

320 A 3

420-448 Riverside

436 Riverside Street

Maine Turnpike Authority

**CITY OF PORTLAND, MAINE  
DEVELOPMENT REVIEW APPLICATION  
PLANNING DEPARTMENT PROCESSING FORM**

2001-0165  
Application I. D. Number

Planning Copy

6/29/01  
Application Date

430 Riverside Street  
Project Name/Description

420 - 448 Riverside St, Portland, Maine

320 A003001  
Address of Proposed Site

Assessor's Reference: Chart-Block-Lot

Proposed Development (check all that apply):  
 New Building  Building Addition  Change Of Use  Residential  Office  Retail  
 Parking Lot  Warehouse/Distribution  Other (specify)  **add 14 spaces to parking lot**

113140 sq.ft.  
Acreage of Site

IM  
Zoning

Proposed Building square Feet or # of Units

14-403 Streets Review  PAD Review  Historic Preservation  DEP Local Certification  Other

Fees Paid: \$400.00

Subdivision  Site Plan  Zoning Conditional  Zoning Variance  Flood Hazard  Shoreland  # of lots (major/minor)  Subdivision  PAD Review  DEP Local Certification  Other

Approval Date

Approval Expiration

Extension to  Additional Sheets Attached

OK to Issue Building Permit

Performance Guarantee  Required\*  Not Required

\* No building permit may be issued until a performance guarantee has been submitted as indicated below

Performance Guarantee Accepted  Inspection Fee Paid  Building Permit Issue  Performance Guarantee Reduced  Temporary Certificate of Occupancy  Final Inspection  Certificate Of Occupancy  Performance Guarantee Released  Defect Guarantee Submitted  Defect Guarantee Released

date

amount

signature

expiration date

amount

signature

expiration date

amount

signature

expiration date

signature

expiration date

**From:** "Steve Bushey" <SBushey@DelucaHoffman.com>  
**To:** "Sarah Hopkins (E-mail)" <SH@ci.portland.me.us>  
**Date:** Fri, Jul 13, 2001 7:59 AM  
**Subject:** Maine Turnpike Authority Parking lot expansion

Sarah,

I do not know who has been assigned this project, so I offer the following comments for you to pass onto the appropriate staffer.

I have reviewed the plan dated June 21, 2001 for the Maine Turnpike Parking Lot expansion on Riverside Street. The plan is a simple layout plan that lacks specific geometric dimensioning and grading. With the expansion, the parking lot will have 57 spaces thus exceeding the City's threshold of 25 spaces whereby some type of water quality treatment of stormwater runoff is required. The applicant should address this requirement. I am not too concerned about the increase of stormwater created by the additional 4,416 SF of impervious surface, however the applicant should provide a written explanation and supporting computations for the increased runoff and a statement supporting the conclusion that the project will have no detrimental impacts.

The plan should include measures for erosion control including the proper placement of silt fence and stabilization measures along the realigned swale.

I will leave it to staff to review and determine the necessary requirements for signage in the lot. This might include stop signs, handicap signs, crosswalk signs etc.

The plan provides no information regarding parking lot lighting. I presume staff will want to review this item.

The plan contains no information on landscaping. I also presume staff will want to review this item.

If you have any questions please call.

Steve Bushey Technical Reviewer

**Site Review Pre-Application  
Multi-Family/Attached Single Family Dwellings/Two-Family Dwelling  
or Commercial Structures and Additions Thereto**

In the interest of processing your application in the quickest possible manner, please complete the information below for Site Plan Review

**NOTE\*\*If you or the property owner owes real estate or personal property taxes or user charges on ANY PROPERTY within the City, payment arrangements must be made before permits of any kind are accepted.**

Applicant MAINE TURBOPINE AUTHORITY  
 Applicant's Mailing Address 430 RIVERSIDE STREET  
 Consultant/Agent JOHN D. BARRETT  
 Applicant/Agent Daytime telephone and FAX 828-5814 (V) 828-5815 (F)

Project Name/Description PARKING  
 Address Of Proposed Site SAME 430 RIVERSIDE  
 Assessor's Reference, Chart#, Block, Lot# MAP 320 L A-3

Proposed Development (Check all that apply)  New Building  Building Addition  Change of Use  Residential  Office  Retail  
 Manufacturing  Warehouse/Distribution  Parking Lot  Other(Specify) DIFFERENTIAL 56 PROPOSED  
 Proposed Building Square Footage and /or # of Units \_\_\_\_\_  
 Acreage of Site 113140 SQ FT  
 Major Site Plan \_\_\_\_\_  
 Minor Site Plan

You must include the following with you application:  
 1) A Copy of Your Deed or Purchase and Sale Agreement  
 2) 9 sets of Site Plan packages containing the information found in the attached sample plans and checklist.  
 (Section 14-522 of the Zoning Ordinance outlines the process, copies are available for review at the counter, photocopies are \$ 0.25 per page)

I hereby certify that I am the Owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if an approval for the proposed project or use described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this approval at any reasonable hour to enforce the provisions of the codes applicable to this approval.

Signature of applicant: \_\_\_\_\_  
 Date: 6-29-01

Site Review Fee: Major \$500.00 Minor 400.00

This application is for site review ONLY, a Building Permit application and associated fees will be required prior to construction.

JULIAN R. COLES, CAPE ELIZABETH, CHAIRMAN  
PATRICK F. BUTLER, LEWISTON, VICE CHAIR  
LUCIEN B. GOSSSELIN, LEWISTON, MEMBER  
SAMUEL M. ZAITLIN, SACO, MEMBER  
EARL L. ADAMS, GARDINER, MEMBER  
JOHN G. MELROSE, VASSALBORO, MEMBER EX-OFFICIO

PAUL E. VIOLETTE  
EXECUTIVE DIRECTOR  
MARGARET A. TRUWORTH  
SECRETARY-TREASURER

# Maine Turnpike Authority

430 RIVERSIDE STREET  
PORTLAND, MAINE 04103

June 29, 2001

Ms. Marge Schmuuckal  
Zoning Administrator  
City of Portland, Maine  
389 Congress Street  
Portland, ME 04101

Proposed parking lot improvements-430 Riverside Street

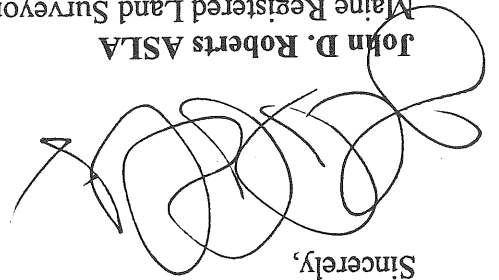
Dear Ms. Schmuuckal:

The Maine Turnpike Authority would like to add 14 spaces to its existing parking lot at 430 Riverside Street. I have sent an earlier issue of this plan to the Portland Planning and have revised the plan to reflect their recommendations.

I have enclosed a check in the amount of Four Hundred Dollars (\$400.00) for the application fee.

If you have any further questions, please feel free to contact me at 828-5814 or by email [jroberts@maineturnpike.com](mailto:jroberts@maineturnpike.com). I look forward to working with you on this project.

Sincerely,



John D. Roberts ASLA

Maine Registered Land Surveyor  
Maine Licensed Landscape Architect

Cc: Peter S. Merfeld PE (MTA)  
Stephen R. Tartre PE (MTA)

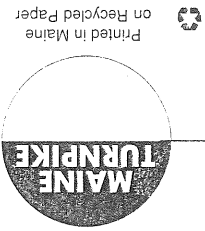
Enclosures: MTA check # 2046  
Nine (9) prints of site plan



TELEPHONE (207) 871-7771

FACSIMILE (207) 871-7739

TURNPIKE TRAVEL CONDITIONS 1-800-675-7453



Printed in Maine  
on Recycled Paper

**Reach 3R: REACH 3**

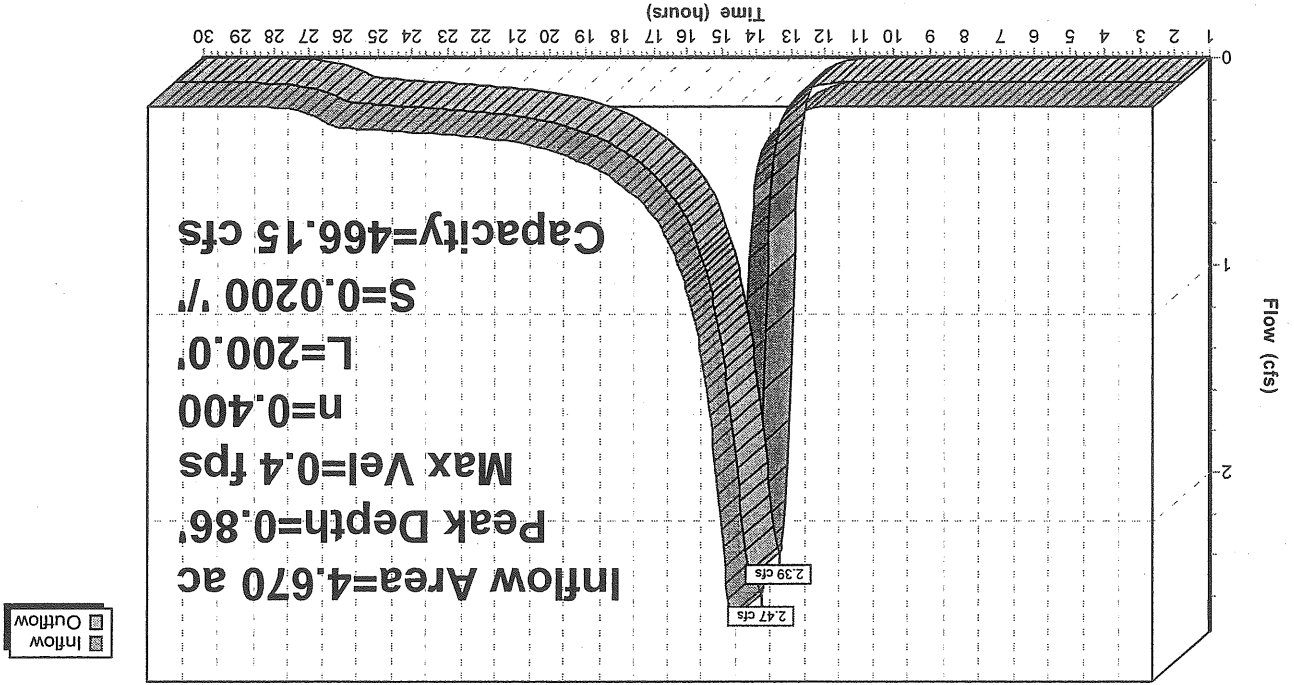
Inflow Area = 4.670 ac, Inflow Depth = 1.25"  
 Inflow = 2.47 cfs @ 13.07 hrs, Volume = 0.486 af  
 Outflow = 2.39 cfs @ 13.34 hrs, Volume = 0.486 af, Atten= 3%, Lag= 15.7 min

Routing by Stor-Ind+Trans method, Time Span= 1:00-30:00 hrs, dt= 0.05 hrs  
 Max. Velocity= 0.4 fps, Min. Travel Time= 8.6 min  
 Avg. Velocity = 0.2 fps, Avg. Travel Time= 19.4 min

Peak Depth= 0.86' @ 13.19 hrs  
 Capacity at bank full= 466.15 cfs  
 Inlet Invert= 35.00', Outlet Invert= 31.00'  
 5.00' x 10.00' deep channel, n= 0.400 Length= 200.0' Slope= 0.0200 %  
 Side Slope Z-value= 2.0 3.0 %

**Reach 3R: REACH 3**

Hydrograph



Inflow Area = 4.670 ac, Inflow Depth = 1.25"  
 Inflow = 5.63 cfs @ 12.16 hrs, Volume = 0.486 af  
 Outflow = 2.47 cfs @ 13.07 hrs, Volume = 0.486 af, Atten= 56%, Lag= 54.6 min

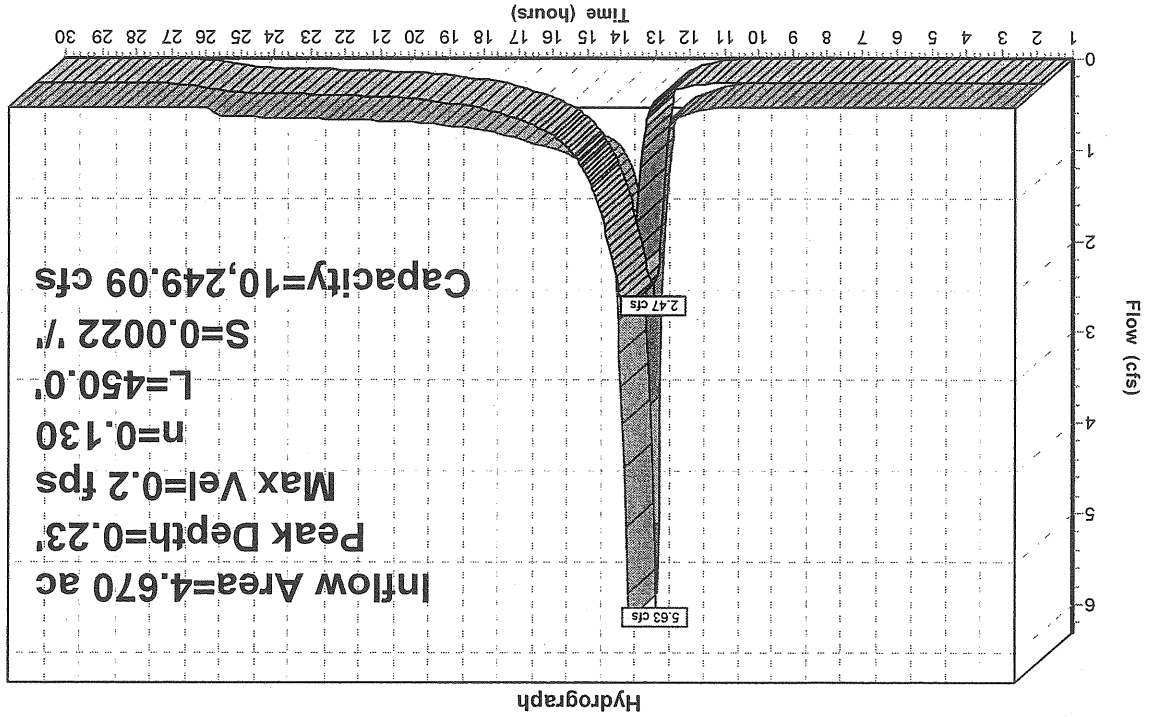
Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 0.2 fps, Min. Travel Time= 35.5 min  
 Avg. Velocity = 0.2 fps, Avg. Travel Time= 35.5 min

Peak Depth= 0.23' @ 12.48 hrs  
 Capacity at bank full= 10,249.09 cfs  
 Inlet Invert= 36.00', Outlet Invert= 35.00'

50.00' x 25.00' deep channel, n= 0.130 Length= 450.0' Slope= 0.0022 %  
 Side Slope Z-value= 3.0 %

**Reach 4R: REACH 4**

Inflow  
 Outflow



**Reach 4R: REACH 4**

**Reach 5R: SWALE TO PRESUMPCOT RIVER**

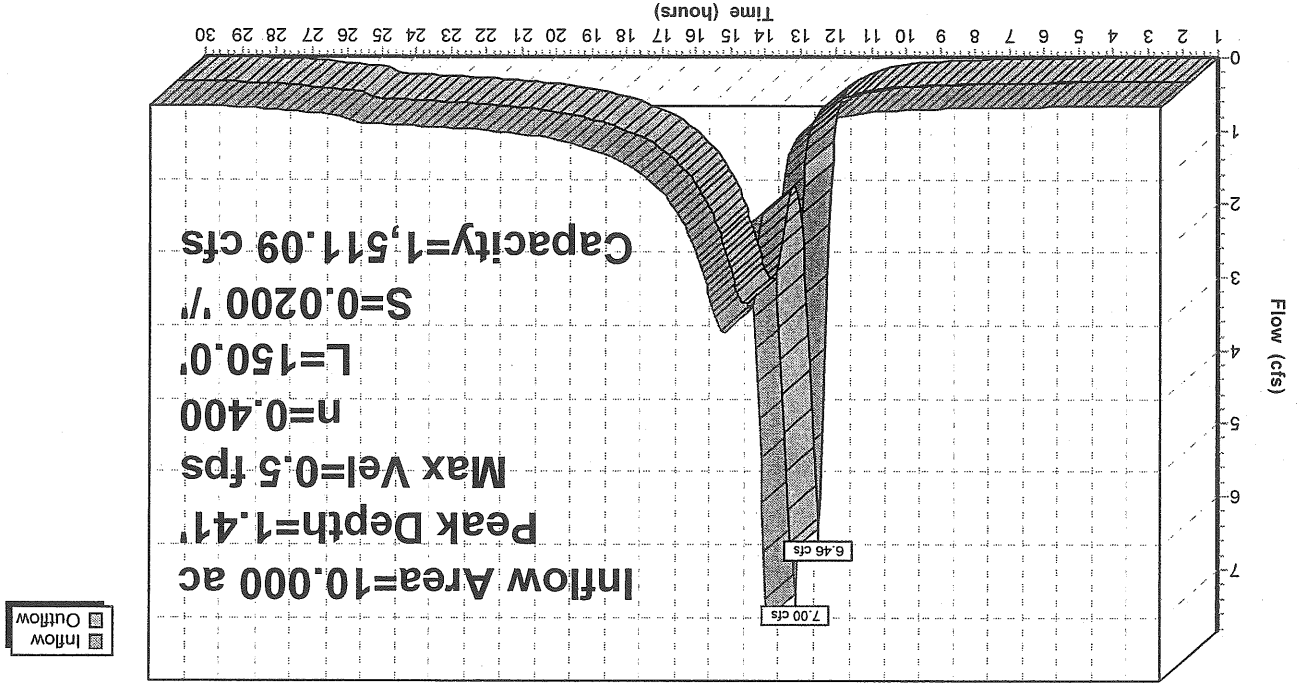
Inflow Area = 10.000 ac, Inflow Depth = 1.41"  
 Inflow = 7.00 cfs @ 12.31 hrs, Volume = 1.175 af  
 Outflow = 6.46 cfs @ 12.46 hrs, Volume = 1.175 af, Atten = 8%, Lag = 9.1 min

Routing by Stor-Ind+Trans method, Time Span = 1.00-30.00 hrs, dt = 0.05 hrs  
 Max. Velocity = 0.5 fps, Min. Travel Time = 5.0 min  
 Avg. Velocity = 0.2 fps, Avg. Travel Time = 12.4 min

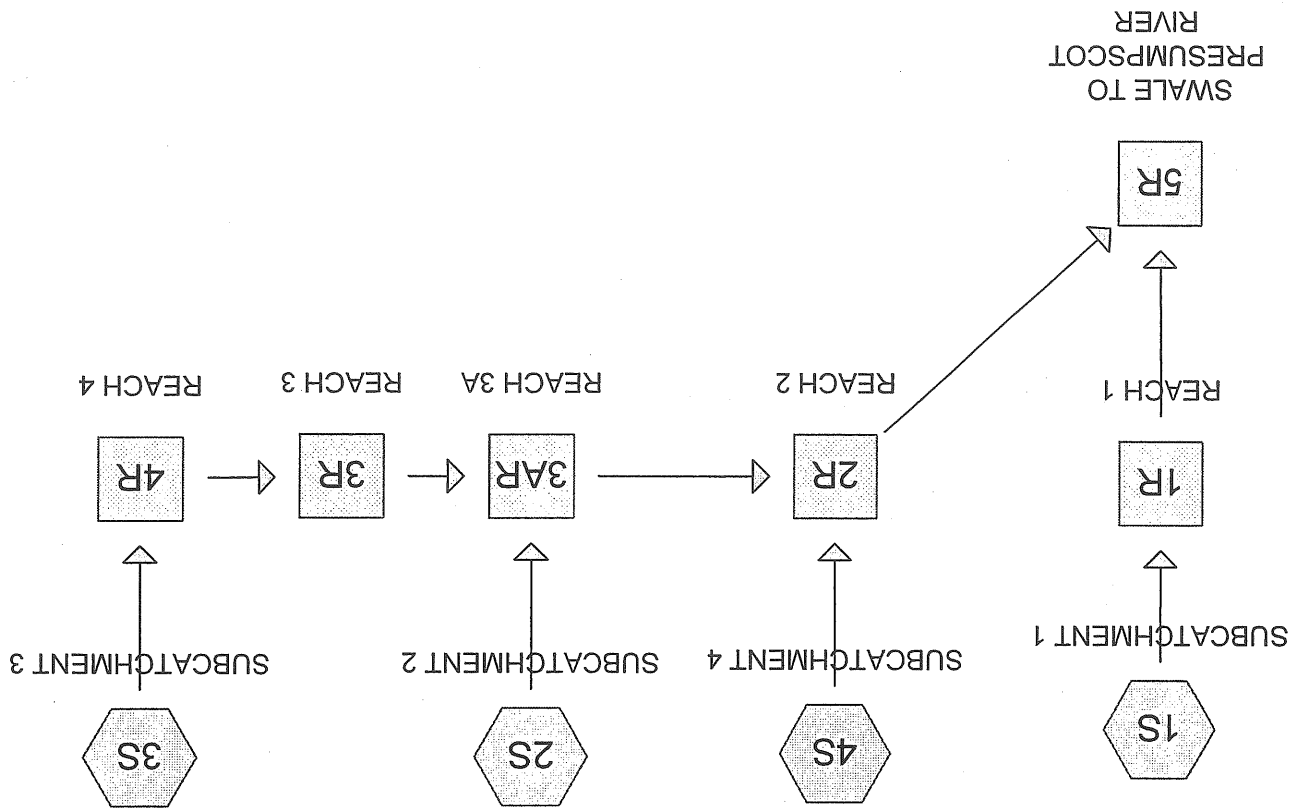
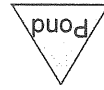
Peak Depth = 1.41' @ 12.37 hrs  
 Capacity at bank full = 1,511.09 cfs  
 Inlet Invert = 20.00', Outlet Invert = 17.00'  
 5.00' x 15.00' deep channel, n = 0.400 Length = 150.0' Slope = 0.0200 %  
 Side Slope Z-value = 3.0 %

**Reach 5R: SWALE TO PRESUMPCOT RIVER**

Hydrograph







**LOT 4-400 Riverside Street Properties Post1**

Type III 24-hr Rainfall=4.70"

Prepared by {enter your company name here}

HydroCAD@ 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

12/5/2005

Time span=1.00-30.00 hrs, dt=0.05 hrs, 581 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: SUBCATCHMENT 1**

Runoff Area=3.000 ac Runoff Depth=2.72"  
Flow Length=680' Tc=12.4 min CN=81 Runoff=7.73 cfs 0.680 af

**Subcatchment 2S: SUBCATCHMENT 2**

Runoff Area=1.330 ac Runoff Depth=2.63"  
Flow Length=190' Tc=1.5 min CN=80 Runoff=4.48 cfs 0.292 af

**Subcatchment 3S: SUBCATCHMENT 3**

Runoff Area=4.670 ac Runoff Depth=2.63"  
Flow Length=565' Tc=11.1 min CN=80 Runoff=12.09 cfs 1.025 af

**Subcatchment 4S: SUBCATCHMENT 4**

Runoff Area=1.000 ac Runoff Depth=4.35"  
Flow Length=501' Tc=8.6 min CN=97 Runoff=4.13 cfs 0.362 af

**Reach 1R: REACH 1**

Peak Depth=1.06' Max Vel=0.8 fps Inflow=7.73 cfs 0.680 af  
n=0.400 L=200.0' S=0.0750' Capacity=1,058.98 cfs Outflow=7.13 cfs 0.680 af

