

Providence City Plan Commission

October 20, 2020



AGENDA ITEM 4 ■ 16-42 SOMERSET STREET, 17-27 PORTLAND STREET AND 34 HAYWARD STREET



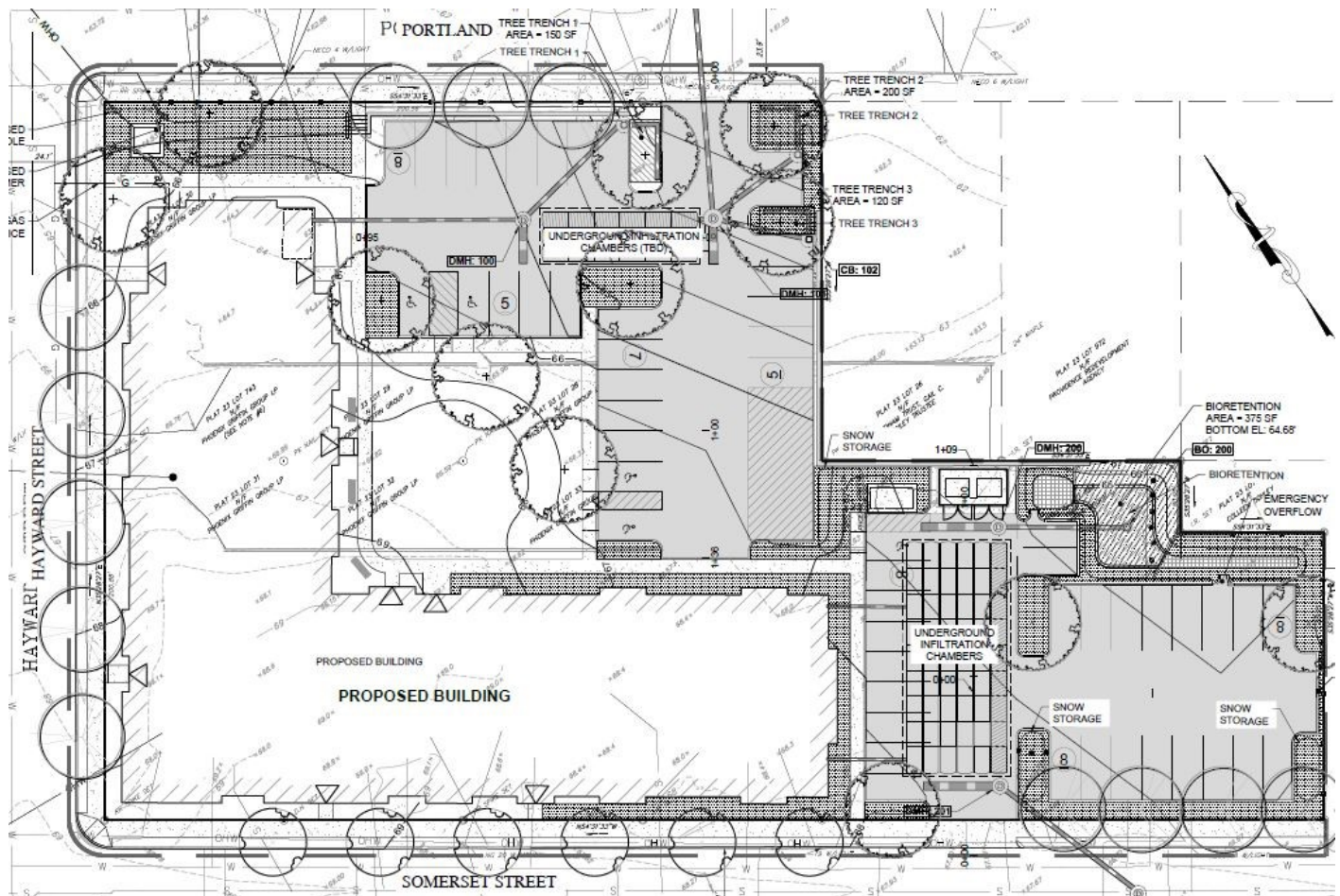
Building elevations



An aerial view of the site

OVERVIEW

OWNER/APPLICANT: Omni Development Corporation/Wingate Companies, Applicants Rhode Island Housing, Owner	PROJECT DESCRIPTION: The applicant is requesting preliminary plan approval for construction of a four story residential building with 54 units. The development area is zoned R-3 and a zone change to C-2 has been requested to accommodate the multifamily development.
CASE NO./PROJECT TYPE: 20-031 MI Minor Land Development Preliminary Plan Approval	
PROJECT LOCATION: 16-42 Somerset Street, 17-27 Portland and 34 Hayward AP 23 Lots 27-35, 743, 883	RECOMMENDATION: Approval of the Preliminary Plan
NEIGHBORHOOD: Upper South Providence	PROJECT PLANNER: Choyon Manjrekar



Proposed site plan

PROJECT OVERVIEW

The applicant is seeking preliminary plan approval for construction of a four story, 54 unit residential building. The development is composed of 11 lots occupied by 10 buildings that will be demolished, and the lots merged. The new lot will measure 53,582 SF with the building providing 70,784 SF of area. The subject lots are zoned R-3, but a zone change to C-2 has been requested to accommodate the multifamily dwelling, which is expected to serve low and moderate income populations.

ANALYSIS AND IDENTIFICATION OF POTENTIAL ISSUES

Use

A zone change to rezone the site to C-2 from R-3 has been requested. Multifamily development is permitted by right in the C-2 zone.

Dimensions and site design

Upon merging the subject lots, the building will be built on a corner lot that addresses the intersection of Hayward and Somerset Streets. The façade will be set to the lot lines of both streets within the 5' build-to zone prescribed by the C-2 zone.

A height of 42' and four stories is proposed, which is within the 50', four story height limit of the C-2 zone. A total of 54 units—a mix of one, two and three family bedroom dwelling units—will be provided within the building. Community space, trash collection, a laundry room, and a maintenance area will be located on the first floor in addition to dwelling units. A courtyard is located in the rear yard and parking is provided at the rear and side. Direct pedestrian access from the sidewalk is provided from Hayward and Somerset Streets as well as the parking area.

The façade is composed of a brick veneer on the ground

floor with cementitious fiber siding on the upper stories which are materials permitted by right in the C-2 zone. The building's exterior conforms to the design guidelines for multifamily development in the C-2 zone as it utilizes a common architectural theme throughout the façade, employs a cornice on the roofline, and incorporates projections and articulations for a variety of dimensional elements. The amount of transparency on street facing facades is in excess of 25 percent required for multifamily dwellings.

Parking

The development meets the parking requirement with fifty four parking spaces provided for 54 units, of which four are compact and five will be accessible. A loading space, which is required for multifamily dwellings over 40,000 SF, is located in the parking area.

Landscaping

The applicant is required to provide landscaping equivalent to 15 percent of the lot area for the C-2 zone, which amounts to approximately 8,050 SF. However, close to 29,600 SF will be provided, which far exceeds the requirement. Plantings will be distributed within a planting strip that runs along the perimeter of the site in addition to internal plantings in the parking lot. The plan will meet the canopy coverage and internal parking landscaping requirements for the site.

Environmental management

Site drainage will be provided through a subsurface infiltration system with stormtech chambers that will collect and treat runoff. An adverse impact on surroundings is not expected.

Lighting

A lighting plan has been submitted which includes a photometric plan for the site and the location of light fixtures. The plan complies with the ordinance as light transmittance will not exceed 1 footcandle at any lot line and will employ downward facing light fixtures. There will be no light trespass onto neighboring property.

FINDINGS

Section 806 of the Commission's *Development Review Regulations* requires that the City Plan Commission make the following findings as part of their approval of all land development project applications. Based on the analysis contained herein and subject to the conditions contained in this report, staff has prepared the following findings regarding the request for approval of the Preliminary Plan stage:

1. *Consistency—The proposed development is consistent with the Comprehensive Plan and/or has satisfactorily addressed the issues where there may be inconsistencies.*

The subject property is located in an area that the future land use map of *Providence Tomorrow: The Comprehensive Plan* intends for medium density residential development, but is in proximity to neighborhood commercial/mixed use development where multifamily and mixed use uses are encouraged. The future land use map is not intended for parcel level analysis, therefore multifamily housing located besides medium density residential development is appropriate.

Provision of housing, particularly for low and moderate income families, would conform to objectives H-2 and H-3 which encourages creation of new and affordable housing opportunities in the City.

2. *Compliance with Zoning Ordinance—The proposed development is in compliance with the standards and provisions of the Zoning Ordinance.*

Use: The multifamily development will be permitted by right, subject to the applicant receiving a zone change to C-2.

Dimension: The applicant shall apply for an administrative subdivision to merge the lots prior to final plan approval

to allow for the building to be located on a single lot. Upon merging the lots, the development will conform to the dimensional, landscaping and design requirements for multifamily residential development as previously discussed.

Parking: The applicant will meet the parking requirement providing 54 spaces for 54 dwelling units.

3. *Environmental Impact—There will be no significant environmental impacts from the proposed development as shown on the final plan, with all required conditions for approval.*

There do not appear to be any negative environmental impacts as a result of the development as the applicant is expected to come into conformance with all applicable environmental regulations.

4. *Buildable Lot—The subdivision or development project, as proposed, will not result in the creation of individual lots with such physical constraints to development that building on those lots according to pertinent regulations and building standards would be impracticable.*

The applicant shall merge the lots prior to applying for final plan approval. There are no physical constraints that impact development of this property as it will conform to the dimensional requirements of the zoning ordinance.

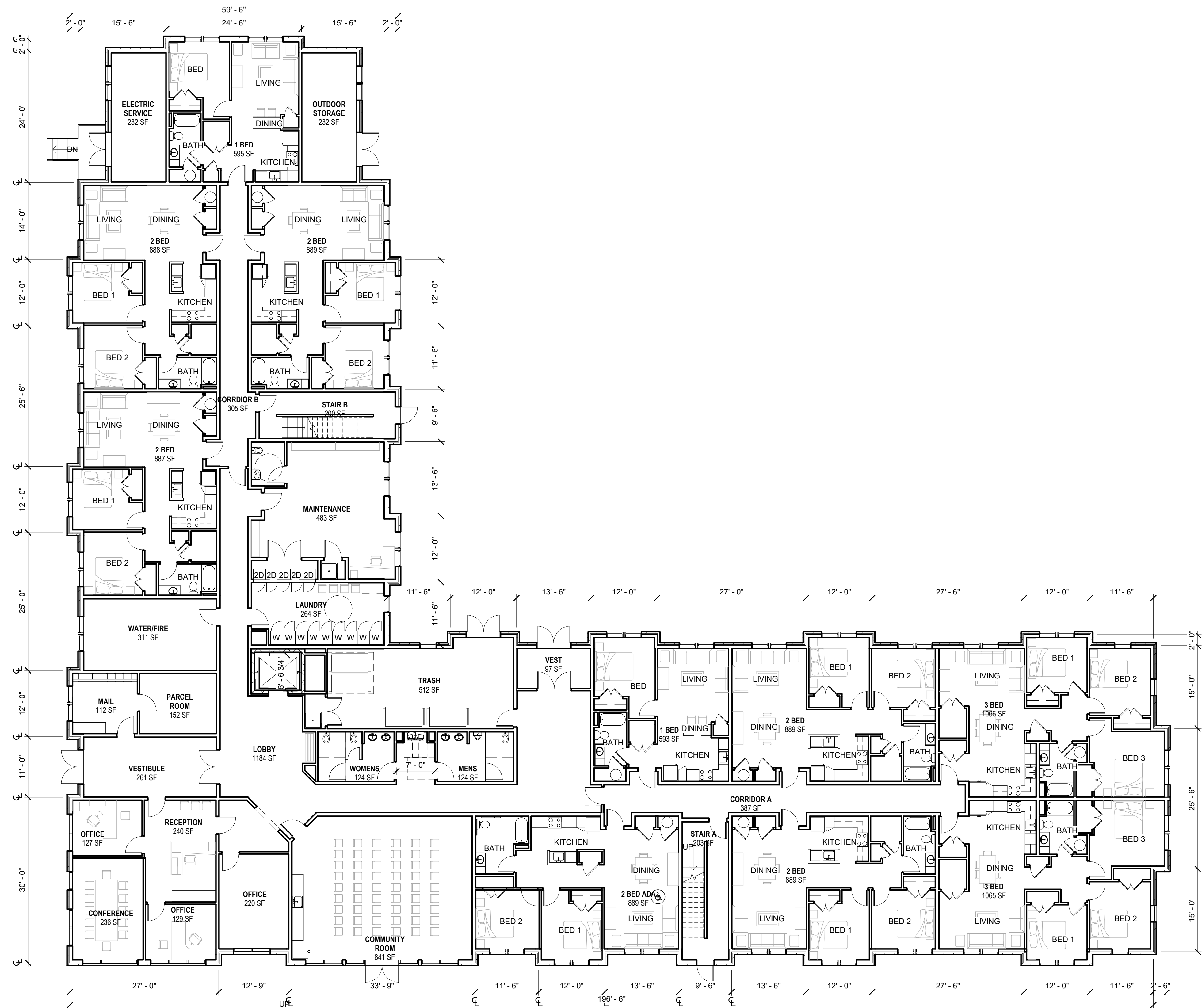
5. *Street Access—All proposed development projects and all subdivision lots shall have adequate and permanent physical access to a public street. Lot frontage on a public street without physical access shall not be considered compliance with this requirement.*

Adequate vehicular and pedestrian access is provided from Somerset, Hayward and Portland Streets.

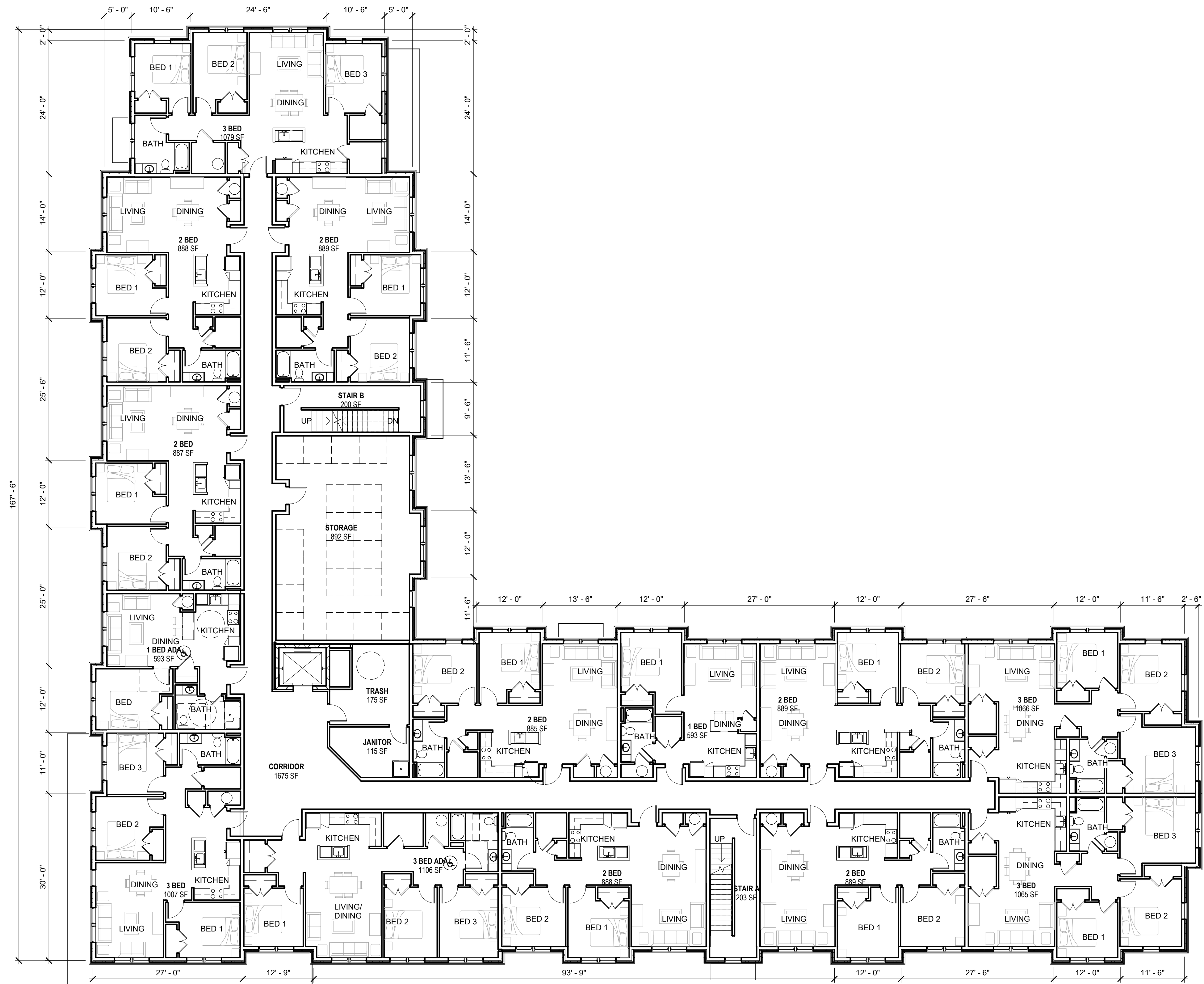
RECOMMENDATION

The CPC should vote to approve the preliminary plan finding it to be in conformance with the zoning ordinance and comprehensive plan, subject to the following conditions:

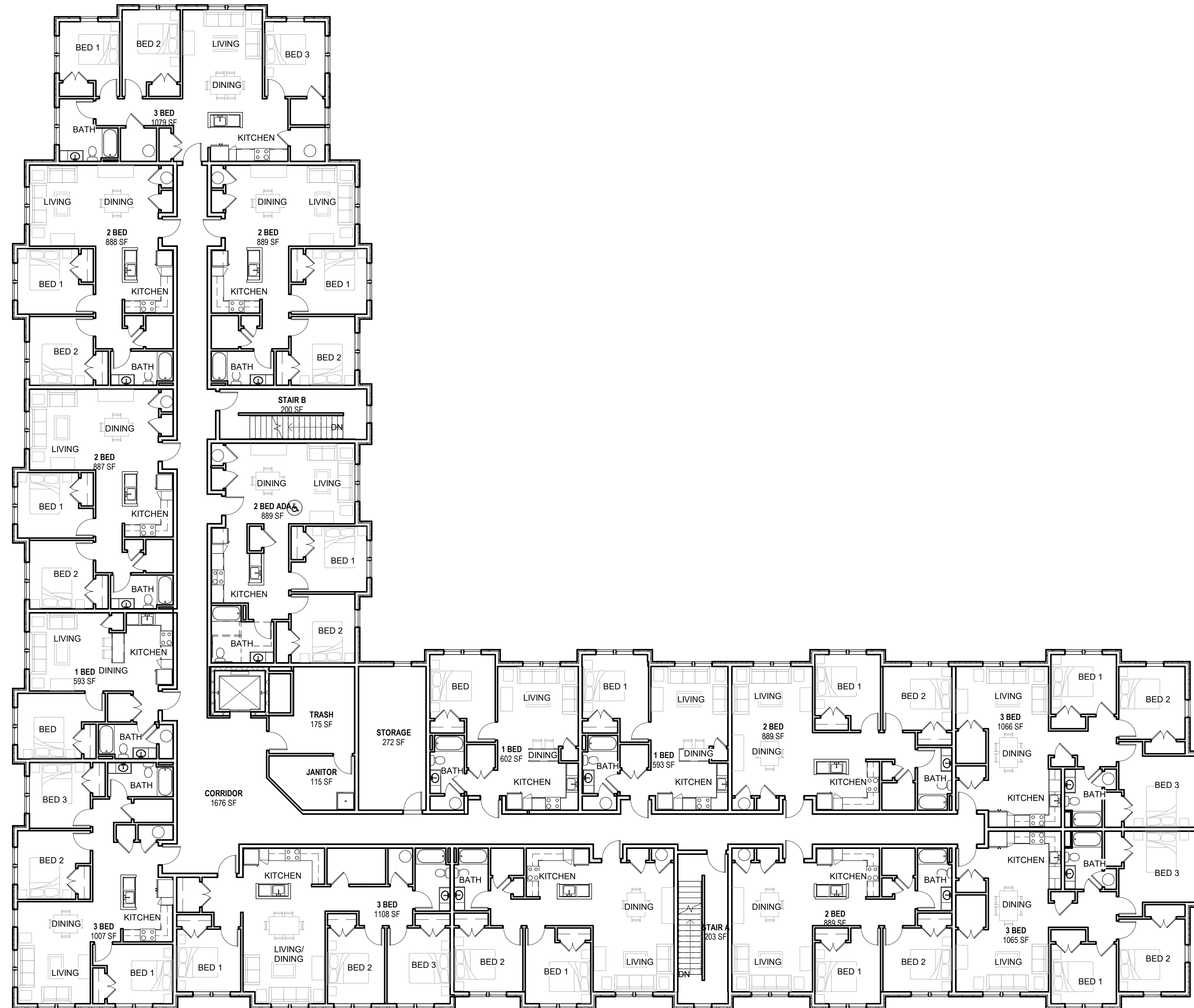
1. Final plan approval is subject to the applicant receiving a zone change to C-2.
2. The applicant shall merge the lots prior to applying for final plan approval.
3. The expiration date shall be extended to one year from the recording of the approval letter.
4. Final plan approval should be delegated to DPD staff.



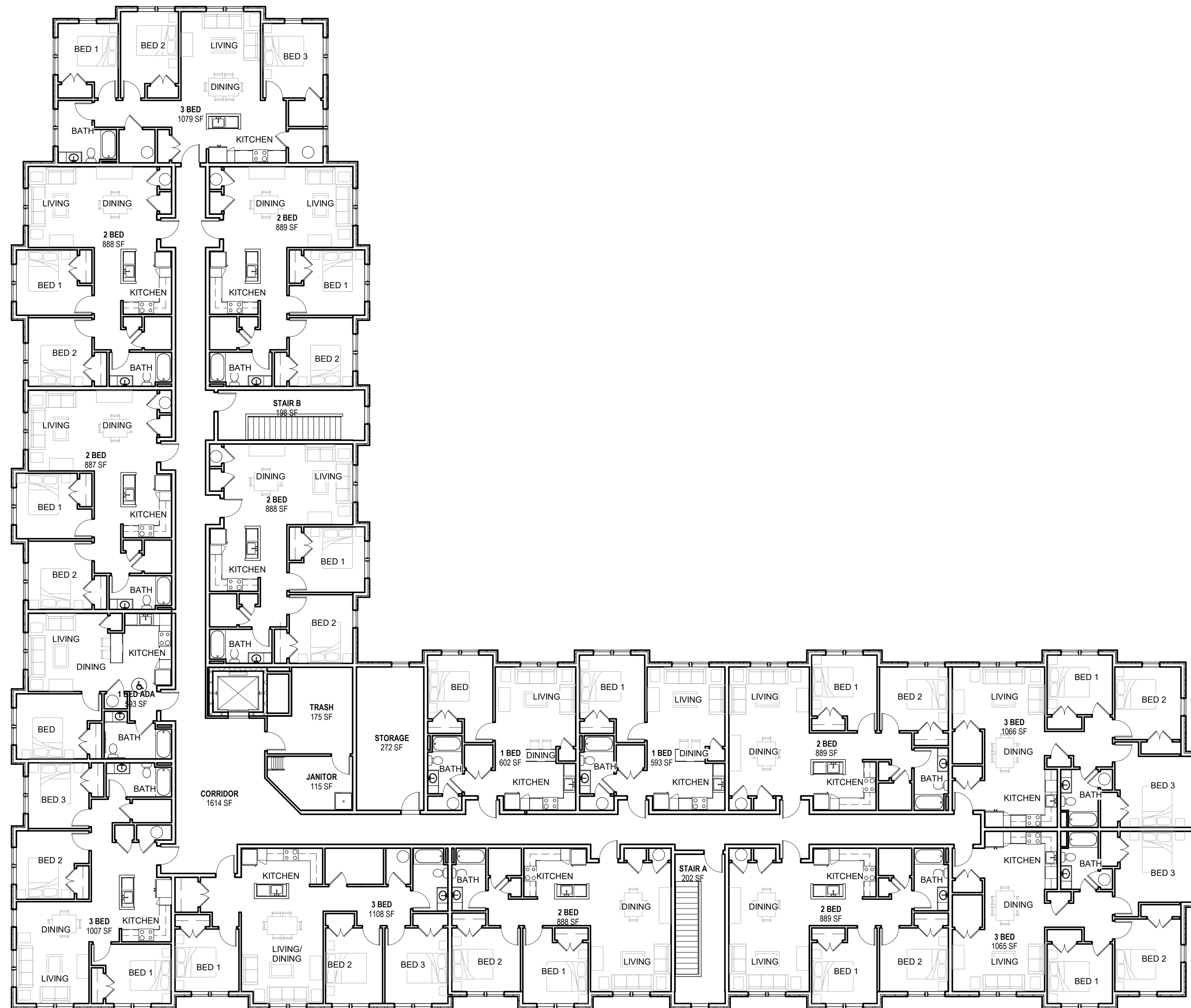
1 FIRST FLOOR PLAN
3/32" = 1'-0"



