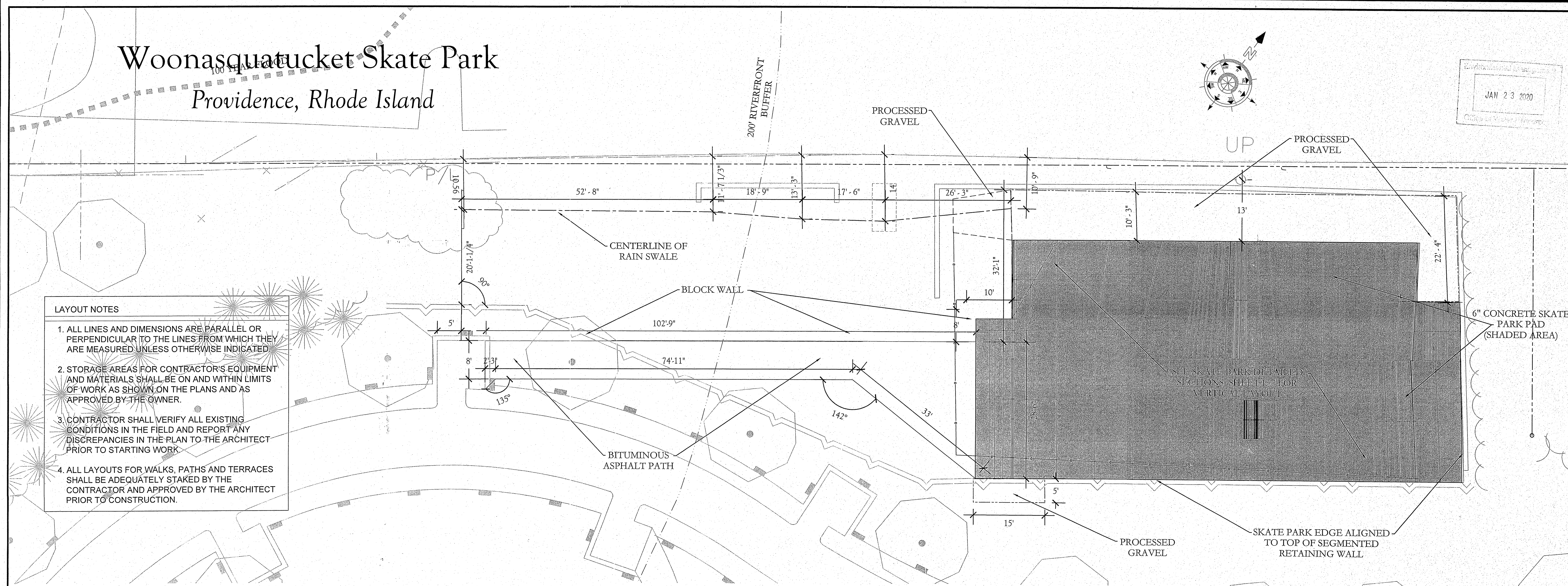
Providence, Rhode Island



JAN 23 2020  
 Office of Water Resources



- LAYOUT NOTES**
1. ALL LINES AND DIMENSIONS ARE PARALLEL OR PERPENDICULAR TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED.
  2. STORAGE AREAS FOR CONTRACTOR'S EQUIPMENT AND MATERIALS SHALL BE ON AND WITHIN LIMITS OF WORK AS SHOWN ON THE PLANS AND AS APPROVED BY THE OWNER.
  3. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES IN THE PLAN TO THE ARCHITECT PRIOR TO STARTING WORK.
  4. ALL LAYOUTS FOR WALKS, PATHS AND TERRACES SHALL BE ADEQUATELY STAKED BY THE CONTRACTOR AND APPROVED BY THE ARCHITECT PRIOR TO CONSTRUCTION.

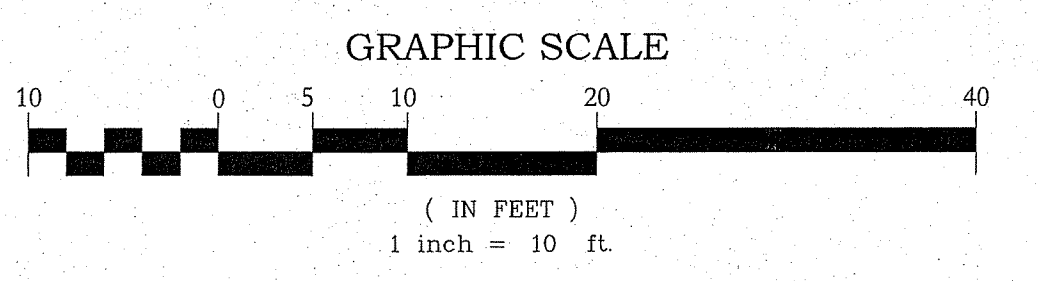
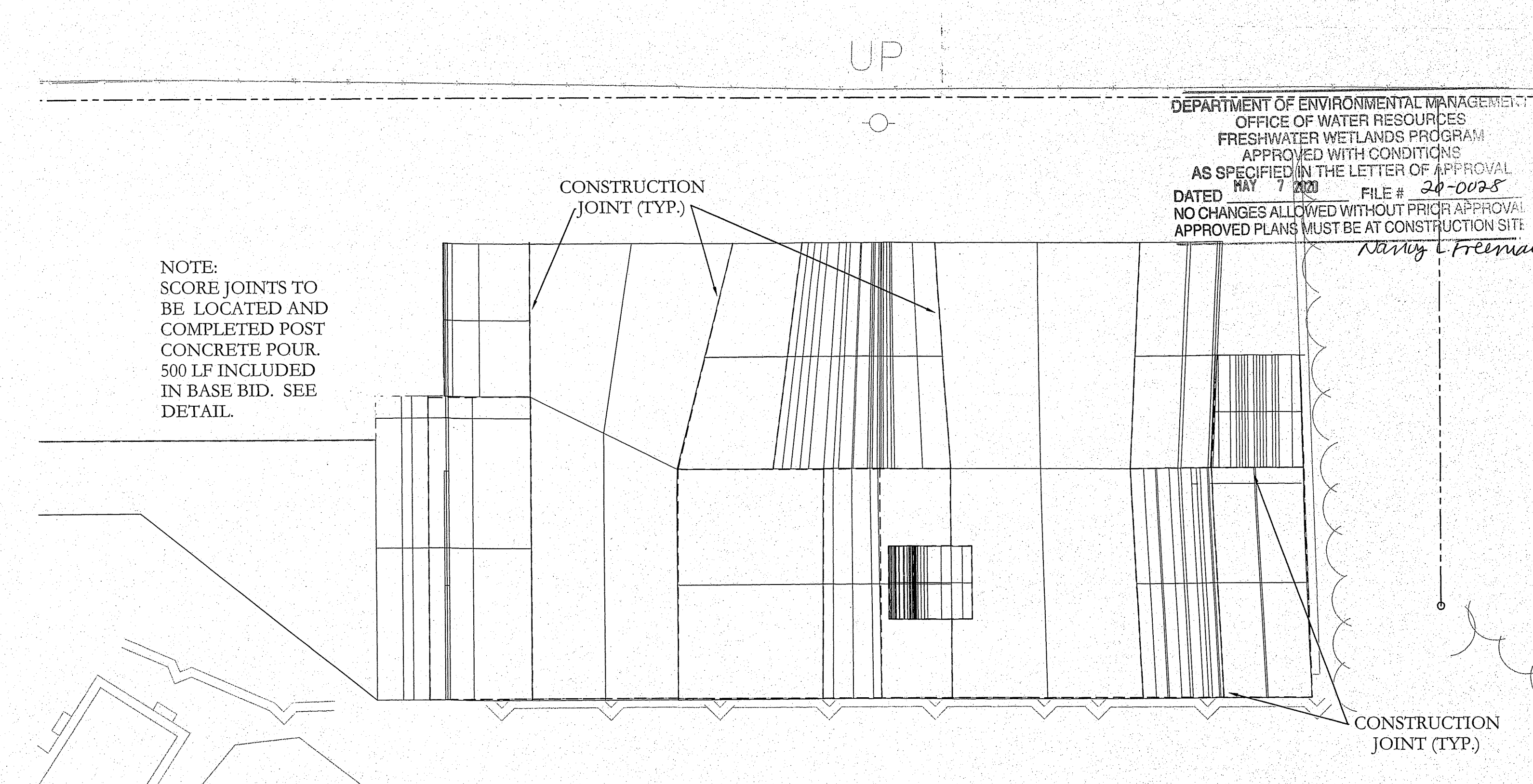