**Reach 2R: REACH 2**

Peak Depth=1.24' Max Vel=0.7 fps Inflow=8.58 cfs 1.679 af  
n=0.400 L=200.0' S=0.0450' Capacity=820.28 cfs Outflow=7.49 cfs 1.679 af

**Reach 3AR: REACH 3A**

Peak Depth=1.51' Max Vel=0.5 fps Inflow=7.01 cfs 1.316 af  
n=0.400 L=100.0' S=0.0200' Capacity=466.15 cfs Outflow=6.95 cfs 1.316 af

**Reach 3R: REACH 3**

Peak Depth=1.47' Max Vel=0.5 fps Inflow=6.90 cfs 1.025 af  
n=0.400 L=200.0' S=0.0200' Capacity=466.15 cfs Outflow=6.62 cfs 1.025 af

**Reach 4R: REACH 4**

Peak Depth=0.43' Max Vel=0.3 fps Inflow=12.09 cfs 1.025 af  
n=0.130 L=450.0' S=0.0022' Capacity=10,249.09 cfs Outflow=6.90 cfs 1.025 af

**Reach 5R: SWALE TO PRESUMPSHOT RIVE** Peak Depth=2.02' Max Vel=0.6 fps Inflow=14.50 cfs 2.359 af  
n=0.400 L=150.0' S=0.0200' Capacity=1,511.09 cfs Outflow=13.53 cfs 2.359 af

Total Runoff Area = 10.000 ac Runoff Volume = 2.359 af Average Runoff Depth = 2.83"

Type III 24-hr Rainfall=4.70"

**Subcatchment 1S: SUBCATCHMENT 1**

Runoff = 7.73 cfs @ 12.17 hrs, Volume= 0.680 af, Depth= 2.72"

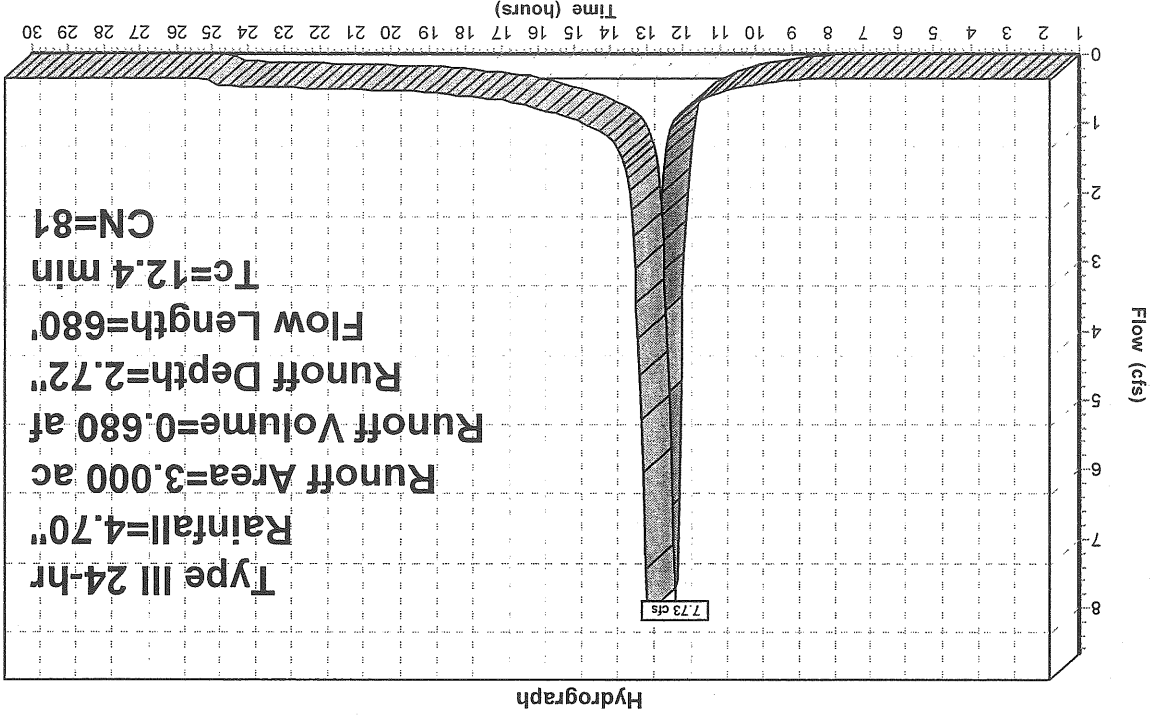
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
0.750	98	IMPERVIOUS
0.750	77	WEEDS, LOW BRUSH, FAIR, HSG D
0.750	78	CONTINUOUS GRASS, HSG D
0.750	71	CONTINUOUS GRASS, HSG C
3.000	81	Weighted Average

Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	0.2	0.0400	0.2	Sheet Flow, SHEET FLOW A-B
0.7	2.9	0.1670	2.9	Grass: Short n= 0.150 P2= 3.00"
0.7	2.9	0.1670	2.9	Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C
0.5	9.0	8,142.85	9.0	Short Grass Pasture Kv= 7.0 fps
0.5	9.0	8,142.85	9.0	Channel Flow, CHANNEL FLOW C-D
3.5	0.9	0.0180	0.9	Area= 900.0 sf Perim= 110.0' r= 8.18' n= 0.130
3.5	0.9	0.0180	0.9	Shallow Concentrated Flow, SHALLOW CONCENTRATED D T
12.4	680	Total	680	Total

**Subcatchment 1S: SUBCATCHMENT 1**

Runoff



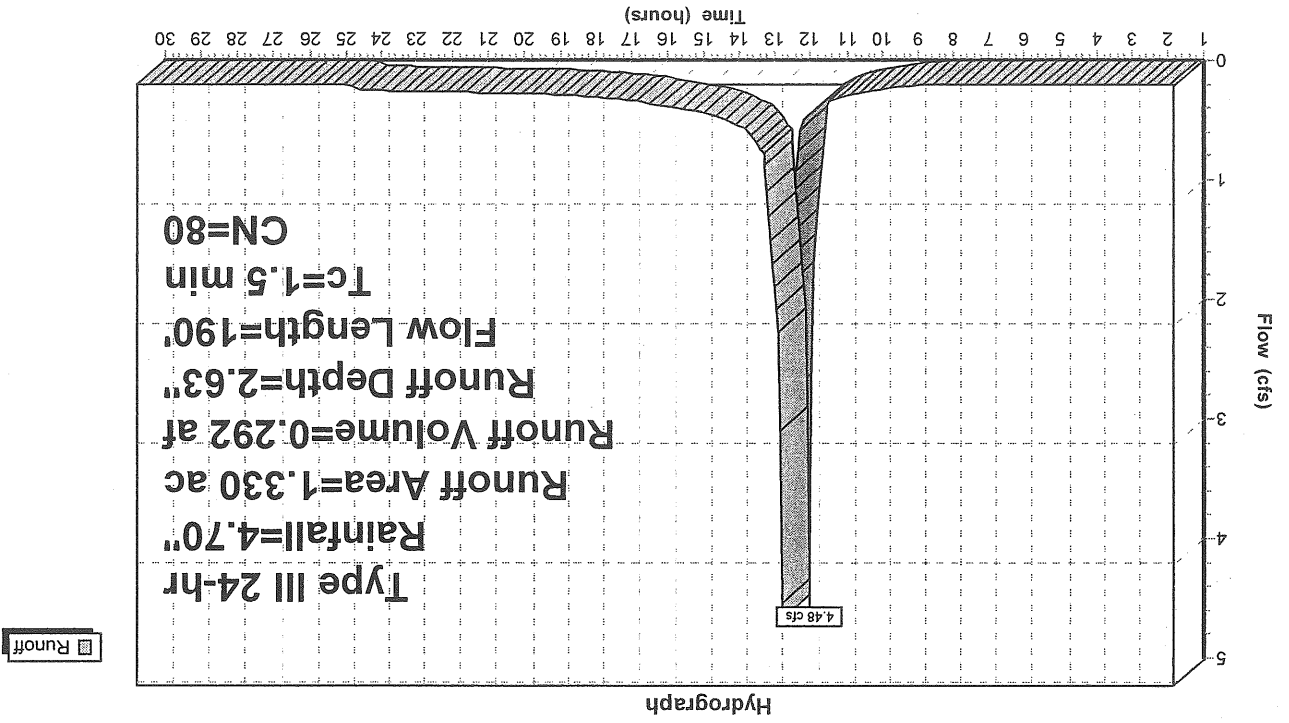
**Subcatchment 2S: SUBCATCHMENT 2**

Runoff = 4.48 cfs @ 12.03 hrs, Volume = 0.292 af, Depth = 2.63"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description		
0.400	56	BRUSH, WEEDS, FAIR, HSG B		
0.530	98	IMPERVIOUS		
0.150	71	CONTINUOUS GRASS, HSG C		
0.250	84	GRASSLAND, FAIR, HSG D		
1.330	80	Weighted Average		
Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	20	0.2000	0.3	Sheet Flow, SHEET FLOW A-B
1.1	20	0.2000	0.3	Grass: Short n= 0.150 P2= 3.00"
0.0	120	0.0586	55.5	36,058.34 Channel Flow, CHANNEL B TO C
0.4	50	0.1500	1.9	Area= 650.0 sf Perim= 120.0' r= 5.42' n= 0.020 Shallow Concentrated Flow, SHALLOW CONCENTRATED C TO
1.5	190	Total		Woodland Kv= 5.0 fps

**Subcatchment 2S: SUBCATCHMENT 2**



**Subcatchment 3S: SUBCATCHMENT 3**

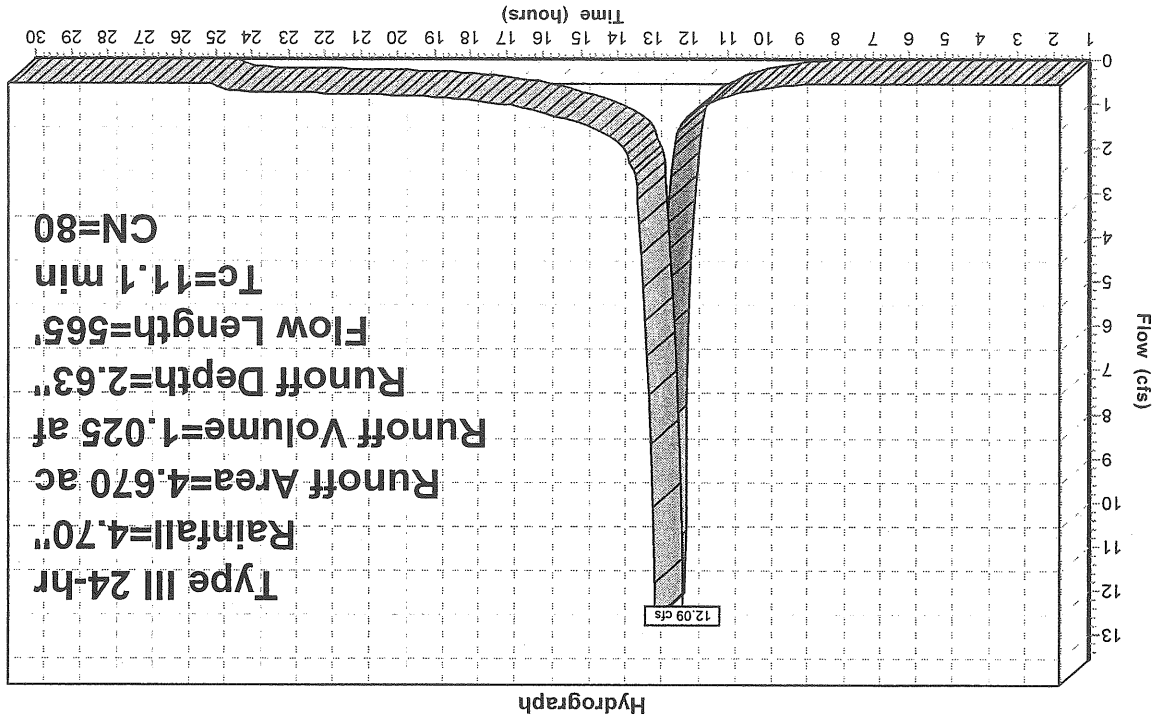
Runoff = 12.09 cfs @ 12.16 hrs, Volume= 1.025 af, Depth= 2.63"  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
2.400	98	IMPERVIOUS
1.520	56	WEEDS, LOW BRUSH, FAIR, HSG B
0.750	71	CONTINUOUS GRASS, HSG C
4.670	80	Weighted Average

Tc (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.3	100	0.1700	0.4	Sheet Flow, SHEET FLOW A-B
5.7	340	0.0200	1.0	Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C
0.3	75	0.1330	4.2	Short Grass Pasture K <sub>v</sub> = 7.0 fps
0.8	50	0.0400	1.0	Channel Flow, CHANNEL FLOW C-D Area= 650.0 sf Perim= 120.0' r= 5.42' n= 0.400
11.1	565	Total		Woodland K <sub>v</sub> = 5.0 fps

**Subcatchment 3S: SUBCATCHMENT 3**

Runoff



**Subcatchment 4S: SUBCATCHMENT 4**

Runoff = 4.13 cfs @ 12.12 hrs, Volume= 0.362 af, Depth= 4.35"

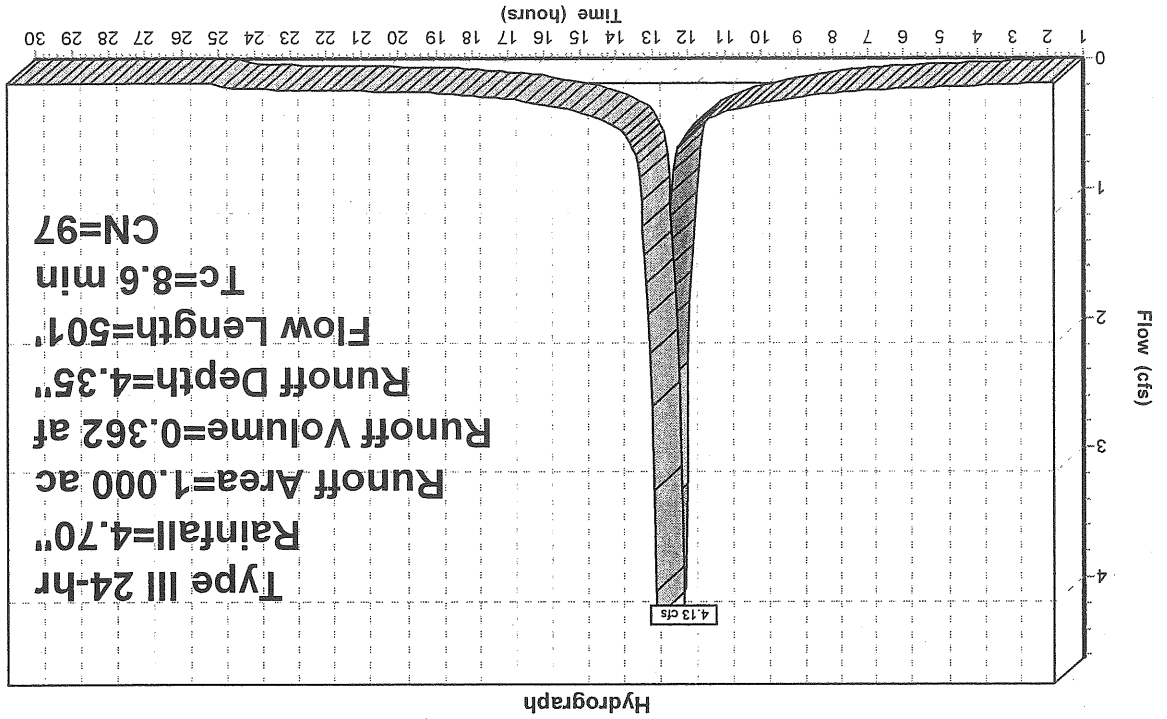
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
0.900	98	IMPERVIOUS
0.100	84	GRASSLAND, FAIR, HSG D
1.000	97	Weighted Average

Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.0	0.3	0.1000	70	Sheet Flow, SHEET FLOW A-B
0.9	3.1	0.0230	160	Grass: Short n= 0.150 P2= 3.00"
0.7	4.2	0.0035	186	Shallow Concentrated Flow, Shallow Concentrated B to C
0.1	6.5	0.0058	50	Paved Kv= 20.3 fps
0.1	20.36	7.34	7.34	Circular Channel (pipe), Channel C to D
0.1	20.36	6.5	20.36	Diam= 18.0" Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.011
2.9	0.2	0.4000	35	Circular Channel (pipe), Channel D to E
2.9	0.2	0.4000	35	Diam= 24.0" Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.011
8.6	501	Total	501	Sheet Flow, SHEET FLOW E to F
8.6	501	Total	501	Woods: Light underbrush n= 0.400 P2= 3.00"

**Subcatchment 4S: SUBCATCHMENT 4**

Runoff



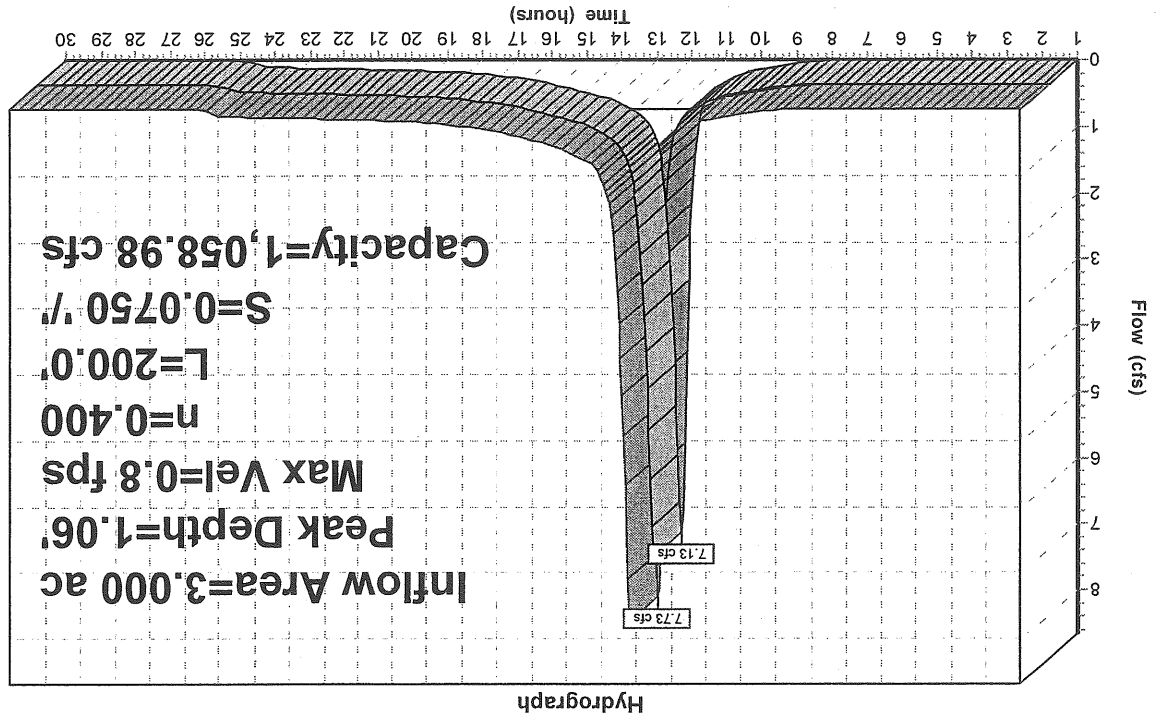
Inflow Area = 3.000 ac, Inflow Depth = 2.72"  
 Inflow = 7.73 cfs @ 12.17 hrs, Volume = 0.680 af  
 Outflow = 7.13 cfs @ 12.29 hrs, Volume = 0.680 af, Atten = 8%, Lag = 7.3 min

Routing by Stor-Ind+Trans method, Time Span = 1.00-30.00 hrs, dt = 0.05 hrs  
 Max. Velocity = 0.8 fps, Min. Travel Time = 4.0 min  
 Avg. Velocity = 0.3 fps, Avg. Travel Time = 11.3 min

Peak Depth = 1.06' @ 12.22 hrs  
 Capacity at bank full = 1,058.98 cfs  
 Inlet Invert = 35.00', Outlet Invert = 20.00'  
 5.00' x 10.00' deep channel, n = 0.400 Length = 200.0' Slope = 0.0750 %/  
 Side Slope Z-value = 3.0 %/

**Reach 1R: REACH 1**

Inflow  
 Outflow



**Reach 1R: REACH 1**

Hydrograph

**LOT 4-400 Riverside Street Properties Post1**

**Reach 2R: REACH 2**

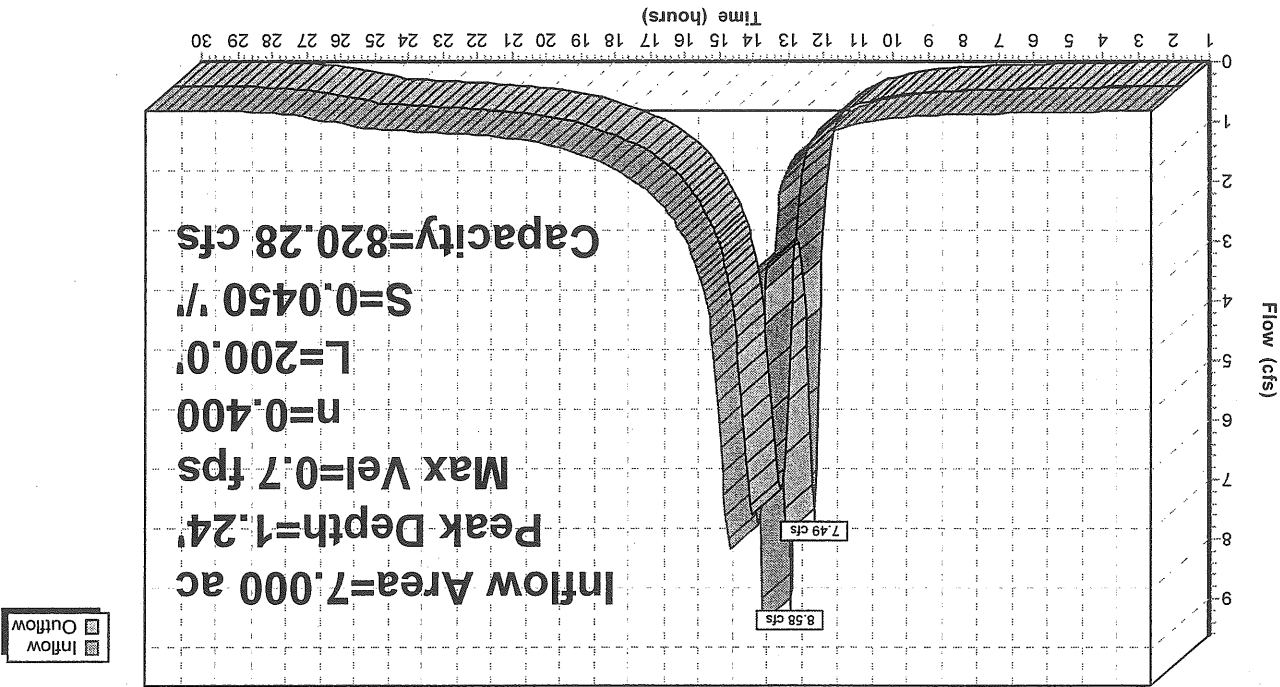
Inflow Area = 7.000 ac, Inflow Depth = 2.88"  
 Inflow = 8.58 cfs @ 12.12 hrs, Volume = 1.679 af  
 Outflow = 7.49 cfs @ 12.26 hrs, Volume = 1.679 af, Atten = 13%, Lag = 8.2 min

Routing by Stor-Ind+Trans method, Time Span = 1.00-30.00 hrs, dt = 0.05 hrs  
 Max. Velocity = 0.7 fps, Min. Travel Time = 4.8 min  
 Avg. Velocity = 0.3 fps, Avg. Travel Time = 12.1 min

