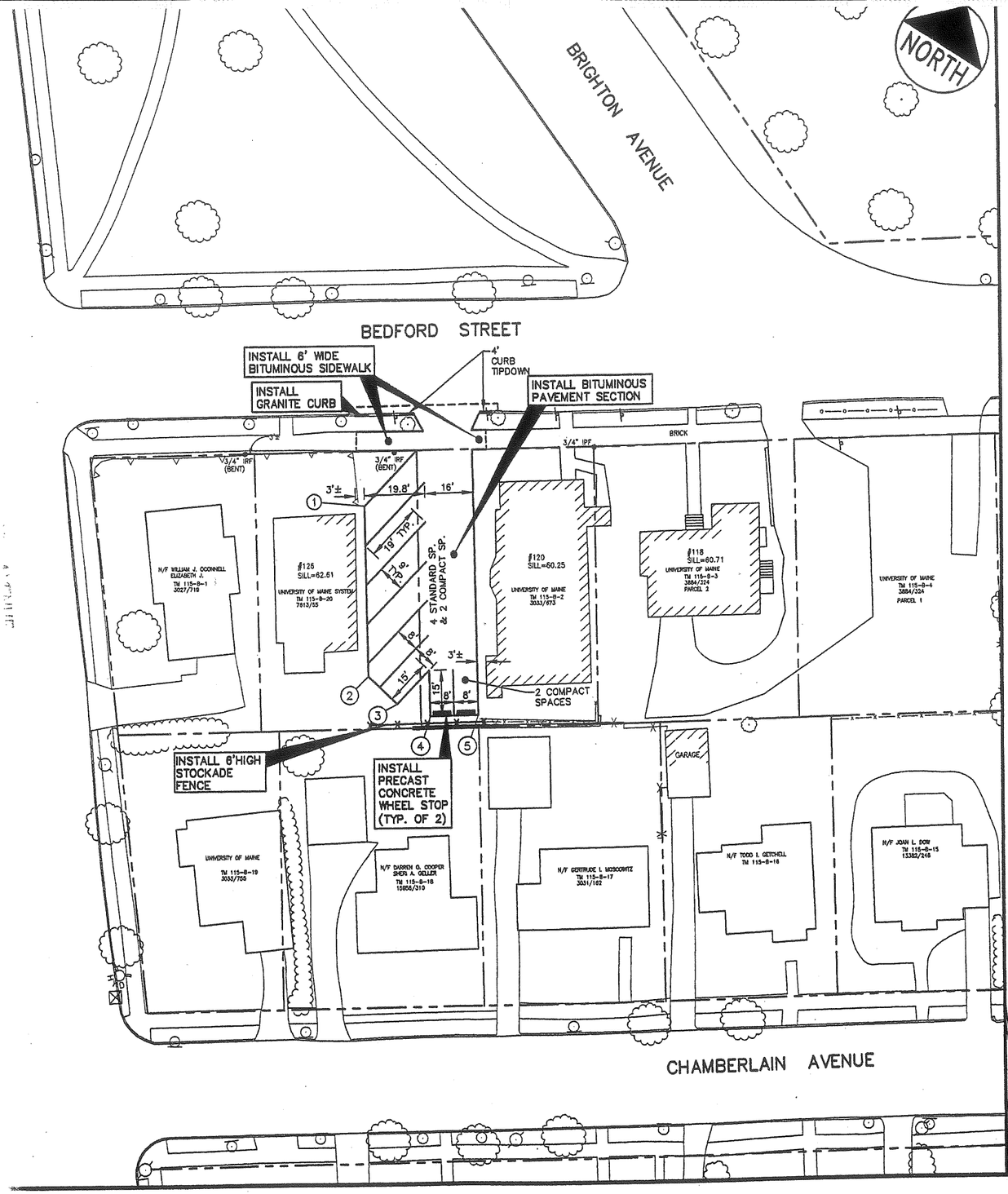
114A-A-1

96 Falmouth St.

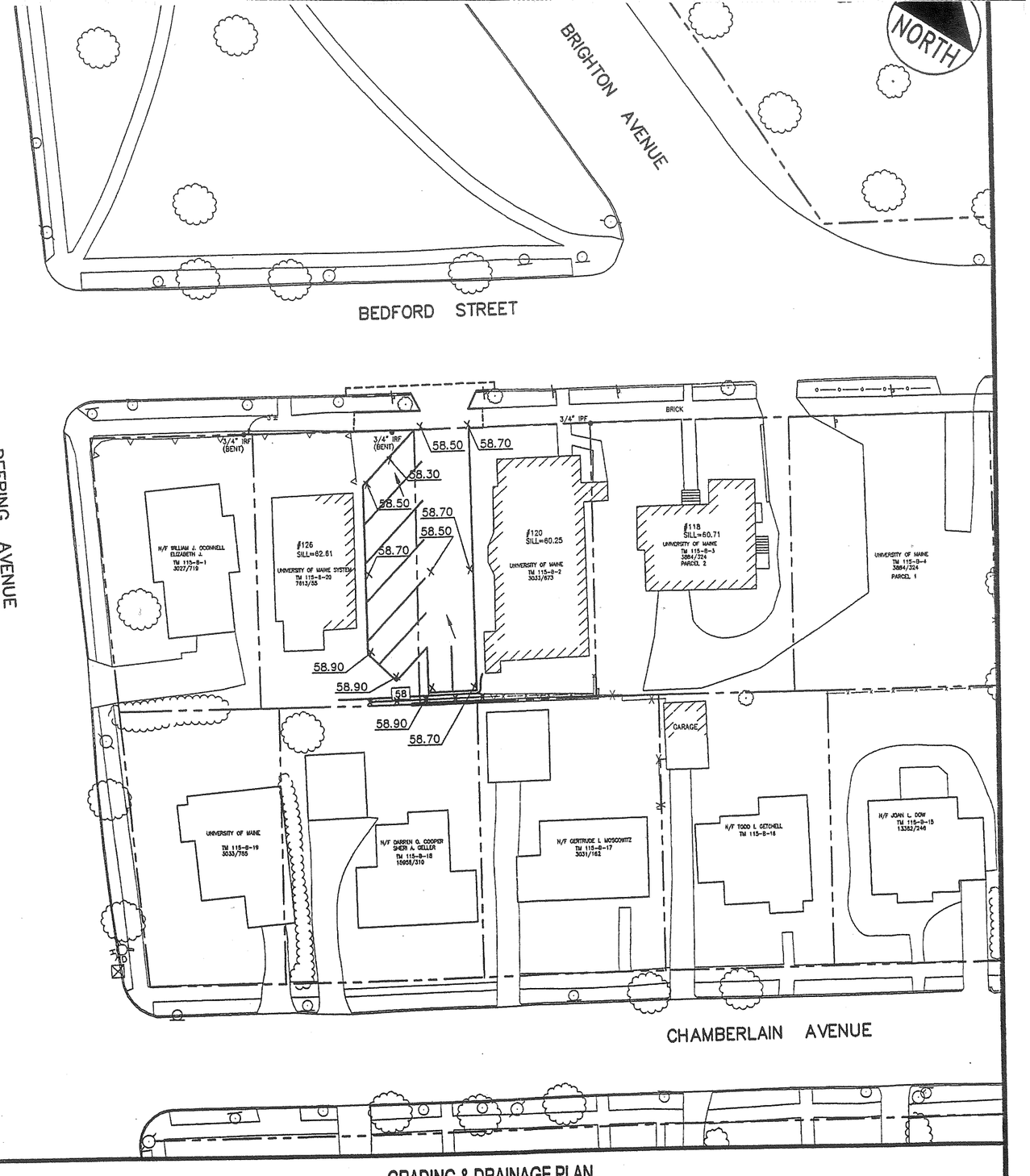
Parking Lots

USM

2001-0320



SITE LAYOUT PLAN

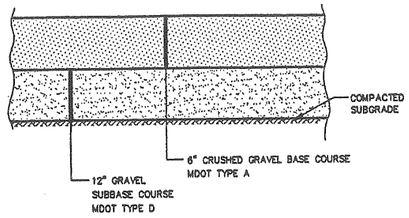


GRADING & DRAINAGE PLAN

PRELIMINARY NOT FOR CONSTRUCTION

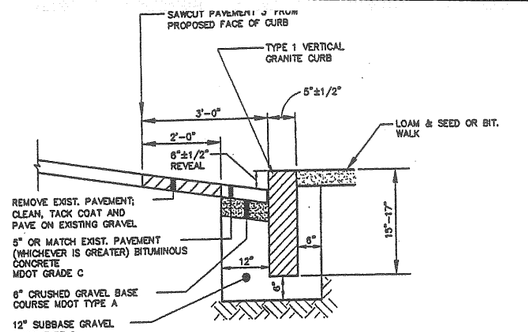
NOTES:

1. MDOT TYPE D AGGREGATE GRADATION SHALL BE MODIFIED FOR A MAXIMUM 4" STONE SIZE AND LIMIT #200 SIEVE TO 5% PASSING.



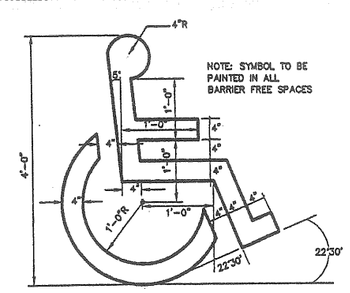
TYPICAL GRAVEL PARKING AREA SECTION DETAIL

N.T.S.



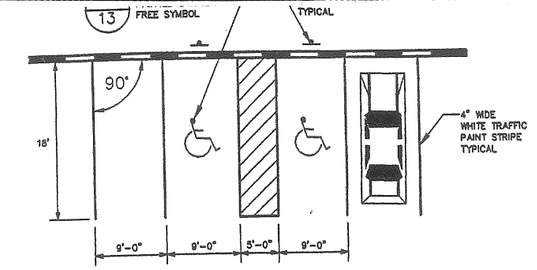
TYPE 1 VERTICAL GRANITE CURB DETAIL

N.T.S.



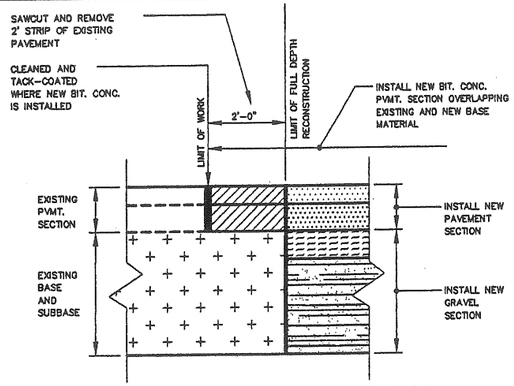
PAINTED BARRIER FREE SYMBOL

N.T.S.



TYPICAL PARKING SPACE DIMENSIONS

N.T.S.

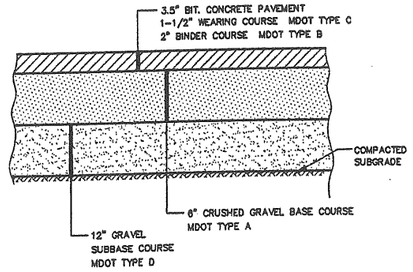


NEW PAVEMENT ADJACENT TO EXISTING PAVEMENT SAWCUT DETAIL

N.T.S.

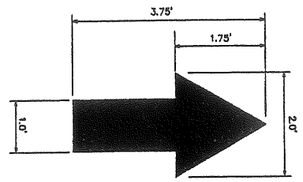
NOTES:

1. MDOT TYPE D AGGREGATE GRADATION SHALL BE MODIFIED FOR A MAXIMUM 4" STONE SIZE AND LIMIT #200 SIEVE TO 5% PASSING.



DRIVE & PARKING AREA PAVEMENT SECTION DETAIL

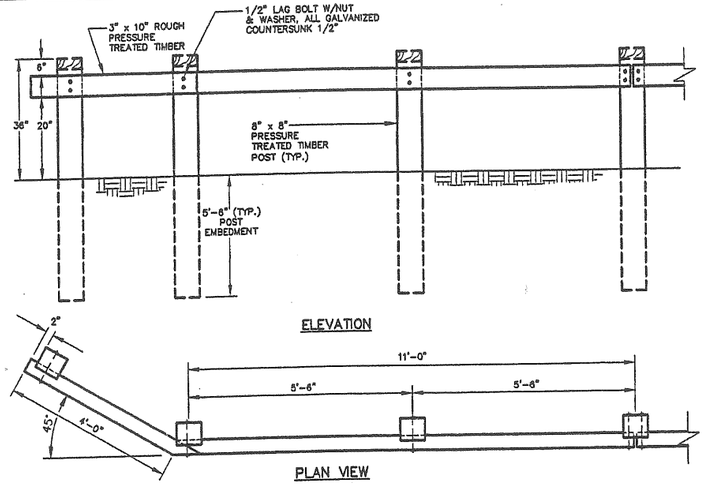
N.T.S.



NOTE: ALL TRAFFIC FLOW ARROWS TO BE SOLID WHITE REFLECTIVE TRAFFIC PAINT AS PER DIMENSIONS ABOVE.

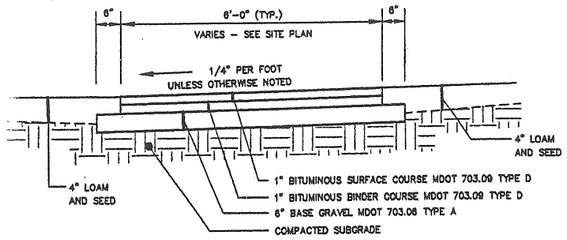
TYPICAL TRAFFIC FLOW ARROW PAVEMENT MARKING

N.T.S.



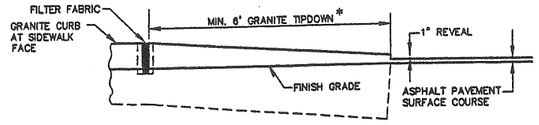
TIMBER GUIDERAIL DETAIL

N.T.S.



