# BUTTONWOOD COMMUNITY CENTER

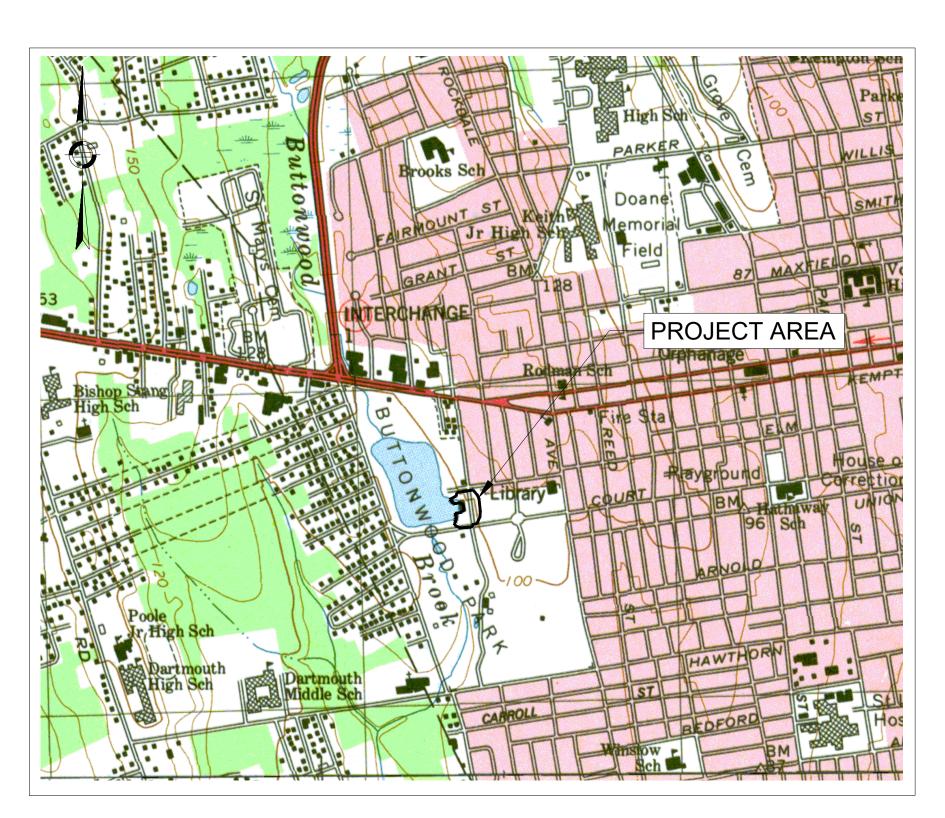
# CITY OF NEW BEDFORD 1 ONEIDA STREET NEW BEDFORD, MA

# NOI SUBMISSION

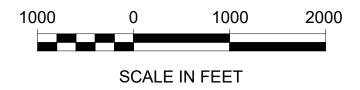
**JUNE 24, 2021** 

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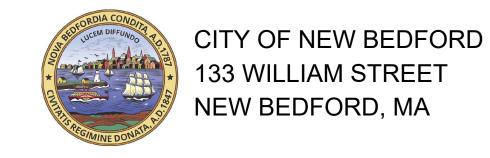
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# **LOCATION PLAN**



## **CLIENT:**



## **CIVIL ENGINEER:**



GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS
239 LITTLETON RD, WESTFORD, MA
(978) 923-0400

# **GEOTECHNICAL ENGINEER:**



GEI CONSULTANTS 400 UNICORN PARK DR., WOBURN, MA (781) 721-4000



#### **GENERAL CONSTRUCTION REQUIREMENTS**

- ALL CONSTRUCTION DEBRIS SHALL BE DISPOSED OF OFF SITE.
- CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL. DUST CONTROL SHALL INCLUDE THE WATERING OF UNPAVED ROAD SURFACES AND STREET SWEEPING OF PAVED SURFACES. STREET SWEEPING SHALL OCCUR ON THE PAVED SURFACES WITHIN THE SITE AND OFF THE SITE WHERE VEHICLE TRACKING OF SEDIMENTS HAS OCCURRED.
- 3. DURING CONSTRUCTION, TRENCHES ARE NOT TO BE LEFT IN A CONDITION THAT WOULD DIRECT RUNOFF AROUND TREATMENT AND DETENTION FACILITIES.
- 4. ALL SITE WORK SHOULD BE SECURED AT THE END OF THE WORK DAY TO REDUCE EROSION AND SEDIMENT PROBLEMS. THIS INCLUDES AS APPLICABLE, COVERING STOCKPILES OF SEDIMENT, INSTALLING TEMPORARY VEGETATION OR BY USING GEOTEXTILES TO COVER DISTURBED AREAS WITH STEEPER SLOPES.
- 5. DEWATERING OPERATION SHALL COMPLY WITH THE REQUIREMENTS OF THE U.S. EPA NPDES PHASE I CONSTRUCTION ACTIVITY GENERAL PERMIT FOR CONSTRUCTION SITES THAT ARE GREATER THAN 1 ACRE.
- 6. CONTRACTOR IS RESPONSIBLE FOR RESTORING SITE TO WORKING CONDITION UPON COMPLETION OF CONSTRUCTION.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY CONSTRUCTION PERMITS FOR THIS PROJECT.

#### PRE-CONSTRUCTION

- 1. PRIOR TO CONSTRUCTION, CONSTRUCTION FENCE OR OTHER SUITABLE FORM OF DEMARCATION SHALL BE INSTALLED AT THE LIMITS OF THE AREAS TO BE
- 2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL DESIGNATE A STAGING AREA FOR STORAGE OF CONSTRUCTION EQUIPMENT AND MATERIALS.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DEVELOP A CONSTRUCTION PHASING PLAN AND THAT EROSION CONTROL MEASURES ARE INSTALLED AND MAINTAINED.

#### SITE PREPARATION

- 1. EXCESS MATERIAL SHALL BE STOCKPILED AT A PROPER UPLAND LOCATION. STOCKPILES ARE TO BE PROPERLY SECURED TO PREVENT EROSION AND SEDIMENT RUNOFF. THIS MAY INCLUDE COVERING THE STOCKPILE OR PROVIDING ADDITIONAL HAYBALE AND SILT FENCING AROUND THE STOCKPILE.
- 2. STOCKPILES SHALL NOT BE SITED AT OR NEAR CRITICAL LOCATIONS SUCH AS DRAINAGE INLET STRUCTURES.
- 3. STOCKPILES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH GOOD ENGINEERING PRACTICE AND PERIODIC INSPECTIONS SHALL BE PERFORMED FOR SLOPE STABILITY.
- 4. THE CONTRACTOR SHOULD PHASE THE CONSTRUCTION TO MINIMIZE THE AMOUNT OF DISTURBED AREA EXPOSED.
- 5. A TEMPORARY BITUMINOUS CONCRETE BERM/LIP SHALL BE INSTALLED ALONG THE EDGE OF PAVEMENT AT THE TIME THE BINDER COURSE IS CONSTRUCTED TO COLLECT STORM WATER RUNOFF UNTIL THE CURBING IS INSTALLED.
- 6. EROSION CONTROL MEASURES ARE TO REMAIN IN PLACE UNTIL THE SITE HAS BEEN STABILIZED.
- 7. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ON THIS PLAN SHALL BE CONSIDERED APPROXIMATE. THEREFORE, PRIOR TO THE START OF ANY WORK ON THE SITE, THE CONTRACTOR SHALL VERIFY THE ACTUAL LOCATION OF ALL UTILITIES, SHOWN OR NOT SHOWN ON THIS PLAN. CONTACT DIG-SAFE AT 1-888-344-7233 (1-888-DIG-SAFE) AT LEAST 72 HOURS PRIOR TO THE START OF EXCAVATION.
- 8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES AND PROCEDURES: AND FOR THE SAFETY PRECAUTIONS AND PROGRAMS REQUIRED FOR THE WORK UNDER THIS CONTRACT. THE CONTRACT DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY AND THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING ALL SAFETY BARRIERS. WARNING FLASHERS, AND THE LIKE AS REQUIRED FOR THE PROTECTION OF WORKERS AND THE PUBLIC. COMPLY WITH OSHA REQUIREMENTS.
- 9. REMNANTS OF PREVIOUS BUILDING FOUNDATION, UTILITY STRUCTURES AND UNDERGROUND UTILITIES MAY BE ENCOUNTERED DURING EXCAVATION AND SHALL BE REMOVED AND DISPOSED LEGALLY OFF SITE.
- 10. ALL TREES WITHIN THE LOW, UNLESS OTHERWISE NOTED, SHALL BE PROTECTED AND RETAINED.

#### **EROSION AND SEDIMENT CONTROLS**

- 1. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING EROSION AND SEDIMENT DURING THE CONSTRUCTION PROCESS. SITE SPECIFIC CONDITIONS MAY REQUIRE MODIFICATIONS IN THE FIELD, BUT THE CONTRACTOR MUST ENSURE THAT THE PROJECT SPECIFICATIONS THAT ARE DEVELOPED IN THE FIELD MEET THE MINIMUM REQUIREMENTS OF THE PLAN.
- 2. IN ORDER TO MINIMIZE EROSION AND SEDIMENT RUNOFF FROM THE SITE, THE CONTRACTOR SHOULD MAINTAIN EXISTING VEGETATION WHERE POSSIBLE AND STABILIZE THE DISTURBED PORTIONS OF THE SITE AS QUICKLY AS POSSIBLE. THIS MAY INCLUDE PHASING THE PROJECT AS NEEDED TO MINIMIZE THE SIZE OF THE DISTURBED AREAS ON THE SITE.
- 3. THE CONTRACTOR MUST ALSO ANTICIPATE INCREASED RUNOFF FROM STEEPER SLOPES AND DURING HIGH GROUNDWATER CONDITIONS. THIS MAY OCCUR DURING THE WET SEASON (TYPICALLY MARCH THROUGH APRIL) OR AFTER SIGNIFICANT PRECIPITATION EVENTS.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF SILT FENCES. DRAINAGE SWALES, EARTH DIKES, TEMPORARY SETTLING BASINS, CHECK DAMS AND TEMPORARY OR PERMANENT SEDIMENT BASINS. THESE PRACTICES DIVERT FLOWS FROM EXPOSED SOILS, LIMIT RUNOFF AND THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE TO THE DEGREE ATTAINABLE.
- 5. ALL DISTURBED SURFACES SHALL BE STABILIZED WITHIN 14 DAYS AFTER CONSTRUCTION IN ANY PORTION OF THE SITE THAT HAS BEEN COMPLETED OR WHERE CONSTRUCTION HAS TEMPORARILY CEASED.
- 6. THE CONTRACTOR SHALL, AT ALL TIMES, HAVE A STOCKPILE OF STRAW WATTLES, SILT FENCE AND CATCH BASIN FILTER BAGS ADEQUATE TO REINFORCE/REPLACE EROSION AND SEDIMENT CONTROLS AS NEEDED.
- 7. THE CONTRACTOR SHALL MAINTAIN EROSION CONTROL MEASURES AT ALL TIMES UNTIL ALL EARTHWORK OPERATIONS ARE COMPLETE AND ALL AREAS ARE STABILIZED TO PREVENT THE MOVEMENT OF SOIL, SILT, SEDIMENT, AND DEBRIS INTO THE DRAINAGE SYSTEM ON AND NEAR THE SITE. THE CONTRACTOR SHALL REMOVE ALL EROSION CONTROL DEVICES UPON COMPLETION AND ACCEPTANCE OF THE WORK.
- 8. ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY OR FINAL STABILIZATION WITHIN 14 DAYS OF THE INITIAL DISTURBANCE. AFTER THIS TIME, ANY DISTURBANCE IN THE AREA MUST BE STABILIZED AT THE END OF EACH WORK DAY. THE FOLLOWING EXCEPTIONS APPLY:
  - a. STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE IN THE AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS.
  - STABILIZATION IS NOT REQUIRED IF THE WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION WITH A DEPTH OF 2 FEET OR GREATER

## SITE LAYOUT NOTES

- 1. PLACE BINDER COURSE ON PARKING AREAS PRIOR TO ADJUSTING CATCH BASIN GRATES AND MANHOLE COVERS TO FINISHED GRADE.
- 2. ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS AND SITE CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND RESOLUTION PRIOR TO BIDDING OR CONSTRUCTION.
- 3. ACCESSIBLE CURB RAMPS SHALL BE PER THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD (MAAB) AND THE AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBLILITY GUIDELINES, WHICHEVER IS MORE STRINGENT.