layout & Materials Plan

NO	REVISIONS	BY	DATE

**P**

Layout & Materials Plan



MANTON SKATEPARK  
 Providence, Rhode Island

DESIGNED BY	DWG SCALE
TDG	1" = 10'
DRAWN BY	CONTRACT NO
TDG	
CHECKED BY	DATE
TDG	07.18.19

Joint Plan

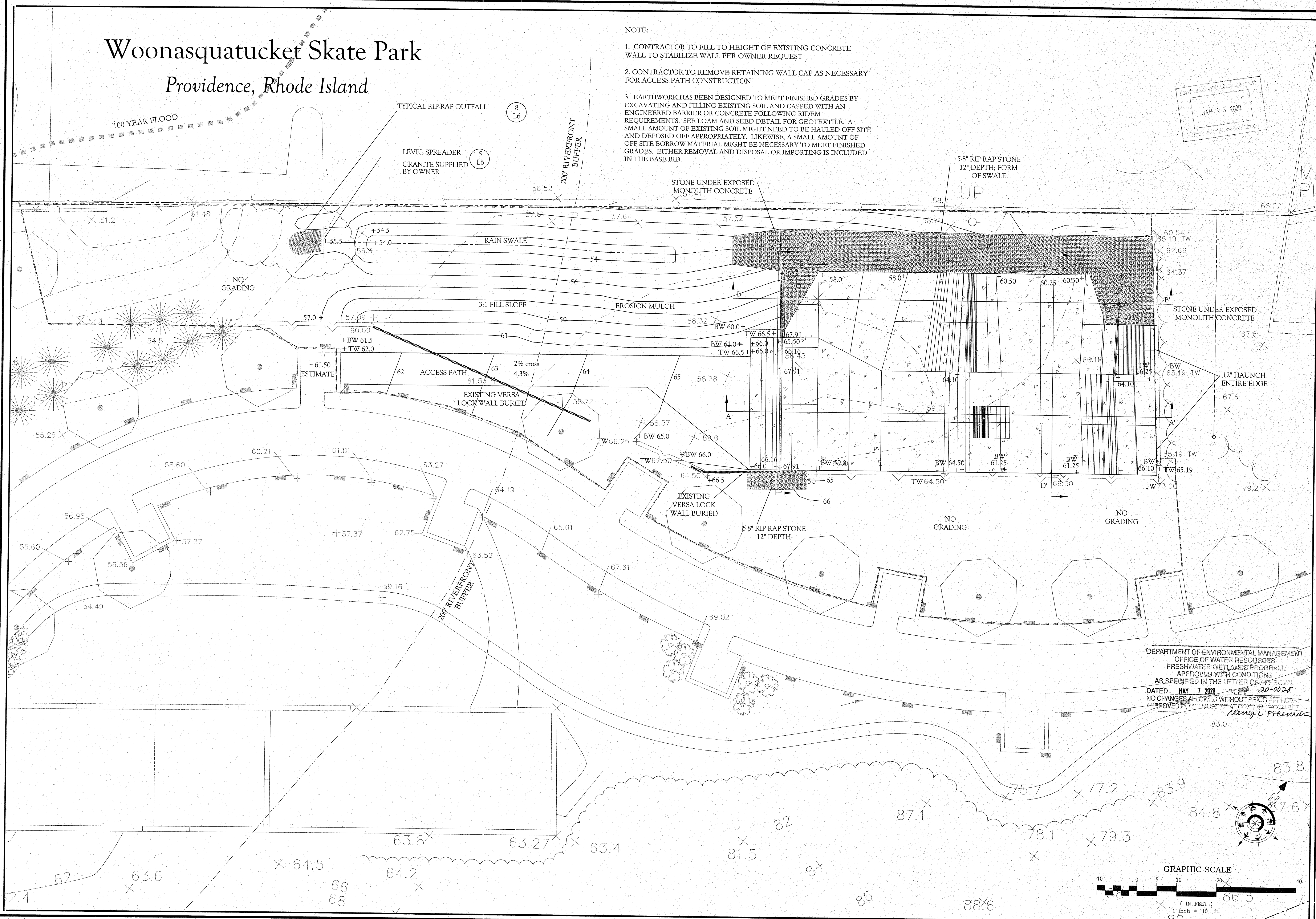
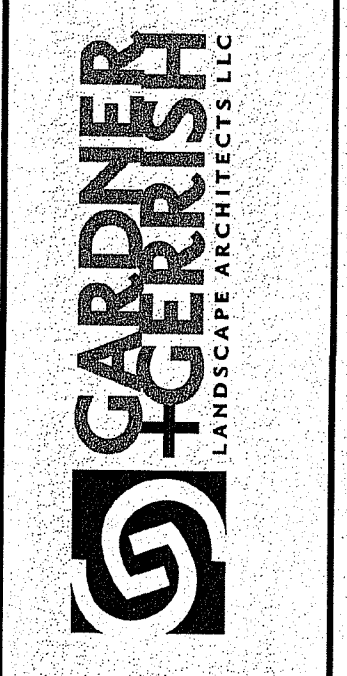
L-3  
 Sheet 4 of 11

# Woonasquacket Skate Park

## Providence, Rhode Island

- NOTE:
1. CONTRACTOR TO FILL TO HEIGHT OF EXISTING CONCRETE WALL TO STABILIZE WALL PER OWNER REQUEST
  2. CONTRACTOR TO REMOVE RETAINING WALL CAP AS NECESSARY FOR ACCESS PATH CONSTRUCTION.
  3. EARTHWORK HAS BEEN DESIGNED TO MEET FINISHED GRADES BY EXCAVATING AND FILLING EXISTING SOIL AND CAPPED WITH AN ENGINEERED BARRIER OR CONCRETE FOLLOWING RIDEM REQUIREMENTS. SEE LOAM AND SEED DETAIL FOR GEOTEXTILE. A SMALL AMOUNT OF EXISTING SOIL MIGHT NEED TO BE HAULED OFF SITE AND DEPOSED OFF APPROPRIATELY. LIKEWISE, A SMALL AMOUNT OF OFF SITE BORROW MATERIAL MIGHT BE NECESSARY TO MEET FINISHED GRADES. EITHER REMOVAL AND DISPOSAL OR IMPORTING IS INCLUDED IN THE BASE BID.

Environmental Management  
 JAN 23 2020  
 Office of Water Resources



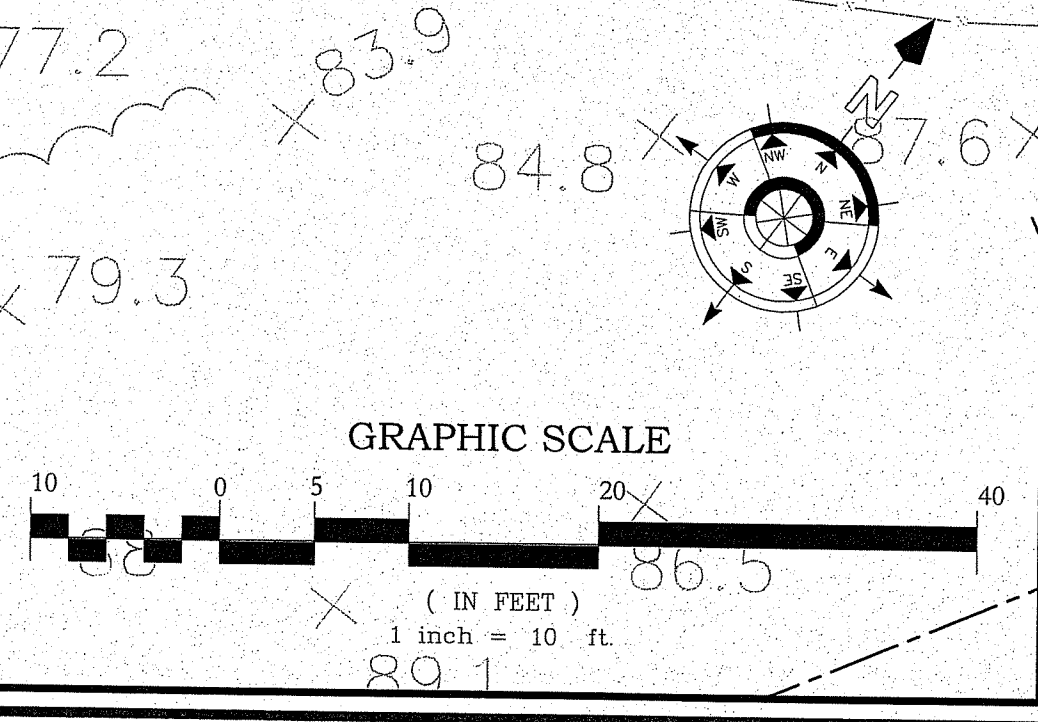
NO.	REVISIONS	BY	DATE

# P

Grading  
Plan

MANTON SKATEPARK  
 Providence, Rhode Island

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
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 DATED MAY 7 2020 FILE # 20-0028  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED: *Nancy L. Freeman*