BITUMINOUS SIDEWALK DETAIL

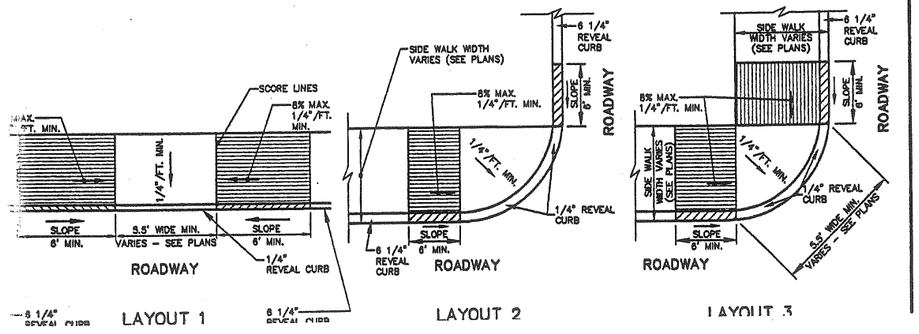
N.T.S

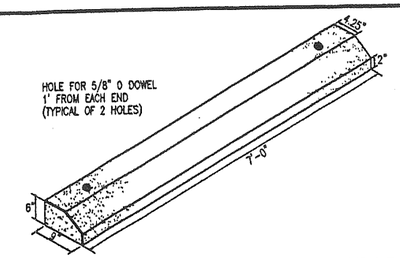


* 6'-0" IS MINIMUM - LENGTH MAY NEED TO BE EXTENDED TO MEET ADA REQUIREMENTS

CURB INSTALLATION TYPICAL TIPDOWN

N.T.S.





PRECAST CONCRETE WHEEL STOP DETAIL

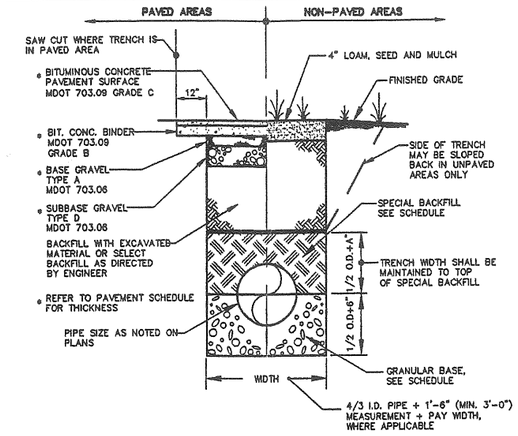
N.T.S.

PRELIMINARY NOT FOR CONSTRUCTION

TRENCH SECTION BACKFILL SCHEDULE

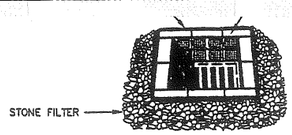
TYPE OF PIPE	GRANULAR BASE MATERIAL	SPECIAL BACKFILL	SPECIAL BACKFILL COVER "A" (IN)	SELECT BACKFILL
PVC	3/4" CRUSHED STONE	GRANULAR AASHTO M145-49 A-3 OR BETTER	6"	GRANULAR AASHTO M145-49 A-3 OR BETTER
RCP	3/4" CRUSHED STONE	GRANULAR AASHTO M145-49 A-3 OR BETTER	12"	GRANULAR AASHTO M145-49 A-3 OR BETTER

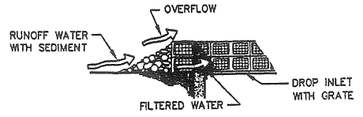
NOTE:
BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS . ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.



TYPICAL UTILITY PIPE TRENCH SECTION

N.T.S.





SPECIFIC APPLICATION

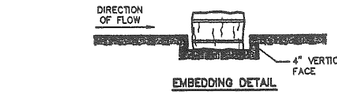
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

NOTES:

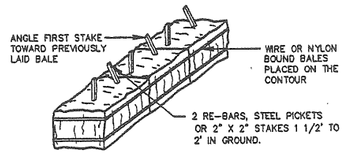
1. PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, WITH THE ENDS OF ADJACENT BLOCKS ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING COMBINATIONS OF 4", 8" AND 12" WIDE BLOCKS. THE BARRIER OF BLOCKS SHALL BE AT LEAST 12 INCHES HIGH, AND NO GREATER THAN 24" HIGH.
2. WIRE MESH SHALL BE PLACED OVER THE OUTSIDE VERTICAL FACE (WEBBING) OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2" OPENINGS SHALL BE USED.
3. STONE SHALL BE PILED AGAINST THE WIRE TO THE TOP OF THE BLOCK BARRIER, AS SHOWN IN DETAIL. THE STONE FILTER SHALL BE 3/4" CRUSHED STONE.
4. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT, SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND REPLACED.

STONE SEDIMENT BARRIER

N.T.S.



EMBEDDING DETAIL



ANCHORING DETAIL

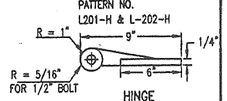
CONSTRUCTION SPECIFICATIONS

1. Bales shall be placed in a row with ends tightly abutting the adjacent bales.
2. Each bale shall be embedded in the soil a minimum of 4".
3. Bales shall be securely anchored in place by stakes or re-bars driven through the bales. The first stake in each bale was angled toward previously laid bale to force bales together.
4. Inspection will be frequent and repair or replacement shall be made promptly as needed.
5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

STRAW OR HAY BALE BARRIER

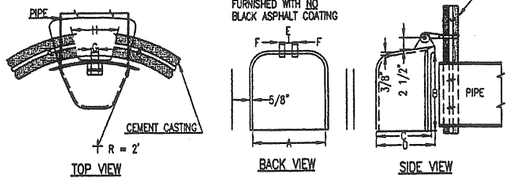
N.T.S.

DIMENSIONS	A	B	C	D	E	F	G	H
10" PIPE	18	18	10	11.25	2	1	1.875	14



HINGE

NOTE:
ASSEMBLED WITH 1/2" DIA. BY 5" HEX HEAD BRASS BOLT AND BRASS HEX NUT.

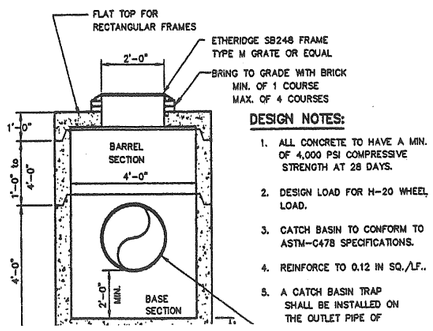


TOP VIEW BACK VIEW SIDE VIEW

(MODEL L 202 - MANUFACTURED BY THE LEBARON FOUNDRY, INC.; BROCKTON MASS.)

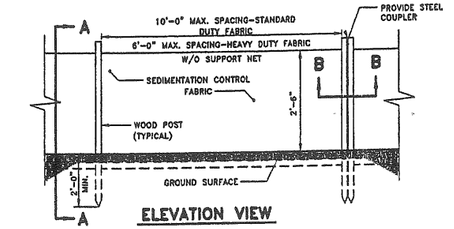
CATCH BASIN TRAP DETAIL

N.T.S.



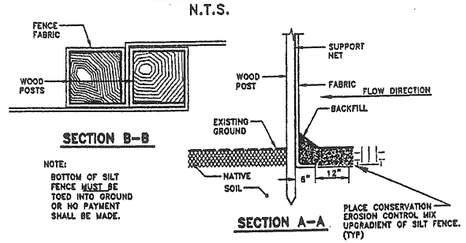
DESIGN NOTES:

1. ALL CONCRETE TO HAVE A MIN. OF 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. DESIGN LOAD FOR H-20 WHEEL LOAD.
3. CATCH BASIN TO CONFORM TO ASTM-C478 SPECIFICATIONS.
4. REINFORCE TO 0.12 IN SQ./LF..
5. A CATCH BASIN TRAP SHALL BE INSTALLED ON THE OUTLET PIPE OF



ELEVATION VIEW

N.T.S.



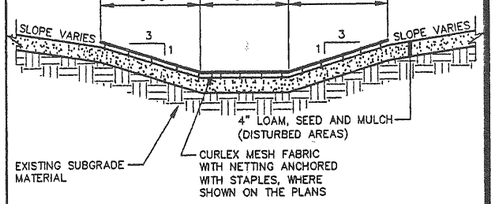
SECTION B-B

NOTE:
BOTTOM OF SILT FENCE MUST BE TOED INTO GROUND OR NO PAYMENT SHALL BE MADE.

SECTION A-A

SILTATION FENCE DETAIL

N.T.S.



VEGETATED SWALE DETAIL

N.T.S.

PRELIMINARY NOT FOR CONSTRUCTION

SITE DEVELOPMENT

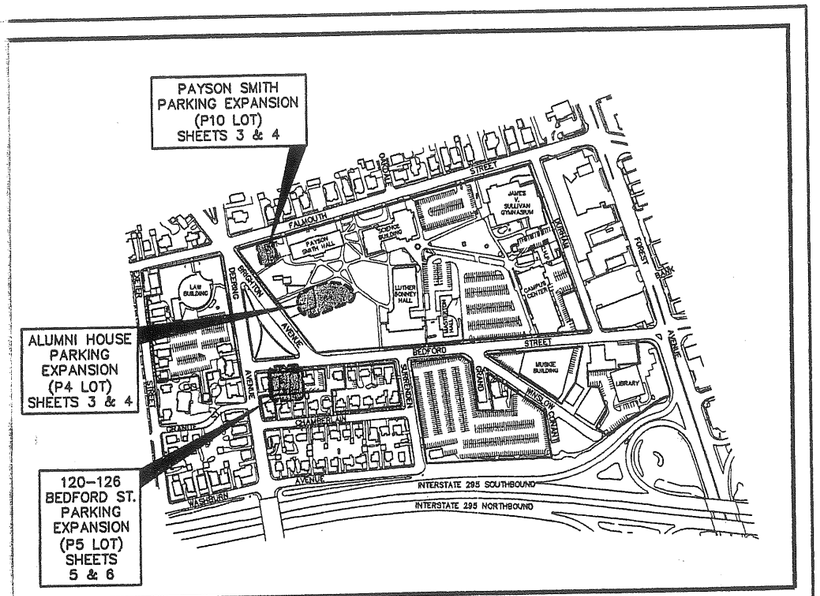
FOR

VEHICULAR PARKING LOT IMPROVEMENTS

UNIVERSITY OF SOUTHERN MAINE

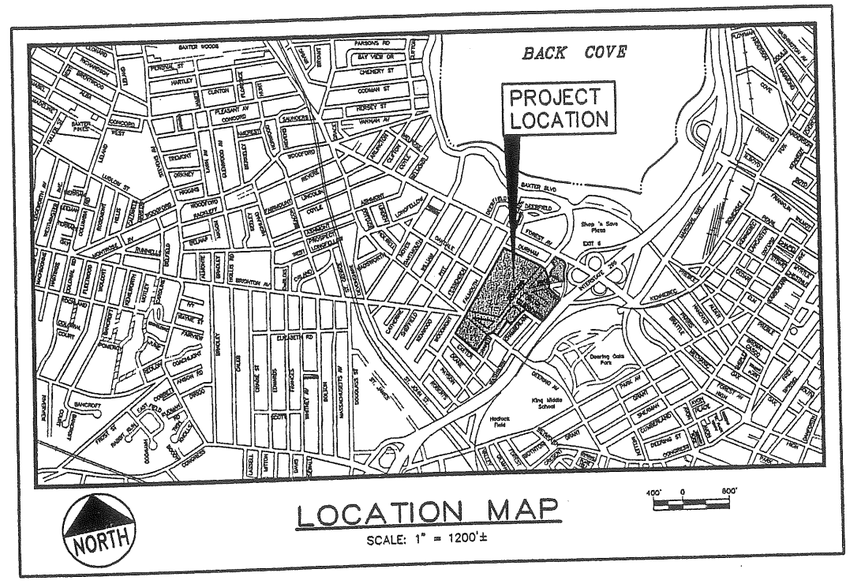
PORTLAND CAMPUS

DECEMBER 2001



PROJECT VICINITY MAP

SCALE: 1" = 300'±



LOCATION MAP

SCALE: 1" = 1200'±

APPLICANT (FOR THE PURPOSE OF SECURING LOCAL SITE PLAN APPROVALS AND STATE SITE LOCATION PERMIT MODIFICATION)

UNIVERSITY OF MAINE SYSTEM
107 MAINE AVENUE
BANGOR, MAINE 04401–4380
Tel: (207) 973–3334

PROJECT SITE PARCELS

TAX MAP	BLOCK	LOT NO.
51	E	1, 6, 7, 12, 14, 15, 16, 17, 18, 19, 22
114	A	4, 12
114	B	1, 2
114	D	5, 23
114A	A	1
114A	G	6, 9, 10

LAND OWNER

UNIVERSITY OF MAINE SYSTEM
107 MAINE AVENUE
BANGOR, MAINE 04401–4380
Tel: (207) 973–3334

UTILITIES

ELECTRICITY :
CENTRAL MAINE POWER COMPANY
ATTN: MR. ROBERT STOREY
162 CANCO ROAD
PORTLAND, ME 04103
(207) 828–2821

TELEPHONE :
VERIZON COMMUNICATIONS
ATTN: MR. JOSEPH RAYNES
13 DAVIS FARM ROAD
PORTLAND, ME 04103
(207) 797–1867

GAS :
NORTHERN UTILITIES, INC.
ATTN: MR. PERRY ROBICHAUD
DISTRIBUTION DEPARTMENT
1075 FOREST AVENUE
PORTLAND, MAINE 04103
(207) 797–8002, EXT. 6242

OFFSITE SEWER AND STORM DRAIN :
CITY OF PORTLAND
ATTN: TODD MERKLE
DEPARTMENT OF PUBLIC WORKS
55 PORTLAND STREET
PORTLAND, ME 04101
(207) 874–8871

OFFSITE WATER :
PORTLAND WATER DISTRICT
ATTN: MR. DAVID COFFIN
225 DOUGLASS STREET
P.O. BOX 3553
PORTLAND, ME 04104–3553
(207) 774–5961

ONSITE SEWER, WATER, HEATING SYSTEM, TELEPHONE & ELECTRIC :
UNIVERSITY OF SOUTHERN MAINE
DEPARTMENT OF FACILITIES MANAGEMENT
ATTN: DAVE EARLY
(207) 780–4656

DIG SAFE :
1–888–344–7233 (1–888–DIG–SAFE)

PROJECT PERMITS

SITE PLAN/SPECIAL EXCEPTION APPROVAL :
PORTLAND PLANNING BOARD
ATTN: SARAH HOPKINS
PORTLAND CITY HALL
389 CONGRESS STREET
PORTLAND, ME 04101–3503
(207) 874–8300

SITE LOCATION PERMIT MODIFICATION:
MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
312 CANCO ROAD
PORTLAND, ME 04103
(207) 822–6300

PROJECT CONSULTANTS

CIVIL ENGINEER:
DeLUCA–HOFFMAN ASSOCIATES. INC.