Peak Depth = 1.24' @ 12.17 hrs  
 Capacity at bank full = 820.28 cfs  
 Inlet Invert = 29.00', Outlet Invert = 20.00'  
 5.00' x 10.00' deep channel, n = 0.400 Length = 200.0' Slope = 0.0450' /'  
 Side Slope Z-value = 3.0' /'

**Reach 2R: REACH 2**

Hydrograph





**Reach 3AR: REACH 3A**

Inflow Area = 6,000 ac, Inflow Depth = 2.63"  
 Inflow = 7.01 cfs @ 12.96 hrs, Volume = 1,316 af  
 Outflow = 6.95 cfs @ 13.06 hrs, Volume = 1,316 af, Atten = 1%, Lag = 5.8 min

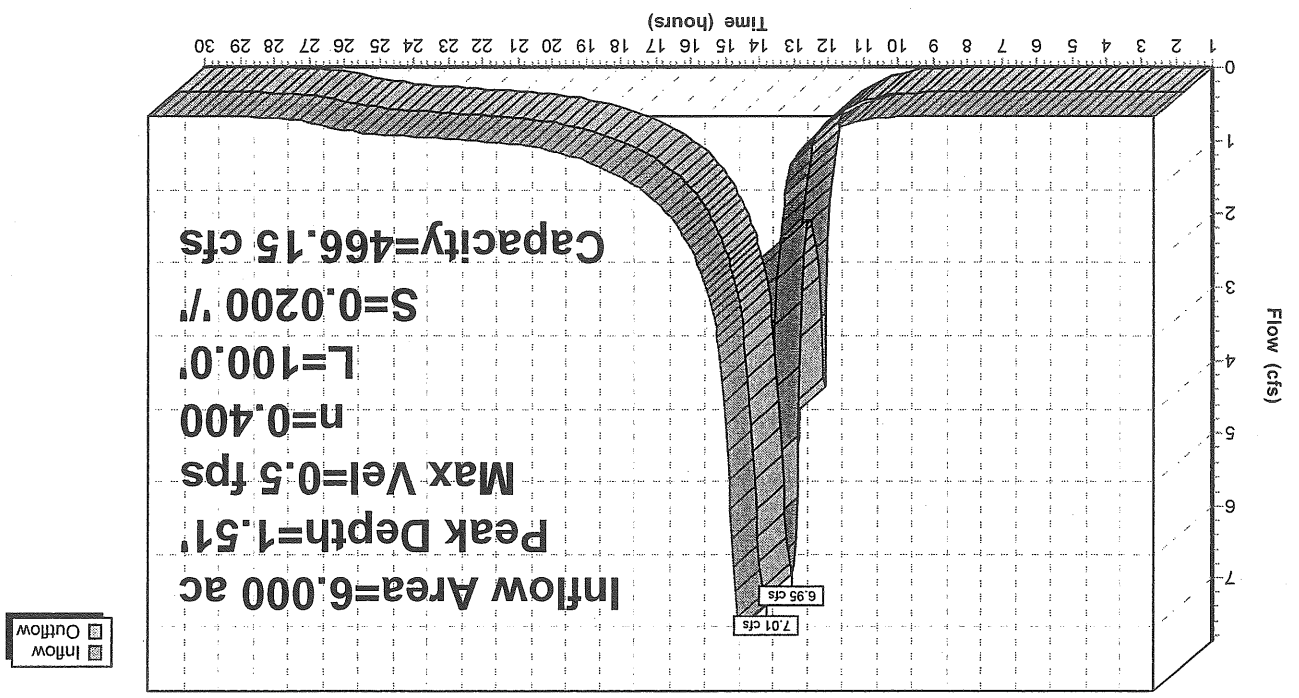
Routing by Stor-Ind+Trans method, Time Span = 1.00-30.00 hrs, dt = 0.05 hrs  
 Max. Velocity = 0.5 fps, Min. Travel Time = 3.2 min  
 Avg. Velocity = 0.2 fps, Avg. Travel Time = 7.7 min

Peak Depth = 1.51' @ 13.01 hrs  
 Capacity at bank full = 466.15 cfs  
 Inlet Invert = 31.00', Outlet Invert = 29.00'

5.00' x 10.00' deep channel, n = 0.400 Length = 100.0' Slope = 0.0200 %  
 Side Slope Z-value = 2.0 3.0 %

**Reach 3AR: REACH 3A**

Hydrograph



**Reach 3R: REACH 3**

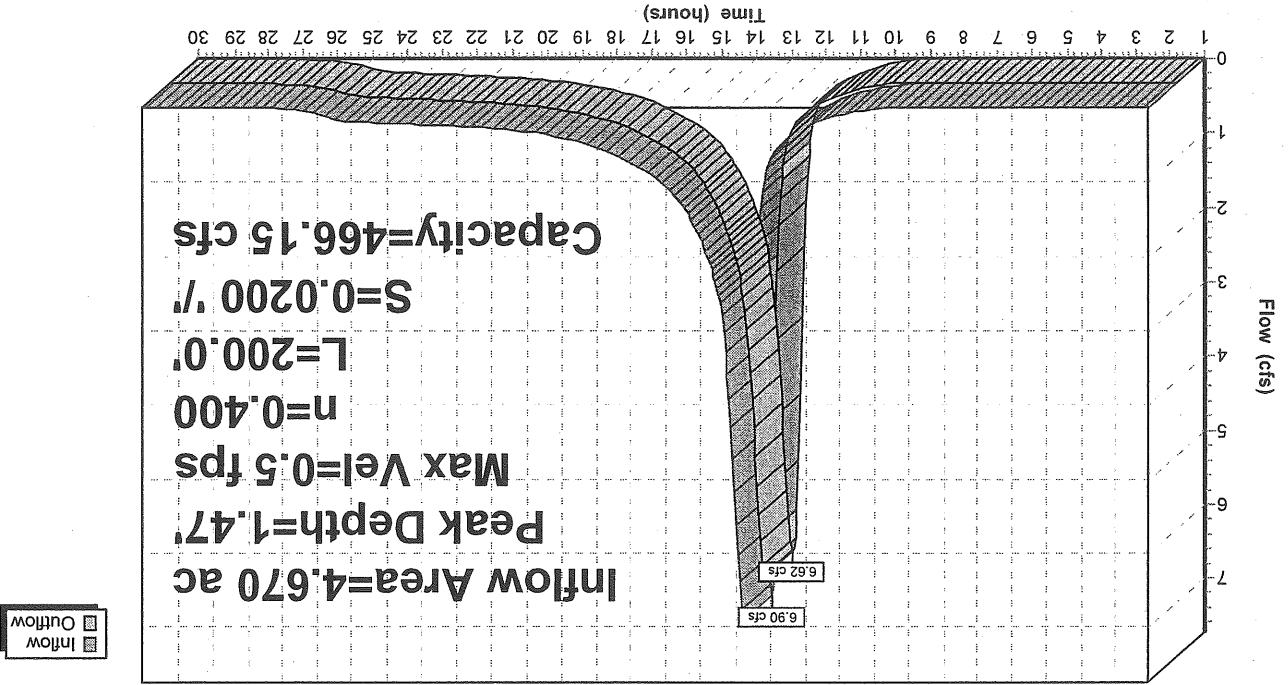
Inflow Area = 4.670 ac, Inflow Depth = 2.63"  
 Inflow = 6.90 cfs @ 12.76 hrs, Volume = 1.025 af  
 Outflow = 6.62 cfs @ 12.97 hrs, Volume = 1.025 af, Atten = 4%, Lag = 12.4 min

Routing by Stor-Ind+Trans method, Time Span = 1.00-30.00 hrs, dt = 0.05 hrs  
 Max. Velocity = 0.5 fps, Min. Travel Time = 6.4 min  
 Avg. Velocity = 0.2 fps, Avg. Travel Time = 16.6 min

Peak Depth = 1.47' @ 12.86 hrs  
 Capacity at bank full = 466.15 cfs  
 Inlet Invert = 35.00', Outlet Invert = 31.00'  
 5.00' x 10.00' deep channel, n = 0.400 Length = 200.0' Slope = 0.0200 %  
 Side Slope Z-value = 2.0 3.0 %

**Reach 3R: REACH 3**

Hydrograph



**Reach 4R: REACH 4**

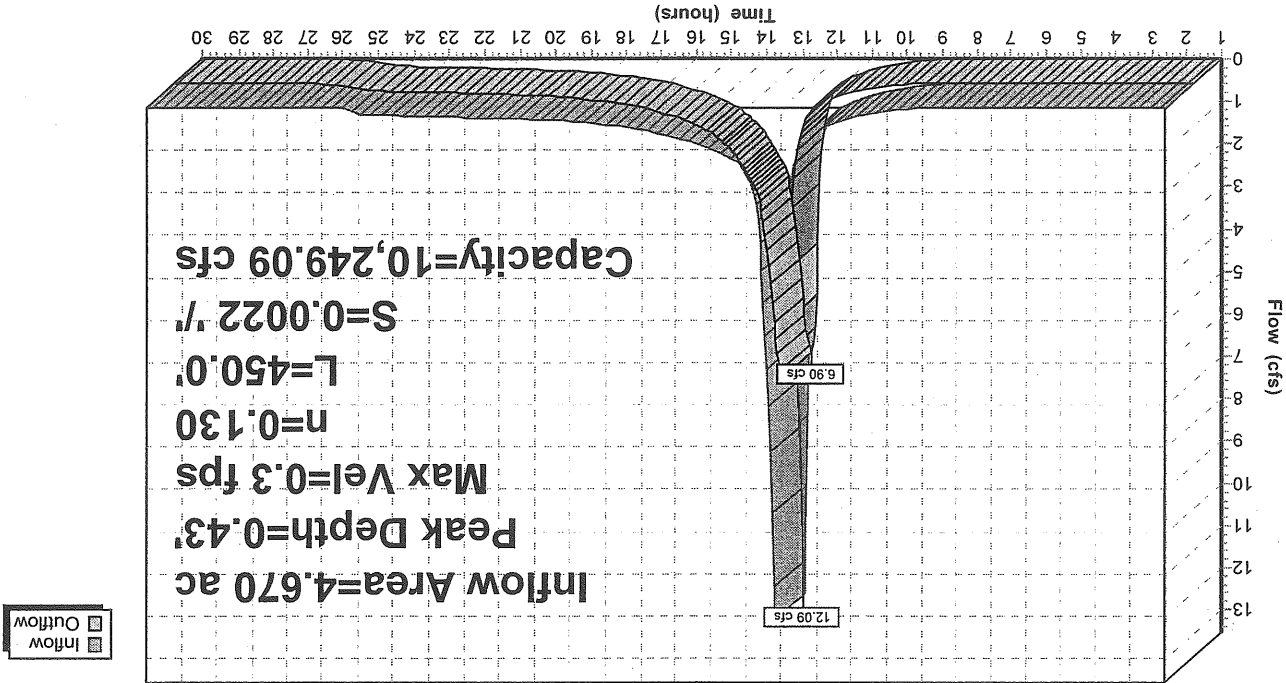
Inflow Area = 4.670 ac, Inflow Depth = 2.63"  
 Inflow = 12.09 cfs @ 12.16 hrs, Volume = 1.025 af  
 Outflow = 6.90 cfs @ 12.76 hrs, Volume = 1.025 af, Atten = 43%, Lag = 36.3 min

Routing by Stor-Ind+Trans method, Time Span = 1.00-30.00 hrs, dt = 0.05 hrs  
 Max. Velocity = 0.3 fps, Min. Travel Time = 24.0 min  
 Avg. Velocity = 0.2 fps, Avg. Travel Time = 35.0 min

Peak Depth = 0.43' @ 12.36 hrs  
 Capacity at bank full = 10,249.09 cfs  
 Inlet Invert = 36.00', Outlet Invert = 35.00'  
 50.00' x 25.00' deep channel, n = 0.130 Length = 450.0' Slope = 0.0022 /'  
 Side Slope Z-value = 3.0 /'

**Reach 4R: REACH 4**

Hydrograph



**Reach 5R: SWALE TO PRESUMPSCOT RIVER**

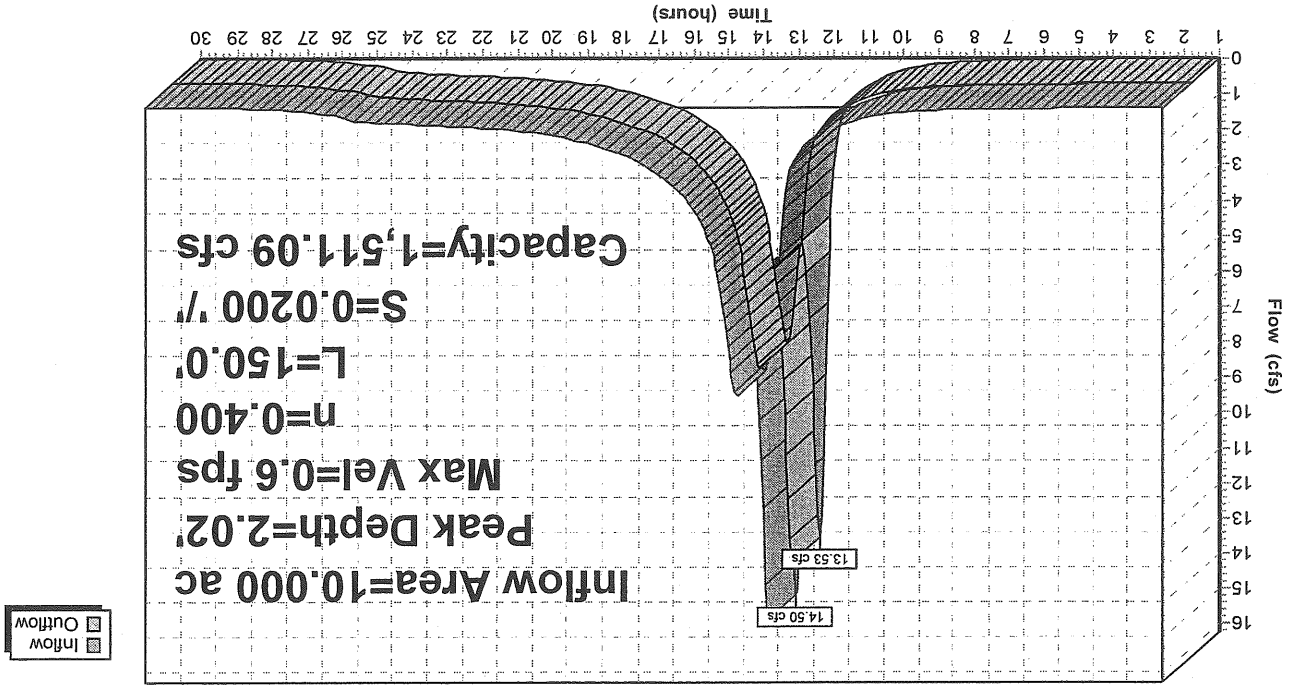
Inflow Area = 10.000 ac, Inflow Depth = 2.83"  
 Inflow = 14.50 cfs @ 12.27 hrs, Volume = 2.359 af  
 Outflow = 13.53 cfs @ 12.40 hrs, Volume = 2.359 af, Atten= 7%, Lag= 7.6 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 0.6 fps, Min. Travel Time= 4.1 min  
 Avg. Velocity = 0.2 fps, Avg. Travel Time= 10.8 min

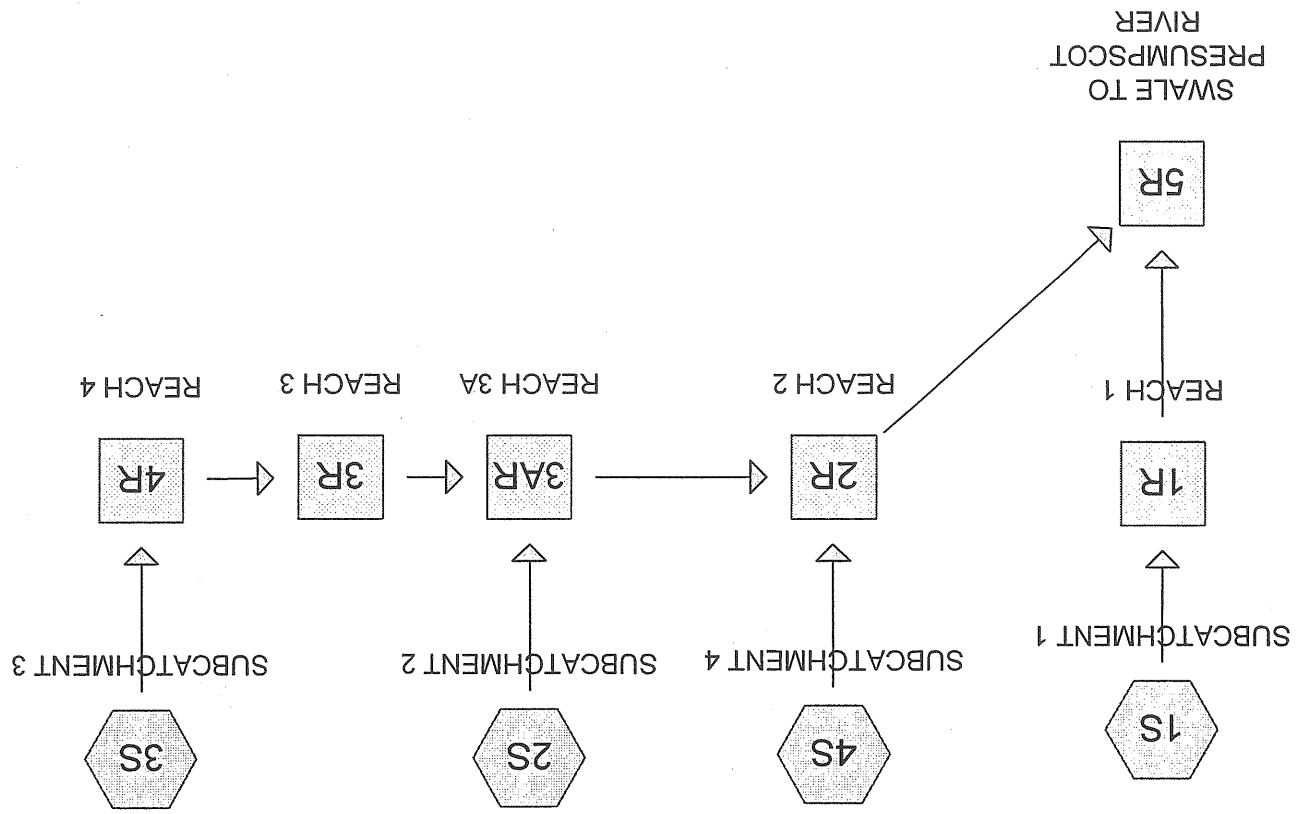
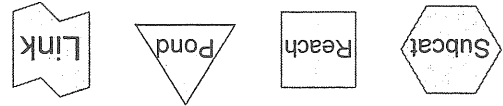
Peak Depth= 2.02' @ 12.32 hrs  
 Capacity at bank full= 1,511.09 cfs  
 Inlet Invert= 20.00', Outlet Invert= 17.00'  
 5.00' x 15.00' deep channel, n= 0.400 Length= 150.0' Slope= 0.0200 %  
 Side Slope Z-value= 3.0 %

**Reach 5R: SWALE TO PRESUMPSCOT RIVER**

Hydrograph



Drainage Diagram for LOT 4-400 Riverside Street Properties Postl  
 Prepared by {enter your company name here} 12/5/2005  
 HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems



**LOT 4-400 Riverside Street Properties Post1**

Type III 24-hr Rainfall=5.50"

Prepared by {enter your company name here}

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

12/5/2005

Time span=1.00-30.00 hrs, dt=0.05 hrs, 581 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: SUBCATCHMENT 1**

Runoff Area=3.00 ac Runoff Depth=3.43"  
Flow Length=680' Tc=12.4 min CN=81 Runoff=9.72 cfs 0.858 af

**Subcatchment 2S: SUBCATCHMENT 2**

Runoff Area=1.330 ac Runoff Depth=3.33"  
Flow Length=190' Tc=1.5 min CN=80 Runoff=5.65 cfs 0.369 af

**Subcatchment 3S: SUBCATCHMENT 3**

Runoff Area=4.670 ac Runoff Depth=3.33"  
Flow Length=565' Tc=11.1 min CN=80 Runoff=15.28 cfs 1.297 af

**Subcatchment 4S: SUBCATCHMENT 4**

Runoff Area=1.000 ac Runoff Depth=5.15"  
Flow Length=501' Tc=8.6 min CN=97 Runoff=4.85 cfs 0.429 af

**Reach 1R: REACH 1**

Peak Depth=1.20' Max Vel=0.9 fps Inflow=9.72 cfs 0.858 af  
n=0.400 L=200.0' S=0.0750' Capacity=1,058.98 cfs Outflow=9.02 cfs 0.858 af

**Reach 2R: REACH 2**

Peak Depth=1.39' Max Vel=0.7 fps Inflow=10.68 cfs 2.095 af  
n=0.400 L=200.0' S=0.0450' Capacity=820.28 cfs Outflow=9.51 cfs 2.095 af

**Reach 3AR: REACH 3A**

Peak Depth=1.73' Max Vel=0.6 fps Inflow=9.30 cfs 1.667 af  
n=0.400 L=100.0' S=0.0200' Capacity=466.15 cfs Outflow=9.23 cfs 1.667 af

**Reach 3R: REACH 3**

Peak Depth=1.69' Max Vel=0.6 fps Inflow=9.17 cfs 1.297 af  
n=0.400 L=200.0' S=0.0200' Capacity=466.15 cfs Outflow=8.78 cfs 1.297 af

**Reach 4R: REACH 4**

Peak Depth=0.52' Max Vel=0.3 fps Inflow=15.28 cfs 1.297 af  
n=0.130 L=450.0' S=0.0022' Capacity=10,249.09 cfs Outflow=9.17 cfs 1.297 af

**Reach 5R: SWALE TO PRESUMPSHOT RIVE Peak Depth=2.26' Max Vel=0.7 fps Inflow=18.23 cfs 2.953 af**

n=0.400 L=150.0' S=0.0200' Capacity=1,511.09 cfs Outflow=17.07 cfs 2.953 af

Total Runoff Area = 10.000 ac Runoff Volume = 2.953 af Average Runoff Depth = 3.54"