1 SECOND FLOOR PLAN
3/32" = 1'-0"



1 THIRD FLOOR PLAN
3/32" = 1'-0"



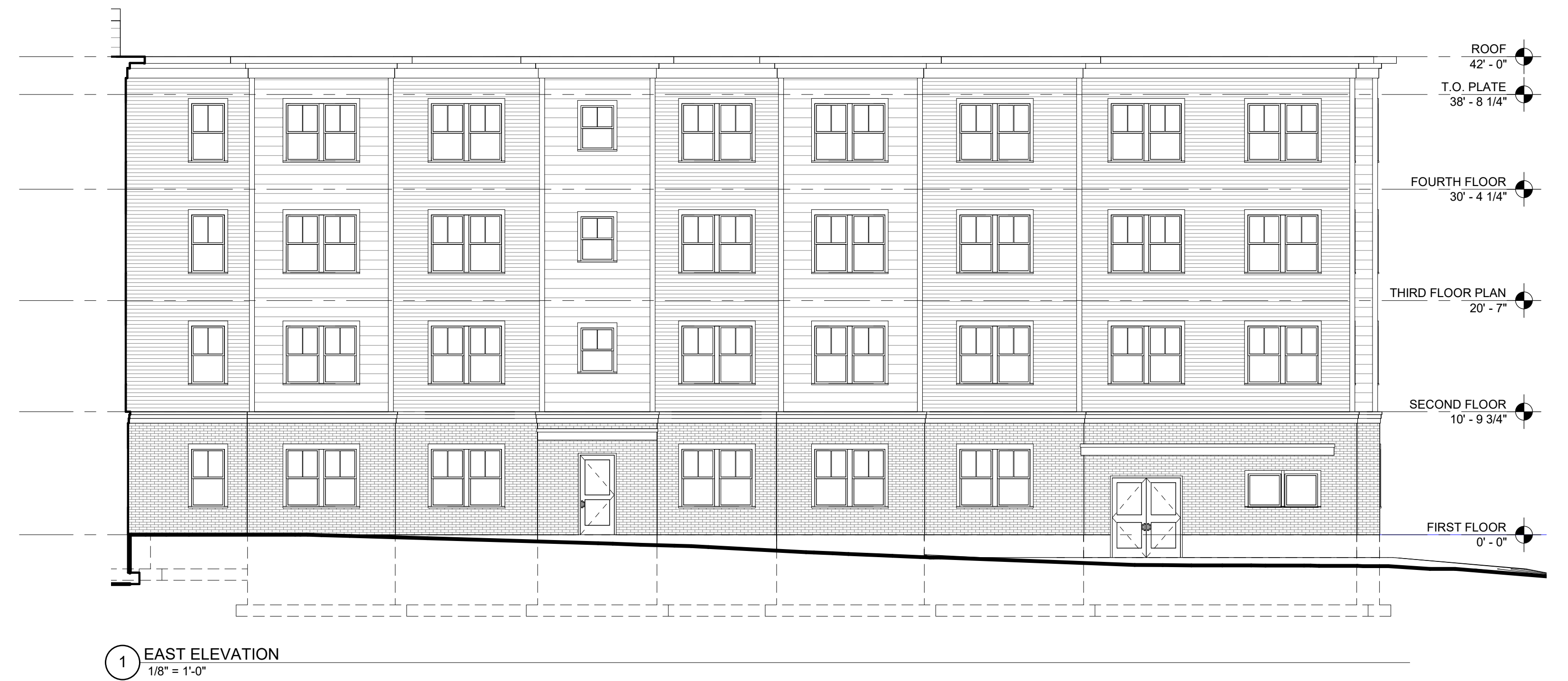
1 FOURTH FLOOR PLAN
3/32" = 1'-0"



2 BUILDING TYPE D - WEST ELEVATION (HAYWARD)
1/8" = 1'-0"



1 BUILDING TYPE D - SOUTH ELEVATION (SOMERSET)
1/8" = 1'-0"

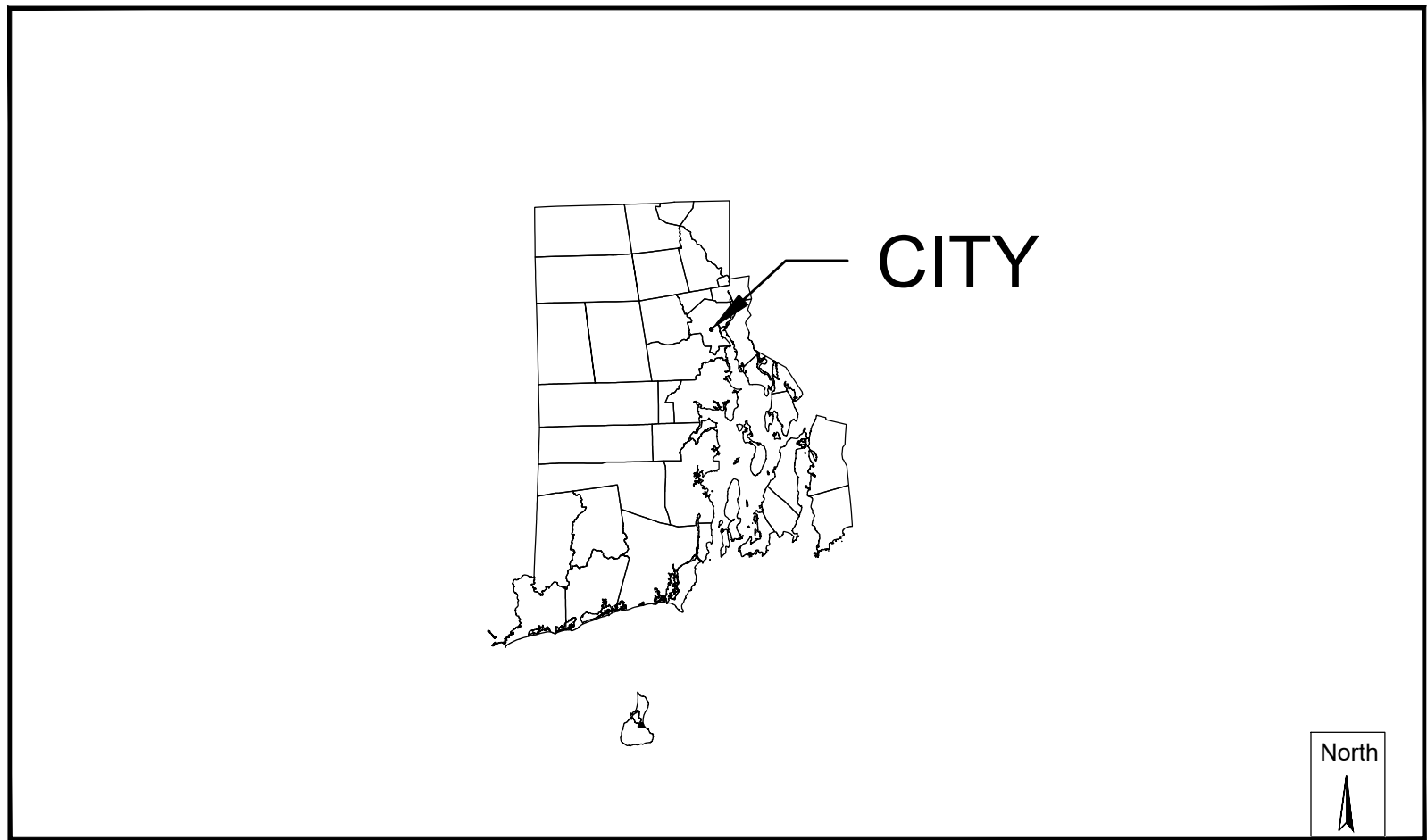


BARBARA JORDAN II, BUILDING "D"

HAYWARD STREET, PORTLAND STREET, & SOMERSET STREET

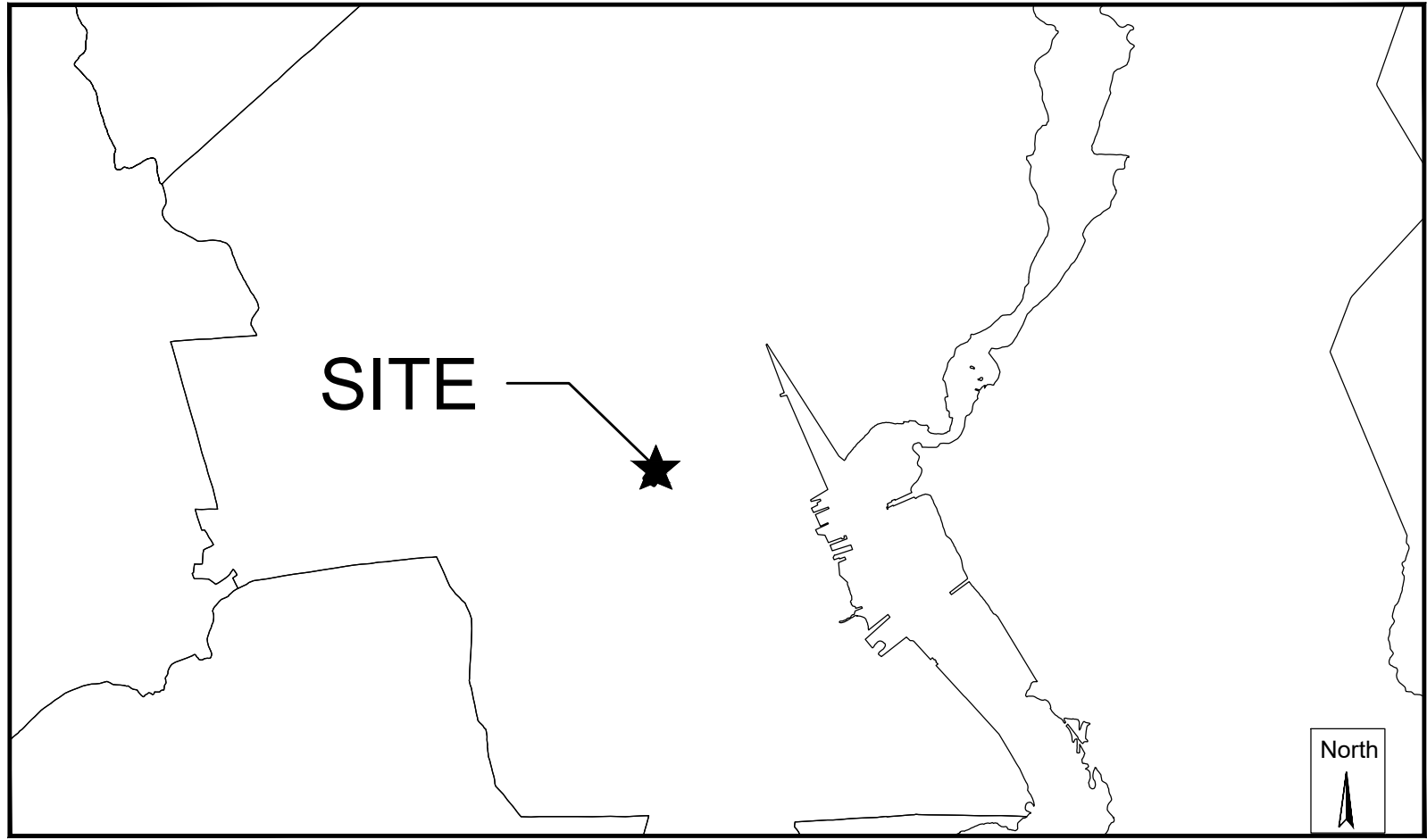
PROVIDENCE, RHODE ISLAND

SPETEMBER 2020



RHODE ISLAND

Graphic Scale
0 150000
SCALE IN FEET
1:150000



PROVIDENCE

Graphic Scale
0 12000
SCALE IN FEET
1:12000



VICINITY MAP

Graphic Scale
1-inch = 100-feet

Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
2	CONSTRUCTION NOTES
3	SITE PREP AND SESC PLAN
4	SITE PLAN
5	GRADING & DRAINAGE PLAN
6	UTILITY PLAN
7	LANDSCAPE PLAN
8	SITE DETAILS
9	DRAINAGE DETAILS
10	CHAMBER DETAILS
11	UTILITY DETAILS
12	PLANTING DETAILS

- GENERAL NOTES:
- THIS PLAN SET IS FOR PERMITTING ONLY AND NOT FOR CONSTRUCTION.
 - SITE INFORMATION:
PLAT: 21, LOTS: 26 THROUGH 35, 743, 883
 - THE PROPERTY IS SHOWN AS BEING PROTECTED FROM THE 1-PERCENT -ANNUAL-CHANCE OR GREATER FLOOD HAZARD BY A LEVEE SYSTEM. OVERTOPPING OR FAILURE OF ANY LEVEE SYSTEM IS POSSIBLE, AS SHOWN ON COMMUNITY PANEL NO.44007C0308J DATED OCTOBER 02, 2015.

Plan Set:

BARBARA JORDAN II, BUILDING "D"
HAYWARD STREET, PORTLAND STREET, &
SOMERSET STREET
PROVIDENCE, RHODE ISLAND

Prepared For:

Omni Development Corporation / The Wingate Companies
810 Eddy Street
Providence, RI 02905
(401) 461-4442

Prepared By:

Horsley Witten Group, Inc.
Sustainable Environmental Solutions
www.horsleywitten.com

Headquarters
90 Route 6A
Sandwich, MA 02563
(508) 833-6600 voice
(508) 833-3150 fax

294 Washington Street, Suite 801
Boston, MA 02108
(857) 263-8193 voice
(617) 574-4799 fax

55 Dorrance Street, Suite 200
Providence, RI 02906
(401) 272-1717 voice
(401) 439-8368 fax

113 Water Street, R2
Exeter, NH 03833
(603) 658-1660

Registration:

DRAFT
NOT FOR
CONSTRUCTION

Rev.	Date	By	Appr.	Description

Project Number:

20089

Sheet Number:

1 of 12

Drawing Number:

C - 1

1. ALL SITE WORK TO COMPLETE THIS PROJECT AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
2. IMMEDIATELY CONTACT AND COORDINATE WITH THE ENGINEER AND OWNER IF ANY DEVIATION OR ALTERATION OF THE WORK PROPOSED ON THESE DRAWINGS IS REQUIRED.
3. UTILIZE ALL PRECAUTIONS AND MEASURES TO ENSURE THE SAFETY OF THE PUBLIC, ALL PERSONNEL AND PROPERTY DURING CONSTRUCTION IN ACCORDANCE WITH OSHA STANDARDS, INCLUDING THE INSTALLATION OF TEMPORARY FENCING BARRICADES, SAFETY LIGHTING, CONES, POLICE DETAIL AND/OR FLAGMEN AS DETERMINED NECESSARY BY THE TOWN/LOCAL MUNICIPALITY. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF POLICE DETAIL AND FOR COORDINATING WITH THE LOCAL OR STATE POLICE DEPARTMENT FOR ALL REQUIRED POLICE DETAIL.
4. MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY CONSTRUCTION PERMITS, PAY ALL REQUIRED POLICE DETAILS AND POST ALL BONDS, IF NECESSARY, ASSOCIATED WITH THE SAME, AND COORDINATE WITH THE OWNER AND THE ENGINEER.
5. ALL EXISTING CONDITIONS SHOWN ARE APPROXIMATE AND ARE BASED ON THE BEST INFORMATION AVAILABLE. PRIOR TO THE START CONSTRUCTION VERIFY THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, NOTIFY THE OWNER AND THE ENGINEER PRIOR TO INSTALLING ANY PORTION OF THE SITE WORK WHICH WOULD BE AFFECTED.
6. THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS INDICATED ON THE DRAWINGS ARE BASED ON RECORDS OF VARIOUS UTILITY COMPANIES, AND WHEREVER POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY IN THE TOWN, AND "DISCAS" (1-888-344-7233) AT LEAST THREE BUSINESS DAYS PRIOR TO ANY EXCAVATION WORK IN PREVIOUSLY UNALTERED AREAS TO REQUEST EXACT FIELD LOCATION OF UTILITIES. THE CONTRACTOR MUST RESOLVE CONFLICTS BETWEEN THE PROPOSED UTILITIES AND FIELD-LOCATED UTILITIES AND REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY. THE CONTRACTOR ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OBTAINED, INCOMPLETELY OR INACCURATELY SHOWN. THE CONTRACTOR MUST MAINTAIN ACCURATE RECORDS OF THE LOCATION AND ELEVATION OF ALL WORK INSTALLED AND EXISTING UTILITIES FOUND DURING CONSTRUCTION FOR THE PREPARATION OF THE AS-BUILT PLAN.
7. COORDINATE AND MAKE ALL CONNECTION ARRANGEMENTS WITH UTILITY COMPANIES, AS REQUIRED.
8. THE CONTRACTOR MUST MAINTAIN ALL EXISTING UTILITIES IN WORKING ORDER AND FREE FROM DAMAGE DURING THE ENTIRE DURATION OF THE PROJECT. REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ALL COST RELATED TO THE REPAIR OF UTILITIES. EXCAVATION REQUIRED WITHIN THE PROXIMITY OF EXISTING UTILITY LINES MUST BE DONE BY HAND.
9. COORDINATE ALL TRENCHING WORK WITHIN ROADWAYS WITH THE PROPER LOCAL & STATE AGENCY. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRENCH SAFETY INCLUDING ANY LOCAL AND/OR STATE PERMITS REQUIRED FOR THE TRENCH WORK. IF THIS WORK IS REQUIRED TO OCCUR OUTSIDE THE AGREED UPON HOURS OF OPERATION FOR THE FACILITY, THE CONTRACTOR MUST PLAN ACCORDINGLY.
10. SAWCUT ALL TRENCH WORK WITHIN EXISTING PAVEMENT AS INDICATED ON THE DRAWINGS. BACKFILL AND COMPACT TRENCH WORK AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. IF SETTLEMENT OCCURS DUE TO INADEQUATE COMPACTION, AS DETERMINED BY THE ENGINEER, WITHIN THE WARRANTY PERIOD, CONTRACTOR IS REQUIRED TO REMOVE, PATCH AND REPAVE AFTER ONE COMPLETE 12-MONTH CYCLE.
11. IMPORT ONLY CLEAN MATERIAL.
12. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH AND MAINTAIN ALL CONTROL POINTS AND BENCHMARKS DURING CONSTRUCTION INCLUDING BENCHMARK LOCATIONS AND ELEVATIONS AT CRITICAL AREAS. COORDINATE WITH THE ENGINEER THE LOCATION OF ALL CONTROL POINTS AND BENCHMARKS.
13. SITE LAYOUT SURVEY REQUIRED FOR CONSTRUCTION MUST BE PROVIDED BY THE CONTRACTOR AND PERFORMED BY A RHODE ISLAND REGISTERED PROFESSIONAL LAND SURVEYOR. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE SURVEYOR FOR ALL SITE SURVEY WORK.
14. MAINTAIN ALL GRADE STAKES SET BY THE SURVEYOR. GRADE STAKES ARE TO REMAIN UNTIL A FINAL INSPECTION OF THE ITEM HAS BEEN COMPLETED BY THE ENGINEER. RE-STAKING OF PREVIOUSLY SURVEYED SITE FEATURES IS THE RESPONSIBILITY (INCLUDING COST) OF THE CONTRACTOR.
15. UNLESS OTHERWISE INDICATED ON THE DRAWINGS AND/OR IN THE SPECIFICATIONS, ALL SITE CONSTRUCTION MATERIALS AND METHODOLOGIES ARE TO CONFORM TO THE MOST RECENT VERSION OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
16. PROVIDE ALL CONSTRUCTION SERVICE IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS REGARDING NOISE, VIBRATION, DUST, SEDIMENTATION CONTAINMENT, AND TRENCH WORK.
17. COLLECT SOLID WASTES AND STORE IN A SECURED DUMPSTER. THE DUMPSTER MUST MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS.
18. RESTORE ALL SURFACES EXCEPT TO THEIR ORIGINAL CONDITION AFTER CONSTRUCTION IS COMPLETE PER SPECIFICATIONS. LEAVE ALL AREAS NOT DISTURBED BY CONSTRUCTION IN THEIR NATURAL STATE. TAKE CARE TO PREVENT DAMAGE TO SHRUBS, TREES, OTHER LANDSCAPING AND/OR NATURAL FEATURES. WHEREAS THE PLANS DO NOT SHOW ALL LANDSCAPE FEATURES, EXISTING CONDITIONS MUST BE VERIFIED BY THE CONTRACTOR IN ADVANCE OF THE WORK.
19. CONSTRUCT ALL WHEELCHAIR RAMPS IN ACCORDANCE WITH RIDOT.
20. PROVIDE A UNIT PRICE COST IN CUBIC YARD MEASURE FOR LEDGE AND/OR BOLDER REMOVAL. LEDGE AND/OR BOLDERS LESS THAN 1 CUBIC YARD IN SIZE BASED ON THE AVERAGE DIMENSIONS WILL NOT BE CONSIDERED PAYABLE ROCK. PROVIDE UNIT PRICES FOR BOTH ON AND OFF SITE DISPOSAL. IF ADDITIONAL FILL MATERIAL IS REQUIRED INCLUDE THE COST OF ALL FILL MATERIAL.
21. REGULARLY INSPECT THE PERIMETER OF THE PROPERTY TO CLEAN UP AND REMOVE LOOSE CONSTRUCTION DEBRIS BEFORE IT LEAVES THE SITE. PROMPTLY REMOVE ALL DEMOLITION DEBRIS FROM THE SITE TO AN APPROVED DUMP SITE.
22. ALL TRUCKS LEAVING THE SITE MUST BE COVERED.
23. DO NOT WASH ANY CONCRETE TRUCKS ONSITE. REMOVE BY HAND ANY CEMENT OR CONCRETE DEBRIS LEFT IN THE DISTURBED AREA.
24. BURIAL OF ANY STUMPS, SOLID DEBRIS, AND/OR STONES/BOLDERS ONSITE IS PROHIBITED. DO NOT USE ROAD SALT OR OTHER DE-ICING CHEMICALS ON THE ACCESS ROADWAY.
25. AT THE END OF CONSTRUCTION, REMOVE ALL CONSTRUCTION DEBRIS AND SURPLUS MATERIALS FROM THE SITE (AS INDICATED IN THE SPECIFICATIONS). PERFORM A THOROUGH INSPECTION OF THE WORK PERIMETER. COLLECT AND REMOVE ALL MATERIALS AND BLOWN OR WATER CARRIED DEBRIS FROM THE SITE.