DESIGNED BY	TDWG SCALE
TDC	1" = 10'
DRAWN BY	CONTRACT NO
TDC	
CHECKED BY	DATE
TDC	07.18.19

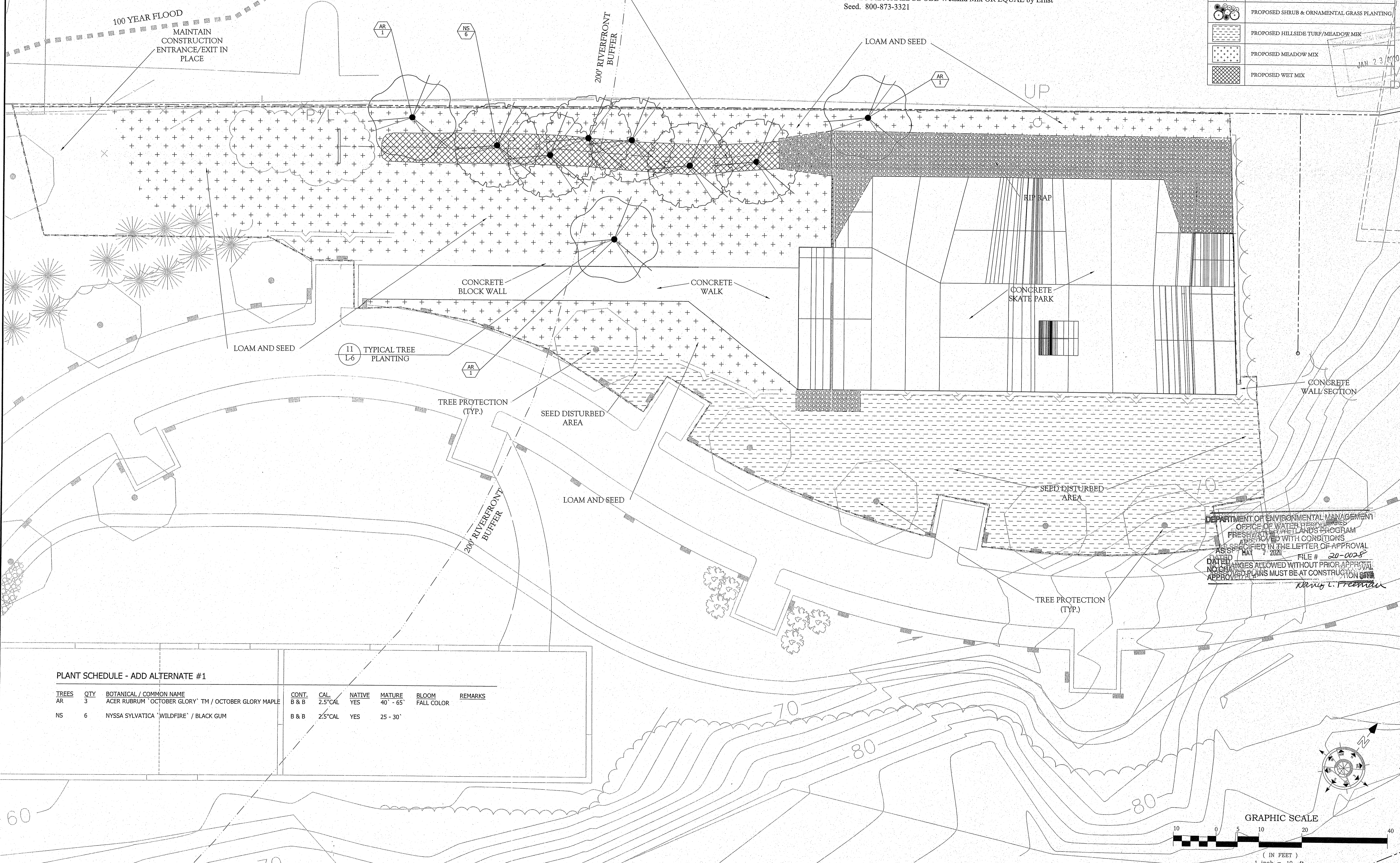
L4  
 Sheet 5 of 11

# Woonasquacket Skate Park

## Providence, Rhode Island

PLANTING LEGEND	
	EXISTING TREE TO REMAIN & PROTECT
	PROPOSED DECIDUOUS TREE
	PROPOSED FLOWERING TREE
	PROPOSED SHRUB & ORNAMENTAL GRASS PLANTING
	PROPOSED HILLSIDE TURF/MEADOW MIX
	PROPOSED MEADOW MIX
	PROPOSED WET MIX

NOTE:  
 1. HILLSIDE TURF/MEADOW MIX SHALL BE Commercial Conservation Mix OR EQUAL by Ernst Seed. 800-873-3321  
 2. MEADOW MIX SHALL BE Ernst Solar Farm Seed Mix OR EQUAL by Ernst Seed. 800-873-3321  
 3. WET MIX SHALL BE OBL Wetland Mix OR EQUAL by Ernst Seed. 800-873-3321



PLANT SCHEDULE - ADD ALTERNATE #1

TREES	QTY	BOTANICAL / COMMON NAME	CONT.	CAL.	NATIVE	MATURE	BLOOM	REMARKS
AR	3	ACER RUBRUM 'OCTOBER GLORY'™ / OCTOBER GLORY MAPLE	B & B	2.5" CAL	YES	40' - 65'	FALL COLOR	
NS	6	NYSSA SYLVATICA 'WILDFIRE' / BLACK GUM	B & B	2.5" CAL	YES	25 - 30'		

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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 DATED 1/21/10 FILE # 20-0028  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED: *Mary L. Freeman*

**GARDNER GERRISH**  
 LANDSCAPE ARCHITECTS, LLC

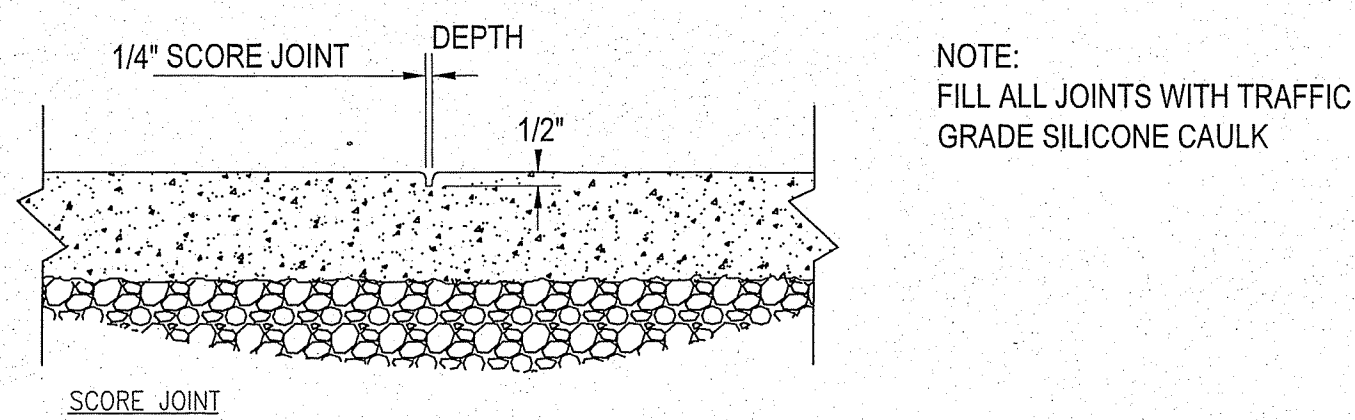
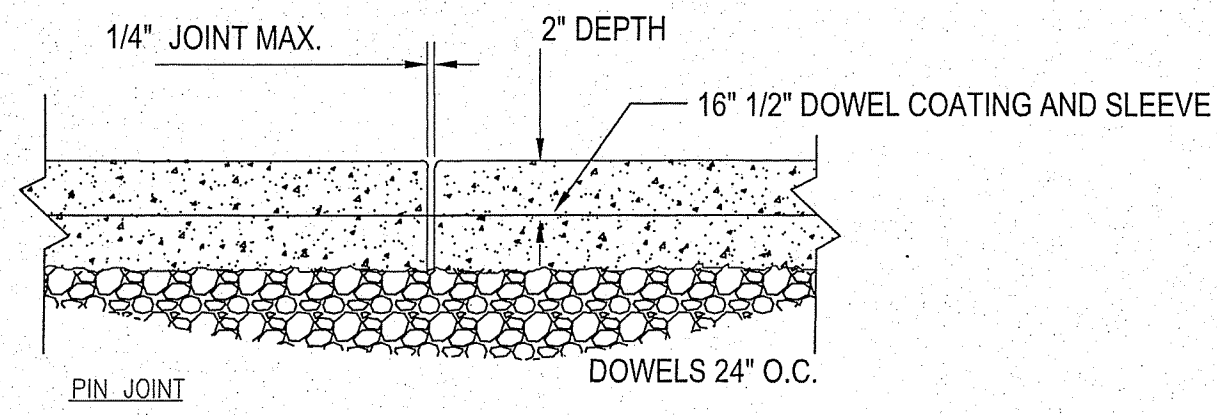
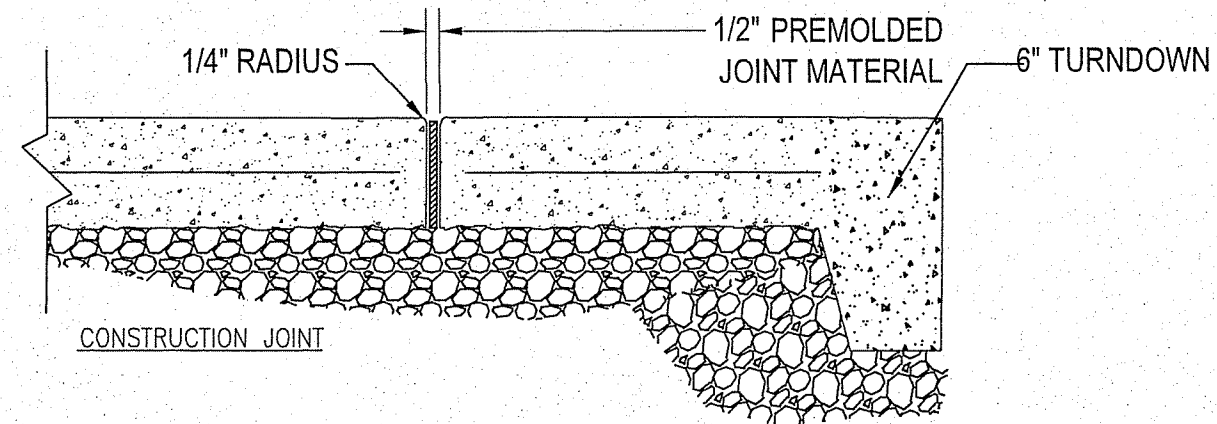
**MANTON SKATEPARK**  
 Providence, Rhode Island

Planting Plan

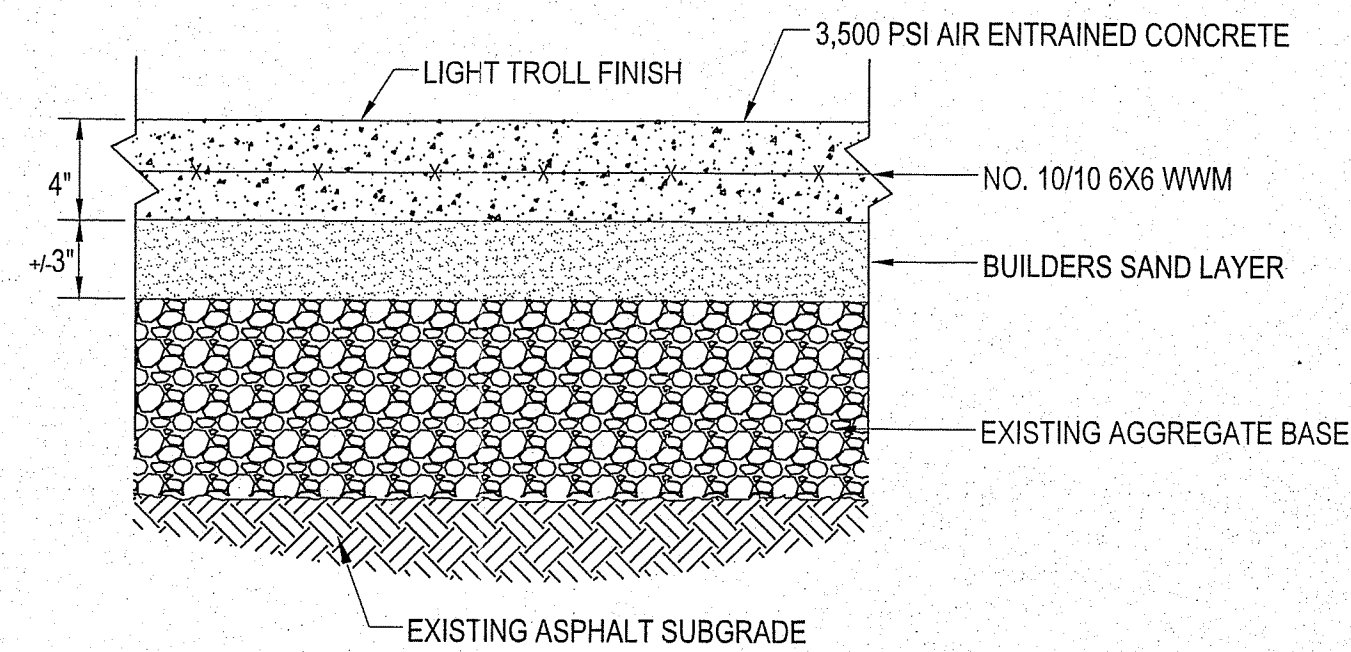
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 DRAWN BY TDG  
 CHECKED BY TDG

