REFER TO SHEET C-4.1 FOR ADDITIONAL INFORMATION PERTAINING TO STREAM BUFFERS AND EASEMENTS AS SHOWN ON THIS PLAN.

GENERAL NOTES

1. OWNER OF RECORD:
   TOWN OF CUMBERLAND
   290 TUTTLE ROAD
   CUMBERLAND, MAINE 04021
2. PROJECT NAME / MUNICIPALITY:
   VILLAGE GREEN
   CUMBERLAND, MAINE
3. APPLICANT / DEVELOPER:
   VILLAGE GREEN CUMBERLAND, LLC
   P.O. BOX 3572
   PORTLAND, MAINE 04104
4. ENGINEER / DESIGNER:
   DELUCA-HOFFMAN ASSOCIATES, INC
   778 MAIN STREET, SUITE 8
   SOUTH PORTLAND, MAINE 04106
5. BOUNDARY AND TOPOGRAPHIC SURVEY
   TITCOMB ASSOCIATES, INC.
   133 GRAY ROAD
   FALMOUTH, MAINE 04105
6. WETLANDS DELINEATION:
   BOYLE ASSOCIATES
   25 DUNDEE ROAD
   GORHAM, ME 04038
7. PARCEL SIZE AND TAX ASSESSOR DATA
   PROJECT SITE IS IDENTIFIED BY THE CUMBERLAND ASSESSOR'S OFFICE AS LOT 78 ON TAX MAP U10 CONTAINING 40.69 ACRES OF LAND, INCLUDING 1.46 ACRES IN WYMAN WAY RIGHT-OF-WAY TO MAIN STREET
8. ZONING:
   VILLAGE MIXED USE (VMU) WITH CONTRACT ZONING OVERLAY
9. USE:
   SINGLE FAMILY RESIDENTIAL USES (ATTACHED AND DETACHED) ARE PERMITTED USES WITHIN THE CONTRACT OVERLAY ZONE
10. CONTRACT OVERLAY ZONE DIMENSIONAL REQUIREMENTS:
    THE FOLLOWING MINIMUM LOT SIZES ARE REQUIRED:

USE	MIN. LOT SIZE (S.F.)	MIN LOT AREA PER UNIT (S.F.)	MIN LOT FRONTAGE (FT) PRIVATE 7.97' R.O.W.	PRIVATE ROAD R.O.W.	PUBLIC ROAD R.O.W.
DETACHED SINGLE FAMILY RESIDENTIAL STRUCTURE	5,000	5,000	15'	50'	50'
ATTACHED SINGLE FAMILY RESIDENTIAL STRUCTURE	5,000	5,000	15'	50'	50'

MAXIMUM NUMBER OF RESIDENTIAL UNITS ACCESSED FROM PRIVATE DRIVE IS LIMITED TO 6.

THE FOLLOWING MINIMUM SETBACKS ARE REQUIRED FOR ALL STRUCTURES:

STRUCTURE TYPE	FRONT	SIDE	REAR
DETACHED SINGLE FAMILY RESIDENTIAL STRUCTURE AND GARAGE	15' *	10'	15'
ATTACHED SINGLE FAMILY RESIDENTIAL STRUCTURE AND GARAGE	15' *	10' **	15'
DETACHED SHED	15'	8'	8'
DRIVEWAYS	0'	8' **	8'

* SETBACK BETWEEN FACE OF GARAGE AND SIDEWALK SHALL BE MINIMUM DISTANCE OF 20'.
** SIDE SETBACK REDUCED TO 0' ALONG COMMON SIDELINE BETWEEN ATTACHED RESIDENTIAL STRUCTURES AND GARAGES.

11. NET RESIDENTIAL DENSITY CALCULATIONS:

TOTAL PARCEL AREA	40.69 ACRES
MINUS	
15% FOR ROADS AND PARKING	6.10 ACRES
ISOLATED LAND AREAS	0 ACRES
OTHER UNDEVELOPABLE AREAS	
SLOPES >20%	6.53 ACRES
WETLANDS	6.20 ACRES
100-YEAR FLOODPLAIN	0 ACRES
LAND W/IN ROW OR EASEMENT	1.11 ACRES
RESOURCE PROTECTION DISTRICT	0 ACRES
NET RESIDENTIAL ACREAGE	20.75 ACRES
RESIDENTIAL DENSITY (5,000 S.F./UNIT)	180 RES. UNITS

12. A PRECONSTRUCTION MEETING BETWEEN THE TOWN OF CUMBERLAND AND THE DEVELOPER'S CONTRACTOR IS REQUIRED PRIOR TO THE START OF ANY WORK.
13. THE PERFORMANCE GUARANTEE REQUIRED BY SECTION 4.4.D.7 OF THE TOWN OF CUMBERLAND SUBDIVISION ORDINANCE SHALL BE FURNISHED IN AN AMOUNT AND IN A FORM ACCEPTABLE TO AND APPROVED BY THE TOWN PRIOR TO START OF ANY WORK.
14. THE WETLAND AREAS SHOWN ON THE INDIVIDUAL LOTS SHALL NOT BE DISTURBED BEYOND THE LIMITS IDENTIFIED ON THE PLANS AND APPROVED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE ARMY CORPS OF ENGINEERS. NO ADDITIONAL WETLAND IMPACTS MAY OCCUR ON THE INDIVIDUAL LOTS BEYOND THAT SHOWN ON THE PLANS, UNLESS THE REQUIRED PERMITS ARE FIRST OBTAINED. THE INDIVIDUAL LOTS ARE NOT ELEGIBLE FOR THE 4,300 S.F WETLAND IMPACT EXEMPTION.
15. ALL LOT OWNERS SHALL BE MEMBERS OF AN ASSOCIATION THAT WILL BE RESPONSIBLE FOR MAINTAINING ALL STORMWATER MANAGEMENT AND TREATMENT MEASURES AND ASSOCIATED PIPES AND STRUCTURES; PRIVATE ROADS; PRIVATE DRIVES; AND PUBLIC WALKING TRAILS WITHIN THE DESIGNATED OPEN SPACE AREAS.
16. DESIGNATED OPEN SPACE AREAS SHALL BE OPEN TO THE GENERAL PUBLIC.
17. FURTHER LOT DIVISION SHALL BE PROHIBITED WITHOUT FURTHER PLANNING BOARD APPROVAL.
18. ALL LOTS ARE SUBJECT TO THE CONDITIONS OF THE FOLLOWING PERMITS:

SITE LOCATION OF DEVELOPMENT ACT: PERMIT # L-25376-L3-A-N
NATURAL RESOURCE PROTECTION ACT: PERMIT # L-25376-TC-B-N
U.S. ACOE SECTION 404 WETLAND: PERMIT # NAE-2011-01168

LEGEND

DESCRIPTION
PROJECT BOUNDARY
EXISTING ABUTTING PROPERTY LINE/R.O.W. LINE
PROPOSED SUBDIVISION LOT LINE
PROPOSED RIGHT-OF-WAY LINE
PROPOSED PRIVATE DRIVE RIGHT-OF-WAY LINE
PROPOSED EASEMENT LINE
PROPOSED EASEMENT AREA
PROPOSED BUILDING SETBACK
EDGE OF WETLAND
STREAM
SB SB STREAM BUFFER LINE
PHASE LINE
WETLAND IMPACT AREA
EXISTING ROADWAY MONUMENTATION
GRANITE OR PRECAST CONC. MON. TO BE SET
EXISTING PROPERTY MONUMENTATION
IRON PIPE / IRON PIN TO BE SET

THIS AMENDED FINAL SUBDIVISION PLAN SUPERCEDES THE PREVIOUS FINAL SUBDIVISION PLAN APPROVED BY THE CUMBERLAND PLANNING BOARD ON SEPTEMBER 20, 2011.

APPROVAL - TOWN OF CUMBERLAND PLANNING BOARD

1-17-12
DATE

CHAIRPERSON

REGISTRY BLOCK

STATE OF MAINE
CUMBERLAND COUNTY REGISTRY OF DEEDS
RECEIVED JANUARY 18, 20 12
AT 8 h 59 m A M. AND RECORDED IN
PLAN BOOK 212 PAGE 18 ATTEST
REGISTRAR

LINE TABLE

ID	LENGTH	DIRECTION
L1	23.00'	N59° 07' 19"W
L2	37.85'	S30° 52' 41"W
L3	23.00'	S59° 07' 19"E
L4	15.00'	S89° 35' 02"E
L5	15.00'	S89° 35' 02"E
L6	38.76'	S00° 24' 58"W
L7	30.79'	N39° 25' 28"W
L8	105.42'	S36° 12' 16"E
L9	15.00'	S89° 06' 16"E
L10	15.00'	S89° 06' 16"E
L11	68.69'	N00° 53' 44"E
L12	68.69'	N00° 53' 44"E
L13	46.09'	S05° 36' 49"E
L14	23.00'	N68° 51' 39"E
L15	14.83'	N39° 25' 28"W
L16	15.96'	N39° 25' 28"W
L17	5.00'	N74° 20' 53"W
L18	33.50'	N26° 04' 51"W
L19	25.11'	N22° 07' 02"W
L20	16.16'	N38° 57' 47"E
L21	10.95'	N38° 57' 47"E
L22	4.24'	N38° 57' 47"E
L23	54.13'	N26° 32' 33"E
L24	13.00'	S63° 27' 27"E
L25	30.00'	N26° 32' 33"E
L26	43.00'	N63° 27' 27"W
L27	15.00'	N26° 32' 33"E
L28	7.32'	N36° 31' 50"E
L29	12.45'	N36° 31' 50"E
L30	27.35'	S56° 33' 37"W
L31	15.00'	S05° 57' 01"E
L32	10.90'	S84° 02' 59"W
L35	15.00'	S05° 57' 01"E
L36	10.90'	N84° 02' 59"E
L37	58.97'	S87° 20' 30"E
L38	23.06'	S71° 15' 17"E
L39	20.75'	S71° 15' 17"E
L40	30.23'	N36° 31' 50"E

CURVE TABLE

ID	RADIUS	LENGTH	DELTA
C1	15.00'	23.56'	090° 00' 00"
C2	215.00'	23.81'	006° 20' 47"
C3	215.00'	30.13'	008° 01' 49"
C4	99.00'	52.63'	030° 27' 43"
C5	69.00'	36.68'	030° 27' 43"
C6	250.00'	6.14'	001° 24' 29"
C7	310.00'	24.64'	004° 33' 17"
C8	85.00'	62.93'	042° 25' 01"
C9	115.00'	59.22'	029° 30' 13"
C10	115.00'	30.17'	015° 01' 47"
C11	85.00'	66.07'	044° 32' 00"
C13	275.00'	14.34'	002° 59' 16"
C14	15.00'	23.56'	090° 00' 00"
C15	15.00'	23.56'	090° 00' 00"
C16	15.00'	23.56'	090° 00' 00"
C17	15.00'	25.33'	096° 45' 32"
C18	15.00'	16.66'	063° 37' 35"
C19	30.00'	14.39'	027° 29' 22"
C20	115.00'	25.82'	012° 51' 57"
C21	115.00'	59.31'	029° 33' 04"
C22	250.00'	30.02'	006° 52' 47"
C23	250.00'	21.11'	004° 50' 17"

NORTH

GRAPHIC SCALE
0 50 100 200
(IN FEET)
1 inch = 100 ft.

REV	DATE	DESCRIPTION
10	01.05.12	RESUBMITTED TO TOWN
9	12.22.11	ADDED PHASE LIMITS, STREAM BUFFERS TO LOTS 33-58 AND DRAINAGE EASEMENTS TO LOTS 2 & 17
8	11.28.11	PHASE 1 CONSTRUCTION SET
7	09.29.11	REVISED UTILITY EASEMENTS IN LOTS 12 AND 36
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE — ERIC A. TITCOMB — #1273 — PROFESSIONAL LAND SURVEYOR

STATE OF MAINE — JOSEPH A. LAVERRIERE — 7417 — LICENSED PROFESSIONAL ENGINEER

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

PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

SHEET TITLE
AMENDED FINAL SUBDIVISION PLAN

CLIENT - OWNER OF RECORD
VILLAGE GREEN CUMBERLAND, LLC
P.O. BOX 3572, PORTLAND, ME 04104

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	1" = 100'
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-SUBDIVISION PLAN		
SHEET	C-4.0		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-SUBDIVISION PLAN.dwg, C-4.0 SUBDIVISION PLAN-BUFFERS, 1/12/2012 12:19:52 PM, cdube

APPROVAL - TOWN OF CUMBERLAND PLANNING BOARD

1-17-12
DATE

CHAIRPERSON

REGISTRY BLOCK

STATE OF MAINE
CUMBERLAND COUNTY REGISTRY OF DEEDS
RECEIVED JANUARY 18, 20 12
AT 9 h 01 m A M. AND RECORDED IN
PLAN BOOK 212 PAGE 19 ATTEST
REGISTRAR

LEGEND

DESCRIPTION
PROJECT BOUNDARY
EXISTING ABUTTING PROPERTY LINE/R.O.W. LINE
PROPOSED SUBDIVISION LOT LINE
PROPOSED RIGHT-OF-WAY LINE
PROPOSED PRIVATE DRIVE RIGHT-OF-WAY LINE
PROPOSED EASEMENT AREA
STREAM
STREAM BUFFER LINE
STREAM BUFFER AREA
IRON PIPE / IRON PIN TO BE SET

LINE TABLE		
ID	LENGTH	DIRECTION
L1	20.00'	S24° 43' 31"W
L2	20.00'	N10° 03' 32"E
L3	40.00'	N19° 49' 59"E
L4	110.07'	N08° 39' 14"E
L5	109.42'	N08° 39' 14"E
L6	50.68'	N17° 09' 51"E
L7	49.15'	N17° 09' 51"E
L8	15.01'	N71° 16' 10"W
L9	30.00'	N20° 47' 11"E
L10	30.00'	N32° 11' 38"E
L11	20.00'	N16° 36' 27"E
L12	20.00'	S42° 06' 27"W
L13	10.00'	N30° 52' 41"E
L14	10.00'	N59° 07' 19"W
L15	10.00'	N30° 52' 41"E
L16	10.00'	N59° 07' 19"W

LINE TABLE		
ID	LENGTH	DIRECTION
L17	10.00'	N41° 50' 37"E
L18	10.00'	N44° 58' 21"E
L19	9.46'	N43° 13' 41"W
L20	91.52'	S08° 49' 13"E
L21	82.02'	S08° 49' 13"E
L22	10.00'	S79° 15' 57"W
L23	10.00'	S08° 49' 13"E
L24	10.00'	N08° 49' 13"W
L25	10.55'	S89° 06' 16"E
L26	10.00'	S00° 53' 44"W
L27	11.18'	S89° 06' 16"E
L28	11.54'	S39° 25' 28"E
L29	10.00'	S50° 34' 32"W
L30	10.00'	N39° 25' 28"W
L31	10.12'	N41° 50' 37"E
L32	13.00'	S63° 27' 27"E

CURVE TABLE			
ID	RADIUS	LENGTH	DELTA
C1	430.00'	25.76'	003° 25' 56"
C2	430.00'	60.04'	007° 59' 59"
C3	450.00'	62.83'	007° 59' 59"
C4	450.00'	26.11'	003° 19' 29"
C5	540.00'	50.00'	005° 18' 18"
C6	235.00'	50.05'	012° 12' 06"
C7	265.00'	56.02'	012° 06' 42"
C8	335.00'	119.90'	020° 30' 26"
C9	335.00'	29.19'	004° 59' 34"
C10	315.00'	28.95'	005° 15' 59"
C11	315.00'	89.43'	016° 16' 00"
C12	275.00'	10.00'	002° 05' 04"
C13	310.00'	10.00'	001° 50' 57"
C14	80.00'	10.03'	007° 10' 51"
C15	315.00'	20.33'	003° 41' 53"
C16	315.00'	21.81'	003° 58' 01"
C17	315.00'	44.87'	008° 09' 39"
C18	315.00'	36.01'	006° 33' 02"
C19	450.00'	13.82'	001° 45' 37"

THIS AMENDED STREAM BUFFER AND EASEMENT PLAN SUPERCEDES THE PREVIOUS STREAM BUFFER AND EASEMENT PLAN APPROVED BY THE CUMBERLAND PLANNING BOARD ON SEPTEMBER 20, 2011.

REV	DATE	DESCRIPTION
5	01.05.12	RESUBMITTED TO TOWN
4	12.22.11	ADDED STREAM BUFFERS TO LOTS 33-58 AND DRAINAGE EASEMENTS TO LOTS 2 & 17
3	11.28.11	PHASE 1 CONSTRUCTION SET
2	09.29.11	REVISED UTILITY EASEMENTS IN LOTS 12 AND 36
1	09.13.11	RESUBMITTED TO TOWN

REVISIONS

STATE OF MAINE — DAVID E. TITCOMB #1273 — PROFESSIONAL LAND SURVEYOR

STATE OF MAINE — JOSEPH A. LAVERRIERE #7417 — LICENSED PROFESSIONAL ENGINEER

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

SHEET TITLE: AMENDED STREAM BUFFER AND EASEMENT PLAN

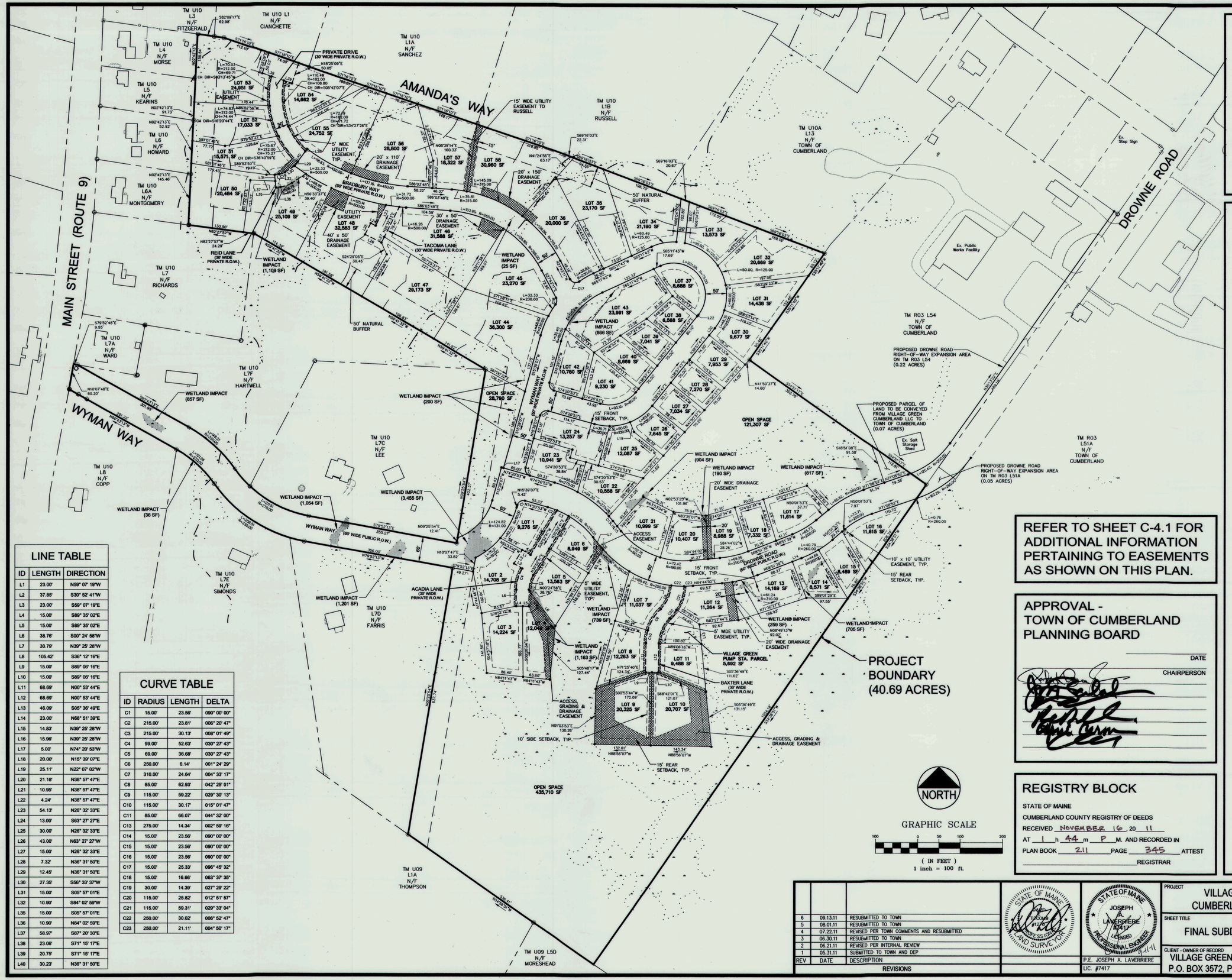
CLIENT - OWNER OF RECORD: VILLAGE GREEN CUMBERLAND LLC
P.O. BOX 3572, PORTLAND, ME 04104

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	1" = 50'
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-EASEMENT PLAN		
SHEET	C-4.1		

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-EASEMENT PLAN.dwg, C-4.1 EASEMENT PLAN-BUFFERS, 1/9/2012 11:43:37 AM, cdube



LEGEND

DESCRIPTION
PROJECT BOUNDARY
EXISTING ABUTTING PROPERTY LINE/R.O.W. LINE
PROPOSED SUBDIVISION LOT LINE
PROPOSED RIGHT-OF-WAY LINE
PROPOSED PRIVATE DRIVE RIGHT-OF-WAY LINE
PROPOSED EASEMENT LINE
PROPOSED BUILDING SETBACK
EDGE OF WETLAND
STREAM
WETLAND IMPACT AREA
EXISTING ROADWAY MONUMENTATION
GRANITE OR PRECAST CONC. MON. TO BE SET
EXISTING PROPERTY MONUMENTATION
IRON PIPE / IRON PIN TO BE SET

GENERAL NOTES

1. OWNER OF RECORD:
   TOWN OF CUMBERLAND
   290 TUTTLE ROAD
   CUMBERLAND, MAINE 04021
2. PROJECT NAME / MUNICIPALITY:
   VILLAGE GREEN
   CUMBERLAND, MAINE
3. APPLICANT / DEVELOPER:
   VILLAGE GREEN CUMBERLAND, LLC
   P.O. BOX 3572
   PORTLAND, MAINE 04104
4. ENGINEER / DESIGNER:
   DELUCA-HOFFMAN ASSOCIATES, INC.
   778 MAIN STREET, SUITE 8
   SOUTH PORTLAND, MAINE 04106
5. BOUNDARY AND TOPOGRAPHIC SURVEY:
   TITCOMB ASSOCIATES, INC.
   133 GRAY ROAD
   FALMOUTH, MAINE 04105
6. WETLANDS DELINEATION:
   BOYLE ASSOCIATES
   25 DUNDEE ROAD
   GORHAM, ME 04038
7. PARCEL SIZE AND TAX ASSESSOR DATA:
   PROJECT SITE IS IDENTIFIED BY THE CUMBERLAND ASSESSOR'S OFFICE AS LOT 7B ON TAX MAP U10 CONTAINING 40.69 ACRES OF LAND, INCLUDING 1.48 ACRES IN WYMAN WAY RIGHT-OF-WAY TO MAIN STREET
8. ZONING:
   VILLAGE MIXED USE (VMU) WITH CONTRACT ZONING OVERLAY
9. USE:
   SINGLE FAMILY RESIDENTIAL USES (ATTACHED AND DETACHED) ARE PERMITTED USES WITHIN THE CONTRACT OVERLAY ZONE
10. CONTRACT OVERLAY ZONE DIMENSIONAL REQUIREMENTS:
    THE FOLLOWING MINIMUM LOT SIZES ARE REQUIRED:

USE	MIN. LOT SIZE (S.F.)	MIN LOT AREA PER UNIT (S.F.)	MIN LOT FRONTAGE (FT) PRIVATE DRIVE R.O.W.	PRIVATE ROAD R.O.W.	PUBLIC ROAD R.O.W.
DETACHED SINGLE FAMILY RESIDENTIAL STRUCTURE	5,000	5,000	15'	50'	50'
ATTACHED SINGLE FAMILY RESIDENTIAL STRUCTURE	5,000	5,000	15'	50'	50'

MAXIMUM NUMBER OF RESIDENTIAL UNITS ACCESSED FROM PRIVATE DRIVE IS LIMITED TO 6.

THE FOLLOWING MINIMUM SETBACKS ARE REQUIRED FOR ALL STRUCTURES:

STRUCTURE TYPE	FRONT	SIDE	REAR
DETACHED SINGLE FAMILY RESIDENTIAL STRUCTURE AND GARAGE	15' *	10'	15'
ATTACHED SINGLE FAMILY RESIDENTIAL STRUCTURE AND GARAGE	15' *	10' **	15'
DETACHED SHED	15'	8'	8'
DRIVEWAYS	0'	8' **	8'

* SETBACK BETWEEN FACE OF GARAGE AND SIDEWALK SHALL BE MINIMUM DISTANCE OF 20'.
** SIDE SETBACK REDUCED TO 0' ALONG COMMON SIDELINE BETWEEN ATTACHED RESIDENTIAL STRUCTURES AND GARAGES.

11. NET RESIDENTIAL DENSITY CALCULATIONS:

TOTAL PARCEL AREA	40.69 ACRES
MINUS	
15% FOR ROADS AND PARKING	6.10 ACRES
ISOLATED LAND AREAS	0 ACRES
OTHER UNDEVELOPABLE AREAS	
SLOPES >20%	6.53 ACRES
WETLANDS	6.20 ACRES
100-YEAR FLOODPLAIN	0 ACRES
LAND WITH ROW OR EASEMENT	1.11 ACRES
RESOURCE PROTECTION DISTRICT	0 ACRES
NET RESIDENTIAL ACREAGE	20.75 ACRES
RESIDENTIAL DENSITY (5,000 S.F./UNIT)	180 RES. UNITS

12. A PRECONSTRUCTION MEETING BETWEEN THE TOWN OF CUMBERLAND AND THE DEVELOPER'S CONTRACTOR IS REQUIRED PRIOR TO THE START OF ANY WORK.
13. THE PERFORMANCE GUARANTEE REQUIRED BY SECTION 4.4.D.7 OF THE TOWN OF CUMBERLAND SUBDIVISION ORDINANCE SHALL BE FURNISHED IN AN AMOUNT AND IN A FORM ACCEPTABLE TO AND APPROVED BY THE TOWN PRIOR TO START OF ANY WORK.
14. THE WETLAND AREAS SHOWN ON THE INDIVIDUAL LOTS SHALL NOT BE DISTURBED BEYOND THE LIMITS IDENTIFIED ON THE PLANS AND APPROVED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE ARMY CORPS OF ENGINEERS. NO ADDITIONAL WETLAND IMPACTS MAY OCCUR ON THE INDIVIDUAL LOTS BEYOND THAT SHOWN ON THE PLANS, UNLESS THE REQUIRED PERMITS ARE FIRST OBTAINED. THE INDIVIDUAL LOTS ARE NOT ELEGIBLE FOR THE 4,300 S.F. WETLAND IMPACT EXEMPTION.
15. ALL LOT OWNERS SHALL BE MEMBERS OF AN ASSOCIATION THAT WILL BE RESPONSIBLE FOR MAINTAINING ALL STORMWATER MANAGEMENT AND TREATMENT MEASURES AND ASSOCIATED PIPES AND STRUCTURES; PRIVATE ROADS; PRIVATE DRIVES; AND PUBLIC WALKING TRAILS WITHIN THE DESIGNATED OPEN SPACE AREAS.
16. DESIGNATED OPEN SPACE AREAS SHALL BE OPEN TO THE GENERAL PUBLIC.
17. FURTHER LOT DIVISION SHALL BE PROHIBITED WITHOUT FURTHER PLANNING BOARD APPROVAL.
18. ALL LOTS ARE SUBJECT TO THE CONDITIONS OF THE FOLLOWING PERMITS:

SITE LOCATION OF DEVELOPMENT ACT.	PERMIT # L-25376-L3-A-N
NATURAL RESOURCE PROTECTION ACT.	PERMIT # L-25376-TC-B-N
U.S. ACOE SECTION 404 WETLAND	PERMIT #

REFER TO SHEET C-4.1 FOR ADDITIONAL INFORMATION PERTAINING TO EASEMENTS AS SHOWN ON THIS PLAN.

APPROVAL - TOWN OF CUMBERLAND PLANNING BOARD

DATE

CHAIRPERSON

REGISTRY BLOCK

STATE OF MAINE
CUMBERLAND COUNTY REGISTRY OF DEEDS
RECEIVED NOVEMBER 16, 20 11
AT 1 h 44 m P M. AND RECORDED IN
PLAN BOOK 211 PAGE 345 ATTEST
REGISTRAR

LINE TABLE

ID	LENGTH	DIRECTION
L1	23.00'	N59° 07' 19"W
L2	37.85'	S30° 52' 41"W
L3	23.00'	S59° 07' 19"E
L4	15.00'	S89° 35' 02"E
L5	15.00'	S89° 35' 02"E
L6	38.76'	S00° 24' 58"W
L7	30.79'	N39° 25' 28"W
L8	105.42'	S36° 12' 16"E
L9	15.00'	S89° 06' 16"E
L10	15.00'	S89° 06' 16"E
L11	68.69'	N00° 53' 44"E
L12	68.69'	N00° 53' 44"E
L13	46.09'	S05° 36' 49"E
L14	23.00'	N68° 51' 39"E
L15	14.83'	N39° 25' 28"W
L16	15.96'	N39° 25' 28"W
L17	5.00'	N74° 20' 53"W
L18	20.00'	N15° 39' 07"E
L19	25.11'	N22° 07' 02"W
L20	21.18'	N38° 57' 47"E
L21	10.95'	N38° 57' 47"E
L22	4.24'	N38° 57' 47"E
L23	54.13'	N26° 32' 33"E
L24	13.00'	S63° 27' 27"E
L25	30.00'	N26° 32' 33"E
L26	43.00'	N63° 27' 27"W
L27	15.00'	N26° 32' 33"E
L28	7.32'	N36° 31' 50"E
L29	12.45'	N36° 31' 50"E
L30	27.35'	S56° 33' 37"W
L31	15.00'	S05° 57' 01"E
L32	10.90'	S84° 02' 59"W
L35	15.00'	S05° 57' 01"E
L36	10.90'	N84° 02' 59"E
L37	58.97'	S87° 20' 30"E
L38	23.06'	S71° 15' 17"E
L39	20.75'	S71° 15' 17"E
L40	30.23'	N36° 31' 50"E

CURVE TABLE

ID	RADIUS	LENGTH	DELTA
C1	15.00'	23.56'	090° 00' 00"
C2	215.00'	23.81'	006° 20' 47"
C3	215.00'	30.13'	008° 01' 49"
C4	99.00'	52.63'	030° 27' 43"
C5	69.00'	36.68'	030° 27' 43"
C6	250.00'	6.14'	001° 24' 29"
C7	310.00'	24.64'	004° 33' 17"
C8	85.00'	62.93'	042° 25' 01"
C9	115.00'	59.22'	029° 30' 13"
C10	115.00'	30.17'	015° 01' 47"
C11	85.00'	66.07'	044° 32' 00"
C13	275.00'	14.34'	002° 59' 16"
C14	15.00'	23.56'	090° 00' 00"
C15	15.00'	23.56'	090° 00' 00"
C16	15.00'	23.56'	090° 00' 00"
C17	15.00'	25.33'	096° 45' 32"
C18	15.00'	16.66'	063° 37' 35"
C19	30.00'	14.39'	027° 29' 22"
C20	115.00'	25.82'	012° 51' 57"
C21	115.00'	59.31'	029° 33' 04"
C22	250.00'	30.02'	006° 52' 47"
C23	250.00'	21.11'	004° 50' 17"

REV	DATE	DESCRIPTION
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE — TITCOMB #1220 — REGISTERED PROFESSIONAL LAND SURVEYOR

STATE OF MAINE — JOSEPH LAVERRIERE #7417 — LICENSED PROFESSIONAL ENGINEER — 9/1/11

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

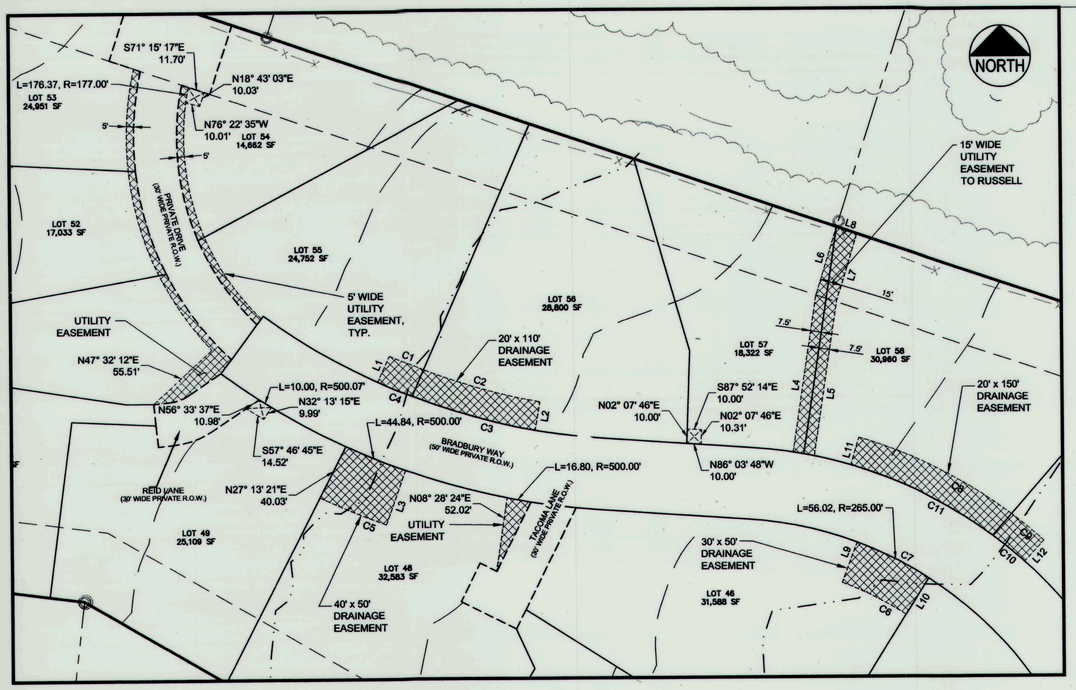
SHEET TITLE: FINAL SUBDIVISION PLAN

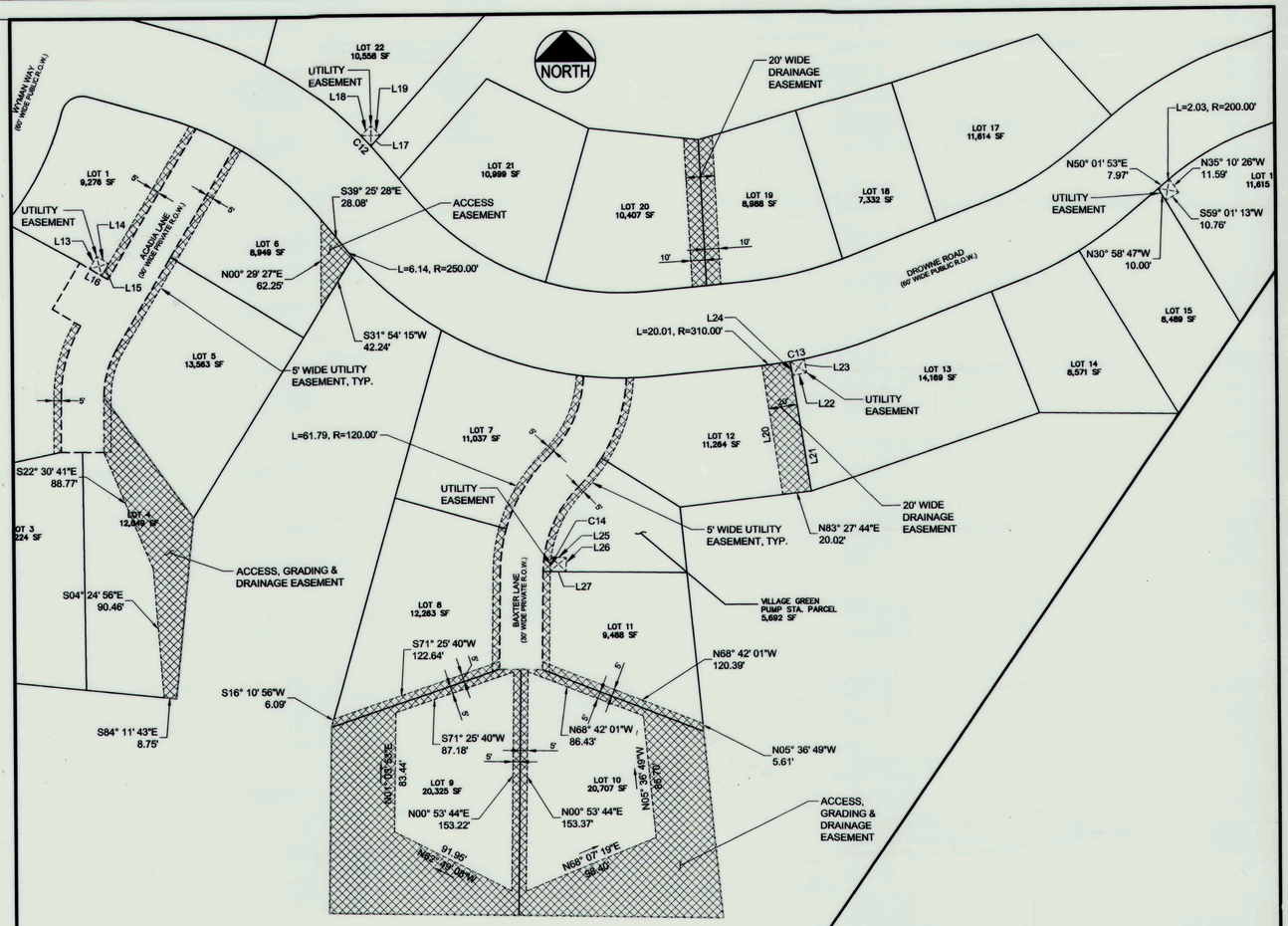
CLIENT - OWNER OF RECORD: VILLAGE GREEN CUMBERLAND, LLC
P.O. BOX 3572, PORTLAND, ME 04104

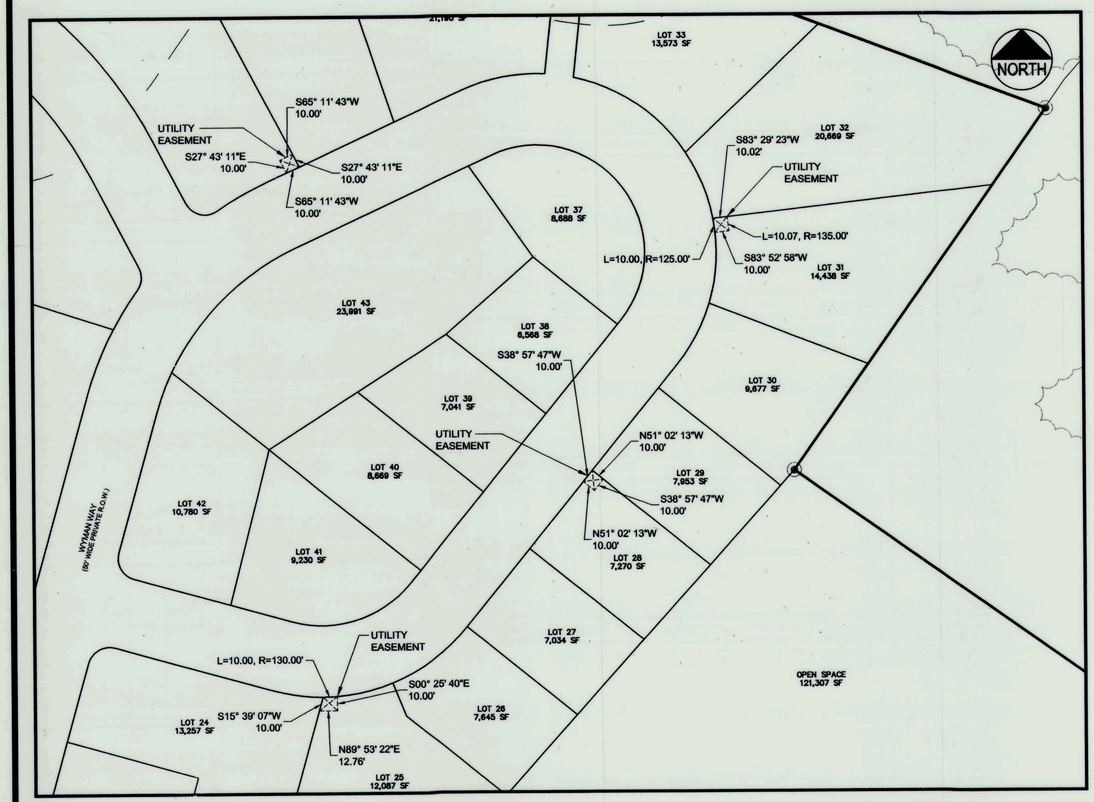
DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	1" = 100'
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-SUBDIVISION PLAN		
SHEET	C-4.0		

R:\2998 Bateman Cumberland\CADD\PERMIT SET\DWG\2998-SUBDIVISION PLAN.dwg, C-4.0 SUBDIVISION PLAN, 9/20/2011 11:50:27 AM, cdube







GRAPHIC SCALE

50 0 25 50 100

(IN FEET)

1 inch = 50 ft.

LINE TABLE		
ID	LENGTH	DIRECTION
L1	20.00	S24° 43' 31.40"W
L2	20.00	N10° 03' 31.52"E
L3	40.00	N19° 49' 59.10"E
L4	110.07	N08° 39' 13.75"E
L5	109.42	N08° 39' 13.75"E
L6	50.68	N17° 09' 50.76"E
L7	49.15	N17° 09' 50.76"E
L8	15.01	N71° 16' 10"W
L9	30.00	N20° 47' 11.30"E
L10	30.00	N32° 11' 38.08"E
L11	20.00	N16° 36' 26.88"E
L12	20.00	S42° 06' 27.24"W
L13	10.00	N30° 52' 41.24"E
L14	10.00	N59° 07' 18.76"W

LINE TABLE		
ID	LENGTH	DIRECTION
L15	10.00	N30° 52' 41.24"E
L16	10.00	N59° 07' 18.76"W
L17	10.00	N41° 50' 36.78"E
L18	10.00	N44° 58' 21.32"E
L19	9.46	N43° 13' 40.54"W
L20	91.52	S08° 49' 12.81"E
L21	92.02	S08° 49' 12.81"E
L22	10.00	S79° 15' 57.41"W
L23	10.00	S08° 49' 12.81"E
L24	10.00	N08° 49' 12.81"W
L25	10.55	S89° 06' 15.98"E
L26	10.00	S00° 53' 44.02"W
L27	11.18	S89° 06' 15.98"E

CURVE TABLE		
ID	RADIUS	LENGTH
C1	430.00	25.76
C2	430.00	60.04
C3	450.00	62.83
C4	450.00	26.11
C5	540.00	50.00
C6	235.00	50.05
C7	265.00	56.02
C8	335.00	119.90
C9	335.00	29.19
C10	315.00	28.95
C11	315.00	111.24
C12	275.00	10.00
C13	310.00	10.00
C14	80.00	10.03

APPROVAL -
TOWN OF CUMBERLAND
PLANNING BOARD

DATE

CHAIRPERSON

REGISTRY BLOCK

STATE OF MAINE
CUMBERLAND COUNTY REGISTRY OF DEEDS
RECEIVED NOVEMBER 16, 20 11
AT 1 h 45 m P M. AND RECORDED IN
PLAN BOOK 211 PAGE 346 ATTEST
REGISTRAR

REV	DATE	DESCRIPTION
1	09.13.11	RESUBMITTED TO TOWN

REVISIONS

STATE OF MAINE
DAVID
A.
RICH
#12
LICENSED
PROFESSIONAL
LAND SURVEYOR

STATE OF MAINE
JOSEPH
A.
LAVERRIERE
#7417
LICENSED
PROFESSIONAL ENGINEER
9/1/11

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

PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

SHEET TITLE
EASEMENT PLAN

CLIENT - OWNER OF RECORD
VILLAGE GREEN CUMBERLAND, LLC
P.O. BOX 3572, PORTLAND, ME 04104

DeLUCA-HOFFMAN
ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	1" = 50'
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-EASEMENT PLAN		
SHEET	C-4.1		

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SUBDIVISION APPLICATION

FOR

VILLAGE GREEN

CUMBERLAND, MAINE

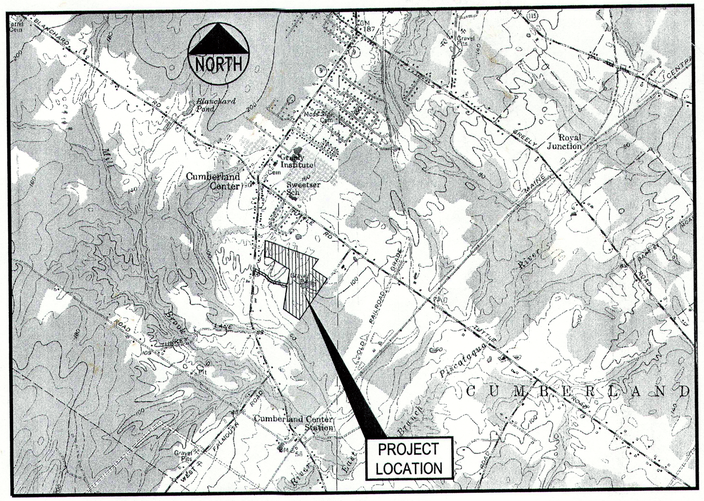
WYMAN WAY AND DROWNE ROAD

CONSTRUCTION SET

PHASE 1

VILLAGE GREEN REVITALIZATION MASTER PLAN

MAY 2011



LOCATION MAP
SCALE: 1" = 2000' ±

ZONING

CONTRACT ZONE
PHASE 1 OF THE VILLAGE GREEN
REVITALIZATION MASTER PLAN

TAX ASSESSOR'S MAP + LOT NUMBER

MAP	LOT
U10	7B

APPLICANT + DEVELOPER:

VILLAGE GREEN
CUMBERLAND L.L.C.
P.O. BOX 3572
PORTLAND, MAINE 04104
(207) 772-2992

RECORD OWNER:

TOWN OF CUMBERLAND
290 TUTTLE ROAD
CUMBERLAND, MAINE 04021
(207) 829-2224

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C-3.0	BOUNDARY SURVEY PLAN
C-3.1	OVERALL EXISTING CONDITIONS PLAN
C-4.0	SUBDIVISION PLAN
C-4.1	EASEMENT PLAN
C-5.0	OVERALL LAYOUT PLAN
C-6.0	OVERALL ROADWAY & STORMWATER BASIN GRADING PLAN
C-6.1*	OVERALL CONCEPTUAL LOT GRADING PLAN
C-7.0	OVERALL UTILITY PLAN
C-8.0	LANDSCAPE PLAN (1 OF 4)
C-8.1	LANDSCAPE PLAN (2 OF 4)
C-8.2	LANDSCAPE PLAN (3 OF 4)
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C-9.3	EROSION & SEDIMENT CONTROL DETAILS 1 OF 2
C-9.4	EROSION & SEDIMENT CONTROL DETAILS 2 OF 2
C-10.0	PAVEMENT, CURB & SIDEWALK DETAILS
C-10.1	PAVEMENT, CURB & SIDEWALK DETAILS
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P-7	PRIVATE DRIVE 1 AND PRIVATE DRIVE 2

*NOT INCLUDED IN PHASE 1 CONSTRUCTION SET

UTILITIES

WATER :	PORTLAND WATER DISTRICT 225 DOUGLASS STREET P.O. BOX 3553 PORTLAND, MAINE 04104-3553 TEL : (207) 774-5961
SEWER :	PORTLAND WATER DISTRICT 225 DOUGLASS STREET P.O. BOX 3553 PORTLAND, MAINE 04104-3553 TEL : (207) 774-5961
ELECTRIC :	CENTRAL MAINE POWER COMPANY 162 CANCO ROAD PORTLAND, MAINE 04103 TEL : (800) 565-0121
TELEPHONE :	FAIRPOINT COMMUNICATIONS 5 DAVIS FARM ROAD PORTLAND, MAINE 04103 TEL : (207) 797-1866
CABLE TV:	TIME WARNER CABLE 118 JOHNSON ROAD PORTLAND, MAINE 04102 TEL : (207) 253-2325
CALL BEFORE YOU DIG: (DIG SAFE)	1-888-344-7233 (1-888-DIG-SAFE)

PERMITS

TYPE:	ISSUING AGENCY:	DATE OF APPLICATION:	STATUS:
LOCAL			
MAJOR SUBDIVISION	TOWN OF CUMBERLAND 290 TUTTLE ROAD CUMBERLAND, MAINE 04021	MAY 31, 2011	PENDING
BUILDING PERMITS	TOWN OF CUMBERLAND 290 TUTTLE ROAD CUMBERLAND, MAINE 04021	TO BE FILED PRIOR TO CONSTRUCTION	TO BE FILED BY INDIVIDUAL LOT OWNER.
STATE			
SITE LOCATION OF DEVELOPMENT PERMIT	MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 312 CANCO ROAD PORTLAND, MAINE 04103	MAY 31, 2011	PENDING
STORMWATER PERMIT	MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 312 CANCO ROAD PORTLAND, MAINE 04103	MAY 31, 2011	PENDING
MAINE CONSTRUCTION GENERAL PERMIT	MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 312 CANCO ROAD PORTLAND, MAINE 04103	MAY 31, 2011	PENDING
NRPA WETLAND ALTERATION PERMIT	MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 312 CANCO ROAD PORTLAND, MAINE 04103	MAY 31, 2011	PENDING
FEDERAL			
ARMY CORPS OF ENGINEERS SECTION 404 PERMIT	U.S. ARMY CORPS OF ENGINEERS RR2 BOX 1855 MANCHESTER, MAINE 04351 (207) 623-8367	MAY 31, 2011	PENDING

PREPARED BY:

CIVIL ENGINEER:
DeLuca-Hoffman Associates, Inc.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, MAINE 04106
(207) 775-1121

TRAFFIC ENGINEER:
Traffic Solutions
235 BANCROFT STREET
PORTLAND, MAINE 04102
(207) 774-3603

SURVEYORS:
Titcomb Associates
133 GRAY ROAD
FALMOUTH, MAINE 04105
(207) 797-9199

WETLAND CONSULTANT:
Boyle Associates, Inc.
25 DUNDEE ROAD
GORHAM, MAINE 04038
(207) 591-5220

LANDSCAPE ARCHITECTURAL CONSULTANT:
Tony Muench Landscape Architect
94 COMMERCIAL STREET
PORTLAND, MAINE 04101-4738
(207) 761-6621

C 10.2 - Speed TABLE
22' x 22'
Curb SW side
No curb opposite side

I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MAINE AND THAT I AM COMPETENT TO PREPARE THIS DOCUMENT.

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE — JOSEPH A. LAVERRIERE — 7417 — LICENSED PROFESSIONAL ENGINEER — 11-28-11

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE
SHEET TITLE: COVER
CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	AS NOTED
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-COVER-GEN NOTES		
SHEET	C-1.0		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-COVER-GEN NOTES.dwg, C-1.0 COVER, 11/30/2011 10:44:15 AM, cdube

Village Green Subdivision Grover 2011

GENERAL NOTES:

1. THIS PROJECT WILL BE SUBJECT TO THE TERMS AND CONDITIONS OF ALL PERMITS ISSUED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LOCAL UTILITY COMPANIES AND THE TOWN OF CUMBERLAND.
2. ALL REQUIRED AND NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
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 OF THE 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 AND DIG SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
4. MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE APPLICANT AND THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. THE EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ONSITE INSPECTIONS OF THE OWNER, THEIR REPRESENTATIVES, OR THE TOWN 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 THE MOST STRINGENT OF THE MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, THE PROJECT SPECIFICATIONS, UTILITY COMPANY SPECIFICATIONS AND TOWN OF CUMBERLAND REQUIREMENTS.

SITE LAYOUT NOTES:

1. ALL STOP SIGNS INDICATED ON THE LAYOUT PLANS ARE TO MEET ALL REQUIREMENTS & STANDARDS OF THE MAINE DEPARTMENT OF TRANSPORTATION.
2. ALL CURB SHALL CONFORM TO THE PROJECT SPECIFICATIONS AND DETAILS CONTAINED IN THE PLAN SET.
3. ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB OR THE EDGE OF PAVEMENT.