## SITE GRADING NOTES:

- 1. THE CONSTRUCTION MANAGER SHALL VERIFY ALL GRADES AND EXISTING CONDITIONS, AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE.
- 2. GRADE DISTURBED AREAS. PROPOSED GRADING SHALL MATCH EXISTING GRADES AT THE LIMIT OF WORK. WHERE PROPOSED GRADES MEET EXISTING GRADES, CONTRACTOR SHALL BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK. PONDING AT TRANSITION AREAS WILL NOT BE ALLOWED.
- 3. GRADE ALL AREAS TO PROVIDE POSITIVE DRAINAGE TO EXISTING CATCH BASINS.
- 4. PROPOSED WALKWAYS SHALL BE CONSTRUCTED WITH A CROSS SLOPE OF NO MORE THAN 1.5% AND A LONGITUDINAL SLOPE OF NO MORE
- 5. LANDINGS AT BUILDING ENTRANCES AND AT ENDS OF RAMPS SHALL BE CONSTRUCTED WITH SLOPES NO MORE THAN 1.5% IN ANY DIRECTION.
- 6. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS AND STRUCTURES.
- 7. CONTRACTOR SHALL ADJUST UTILITY ELEMENTS MEANT TO BE FLUSH WITH GRADE (I.E. UTILITY MANHOLES, CATCH BASINS, ETC.) THAT ARE AFFECTED BY SITE WORK OR GRADE CHANGES, WHETHER SPECIFICALLY NOTED ON PLANS OR NOT.
- 8. FINE GRADE AND COMPACT EXISTING SUBBASE FOR AREAS OUTSIDE FULL DEPTH REPLACEMENT AND PROOF ROLL SUBBASE PRIOR TO BINDER PLACEMENT.
- 9. ANY STONES OVER 4-INCHES THAT ARE OBSERVED WITHIN THE EXISTING SUBBASE TO REMAIN WILL BE REMOVED AND REPLACED WITH GRAVEL SUBBASE.
- 10. ALL AREAS DISTURBED WITHIN THE LIMIT OF WORK WILL BE RESTORED TO EXISTING CONDITIONS OR BETTER.

#### UTILITY NOTES

- 1. UTILITY WORK WITHIN THE ZONE 10 FT OUTSIDE OF FOUNDATION WALL OF THE BUILDING SHALL CONFORM TO EFFECTIVE BUILDING CODE REQUIREMENTS, CITY OF NEW BEDFORD REQUIREMENTS AND THE MECHANICAL, ELECTRICAL AND PLUMBING SPECIFICATIONS.
- 2. ALL UNDERGROUND UTILITIES AS SHOWN WERE COMPILED USING FIELD SURVEY INFORMATION AND THE AVAILABLE RECORD PLANS PREPARED BY THE CITY OF NEW BEDFORD.
- 3. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE MUST BE NOTIFIED, INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN, (SEE CHAPTER 370, ACTS OF 1963, MASSACHUSETTS) PRIOR TO DESIGNING, EXCAVATING, BLASTING. INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORING OR REPAVING.
- 4. THE LOCATION OF EXISTING PIPES OR OTHER UNDERGROUND STRUCTURES ARE NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL UNDERGROUND PIPES OR STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL CALL "DIG SAFE" (1-888-344-7233) 72 HOURS (EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS) PRIOR TO ANY EXCAVATION TO OBTAIN ACCURATE UTILITY LOCATIONS.
- 5. SUBSURFACE UTILITY LOCATIONS HAVE BEEN PLOTTED TO MEET UTILITY QUALITY LEVEL "C" AS DESCRIBED IN ASCE STANDARD 38-02 AND SUMMARIZED BELOW. THE UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS BASED ON ABOVE-GROUND FIELD OBSERVATION AND EXISTING RECORD INFORMATION RECEIVED FROM UTILITY STAKE-HOLDERS.

INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D INFORMATION.

- 6. INVERTS SHOWN ON PLAN ARE NOT GUARANTEED TO BE ACCURATE. DUE TO THE LIMITATIONS OF FIELD OBSERVATION AND SURVEY TECHNIQUES, THE INVERTS ARE SHOWN AS APPROXIMATE ONLY AND SHALL NOT BE WARRANTED TO BE CORRECT ADDITIONAL FIELD INVESTIGATION IS NECESSARY WHERE ACCURATE MEASUREMENTS ARE REQUIRED FOR DESIGN OF CRITICAL AREAS.
- 7. THE EXISTING SITE CONDITIONS PLAN IS TO BE USED FOR THE SPECIFIED PROJECT ONLY AND IS NOT WARRANTED TO BE COMPLETE FOR ANY OTHER FUTURE PROJECTS.
- 8. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE OWNER'S REPRESENTATIVE FOR RESOLUTION OF THE CONFLICT
- 9. THE CONTRACTOR SHALL ALTER THE MASONRY OF THE TOP SECTION OF ALL EXISTING DRAINAGE STRUCTURES AS NECESSARY FOR CHANGES IN GRADE, AND RESET ALL WATER AND DRAINAGE FRAMES, GRATES, AND BOXES TO THE PROPOSED FINISH SURFACE GRADE.
- 10. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF ALL GAS, ELECTRIC, TELEPHONE, AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
- 11. AREA OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION. AT THE CONTRACTOR'S EXPENSE.



Civil and Structural Engineers 239 Littleton Rd, Suite 3 Westford, Massachusetts GreenIntl.com (978) 923-0400

Client:



CITY OF NEW BEDFORD 133 WILLIAM ST NEW BEDFORD **MASSACHUSETTS** 

Project Title:

**BUTTONWOOD PARK** COMMUNITY CENTER SITE IMPROVEMENTS

NOI SUBMISSION

Project Location:

1 ONEIDA ST. NEW BEDFORD, MA

Stamp:



No.	Date	Revision

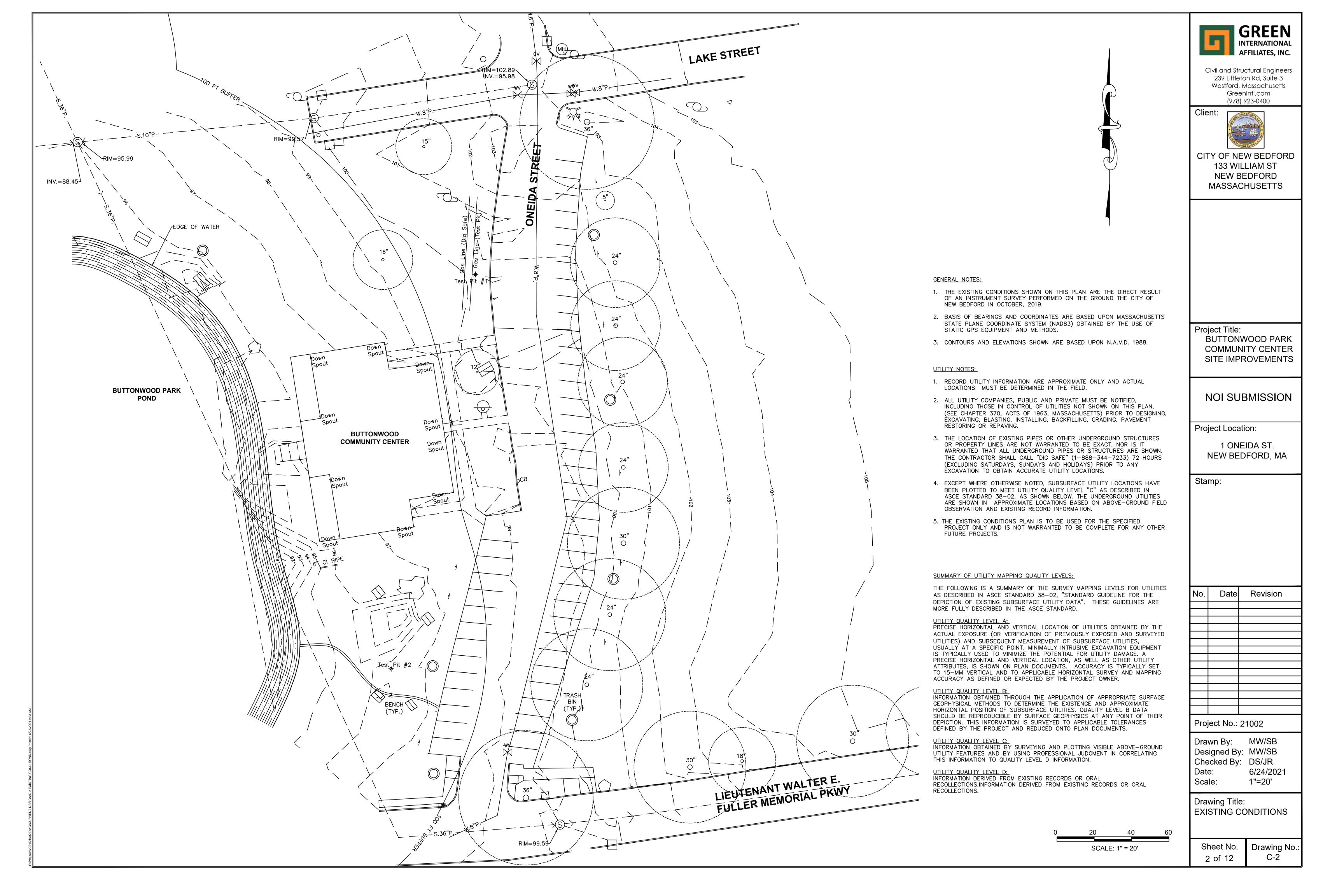
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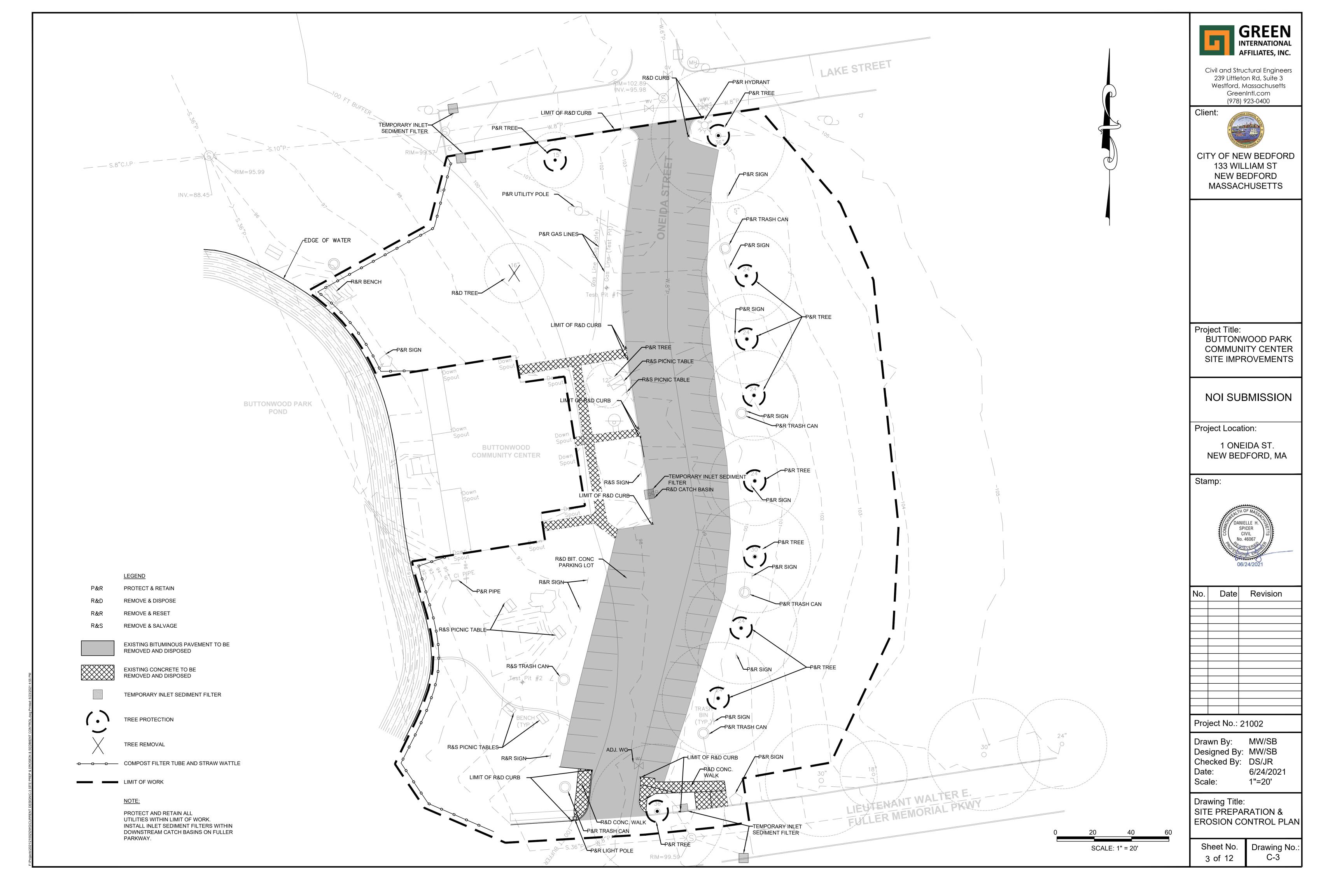
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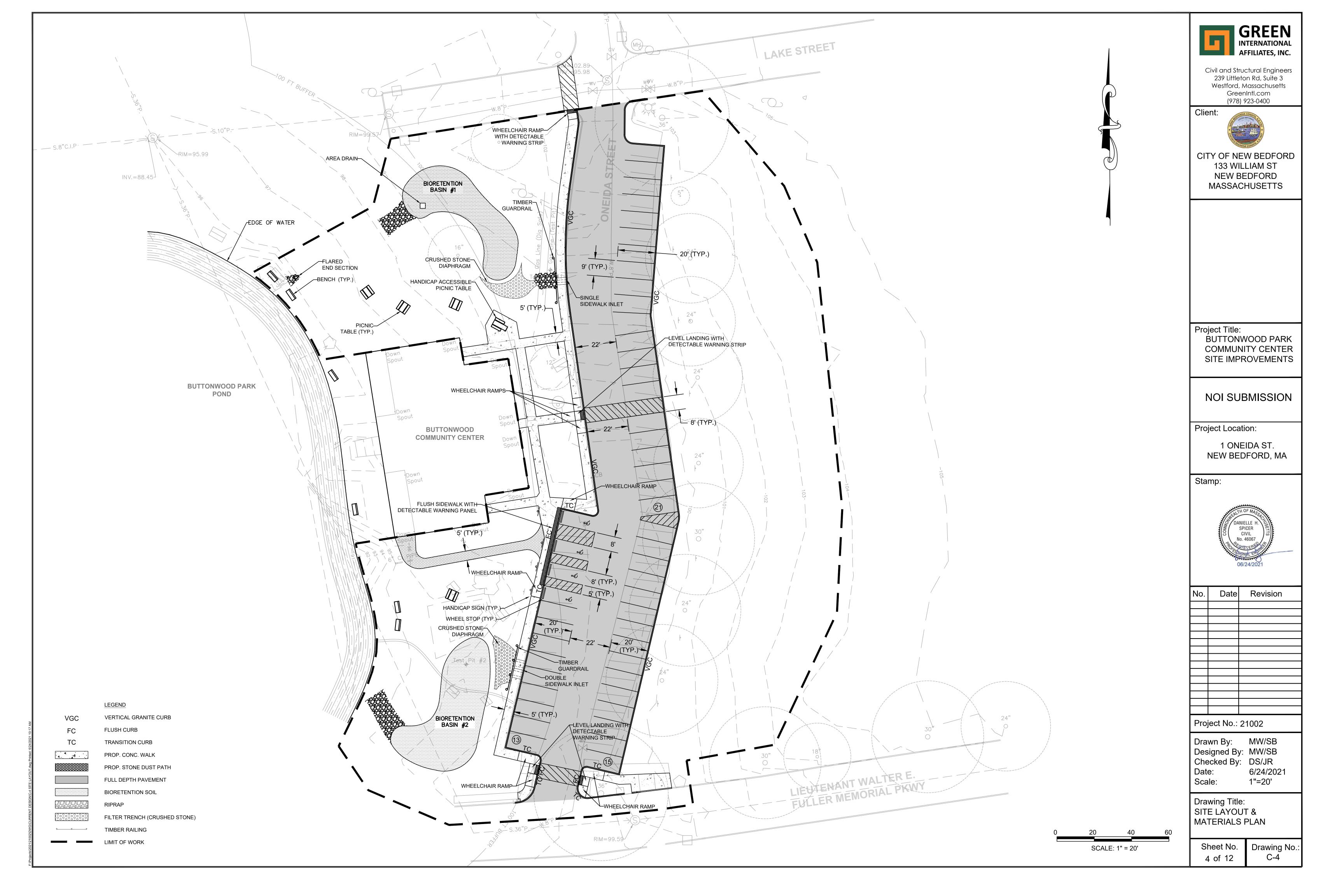
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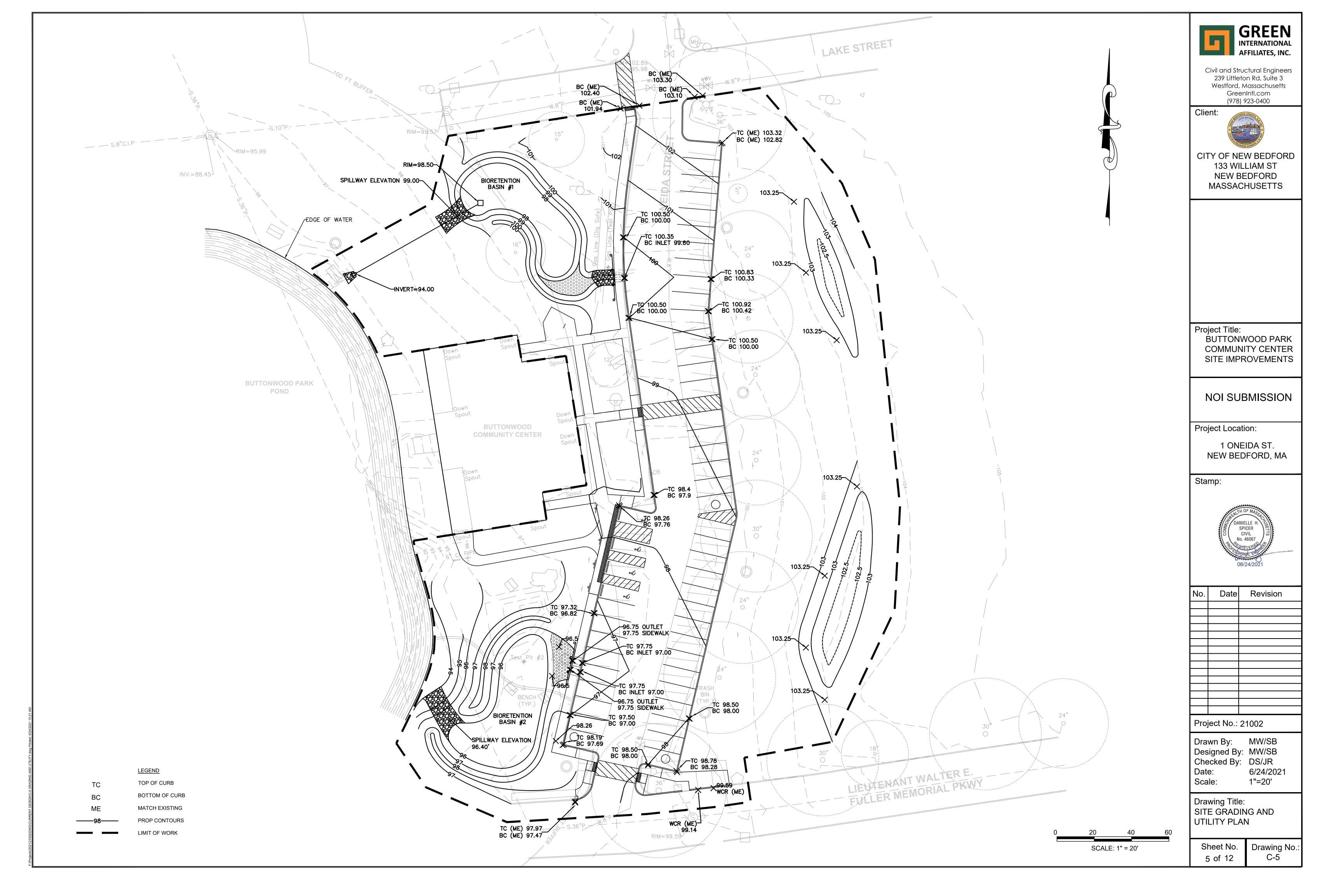
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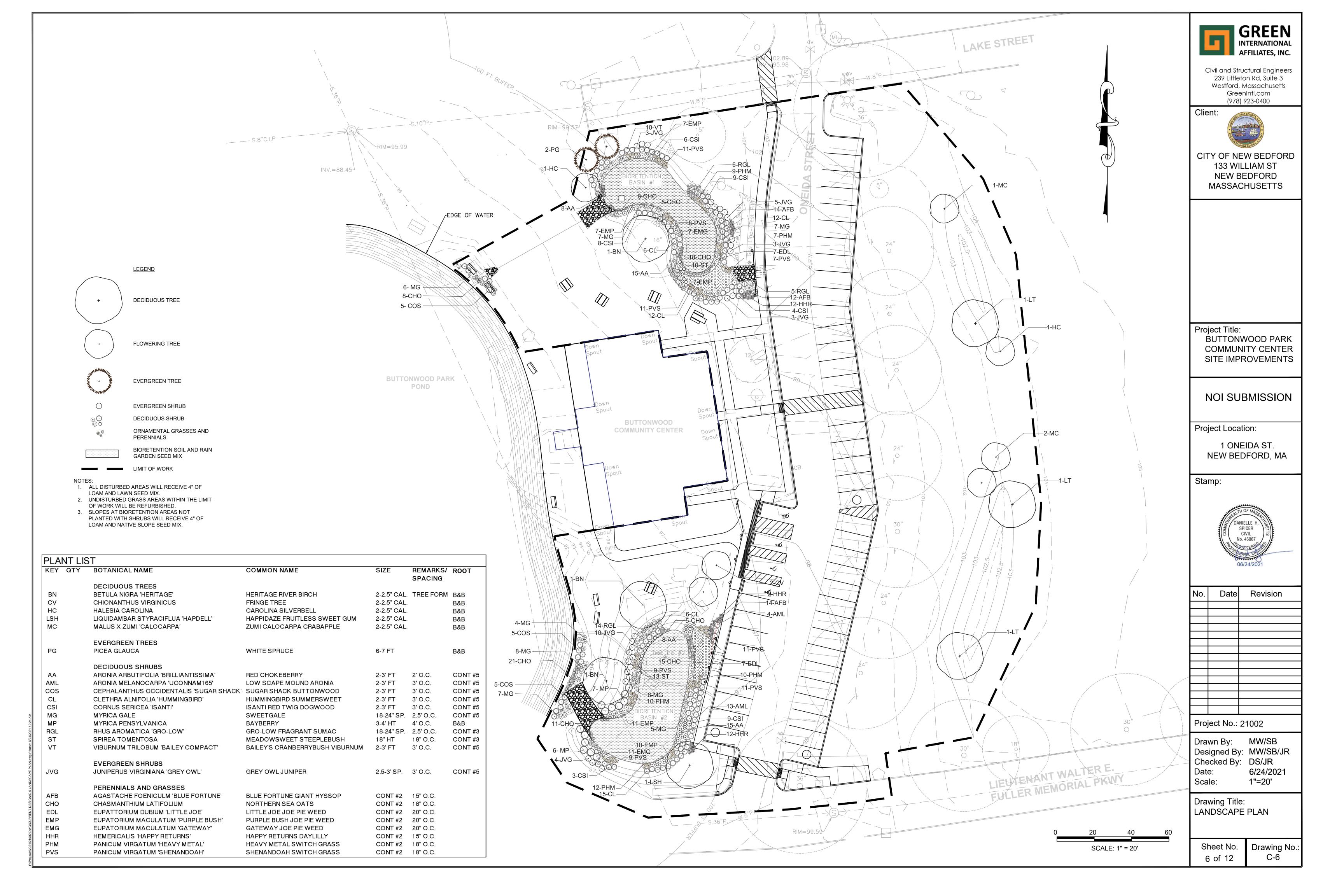
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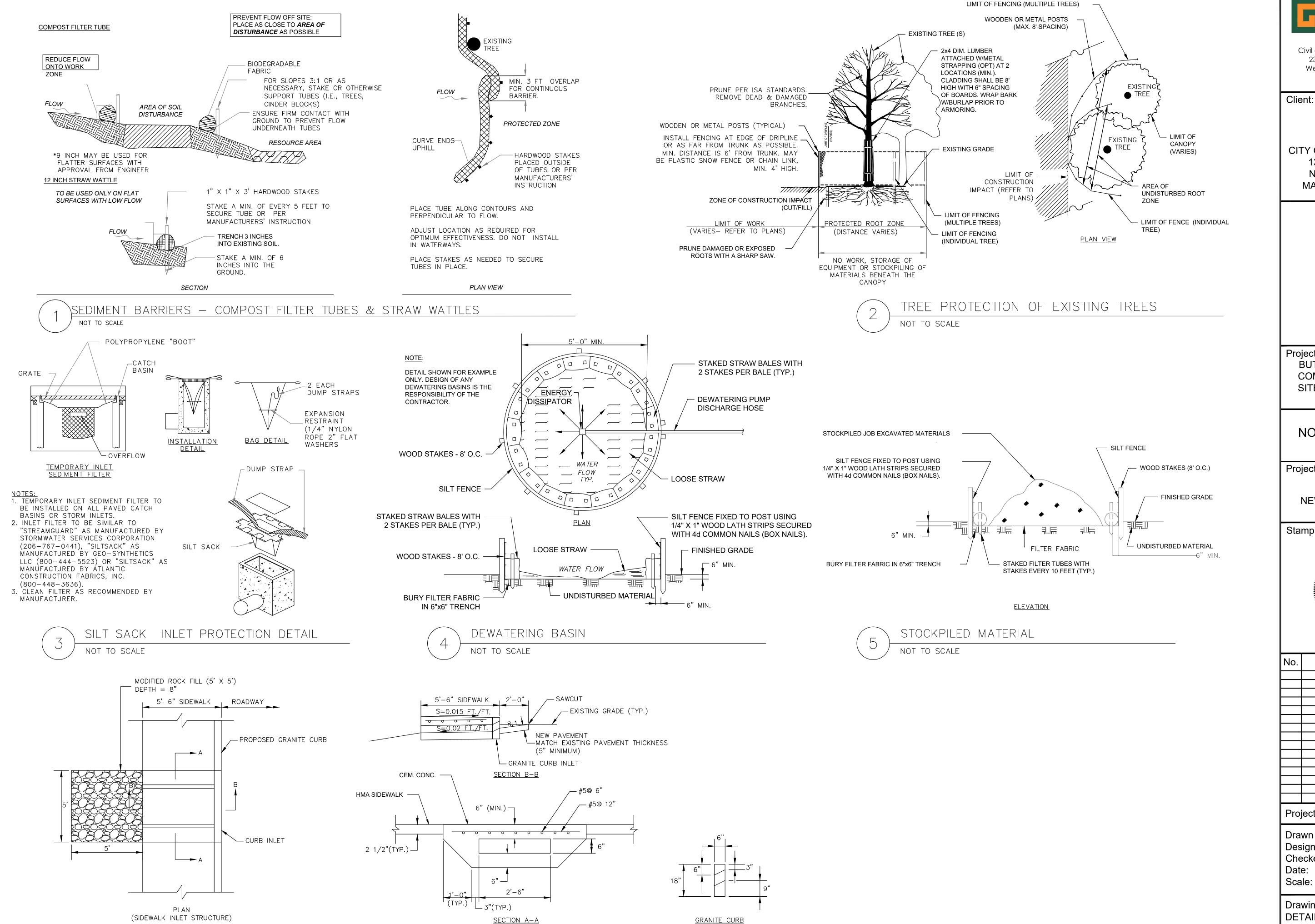