**Subcatchment 1S: SUBCATCHMENT 1**

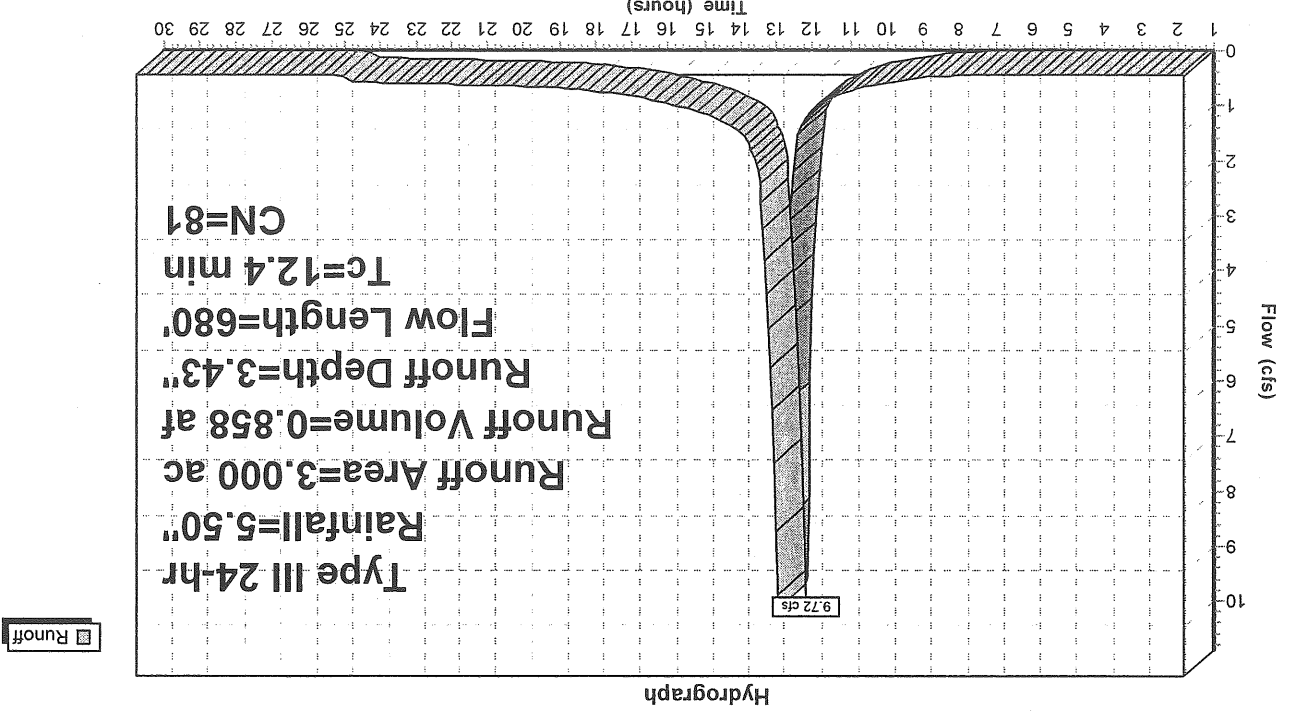
Runoff = 9.72 cfs @ 12.17 hrs, Volume= 0.858 af, Depth= 3.43"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (ac)	CN	Description
0.750	98	IMPERVIOUS
0.750	77	WEEDS, LOW BRUSH, FAIR, HSG D
0.750	78	CONTINUOUS GRASS, HSG D
0.750	71	CONTINUOUS GRASS, HSG C
3.000	81	Weighted Average

Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	0.0400	0.2		Sheet Flow, SHEET FLOW A-B
0.7	0.1670	2.9		Grass: Short n= 0.150 P2= 3.00"
0.7	0.1670	2.9		Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C
0.5	0.0380	9.0	8,142.85	Short Grass Pasture Kv= 7.0 fps
0.5	0.0380	9.0	8,142.85	Channel Flow, CHANNEL FLOW C-D
3.5	0.0180	0.9		Area= 900.0 sf Perim= 110.0' r= 8.18' n= 0.130
3.5	0.0180	0.9		Shallow Concentrated Flow, SHALLOW CONCENTRATED D T
12.4	680	Total		Short Grass Pasture Kv= 7.0 fps

**Subcatchment 1S: SUBCATCHMENT 1**



Runoff

### Subcatchment 2S: SUBCATCHMENT 2

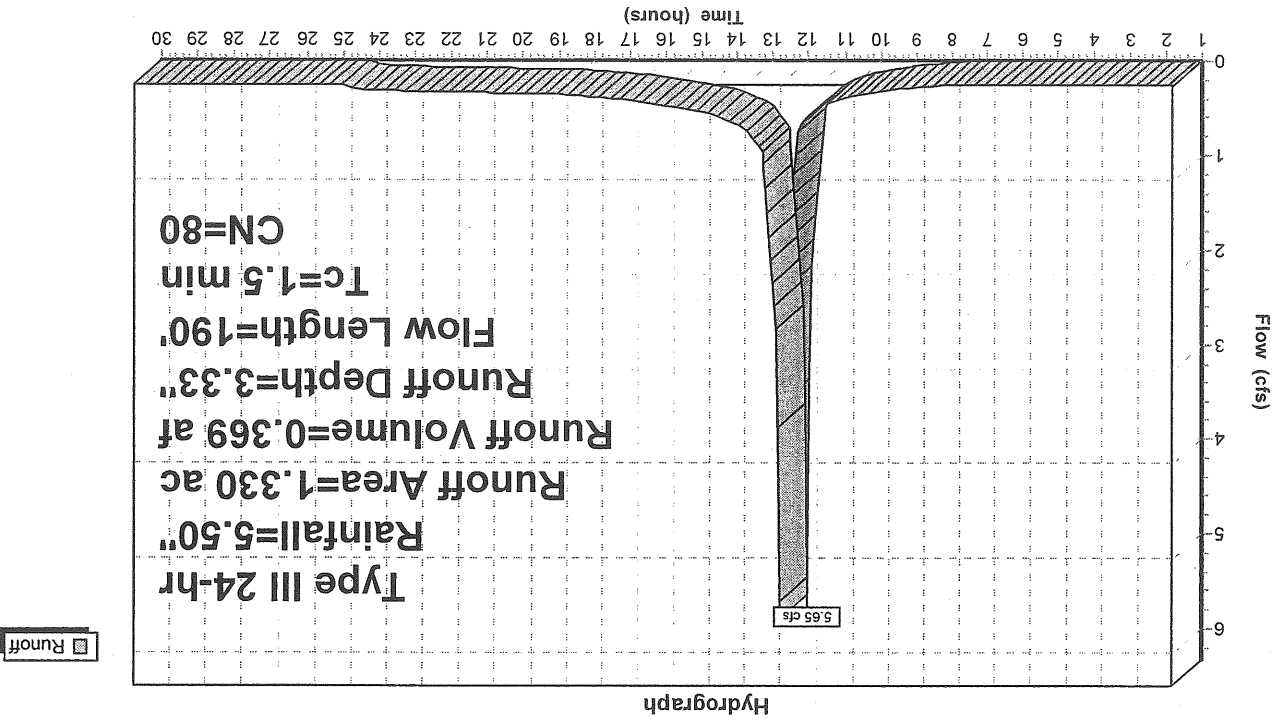
Runoff = 5.65 cfs @ 12.03 hrs, Volume= 0.369 af, Depth= 3.33"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (ac)	CN	Description
0.400	56	BRUSH, WEEDS, FAIR, HSG B
0.530	98	IMPERVIOUS
0.150	71	CONTINUOUS GRASS, HSG C
0.250	84	GRASSLAND, FAIR, HSG D
1.330	80	Weighted Average

Tc (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	0.2000	0.3		Sheet Flow, SHEET FLOW A-B
0.0	0.0586	55.5	36,058.34	Grass: Short n= 0.150 P2= 3.00" Channel Flow, CHANNEL B TO C Area= 650.0 sf Perim= 120.0' r= 5.42' n= 0.020
0.4	0.1500	1.9		Shallow Concentrated Flow, SHALLOW CONCENTRATED C TO Woodland Kv= 5.0 fps
1.5	Total			

### Subcatchment 2S: SUBCATCHMENT 2





Type III 24-hr Rainfall=5.50"

### Subcatchment 3S: SUBCATCHMENT 3

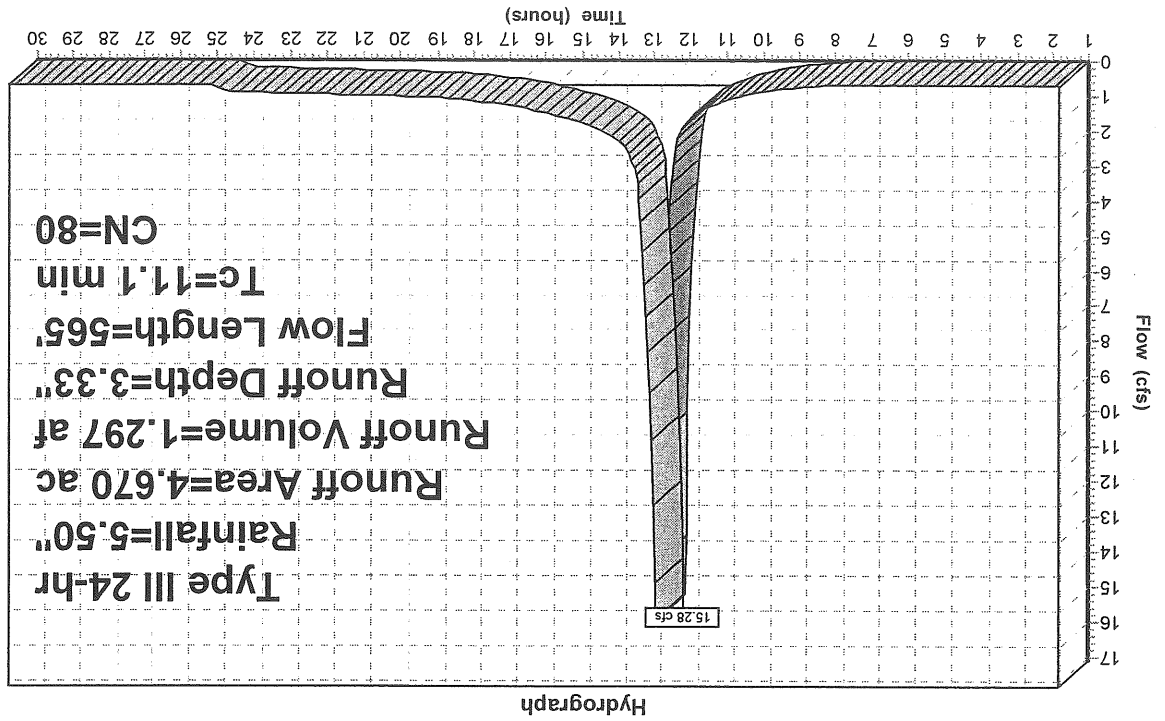
Runoff = 15.28 cfs @ 12.16 hrs, Volume= 1.297 af, Depth= 3.33"  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (ac)	CN	Description
2.400	98	IMPERVIOUS
1.520	56	WEEDS, LOW BRUSH, FAIR, HSG B
0.750	71	CONTINUOUS GRASS, HSG C
4.670	80	Weighted Average

Tc (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.3	0.4	0.1700	100	Sheet Flow, SHEET FLOW A-B
5.7	1.0	0.0200	340	Grass: Short n=0.150 P2=3.00"
5.7	1.0	0.0200	340	Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C
0.3	4.2	2.716.14	75	Short Grass Pasture Kv=7.0 fps
0.3	4.2	2.716.14	75	Channel Flow, CHANNEL FLOW C-D
0.8	1.0	0.0400	50	Area=650.0 sf Perim=120.0' r=5.42' n=0.400
0.8	1.0	0.0400	50	Shallow Concentrated Flow, SHALLOW CONCENTRATED D T
11.1	565	Total	565	Woodland Kv=5.0 fps

### Subcatchment 3S: SUBCATCHMENT 3

Runoff



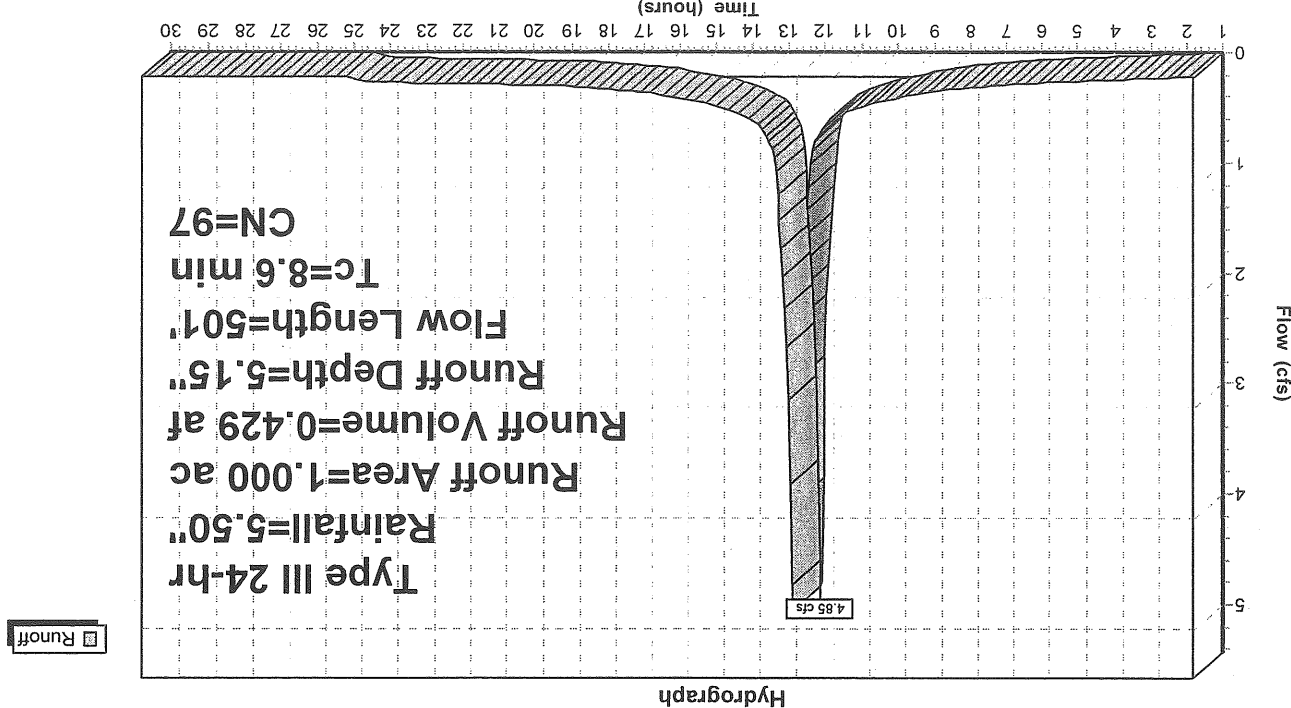
**Subcatchment 4S: SUBCATCHMENT 4**

Runoff = 4.85 cfs @ 12.12 hrs, Volume= 0.429 af, Depth= 5.15"  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (ac)	CN	Description
0.900	98	IMPERVIOUS
0.100	84	GRASSLAND, FAIR, HSG D
1.000	97	Weighted Average

Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.0	0.3	0.1000	70	Sheet Flow, SHEET FLOW A-B
0.9	3.1	0.0230	160	Grass: Short n= 0.150 P2= 3.00"
0.7	4.2	0.0035	186	Paved Kv= 20.3 fps
0.1	6.5	0.0058	50	Circular Channel (pipe), Channel C to D
2.9	0.2	0.4000	35	Diam= 18.0" Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.011
8.6	501	Total	501	Circular Channel (pipe), Channel D to E
				Diam= 24.0" Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.011
				Sheet Flow, SHEET FLOW E to F
				Woods: Light underbrush n= 0.400 P2= 3.00"

**Subcatchment 4S: SUBCATCHMENT 4**



Runoff

**Reach 1R: REACH 1**

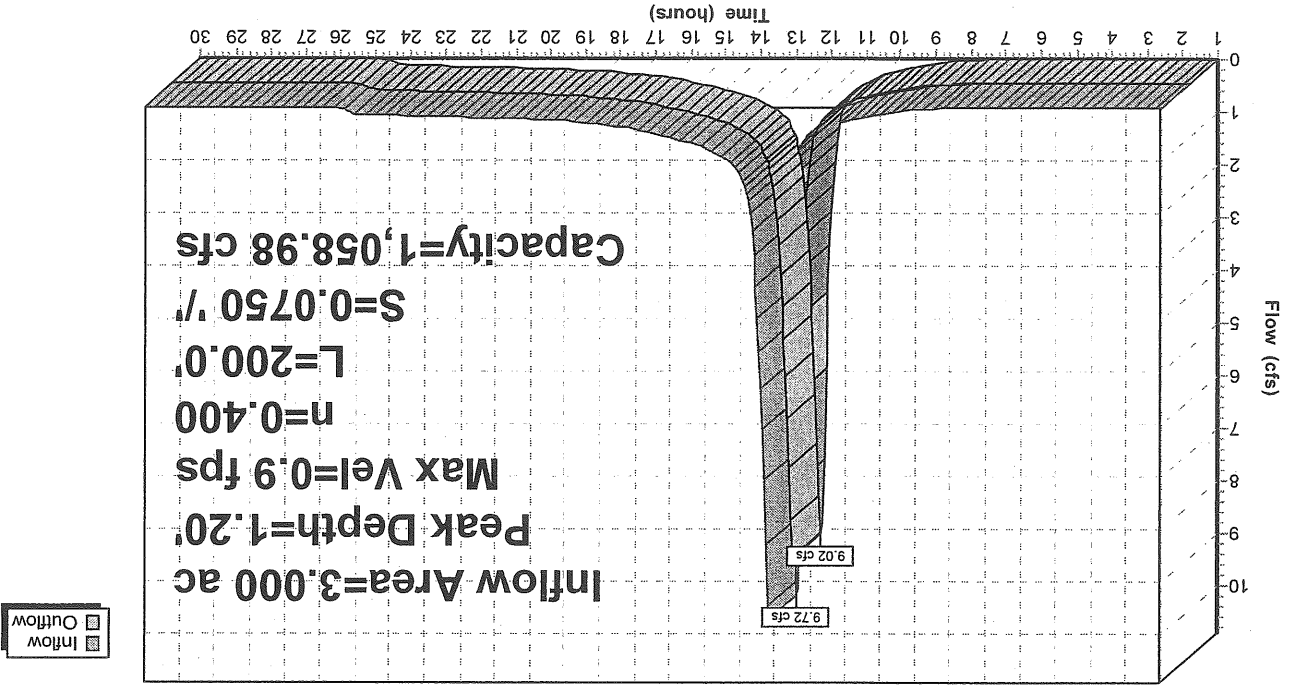
Inflow Area = 3.000 ac, Inflow Depth = 3.43"  
 Inflow = 9.72 cfs @ 12.17 hrs, Volume = 0.858 af  
 Outflow = 9.02 cfs @ 12.28 hrs, Volume = 0.858 af, Atten=7%, Lag=6.8 min

Routing by Stor-Ind+Trans method, Time Span=1.00-30.00 hrs, dt=0.05 hrs  
 Max. Velocity=0.9 fps, Min. Travel Time=3.8 min  
 Avg. Velocity = 0.3 fps, Avg. Travel Time=10.7 min

Peak Depth=1.20' @ 12.22 hrs  
 Capacity at bank full=1,058.98 cfs  
 Inlet Invert=35.00', Outlet Invert=20.00'  
 5.00' x 10.00' deep channel, n=0.400 Length=200.0' Slope=0.0750 %  
 Side Slope Z-value=3.0 %

**Reach 1R: REACH 1**

Hydrograph



**Reach 2R: REACH 2**

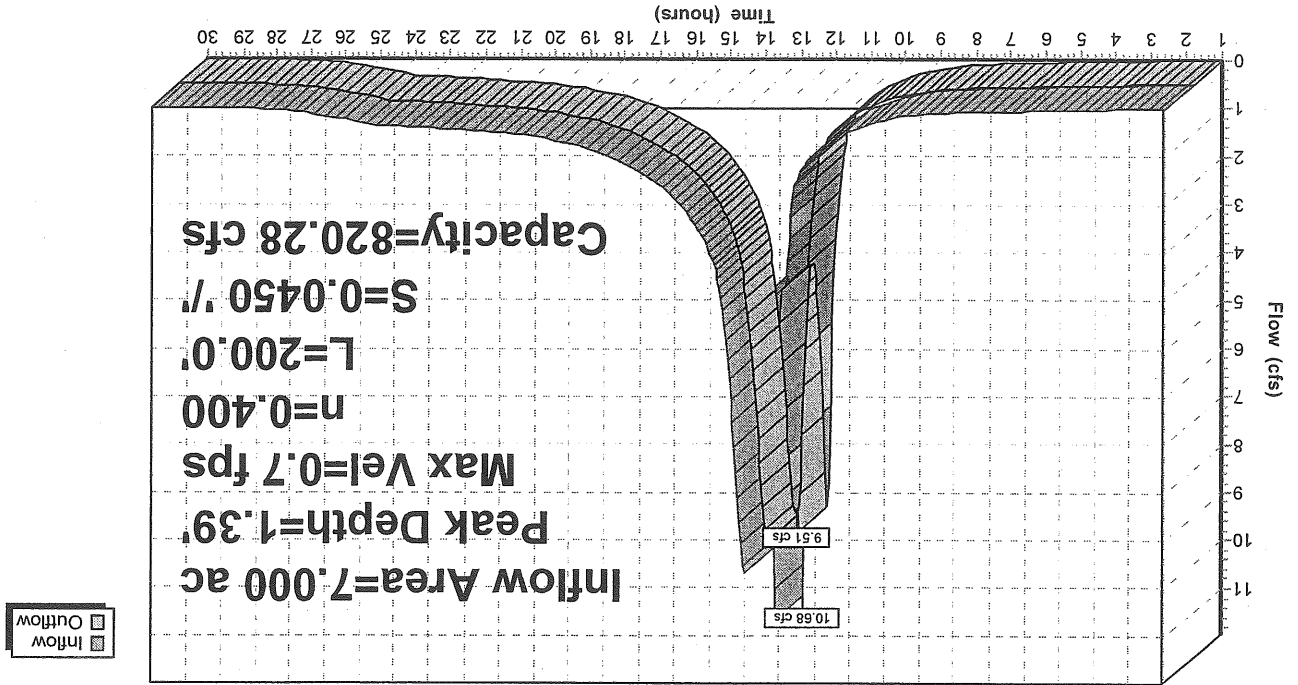
Inflow Area = 7.000 ac, Inflow Depth = 3.59"  
 Inflow = 10.68 cfs @ 12.11 hrs, Volume = 2.095 af  
 Outflow = 9.51 cfs @ 13.11 hrs, Volume = 2.095 af, Atten = 11%, Lag = 59.8 min

Routing by Stor-Ind+Trans method, Time Span = 1.00-30.00 hrs, dt = 0.05 hrs  
 Max. Velocity = 0.7 fps, Min. Travel Time = 4.5 min  
 Avg. Velocity = 0.3 fps, Avg. Travel Time = 11.5 min

Peak Depth = 1.39' @ 13.03 hrs  
 Capacity at bank full = 820.28 cfs  
 Inlet Invert = 29.00', Outlet Invert = 20.00'  
 5.00' x 10.00' deep channel, n = 0.400 Length = 200.0' Slope = 0.0450 %  
 Side Slope Z-value = 3.0 %

**Reach 2R: REACH 2**

Hydrograph

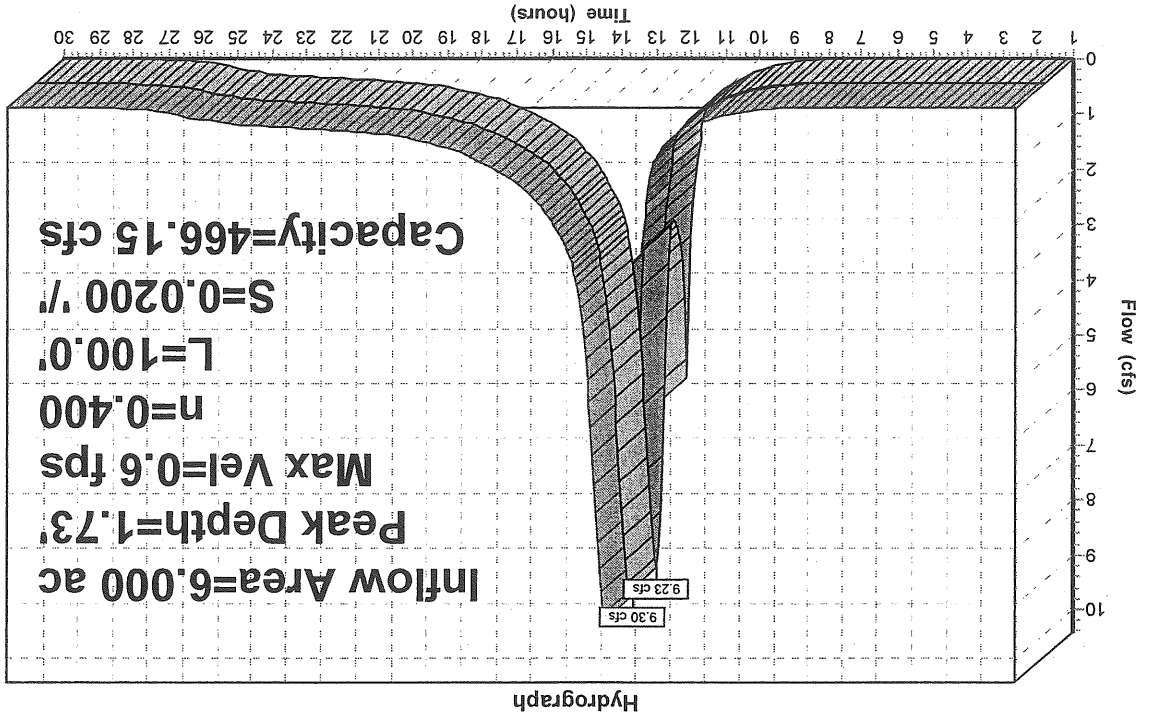


**Reach 3AR: REACH 3A**

Inflow Area = 6.000 ac, Inflow Depth = 3.33"  
 Inflow = 9.30 cfs @ 12.89 hrs, Volume = 1.667 af  
 Outflow = 9.23 cfs @ 12.97 hrs, Volume = 1.667 af, Atten = 1%, Lag = 5.3 min