GRADING AND DRAINAGE NOTES:

1. ALL STORM DRAIN PIPE SHALL BE SMOOTH BORE INTERIOR PROVIDING A MANNINGS ROUGHNESS COEFFICIENT OF n = 0.012 OR LESS.
2. THE PROJECT ELEVATIONS ARE BASED UPON U.S.G.S. VERTICAL DATUM. THE HORIZONTAL & VERTICAL CONTROL FOR THE PROJECT WAS PERFORMED BY TITCOMB ASSOCIATES, OF FALMOUTH, MAINE.
3. ALL WASTE SOIL MATERIAL EXCAVATED FROM THE PROJECT SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
4. ALL LOAM SALVAGED FROM THE SITE DURING THE INITIAL SITE PREPARATION WORK SHALL BE SCREENED AND STOCKPILED. THE STOCKPILED LOAM SHALL BE USED TO RELOAM THE PROPOSED LAWN AREAS. ANY SURPLUS LOAM SHALL REMAIN THE PROPERTY OF THE OWNER.

EROSION CONTROL NOTES:

1. PRIOR TO BEGINNING ANY LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL INSTALL THE PERIMETER SILT FENCES AND THE CONSTRUCTION ENTRANCES ASSOCIATED WITH THAT PHASE OF THE PROJECT.
2. ALL GROUND AREAS GRADED FOR CONSTRUCTION WILL BE GRADED, LOAMED, SEEDED AND MULCHED AS SOON AS POSSIBLE. PERMANENT SEED MIXTURE SHALL CONFORM TO THE SEEDING PLAN CONTAINED IN THE EROSION CONTROL PROJECT PREPARED FOR THIS PROJECT.
3. PRIOR TO PAVING, THE CONTRACTOR SHALL FLUSH SILT FROM ALL STORM LINES.
4. SILT FENCES SHALL BE INSPECTED, REPAIRED AND CLEANED AS NOTED IN THE EROSION CONTROL NOTES SHOWN ON THE EROSION CONTROL DETAIL SHEET.
5. THE CONTRACTOR SHALL REPAIR AND ADD STONE TO THE CONSTRUCTION ENTRANCE AS IT BECOMES SATURATED WITH MUD TO ENSURE THAT IT WORKS AS PLANNED DURING CONSTRUCTION, AND SHALL KEEP DROWNE ROAD AND WYMAN WAY CLEAR OF DIRT AND MUD.
6. SILT REMOVED FROM AROUND INLETS AND BEHIND THE SILT FENCES SHALL BE PLACED ON A TOPSOIL STOCKPILE AND MIXED INTO TOPSOIL FOR USE IN LANDSCAPING OPERATIONS.
7. LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE SITE.
8. THE CONTRACTOR IS CAUTIONED THAT FAILURE TO COMPLY WITH THE SEQUENCE OF CONSTRUCTION, 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.

UTILITY NOTES:

1. ALL WATER UTILITY MATERIALS AND INSTALLATION METHODS SHALL CONFORM TO THE PORTLAND WATER DISTRICT SPECIFICATIONS. ALL WATER DISTRIBUTION PIPING SHALL BE CLASS 52 DUCTILE IRON PIPE. DISINFECTION OF WATER MAINS SHALL CONFORM TO AWWA STANDARD C651, LATEST REVISION.
2. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF UNDERGROUND TELEPHONE WITH FAIRPOINT COMMUNICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION & BACKFILL OF TRENCH AND ANY UNDERGROUND CONDUITS.
3. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF UNDERGROUND ELECTRIC POWER SERVICE WITH CENTRAL MAINE POWER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TOTAL INSTALLATION OF THE UNDERGROUND SERVICE INCLUDING, BUT NOT LIMITED TO, ALL TRENCHING, PRIMARY AND SECONDARY CABLES, TERMINATORS, CONNECTORS, PULL WIRES, ETC.
4. SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE SDR 35 FOR GRAVITY MAINS/SERVICES & SDR 18 PRESSURE PIPE FOR FORCE MAIN, UNLESS OTHERWISE NOTED ON THE PLANS. ALL SEWER UTILITY MATERIALS AND INSTALLATION METHODS SHALL CONFORM TO THE PORTLAND WATER DISTRICT SPECIFICATIONS.
5. REFER TO ELECTRICAL PLANS FOR SECONDARY ELECTRIC SERVICE TO LIGHTS, SIGNS AND OTHER APPURTENANCES.

LANDSCAPE NOTES:

1. ALL PLANT MATERIALS SHALL MEET THE STANDARDS AS SET FORTH BY THE AMERICAN ASSOCIATION OF NURSERYMEN. ALL TREES ARE TO BE GUYED AND STAKED PER THE DETAIL. ALL TREES, SHRUB BEDS, ETC. ARE TO BE MULCHED WITH 4" OF SHREDDED PINE OR HEMLOCK BARK MULCH.
2. ALL DISTURBED AREAS ARE TO RECEIVE A MINIMUM OF 4" OF TOPSOIL PRIOR TO PERMANENT SEEDING.
3. ANY DEVIATIONS FROM THE LANDSCAPE PLAN, INCLUDING PLANT SPECIES, SIZE, QUANTITY, LOCATION OR CONDITION, SHALL BE REVIEWED & APPROVED BY THE LANDSCAPE ARCHITECT, DEVELOPER AND MUNICIPAL AUTHORITY (IF APPLICABLE) PRIOR TO INSTALLATION.
4. THE DEVELOPER, OR HIS REPRESENTATIVE, SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE PLANT MATERIAL. CLEAR VISIBILITY SHALL BE MAINTAINED AT INTERSECTIONS, BETWEEN THE HEIGHTS OF 3 FEET & 6 FEET, WITHIN 15 FEET OF THE TRAVEL WAY.
5. ALL TREES AND VEGETATED AREAS INDICATED TO BE PRESERVED SHALL BE PROTECTED FROM DAMAGE BY PLACEMENT OF A PROTECTIVE BARRIER IN ACCORDANCE WITH THE TREE PROTECTION DETAIL CONTAINED ON THE LANDSCAPE PLANS.

GENERAL CONSTRUCTION PLAN:

IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCHEDULE CERTAIN PORTIONS OF THE SITE WORK TO ENSURE EROSION AND SEDIMENTATION CONTROL MEASURES ARE SEQUENCED FOR OPTIMUM EFFECTIVENESS. BUILDING CONSTRUCTION WILL COMMENCE AT THE START OF THE PROJECT AND BE CONCURRENT WITH SEVERAL ELEMENTS OF THE SITE WORK. THE FOLLOWING SCHEDULE FOR CONSTRUCTION REFLECTS THIS :

1. Install crushed stone stabilized construction entrance. Primary construction access will be via Drowne Road.
2. Install siltation fence.
3. Clear and grub areas within work area. Strip work zone of loam material & stockpile.
4. During grubbing operations, install stone check dams at any evident concentrated flows.
5. Install temporary dewatering sumps.
6. Begin long-term stormwater filter basin construction.
7. Begin underground utility infrastructure improvements (sewer and water).
8. Begin installation of storm drain system with riprap aprons.
9. Begin roadway construction commencing from Drowne Road. Perform earthwork operations to rough grade roadway to subgrade including drainage swales and culverts.
10. Install ditch channel stabilization.
11. Install subbase gravel along roadway.
12. Install base gravel along roadway.
13. Install pavement and curbing.
14. Loam, lime, fertilize, seed and mulch disturbed areas.
15. Remove accumulated sediment from ahead of any silt barriers (as necessary).
16. Once the site is stable and a 90% catch of vegetation has been obtained, remove all temporary erosion control measures.
17. Touch up loam and seed.

LEGEND

EXISTING	PROPOSED
BUILDING	BUILDING
EDGE OF TRAVEL WAY, PAVEMENT, ROADS, DRIVES	PROPERTY LINE
CURBING	EASEMENT LINE
PROPERTY LINE	BUILDING SETBACK
OVERHEAD ELECTRIC LINES	RETAINING WALL
UNDERGROUND ELECTRIC LINE	CURBING (SEE DRAWING FOR TYPES)
UNDERGROUND TELEPHONE LINE	
WATER LINE	EDGE OF PAVEMENT
STORM DRAIN LINE	EDGE OF GRAVEL DRIVE
SANITARY SEWER LINE	GRADING CONTOUR LINE
FENCE	SPOT ELEVATION
EXISTING CONTOUR LINE	GUARD POST/BOLLARD
EXISTING WETLANDS	POLE WITH LIGHT FIXTURE(S)
EXISTING TREELINE	UTILITY POLE
EXISTING STONE WALL	FREESTANDING SIGN
UTILITY POLE	PEDESTRIAN CROSSWALK
BOLLARD	PAINTED DIRECTIONAL TRAFFIC ARROW
SIGN	TRAFFIC SIGNAL
LIGHT POLE	OVERHEAD ELECTRIC & TELEPHONE
GAS VALVE	UNDERGROUND ELECTRIC/TELEPHONE
HYDRANT	WATER LINE
IPF – REBAR (UNLESS NOTED)	SEWER LINE
HIGHWAY MONUMENT	GAS LINE
WATER SHUT OFF	STORM DRAIN LINE
CATCH BASIN	CULVERT
SEWER MANHOLE	HYDRANT
DIRECTION ARROW	WATER GATE VALVE
DECIDUOUS SHRUB	WATER SHUT OFF VALVE
CONIFEROUS SHRUB	MANHOLE
DECIDUOUS TREE	CATCH BASIN
CONIFEROUS TREE	TREELINE
TELEPHONE MANHOLE	TREES/LANDSCAPING
WELL	RIPRAP
SIGNAL BOX	SILT FENCE
NOW OR FORMERLY	WIRE LINK FENCE
	CHAIN LINK FENCE
	WOOD FENCE
	GUIDE RAIL
	STONE SEDIMENT BARRIER
	TRANSFORMER PAD
	EDGE OF WATER
	STREAM CENTER LINE
	CENTER LINE

ZONING COMPLIANCE SUMMARY

EXCERPT OF THE CONTRACT ZONING AGREEMENT RELATING TO PHASE 1 OF THE VILLAGE GREEN REVITALIZATION MASTER PLAN.

This Contract Zoning Agreement is entered into this _____ day of _____, 2011 by and between the **Town of Cumberland**, a Municipal Corporation (the **"Town"**), and **Village Green Cumberland, LLC**, a Maine Limited Liability Company with a business address of PO Box 3572, Portland, ME 04104-3571, its nominee or assigns (the **"Developer"**), pursuant to the Conditional and Contract rezoning provisions set forth in 30-A M.R.S.A. Section 4352 (the **"Act"**) and Section 606 of the Cumberland Zoning Ordinance, as amended (the **" Zoning Ordinance"**).

WHEREAS, the property subject to this Agreement consists of a 40.7 +/- acre parcel of unimproved real estate located between Drowne Road and Wyman Way, identified on the Town's Tax Assessor map as MAP U10, Lot 7B, as more particularly shown on Exhibit A attached hereto (the **"Property"**), which property is currently owned by the Town by virtue of a certain Deed dated September 13, 2000, recorded in the Cumberland County Registry of Deeds in Book 15732, Page 22;

WHEREAS, the Property is located in the Village Mixed-Use Zone (V-MUZ) Zoning District (the **" V-MUZ Zoning District"**) located in section 204.13 of the Zoning Ordinance;

WHEREAS, the Developer has entered into a Purchase and Sale Agreement - Land Only, dated _____, as amended (the **"Purchase and Sale Agreement"**), pursuant to which the Developer has agreed to purchase the Property from the Owner;

WHEREAS, the Town desires to sell the property to generate tax revenue and stimulate further economic development in the town center as recommended by the 2009 Comprehensive Plan.

WHEREAS, the Developer intends to develop the Property into a 59 lot residential subdivision, subject to the terms and conditions set forth herein , as further described in the Exhibit B attached hereto (the **"Project"**);

WHEREAS, in order for the Project to be financially feasible for the construction and sale of residential dwelling units while meeting all applicable codes, certain Amendments with respect to dimensional, design and certain other performance standards of the Cumberland Zoning Ordinance are required, and;

WHEREAS, the Town and Developer desire to enter into this Contract Zoning Agreement relating to the Property, subject to the terms and conditions set forth herein.

NOW THEREFORE, pursuant to the provisions of 30-A.M.R.S.A. § 4352(8) and Section 606 of the Cumberland Zoning Ordinance, as amended, the Cumberland Town Council hereby finds that this Amended and Restated Contract Zoning Agreement:

A) is consistent with the Comprehensive Plan duly adopted by the Town of Cumberland on November 9, 2009;

B) establishes a contract zone area consistent with the existing and permitted uses in the original zone of the area involved;

C) only includes conditions and restrictions which relate to the physical development and future operation of the proposed development; and

D) imposes those conditions and restrictions which are necessary and appropriate for the protection of the public health, safety and general welfare of the Town.

In furtherance of these common goals, the parties agree as follows:

I. Establishment of the Contract Zone :

The Town hereby agrees that the Property as described herein shall be a contract zone (the **" Contract Zone"**) pursuant to the provisions of 30-A.M.R.S.A. § 4352(8) and Section 606 of the Cumberland Zoning Ordinance. This Agreement shall create an overlay zone. Except as expressly modified or otherwise stated herein, the Property shall be subject to the requirements of the underlying V-MUZ Zoning District, as the same may be amended from time to time, together with all applicable lot requirements and general requirements, not modified herein.

II. Permitted Uses Within the Contract Zone :

The development permitted within the Contract Zone established herein shall be as follows:

All uses currently authorized either as permitted uses or special exceptions in the VMUZ Zoning District, or as specifically authorized herein.

III. Restrictions and Certain Design Standards Within The Contract Zone :

All restrictions as currently set forth in Section 606 of the Cumberland Zoning Ordinance, except as modified herein and as appears on Exhibit C, attached hereto and made a part hereof.

IV. Performance Standards Within the Contract Zone :

The following performance standards shall apply to the Contract Zone (Phase I of the VGRMP) as follows:

A. The Recreation Facilities and Open Space Impact Fee Ordinance of the Town of Cumberland shall be waived in accordance with Article 1.10 Waiver of Impact Fee subject to the following provisions:

- 1.6 Payment of Fees shall be modified as follows; the Developer shall submit to the Town a list of specific public improvements with corresponding values for said improvements to be provided by each Phase of the approved Village Green Revitalization Master Plan (VGRMP). The public improvements shall include construction of a roadway from the existing terminus of Wyman Way, crossing the Property and connecting with Drowne Road. All public improvements provided in lieu of the impact fee for each Phase of the approved VGRMP shall be completed prior to the final release of bonds or letter of credit(s) required to secure all public improvements for each Development Phase. Performance guarantees, including Letters of Credit and bonds, shall include the value of the in lieu payments attributed to Public Improvements, even where the Public Improvements are to be located upon future Phases which may or may not be constructed.
- The public improvements provided for each Phase of the approved VGRMP will, at a minimum, equal the value of the impact fee(s) otherwise due as provided in 1.11 Calculation of Fees.
- All public improvements to be located within the adjacent "Civic Lot" (Map U10-A, Lot 13) provided by the Developer as part of this Agreement shall be in accordance with a Site Plan approved in advance by the Town.
- Certain areas within the parcel purchased from the Town (Map U10, Lot 7B) by the Developer shall be subject to an easement which allows for public use and recreation (see Exhibit D Plan of Open Space/Recreational Easements). The value of these easements for the purposes of 1.11 Calculation of Fees (Land for Public Use) shall be based on the total purchase price paid for said parcel, divided by the total acreage of the parcel multiplied by the acreage finally included within the easement area(s). Provided, however, that the Developer shall not be credited for any easements or improvements that are required by law or ordinance of residential subdivisions approved by the Town. The financial guarantees, including Letters of Credit, posted by the Developer to assure the construction of qualifying public improvements in phases future to Phase 1, may be required to be maintained in applicable portion by the Town until the Town and Developer have mutually determined an agreed plan for the future phases.

B. The Town of Cumberland's Growth Management Ordinance is hereby amended to include the following additional exemption within Section 106 of this ordinance:

106.6 Lots included within the Phase I subdivision of the approved Village Green Revitalization Plan.

C. The improvements to be constructed within Phase 1 of the development shall be constructed in a manner to take advantage of emerging energy conservation techniques and technologies, consistent with the standards set forth in Exhibit E hereto.

Subject to the terms herein, the Cumberland Planning Board shall have review authority under the applicable provisions of the Cumberland Subdivision, Site Plan and Zoning Ordinances to impose conditions of approval pursuant to said Ordinances relating to the development and construction.

EXHIBIT C
Summary of Zoning Amendments

A) The following minimum lot frontages shall be required on a Private Drive within the Contract Zone (Phase I of the Village Green Revitalization Master Plan, VGRMP) as follows:

Use	Min. Lot Frontage
Detached Single Family Residential Structure	15'
Attached Single Family Residential Structure	15'
Duplex Residential Structure	50'

Maximum Number of Residential Units Accessed from Private Drive = 6

B) The following minimum setbacks within the VMUZ District shall be modified for all structures within the Contract Zone (Phase I of the VGRMP) as follows:

Structure Type	Front	Side
Detached Single Family Residential Structure and Garage	15' *	
Attached Single Family Residential Structure and Garage	15' *	10' **
Duplex Residential Structure and Garage	15' *	
Driveways	0'	8' **

* Setback between face of garage and sidewalk shall be minimum distance of 20'

** Side setback reduced to 0' along common sideline between attached residential structures and garages

C) All public roads within the Contract Zone (Phase I of the VGRMP), including the full extent of Wyman Way connecting to Main Street, shall be designed in accordance with the residential sub-collector roadway standards as contained in Section 8.2 of the Subdivision Ordinance, as modified by Section 204.13.5.4 of the V-MUZ District and as further modified below:

Standard	Public Road
Grass Esplanade	6' * (one side)
Paved Sidewalk	6' (one side)
Min. Tangent Length Between Curves of Reverse Alignment	0'
Min. Distance Between Street Intersections on Same Side	100'
Min. Distance Between Street Intersections on Opposite Side	200'
Min. Pavement Radii at Intersections	35'
Min. K Factor, Crest Vertical Curve	15
Min. K Factor, Sag Vertical Curve	20
MPH Design Speed	25
Min. Property Line Radius at Intersection	15'
Dead End Turn Around	Cul-de-Sac Per 8.2.D.3

* Reduce esplanade width to 0' along portion of Wyman Way extending between Parcel 1 (Tax Map U10, Lot 7B) - Former Doane Parcel and Main Street (Route 9).

D) All private roads within the Contract Zone (Phase 1 of the VGRMP) shall be designed in accordance with the private roadway standards as contained in Section 8.2 of the Subdivision Ordinance, as modified by Section 204.13.5.4 of the V-MUZ District and as further modified below:

Standard	Private Road
Grass Esplanade	4' (one side)
Paved Sidewalk	5' (one side)
Min. Tangent Length Between Curves of Reverse Alignment	0'
Min. Distance Between Street Intersections on Same Side	100'
Dead End Turn Around	Tee Turn Around 25' Length

E) The following roadway standards shall apply to private drives within the Contract Zone (Phase 1 of the VGRMP):

Standard	Private Drive
Right-of-Way Width	30'
Roadway Pavement Width	18'
Grass Esplanade	N/A
Paved Sidewalk	N/A
Max. Dead End Road Length	250'
Min. Roadway Centerline Grade (1.0% preferred)	1.0%
Max. Roadway Centerline Grade	10%
Min. Centerline Radius (100' Preferred)	100'
Min. Tangent Length Between Curves of Reverse Alignment	0'
Min. Angle of Street Intersections (90° Preferred)	75°
Min. Distance Between Street Intersections on Same Side	100'
Min. Distance Between Street Intersections on Opposite Side	100'
Min. Pavement Radii at Intersections	10'
Min. Pavement Crown	¼" per foot
Min. Slope of Gravel Shoulder	½" per foot
Min. K Factor, Crest Vertical Curve	15
Min. K Factor, Sag Vertical Curve	20
MPH Design Speed	25
Max. Grade within 75' of Intersection	3%
Min. Property Line Radius at Intersection	0'
Dead End Turn Around	N/A

F) The following design standards shall apply to the Contract Zone (Phase I of the VGRMP) as follows:

1. The portion of public roadway along the existing Wyman Way right-of-way shall conform to the existing right-of-way dimensions and geometry, which shall include the ability of the roadway not to be centered within the existing right-of-way to minimize impact to existing residences.
2. The drainage system for public and private roadways shall consist of closed drainage to the extent practicable; however, shallow under-drained swales may be used alongside roadways where no sidewalk is proposed. Where sidewalks are proposed, they shall be constructed with curb and access to the closed drain system through catch basin inlets, for example.
3. Parking and garage doors facing towards the public right-of-way are permissible provided the garages are architecturally designed to not be the principal element of the structure. Parking and garage doors facing towards private roads and private drives are permissible.
4. No minimum wooded buffer strip is required to be maintained along existing public streets as referenced in Section 7.9 of the Subdivision Ordinance.
5. Curbing at roadways to be either bituminous or slip form concrete.
6. A minimum 50' buffer shall be maintained along the exterior of the VGRMP parcel (excluding Wyman Way right-of-way) and abutting residential development. The 50' buffer shall not be required to adjacent land owned by the Town.

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE — JOSEPH A. LAVERRIERE — 3447 — REGISTERED PROFESSIONAL ENGINEER — 11-28-11

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

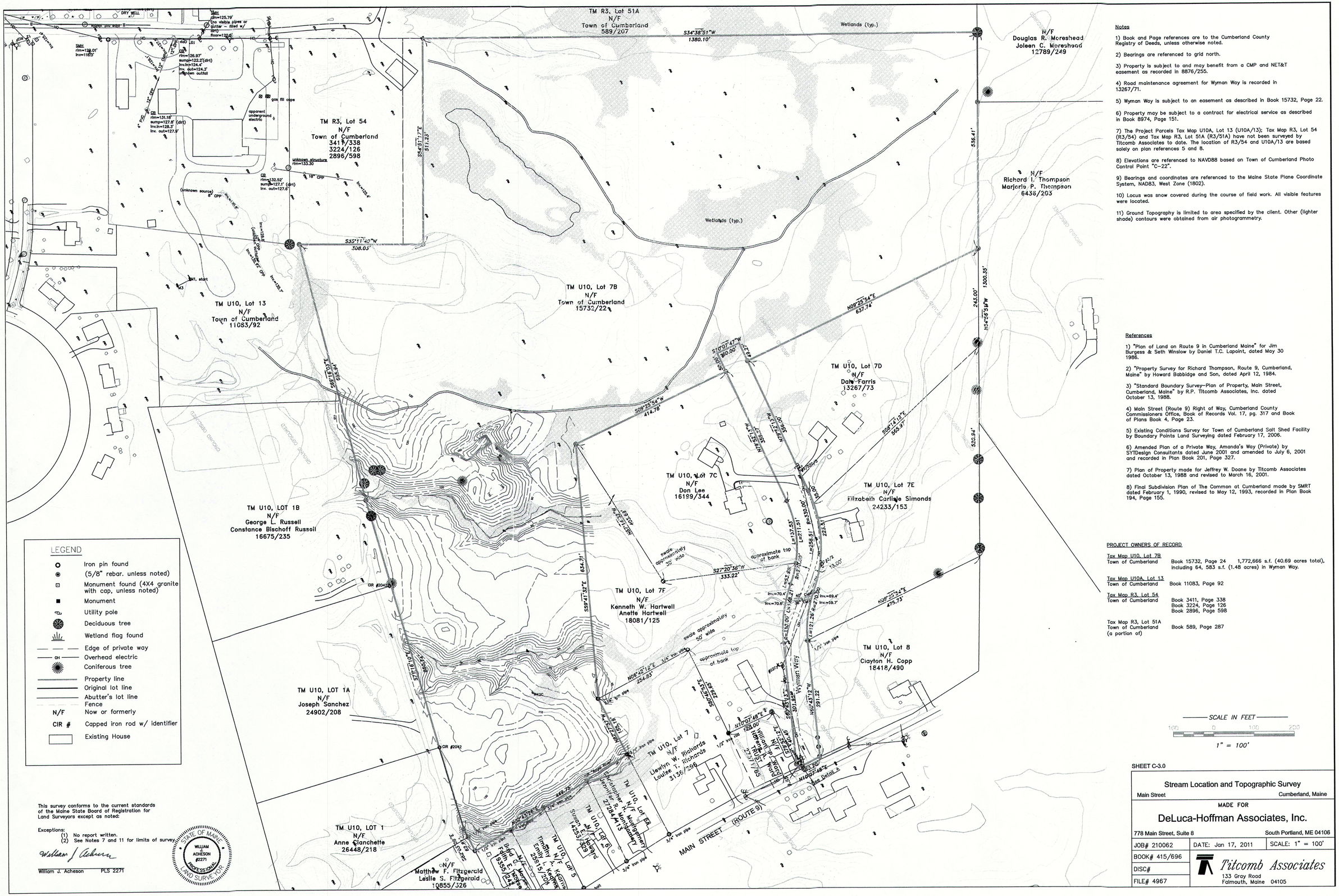
SHEET TITLE: GENERAL NOTES AND LEGEND

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 6
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	—
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-COVER-GEN NOTES		
SHEET	C-2.0		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-COVER-GEN NOTES.dwg, C-2.0 GEN NOTES, 11/30/2011 10:43:20 AM, caluibe


TM R3, Lot 51A
N/F
Town of Cumberland
589/207
S34°38'51"W
1380.10'
Wetlands (typ.)
N/F
Douglas R. Moreshead
Joleen C. Moreshead
12789/249
TM R3, Lot 54
N/F
Town of Cumberland
3411/338
3224/126
2896/598
S54°51'17"E
511.33'
556.41'
N/F
Richard I. Thompson
Marjorie P. Thompson
6438/203
Wetlands (typ.)
S35°11'40"W
308.03'
TM U10, Lot 7B
N/F
Town of Cumberland
15732/22
TM U10, Lot 13
N/F
Town of Cumberland
11083/92
N09°25'54"E
637.74'
1300.35'
N5°26'54"W
245.00'
S10°07'47"W
80.00'
TM U10, Lot 7D
N/F
Dale Farris
13267/73
S09°25'54"W
414.78'
S08°14'17"E
955.97'
TM U10, Lot 7C
N/F
Don Lee
16199/344
TM U10, Lot 7E
N/F
Elizabeth Carlisle Simonds
24233/153
TM U10, LOT 1B
N/F
George L. Russell
Constance Bischoff Russell
16675/235
S27°20'36"W
333.22'
TM U10, Lot 7F
N/F
Kenneth W. Hartwell
Anette Hartwell
18081/125
TM U10, Lot 8
N/F
Clayton H. Copp
18418/490
N05°25'54"E
475.73'
N08°42'14"E
254.83'
TM U10, LOT 1A
N/F
Joseph Sanchez
24902/208
S59°41'32"E
634.71'
S24°01'25"E
386.04'
N24°51'28"W
195.19'
TM U10, Lot 7
N/F
Llewlyn W. Richards
Louise T. Richards
3136/298
N10°07'48"E
121.00'
N80°45'12"W
291.22'
S80°45'12"E
301.82'
Wyman Way
N/F
William P. Ward
Norene Ward, TRUSTEES
2737/193
See Detail A
N10°07'48"E
TM U10, LOT 1
N/F
Anne Cianchette
26448/218
N05°43'58"E
448.75'
TM U10, Lot 5
N/F
Timothy A. Kearns
Emily L. Kearns
25915/208
TM U10, Lot 6
N/F
Susan E. Howard
4253/329
TM U10, Lot 6A
N/F
Christopher K. Montgomery
Jennifer K. Montgomery
2728/413
TM U10, Lot 6B
N/F
Brent G. Morse
Ruth E. Morse
9355/247
N/F
Matthew F. Fitzgerald
Leslie S. Fitzgerald
10855/326
MAIN STREET (ROUTE 9)
CIR #2042
DRY WELL
SMH
rim=125.79'
(no visible pipes or gutter - filled w/ dirt)
floor=120.6'
SMH
rim=129.01'
inv=118.5'
CB
rim=126.97'
sump=122.2'(dirt)
inv.in=124.4'
inv. out=124.3'
unknown outfall
gas fill caps
apparent underground electric
unknown structure
rim=133.30
CB
rim=131.18'
sump=127.8' (dirt)
inv.in=128.3'
inv. out=127.9'
CB
rim=132.50'
sump=127.1' (dirt)
inv. out=127.8'
(unknown source)
8" CPP
18" CPP
12" CPP
inv.in=125.4'
inv.in=125.6'
inv.in=125.7'
inv.in=135.7'
inv.in=135.6'
inv.in=135.8'
inv.in=135.9'
inv.in=136.0'
inv.in=136.1'
inv.in=136.2'
inv.in=136.3'
inv.in=136.4'
inv.in=136.5'
inv.in=136.6'
inv.in=136.7'
inv.in=136.8'
inv.in=136.9'
inv.in=137.0'
inv.in=137.1'
inv.in=137.2'
inv.in=137.3'
inv.in=137.4'
inv.in=137.5'
inv.in=137.6'
inv.in=137.7'
inv.in=137.8'
inv.in=137.9'
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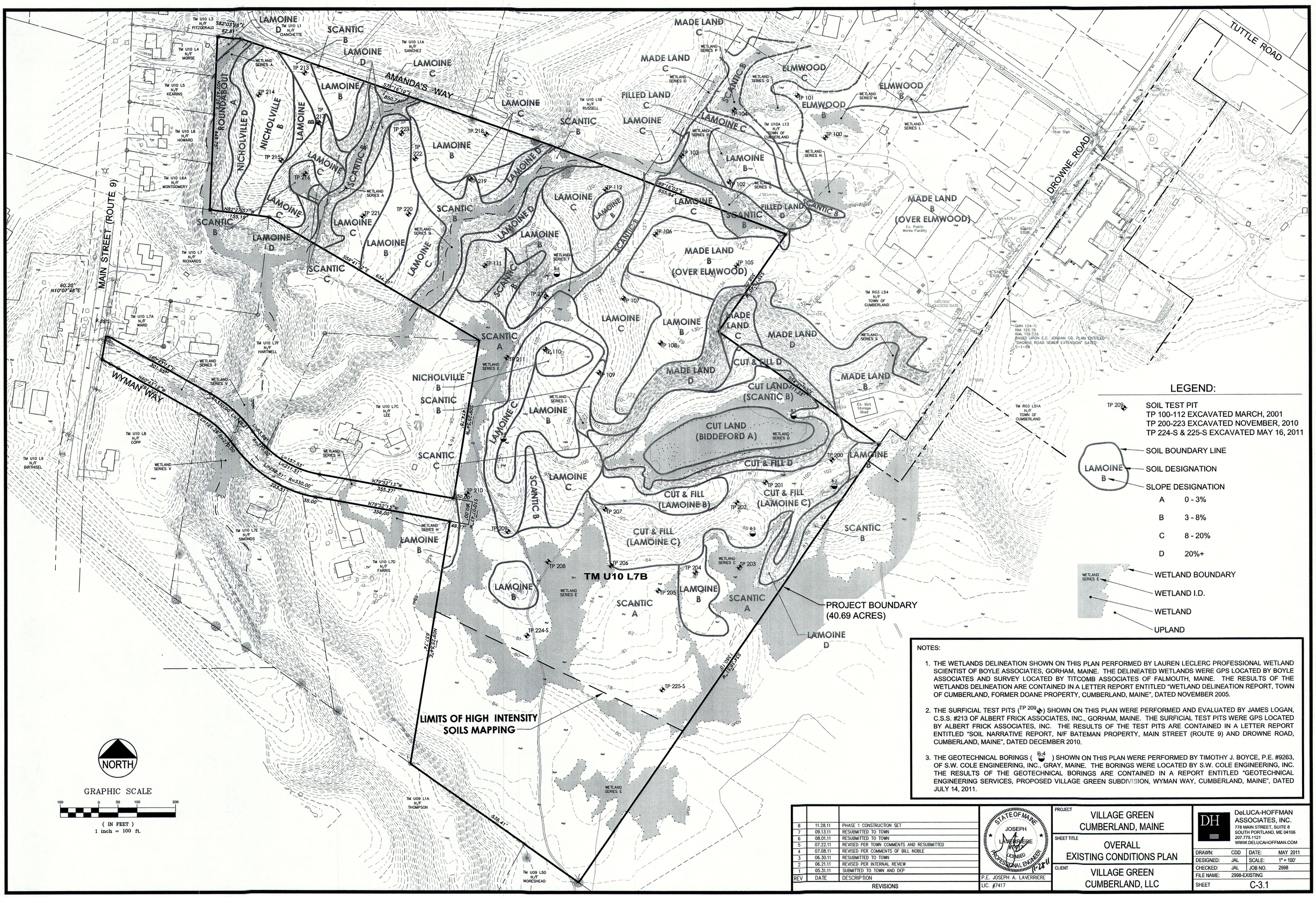
inv.in=139.7'



LEGEND:

TP 209 — SOIL TEST PIT
TP 100-112 EXCAVATED MARCH, 2001
TP 200-223 EXCAVATED NOVEMBER, 2010
TP 224-S & 225-S EXCAVATED MAY 16, 2011

LAMOINE B — SOIL BOUNDARY LINE; SOIL DESIGNATION; SLOPE DESIGNATION

A	0 - 3%
B	3 - 8%
C	8 - 20%
D	20%+

WETLAND SERIES E — WETLAND BOUNDARY; WETLAND I.D.; WETLAND; UPLAND

NOTES:

1. THE WETLANDS DELINEATION SHOWN ON THIS PLAN PERFORMED BY LAUREN LECLERC PROFESSIONAL WETLAND SCIENTIST OF BOYLE ASSOCIATES, GORHAM, MAINE. THE DELINEATED WETLANDS WERE GPS LOCATED BY BOYLE ASSOCIATES AND SURVEY LOCATED BY TITCOMB ASSOCIATES OF FALMOUTH, MAINE. THE RESULTS OF THE WETLANDS DELINEATION ARE CONTAINED IN A LETTER REPORT ENTITLED "WETLAND DELINEATION REPORT, TOWN OF CUMBERLAND, FORMER DOANE PROPERTY, CUMBERLAND, MAINE", DATED NOVEMBER 2005.
2. THE SURFICIAL TEST PITS (TP 209) SHOWN ON THIS PLAN WERE PERFORMED AND EVALUATED BY JAMES LOGAN, C.S.S. #213 OF ALBERT FRICK ASSOCIATES, INC., GORHAM, MAINE. THE SURFICIAL TEST PITS WERE GPS LOCATED BY ALBERT FRICK ASSOCIATES, INC. THE RESULTS OF THE TEST PITS ARE CONTAINED IN A LETTER REPORT ENTITLED "SOIL NARRATIVE REPORT, N/F BATEMAN PROPERTY, MAIN STREET (ROUTE 9) AND DROWNE ROAD, CUMBERLAND, MAINE", DATED DECEMBER 2010.
3. THE GEOTECHNICAL BORINGS (B-4) SHOWN ON THIS PLAN WERE PERFORMED BY TIMOTHY J. BOYCE, P.E. #9263, OF S.W. COLE ENGINEERING, INC., GRAY, MAINE. THE BORINGS WERE LOCATED BY S.W. COLE ENGINEERING, INC. THE RESULTS OF THE GEOTECHNICAL BORINGS ARE CONTAINED IN A REPORT ENTITLED "GEOTECHNICAL ENGINEERING SERVICES, PROPOSED VILLAGE GREEN SUBDIVISION, WYMAN WAY, CUMBERLAND, MAINE", DATED JULY 14, 2011.

REV	DATE	DESCRIPTION
8	11.28.11	PHASE 1 CONSTRUCTION SET
7	09.13.11	RESUBMITTED TO TOWN
6	08.01.11	RESUBMITTED TO TOWN
5	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
4	07.08.11	REVISED PER COMMENTS OF BILL NOBLE
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE — JOSEPH A. LAVERRIERE — 7417 — LICENSED PROFESSIONAL ENGINEER — 11-28-11

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

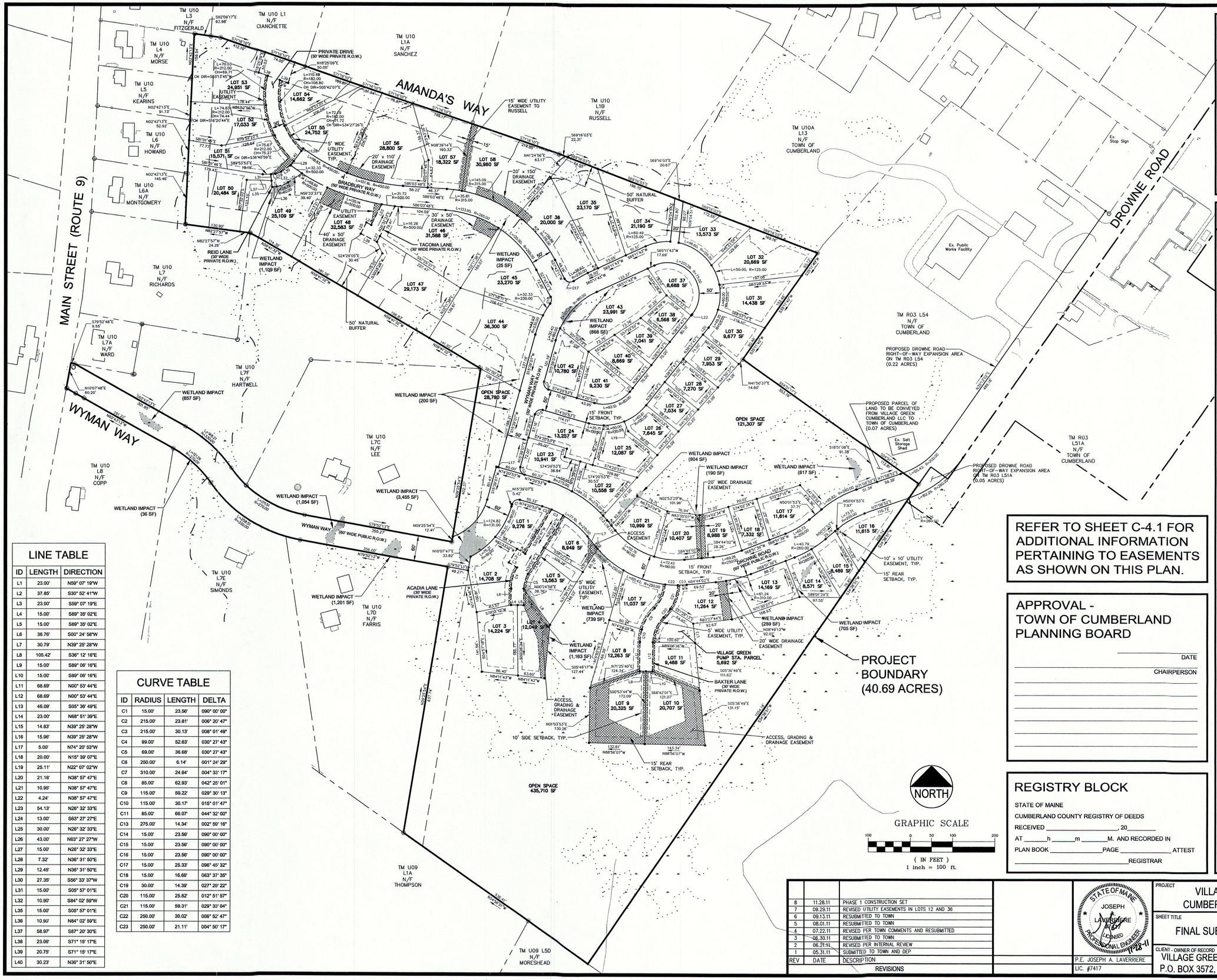
SHEET TITLE: OVERALL EXISTING CONDITIONS PLAN

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	1" = 100'
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-EXISTING		
SHEET	C-3.1		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-OVERALL EXISTING.dwg, C-3.1 OVERALL EXISTING, 11/30/2011 11:57:47 AM, cdube



LEGEND

	DESCRIPTION
———	PROJECT BOUNDARY
— — — —	EXISTING ABUTTING PROPERTY LINE/R.O.W. LINE
———	PROPOSED SUBDIVISION LOT LINE
———	PROPOSED RIGHT-OF-WAY LINE
— — — —	PROPOSED PRIVATE DRIVE RIGHT-OF-WAY LINE
- - - - - -	PROPOSED EASEMENT LINE
- - - - - -	PROPOSED BUILDING SETBACK
. . . . .	EDGE OF WETLAND
— · — · —	STREAM
	WETLAND IMPACT AREA
◇	EXISTING ROADWAY MONUMENTATION
■	GRANITE OR PRECAST CONC. MON. TO BE SET
○ ◉	EXISTING PROPERTY MONUMENTATION
•	IRON PIPE / IRON PIN TO BE SET

GENERAL NOTES

1. OWNER OF RECORD:
   TOWN OF CUMBERLAND
   290 TUTTLE ROAD
   CUMBERLAND, MAINE 04021
2. PROJECT NAME / MUNICIPALITY:
   VILLAGE GREEN
   CUMBERLAND, MAINE
3. APPLICANT / DEVELOPER:
   VILLAGE GREEN CUMBERLAND, LLC
   P.O. BOX 3572
   PORTLAND, MAINE 04104
4. ENGINEER / DESIGNER:
   DELUCA-HOFFMAN ASSOCIATES, INC.
   778 MAIN STREET, SUITE 8
   SOUTH PORTLAND, MAINE 04106
5. BOUNDARY AND TOPOGRAPHIC SURVEY:
   TITCOMB ASSOCIATES, INC.
   133 GRAY ROAD
   FALMOUTH, MAINE 04105
6. WETLANDS DELINEATION:
   BOYLE ASSOCIATES
   25 DUNDEE ROAD
   GORHAM, ME 04038
7. PARCEL SIZE AND TAX ASSESSOR DATA:
   PROJECT SITE IS IDENTIFIED BY THE CUMBERLAND ASSESSOR'S OFFICE AS LOT 7B ON TAX MAP U10 CONTAINING 40.69 ACRES OF LAND, INCLUDING 1.46 ACRES IN WYMAN WAY RIGHT-OF-WAY TO MAIN STREET.
8. ZONING:
   VILLAGE MIXED USE (VMU) WITH CONTRACT ZONING OVERLAY
9. USE:
   SINGLE FAMILY RESIDENTIAL USES (ATTACHED AND DETACHED) ARE PERMITTED USES WITHIN THE CONTRACT OVERLAY ZONE.
10. CONTRACT OVERLAY ZONE DIMENSIONAL REQUIREMENTS:
    THE FOLLOWING MINIMUM LOT SIZES ARE REQUIRED:

USE	MIN. LOT SIZE (S.F.)	MIN. LOT AREA PER UNIT	MIN. LOT FRONTAGE (FT) PRIVATE DRIVE	PRIVATE ROAD R.O.W.	PUBLIC ROAD R.O.W.
DETACHED SINGLE FAMILY RESIDENTIAL STRUCTURE	5,000	5,000	15'	50'	50'
ATTACHED SINGLE FAMILY RESIDENTIAL STRUCTURE	5,000	5,000	15'	50'	50'

MAXIMUM NUMBER OF RESIDENTIAL UNITS ACCESSED FROM PRIVATE DRIVE IS LIMITED TO 6.

THE FOLLOWING MINIMUM SETBACKS ARE REQUIRED FOR ALL STRUCTURES:

STRUCTURE TYPE	FRONT	SIDE	REAR
DETACHED SINGLE FAMILY RESIDENTIAL STRUCTURE AND GARAGE	15' *	10'	15'
ATTACHED SINGLE FAMILY RESIDENTIAL STRUCTURE AND GARAGE	15' *	10' **	15'
DETACHED SHED	15'	8'	8'
DRIVEWAYS	0'	8' **	8'

* SETBACK BETWEEN FACE OF GARAGE AND SIDEWALK SHALL BE MINIMUM DISTANCE OF 20'.
** SIDE SETBACK REDUCED TO 0' ALONG COMMON SIDELINE BETWEEN ATTACHED RESIDENTIAL STRUCTURES AND GARAGES.

11. NET RESIDENTIAL DENSITY CALCULATIONS:

TOTAL PARCEL AREA	40.69 ACRES
MINUS	
15% FOR ROADS AND PARKING	6.10 ACRES
ISOLATED LAND AREAS	0 ACRES
OTHER UNDEVELOPABLE AREAS	
SLOPES >20%	6.53 ACRES
WETLANDS	6.20 ACRES
100-YEAR FLOODPLAIN	0 ACRES
LAND WIN ROW OR EASEMENT	1.11 ACRES
RESOURCE PROTECTION DISTRICT	0 ACRES
NET RESIDENTIAL ACREAGE	20.75 ACRES
RESIDENTIAL DENSITY (5,000 S.F./UNIT)	180 RES. UNITS

12. A PRECONSTRUCTION MEETING BETWEEN THE TOWN OF CUMBERLAND AND THE DEVELOPER'S CONTRACTOR IS REQUIRED PRIOR TO THE START OF ANY WORK.
13. THE PERFORMANCE GUARANTEE REQUIRED BY SECTION 4.4.D.7 OF THE TOWN OF CUMBERLAND SUBDIVISION ORDINANCE SHALL BE FURNISHED IN AN AMOUNT AND IN A FORM ACCEPTABLE TO AND APPROVED BY THE TOWN PRIOR TO START OF ANY WORK.
14. THE WETLAND AREAS SHOWN ON THE INDIVIDUAL LOTS SHALL NOT BE DISTURBED BEYOND THE LIMITS IDENTIFIED ON THE PLANS AND APPROVED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE ARMY CORPS OF ENGINEERS. NO ADDITIONAL WETLAND IMPACTS MAY OCCUR ON THE INDIVIDUAL LOTS BEYOND THAT SHOWN ON THE PLANS, UNLESS THE REQUIRED PERMITS ARE FIRST OBTAINED. THE INDIVIDUAL LOTS ARE NOT ELEGIBLE FOR THE 4,300 S.F. WETLAND IMPACT EXEMPTION.
15. ALL LOT OWNERS SHALL BE MEMBERS OF AN ASSOCIATION THAT WILL BE RESPONSIBLE FOR MAINTAINING ALL STORMWATER MANAGEMENT AND TREATMENT MEASURES AND ASSOCIATED PIPES AND STRUCTURES; PRIVATE ROADS; PRIVATE DRIVES, AND PUBLIC WALKING TRAILS WITHIN THE DESIGNATED OPEN SPACE AREAS.
16. DESIGNATED OPEN SPACE AREAS SHALL BE OPEN TO THE GENERAL PUBLIC.
17. FURTHER LOT DIVISION SHALL BE PROHIBITED WITHOUT FURTHER PLANNING BOARD APPROVAL.
18. ALL LOTS ARE SUBJECT TO THE CONDITIONS OF THE FOLLOWING PERMITS:

    SITE LOCATION OF DEVELOPMENT ACT: PERMIT # L-25376-L3-A-N
    NATURAL RESOURCE PROTECTION ACT: PERMIT # L-25376-TC-B-N
    U.S. ACOE SECTION 404 WETLAND: PERMIT #

LINE TABLE

ID	LENGTH	DIRECTION
L1	23.00'	N59° 07' 19"W
L2	37.85'	S30° 52' 41"W
L3	23.00'	S59° 07' 19"E
L4	15.00'	S89° 35' 02"E
L5	15.00'	S89° 35' 02"E
L6	38.76'	S00° 24' 58"W
L7	30.79'	N39° 25' 28"W
L8	105.42'	S36° 12' 16"E
L9	15.00'	S89° 06' 16"E
L10	15.00'	S89° 06' 16"E
L11	68.69'	N00° 53' 44"E
L12	68.69'	N00° 53' 44"E
L13	46.09'	S05° 36' 49"E
L14	23.00'	N68° 51' 39"E
L15	14.83'	N39° 25' 28"W
L16	15.98'	N39° 25' 28"W
L17	5.00'	N74° 20' 53"W
L18	20.00'	N15° 39' 07"E
L19	25.11'	N22° 07' 02"W
L20	21.18'	N38° 57' 47"E
L21	10.95'	N38° 57' 47"E
L22	4.24'	N38° 57' 47"E
L23	54.13'	N26° 32' 33"E
L24	13.00'	S63° 27' 27"E
L25	30.00'	N26° 32' 33"E
L26	43.00'	N63° 27' 27"W
L27	15.00'	N26° 32' 33"E
L28	7.32'	N36° 31' 50"E
L29	12.45'	N36° 31' 50"E
L30	27.35'	S56° 33' 37"W
L31	15.00'	S05° 57' 01"E
L32	10.90'	S84° 02' 59"W
L35	15.00'	S05° 57' 01"E
L36	10.90'	N84° 02' 59"E
L37	58.97'	S87° 20' 30"E
L38	23.06'	S71° 15' 17"E
L39	20.75'	S71° 15' 17"E
L40	30.23'	N36° 31' 50"E

CURVE TABLE

ID	RADIUS	LENGTH	DELTA
C1	15.00'	23.56'	090° 00' 00"
C2	215.00'	23.81'	006° 20' 47"
C3	215.00'	30.13'	008° 01' 49"
C4	99.00'	52.63'	030° 27' 43"
C5	69.00'	36.68'	030° 27' 43"
C6	250.00'	6.14'	001° 24' 29"
C7	310.00'	24.64'	004° 33' 17"
C8	85.00'	62.93'	042° 25' 01"
C9	115.00'	59.22'	029° 30' 13"
C10	115.00'	30.17'	015° 01' 47"
C11	85.00'	66.07'	044° 32' 00"
C13	275.00'	14.34'	002° 59' 16"
C14	15.00'	23.56'	090° 00' 00"
C15	15.00'	23.56'	090° 00' 00"
C16	15.00'	23.56'	090° 00' 00"
C17	15.00'	25.33'	096° 45' 32"
C18	15.00'	16.66'	063° 37' 35"
C19	30.00'	14.39'	027° 29' 22"
C20	115.00'	25.82'	012° 51' 57"
C21	115.00'	59.31'	029° 35' 04"
C22	250.00'	30.02'	006° 52' 47"
C23	250.00'	21.11'	004° 50' 17"

REFER TO SHEET C-4.1 FOR ADDITIONAL INFORMATION PERTAINING TO EASEMENTS AS SHOWN ON THIS PLAN.