SURVEYOR:
OWEN HASKELL, INC.
16 Casco Street

PRELIMINARY
NOT FOR CONSTRUCTION

GENERAL NOTES:

THIS PROJECT WILL BE SUBJECT TO THE TERMS AND CONDITIONS OF A MAINE DEP SITE LOCATION OF DEVELOPMENT PERMIT MODIFICATION AND CITY OF PORTLAND SITE PLAN APPROVAL, WHICH WILL BE MADE A PART OF THE CONTRACT BID DOCUMENTS.

THE CONTRACTOR SHALL REFER TO THE PROJECT MANUAL FOR CONSTRUCTION SPECIFICATIONS AND BIDDING PROCEDURES.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS AVAILABLE FROM THE UNIVERSITY & VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY, DIG SAFE, AND THE UNIVERSITY OF SOUTHERN MAINE DEPARTMENT OF FACILITIES MANAGEMENT AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST THE EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE OWNER AND THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTIONS OF THE OWNER OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE OWNER.

ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.

ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND TO CITY OF PORTLAND CONSTRUCTION STANDARDS.

THE ORIGINAL EXISTING CONDITIONS AND TOPOGRAPHIC SURVEYS WERE PERFORMED BY OWEN HASKELL INC. OF PORTLAND, MAINE, AND AERIAL SURVEY & PHOTO, INC. OF NORRIDGEWOCK, MAINE. THE EXISTING CONDITIONS CONTAINED ON THIS PLAN SET ARE A COMPILATION OF THE FIELD & AERIAL SURVEY PLANS. THE FOLLOWING BENCHMARKS HAVE BEEN ESTABLISHED FOR THIS PROJECT:

I.D.	ELEVATION	DESCRIPTION
TBM #1	48.55	PK NAIL SET IN BRICK SIDEWALK AT THE SOUTHERLY CORNER OF BEDFORD ST. & SURRENDEN ST. NEAR #82 BEDFORD.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RECORD DRAWINGS THROUGHOUT THIS PROJECT AND PROVIDING THE UNIVERSITY WITH A SET OF THE FINAL RECORD DRAWINGS WHEN THE PROJECT IS COMPLETE.

SITE LAYOUT NOTES:

1. ALL BARRIER FREE PARKING SPACES ARE TO RECEIVE BARRIER FREE SIGNS AND PAVEMENT MARKINGS AS ILLUSTRATED ON THE DETAIL SHEETS.
2. ALL DIMENSIONS, UNLESS NOTED OTHERWISE, ARE TO THE FACE OF CURB, THE FACE OF THE BUILDING, OR THE EDGE OF PAVEMENT.
3. THE STOP SIGNS INDICATED ON THE SITE LAYOUT PLAN ARE TO MEET ALL REQUIREMENTS & STANDARDS OF THE MAINE DEPARTMENT OF TRANSPORTATION.
4. CURBING REQUIREMENTS:

   THE CONTRACTOR SHALL USE TYPE 1 VERTICAL CURB THROUGHOUT THE PROJECT UNLESS OTHERWISE SPECIFIED ON THE PLAN SET.

GRADING & DRAINAGE NOTES:

1. ALL STORM DRAIN PIPE SHALL BE POLYVINYL CHLORIDE PIPE MEETING THE REQUIREMENTS OF SDR-35, WITH THE EXCEPTION OF EXPOSED PIPE WHICH SHALL BE REINFORCED CONCRETE.
2. ALL DISTURBED AREAS, EXCEPT ROCK TO REMAIN EXPOSED, ARE TO RECEIVE A MINIMUM OF 4" OF TOPSOIL PRIOR TO PERMANENT SEEDING. ROCK CUT AREAS, WHICH ARE TO BE GRASSED, SHALL RECEIVE A MINIMUM OF 10" OF TOPSOIL.
3. THE CONTRACTOR IS REFERENCED TO SECTION 02050 - "DEMOLITION" OF THE CONTRACT SPECIFICATIONS FOR SPECIFIC REQUIREMENTS FOR THE DISPOSAL OF SOLID WASTE AND CONSTRUCTION DEMOLITION DEBRIS. THE CONTRACTOR IS ADVISED TO VISIT THE SITE TO CONFIRM DEMOLITION ITEMS REQUIRED TO COMPLETE THE WORK OF THIS CONTRACT.

BLASTING NOTES:

1. ALL BLASTING SHALL BE PERFORMED IN ACCORDANCE WITH ALL PERTINENT PROVISIONS OF THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" ISSUED BY THE AGC OF AMERICA, INC., THE "CONSTRUCTION SAFETY RULES AND REGULATIONS" AS ADOPTED BY THE STATE BOARD OF CONSTRUCTION SAFETY AND THE MDOT STANDARD SPECIFICATIONS SECTION 107.12.
2. THE CONTRACTOR SHALL CONDUCT A PREBLAST SURVEY OF ALL STRUCTURES WITHIN THE BLASTING AREA AND PROVIDE THE OWNER WITH A WRITTEN REPORT OF THE PREBLAST SURVEY.
3. REFER TO MeDEP SITE LOCATION OF DEVELOPMENT PERMIT FOR ADDITIONAL REQUIREMENTS.
4. ROCK REMOVAL REQUIRES APPROVAL OF THE PREBLAST SURVEY AND MEASUREMENT BY THE OWNER PRIOR TO ANY BLASTING.

EROSION CONTROL NOTES:

1. LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE SITE.
2. PRIOR TO BEGINNING ANY CLEARING/LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL INSTALL THE PERIMETER SILT FENCES AND THE CONSTRUCTION ENTRANCE.
3. ALL GROUND AREAS GRADED FOR CONSTRUCTION WILL BE GRADED, LOAMED AND SEEDED AS SOON AS POSSIBLE. PERMANENT SEED MIXTURE SHALL CONFORM TO THE SEEDING PLAN CONTAINED IN THE EROSION CONTROL REPORT PREPARED FOR THIS PROJECT.
4. PRIOR TO PAVING, THE CONTRACTOR SHALL FLUSH SILT FROM ALL STORM DRAIN LINES.
5. ALL STORM DRAIN INLETS & OUTLETS ARE TO RECEIVE RIPRAP PROTECTION APRONS DURING CONSTRUCTION.
6. SILT FENCES SHALL BE INSPECTED, REPAIRED AND CLEANED AS NOTED IN THE EROSION CONTROL REPORT APPENDED TO SECTION 02780 OF THE TECHNICAL SPECIFICATIONS.
7. THE CONTRACTOR SHALL REPAIR AND ADD STONE TO THE CONSTRUCTION ENTRANCES AS THEY BECOME SATURATED WITH MUD TO ENSURE THAT THEY WORK AS PLANNED DURING CONSTRUCTION.
8. SILT REMOVED FROM AROUND INLETS AND BEHIND THE SILT FENCES SHALL BE PLACED ON A TOPSOIL STOCKPILE AND MIXED INTO IT FOR LATER USE IN LANDSCAPING OPERATIONS.
9. A FULL EROSION CONTROL PLAN ACCOMPANIES THIS PLAN SET AND IS CONTAINED IN SECTION 02780 OF THE TECHNICAL SPECIFICATIONS.
10. THE MAINTENANCE SCHEDULE FOR THE CATCH BASIN SEDIMENT SUMPS IS AS FOLLOWS:

    THESE DEVICES SHALL BE INSPECTED IN APRIL AND OCTOBER OF EACH YEAR. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE CATCH BASIN WHEN THE DEPTH OF THE SEDIMENT IS GREATER THAN ONE FOOT. THE SEDIMENT WILL BE REMOVED FROM THE SITE BY THE OWNER OR THE CATCH BASIN CLEANING CONTRACTOR AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.
11. THE CONTRACTOR IS CAUTIONED THAT FAILURE TO COMPLY WITH THE SEQUENCE OF CONSTRUCTION CONTAINED IN THE EROSION/SEDIMENT CONTROL PLAN, AND OTHER PERMIT REQUIREMENTS MAY RESULT IN MONETARY PENALTIES. THE CONTRACTOR SHALL BE ASSESSED ALL SUCH PENALTIES AT NO COST TO THE OWNER OR PERMITTEE.

EXISTING	DESCRIPTION	PROPOSED
	PROPERTY/ROW LINE	
	CONSTRUCTION CENTERLINE	12+00
	SURVEY CONTROL POINT	
B-1	TEST BORING	
TP 1	TEST PIT	
	TREELINE	
	EVERGREEN TREE	
	DECIDUOUS TREE	
	SHRUB	
	SIGN	2
MB	MAILBOX	
	WIRE/CHAIN LINK FENCE	
	LIGHT POST	
UP #06J	UTILITY POLE	
	GUY WIRE	
	ELECTRIC CONTROL BOX	
100	GRADING CONTOUR LINE	100
99.03	GRADING SPOT GRADE	107.70
	WETLAND BOUNDARY	
	WETLAND SYMBOL	
	1.5 TO 1 RIPRAP SLOPE	
	RIPRAP SPILLWAY/APRON	
	SILT FENCE	
	STABILIZED CONSTRUCTION ENTRANCE	
	CATCH BASIN SEDIMENT TRAP	
	BUILDING	
	BUILDING SETBACK	
	PAVEMENT SETBACK	
EDGE OF PVMT	EDGE OF PAVEMENT	
	CONC./PAVED ISLAND w/CURB	
	CURB	
	PAVEMENT STRIPING	
	GUIDERAIL	
W	WELL	
HYD	FIRE HYDRANT	
CB	CATCH BASIN	CB 3
MH	MANHOLE	DMH 3
WV	WATER GATE/VALVE	
OH	OVERHEAD WIRES	OHE
12"W	WATER LINE	8" WATER
14"CMP	STORM DRAIN LINE	18"SD
8"SAN	SANITARY SEWER LINE	8" SAN
UE	UNDERGROUND ELECTRIC	UGE
T	UNDERGROUND TELEPHONE	UGT
HEAT SUPPLY & RETURN	UNDERGROUND HEATING SYSTEM SUPPLY & RETURN LINES	UHS UHR