Routing by Stor-Ind+Trans method, Time Span = 1.00-30.00 hrs, dt = 0.05 hrs  
 Max. Velocity = 0.6 fps, Min. Travel Time = 2.9 min  
 Avg. Velocity = 0.2 fps, Avg. Travel Time = 7.4 min

Peak Depth = 1.73' @ 12.93 hrs  
 Capacity at bank full = 466.15 cfs  
 Inlet Invert = 31.00', Outlet Invert = 29.00'  
 5.00' x 10.00' deep channel, n = 0.400 Length = 100.0' Slope = 0.0200 %  
 Side Slope Z-value = 2.0 3.0 %



**Reach 3AR: REACH 3A**

Legend:  
 [Solid Line] Inflow  
 [Dashed Line] Outflow

**Reach 3R: REACH 3**

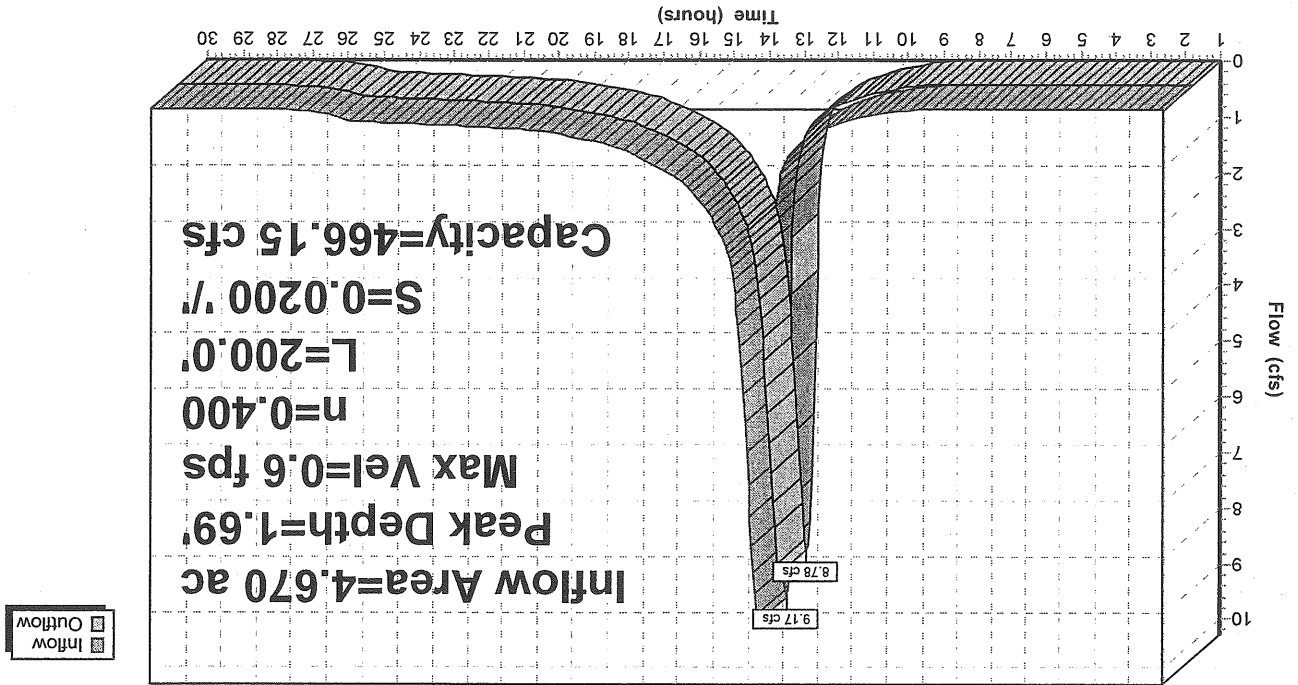
Inflow Area = 4.670 ac, Inflow Depth = 3.33"  
 Inflow = 9.17 cfs @ 12.71 hrs, Volume = 1.297 af  
 Outflow = 8.78 cfs @ 12.89 hrs, Volume = 1.297 af, Atten = 4%, Lag = 11.2 min

Routing by Stor-Ind+Trans method, Time Span = 1.00-30.00 hrs, dt = 0.05 hrs  
 Max. Velocity = 0.6 fps, Min. Travel Time = 5.9 min  
 Avg. Velocity = 0.2 fps, Avg. Travel Time = 15.8 min

Peak Depth = 1.69' @ 12.79 hrs  
 Capacity at bank full = 466.15 cfs  
 Inlet Invert = 35.00', Outlet Invert = 31.00'  
 5.00' x 10.00' deep channel, n = 0.400 Length = 200.0' Slope = 0.0200 %  
 Side Slope Z-value = 2.0 3.0 %

**Reach 3R: REACH 3**

Hydrograph



**Reach 4R: REACH 4**

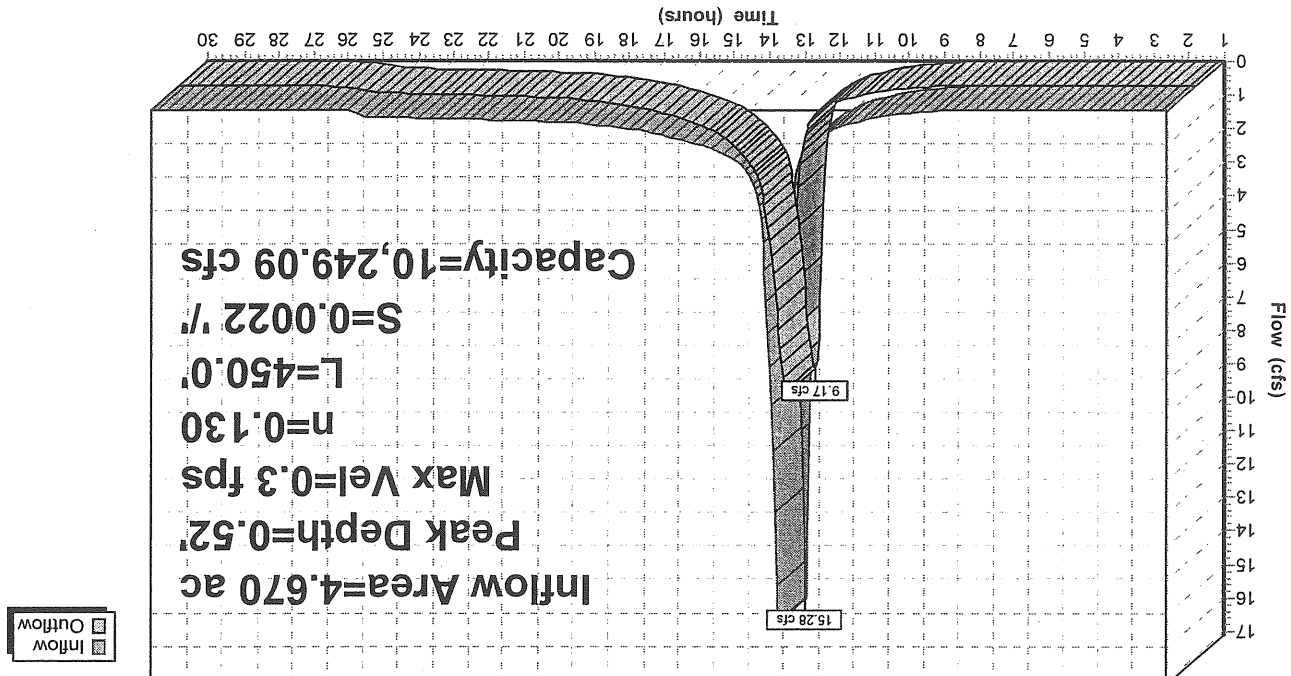
Inflow Area = 4.670 ac, Inflow Depth = 3.33"  
 Inflow = 15.28 cfs @ 12.16 hrs, Volume = 1.297 af  
 Outflow = 9.17 cfs @ 12.71 hrs, Volume = 1.297 af, Atten= 40%, Lag= 33.0 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 0.3 fps, Min. Travel Time= 21.8 min  
 Avg. Velocity = 0.2 fps, Avg. Travel Time= 34.8 min

Peak Depth= 0.52' @ 12.34 hrs  
 Capacity at bank full= 10,249.09 cfs  
 Inlet Invert= 36.00', Outlet Invert= 35.00'  
 50.00' x 25.00' deep channel, n= 0.130 Length= 450.0' Slope= 0.0022'/'  
 Side Slope Z-value= 3.0'/'

**Reach 4R: REACH 4**

Hydrograph



Legend:  
 [ ] Inflow  
 [ ] Outflow

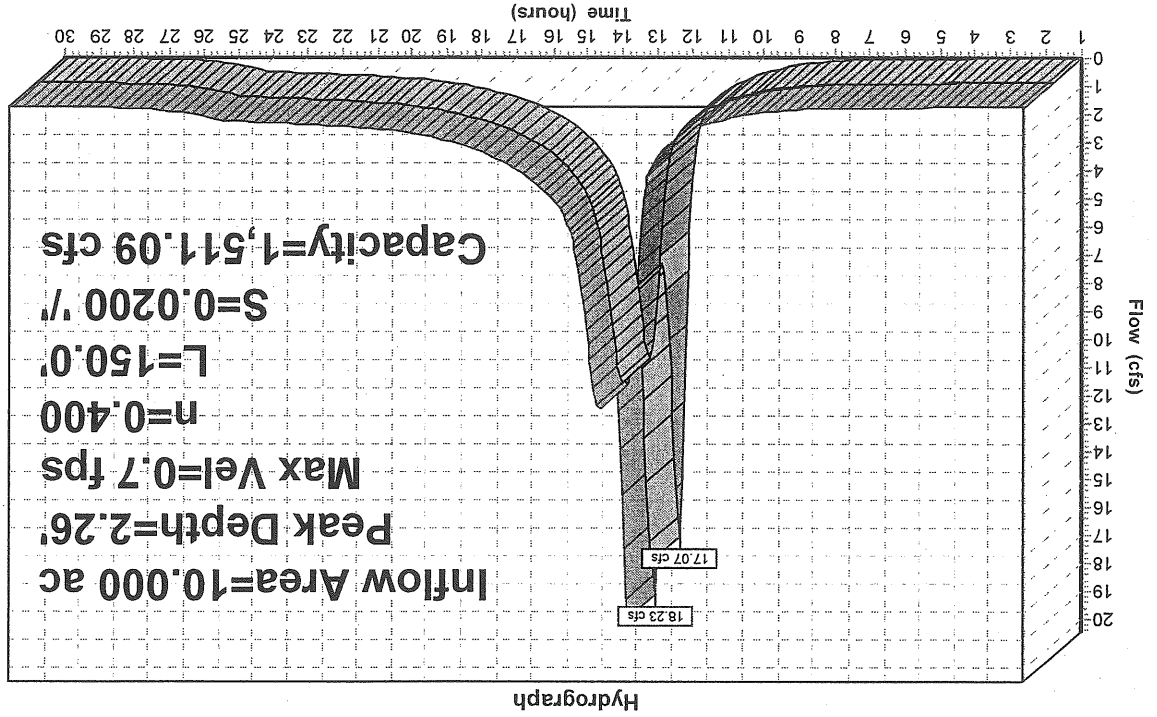
**Reach 5R: SWALE TO PRESUMPCOT RIVER**

Inflow Area = 10,000 ac, Inflow Depth = 3.54"  
 Inflow = 18.23 cfs @ 12.26 hrs, Volume = 2.953 af  
 Outflow = 17.07 cfs @ 12.38 hrs, Volume = 2.953 af, Atten = 6%, Lag = 7.0 min

Routing by Stor-Ind+Trans method, Time Span = 1.00-30.00 hrs, dt = 0.05 hrs  
 Max. Velocity = 0.7 fps, Min. Travel Time = 3.8 min  
 Avg. Velocity = 0.2 fps, Avg. Travel Time = 10.2 min

Peak Depth = 2.26' @ 12.31 hrs  
 Capacity at bank full = 1,511.09 cfs  
 Inlet Invert = 20.00', Outlet Invert = 17.00'  
 5.00' x 15.00' deep channel, n = 0.400 Length = 150.0' Slope = 0.0200 %  
 Side Slope Z-value = 3.0 %

**Reach 5R: SWALE TO PRESUMPCOT RIVER**



Inflow  
 Outflow



OFFICE WAREHOUSE BUILDING  
VICINITY OF 410 RIVERSIDE STREET  
SITE PLAN AND SITE LOCATION OF DEVELOPMENT REVIEW  
EASTMAN INDUSTRIES DBA, 410 RIVERSIDE STREET LLC, APPLICANT

Submitted to:

Portland Planning Board  
Portland, Maine

Submitted by:  
Bill Needelman, Senior Planner

November 20, 2007  
In support of the  
November 27, 2007  
Public Hearing

## I. INTRODUCTION

410 Riverside Street LLC requests a public hearing with the Planning Board for review of a proposed 23,000 square foot industrial space/warehouse facility. The site is located in the I-M zone and was previously approved for a similar project proposed by the Rist/Brunet Family Trust in 2005. The project is to be reviewed as a major site plan and as a Site Location of Development under Maine DEP delegated review authority.

158 notices were sent to area residents and interested parties in addition to notice in the *Portland Press Herald*.

The applicant has held the required neighborhood meeting as documented in Attachment 9 of this report.

### Background

The site is a +/-14 acre parcel shown as "Lot 4" in the 400 Riverside Street Properties subdivision. In October of 2005, the site was approved for a new building with associated parking in the same configuration as currently proposed. The Planning Board approval included both Major Site Plan and Site Location of Development (SLOD) under delegated review. The Rist/Brunet approval expired in 2006 and the property has been sold to the current applicant who is currently operating a manufacturing use within existing structures on the property. With the expiration of the site plan, the project also lost its Site Location permit. The applicant is pursuing a Stormwater Permit with DEP in addition to a Tier 1 wetlands filling permit.

The October 2005 approval letter is provided as Attachment 7 and the previous Planning Board Report is provided in Attachment 8.

## II. SUMMARY OF FINDINGS

Zoning:	IM
Parcel Size:	14 acres
Parking Spaces:	42 new
Building Floor Area:	23,140 sq. ft.
Building Height:	To be determined – One story
Uses:	Office/warehouse

## III. PROPOSED DEVELOPMENT

### Project Site and Description

The project site is located to the west of Riverside Street and along the bank of the Presumpscott River. Adjacent uses are commercial and industrial facilities typical of the I-M zone. Access to the site is by an existing 26-foot-wide paved access drive from Riverside Street currently serving

a two (2) story, 20,000 sq. ft. office building/warehouse, and a two (2) story 35,250 sq. ft. office building/warehouse.

The site's location along the river requires that particular attention be paid to erosion and wildlife impacts of the development. The Board should note that despite the proximity to the river, no part of the building or paved areas are located within 250 feet of the river and therefore beyond the limits of Shoreland Zone review.

The applicant is proposing to construct a one (1) story, 23,140 sq. ft. office building/warehouse with associated parking and truck loading areas. Approximately 42 parking spaces will be added to the site and both the proposed and existing buildings will be improved with truck loading bays.

+/-8000 square feet of wetlands are proposed to be filled. The project is also subject to review by the Maine DEP for wetlands filling and for a Chapter 500 Stormwater permit.

Photos of the current site conditions are provided in attachment 2, and an aerial photo is included as Attachment 3. The property boundary survey is shown in plan set Attachment A, and the existing conditions plan is shown in Attachment B.

#### IV. STAFF REVIEW

The proposed development has been reviewed by staff for conformance with the relevant review standards of the site plan ordinances. Staff comments related to site plan standards are provided below in Section V and additional issues are addressed highlighted below.

#### Zoning and Building Design

The proposed building is assumed to be utilized for industrial/warehouse space as was permitted previously; but, with the new submission, the current applicant has not tentatively building. The Zoning Administrator has asked for clarifications as to use prior to making a definitive interpretation for compliance with parking and use requirements in the I-M zone.

Given the lack of tenant, the applicant is also asking to delay submission of building elevations and floor plans until application of a building permit to allow use of a "design-build" contracting process. Staff is suggesting the following condition of approval to allow the applicant to proceed with a speculative development:

*That the applicant submit elevations, floor plans, and divisions of use for the proposed building for review and approval by the Zoning and Planning Authorities prior to the issuance of a building permit. The applicant will need to demonstrate compliance with all zoning requirements based on the above information.*

## Historic Resources

V. With the site's location at the Presumpscott River, the previous approval included a requirement that the applicant submit an acknowledgment by Maine Historic Preservation that the application has no impacts on historic resources.

## SITE PLAN REVIEW

### 1/2. Circulation and Parking

#### *Parking:*

The proposal adds 42 parking spaces to the site plus truck loading bays on both the existing southerly building and the south side of the proposed structure. This would appear to be adequate for the structure, but as stated above, a formal zoning determination is needed based on use. Truck circulation could be constricted on site if all of the parking spaces are occupied and if the future tenant utilizes larger sized trailer trucks. Reviewing Traffic Engineer, Tom Errico has provided the follow comments.

*The expanded parking lot on the north side of the project should be revised. The central parking stall should be expanded by four parking spaces and creation of a 24-foot circulation aisle between the parking stalls and the edge of the parking lot. Additionally, 10 parking spaces will need to be eliminated such that appropriate access and egress can occur from the two loading docks. The total future parking supply is therefore expected to decline, although it appears adequate parking will be provided. The applicant should confirm that an adequate parking supply will be provided.*

With the above statement incorporated into a condition of approval, Mr. Errico, does not anticipate difficulties with the design.

#### *Traffic:*

As stated above, all access to the site is from Riverside Street along a private drive. Assuming a typical industrial use, the Riverside Street access drive should be adequate. However, given the amount of activity and needed improvement in the Warren Avenue/Riverside Street area, Mr. Errico recommends requiring a proportional contribution towards Riverside/Warren improvements based on the anticipated increase in traffic attributed to the proposed development. Assuming an even split between office and warehouse uses, the site would generate 23 peak hour trip through the Riverside/Warren intersection, which suggests a \$25,000 contribution toward anticipated necessary traffic improvements. The condition of approval suggested in the Motions leaves the actual determination of value for the contribution to the point of application for a building permit when the use square footages (and the corresponding traffic impacts) would be known.

*Pedestrian Circulation:*

Pedestrian circulation within the site is minimal and additional improvements are not proposed.

Currently, pedestrians have created an informal trail along the river and, the previous approval was subject to a condition requiring a trail easement to connect planned and existing trail links to the east and west of the site. The current property owner has contacted Portland Trails Director, Nan Cummings and walked the site with other members of Portland Trails on other occasions. Ms. Cummings has described a good faith effort on all parties to agree to a trail solution for this site. A note and proposed location (subject to change) of a trail easement is shown on the site plan (Attachment E.)

Through the applicant's agent, the applicant has expressed his intention to execute a trail easement, but holds reservations regarding to an expressed *requirement* from the Planning Board. The previous approval of the project included the following condition of approval:

*That the applicant provides or grants a trail easement to Portland Trails and for the easement to be reviewed and approved by Corporation Counsel.*

Staff strongly encourages the development of a formalized trail along the Presumpscott River. The Board may want to explore with the applicant how this goal is best met within the context of this site plan review.

3. Bulk, Location, Height of Proposed Buildings

Existing building structures in the area of the proposed structure will not experience negative impacts from the proposed development, subject to zoning conformance of the final plans as will be determined under building permit review.

4. Sewers, Stormdrains, Water

*Stormwater*

The year 2005 stormwater system was designed and approved under the previous standards for SLOD using subsurface treatment tanks. With changes in State standards, the project is now designed with a stormwater system that relies on surface runoff, vegetated swales, and infiltration to provide stormwater treatment. As currently designed, the proposed stormwater system outlets into existing natural drainage swales that flow into the adjacent river. One of the results of this approach is that peak runoff volumes are anticipated to increase during larger storms. While this requires a waiver of the typical requirement to keep post-development flows to pre-development rates, with the site's location at the Presumpscott River this would not present a problem. Reviewing Engineer, Dan Goyette has provided a series of review memos (Attachment 5) and has found the proposed plans to be acceptable.

**Water Supply**

Water currently accesses the site via an existing 2" service line from Riverside Street. The proposal shows a 1.5" domestic line and an 8" fire service line to the new building. The proposal includes a new hydrant in central location within the site for access to all three buildings. A Portland Water District capacity letter is provided in Attachment 1a.

**Electricity**

Electric service to the new building is proposed as an underground line from an existing overhead pole on site.

For sanitary sewers, please see section 10 below under *City Infrastructure*.

6. Landscaping and Existing Vegetation

**Landscaping**

Attachment E shows 12 new trees proposed for the perimeter of the parking area. Given the site's out of the way location and industrial context, this somewhat spare approach is probably reasonable.

While the new construction will require loss of existing forest, the development area is not home to trees of significant size or quality and the impact of this development would be comparable to similar recent developments along the Presumpscott River.

7. Soils and Drainage and Wetlands

As stated above, up to 8000 square feet of wetlands are proposed to be filled as part of this development. These wetlands are forested and appear from staff observation to have been previously impacted by development and previous activity on the site. The State DEP will need to provide a Tier 1 wetlands alteration permit prior to construction.

8. Exterior Lighting

Cutoff lighting fixture specifications are provided in Attachment 4 and a photometric plan has been provided meeting all site lighting standards.

9. Fire

Fire Safety has reviewed the plan and finds it acceptable.

10. City Infrastructure

**Utilities**

Sewer for the site has to date utilized an on-site disposal system that is proposed to be replaced with a force-main to the Riverside Street system. This part of the City shares infrastructure with the City of Westbrook and under an *inter-municipal* agreement, the previous approval placed limits on the amount of daily discharge to the shared system. The applicant indicates their ability and willingness to operate within these limits. Portland Public Works has asked that the applicant request a capacity letter based on a specified use to ensure the discharge limits are maintained. The applicant has provided this request (Attachment 11b) and anticipates receipt of a sewer capacity letter based on the previous restrictions. A condition of approval requiring such a letter is suggested in the motions.

13. Easements

See the pedestrian circulation discussion above regarding the anticipated Portland Trails easement.

25. Landscaping and buffering in Industrial Zones

Given the secluded location of the site, the somewhat spare landscaping plan appears adequate. See the landscaping section above.

VI. MOTIONS FOR THE BOARD TO CONSIDER

**Waivers:**

On the basis of the application, plans, reports and other information submitted by the applicant, findings and recommendations contained in the Planning Board Report # 53-07 relevant to Portland's Technical and Design Standards and other regulations, and the testimony presented at the Planning Board hearing:

The Planning Board (waives/does not waive) Technical Standard, Section V. 3 B, which requires post development stormwater rates to be less than predevelopment rates. Waiver of this standard is based upon the recommendation of the City engineering review staff, and that stormwater exiting the proposed development, as described in Attachments 8 and Plans F and I, will be adequately treated, and the increase in stormwater runoff rates from the proposed development will not cause any negative downstream impacts.