APPROVAL - TOWN OF CUMBERLAND PLANNING BOARD

_____ DATE

_____ CHAIRPERSON

REGISTRY BLOCK

STATE OF MAINE

CUMBERLAND COUNTY REGISTRY OF DEEDS

RECEIVED _____, 20_____

AT _____h _____m _____M. AND RECORDED IN

PLAN BOOK _____ PAGE _____ ATTEST

_____ REGISTRAR

REV	DATE	DESCRIPTION
8	11.28.11	PHASE 1 CONSTRUCTION SET
7	09.29.11	REVISED UTILITY EASEMENTS IN LOTS 12 AND 36
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE — JOSEPH A. LAVERRIERE — 7417 — LICENSED PROFESSIONAL ENGINEER — 12-7-11

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

PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

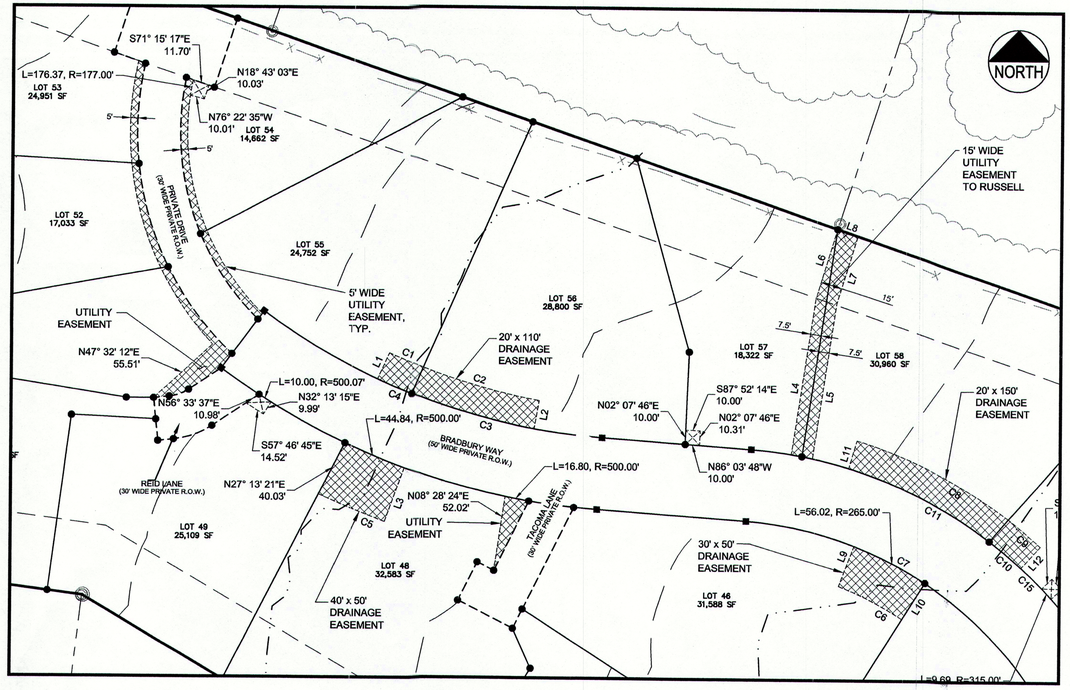
SHEET TITLE
FINAL SUBDIVISION PLAN

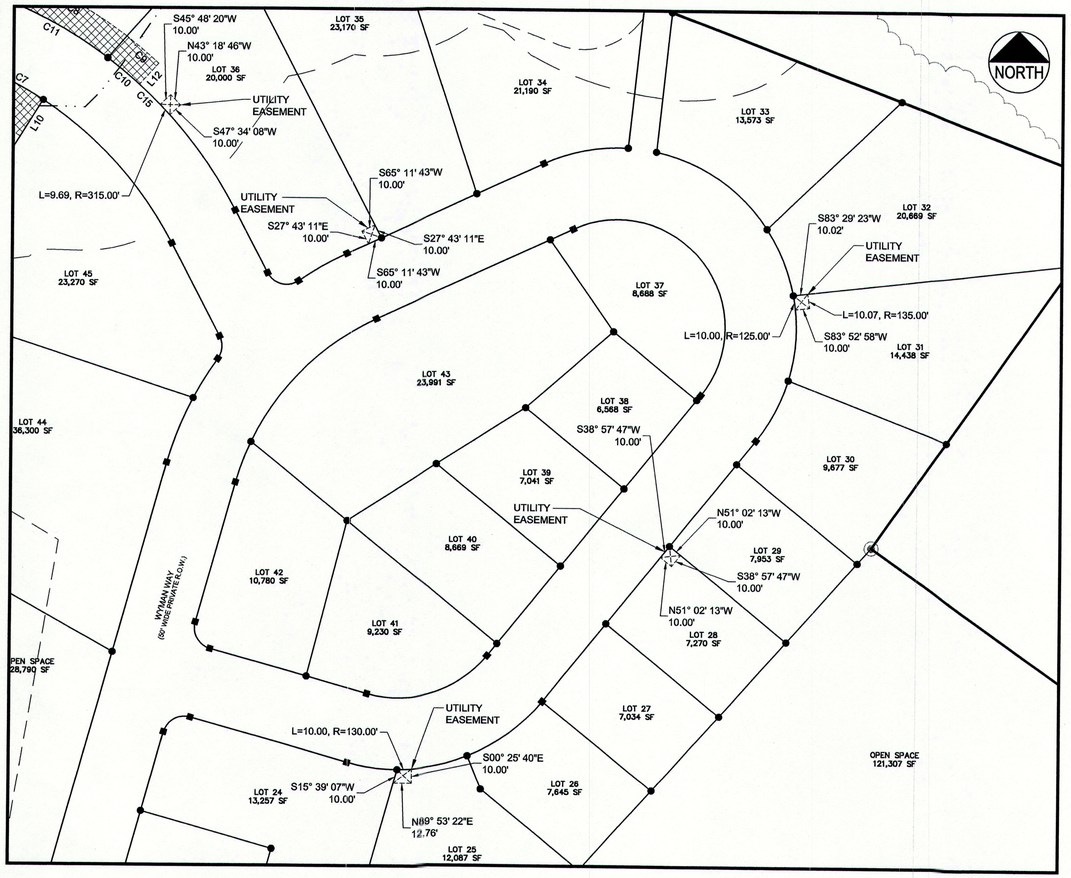
CLIENT - OWNER OF RECORD
VILLAGE GREEN CUMBERLAND, LLC
P.O. BOX 3572, PORTLAND, ME 04106

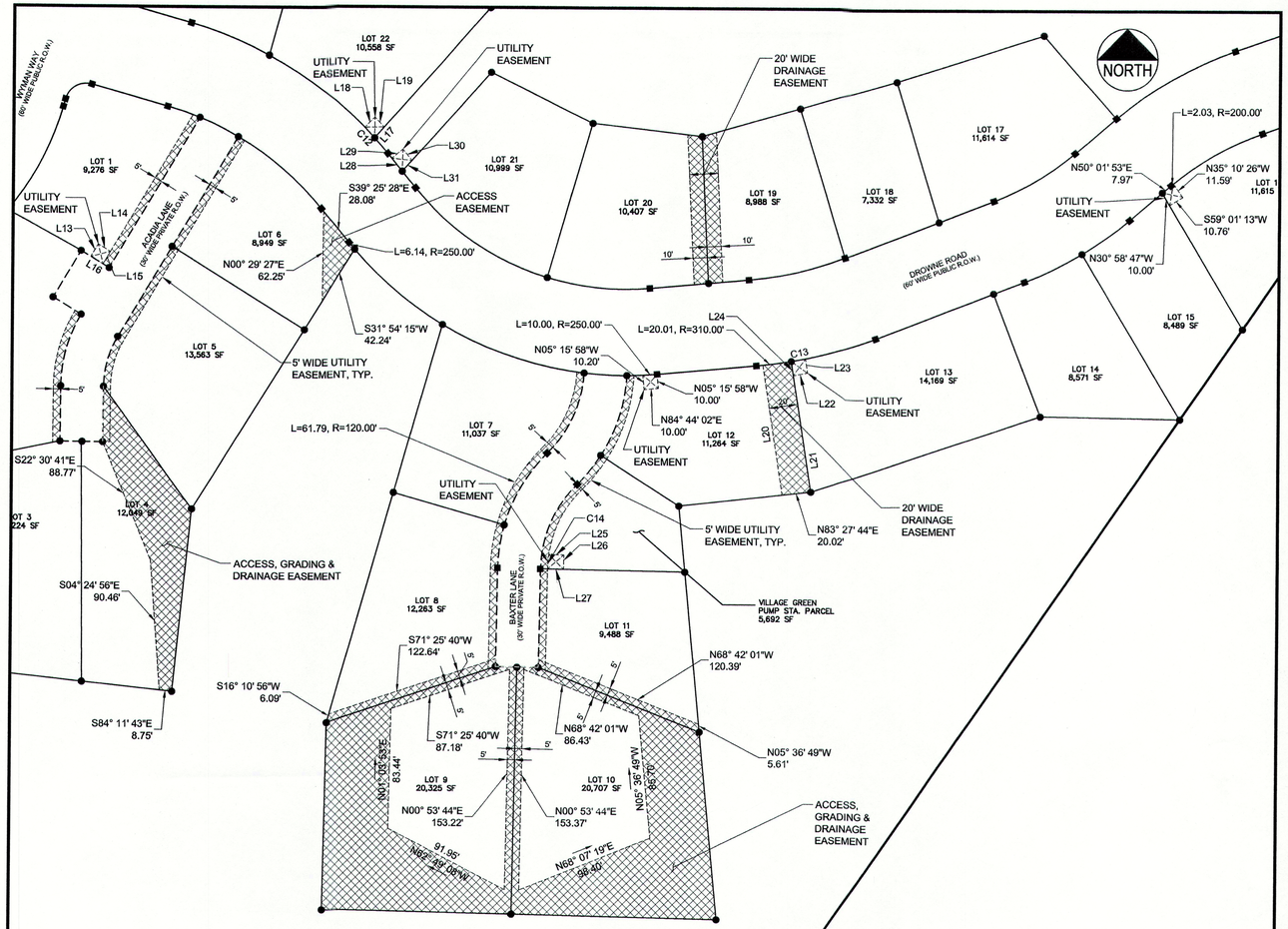
DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	1" = 100'
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-SUBDIVISION PLAN		
SHEET	C-4.0		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-SUBDIVISION PLAN.dwg, C-4.0 SUBDIVISION PLAN, 11/30/2011 11:46:20 AM, cdube







LINE TABLE		
ID	LENGTH	DIRECTION
L1	20.00'	S24° 43' 31"W
L2	20.00'	N10° 03' 32"E
L3	40.00'	N19° 49' 59"E
L4	110.07'	N08° 39' 14"E
L5	109.42'	N08° 39' 14"E
L6	50.68'	N17° 09' 51"E
L7	49.15'	N17° 09' 51"E
L8	15.01'	N71° 16' 10"W
L9	30.00'	N20° 47' 11"E
L10	30.00'	N32° 11' 38"E
L11	20.00'	N16° 36' 27"E
L12	20.00'	S42° 06' 27"W
L13	10.00'	N30° 52' 41"E
L14	10.00'	N59° 07' 19"W
L15	10.00'	N30° 52' 41"E
L16	10.00'	N59° 07' 19"W

LINE TABLE		
ID	LENGTH	DIRECTION
L17	10.00'	N41° 50' 37"E
L18	10.00'	N44° 58' 21"E
L19	9.46'	N43° 13' 41"W
L20	91.52'	S08° 49' 13"E
L21	82.02'	S08° 49' 13"E
L22	10.00'	S79° 15' 57"W
L23	10.00'	S08° 49' 13"E
L24	10.00'	N08° 49' 13"W
L25	10.55'	S89° 06' 16"E
L26	10.00'	S00° 53' 44"W
L27	11.18'	S89° 06' 16"E
L28	11.54'	S39° 25' 28"E
L29	10.00'	S50° 34' 32"W
L30	10.00'	N39° 25' 28"W
L31	10.12'	N41° 50' 37"E

CURVE TABLE			
ID	RADIUS	LENGTH	DELTA
C1	430.00'	25.76'	003° 25' 56"
C2	430.00'	60.04'	007° 59' 59"
C3	450.00'	62.83'	007° 59' 59"
C4	450.00'	26.11'	003° 19' 29"
C5	540.00'	50.00'	005° 18' 18"
C6	235.00'	50.05'	012° 12' 06"
C7	265.00'	56.02'	012° 06' 42"
C8	335.00'	119.90'	020° 30' 26"
C9	335.00'	29.19'	004° 59' 34"
C10	315.00'	28.95'	005° 15' 59"
C11	315.00'	111.24'	020° 14' 01"
C12	275.00'	10.00'	002° 05' 04"
C13	310.00'	10.00'	001° 50' 57"
C14	80.00'	10.03'	007° 10' 51"
C15	315.00'	20.33'	003° 41' 53"

APPROVAL - TOWN OF CUMBERLAND PLANNING BOARD

_____ DATE

_____ CHAIRPERSON

REGISTRY BLOCK

STATE OF MAINE

CUMBERLAND COUNTY REGISTRY OF DEEDS

RECEIVED _____, 20_____

AT _____h _____m _____M. AND RECORDED IN

PLAN BOOK _____PAGE _____ ATTEST

_____REGISTRAR

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)

1 inch = 50 ft.

REV	DATE	DESCRIPTION
3	11.28.11	PHASE 1 CONSTRUCTION SET
2	09.29.11	REVISED UTILITY EASEMENTS IN LOTS 12 AND 36
1	09.13.11	RESUBMITTED TO TOWN

REVISIONS

STATE OF MAINE JOSEPH A LAVERRIERE 7417 LICENSED PROFESSIONAL ENGINEER

P.E. JOSEPH A. LAVERRIERE

LIC. #7417

PROJECT

VILLAGE GREEN CUMBERLAND, MAINE

SHEET TITLE

EASEMENT PLAN

CLIENT - OWNER OF RECORD

VILLAGE GREEN CUMBERLAND, LLC

P.O. BOX 3572, PORTLAND, ME 04104

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	1" = 50'
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-EASEMENT PLAN		
SHEET	C-4.1		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-EASEMENT PLAN.dwg, C-4.1 EASEMENT PLAN, 11/30/2011 11:08:39 AM, cdube

MAIN STREET (ROUTE 9)

AMANDA'S WAY

WYMAN WAY

DROWNE ROAD

GATE

18' WIDE TRAVEL WAY - STA. 57+69.50 TO END

30' WIDE PRIVATE DRIVE RIGHT-OF-WAY

STA. 57+69.50 END 50' WIDE PRIVATE ROAD

50' WIDE NATURAL BUFFER

50' WIDE PRIVATE ROAD RIGHT-OF-WAY

CONNECT TO EXISTING TRAIL SYSTEM

RELOCATE EXISTING SNOWMOBILE CLUB MAINTENANCE BUILDING

INSTALL [6] WITHIN 100' OF TUTTLE ROAD

INTERSECTION DROWNE / OAK THREE WAY ALL STOP TRAFFIC CALMING MEASURE

Ex. Stop Sign

Ex. Public Works Facility

60' WIDE EXPANDED DROWNE ROAD RIGHT-OF-WAY

PEDESTRIAN WALKING TRAIL, TYP.

22' WIDE TRAVEL WAY, TYP.

STA. 17+37.31 WYMAN WAY = STA. 50+00 PRIVATE ROAD

50' WIDE PRIVATE ROAD RIGHT-OF-WAY

PROPOSED DROWNE ROAD RIGHT-OF-WAY EXPANSION AREA ON TM R03 L54 (0.22 ACRES)

STRIPE FOUR PARKING STALLS FOR PUBLIC ACCESS TO WALKING TRAILS

PROPOSED PARCEL OF LAND TO BE CONVEYED FROM VILLAGE GREEN CUMBERLAND LLC TO TOWN OF CUMBERLAND (0.07 ACRES)

LIMIT OF WORK

RETAINING WALL 'A'

RETAINING WALL 'B'

6' WIDE SIDEWALK

STA. 14+99.49 WYMAN WAY = STA. 27+48.99 WYMAN WAY

50' WIDE PRIVATE ROAD RIGHT-OF-WAY

INTERSECTION WYMAN / DROWNE THREE WAY ALL STOP TRAFFIC CALMING MEASURE

STA. 12+85.32 WYMAN WAY = STA. 30+00 DROWNE ROAD

60' WIDE PUBLIC ROAD RIGHT-OF-WAY

PROJECT SIGN

PERMANENT RAISED SPEED TABLE TRAFFIC CALMING MEASURE STA. 7+05

RETAINING WALL 'C'

60' WIDE PUBLIC ROAD RIGHT-OF-WAY

Ex. Salt Storage Shed

EXISTING 50' WIDE DROWNE ROAD RIGHT-OF-WAY

RELOCATED SNOWMOBILE CLUB MAINTENANCE BUILDING

PROPOSED DROWNE ROAD RIGHT-OF-WAY EXPANSION AREA ON TM R03 L51A (0.05 ACRES)

PERMANENT RAISED SPEED TABLE TRAFFIC CALMING MEASURE STA. 40+08

6' WIDE ESPLANADE, TYP.

6' WIDE SIDEWALK, TYP.

CONNECT TO EXISTING TRAIL SYSTEM

RETAINING WALL 'D'

22' WIDE TRAVEL WAY, TYP.

VILLAGE GREEN PUMP STATION

30' WIDE PRIVATE DRIVE RIGHT-OF-WAY

PROJECT BOUNDARY (40.69 ACRES)

POTENTIAL RELOCATION OF SNOWMOBILE TRAIL

CONNECT TO EXISTING TRAIL SYSTEM

TM U10 L1 N/F CIANCHETTE

TM U10 L1A N/F SANCHEZ

TM U10 L1B N/F RUSSELL

TM U10 L4 N/F MORSE

TM U10 L5 N/F KEARINS

TM U10 L6 N/F HOWARD

TM U10 L6A N/F MONTGOMERY

TM U10 L7 N/F RICHARDS

TM U10 L7A N/F WARD

TM U10 L7C N/F LEE

TM U10 L7D N/F FARRIS

TM U10 L7E N/F SIMONDS

TM U10 L7F N/F HARTWELL

TM U10 L8 N/F COPP

TM U10A L13 N/F TOWN OF CUMBERLAND

TM R03 L54 N/F TOWN OF CUMBERLAND

TM R03 L51A N/F TOWN OF CUMBERLAND

REFER TO SHEETS P-1 THROUGH P-7 FOR ADDITIONAL INFORMATION ON ROADWAY GRADING AND UNDERGROUND UTILITY INSTALLATIONS.

SIGN LEGEND:

1	1A	2	3	4	5	6
STOP R1-1 24" x 24"	STOP R1-1 24" x 24" ALL WAY 12" x 6"	SPEED LIMIT 25 R2-1 18" x 24"	24" x 24" AHEAD 12" x 6"	30" x 30" CAUTION RAISED SPEED TABLE AHEAD 15 MPH W13-1P 18" x 18"	30" x 30" DEAD END	NO THRU TRAFFIC 24" x 30"

ALL SIGNAGE & STRIPING SHALL CONFORM TO THE STANDARDS FOR SIZE, HEIGHT, LOCATION, COLOR, INSTALLATION AND REFLECTIVITY SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

NORTH

GRAPHIC SCALE

80 0 40 80 160

(IN FEET)

1 inch = 80 ft.

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE JOSEPH A LAVERRIERE 7417 LICENSED PROFESSIONAL ENGINEER 12-11

P.E. JOSEPH A. LAVERRIERE

LIC. #7417

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

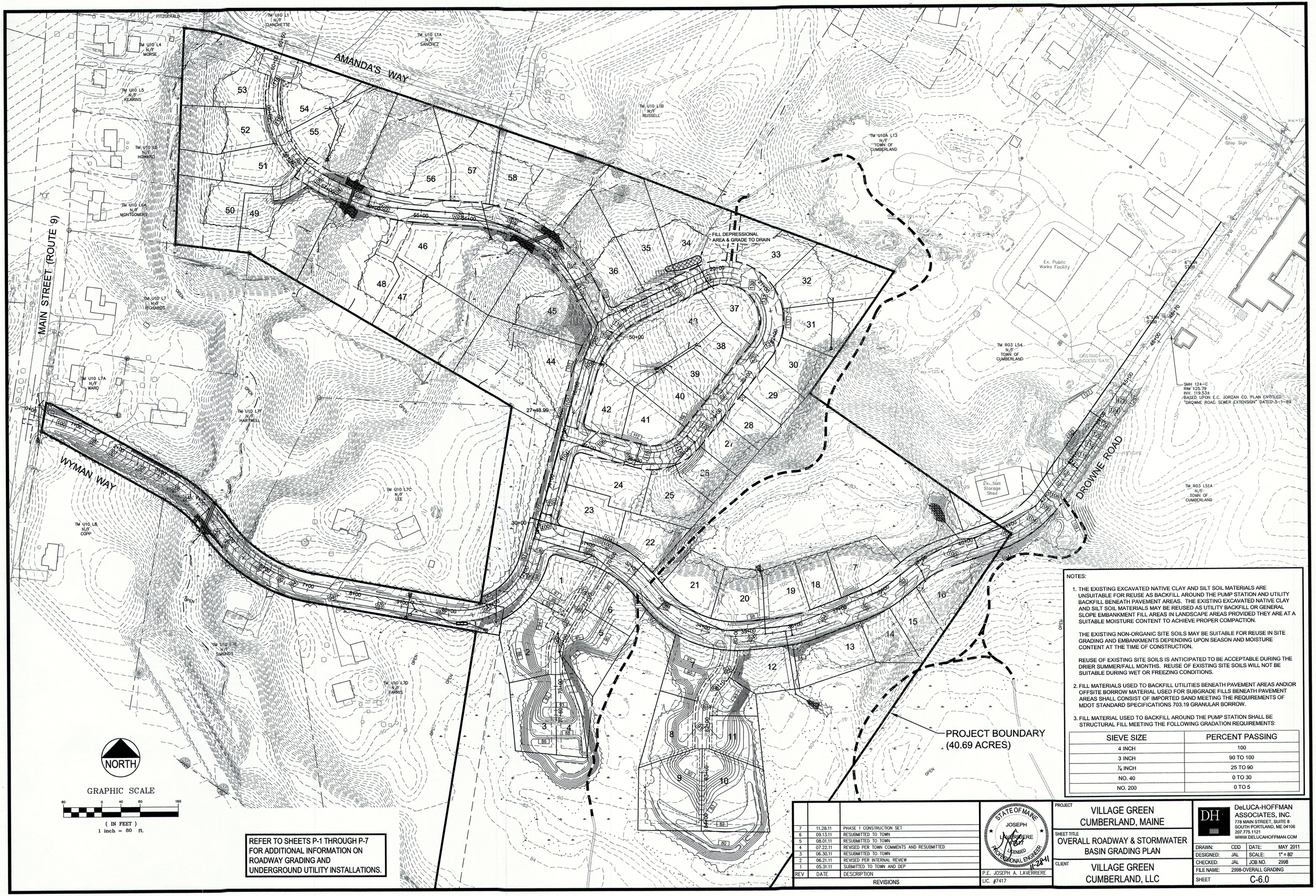
SHEET TITLE: OVERALL LAYOUT PLAN

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	1" = 80'
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-OVERALL LAYOUT		
SHEET	C-5.0		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-OVERALL LAYOUT.dwg, C-5.0 OVERALL LAYOUT PLAN, 11/30/2011 11:54:39 AM, cdube



REFER TO SHEETS P-1 THROUGH P-7 FOR ADDITIONAL INFORMATION ON ROADWAY GRADING AND UNDERGROUND UTILITY INSTALLATIONS.

NOTES:

1. THE EXISTING EXCAVATED NATIVE CLAY AND SILT SOIL MATERIALS ARE UNSUITABLE FOR REUSE AS BACKFILL AROUND THE PUMP STATION AND UTILITY BACKFILL BENEATH PAVEMENT AREAS. THE EXISTING EXCAVATED NATIVE CLAY AND SILT SOIL MATERIALS MAY BE REUSED AS UTILITY BACKFILL OR GENERAL SLOPE EMBANKMENT FILL AREAS IN LANDSCAPE AREAS PROVIDED THEY ARE AT A SUITABLE MOISTURE CONTENT TO ACHIEVE PROPER COMPACTION.

   THE EXISTING NON-ORGANIC SITE SOILS MAY BE SUITABLE FOR REUSE IN SITE GRADING AND EMBANKMENTS DEPENDING UPON SEASON AND MOISTURE CONTENT AT THE TIME OF CONSTRUCTION.

   REUSE OF EXISTING SITE SOILS IS ANTICIPATED TO BE ACCEPTABLE DURING THE DRIER SUMMER/FALL MONTHS. REUSE OF EXISTING SITE SOILS WILL NOT BE SUITABLE DURING WET OR FREEZING CONDITIONS.

2. FILL MATERIALS USED TO BACKFILL UTILITIES BENEATH PAVEMENT AREAS AND/OR OFFSITE BORROW MATERIAL USED FOR SUBGRADE FILLS BENEATH PAVEMENT AREAS SHALL CONSIST OF IMPORTED SAND MEETING THE REQUIREMENTS OF MDOT STANDARD SPECIFICATIONS 703.19 GRANULAR BORROW.

3. FILL MATERIAL USED TO BACKFILL AROUND THE PUMP STATION SHALL BE STRUCTURAL FILL MEETING THE FOLLOWING GRADATION REQUIREMENTS:

SIEVE SIZE	PERCENT PASSING
4 INCH	100
3 INCH	90 TO 100
¼ INCH	25 TO 90
NO. 40	0 TO 30
NO. 200	0 TO 5

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
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4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE — JOSEPH LAVERRIERE — LICENSED PROFESSIONAL ENGINEER — 12841

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

PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

SHEET TITLE
OVERALL ROADWAY & STORMWATER BASIN GRADING PLAN

CLIENT
VILLAGE GREEN
CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	1" = 80'
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-OVERALL GRADING		
SHEET	C-6.0		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-OVERALL GRADING PLAN-ROAD, 11/30/2011 11:56:21 AM, cdube

AMANDA'S WAY

MAIN STREET (ROUTE 9)

WYMAN WAY

DROWNE ROAD

TRANSFORMER FOR LOTS 52 - 55

TRANSFORMER FOR LOTS 49 - 51

TRANSFORMER FOR LOTS 46 - 48, 56 - 58

TRANSFORMER FOR LOTS 34 - 36, 43 - 45

TRANSFORMER FOR LOTS 30 - 33, 37

TRANSFORMER FOR LOTS 27 - 29, 38 - 40

TRANSFORMER FOR LOTS 24 - 26, 41, 42

TRANSFORMER FOR LOTS 21 - 23

TRANSFORMER FOR LOTS 14 - 17

TRANSFORMER FOR LOTS 12, 13, 18 - 20

TRANSFORMER FOR LOTS 7 - 11

TRANSFORMER FOR LOTS 1 - 6

TRANSFORMER FOR PUMP STATION

STA. 55+00 AIR RELEASE VALVE

STA. 21+70 AIR RELEASE VALVE

STA. 0+70.07 AIR RELEASE VALVE

STA. 7+04.81 AIR RELEASE VALVE

15' WIDE UTILITY EASEMENT TO RUSSELL

1" WATER SERVICE, TYP.

6" SEWER SERVICE, TYP.

12" x 8" TAPPING SLEEVE AND VALVE

1½" SEWER FORCE MAIN SERVICE WITH VALVE

1" WATER SERVICE WITH SHUTOFF VALVE

3" PLUG VALVE

CONNECT TO EXISTING 12" WATER MAIN

3" COMMON LOW PRESSURE FORCE MAIN

1" BLOWOFF

VALVE PIT

PUMP STA

VILLAGE GREEN PUMP STATION

PUMP STATION ELECTRICAL CONTROL BLDG. (16' x 16')

UNIT 3

UNIT 4

2 - 45° BENDS

CONNECT 4" FORCE MAIN TO EXISTING GRAVITY SEWER MAIN

EX SMH 124-B

EX SMH 124-C

SMH 124-C
RIM 125.79
INV. 115.93±
BASED UPON E.C. JORDAN CO. PLAN ENTITLED "DROWNE ROAD SEWER EXTENSION" DATED 5-1-69

CONNECT TO EXISTING 8" WATER MAIN IN DROWNE ROAD

8" GATE VALVE

8" STUB FOR FUTURE USE

PROJECT BOUNDARY (40.69 ACRES)

SMH 1 through SMH 34, SMH 9A, SMH 13A

8"SAN

8"W

4"FM

4"SAN

REFER TO SHEETS E-100 AND E-101 FOR DETAILED INFORMATION ON THE UNDERGROUND ELECTRIC, TELEPHONE AND CABLE TELEVISION CONDUIT SYSTEM. THE PRIMARY LOCATION OF THE UNDERGROUND CONDUIT SYSTEM SHALL BE BENEATH THE PEDESTRIAN SIDEWALKS AS SHOWN ON THIS SHEET.

REFER TO SHEETS P-1 THROUGH P-7 FOR ADDITIONAL INFORMATION ON ROADWAY GRADING AND UNDERGROUND UTILITY INSTALLATIONS.

NORTH

GRAPHIC SCALE

80 0 40 80 160

(IN FEET)

1 inch = 80 ft.

REV	DATE	DESCRIPTION
8	11.28.11	PHASE 1 CONSTRUCTION SET
7	09.29.11	REVISED UGE IN VICINITY OF LOTS 12 AND 36
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE
JOSEPH A. LAVERRIERE
7417
LICENSED PROFESSIONAL ENGINEER
11-28-11

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

PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

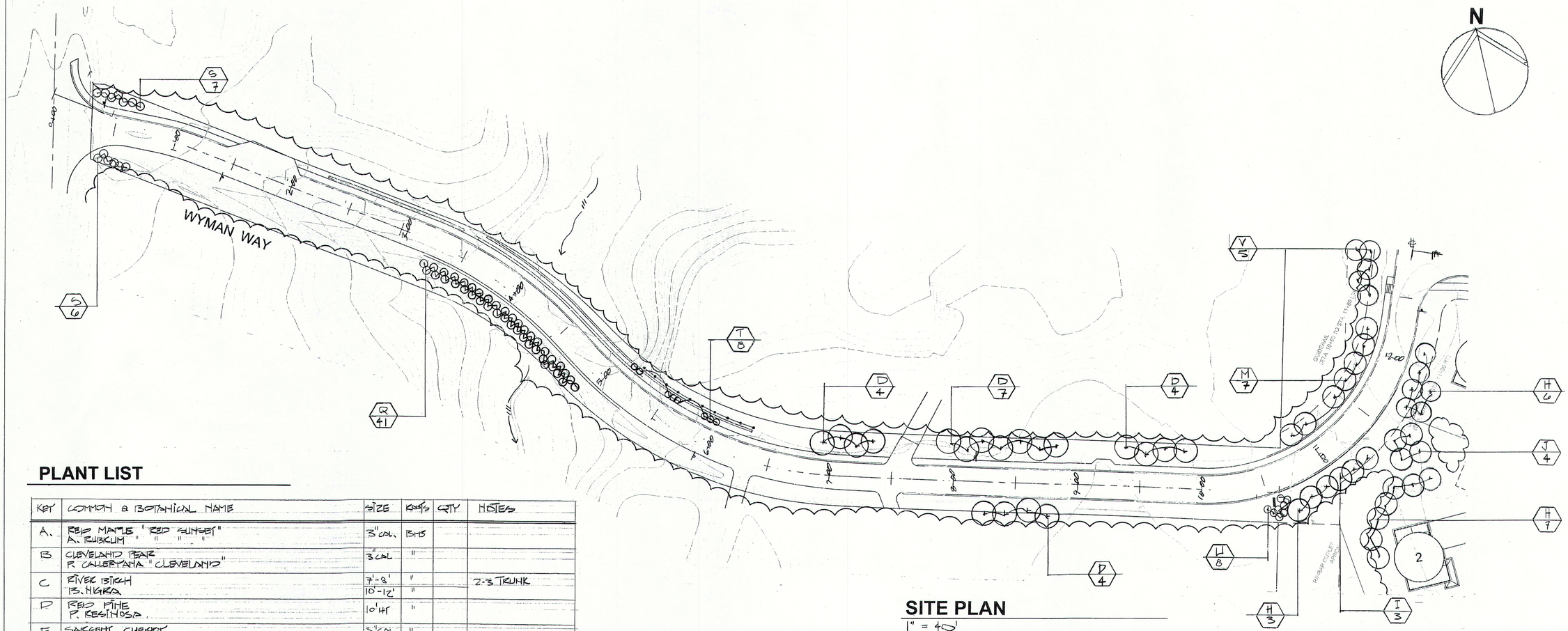
SHEET TITLE
OVERALL UTILITY PLAN

CLIENT
VILLAGE GREEN
CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	1" = 80'
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-OVERALL UTILITY		
SHEET	C-7.0		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-OVERALL UTILITY PLAN, 11/30/2011 11:52:46 AM, cdube



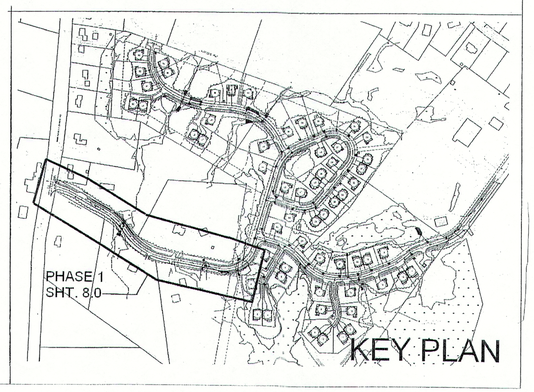
SITE PLAN

1" = 40'

0 40 80 160

PLANT LIST

KEY	COMMON & BOTANICAL NAME	SIZE	ROOTS	QTY	NOTES
A.	RED MAPLE "RED SUNSET" A. RUBRUM " " " "	3" CAL.	B+B		
B	CLEVELAND PEAR P. CALLERYANA "CLEVELAND"	3" CAL	"		
C	RIVER BIRCH B. NIGRA	7'-8' 10'-12'	" "		2-3 TRUNK
D	RED PINE P. RESINOSA	10' HT	"		
E	SARGENT CHERRY P. SARGENTII	5' CAL	"		
F	SHOWBERRY FLOWERING CRABS M. " SHOWBERRY"	2½"-3" CAL.	"		
G	NORWAY SPRUCE P. ABIES	6'-7' 8'-10'	"		
H	COLORADO GREEN SPRUCE P. PUNGENS	7'-8'	"		
I	WHITE SPRUCE P. GLAUCA	6'-7'	"		
J	FIRBERG FIR A. FRASERI		"		
K	SHADBLOW A. x GRANDIFLORA "ROBIN HILL"	2" CAL.	"		2-3 TRUNK
L	NATIVE SHADBUSH A. CANADENSIS	5'-6' CLUMP	"		
M	CANAAN BALSAM FIR A. BALSAMEA VAR. PHANEROLEPIS	6'-7' 5'-6'	" "		
N	BLACKHAW VIBURNUM V. PRUNIFOLIUM	4'-4½'	CONT.		3 CANES
O	COMPACT RED TWIG DOGWOOD C. SERICEA 'TIDYTWIG'	2' HT.	"		
P	CORNELIAN CHERRY DOGWOOD C. MAS	4'-5'	"		3 CANES
Q	BUSH HONEYSUCKLE DIERVILLA LONICERA	2-2½	B+B		
R	CARDINAL RED TWIG DOGWOOD C. SERICEA 'CARDINAL'	3' HT.	CONT		
S	COMMON LILAC S. VULGARIS	4½' HT.	B+B		PURPLE BLOOM.
T	VIRGINIA CREEPER PARTHENOCISSUS QUINQUEFOLIA	—	POT.		2 YR.
U	CHINESE PFITZER JUNIPER J. CHINENSIS PFITZERIANA "GLAUCA"	2½' SPR	B+B		
V	BLACK SPRUCE P. MARIANA	5'-6'	"		



Anthony Muench Landscape Architect
94 Commercial Street Portland Maine 04101 2077616621

OWNER
VILLAGE GREEN CUMBERLAND, LLC

CIVIL ENGINEER
DeLUCA-HOFFMAN ASSOCIATES, INC.

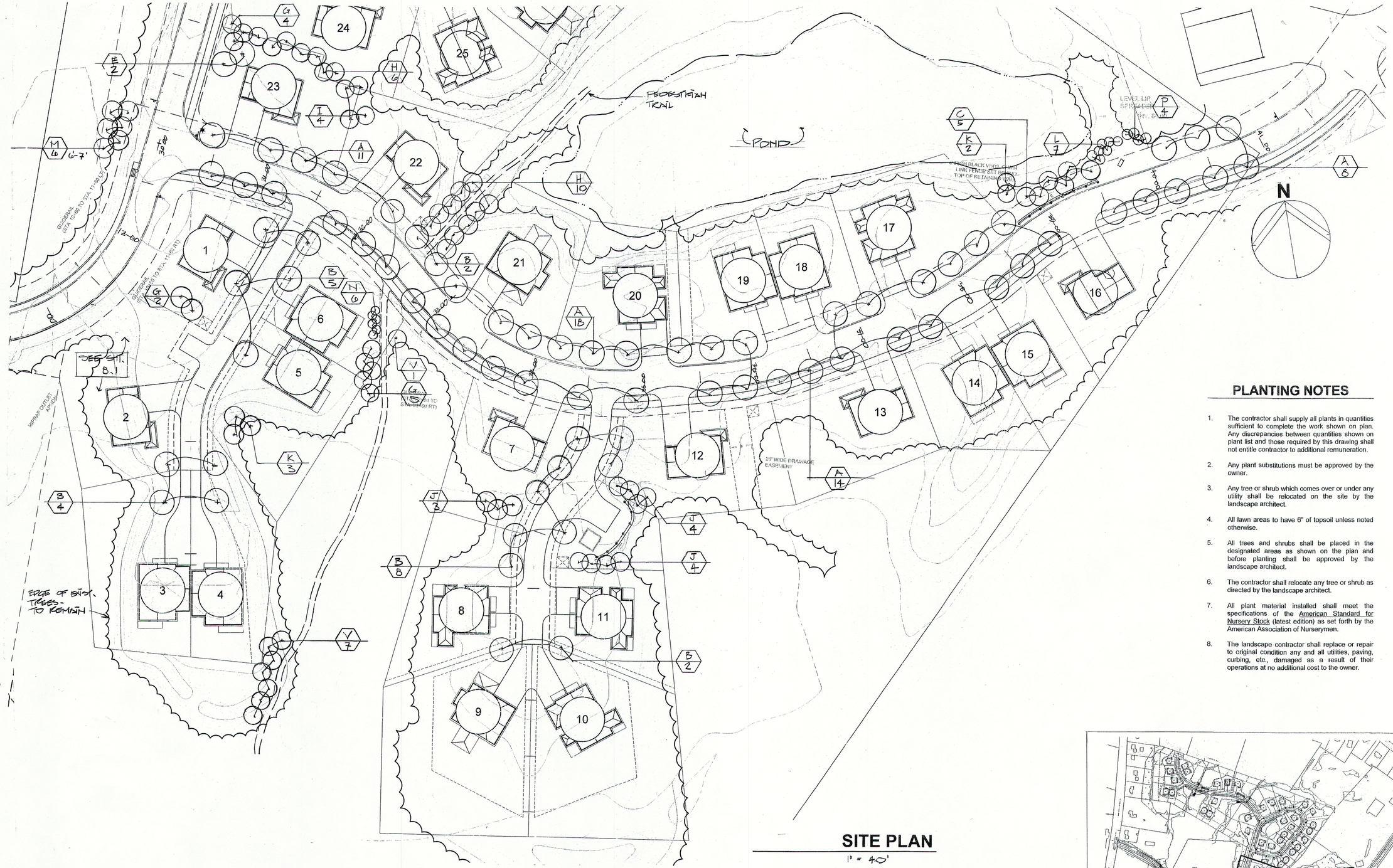
LANDSCAPE ARCHITECT
ANTHONY MUENCH

VILLAGE GREEN
CUMBERLAND, MAINE

REV. 9.6.11
DATE 6.15.11

LANDSCAPE PLAN

8.0



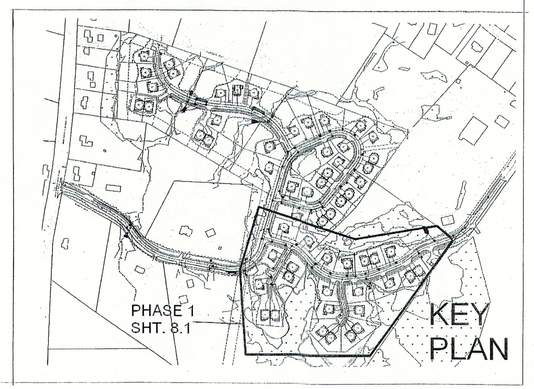
SITE PLAN

1" = 40'

0 40 80 160

PLANTING NOTES

1. The contractor shall supply all plants in quantities sufficient to complete the work shown on plan. Any discrepancies between quantities shown on plant list and those required by this drawing shall not entitle contractor to additional remuneration.
2. Any plant substitutions must be approved by the owner.
3. Any tree or shrub which comes over or under any utility shall be relocated on the site by the landscape architect.
4. All lawn areas to have 6" of topsoil unless noted otherwise.
5. All trees and shrubs shall be placed in the designated areas as shown on the plan and before planting shall be approved by the landscape architect.
6. The contractor shall relocate any tree or shrub as directed by the landscape architect.
7. All plant material installed shall meet the specifications of the American Standard for Nursery Stock (latest edition) as set forth by the American Association of Nurserymen.
8. The landscape contractor shall replace or repair to original condition any and all utilities, paving, curbing, etc., damaged as a result of their operations at no additional cost to the owner.



Anthony Muench Landscape Architect
94 Commercial Street Portland Maine 04101 207.761.6631

OWNER
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CIVIL ENGINEER
DeLUCA-HOFFMAN ASSOCIATES, INC.

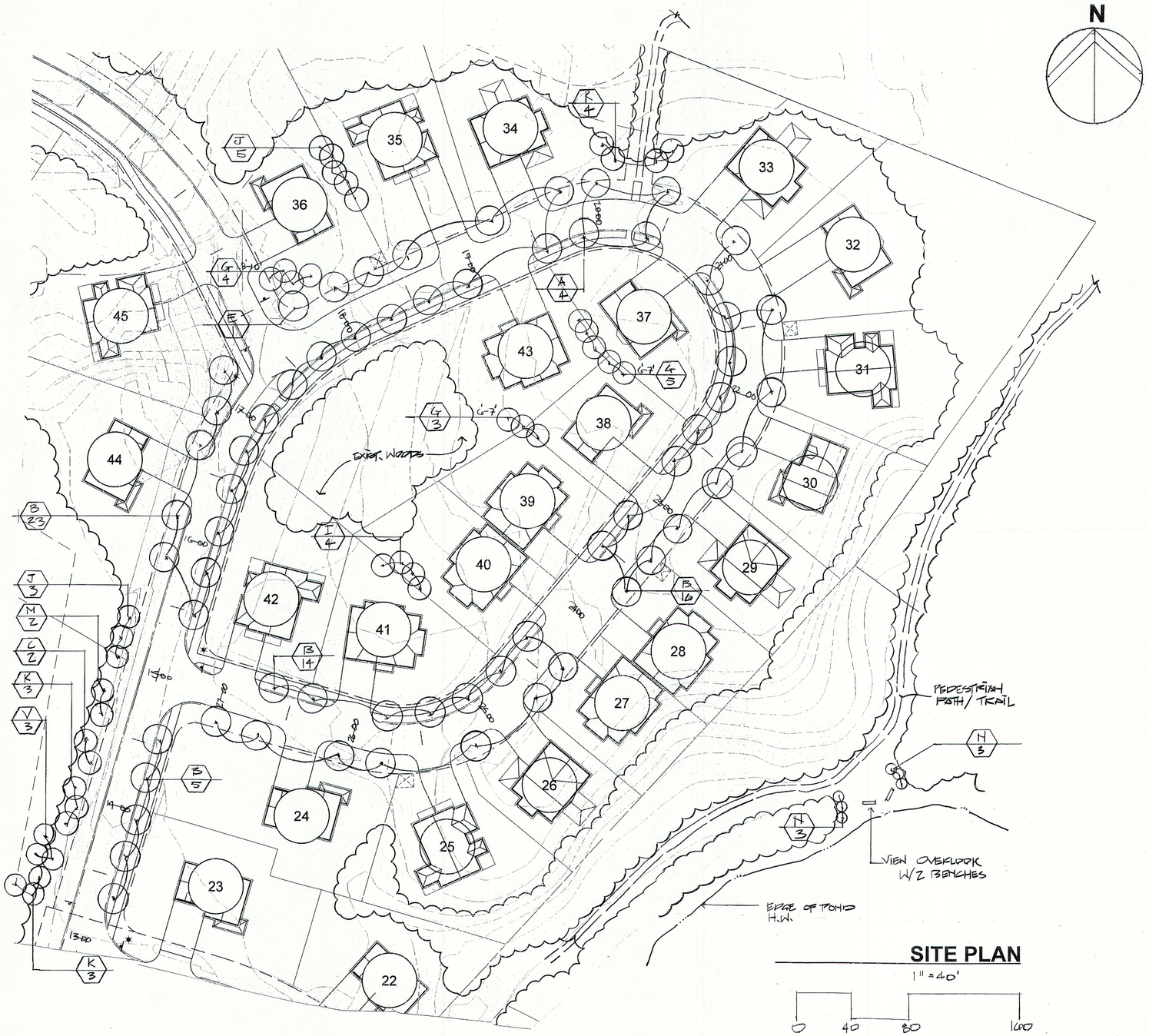
LANDSCAPE ARCHITECT
ANTHONY MUENCH

VILLAGE GREEN
CUMBERLAND, MAINE

REV. 9.6.11
DATE 6.15.11

LANDSCAPE PLAN

8.1



SITE PLAN

1" = 40'

0 40 80 160

NOTES:

1. TREE SHALL BEAR SAME RELATION TO GRADE AS PRIOR TO PLANTING.

2. NEVER CUT A LEADER, THIN BRANCHES & FOLIAGE BY 1/3 RETAINING NORMAL TREE SHAPE.

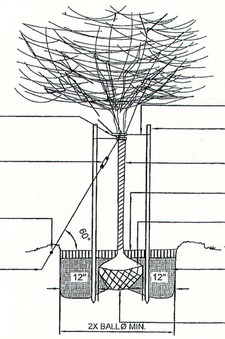
NOTE 'B':

SECURE GUYS W/ RUBBER HOSE & #12 GA. WIRE S/M. TO STAKING NOTE 'A'.

2" GALV. TURNBUCKLE (3 GUYS/TREE)

CLAMP FOR GUY REMOVAL

TO METAL DEADMAN ANCHORS DRIVEN INTO SUBGRADE



NOTE 'A':

FOR ALL TREES UP TO 2 1/2" CAL. USE 2"x2" OR 2 1/2" Ø STAKES W/ 2-#12 GA. GALV. WIRE ENCASED IN 2 PLY REINF. RUBBER HOSE. 1/2" INSIDE DIA.
GUY ALL TREES OVER 2 1/2" DIA. NOTE 'B'). GUY ALL EVERGREEN TREES.

#12 GA. ANNEALED GALV. WIRE IN RUBBER HOSE (SEE NOTE 'A')

WOOD STAKES - DARK WALNUT OIL STAIN - ONE COAT, 3 STAKES/TREE

APPROVED TREE WRAP, LAP ENDS DO NOT STAPLE. WRAP TO HT. OF 2ND BRANCH

3" SHREDDED BARK MULCH (EXCEPT AS NOTED)

REMOVE BURLAP FROM TOP 1/3RD OF BALL

6" TEMP. SAUCER

SOIL MIX NOTES
FOR DECIDUOUS TREES USE 4 PARTS TOPSOIL, 1 PART MANURE.
FOR EVERGREEN TREES USE 4 PARTS TOPSOIL, 1 PART PEAT HUMUS.

4" MOUND FOR DRAINAGE

PLANTING DETAIL - TREE

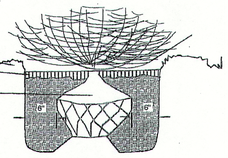
8.2

N.T.S.

NOTE: SHRUBS SHALL BEAR SAME RELATION TO GRADE AS PRIOR TO PLANTING.

3" BARK MULCH W/ 4" SAUCER

REMOVE BURLAP FROM TOP 1/3 BALL



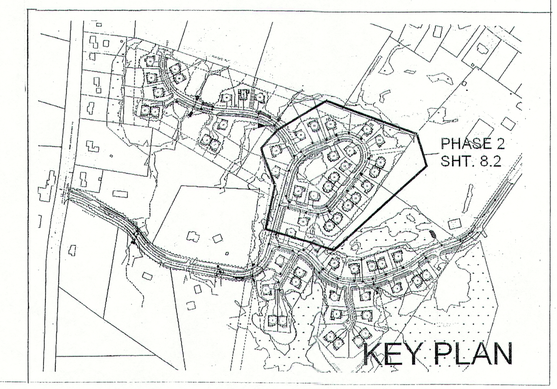
SOIL MIX NOTES:

4 PARTS TOPSOIL, 1 PART HUMUS FOR EVERGREENS
4 PARTS TOPSOIL, 1 PART MANURE FOR DECIDUOUS SHRUBS

PLANTING DETAIL - SHRUB

Z
8.2

N.T.S.



KEY PLAN

Anthony Muench Landscape Architect
84 Commercial Street Portland Maine 04101 207.761.6621

OWNER
VILLAGE GREEN CUMBERLAND, LLC

CIVIL ENGINEER
DeLUCA-HOFFMAN ASSOCIATES, INC.

LANDSCAPE ARCHITECT
ANTHONY MUENCH

VILLAGE GREEN
CUMBERLAND, MAINE

REV. 9.6.11
DATE: 6.15.11

LANDSCAPE PLAN

8.2

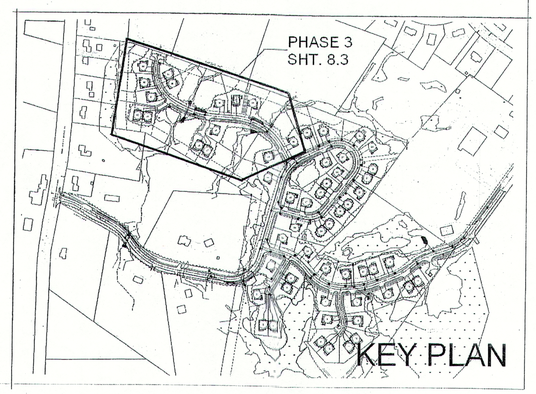
AMANDA'S WAY

N

SITE PLAN

1" = 40'

0 40 80 160



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OWNER
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CIVIL ENGINEER
DeLUCA-HOFFMAN ASSOCIATES, INC.

LANDSCAPE ARCHITECT
ANTHONY MUENCH

VILLAGE GREEN
CUMBERLAND, MAINE

REV. 9.6.11
DATE: 6.15.11

LANDSCAPE PLAN

8.3

AMANDA'S WAY

MAIN STREET (ROUTE 9)

WYMAN WAY

DROWNE ROAD

STABILIZED CONSTRUCTION ENTRANCE

SOD DITCH LINING,TYP.

TURF REINFORCEMENT BLANKET (TYP.)

SILTATION FENCE (TYP.)

STABILIZED CONSTRUCTION ENTRANCE

Ex. Stop Sign

Ex. Public Works Facility

EXISTING ACCESS GATE

Ex. Salt Storage Shed

SMH 124-C
RIM 125.79
INV. 119.53±
BASED UPON E.C. JORDAN CO. PLAN ENTITLED "DROWNE ROAD SEWER EXTENSION" DATED 5-1-85

PROJECT BOUNDARY (40.69 ACRES)

NORTH

GRAPHIC SCALE

80 0 40 80 160

(IN FEET)
1 inch = 80 ft.

LEGEND

SF — SILT FENCE

EROSION CONTROL BLANKET

SOD DITCH LINING

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
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3	06.30.11	RESUBMITTED TO TOWN
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1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE
JOSEPH A. LAVERRIERE
#7417
LICENSED
PROFESSIONAL ENGINEER

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

PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

SHEET TITLE
OVERALL ROADWAY & STORMWATER BASIN EROSION CONTROL PLAN

CLIENT
VILLAGE GREEN
CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	1" = 80'
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-OVERALL EROSION		

SHEET C-9.0

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Erosion/Sedimentation Control Devices

As part of the site development, the contractor will be obligated to implement the following erosion and sediment control devices. These devices shall be installed as indicated on the plans or as described within this report. For further reference on these devices, see the Maine Erosion and Sediment Control BMPS prepared and maintained by the Maine Department of Environmental Protection.

1. Siltation fence shall be installed down slope of any disturbed areas to trap runoff-borne sediments until the site is revegetated. The silt fence shall be installed per the detail provided in the plan set and inspected immediately after each rainfall and at least daily during prolonged rainfall. The Contractor shall make repairs immediately if there are any signs of erosion or sedimentation below the fence line. If such erosion is observed, the contractor shall take proactive action to identify the cause of the erosion and take action to avoid its reoccurrence. Typically this requires stabilization methods be taken. Proper placement of stakes and keying the bottom of the fabric into the ground is critical to the fence's effectiveness. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind the fence, the barrier shall be replaced with a stone check dam and measures taken to avoid the concentration of flows not intended to be directed to the silt fence.

2. Straw or hay mulch including hydroseeding is intended to provide cover for denuded or seeded areas until revegetation is established. Mulching should be occurring several times per week when the site construction activity is high and at sufficient intervals to reduce the period of exposure of bare soils to the time limits set forth in this plan. 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 fabric netting as immediately after mulching as practicable and anchored with staples in accordance with the manufacturer's recommendations. Proposed drainage channels, which are to be revegetated, shall receive Curlex blankets by American Excelsior or North American Green selected for the slope, velocity, and whether the measure is temporary or intended to be in place for a sustained period. Mulch application rates are provided in Attachment A of this section. Hay mulch shall be available on site at all times in order to provide immediate temporary stabilization when necessary. Where necessary a window of crushed stone and or gravel shall be placed at the top of the slope and directed to a temporary stone channel or pipe sluice to convey runoff down slopes. A dissipation device such as stone or a plunge pool should be installed at the base of the slope and sluice outlet to dissipate the energy of the water from the sluice or channel.

3. Water quality wet pond and underdrained filter basins will be constructed to provide sedimentation control for stormwater runoff from the roadway and building areas during and after construction.

4. Riprap slopes, ditch linings, stone check dams, hay bale barriers, and culvert outlet aprons are intended to and protect denuded soil surfaces or dissipate the energy and erosive forces from concentrated flows. Installation details and stone sizes are provided in the construction plan set on the erosion control detail sheets.

5. A construction entrance will be constructed at all access points onto the site to prevent tracking of soil onto adjacent local roads. Primary construction vehicle access will be via Drowne Road.

6. Stone sediment traps or hay bales and a premanufactured SiltSack® will be installed at catch basin inlets to prevent silt from entering the storm drain system. Installation details are provided in the plan set on the erosion control detail sheets.

7. Dirtbags will be required to be on site and available for construction dewatering. The use of Dirtbags will be required in the event that trench dewatering activities can not be discharged through a natural buffer area at least 100' in length or at the signs of any turbid discharge from the site.