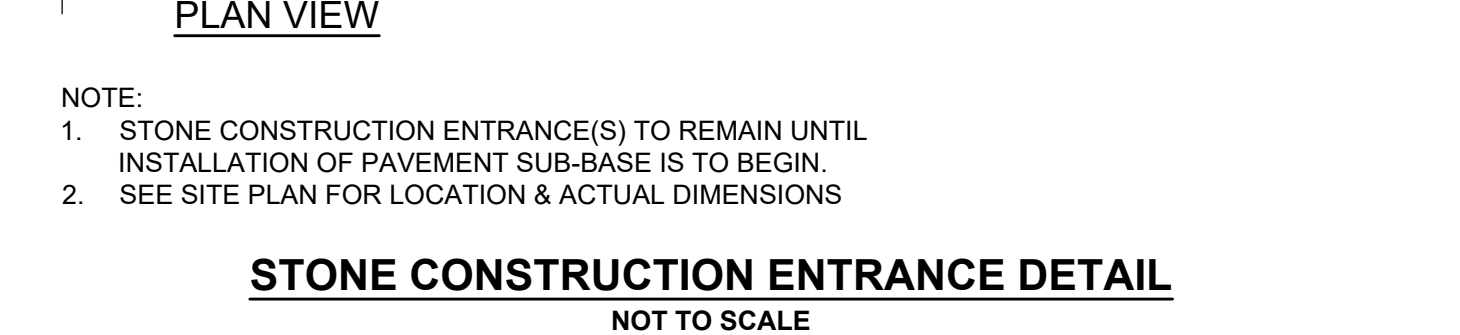
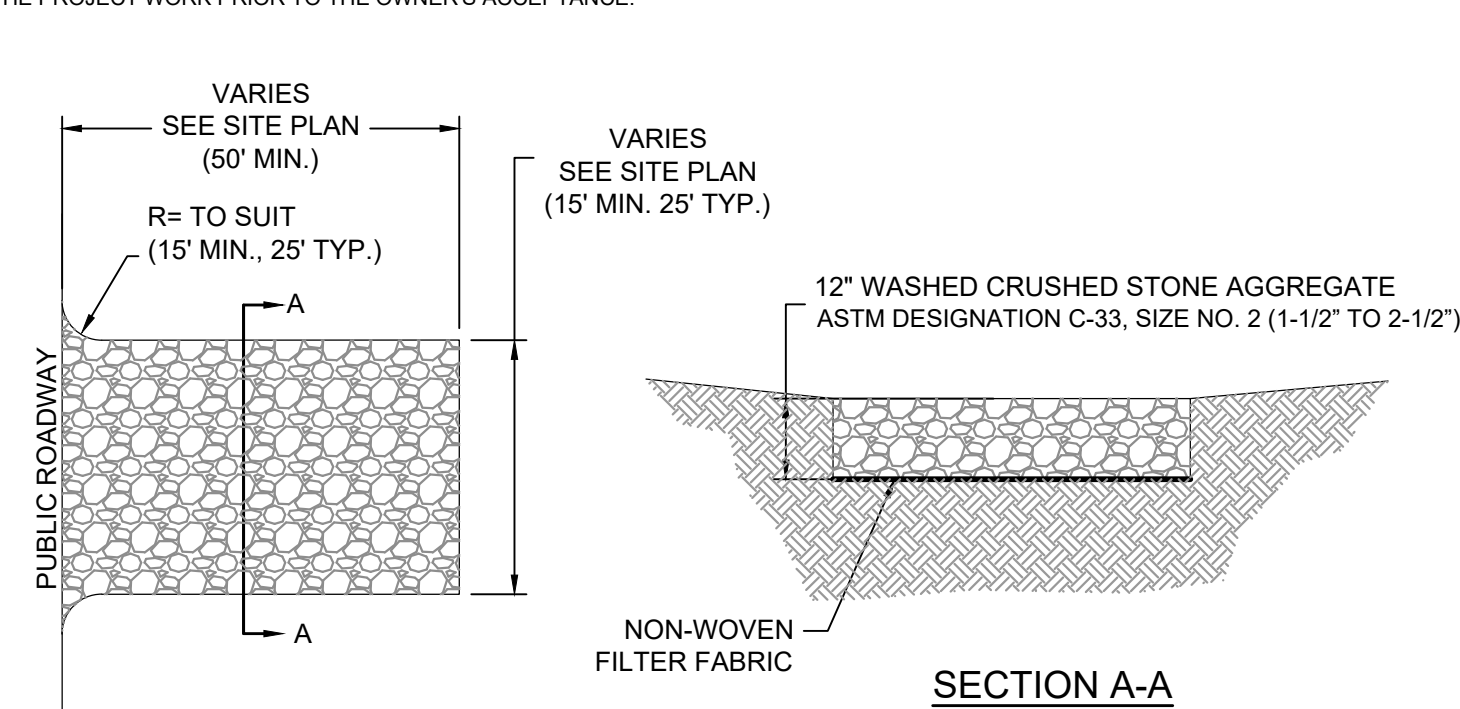
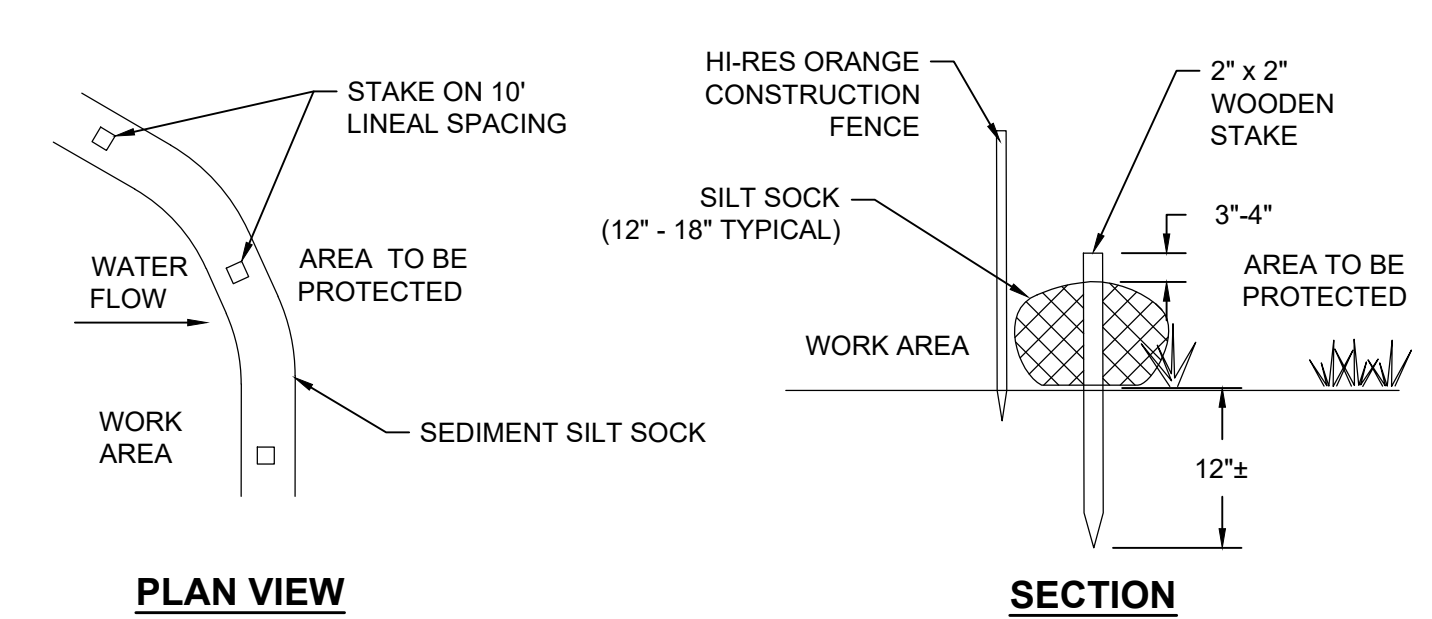
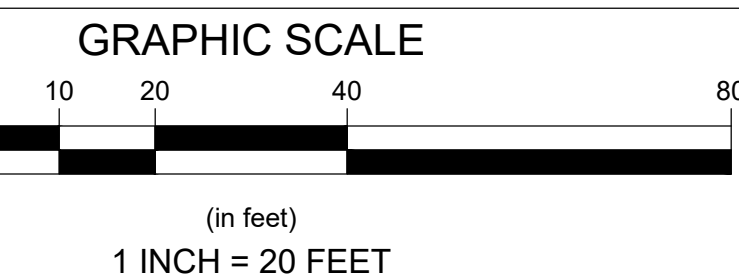
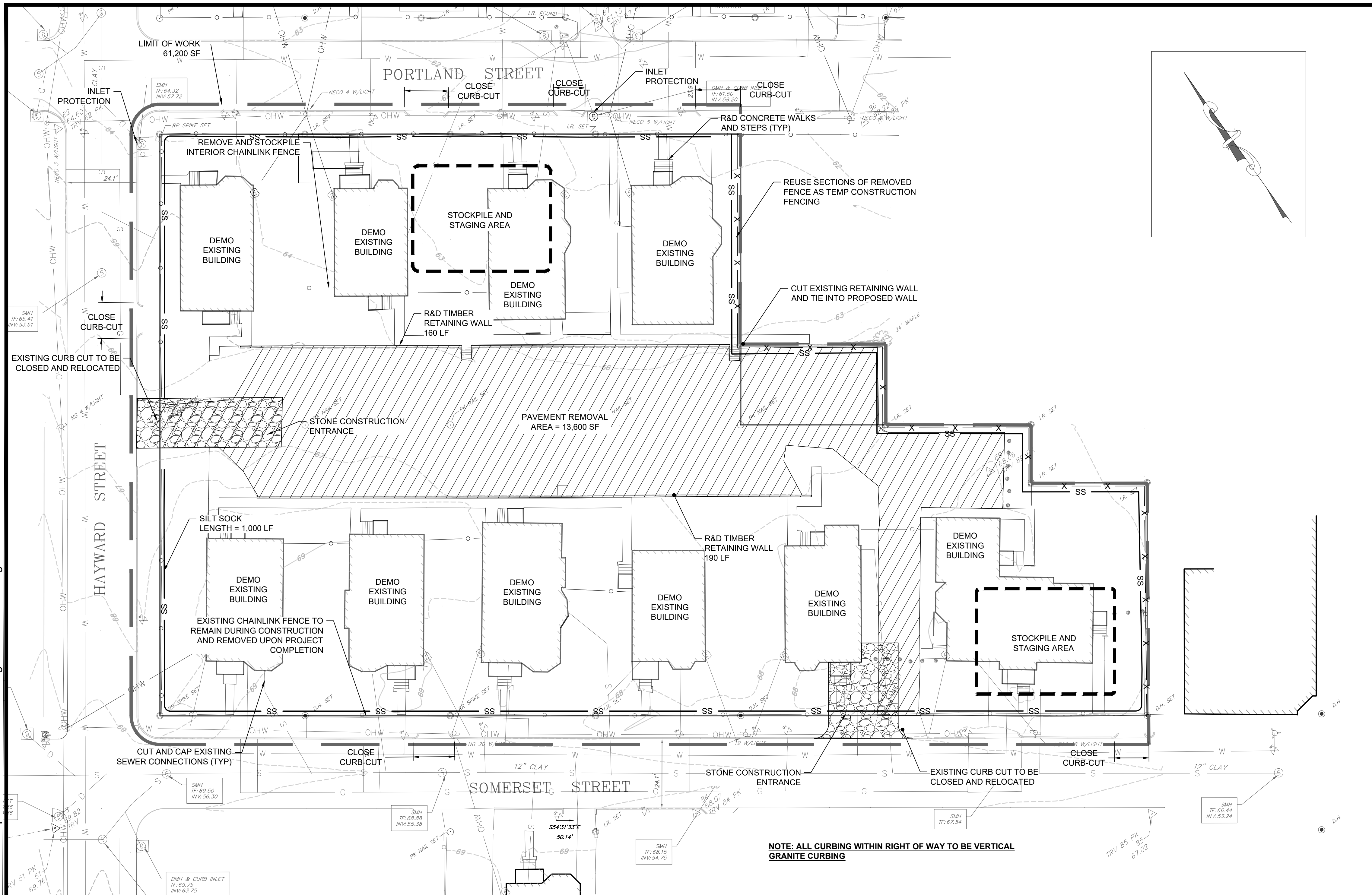
1. UNLESS OTHERWISE NOTED, THE CONTRACTOR IS RESPONSIBLE FOR THE RELOCATION, DEMOLITION, REMOVAL AND DISPOSAL, IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES, OF ALL EXISTING SITE ELEMENTS AND STRUCTURES INCLUDING, BUT NOT LIMITED TO, BUILDINGS, ROADWAYS, PARKING AREAS, PARKING ISLANDS, BITUMINOUS CONCRETE, CEMENT CONCRETE, GRAVEL, CURBS, WALKWAYS, SIDEWALKS, BERMS, FENCES, BOLLARDS, POSTS, PLANTING BEDS, TREES, SHRUBS, UTILITIES, DRAINAGE STRUCTURES AND ALL OTHER STRUCTURES SHOWN AND NOT SHOWN WITHIN CONSTRUCTION LIMITS, AND WHERE NEEDED, TO ALLOW FOR NEW CONSTRUCTION. ALL FACILITIES TO BE REMOVED ARE TO BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER SPECIFICATIONS.
2. REMOVE ALL DEBRIS FROM THE SITE AND DISPOSE OF THE DEBRIS IN A PROPER AND LEGAL MANNER.
3. OBTAIN ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
4. COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. COORDINATE WITH THE UTILITY COMPANIES CONCERNING PORTIONS OF THE WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
5. REFER TO MECHANICAL AND UTILITY PLANS AND SPECIFICATIONS FOR ALL WORK WHICH REQUIRES UTILITIES TO BE REMOVED, RELOCATE OR ABANDONED AND LEFT IN PLACE.
6. PROVIDE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL UTILITY LINES, AS REQUIRED, BEFORE PROCEEDING WITH THE WORK.
7. MAINTAIN CONTINUOUS ACCESS AND OPERATION FOR SURROUNDING FACILITIES, AS DEEMED BY THE OWNER, AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES.
8. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.

1. A HIGH WATER TABLE IS NOT ANTICIPATED. HOWEVER, IF DEWATERING IS REQUIRED DURING EXCAVATION, TEMPORARILY LOWER THE WATER TABLE [PER SPECIFICATIONS OR] BY PUMPING INSTALL THE BASIN(S) WITHIN THE LIMIT OF DISTURBANCE INDICATED BY THE SILT FENCE OR STRAWBALES IF NEEDED.
2. PRIOR TO ANY DEWATERING, THE DEWATERING PLAN MUST BE APPROVED BY THE ENGINEER.
3. IF DEWATERING IS NECESSARY DURING CONSTRUCTION, IMPLEMENT THE PROPER ESC MEASURES ON SITE TO PREVENT EROSION OR SEDIMENT RUNOFF. THESE MEASURES CAN INCLUDE DEWATERING BAGS, TEMPORARY STRAWBALES, SILT FENCES, SILT SOCKS AND/OR APPROVED DEVICES AS INDICATED IN THE DETAILS.

1. PRIOR TO THE START OF CONSTRUCTION A NOTICE OF INTENT (NOI) MUST BE FILED WITH NPDES. REFER TO THE STORMWATER AND POLLUTION PREVENTION PLAN (SWPPP) REGARDING ALL CONSTRUCTION CONTROL MATTERS. MAINTAIN A WORKING COPY OF THE SWPPP ONSITE AT ALL TIMES. FOLLOW THE SWPPP PROTOCOL FOR SITE MAINTENANCE, INSPECTIONS AND PROPER DOCUMENTATION UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE OWNER. AT THE COMPLETION OF THE PROJECT THE CONTRACTOR OR OWNER MUST FILE A NOTICE OF TERMINATION WITH NPDES. IN ACCORDANCE WITH NPDES REGULATIONS, THE COMPLETED SWPPP MUST INCLUDE ALL OF THE SITE EROSION CONTROL DOCUMENTATION, WEEKLY EROSION INSPECTION REPORTS COMPLETED BY THE DESIGNATED SITE PERSONNEL, AND ANY OTHER PERTINENT SITE DOCUMENTATION MUST BE RETAINED FOR A MINIMUM OF 3 YEARS FROM THE DATE OF TERMINATION.
2. DESIGNATE THE SITE CONSTRUCTION FOREMAN AS THE ON-SITE PERSONNEL RESPONSIBLE FOR THE DAILY INSPECTION AND MAINTENANCE OF ALL SEDIMENT AND EROSION CONTROLS AND IMPLEMENTATION OF ALL NECESSARY MEASURES TO CONTROL EROSION AND PREVENT SEDIMENT FROM LEAVING THE SITE.
3. INSTALL ALL EROSION AND SEDIMENT CONTROL (ESC) MEASURES AS INDICATED ON DRAWINGS IN CONSULTATION WITH THE CONSERVATION AGENT, AND ENGINEER BEFORE ANY CONSTRUCTION ACTIVITIES BEGIN. INSPECT, MAINTAIN REPAIR AND REPLACE EROSION CONTROL MEASURES, AS NECESSARY, DURING THE ENTIRE CONSTRUCTION PERIOD OF THE PROJECT. THE SITE PERSONNEL EROSION CONTROL MEASURES ARE THE DESIGNATED LIMIT OF WORK. INFORM ALL PERSONNEL WORKING ON THE PROJECT SITE THAT NO CONSTRUCTION ACTIVITY IS TO OCCUR BEYOND THE LIMIT OF WORK AT ANY TIME THROUGHOUT THE CONSTRUCTION PERIOD.
4. MAINTAIN A MINIMUM SURPLUS OF 100 FEET OF EROSION CONTROL BARRIER (SILT FENCE, STRAWBALE, &/OR SILT SOCK) ONSITE AT ALL TIMES.
5. PROTECT THE ADJACENT RESOURCE AREA FROM SEDIMENTATION DURING PROJECT CONSTRUCTION UNTIL ACCEPTANCE BY THE OWNER & IN CONFORMANCE WITH THE ORDER OF CONDITIONS.
6. PROVIDE CONSTRUCTION EXITS AS INDICATED ON DRAWINGS TO SHED DIRT FROM CONSTRUCTION VEHICLE TIRES. CLEAN AND/OR REPLACE THE CRUSHED STONE PAD, AS NECESSARY, TO MAINTAIN ITS EFFECTIVENESS.
7. PHASE THE LIMIT OF CLEARING, GRADING AND DISTURBANCES TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. PHASE THE SITE WORK IN A MANNER TO MINIMIZE AREAS OF EXPOSED SOIL. IF TREES ARE TO BE CUT ON THE ENTIRE SITE, CLEAR AND GRUB ONLY THOSE AREAS THAT ARE ACTIVELY UNDER CONSTRUCTION. PROPERLY INSTALL THE SEDIMENTATION CONTROLS PRIOR TO BEGINNING ANY LAND CLEARING ACTIVITY AND/OR OTHER CONSTRUCTION RELATED WORK.
8. MONITOR LOCAL WEATHER REPORTS DURING CONSTRUCTION AND PRIOR TO SCHEDULING EARTHMOVING OR OTHER CONSTRUCTION ACTIVITIES WHICH LEAVE LARGE DISTURBED AREAS UNSTABILIZED. IF INCLEMENT WEATHER IS PREDICTED, USE BEST PROFESSIONAL JUDGEMENT AND GOOD CONSTRUCTION PRACTICES WHEN SCHEDULING CONSTRUCTION ACTIVITIES AND WHEN THE NECESSARY EROSION CONTROL DEVICES ARE INSTALLED AND FUNCTIONING PROPERLY TO MINIMIZE EROSION FROM ANY IMPENDING WEATHER EVENTS.
9. INSPECT EROSION AND SEDIMENT CONTROL DEVICES AND STABILIZED SLOPES ON A WEEKLY BASIS AND AFTER EACH RAINFALL EVENT OF 25 INCH OR GREATER. REPAIR IDENTIFIED PROBLEMS WITHIN 24 HOURS TO ENSURE EROSION AND SEDIMENT CONTROLS ARE IN GOOD WORKING ORDER. RESET OR REPLACE MATERIALS AS REQUIRED.
10. SURROUND THE PERIMETER OF SOIL STOCKPILES WITH SILT SOCK, SILT FENCE, STRAWBALES, OR A COMBINATION OF SILT FENCE WITH STRAWBALE, AS DETERMINED NECESSARY.
11. DISTURBED AREAS AND SLOPES MUST NOT BE LEFT UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON. PROVIDE APPROPRIATE STABILIZATION PRACTICES ON ALL DISTURBED AREAS AS SOON AS POSSIBLE, BUT NOT MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY AREAS HAVING A SLOPE GREATER THAN 4:1 WITH EROSION BLANKETS OR APPROXIMATELY EQUAL USE THE SILT SITE IS PROPERLY STABILIZED. TEMPORARY SLOPES MAY ALSO BE REQUIRED IF DETERMINED NECESSARY IN THE FIELD BY THE ENGINEER.

GENERAL			
EXISTING	PROPOSED		SYMBOLS
		BUILDING	CB BOUNDARY
		CENTERLINE	CONTROL POINT
44	44	CONTOUR - MINOR	EXISTING TREE
50	50	CONTOUR - MAJOR	EXISTING SPOT GRADE
		CURB	EL 98.45
		CURB CUT	EL 95.00
		EDGE OF PAVEMENT	SEWER MANHOLE
		FENCE - CHAIN LINK	ELECTRIC MANHOLE
		FENCE - WIRE	MANHOLE
		FENCE - WOOD	DRAIN MANHOLE
		LIMIT OF WORK	CATCHBASIN
		PATHWAY	BIORETENTION OUTLET
		STONE	FLARED END OUTLET
		SIDEWALK	STONE APRON
		STORMWATER AREA	INLET PROTECTION
		TREE LINE	WATER VALVE
		WALL - RETAINING	SEWER VALVE
		CONCRETE	GAS VALVE
		CROSSWALK/PAVEMENT STRIPING	CS CURB STOP
			CO CLEAN OUT
			THRUST BLOCK
			HYDRANT
			UP UTILITY POLE WIGWAG
			UP1 UTILITY POLE
			GUY
			LIGHT POST
			TP TEST PIT
			BORING
			SIGN
			BENCH
			BIKE BIKE RACK
			HANDICAP SYMBOL
			10 NUMBER OF PARKING SPACES
PROPERTY INFORMATION			
EXISTING	PROPOSED	ABUTTING LOT	
		EASEMENT LINE	
		PROPERTY, LOT, OR ROW	
		SETBACK LINE	
UTILITIES			
EXISTING	PROPOSED	DRAIN PIPE	
D	D	GAS LINE	
G	G	OVERHEAD WIRE	
OHW	OHW	SANITARY SEWER	
S	S	SEWER FORCE MAIN	
FM	FM	UNDERGROUND E/T/C	
E/T/C	E/T/C	UNDERGROUND ELEC.	
UGE	UGE	CABLE LINE	
C	C	TELEPHONE LINE	
T	T	WATER LINE	
W	W		
EROSION & SEDIMENT CONTROL			
SF	SF	SILT FENCE	
SS	SS	SILT SOCK	

DRAFT
NOT FOR
CONSTRUCTION



GENERAL DEMOLITION NOTES:

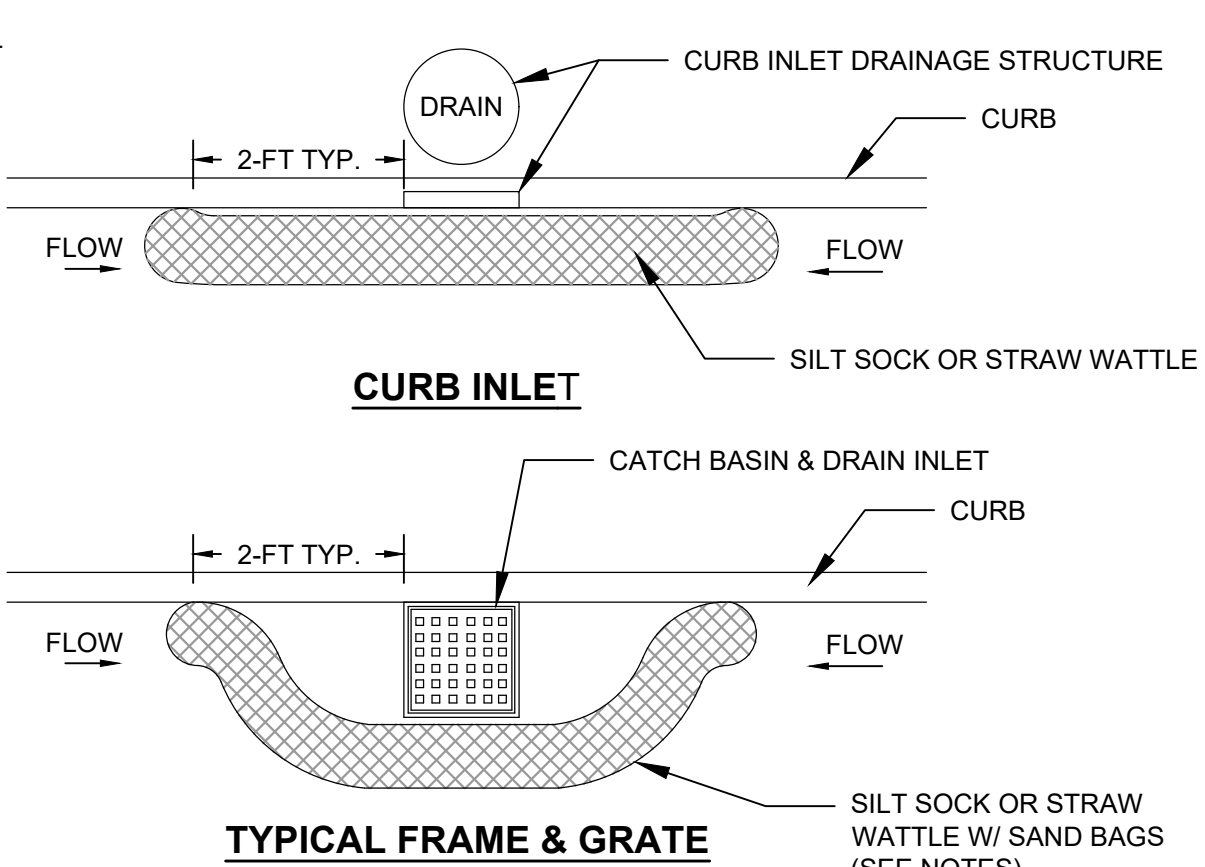
THIS PLAN SET DOES NOT INCLUDE DETAILS & SPECIFICATIONS FOR ALL DEMOLITION WORK REQUIRED WITHIN THE PROPOSED CONSTRUCTION LIMITS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE OWNER, PROJECT ARCHITECT, MECHANICAL ENGINEERS AND OTHER PROJECT ENGINEERS INVOLVED WITH THE PROPOSED NEW CONSTRUCTION TO DEVELOP A SUITABLE DEMOLITION PLAN, WHICH WILL ALLOW THE FACILITIES TO REMAIN IN OPERATION DURING THE ENTIRETY OF CONSTRUCTION.

1. UNLESS OTHERWISE NOTED, THE CONTRACTOR IS RESPONSIBLE FOR THE RELOCATION, DEMOLITION, REMOVAL AND DISPOSAL, IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES, OF ALL EXISTING SITE ELEMENTS AND STRUCTURES INCLUDING, BUT NOT LIMITED TO, BUILDINGS, ROADWAYS, PARKING AREAS, PARKING ISLANDS, BITUMINOUS CONCRETE, CEMENT CONCRETE, GRAVEL, CURBS, SIDEWALKS, SIDEWALKS, BERMS, FENCES, BOLLARDS, POSTS, PLANTING BEDS, TREES, SHRUBS, UTILITIES, DRAINAGE STRUCTURES AND ALL OTHER STRUCTURES SHOWN AND NOT SHOWN WITHIN CONSTRUCTION LIMITS, AND WHERE NECESSARY, TO ALLOW FOR NEW CONSTRUCTION. ALL FACILITIES TO BE REMOVED ARE TO BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER SPECIFICATIONS. BUILDING DEMO IS SHOWN FOR REFERENCE ONLY. BUILDING DEMO REQUIREMENTS AND SPECIFICATIONS BY OTHERS.
2. REMOVE ALL DEBRIS FROM THE SITE AND DISPOSE OF THE DEBRIS IN A PROPER AND LEGAL MANNER.
3. OBTAIN ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
4. COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. COORDINATE WITH THE UTILITY COMPANIES CONCERNING PORTIONS OF THE WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
5. REFER TO MECHANICAL AND UTILITY PLANS AND SPECIFICATIONS FOR ALL WORK WHICH REQUIRES UTILITIES TO BE REMOVED, RELOCATE OR ABANDONED AND LEFT IN PLACE.
6. PROVIDE NOTICE TO ALL UTILITY COMPANIES REGARDING DEMOLITION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL UTILITY LINES, AS REQUIRED, BEFORE PROCEEDING WITH THE WORK.
7. MAINTAIN CONTINUOUS ACCESS AND OPERATION FOR SURROUNDING FACILITIES, AS DEEMED BY THE OWNER, AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES.