CONTRACT NO.  
 DATE 07.18.19

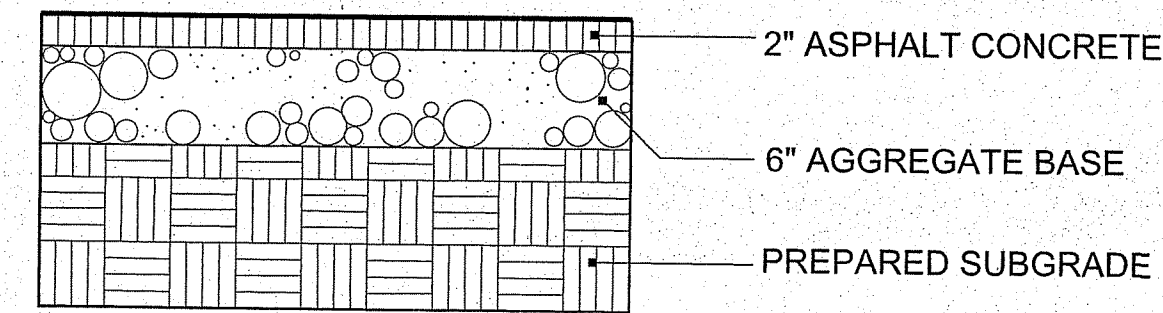
**L5**  
 Sheet 6 of 11



1 CONCRETE JOINTS No Scale

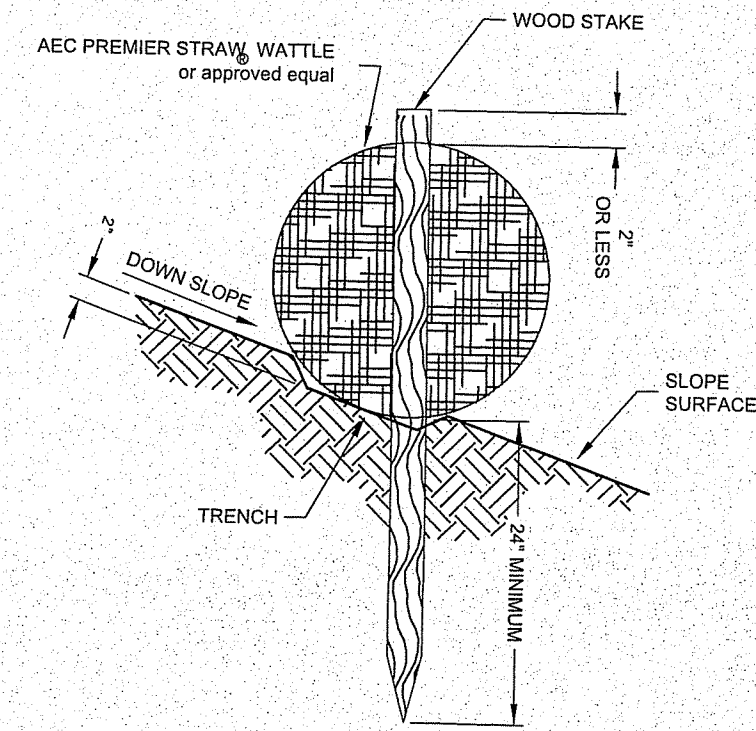


2 CONCRETE PAD No Scale

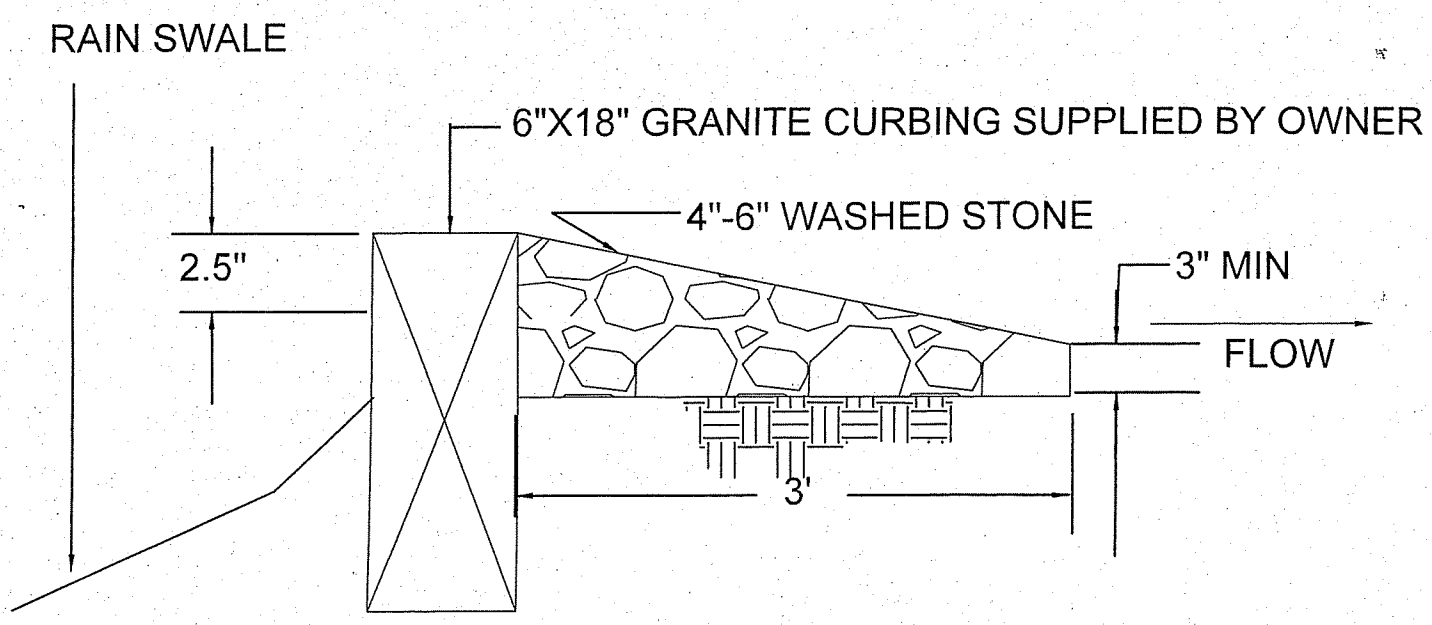


3 ASPHALT PATH ON AGG. BASE No Scale

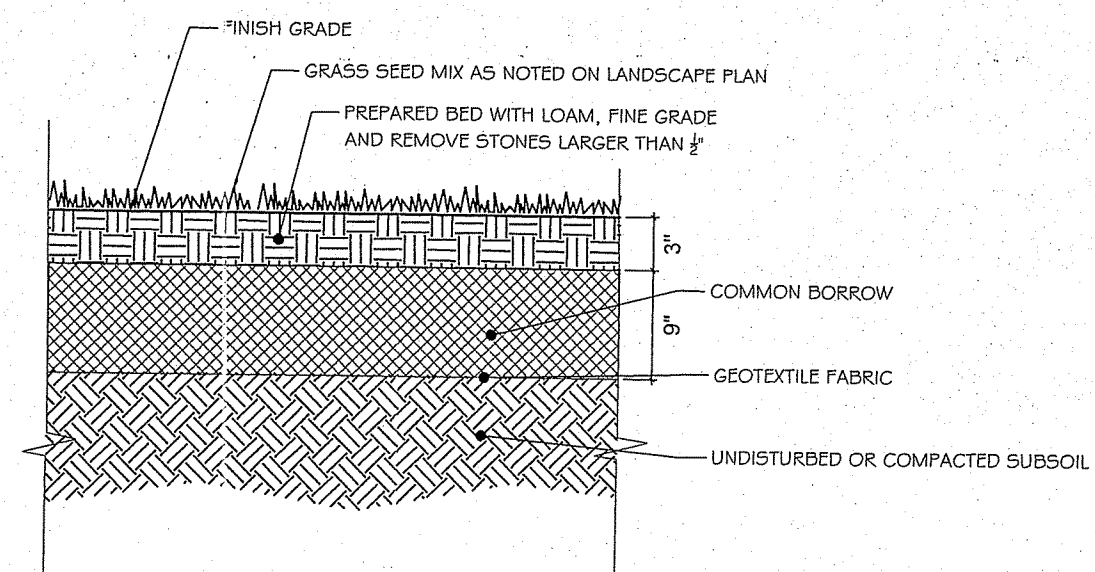
WATTLES ARE INSTALLED PERPENDICULAR TO THE SLOPE OR DIRECTION OF FLOW. WOOD STAKE PLACED WITHIN 2' OF END OF WATTLE, THEN ANOTHER 2' AND THEN CONTINUOUSLY 4' O.C. WHEN JOINING TWO WATTLES, TIGHTLY ABUT BOTH ENDS, TIE THE ENDS TOGETHER USING HEAVY TWINE OR PLASTIC LOCKING TIES. LAST 2' OF WATTLES SHALL BE TURNED UPHILL.