**Site Plan:**

On the basis of the application, plans, reports and other information submitted by the applicant, findings and recommendations contained in the Planning Board Report # 53-07, relevant to the Site Plan Ordinance, and the testimony presented at the Planning Board hearing, the Planning Board finds that the plan (is/is not) in conformance with the site plan standards of the land use code, standards for Site Location of Development

under delegated review authority, and other regulations, subject to the following conditions of approval:

- i. That the applicant submits elevations, floor plans, and divisions of use for the proposed building for review and approval by the Zoning and Planning Authorities prior to the issuance of a building permit. The applicant will need to demonstrate compliance with all zoning requirements based on the above information.
- ii. That the parking spaces shown on the site plan be modified to reflect the comments provided by reviewing Traffic Engineer, Tom Errico, as described in Attachment I of Planning Board Report #53-07.
- iii. That prior to issuance of a building permit the applicant makes a financial contribution toward offsite traffic improvements in the area of Riverside Street and Warren Avenue. These funds are to be held in escrow for a period of not more than ten years and if not spent, will be returned to the applicant. The value of the contribution is estimated at \$25,000. The actual value of the contribution will be determined by the City Traffic Engineer upon application of a building permit with the value to be determined based on the proposed use of the building.
- iv. That the applicant submit written acknowledgement by Maine Historic Preservation Commission that the application has no undue impacts on historic resources.
- v. That prior to receiving a building permit, the applicant receives a sewer capacity letter from the Public Works Authority. The applicant shall restrict sanitary flows to the Riverside Street system from the site according to the previous restrictions placed on the development as will be described in the sewer capacity letter.



**Attachments:**

1. Written Statements, Steve Bushy, Deluca Hoffman Engineers
  - a. October 3, 2007
  - b. August 9, 2007
  - c. April 2, 2007
  - d. January 24, 2007
2. Photos of existing conditions
3. Aerial context photo
4. Lighting specifications
5. Engineering review memos, Dan Goyette, Woodard and Curran Engineers
  - a. October 18, 2007
  - b. August 24, 2007
  - c. April 18, 2007
6. Planning Board Approval letter, October 25, 2005
7. Planning Board Report #55-05, previous approval, October 20, 2005
8. Attachments omitted
9. Stormwater Calculations – to be provided for Public Hearing
9. Neighborhood meeting information
10. Traffic Review comment, Tom Errico
  - a. October 24, 2007
  - b. October 19, 2007
11. Utility Capacity
  - a. Water
  - b. Sewer

**Plan Set:**

- A. Property Survey
- B. Existing Conditions
- C. Notes
- D. Summary Plan
- E. Site Plan and Landscaping
- F. Grading and Erosion Control
- G. Utilities
- H. Details
- I. Watershed Plans – Pre and Post-Development

- SITE PLANNING AND DESIGN
- ROADWAY DESIGN
- ENVIRONMENTAL ENGINEERING
- PERMITTING
- AIRPORT ENGINEERING
- CONSTRUCTION ADMINISTRATION

*AH-1-a.1*

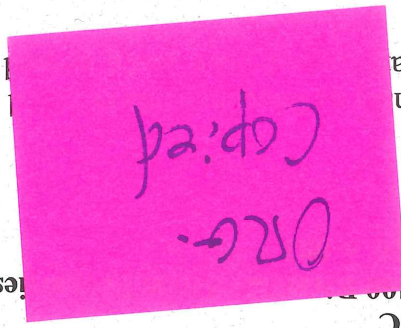
DELUCA-HOFFMAN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
778 MAIN STREET  
SUITE 8  
SOUTH PORTLAND, MAINE 04106  
TEL. 207 775 1121  
FAX 207 879 0896



October 3, 2007

Mr. Bill Needelman  
City of Portland, Planning Department  
389 Congress Street  
Portland, Maine 04101

**Subject:** Lot 4 - 410 Riverside Street  
410 Riverside Street LLC  
(Formerly Lot 4 of the 400  
ID #2004-0074, CBL #3  
(es))



Dear Bill:  
We have prepared the following response  
2007. Accompanying this submission a  
report.  
via email on August 30,  
stormwater management

**Responses to Review Memorandum from Dan Govette**

Comment 1: The vertical granite curb detail should show a 7" reveal to comply with the City's Standards.

Response: The detail has been revised and the revised sheet now accompanies this submission.

Comment 2: The most recent Post Development Watershed Plan differs from the previously submitted watershed plan with revised subcatchment areas, watershed flow paths and grading. An updated stormwater management report for the revised drainage system should be submitted for review. This plan should address the increase in flow off site and what impacts this increase will have on down stream properties.

Response: We have prepared an updated stormwater model. The development site is located directly adjacent to the Presumpscot River; therefore, on behalf of the applicant and in accordance with MDEP Chapter 500, Section 4.E (2), we are requesting a waiver of the flooding standard. The development site is located at the low end of the Presumpscot River watershed; therefore, the release of any increased runoff quantities will not have an impact on the overall routing and flood levels of the river. In general terms, the runoff peak from the site will occur well in advance of the river's peak flow; therefore release of runoff from the site is actually preferred when compared to the overall watershed routing. There are no down gradient

Att. 1.a.2

Mr. Bill Needeman  
October 3, 2007  
Page 2

properties between the site and the river; therefore, no offsite impacts to downstream properties will occur. Surface conditions between the development area and the river include stabilized channels down to the river. The accompanying computations show that the development will result in a minor increase to the peak flow conditions. Two water quality treatment systems will not only address the requirements under the Chapter 500 Basic Standards, but also provide a limited amount of quantity control.

Comment 3: The Site Layout Plan (Sheet 4) shows the snow disposal areas directly on top of the underdrained soil filter beds. The snow disposal areas should be moved to a different location.

Response: We have revised the locations of possible snow storage as indicated on the accompanying plans.

Comment 4: As noted in our previous memorandum, the following items have not been submitted for review and should be submitted to the Planning Department prior to awarding of a building permit:

- Letter of Request to Portland Water District;
- Portland Water District's memorandum to Planning Department;
- Identification of personnel responsible for stormwater inspection and monitoring;
- Confirmation of the Fire Chief's approval of the fire suppression system;
- Confirmation from the Maine Historic Preservation Commission that a Phase I archaeological survey is not required;
- A trail easement agreement; and
- Building elevations.

Response: Copies of the correspondence with the Portland Water District accompany this letter, including their response as to their ability to provide service to the site.

Eastman Industries will be responsible for the maintenance of the site including the stormwater systems. Their personnel provide the routine maintenance of the property grounds including lawn care and general upkeep. They will also be responsible for monitoring the operations of the proposed drainage systems in accordance with the Inspection and Maintenance Manual for Stormwater Management System and Common Facilities previously submitted for this project.

The applicant is requesting as a condition of approval that any additional archaeological work required per the MHPC be performed only prior to the application for a building permit.

The applicant has previously met with representatives of Portland Trails regarding a trail easement across the property. The current plans reflect the placement of a trail at a location to be specifically determined at a later date. It is the intention of the applicant to fully cooperate with Portland Trails regarding the granting of an easement as a condition of approval; however, we do

Att. 1.0.3

Mr. Bill Needleman  
October 3, 2007  
Page 3

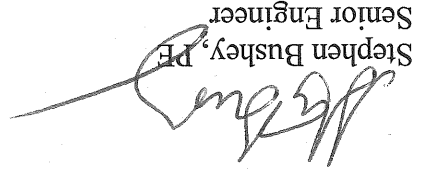
not anticipate that an executed easement agreement will be completed prior to Site Plan approval.

It is the applicant's intention to use a design-build contractor for the performance of the building construction. At this time a Design-Build contractor has not been selected; therefore specific building elevations have not been prepared. The applicant's intentions are to construct a building similar in appearance to the two existing buildings. The existing buildings are depicted on the accompanying photos. These buildings are predominantly steel-framed structures with a combination of metal and CMU block wall construction. Additional building design information can be supplied to the Planning Authority as a condition of approval, prior to the submission of a building permit application if necessary.

We trust this information adequately addresses the City's comments and we look forward to appearing before the Planning Board for approval.

Sincerely,

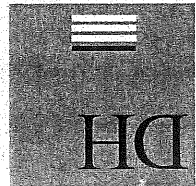
DeLUCA-HOFFMAN ASSOCIATES, INC.



Stephen Bushey, PE  
Senior Engineer

SRB/sq/JN2314.03/Needleman10-03-07

Attachments



DELUCA-HOFFMAN ASSOCIATES, INC.  
CONSULTING ENGINEERS

778 MAIN STREET  
SUITE 8  
SOUTH PORTLAND, MAINE 04106  
TEL. 207 775 1121  
FAX 207 879 0896

- SITE PLANNING AND DESIGN
- ROADWAY DESIGN
- ENVIRONMENTAL ENGINEERING
- PERMITTING
- AIRPORT ENGINEERING
- CONSTRUCTION ADMINISTRATION

AH.1.5.1

August 9, 2007

Mr. Bill Needelman  
City of Portland, Planning Department  
389 Congress Street  
Portland, Maine 04101

**Subject:**  
Lot 4 - 410 Riverside Street  
410 Riverside Street LLC  
(Formerly Lot 4 of the 400 Riverside Street Properties)  
ID #2004-0074, CBL #320-A-002

Dear Bill:

I am enclosing our long-awaited resubmission of plans associated with the proposed development at 410 Riverside Street. In response to our meeting back in May, we have prepared revised plans that incorporate changes to the drainage system for the proposed project. As we had discussed, the lapsing of the Site Plan Approval impacted the project's stormwater requirements. We contacted Linda Kokemuller at the Department of Environmental Protection office and she advised that the project is subject to the current DEP stormwater rules (as revised in November 2005 and December 2006). These latest rules contain substantial changes to the standards applied to development projects and the techniques to address water quality treatment on qualifying projects. Since the enactment of the latest Chapter 500 regulations, the DEP has also withdrawn the City of Portland's delegated authority to review projects meeting the Chapter 500 permitting thresholds. The proposed development project triggers the need for a stormwater permit under the Chapter 500 regulations; hence, we will be filing a stormwater permit application with the DEP for this project.

The major revisions to the plans include the measures to capture and treat stormwater runoff from the proposed development's new impervious surfaces. The original approved design consisted of a closed drainage system that contained catch basins, drainage pipe and two manufactured water quality treatment devices to remove suspended sediment from runoff. This system was generally consistent with the old stormwater standards. The proposed plans now depict two underdrained soil filter beds that will capture and filter runoff from the new pavement areas. In accordance with the DEP's stormwater guidelines, these measures are sized to detain runoff volume equal to 1.0 inch times the contributing impervious area plus 0.4 inch times the contributing landscaped area. As with the original design, measures to provide quantity control are not warranted at this site due to its location at the low end of the Presumpscot River watershed. We continue to request that the project be granted a waiver of the stormwater quantity standards, given these conditions.

Att. 1. b. 2

Mr. Bill Needleman  
August 9, 2007  
Page 2

The remaining aspects of the development remain unchanged with respect to the proposed building location and size. We have reduced the limits of new pavement on the north end of the site since additional area is necessary to fit in the proposed undrained filter bed in that area. The original plans depicted 17 additional parking spaces in this area and the revised plans only include 11 new spaces. The grading limits have been revised modestly to account for the construction of the filter beds for stormwater treatment. You will note that the limits of work for clearing have been identified on the plans. Given the site's secluded location, we have not provided any substantive landscape measures other than a few tree plantings.

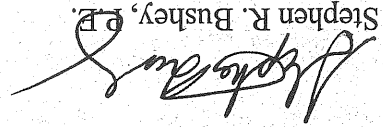
We are also including catalog cuts of the proposed lighting for the project. Swaney Lighting is in the process of preparing a photometrics plan that, when completed, will be forwarded to you for review. I have also included several photos of the existing buildings. As we discussed, the proposed building is intended to be a block-and-metal style building similar in scale and design to the two existing structures.

We trust that the bulk of our original application package remains applicable and no further submission of these materials is necessary. We have included ten sets of updated plans for your distribution to staff. We look forward to your continued review and processing of our application.

If you have any further comments or if additional information is required, please call this office.

Sincerely,

DeLUCA-HOFFMAN ASSOCIATES, INC.

  
Stephen R. Bushey, P.E.  
Senior Engineer

SRB/sq/JN2314.03/Needleman-8-8-07

Attachments

c: Mr. Nickolas Nikazmerad, Owner/Applicant  
Eastman Industries  
410 Riverside Street  
Portland, ME 04103

One of the original conditions of approval related to the granting of a trail easement for Portland Trails. We note that Mr. Nick Nakazmerad of 410 Riverside Street LLC has met with representatives of Portland Trails to discuss the easement. A formal easement agreement has not yet been executed; however, it is the Owner's intentions to grant this easement pending proper coordination and some site planning as to the easement location.

We note that Deluca-Hoffman Associates, Inc. provided additional supporting information to satisfy the original conditions of approval in a letter dated January 25, 2006 to Ms. Kandi Tabbot. A copy of this letter and the supporting materials accompany this submission for ease of review. We trust that the information provided at that time is satisfactory as it relates to the approved development proposal.

The Planning Authority granted Site Plan Approval with Conditions to the Rist/Brunet Family Trust for the planned development at Lot 4 of the 400 Riverside Street Properties in the City of Portland at the October 25, 2005 Public Hearing. Since that time, 410 Riverside LLC, doing business as Eastman Industries, has purchased the Lot 4 property from the Rist/Brunet Family Trust. On January 24, 2007 we submitted a request for an extension of the lapsed Site Plan Approval granted to Rist/Brunet Family Trust. We now understand that the City will not grant the extension request but will allow the project to be considered for an Amended Approval at the Planning Board's next available Public Hearing. In accordance with City requirements we have prepared the accompanying supporting new application materials and supporting plans. The project remains virtually unchanged from the originally approved design. The current plan submission does address each of the original conditions of approval. Therefore we trust that the staff review can be kept to a minimum. Upon a new approval, the owner will be seeking to commence the initial clearing and earthwork activities to prepare a building pad.

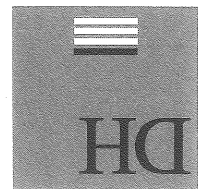
Dear Barbara:

**Subject: Lot 4 - 410 Riverside Street  
410 Riverside Street LLC  
(Formerly Lot 4 of the 400 Riverside Street Properties,  
Rist/Brunet Family Trust, Applicant/Owner)  
ID #2004-0074, CBL #320-A-002**

Ms. Barbara Barhydt  
City of Portland, Planning Department  
389 Congress Street  
Portland, Maine 04101

April 2, 2007

DELUCA-HOFFMAN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
778 MAIN STREET  
SUITE 8  
SOUTH PORTLAND, MAINE 04106  
TEL. 207 775 1121  
FAX 207 879 0896



- SITE PLANNING AND DESIGN
- ROADWAY DESIGN
- ENVIRONMENTAL ENGINEERING
- PERMITTING
- AIRPORT ENGINEERING
- CONSTRUCTION ADMINISTRATION
- TRAFFIC STUDIES AND MANAGEMENT

Att. 1.C.1

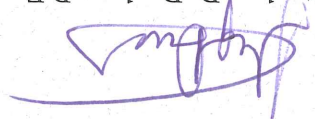
Ms. Barbara Barhydt  
April 2, 2007  
Page 2

We trust the Planning Authority can consider this request and we look forward to the Planning Board's consideration for a new Final Approval. Accompanying this letter are a completed Amendment Application form and a fee balance in the amount of \$450.00 to cover the total \$700.00 fee. A check in the amount of \$250.00 was previously provided to the Department as part of our January 24, 2007 submission.

If you have any further comments or if additional information is required, please call this office.

Sincerely,

DeLUCA-HOFFMAN ASSOCIATES, INC.



Stephen R. Bushey, P.E.  
Senior Engineer

SRB/smk/JN2314.03/Barhydt03-30-07

Attachments

c: Nell Hamming, Economic Development Department  
Mr. Nickolas Nikazmerad, Owner/Applicant  
Eastman Industries  
410 Riverside Street  
Portland, ME 04103



We also note that Deluca-Hoffman Associates, Inc. provided additional supporting information to satisfy the conditions of approval in a letter dated January 25, 2006 to Ms. Kandi Talbot. We trust that the information provided at that time is satisfactory as it relates to the approved development proposal.

The Planning Authority granted Site Plan Approval with Conditions to the Rist/Brunet Family Trust for the planned development at Lot 4 of the 400 Riverside Street Properties in the City of Portland at the October 25, 2005 Public Hearing. Since that time, 410 Riverside LLC, doing business as Eastman Industries, has purchased the Lot 4 property from the Rist/Brunet Family Trust. At this time, 410 Riverside LLC is requesting a one-year extension of the Site Plan Permit Approval. As outlined in Condition #3 of the November 18, 2005 approval letter, the approval was to be deemed expired unless work in the development commenced within one year of the approval. As we recently discussed, the owner has not yet commenced development activities but is seeking to do so soon. We trust you will understand the delay in activity has been primarily related to Eastman Industries' relocation to the site from their plant in Wisconsin. As such, the opportunity to begin the development activity has not been available. The pace of ownership activities at the business has also resulted in this minor lapse of time since the one-year expiration and we respectfully request your consideration of the extension despite the passing of the expiration period.

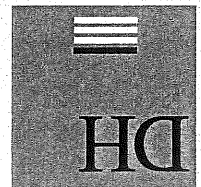
Dear Barbara:

**Subject: Lot 4 - 410 Riverside Street  
410 Riverside Street LLC  
(Formerly Lot 4 of the 400 Riverside Street Properties,  
Rist/Brunet Family Trust, Applicant/Owner)  
ID #2004-0074, CBL #320-A-002**

Ms. Barbara Barhydt  
City of Portland, Planning Department  
389 Congress Street  
Portland, Maine 04101

January 24, 2007

DELUCA-HOFFMAN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
778 MAIN STREET  
SUITE 8  
SOUTH PORTLAND, MAINE 04106  
TEL. 207 775 1121  
FAX 207 879 0896



- SITE PLANNING AND DESIGN
- ROADWAY DESIGN
- ENVIRONMENTAL ENGINEERING
- PERMITTING
- AIRPORT ENGINEERING
- CONSTRUCTION ADMINISTRATION
- TRAFFIC STUDIES AND MANAGEMENT

Att. 1. d. 1

Att. 1.d. 2

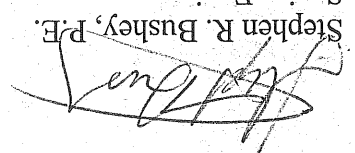
Ms. Barbara Barhydt  
January 24, 2007  
Page 2

We trust this request can be considered by the Planning Authority and we look forward to the granting of a one-year extension of the Site Plan approval for the subject property. Accompanying this letter are a completed Amendment Application form and an Amendment fee of \$250.00.

If you have any further comments or if additional information is required, please call this office.

Sincerely,

DeLUCA-HOFFMAN ASSOCIATES, INC.



Stephen R. Bushey, P.E.  
Senior Engineer

SRB/sq/JN2314.03/Barhydt01-24-07

c: Nell Hanning, Economic Development Department  
Mr. Nickolas Nikazmerad, Owner/Applicant  
Eastman Industries  
410 Riverside Street  
Portland, ME 04103

If you or the property owner owes real estate taxes, personal property taxes or user charges on any property within the City, payment arrangements must be made before permit applications can be received by the Inspections Division.

# City of Portland Site Plan Application



Att. I.D.3

Address of Proposed Development: <b>410 RIVERSIDE STREET</b> Zone: <b>INDUSTRIAL</b>	
Existing Building Size: #1 20,000 sq. ft. #2 35,250 sq. ft.	Existing Acreage of Site: 631,620 sq. ft.
Tax Assessor's Chart, Block & Lot: Chart# 320 Block# A Lot# 2	Property owner's mailing address: <b>410 Riverside St Portland, ME 04103</b>
Consultant/Agent, mailing address, phone # & contact person: <b>Deluca Koffman Associates 718 Main Street S. Portland, ME 04106</b>	Applicant's name, mailing address, telephone #/Fax#/Pager#: <b>Eastman Industries 26A Riverside LLC</b>
Project name: _____	Telephone #: <b>207-878-5353</b>

Fee For Service Deposit (all applications) \_\_\_\_\_ (\$200.00)

Proposed Development (check all that apply)

- \_\_\_\_\_ New Building
- \_\_\_\_\_ Building Addition
- \_\_\_\_\_ Change of Use
- \_\_\_\_\_ Residential
- \_\_\_\_\_ Office
- \_\_\_\_\_ Retail
- \_\_\_\_\_ Manufacturing
- \_\_\_\_\_ Warehouse/Distribution
- \_\_\_\_\_ Parking lot
- \_\_\_\_\_ Subdivision (\$500.00) + amount of lots \_\_\_\_\_ (\$25.00 per lot) + major site plan fee if applicable
- \_\_\_\_\_ Site Location of Development (\$3,000.00)
- \_\_\_\_\_ (except for residential projects which shall be \$200.00 per lot)
- \_\_\_\_\_ Traffic Movement (\$1,000.00)
- \_\_\_\_\_ Storm water Quality (\$250.00)
- \_\_\_\_\_ Section 14-403 Review (\$400.00 + \$25.00 per lot)
- \_\_\_\_\_ Other \_\_\_\_\_

Major Development (more than 10,000 sq. ft.)

- \_\_\_\_\_ Under 50,000 sq. ft. (\$500.00)
- \_\_\_\_\_ 50,000 - 100,000 sq. ft. (\$1,000.00)
- \_\_\_\_\_ Parking Lots over 100 spaces (\$1,000.00)
- \_\_\_\_\_ 100,000 - 200,000 sq. ft. (\$2,000.00)
- \_\_\_\_\_ 200,000 - 300,000 sq. ft. (\$3,000.00)
- \_\_\_\_\_ Over 300,000 sq. ft. (\$5,000.00)
- \_\_\_\_\_ After-the-fact Review (\$1,000.00 + applicable application fee)

Minor Site Plan Review

- \_\_\_\_\_ Less than 10,000 sq. ft. (\$400.00)
- \_\_\_\_\_ After-the-fact Review (\$1,000.00 + applicable application fee)

Plan Amendments

- \_\_\_\_\_ Planning Staff Review (\$250.00)
- \_\_\_\_\_ Planning Board Review (\$500.00)

~ Please see next page ~

This application is for site review ONLY; a building Permit application and associated fees will be required prior to construction.