PRELIMINARY NOT FOR CONSTRUCTION

PROJECT
VEHICULAR PARKING LOT

DeLUCA-HOFFMAN

NORTH

FALMOUTH STREET

BRIGHTON AVENUE

DEERING AVENUE

BEDFORD STREET

REMOVE & RELOCATE TREES

REMOVE GUIDERAIL

PROTECT PAVEMENT

PROTECT FLAGPOLE

PROTECT UNDERGROUND UTILITIES

PROTECT TREES

PROTECT SIDEWALK

REMOVE & REPLACE CATCH BASIN

Heat Pit #15

Heat Pit #16

Heat Pit #17

Heat Pit #18

Heat Pit #19

Heat Pit #20

Heat Pit #21

Heat Pit #22

Heat Pit #23

Heat Pit #24

RIM=53.04

RIM=53.88
TRAP OUT=48.38

RIM=52.52
WATER=49.02
2' CONE SHAFT

10"SD

24"S

UE

WV

ELEC. BOX

SMH

MH

CONC. PAD

BENCH

FLOWER BED

SIGN

FLAGPOLE

ELEC. BOX

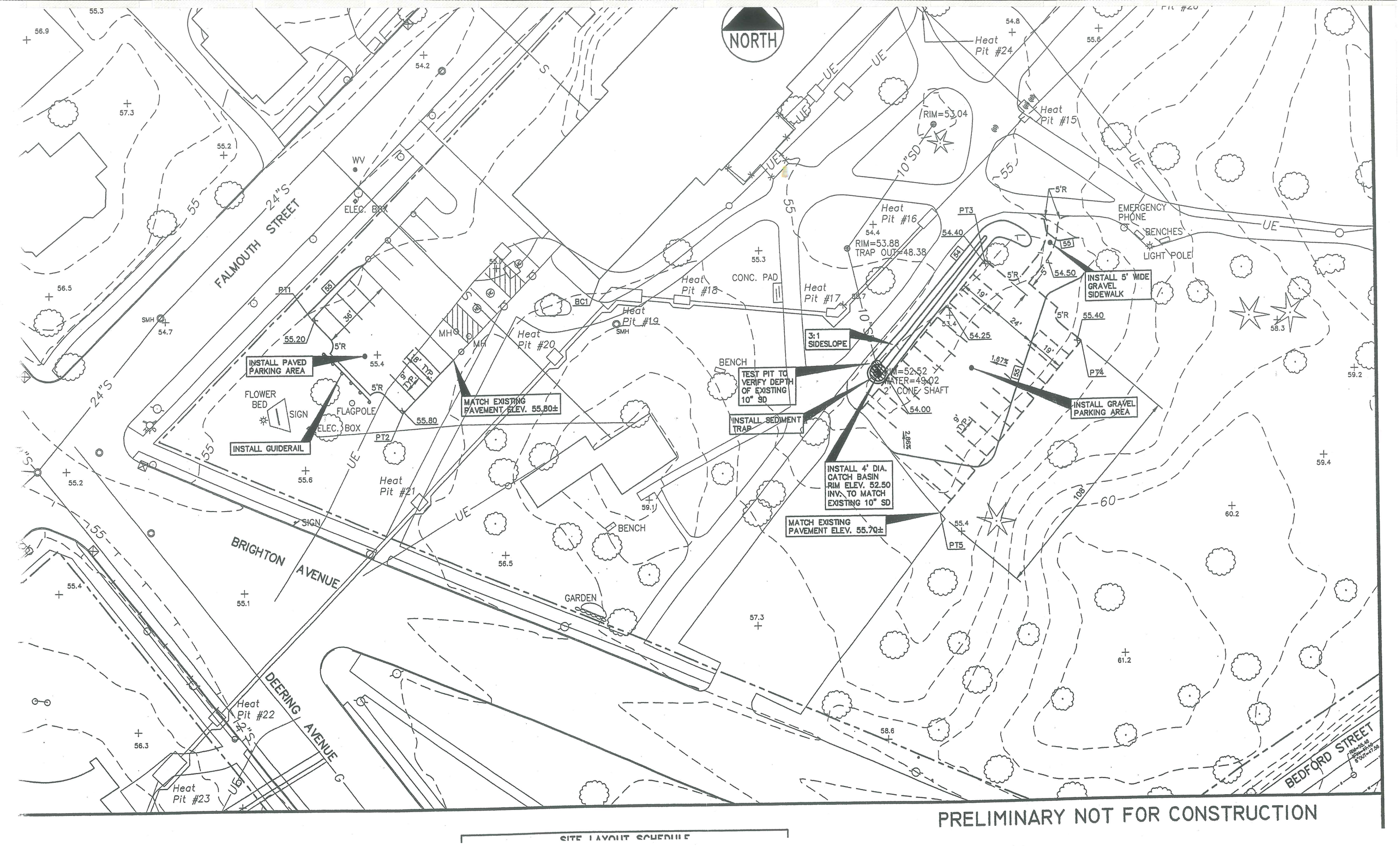
GARDEN

EMERGENCY PHONE

BENCHES

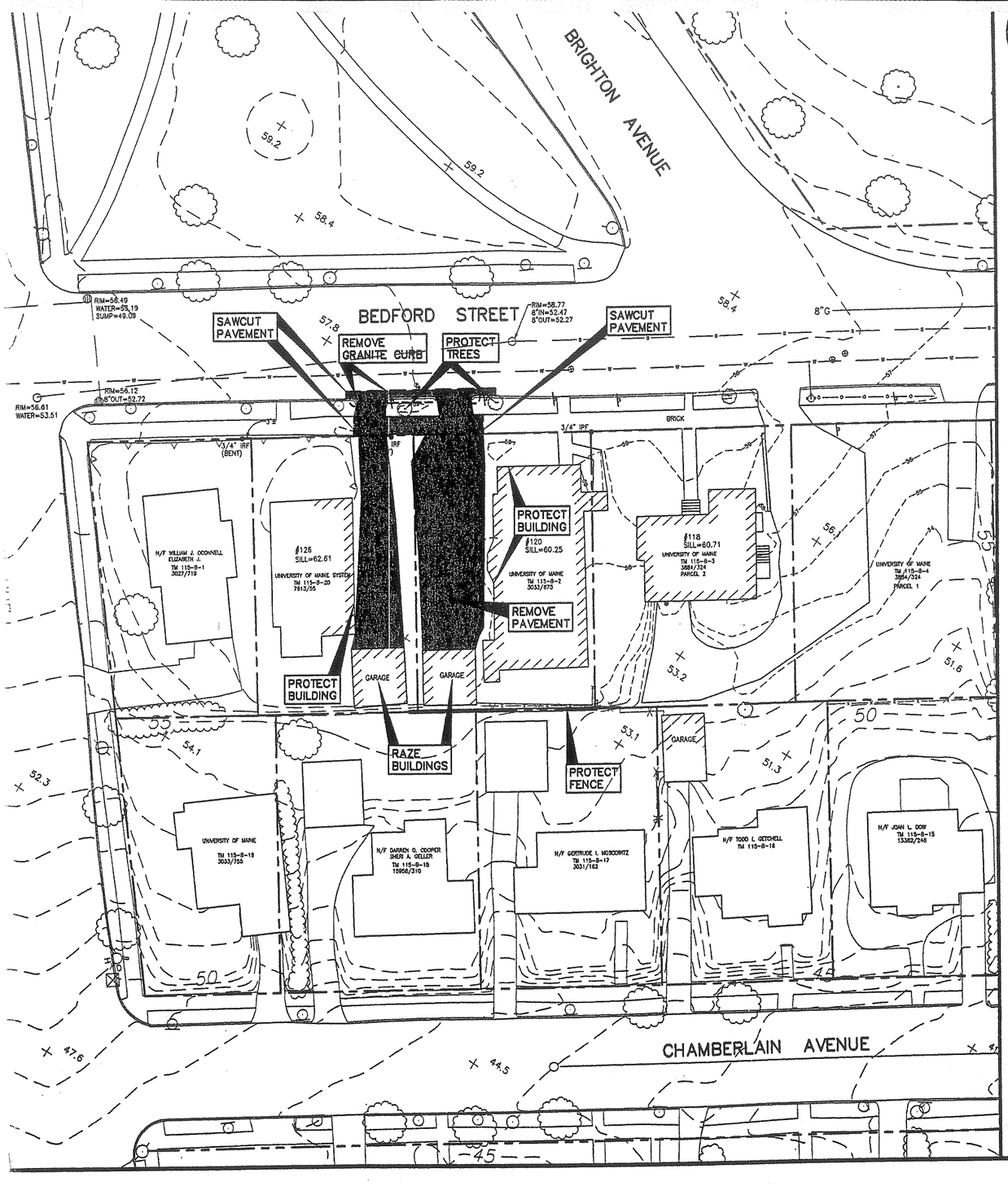
LIGHT POLE

PRELIMINARY NOT FOR CONSTRUCTION



PRELIMINARY NOT FOR CONSTRUCTION

SITE LAYOUT SCHEDULE



KEY

PRELIMINARY NOT FOR CONSTRUCTION

Attachment 1a

SITE DEVELOPMENT PLANS

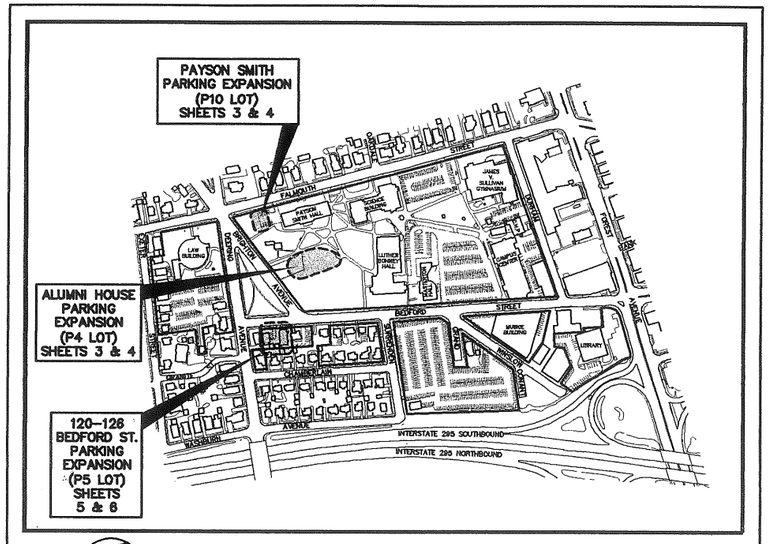
FOR

VEHICULAR PARKING LOT IMPROVEMENTS

UNIVERSITY OF SOUTHERN MAINE

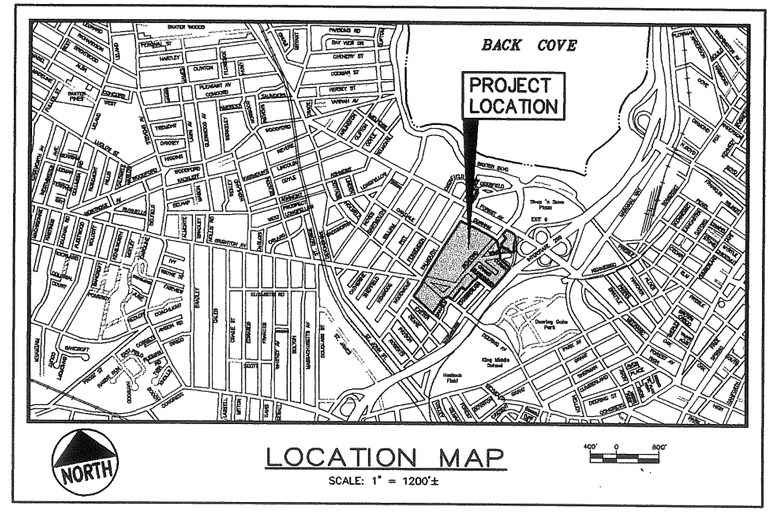
PORTLAND CAMPUS

DECEMBER 2001



PROJECT VICINITY MAP

SCALE: 1" = 300'±



LOCATION MAP

SCALE: 1" = 1200'±

UTILITIES

ELECTRICITY :	CENTRAL MAINE POWER COMPANY ATTN: MR. ROBERT STOREY 162 CANCO ROAD PORTLAND, ME 04103 (207) 828-2821
TELEPHONE :	VERIZON COMMUNICATIONS ATTN: MR. JOSEPH RAYNES 13 DAVIS FARM ROAD PORTLAND, ME 04103 (207) 797-1867
GAS :	NORTHERN UTILITIES, INC. ATTN: MR. PERRY ROBICHAUD DISTRIBUTION DEPARTMENT 1075 FOREST AVENUE PORTLAND, MAINE 04103 (207) 797-8002, EXT. 6242
OFFSITE SEWER AND STORM DRAIN :	CITY OF PORTLAND ATTN: TODD MERKLE DEPARTMENT OF PUBLIC WORKS 55 PORTLAND STREET PORTLAND, ME 04101 (207) 874-8871
OFFSITE WATER :	PORTLAND WATER DISTRICT ATTN: MR. DAVID COFFIN 225 DOUGLASS STREET P.O. BOX 3553 PORTLAND, ME 04104-3553 (207) 774-5961
ONSITE SEWER, WATER, HEATING SYSTEM, TELEPHONE & ELECTRIC :	UNIVERSITY OF SOUTHERN MAINE DEPARTMENT OF FACILITIES MANAGEMENT ATTN: DAVE EARLY (207) 780-4656
DIG SAFE :	1-888-344-7233 (1-888-DIG-SAFE)

PROJECT PERMITS

SITE PLAN/SPECIAL EXCEPTION APPROVAL :	PORTLAND PLANNING BOARD ATTN: SARAH HOPKINS PORTLAND CITY HALL 389 CONGRESS STREET PORTLAND, ME 04101-3503 (207) 874-8300
SITE LOCATION PERMIT MODIFICATION:	MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 312 CANCO ROAD PORTLAND, ME 04103 (207) 822-6300

APPLICANT (FOR THE PURPOSE OF SECURING LOCAL SITE PLAN APPROVALS AND STATE SITE LOCATION PERMIT MODIFICATION)

UNIVERSITY OF MAINE SYSTEM
107 MAINE AVENUE
BANGOR, MAINE 04401-4380
Tel: (207) 973-3334

PROJECT SITE PARCELS

TAX MAP	BLOCK	LOT NO.
51	E	1, 6, 7, 12, 14, 15, 16, 17, 18, 19, 22
114	A	4, 12
114	B	1, 2
114	D	5, 23
114A	A	1
114A	G	6, 9, 10
114A	H	5
115	B	2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 19, 20

LAND OWNER
UNIVERSITY OF MAINE SYSTEM
107 MAINE AVENUE
BANGOR, MAINE 04401-4380
Tel: (207) 973-3334

PROJECT CONSULTANTS

CIVIL ENGINEER:
DeLUCA-HOFFMAN ASSOCIATES, INC.
778 Main Street, Suite 8
South Portland, Me 04106
Tel. (207) 775-1121

SURVEYOR:
OWEN HASKELL, INC.
16 Casco Street
Portland, Me 04101-2979
Tel. (207) 774-0424

PRELIMINARY
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION
2	12/21/01	SUBMITTED TO CITY OF PORTLAND
1	08/15/01	REVIEWED PRELIMINARY PLAN SET WITH USM & CITY OF PORTLAND

REVISIONS

P.E. JOSEPH A. LAVERRIERE
LIC. #7417

GENERAL NOTES

GENERAL NOTES:

1. THIS PROJECT WILL BE SUBJECT TO THE TERMS AND CONDITIONS OF A MAINE DEP SITE LOCATION OF DEVELOPMENT PERMIT MODIFICATION AND CITY OF PORTLAND SITE PLAN APPROVAL, WHICH WILL BE MADE A PART OF THE CONTRACT BID DOCUMENTS.

2. THE CONTRACTOR SHALL REFER TO THE PROJECT MANUAL FOR CONSTRUCTION SPECIFICATIONS AND BIDDING PROCEDURES.

3. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS AVAILABLE FROM THE UNIVERSITY & VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY, DIG SAFE, AND THE UNIVERSITY OF SOUTHERN MAINE DEPARTMENT OF FACILITIES MANAGEMENT AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST THE EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

4. MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE OWNER AND THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTIONS OF THE OWNER OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE OWNER.

5. ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.

6. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND TO CITY OF PORTLAND CONSTRUCTION STANDARDS.

7. THE ORIGINAL EXISTING CONDITIONS AND TOPOGRAPHIC SURVEYS WERE PERFORMED BY OWEN HASKELL, INC. OF PORTLAND, MAINE, AND AERIAL SURVEY & PHOTO, INC. OF NORRIDGEWOCK, MAINE. THE EXISTING CONDITIONS CONTAINED ON THIS PLAN SET ARE A COMPILATION OF THE FIELD & AERIAL SURVEY PLANS. THE FOLLOWING BENCHMARKS HAVE BEEN ESTABLISHED FOR THIS PROJECT:

I.D.	ELEVATION	DESCRIPTION
TBM #1	48.55	PK NAIL SET IN BRICK SIDEWALK AT THE SOUTHERLY CORNER OF BEDFORD ST. & SURRENDEN ST. NEAR #92 BEDFORD.

8. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RECORD DRAWINGS THROUGHOUT THIS PROJECT AND PROVIDING THE UNIVERSITY WITH A SET OF THE FINAL RECORD DRAWINGS WHEN THE PROJECT IS COMPLETE.

SITE LAYOUT NOTES:

1. ALL BARRIER FREE PARKING SPACES ARE TO RECEIVE BARRIER FREE SIGNS AND PAVEMENT MARKINGS AS ILLUSTRATED ON THE DETAIL SHEETS.

2. ALL DIMENSIONS, UNLESS NOTED OTHERWISE, ARE TO THE FACE OF CURB, THE FACE OF THE BUILDING, OR THE EDGE OF PAVEMENT.

3. THE STOP SIGNS INDICATED ON THE SITE LAYOUT PLAN ARE TO MEET ALL REQUIREMENTS & STANDARDS OF THE MAINE DEPARTMENT OF TRANSPORTATION.

4. CURBING REQUIREMENTS:

   THE CONTRACTOR SHALL USE TYPE 1 VERTICAL CURB THROUGHOUT THE PROJECT UNLESS OTHERWISE SPECIFIED ON THE PLAN SET.