SIDEWALK INLET

NOT TO SCALE

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CITY OF NEW BEDFORD 133 WILLIAM ST **NEW BEDFORD MASSACHUSETTS** 

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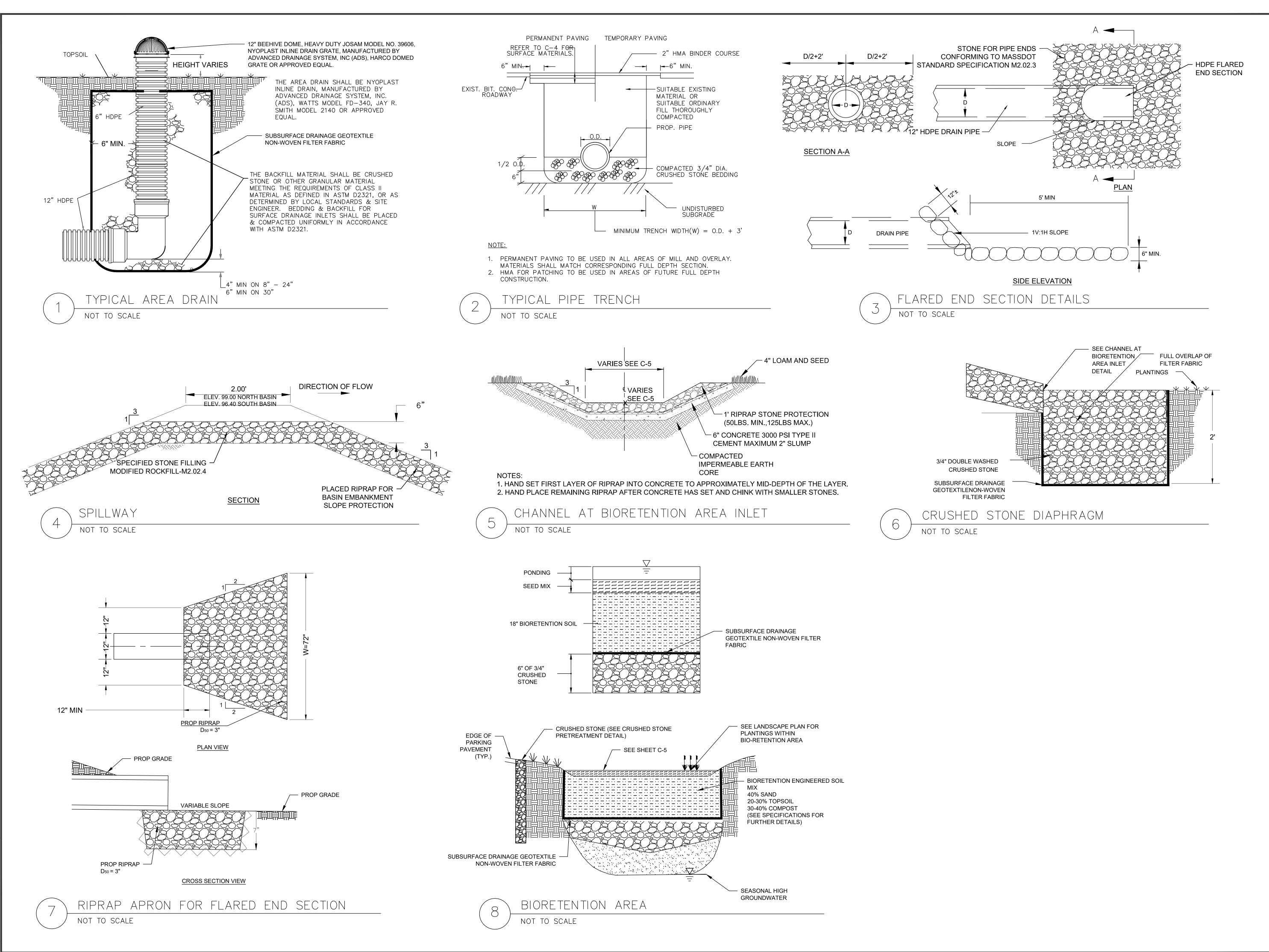
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> Sheet No. Drawing No.: 7 of 12



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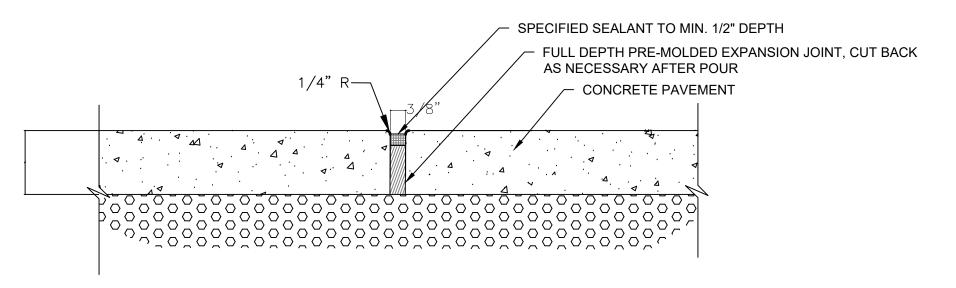


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Drawing Title: DETAILS-2

> Sheet No. Drawing No.



EXPANSION JOINT NOTES:

BIT. CONC. BINDER COURSE

GRAVEL BASE. COMPACTED TO 95% OF MAXIMUM DRY

DENSITY

(2.5" COMPACTED THICKNESS)

1. EXPANSION JOINT REQUIRED FOR EVERY +/- 225 SF OF PAVING OR EVERY 30FT ALONG WALKWAYS.

2. CONSTRUCT EXPANSION JOINTS WHERE CONCRETE MEETS EXISTING PAVEMENTS AND STRUCTURES, AND PROPOSED CRANITE PLANTER CURP. AND SECMENTAL CONCRETE PLACE WALL.

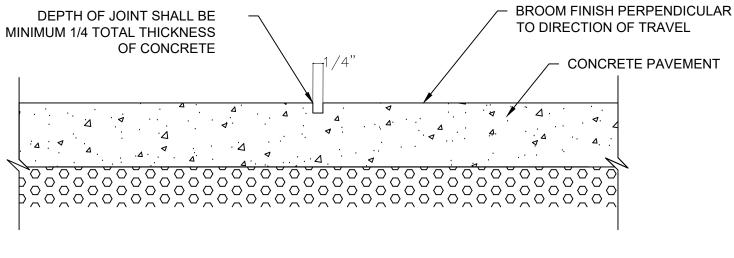
PREPARED SUBGRADE

BIT. CONC. TOP COURSE

(1.5" COMPACTED THICKNESS)

PROPOSED GRANITE PLANTER CURB, AND SEGMENTAL CONCRETE BLOCK WALL.