8. Loam and seed is intended to serve as the primary permanent revegetative measure for all denuded areas not provided with other erosion control measures, such as riprap. Specific areas as shown on the landscape plan will receive sod. Application rates are provided in Attachment A of this section for temporary and permanent seeding in non-wetland areas.

Temporary Erosion/Sedimentation Control Measures

The following are planned as temporary erosion/sedimentation control measures during construction:

1. A crushed stone-stabilized construction entrance shall be placed at any construction access points into the site. The locations of the construction entrances shown on the drawings should be considered illustrative and adjusted as appropriate and located at any area where tracking of mud and debris onto existing roads, previously paved areas within the project, or streets is a potential. Stone stabilized construction entrances will require the stone to be removed and replaced as it becomes covered or filled with mud and material tracked by vehicles exiting the site.

2. Siltation fence shall be installed along the downgradient side of the proposed improvement areas. The siltation fence will remain in place and properly maintained until the site is acceptably revegetated. Siltation fence is to be used along the contour of significant fill slopes as illustrated on the erosion control plan site drawings. Siltation fence needs to be checked to insure the bottom is properly keyed in and inspected after significant rains. Wood chips from clearing are often used on the construction site in front of the silt fence to provide an extra margin of safety and security for the silt fence. This practice is encouraged, provided the chips are removed or dispersed into forested areas when the fence is removed.

3. Dirtbags shall be installed in accordance with the details in the plan set. The Dirtbags' function on the project is to receive any water pumped from excavations during construction. A Dirtbag shall be installed and prepared for operation prior to any trenching on site. When Dirtbags are observed to be at 50% capacity, they shall be cleaned or replaced. Stone under the Dirtbag shall be removed and replaced concurrently.

4. Temporary stockpiles of common excavation will be protected as follows:

   a) Temporary stockpiles shall not be located within 100 feet of the wetlands and at least 50 feet upgradient of the perimeter silt fence.

   b) Inactive stockpiles shall be stabilized within 5 days by either temporarily seeding the stockpile with a hydroseed method containing an emulsified mulch tackifier or by covering the stockpile with mulch. If necessary, mesh shall be installed to prevent wind from removing the mulch.

1. All denuded areas which have been rough graded shall receive mulch or erosion control mesh fabric within 7 days of initial disturbance of soil. Disturbed areas within 100' of the wetland edge must receive temporary erosion control measures within 48 hours.

2. All soils disturbed between November 1 and April 1 will be covered with mulch within 5 days of disturbance, prior to any predicted storm event of the equivalent of ½" of equivalent rainfall in a 24-hour period, or prior to any work shutdown lasting more than 35 hours (including weekends and holidays). The mulch rate shall be double the normal rate.

   For work that 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 (in areas over 10% grade) anchored with a fabric netting. The time period for applying mulch shall be limited to 5 days for all areas or immediately in advance of a predicted rainfall event.

3. The access roads (after paving) as well as Drowne Road and Main Street shall be swept to control mud and dust as necessary. A street sweeper shall be available from the Contractor on immediate notice or as requested by the Owner, Town or regulatory agency.

4. Stone check dams or hay bale barriers will be installed at any evident concentrated flow discharge points during construction and earthwork operations.

5. Silt fencing with a maximum stake spacing of 6 feet should be used, unless the fence is supported by wire fence reinforcement of minimum 14 gauge and with a maximum mesh spacing of 6 inches, in which case stakes may be spaced a maximum of 10 feet apart. The bottom of the fence should be properly anchored a minimum of 6" per the plan detail and backfilled. Any silt fence identified by the owner or reviewing agencies, as not being properly installed during construction shall be immediately repaired in accordance with the installation details.

6. Storm drain catch basin inlet protection shall be provided through the use of stone sediment barriers or a premanufactured SiltSack® as distributed by A. H. Harris Company, Portland, Maine. Stone sediment barrier installation details are provided in the plan set. The barriers or SiltSacks® shall be inspected after each rainfall and repairs made as necessary, including the removal of sediment. Sediment shall be removed and the barrier or SiltSack® restored to its original dimensions when the sediment has accumulated to ½ the design depth of the barrier. Sediment shall be removed from SiltSacks® as necessary. Inlet protection shall be removed when the tributary drainage area has been stabilized.

7. All slopes over 3:1 shall receive erosion control mesh.

8. Additional siltation fences shall be installed as construction progresses.

9. Areas of visible erosion shall be stabilized with crushed stone.

10. Storm drain catch basin inlet protection shall be provided through the use of stone sediment barriers (paved areas) or hay bales (lawn areas) and a pre-manufactured SiltSack® as distributed by A. H. Harris Company, Portland, Maine. Stone sediment barrier installation details are provided in the plan set. The barriers or SiltSacks® shall be inspected after each rainfall and repairs made as necessary, including the removal of sediment.

Standards for Stabilizing Sites for the Winter

The construction of the project may be a multi-season project. The contractor shall schedule the work to avoid construction of stormwater basins during the winter months. For permitted winter construction, the erosion control measures are substantially more stringent due to the cold temperatures and lack or weather which aids in drying the subgrade soils through evaporation.

The winter construction period is from November 1st through April 15th. If the construction site is not stabilized with pavement, aggregate subbase gravel, 90% mature vegetation cover or riprap before November 15th, then the site needs to be protected with over-winter stabilization. An area considered open is any area not stabilized with pavement, vegetation, mulching, erosion control mix, erosion control mats, riprap or subbase gravel.

During the periods of November 1st through April 15th, the Contractor shall install erosion control berms in lieu of silt fence.

During the winter construction period, a double row of sediment barriers (i.e. silt fence with hay bales or erosion control mix berms) will be placed between any natural resource (i.e. wetland, etc.) and the disturbed area.

In addition, during the winter construction period the amount of exposed area shall be limited to that which can be mulched within one day in the event of a predicted storm and shall not exceed a maximum open area of one-acre.

1. Standard for the timely stabilization of ditches and channels: The contractor shall construct and stabilize all stone-lined ditches and channels on the site by November 15th. The contractor shall construct and stabilize all grass-lined ditches and channels on the site by September 1st. If the contractor fails to stabilize a ditch or channel to be grass-lined by September 1st, then the contractor shall take one of the following actions to stabilize the ditch for late fall and winter.

   i. Install a sod lining in the ditch. The contractor shall line the ditch with properly installed sod by October 1st. Proper installation includes the applicant pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, watering the sod to promote root growth into the disturbed soil, and anchoring the sod with jute or plastic mesh to prevent the sod strips from sloughing during flow conditions.

   ii. Install a stone lining in the ditch. The contractor shall line the ditch with stone riprap by November 1st. The contractor shall hire a registered professional engineer to determine the stone size and lining thickness needed to withstand the anticipated flow velocities and flow depths within the ditch. If necessary, the contractor shall regrade the ditch prior to placing the stone lining so as to prevent the stone lining from reducing the ditch's cross-sectional area.

2. Standard for the timely stabilization of disturbed slopes: The contractor shall construct and stabilize stone-covered slopes by November 15th. The contractor shall seed and mulch all slopes to be vegetated by September 1st. The department will consider any area having a grade greater than 15% (10H: 1V) to be a slope. If the contractor fails to stabilize any slope to be vegetated by September 15th, then the contractor shall take one of the following actions to stabilize the slope for late fall and winter.

   i. Stabilize the soil with temporary vegetation and erosion control mesh. By October 1st the contractor shall seed the disturbed slope with winter rye at a seeding rate of 3 pounds per 1000 square feet and apply erosion control mats over the mulched slope. The contractor shall monitor growth of the rye over the next 45 days. If the rye fails to grow at least three inches or fails to cover at least 75% of the disturbed slope by November 15th, then the contractor shall cover the slope with a layer of wood waste compost as described in item iii of this standard or with stone rip rap as described in item iv of this standard.

Stabilize the slope with sod. The contractor shall stabilize the disturbed slope with properly installed sod by October 1st. Proper installation includes the contractor pinning the sod onto the slope with wire pins, rolling the sod to guarantee contact between the

   ii. sod and underlying soil, and watering the sod to promote root growth into the disturbed soil. The contractor shall not use late-season sod installation to stabilize slopes having a grade greater than 33% (3H: 1V) or having groundwater seeps on the slope face.

   ii. Stabilize the slope with wood waste compost. The contractor shall place a six-inch layer of wood waste compost on the slope by November 15th. Prior to placing the wood waste compost, the contractor shall remove any snow accumulation on the disturbed slope. The contractor shall not use wood waste compost to stabilize slopes having grades greater than 50% (2H: 1V) or having groundwater seeps on the slope face.

   iii. Stabilize the slope with stone riprap. The contractor shall place a layer of stone riprap on the slope by November 15th. The contractor shall hire a registered professional engineer to determine the stone size needed for stability and to design a filter layer for underneath the riprap.

3. Standard for the timely stabilization of disturbed soil: By September 15th, the contractor shall seed and mulch all disturbed soils on areas having a slope less than 15%. If the contractor fails to stabilize these soils by this date, then the contractor shall take one of the following actions to stabilize the soil for late fall and winter.

   i. Stabilize the soil with temporary vegetation. By October 1st, the contractor shall seed the disturbed soil with winter rye at a seeding rate of 3 pounds per 1000 square feet, lightly mulch the seeded soil with hay or straw at 75 pounds per 1000 square feet, and anchor the mulch with plastic netting. The contractor shall monitor the growth of the rye over the next 45 days. If the rye fails to grow at least three inches or fails to cover at least 75% of the disturbed soil before November 1st, then the contractor shall mulch the area for over-winter protection as described in item ii of this standard.

   ii. Stabilize the soil with sod. The contractor shall stabilize the disturbed soil with properly installed sod by October 1st. Proper installation includes the contractor pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil.

   iii. Stabilize the soil with mulch. By November 15th, the contractor shall mulch the disturbed soil by spreading hay or straw at a rate of at least 150 pounds per 1000 square feet on the area so that no soil is visible through the mulch. Prior to applying the mulch, the contractor shall remove any snow accumulation on the disturbed area. Immediately after applying the mulch, the contractor shall anchor the mulch with plastic netting to prevent wind from moving the mulch off the disturbed soil.

4. Standard for timely stabilization of Soil Stockpiles: Stockpiles of soil or subsoil will be mulched for over winter protection with hay or straw at twice the normal application rate or with a four-inch thick layer of erosion control mix. This will be completed within 24-hours of stockpiling or re-established prior to any predicted rainfall or snowfall event. Any soil stockpile will not be placed (even covered with mulch) within 100 feet from a natural resource (i.e. wetland, etc.).

Special Measures for Summer Construction

The summer period is generally optimum for construction in Maine but it is also the period where intense short duration storms are most common making denuded areas very susceptible to erosion, where dust control needs to be the most stringent, and where the potential to establish vegetation is often restricted by moisture deficit. During these periods the contractor must:

1. Implement a program to apply dust control measures on a daily basis except those days where the precipitation exceeds 0.25 inches;
2. Spray the mulch after anchoring with water to dampen the soil and encourage early growth. Temporary seed may be required until the late summer seeding season.
3. Mulch, cover, and moisten stockpiles of fine-grained materials that are susceptible to erosion.
4. Take additional steps needed to control fugitive dust emissions to minimize reductions in visibility and the airborne disbursement of fine-grained soils.

These measures may also be required in the spring and fall during the drier periods of these seasons.

Sedimentation Sumps

The use of shallow sediment sumps on the downgradient side of erodible stockpiles and areas where denuded conditions will be prolonged is encouraged. The stormwater filter basins may be used as temporary sediment sump, if the filter and underdrain are not installed until the up-gradient area is stabilized or unless a sacrificial filter fabric is placed above the filter to protect the area until the site has been stabilized.

Permanent Erosion Control Measures

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

1. The drainage conveyance systems have been designed to intercept and convey the 25-year storm. In the case of open channels or swales, this includes the design of measures to resist scour of the channel.

2. All storm drain pipes shall have riprap aprons at their outlet to protect the outlet and receiving channel of the culverts from scour and deterioration. Installation details are provided in the plan set. The aprons shall be installed and stabilized prior to directing runoff to the tributary pipe or culvert.

3. All areas disturbed during construction, but not subject to other restoration (paving, riprap, etc.) will be loamed, limed, fertilized, mulched, and seeded. Fabric netting, anchored with staples, shall be placed over the mulch in areas where the finish grade slope is greater than 10 percent. Native topsoil shall be stockpiled and temporarily stabilized with seed and mulch and reused for final restoration when it is of sufficient quality.

4. Catch basins shall be provided with sediment sumps for all outlet pipes that are 12" in diameter or greater. Catch basins have been designed with an under drain connection to allow the subbase gravel to drain and reduce frost heave and movement at the basin.

5. Permanent stormwater retention ponds with underdrain filters will be installed. These shallow underdrain filters are designed to capture approximately the one-year storm event and release over a 24-30 hour period.

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 exercise extreme caution not to overexpose the site by limiting the disturbed area and shall stabilize any steep slopes within 24 hours if final slope grading and stabilization will not be completed within 7 days. Any final slopes shall have the specified erosion control measures installed within 7 days of final stabilization.

1. Install crushed stone-stabilized construction entrance as shown on the Erosion and Sedimentation Control Plan.
2. Mark the grading and clearing limits and initiate clearing that will permit the contractor to access the site and install silt fence.
3. Install siltation fence where shown on the contract drawings. During periods of November 1st through April 15th, the Contractor shall install erosion control mix berms in lieu of silt fence.
4. Establish and prepare Dirtbag area.
5. Construct the modifications to the existing pond to create a stabilized outlet as well as construction of the two underdrained soil filter basins.
6. Cover the water quality filter with a protective drainage filter fabric that can be removed after turf establishment.
7. Construct diversion and drainage channels to direct flow to the stormwater facilities from the lot development and roadway areas.
8. Prepare area to receive excavated material recognizing the need to limit the denuded area of the site.
9. Construct the access roads to subgrade and restore the slopes.
10. Install stone and hay bale check dams at any concentrated flow discharge points.
11. Install storm drain and other utility work. Install inlet and outlet protection immediately after the installation of any culverts. Pump any accumulated water within the trenches to a Dirtbag.
12. Place gravels in the roadways as soon as subgrade is prepared to minimize the period that the unprotected subgrade is exposed and vulnerable to erosion from runoff events.
13. Raise catch basins to grade and install inlet protection devices including the underdrain at each catch basin, the SiltSack® inside the basin and the external hay bales or stone filter.
14. Install binder pavement.
15. Loam, lime, fertilize, seed and mulch all disturbed and denuded areas.
16. Remove all accumulated sediment from silt barriers.
17. Review stability of the site. Removal of erosion control measures shall be performed within 30 days of establishing permanent stabilization. Permanent stabilization in grassed areas is established with 90% catch of grass with no evidence of rilling or erosion.

This sequence is applicable to both the initial and subsequent phases of the project.

Soil will be considered disturbed if it does not have an established stand of vegetation covering at least 90% of the soil surface or has not been mulched with hay applied at a rate of 230-lb. /1000 sq. ft.

It is anticipated that site work may be suspended prior to winter. If so, the General Contractor shall schedule a meeting with the MeDEP, Owner, and Owner's representatives to review the site for conformance with the plan. This meeting shall be scheduled at least 10 days prior to winter shutdown. The Owner may elect to provide the Contractor with a punch list for measures to be complete before the interim shutdown. The Owner's punch list shall not obviate the Contractor's responsibility for compliance with the erosion control requirements of the project or permits.

Individual Lot Development

The scheduling of individual lot development is anticipated to commence as soon as the access is available for lot development. Each individual lot development will be required to establish a site-specific erosion control plan to be submitted to the Town of Cumberland as part of the building permit application. The individual lot development plans shall provide the following implementation schedule:

1. Install crushed stone stabilized construction entrance and siltation fence.

2. Clear and grub areas within lot work area. Strip lot work area of loam material and stockpile.

3. During grubbing operations, install stone check dams at any evident concentrated flows.

4. Begin general earthwork operations to establish site to subgrade elevations, including erosion control measures (i.e., riprap aprons, etc.). Begin building foundation and installation of underground utility services.

5. Install base and subbase gravels and pavement.

6. Loam, lime, fertilize, seed and mulch disturbed areas.

7. Remove accumulated sediment from ahead of any silt barriers (as necessary).

8. Once the site is stable and a 75% catch of vegetation has been obtained, remove all temporary erosion control measures.

9. Touch up loam and seed.

Further reference is made to Section I-4 "House Lot Development" of the Maine Erosion and Sediment Control BMP manual prepared by the MeDEP, including sample lot development plans, which is contained on Sheet C-9.3 of the plan set.

Provisions for Maintenance of the Erosion/Sedimentation Control Features

The construction of the access road and utility infrastructure improvements to serve the development will be contracted by Village Green Cumberland, LLC. Individual site development work will be contracted separately by either Village Green Cumberland, LLC or each lot owner. The project is subject to the requirement of a MeDEP Site Location of Development Permit, MeDEP Natural Resources permits, federal 404 wetland permits, and a MeDEP General Permit for Stormwater Pollution Prevention. This project requires the Contractor to prepare a list and designate by name, address and telephone number all individuals who will be responsible for implementation, inspection and maintenance of all erosion control measures identified within this section and as contained in the Erosion and Sedimentation Control Plan of the contract drawings. Specific responsibilities of the inspector(s) will include:

1. Execution of the Contractor/Subcontractor Certification contained in Attachment C by any and all parties responsible for erosion control measures on the site as required by the forms.
2. Assuring and certifying the Owner's construction sequence and all subcontractors are in conformance with the specified schedule of this section. A weekly certification stating compliance, any deviations, and corrective measures necessary to comply with the erosion control requirements of this section shall be prepared and signed by the inspector(s). In the event that the site work is subcontracted, this certification shall be signed by both the General and Site Work contractors.
3. In addition to the weekly certifications, the inspector(s) shall maintain written reports recording construction activities on site which include:
   - Dates when major grading activities occur in a particular areas.
   - Dates when major construction activities cease in a particular area, either temporarily or permanently.
   - Dates when an area is stabilized.
4. Inspection of this project work site on a weekly basis and after each significant rainfall event (0.5 inches or more within any consecutive 24-hour period) during construction until permanent erosion control measures have been properly installed and the site has been stabilized. Inspection of the project work site shall include:
   - Identification of proper erosion control measure installation in accordance with the erosion control detail sheet or as specified in this section.
   - Determine whether each erosion control measure is properly operating. If not, identify damage to the control device and determine remedial measures.
   - Identify areas that appear vulnerable to erosion and determine additional erosion control measures, which should be used to improve conditions.
   - Inspect areas of recent seeding to determine percent catch of grass. A minimum catch of 75 percent is required prior to removal of erosion control measures.

   Accumulated silt/sediment should be removed when the depth of sediment reaches 50 percent of the barrier height. Accumulated silt/sediment should be removed from behind silt fencing when the depth of the sediment reaches 6 inches.

   SiltSacks® should be removed and replaced at least every three months and at any time where the weekly inspection reveals that siltation has significantly retarded the rate of flow through the SiltSack®.
6. If inspection of the site indicates a change should be made to the erosion control plan, either to improve effectiveness or correct a site-specific deficiency, the inspector shall immediately implement the corrective measure and notify the owner of the change.

   Once construction has been completed, long-term maintenance of the detention pond and catch basins will be the responsibility of the applicant. The catch basin sumps shall be inspected in April and October of each year. Sediment shall be removed when the depth of sediment reaches one-half the depth of the sump.

   All certifications, inspection forms, and written reports prepared by the inspector(s) shall be filed with the Owner, and the Permit File contained on the project site. All written certifications, inspection forms, and written reports must be filed within one (1) week of the inspection date.

The Contractor has sole responsibility for complying with the erosion/sediment control report and shall be responsible for any monetary penalties resulting from failure to comply with these standards .

Preconstruction Conference

Prior to any construction at the site, representatives of the Contractor, MeDEP and Town officials, and the site design engineer shall arrange for and meet with the Owner to discuss the scheduling of the site construction, the designation of the responsible parties for implementing the plan. This meeting shall be scheduled by the Contractor with reasonable advance notice for all attendees. Prior to the meeting the Contractor shall prepare a detailed schedule and a marked-up site plan indicating areas and components of the work and key dates showing date of disturbance and completion of the work. If bid through a general contractor, the general contractor's superintendent shall provide a written acknowledgement that the erosion control plan has definitive dates for implementation that may supersede the building schedule. The contractor shall conduct a meeting with employees and sub-contractors to review the erosion control plan, the construction techniques which will be employed to implement the plan, and provide a list of attendees and items discussed at the meeting to the Owner. Three copies of the schedule, the contractor's meeting minutes, and marked-up site plan shall be provided to the Owner at the preconstruction meeting.

SEEDING PLAN: LAWN OR LANDSCAPE TURF

Project Village Green

Site Location Cumberland, Maine

X Permanent Seeding ____ Temporary Seeding

1. Area to be seeded: TBD acre, OR ____ 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 115 #/M Sq. Ft.
4. Fertilize with ____ pounds of - - N-P-K/ac. OR
   20 pounds of organic 10 - 20 - 20 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:
   35% Perennial Rye
   25% Kentucky Bluegrass
   40% Penn Lawn Tall Fescue

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	115	#/1000 sq. ft.
9. TOTAL FERTILIZER	20	#/1000 sq. ft.
10. TOTAL SEED	8.0	#/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 October 15 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.
- Fertilizer requirements shall be subject to actual test results of the topsoil used for the project. The Contractor shall be responsible for providing topsoil test results for pH and recommended fertilizer application rates to the Owner. pH should be between 6.0 and 8.0.
- Seed mixture shall be fresh, clean, new crop seed. Seed may be mixed by an appropriate method on the site or may be mixed by the dealer. If the seed is mixed on the site, each variety shall be delivered in the original containers bearing the dealer's guaranteed analysis. If seed is mixed by the dealer, the Seeding Contractor shall furnish to the Owner the dealer's guaranteed statement of the composition of the mixture and the percentage of purity and germination of each variety.
- Seed shall be purchased from a recognized distributor and shall test to a minimum percentage of 95% for purity and 85% for germination.
- All loam shall have compost or peat admixtures to raise the organic content to 8%.

SEEDING PLAN: EROSION CONTROL MIX

Project Village Green

Site Location Cumberland, Maine

X Permanent Seeding ____ Temporary Seeding

1. Area to be seeded: TBD acres, OR ____ 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 115#/M Sq. Ft.
4. Fertilize with ____ pounds of - - N-P-K/ac. OR
   20 pounds of 10 - 20 - 20 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:
   New England Erosion Control Seed Mix as manufactured by *"New England Wetland Plants, Inc. - Amherst, MA" consisting of the following species:*

   Creeping Red Fescue, Annual Rye-grass, Indian Grass, Timothy, White Clover, Red Top, Little Bluestem

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 230 pounds per M. Sq. Ft.

	Amount	Unit #, Tons, Etc.
8. TOTAL LIME	115	#/1000 sq. ft.
9. TOTAL FERTILIZER	20	#/1000 sq. ft.
10. TOTAL SEED	1	#/1000 sq. ft.
11. TOTAL MULCH	230	#/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 October 15 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.
- Fertilizer requirements shall be subject to actual test results of the topsoil used for the project. The Contractor shall be responsible for providing topsoil test results for pH and recommended fertilizer application rates to the Owner. pH should be between 6.0 and 8.0.
- Seed mixture shall be fresh, clean, new crop seed. Seed may be mixed by an appropriate method on the site or may be mixed by the dealer. If the seed is mixed on the site, each variety shall be delivered in the original containers bearing the dealer's guaranteed analysis. If seed is mixed by the dealer, the Seeding Contractor shall furnish to the Owner the dealer's guaranteed statement of the composition of the mixture and the percentage of purity and germination of each variety.
- Seed shall be purchased from a recognized distributor and shall test to a minimum percentage of 95% for purity and 85% for germination.
- All loam shall have compost or peat admixtures to raise the organic content to 8%.

SEEDING PLAN: WETLAND OR AREAS WITHIN 1 FOOT OF NORMAL WET AREAS

Project Village Green

Site Location Cumberland, Maine

X Permanent Seeding ____ Temporary Seeding

1. Area to be seeded: TBD acres, OR ____ 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 115 #/M Sq. Ft.
4. Fertilize with ____ pounds of - - N-P-K/ac. OR ____ pounds of ____ 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:
   New England Wet Mix as manufactured by *"New England Wetland Plants, Inc. - Amherst, MA" consisting of the following species:*

   Fox Sedge, Bearded Sedge, Lurid Sedge, Soft Rush, Grass-Leaved Goldenrod, Boneset, Hop Sedge, Blue Vervain, Nodding Sedge, Green Bulrush, Sensitive Fern, Blue Flag Iris, Woolgrass, Spotted Joe, Pye Weed, Swamp Milkweed, Monkey Flower, Soft-Stem Bulrush, Hard-Stem Bulrush, Nodding Bur Marigold, Flat-Top Aster

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 180 pounds per M. Sq. Ft.

	Amount	Unit #, Tons, Etc.
8. TOTAL LIME	115	#/1000 sq. ft.
9. TOTAL FERTILIZER	20	#/1000 sq. ft.
10. TOTAL SEED	4	#/1000 sq. ft.
11. TOTAL MULCH	180	#/1000 sq. ft.
12. TOTAL other materials, seeds, etc.		

13. REMARKS

- The above seed mix is required in all temporarily disturbed wetland areas and bottom surface of water quality filtration areas and perimeter ring around stormwater management ponds.
- Spring seeding is recommended; however late summer (prior to September 1) seeding may be made at an increased rate.
- Fertilizer requirements shall be subject to actual test results of the topsoil used for the project. The Contractor shall be responsible for providing topsoil test results for pH and recommended fertilizer application rates to the Owner.
- Seed mixture shall be fresh, clean, new crop seed. Seed may be mixed by an appropriate method on the site or may be mixed by the dealer. If the seed is mixed on the site, each variety shall be delivered in the original containers bearing the dealer's guaranteed analysis. If seed is mixed by the dealer, the Seeding Contractor shall furnish to the Owner the dealer's guaranteed statement of the composition of the mixture and the percentage of purity and germination of each variety.
- Seed shall be purchased from a recognized distributor and shall test to a minimum percentage of 95% for purity and 85% for germination.

TEMPORARY SEEDING PLAN

Project Village Green

Site Location Cumberland, Maine

Permanent Seeding X Temporary Seeding

1. Area to be seeded: TBD acres, OR 115#/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 ____ #/M Sq. Ft.
4. Fertilize with ____ pounds of - - N-P-K/ac. OR
   20 pounds of 10 - 20 - 20 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:
   50% Perennial Ryegrass
   50% Annual Ryegrass

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 180 pounds per M. Sq. Ft.

	Amount	Unit #, Tons, Etc.
8. TOTAL LIME	115	#/1000 sq. ft.
9. TOTAL FERTILIZER	20	#/1000 sq. ft.
10. TOTAL SEED	4	#/1000 sq. ft.
11. TOTAL MULCH	180	#/1000 sq. ft.
12. TOTAL other materials, seeds, etc.		

13. REMARKS

- The above seed mix is required in all disturbed areas that cannot be permanently seeded within allowable timeframe.

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE JOSEPH A. LAVERRIERE LICENSED PROFESSIONAL ENGINEER 12-28-11

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

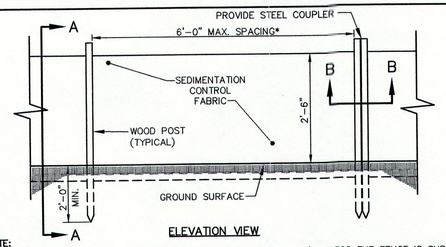
SHEET TITLE: EROSION & SEDIMENT CONTROL NARRATIVE

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

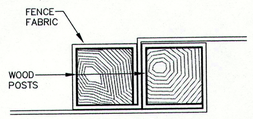
DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	—
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-DET		
SHEET	C-9.2		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-DET.dwg, C-9.2 EROSION NARRATIVE, 11/30/2011 10:46:32 AM, cdube



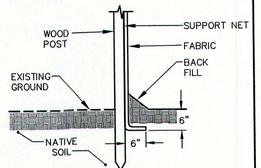
ELEVATION VIEW

*NOTE:
THE SILT FENCE SHOULD HAVE A MAXIMUM STAKING DISTANCE OF 6' UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT A MAXIMUM 14 GAUGE AND WITH A MINIMUM MESH SPACING OF 6".



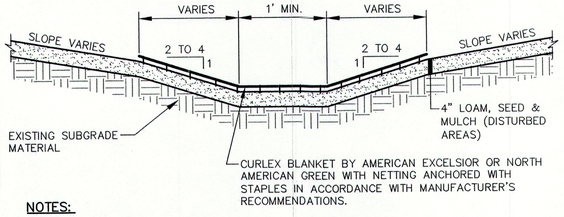
SECTION B–B

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



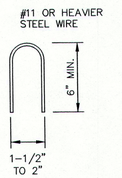
SECTION A–A

(A) SILTATION FENCE DETAIL
N.T.S.



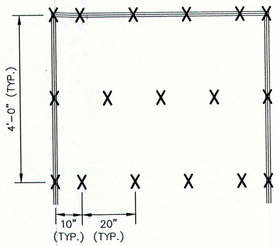
NOTES:

1. ALL MATERIALS SHALL CONFORM TO THE CURRENT EDITION OF THE MDOT STANDARD SPECIFICATIONS.
2. THIS DETAIL SHALL BE USED FOR SWALES WITH LONGITUDINAL SLOPES UP TO 6%.
3. FOR SWALES WITH LONGITUDINAL SLOPES 6% TO 8%, SOD SHALL BE PLACED IN LIEU OF EROSION CONTROL BLANKET. SEE EROSION CONTROL PLAN, SHEET C–9.0, FOR THE LOCATIONS OF DITCH LINING TREATMENTS.



NOTE:
STAPLE SPACING AT 20" C/C ALONG MAT EXCEPT AT 6" OVERLAP WHERE A DOUBLE ROW OF STAPLES 4" APART IS TO BE USED. USE STAPLE PATTERN 'E'.

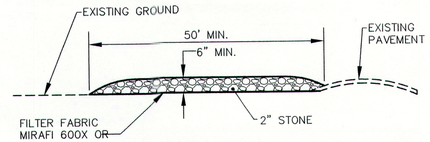
WIRE STAPLE DETAIL



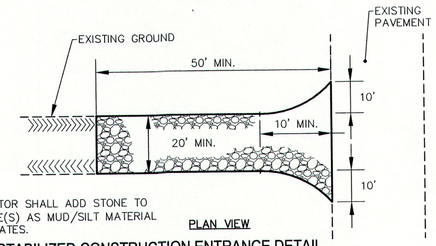
NOTE:
3.8 STAPLES/SQ. YD. USING 6", 11 GA. WIRE "U" STAPLES. 8" STAPLES AND LONGER MAY BE USED FOR LOOSE SOILS. 9 GA. STAPLES OR HEAVIER MAY BE NECESSARY IN HARD OR ROCKY SOILS.

STAPLE PATTERN 'E' DETAIL

(D) VEGETATIVE SWALE DETAIL
N.T.S.



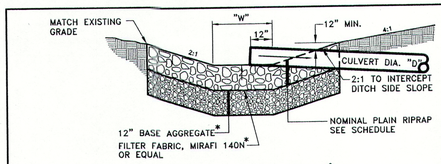
SECTION VIEW



NOTE:
CONTRACTOR SHALL ADD STONE TO ENTRANCE(S) AS MUD/SILT MATERIAL ACCUMULATES.

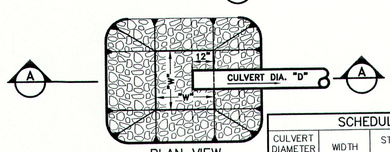
PLAN VIEW

(F) STABILIZED CONSTRUCTION ENTRANCE DETAIL
N.T.S.



*DELETE ON ROCK SUBGRADE

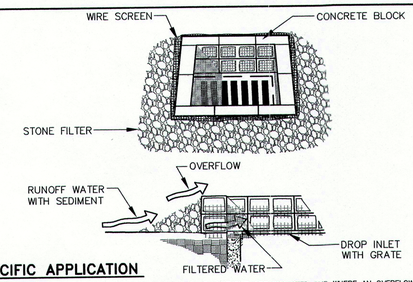
SECTION VIEW



PLAN VIEW

SCHEDULE			
CULVERT DIAMETER (D)	WIDTH (W)	STONE d_{50}	RIPRAP THICKNESS
15"	4'	6"	14"
24"	6'	9"	21"
30"	8'	12"	27"
36"	8'	12"	27"
TWIN 48"	20'	12"	27"

(I) RIPRAP INLET APRON DETAIL
N.T.S.



SPECIFIC APPLICATION

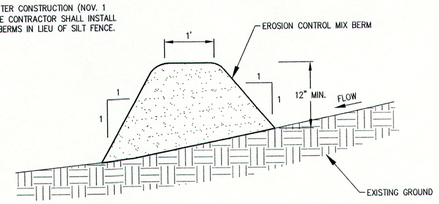
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

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 INCHES 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.
5. ALL INLETS ALSO REQUIRE SILT SACKS AS DETAILED ON THIS SHEET.

(B) STONE SEDIMENT BARRIER DETAIL
N.T.S.

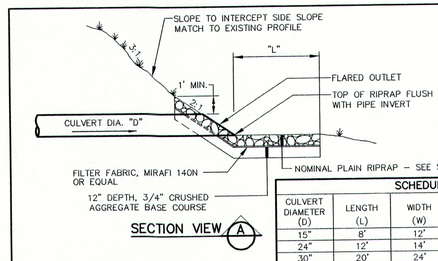
NOTE:
DURING PERIODS OF WINTER CONSTRUCTION (NOV. 1 THROUGH APRIL 15), THE CONTRACTOR SHALL INSTALL EROSION CONTROL MIX BERMS IN LIEU OF SILT FENCE.



EROSION CONTROL MIX:
EROSION CONTROL MIX SHALL CONTAIN A WELL–GRADED MIXTURE OF PARTICLE SIZES & MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH. THE MIX COMPOSITION SHALL MEET THE FOLLOWING STANDARDS:

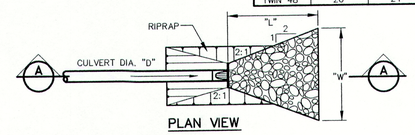
- THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 80 AND 100%, DRY WEIGHT BASIS.
- PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN AND A MINIMUM OF 70%, MAXIMUM OF 85%, PASSING A 0.75" SCREEN.
- THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.
- LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.
- SOLUBLE SALTS CONTENT SHALL BE < 4.0 mmhos/cm.
- PH SHALL FALL BETWEEN 5.0 AND 8.0.

(G) EROSION CONTROL MIX BERMS DETAIL
N.T.S.



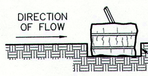
SECTION VIEW

SCHEDULE				
CULVERT DIAMETER (D)	LENGTH (L)	WIDTH (W)	STONE d_{50}	RIPRAP THICKNESS
15"	8'	12'	6"	14"
24"	12'	14'	9"	21"
30"	20'	24'	12"	27"
36"	20'	24'	12"	27"
TWIN 48"	20'	24'	12"	27"

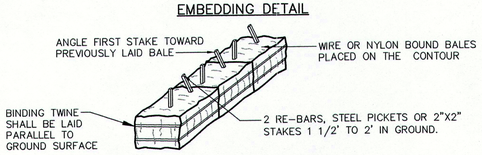


PLAN VIEW

(J) RIPRAP OUTLER APRON DETAIL
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 SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION SHALL 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.

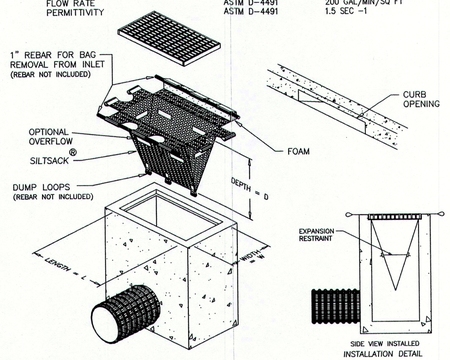
(C) STRAW OR HAY BALE BARRIER DETAIL
N.T.S.

SILTSACK®
SPECIFICATIONS

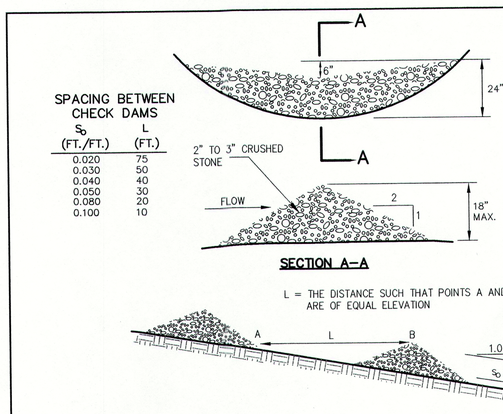
NOTE: THE SILTSACK ® WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

HI–FLOW SILTSACK® (FOR USE IN LOW POINTS/SAGS)
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN–OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D–4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D–4632	20 %
PUNCTURE	ASTM D–4833	135 LBS
MULLEN BURST	ASTM D–3786	420 PSI
TRAPEZOID TEAR	ASTM D–4533	45 LBS
UV RESISTANCE	ASTM D–4355	90 %
APPARENT OPENING SIZE	ASTM D–4751	20 US SIEVE
FLOW RATE	ASTM D–4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D–4491	1.5 SEC –1



(E) SILT SACK® DETAIL
N.T.S.

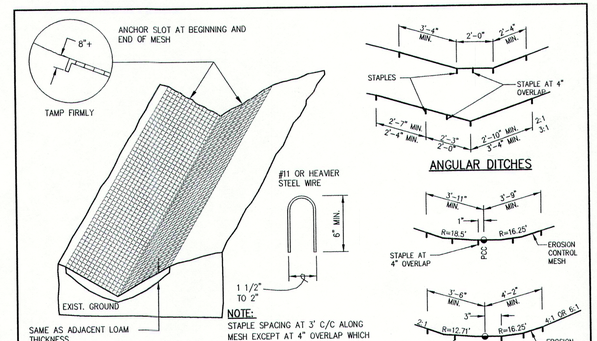


SECTION A–A

SPACING BETWEEN CHECK DAMS	
S_0 (FT./FT.)	L (FT.)
0.020	75
0.030	50
0.040	40
0.050	30
0.080	20
0.100	10

L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

(H) STONE CHECK DAM DETAIL
N.T.S.



WIRE STAPLE

ANGULAR DITCHES

CIRCULAR DITCHES

NOTE:
LOCATE STAPLES AT EDGES, AT QUARTER POINTS, & AT 4" OVERLAP.

(K) EROSION CONTROL MESH DETAIL
N.T.S.

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE — JOSEPH A. LAVERRIERE — 7417 — REGISTERED PROFESSIONAL ENGINEER — 12/21/11

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

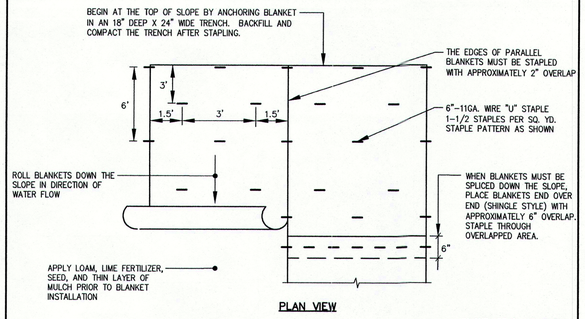
SHEET TITLE: EROSION & SEDIMENT CONTROL DETAILS (1 OF 2)

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

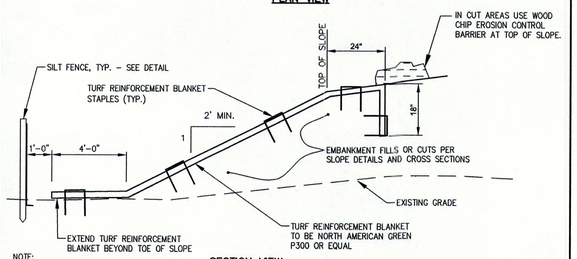
DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	N.T.S.
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-DET		
SHEET	C-9.3		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-DET.dwg, C-9.3 EROSION CONTROL-1, 11/30/2011 10:47:35 AM, cdube



PLAN VIEW

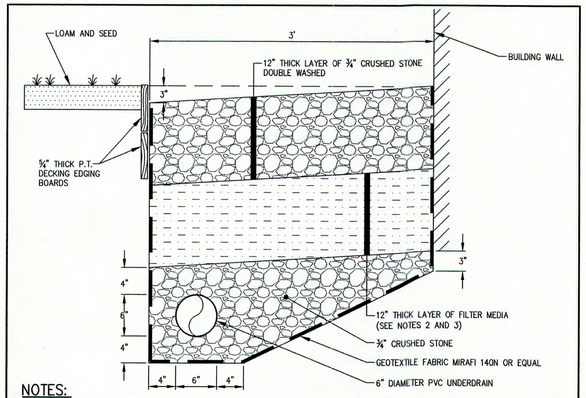


NOTE:
REINFORCEMENT BLANKET STAPLE SIZE AND DISTRIBUTION PER MANUFACTURER'S SPECIFICATIONS.

SECTION VIEW

NOTES:
1. IF GRASS CATCH IS NOT 75% BY SEPTEMBER 1, ADD #4 REBARS @ 3'-0" ROWS @ 3' CENTERS. REMOVE OR DRIVE REBARS 3" BELOW GRADE IN SPRING FOLLOWING TURF ESTABLISHMENT.
2. MULCH RATE TO BE 1/2 THE RATE OTHERWISE SPECIFIED.

(A) TURF REINFORCEMENT BLANKET DETAIL
N.T.S.



NOTES:

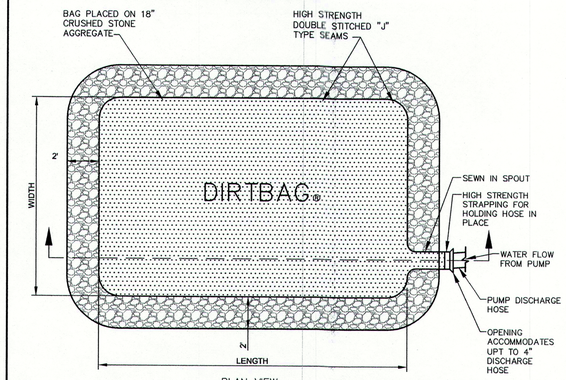
1. ROOF DRIPLINE FILTERS SHALL BE INSTALLED ON ALL LOTS. THEY SHALL BE INSTALLED AROUND ALL HOUSE PERIMETERS IN LANDSCAPED AREAS WHERE ROOF RUNOFF WILL BE PRESENT. UNDERDRAINS SHALL DAYLIGHT AWAY FROM HOUSES OR CONNECT TO THE STORM DRAIN SYSTEM WHERE NECESSARY.
2. FILTER MEDIA - THE BACKFILL FOR THE FOUNDATION MAY BE USED AS FILTER MEDIA AS LONG AS THE MATERIAL IS A MINERAL SOIL WITH BETWEEN 4 AND 7% FINES (PASSING #200 SIEVE). THE CONTRACTOR SHALL EITHER HAVE THE EXISTING SOIL MATERIAL TESTED OR PROVIDE SAND BACKFILL MATERIAL MEETING THE FOLLOWING GRADATION:

SAND GRADATION FOR FILTER MEDIA (MDOT 703.01 MODIFIED)

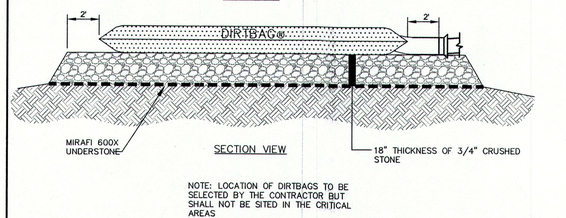
SIEVE SIZE	PERCENT PASSING BY WEIGHT
3/8	100
#4	95-100
#8	80-100
#16	50-85
#30	25-60
#60	10-30
#100	4-10
#200	4-7

3. THE FILTER MEDIA SPECIFICATION IS BASED ON THE MAY 2007 ROOF DRIPLINE FILTRATION MeDEP BMP. THIS IS SUBJECT TO CHANGE BASED UPON OPERATING EXPERIENCE. GRADATION SPECIFICATIONS MAY BE CHANGED PERIODICALLY BY MeDEP. VERIFY THAT GRADATION IS CURRENT BEFORE INSTALLATION.

(B) ROOF DRIPLINE FILTER DETAIL
N.T.S.



PLAN VIEW



SECTION VIEW

NOTE: LOCATION OF DIRTBAGS TO BE SELECTED BY THE CONTRACTOR BUT SHALL NOT BE SITED IN THE CRITICAL AREAS

SPECIFICATIONS AND REQUIREMENTS FOR DEWATERING

THIS PROJECT WILL REQUIRE THE DISCHARGE OF CONSTRUCTION DEWATERING AND TURBID LADEN RUNOFF FROM THE SITE TO BE DIRECTED AND DISCHARGED THROUGH A DIRTBAG. THIS DESCRIPTION ALSO CONTAINS APPENDED MATERIALS DESCRIBING THE DIRTBAGS REFERRED TO IN THIS NARRATIVE.

OVERVIEW:

THE PROJECT WILL BENEFIT FROM A POND DESIGNED NOT ONLY FOR DETENTION BUT ALSO FOR USE AS SEDIMENTATION BASINS DURING CONSTRUCTION. HOWEVER, IT IS RECOGNIZED THAT WEATHER CONDITIONS ARE NOT ALWAYS PREDICTABLE; THERE MAY BE EXCEPTIONAL PERIODS WHEN CONSTRUCTION ACTIVITY RESULTS IN HIGHLY TURBID WATER WHICH IS NOT CONSIDERED DESIRABLE TO DISCHARGE TO THE PONDS, OR LIMITED ACTIVITY IS REQUIRED THAT MAY NOT BE EASILY ACCOMMODATED BY THE PONDS. TRADITIONALLY, MEDEP PERMITS HAVE HAD A STANDARD CONDITION WHICH STATES:

"THE APPLICANT SHALL TAKE ALL NECESSARY ACTIONS TO ENSURE THAT ITS ACTIVITIES OR THOSE OF ITS AGENTS DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS ON THE SITE DURING THE CONSTRUCTION AND OPERATION OF THE PROJECT COVERED BY THIS APPROVAL."

THESE SPECIFICATIONS HAVE BEEN DEVELOPED FOR THE PURPOSE OF ADDRESSING CONSTRUCTION-DEWATERING ACTIVITIES WITH THE CONTINGENCY THAT UNPREDICTABLE WEATHER CAN CREATE. THE SPECIFICATION IS INTENDED TO "SHARE THE RISK" BETWEEN THE CONTRACTOR AND OWNER. IT IS ANTICIPATED THAT THIS METHOD WILL ALLOW THE BASE BID FOR THE PROJECT TO HAVE A REDUCED BUILT-IN CONTINGENCY COST FOR CERTAIN WEATHER-RELATED FACTORS.

THIS SPECIFICATION IS NOT INTENDED TO DIMINISH THE RECOGNIZED AND POTENTIAL AID OF THE PROPOSED SEDIMENT PONDS TO ACT AS THE PRIMARY DEVICE TO CAPTURE AND RETAIN SUSPENDED SEDIMENT. THIS BENEFIT IS A PRINCIPAL REASON WHY THE CONSTRUCTION OF THE PONDS EARLY IN THE PROJECT IS SO IMPORTANT.

ACCEPTABLE METHODS OF DISCHARGING CONSTRUCTION SITE RUNOFF:

DEWATERING OF THE CONSTRUCTION SITE SHALL BE ACCOMPLISHED USING ONE OF THE FOLLOWING MEASURES:

- THE DIRECTION OF THE RUNOFF TO THE SEDIMENTATION BASIN BY GRAVITY FLOW.
- THE PUMPING OF DIRTBAGS WITH A DISCHARGE TO THE POND.
- THE PUMPING OF CONSTRUCTION SITE WATER AND COLLECTED RUNOFF TO A DIRTBAG (PATENTED PRODUCT BY ACF ENVIRONMENTAL PRODUCTS) WITH RELEASE THROUGH A VEGETATED BUFFER AT LEAST 50 FEET UPGRADIENT OF A WETLAND.

REQUIREMENTS FOR DIRTBAGS:

THE SITE CONTRACTOR SHALL INCLUDE THE PRICE OF INSTALLING, OPERATING, AND REMOVAL AND DISPOSAL OF FOUR DIRTBAG 55'S AS PART OF THE BASE BID. A UNIT PRICE SHALL BE PROVIDED FOR ADDITIONAL DIRTBAGS.

AT ALL TIMES THERE MUST BE AN UNUSED DIRTBAG AVAILABLE FOR EMERGENCY USE.

AT ALL TIMES (AFTER INITIAL SITE PREPARATION), THE CONTRACTOR SHALL HAVE ONE **DIRTBAG** ACTIVE OR READY FOR USE. THE **DIRTBAGS** SHALL BE FIELD LOCATED BY THE CONTRACTOR BUT ARE NOT TO BE INSTALLED IN ANY **"CRITICAL"** AREA. (THE SITE CRITICAL AREAS ARE SHOWN ON THE EROSION-SEDIMENT CONTROL PLAN.) THE **DIRTBAG** SHALL BE INSTALLED ON A PREPARED SUBGRADE. THIS SUBGRADE SHALL CONSIST OF THE INSTALLATION OF A LAYER OF MIRAFI 600X, AND 18 INCHES OF ¾ INCH CRUSHED STONE. THE PLAN DIMENSION OF THE CRUSHED STONE PAD SHALL EXCEED THE PLAN AREA OF THE **DIRTBAG** BY AT LEAST TWO FEET IN ALL DIRECTIONS. THE **DIRTBAG** SHALL NOT BE INSTALLED ON AN UNDERLYING SLOPE OF GREATER THAN 15 PERCENT.

CONSTRUCTION DEWATERING OPERATIONS:

ALL CONSTRUCTION-DEWATERING OPERATIONS ARE THE RESPONSIBILITY OF THE SITE CONTRACTOR. IT SHALL BE THE SITE CONTRACTOR WHO IS RESPONSIBLE FOR SELECTING THE SITE FOR THE **DIRTBAG**, THE SELECTION OF THE USE OF THE **DIRTBAG** OR THE SEDIMENTATION BASIN FOR DIRECTING DEWATERING, EXCEPT THAT THE OWNER MAY DIRECT THE SITE CONTRACTOR TO ALTER THE SELECTED OPERATION IF TURBID DISCHARGE TO A WETLAND OR WATERCOURSE, OR DRAINAGE SYSTEM LEAVING THE SITE IS OBSERVED.

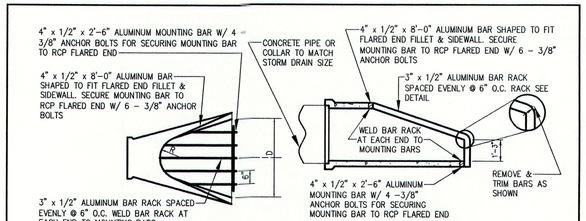
WINTER OPERATIONS:

IN THE EVENT THAT WINTER OPERATIONS ARE REQUIRED, THE CONTRACTOR SHALL "POLY", ENCLOSE, AND PROVIDE TEMPORARY HEAT TO PREVENT THE **DIRTBAG** FROM SUBSTANTIAL FREEZING.

RECORD KEEPING:

THE WEEKLY EROSION-SEDIMENT CONTROL REPORTS PREPARED IN ACCORDANCE WITH THE NPDES PERMIT SHALL MAINTAIN A LOG OF THE LOCATION, USE, AND REMOVAL OF **DIRTBAGS.** IN THE EVENT THAT THE STONE UNDER THE **DIRTBAG** BECOMES HIGHLY CONTAMINATED WITH FINES, THE NEXT **DIRTBAG** SHALL BE INSTALLED IN A DIFFERENT LOCATION.

(C) DIRTBAG AND SPECIFICATIONS FOR DEWATERING DETAIL
N.T.S.

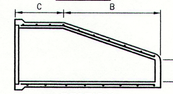


PLAN VIEW - TYP. EACH PIPE

DIA.	A	B	C	D	E	R
18"	9"	2'-3"	3'-10"	3'-0"	2 1/2"	11"
24"	9 1/2"	3'-7 1/2"	2'-6"	4'-0"	3"	14"
30"	12"	4'-6"	1'-7 3/4"	5'-0"	3 1/2"	15"
36"	15"	5'-3"	2'-10 3/4"	6'-0"	4"	20"
42"	21"	5'-3"	2'-11"	6'-6"	4 1/2"	22"
48"	24"	6'-0"	2'-2"	7'-0"	5"	22"
54"	27"	5'-5"	2'-11"	7'-6"	5 1/2"	24"
60"	30"	5'-0"	3'-3"	8'-0"	6"	24"

NOTE:
JOINTS MAY BE FURNISHED WITH EITHER BELL & SPIGOT OR TONGUE & GROOVE ENDS.