GRADING & DRAINAGE NOTES:

1. ALL STORM DRAIN PIPE SHALL BE POLYVINYL CHLORIDE PIPE MEETING THE REQUIREMENTS OF SDR-35, WITH THE EXCEPTION OF EXPOSED PIPE WHICH SHALL BE REINFORCED CONCRETE.

2. ALL DISTURBED AREAS, EXCEPT ROCK TO REMAIN EXPOSED, ARE TO RECEIVE A MINIMUM OF 4" OF TOPSOIL PRIOR TO PERMANENT SEEDING. ROCK CUT AREAS, WHICH ARE TO BE GRASSED, SHALL RECEIVE A MINIMUM OF 10" OF TOPSOIL.

3. THE CONTRACTOR IS REFERENCED TO SECTION 02050 - "DEMOLITION" OF THE CONTRACT SPECIFICATIONS FOR SPECIFIC REQUIREMENTS FOR THE DISPOSAL OF SOLID WASTE AND CONSTRUCTION DEMOLITION DEBRIS. THE CONTRACTOR IS ADVISED TO VISIT THE SITE TO CONFIRM DEMOLITION ITEMS REQUIRED TO COMPLETE THE WORK OF THIS CONTRACT.

BLASTING NOTES:

1. ALL BLASTING SHALL BE PERFORMED IN ACCORDANCE WITH ALL PERTINENT PROVISIONS OF THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" ISSUED BY THE AGC OF AMERICA, INC., THE "CONSTRUCTION SAFETY RULES AND REGULATIONS" AS ADOPTED BY THE STATE BOARD OF CONSTRUCTION SAFETY AND THE MDOT STANDARD SPECIFICATIONS SECTION 107.12.

2. THE CONTRACTOR SHALL CONDUCT A PREBLAST SURVEY OF ALL STRUCTURES WITHIN THE BLASTING AREA AND PROVIDE THE OWNER WITH A WRITTEN REPORT OF THE PREBLAST SURVEY.

3. REFER TO MeDEP SITE LOCATION OF DEVELOPMENT PERMIT FOR ADDITIONAL REQUIREMENTS.

4. ROCK REMOVAL REQUIRES APPROVAL OF THE PREBLAST SURVEY AND MEASUREMENT BY THE OWNER PRIOR TO ANY BLASTING.

EROSION CONTROL NOTES:

1. LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE SITE.

2. PRIOR TO BEGINNING ANY CLEARING/LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL INSTALL THE PERIMETER SILT FENCES AND THE CONSTRUCTION ENTRANCE.

3. ALL GROUND AREAS GRADED FOR CONSTRUCTION WILL BE GRADED, LOAMED AND SEEDED AS SOON AS POSSIBLE. PERMANENT SEED MIXTURE SHALL CONFORM TO THE SEEDING PLAN CONTAINED IN THE EROSION CONTROL REPORT PREPARED FOR THIS PROJECT.

4. PRIOR TO PAVING, THE CONTRACTOR SHALL FLUSH SILT FROM ALL STORM DRAIN LINES.

5. ALL STORM DRAIN INLETS & OUTLETS ARE TO RECEIVE RIPRAP PROTECTION APRONS DURING CONSTRUCTION.

6. SILT FENCES SHALL BE INSPECTED, REPAIRED AND CLEANED AS NOTED IN THE EROSION CONTROL REPORT APPENDED TO SECTION 02780 OF THE TECHNICAL SPECIFICATIONS.

7. THE CONTRACTOR SHALL REPAIR AND ADD STONE TO THE CONSTRUCTION ENTRANCES AS THEY BECOME SATURATED WITH MUD TO ENSURE THAT THEY WORK AS PLANNED DURING CONSTRUCTION.

8. SILT REMOVED FROM AROUND INLETS AND BEHIND THE SILT FENCES SHALL BE PLACED ON A TOPSOIL STOCKPILE AND MIXED INTO IT FOR LATER USE IN LANDSCAPING OPERATIONS.

9. A FULL EROSION CONTROL PLAN ACCOMPANIES THIS PLAN SET AND IS CONTAINED IN SECTION 02780 OF THE TECHNICAL SPECIFICATIONS.

10. THE MAINTENANCE SCHEDULE FOR THE CATCH BASIN SEDIMENT SUMPS IS AS FOLLOWS:

    THESE DEVICES SHALL BE INSPECTED IN APRIL AND OCTOBER OF EACH YEAR. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE CATCH BASIN WHEN THE DEPTH OF THE SEDIMENT IS GREATER THAN ONE FOOT. THE SEDIMENT WILL BE REMOVED FROM THE SITE BY THE OWNER OR THE CATCH BASIN CLEANING CONTRACTOR AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

11. THE CONTRACTOR IS CAUTIONED THAT FAILURE TO COMPLY WITH THE SEQUENCE OF CONSTRUCTION CONTAINED IN THE EROSION/SEDIMENT CONTROL PLAN, AND OTHER PERMIT REQUIREMENTS MAY RESULT IN MONETARY PENALTIES. THE CONTRACTOR SHALL BE ASSESSED ALL SUCH PENALTIES AT NO COST TO THE OWNER OR PERMITTEE.

INDEX

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	PROPERTY/ROW LINE	
	CONSTRUCTION CENTERLINE	12+00
	SURVEY CONTROL POINT	
B-1	TEST BORING	
TP 1	TEST PIT	
	TREELINE	
	EVERGREEN TREE	
	DECIDUOUS TREE	
	SHRUB	
	SIGN	2
MB	MAILBOX	
	WIRE/CHAIN LINK FENCE	
	LIGHT POST	
	UTILITY POLE	
	GUY WIRE	
	ELECTRIC CONTROL BOX	
100	GRADING CONTOUR LINE	100
90.05	GRADING SPOT GRADE	107.70
	WETLAND BOUNDARY	
	WETLAND SYMBOL	
	1.5 TO 1 RIPRAP SLOPE	
	RIPRAP SPILLWAY/APRON	
	SILT FENCE	
	STABILIZED CONSTRUCTION ENTRANCE	
	CATCH BASIN SEDIMENT TRAP	
	BUILDING	
	BUILDING SETBACK	
	PAVEMENT SETBACK	
EDGE OF PVMT.	EDGE OF PAVEMENT	
	CONC./PAVED ISLAND w/CURB	
	CURB	
	PAVEMENT STRIPING	
	GUIDERAIL	
W	WELL	
HYD	FIRE HYDRANT	
CB	CATCH BASIN	CB 3
MH	MANHOLE	DMH 3
WV	WATER GATE/VALVE	
OH	OVERHEAD WIRES	OHE
12"W	WATER LINE	8" WATER
14"CMP	STORM DRAIN LINE	18"SD
8"SAN	SANITARY SEWER LINE	8" SAN
UE	UNDERGROUND ELECTRIC	UGE
T	UNDERGROUND TELEPHONE	UGT
HEAT SUPPLY & RETURN	UNDERGROUND HEATING SYSTEM SUPPLY & RETURN LINES	UHS UHR

PRELIMINARY NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION
2	12/21/01	SUBMITTED TO CITY OF PORTLAND
1	08/15/01	REVIEWED PRELIMINARY PLAN SET WITH USM & CITY OF PORTLAND
		REVISIONS

P.E. JOSEPH A. LAVERRIERE
LIC. #7417

PROJECT
VEHICULAR PARKING LOT IMPROVEMENTS

SHEET TITLE
GENERAL NOTES, INDEX & LEGEND

CLIENT
UNIVERSITY OF MAINE SYSTEM

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
(207) 775-1121
DHA@MAINE.RR.COM

DRAWN: LA/CDD | DATE: AUG. 2001
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CHECKED: JAL | JOB NO. 2074.02
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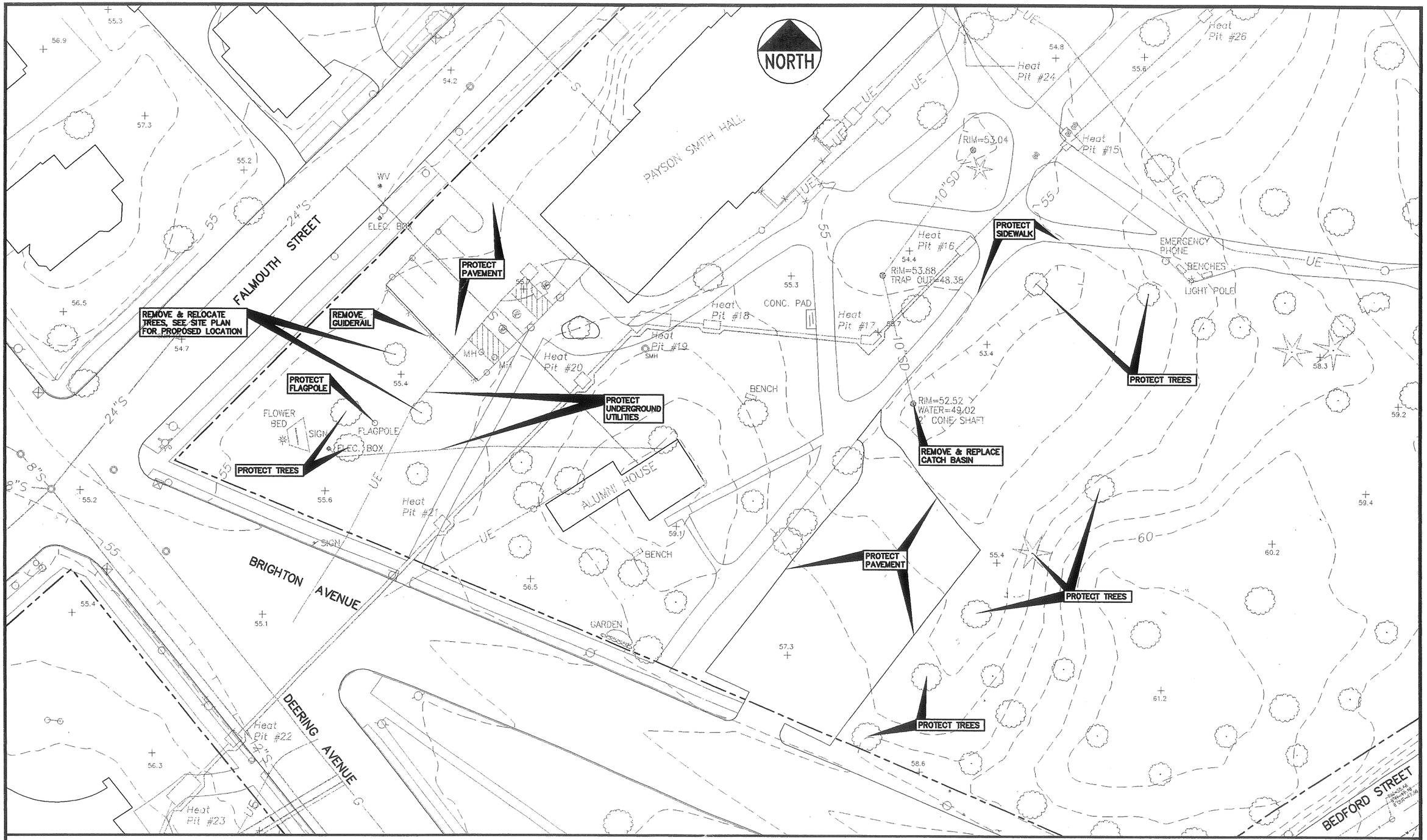

PRELIMINARY NOT FOR CONSTRUCTION

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)

1 inch = 20 ft.

REV	DATE	DESCRIPTION
3	02/11/02	REVISED PER COMMENTS FROM CITY PLANNING DEPARTMENT
2	12/21/01	SUBMITTED TO CITY OF PORTLAND
1	08/15/01	REVIEWED PRELIMINARY PLAN SET WITH USM & CITY OF PORTLAND

REVISIONS

P.E. JOSEPH A. LAVERRIERE
LIC. #7417

PROJECT
VEHICULAR PARKING LOT IMPROVEMENTS

SHEET TITLE
PARKING LOTS P-4 & P-10 EXPANSION DEMOLITION PLAN

CLIENT
UNIVERSITY OF MAINE SYSTEM

DeLUCA–HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
(207) 775-1121
DHA@MAINE.RR.COM

DRAWN: CDD	DATE: AUG. 2001
DESIGNED: JAL	SCALE: 1" = 20'
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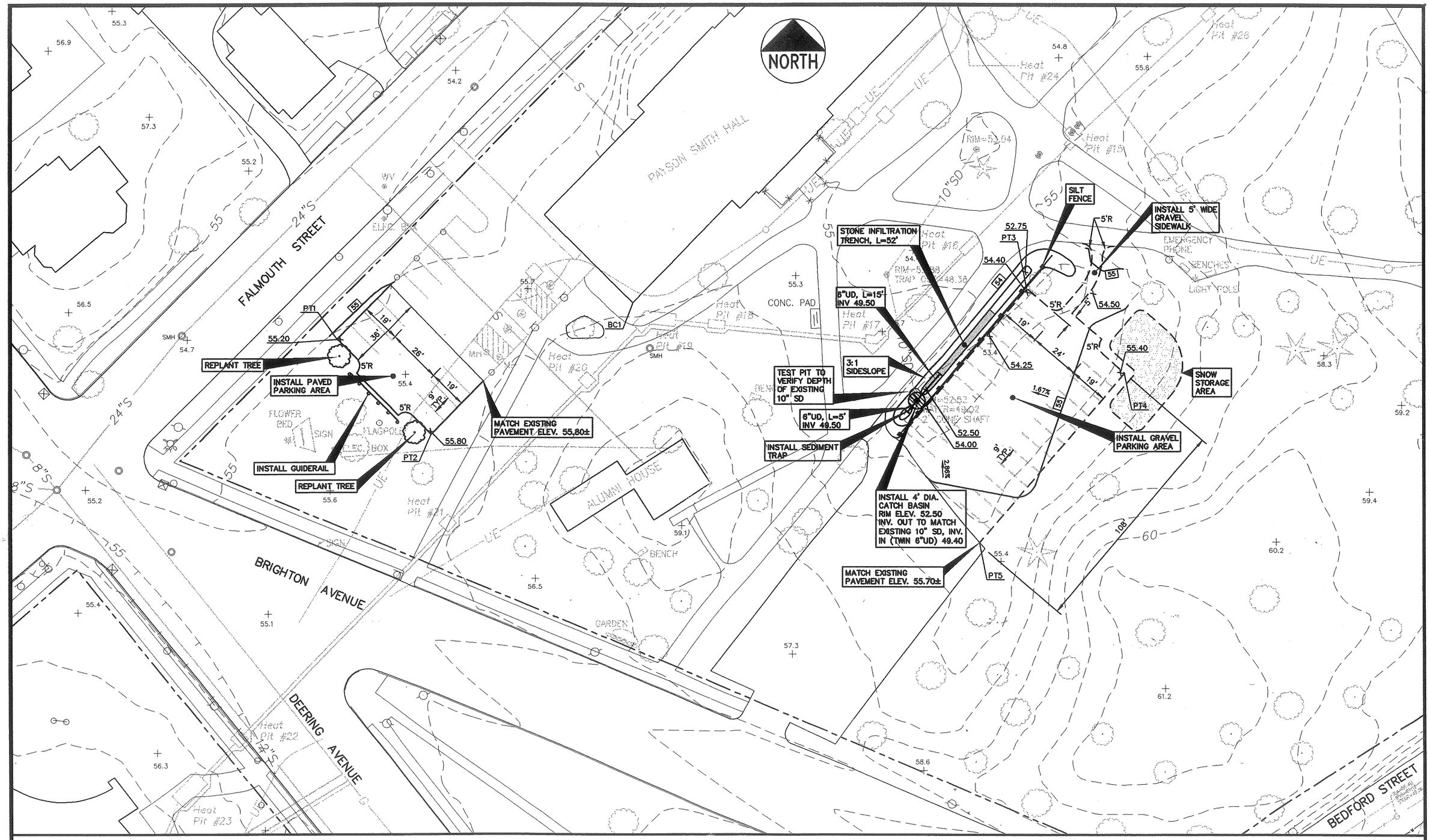

PRELIMINARY NOT FOR CONSTRUCTION

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NOTE: BEARINGS ARE BASED ON MAINE STATE PLANE COORDINATE SYSTEM.