4 STRAW WATTLE NO SCALE



5 TIMBER LEVEL SPREADER No Scale



6 LOAM AND SEED NO SCALE

**FLEXERRA® HP-FGM™ HYDRAULICALLY APPLIED EROSION CONTROL PRODUCT (HECP)**

THIS SECTION SPECIFIES THE HYDRAULICALLY-APPLIED EROSION CONTROL PRODUCT FLEXERRA® High Performance-Flexible Growth Medium™ (HP-FGM™). FLEXERRA HP-FGM is 100% biodegradable, made in the United States and composed of 100% recycled, thermally refined (within a pressurized vessel) virgin wood fibers, oriented interlocking biodegradable fibers, mineral activators, and wetting agents (including high-viscosity colloidal polyacrylamides, cross-linked biopolymers, and water absorbents). The HP-FGM is phytoactivated, free from plastic fillers, requires no curing period and upon application forms an intimate bond with the soil surface to create a continuous, porous, absorbent and flexible erosion resistant blanket that allows for rapid germination and accelerated plant growth. All components of the HP-FGM shall be pre-packaged by the Manufacturer to assure both material performance and compliance with product specifications.

**APPLICATION RATES:** These application rates are for standard conditions. Application rates may need to be increased to accommodate very rough surfaces. For additional details including mixing instructions, application rates for specific machine sizes and visual keys for proper application, please consult Product Application Guide for HP-FGM™ and ET-FGM™.

Slope Gradient / Condition	Rate (lb/ac)	Rate (kg/ha)
< 4H to 1V	2,500	2,800
> 4H to 1V and < 3H to 1V	3,000	3,400
> 3H to 1V and < 2H to 1V	3,500	3,900
> 2H to 1V and < 1H to 1V	4,000	4,500
> 1H to 1V	4,500	5,100
Below EC2 or TRM	1,500	1,700
As Infill for TRM*	3,500	3,900

**INSTALLATION:** Strictly comply with equipment manufacturer's installation instructions and recommendations. Use approved hydroseeding machines with fan-type nozzles (55-degree tip). To achieve optimum soil surface coverage, apply HP-FGM from opposing directions to soil surface. Rough surfaces (rocky terrain, cut tracks and rippled soils) may require higher application rates to achieve 100% cover. Slope Interruption devices or water diversion techniques are recommended when slope lengths (3H:1V) exceed 100 feet (30 m). Slope Interruption devices may need to be decreased based on steeper slopes or other site conditions. HP-FGM is not recommended for channels or areas with concentrated water flow unless used in conjunction with a solid erosion control product designed to accommodate the anticipated hydraulic conditions. Unless approved by the Manufacturer, no chemical additives with the exception of fertilizer, soil neutralizers and biostimulant materials should be added to this product. To ensure proper application rates, measure and stake area. For maximum performance, apply HP-FGM in a two-step process as follows:

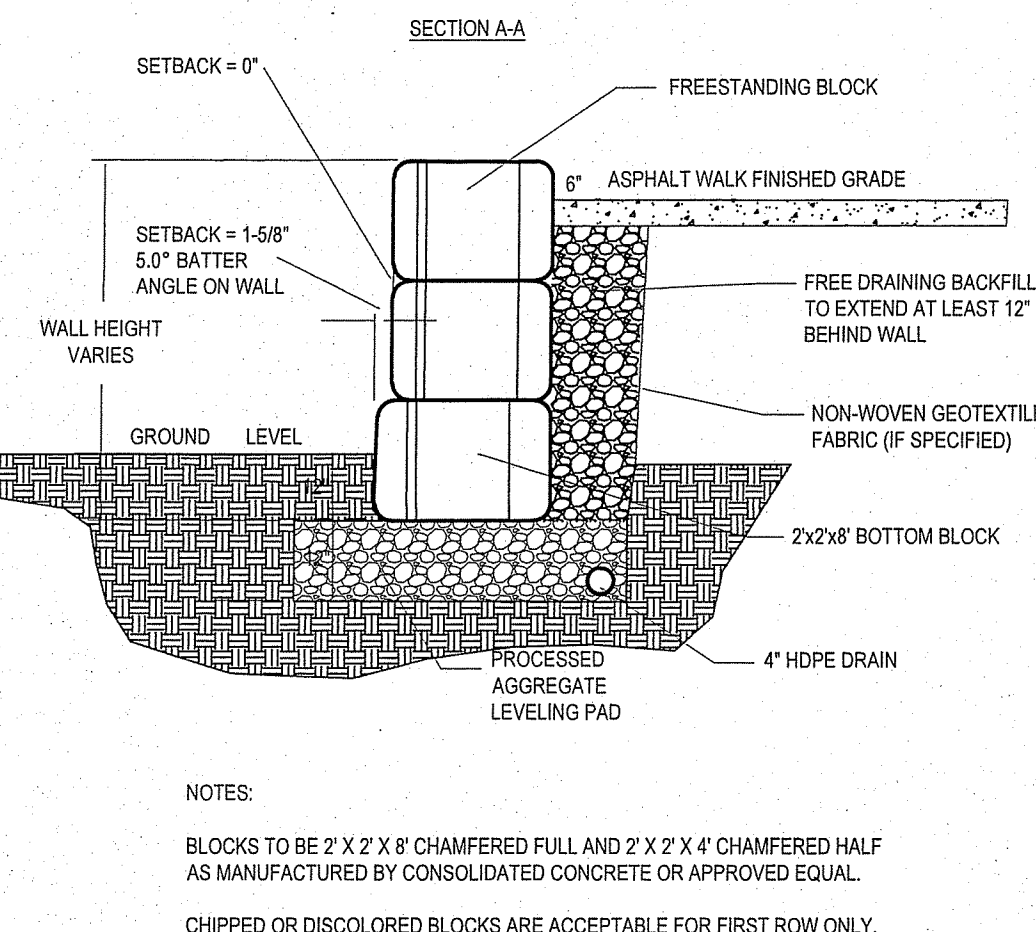
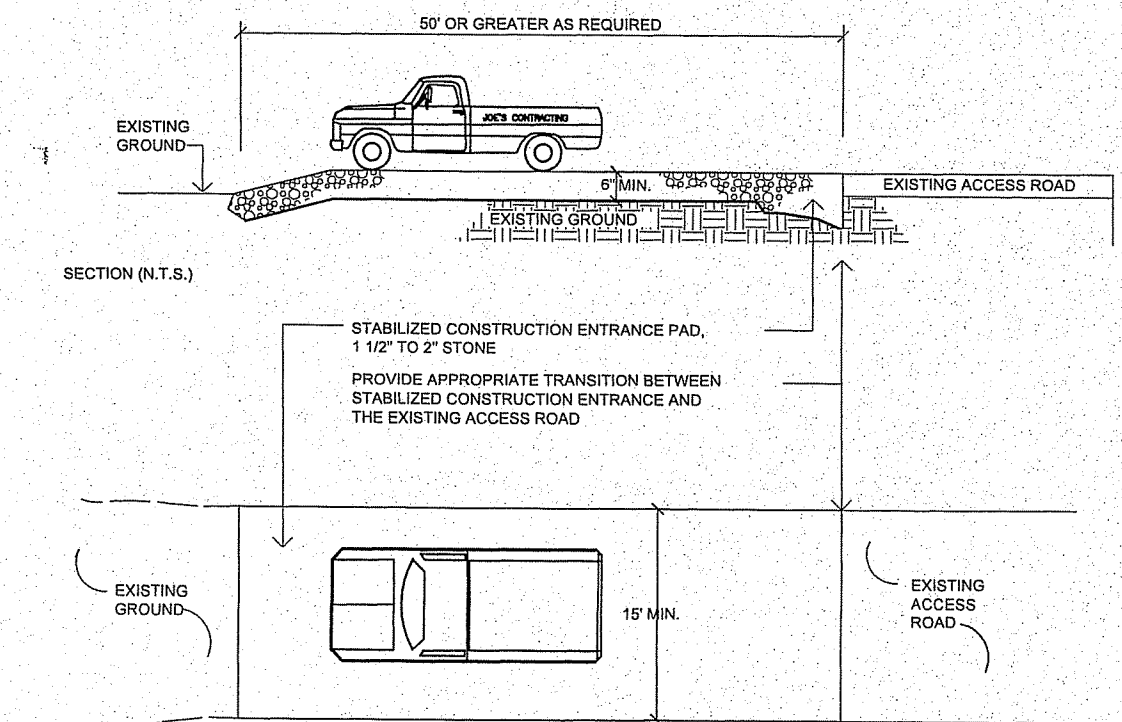
- Step One: Apply fertilizer with specified prescriptive agronomic formulations and typically 50% of specified seed mix with a small amount of HP-FGM for visual metering. Do not leave seeded surfaces unattended, especially if precipitation is imminent.
- Step Two: Mix balance of seed and apply HP-FGM at a rate of 50 lb per 125 gallons (22.7 kg/475 l) of water over freshly seeded surfaces. Confirm seeding rates with equipment manufacturer.

\*Use only approved and tested Futerra® Turf Reinforcement Mats (TRMs) to create the GreenArmor™ System.