SECTION



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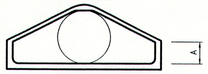


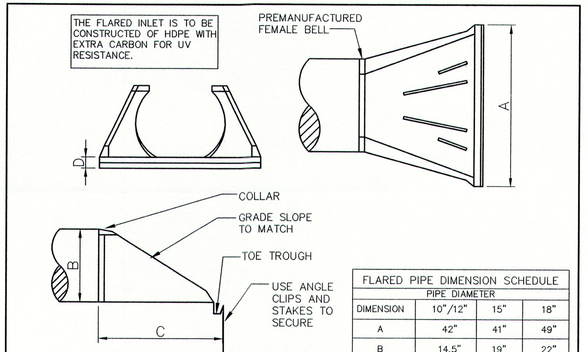
END VIEW

* BAR RACKS ARE REQUIRED ONLY ON PIPES 18" AND OVER IN SIZE.

* USE FIELD MITRE FOR CULVERTS WITH A DIAMETER OF LESS THAN 18"

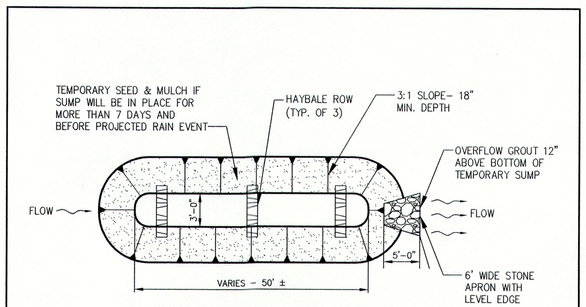
(D) RCP FLARED END WITH BAR RACK DETAIL
N.T.S.

REQUIRED FOR ALL INLETS/OUTLETS FOR PIPE OVER 18" DIAMETER.

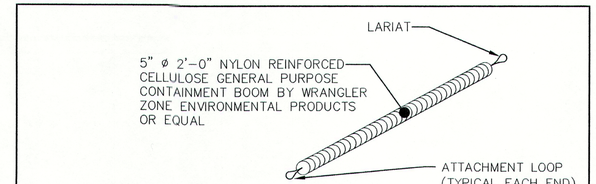


FLARED PIPE DIMENSION SCHEDULE			
	PIPE DIAMETER		
DIMENSION	10"/12"	15"	18"
A	42"	41"	49"
B	14.5"	19"	22"
C	33"	34"	43"
D	6"	6"	6"

(E) FLARED INLETS FOR 10" TO 18" PIPES
N.T.S.



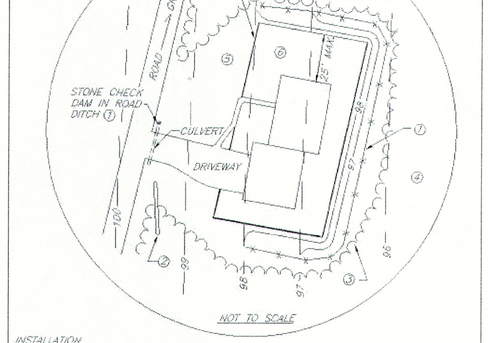
(F) TEMPORARY SEDIMENT SUMP
N.T.S.



PLAN VIEW LOOKING INTO CATCH BASIN

NOTES:
1. REQUIRED FOR ALL CATCH BASINS WHICH RECEIVE RUNOFF FROM PAVED AREAS AND SHALL BE REPLACED BEFORE FINAL ACCEPTANCE OF PROJECT.
2. REFER TO EROSION CONTROL REPORT FOR ADDITIONAL INFORMATION.
3. CONTRACTOR MAY SELECT OTHER TYPE OF EQUIVALENT OIL ABSORBENT PRODUCTS. (BOONS OR PILLOWS.)
4. SUBMITTALS ARE REQUIRED FOR THESE ITEMS.

(G) TEMPORARY WATER QUALITY MEASURE INSIDE OF CATCH BASINS
N.T.S.



INSTALLATION

1. INSTALL SEDIMENT BARRIERS ON YOUR SITE BEFORE DISTURBING SOILS. SEE THE "SEDIMENT BARRIERS" MEASURE FOR DETAILS ON INSTALLATION AND MAINTENANCE.
2. CONSTRUCT A DIVERSION DITCH TO KEEP UPSLOPE RUNOFF OUT OF WORK AREA.
3. MARK CLEARING LIMITS ON THE SITE TO KEEP EQUIPMENT OUT OF AREAS WITH STEEP SLOPES, CHANNELIZED FLOW, OR ADJACENT SURFACE WATERS AND WETLANDS.
4. PRESERVE BUFFERS BETWEEN THE WORK AREA AND ANY DOWNSTREAM SURFACE WATERS AND WETLANDS. SEE THE "BUFFERS" MEASURE FOR BUFFER PRESERVATION.
5. USE TEMPORARY MULCH AND RYE-SEED TO PROTECT DISTURBED SOILS OUTSIDE THE ACTIVE CONSTRUCTION AREA. SEE THE "MULCHING" MEASURE AND "VEGETATION" MEASURE FOR DETAILS AND SPECIFICATIONS FOR THESE CONTROLS.
6. PERMANENTLY SEED AREAS NOT TO BE PAVED WITHIN SEVEN DAYS OF COMPLETING FINAL GRADING. SEE "VEGETATION" MEASURE FOR INFORMATION ON PROPER SEEDING.

MAINTENANCE

EVERY MONTH, THE FIRST YEAR AFTER CONSTRUCTION AND YEARLY THEREAFTER, INSPECT FOR AREAS SHOWING EROSION OR POOR VEGETATION GROWTH. FIX THESE PROBLEMS AS SOON AS POSSIBLE. EACH SPRING REMOVE ANY ACCUMULATION OF DEBRIS OR WINTER SAND THAT WOULD IMPEDE RUNOFF FROM ENTERING A BUFFER OR DITCH.

HOUSE SITE BMP

ME DEP 2003

FILE: HOUSE.DGT

(H) TYPICAL HOUSE SITE BMP DETAIL
N.T.S.

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
5	07.29.11	REVISED PER COMMENTS OF BEN WOLA & RESUBMITTED TO DEP
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE JOSEPH A. LAVERRIERE #7417 LICENSED PROFESSIONAL ENGINEER

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

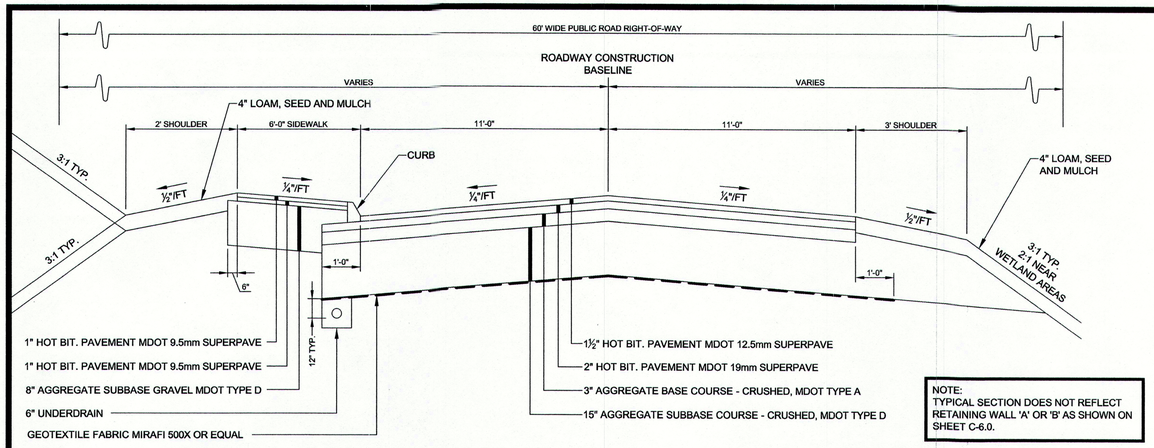
SHEET TITLE: EROSION & SEDIMENT CONTROL DETAILS (2 OF 2)

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

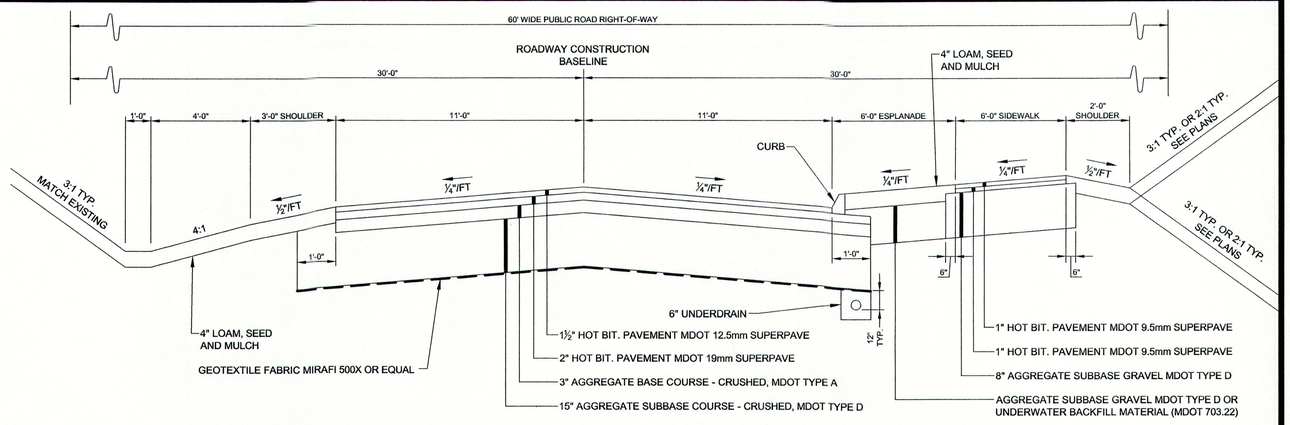
DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	N.T.S.
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-DET		
SHEET	C-9.4		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-DET.dwg, C-9.4 EROSION CONTROL-2, 11/30/2011 10:47:55 AM, cdube



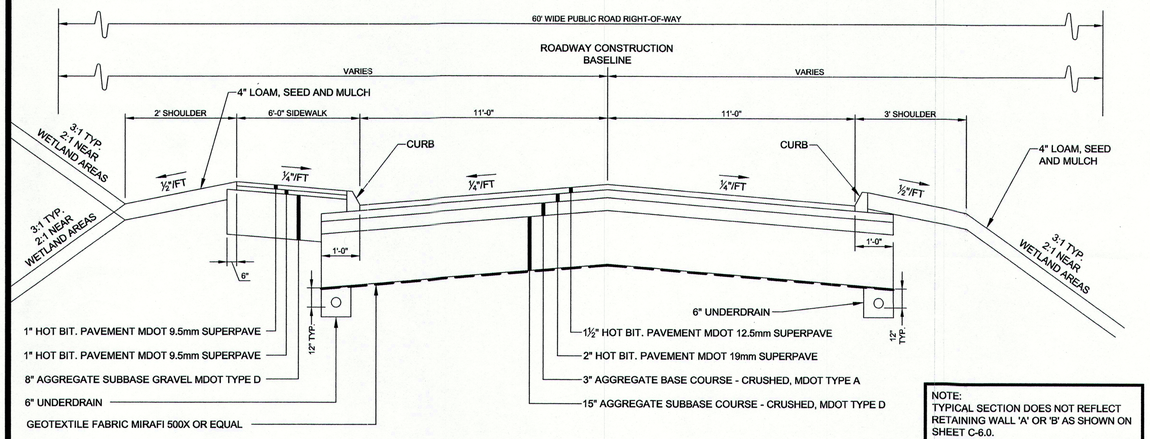
NOTE:
TYPICAL SECTION DOES NOT REFLECT RETAINING WALL 'A' OR 'B' AS SHOWN ON SHEET C-6.0.

TYPICAL ROADWAY SECTION
WYMAN WAY (STA. 0+00 TO STA. 7+50)



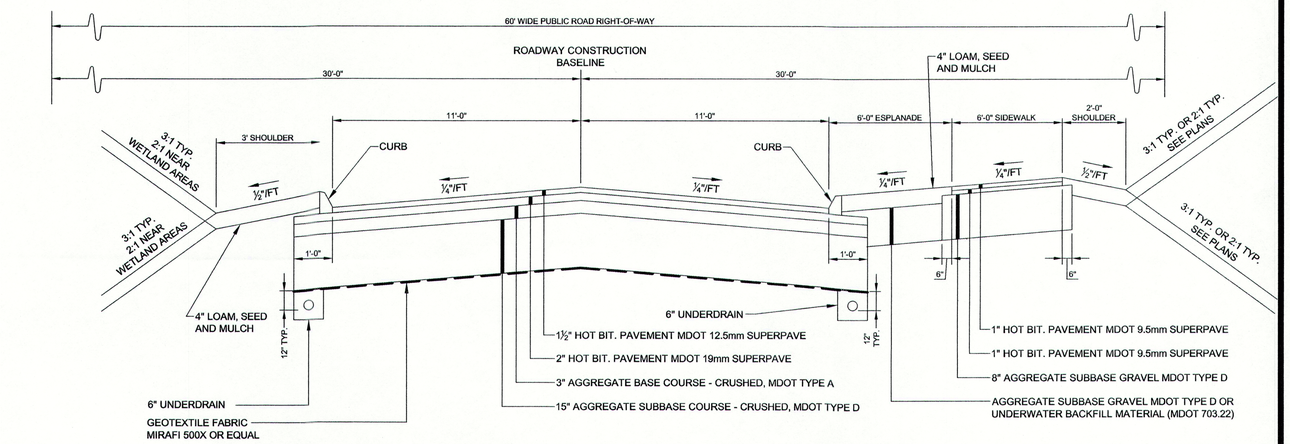
NOTE:
TYPICAL SECTION DOES NOT REFLECT RETAINING WALL 'C' AS SHOWN ON SHEET C-6.0.

TYPICAL ROADWAY SECTION
DROWNE ROAD (STA. 30+00 TO STA. 40+05)

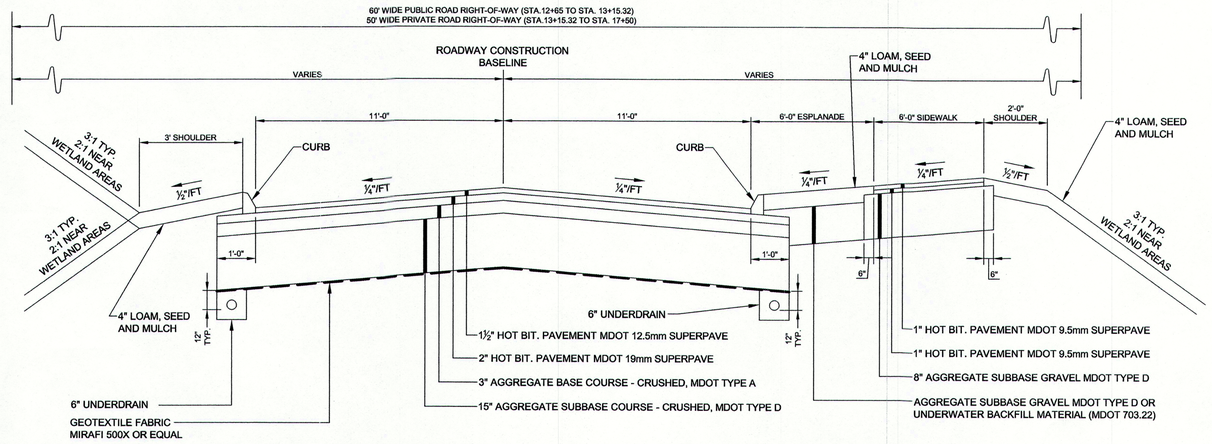


NOTE:
TYPICAL SECTION DOES NOT REFLECT RETAINING WALL 'A' OR 'B' AS SHOWN ON SHEET C-6.0.

TYPICAL ROADWAY SECTION
WYMAN WAY (STA. 7+50 TO STA. 12+65)



TYPICAL ROADWAY SECTION
DROWNE ROAD (STA. 40+05 TO STA. 45+00)



TYPICAL ROADWAY SECTION
WYMAN WAY (STA. 12+65 TO STA. 17+50)

REV	DATE	DESCRIPTION
8	11.28.11	PHASE 1 CONSTRUCTION SET
7	09.13.11	RESUBMITTED TO TOWN
6	08.22.11	MODIFIED GRAVEL WIDTH BEHIND CURB FROM 2' TO 1'
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE
JOSEPH A. LAVERRIERE
#7417
LICENSED
PROFESSIONAL ENGINEER

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

PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

SHEET TITLE
PAVEMENT, CURB & SIDEWALK DETAILS

CLIENT
VILLAGE GREEN
CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	N.T.S.
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-DET		
SHEET	C-10.0		

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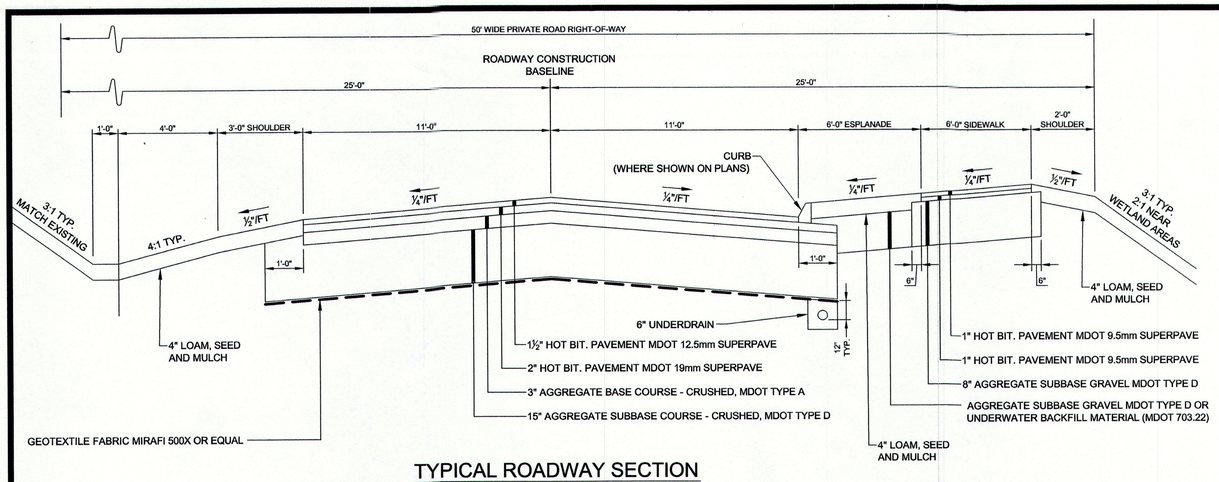
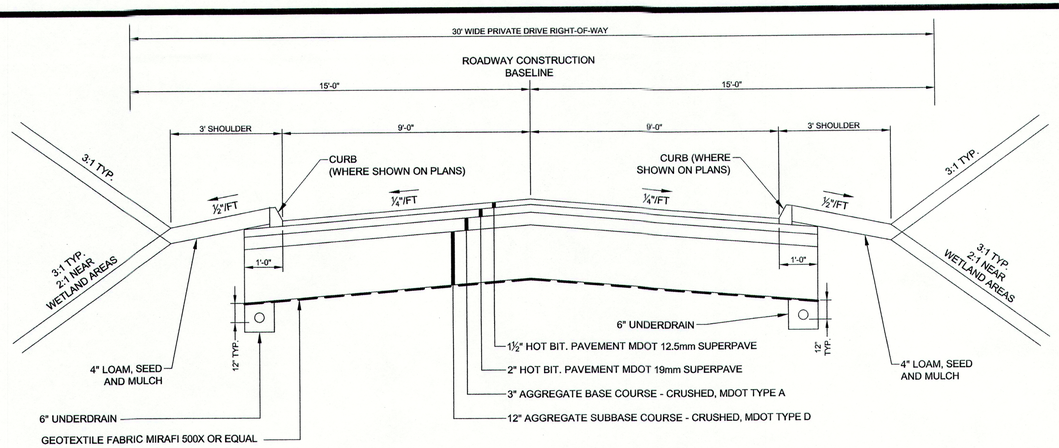
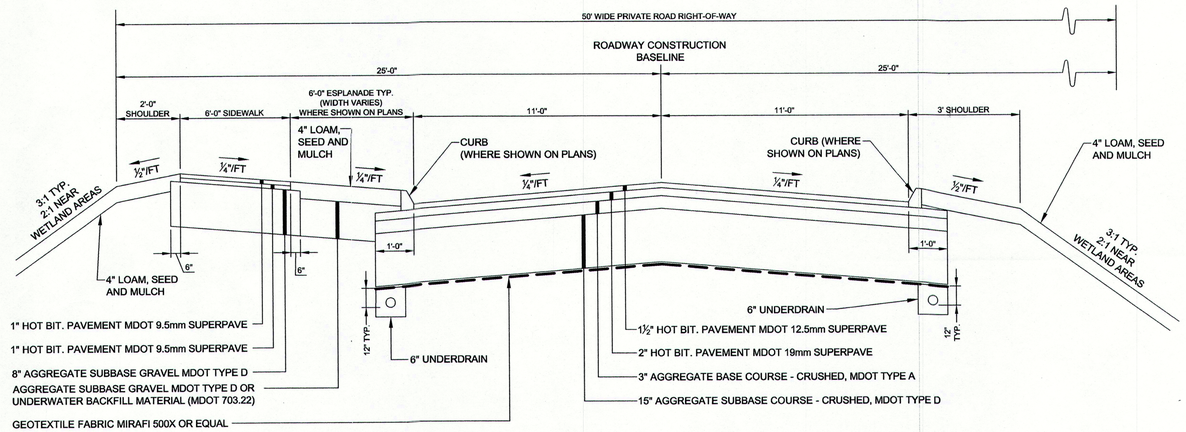


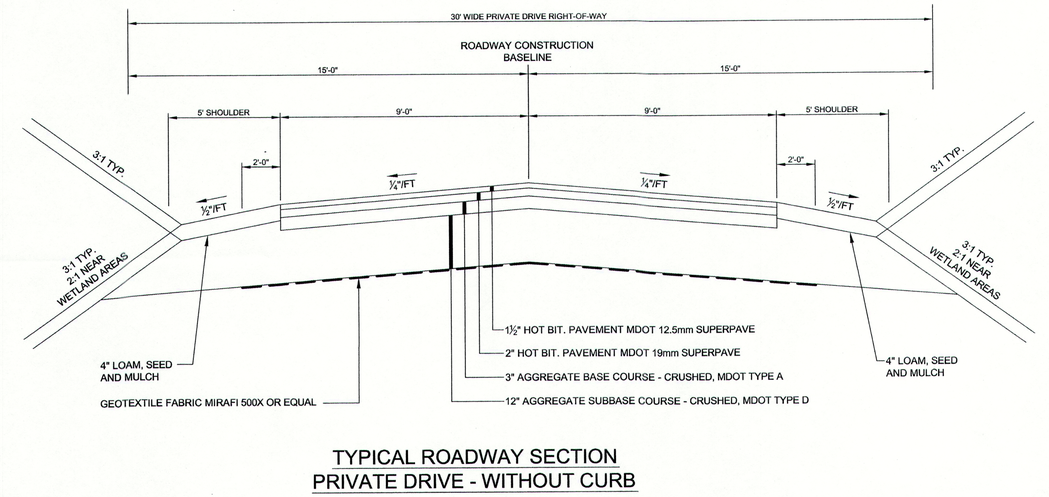
TYPICAL ROADWAY SECTION
WYMAN WAY (STA. 17+50 TO STA. 27+48.99)



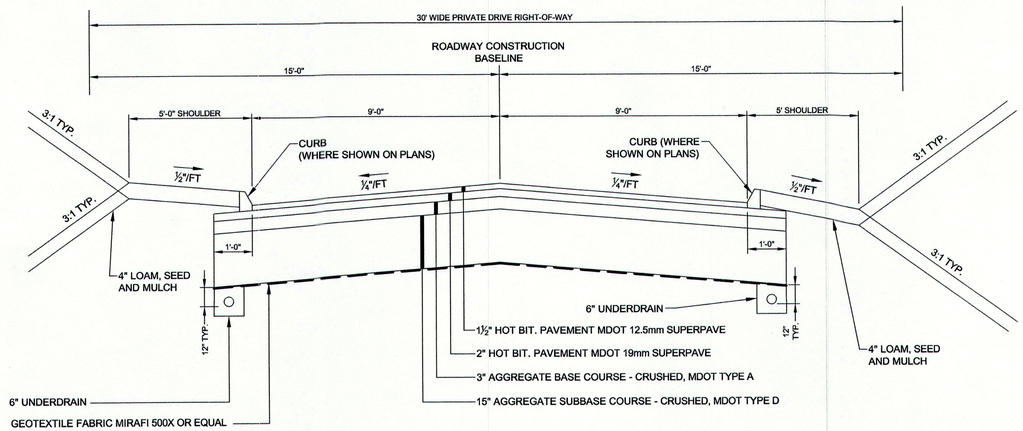
TYPICAL ROADWAY SECTION
PRIVATE DRIVE - WITH CURB



TYPICAL ROADWAY SECTION
PRIVATE ROAD (STA. 50+00 TO STA. 57+69.50)



TYPICAL ROADWAY SECTION
PRIVATE DRIVE - WITHOUT CURB



TYPICAL ROADWAY SECTION
PRIVATE DRIVE (STA. 57+69.50 TO STA. 60+00)

REV	DATE	DESCRIPTION
8	11.28.11	PHASE 1 CONSTRUCTION SET
7	09.13.11	RESUBMITTED TO TOWN
6	08.22.11	MODIFIED GRAVEL WIDTH BEHIND CURB FROM 2' TO 1'
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE — JOSEPH A. LAVERRIERE — LICENSED PROFESSIONAL ENGINEER — 10941

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

SHEET TITLE: PAVEMENT, CURB & SIDEWALK DETAILS

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	N.T.S.
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-DET		
SHEET	C-10.1		

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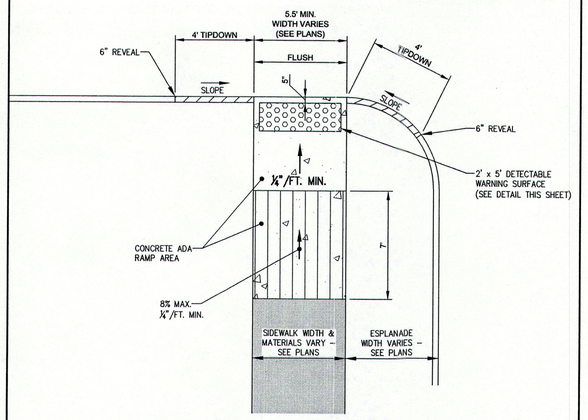
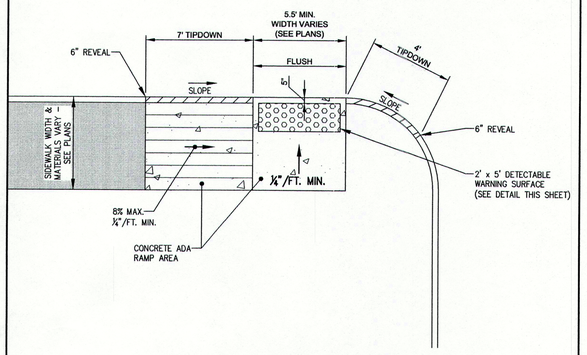


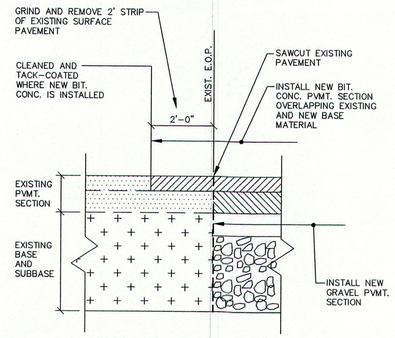
LAYOUT 2 PLAN VIEW (WITH ESPLANADE)



LAYOUT 1 PLAN VIEW (NO ESPLANADE)

CONCRETE ADA DUSTPAN RAMP DETAIL - WITH DETECTABLE WARNING SURFACE

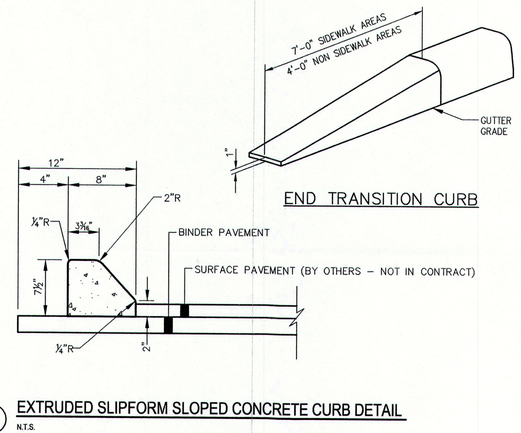
A N.T.S.



PAVEMENT SAWCUT - NEW PAVEMENT ADJACENT TO EXISTING PAVEMENT

PAVEMENT SECTION

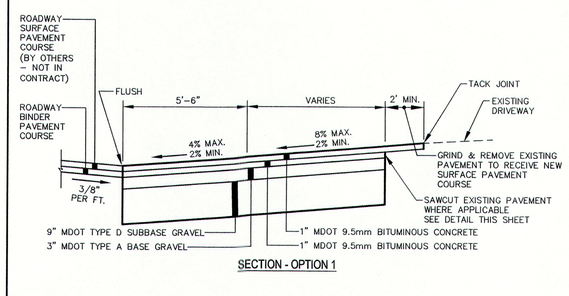
C N.T.S.



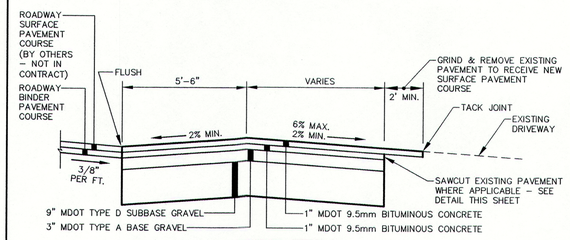
END TRANSITION CURB

EXTRUDED SLIPFORM SLOPED CONCRETE CURB DETAIL

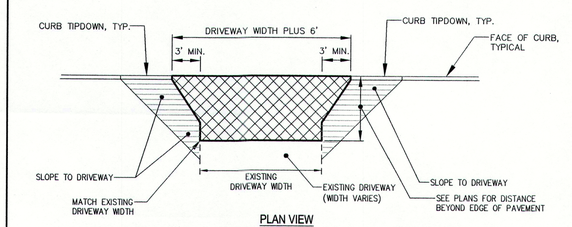
D N.T.S.



SECTION - OPTION 1



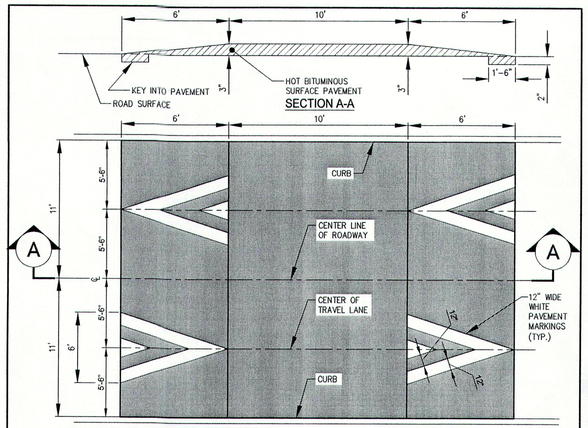
SECTION - OPTION 2



PLAN VIEW

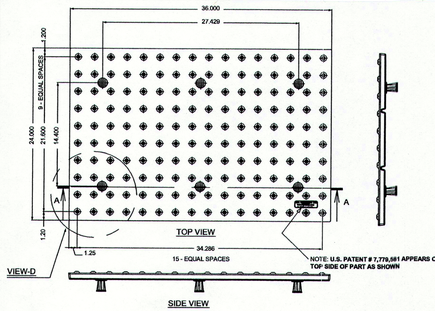
TYPICAL DRIVEWAY APRON PLAN VIEW & SECTION

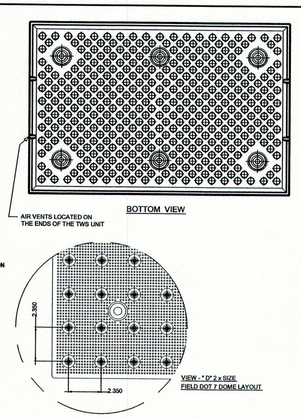
E N.T.S.

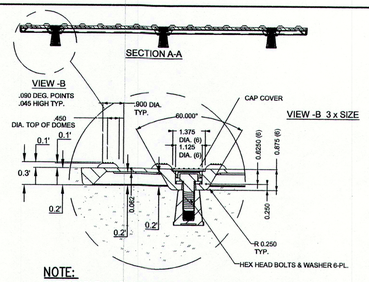


RAISED SPEED TABLE DETAIL

G N.T.S.







DETECTABLE WARNING SURFACE DETAIL

B N.T.S.

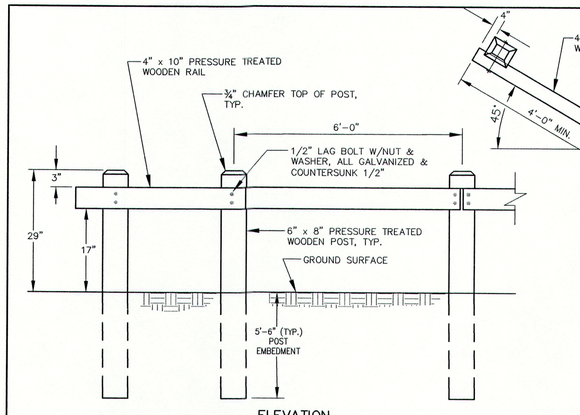
NOTE:

DETECTABLE WARNING SURFACE SHALL BE ADA REPLACABLE (WET-SET) COMPOSITE TACTILE WARNING SURFACE AS MANUFACTURED BY:

ADA SOLUTIONS, INC.
P.O. BOX 3
NORTH BILLERICA, MA. 01862
1-800-372-0519
www.adatile.com

DETECTABLE WARNING SURFACE COLOR TO BE BRICK RED.

PROVIDE CONCRETE SETTING BED WITH DIMENSIONS OF 36"x60" FOR PLACEMENT OF WARNING SURFACE SYSTEM AS INCIDENTAL TO COST OF SYSTEM. PROVIDE FIBER REINFORCED CONCRETE 3000 PSI



WOODEN GUIDERAIL DETAIL

F N.T.S.

REV	DATE	DESCRIPTION
8	11.28.11	PHASE 1 CONSTRUCTION SET
7	09.13.11	RESUBMITTED TO TOWN
6	08.22.11	MODIFIED PAVEMENT WIDTH BEHIND FACE OF CURB ON DETAIL D
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE JOSEPH A. LAVERRIERE 7417 LICENSED PROFESSIONAL ENGINEER 11-28-11

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

PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

SHEET TITLE
PAVEMENT, CURB & SIDEWALK DETAILS

CLIENT
VILLAGE GREEN
CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
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WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	N.T.S.
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-DET		
SHEET	C-10.2		

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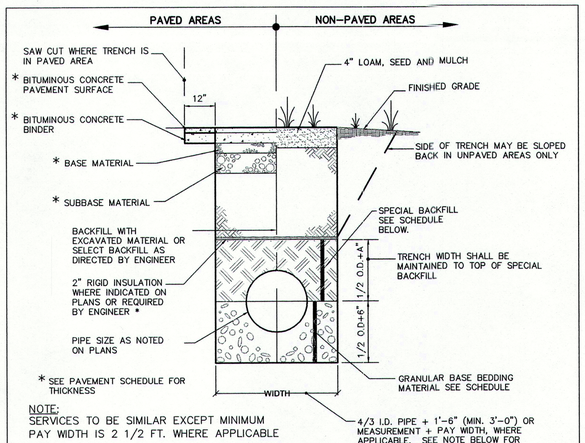


NOTE:
SERVICES TO BE SIMILAR EXCEPT MINIMUM PAY WIDTH IS 2 1/2 FT. WHERE APPLICABLE

SCHEDULE OF BASE BACKFILL FOR NON-SANITARY INSTALLATIONS

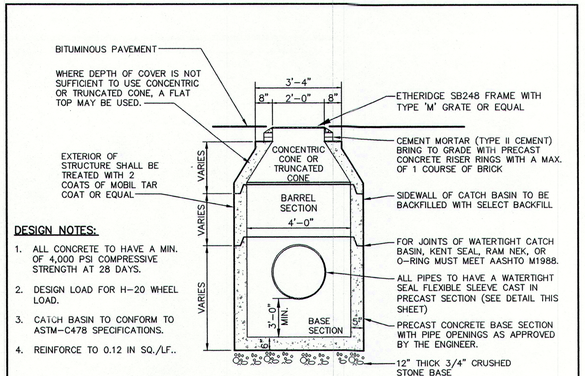
TYPE OF PIPE	BEDDING MATERIAL	SPECIAL BACKFILL	SPECIAL BACKFILL COVER "A" (IN)	SELECT BACKFILL
CONCRETE	3/4" CRUSHED STONE	GRANULAR AASHTO M145-49 A-3 OR BETTER	12	GRANULAR AASHTO M145-49 A-3 OR BETTER
PVC	3/4" CRUSHED STONE	GRANULAR AASHTO M145-49 A-3 OR BETTER	6	GRANULAR AASHTO M145-49 A-3 OR BETTER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

MAXIMUM ALLOWABLE TRENCH WIDTHS FOR SEWERS

PIPE SIZE 10" OR LESS	MAXIMUM WIDTH
12 TO 15	4'-0"
18	4'-6"
24	5'-6"
30	6'-0"
36	6'-9"
42	7'-3"
48	8'-0"

SHEETING, IF REQUIRED, SHALL BE CUT OFF 2'-0" BELOW FINISH GRADE.

(A) TYPICAL STORM DRAIN TRENCH SECTION 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..

ALL CATCH BASIN OUTLET PIPES TO BE EQUIPPED WITH SNOUT OIL- WATER- DEBRIS SEPARATOR (SEE DETAIL F THIS SHEET)

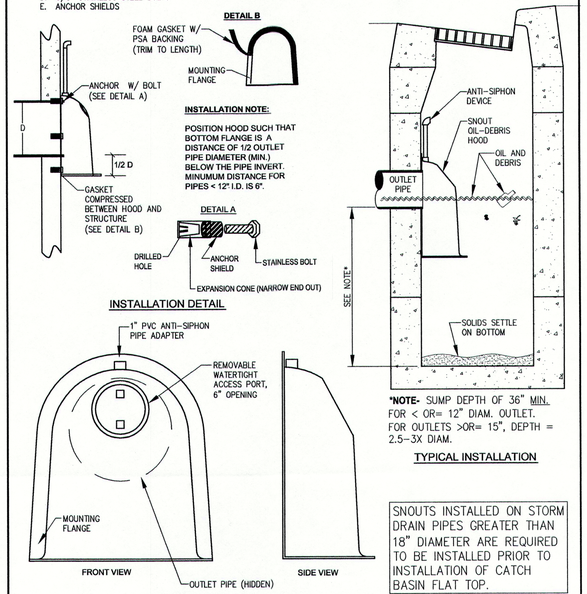
(D) 4'-0" PRECAST CATCH BASIN DETAIL
N.T.S.

NOTES:

1. ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY BEST MANAGEMENT PRODUCTS, INC. TOLL FREE: (800) 504-8008 OR (888) 354-7585 WEB SITE: www.bmpinc.com OR PRE-APPROVED EQUAL.
2. ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS.
3. ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, & AN ANTI-SIPHON VENT AS DRAWN. (SEE CONFIGURATION DETAIL)
4. THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE IN ACCORDANCE WITH THE FOLLOWING TABLE:

STRUCTURE OUTLET HOLE SIZE	SNOUT SIZE
11.9" O.D. OR LESS	12 F or R
12.0"-17.9" O.D.	18 F or R
18.0"-23.9" O.D.	24 F or R
24.0"-29.9" O.D.	30 F or R
30.0"-47.9" O.D.	48 F
48.0"-95.9" O.D.	96 F

5. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6" FOR PIPES <12" I.D.
6. THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3" AND A MAXIMUM OF 24" ACCORDING TO STRUCTURE CONFIGURATION.
7. THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIAL.
8. THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8" STAINLESS STEEL BOLTS AND OIL-RESISTANT GASKET AS SUPPLIED BY MANUFACTURER. (SEE INSTALLATION DETAIL)
9. INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT, WHICH INCLUDES:
   A. INSTALLATION INSTRUCTIONS
   B. PVC ANTI-SIPHON VENT PIPE AND ADAPTER
   C. OIL-RESISTANT CRUSHED CELL FOAM GASKET WITH PSA BACKING
   D. 3/8" STAINLESS STEEL BOLTS
   E. ANCHOR SHIELDS

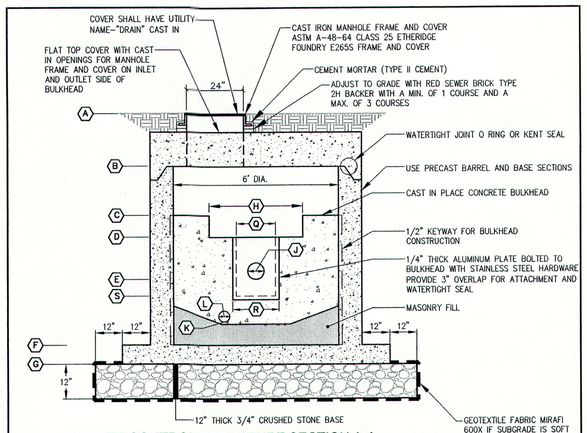


***NOTE-** SUMP DEPTH OF 36" MIN. FOR < OR= 12" DIAM. OUTLET. FOR OUTLETS >OR= 15", DEPTH = 2.5-3X DIAM.

TYPICAL INSTALLATION

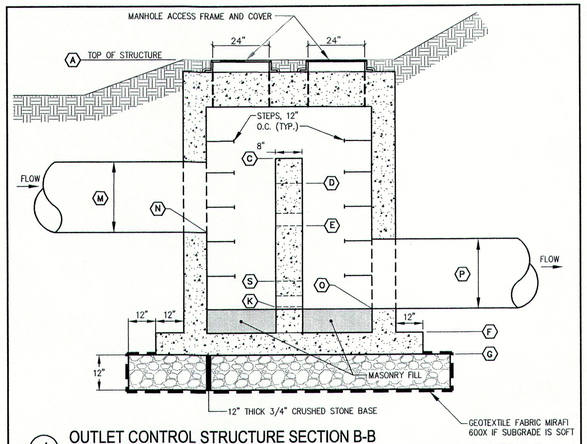
SNOUTS INSTALLED ON STORM DRAIN PIPES GREATER THAN 18" DIAMETER ARE REQUIRED TO BE INSTALLED PRIOR TO INSTALLATION OF CATCH BASIN FLAT TOP.

(G) SNOUT OIL-WATER-DEBRIS SEPARATOR DETAIL
N.T.S.



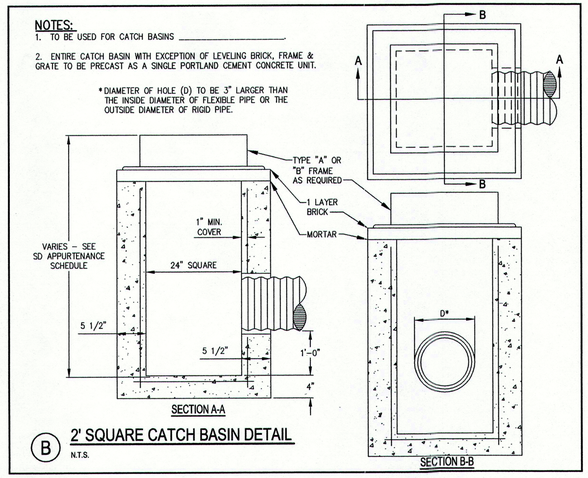
(I) OUTLET CONTROL STRUCTURE SECTION A-A
N.T.S.

SEE SCHEDULE A



(J) OUTLET CONTROL STRUCTURE SECTION B-B
N.T.S.

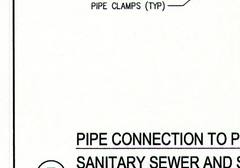
SEE SCHEDULE A



(B) 2' SQUARE CATCH BASIN DETAIL
N.T.S.

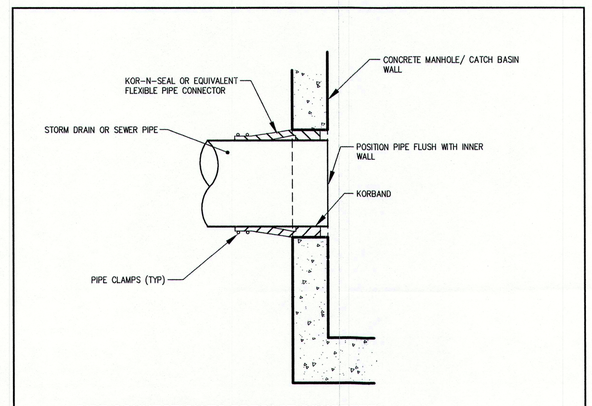
NOTES:
1. TO BE USED FOR CATCH BASINS _____
2. ENTIRE CATCH BASIN WITH EXCEPTION OF LEVELING BRICK, FRAME & GRATE TO BE PRECAST AS A SINGLE PORTLAND CEMENT CONCRETE UNIT.

*DIAMETER OF HOLE (D) TO BE 3" LARGER THAN THE INSIDE DIAMETER OF FLEXIBLE PIPE OR THE OUTSIDE DIAMETER OF RIGID PIPE.

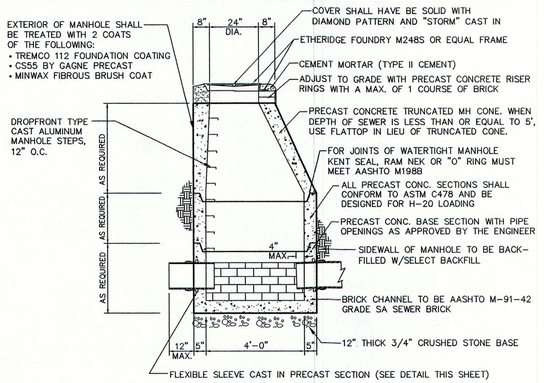


NOTES:
1. BRICK CHANNEL TO BE AASHTO M-91-42 GRADE SA SEWER BRICK.
2. MANHOLE TEST TO BE PERFORMED AFTER CHANNEL INSTALLATION IS COMPLETE.
3. WHERE THE ALIGNMENT CHANGES OR SIDE FLOW ENTERS THE MANHOLE, CONSTRUCT CHANNEL WITH A SMOOTH RADIAL CHANNEL TO ACCOMPLISH ALL JUNCTIONAL CHANGE OF ALIGNMENT WITHIN MANHOLE.

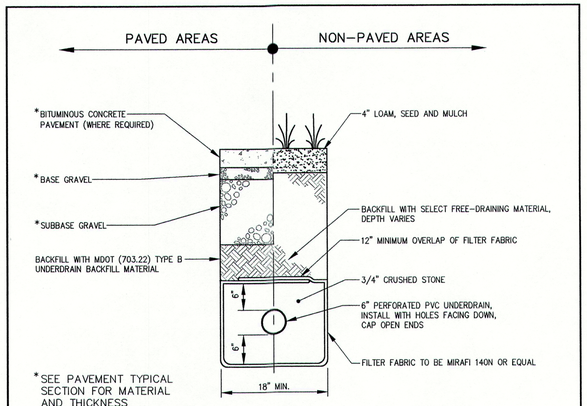
(C) MANHOLE BRICK CHANNEL INSTALLATION DETAIL
N.T.S.



PIPE CONNECTION TO PRECAST CONCRETE SANITARY SEWER AND STORM DRAINAGE STRUCTURES
(E)
N.T.S.



(F) 4'-0" PRECAST CONCRETE STORM DRAIN MANHOLE DETAIL
N.T.S.



(H) TYPICAL UNDERDRAIN TRENCH SECTION DETAIL
N.T.S.

SCHEDULE A
OUTLET CONTROL STRUCTURE

ITEM	DESCRIPTION	DIMENSION/ELEVATION
A	TOP OF STRUCTURE	87.50
B	UNDERSIDE TOP SLAB	86.60
C	TOP CONCRETE BULKHEAD	84.60
D	TOP OF WEIR ELEVATION	84.20
E	UPPER ORIFICE INVERT	81.75
F	BOTTOM OF SUMP	79.90
G	BOTTOM OF STRUCTURE	79.23
H	WEIR LENGTH	4'
J	UPPER ORIFICE DIAMETER	6"
K	LOWER ORIFICE INVERT	81.00
L	LOWER ORIFICE DIAMETER	4"
M	INLET PIPE DIAMETER	18"
N	INVERT IN	81.00
O	INVERT OUT	80.90
P	OUTLET PIPE DIAMETER	18"
Q	WIDTH OF NOTCH IN BULKHEAD	12"
R	WIDTH OF ALUMINUM PLATE	18"
S	BOTTOM OF NOTCH IN BULKHEAD	81.40

(K) SCHEDULE A OUTLET CONTROL STRUCTURE
N.T.S.