SITE LAYOUT SCHEDULE

POINT NO.	DESCRIPTION	NORTHING	EASTING
BC1	CORNER OF EXISTING BUILDING	302034.8310	2923335.0860
PT1	PROPOSED CORNER OF P10 PARKING LOT	302017.5969	2923192.4647
PT2	PROPOSED CORNER OF P10 PARKING LOT	301971.8560	2923237.7252
PT3	PROPOSED CORNER OF P4 PARKING LOT	302041.8313	2923524.4802
PT4	PROPOSED CORNER OF P4 PARKING LOT	302001.4839	2923571.5555
PT5	PROPOSED CORNER AND EXIST. EDGE OF P4 PARKING LOT	301919.9154	2923501.6446

REV	DATE	DESCRIPTION
4	02/15/02	REVISED PER COMMENTS OF SEBAGO TECHNICS AND RESUBMITTED
3	02/11/02	REVISED PER COMMENTS FROM CITY PLANNING DEPARTMENT
2	12/21/01	SUBMITTED TO CITY OF PORTLAND
1	08/15/01	REVIEWED PRELIMINARY PLAN SET WITH USM & CITY OF PORTLAND

REVISIONS

P.E. JOSEPH A. LAVERRIERE
LIC. #7417

PROJECT
VEHICULAR PARKING LOT IMPROVEMENTS

SHEET TITLE
PARKING LOTS P-4 & P-10 EXPANSION IMPROVEMENTS

CLIENT
UNIVERSITY OF MAINE SYSTEM

DeLUCA–HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
(207) 775-1121
DHA@MAINE.RR.COM

DRAWN:	CDD	DATE:	AUG. 2001
DESIGNED:	JAL	SCALE:	1" = 20'
CHECKED:	JAL	JOB NO.	2074.02
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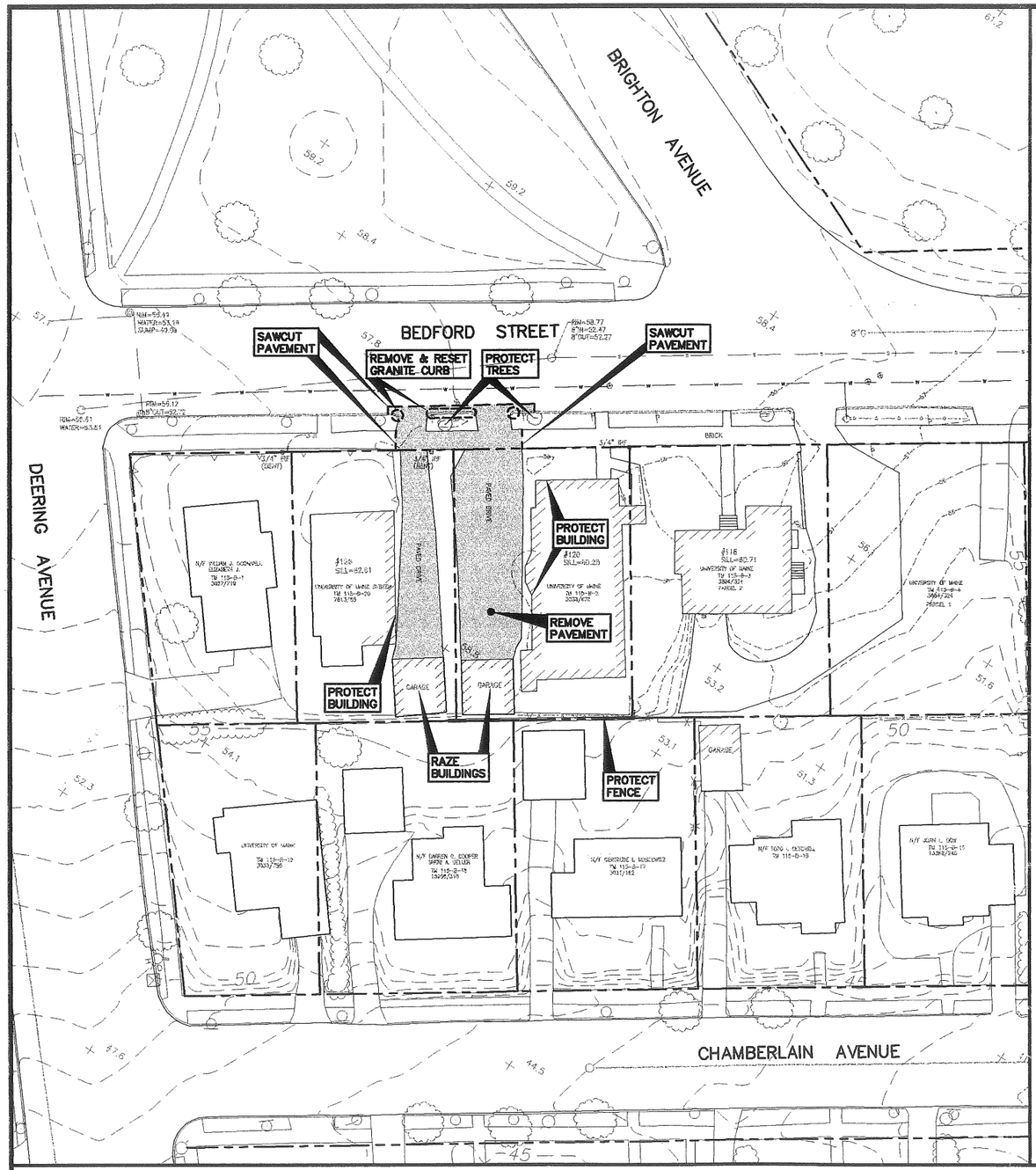

NOTES:

1. REMOVED GRANITE CURB NOT BEING RESET WITHIN PUBLIC RIGHT OF WAY SHALL REMAIN THE PROPERTY OF THE CITY OF PORTLAND AND BE DELIVERED TO A STOCKYARD DESIGNATED BY PORTLAND PUBLIC WORKS DEPARTMENT.

2. WHERE NECESSARY TO INSTALL CURBING, STREET SIGNS SHALL BE REMOVED AND RESET IN ORIGINAL LOCATIONS.

KEY

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

BITUMINOUS PAVEMENT/CONCRETE/BRICK TO BE REMOVED

PRELIMINARY NOT FOR CONSTRUCTION

REV.	DATE	REVISIONS	P.E. JOSEPH A. LAVERRIERE
			LIC. #7417
3	02/11/02	REVISED PER COMMENTS FROM CITY PLANNING DEPARTMENT	
2	12/21/01	SUBMITTED TO CITY OF PORTLAND	
1	08/15/01	REVIEWED PRELIMINARY PLAN SET WITH USM & CITY OF PORTLAND	

PROJECT
VEHICULAR PARKING LOT IMPROVEMENTS

SHEET TITLE
PARKING LOT P-5 EXPANSION DEMOLITION PLAN

CLIENT
UNIVERSITY OF MAINE SYSTEM

DeLUCA–HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
(207) 775–1121
DHA@MAINE.RR.COM

DRAWN:	CDD	DATE:	AUG. 2001
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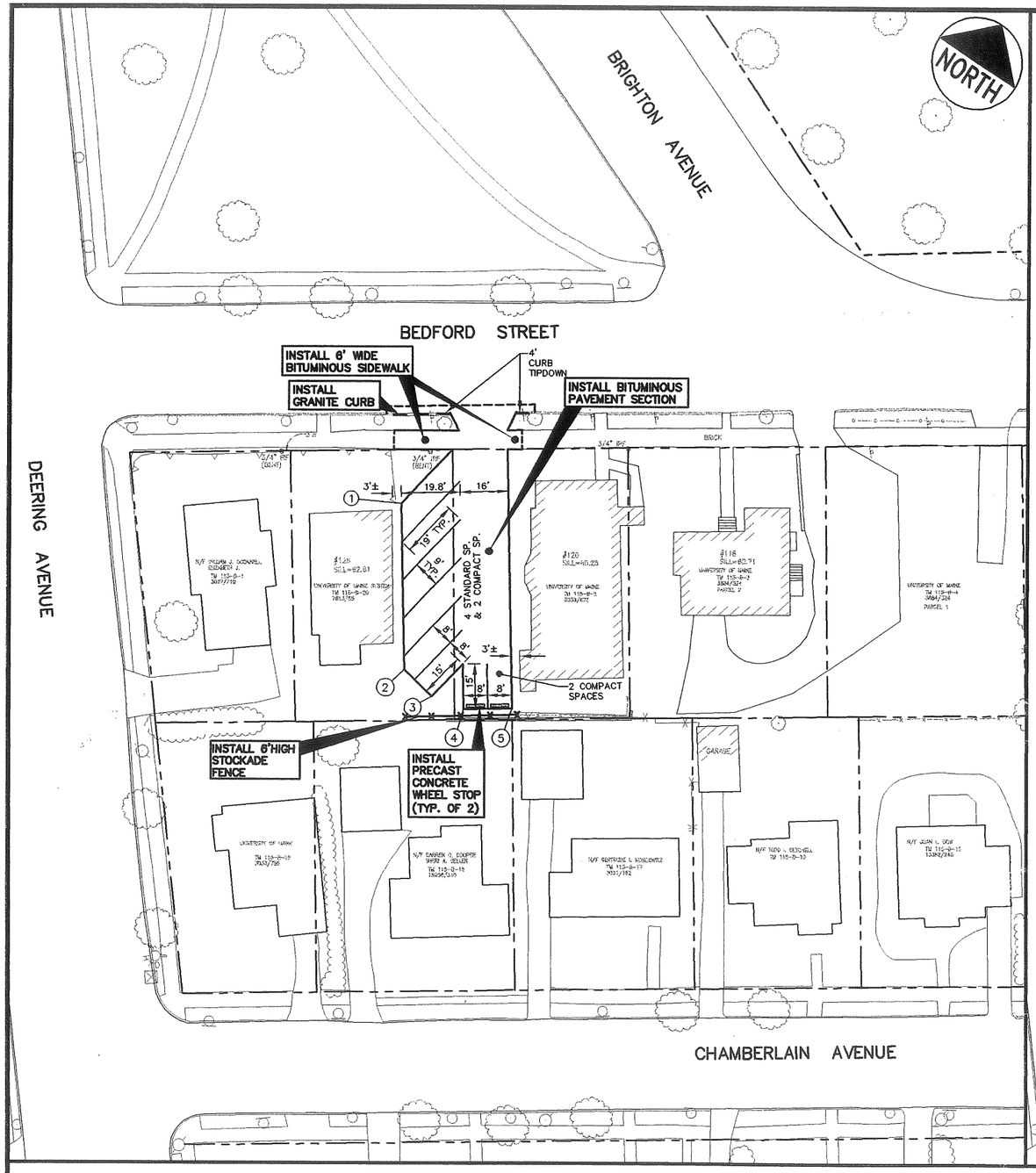
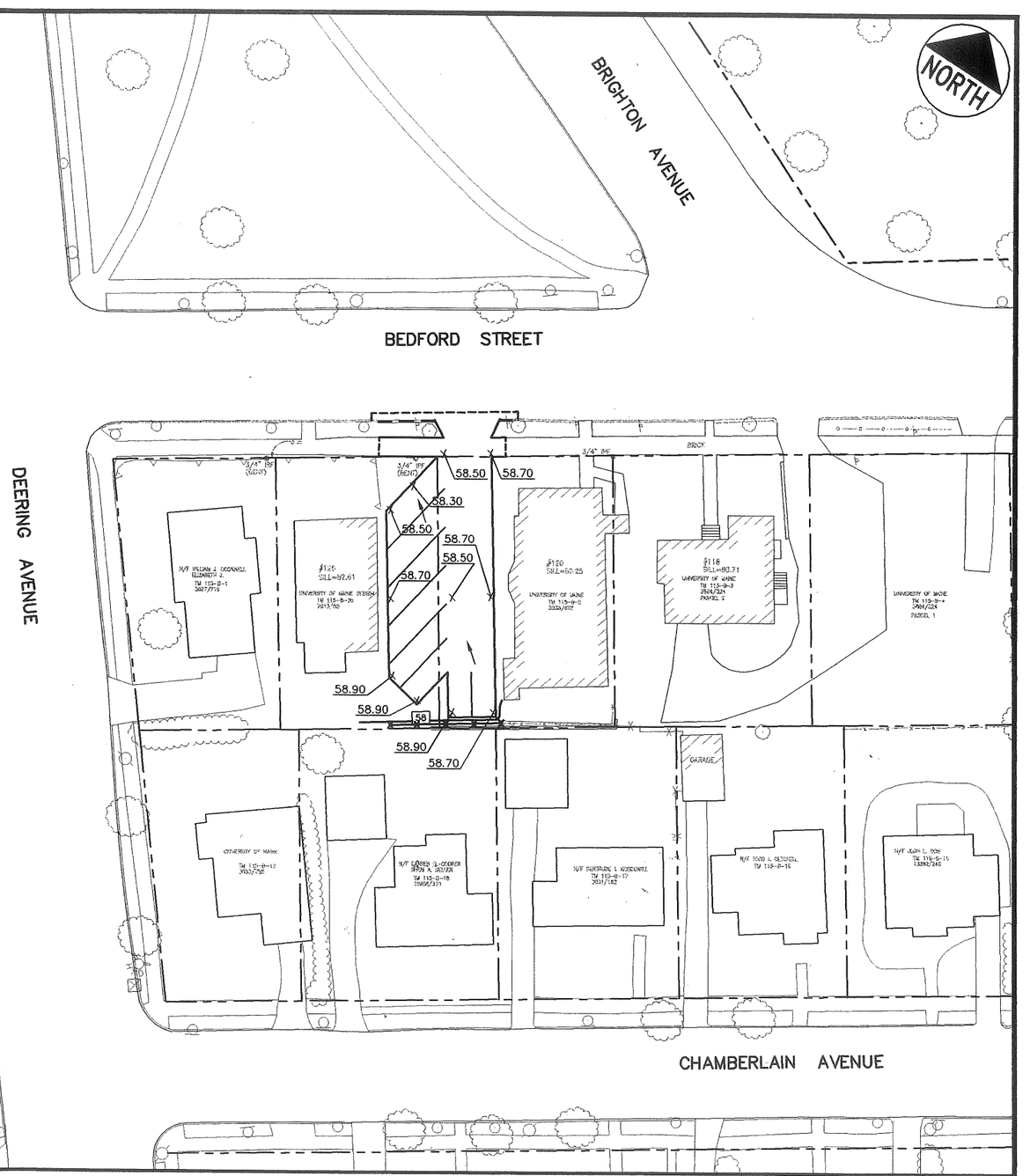