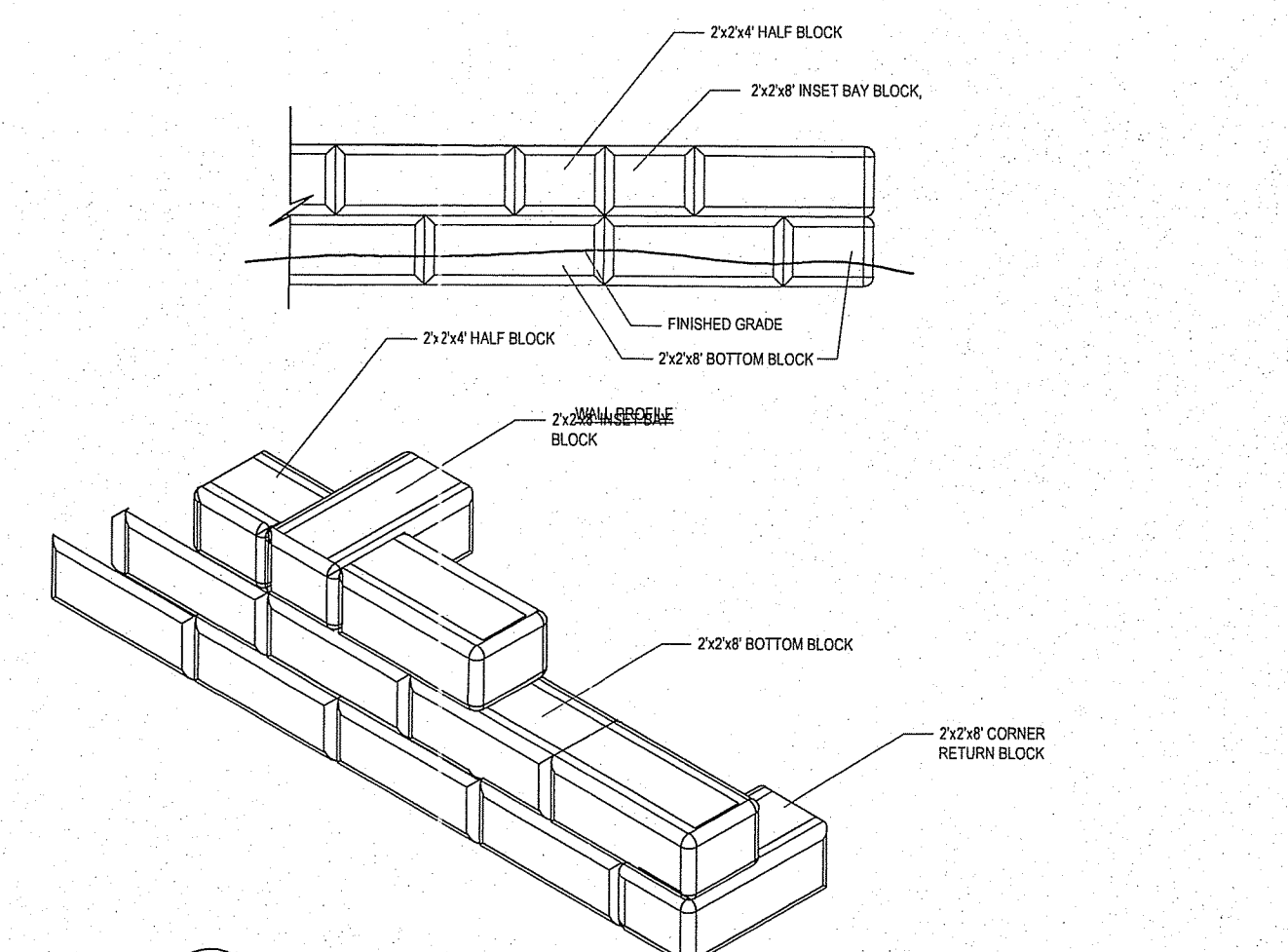
SEE COMPREHENSIVE CSI FORMATTED SPECIFICATION FOR FURTHER DETAILS

FILE NAME: CAD Details Slope - Flexerra HP-FGM.dwg  
 CONTRACT: 800-506-9815 (US) & Canada  
 1-847-215-1144 (International)  
 WEB SITE: www.profitproducts.com  
 DRAWN BY: RPH DATE: 04/7/17 SCALE: NOT TO SCALE  
 CHECKED BY: DATE: SHEET 1 OF 1

7 EROSION CONTROL No Scale



9 BLOCK WALL SECTION No Scale



11 TYPICAL TREE PLANTING No Scale

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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 Nancy L. Freeman

BLANK

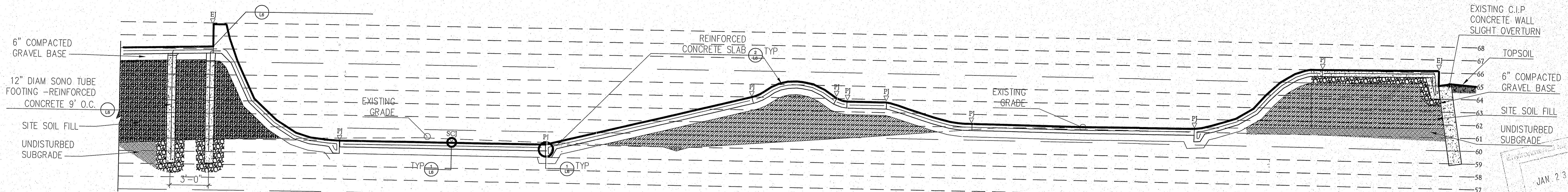
**GARRNER**  
 LANDSCAPE ARCHITECTS LLC

MANTON SKATEPARK  
 Providence, Rhode Island

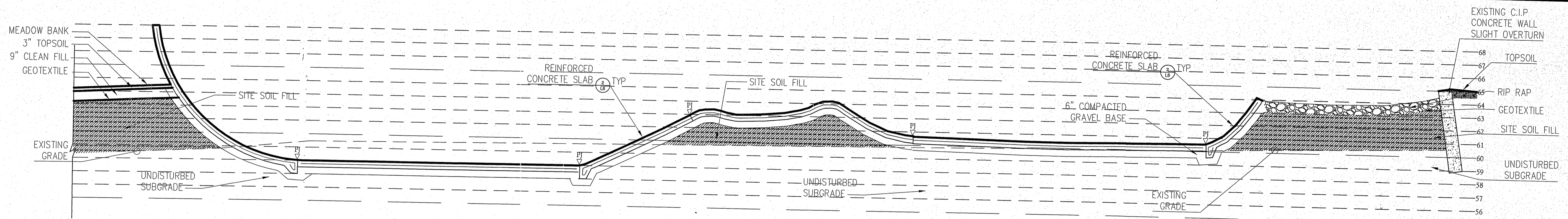
Details  
 Plan

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 CHECKED BY TDG  
 DATE 07.18.19

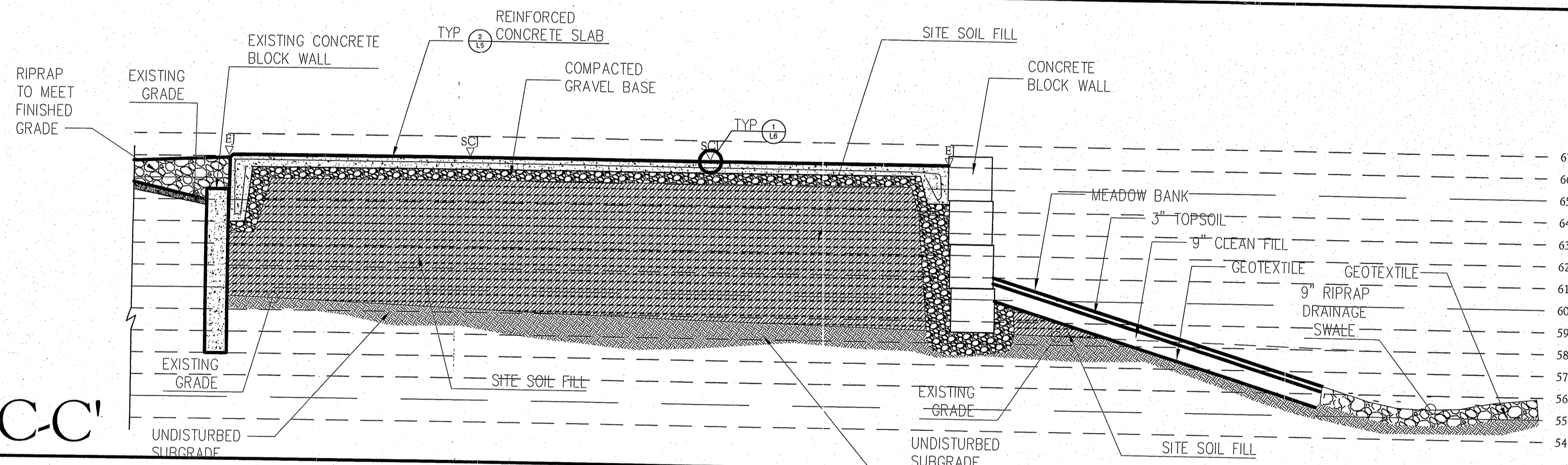
L-6  
 Sheet 7 of 11



SECTION A-A'

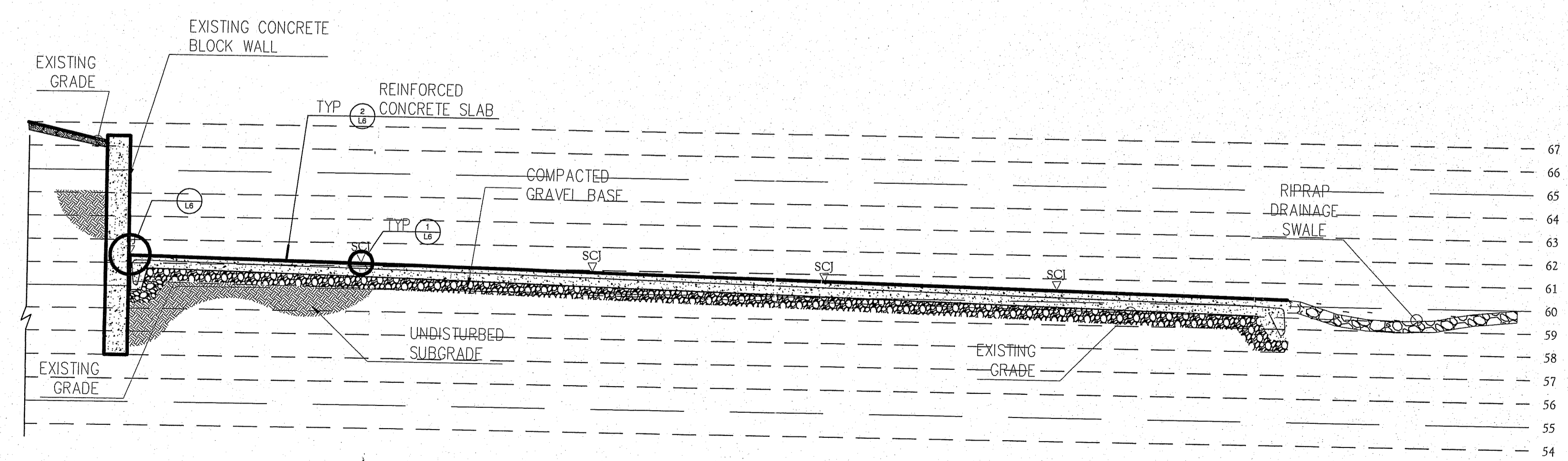


SECTION B-B'