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE JOSEPH A. LAVERRIERE 7417 LICENSED PROFESSIONAL ENGINEER

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

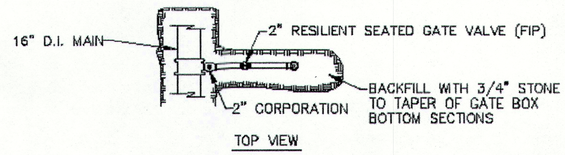
PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

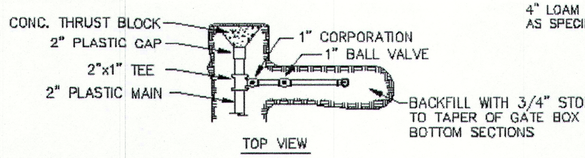
SHEET TITLE: STORM DRAIN DETAILS

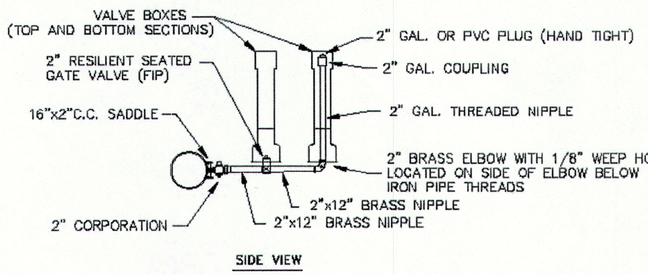
CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

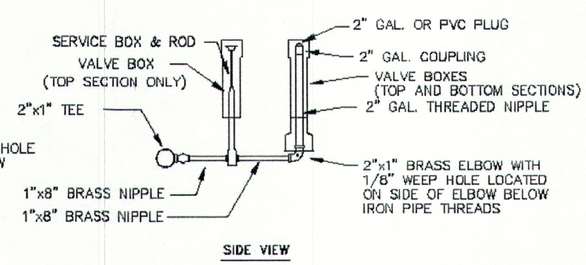
DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	N.T.S.
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-DET		
SHEET	C-10.3		



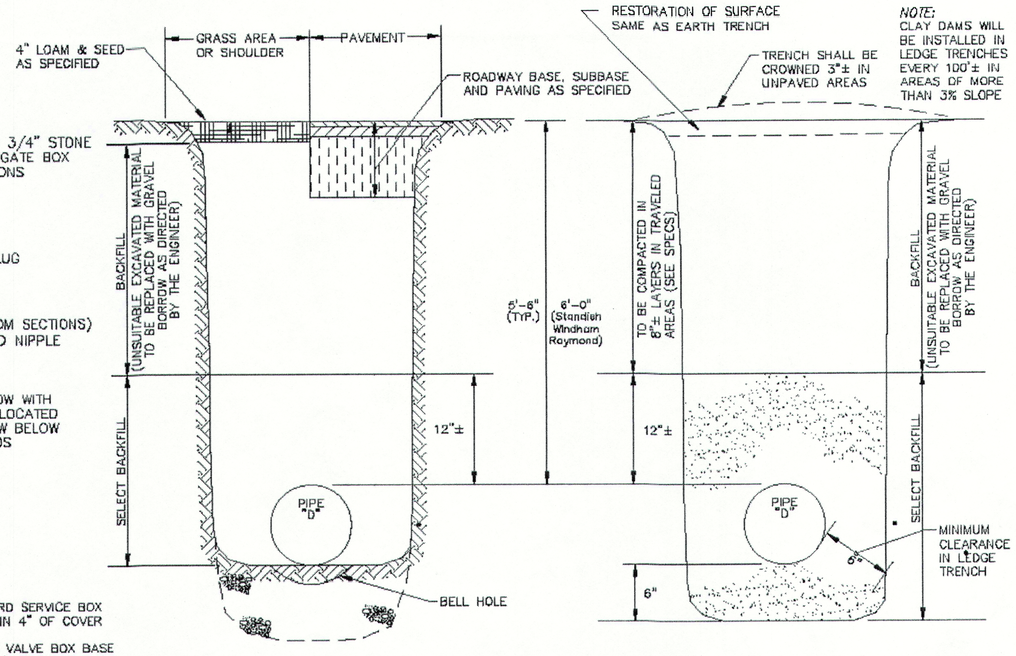




SIDE-ARM BLOW-OFF 4" & LARGER MAINS

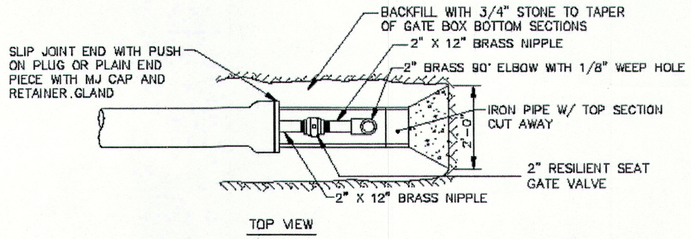


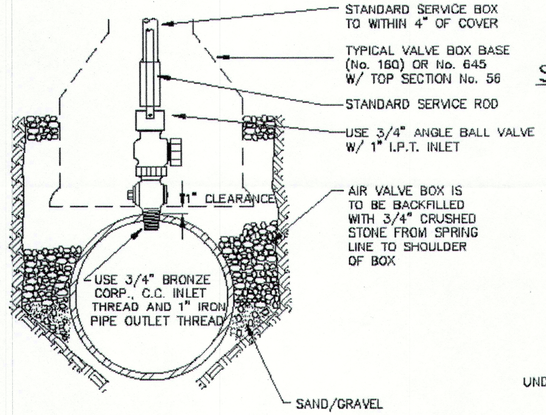
SIDE-ARM BLOW-OFF 2" MAIN



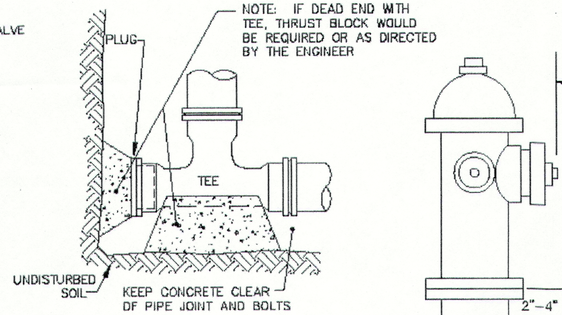
SECTION THRU EARTH TRENCH

SECTION THRU LEDGE TRENCH

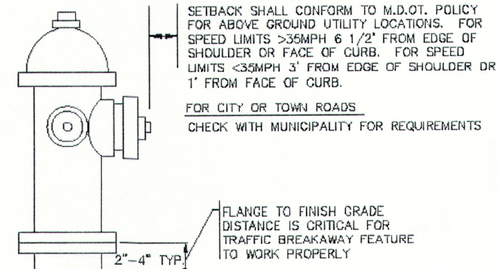


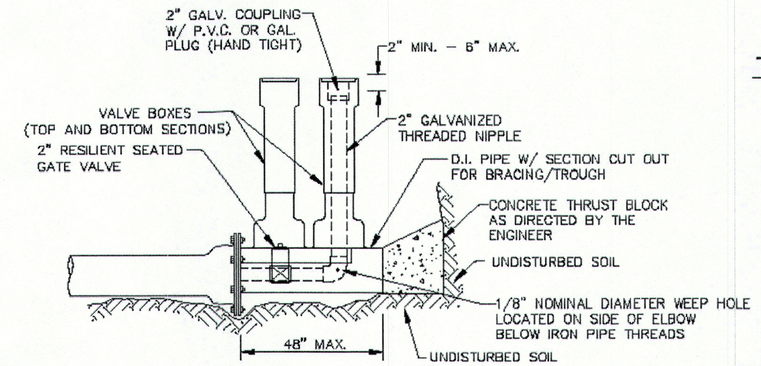


TYPICAL AIR VALVE (1")

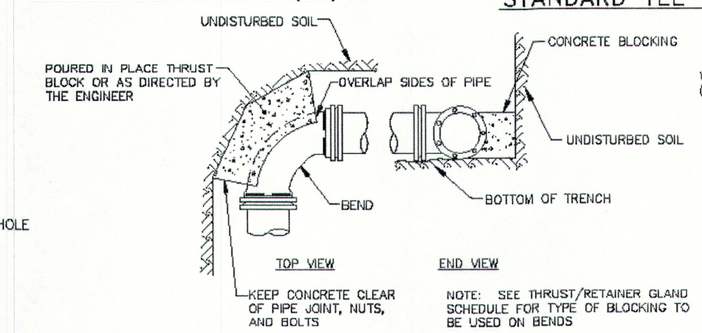


STANDARD TEE BLOCKING

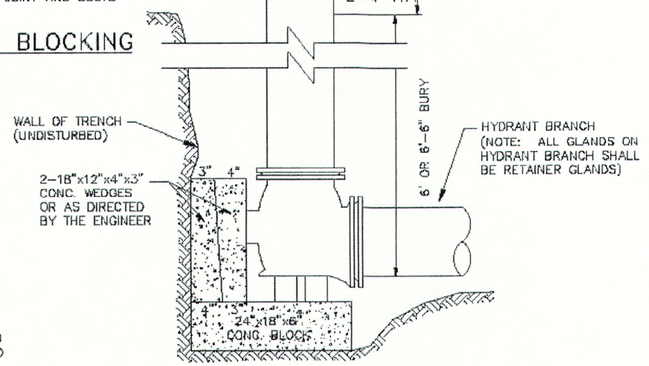




STANDARD 2" BLOW OFF



STANDARD BEND BLOCKING



TYPICAL HYDRANT INSTALLATION DETAIL

THE STANDARD DETAILS AS CONTAINED ON THIS SHEET WERE OBTAINED FROM THE PORTLAND WATER DISTRICT, WATER AND WASTEWATER MAIN EXTENSIONS / SPECIFICATIONS, SECTION VI - STANDARD DETAIL AND CONSTRUCTION, WITH LATEST REVISION DATE OF FEBRUARY 1, 2009.

ALL WATER MAIN EXTENSION MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PORTLAND WATER DISTRICT.

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
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1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE · JOSEPH A. LAVERRIERE · 7417 · LICENSED PROFESSIONAL ENGINEER · 12-8-11

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

SHEET TITLE: STANDARD WATER DETAILS (1 OF 2)

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	N.T.S.
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-DET		

SHEET C-10.4

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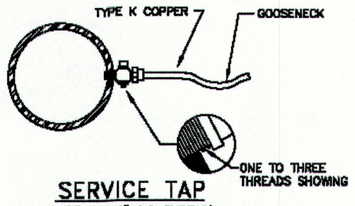
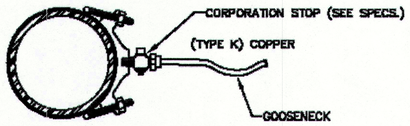
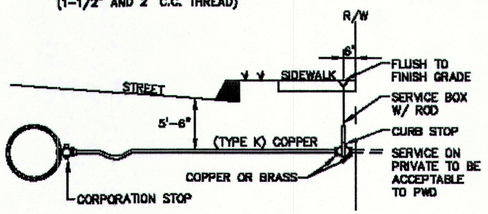


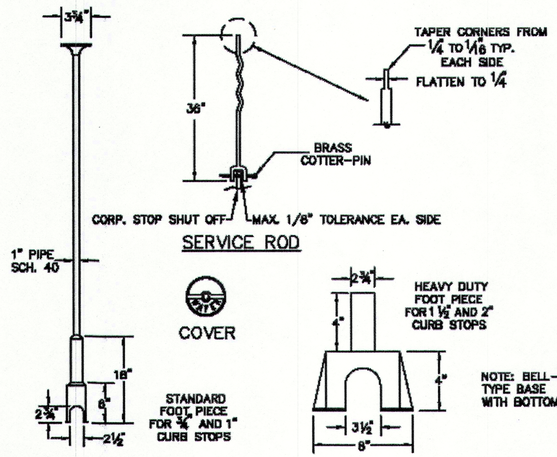
SERVICE TAP
(3/4" AND 1" C.C. THREAD)



SERVICE SADDLE
(1-1/2" AND 2" C.C. THREAD)



TYPICAL SERVICE CONNECTION

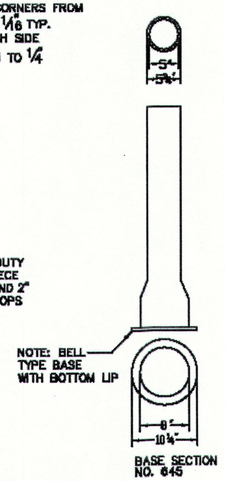


SERVICE ROD

SERVICE BOX

FOOT PIECE

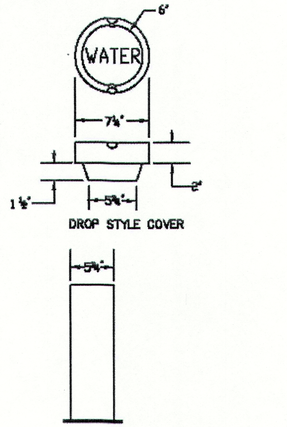
NOTE : ANY EXTENSION OF SERVICE BOX REQUIRES:
1) 1" FEMALE IRON PIPE COUPLING
2) 1" THREADED PIPE
(THIS IS TO BE A NON-WELDED, TWO PIECE ARRANGEMENT. SLIP ON ADAPTERS ARE NOT PERMISSIBLE.)



BASE SECTION NO. 845

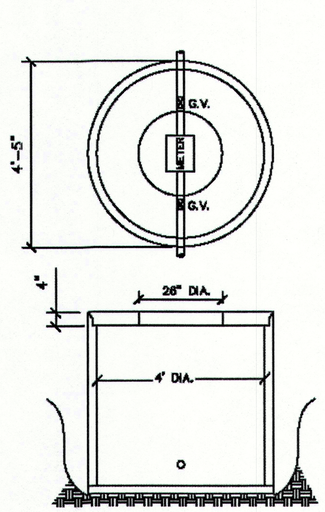
INTERMEDIATE SECTION NO.58

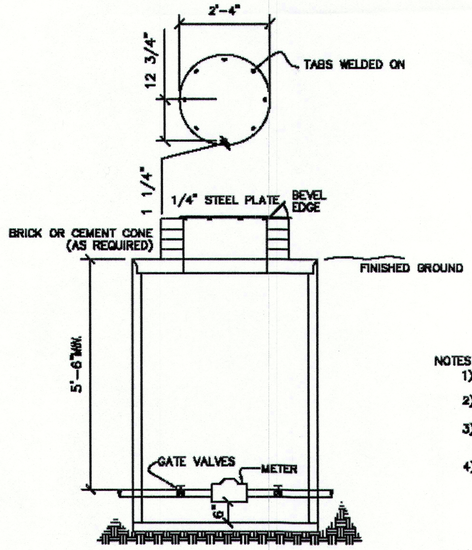
TOP SECTION NO.56



(NUMBERS ARE FOR 5 1/4" BUFFALO VALVE BOXES)
(BASE SECTION MAY BE USED AS INTERMEDIATE SECTION)

VALVE BOX & COVER





TYPICAL METER PIT

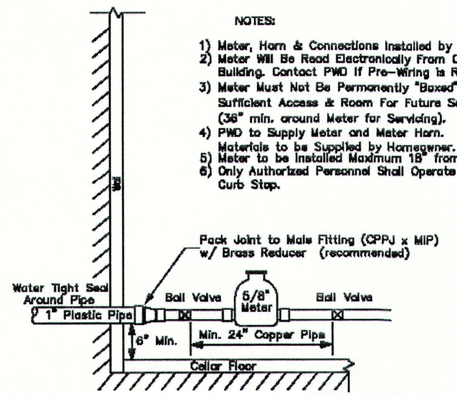
5/8" TO 2" METERS

METER BOX
1) TO BE INSTALLED AND SUPPLIED BY OWNER
2) MINIMUM 4'-0" DIAMETER CONC. M.H. W/ CEMENT BASE
3) WATER METER TO HAVE 5'-6" OF COVER AND IS TO BE SUPPLIED BY P.W.D.
4) OWNER IS TO SUPPLY 2 VALVES INSIDE OF PIT (MINIMUM SEPARATION OF 2'-0")
5) COPPER PIPE REQUIRED THRU METER PIT

COVER PLATE
1) COVER MUST WEIGH LESS THAN 60 lbs.
2) MINIMUM SIZE OF COVER WILL BE 28" DIAMETER.
3) IF STEEL PLATE IS USED, TREAT WITH A COAT OF RUST INHIBITING PAINT.

NOTES
1) THIS PIT IS TO BE PLACED ON PRIVATE PROPERTY NEAR THE STREET LINE.
2) THIS TYPICAL PIT WAS NOT DESIGNED FOR ANY TRAFFIC LOAD
3) THE PIT CAN BE ORDERED THRU OTHERS WITH SPECIAL DETAILS SUCH AS LARGER M.H. COVERS, ETC.
4) THIS PIT WILL HOUSE UP TO TWO 5/8", 3/4", OR 1" METERS

NOTES:
1) Meter, Horn & Connections Installed by PWD
2) Meter Will Be Read Electronically From Outside of Building. Contact PWD If Pre-Wiring is Required.
3) Meter Must Not Be Permanently "Boxed" Without Sufficient Access & Room For Future Servicing (36" min. around Meter for Servicing).
4) PWD to Supply Meter and Meter Horn. All Other Materials to be Supplied by Homeowner.
5) Meter to be Installed Maximum 18" from Entrance.
6) Only Authorized Personnel Shall Operate Service Curb Stop.



TYP. HORIZONTAL METER SET

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ALL WATER MAIN EXTENSION MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PORTLAND WATER DISTRICT.

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REVISIONS

STATE OF MAINE · JOSEPH A. LAVERRIERE · 7417 · LICENSED PROFESSIONAL ENGINEER

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

SHEET TITLE: STANDARD WATER DETAILS (2 OF 2)

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	N.T.S.
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-DET		
SHEET	C-10.5		

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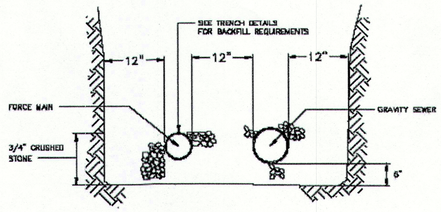
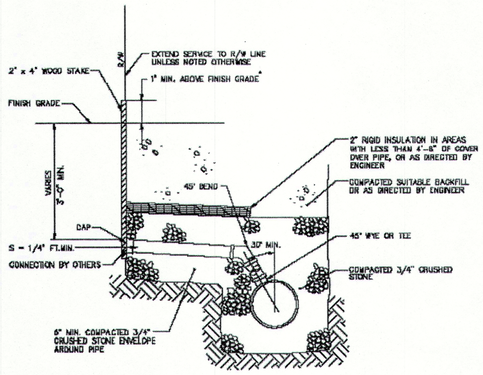


TWO PIPE TRENCH DETAIL

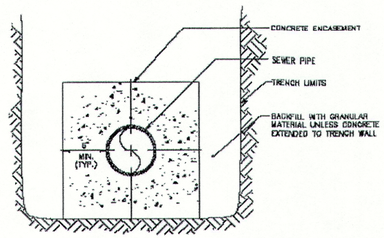


NOTES:

* PIPE DIAMETERS MAY VARY. SEE TYPICAL PIPE TRENCH DETAIL. THIS SHEET.
* WHERE 30° MINIMUM ANGLE BETWEEN SEWER CONNECTION AT THE SEWER MAIN AND THE VERTICAL CANNOT BE MAINTAINED, PROVIDE A PRECAST SEWER CHIMNEY.
* IF STAKE IS CUT OFF FLUSH OR SLIGHTLY BELOW GRADE, PROVIDE MIN. OF TWO 16d. GALV. SPIKES DRIVEN INTO TOP OF 2" x 4" TO PROVIDE METAL DETECTABILITY.

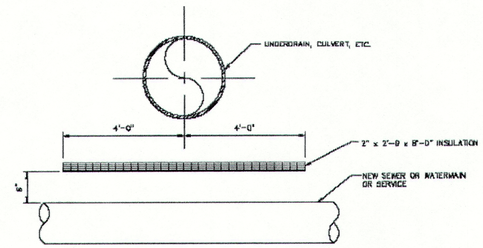
HORIZONTAL SEWER CONNECTION

N.T.S.



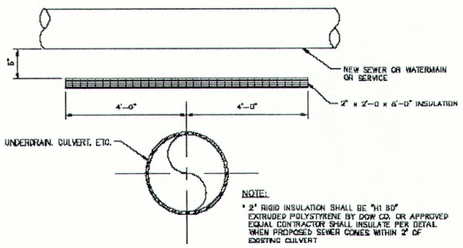
CONCRETE ENCASEMENT FOR SEWER MAINS

N.T.S.



INSULATION DETAIL "A"

N.T.S.

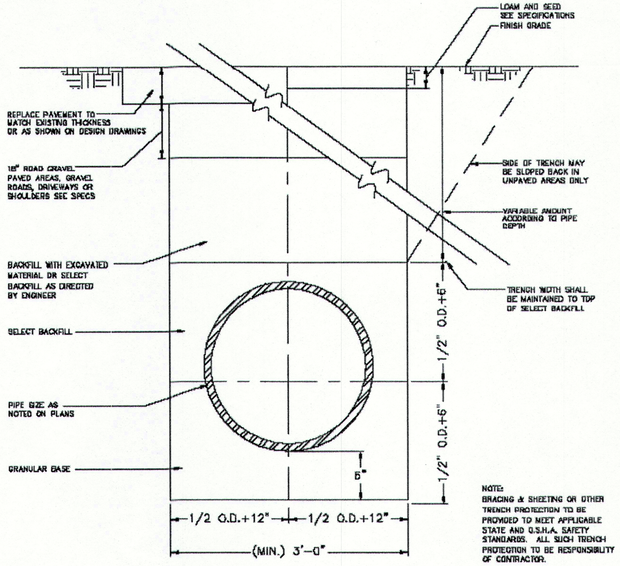


NOTE:

* 2" RIGID INSULATION SHALL BE "HI 80" EXTRUDED POLYSTYRENE BY DOW CO. OR APPROVED EQUAL CONTRACTOR SHALL INSULATE PER DETAIL WHEN PROPOSED SEWER COMES WITHIN 2' OF EXISTING CULVERT

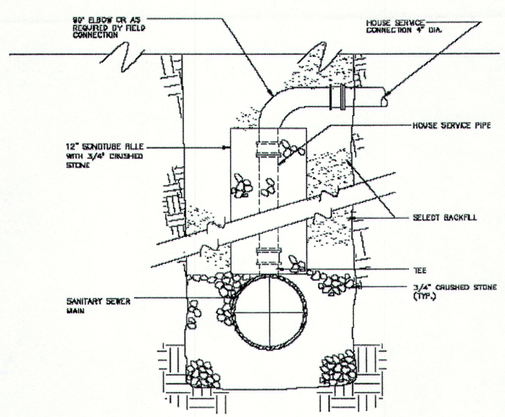
INSULATION DETAIL "B"

N.T.S.



TRENCH SECTION

N.T.S.



CHIMNEY DETAIL

N.T.S.

THE STANDARD DETAILS AS CONTAINED ON THIS SHEET WERE OBTAINED FROM THE PORTLAND WATER DISTRICT, WATER AND WASTEWATER MAIN EXTENSIONS / SPECIFICATIONS, SECTION VI - STANDARD DETAIL AND CONSTRUCTION, WITH LATEST REVISION DATE OF FEBRUARY 1, 2009.

ALL SEWER MAIN EXTENSION MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PORTLAND WATER DISTRICT.

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
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4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE — JOSEPH A. LAVERRIERE — LICENSED PROFESSIONAL ENGINEER — 12031

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

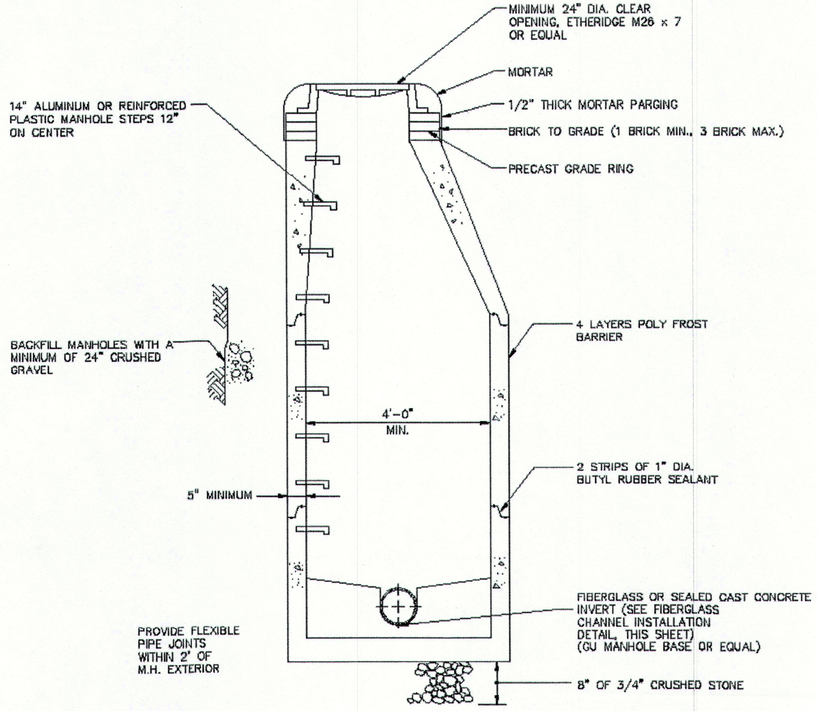
SHEET TITLE: SEWER TRENCH DETAILS

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

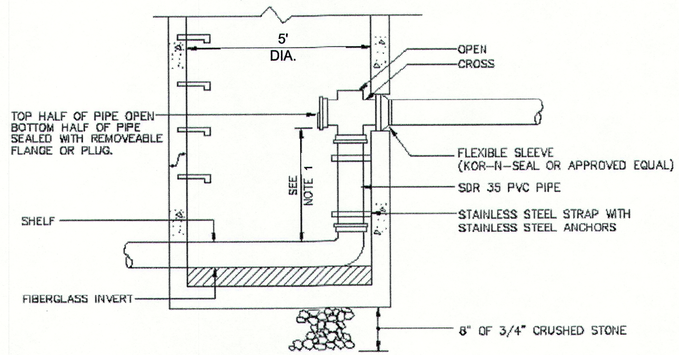
DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	N.T.S.
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-DET		
SHEET	C-10.6		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-DET.dwg, C-10.6 SEWER TRENCH DETAILS, 11/30/2011 10:51:53 AM, cdube



PRECAST MANHOLE

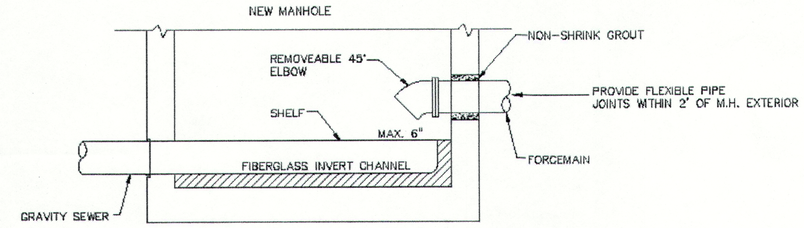


PRECAST DROP MANHOLE

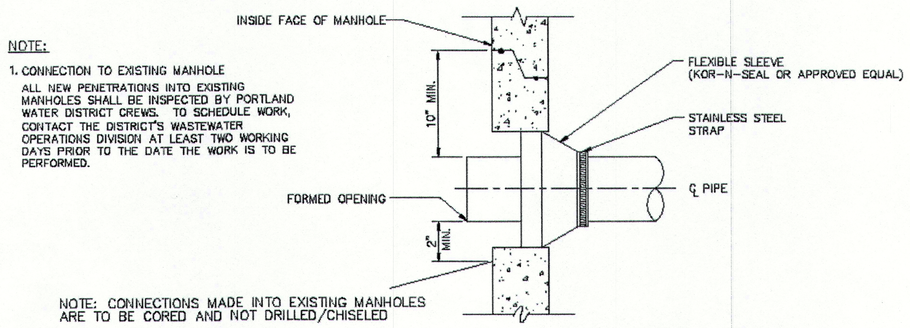
NOTES:

1. MINIMUM HEIGHT OF DROP IS 2'-0"
2. SEE PRECAST MANHOLE SECTION FOR TYPICAL MANHOLE INFORMATION, INCLUDING NOTES.
3. PROVIDE DROP PIPE FOR ALL INVERT DIFFERENTIALS GREATER THAN TWO (2) FEET.
4. CUT OFF TOP 1/3 OF PIPE PLUG.
5. INSTALL PVC TEE AND PLUG FACING UP AT INSIDE DROP INSTALLATION AT EXISTING MANHOLE LOCATED ON WEST STREET.

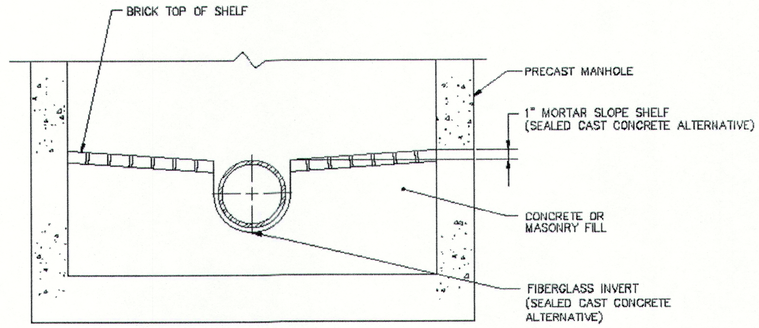
SPECIAL NOTE:
THE MINIMUM DIAMETER OF THE DROP MANHOLE DETAIL AS CONTAINED ON THIS DETAIL HAS BEEN MODIFIED PER THE REQUEST OF THE PORTLAND WATER DISTRICT.



FORCEMAIN TERMINUS



NEW PIPE TO EXISTING MANHOLE CONNECTION DETAIL – 4" TO 24"



FIBERGLASS CHANNEL INSTALLATION

THE STANDARD DETAILS AS CONTAINED ON THIS SHEET WERE OBTAINED FROM THE PORTLAND WATER DISTRICT, WATER AND WASTEWATER MAIN EXTENSIONS / SPECIFICATIONS, SECTION VI - STANDARD DETAIL AND CONSTRUCTION, WITH LATEST REVISION DATE OF FEBRUARY 1, 2009.

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1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE JOSEPH LAVERRIERE LICENSED PROFESSIONAL ENGINEER 7417

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

PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

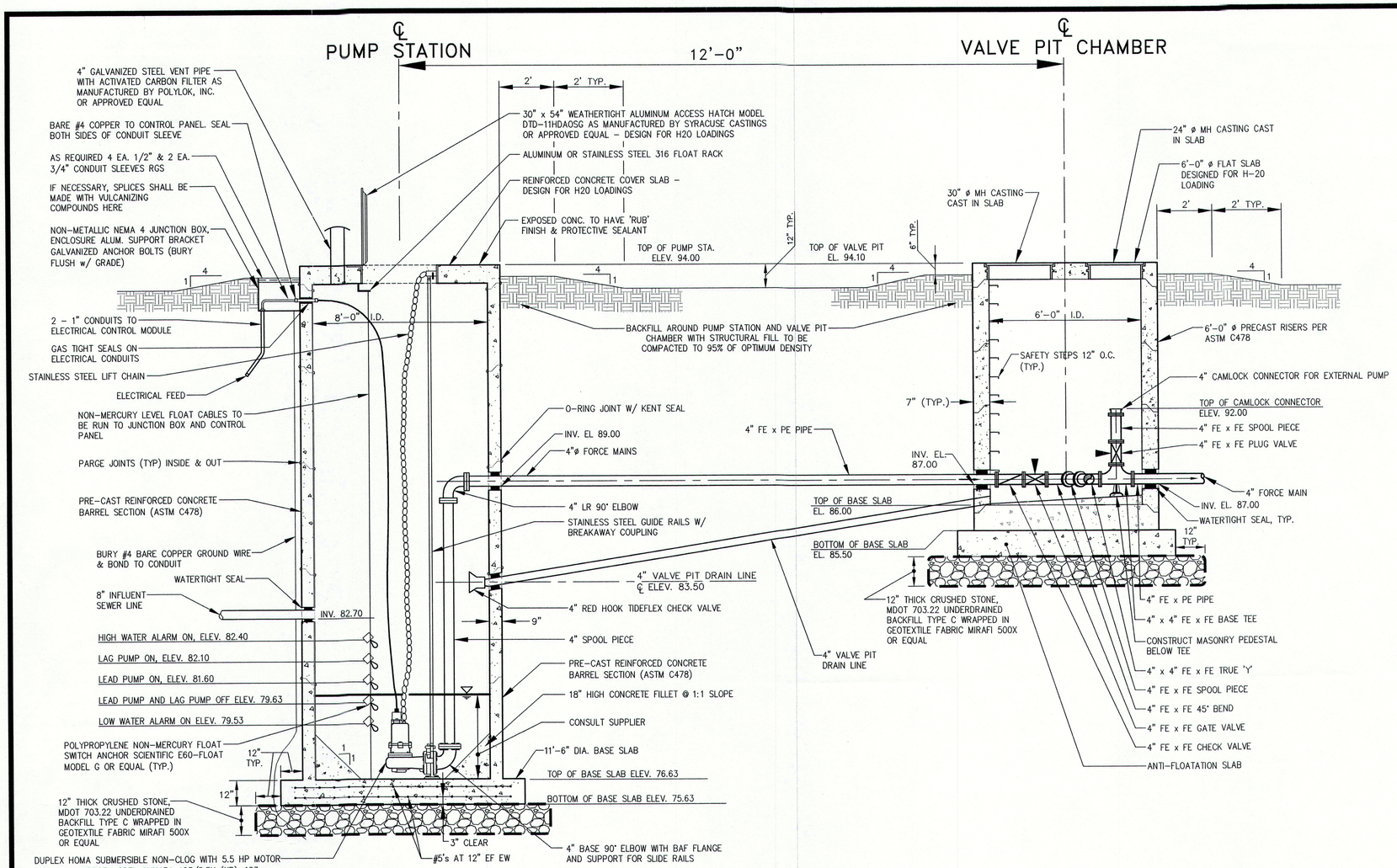
SHEET TITLE
SEWER MANHOLE DETAILS

CLIENT
VILLAGE GREEN
CUMBERLAND, LLC

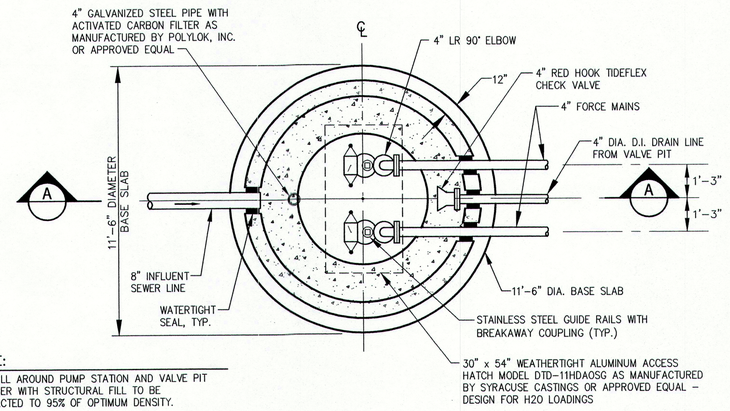
DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	N.T.S.
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-DET		
SHEET	C-10.7		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-DET.dwg, C-10.7 SEWER MANHOLE DETAILS, 11/30/2011 11:01:51 AM, cdube



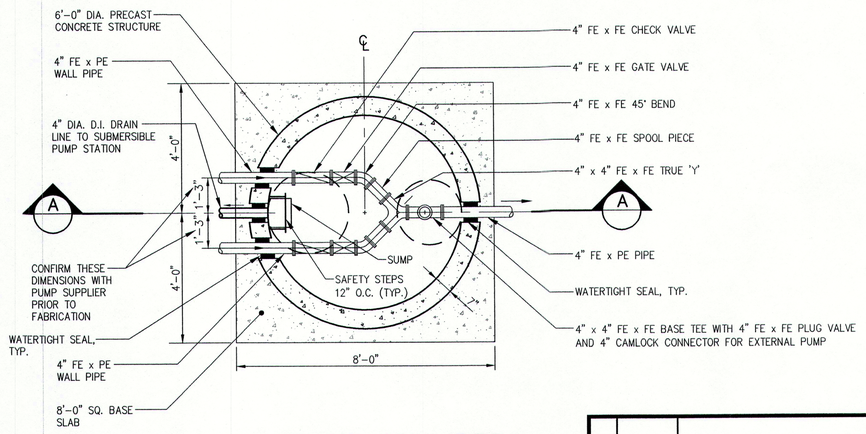
PUMP STATION SECTION VIEW



NOTE:
BACKFILL AROUND PUMP STATION AND VALVE PIT CHAMBER WITH STRUCTURAL FILL TO BE COMPACTED TO 95% OF OPTIMUM DENSITY.

PUMP STATION PLAN VIEW

VALVE PIT CHAMBER SECTION VIEW



VALVE PIT CHAMBER PLAN VIEW

STRUCTURAL FILL MATERIAL SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS	
SIEVE SIZE	PERCENT PASSING
4 - INCH	100
3 - INCH	90 TO 100
¼ - INCH	25 TO 90
NO. 40	0 TO 30
NO. 200	0 TO 5

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REVISIONS

STATE OF MAINE JOSEPH A. LAVERRIERE LICENSED PROFESSIONAL ENGINEER 11-28-11

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

SHEET TITLE: SEWAGE PUMP STATION DETAILS

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	N.T.S.
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SHEET: C-10.8

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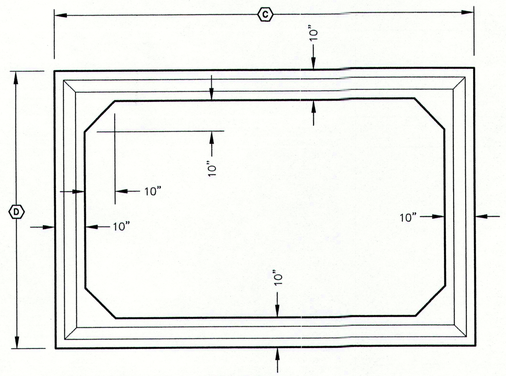
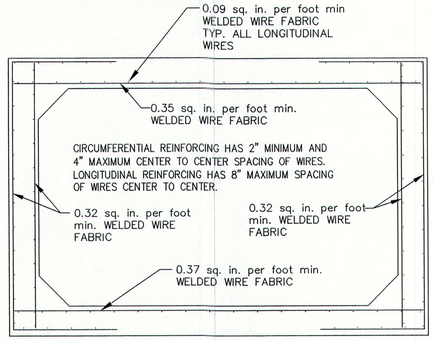
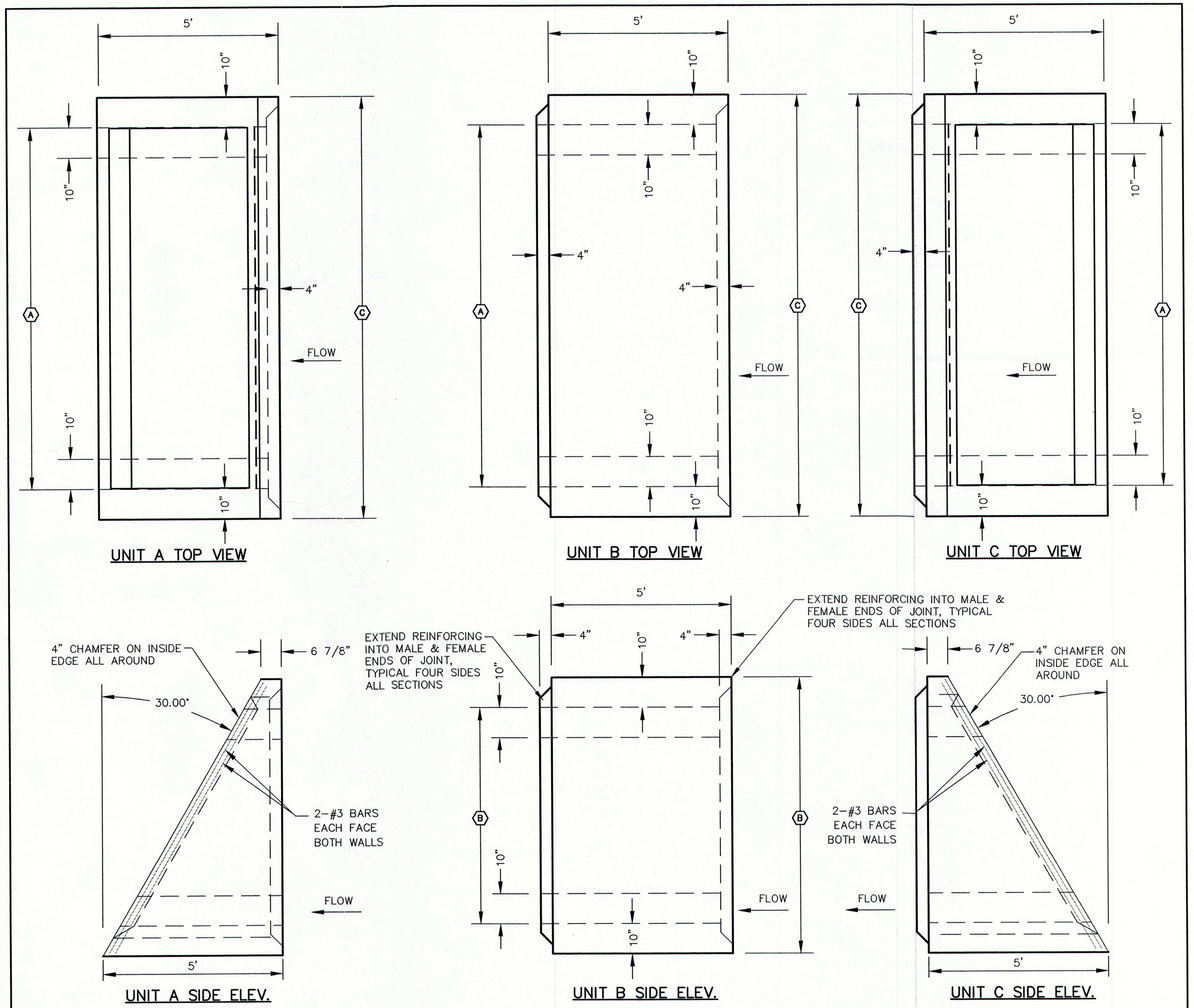


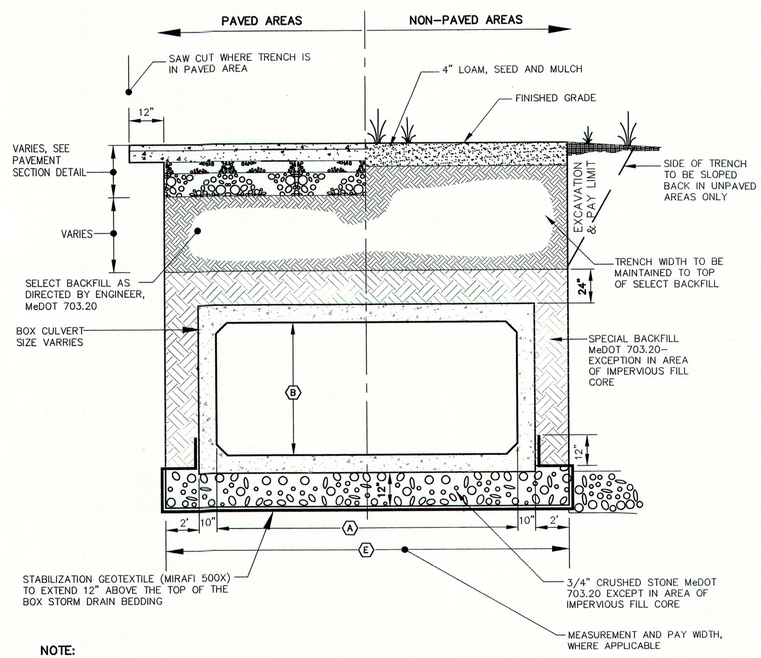


A BOX CULVERT TYPICAL UNIT SECTION
N.T.S.



B BOX CULVERT TYPICAL UNIT DETAILS
N.T.S.

BOX STORM DRAIN & TRENCH

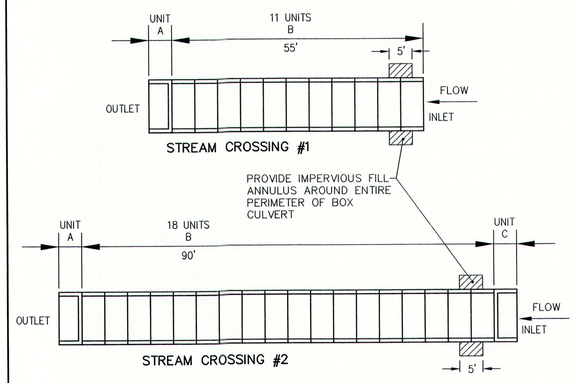


NOTE:
BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

SCHEDULE A CULVERT DIMENSIONS

ITEM	DESCRIPTION	STREAM CROSSING #1	STREAM CROSSING #2
A	INSIDE WIDTH	72"	96"
B	INSIDE HEIGHT	60"	48"
C	OUTSIDE WIDTH	92"	116"
D	OUTSIDE HEIGHT	80"	68"
E	TRENCH WIDTH	140"	164"

C BOX CULVERT TYPICAL TRENCH SECTION
N.T.S.



D BOX CULVERT ORIENTATION PLAN
N.T.S.

BOX CULVERT STRUCTURAL NOTES:

1. CONCRETE BOX CULVERT TO CONFORM TO ASTM C789, STANDARD SPECIFICATION FOR CONCRETE BOX SECTIONS FOR CULVERTS, STORM DRAINS, AND SEWERS.
2. CONCRETE TO ACHIEVE A 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS.
3. CONCRETE REINFORCING STEEL TO CONFORM TO ASTM A185 GRADE 60 FOR WELDED WIRE FABRIC AND ASTM A615 GRADE 60 AS SHOWN ON THE DRAWINGS.
4. JOINTS TO BE SEALED WITH TWO LAYERS OF 1" DIA BUTYL RUBBER SEALANT PRIOR TO MATING SECTIONS TOGETHER. JOINTS TO BE CLEAN AND FREE OF FOREIGN MATTER WHEN JOINTS ARE MADE.
5. CLEAR CONCRETE COVER OF 1" TO BE MAINTAINED OVER REINFORCING STEEL ON ALL SURFACES.
6. PRECAST SECTIONS TO BE MANUFACTURED BY AN ETABLISHED PRECAST CONCRETE MANUFACTURING COMPANY WITH AT LEAST FIVE YEARS EXPERIENCE IN THE BUSINESS OF PRECAST CONCRETE MANUFACTURING. AMERICAN CONCRETE INDUSTRIES OF BANGOR, ME. (1–800–432–7843) OR NEW ENGLAND PIPE OF WAUREGAN, CT. (1–800–962–7473) ARE ACCEPTABLE MANUFACTURERS OF CONCRETE BOX CULVERT SECTIONS.
7. PLACE CULVERT ON 12" THICK BED OF CRUSHED STONE UNDERLAID WITH MIRAFI 500X GEOTEXTILE FABRIC.
8. BACKFILL AROUND AND ON TOP OF CULVERT WITH 24" OF SELECT BACKFILL MEETING THE SPECIFICATION FOR MDOT 703.20 GRANULAR BORROW WITH A MAXIMUM STONE SIZE OF 6".
9. SUBMIT CONCRETE REINFORCEMENT PLACEMENT DRAWINGS FOR REVIEW BY THE ENGINEER.

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REVISIONS

STATE OF MAINE · JOSEPH A. LAVERRIERE · 7417 · LICENSED PROFESSIONAL ENGINEER

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

PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

SHEET TITLE
PRECAST CONCRETE BOX CULVERT DETAILS

CLIENT
VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

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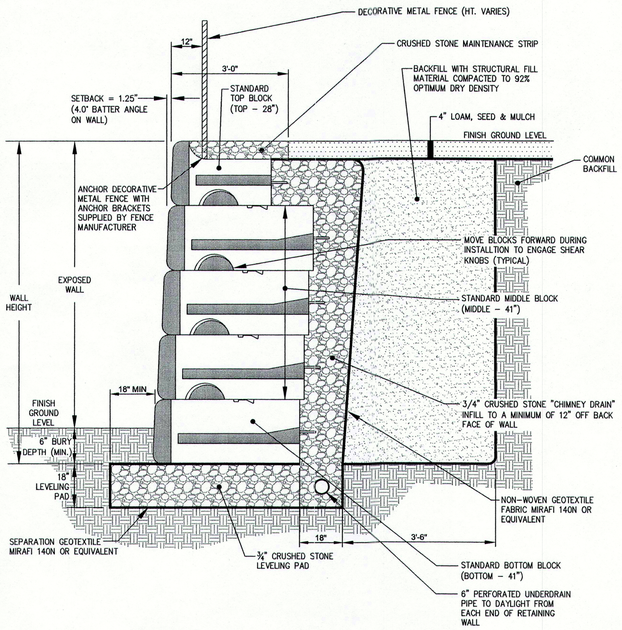
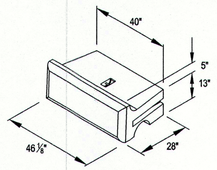


STANDARD TOP BLOCK

Top - 28"

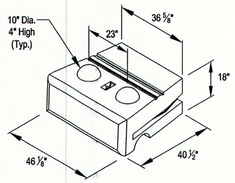
Volume = 8.55 cft
Weight = ±1223 lbs



STANDARD MIDDLE BLOCK

Middle - 41"

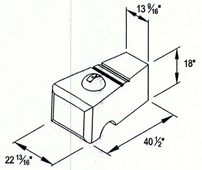
Volume = 16.44 cft
Weight = ±2351 lbs



HALF MIDDLE BLOCK

Half Middle - 41"

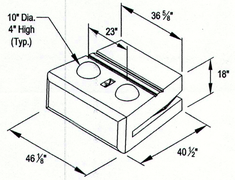
Volume = 7.28 cft
Weight = ±1041 lbs



STANDARD BOTTOM BLOCK

Bottom - 41"

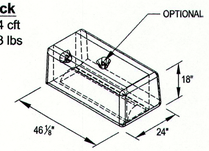
Volume = 17.37 cft
Weight = ±2483 lbs



FREESTANDING TOP BLOCKS

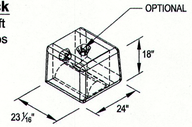
Full Top Block

Volume = 10.44 cft
Weight = ±1493 lbs



Half Top Block

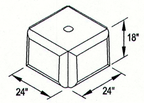
Volume = 5.18 cft
Weight = ±741 lbs



FREESTANDING COLUMN BLOCKS

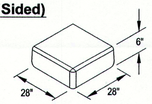
End Column

Volume = 5.39 cft
Weight = ±771 lbs



Column Cap (4 Sided)

Volume = 3.02 cft
Weight = ±432 lbs

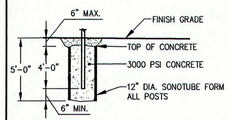


NOTES:

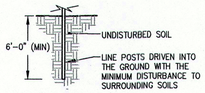
1. RETAINING WALL MATERIAL SHALL BE REDI-ROCK LARGE BLOCK SEGMENTAL CONCRETE UNIT MASONRY RETAINING WALL SYSTEM WITH LEDGESTONE TEXTURED FINISH OR APPROVED EQUAL.
2. A DECORATIVE METAL RAIL FENCE (HEIGHT VARIES FROM 3'-0" TO 4'-6") IS REQUIRED ALONG THE TOP OF RETAINING WALLS A & B. THIS FENCE SHALL BE ANCHORED DIRECTLY TO THE TOP OF THE RETAINING WALL BLOCKS OR COLUMNS IN ACCORDANCE WITH ANCHOR BRACKETS SUPPLIED BY THE FENCE MANUFACTURER.
3. LARGE BLOCK SEGMENTAL CONCRETE UNIT MASONRY RETAINING WALLS REQUIRE UNDERDRAIN, CRUSHED STONE INFILL AND GRANULAR BORROW BACKFILL.
4. PREPARED SUBGRADE SHALL CONFORM TO THE GEOTECHNICAL RECOMMENDATIONS CONTAINED IN THE REPORT BY R.W. GILLESPIE ASSOCIATES, INC. AND PROJECT SPECIFICATIONS.
5. THE APPLIED FACTORED BEARING PRESSURE FOR PRECAST CONCRETE BLOCK GRAVITY WALL SHALL NOT EXCEED 3.0 KSF FOR UNREINFORCED WALL.
6. ALL BLOCKS AT THE ENDS OF THE WALL(S) MUST BE FINISHED ON THREE SIDES: THE FRONT, THE TOP AND THE EXPOSED END. BLOCKS WITH EXPOSED SURFACES AT THE ENDS AND TOP OF THE WALL MUST BE MANUFACTURED FOR THIS PURPOSE AND MUST BE FINISHED TO MATCH THE FACE OF THE BLOCKS.
7. PIPED DRAINAGE SHALL BE INCLUDED IN THE DESIGN OF THE WALLS.
8. A MINIMUM EMBEDMENT DEPTH OF 6" IS REQUIRED IN THE DESIGN AND CONSTRUCTION OF THE PRECAST CONCRETE BLOCK GRAVITY WALL.
9. THE FACE QUALITY OF PRECAST CONCRETE BLOCK WALL WILL BE APPROVED BY THE OWNER'S REPRESENTATIVE.
10. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, PREPARED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF MAINE, FOR ALL RETAINING WALLS.

A LARGE BLOCK RETAINING WALL DETAIL
N.T.S.

INSTALLATION SCHEDULE			
FENCE HEIGHT (A)	TOP RAIL PIPE DIA. (B)	LINE POST PIPE DIA. (C)	CORNER & END POST PIPE DIA. (D)
4'	1.66"	1.90"	2.375"
6'	1.66"	1.90"	2.375"
8'	1.66"	2.375"	2.875"
10'	1.66"	2.875"	2.875"



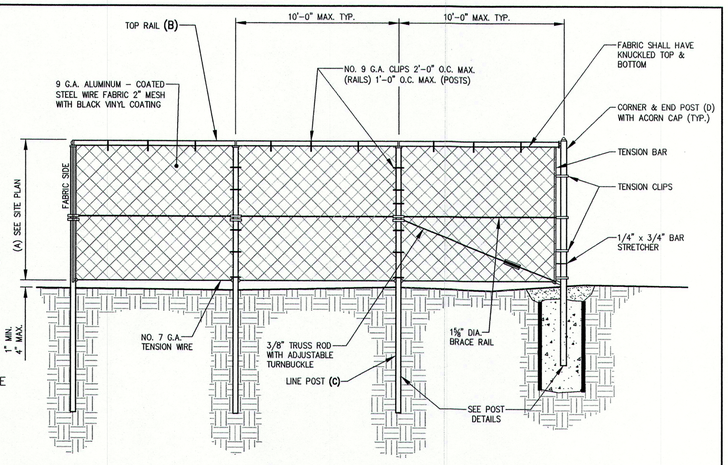
END, CORNER & GATE POST DETAIL



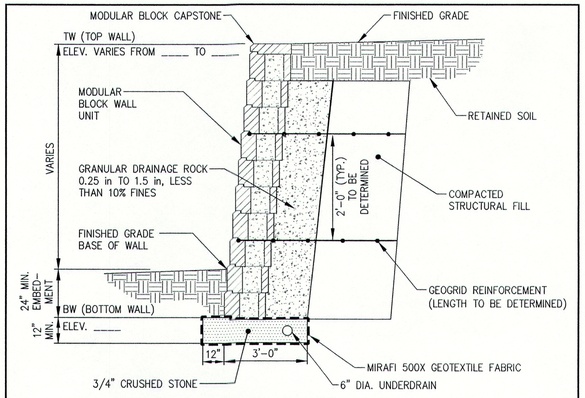
INTERMEDIARY LINE POST DETAIL

NOTES:

1. DIMENSIONS FOR PIPE DIAMETERS ARE NOMINAL OUTSIDE DIAMETERS.
2. REFER TO SITE PLAN FOR LOCATION(S) & HEIGHT(S) OF FENCES TO BE INSTALLED.