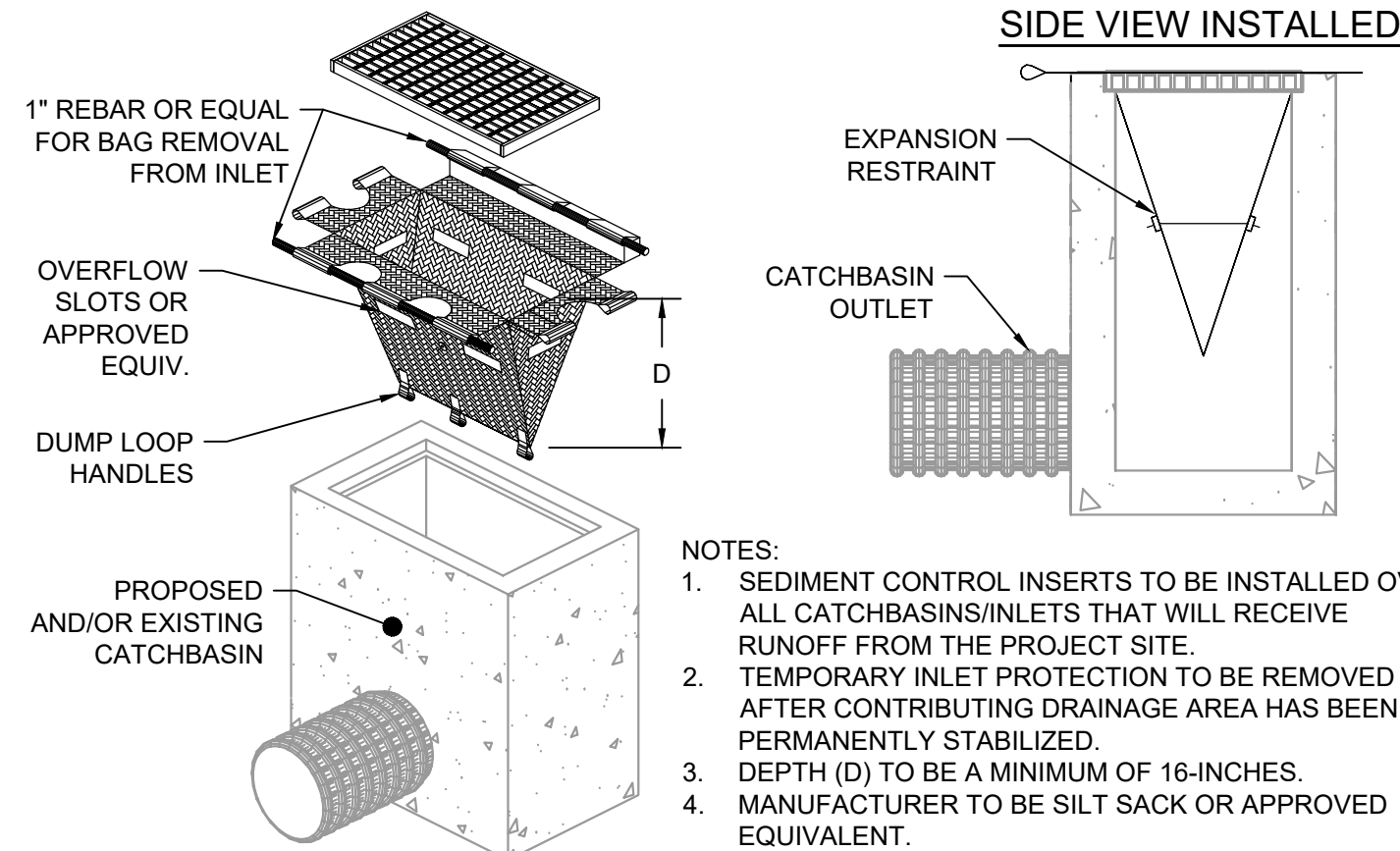
8. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED

EROSION & SEDIMENT CONTROL NOTES:

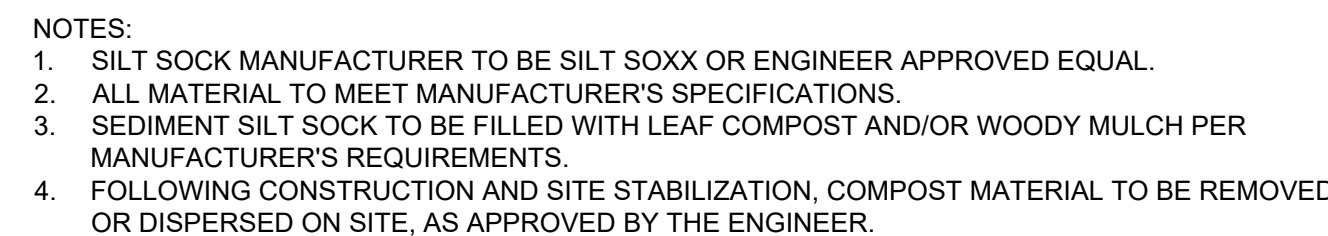
1. PRIOR TO THE START OF CONSTRUCTION A NOTICE OF INTENT (NOI) MUST BE FILED WITH NPDES. REFER TO THE STORMWATER AND POLLUTION PREVENTION PLAN (SWPPP) REGARDING ALL EROSION CONTROL MEASURES. MAINTAIN A WORKING COPY OF THE SWPPP ON SITE AT ALL TIMES. FOLLOW THE SWPPP PROTOCOL FOR SITE MAINTENANCE, INSPECTIONS AND PROPER DOCUMENTATION UNTIL THE SITE HAS BEEN ACCEPTED BY THE OWNER. AT THE COMPLETION OF THE PROJECT THE CONTRACTOR OR OWNER MUST FILE A NOTICE OF TERMINATION WITH NPDES. IN ACCORDANCE WITH NPDES REGULATIONS, THE COMPLETED SWPPP MUST INCLUDE ALL OF THE SITE EROSION CONTROL DOCUMENTATION, WEEKLY EROSION INSPECTION REPORTS COMPLETED BY THE DESIGNATED SITE PERSONNEL, AND ANY OTHER PERTINENT SITE DOCUMENTATION MUST BE RETAINED FOR A MINIMUM OF 3 YEARS FROM THE DATE OF TERMINATION.
2. DESIGNATE THE SITE CONSTRUCTION FOREMAN AS THE ON-SITE PERSONNEL RESPONSIBLE FOR THE DAILY INSPECTION AND MAINTENANCE OF ALL SEDIMENT AND EROSION CONTROLS AND IMPLEMENTATION OF ALL NECESSARY MEASURES TO CONTROL EROSION AND PREVENT SEDIMENT FROM LEAVING THE SITE.
3. INSTALL ALL EROSION AND SEDIMENT CONTROL (ESC) MEASURES AS INDICATED ON DRAWINGS IN CONSULTATION WITH THE CONSERVATION AGENT, AND ENGINEER BEFORE ANY CONSTRUCTION ACTIVITIES BEGIN. INSPECT, MAINTAIN REPAIR AND REPLACE EROSION CONTROL MEASURES, AS NECESSARY, DURING THE ENTIRE CONSTRUCTION PERIOD OF THE PROJECT. THE SITE PERIMETER EROSION CONTROLS ARE THE DESIGNATED LIMIT OF WORK. INFORM ALL PERSONNEL WORKING ON THE PROJECT SITE THAT NO CONSTRUCTION ACTIVITY IS TO OCCUR BEYOND THE LIMIT OF WORK AT ANY TIME THROUGHOUT THE CONSTRUCTION PERIOD.
4. MAINTAIN A MINIMUM SURPLUS OF 100 FEET OF EROSION CONTROL BARRIER (SILT FENCE, STRAWBALE, &/OR SILT SOCK) ONSITE AT ALL TIMES.
5. PROTECT THE ADJACENT RESOURCE AREA FROM SEDIMENTATION DURING PROJECT CONSTRUCTION UNTIL ACCEPTANCE BY THE OWNER & IN CONFORMANCE WITH THE ORDER OF CONDITIONS.
6. PROVIDE CONSTRUCTION EXITS AS INDICATED ON DRAWINGS TO SHEED DIRT FROM CONSTRUCTION VEHICLE TIRES. CLEAN AND/OR REPLACE THE CRUSHED STONE PAD, AS NECESSARY, TO MAINTAIN ITS EFFECTIVENESS.
7. KEEP THE LIMIT OF CLEARING, GRADING AND DISTURBANCES TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. PHASE THE SITE WORK IN A MANNER TO MINIMIZE AREAS OF EXPOSED SOIL. IF TREES ARE TO BE CUT ON THE ENTIRE SITE, CLEAR AND GRUB ONLY THOSE AREAS WHICH ARE ACTIVELY UNDER CONSTRUCTION. PROPERLY INSTALL THE SEDIMENTATION CONTROLS PRIOR TO BEGINNING ANY LAND CLEARING ACTIVITY AND/OR OTHER CONSTRUCTION RELATED WORK.
8. MONITOR LOCAL WEATHER REPORTS DURING CONSTRUCTION AND PRIOR TO SCHEDULING EARTHMOVING OR OTHER CONSTRUCTION ACTIVITIES WHICH LEAVE LARGE DISTURBED AREAS UNSTABILIZED. IF INCLEMENT WEATHER IS PREDICTED, USE BEST PROFESSIONAL JUDGEMENT AND GOOD CONSTRUCTION PRACTICES WHEN SCHEDULING CONSTRUCTION ACTIVITIES AND ENSURE THE NECESSARY EROSION CONTROL DEVICES ARE INSTALLED AND FUNCTIONING PROPERLY TO MINIMIZE EROSION FROM ANY IMPENDING WEATHER EVENTS.
9. INSPECT EROSION AND SEDIMENT CONTROL DEVICES AND STABILIZED SLOPES ON A WEEKLY BASIS AND AFTER EACH RAINFALL EVENT OF 25 INCH OR GREATER. REPAIR IDENTIFIED PROBLEMS WITHIN 24 HOURS TO ENSURE EROSION AND SEDIMENT CONTROLS ARE IN GOOD WORKING ORDER. RESET OR REPLACE MATERIALS AS REQUIRED.
10. SURROUND THE PERIMETER OF SOIL STOCKPILES WITH SILT SOCK, SILT FENCE, STRAWBALES, OR A COMBINATION OF SILT FENCE WITH STRAWBALE, AS DETERMINED NECESSARY.
11. DISTURBED AREAS AND SLOPES MUST NOT BE LEFT UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON. PROVIDE APPROPRIATE STABILIZATION PRACTICES ON ALL DISTURBED AREAS AS SOON AS POSSIBLE BUT NOT MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED. MAINTAIN TEMPORARY AREAS HAVING A SLOPE GREATER THAN 1:1 WITH EROSION BLANKETS OR APPROVED EQUIV. UNTIL THE SITE IS PROPERLY STABILIZED. TEMPORARY SWALES MAY ALSO BE REQUIRED IF DETERMINED NECESSARY IN THE FIELD BY THE ENGINEER.
12. INSTALL A SILT SACK OR APPROVED EQUIVALENT IN EACH EXISTING CATCHBASIN RECEIVING RUNOFF FROM THE SITE. UPON THE INSTALLATION OF EACH CATCH BASIN, INSTALL A SILT SACK OR APPROVED EQUIVALENT. INSPECT SILT SACKS, AFTER EACH SIGNIFICANT STORM EVENT AND REMOVE AND EMPTY AS NEEDED FOR THE DURATION OF THE CONSTRUCTION PERIOD.
13. SMALL SEDIMENTATION BASINS MAY BE CONSTRUCTED ON AN AS-NEEDED BASIS DURING CONSTRUCTION TO AID IN THE CAPTURE OF SITE RUNOFF AND SEDIMENT. IT WILL BE THE RESPONSIBILITY OF THE SITE CONTRACTOR, IN CONSULTATION WITH THE ENGINEER, TO SIZE AND CREATE THESE BASINS IN APPROPRIATE LOCATIONS.
14. CONTAIN ALL SEDIMENT ONSITE. SWEEP ALL EXITS FROM THE SITE AS NECESSARY INCLUDING ANY SEDIMENT TRACKING. SWEEP PAVED AREAS AS NEEDED TO REMOVE SEDIMENT AND POTENTIAL POLLUTANTS ACCUMULATED DURING SITE CONSTRUCTION.
15. REMOVE ACCUMULATED SEDIMENT FROM ALL TEMPORARY PRACTICES AND DISPOSE OF IN A PRE-APPROVED LOCATION.
16. PROVIDE ON SITE OR MAKE READILY AVAILABLE THE NECESSARY EQUIPMENT AND SITE PERSONNEL DURING CONSTRUCTION HOURS FOR THE DURATION OF THE PROJECT TO ENSURE ALL EROSION AND SEDIMENTATION CONTROL DEVICES ARE PROPERLY MAINTAINED AND REPAIRED IN A TIMELY AND RESPONSIBLE MANNER. IF SITE WORK IS SUSPENDED DURING THE WINTER MONTHS THE CONTRACTOR MUST CONTINUE TO PROVIDE PERSONNEL AND EQUIPMENT EITHER ON SITE OR READILY AVAILABLE TO PROPERLY MAINTAIN AND REPAIR ALL EROSION AND SEDIMENTATION CONTROL DEVICES IN A TIMELY AND RESPONSIBLE MANNER.
17. PRIOR TO THE INSTALLATION OF FILTER FABRIC AND MEDIA WITHIN THE BIOTRETIONMENT AREAS, REMOVE AND PROPERLY DISPOSE OF SEDIMENT ACCUMULATED IN ANY PARTIALLY CONSTRUCTED OR TEMPORARY BIOTRETIONMENT/DRAINAGE AREA USED FOR SEDIMENT CONTROL DURING CONSTRUCTION. PROVIDE A SURFACE ELEVATION AT A MINIMUM 1-FOOT ABOVE THE BOTTOM OF THE CONSTRUCTION TRENCH SHOWN IN THE BIODRAINAGE OR PARTIALLY CONSTRUCTED BIOTRETIONMENT AREAS. THIS ALLOWS FOR AN OVER-DIG OF THE COLLECTED SEDIMENT FROM WITHIN THE BIOTRETIONMENT AREA PRIOR TO MEDIA/FABRIC INSTALLATION.
18. CONTROL DUST BY WATERING OR OTHER APPROVED METHODS AS NECESSARY, OR AS DIRECTED BY THE ENGINEER.
19. THE CONTRACTOR IS RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE DURING CONSTRUCTION OF ALL STORMWATER FACILITIES INSTALLED OR AFFECTED BY THE PROJECT. REMOVE SEDIMENT OR DEBRIS COLLECTED WITHIN THESE FACILITIES FROM THE PROJECT WORK PRIOR TO THE OWNER'S ACCEPTANCE.



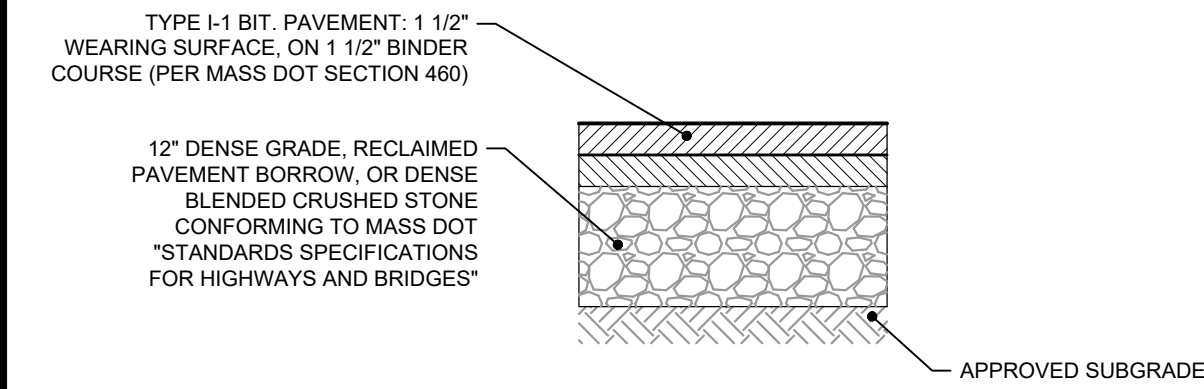
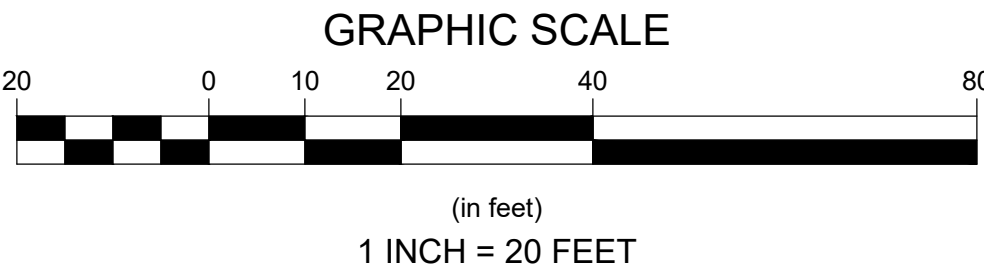
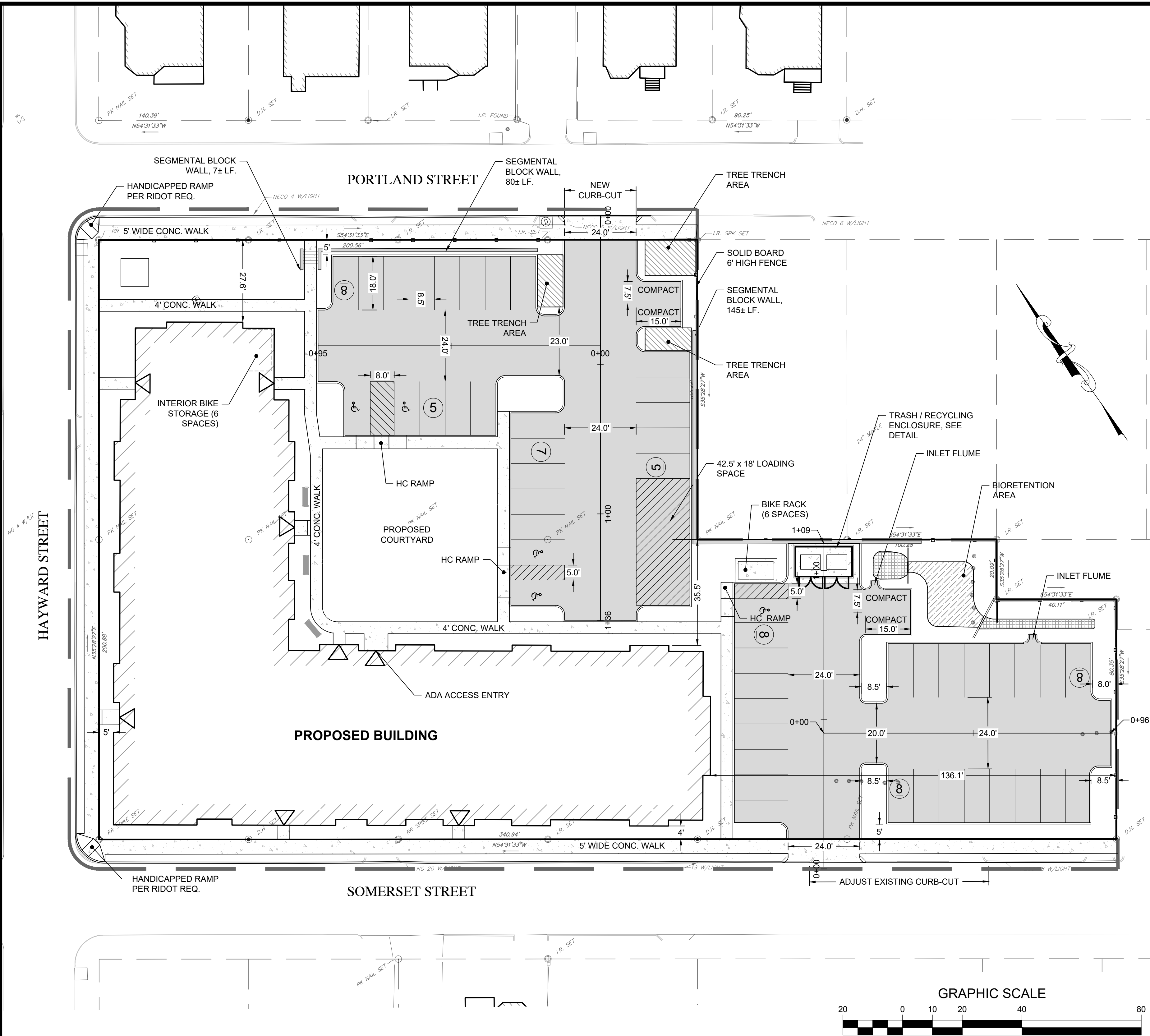
DRAINAGE INLET PROTECTION AT SURFACE DETAIL
NOT TO SCALE



TEMPORARY CATCHBASIN INSERT WITH INLET PROTECTION
NOT TO SCALE

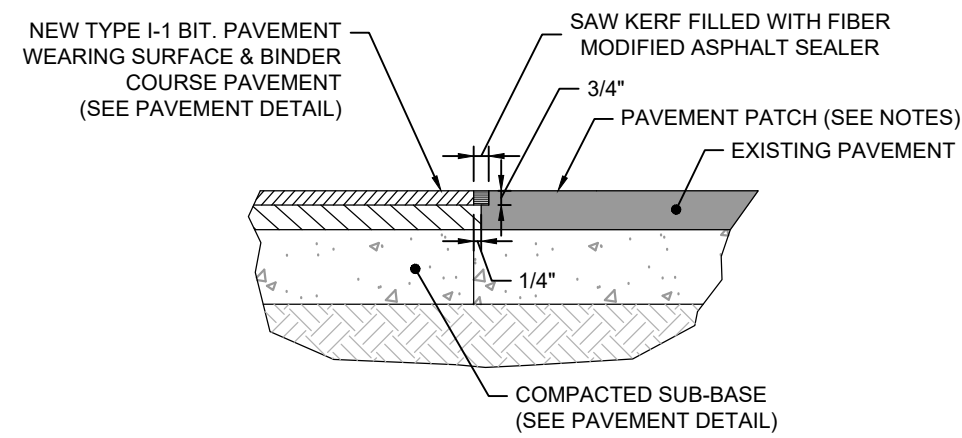


SEDIMENT SILT SOCK DETAIL
NOT TO SCALE



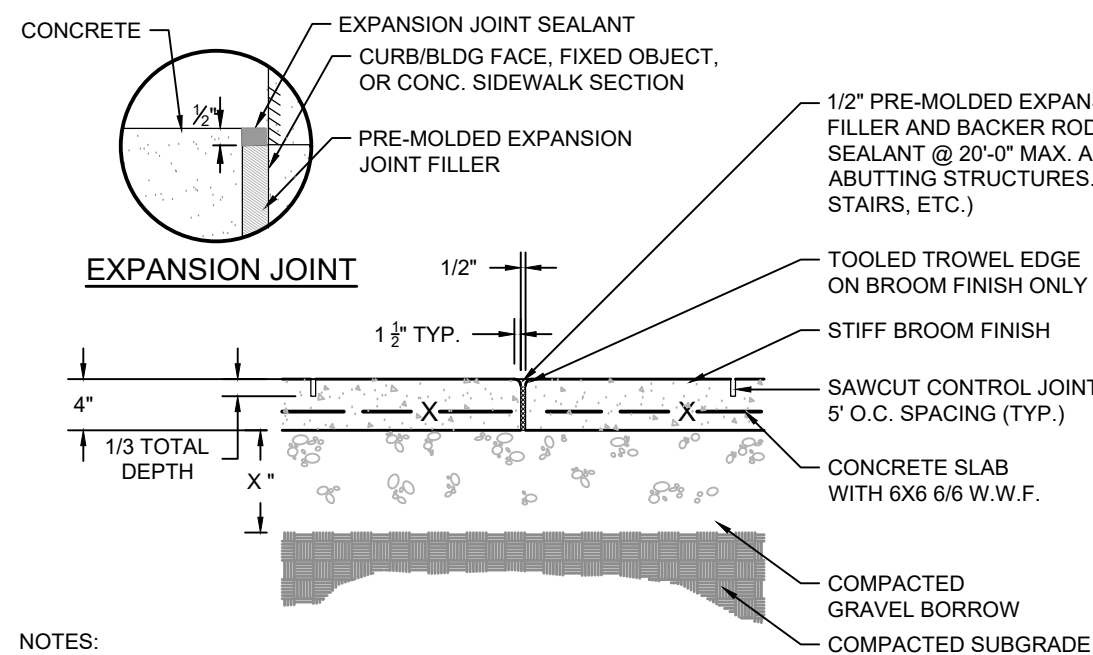
- GENERAL NOTES:**
- SUB-GRADE (EXISTING MATERIAL) SHALL CONSIST OF INERT MATERIAL THAT IS HARD, DURABLE STONE AND/OR COARSE SAND, FREE FROM LOAM AND CLAY TO A DEPTH NOT LESS THAN 4-FT BELOW THE FINISH PAVEMENT SURFACE. EXCAVATE SANDY-LOAM AND/OR LOAMY-SAND TOPSOIL MATERIAL FROM ALL PAVED AREAS PRIOR TO SUB-BASE INSTALLATION.
 - PLACE SUB-BASE IN MAXIMUM 6" LIFTS (COMPACTED TO 95%).
 - COMPACT SUB-GRADE FILL TO 95% COMPACTION.
 - SEE SITE LAYOUT PLAN FOR PAVEMENT WIDTH AND LOCATION.
 - SEE GRADING PLANS FOR PAVEMENT SLOPE AND CROSS SLOPE.
 - SWEEP CLEAN THE EXISTING BINDER COURSE SURFACE PRIOR TO INSTALLING THE WEARING COURSE BY A STREET SWEEPING MACHINE. APPLY A TACK COAT PER SPECIFICATIONS.

BITUMINOUS PAVEMENT
NOT TO SCALE



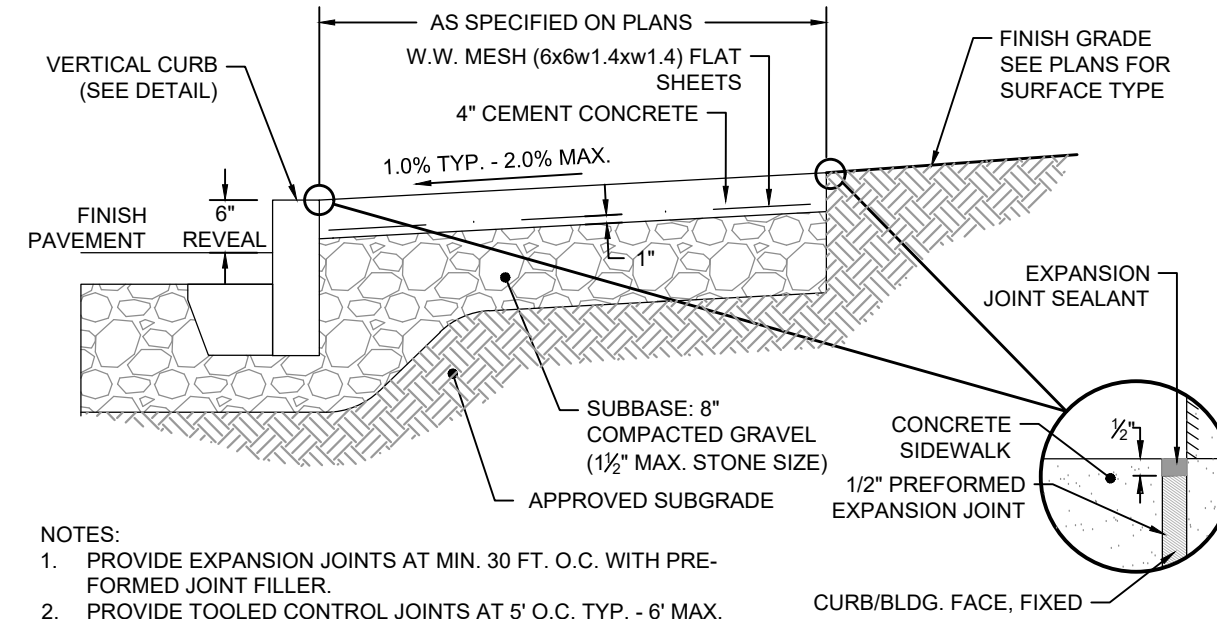
- NOTES:**
- EXISTING BITUMINOUS PAVEMENT SHALL BE REMOVED TO A CLEAN STRAIGHT EDGE VIA SAW CUTTING. THE SAW CUT SHALL BE COMPLETED PERPENDICULAR TO THE ROADWAY/SIDEWALK.
 - PRIOR TO INSTALLING THE WEARING COURSE THE EXISTING VERTICAL PAVEMENT SURFACE SHALL BE SWEEPED COMPLETELY CLEAN.
 - AFTER PROPER COMPACTION (SEE PAVEMENT DETAIL) SAW CUT NEW PAVEMENT ABUTMENT 3/4" DEEP AND FILL WITH FIBER MODIFIED ASPHALT SEALER AS SHOWN.