Date: 1/24/07	Signature of applicant: <i>Stephen Smith agent</i>
---------------	--

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Section 14-522 of the Zoning Ordinance outlines the process which is available on our web site: [portlandmaine.gov](http://portlandmaine.gov)

Amendment to Plans: Amendment applications should include 9 separate packets of the above (a, b, & c) ALL PLANS MUST BE FOLDED NEATLY AND IN PACKET FORM

- a. copy of application
- b. cover letter stating the nature of the project
- c. site plan containing the information found in the attached sample plans checklist
- d. 1 set of 11 x 17 plans

Submittals shall include (9) separate **folded** packets of the following:

Who billing will be sent to: (Company, Contact Person, Address, Phone #)	<i>Nick Wilkerson        Eastman Industrial        410 Riverside St.        Portland, ME        878-5353</i>
--	--

*Att. 1.d.4*

Eastman Industries – Portland, Maine

DELUCA-HOFFMAN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
778 MAIN STREET, SUITE 8  
SOUTH PORTLAND, MAINE 04106  
TEL. 207-775-1121  
FAX: 207-879-0896  
E-MAIL: [dhar@delucahoffman.com](mailto:dhar@delucahoffman.com)



A# 2.1

Eastman Industries - Portland, Maine

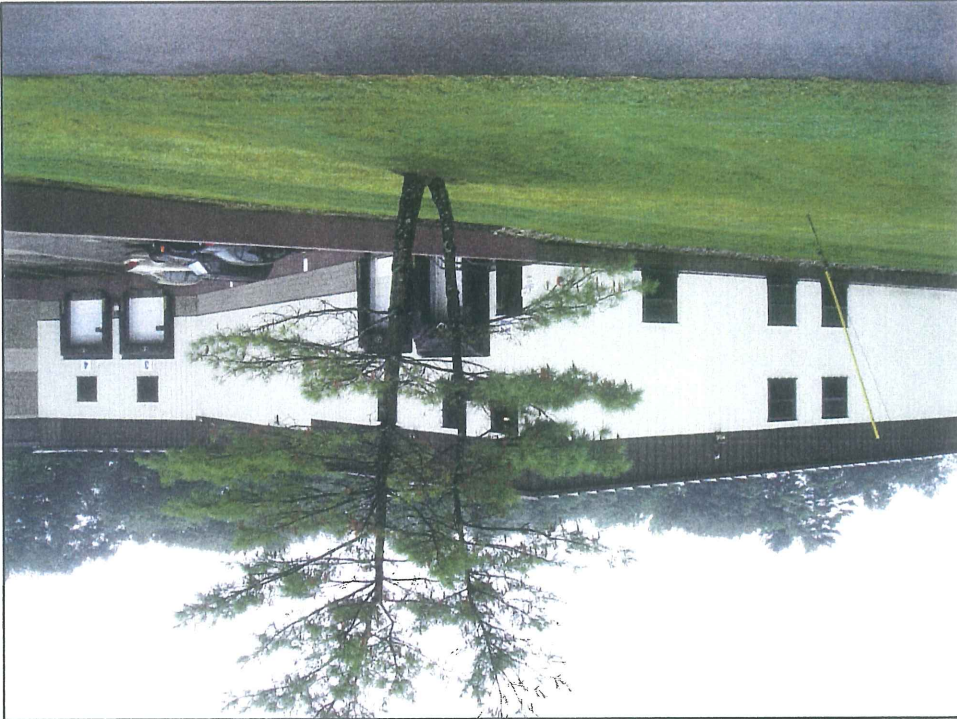
DELUCA-HOFFMAN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
778 MAIN STREET, SUITE 8  
SOUTH PORTLAND, MAINE 04106  
TEL. 207-775-1121  
FAX: 207-879-0896  
E-MAIL: dha!@delucahoffman.com



Att: 2, 12

Eastman Industries – Portland, Maine

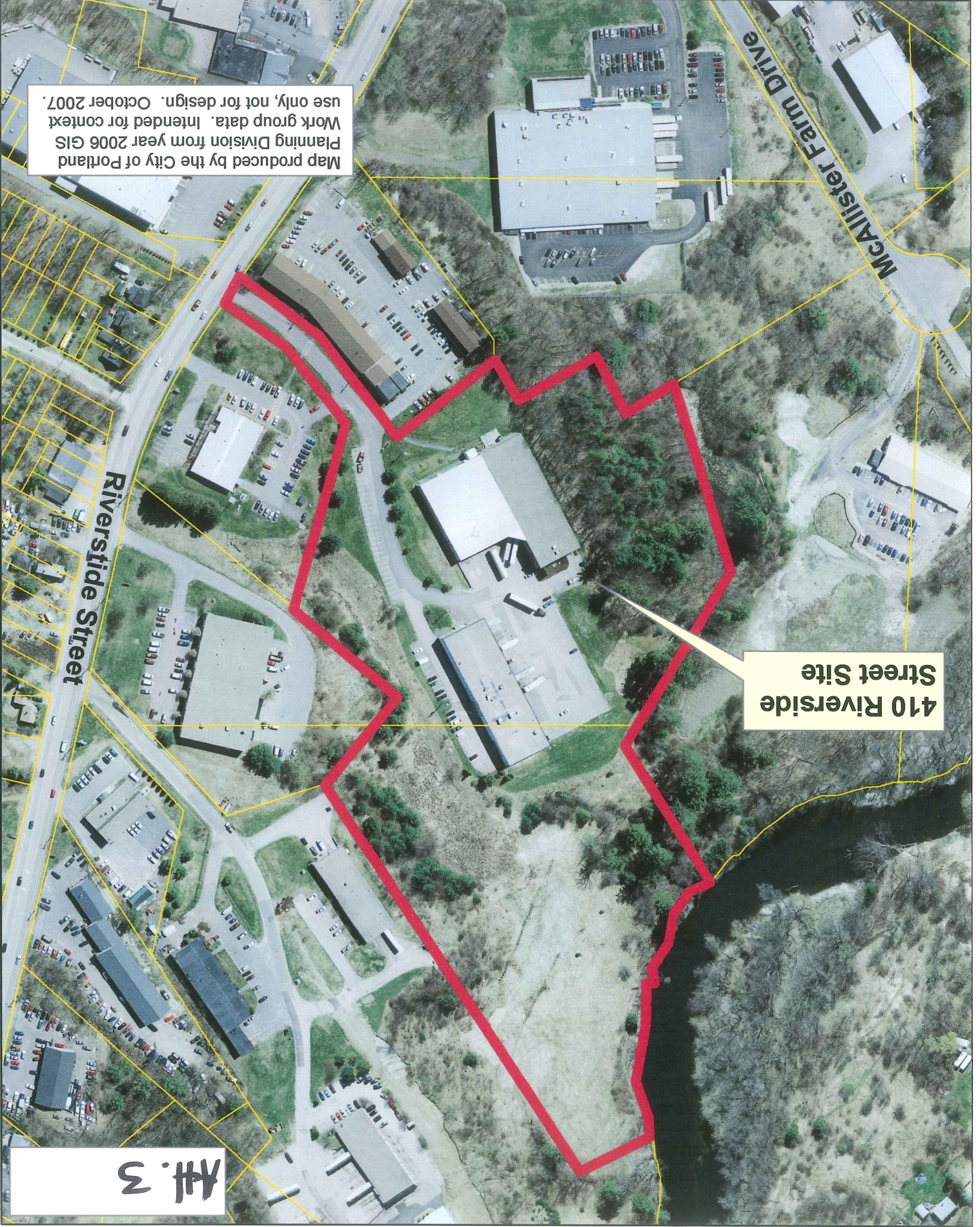
DELUCA-HOFFMAN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
778 MAIN STREET, SUITE 8  
SOUTH PORTLAND, MAINE 04106  
TEL. 207-775-1121  
FAX: 207-879-0896  
E-MAIL: [dhai@delucahoffman.com](mailto:dhai@delucahoffman.com)



01/10/04

# 410 Riverside Street

0 50 100 200 300 400



Map produced by the City of Portland Planning Division from year 2006 GIS work group data. Intended for context use only, not for design. October 2007.

410 Riverside Street Site

Att. 3



**SERIES**  
CRI Cimarron

**WATTAGE/SOURCE**  
M17 175W (ED-28)  
H40 400W (ED-28)  
PULSE START METAL HALIDE  
MS17 175W (ED-28)  
MS25 250W (ED-28)  
MS40 400W (ED-28)

**MOUNTING**  
A\* Arm Mount Construction (6" straight rigid arm included & acceptable for 90° configurations)  
AD\* Decorative Arm Mount Const. (6" decorative upswept arm incl. & acceptable for 90° configurations)  
WB Wall Bracket Const. (includes Wall Bracket & 6" straight arm unless WBAD option is chosen)  
0 No Arm or Wall Bracket (only order without arm or wall bracket when they are ordered as accessory)

**METAL HALIDE**  
H17 175W (ED-28)  
H25 250W (ED-28)  
H40 400W (ED-28)

**SUPER METAL HALIDE**  
MS17 175W (ED-28)  
MS25 250W (ED-28)  
MS40 400W (ED-28)

**PULSE START METAL HALIDE**  
P10 100W (ED-17)  
P12 125W (ED-17)  
P15 150W (ED-28)  
P20 200W (ED-28)  
P25 250W (ED-28)  
P32 320W (ED-28)  
P35 350W (ED-28)  
P40 400W (ED-28)

*1 When ordering poles, specify Pole Drill Pattern #2 for A and AD mounting.*

**WATTAGE/SOURCE cont'**  
S10 100W (ED-23 1/2)  
S15 150W (ED-23 1/2)  
S25 250W (ED-18)  
S40 400W (ED-18)

**LAMP ORIENTATION/DISTRIBUTION**  
H2 Horizontal II  
H3 Horizontal III  
H4 Horizontal IV  
H5 Horizontal V (square)

**LENS**  
F Flat

**VOLTAGE**  
Q Quad-Tap (120, 208, 240, 277V)  
V Five-Tap (120, 208, 240, 277, 480V)

**5** 480V  
**T** 120, 277, 347V  
**0** No Ballast  
**E** 50 Hz 220/240V  
**(250 & 400 MH, 250 & 400 HPS only)**

**COLOR**  
DB Dark Bronze  
BL Black  
WH White  
GR Gray  
PS Platinum Silver  
RD Red (premium color)  
FG Forest Green (premium color)  
GC Custom Color (premium color)

**OPTIONS**  
WBAD Substitutes Decorative Upswept Arm when WB wall bracket mounting is chosen  
RPA2 Round Pole Adapter (2 3/4" - 3 1/4")  
RPA3 Round Pole Adapter (3 1/4" - 3 3/4")  
RPA4 Round Pole Adapter (3 3/4" - 4 1/2")  
RPA5 Round Pole Adapter (5")  
RPA6 Round Pole Adapter (6")  
F1 Fusing - 120V  
F2 Fusing - 208V  
F3 Fusing - 240V  
F4 Fusing - 277V  
F5 Fusing - 480V  
F6 Fusing - 247V  
P1 Photo Button - 120V  
P2 Photo Button - 208V  
P3 Photo Button - 240V  
P4 Photo Button - 277V  
P6 Photo Button - 347V  
PR1 Photo Cell Receptacle - 120V  
PR2 Photo Cell Receptacle - 208V  
PR3 Photo Cell Receptacle - 240V  
PR4 Photo Cell Receptacle - 277V  
PR5 Photo Cell Receptacle - 480V  
PR6 Photo Cell Receptacle - 347V  
QZ Quartz BS with lamp  
HS Internal House Side Shield (available for H2, H3 & H4 distributions)  
VG Polycarbonate Vandal Guard  
L Lamp

**SELECT UNITS ARE STOCKED FOR IMMEDIATE SHIPMENT.**

**ORDERING INFORMATION**

ORDERING EXAMPLE

Series: CRI  
Mounting: A  
Wattage/Source: H17  
Lamp: H2  
Orientation/Distribution: -  
Lens: F  
Voltage: Q  
Color: DB  
Options: PR1

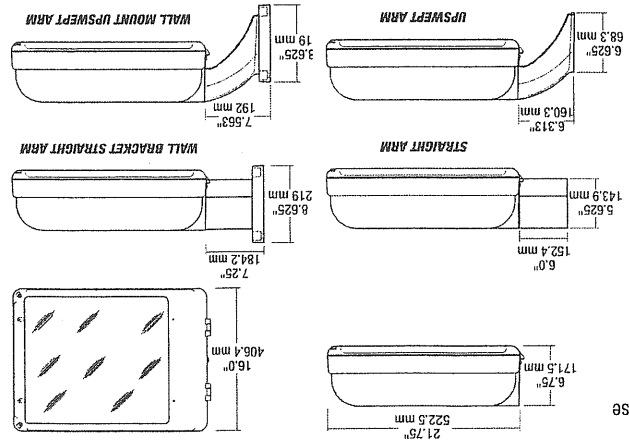
- APPLICATIONS**
- Area and wall lighting.
  - SPECIFICATIONS
  - IES Type II, III, IV, V (square) light distributions
  - Flat lens design for full cutoff control
  - 175w to 400w lamps in HPS, MH, Super MH, and Pulse Start for design flexibility
  - Mounts on upswept, straight arms for poles or on wall bracket for a uniform project look
  - 5 standard, 2 premium, and custom colors are available

- LISTINGS**
- UL and CSA certified for outdoor use in wet locations.



For more detail, see back.

EPA = 1.2 ft (single unit with arm)



CIMARRON SERIES

Job #	Type
Cat #	Approvals

SPAULDING LIGHTING



Submitted by Swaneley Lighting Associates Inc

Job Name: INITIAL 400 RIVERSIDE STREET (LOT 4) SITE -  
Architect: DELUCA HOFFMAN

Catalog Number: CR1-A-H17-H4-F-Q-HS-DB-L  
Notes: LAMP INC

Type: D  
SLA07-8158

AH 9.1



Submitted by Swaney Lighting Associates Inc

Job Name: 400 RIVERSIDE STREET (LOT 4) SITE - INITIAL Architect: DELUCA HOFFMAN

Notes: LAMP INC

Catalog Number: CR1-A-H17-H4-F-Q-HS-DB-L

Type:

D

SLA07-8158

### ACCESSORIES

#### CIMARRON ACCESSORIES

CATALOG #	DESCRIPTION
ARM-CR-6-S-XX <sup>1,2</sup>	6" Rigid Straight Arm
ARM-CRD-6-S-XX <sup>1,2</sup>	6 1/2" Rigid Upswept Arm
ARM-CR-K-TA-XX <sup>1</sup>	Tenon Arm (single) adjustable
ARM-CR-TK-TA-XX <sup>1</sup>	Tenon Arm (double 1.80") adjustable
ARM-CR-K-S-XX <sup>1,2</sup>	Adjustable Arm (for flat surfaces)
CR1-PVG	Polycarbonate Vandal Guard
CR1-HS-23	Internal House Side Shield (H2 & H3 distributions)
CR1-HS-4	Internal House Side Shield (H4 distribution)
CR-RP42-XX <sup>1</sup>	Round Pole Adapter for Straight Arm (2 3/4" - 3 1/4")
CR-RP43-XX <sup>1</sup>	Round Pole Adapter for Straight Arm (3 1/4" - 3 3/4")
CR-RP45-XX <sup>1</sup>	Round Pole Adapter for Straight Arm (3 3/4" - 4 1/2")
CR-RP45-XX <sup>1</sup>	Round Pole Adapter for Straight Arm (5")
CR-RP45-XX <sup>1</sup>	Round Pole Adapter for Straight Arm (6")
CRD-RP42-XX <sup>1</sup>	Round Pole Adapter for Upswept Arm (2 3/4" - 3 3/4")
CRD-RP43-XX <sup>1</sup>	Round Pole Adapter for Upswept Arm (3 1/4" - 3 3/4")
CRD-RP44-XX <sup>1</sup>	Round Pole Adapter for Upswept Arm (3 3/4" - 4 1/2")
CRD-RP45-XX <sup>1</sup>	Round Pole Adapter for Upswept Arm (5")
CRD-RP45-XX <sup>1</sup>	Round Pole Adapter for Upswept Arm (6")
WB-CR-XX <sup>1</sup>	Wall Bracket

<sup>1</sup> Replace XX with color choice, eg: DB for Dark Bronze  
<sup>2</sup> When ordering poles, specify Pole Drill Pattern #2

#### CIMARRON TENON TOP POLE BRACKET ACCESSORIES

CATALOG #	DESCRIPTION
SSS-490-XX <sup>1</sup>	Square Pole Tenon Adapter (4 at 90 degrees)
RSS-490-XX <sup>1</sup>	Round Pole Tenon Adapter (4 at 90 degrees)
RSS-3120-XX <sup>1</sup>	Round Pole Tenon Adapter (3 at 120 degrees)
PTL-1	Photocell - Twist-Lock Cell (120V)
PTL-8	Photocell - Twist-Lock Cell (120-277V)
PTL-5	Photocell - Twist-Lock Cell (480V)
PTL-6	Photocell - Twist-Lock Cell (347V)
PSC	Shorting Cap - Twist-Lock

#### ADDITIONAL ACCESSORIES

<sup>1</sup> Replace XX with color choice, eg: DB for Dark Bronze

**HOUSING** Architecturally styled, one piece die-cast aluminum housing with nominal .125" wall thickness. Low profile design reduces the overall wind loading while providing a sleek, unobtrusive look which complements most building architectural styles.

**DOOR** Die-cast aluminum door hinges to housing and secures with two captive screws providing four points on contact ensuring a clean lens and optical assembly. Both the flat tempered glass and door are sealed with one-piece extruded silicone gaskets.

**OPTICS** Specular, anodized aluminum reflectors provide IES type II, III, IV, and V distributions with a horizontal lamp orientation. The type II, III, and V reflectors are one-piece hydroformed while the type IV is a multi-piece design. All meet IESNA Full Cutoff classification and are field rotate in 90 degree increments. House side shields available as either factory installed options or field installed accessories.

**MOUNTING** Two arm designs are available providing maximum design flexibility. The die-cast aluminum arm offers a sleek upswept look while the extruded straight arm includes the housings contoured lines for continuity of style. A wall bracket and pole/tenon accessories are also available allowing easy mounting for virtually any application.

**ELECTRICAL** Energy efficient HID lamps up to 400 watts. Pulse rated porcelain sockets have spring loaded, nickel plated center contact. All units offer factory or field-installable photocell options and fusing.

**BALLAST** HPF ballast circuit, starting rated at -20 deg F (-40 deg F for HPS). Ballast and other electrical components mounted directly to housing for excellent heat dissipation and long life.

**FINISH** Durable Lekrocote® TGIC thermoset polyester powder paint finish assures long life and maintenance free service. Standard finishes include Dark Bronze, Black, White, Gray, and Platinum Silver. Also available are Red, Forest Green, and custom colors.

**LISTING** UL 1598 approved and CSA Certified for wet location applications.

Due to our continued efforts to improve our products, product specifications are subject to change without notice.



Spaulding Lighting • 101 Corporate Drive, Suite L • Spartanburg, SC 29303 • PHONE: 864-599-6000  
For more information visit our web site: [www.spauldinglighting.com](http://www.spauldinglighting.com)

Att. 6.2

# Poles

Hubbell Lighting and Spaulding's complete line of poles offer simple solutions for all your lighting needs from 6-60 feet in height. Pole applications include general floodlighting, sports lighting, auto dealerships, commercial site lighting, and roadways. Mounting configurations include tenon top, side mount, pad mount, or open top models to match any luminaire style.

Constructed with exacting standards, both our aluminum and steel poles meet strict guidelines for quality, strength, and finish. Protecting your investment for years. Letrocote paint or galvanized finish. Both guarantee your investment for years. From shaft cutting through painting, quality control inspections are conducted throughout a highly automated process.

Lastly, to ensure the finish in not damaged during shipment, all poles are protected with either cardboard or double-wrapped in foam and plastic.

## Pole Logic

1	2	3	4	5	6	7	8
Cross Section	Style	Material	Nominal Length	Nominal Shaft Diameter	Nominal Shaft Thickness	Mount Type	Finish
S Square	S Straight	S Steel	10	40	1	A1	DB

⊗ This pole logic is for reference use only. The appropriate pole table should be used when sizing and ordering poles.

1	2	3	4
Cross Section	Style	Material	Nominal Length
S Square	S Straight	S Steel	10

5	6
Nominal Shaft Diameter	Shaft Thickness
30 3 inch	1 12 inch

7	8
Steel - Heavy (7 GA / .179)	Aluminum - Extra Heavy (.220 - .250)

1	2	3	4	5	6	7	8	
Round Tapered Steel Poles Only	Round Straight Poles Only	Tapered Poles Only	DRILL PATTERNS: Repase X with the following: 1 = Spaulding luminaires with a straight pole (4-bolt), 2 = Spaulding luminaires for tapered pole (2-bolt) plus new CR1 and Raven Series, 4 = Hubbell DS and MSS luminaires, 5 = Detroit III 4-bolt design (square poles only), 6 = Hubbell MSY, RCS, RCL & DM luminaires (including tapered poles), 9 = Devine luminaires.	Specify option location using logic found in pole introduction pages.	Optional base cover only needed when not provided as standard.	Optional round base cover.	SSS Poles Only	Removable tenon used in conjunction with side arm mounting. First specify desired arm configuration followed by "TR" notation.

Example: SSS-25-40-7-C6-TR-DB

Options
Q55 Internal Coating (Hubbell Seal)
Q18 15 Amp GFCI Receptacle and Cover
Q22 Extra Handhole
Q26 5" Coupling
Q27 7.5" Coupling
Q30 2" Coupling
Q32 Mid-pole Luminaire Bracket
Q40 Vibration Damper
Q45 Square Base Cover
Q46 Round Base Cover
LAB Less Anchor Bolts
CSA CSA Certified (Consult Factory)

8
Finish
DB Dark Bronze
BL Black
WH White
GR Gray
PS Platinum Silver
RD Red (Premium Color)
FG Forest Green (Premium Color)
CC Custom Color (Consult Factory)
PR Primer Only
GL Hot Dip Galvanized
NA Natural Aluminum (aluminum poles only)

7
Luminaire Mounting Type
AX Side - Single
BX Side - Double at 90°
CX Side - Double at 180°
DX Side - Triple at 90°
EX Side - Triple at 120°
FX Side - Quad at 90°
P1 Pad Mount - Spider Type
P2 Pad Mount - Yoke Type
P3 Pad Mount - Yoke Type (Protector XL only)
TR Removable Tenon (2.375 x 4.25)
TA Tenon (2.375" OD)
TB Tenon (2.875" OD)
OT Open Top (for post top luminaires)
CD Concord Top (use with Concord luminaires only)

Submitted by Swaney Lighting Associates Inc

Job Name: INITIAL 400 RIVERSIDE STREET (LOT 4) SITE - Architect: DELUCA HOFFMAN

Catalog Number: SSS-30-40-7-A2-DB Notes:

Type: D SLA07-8158

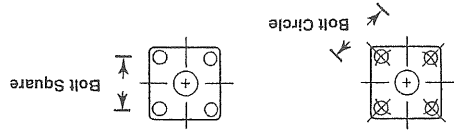
AH. 61.3

Note

Fabricated from high tensile steel, each anchor bolt has two nuts and two washers. Galvanized anchor bolts are hot dipped. (Galvanizing includes threaded portion plus six inches)

**Standard Anchor Bolts and Template**  
(Included with pole purchase)

TAB-15	.5 x 15 x 3" (Non-Galvanized)
TAB-30-M38	.75 x 30 x 3" (Galvanized)
TAB-36-M38	1 x 36 x 4" (Galvanized)
TAB-42-M38	1.25 x 42 x 6" (Galvanized)