B CHAIN LINK FENCE DETAIL
N.T.S.



TYPICAL SECTION

C MODULAR CONCRETE BLOCK RETAINING WALL DETAIL
N.T.S.

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE — JOSEPH A. LAVERRIERE — 7417 — LICENSED PROFESSIONAL ENGINEER — 11-28-11

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

SHEET TITLE: RETAINING WALLS & FENCE DETAILS

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	N.T.S.
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-DET		
SHEET	C-10.10		

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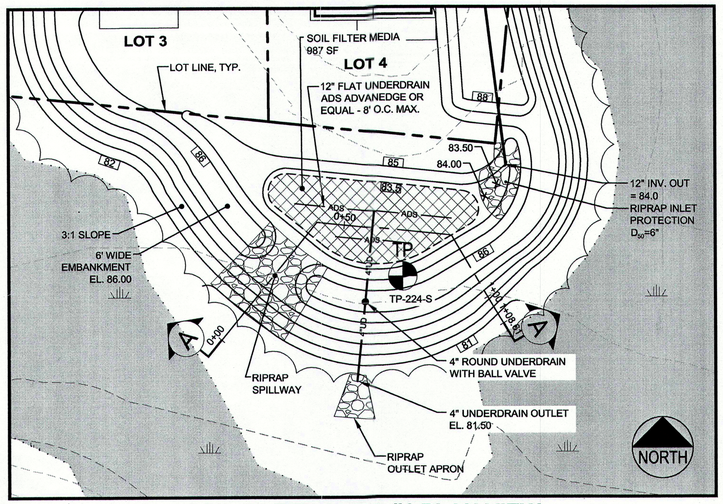
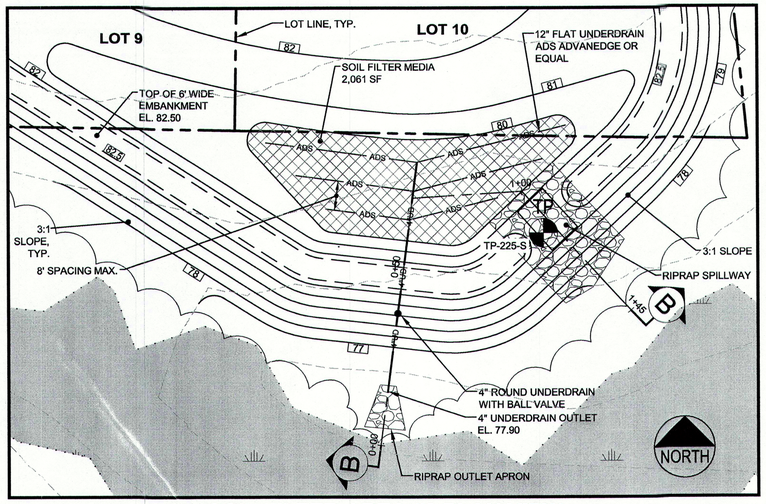


SOIL FILTER AREA #1 PLAN VIEW

SCALE: 1" = 20'



SOIL FILTER AREA #2 PLAN VIEW

SCALE: 1" = 20'

NOTES:

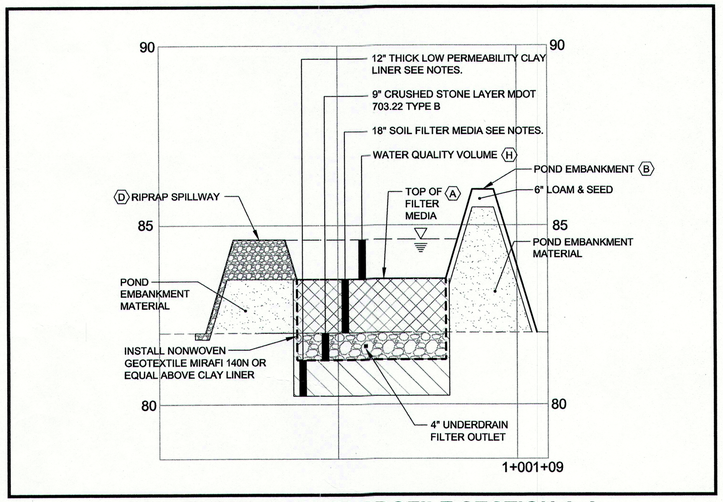
1. FILTERS ARE DESIGNED TO TREAT 1.0" RUNOFF FROM PAVED OR IMPERVIOUS SURFACES AND 0.4" RUNOFF FROM LANDSCAPED AREAS.
2. LOAM SOIL FILTER MEDIA:

SOIL FILTER MEDIA MUST CONSIST OF A SILTY SAND SOIL OR SOIL MIXTURE COMBINED WITH 20% TO 25 % BY VOLUME OF A MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH (OR OTHER ORGANIC SOURCE APPROVED BY THE ENGINEER & MeDEP). THE RESULTING MIXTURE MUST HAVE NO LESS THAN 8% PASSING THE 200 SIEVE.

3. SAND GRADATION FOR FILTER MEDIA: *SEE NOTE 4

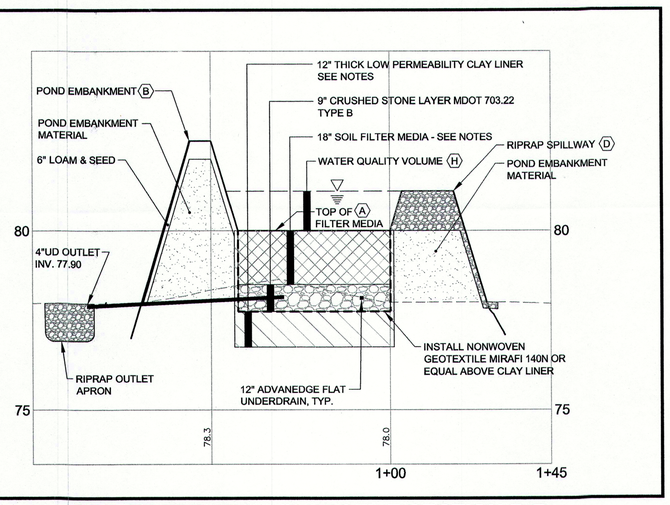
SIEVE SIZE	% PASSING BY WEIGHT
3/8	100
#4	95–100
#8	80–100
#16	50–85
#30	25–60
#60	10–30
#100	2–10
#200	0–5

4. THE FILTER MEDIA SPECIFICATION IS BASED UPON THE APRIL 2007 UPDATES TO THE MeDEP BMP TECHNICAL DESIGN MANUAL. THESE ARE SUBJECT TO CHANGE BASED UPON OPERATING EXPERIENCE. GRADATION MAY BE CHANGED BY MeDEP. VERIFY GRADATION IS CURRENT BEFORE INSTALLATION.
5. SEASONAL HIGH GROUND WATER ELEVATION IS APPROXIMATELY 0.7' BELOW EXISTING GROUND ELEVATION, BASED ON GEOTECHNICAL INVESTIGATIONS TP224–S AND TP225–S.
6. LOW PERMEABILITY CLAY LINER SHALL BE PLACED ABOVE PREPARED SUBGRADE IN 2 – 6" LIFTS TO PREVENT GROUNDWATER INFILTRATION. MAXIMUM ALLOWABLE IN PLACE PERMEABILITY SHALL BE 1 X 10^{-6}CM/S. LINER SHALL EXTEND UP POND SIDE SLOPES TO ELEVATION (H).
7. TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:
   - SUBMIT SAMPLES OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA AND SAMPLES OF THE UNDERDRAIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRABS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.
   - PERFORM A SIEVE ANALYSIS IS CONFORMING TO ASTM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES; 1996a) ON EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING SOIL FILTER MEDIA MIXTURE MUST HAVE 8% TO 12% BY WEIGHT PASSING THE #200 SIEVE, A CLAY CONTENT OF LESS THAN 2% (DETERMINED HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER.
   - PERFORM A PERMEABILITY TEST ON THE SOIL FILTER MEDIA MIXTURE CONFORMING TO ASTM 2434 WITH THE MIXTURE COMPACTED TO 90–92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698.
8. CONSTRUCTION OVERSIGHT: THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 7 DAYS PRIOR TO BEGINNING CONSTRUCTION ON THE FILTER BASINS. INSPECTION OF THE FILTER BASINS SHALL BE PROVIDED AT EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER WITH REQUIRED REPORTING TO MDEP. AT A MINIMUM, INSPECTIONS WILL OCCUR:
   - AFTER THE FILTER HAS BEEN GRADED TO SUBGRADE AND UNDERDRAIN PIPES HAVE BEEN INSTALLED BUT NOT BACKFILLED.
   - AFTER THE CRUSHED STONE LAYER IS INSTALLED BUT PRIOR TO PLACEMENT OF FILTER MEDIA.
   - AFTER SOIL FILTER MEDIA IS INSTALLED AND SEEDED.
   - AFTER ONE YEAR TO INSPECT THE HEALTH OF THE VEGETATION AND MAKE CORRECTIONS.
9. UPON COMPLETION OF INSTALLATION OF THE SOIL FILTER MEDIA, AND ESTABLISHMENT OF 90% OF GRASS COVER OVER THE FILTER MEDIA, THE CONTRACTOR SHALL FLOOD THE BASIN TO ELEVATION (H) WITH CLEAN WATER AND ADJUST THE BALL VALVE INSTALLED ON THE UNDERDRAIN OUTLET TO ACHIEVE A 24–32 HOUR DRAIN TIME.



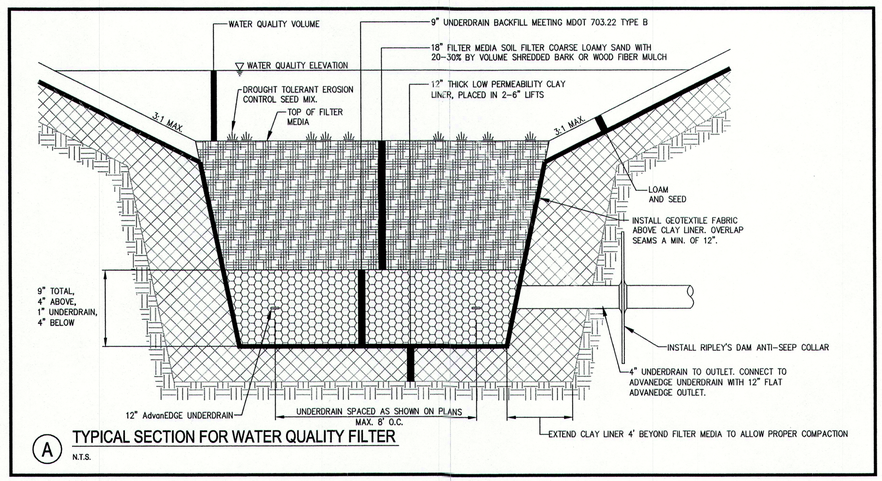
SOIL FILTER AREA #1 PROFILE SECTION A-A

SCALE: 1" = 20' HORZ.
1" = 2' VERT.

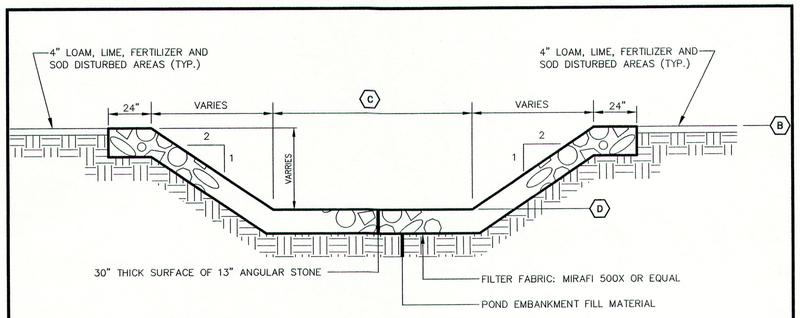


SOIL FILTER AREA #2 PROFILE SECTION B-B

SCALE: 1" = 20' HORZ.
1" = 2' VERT.



(A) TYPICAL SECTION FOR WATER QUALITY FILTER
N.T.S.

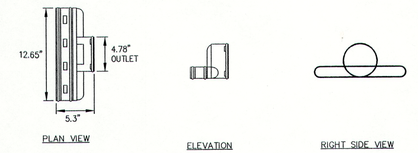


SEE SCHEDULE A

(B) TYPICAL RIPRAP SPILLWAY DETAIL
N.T.S.

SCHEDULE A
UNDERDRAINED FILTER ELEVATIONS

ITEM/DESCRIPTION	DIMENSION/ELEVATION	
	FILTER #1	FILTER #2
(A) BOTTOM OF POND ELEVATION	83.50	80.00
(B) TOP OF BERM ELEVATION	86.00	82.50
(C) WIDTH OF SPILLWAY	15'	15'
(D) CREST OF SPILLWAY	84.60	81.10
(E) 2 YEAR STAGE 2 YEAR STORAGE (CF)	84.68 1,558 CF	81.19 4,177 CF
(F) 10 YEAR STAGE 10 YEAR STORAGE (CF)	84.75 1,698 CF	81.35 5,124 CF
(G) 25 YEAR STAGE 25 YEAR STORAGE (CF)	84.77 1,737 CF	81.39 5,382 CF
(H) WATER QUALITY STAGE WATER QUALITY STORAGE (CF)	84.60 1,420 CF	81.10 3,647 CF



NOTE:

1. AdvanEDGE OUTLET TO BE INSTALLED IN THE ORIENTATION SHOWN ABOVE, SUCH THAT THE INVERT ELEVATION OF THE AdvanEDGE EQUALS THE INVERT ELEVATION OF THE 4" ROUND PIPE AT THE JUNCTION.

(C) 12" FLAT AdvanEDGE OUTLET (ADS PART # 1432AN)
N.T.S.

TEST PIT DATA

TEST PIT NO.	BMP	EXISTING GROUND ELEVATION	DEPTH TO GROUNDWATER	GROUNDWATER ELEVATION	BOTTOM OF FILTER MEDIA
TP 224-S	SOIL FILTER #1	82.50	0.7'	81.80	81.5
TP 225-S	SOIL FILTER #2	78.50	0.7'	77.80	78.0

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE — JOSEPH A. LAVERRIERE — #7417 — LICENSED PROFESSIONAL ENGINEER — 11-28-11

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE
SHEET TITLE: SOIL FILTER AREAS PLANS & SECTIONS
CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	AS NOTED
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-POND PLAN & SECTIONS		
SHEET	C-11.0		

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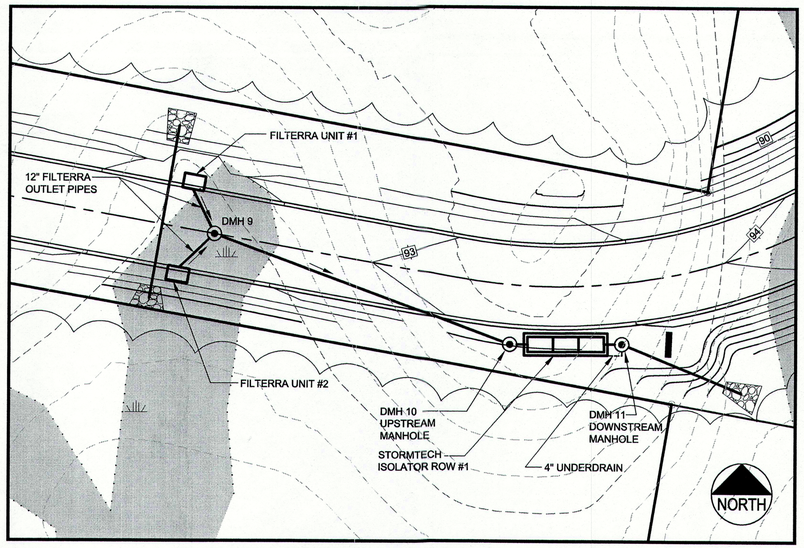
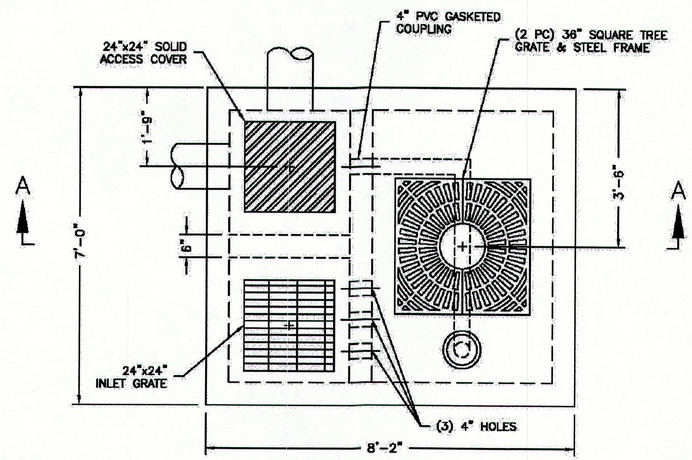
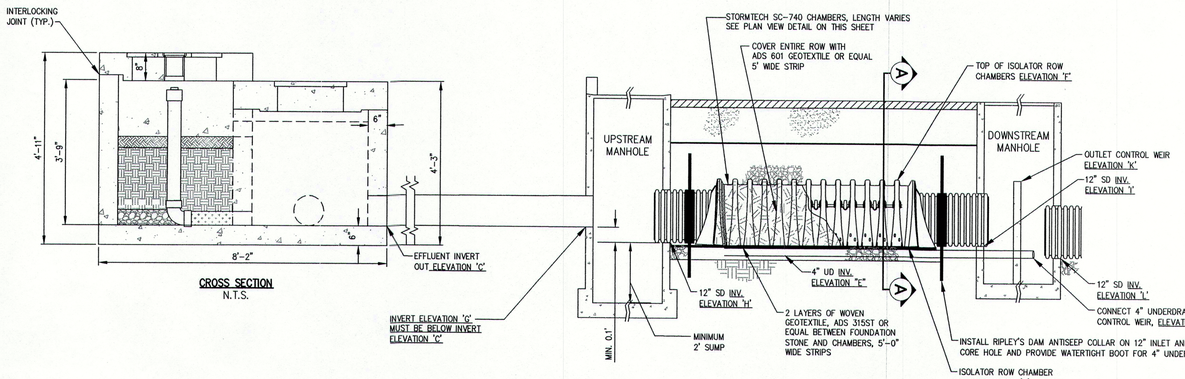


FILTERRA TREATMENT AREA #1 PLAN VIEW

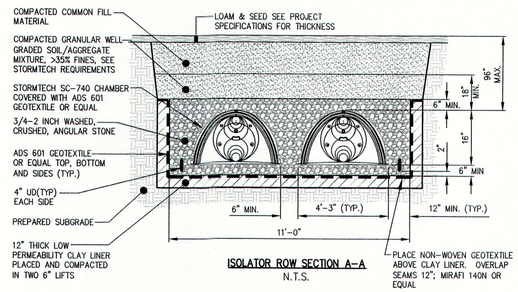
SCALE: 1" = 20'



PLAN VIEW
N.T.S.



A FILTERRA® UNIT AND STORMTECH® ISOLATOR ROW
N.T.S.



ISOLATOR ROW SECTION A-A
N.T.S.

NOTES:

1. ALL FILTERRA UNITS ARE TO BE PROVIDED WITH TREE GRATE CASTINGS PER MANUFACTURER'S DETAIL. SHOP DRAWING SUBMITTALS REQUIRED. REFER TO LANDSCAPE PLANS FOR PLANTINGS IN FILTERRA UNITS. MEDIA WITHIN FILTERRA UNITS TO BE PER MANUFACTURER'S SPECIFICATIONS.
2. THE FILTERRA UNITS SHALL BE DELIVERED TO THE SITE WITH THE ENGINEERED FILTER MEDIA AND PLUMBING FULLY INSTALLED. THE FILTERRA SHALL BE DELIVERED SEALED, PREVENTING DEBRIS AND SEDIMENT FROM ENTERING THE SYSTEM DURING CONSTRUCTION. THE BOARDS ON TOP OF THE LID AND SEALED IN THE UNIT'S THROAT MUST NOT BE REMOVED PRIOR TO "ACTIVATION". THE ACTIVATION OF THE UNIT INCLUDES REMOVAL OF THE INTERNAL WOODEN FORMS AND PROTECTIVE MESH COVER AND INSTALLATION OF PLANT(S) AND MULCH LAYERS AS NECESSARY. ACTIVATION OF THE FILTERRA UNIT IS TO BE PERFORMED ONLY BY THE SUPPLIER (AMERICAST OR AUTHORIZED DEALER). THE ACTIVATION PROCESS SHALL NOT COMMENCE UNTIL THE PROJECT SITE IS FULLY STABILIZED AND CLEANED (FULL LANDSCAPING, GRASS COVER, FINAL PAVING, AND STREET SWEEPING COMPLETED), MINIMIZING THE RISK OF CONTAMINATING THE FILTERRA SYSTEM.
3. THE INSTALLATION OF THE FILTERRA UNITS AND STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE LATEST MANUFACTURER INSTALLATION INSTRUCTIONS.
4. THE CONTRACTOR IS ADVISED TO REVIEW AND UNDERSTAND THE INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION. CALL 1-888-892-2694 OR VISIT WWW.STORMTECH.COM TO RECEIVE A COPY OF THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.
5. SEE PLAN AND PROFILE DRAWINGS FOR MANHOLE AND CATCH BASIN RIM INFORMATION AND STORM DRAIN INVERT INFORMATION.
6. LOW PERMEABILITY CLAY LINER SHALL BE PLACED ABOVE PREPARED SUBGRADE AROUND STORMTECH ISOLATOR ROWS IN 2 - 6" LIFTS TO PREVENT DETAINED STORM WATER FROM MIXING WITH GROUNDWATER. MAXIMUM ALLOWED IN PLACE PERMEABILITY SHALL BE 1 x 10^{-6} cm / sec. LINER SHOULD EXTEND UP TO THE TOP OF STONE ELEVATION.

FILTERRA ELEVATION TABLE

FILTERRA ID	SIZE	TYPE	ISOLATOR ROW NO.	GRATE ELEVATION A	RIM / TOP SLAB ELEVATION B	INVERT ELEVATION C
1	6x4	Grated Inlet	#1	92.17	92.84	88.42
2	6x4	Grated Inlet	#1	92.17	92.84	88.42

STORMTECH ISOLATOR ROW TABLE

ISOLATOR ROW ID	NUMBER OF CHAMBERS	CHAMBER INVERT ELEVATION D	UNDERDRAIN INV. E	TOP OF CHAMBER ELEVATION F	UPSTREAM MANHOLE INV. IN G	UPSTREAM MANHOLE INV. OUT H	DOWNSTREAM MANHOLE INV. IN FROM CHAMBERS I	DOWNSTREAM MANHOLE INV. IN FROM UNDERDRAIN J	OUTLET CONTROL WEIR ELEVATION K	DOWNSTREAM MANHOLE INV. OUT L
#1	3	87.60	87.43	90.10	SEE PLAN	87.60	87.40	87.33	90.10	87.23

REV	DATE	DESCRIPTION
8	11.28.11	PHASE 1 CONSTRUCTION SET
7	09.13.11	RESUBMITTED TO TOWN
6	08.01.11	RESUBMITTED TO TOWN
5	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
4	07.08.11	REVISED PER COMMENTS OF BILL NOBLE
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE JOSEPH A. LAVERRIERE LICENSED PROFESSIONAL ENGINEER 11-28-11

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

PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

SHEET TITLE
FILTERRA / STORMTECH ISOLATOR ROW PLANS & DETAILS

CLIENT
VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	AS NOTED
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-POND PLAN & SECTIONS		
SHEET	C-11.1		

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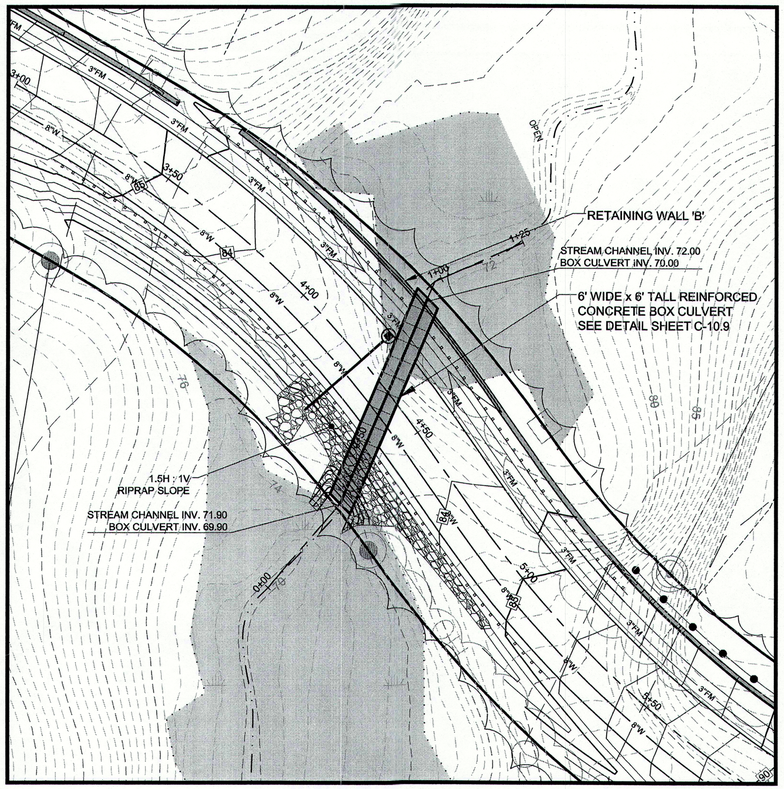
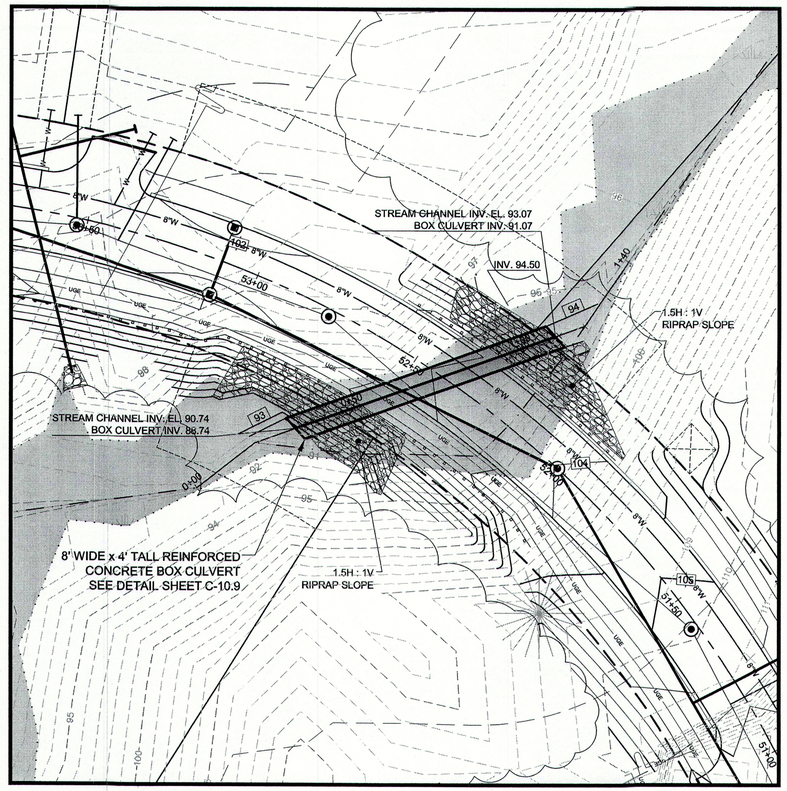


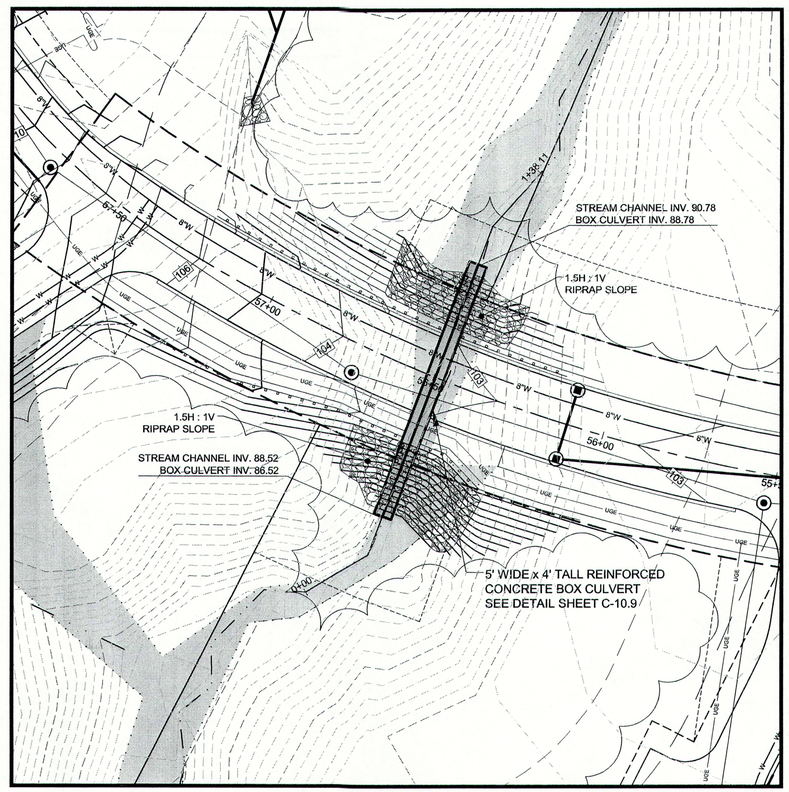
STREAM CROSSING #1 PLAN VIEW

SCALE: 1"=20'



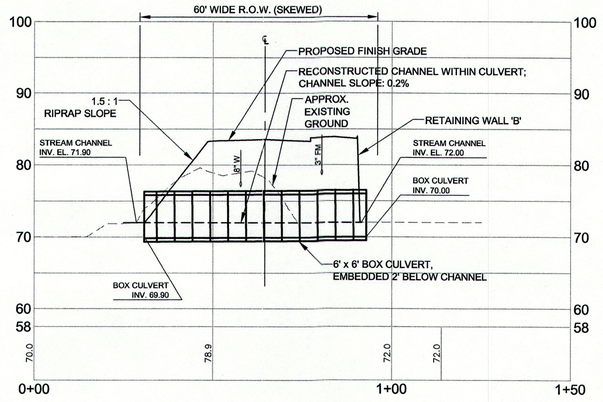
STREAM CROSSING #2 PLAN VIEW

SCALE: 1"=20'



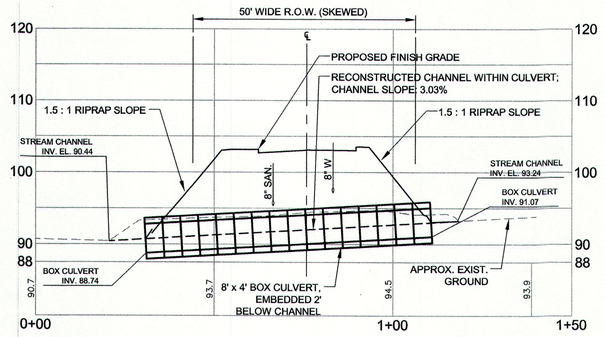
STREAM CROSSING #3 PLAN VIEW

SCALE: 1"=20'



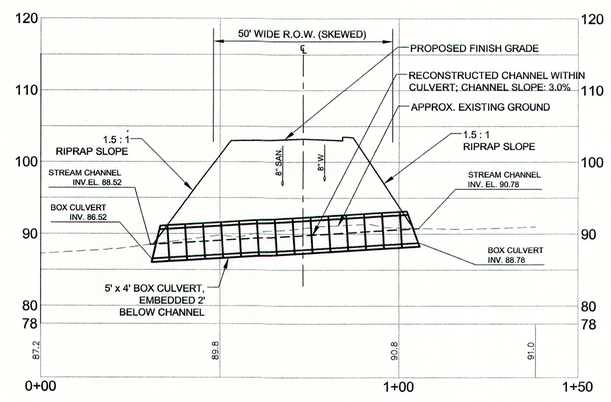
STREAM CROSSING #1 PROFILE VIEW

SCALE: H:1"=20' V:1"=10'



STREAM CROSSING #2 PROFILE VIEW

SCALE: H:1"=20' V:1"=10'



STREAM CROSSING #3 PROFILE VIEW

SCALE: H:1"=20' V:1"=10'

REV	DATE	DESCRIPTION
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6	09.13.11	RESUBMITTED TO TOWN
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3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE JOSEPH LAVERRIERE LICENSED PROFESSIONAL ENGINEER

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

PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

SHEET TITLE
STREAM CROSSING PLAN VIEWS AND PROFILES

CLIENT
VILLAGE GREEN
CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	N.T.S.
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-DET		
SHEET	C-11.2		

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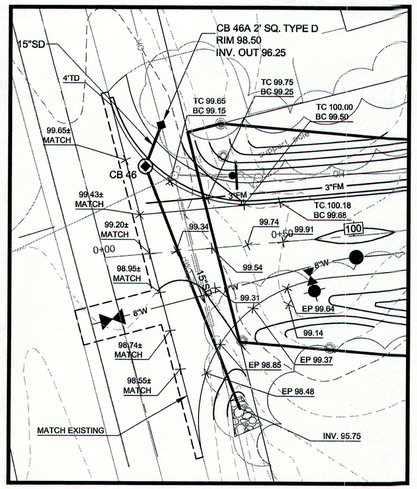
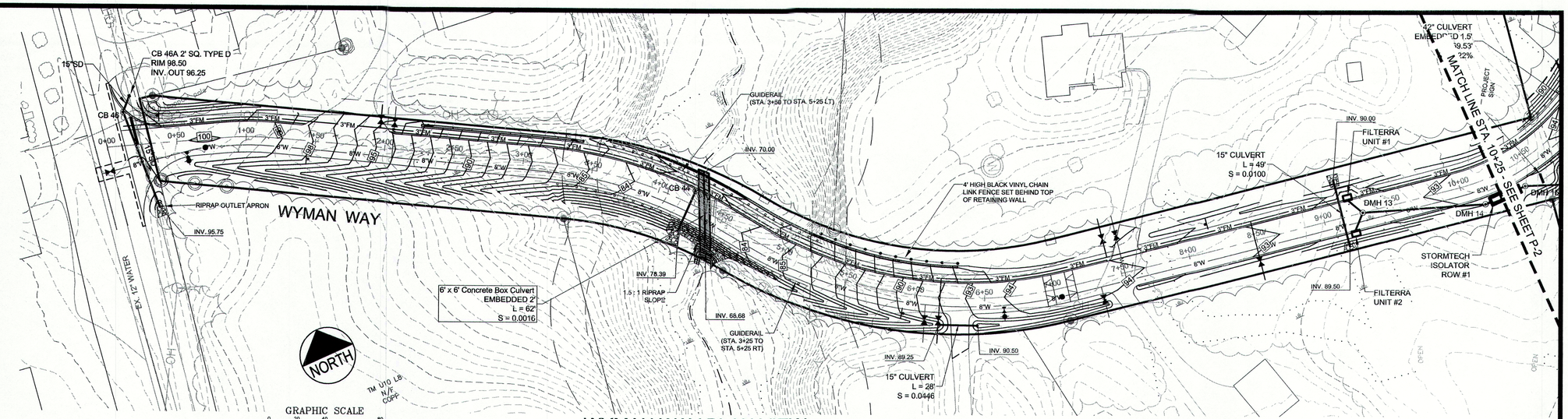


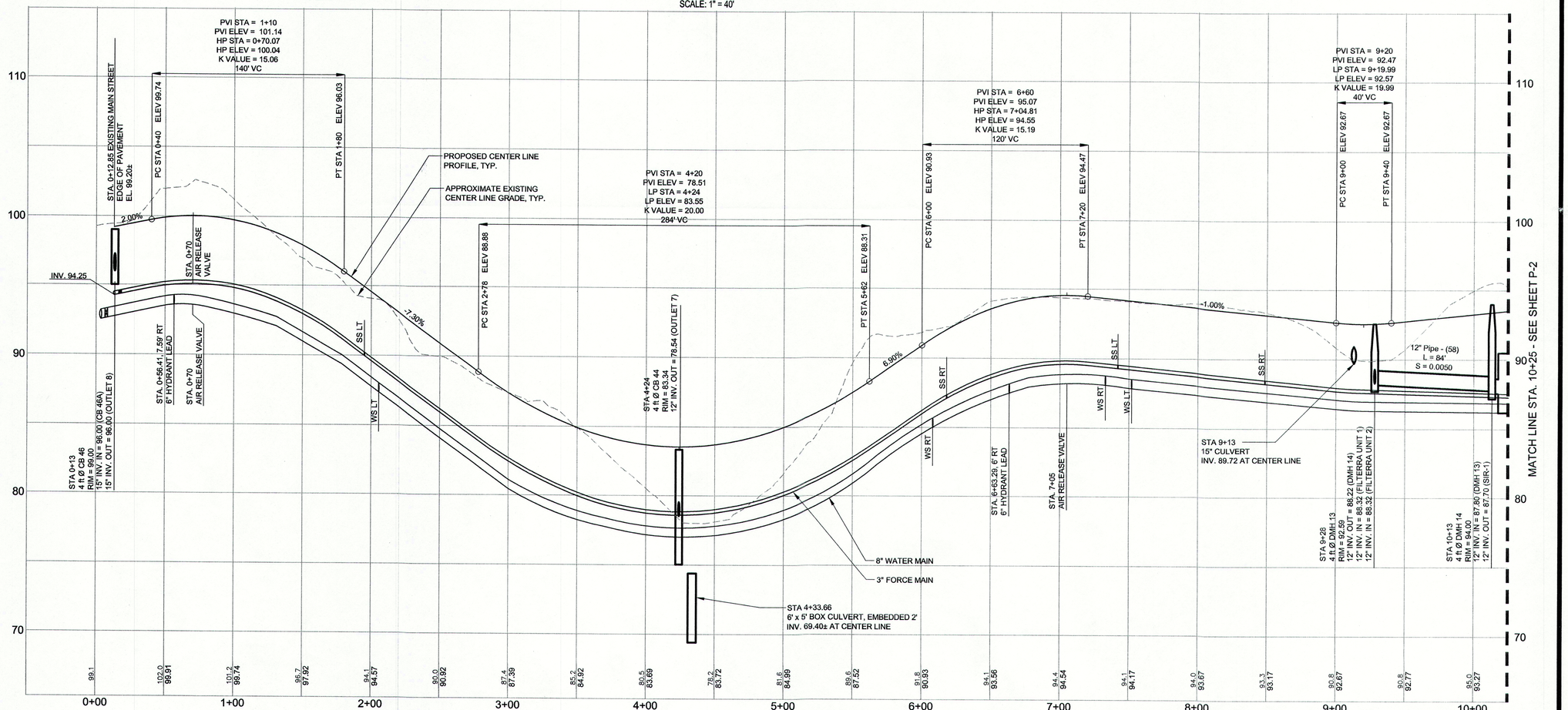
INTERSECTION GRADING DETAIL

SCALE: 1" = 20'



WYMAN WAY PLAN VIEW

SCALE: 1" = 40'



WYMAN WAY PROFILE

SCALE: 1" = 40' HORZ.
1" = 4' VERT.

LEGEND	
FDS	FOUNDATION DRAIN SERVICE
WS	WATER SERVICE
SS	SEWER SERVICE
RT	RIGHT
LT	LEFT
SIR	STORMTECH ISOLATOR ROW

REV	DATE	DESCRIPTION
8	11.28.11	PHASE 1 CONSTRUCTION SET
7	10.07.11	REVISED CULVERT AT MAIN STREET PER MDOT COMMENTS
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE
JOSEPH LAVERRIERE
7417
LICENSED
PROFESSIONAL ENGINEER
12-8-11

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

PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

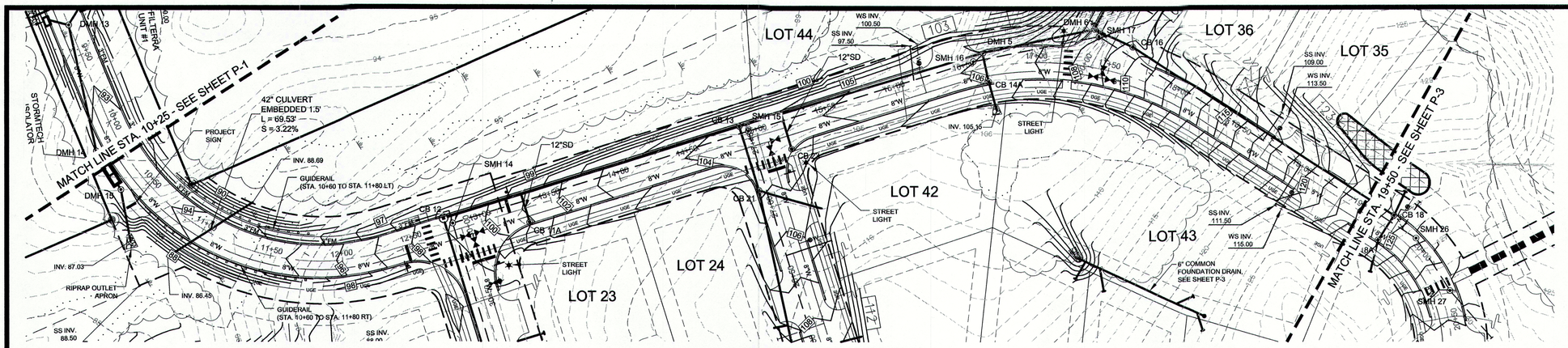
SHEET TITLE
WYMAN WAY
STA. 0+00 TO STA. 10+25

CLIENT
VILLAGE GREEN
CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	AS NOTED
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-PROFILE-ACCESS DRIVE		
SHEET	P-1		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-PROFILE-ACCESS DRIVE.dwg, P-1 WYMAN WAY-1, 11/30/2011 9:44:45 AM, cdube

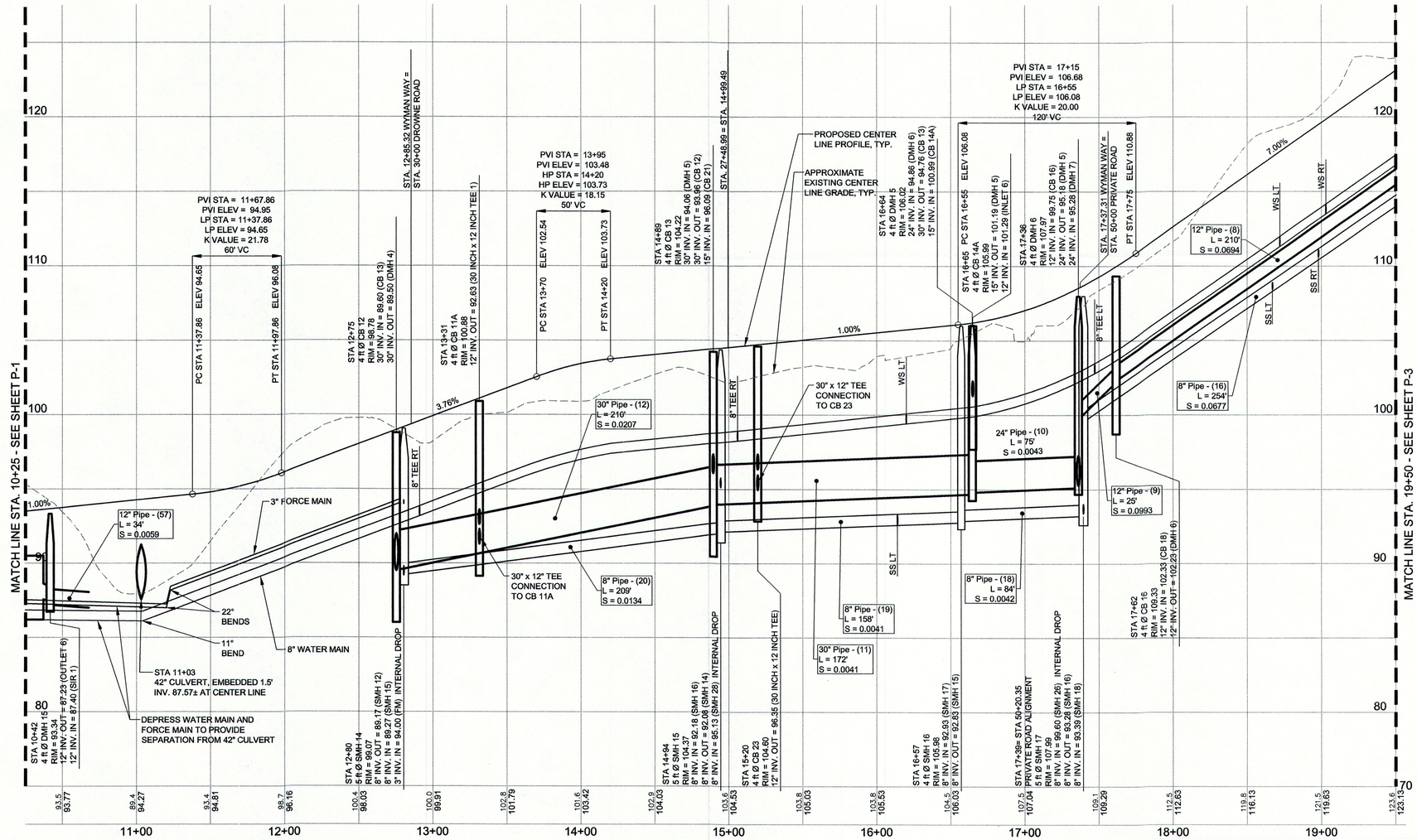


WYMAN WAY PLAN VIEW

SCALE: 1" = 40'

NORTH

GRAPHIC SCALE
0 20 40 80
1 inch = 40 ft.



WYMAN WAY PROFILE

SCALE: 1" = 40' HORZ.
1" = 4' VERT.

LEGEND	
FDS	FOUNDATION DRAIN SERVICE
WS	WATER SERVICE
SS	SEWER SERVICE
RT	RIGHT
LT	LEFT
SIR	STORMTECH ISOLATOR ROW

REFER TO SHEETS E-100 AND E-101 FOR DETAILED INFORMATION ON THE UNDERGROUND ELECTRIC, TELEPHONE AND CABLE TELEVISION CONDUIT SYSTEM. THE PRIMARY LOCATION OF THE UNDERGROUND CONDUIT SYSTEM SHALL BE BENEATH THE PEDESTRIAN SIDEWALKS AS SHOWN ON THIS SHEET.

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE
JOSEPH A. LAVERRIERE
7417
REGISTERED PROFESSIONAL ENGINEER
P.E. JOSEPH A. LAVERRIERE
LIC. #7417

PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

SHEET TITLE
WYMAN WAY
STA. 10+25 TO STA. 19+50

CLIENT
VILLAGE GREEN
CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	AS NOTED
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-PROFILE-ACCESS DRIVE		
SHEET	P-2		

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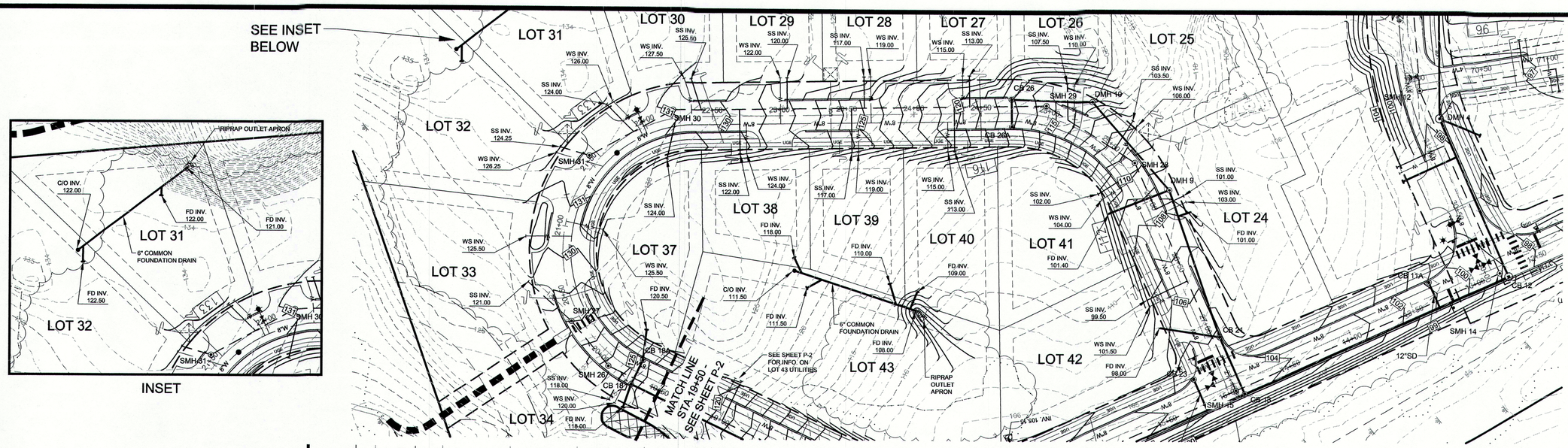
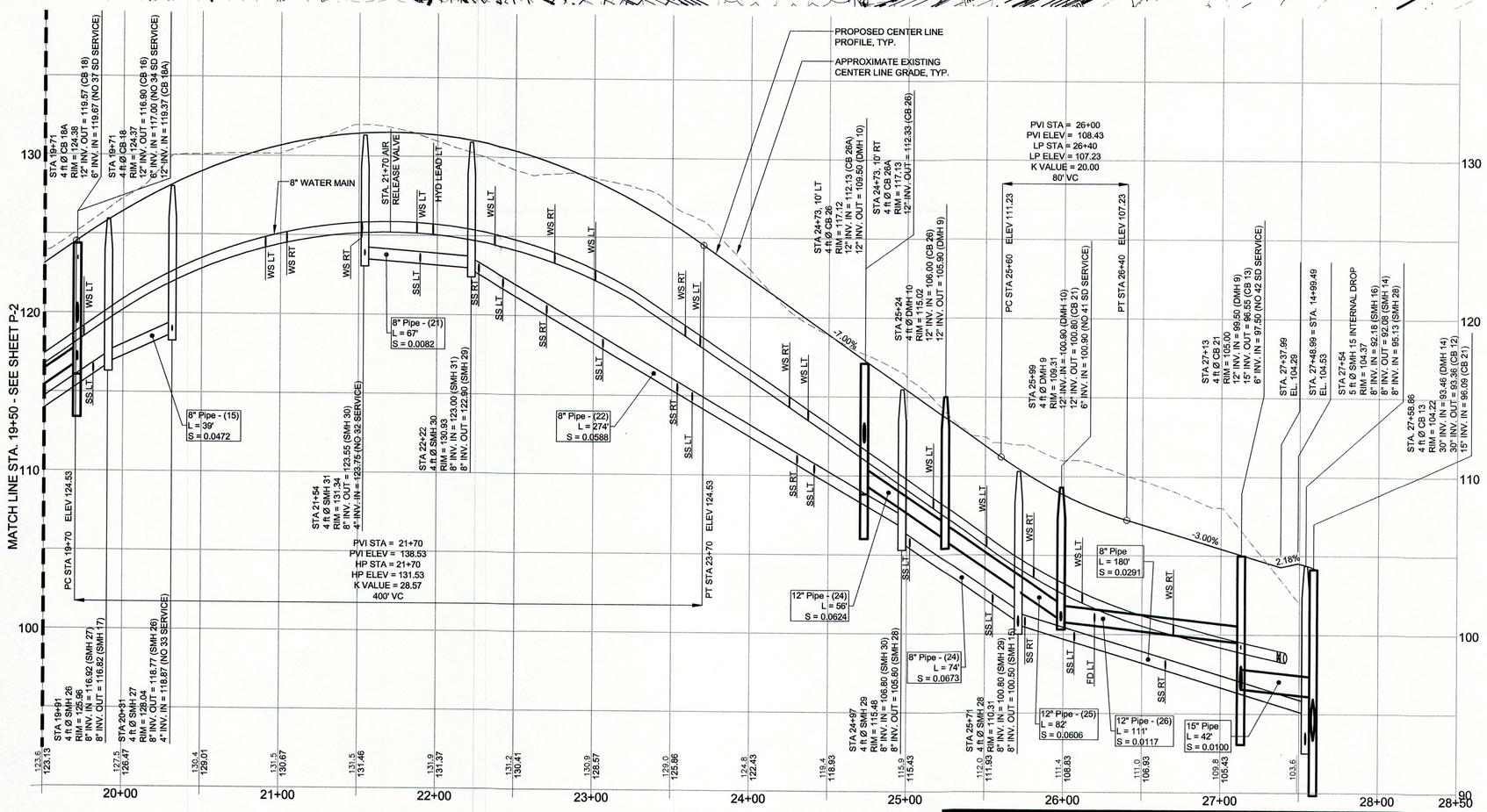


INSET

GRAPHIC SCALE
0 20 40 80
1 inch = 40 ft.