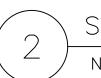




EXPANSION JOINT NOTES:

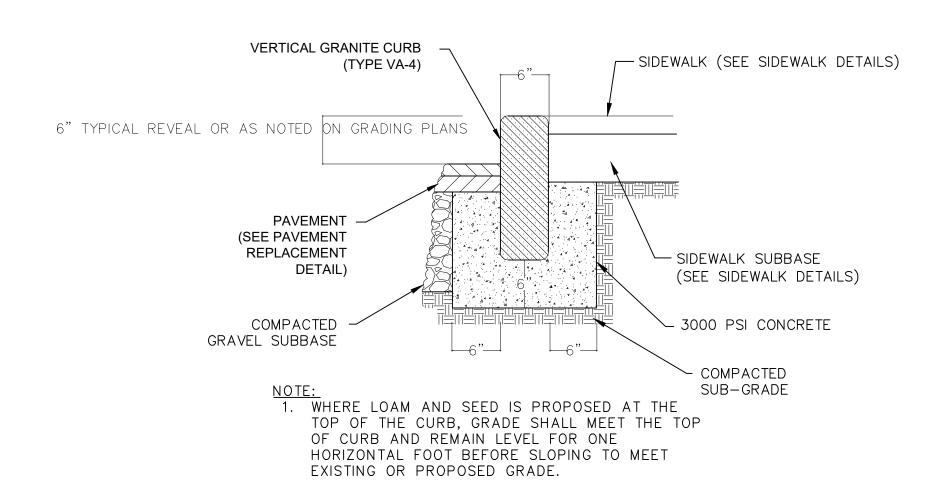
1. CONSTRUCT SAWCUT CONTROL JOINT AT +/- 5 FT ON CENTER AT CONCRETE WALK.

2. SAWCUT CONTROL JOINT REQUIRED FOR EVERY 36 SF OF PAVING.



SAWCUT CONCRETE PAVEMENT JOINT

NOT TO SCALE

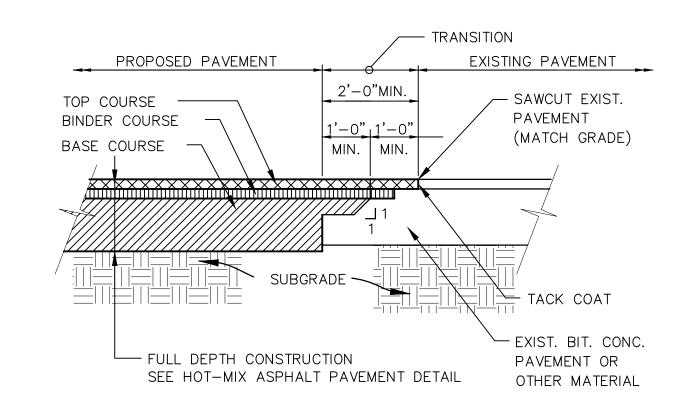


4 HOT-MIX ASPHALT PAVEMENT
NOT TO SCALE



VERTICAL GRANITE CURB

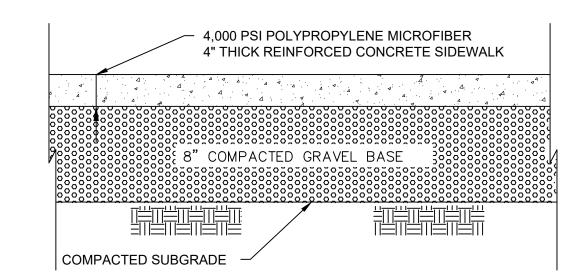
NOT TO SCALE





TYPICAL SAWCUT

NOT TO SCALE



#### CEMENT CONCRETE PAVEMENT NOTES

- 1. CEMENT CONCRETE PAVEMENT SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI WITH 6% AIR-ENTRAINMENT AND MINIMUM CEMENT CONTENT OF 610 LBS/C.Y.
- 2. CONTRACTOR SHALL SUBMIT CONCRETE JOINT LAYOUT PLAN FOR APPROVAL. EXPANSION JOINTS SHALL BE TRANSVERSE PREFORMED EXPANSION JOINT FILLER (AASHTO M−213−65) ½ IN. THICKNESS.

  3. PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED ADJACENT TO OR AROUND EXISTING STRUCTURES AND WALKWAYS.
- 4. AFTER CONSOLIDATION, CONCRETE DEPTH SHALL BE 4 INCHES IN DEPTH.
  5. ENSURE THAT NO BLED WATER OR WATER SHEEN EXISTS ON THE SURFACE OF THE CONCRETE AND THAT CONCRETE HAS
- STARTED TO STIFFEN BEFORE ANY FINISHING OPERATIONS ARE PERFORMED.

  6. AFTER TROWELING, SURFACE SHALL BE BRUSHED BY DRAWING A SOFT—BRISTLED PUSHBROOM WITH A LONG HANDLE OVER THE SURFACE OF THE CONCRETE TO PRODUCE A NON—SLIP SURFACE.
- 7. THE FINISHING OF CONCRETE SURFACE SHALL BE DONE BY EXPERIENCED AND COMPETENT CEMENT CONCRETE FINISHERS.

  8. FINISHING SHALL BE BROOM FINISH.

9. WHEN COMPLETED, WALKWAYS SHALL BE KEPT MOIST AND PROTECTED FROM TRAFFIC AND WEATHER FOR AT LEAST 3 DAYS.

CEMENT CONCRETE PAVEMENT

NOT TO SCALE



CITY OF NEW BEDFORD 133 WILLIAM ST NEW BEDFORD MASSACHUSETTS

**GREEN** 

INTERNATIONAL

AFFILIATES, INC.

Civil and Structural Engineers

239 Littleton Rd, Suite 3

Westford, Massachusetts

GreenIntl.com

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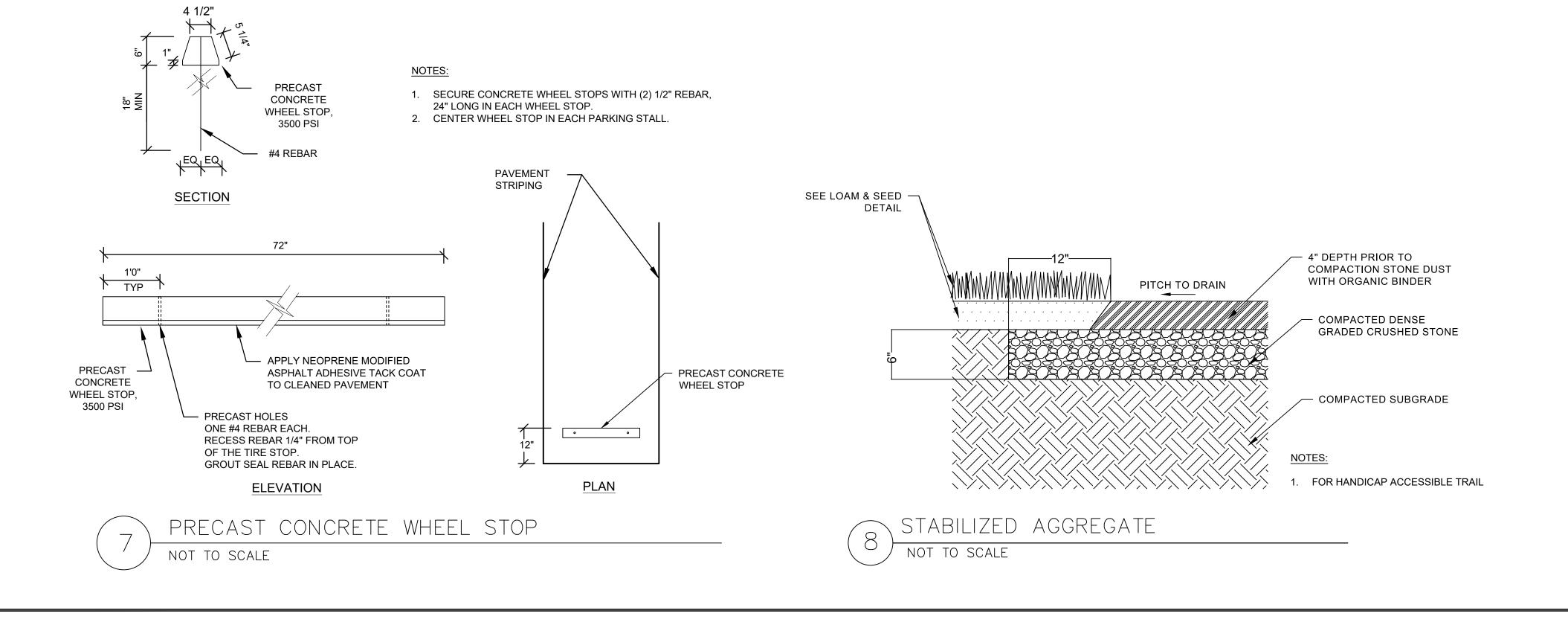
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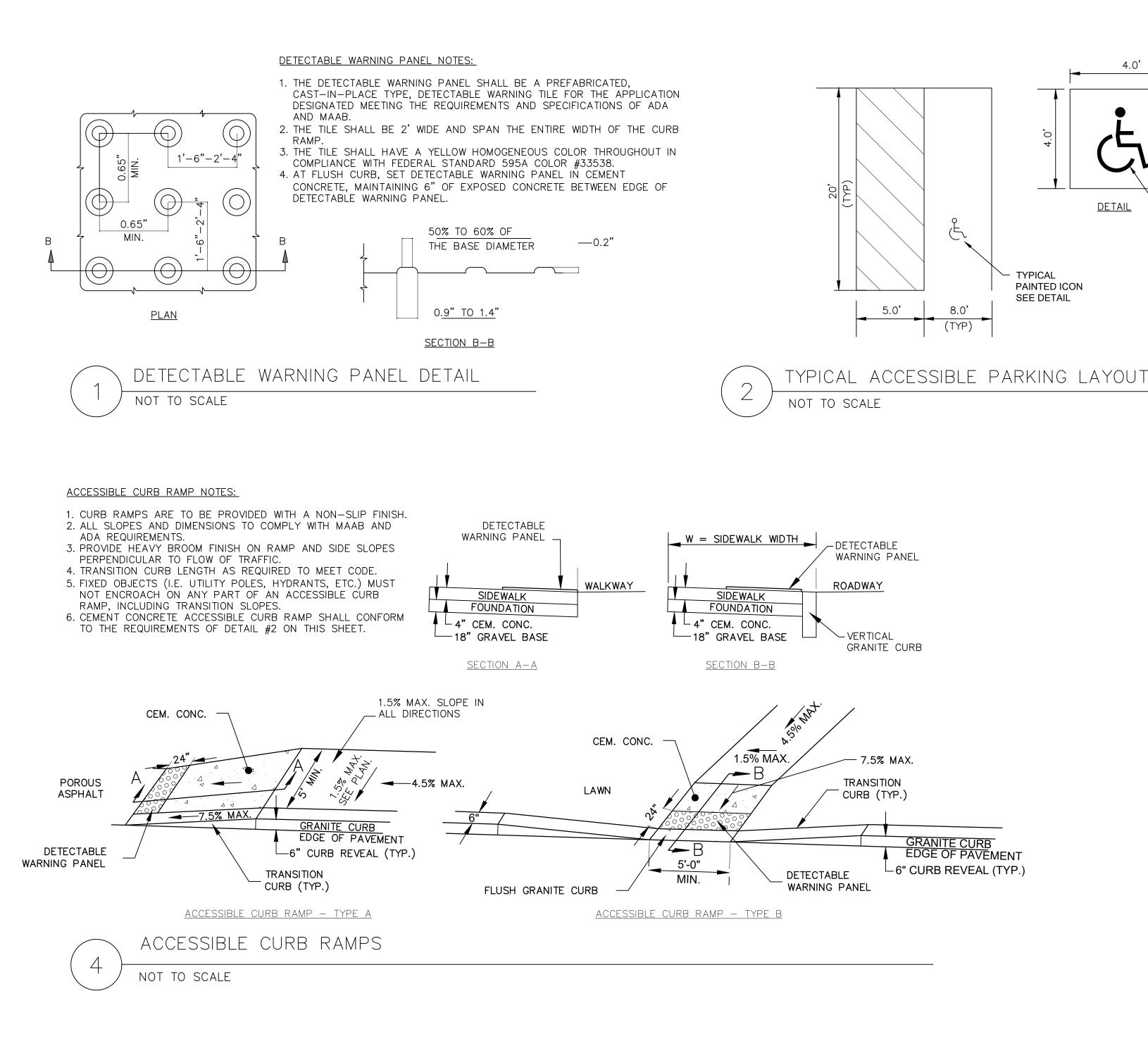
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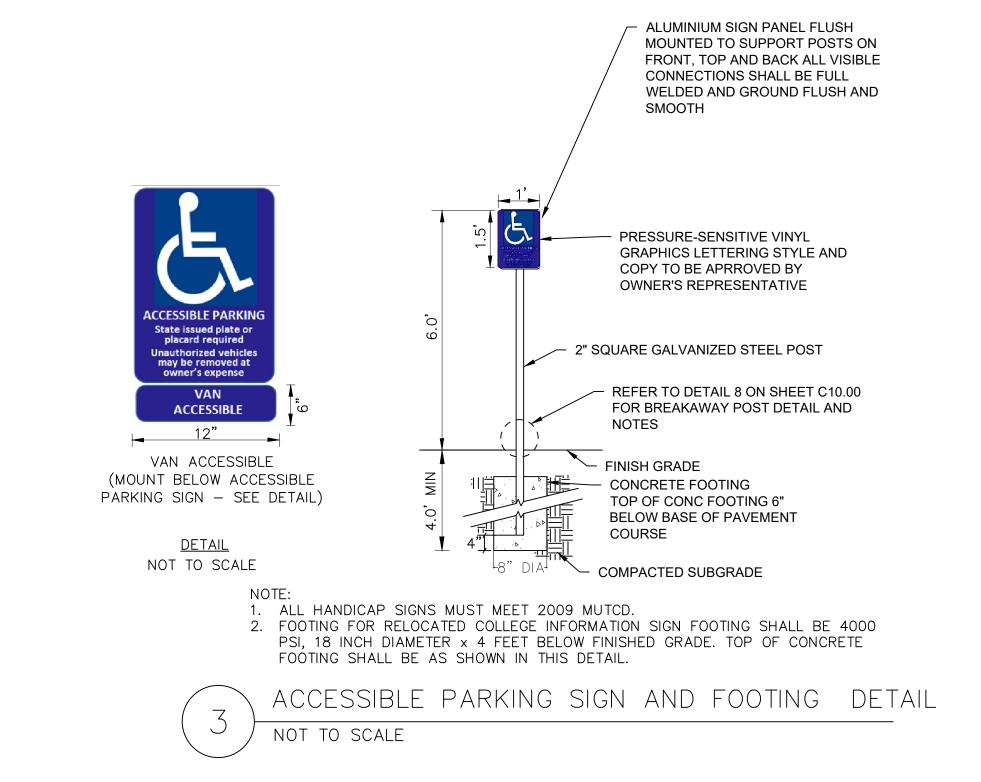
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Date: 6/24/2021
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Drawing Title: DETAILS-3