PAVEMENT PATCH
NOT TO SCALE



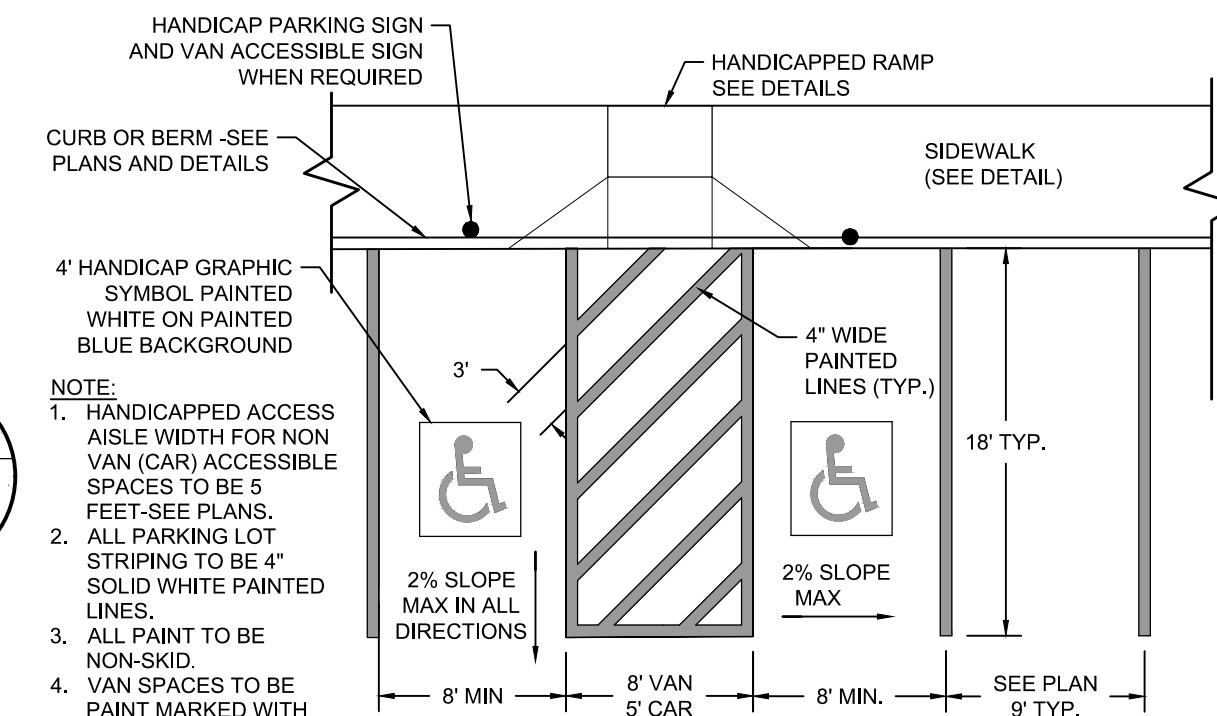
- NOTES:**
- FINISH: BROOM FINISH
 - CEMENT CONCRETE: 4,000 PSI-TYPE II
 - SUBBASE: COMPACTED TO 95%.

BROOM FINISH CONCRETE
NOT TO SCALE



- NOTES:**
- PROVIDE EXPANSION JOINTS AT MIN. 30 FT. O.C. WITH PRE-FORMED JOINT FILLER.
 - PROVIDE TOOLED CONTROL JOINTS AT 5' O.C. TYP. - 6" MAX.
 - PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.
 - CEMENT CONCRETE: 4,000 PSI-TYPE II
 - IF APPLICABLE, MATCH ALL EXISTING SIDEWALK WIDTHS.
 - SUBBASE: COMPACTED TO 95%.

CONCRETE SIDEWALK
NOT TO SCALE



HANDICAPPED & STANDARD PARKING SPACES DETAIL
NOT TO SCALE

DISTRICTS				
CITY: Providence				
ZONING DISTRICT: C-2 Proposed, Currently R-3				
	REQUIRED	EXISTING	PROVIDED	WAIVER
PROPERTY USE:				
LOT SIZE AND COVERAGE				
MINIMUM LOT SIZE (sf):	NONE			
% BUILDING COVERAGE:	NA			
% LOT COVERAGE:	NA			
% OPEN SPACE:	NA			
DIMENSIONAL				
MINIMUM LOT FRONTAGE (feet):	NA			
FRONT YARD SETBACK (feet):	*			
REAR YARD SETBACK (feet):	**			
SIDE YARD SETBACK (feet):	***			
CORNER SIDE YARD SETBACK (feet):	****			
BUILDING HEIGHT (feet):	50'			
PARKING				
PARKING SPACES:				
One Space per each dwelling unit				
TOTAL PARKING SPACES (FULLSIZE)	54		50	
TOTAL PARKING SPACES (COMPACT)			4	
TOTAL PARKING SPACES:	54		54	
HANDICAP SPACES:	5		5	
MINIMUM PARKING DIMENSIONS	8.5' x 18'		8.5' x 18'	
PARKING DIMENSIONS-COMPACT	7.5' x 15'		7.5' x 15'	
BICYCLE SPACES:				
One space per 5 units: 54 UNITS				
	11		12	
BICYCLE SPACE DIMENSIONS	2' x 6'		2' x 6'	
OTHER				
One 18' x 42.5' loading space				
NOTES				
* Build-to-zone of 0' to 5' (see Zoning Sect. 503.A.6) Required build-to percentage is 60% of the front lot line.				
** None; unless abutting residential district, then 20'				
*** None; unless abutting residential district, then 10'				
**** Build-to-zone of 0 to 5'. Required build-to percentage is 40% of the corner side lot line				

Revisions

Rev	Date	By	Appr	Description
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Horsley Witten Group, Inc.

Sustainable Environmental Solutions

hws@hwsinc.com

40 Route 6A

South Windsor, CT 06075

Phone: 860-291-1755

Fax: 860-291-4757

Task:

SP/TEMBER 2020

Designed By:

JK

Drawn By:

CSG

Checked By:

JF

Plan Set:

BARBARA JORDAN II, BUILDING "D" HAYWARD STREET, PORTLAND STREET, & SOMERSET STREET PROVIDENCE, RHODE ISLAND

Plan Title:

SITE PLAN

Prepared For:

Omni Development Corporation / The Wingate Companies

810 Eddy Street

Providence, RI 02905

Phone: (401) 461-4442

Fax: ---

Survey Provided By:

Design Professionals

21 Jeffrey Drive

South Windsor, CT

Phone: 860-291-1755

Providence, RI 02905

Registration:

DRAFT NOT FOR CONSTRUCTION

Project Number:

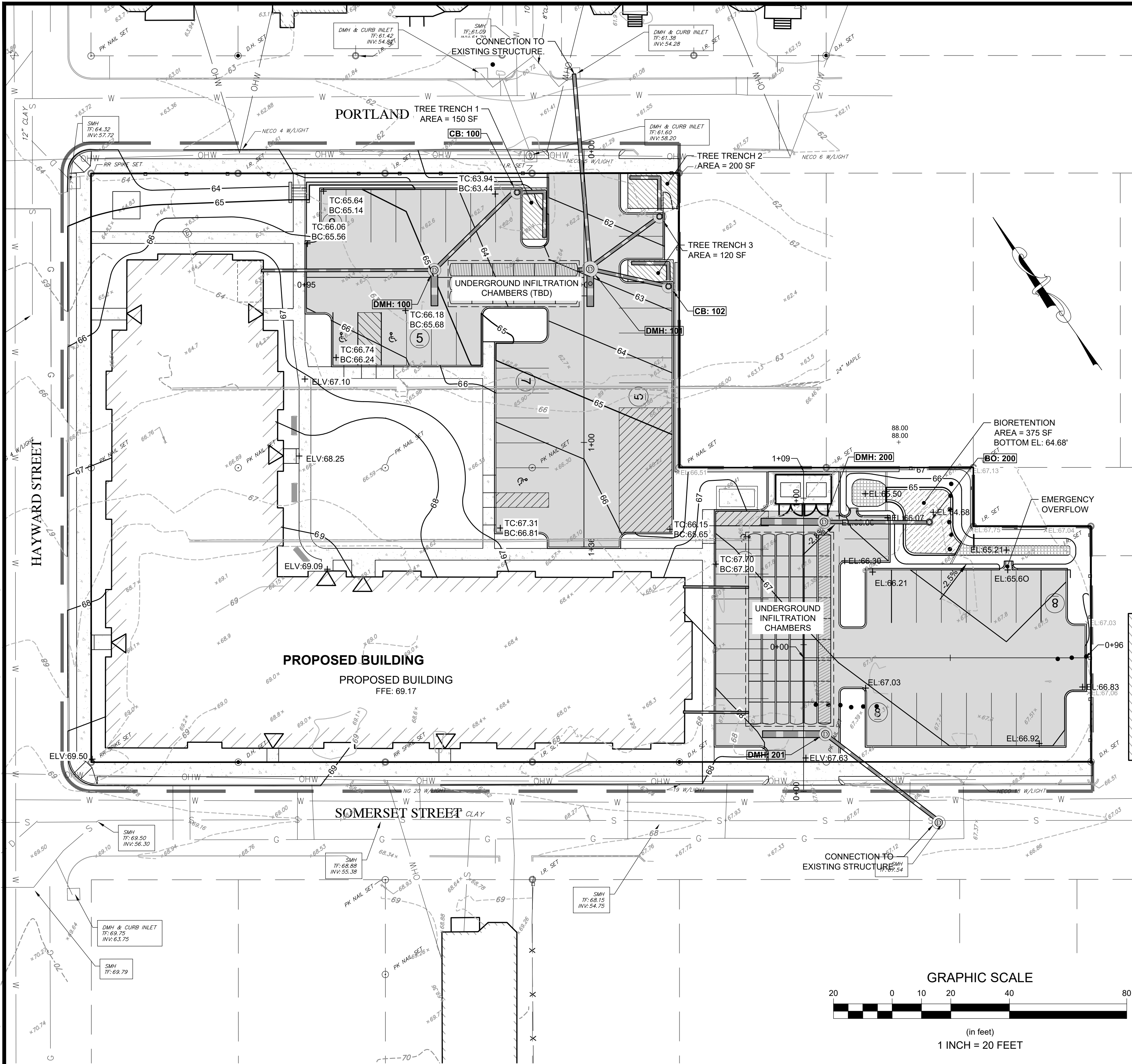
20089

Sheet :

4 of 12

Sheet Number:

C - 4



NOTES:

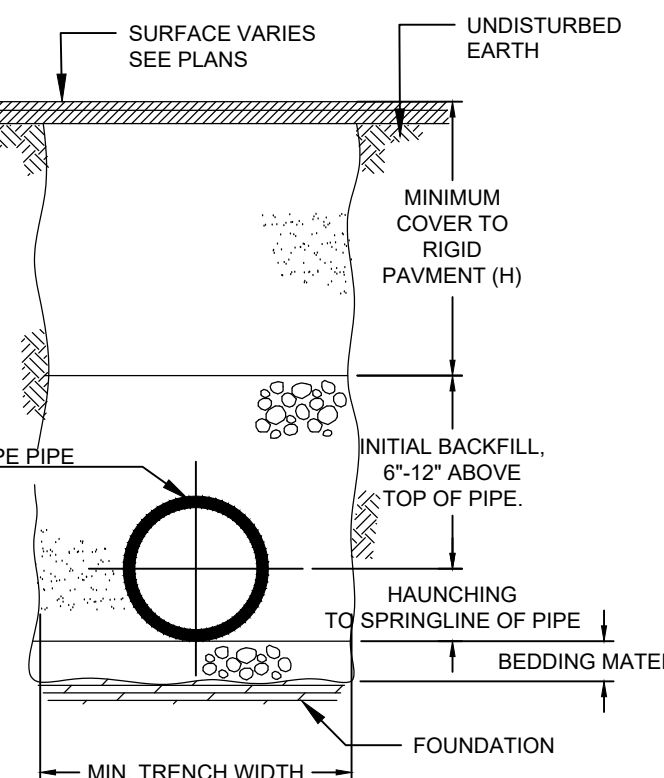
1. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR TO EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I OR II MATERIAL AS DEFINED IN ASTM D2321, "STANDARD PRACTICE FOR INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS," LATEST EDITION; AS AN ALTERNATIVE AND AT THE DISCRETION OF THE ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A WOVEN GEOTEXTILE FABRIC.
2. BEDDING, HAUNCHING AND INITIAL BACKFILL: SUITABLE MATERIAL TO CONSIST OF CLEAN, HARD, PARTICLES OF GRAVEL MEETING THE FOLLOWING:

SIEVE SIZE	% PASSING
3/8"	85-95
NO. 4	5-15
NO. 8	0-2

MATERIAL TO BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
3. MINIMUM BEDDING THICKNESS TO BE 4" (100mm) FOR 4"-24" (100-600mm) AND 42"-48" (1050-1200mm) CORRUGATED POLYETHYLENE PIPE (CPEP); 6" (150mm) FOR 30"-36" (750-900mm) CPEP.
4. MINIMUM TRENCH WIDTHS TO BE AS FOLLOWS:

NOMINAL Ø in (mm)	MIN. TRENCH WIDTH, in (mm)
8 (200)	25 (630)
10 (250)	28 (710)
12 (300)	31 (790)
15 (375)	34 (860)
18 (450)	39 (990)

RECOMMENDED DEPTHS OF COVER FOR VARIOUS LIVE LOADING CONDITIONS ARE SUMMARIZED IN THE FOLLOWING TABLE. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TAKEN FROM THE TOP OF PIPE TO THE GROUND SURFACE.



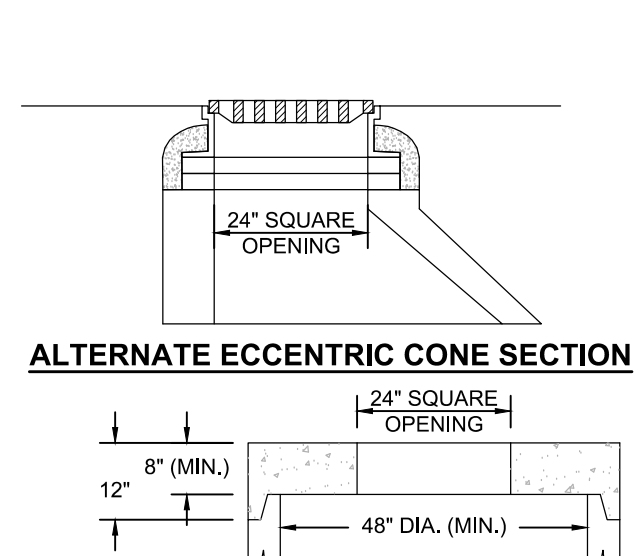
SURFACE LIVE LOADING CONDITION	MINIMUM RECOMMENDED * COVER, in (mm)
H25 (FLEXIBLE PAVEMENT)	12 (300)
H25 (RIGID PAVEMENT) E80	12 (300)
RAILWAY HEAVY CONSTRUCTION	24 (610)
	48 (1220)

* TOP OF PIPE TO BOTTOM OF BITUMINOUS PAVEMENT

THE MINIMUM COVER FOR A HDPE PIPE IS 1'-0" FOR H-20 TRAFFIC LOADS IF INSTALLED IN ACCORDANCE WITH AASHTO SECTION 30. THIS IS BASED ON EMPIRICAL CALCULATION OF LOAD RESPONSE, MANUFACTURERS TESTING AND FIELD EXPERIENCE WITH THE PIPE. AASHTO SPECIFICATIONS SECTION 18.4.1.5 DEFINES THE MINIMUM COVER AS "10/8 BUT NOT LESS THAN 12 INCHES". THIS COVER IS MEASURED FROM THE PIPE OD TO THE TOP OF A RIGID (CONCRETE) PAVEMENT OR THE BOTTOM OF A FLEXIBLE (BITUMINOUS) PAVEMENT. BOTH AASHTO AND ASTM, AS WELL AS MOST MANUFACTURERS, REQUIRE ADDITIONAL TEMPORARY COVER, MOUNDED OVER THE PIPE AND REMOVED FOR FINAL GRADING AND PAVING, IS SUFFICIENT FOR LARGE CONSTRUCTION VEHICLE LOADS.

HDPE DRAINAGE PIPE TRENCH

NOT TO SCALE



ALTERNATE TOP SLAB

NOT TO SCALE

FINISH GRADE

SEE NOTE 4.5

TOP SLAB CONCENTRIC CONE SECTION SEE ALTERNATE

RISE AS REQUIRED

MONOLITHIC BASE SECTION

12" (MIN.)

4" (MIN.)

SEE NOTE 2.

SEE NOTE 3.

SEE NOTE 7.

HOOD (SEE NOTE 7)

INVERT

OUTLET PIPE

DIA. VARIES

SEE NOTE 2.

SEE NOTE 3.

SEE NOTE 4.

SEE NOTE 5.

SEE NOTE 6.

SEE NOTE 7.

SEE NOTE 8.

SEE NOTE 9.

SEE NOTE 10.

SEE NOTE 11.

SEE NOTE 12.

SEE NOTE 13.

SEE NOTE 14.

SEE NOTE 15.

SEE NOTE 16.

SEE NOTE 17.

SEE NOTE 18.

SEE NOTE 19.

SEE NOTE 20.

SEE NOTE 21.

SEE NOTE 22.

SEE NOTE 23.

SEE NOTE 24.

SEE NOTE 25.

SEE NOTE 26.

SEE NOTE 27.

SEE NOTE 28.

SEE NOTE 29.

SEE NOTE 30.

SEE NOTE 31.

SEE NOTE 32.

SEE NOTE 33.

SEE NOTE 34.

SEE NOTE 35.

SEE NOTE 36.

SEE NOTE 37.

SEE NOTE 38.

SEE NOTE 39.

SEE NOTE 40.

SEE NOTE 41.

SEE NOTE 42.

SEE NOTE 43.

SEE NOTE 44.

SEE NOTE 45.

SEE NOTE 46.

SEE NOTE 47.

SEE NOTE 48.

SEE NOTE 49.

SEE NOTE 50.

SEE NOTE 51.

SEE NOTE 52.

SEE NOTE 53.

SEE NOTE 54.

SEE NOTE 55.

SEE NOTE 56.

SEE NOTE 57.

SEE NOTE 58.

SEE NOTE 59.

SEE NOTE 60.

SEE NOTE 61.

SEE NOTE 62.

SEE NOTE 63.

SEE NOTE 64.

SEE NOTE 65.

SEE NOTE 66.

SEE NOTE 67.

SEE NOTE 68.

SEE NOTE 69.

SEE NOTE 70.

SEE NOTE 71.

SEE NOTE 72.

SEE NOTE 73.

SEE NOTE 74.

SEE NOTE 75.

SEE NOTE 76.

SEE NOTE 77.

SEE NOTE 78.

SEE NOTE 79.

SEE NOTE 80.

SEE NOTE 81.

SEE NOTE 82.

SEE NOTE 83.

SEE NOTE 84.

SEE NOTE 85.

SEE NOTE 86.

SEE NOTE 87.

SEE NOTE 88.

SEE NOTE 89.

SEE NOTE 90.

SEE NOTE 91.

SEE NOTE 92.

SEE NOTE 93.

SEE NOTE 94.

SEE NOTE 95.

SEE NOTE 96.

SEE NOTE 97.

SEE NOTE 98.

SEE NOTE 99.

SEE NOTE 100.

SEE NOTE 101.

SEE NOTE 102.

SEE NOTE 103.

SEE NOTE 104.

SEE NOTE 105.

SEE NOTE 106.

SEE NOTE 107.

SEE NOTE 108.

SEE NOTE 109.

SEE NOTE 110.

SEE NOTE 111.

SEE NOTE 112.

SEE NOTE 113.

SEE NOTE 114.

SEE NOTE 115.

SEE NOTE 116.

SEE NOTE 117.

SEE NOTE 118.

SEE NOTE 119.

SEE NOTE 120.

SEE NOTE 121.

SEE NOTE 122.

SEE NOTE 123.

SEE NOTE 124.

SEE NOTE 125.

SEE NOTE 126.

SEE NOTE 127.

SEE NOTE 128.

SEE NOTE 129.

SEE NOTE 130.

SEE NOTE 131.

SEE NOTE 132.

SEE NOTE 133.

SEE NOTE 134.

SEE NOTE 135.

SEE NOTE 136.

SEE NOTE 137.

SEE NOTE 138.

SEE NOTE 139.

SEE NOTE 140.

SEE NOTE 141.

SEE NOTE 142.

SEE NOTE 143.

SEE NOTE 144.

SEE NOTE 145.

SEE NOTE 146.

SEE NOTE 147.

SEE NOTE 148.

SEE NOTE 149.

SEE NOTE 150.

SEE NOTE 151.

SEE NOTE 152.

SEE NOTE 153.

SEE NOTE 154.

SEE NOTE 155.

SEE NOTE 156.

SEE NOTE 157.

SEE NOTE 158.

SEE NOTE 159.

SEE NOTE 160.

SEE NOTE 161.

SEE NOTE 162.

SEE NOTE 163.

SEE NOTE 164.

SEE NOTE 165.

SEE NOTE 166.

SEE NOTE 167.

SEE NOTE 168.

SEE NOTE 169.

SEE NOTE 170.

SEE NOTE 171.

SEE NOTE 172.

SEE NOTE 173.

SEE NOTE 174.

SEE NOTE 175.

SEE NOTE 176.

SEE NOTE 177.

SEE NOTE 178.

SEE NOTE 179.

SEE NOTE 180.

SEE NOTE 181.

SEE NOTE 182.

SEE NOTE 183.

SEE NOTE 184.

SEE NOTE 185.

SEE NOTE 186.

SEE NOTE 187.

SEE NOTE 188.

SEE NOTE 189.

SEE NOTE 190.

SEE NOTE 191.

SEE NOTE 192.

SEE NOTE 193.

SEE NOTE 194.

SEE NOTE 195.

SEE NOTE 196.

SEE NOTE 197.

SEE NOTE 198.

SEE NOTE 199.

SEE NOTE 200.

SEE NOTE 201.

SEE NOTE 202.

SEE NOTE 203.

SEE NOTE 204.

SEE NOTE 205.

SEE NOTE 206.

SEE NOTE 207.

SEE NOTE 208.

SEE NOTE 209.

SEE NOTE 210.

SEE NOTE 211.

SEE NOTE 212.

SEE NOTE 213.

SEE NOTE 214.

SEE NOTE 215.

SEE NOTE 216.

SEE NOTE 217.

SEE NOTE 218.

SEE NOTE 219.

SEE NOTE 220.

SEE NOTE 221.

SEE NOTE 222.

SEE NOTE 223.

SEE NOTE 224.

SEE NOTE 225.

SEE NOTE 226.

SEE NOTE 227.

SEE NOTE 228.

SEE NOTE 229.

SEE NOTE 230.

SEE NOTE 231.

SEE NOTE 232.

SEE NOTE 233.

SEE NOTE 234.

SEE NOTE 235.

SEE NOTE 236.

SEE NOTE 237.

SEE NOTE 238.

SEE NOTE 239.

SEE NOTE 240.

SEE NOTE 241.

SEE NOTE 242.

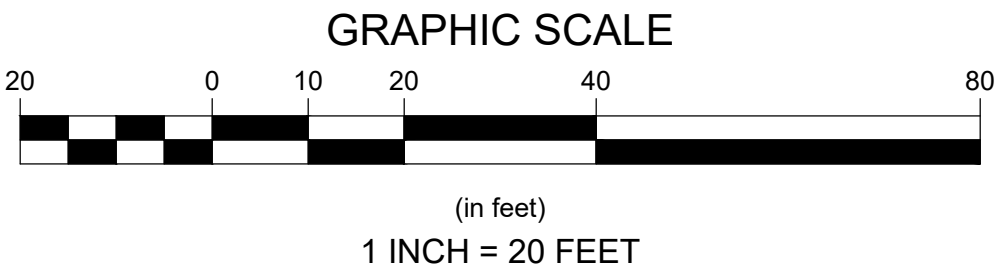
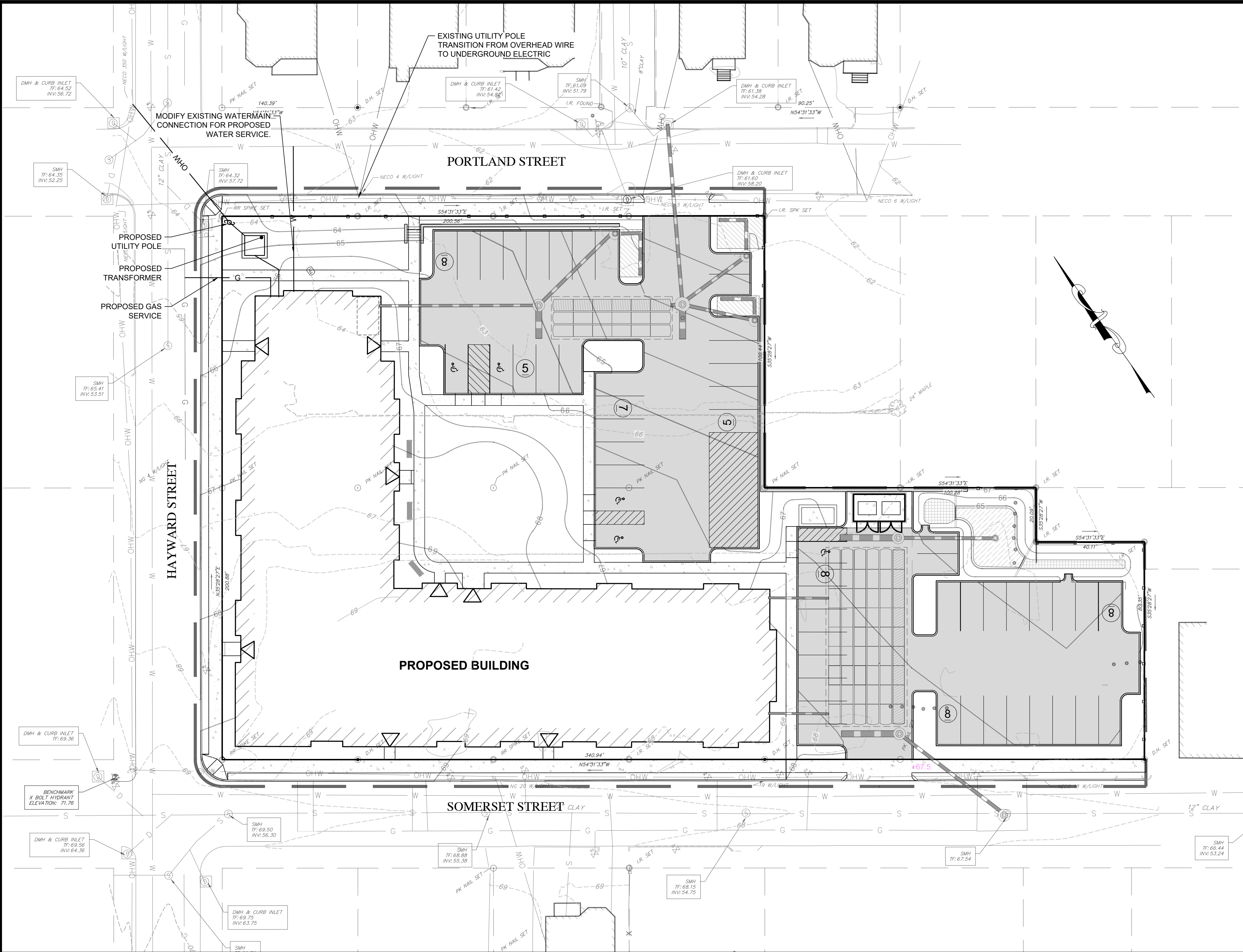
SEE NOTE 243.