SITE LAYOUT PLAN



GRADING & DRAINAGE PLAN

SITE LAYOUT SCHEDULE

I.D.	DESCRIPTION	NORTHING	EASTING
1	CORNER OF PARKING LOT	301605.35	2923511.96
2	CORNER OF PARKING LOT	301559.75	2923542.98
3	CORNER OF PARKING LOT	301557.32	2923555.75
4	CORNER OF PARKING LOT	301559.65	2923566.99
5	CORNER OF PARKING LOT	301568.65	2923580.22

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

NOTE: BEARINGS ARE BASED ON MAINE STATE PLANE COORDINATE SYSTEM.

SIGNAGE & PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) REGARDING, LOCATION, SIZE, INSTALLATION AND REFLECTIVITY.

PRELIMINARY NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION
2	12/21/01	SUBMITTED TO CITY OF PORTLAND
1	08/15/01	REVIEWED PRELIMINARY PLAN SET WITH USM & CITY OF PORTLAND

REVISIONS

P.E. JOSEPH A. LAVERRIERE
LIC. #7417

PROJECT
VEHICULAR PARKING LOT IMPROVEMENTS

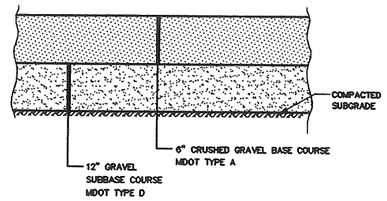
SHEET TITLE
PARKING LOT P-5 EXPANSION SITE LAYOUT AND GRADING & DRAINAGE PLAN

CLIENT
UNIVERSITY OF MAINE SYSTEM

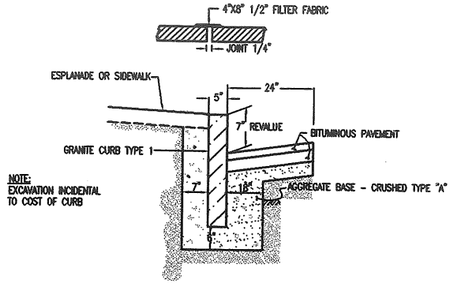
DeLUCA–HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
(207) 775-1121
DHA@MAINE.RR.COM

DRAWN: CDD | DATE: AUG. 2001
DESIGNED: JAL | SCALE: 1" = 20'
CHECKED: JAL | JOB NO. 2074.02
FILE NAME: 207402SP-B.dwg
SHEET 6

NOTES:
1. MDOT TYPE D AGGREGATE GRADATION SHALL BE MODIFIED FOR A MAXIMUM 4" STONE SIZE AND LIMIT @200 SIEVE TO 5% PASSING.



TYPICAL GRAVEL PARKING AREA SECTION DETAIL
N.T.S.



CURB REPLACEMENT DETAIL
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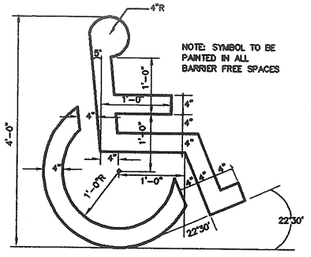
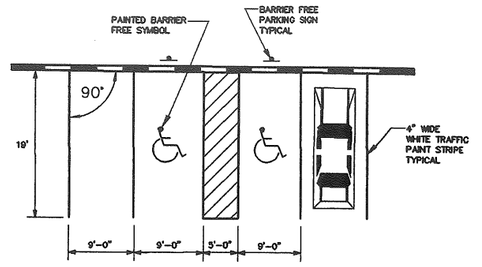
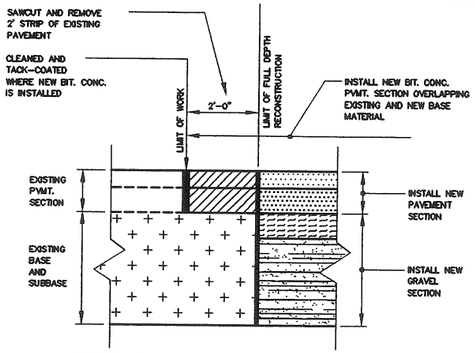


PAINTED BARRIER FREE SYMBOL
N.T.S.

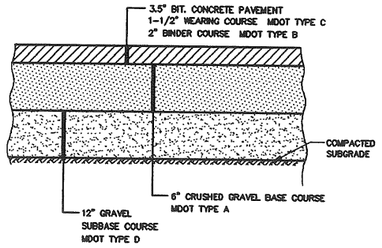


TYPICAL PARKING SPACE DIMENSIONS
N.T.S.

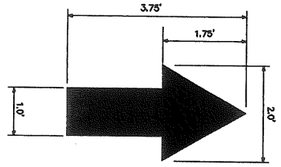


NEW PAVEMENT ADJACENT TO EXISTING PAVEMENT SAWCUT DETAIL
N.T.S.

NOTES:
1. MDOT TYPE D AGGREGATE GRADATION SHALL BE MODIFIED FOR A MAXIMUM 4" STONE SIZE AND LIMIT @200 SIEVE TO 5% PASSING.

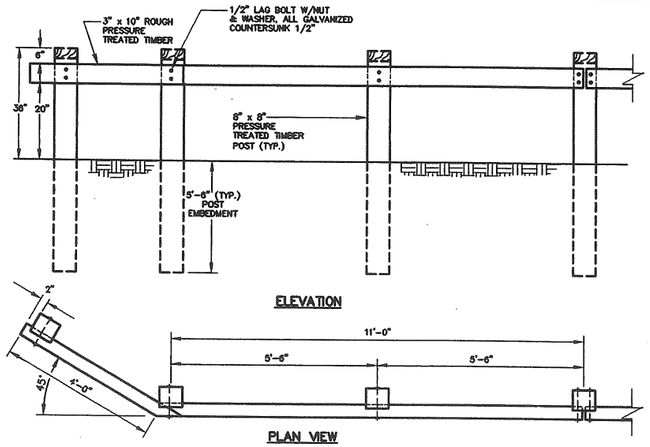


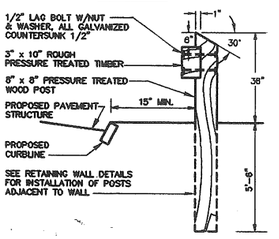
DRIVE & PARKING AREA PAVEMENT SECTION DETAIL
N.T.S.



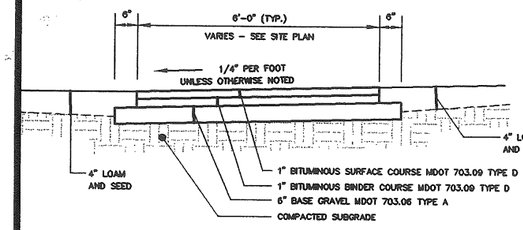
NOTE: ALL TRAFFIC FLOW ARROWS TO BE SOLID WHITE REFLECTIVE TRAFFIC PAINT AS PER DIMENSIONS ABOVE.

TYPICAL TRAFFIC FLOW ARROW PAVEMENT MARKING
N.T.S.

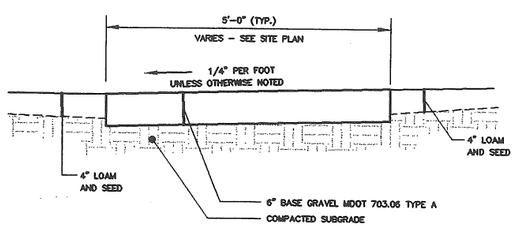




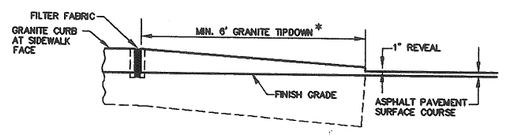
TIMBER GUIDERAIL DETAIL
N.T.S.



BITUMINOUS SIDEWALK DETAIL
N.T.S

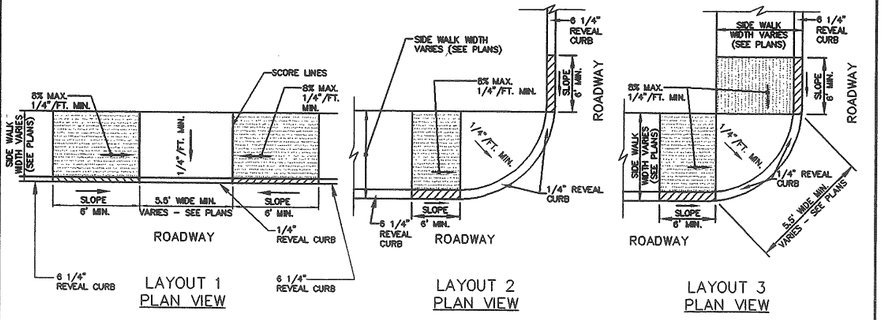


GRAVEL SIDEWALK DETAIL
N.T.S



* 6'-0" IS MINIMUM - LENGTH MAY NEED TO BE EXTENDED TO MEET ADA REQUIREMENTS

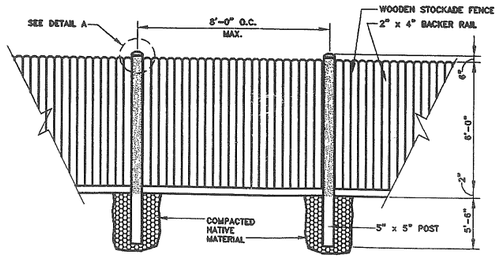
CURB INSTALLATION TYPICAL TIPDOWN
N.T.S.



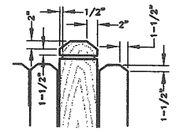
NOTE:
RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH AMERICANS WITH DISABILITIES ACT (ADA).

BARRIER FREE RAMP DETAILS
N.T.S.

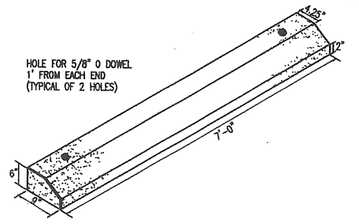
NOTES:
1. ALL WOOD DIMENSIONS ARE ROUGH FINISH.
2. ALL WOOD TO BE #1 GRADE, NORTHERN WHITE CEDAR.
3. ALL WOOD SHALL BE PAINTED WITH TWO COATS OF CEDAR WOOD FINISH BY SHERWIN-WILLIAMS.
4. PRE-MANUFACTURED FENCE OF SIMILAR DIMENSIONS MAY BE SUBSTITUTED TO ENGINEER FOR APPROVAL, PRIOR TO CONSTRUCTION.



STOCKADE FENCE DETAIL
N.T.S.



FENCE FINISH DETAIL A



PRECAST CONCRETE WHEEL STOP DETAIL
N.T.S.

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REVISIONS

P.E. JOSEPH A. LAVERRIERE
LIC. #7417

PROJECT: VEHICULAR PARKING LOT IMPROVEMENTS
SHEET TITLE: SITE DETAILS
CLIENT: UNIVERSITY OF MAINE SYSTEM

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
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DRAWN: LA/CDD | DATE: AUG. 2001
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FILE NAME: 207402DeL.dwg
SHEET 7

EROSION/SEDIMENTATION CONTROL REPORT

EROSION AND SEDIMENTATION CONTROL

24.0 Erosion/Sedimentation Control Devices

The following erosion and sediment control devices will be implemented as part of the site development. These devices shall be installed as indicated on the plans or as described below. For further reference, see the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices.

1. Straw or hay mulch is intended to provide cover for denuded or seeded areas until revegetation is established. Mulch placed on slopes of less than 10 percent shall be anchored by applying water; mulch placed on slopes steeper than 10 percent shall be covered with a fabric netting and anchored with staples in accordance with the manufacturer's recommendations.
2. Sediment traps will be installed at catch basin inlets on site to reduce the amount of silt entering the sewer system. Installation details are provided in the plan set.
3. Loam and seed is intended to serve as the primary permanent revegetative measure for all denuded areas not receiving pavement or gravel surface.