Sheet No. Drawing No. 9 of 12 C-9







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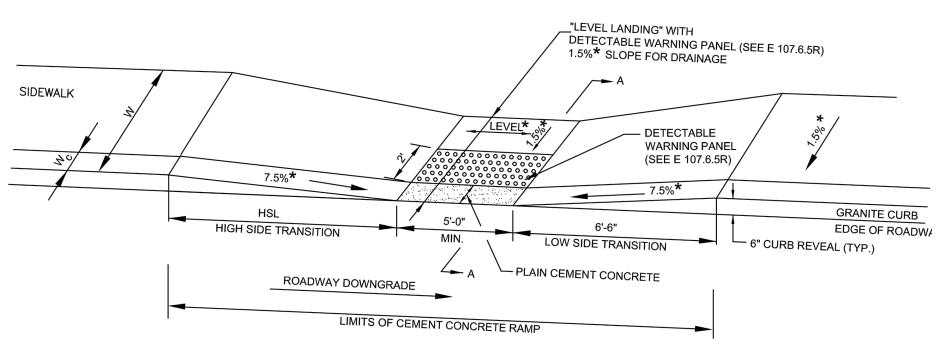
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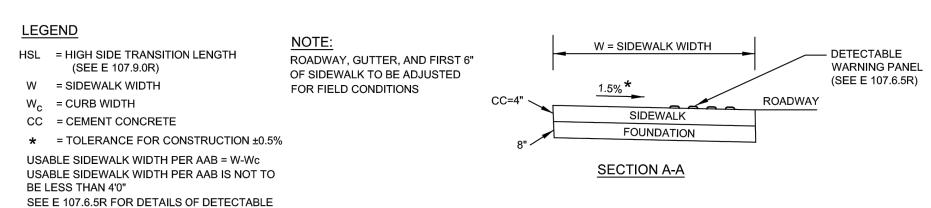
PAINT SYMBOL IN

RESISTANT FIELD

WARNING PANEL

**BLUE SKID** 





NOT TO SCALE

WHEELCHAIR RAMP ON NARROW SIDEWALK WITH DETECTABLE WARNING PANEL



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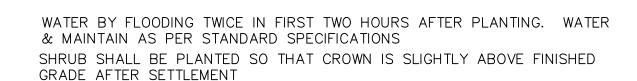
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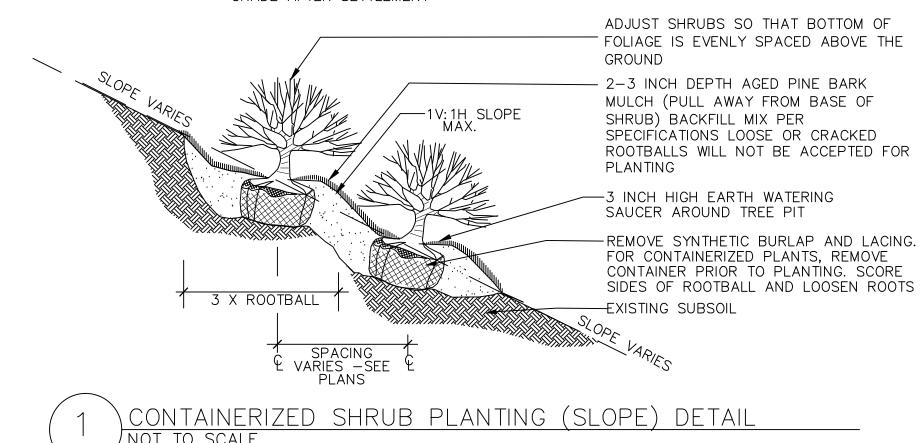
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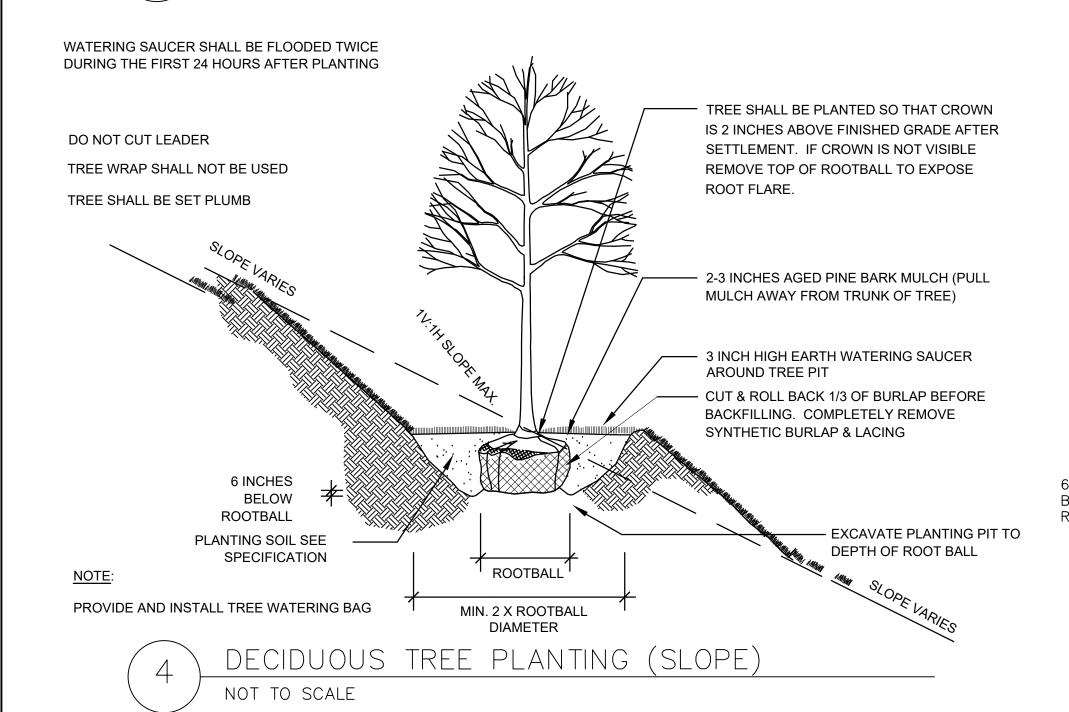
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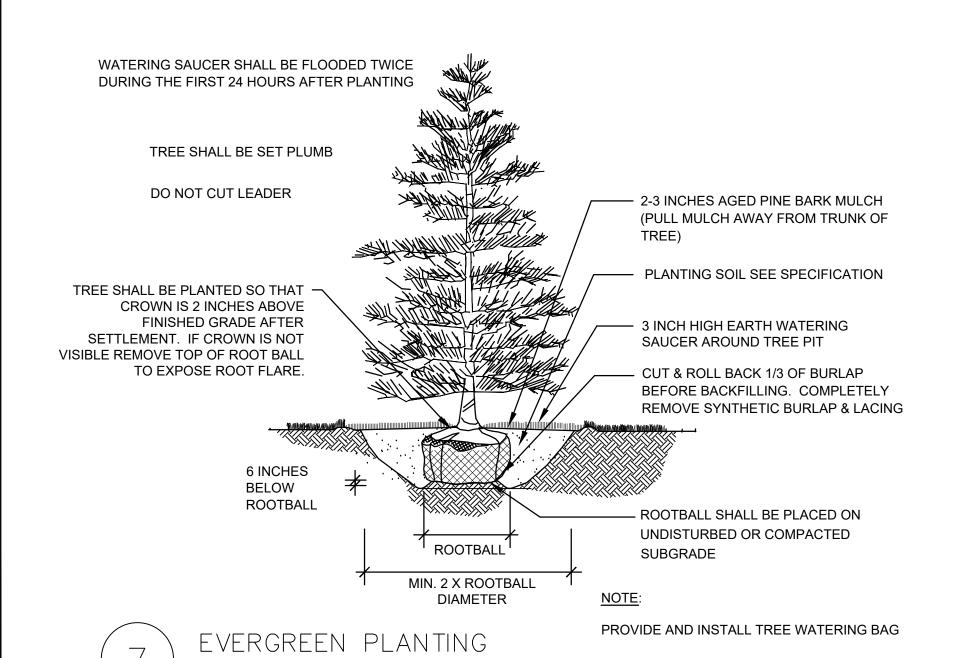
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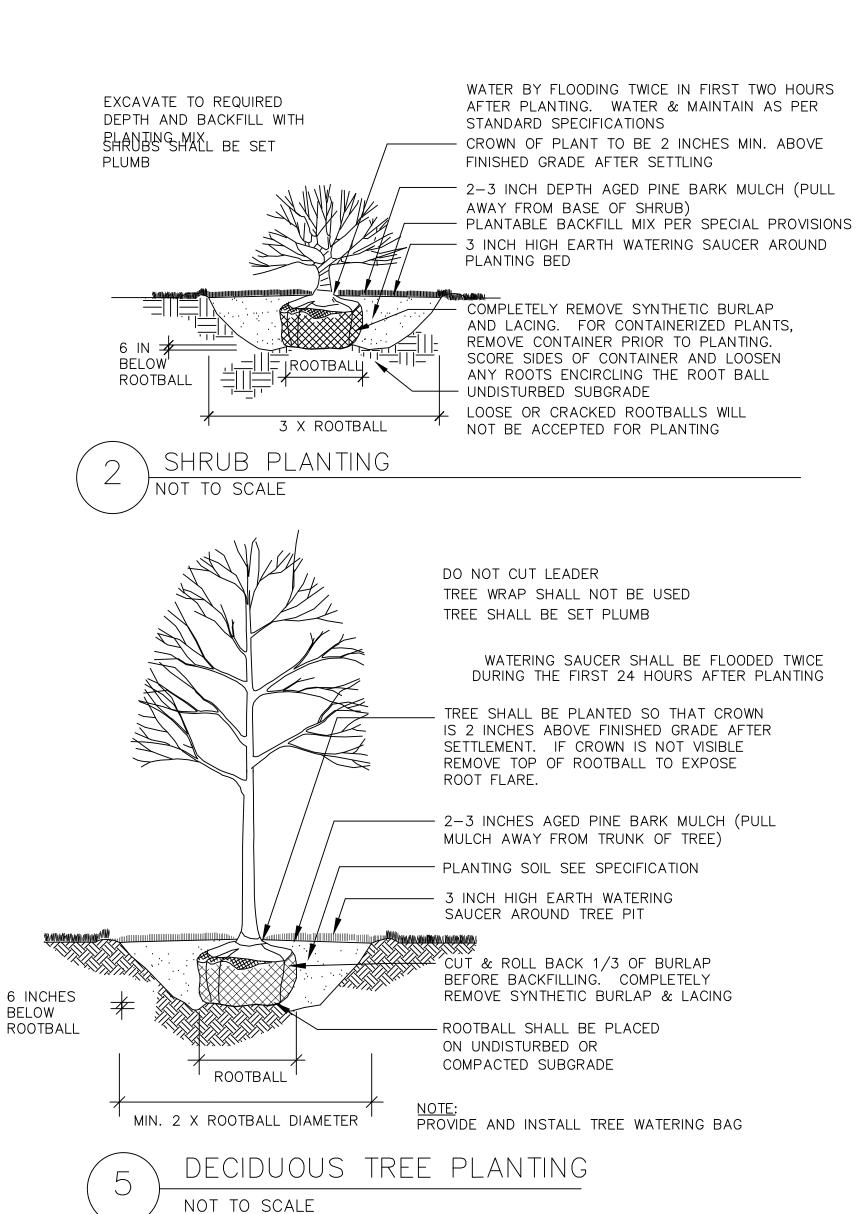