SEE NOTE 244.

SEE NOTE 245.

SEE NOTE 246.

</



UTILITY GENERAL NOTES

- SEE PLANS BY MEP FOR ELECTRIC, GAS, AND COMMUNICATIONS. LOCATIONS SHOWN ON THIS PLAN FOR COORDINATION PURPOSES ONLY.
- FIELD LOCATE EXISTING SEWER LATERALS AND VERIFY LOCATION, INVERT, AND CONDITION. NOTIFY ENGINEER IMMEDIATELY IF DISCREPANCIES EXIST.
- ALL WORK WITHIN THE RIGHT OF WAY SHALL BE PER CITY DPW REQUIREMENTS.
- COORDINATE WITH THE CITY DPW ON THE CORING OF THE SEWER LINE PRIOR TO ANY WORK.
- FIELD VERIFY CONDITION OF THE EXISTING BRICK SEWER AND NOTIFY CITY ENGINEER BEFORE DRILLING.

WATER & SEWER INSTALLATION NOTES

- INSTALL SEWER AND WATER MAINS ACCORDING TO THE FOLLOWING GUIDELINES TO PREVENT FREEZING OF THE MAIN OR SEWER:

UTILITY TYPE	MIN. COVER	OVER TOP OF PIPE	MIN. HORIZONTAL DISTANCE TO DRAIN STRUCTURE
SANITARY FORCEMAIN	5'		3'
GRAVITY FORCEMAIN	4'		2'
WATER MAIN	5'		2'

- INSULATE SANITARY FORCE MAINS, WATER MAINS, HYDRANT PIPING AND DEAD END WATER LINES S WHERE SOIL COVER OR HORIZONTAL SEPARATION TO PRECAST STRUCTURES IS LESS THAN THE DISTANCE SPECIFIED ABOVE AND/OR WHERE SHOWN ON PLANS.
- INSULATION: 2" THICK POLYURETHANE INSULATION WITH PVC JACKET PLACED AROUND PIPE OR DESIGNER APPROVED EQUAL.
- WATER AND SEWER SEPARATION IS TYPICALLY 10-FEET MINIMUM HORIZONTAL AND 18-INCHES VERTICAL WITH SEWER MAINS BELOW THE WATER MAINS (SEE DETAIL). IF SITE CONDITIONS REQUIRE LESS, THEN INSTALL UTILITIES AS INDICATED ON DETAILS.

WATER SYSTEM INSTALLATION NOTES:

- CONSTRUCT THE WATER MAIN AND ITS APPURTENANCE IN ACCORDANCE WITH THE LOCAL WATER DEPARTMENT'S STANDARDS AND SPECIFICATIONS AND PAY FOR ALL ASSOCIATED FEES AS REQUIRED BY THE WATER DEPARTMENT.
- ALL PROPOSED WATER MAIN 4-INCHES AND GREATER IN DIAMETER ARE DUCTILE IRON CLASS 52. ONLY USE HDPE 3408 OR AS INDICATED ON DRAWINGS OR AS APPROVED BY THE ENGINEER.
- SUPPLY TWO COPIES OF SWORN CERTIFICATES TO PROVE THAT ALL PIPES AND FITTINGS ARE INSPECTED AND TESTED AS REQUIRED BY THE STANDARD SPECIFICATIONS TO WHICH THE MATERIAL IS MANUFACTURED.
- GATE VALVES: MUELLER (A 2360 SERIES), CLOW (AWWA STANDARD C509 SERIES), AMERICAN DARLING (RESILIENT WEDGE) OR APPROVED EQUAL.
- PROVIDE GATE VALVES ON ALL HYDRANT BRANCHES AND WATER MAIN. THE GATE VALVE TO TURN TO THE RIGHT TO OPEN (CLOCKWISE). ALL BOLTS AND NUTS MUST BE RUST PROOF STEEL.
- CLEAR ALL NEWLY INSTALLED WATER SYSTEM COMPONENTS OF ALL FOREIGN MATERIALS SUCH AS DIRT AND MISCELLANEOUS DEBRIS PRIOR TO SYSTEM TESTING. NO TESTING IS ALLOWED WITHOUT REMOVAL OF ALL FOREIGN MATERIALS.
- CONTRACTOR IS RESPONSIBLE FOR CONDUCTING A PRESSURE TEST AND DISINFECTION TEST OF ALL WATER MAINS. THE TESTS MUST BE WITNESSED BY THE APPROVED INSPECTOR OR THE ENGINEER. THE CONTRACTOR MUST PROVIDE A MINIMUM OF 48-HOUR ADVANCE NOTICE TO THE LOCAL WATER DEPARTMENT PRIOR TO THE PRESSURE AND DISINFECTION TESTS. THE CONTRACTOR MUST PROVIDE ALL NECESSARY EQUIPMENT AND CHEMICALS TO PROPERLY CONDUCT THE TESTS.
- INSTALL AND REMOVE ALL NECESSARY BLOWOFFS REQUIRED FOR THIS PROJECT AT NO EXTRA COST TO THE OWNER.
- COLLECT ALL BACTERIOLOGICAL SAMPLES AND PAY FOR ALL RELATED LABORATORY FEES.
- MAINTAIN UP-TO-DATE AS-BUILT DRAWINGS AND NOTES INDICATING THE HORIZONTAL AND VERTICAL LOCATION WITH TWO TIES OF ALL SYSTEM COMPONENTS INSTALLED. AS-BUILT DRAWINGS AND NOTES WILL BE UTILIZED BY THE ENGINEER FOR THE PREPARATION OF RECORD PLANS.

SEWER SYSTEM OPERATION & MAINTENANCE:

- CLEAN ALL NEWLY INSTALLED FACILITIES, INCLUDING SEWER COLLECTION SYSTEM OF ALL FOREIGN MATERIALS SUCH AS DIRT AND MISCELLANEOUS DEBRIS PRIOR TO SYSTEM TESTING. TESTING MUST BE WITNESSED AND INSPECTED BY THE ENGINEER. NO TESTING IS ALLOWED WITHOUT REMOVAL OF ALL FOREIGN MATERIALS.
- CONDUCT A LEAKAGE TEST OF ALL SEWER MAINS. TEST MUST BE WITNESSED BY THE ENGINEER. THE CONTRACTOR MUST PROVIDE THE ENGINEER WITH A MINIMUM OF 48-HOURS ADVANCE NOTICE TO THE TIME OF THE PRESSURE TEST.
- TEST SEWER PIPES FOR LEAKAGE WITH THE FOLLOWING PROCEDURE:
INTRODUCE LOW PRESSURE AIR INTO THE SEAL LINE (WITH PNEUMATIC PLUGS) UNTIL THE INTERNAL AIR PRESSURE REACHES 4 psi GREATER THAN THE AVERAGE BACK PRESSURE OF ANY GROUNDWATER THAT MAY BE OVER THE PIPE.
ALLOW AT LEAST 2 MINUTES FOR AIR PRESSURE TO STABILIZE.
AFTER THE STABILIZATION PERIOD (3.5 psi MINIMUM PRESSURE IN THE PIPE), THE PORTION OF PIPE TESTED IS ACCEPTABLE IF THE TIME REQUIRED IN MINUTES FOR THE PRESSURE TO DECREASE FROM 3.5 TO 3 psi IS NOT LESS THAN 1.90 TIMES THE LENGTH OF PIPE BEING TESTED.
- VACUUM TEST ALL SEWER MANHOLES. TESTS MUST BE WITNESSED BY THE ENGINEER UNLESS THE SEASONAL GROUNDWATER LEVEL IS MORE THAN 10 FEET FROM THE BOTTOM OF THE MANHOLE.
- MANDREL TEST ALL SEWER MAINS AFTER 30 DAYS. TESTS MUST BE WITNESSED BY A TOWN REPRESENTATIVE OR THE ENGINEER.

Revisions

Rev	Date	By	Appr	Description
1				
2				
3				
4				
5				
6				

Horsley Witten Group, Inc.

Sustainable Environmental Solutions

40 Route 6A

Sandwich, MA 02563

508-833-6600 voice

508-833-3150 fax

DATE: 09/24/2020

DESIGNED BY: JK

DRAWN BY: CSG

CHECKED BY: JF

BARBARA JORDAN II, BUILDING "D"

HAYWARD STREET, PORTLAND STREET, & SOMERSET STREET

PROVIDENCE, RHODE ISLAND

Plan Set:

UTILITY PLAN

Prepared For:

Omni Development Corporation / The Wingate Companies

810 Eddy Street

Providence, RI 02905

Phone: (401) 461-4442

Fax: ---

Survey Provided By:

Design Professionals

21 Jeffrey Drive

South Windsor, CT

Phone: 860-291-9755

Fax: 860-291-4767

Dated: ---

Registration:

DRAFT

NOT FOR CONSTRUCTION

Project Number:

20089

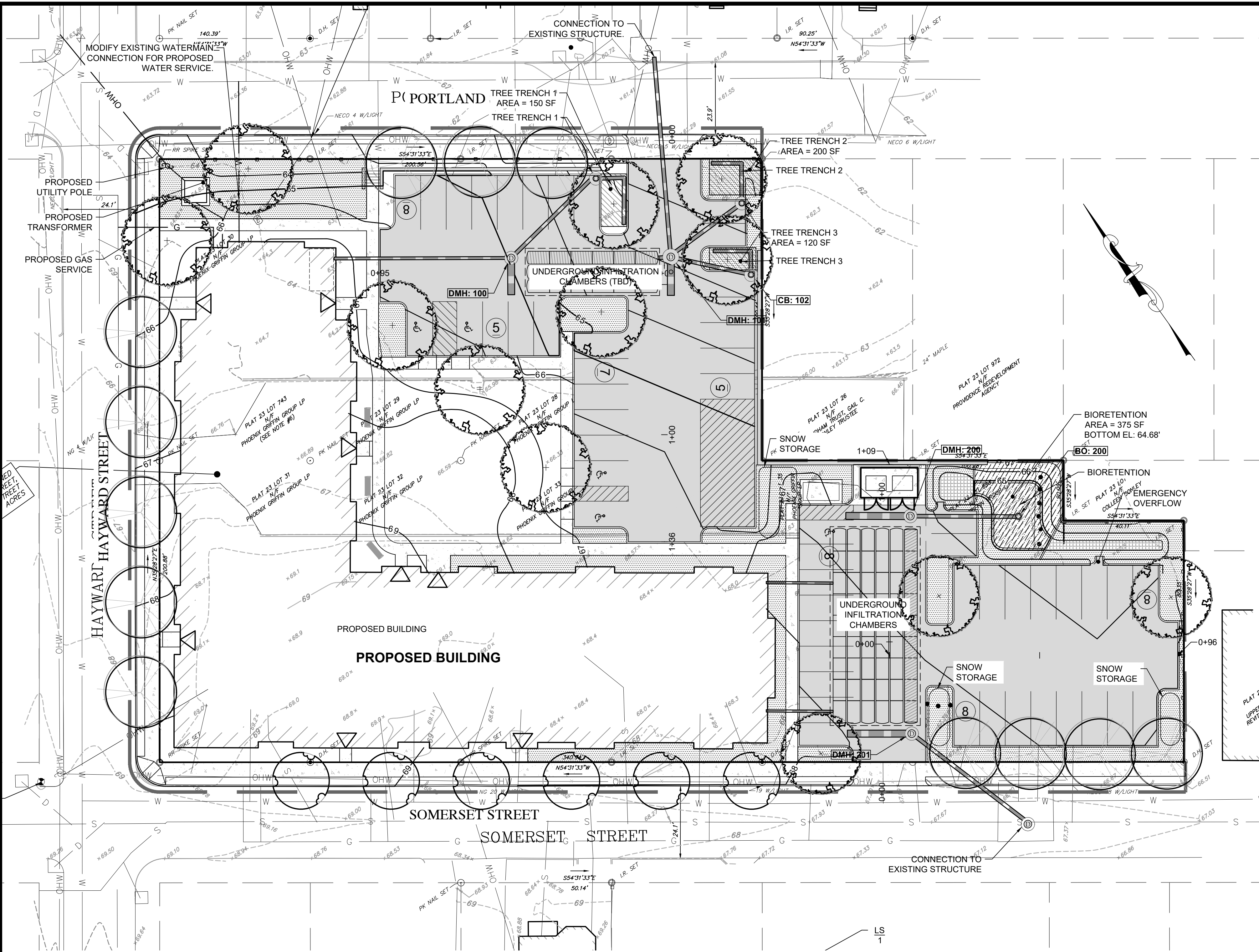
Sheet :

6 of 12

Sheet Number:

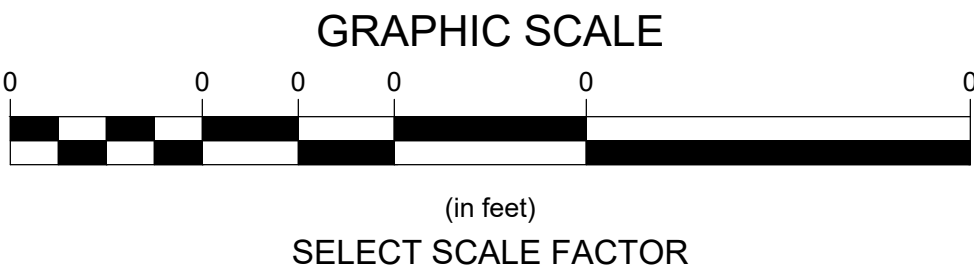
C - 6

last modified: 09/24/20 printed: 09/24/20 by jk H:\Projects\2020\20089 Barbara Jordan II Apartments Providence\Drawings\20089 la.dwg



- PROPOSED LARGE CANOPY TREE
- PROPOSED MEDIUM CANOPY TREE
- PROPOSED SMALL CANOPY TREE
- PROPOSED LARGE SHRUB
- PROPOSED MEDIUM SHRUB
- PROPOSED SMALL SHRUB
- SEED MIX 1 - MOW AS NEEDED**
COLONIAL SEED - HARMONY MIX
WAVY HAIR GRASS
SHEEP FESCUE
BLUE X HARD FESCUE
BLUE FESCUE
HARD FESCUE
- BIORETENTION PLANTING**
- PERENNIAL / GROUNDCOVER PLANTING**

ZONING REQUIREMENTS		
	PROPOSED	REQUIRED
SITE INFORMATION		
TOTAL LOT AREA (SF)	53,583	-
TOTAL PARKING AREA (SF)	18,215	NONE
TREE CANOPY COVERAGE		
TOTAL CANOPY COVERAGE (SF)	29,600	21,388
LARGE TREES (1,000 SF)	22 (22,000 SF)	-
MEDIUM TREES (700 SF)	4 (2800 SF)	-
SMALL TREES (300 SF)	16 (4,800 SF)	-
INTERIOR LANDSCAPE		
TOTAL PARKING LOT ISLANDS (8.5'X18' MIN.) (ONE SHADE TREE PER ISLAND)	6	NONE
TOTAL INTERIOR LANDSCAPE AREA (SF)	11,250	NONE
PARKING PERIMETER LANDSCAPE		
LANDSCAPE BUFFER FROM STREET	5'	5'
60% OF BUFFER PLANTED WITH 3' PLANTS		
PORTLAND (LF)	160	156
SOMERSET (LF)	38	28
PERIMETER TREES (1 TREE PER 25')		
PORTLAND	11	11
SOMERSET	4	4



Revisions

Rev	Date	By	Appr	Description
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Horsley Witten Group, Inc.
Sustainable Environmental Solutions
80 Route 6A
Sandwich, MA 02563
508-833-6600 voice
508-833-3150 fax

Plan Set:

BARBARA JORDAN II, BUILDING "D"
SOMERSET STREET
PROVIDENCE, RHODE ISLAND

Plan Title:

LANDSCAPE PLAN

Prepared For:

Town of *****
***** Street
Town Name, MA
Phone: (508) *****
Fax: ---

Survey Provided By:

Design Professionals
21 Jeffrey Drive
South Windsor, CT
Phone: 860-291-9755
Fax: 860-291-4757
Dated: ---

Registration:

DRAFT

NOT FOR CONSTRUCTION

Project Number:

20089

Sheet :

7 of **

Sheet Number:

LA - 7

Date:

SEPTEMBER 2020

Designed By:

EEB

Drawn By:

EEB

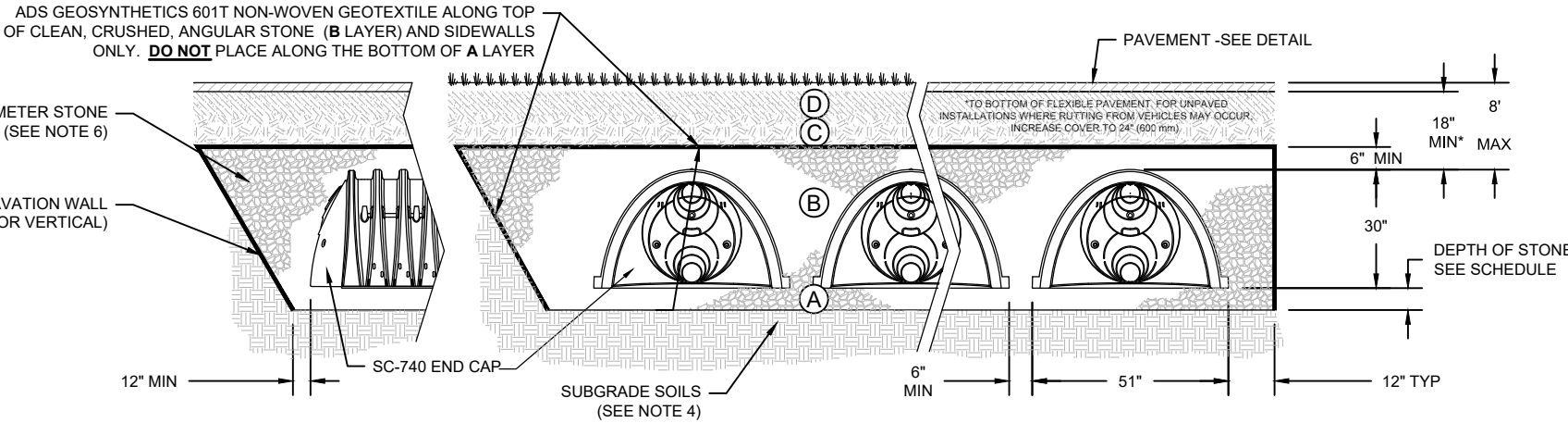
Checked By:

BRK

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	ASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D. FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBGRADE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEERS PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C. INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBODIMENT STONE (B LAYER) TO 1" (40 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBGRADE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBGRADE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145' A-1, A-2.4, A-3 OR AASHTO M43' 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 90% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B. EMBODIMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE.	AASHTO M43' 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A. FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE.	AASHTO M43' 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. **

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR, OF A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) MAX LIFTS USING TWO FULL COVERSAGES WITH A VIBRATORY COMPACTOR.
3. WHERE NITRATION SURFACES MAY BE COMPROMISED BY COMPACTION FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY BRAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



NOTES:

- SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2737 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE INSTALLED CHAMBER SYSTEM TO PROVIDE THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS, WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCE.
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBODIMENT, AND FILL MATERIALS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- ONCE LAYER 'C' IS PLACED, ANY SOLID MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBGRADE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
- FOR INFORMATION, CONTACT STORMTECH AT 1-888-892-2694.

STORMTECH SC-740 CHAMBER TYPICAL CROSS SECTION

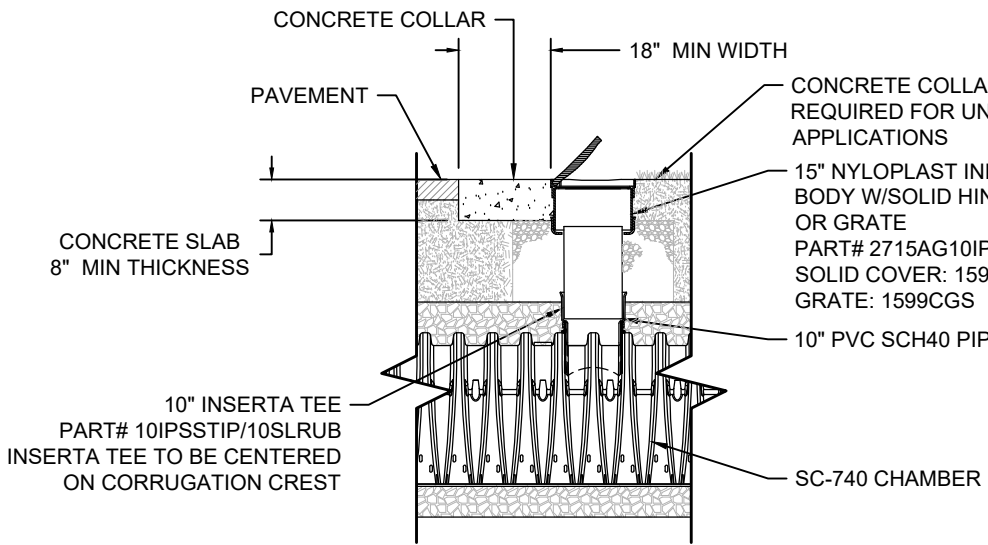
NOT TO SCALE

INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- INSPECTION PORTS (IF PRESENT)
 - REMOVE OPEN LID ON INLET/OUTLET INLET DRAIN
 - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - USING A FLASHLIGHT AND STADIUM ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
- REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
 - USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
 - MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B.3. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
- STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A FIXED CULVERT CLEANING NOZZLE WITH REAR FAN SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
 - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - VACUUM STRUCTURE PUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS. RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

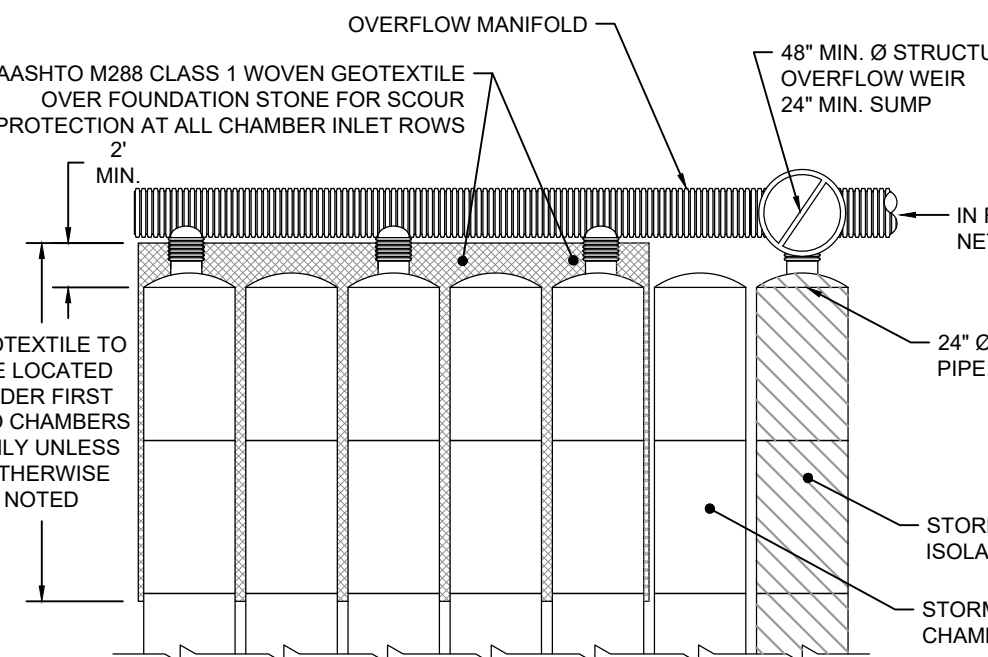
NOTES:

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION, ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACUUMING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