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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 APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Kristy L. Freeman*

SECTION C-C'



SECTION D-D'

- GENERAL LEGEND SECTIONS
- ⊕ EXPANSION JOINT
  - ⊕ DETAIL/SHEET NUMBER
  - ⊕ SAWCUT CONTROL JOINT
  - EXISTING GRADE
  - ⊕ PIN JOINT
  - REBAR
  - ⊕ CONCRETE
  - ←-2% SLOPE PERCENT PITCH
  - ⊕ COMPACTED GRAVEL
  - ⊕ UNDISTURBED SUBGRADE
  - ⊕ RECYCLED ASPHALT
  - ⊕ TOPSOIL



NO.	REVISIONS	BY	DATE

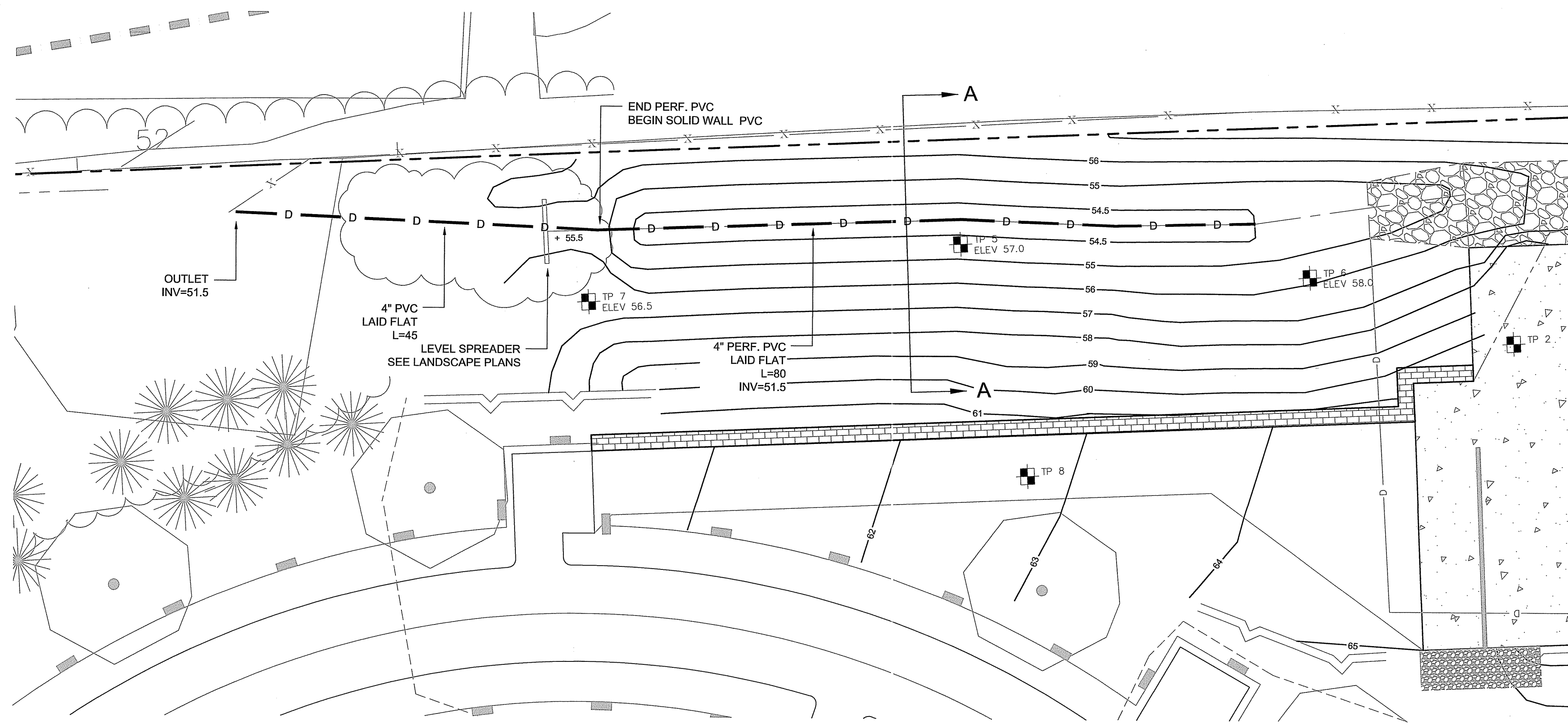
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Skate Sections

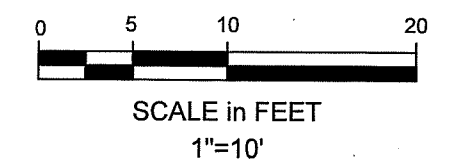
MANTON SKATEPARK  
 Providence, Rhode Island

DESIGNED BY	DWG SCALE	CONTRACT NO	DATE
TDG	1/4" = 1'-0"		08.29.19
DRAWN BY			
TDG			
CHECKED BY			
TDG			

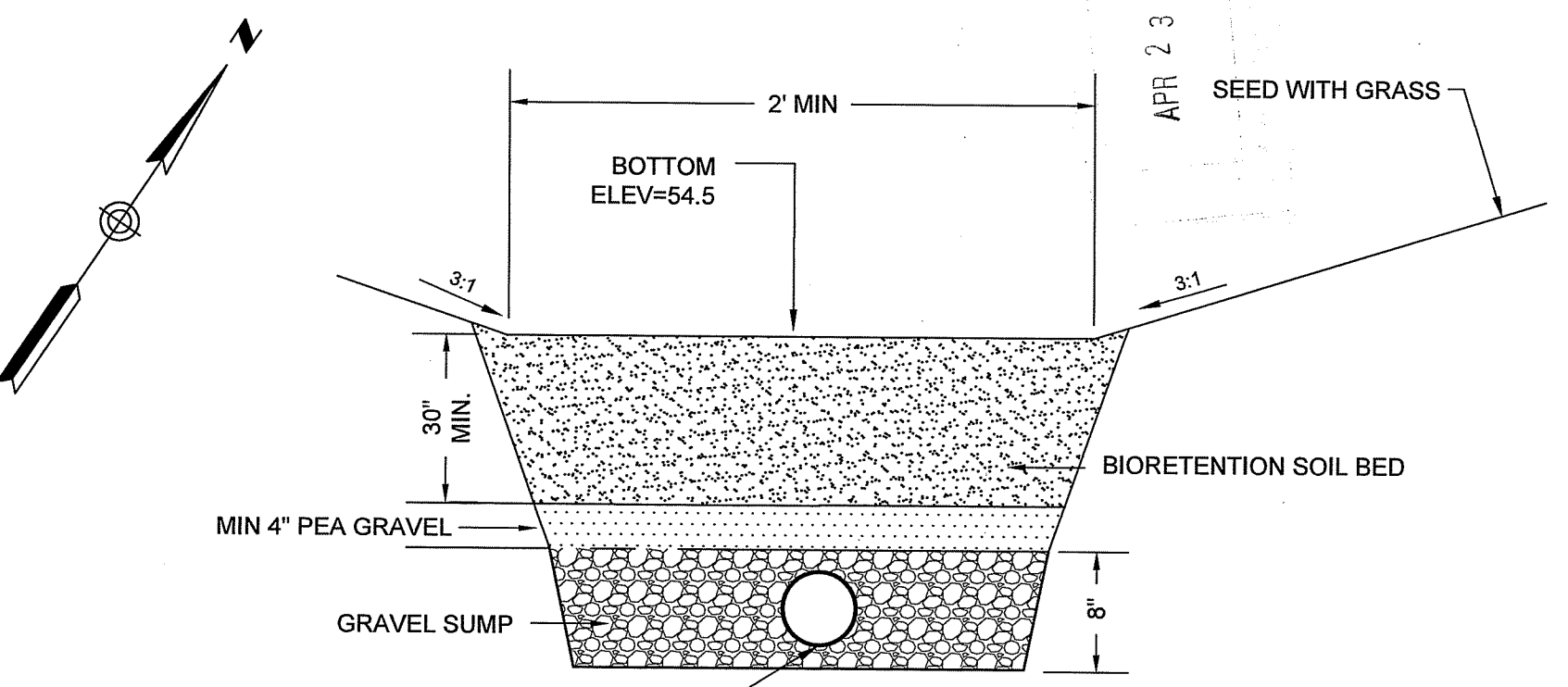
L-7  
 Sheet 8 of 11



PLAN  
1" = 10'



1 DRY SWALE DETAIL  
SCALE AS SHOWN



SECTION A-A  
NOT TO SCALE

Per R.I.D.E.M.  
No Greater Than

- NOTES:
- THE BIORETENTION SOIL MIX SHALL CONSIST OF 20% TO 30% BY VOLUME TOPSOIL, 30% TO 40% COMPOST AND 40% GRAVELLY COARSE SAND MEETING THE FOLLOWING:
 

SIEVE	% PASSING BY WEIGHT
2-INCH	100
3/4-INCH	70-100
1/4-INCH	50-80
U.S.No. 40	15-40
U.S.No. 200	0-3
  - NO HEAVY EQUIPMENT MACHINERY SHALL COMPACT THE SOILS OF THE SOIL FILTER AREA BY DRIVING OVER. ROPE OFF OR PLACE CONSTRUCTION PLASTIC FENCING AROUND THE DESIGNATED RAIN GARDEN AREA.
  - EXCAVATION SHOULD BE PERFORMED WITH MACHINERY SITUATED ON THE SIDE AND OUT OF THE EXCAVATION AREA. MACHINERY SHOULD NOT BE ALLOWED TO COMPACT THE SUBSURFACE SOILS OF THE EXCAVATION. IF MACHINERY MUST OPERATE IN THE SWALE AREA USE SMALLER SIZED EXCAVATION EQUIPMENT.