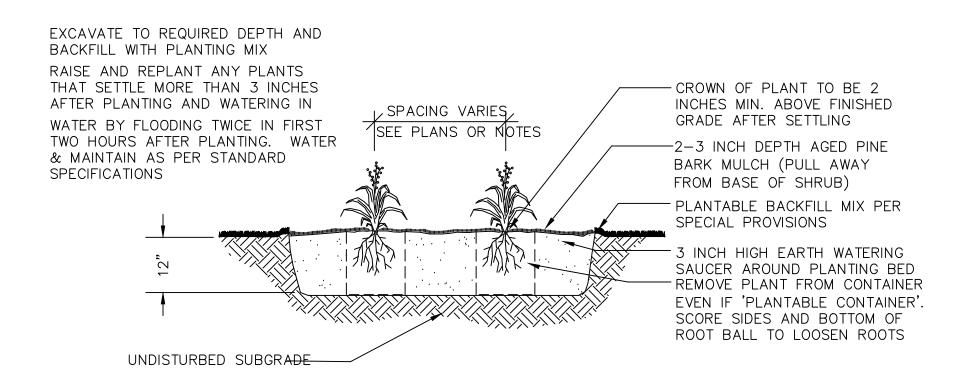
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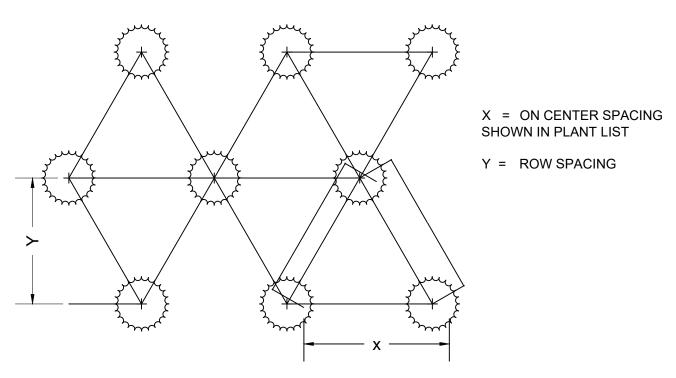
Mix is primarilynative perennial forbs and grasses to provide food and cover for rain garden biodiversity. Little bluestem and Virginia Wildrye are intended as the primary dominant species with small number of forbs for habitat/visual interest. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not. Herbaceous species may grow 3-5 feet in height.

% PLS	Botanical Name	Common Name
33.4%	Schizachyrium scoparium, 'Itasca', MN Ecotype	Little Bluestem, 'Itasca', MN Ecotype
20.0%	Elymus virginicus, Madison-NY Ecotype	Virginia Wildrye, Madison-NY Ecotype
7.0%	Carex vulpinoidea, PA Ecotype	Fox Sedge, PA Ecotype
5.6%	Chasmanthium latifolium, WV Ecotype	River Oats, WV Ecotype
5.5%	Echinacea purpurea	Purple Coneflower
3.0%	Chamaecrista fasciculata, PA Ecotype	Partridge Pea, PA Ecotype
3.0%	Coreopsis lanceolata	Lanceleaf Coreopsis
3.0%	Panicum clandestinum, Tioga	Deertongue, Tioga
3.0%	Panicum rigidulum, PA Ecotype	Redtop Panicgrass, PA Ecotype
3.0%	Rudbeckia hirta	Blackeyed Susan
3.0%	Verbena hastata, PA Ecotype	Blue Vervain, PA Ecotype
2.0%	Heliopsis helianthoides, PA Ecotype	Oxeye Sunflower, PA Ecotype
1.8%	Asclepias incarnata, PA Ecotype	Swamp Milkweed, PA Ecotype
1.0%	Carex scoparia, PA Ecotype	Blunt Broom Sedge, PA Ecotype
1.0%	Senna hebecarpa, VA & WV Ecotype	Wild Senna, VA & WV Ecotype
0.7%	Pycnanthemum tenuifolium	Narrowleaf Mountainmint
0.5%	Aster novae-angliae, PA Ecotype	New England Aster, PA Ecotype
0.5%	Aster prenanthoides, PA Ecotype	Zigzag Aster, PA Ecotype
0.5%	Baptisia australis, Southern WV Ecotype	Blue False Indigo, Southern WV Ecotype
0.5%	Zizia aurea	Golden Alexanders
0.4%	Monarda fistulosa, Fort Indiantown Gap-PA Ecotype	Wild Bergamot, Fort Indiantown Gap-PA Ecotype
0.3%	Helenium autumnale, PA Ecotype	Common Sneezeweed, PA Ecotype
0.3%	Juncus tenuis, PA Ecotype	Path Rush, PA Ecotype
0.2%	Eupatorium perfoliatum, PA Ecotype	Boneset, PA Ecotype
0.2%	Juncus effusus	Soft Rush
0.2%	Oenothera fruticosa var. fruticosa	Sundrops
0.2%	Solidago nemoralis, PA Ecotype	Gray Goldenrod, PA Ecotype
0.2%	Solidago rugosa, PA Ecotype	Wrinkleleaf Goldenrod, PA Ecotype
Seeding F		
	mix at 20 lbs PLS/acre.	
Cover Cro	pp: Add 30 lbs/acre of grain rye.	

RAIN GARDEN SEED MIX



PERENNIAL AND ORNAMENTAL GRASS PLANTING NOT TO SCALE



SHRUB, PERENNIAL AND ORNAMENTAL GRASS SPACING NOT TO SCALE

> **Botanical Name** % PLS **Common Name** 59.0% Festuca rubra Creeping Red Fescue 30.0% Poa pratensis Kentucky Blue 5.0% Lolium perenne Perennial Rye 5.0% Agrostis gigantea Redtop 1.0% Trifolium repens **Dutch White Clover** Seeding Rate:

Apply this mix at 90 lbs PLS/acre. Varieties of Fescue, Rye Grass and Bluegrass shall be from the top 25% of the two most recent National Turfgrass Evaluation Program reports.

\_AWN MIX

Mix is primarily NE native species for general roadside use. Best for full sun, but tolerant of partial shade. Little bluestem is intended as primary dominant species with small number of forbs for habitat/visual interest. Appropriate locations are where no mowing or infrequent mowing will occur and where long-term soil stabilization is desired. Herbaceous species may grow 2-4 feet in height.

**Botanical Name Common Name** 50.6% Schizachyrium scoparium 'Albany Pine' Little Bluestem 'Albany Pine' 20.0% Elymus virginicus Virginia Wild Rye 12.0% Festuca rubra Creeping Red Fescue 5.0% Dichanthelium clandestinum 'Tioga' Deertongue grass 'Tioga' 4.0% Agrostis perennans **Upland Bentgrass** 4.0% Chamaecrista fasciculata Partridge Pea 2.0% Rudbeckia hirta - VT ecotype Black-eyed Susan - VT ecotype **Butterfly Milkweed** 0.5% Asclepias tuberosa 0.5% Aster oblongifolius **Aromatic Aster** 0.5% Aster laevis Smooth Aster 0.5% Solidago nemoralis Grey Goldenrod 0.2% Baptisia tinctoria Wild Indigo Slender Mountain Mint 0.2% Pycnanthemum tenuifolium Seeding Rate:

Apply this mix at 25 lbs PLS/acre on areas of less than 3:1 slope and 40 lbs PLS on areas of greater than 3:1 slope. Cover Crop: Add 30 lbs/acre of either grain oats (1 Jan to 31 July) or grain rye (1 Aug to 31 Dec). Cover crop shall be incidental to seeding item.

NATIVE SHORT MIX



Civil and Structural Engineers 239 Littleton Rd, Suite 3 Westford, Massachusetts GreenIntl.com (978) 923-0400

Client:



CITY OF NEW BEDFORD 133 WILLIAM ST **NEW BEDFORD MASSACHUSETTS** 

**Project Title:** 

**BUTTONWOOD PARK COMMUNITY CENTER** SITE IMPROVEMENTS

NOI SUBMISSION

Project Location:

1 ONEIDA ST. NEW BEDFORD, MA

Stamp:



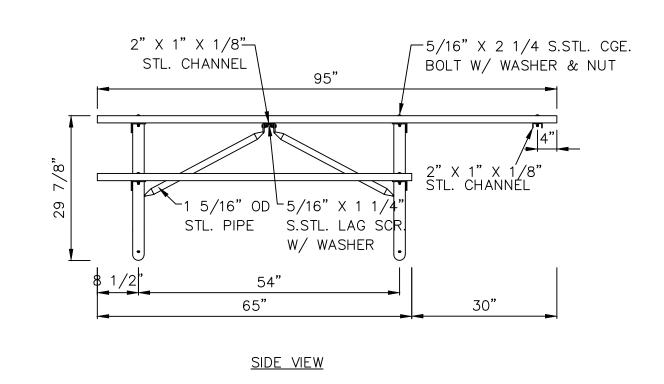
No.	Date	Revision
Project No.: 21002		

10)501 NO.. 21002

MW/SB Drawn By: Designed By: MW/SB/JR Checked By: DS/JR 6/24/2021 Date: Scale: 1"=20'