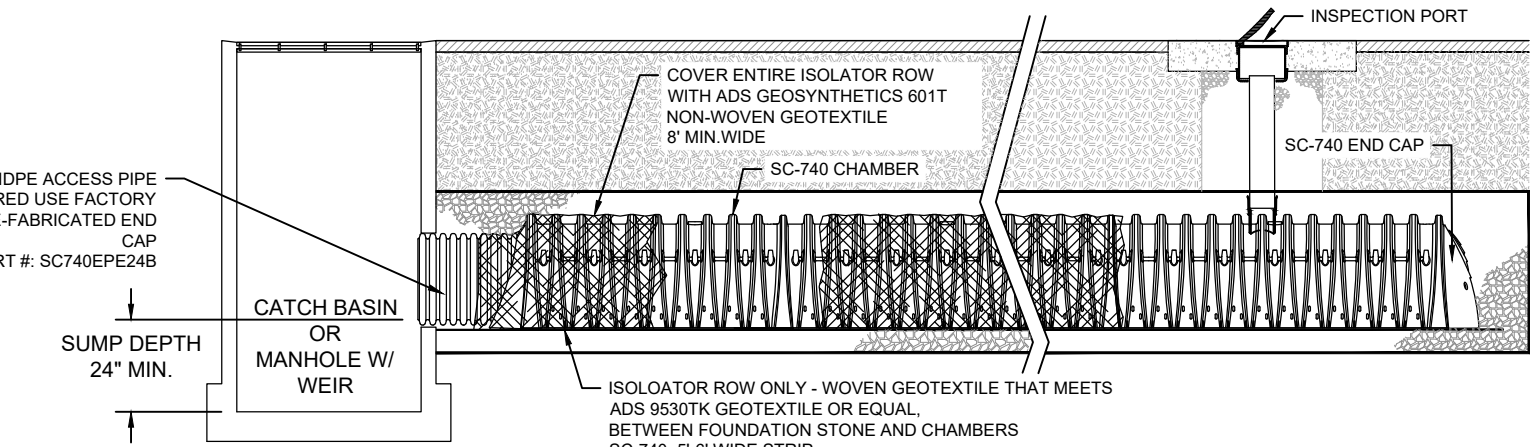
STORMTECH 10 INCH PORT DETAIL

NOT TO SCALE



STORMTECH ISOLATOR ROW MANIFOLD DETAIL

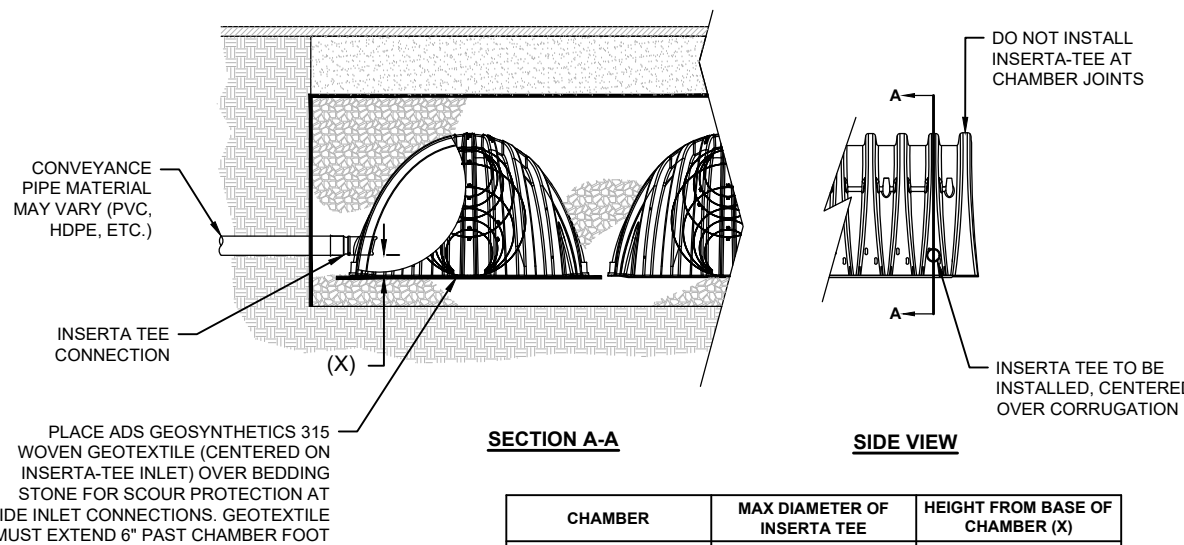
NOT TO SCALE



STORMTECH ISOLATOR ROW DETAIL

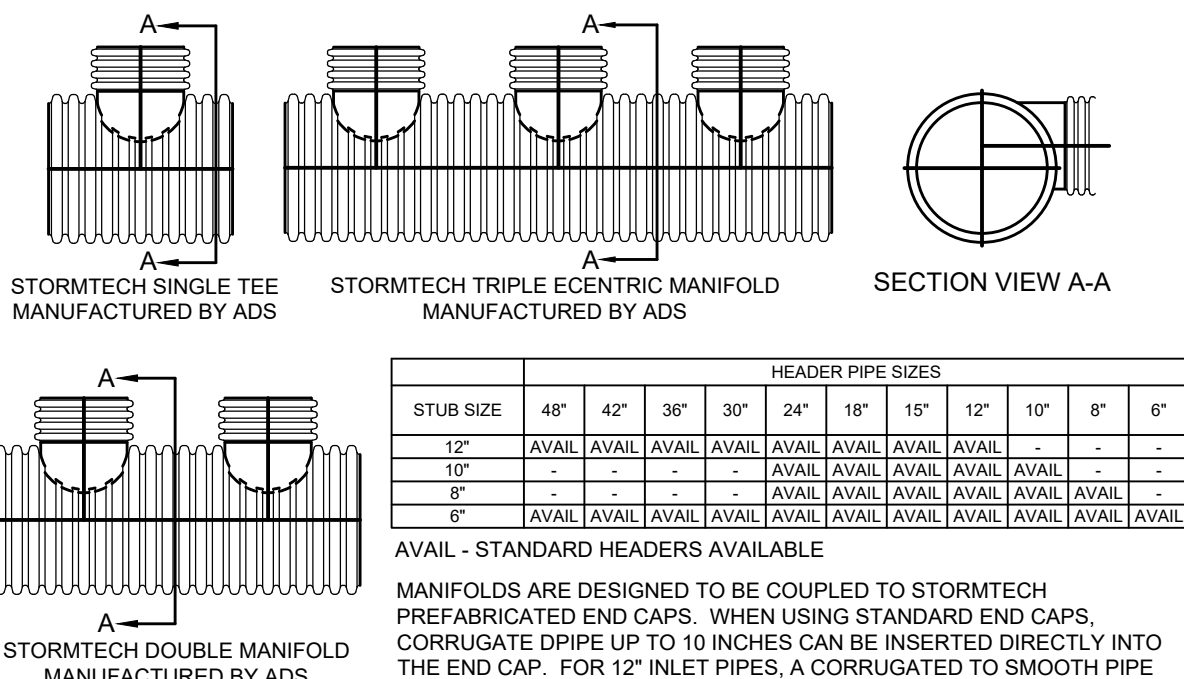
NOT TO SCALE

FOR STORMTECH INFORMATION CALL 1-888-892-2694



INSERT TEE SIDE CONNECTION DETAIL

NOT TO SCALE



ADS MANIFOLD DETAIL

FOR INFORMATION CALL 1-888-892-2694

NOMINAL CHAMBER SPECIFICATIONS
SIZE (W x H x INSTALLED LENGTH)
CHAMBER STORAGE
MINIMUM INSTALLED STORAGE WEIGHT

STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

PART#	STUB	A	B	C
SC740EP08T	8" (200 mm)	10.80" (277 mm)	16.80" (427 mm)	N/A
SC740EP08B	8" (200 mm)	10.80" (277 mm)	N/A	0.30" (7.6 mm)
SC740EP08T	8" (200 mm)	12.20" (310 mm)	16.80" (427 mm)	N/A
SC740EP08B	8" (200 mm)	12.20" (310 mm)	N/A	0.60" (15 mm)
SC740EP08T	10" (250 mm)	13.60" (345 mm)	14.50" (368 mm)	N/A
SC740EP08B	10" (250 mm)	13.60" (345 mm)	N/A	0.30" (7.6 mm)
SC740EP08T	12" (300 mm)	14.70" (373 mm)	12.50" (318 mm)	N/A
SC740EP08B	12" (300 mm)	14.70" (373 mm)	N/A	1.20" (30 mm)
SC740EP08T	15" (375 mm)	18.40" (467 mm)	9.00" (229 mm)	N/A
SC740EP08B	15" (375 mm)	18.40" (467 mm)	N/A	1.50" (38 mm)
SC740EP08T	18" (450 mm)	19.70" (500 mm)	9.00" (229 mm)	N/A
SC740EP08B	18" (450 mm)	19.70" (500 mm)	N/A	1.80" (46 mm)
SC740EP08T	24" (600 mm)	18.50" (470 mm)	N/A	0.70" (18 mm)

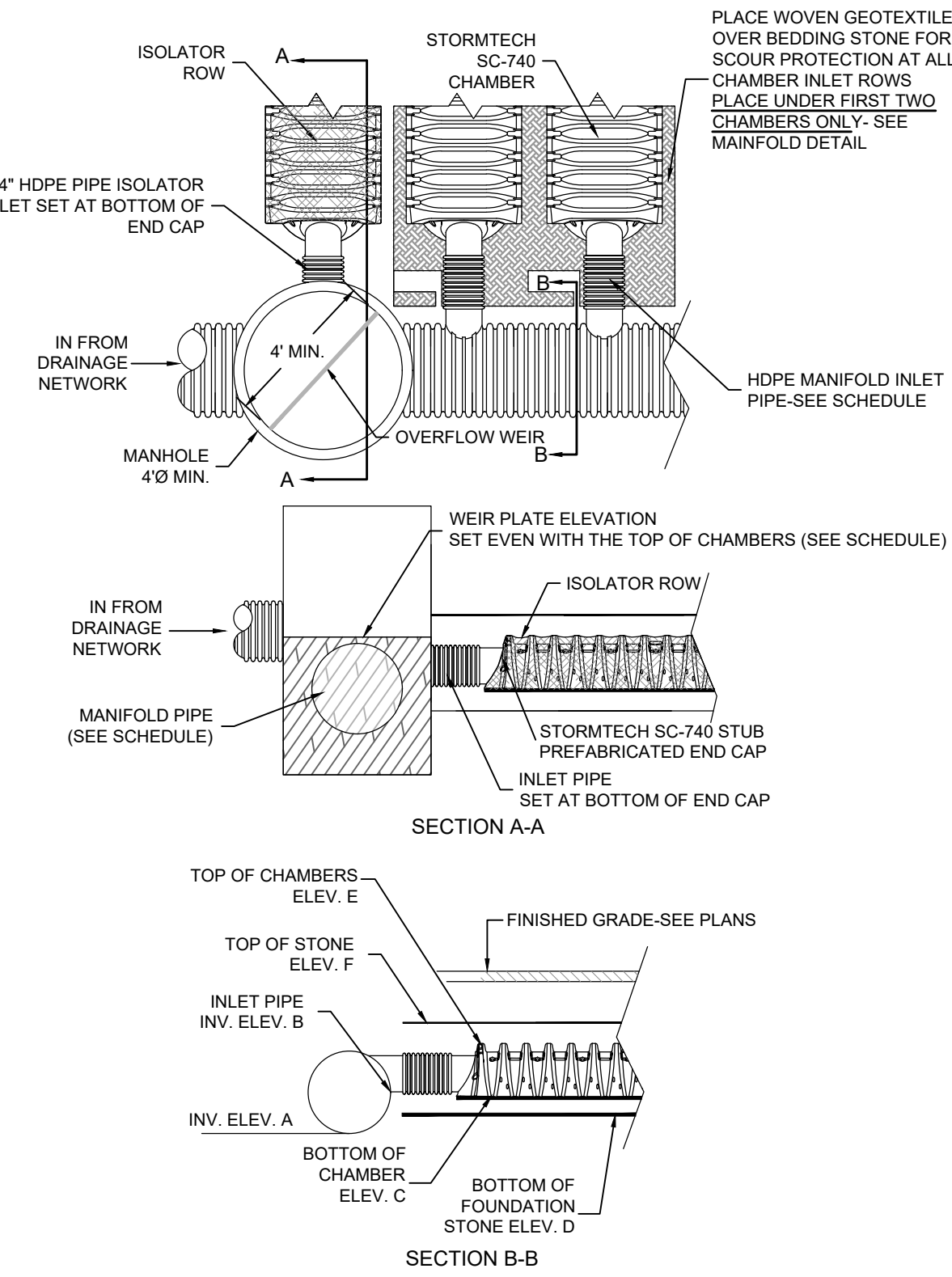
NOTE: ALL DIMENSIONS ARE NOMINAL.

ALL STUBS, EXCEPT FOR THE SC740EP08B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

*FOR THE SC740EP08B THE 24" STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75". BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

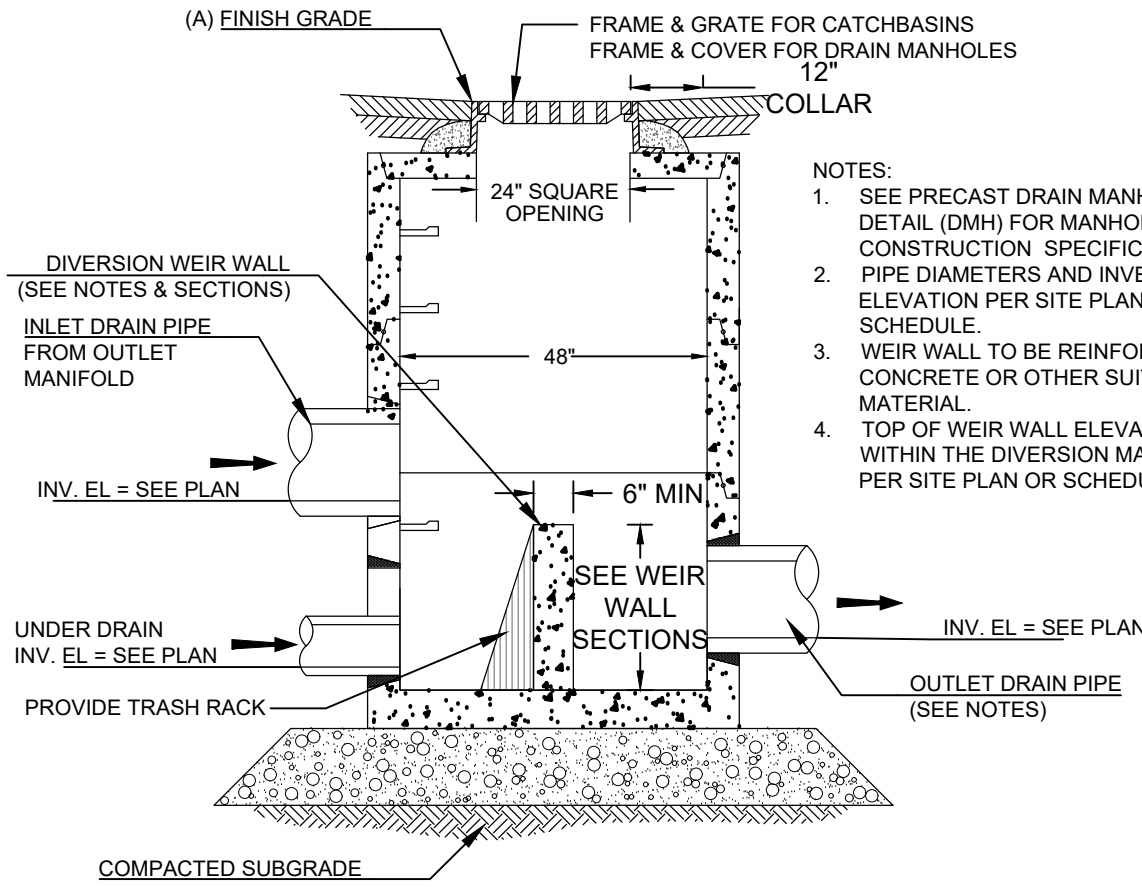
STORMTECH TECHNICAL DETAILS

NOT TO SCALE



STORMTECH SYSTEM DETAIL

NOT TO SCALE



SECTION A-A

URC-PRECAST OUTLET CONTROL DRAIN MANHOLE

NOT TO SCALE

STORMTECH GENERAL NOTES

- STORMTECH LLC ("STORMTECH") REQUIRES INSTALLING CONTRACTORS TO USE AND UNDERSTAND STORMTECH'S LATEST INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION.
- OUR TECHNICAL SERVICES DEPARTMENT OFFERS INSTALLATION CONSULTATIONS TO INSTALLING CONTRACTORS. CONTACT OUR TECHNICAL SERVICES REPRESENTATIVE AT LEAST 30 DAYS PRIOR TO SYSTEM INSTALLATION TO ARRANGE A PRE-INSTALLATION CONSULTATION. OUR REPRESENTATIVE CAN THEN ANSWER QUESTIONS OR ADDRESS COMMENTS ON THE STORMTECH CHAMBER SYSTEM AND INFORM THE INSTALLING CONTRACTOR OF THE MINIMUM INSTALLATION REQUIREMENTS BEFORE BEGINNING THE SYSTEMS CONSTRUCTION. CALL 1-888-892-2694 TO SPEAK TO A TECHNICAL SERVICE REPRESENTATIVE OR VISIT WWW.STORMTECH.COM TO RECEIVE A COPY OF OUR INSTALLATION INSTRUCTIONS.
- STORMTECH'S REQUIREMENTS FOR SYSTEMS WITH PAVEMENT DESIGN (ASPHALT, CONCRETE PAVERS, ETC.) MINIMUM COVER IS 18 INCHES NOT INCLUDING PAVEMENT. MAXIMUM COVER IS 36 INCHES INCLUDING PAVEMENT. FOR INSTALLATIONS THAT DO NOT INCLUDE PAVEMENT, WHERE RUTTING FROM VEHICLES MAY OCCUR, MINIMUM REQUIRED COVER IS 24 INCHES. MAXIMUM COVER IS 36 INCHES.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE DESIGN ENGINEER.
- AASHTO M288 CLASS 2 NON-WOVEN GEOTEXTILE (FILTER FABRIC) MUST BE USED AS INDICATED IN THE PROJECT PLANS.
- STONE PLACEMENT BETWEEN CHAMBERS ROWS AND AROUND PERIMETER MUST FOLLOW INSTRUCTIONS AS INDICATED IN THE MOST CURRENT VERSION OF STORMTECH'S INSTALLATION INSTRUCTIONS.
- BACKFILLING OVER THE CHAMBERS MUST FOLLOW REQUIREMENTS AS INDICATED IN THE MOST CURRENT VERSION OF STORMTECH'S INSTALLATION INSTRUCTIONS.
- THE CONTRACTOR MUST REFER TO STORMTECH'S INSTALLATION INSTRUCTIONS FOR A TABLE OF ACCEPTABLE VEHICLE LOADS AT VARIOUS DEPTHS OF COVER. THIS INFORMATION IS ALSO AVAILABLE AT STORMTECH'S WEBSITE: WWW.STORMTECH.COM. THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING VEHICLES THAT EXCEED STORMTECH'S REQUIREMENTS FROM TRAVELING ACROSS OR PARKING OVER THE STORMWATER SYSTEM. TEMPORARY FENCING, WARNING TAPE AND APPROPRIATELY LOCATED SIGNS ARE COMMONLY USED TO PREVENT UNAUTHORIZED VEHICLES FROM ENTERING SENSITIVE CONSTRUCTION AREAS.
- THE CONTRACTOR MUST APPLY EROSION AND SEDIMENT CONTROL MEASURES TO PROTECT THE STORMWATER SYSTEM DURING ALL PHASES OF SITE CONSTRUCTION PER LOCAL CODES AND DESIGN ENGINEER'S SPECIFICATIONS.
- STORMTECH PRODUCT WARRANTY IS LIMITED. SEE CURRENT PRODUCT WARRANTY FOR DETAILS. TO ACQUIRE A COPY CALL STORMTECH AT 1-888-892-2694 OR VISIT WWW.STORMTECH.COM.

Revisions

No.	By	Date	Description
1	AD		
2	AD		
3	AD		
4	AD		
5	AD		
6	AD		
7	AD		
8	AD		
9	AD		
10	AD		

Checked By: JF

Drawn By: SS/SJ

Designed By: JK

Date: 11/05/2020

Horsley Witten Group, Inc.
Sustainable Environmental Solutions
40 Route 6A
Sandwich, MA 02563
508-833-6600 voice
508-833-3150 fax

BARBARA JORDAN II, BUILDING "D",
HAYWARD STREET, PORTLAND STREET, &
SOMERSET STREET
PROVIDENCE, RHODE ISLAND

CHAMBER DETAILS

Prepared For:
Omni Development Corporation / The Wingate Companies
810 Eddy Street
Providence, RI 02905
Phone: (401) 461-4442
Fax: ----

Survey Provided By:
Design Professionals
21 Jeffrey Drive
South Windsor, CT
Phone: 860-291-8755
Fax: 860-291-8757
Dated: ----

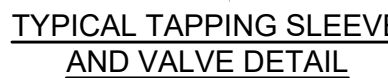
Registration:

Project Number: 20089

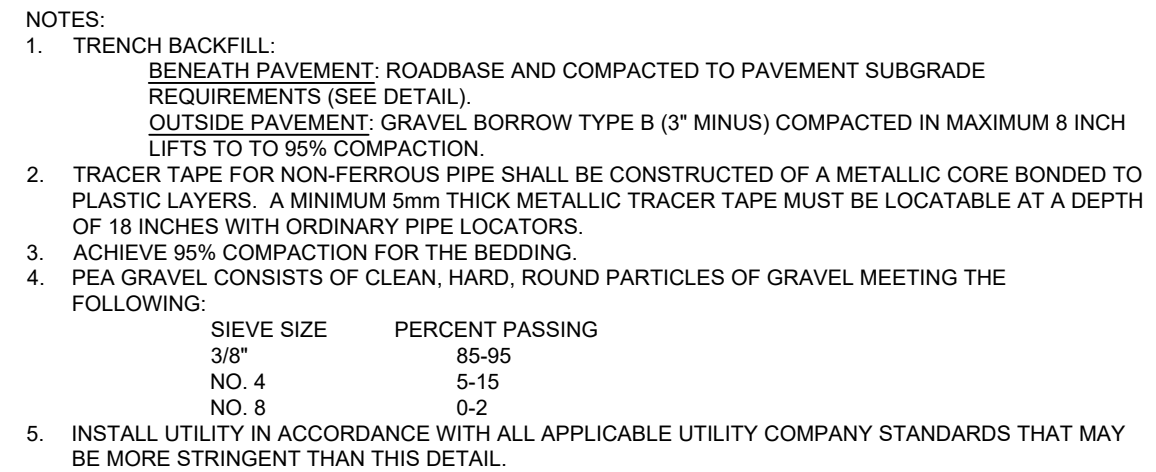
Sheet: 10 of 12

Sheet Number:

C - 10



WATERMAIN CONNECTIONS
NOT TO SCALE



WATERMAIN CONNECTIONS
NOT TO SCALE

last modified: 09/24/20 printed: 09/24/20 by jk H:\Projects\2020\20089 Barbara Jordan II Apartments Providence\Drawings\20089 la.dwg

GENERAL PLANTING NOTES:

- THE FOLLOWING NOTES ARE PROVIDED AS GENERAL PLANTING GUIDELINES ONLY. THOROUGHLY REVIEW THE PROJECT SPECIFICATIONS FOR ALL LANDSCAPE REQUIREMENTS PRIOR TO THE COMMENCEMENT OF ANY LANDSCAPE WORK. SUBMIT IN WRITING TO THE LANDSCAPE ARCHITECT ANY QUESTIONS OR CLARIFICATIONS REQUIRED AT A MINIMUM OF 30 DAYS PRIOR TO ORDERING ANY MATERIALS OR BEGINNING ANY LANDSCAPE CONSTRUCTION.
- SUBMIT TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL ALL REQUIRED LANDSCAPE SUBMITTALS AS DESCRIBED IN THE SPECIFICATIONS INCLUDING A PLANT LIST WITH PLANT SIZE AND QUANTITIES TO BE ORDERED PRIOR TO DELIVERY TO THE PROJECT SITE.
- FURNISH AND INSTALL ALL PLANTS AS SHOWN ON THE DRAWINGS AND IN THE SIZE AND QUANTITIES SPECIFIED ON THE PLANTING SCHEDULE. PLANT SUBSTITUTION SELECTION MUST BE APPROVED BY BIOLOGIST OR LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- ALL PLANTS TO COMPLY WITH APPLICABLE REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK," LATEST EDITION, PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION INC.
- PLANTS TO BE GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT FOR AT LEAST TWO (2) YEARS. USE HEALTHY NURSERY GROWN PLANTS, FREE OF DISEASE, INSECTS, AND PESTS. EGGS OR LARVAE, AND HAVE A WELL DEVELOPED ROOT SYSTEM.
- INSTALL PLANTS WITHIN ONE (1) WEEK OF PURCHASE. IF PLANTS ARE TO BE STORED AT THE SITE PRIOR TO PLANTING, IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THEY ARE PROPERLY MAINTAINED, WATERED, AND REMAIN HEALTHY.
- PROCEED WITH PLANTING ONLY WHEN EXISTING AND FORECASTED WEATHER CONDITIONS PERMIT. SUBMIT TO THE LANDSCAPE ARCHITECT IN WRITING THE PROPOSED PLANTING SCHEDULE. OBTAIN APPROVAL OF PLANTING SCHEDULE FROM THE LANDSCAPE ARCHITECT PRIOR TO PERFORMING ANY WORK.
- SEASONS FOR PLANTING:

S	SPRING:	DECIDUOUS:	APRIL 1 TO JUNE 15
		EVERGREEN:	APRIL 1 TO JUNE 15
		PERENNIALS:	APRIL 15 TO JUNE 1
		GROUNDCOVERS:	APRIL 15 TO JUNE 1
F	FALL:	DECIDUOUS:	SEPTEMBER 15 TO NOVEMBER 15
		EVERGREEN:	SEPTEMBER 15 TO NOVEMBER 15
		PERENNIALS:	SEPTEMBER 15 TO NOVEMBER 15
		GROUNDCOVERS:	SEPTEMBER 15 TO NOVEMBER 15
- PLANTING UNDER FROZEN CONDITIONS IN EITHER THE SPRING OR FALL WILL NOT BE PERMITTED. PLANTING BEFORE OR AFTER THE ABOVE REFERENCED PLANTING DATES WILL INCREASE THE LIKELIHOOD OF PLANT OR GRASS SEED ESTABLISHMENT FAILURE. ANY DEVIATION FROM THE ABOVE REFERENCED PLANTING DATES IS UNDERTAKEN AT SOLE RISK OF THE CONTRACTOR AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ANY ADDITIONAL MAINTENANCE AND WATERING WHICH MAY BE REQUIRED TO ENSURE SATISFACTORY PLANT AND SEED ESTABLISHMENT.
- FURNISH ONE YEAR MANUFACTURER WARRANTY FOR TREES, PLANTS, AND GROUND COVER AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH, EXCEPT FOR DEFECTS RESULTING FROM LACK OF ADEQUATE MAINTENANCE, NEGLIGENCE, OR ABUSE BY OWNER, OR ABNORMAL WEATHER CONDITIONS UNUSUAL FOR WARRANTY PERIOD. THE DATE OF FINAL ACCEPTANCE OF ALL COMPLETED PLANTING WORK ESTABLISHES THE END OF INSTALLATION AND INITIAL MAINTENANCE PERIOD AND THE COMMENCEMENT OF THE GUARANTEE PERIOD.
- ALL TREES WITHIN 5'-0" OF WALKWAYS AND SIDEWALKS TO HAVE A 6'-8" STANDARD BRANCHING HEIGHT.
- INSPECT ALL AREAS TO BE PLANTED OR SEEDED PRIOR TO STARTING ANY LANDSCAPE WORK. REPORT ANY DEFECTS SUCH AS INCORRECT GRADING, INCORRECT SUBGRADE ELEVATIONS OR DRAINAGE PROBLEMS, ETC. TO THE LANDSCAPE ARCHITECT AND ENGINEER PRIOR TO BEGINNING WORK. COMMENCEMENT OF WORK INDICATES ACCEPTANCE OF SUBGRADE AREAS TO BE PLANTED, AND THE LANDSCAPE CONTRACTOR ASSUMES RESPONSIBILITY FOR ALL LANDSCAPE WORK.
- PROVIDE PROPER PREPARATION OF ALL PROPOSED PLANTED AND SEEDED AREAS PER THE NOTES AND SPECIFICATIONS.
- ALL PLANT LAYOUT AND ACTUAL PLANTING LOCATIONS ARE TO BE FIELD VERIFIED BY LANDSCAPE ARCHITECT PRIOR TO PLANTING. NOTIFY THE LANDSCAPE ARCHITECT AT A MINIMUM OF 48 HOURS IN ADVANCE PRIOR TO SCHEDULING ANY FIELD INSPECTIONS.
- BALL AND BURLAP: REMOVE BURLAP AND WIRE BASKETS FROM TOPS OF BALLS AND FROM TOP HALF OF ROOTBALL AS INDICATED ON DRAWINGS. REMOVE PALLETS, IF ANY, BEFORE SETTING.
- POTTED PLANTS: REMOVE THE PLANT FROM THE POT AND LOOSEN OR SCORE THE ROOTS BEFORE PLANTING TO PROMOTE OUTWARDS ROOT GROWTH INTO THE SOIL.
- PLUGS: PLANT UPRIGHT AND NOT AT AN ANGLE. DIG PLANTING HOLES LARGE ENOUGH AND DEEP ENOUGH TO ACCOMMODATE THE ENTIRE ROOT MASS. PLANT PLUGS WITH NO TWISTED OR BALLED ROOTS AND WITH NO ROOTS EXPOSED ABOVE THE GRADE LINE. HAND PACK THE SOIL AROUND THE ENTIRE PLUG ROOT MASS.
- DIG THE THE PLANTING HOLE TO THE SAME DEPTH AS THE ROOT BALL AND TWO TO THREE TIMES WIDER. SCORE ALL SIDES OF THE HOLE, PLACE THE PLANT IN THE HOLE SO THE TOP OF ROOT BALL IS EVEN WITH SOIL SURFACE. FILL THE HOLE HALFWAY AND THEN ADD WATER ALLOWING IT TO SEEP INTO BACK FILLED MATERIAL. BE SURE TO REMOVE ALL AIR POCKETS FROM BACK FILLED SOIL. DO NOT SPREAD SOIL ON TOP OF THE ROOTBALL. IF SOIL IS EXTREMELY POOR, REPLACE BACK FILL WITH GOOD QUALITY TOP SOIL. AMEND THE SOIL, AS NECESSARY.
- CREATE A 2" TO 4" BERM AROUND THE EDGE OF PLANTING HOLE WITH REMAINING SOIL TO RETAIN WATER.
- REMOVE ALL PLANT TAGS AND FLAGS FROM THE PLANTS.
- MULCH ALL PLANTING BEDS AS INDICATED ON DRAWINGS. UNLESS NOTED OTHERWISE, ALL PLANTS TO RECEIVE 2-3 INCHES OF MULCH. DO NOT PILE OR MOUND MULCH AROUND THE PLANT STEMS OR TRUNK.
- TRIM BROKEN AND DEAD BRANCHES FROM TREES AND SHRUBS AFTER PLANTING. NEVER CUT A LEADER.