WYMAN WAY PLAN VIEW

SCALE: 1" = 40'



WYMAN WAY PROFILE

SCALE: 1" = 40' HORZ.
1" = 4' VERT.

LEGEND	
FDS	FOUNDATION DRAIN SERVICE
WS	WATER SERVICE
SS	SEWER SERVICE
RT	RIGHT
LT	LEFT
SIR	STORMTECH ISOLATOR ROW

REFER TO SHEETS E-100 AND E-101 FOR DETAILED INFORMATION ON THE UNDERGROUND ELECTRIC, TELEPHONE AND CABLE TELEVISION CONDUIT SYSTEM. THE PRIMARY LOCATION OF THE UNDERGROUND CONDUIT SYSTEM SHALL BE BENEATH THE PEDESTRIAN SIDEWALKS AS SHOWN ON THIS SHEET.

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE JOSEPH A. LAVERRIERE 7417 LICENSED PROFESSIONAL ENGINEER 11-28-11

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

SHEET TITLE: WYMAN WAY STA. 19+50 TO STA. 27+48.99

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	AS NOTED
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-PROFILE-ACCESS DRIVE		
SHEET	P-3		

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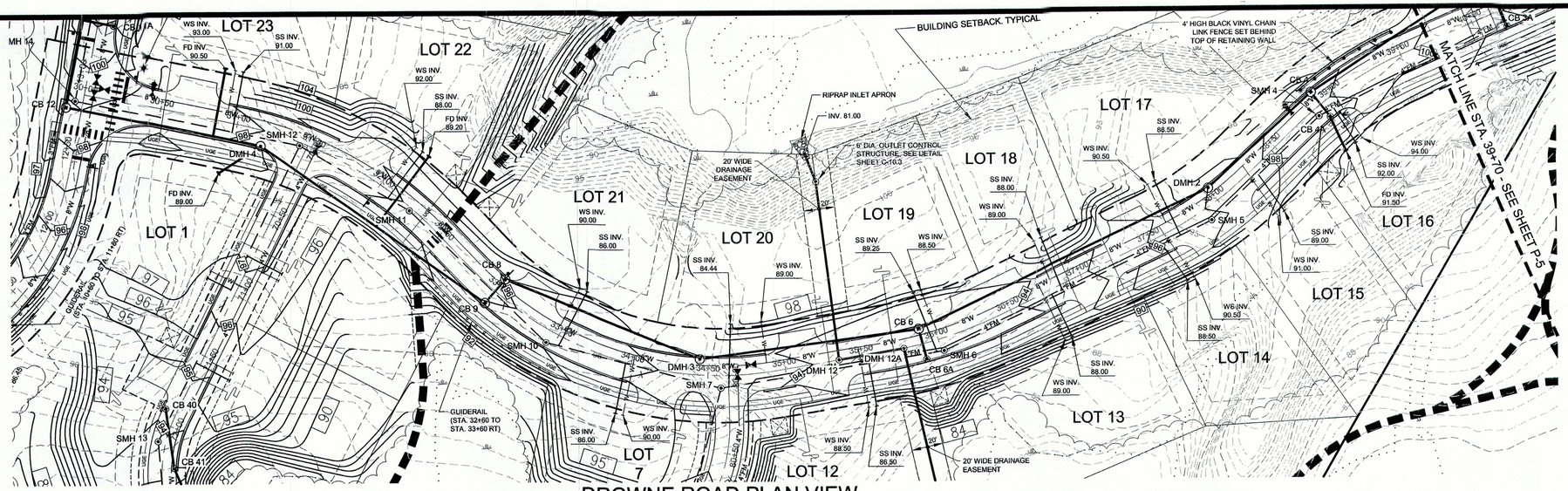
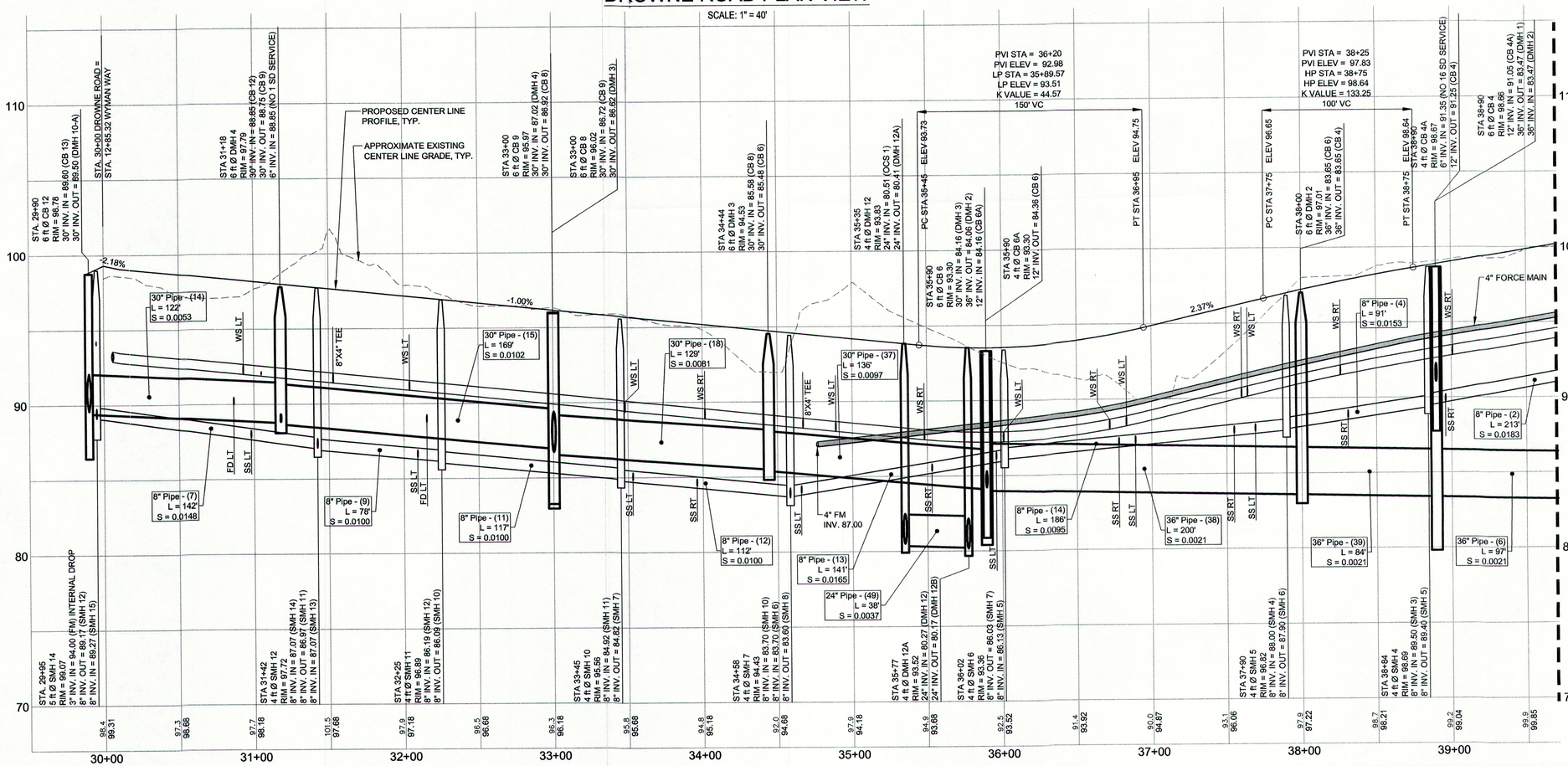


NORTH

GRAPHIC SCALE
0 20 40 80
1 inch = 40 ft.

DROWNE ROAD PLAN VIEW

SCALE: 1" = 40'



DROWNE ROAD PROFILE

SCALE: 1" = 40' HORZ.
1" = 4' VERT.

REFER TO SHEETS E-100 AND E-101 FOR DETAILED INFORMATION ON THE UNDERGROUND ELECTRIC, TELEPHONE AND CABLE TELEVISION CONDUIT SYSTEM. THE PRIMARY LOCATION OF THE UNDERGROUND CONDUIT SYSTEM SHALL BE BENEATH THE PEDESTRIAN SIDEWALKS AS SHOWN ON THIS SHEET.

LEGEND

FDS	FOUNDATION DRAIN SERVICE
WS	WATER SERVICE
SS	SEWER SERVICE
RT	RIGHT
LT	LEFT

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE — JOSEPH A. LAVERRIERE — 7417 — LICENSED PROFESSIONAL ENGINEER

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

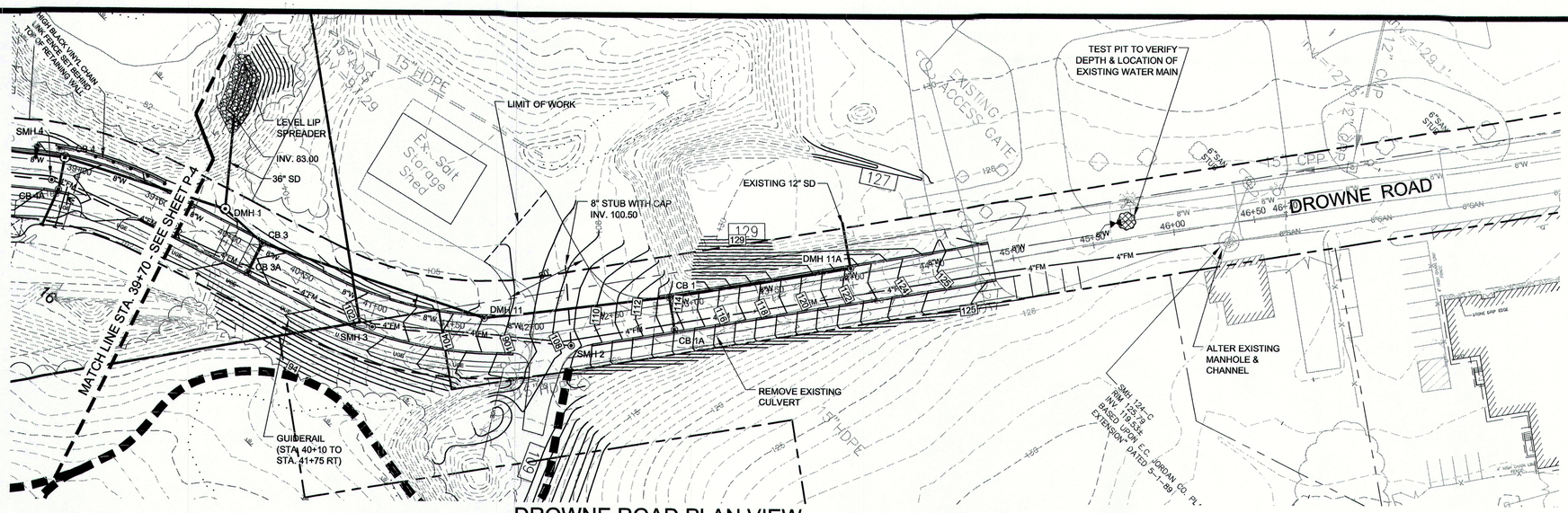
SHEET TITLE: DROWNE ROAD STA. 30+00 TO STA. 39+70

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

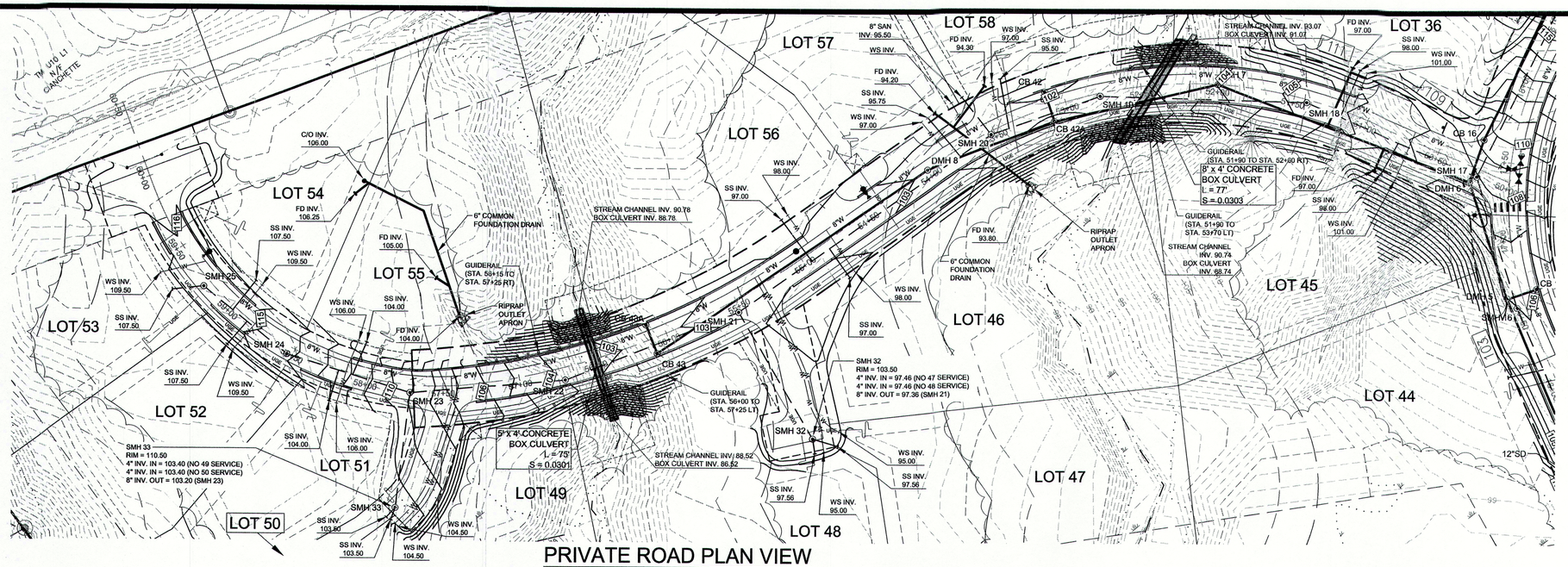
DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	AS NOTED
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-PROFILE-ACCESS DRIVE		
SHEET	P-4		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-PROFILE-ACCESS DRIVE.dwg, P-4 DROWNE ROAD-1, 11/30/2011 9:51:02 AM, cdube


HIGH BLACK VINYL CHAIN LINK FENCE ON TOP OF RETAINING WALL
SMH 4
CB 4
CB 4A
DMH 1
CB 3
CB 3A
LEVEL LIP SPREADER
INV. 83.00
36" SD
MATCH LINE STA. 39+70 - SEE SHEET P-4
LIMIT OF WORK
Ex. Salt Storage Shed
EXISTING ACCESS GATE
8" STUB WITH CAP INV. 100.50
EXISTING 12" SD
DMH 11A
CB 1
DMH 11
SMH 3
CB 1A
SMH 2
GUIDERAIL (STA. 40+10 TO STA. 41+75 RT)
REMOVE EXISTING CULVERT
TEST PIT TO VERIFY DEPTH & LOCATION OF EXISTING WATER MAIN
DROWNE ROAD
ALTER EXISTING MANHOLE & CHANNEL
SMH 124-C RIM = 125.78 INV. 119.43± BASED UPON E.C. JORDAN CO. PL. EXTENSION DATED 5-1-99
15" HDPE
12" CPP
6"SAN STUB
6"W
8"W
4"FM
4"SW
4"FM
45.8W
4"FM
6"SAN
6"SAN
6"W
8"W
8"W
8"W
8"W
8"W
6"SAN
6"SAN
6"W
6"W
6"W

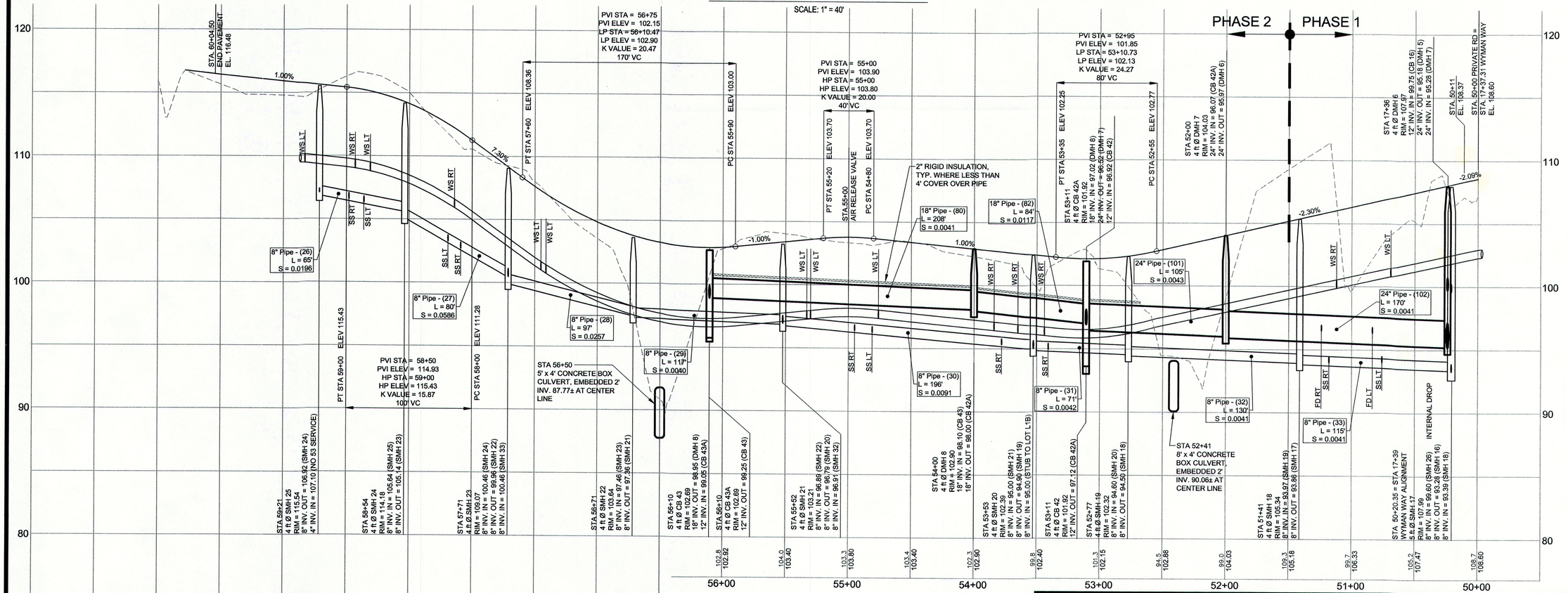
LEGEND	
FDS	FOUNDATION DRAIN SERVICE
WS	WATER SERVICE
SS	SEWER SERVICE
RT	RIGHT
LT	LEFT
SIR	STORMTECH ISOLATOR ROW

REFER TO SHEETS E-100 AND E-101 FOR DETAILED INFORMATION ON THE UNDERGROUND ELECTRIC, TELEPHONE AND CABLE TELEVISION CONDUIT SYSTEM. THE PRIMARY LOCATION OF THE UNDERGROUND CONDUIT SYSTEM SHALL BE BENEATH THE PEDESTRIAN SIDEWALKS AS SHOWN ON THIS SHEET.



PRIVATE ROAD PLAN VIEW

SCALE: 1" = 40'



PRIVATE ROAD PROFILE

SCALE: 1" = 40' HORZ.
1" = 4' VERT.

REV	DATE	DESCRIPTION
7	11.28.11	PHASE 1 CONSTRUCTION SET
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE JOSEPH A. LAVERRIERE 7417 LICENSED PROFESSIONAL ENGINEER

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

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

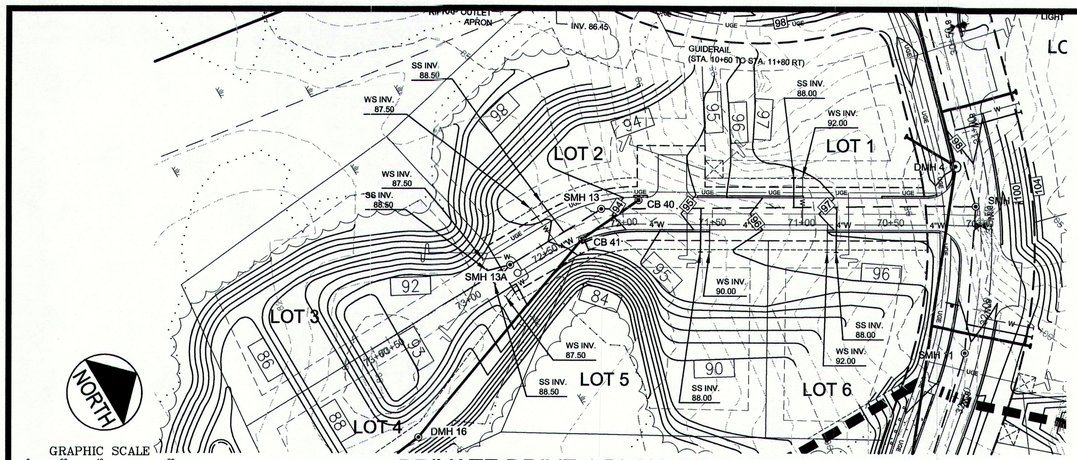
SHEET TITLE: PRIVATE ROAD STA. 50+00 TO STA. 61+00

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

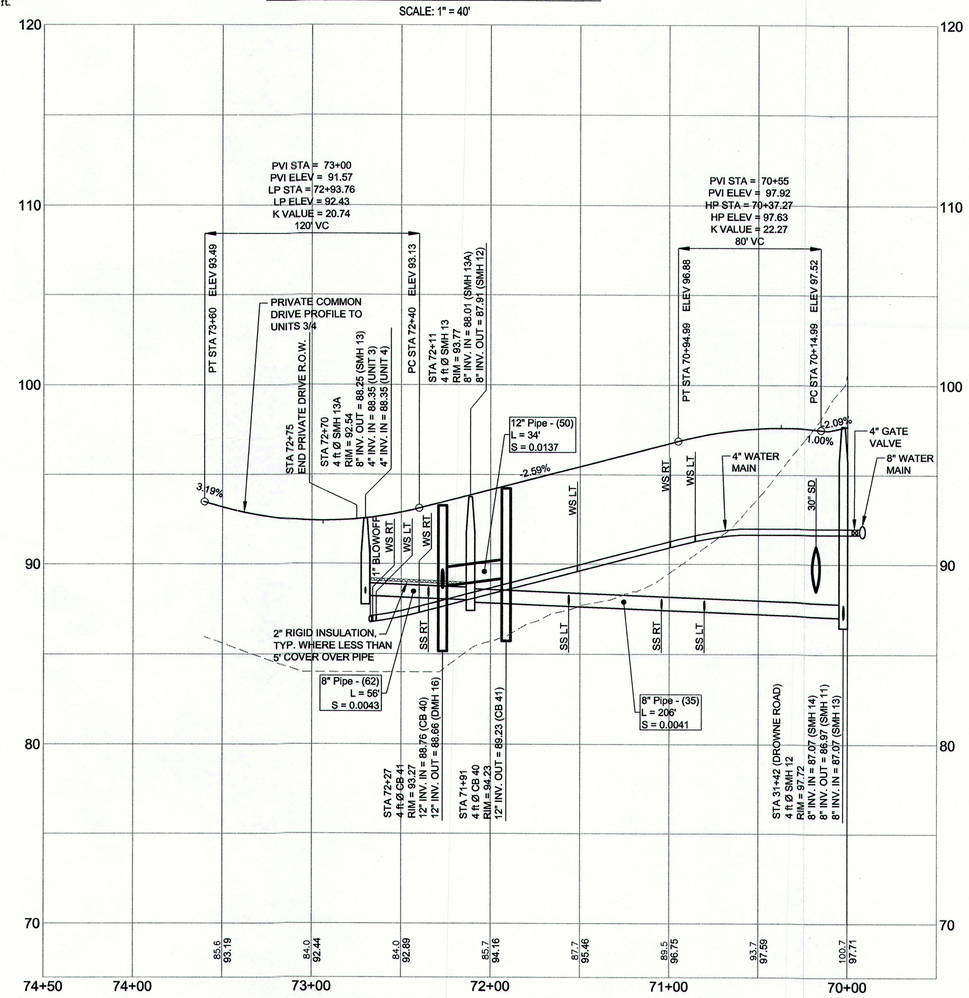
DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	AS NOTED
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-PROFILE-ACCESS DRIVE		
SHEET	P-6		

R:\2998 Bateman Cumberland\CADD\CONSTRUCTION SET\DWG\2998-PROFILE-ACCESS DRIVE.dwg, P-6 PRIVATE ROAD, 11/30/2011 3:32:26 PM, cdube



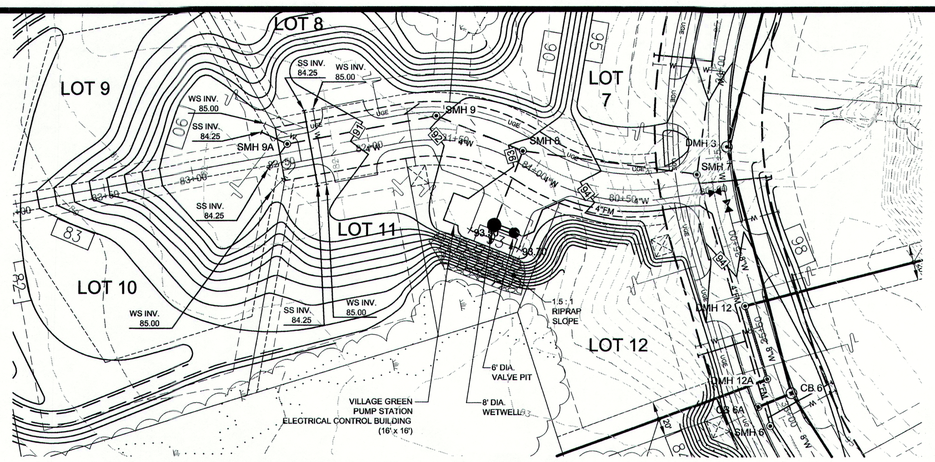
PRIVATE DRIVE 1 PLAN VIEW

SCALE: 1" = 40'



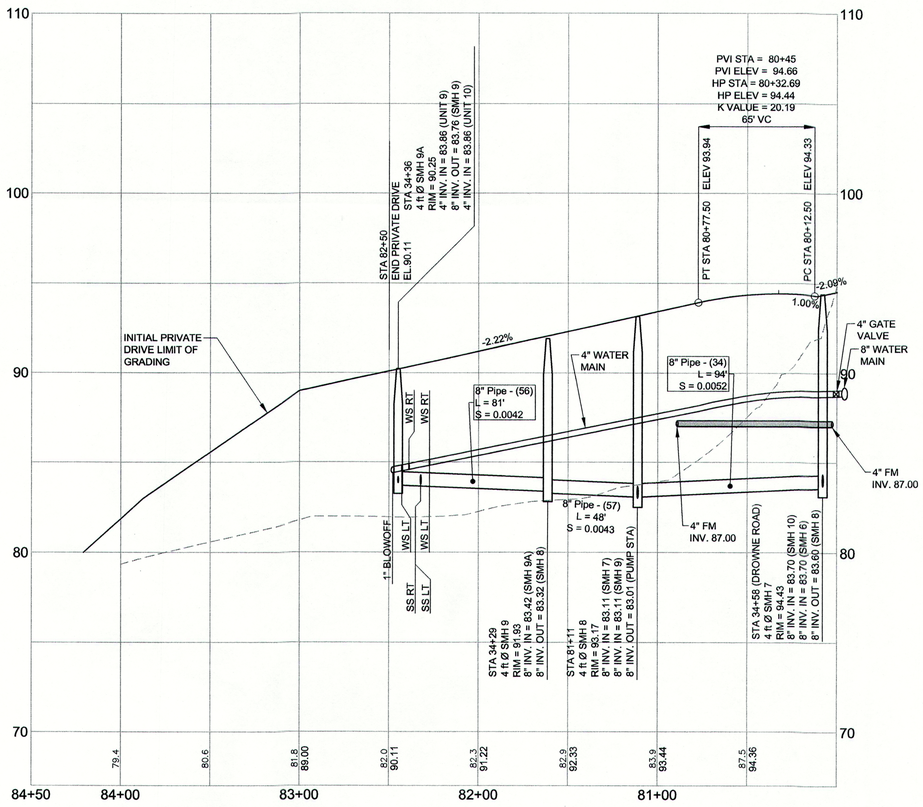
PRIVATE DRIVE 1 PROFILE

SCALE: 1" = 40' HORZ.
1" = 4' VERT.



PRIVATE DRIVE 2 PLAN VIEW

SCALE: 1" = 40'



PRIVATE DRIVE 2 PROFILE

SCALE: 1" = 40' HORZ.
1" = 4' VERT.

LEGEND

FDS	FOUNDATION DRAIN SERVICE
WS	WATER SERVICE
SS	SEWER SERVICE
RT	RIGHT
LT	LEFT

REFER TO SHEETS E-100 AND E-101 FOR DETAILED INFORMATION ON THE UNDERGROUND ELECTRIC, TELEPHONE AND CABLE TELEVISION CONDUIT SYSTEM. THE PRIMARY LOCATION OF THE UNDERGROUND CONDUIT SYSTEM SHALL BE BENEATH THE PEDESTRIAN SIDEWALKS AS SHOWN ON THIS SHEET.

REV	DATE	DESCRIPTION
8	11.28.11	PHASE 1 CONSTRUCTION SET
7	09.29.11	REVISED GRADING & LAYOUT OF PUMP STA. PER PWD COMMENTS
6	09.13.11	RESUBMITTED TO TOWN
5	08.01.11	RESUBMITTED TO TOWN
4	07.22.11	REVISED PER TOWN COMMENTS AND RESUBMITTED
3	06.30.11	RESUBMITTED TO TOWN
2	06.21.11	REVISED PER INTERNAL REVIEW
1	05.31.11	SUBMITTED TO TOWN AND DEP

REVISIONS

STATE OF MAINE — JOSEPH A. LAVERRIERE — REGISTERED PROFESSIONAL ENGINEER — 12841

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

PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

SHEET TITLE
PRIVATE DRIVE 1 AND PRIVATE DRIVE 2

CLIENT
VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	CDD	DATE:	MAY 2011
DESIGNED:	JAL	SCALE:	AS NOTED
CHECKED:	JAL	JOB NO.	2998
FILE NAME:	2998-PROFILE-ACCESS DRIVE		
SHEET	P-7		

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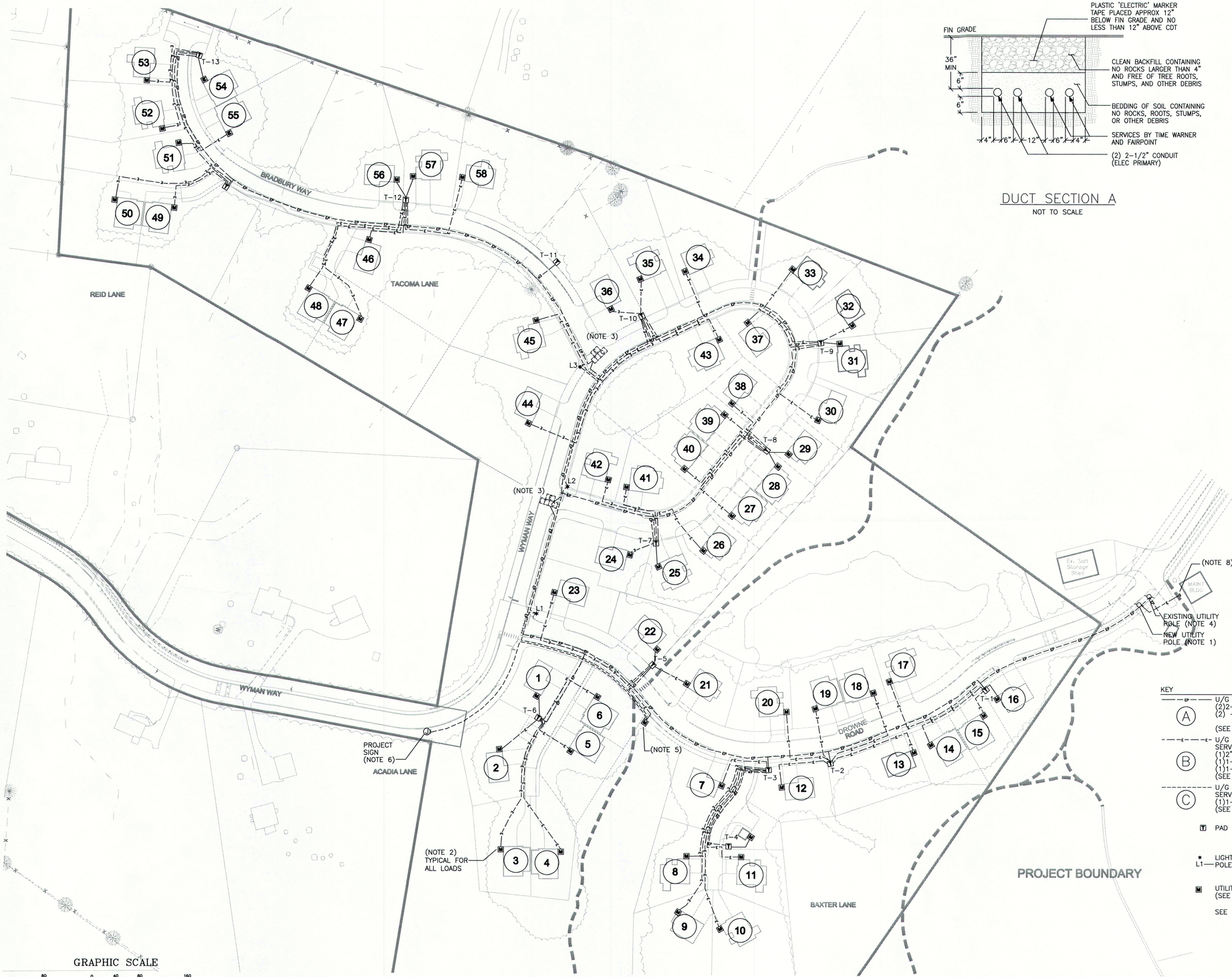
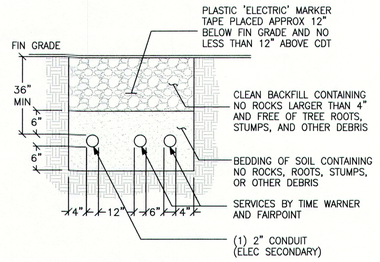


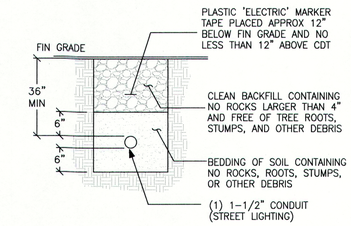
DUCT SECTION A

NOT TO SCALE



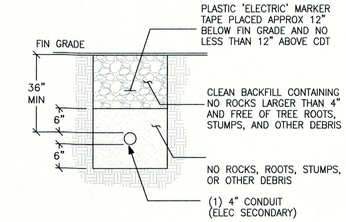
DUCT SECTION B

NOT TO SCALE



DUCT SECTION C

NOT TO SCALE



DUCT SECTION D

NOT TO SCALE

NOTES:

1. UNDERGROUND SERVICE CABLES/CONDUITS SHALL BE INSTALLED BELOW SIDEWALKS AS INDICATED ON SHEETS P2 THRU P7.
2. SERVICE CABLES FOR TELEPHONE AND CABLE TV SHALL BE PROVIDED BY FAIRPOINT AND TIME-WARNER. PROVIDE 4" CONDUIT FOR TELEPHONE AND CABLE TV WHERE CABLES PASS BENEATH PAVED AREAS ONLY.
3. SCHEDULE THE INSTALLATION OF TELEPHONE AND CABLE TV SERVICE CABLES WITH FAIRPOINT AND TIME-WARNER ONE WEEK (MINIMUM) IN ADVANCE OF DESIRED INSTALLATION. UTILITY TRENCHES SHALL BE OPEN AND CONDUITS AT ROAD CROSSINGS SHALL BE INSTALLED.

KEY

- U/G CONDUITS (2)2-1/2" - CMP PRIMARY (2) - SERVICES BY TIME-WARNER & FAIRPOINT (SEE DUCT SECTION A, THIS SHEET)
- (B) U/G CONDUITS SERVING SEPARATE PROPERTY SITES (1)2" - CMP SECONDARY (1)1-1/2" - FAIRPOINT TELEPHONE (1)1-1/2" TIME-WARNER (SEE DUCT SECTION B, THIS SHEET)
- (C) U/G CONDUITS SERVING LIGHTING POLES & PROJECT SIGN (1)1-1/2" - CMP SECONDARY (SEE DUCT SECTION C, THIS SHEET)
- T PAD MOUNTED SERVICE TRANSFORMER
- * L1 LIGHTING POLE / POLE NUMBER
- UTILITY COMPANY SERVICE METER (SEE DETAIL, SHT E101)

SEE SHEET E101 FOR DRAWING NOTES

GRAPHIC SCALE

80 0 40 80 160

(IN FEET)
1 inch = 80 ft.

Bartlett Design
LIGHTING & ELECTRICAL ENGINEERING
942 WASHINGTON STREET, BATH, ME 04530
TEL (207) 443-5447 FAX (207) 443-5560

REV	DATE	DESCRIPTION
6	10-28-11	REVISIONS TO CONDUIT/CABLE LOCATIONS
5	10-11-11	PLAN REVISIONS
4	09-14-11	REVISED PER CMP REVIEW
3	07-29-11	REVISED SUBMISSION TO CITY
2	07-18-11	REVISED DISTRIBUTION
1	06-30-11	SUBMIT TO CITY

REVISIONS

STATE OF MAINE
LAWRENCE E. BARTLETT
No. 7928
REGISTERED PROFESSIONAL ENGINEER
LICENSED
Lawrence E. Bartlett

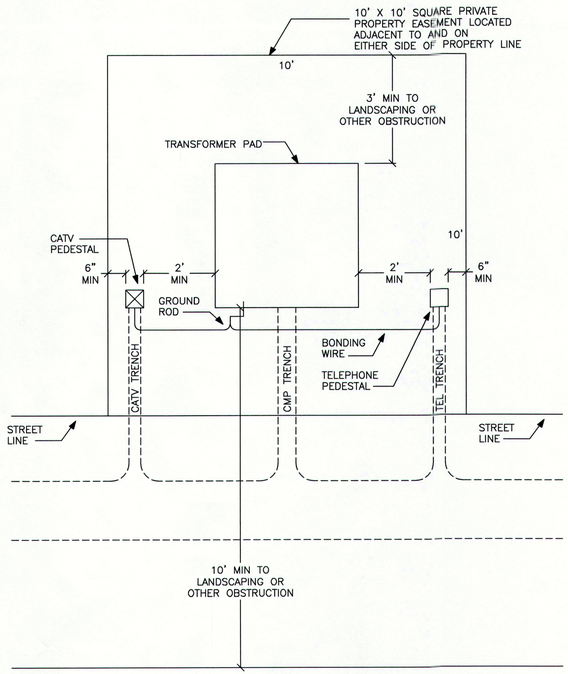
PROJECT
VILLAGE GREEN
CUMBERLAND, MAINE

SHEET TITLE
LIGHTING & DISTRIBUTION PLAN

CLIENT
VILLAGE GREEN
CUMBERLAND, LLC

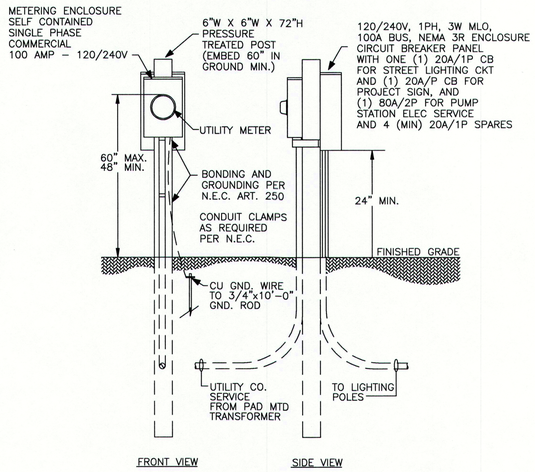
DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	JLC	DATE:	JUNE 2011
DESIGNED:	LEB	SCALE:	1" = 80'-0"
CHECKED:	LEB	JOB NO.	2998
FILE NAME:	1131 E100 & E101.dwg		
SHEET	E100		



TRANSFORMER EASEMENT LAYOUT

NOT TO SCALE

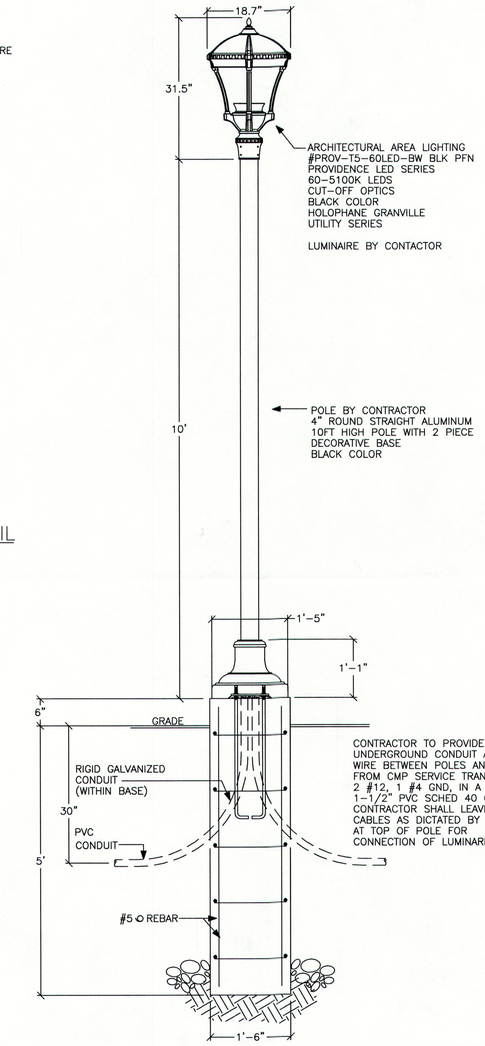


EXTERIOR POST MTD PANEL AND METER DETAIL

1/2" 1'-0"

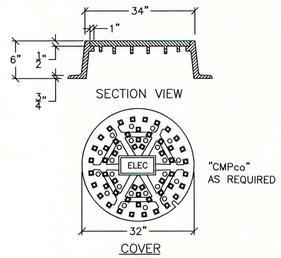
PROJECT NOTES:

1. WHERE INDICATED ARRANGE WITH THE CENTRAL MAINE POWER COMPANY, FAIRPOINT TELEPHONE AND TIME-WARNER CABLE TO PROVIDE A NEW UTILITY POLE TO BECOME A SERVICE RISER POLE TO TRANSITION TO UNDERGROUND SERVICES. THE CONTRACTOR SHALL PROVIDE (2)–5" RGS RISER CONDUITS FOR USE BY CMP, (2)–4" RGS RISER CONDUITS FOR USE BY FAIRPOINT, AND (2)–4" RGS CONDUITS FOR USE BY TIME-WARNER.
2. EXTEND EMPTY CONDUITS FOR FUTURE ELECTRICAL SECONDARY (1 4"), TELEPHONE (1 2–1/2") AND CABLE TV (1 2–1/2") SERVICES ONTO EACH LOT. CONDUITS SHALL ORIGINATE AT CMP TRANSFORMERS AND FAIRPOINT/TIME-WARNER PEDESTALS, AND SHALL EXTEND TEN FEET PAST THE STREET PROPERTY LINE AT EACH LOT. CAP FOR FUTURE USE.
3. WHERE INDICATED, PROVIDE NEW MANHOLE STRUCTURES FOR USE BY CMP, FAIRPOINT, AND TIME-WARNER. SEE DETAIL THIS SHEET FOR MANHOLE CONSTRUCTION REQUIREMENTS.
4. WHERE INDICATED, ARRANGE WITH CMP, FAIRPOINT, AND TIME-WARNER TO UPGRADE EXISTING OVERHEAD UTILITIES AS REQUIRED TO SERVE NEW VILLAGE GREEN PROJECT.
5. WHERE INDICATED, PROVIDE POST WITH CMP METER AND PANEL IN A NEMA 3R ENCLOSURE TO SERVE STREET LIGHTING, THE PROJECT SIGN AND SERVICE TO THE PUMP STATION. SEE DETAIL THIS SHEET.
6. PROVIDE 2 #10, 1 #12GND, IN A 1" CDT FROM THE UTILITY SERVICE PANEL (SEE NOTE 5) TO THE PROJECT SIGN.
7. PROVIDE 3 #2, 1 #8GND, IN A 2" CDT FROM THE UTILITY SERVICE PANEL (SEE NOTE 5) TO THE PUMP STATION.
8. PROVIDE AN EMPTY 4" CDT TO SERVE THE FUTURE MAINTENANCE BUILDING. EXTEND CONDUIT FROM RISER POLE TO LOCATION OF BUILDING (CAP CONDUIT FOR FUTURE USE).



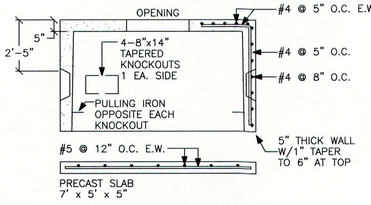
LIGHTING POLE BASE DETAIL

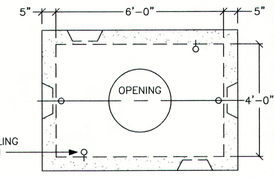
NOT TO SCALE



CABLE AND TELEPHONE MANHOLE NOTES:

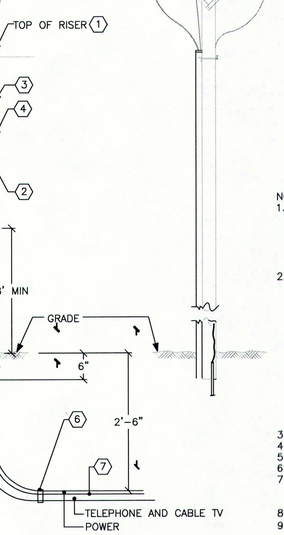
1. CONCRETE: 4,000 PSI @ 28 DAYS.
2. USE 32" COVER AND FRAME MARKED CABLE OR TELE AS REQUIRED. MINIMUM ONE COURSE BRICK TO GRADE.
3. MOUNTINGS FOR CABLE RACKS ECT. CAST IN WALL BY FUTURE PLANS OR FIELD LOCATED.
4. SPLICE BOX SHALL BE SET ON A SUITABLE GRAVEL BASE.
5. REINFORCING: GRADE 60 REBAR:
   - REINFORCEMENT PLACED IN CENTER OF CONCRETE SLAB, WALLS, & ROOF.
   - #4 @ 5" O.C. VERTICALLY IN WALLS, CANTILEVERED OVER TOP OF OPENING.
   - #4 @ 8" O.C. HORIZONTALLY IN WALLS.
   - 4 PIECES #4 SURROUNDING OPENING.
   - #4 @ 5" O.C. EACH WAY ON TOP.
6. MANHOLE FRAMES AND COVERS ARE TO BE MACHINED TO A SMOOTH FIT AND SHALL BE OF GRAY CAST IRON.
7. COVER SHALL HAVE DIAMOND TOP SURFACE.

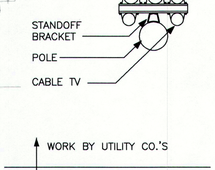




ELECTRICAL MANHOLE DETAIL

NOT TO SCALE





▲ WORK BY UTILITY CO.'S

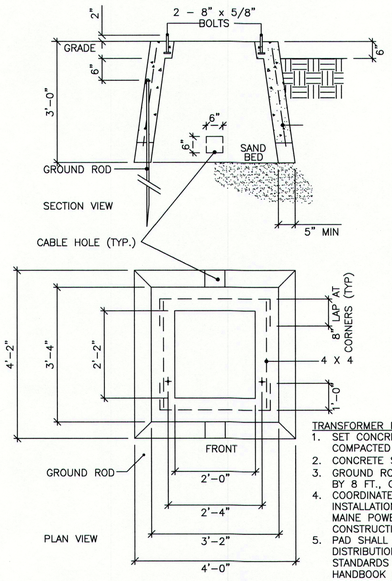
▼ WORK BY ELEC. CONTRACTOR

NOTES:

1. SEAL TOP OF CONDUIT WITH POLYURETHANE SEALER. TOP OF CONDUIT SHALL HAVE A DOUBLE NON-THREADED PLASTIC COUPLING. TOP OF CONDUIT SHALL EXTEND 4" ABOVE PRIMARY NEUTRAL.
2. CONDUIT STANDOFF BRACKETS – CONDUIT SECTION USED WITH STANDOFF BRACKETS SHALL BE METAL CONDUIT ONLY. TOP CONDUIT SECTIONS LONGER THAN 24" MUST BE SUPPORTED. LOWEST BRACKET SHALL BE A MINIMUM OF 8FT ABOVE FINISHED GRADE. ONE BRACKET SHALL BE USED TO SUPPORT EACH 10FT SECTION OF CONDUIT WITH THE BRACKET PLACED JUST BELOW THE RISER CONDUIT COUPLING. A BRACKET WILL ALSO BE PLACED TO HOLD THE TOP OF THE RISE CONDUIT.
3. RIGID STEEL GALVANIZED CONDUIT.
4. STEEL CONDUIT COUPLING.
5. CONDUIT GROUNDING CONNECTOR.
6. PVC TO STEEL CONDUIT COUPLING.
7. PVC SCHEDULE 40 CONDUIT. COVER WITH CONCRETE WHERE PASSING UNDER ROADWAYS OR DRIVES.
8. LONG SWEEP CONDUIT ELBOW.
9. 3/4" DIA BY 10FT LONG COPPER CLAD GROUND ROD.

RISER POLE DETAIL

NOT TO SCALE

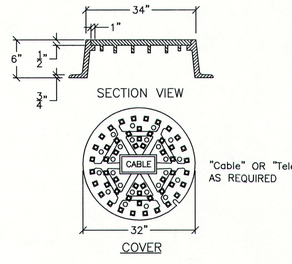


TRANSFORMER PAD DETAIL NOTES:

1. SET CONCRETE PAD ON COMPACTED GRAVEL FILL BASE.
2. CONCRETE SHALL BE 3000 #.
3. GROUND ROD CHALL BE 1/2" DIA. BY 8 FT., COPPER CLAD STEEL.
4. COORDINATE LAYOUT AND INSTALLATION WITH THE CENTRAL MAINE POWER COMPANY BEFORE CONSTRUCTION.
5. PAD SHALL MEET CMP DISTRIBUTION CONSTRUCTION STANDARDS ILLUSTRATION 19 CMP HANDBOOK OF STANDARD REQUIREMENTS.

SINGLE PHASE TRANFORMER PAD DETAIL

NOT TO SCALE



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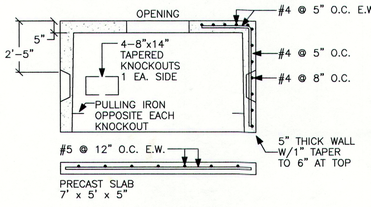

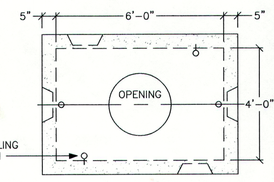

CABLE & TELEPHONE MANHOLE DETAIL

NOT TO SCALE

Bartlett Design
LIGHTING & ELECTRICAL ENGINEERING
942 WASHINGTON STREET, BATH, ME 04530
TEL (207) 443-5447 FAX (207) 443-5560

REV	DATE	DESCRIPTION
6	10-28-11	REVISIONS TO CONDUIT/CABLE LOCATIONS
5	10-11-11	PLAN REVISIONS
4	09-14-11	REVISED PER CMP REVIEW
3	07-29-11	REVISED SUBMISSION TO CITY
2	07-18-11	REVISED DISTRIBUTION
1	06-30-11	SUBMIT TO CITY

REVISIONS

STATE OF MAINE — LAWRENCE E. BARTLETT No. 7928 — LICENSED PROFESSIONAL ENGINEER

Lawrence E. Bartlett

PROJECT: VILLAGE GREEN CUMBERLAND, MAINE

SHEET TITLE: ELECTRICAL DETAILS

CLIENT: VILLAGE GREEN CUMBERLAND, LLC

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	JLC
DATE:	JUNE 2011
DESIGNED:	LEB
SCALE:	NONE
CHECKED:	LEB
JOB NO.	2998
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SHEET	E101