Drawing Title: **DETAILS-5** 

> Sheet No. Drawing No. C-11

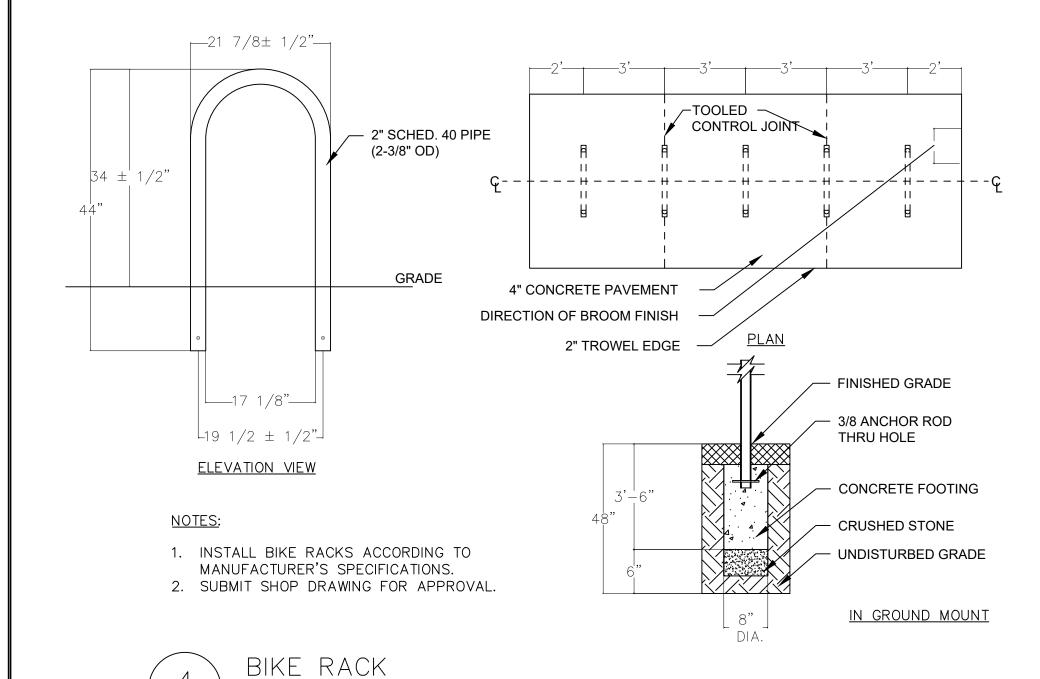


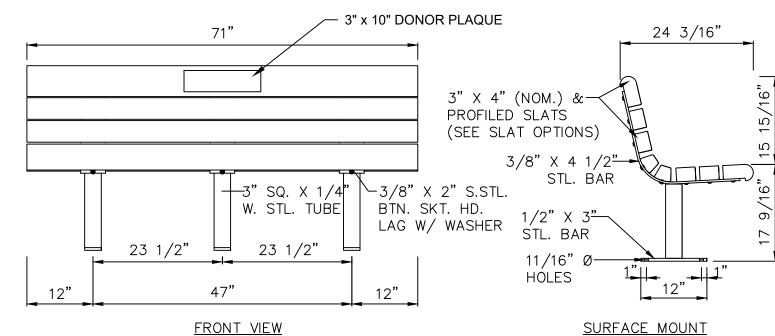
## NOTES:

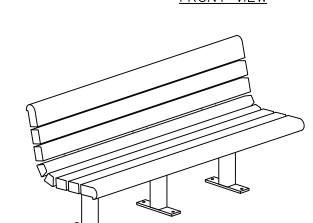
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. 2. DRAWING NOT TO SCALE.

3. SUBMIT SHOP DRAWING FOR APPROVAL.

# ACCESSIBLE RECYCLED PLASTIC PICNIC TABLE NOT TO SCALE







ISOMETRIC VIEW

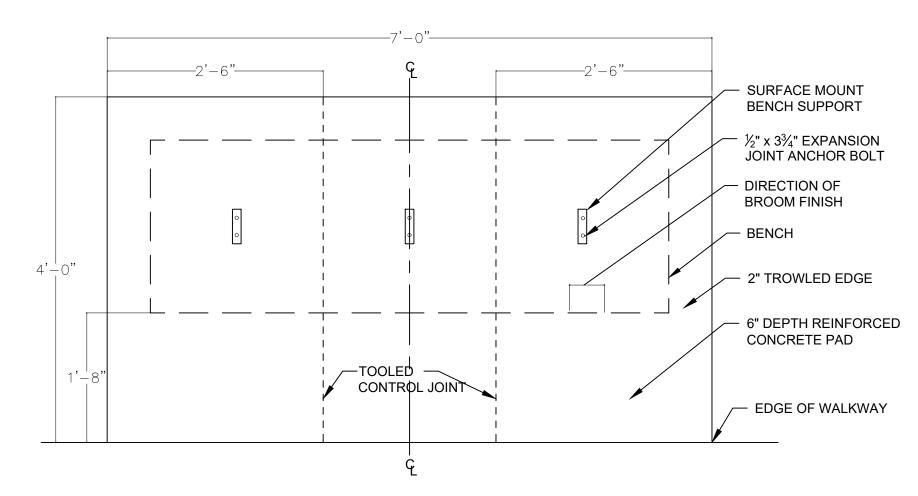
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2. DRAWING NOT TO SCALE.

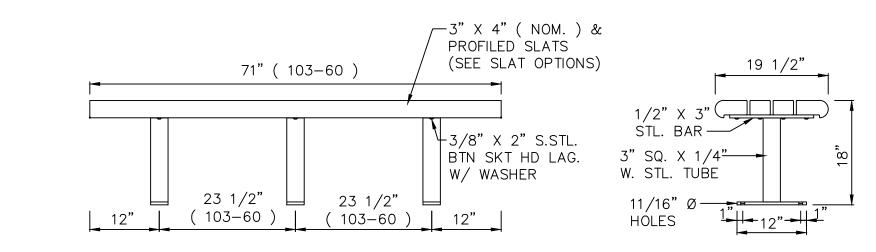
3. ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/POLYESTER POWDER COATING.

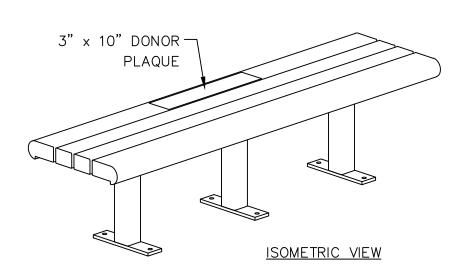
4.  $\frac{1}{2}$ " x 3  $\frac{3}{4}$ " EXPANSION ANCHOR BOLT 6 PER BENCH. SUBMIT SHOP DRAWING FOR APPROVAL. 6. 1 DONOR PLAQUE PER BENCH.

RECYCLED PLASTIC BENCH NOT TO SCALE



CONCRETE PAD FOR BENCH INSTALLATION NOT TO SCALE





SIDE VIEW

NOTES:

- 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- 2. DRAWING NOT TO SCALE..
- 3. ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/POLYESTER POWDER COATING.
- 4. 1/2" x 3 3/4" EXPANSION ANCHOR BOLT 6 PER BENCH. 5. SUBMIT SHOP DRAWING FOR APPROVAL.
- 6. 1 DONOR PLAQUE PER BENCH.

BACKLESS RECYCLED PLASTIC BENCH NOT TO SCALE

SURFACE MOUNT

Project Title:

Client:

**BUTTONWOOD PARK** COMMUNITY CENTER SITE IMPROVEMENTS

**GREEN** 

INTERNATIONAL

AFFILIATES, INC.

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239 Littleton Rd, Suite 3

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(978) 923-0400

CITY OF NEW BEDFORD

133 WILLIAM ST

**NEW BEDFORD** 

MASSACHUSETTS

NOI SUBMISSION

Project Location:

1 ONEIDA ST. NEW BEDFORD, MA

Stamp:



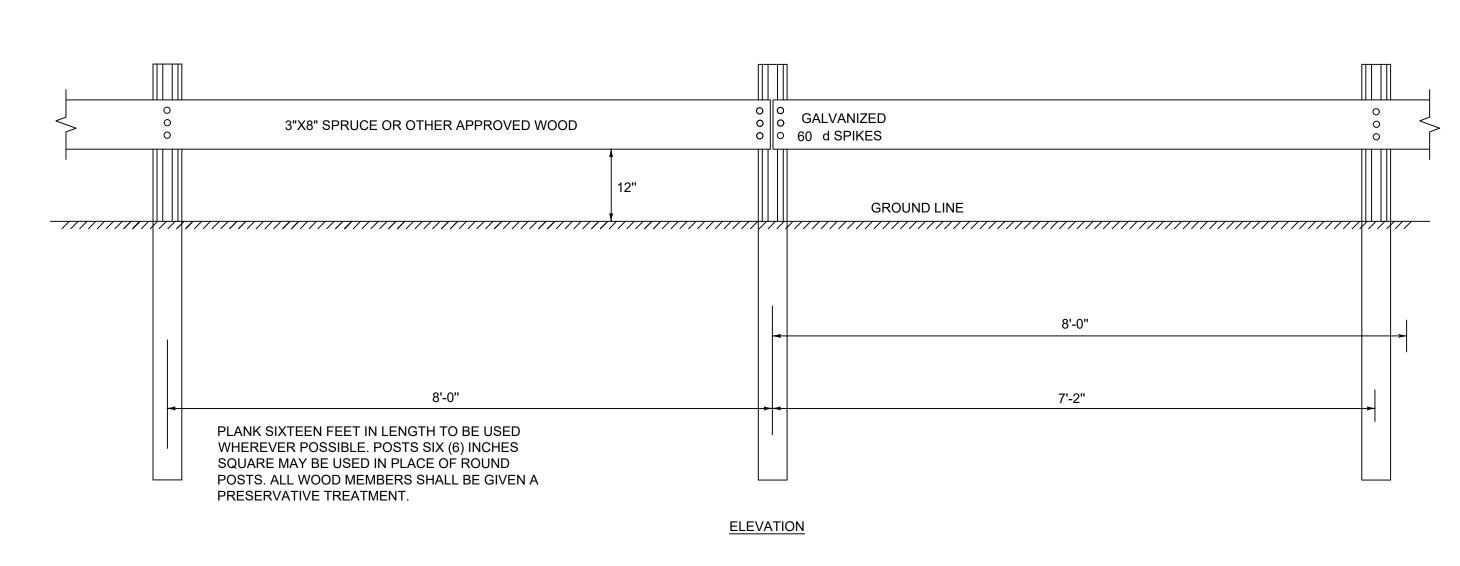
No.	Date	Revision
<u> </u>		
Pro	iect No.:	21002

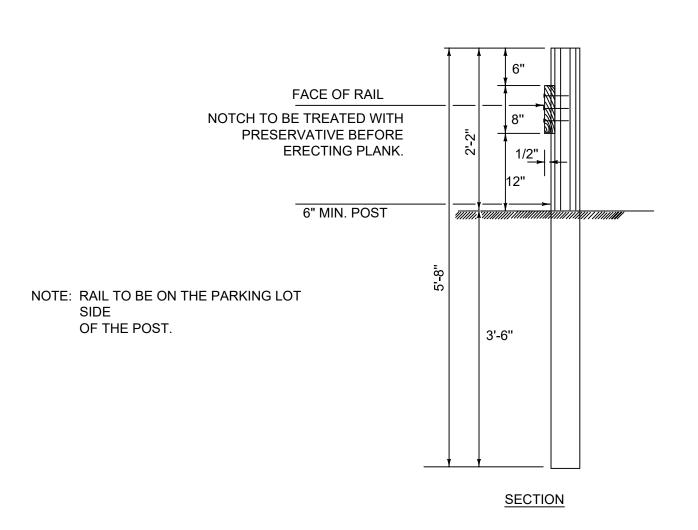
Project No., 21002

Drawn By: MW/SB Designed By: MW/SB/JR Checked By: DS/JR 6/24/2021 Scale: 1"=20'

Drawing Title: DETAILS-6

> Sheet No. Drawing No. C-12





TIMBER GUARDRAIL DETAIL

NOT TO SCALE

NOT TO SCALE