GENERAL SEEDING NOTES:

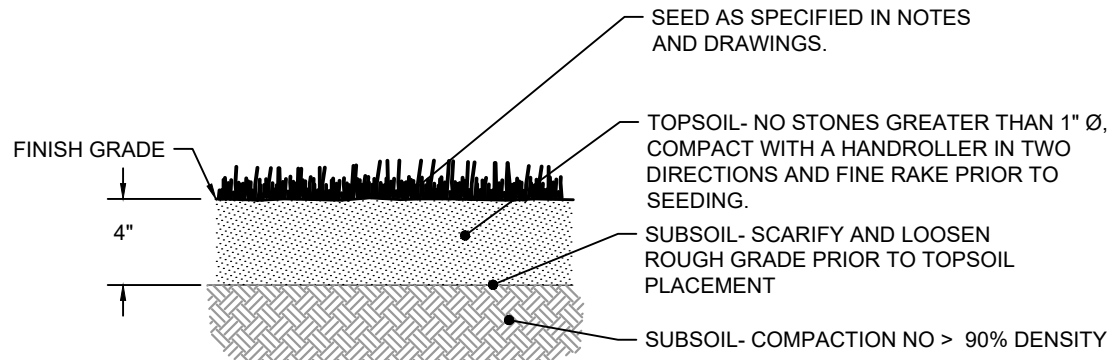
- SEND A REPRESENTATIVE SAMPLE OF THE TOPSOIL TO A TESTING LABORATORY FOR STANDARD SOIL ANALYSIS AS DESCRIBED IN THE SPECIFICATIONS. SUBMIT TO THE LANDSCAPE ARCHITECT AND ENGINEER TEST RESULTS WITH RECOMMENDED SOIL TREATMENTS TO PROMOTE PLANT AND GRASS GROWTH. CORRECT DEFICIENCIES IN THE LOAM AND STOCKPILED TOPSOIL AS DIRECTED BY THE TESTING AGENCY.
- ALL AREAS THAT ARE DISTURBED AND/OR GRADED DURING CONSTRUCTION ARE TO BE BROUGHT TO FINISHED GRADE WITH AT LEAST 4" MINIMUM DEPTH OF GOOD QUALITY LOAM AND SEEDED WITH A QUICK GERMINATING GRASS SEED SUCH AS NEW ENGLAND EROSION CONTROL RESTORATION MIX OR AS SPECIFIED ON THE PLANS.
- PRIOR TO THE PLACEMENT OF TOP SOIL, LOOSEN THE SUBGRADE OF ALL PROPOSED SEEDED AREAS TO A DEPTH OF 6" AND RAKE TO REMOVE STONES LARGER THAN 1 INCH, STICKS, ROOTS, RUBBISH AND OTHER EXTRANEIOUS MATTER AND LEGALLY DISPOSE TO AN OFF SITE LOCATION.
- DO NOT SPREAD TOPSOIL IF THE SUBGRADE IS FROZEN, EXCESSIVELY WET, COMPACTED OR NOT PROPERLY PREPARED PER THE NOTES AND SPECIFICATIONS.

WATERING NOTES:

- PROVIDE PROPER PLANT CARE, MAINTENANCE AND WATERING ON SITE UNTIL SUCH TIME AS THE LANDSCAPING IS ACCEPTED BY THE PROPERTY OWNER AS SATISFACTORY PER THE SPECIFICATIONS OR AS DETERMINED BY ANY WRITTEN AGREEMENTS BETWEEN THE CONTRACTOR AND PROPERTY OWNER.
- ESTABLISH AN APPROPRIATE WATERING SCHEDULE FOR ALL PLANT MATERIAL BASED UPON PLANT SPECIES REQUIREMENTS AND PROVIDE IN WRITING TO THE LANDSCAPE ARCHITECT AND OWNER FOR REVIEW AND APPROVAL. ADHERE TO THE APPROVED SCHEDULE UNTIL PLANTS ARE FULLY ESTABLISHED.
- AT A MINIMUM THE NEWLY SEEDED AND/OR HYDROSEEDED LAWNS SHOULD BE WATERED DAILY. SPECIAL CARE SHOULD BE TAKEN TO ENSURE THAT THE LAWN IS NOT SATURATED DURING WATERING. IF AN IRRIGATION SYSTEM IS NOT PROVIDED, A TEMPORARY IRRIGATION SYSTEM OR HANDHELD GARDEN HOSE SHALL BE USED FOR WATERING SEEDED AREAS. THE AREA MUST BE MAINTAINED CONSISTENTLY MOIST FOR THE BEST GERMINATION RESULTS. ADDITIONAL WATERING WILL BE REQUIRED IF PLANTING AND SEEDING OCCUR OUTSIDE OF THE RECOMMENDED PLANTING SEASONS.

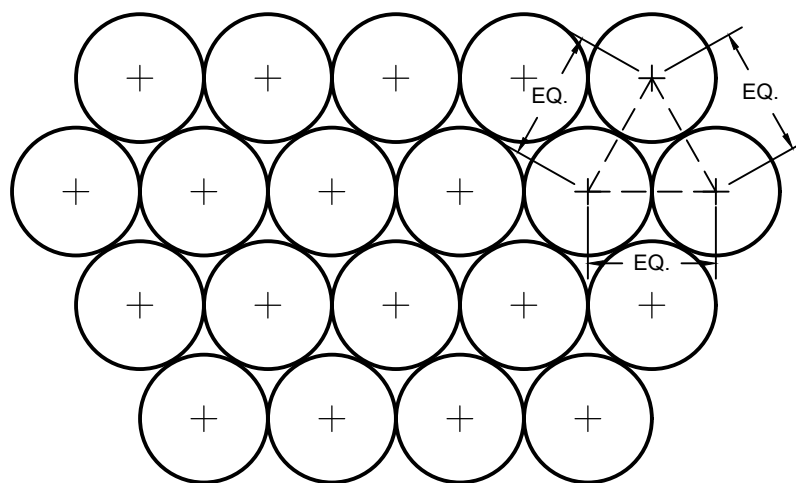
PLANTING LAYOUT NOTES

- HATCHED AREAS - DO NOT PLANT LARGE AREAS OF THE SAME SPECIES. RANDOMLY PLANT AS INDICATED ON THE PLANTING PLANS INTO SMALL GROUPINGS OF THE SAME SPECIES TO CREATE A MORE NATURALISTIC APPEARANCE. PLANT THE SAME PLANT SPECIES IN GROUPS OF 3-7 AND NOT LARGER THAN 7, DEPENDING ON THE OVERALL NUMBER OF PLANTINGS.



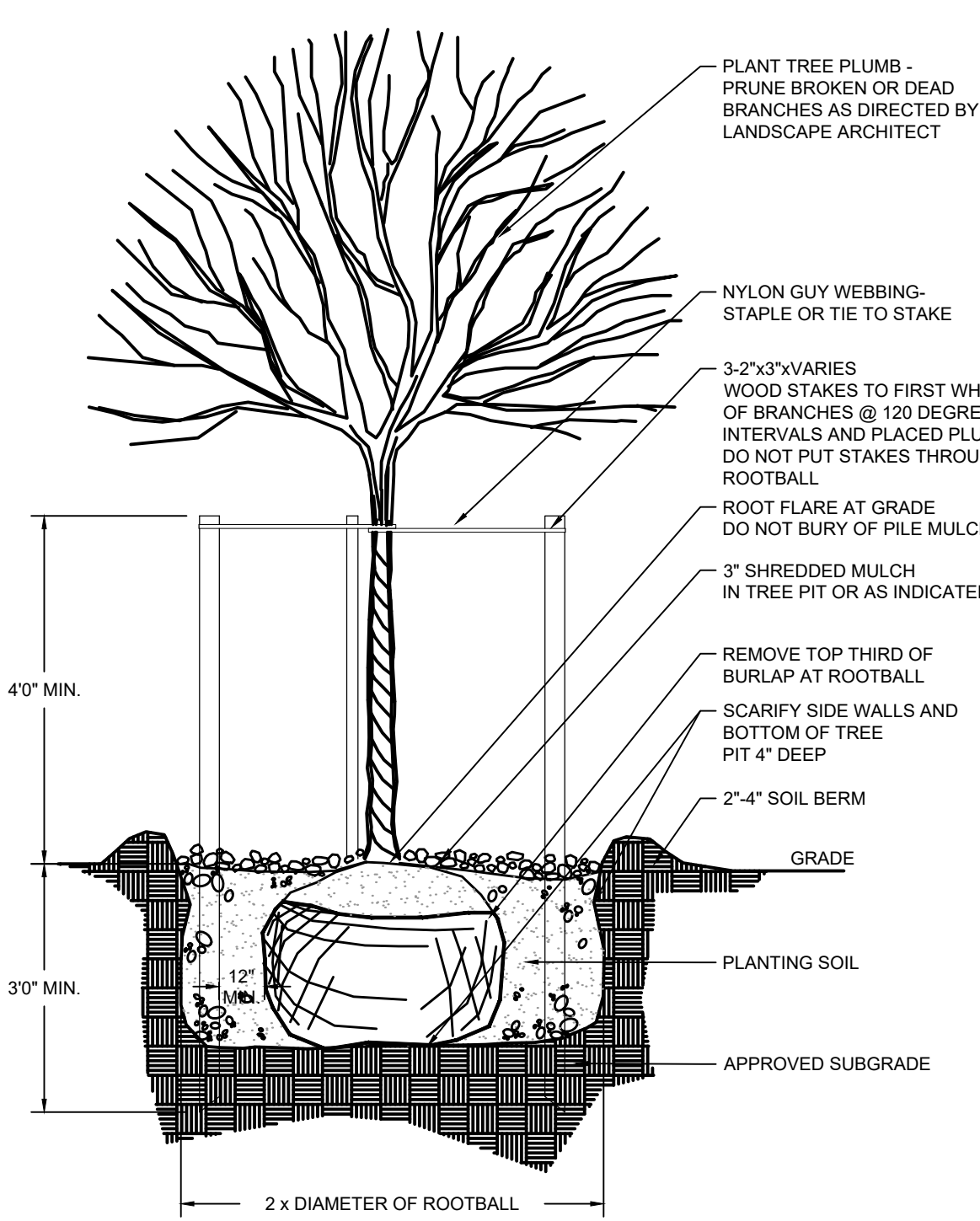
- NOTES:
- SEE LANDSCAPE GRADING SPECIFICATIONS FOR TOPSOIL REQUIREMENTS.
 - CONFIRM SUBGRADES ARE CORRECT AND POSITIVE DRAINAGE IS MAINTAINED PRIOR TO PLACEMENT OF TOPSOIL.
 - NOTIFY ENGINEER/LANDSCAPE ARCHITECT FOR REVIEW OF SUBGRADE PRIOR TO PLACEMENT OF THE TOPSOIL.

LOAM AND SEED DETAIL
NOT TO SCALE

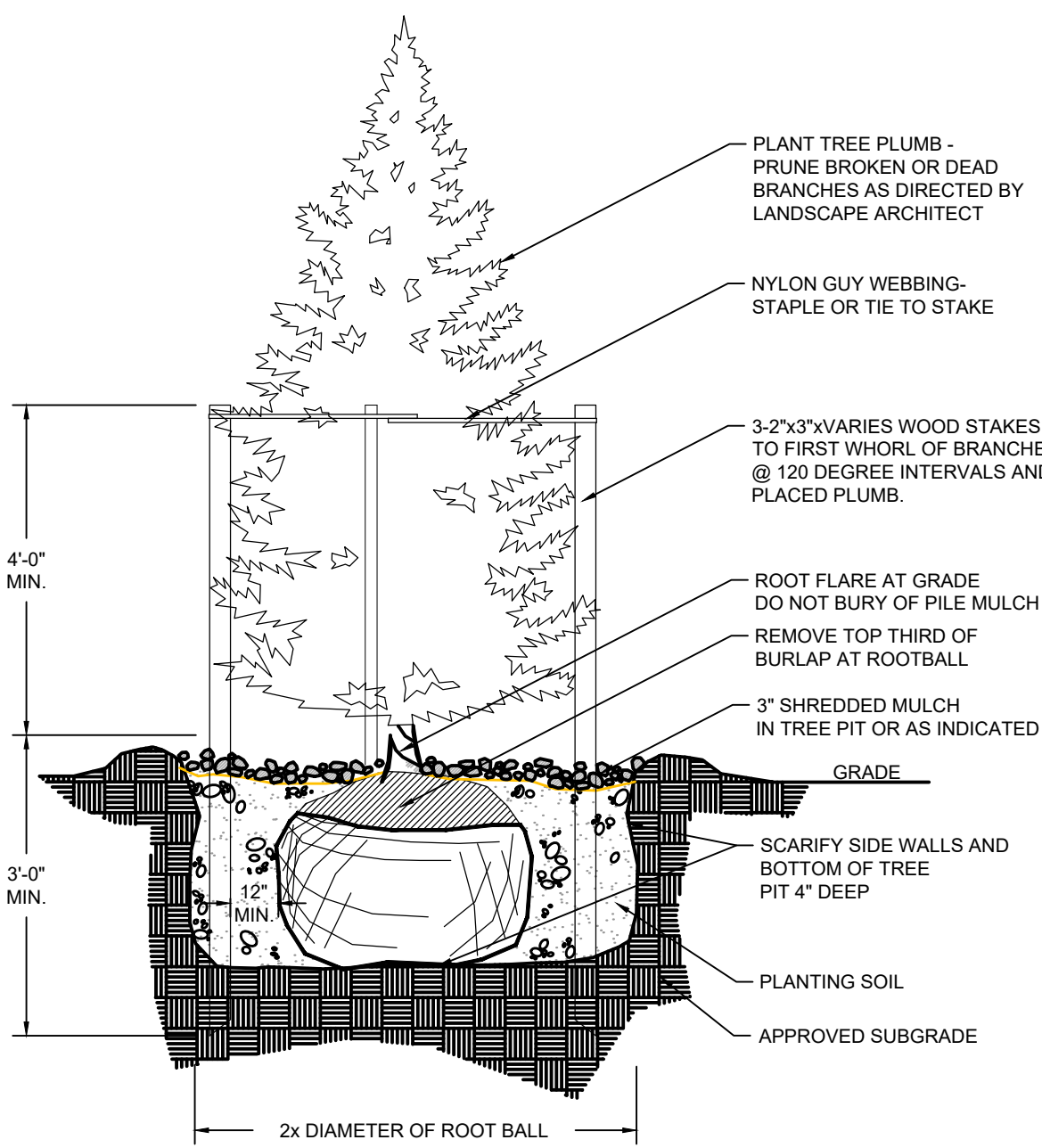


USE EQUIDISTANT TRIANGULAR SPACING FOR PLANTS - FOR ACTUAL SPACING SEE PLANS OR PLANTING SCHEDULE

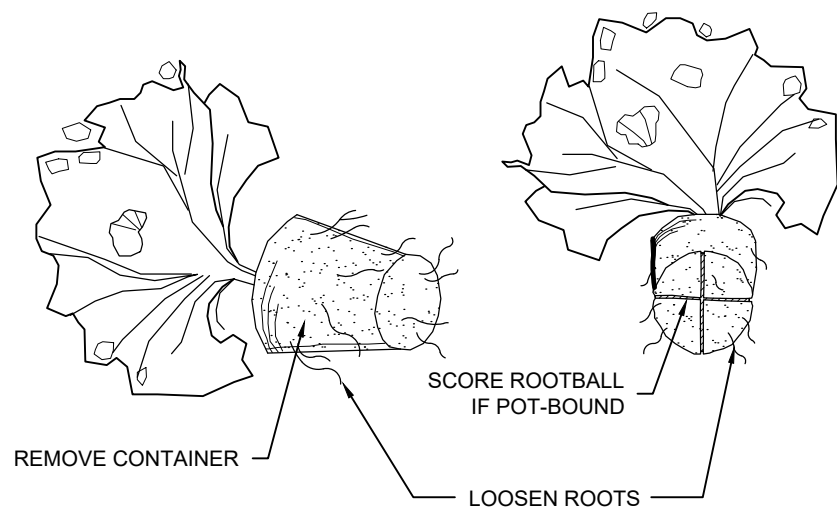
PLANTING SPACING DETAIL
NOT TO SCALE



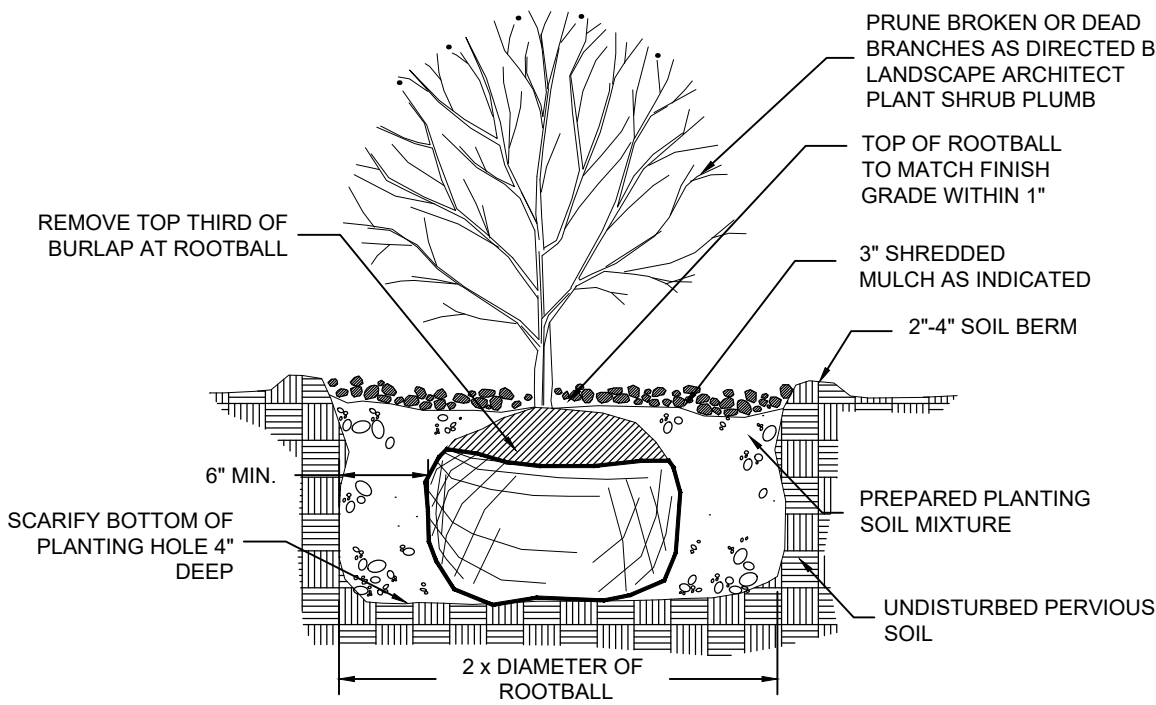
TREE PLANTING DETAIL
NOT TO SCALE



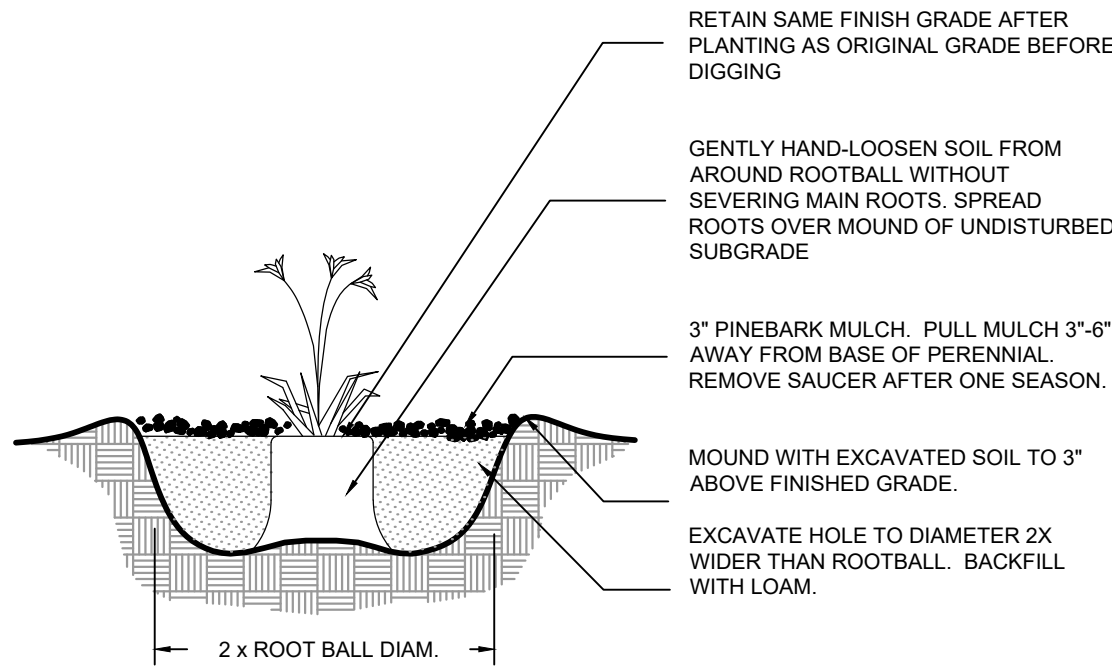
EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE



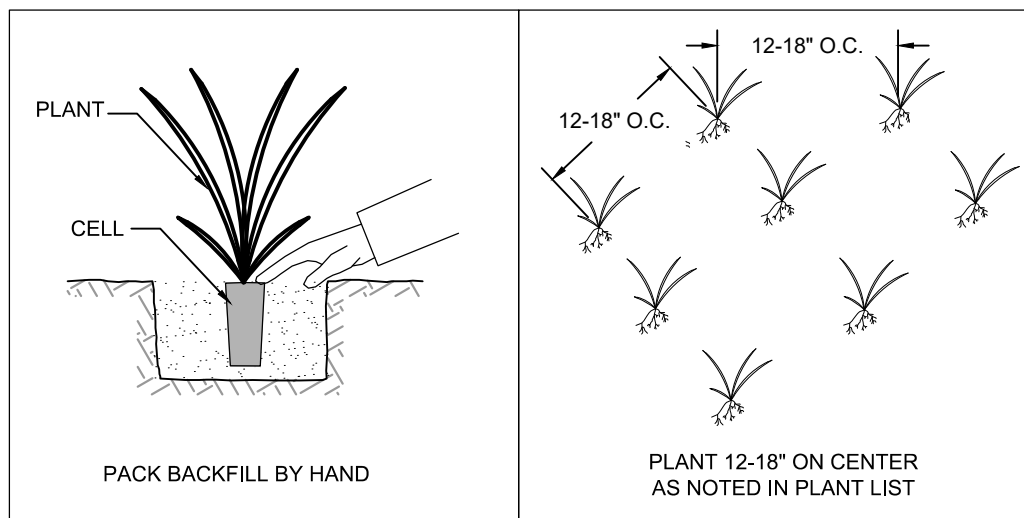
CONTAINER PLANT ROOTBALL TREATMENT
NOT TO SCALE



SHRUB PLANTING DETAIL
NOT TO SCALE



PERENNIAL PLANTING DETAIL
NOT TO SCALE



PLUG PLANTING DETAIL
NOT TO SCALE

Revisions		Date		By		Description	
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

Horsley Witten Group, Inc. Sustainable Environmental Solutions 40 Route 6A Sandwich, MA 02563 508-833-6600 voice 508-833-3150 fax		Checked By: EEB		Drawn By: EEB		Date: SEPTEMBER 2020	
BARBARA JORDAN II, BUILDING "D"		SOMERSET STREET		PROVIDENCE, RHODE ISLAND		20089 LA - PLANTING DETAILS	
Prepared For: TOWN OF ***** ***** Street Town Name, MA Phone: (508) ***** Fax: *****		Survey Provided By: Design Professionals 21 Jeffrey Drive South Windsor, CT Phone: 860-291-9755 Fax: 860-291-4757 Dated: ---		Registration:		Project Number: 20089 Sheet: ---- of **	
Sheet Number: LA - ----		DRAFT NOT FOR CONSTRUCTION					