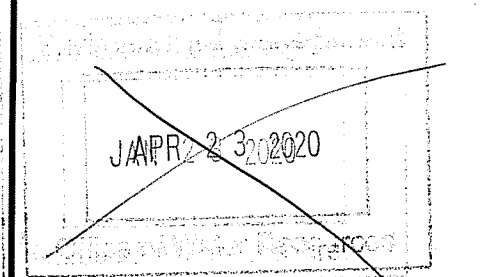
SWALE STORAGE CALCULATIONS:

Contour	Area (sf)	Incr. Vol (cf)	Cum. Vol (cf)
54.5	309		
55.0	977	322	322
55.5	1,300	569	891

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*Nancy L. Freeman*

MANTON AVENUE  
SKATE PARK  
PROVIDENCE, RI

CITY OF PROVIDENCE  
DEPARTMENT OF PLANNING  
AND DEVELOPMENT  
444 WESTMINSTER STREET  
PROVIDENCE, RI



OCG

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Newburyport, MA 01950  
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DRAINAGE SWALE  
DETAIL

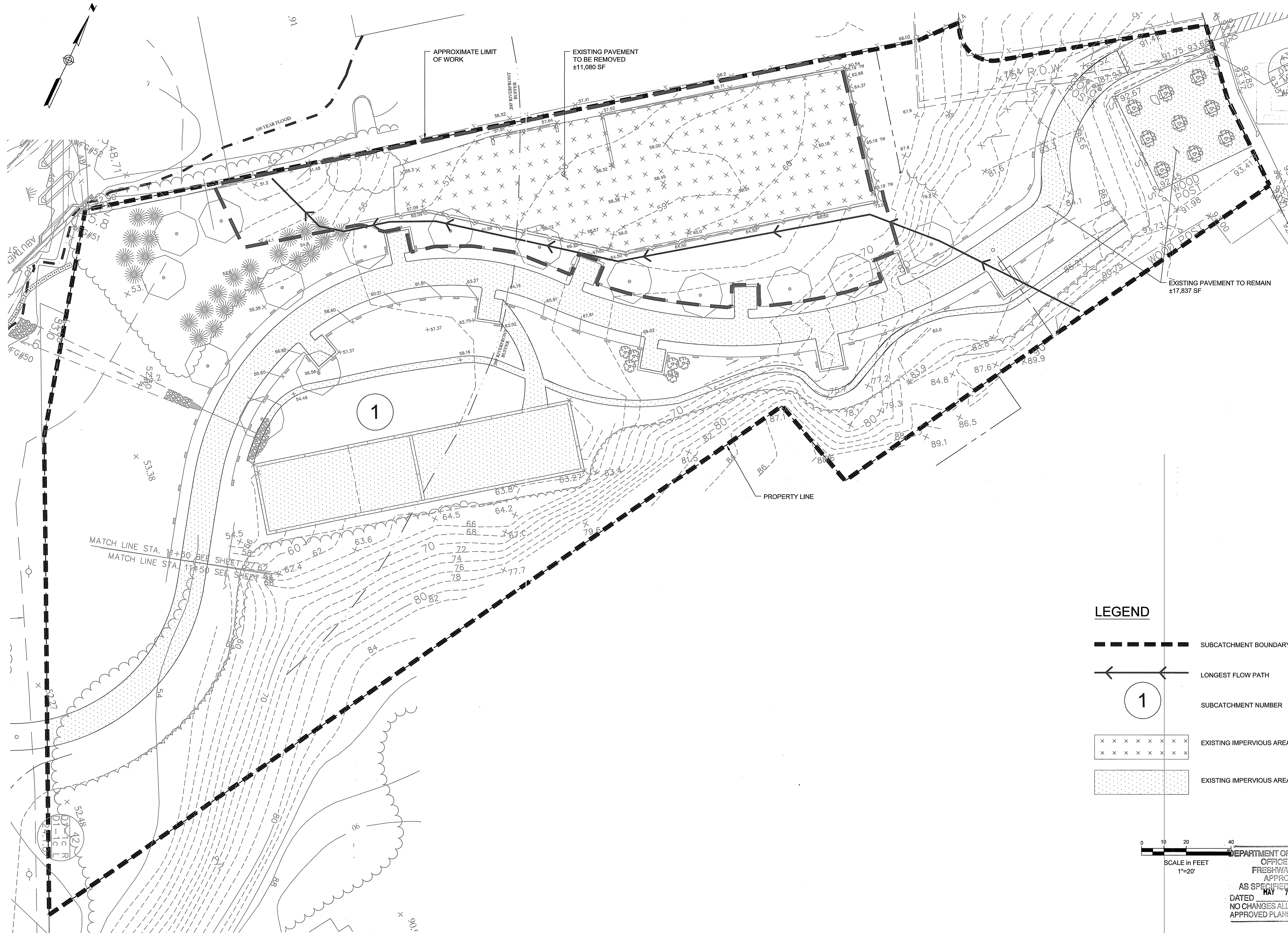
No.	Revision/Issue	Date

Design by:	PFA	Checked by:	
Drawn by:	PFA	Approved by:	
Project:	19009	Date:	MARCH 18, 2020
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**LEGEND**

- SUBCATCHMENT BOUNDARY
- LONGEST FLOW PATH
- SUBCATCHMENT NUMBER
- EXISTING IMPERVIOUS AREA TO BE REMOVED
- EXISTING IMPERVIOUS AREA TO REMAIN



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
MAY 7 2020 FILE # 20-0038  
DATED  
NO CHANGES ALLOWED WITHOUT SPECIFIC APPROVAL  
APPROVED PLANS MUST BE AT CITY TOWN OFFICE

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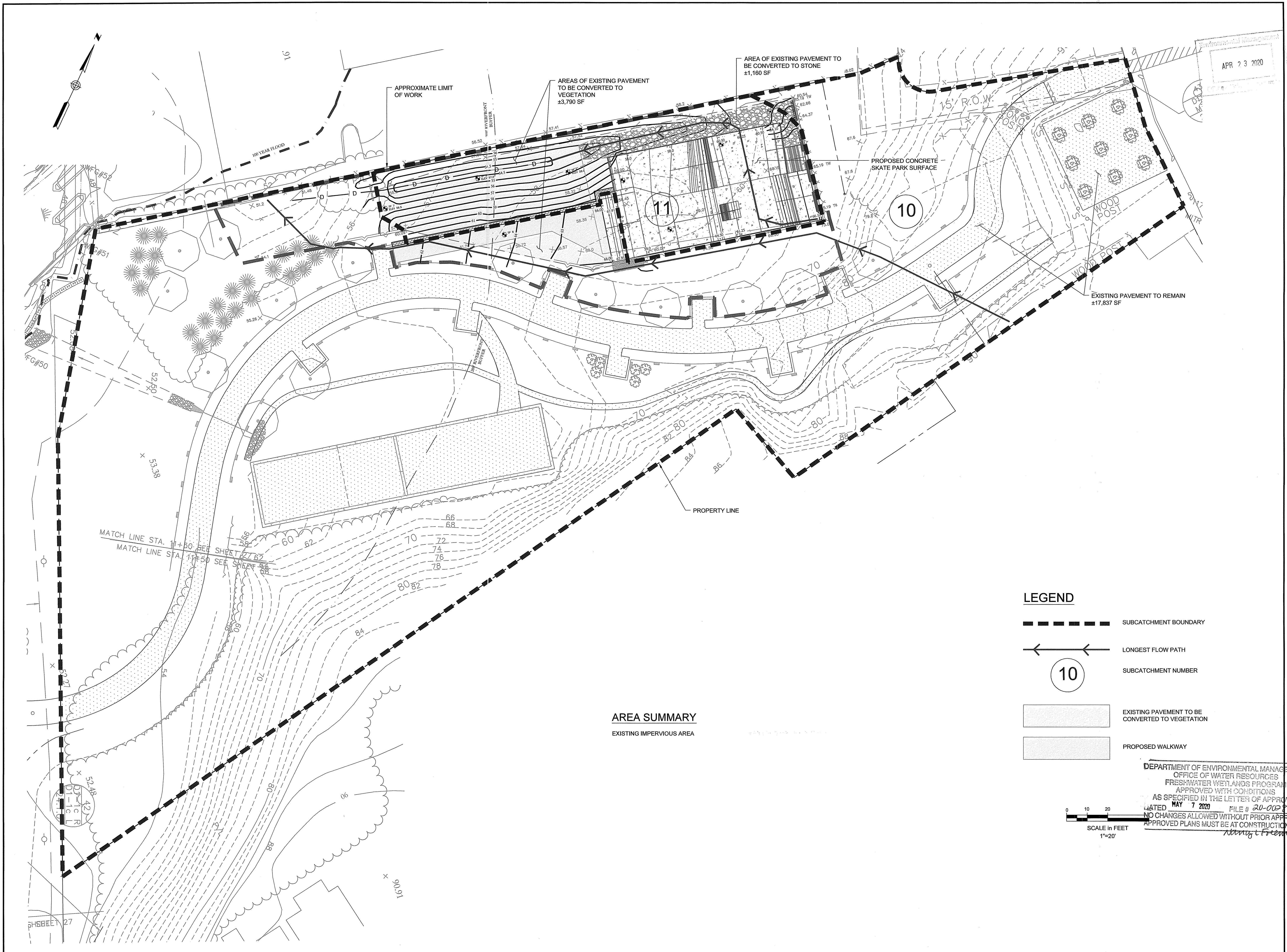
**PRE-DEVELOPMENT  
SUBCATCHMENT PLAN**

No.	Revision/Issue	Date

Design by: PFA  
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Approved by:

Project: 19009  
Date: MARCH 18, 2020

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POST-DEVELOPMENT  
SUBCATCHMENT PLAN

No.	Revision/Issue	Date

Design by: PFA	Checked by:
Drawn by: PFA	Approved by:
Project: 19009	Date: MARCH 18, 2020

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