24.1 Temporary Erosion/Sedimentation Control Measures

The following are planned as temporary erosion/sedimentation control measures during construction:
1. All rough graded areas that are not located within the parking and subbase areas, shall receive mulch or erosion control mesh fabric within 7 days of initial disturbance of soil.
2. For work which is conducted between November 1 and April 15 of any calendar year, all denuded areas will be covered with hay mulch, applied at twice the normal application rate and anchored with a fabric netting. The time period for applying mulch shall be limited to 7 days for all areas.
3. All adjacent streets shall be swept to control mud and dust as necessary.
4. Storm drain catch basin inlet protection shall be provided through the use of stone sediment barriers. Installation details are provided in the plan set. The barriers shall be inspected after each rainfall and repairs made as necessary. Sediment shall be removed and the barrier restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the barrier. The barrier shall be removed when the tributary drainage area has been stabilized.

24.2 Permanent Erosion Control Measures

The following permanent erosion control measures have been designed as part of the Erosion/Sedimentation Control Plan:

1. All areas disturbed during construction, but not subject to other restoration (paving, gravel surface, sod, etc.) will be loamed, limed, fertilized, mulched, and seeded. All areas shall receive protection within 7 days. Native topsoil shall be stockpiled and reused for final restoration when it is of sufficient quality.
2. New catch basins will be equipped with sumps to collect sediment generated within parking area.

24.3 Timing and Sequence of Erosion/Sedimentation Control Measures

The following construction sequence shall be required to insure the effectiveness of the erosion and sedimentation control measures are optimized:

Note: For all grading activities, the contractor shall limit the area disturbed at any time, and exercise extreme caution not to overexpose the site.
1. Provide haybales and silt fence in required locations.
2. Clear and grub the site.
3. Perform earthwork operations to rough grade including drainage swales.
4. Install ditch channel stabilization and storm drain inlet protection.
5. Complete earthwork and grading to subgrade within parking area.
6. Complete installation of drainage appurtenances and piping.
7. Install subbase and base gravels within parking areas and walkways.
8. Complete all remaining earthwork operation including fine grading of slopes and berms.
9. Install base course paving in parking areas, where required.
10. Loam, fertilize, seed and mulch disturbed areas.
11. Where required on plans, install surface course paving for parking areas and stripe parking stalls.
12. Remove accumulated sediment from ahead of any sediment barriers as necessary.
13. Once the site is stabilized and a 75% catch of vegetation has been obtained, remove all temporary erosion control measures.
14. Touch up loam and seed.

Note: All denuded areas not subject to final paving or gravel shall be revegetated with loam and seed.

The Contractor shall submit a schedule for the completion of the work which will satisfy the following criteria:

1. The above construction sequence should generally be completed in the specified order; however, several separate items may be constructed simultaneously. Work must also be scheduled or phased to limit the extent of the exposed areas as specified below. The intent of this sequence is to provide for erosion control and to have structural measures such as hay bales and sediment traps in place before large areas of land are denuded.

2. The work shall be conducted in sections which will:
a) Limit the amount of exposed area to those areas in which work is expected to be undertaken during the proceeding 30 days.
b) Revegetate disturbed areas as rapidly as possible. All areas shall be permanently stabilized within 7 days of final grading or before a storm event; or temporarily stabilized within 7 days of initial disturbance of soil.
c) Incorporate planned inlets and drainage system as early as possible into the construction phase.

24.4 Construction Schedule

The University anticipates constructing the gravel parking lot located at Alumni House in February of 2002. The other two parking improvement areas will be completed during the summer of 2002.

24.5 Attachment

Seeding Plan

PERMANENT SEEDING PLAN NON-WETLAND AREAS
Project USM Vehicular Parking Lot Improvements
Site Location Portland Campus
X Permanent Seeding Temporary Seeding
1. Area to be seeded: _____ acres, OR 430 M Sq. Ft.
2. Instructions on preparation of soil: Prepare a good seed bed for planting method used.
3. Apply lime as follows: #/acres, OR 138#/M Sq. Ft.
4. Fertilize with pounds of – – N–P–K/ac. OR 18.4 pounds of 10 – 10 – 10 ____ N–P–K/M Sq. Ft.
5. Method of applying lime and fertilizer: Spread and work into the soil before seeding.
6. Seed with the following mixture:
20% Pennlawn Fescue
80% Kentucky Blue Grass
When using small grain as nurse crop seed it at one–half the normal seeding rate.
7. Mulching instructions: Apply at the rate of tons per acre. OR 115 pounds per M. Sq. Ft.
Amount Unit #, Tons, Etc.
8. TOTAL LIME.....138 #/1000 sq. ft.
9. TOTAL FERTILIZER.....18.4 #/1000 sq. ft.
10. TOTAL SEED.....2.30 #/1000 sq. ft.
11. TOTAL MULCH.....115 #/1000 sq. ft.
12. TOTAL other materials, seeds, etc.....
13. REMARKS
Spring seeding is recommended, however, late summer (prior to September 1) seeding can be made. Permanent seeding should be made prior to August 5 or as a dormant seeding after the first killing frost and before the first snowfall. If seeding cannot be done within these seeding dates, temporary seeding and mulching shall be used to protect the site. Permanent seeding shall be delayed until the next recommended seeding period.

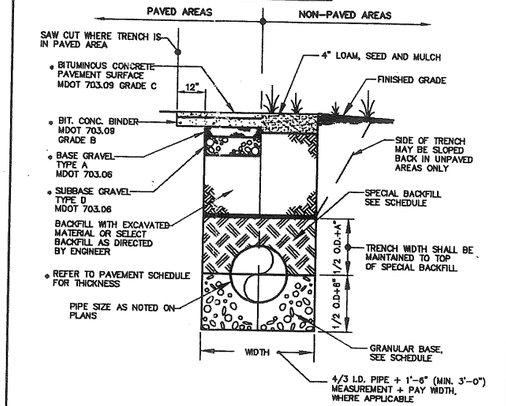
TEMPORARY SEEDING PLAN NON–WETLAND AREAS
Project USM Vehicular Parking Lot Improvements
Site Location Portland Campus
Permanent Seeding X Temporary Seeding
1. Area to be seeded: acres, OR 430 M Sq. Ft.
2. Instructions on preparation of soil: Prepare a good seed bed for planting method used.
3. Apply lime as follows: #/acres, OR 138#/M Sq. Ft.
4. Fertilize with pounds of – – N–P–K/ac. OR 18.4 pounds of 10 – 10 – 10 N–P–K/M Sq. Ft.
5. Method of applying lime and fertilizer: Spread and work into the soil before seeding.
6. Seed with the following mixture:
100% Winter Rye (Fall)
100% Oats (Spring)
When using small grain as nurse crop seed it at one–half the normal seeding rate.
7. Mulching instructions: Apply at the rate of tons per acre. OR 115 pounds per M. Sq. Ft.
Amount Unit #, Tons, Etc.
8. TOTAL LIME..... 138 #/1000 sq. ft.
9. TOTAL FERTILIZER..... 18.4 #/1000 sq. ft.
10. TOTAL SEED.....2.6 Rye, 1.8 Oats #/1000 sq. ft.
11. TOTAL MULCH..... 115 #/1000 sq. ft.
12. TOTAL other materials, seeds, etc.....
13. REMARKS
* Recommended seeding dates after August 15.
* For areas with slopes >10%, waterways, areas within 100 feet of the stream, and fall and winter erosion control areas, mulch netting shall be used per manufacturer's specifications.
* For seeing between November 1 and April 15 the mulching application rate should be doubled.

JN2074.2 24–1 MeDEP Application for Project Modification
December 2001 USM Portland, Maine

TRENCH SECTION BACKFILL SCHEDULE

TYPE OF PIPE	GRANULAR BASE MATERIAL	SPECIAL BACKFILL	SPECIAL BACKFILL COVER "A" (IN)	SELECT BACKFILL
PVC	3/4" CRUSHED STONE	GRANULAR AASHTO M145–49 A–3 OR BETTER	6"	GRANULAR AASHTO M145–49 A–3 OR BETTER
RCP	3/4" CRUSHED STONE	GRANULAR AASHTO M145–49 A–3 OR BETTER	12"	GRANULAR AASHTO M145–49 A–3 OR BETTER

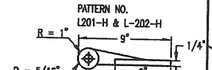
NOTE: BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS . ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.



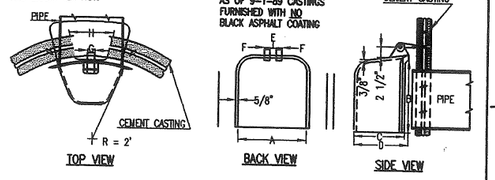
TYPICAL UTILITY PIPE TRENCH SECTION

N.T.S.

DIMENSIONS	A	B	C	D	E	F	G	H
10" PIPE	18	18	10	11.25	2	1	1.875	14



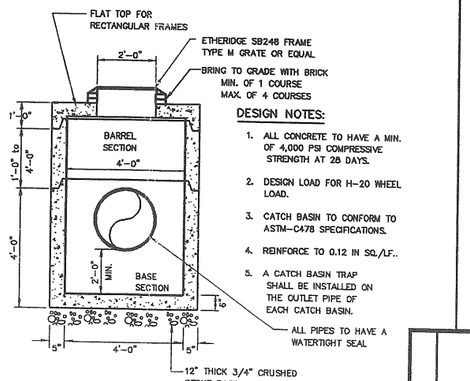
NOTE: ASSEMBLED WITH 1/2" DIA. BY 5" HEX HEAD BRASS BOLT AND BRASS HEX NUT.



(MODEL L 202 – MANUFACTURED BY THE LEBANON FOUNDRY, INC.; BROCKTON MASS.)

CATCH BASIN TRAP DETAIL

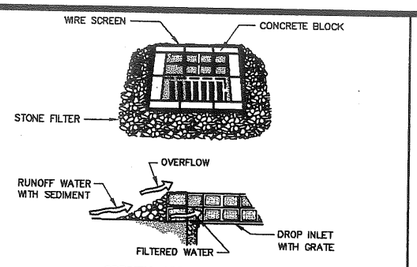
N.T.S.



DESIGN NOTES:
1. ALL CONCRETE TO HAVE A MIN. OF 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. DESIGN LOAD FOR H–20 WHEEL LOAD.
3. CATCH BASIN TO CONFORM TO ASTM–C478 SPECIFICATIONS.
4. REINFORCE TO 0.12 IN SQ./LF..
5. A CATCH BASIN TRAP SHALL BE INSTALLED ON THE OUTLET PIPE OF EACH CATCH BASIN.

4'–0" PRECAST CATCH BASIN

N.T.S.



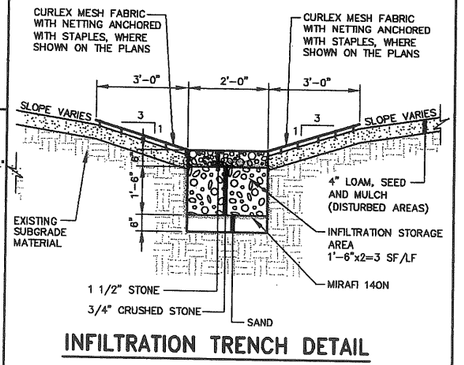
SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

NOTES:
1. PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, WITH THE ENDS OF ADJACENT BLOCKS ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING COMBINATIONS OF 4", 8" AND 12" WIDE BLOCKS. THE BARRIER OF BLOCKS SHALL BE AT LEAST 12 INCHES HIGH, AND NO GREATER THAN 24" HIGH.
2. WIRE MESH SHALL BE PLACED OVER THE OUTSIDE VERTICAL FACE (WEEPHING) OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2" OPENINGS SHALL BE USED.
3. STONE SHALL BE PILED AGAINST THE WIRE TO THE TOP OF THE BLOCK BARRIER, AS SHOWN IN DETAIL. THE STONE FILTER SHALL BE 3/4" CRUSHED STONE.
4. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT, SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND REPLACED.

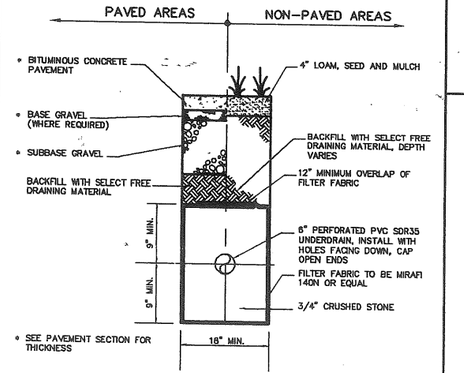
STONE SEDIMENT BARRIER

N.T.S.



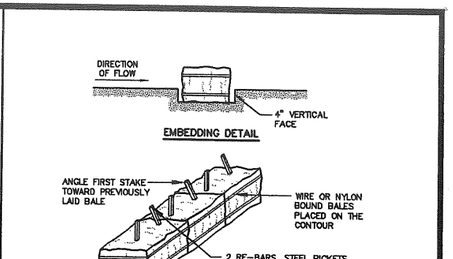
INFILTRATION TRENCH DETAIL

N.T.S.



TYPICAL UNDERDRAIN TRENCH SECTION

N.T.S.

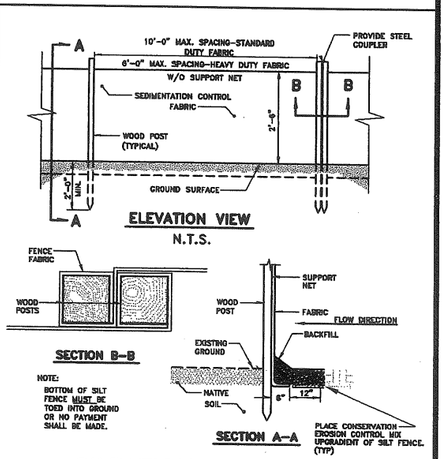


CONSTRUCTION SPECIFICATIONS

1. Bales shall be placed in a row with ends tightly abutting the adjacent bales.
2. Each bale shall be embedded in the soil a minimum of 4".
3. Bales shall be securely anchored in place by stakes or re–bars driven through the bales. The first stake in each bale was angled toward previously laid bale to force bales together.
4. Inspection will be frequent and repair or replacement shall be made promptly as needed.
5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

STRAW OR HAY BALE BARRIER

N.T.S.



SILTATION FENCE DETAIL

N.T.S.

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CLIENT: UNIVERSITY OF MAINE SYSTEM

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