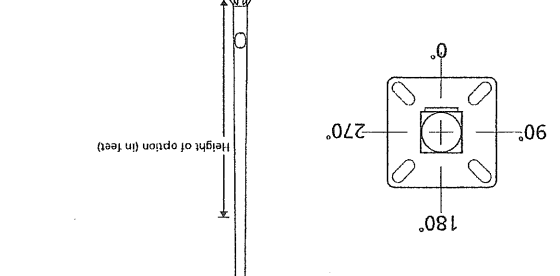
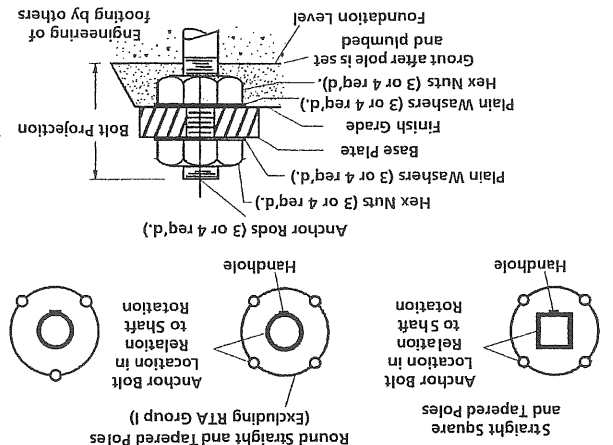
Catalog Number	Description
SBC-4-XX	10.5" Sq x 5" Deep (use on 4" Sq Poles)
SBC-4L-XX	12.25" Sq x 5" Deep (use 4" Sq Poles)
SBC-5-XX	12.25" Sq x 5" Deep (use on 5" Sq Poles)
SBC-6-XX	12.25" Sq x 5" Deep (use on 6" Sq Poles)
SBC-3R-XX	9" Sq x 5" Deep (use on 3" Round Poles)
SBC-4R-XX	10.5" Sq x 5" Deep (use on 4" Round Poles)
SBC-45R-XX	10.5" Sq x 5" Deep (use on 4.5" Round Poles)
SBC-5R-XX	10.5" Sq x 5" Deep (use on 5" Round Poles)
SBC-6R-XX	10.5" Sq x 5" Deep (use on 6" Round Poles)
RBC-4R-XX	10.91" Dia. x 5" Deep (use on 4" Round Poles)
RBC-4RL-XX	14.35" Dia. x 5" Deep (use on 4" Round Poles)
RBC-45R-XX	10.91" Dia. x 5" Deep (use on 4.5" Round Poles)
RBC-45RL-XX	14.35" Dia. x 5" Deep (use on 4.5" Round Poles)
RBC-5R-XX	11.91" Dia. x 5" Deep (use on 5" Round Poles)
RBC-5RL-XX	14.35" Dia. x 5" Deep (use on 5" Round Poles)
RBC-6R-XX	11.91" Dia. x 5" Deep (use on 6" Round Poles)
RBC-6RL-XX	14.35" Dia. x 5" Deep (use on 6" Round Poles)

**Pole Base Covers for Square Poles**

SBC-4-XX	10.5" Sq x 5" Deep (use on 4" Sq Poles)
SBC-4L-XX	12.25" Sq x 5" Deep (use 4" Sq Poles)
SBC-5-XX	12.25" Sq x 5" Deep (use on 5" Sq Poles)
SBC-6-XX	12.25" Sq x 5" Deep (use on 6" Sq Poles)

**Pole Base Covers for Round Poles**

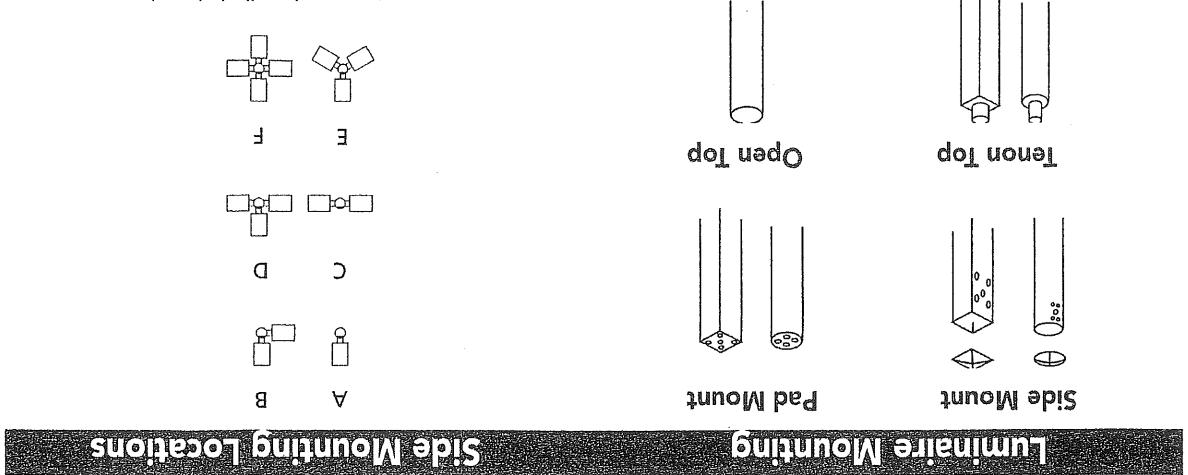
SBC-3R-XX	9" Sq x 5" Deep (use on 3" Round Poles)
SBC-4R-XX	10.5" Sq x 5" Deep (use on 4" Round Poles)
SBC-45R-XX	10.5" Sq x 5" Deep (use on 4.5" Round Poles)
SBC-5R-XX	10.5" Sq x 5" Deep (use on 5" Round Poles)
SBC-6R-XX	10.5" Sq x 5" Deep (use on 6" Round Poles)



Follow the logic below when ordering location specific options. For each option, include its orientation (in degrees) and its height (in feet). Example: Option Q26 should be ordered as: SSS-20-40-1-A1-DB-Q26-0-15 (.5" coupling on the handle/arm side of pole, 15 feet up from the pole base)

**Anchor Bolt Detail Base Diagram**

**Option Orientation**



**Side Mounting Locations**

**Luminaire Mounting**

**Poles**

<p>Submitted by Swaney Lighting Associates Inc</p>	<p><b>Job Name:</b> 400 RIVERSIDE STREET (LOT 4) SITE - INITIAL Architect: DELUCA HOFFMAN</p>	<p><b>Catalog Number:</b> SSS-30-40-7-A2-DB Notes:</p>	<p>SLA07-8158</p>
<p><b>Type:</b> D</p>			<p>AA-4.3</p>

# Pole Logic

Note: Allowable EPA with 1.3 gust factor. To determine max. pole loading weight, multiply allowable EPA by 30 lbs. Factory supplied template must be used when setting anchor bolts. Hubbell Lighting will deny any claim for incorrect anchorage placement resulting from failure to use factory supplied template and anchor bolts.

Section	1	2	3	4	5	6	7	8
Cross S	40	42	44	46	48	50	52	54
Style	SSS-40-60-3-XX-XX	SSS-42-60-3-XX-XX	SSS-44-60-3-XX-XX	SSS-46-60-3-XX-XX	SSS-48-60-3-XX-XX	SSS-50-60-3-XX-XX	SSS-52-60-3-XX-XX	SSS-54-60-3-XX-XX
Material S	6	6	6	6	6	6	6	6
Length 25	14	14	14	14	14	14	14	14
Shaft Dia. 40	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Thickness 1	12	12	12	12	12	12	12	12
Mount 7	11	11	11	11	11	11	11	11
Finish 8	DB	DB	DB	DB	DB	DB	DB	DB
SSS-10-40-1-XX-XX	10	10	10	10	10	10	10	10
SSS-10-50-1-XX-XX	10	10	10	10	10	10	10	10
SSS-12-40-1-XX-XX	12	12	12	12	12	12	12	12
SSS-12-50-1-XX-XX	12	12	12	12	12	12	12	12
SSS-14-40-1-XX-XX	14	14	14	14	14	14	14	14
SSS-14-50-1-XX-XX	14	14	14	14	14	14	14	14
SSS-16-40-1-XX-XX	16	16	16	16	16	16	16	16
SSS-16-50-1-XX-XX	16	16	16	16	16	16	16	16
SSS-18-40-1-XX-XX	18	18	18	18	18	18	18	18
SSS-18-50-1-XX-XX	18	18	18	18	18	18	18	18
SSS-20-40-1-XX-XX	20	20	20	20	20	20	20	20
SSS-20-50-1-XX-XX	20	20	20	20	20	20	20	20
SSS-22-40-1-XX-XX	22	22	22	22	22	22	22	22
SSS-22-50-1-XX-XX	22	22	22	22	22	22	22	22
SSS-24-40-1-XX-XX	24	24	24	24	24	24	24	24
SSS-24-50-1-XX-XX	24	24	24	24	24	24	24	24
SSS-25-40-1-XX-XX	25	25	25	25	25	25	25	25
SSS-25-50-1-XX-XX	25	25	25	25	25	25	25	25
SSS-26-40-1-XX-XX	26	26	26	26	26	26	26	26
SSS-26-50-1-XX-XX	26	26	26	26	26	26	26	26
SSS-27-40-1-XX-XX	27	27	27	27	27	27	27	27
SSS-27-50-1-XX-XX	27	27	27	27	27	27	27	27
SSS-28-40-1-XX-XX	28	28	28	28	28	28	28	28
SSS-28-50-1-XX-XX	28	28	28	28	28	28	28	28
SSS-29-40-1-XX-XX	29	29	29	29	29	29	29	29
SSS-29-50-1-XX-XX	29	29	29	29	29	29	29	29
SSS-30-40-1-XX-XX	30	30	30	30	30	30	30	30
SSS-30-50-1-XX-XX	30	30	30	30	30	30	30	30
SSS-30-60-3-XX-XX	30	30	30	30	30	30	30	30
SSS-30-60-7-XX-XX	30	30	30	30	30	30	30	30
SSS-35-60-3-XX-XX	35	35	35	35	35	35	35	35
SSS-35-60-7-XX-XX	35	35	35	35	35	35	35	35
SSS-40-60-3-XX-XX	40	40	40	40	40	40	40	40
SSS-40-60-7-XX-XX	40	40	40	40	40	40	40	40

- Square Straight Steel Shaft
- One-piece construction
- Side, Tenon, or Pad mounting available
- Ground lug standard
- Galvanized anchor bolts and template included (4-bolt design)
- Base cover standard (Square)
- Gasketed hand hole cover standard
- Lekrocote finish standard
- CSA certification available

# Poles-SSS Square Straight Steel

Submitted by Swaney Lighting Associates Inc

Job Name: INITIAL  
400 RIVERSIDE STREET (LOT 4) SITE -  
Architect: DELUCA HOFFMAN

Notes: SSS-30-40-7-A2-DB

Type: D

SLA07-8158

Att. U.Y

Button photocontrol 208, 240, 277V	PBT-234
Button photocontrol 120V	PBT-1
Polycarbonate shield (.125 thickness)	LMC-SPC
Description	Catalog Number

(order as separate part #)

**ACCESSORIES**

120 or 277V (specify voltage)	BBU-XXX	Ballast Back-Up
others		
Sockets for 12V power by	2EM12?	Two MR11 or MR16 Two Pin
(for 12V power by others)		
MR11/MR16 Two Pin Socket	EM12?	(for remote power by others)
DC Bayonet Socket	EM?	stand by system less lamp
Time Delay Quartz	QST	
voltage, i.e.: F(120)	F(XXX)	Fusing replace X with
Lamp included	LP?	
Touch Latch, Tool-free Entry	TL	
i.e.: PC(120)	PC(XXX)	replace X with voltage,
Button Photocontrol		

- 1 For "Lamp included" option on fluorescent; indicate desired wattage: 42F - LP42, LP32, LP26; 84F - LP84 (2x42W), LP64 (2x32W), LP52 (2x26W). Lamps not included.
- 2 BBU option provides integral ballast back-up and operates one fluorescent lamp at up to 1250 lumens for a minimum of 90 minutes. Operation is reliable between -4°F and +131°F. Maximum output is achieved when the lamp temperature is 77°F. Eliminates the need for remote ballasts or additional fixtures. On two lamp units (2x26W, 2x32W, 2x42W) battery powers one lamp to 1250 lumens. Two lamp fluorescent units have two electronic ballasts. Field wiring can provide switching for 50% fixture output if desired.
- 3 480 volt available on 100F, 150F, 175F, 175F, 150S only.
- 4 Standard on electronic MH or fluorescent.

150S	150W
70S	70W
<b>HPS</b>	
84F	2x42, 2x32, 2x26W
42F	42/32/26W
<b>ELECTRONIC FLUORESCENT</b>	
100E	100W
70E	70W
<b>ELECTRONIC MH</b>	
175H	175W
<b>METAL HALIDE</b>	
175P	175W
150P	150W
100P	100W
70P	70W
50P	50W (120/277V only)
<b>PULSE START METAL HALIDE</b>	
<b>WATTAGE/SOURCE</b>	
LMC	Laredo Medium Cutoff
8	Quad-Tap (120, 208, 240, 277V)
6	Tri-Tap (120, 277, 347V)
5	480V (220/240V 50Hz standard on Electronic or Fluorescent ballasts)
9	120/277V (50W PS only)
0	Less Ballast
<b>FINISH</b>	
1	Bronze
2	Black
3	Gray
4	White
5	Platinum

**SERIES**

LMC	Series
175P	Wattage/Source
8	Voltage
1	Finish
TL	Options

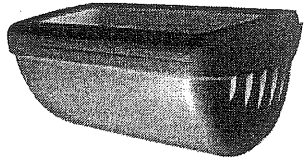
**ORDERING INFORMATION**

**LISTINGS**

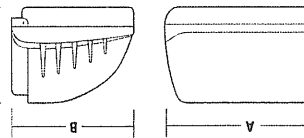
- CSA certified to UL 1598 for use in wet locations.
- 800 Series powder paint for lasting appearance in outdoor environments.
- Multiple options customize including a tool-free latch, which allows re-lamping of H.I.D. units from the ground, photocontrol for energy savings, integral ballast back-up battery for fluorescent units, fusing, quartz standby and EM sockets for remote power, lamps and five standard finishes.
- Full cutoff distribution - flat glass and segmented reflector provide wide spread with an environmentally-friendly light control. Standard, removable front shield on single lamp units, reduces forward beam projection while maintaining lateral throw, if desired.
- Vertical lamp position (lamp is optional) provides maximum performance and life.
- Three point lag over recessed wiring boxes. Three 1/2" conduit hubs allow feed-thru surface wiring capability.
- Wide selection of wattage and sources including pulse start, electronic metal halide and two-lamp fluorescent systems.
- Decorative cast aluminum housing and door. Rugged protection for internal components. Provides heat sink and long ballast life.
- Full cutoff perimeter lighting.

**APPLICATIONS**

**SPECIFICATIONS**



A	16"
B	12 1/8"
C	9"
	406 mm
	308 mm
	229 mm



**LAREDO SERIES**

Cat. #	Job
Approvals	Type



Submitted by Swaney Lighting Associates Inc

**Job Name:** 400 RIVERSIDE STREET (LOT 4) SITE - INITIAL  
 Architect: DELUCA HOFFMAN

**Catalog Number:** LMC-175P8-1-LP  
 Notes: LAMP INC

**Type:** E  
 SLA07-8158

AH. 4.5



Hubbell Outdoor Lighting • 101 Corporate Drive • Spartanburg, SC 29303 • PHONE: 864-599-6000  
 For more information visit our web site: [www.hubbell-ltg.com](http://www.hubbell-ltg.com)

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

**PHOTOMETRICS**

IES File #	Unit Description
10168	175W Metal Halide with Shield
10163	175W Metal Halide - Shield removed
10178	175W Pulse Start with Shield
10169	175W Pulse Start - Shield removed
10176	150W Pulse Start with Shield
10171	150W Pulse Start - Shield removed
10179	100W Pulse Start with Shield*
10184	100W Pulse Start - Shield removed*
10190	70W Pulse Start with Shield*
10191	70W Pulse Start - Shield removed*
10177	150W HPS with Shield
10170	150W HPS - Shield removed
10180	42W Fluorescent with Shield
10185	42W Fluorescent - Shield removed
10339	2x42W Fluorescent - no Shield

\* Output for magnetic pulse start or electronic ballast.

Submitted by Swaney Lighting Associates Inc			
<b>Job Name:</b> 400 RIVERSIDE STREET (LOT 4) SITE - INITIAL Architect: DELUCA HOFFMAN		Notes: LAMP INC Catalog Number: LMC-175P8-1-LP	
Type: <b>E</b>		SLA07-8158	

A.H. 4.6

Att. 5. a

COMMITMENT & INTEGRITY  
DRIVE RESULTS

41 Hutchins Drive  
Portland, Maine 04102  
www.woodardcurran.com

T 800.426.4262  
T 207.774.2112  
F 207.774.6635

## MEMORANDUM

**TO:** Bill Needleman  
**FROM:** Dan Goyette, PE, and Lauren Swett, EIT  
**DATE:** October 18, 2007  
**RE:** Eastman Industries, 410



Woodard & Curran has reviewed the site plan submission for Lot 4 at 410 Riverside Street. Site Plan Approval with Conditions was granted on October 25, 2006. Eastman Industries has since purchased the property, and the project is being considered for an Amended Approval.

### Documents Reviewed

- Letter and attachments to Bill Needleman, City of Portland Planning Department, by Deluca-Hoffman Associates, Inc., dated October 3, 2007.
- Water Quality Computations prepared by Deluca-Hoffman Associates, Inc., dated October 2007.
- Engineering plan sheets 1-13, & Pre- and Post Development Watershed plan sheets 1-2, prepared by Deluca-Hoffman Associates, Inc. for 410 Riverside Street LLC. Sheets 4, 8, and the Post-Development Watershed plan sheets are dated October 3, 2007, and the remaining sheets are dated August 8, 2007.

### Comments

- The following item has not been submitted for review and should be submitted.
  - Confirmation from the Maine Historic Preservation Commission that a Phase 1 archaeological survey is not required.

Please contact our office if you have any questions.

DRG/LJS  
203943



DRG/  
203943.19

Please contact our office if you have any questions.

- Letter of Request to Portland Water District
  - Portland Water District's memorandum to Planning Department
  - Identification of personnel responsible for stormwater inspection and monitoring;
  - Confirmation of the Fire Chief's approval of the fire suppression system;
  - Confirmation from the Maine Historic Preservation Commission that a Phase 1 archaeological survey is not required;
  - A trail easement agreement; and
  - Building elevations.
- As noted in our previous memorandum, the following items have not been submitted for review and soil filter beds. The snow disposal areas should be move to a different locations.
  - The Site Layout Plan (Sheet 4) shows the snow disposal areas directly on top of the undrained down stream properties.
  - This plan should address the increase in flow off site and what impacts this increase will have on stormwater management report for the revised drainage system should be submitted for review.
  - The most recent Post Development Watershed Plan differs from the previously submitted watershed plan with revised subcatchment areas, watershed flow paths and grading. An updated stormwater management report for the revised drainage system should be submitted for review.
  - The vertical granite curb detail should show a 7" reveal to comply with the City's Standards.
  - The vertical granite curb detail should show a 7" reveal to comply with the City's Standards.

**Comments**

- Letter and attachments to Bill Needleman, City of Portland Planning Department, by Deluca-Hoffman Associates, Inc., dated August 9, 2007.
- Letter and Amendment Application form to Barbra Barhydt, City of Portland Planning Department, by Deluca-Hoffman Associates, Inc., dated January 24, 2007.
- Engineering plan sheets 1-13, & Pre- and Post Development Watershed plan sheets 1-2, prepared by Deluca-Hoffman Associates, Inc. for 410 Riverside Street LLC, dated August 8, 2007.

**Documents Reviewed**

Woodard & Curran has reviewed the site plan submission for Lot 4 at 410 Riverside Street. Site Plan Approval with Conditions was granted on October 25, 2006. Eastman Industries has since purchased the property, and the project is being considered for an Amended Approval.



**MEMORANDUM**

**TO:** Bill Needleman

**FROM:** Dan Goyette, PE

**DATE:** August 24, 2007

**RE:** Eastman Industries, 410 Riverside Street Lot 4

DRG/LJS  
203943.19

Please contact our office if you have any questions.

- Identification of personnel responsible for stormwater inspection and monitoring;
- Confirmation of the Fire Chief's approval of the fire suppression system;
- Confirmation from the Maine Historic Preservation Commission that a Phase 1 archaeological survey is not required;
- A trail easement agreement; and
- Building elevations.

- It is noted that the applicant will need to submit a number of items to the Planning Department prior to the awarding of a building permit:
- The January 25 letter references the applicant's Letter of Request to the Portland Water District, and the PWD's memorandum to the Planning Department. These letters have not been included with this submission.

Comments

- Letter requesting Amended Site Plan Approval, sent to the City of Portland Planning Department by Deluca-Hoffman Associates, Inc., dated April 2, 2007.
- Letter and related materials regarding Site Plan approval, sent to the City of Portland Planning Department by Deluca-Hoffman Associates, Inc., dated January 25, 2006.
- Engineering plan sheets 1-12, prepared by Deluca-Hoffman Associates, Inc. for 410 Riverside Street LLC, dated June 2005.

Documents Reviewed

Woodard & Curran has reviewed the site plan submission for Lot 4 at 410 Riverside Street. Site Plan Approval with Conditions was granted on October 25, 2007. Eastman Industries has since purchased the property, and the project is being considered for an Amended Approval.



**MEMORANDUM**

TO: Barbara Barhydt

FROM: Dan Goyette, PE, and Lauren Swett, EIT

DATE: April 18, 2007

RE: Eastman Industries, 410 Riverside Street Lot 4

**COMMITMENT & INTEGRITY  
DRIVE RESULTS**

41 Hutchins Drive  
Portland, Maine 04102  
www.woodardcurran.com

T 800.426.4262  
T 207.774.2112  
F 207.774.6635

AH.S.C

Att. 6.1

**F-Copy – Planning Board Approval Letter**

November 18, 2005

Rist-Brunet Family Trust  
400 Riverside Street  
Suite A7  
Portland, ME 04103

RE: New Building, Lot 4, 400 Riverside Street  
ID #2004-0074, CBL #320-A-001

To Whom It May Concern:

On October 25, 2005, the Portland Planning Board voted 6-0 (Odokara absent) to approve the site location subject to two (2) conditions of approval and voted 5-1 (Beal opposed and Odokara absent) to approve the site plan, subject to eight (8) conditions of approval for a 23,140 sq. ft. office/warehouse building to be located at Lot 4, 400 Riverside Street. The approval was granted for the project with the following conditions:

Site Location

i. That the plans be revised in regards to the Development Review Coordinator's memo dated September 27, 2005 regarding stormwater, historic sites, and inspection of facilities.

ii. The developer shall submit a revised site plan showing the entire parcel, including the 200-foot wildlife corridor.

Site Plan

i. The wastewater generation from Lot 4, 400 Riverside Street shall be limited to flow as is defined in the current capacity letter, requests for sanitary flows and not be eligible to use these facilities for any high volume production discharge in the event the City adopts the amendment to the Westbrook, Portland and the local agreement, the applicant should connect and discharge to the Westbrook system.

Att. 6-2

- ii. That the developer address the Development Review Coordinator's memorandum dated September 27, 2005 regarding stormwater, historic sites, and maintenance and inspection facilities.
  - iii. That the hydrant location shall be reviewed and approved by the Fire Department prior to issuance of a building permit.
  - iv. The applicant submit a revised site plan showing the full parcel together with the 200-foot wildlife preservation corridor and Portland Trails easement.
  - v. That Planning Report #55-05 is made to include the landscaping plan that had been reviewed and approved by the City Arborist.
  - vi. That the applicant submit an acknowledgement by the Maine Historic Preservation body that the application has no delagatory impacts within historic districts.
  - vii. That the applicant provide or grant a trail easement to Portland Trails for the easement, to be reviewed and approved by Corporation Counsel.
  - viii. That the applicant submit elevations of the proposed building for review and approval by the Planning Authority prior to the issuance of a building permit.
- The approval is based on the submitted site plan and the findings related to site plan and subdivision review standards as contained in Planning Report #55-05, which is attached.
- Please note the following provisions and requirements for all site plan approvals:
1. Where submission drawings are available in electronic form, the applicant shall submit any available electronic Autocad files (\*.dwg), release 14 or greater, with seven (7) sets of the final plans.
  2. A performance guarantee covering the site improvements as well as an inspection fee payment of 2.0% of the guarantee amount and 7 final sets of plans must be submitted to and approved by the Planning Division and Public Works prior to the release of the building permit. If you need to make any modifications to the approved site plan, you must submit a revised site plan for staff review and approval.

Att. 6.3

3. The site plan approval will be deemed to have expired unless work in the development has commenced within one (1) year of the approval or within a time period agreed upon in writing by the City and the applicant. Requests to extend approvals must be received before the expiration date.

4. A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.

5. Prior to construction, a pre-construction meeting shall be held at the project site with the contractor, development review coordinator, Public Works representative and owner to review the construction schedule and critical aspects of the site work. At that time, the site/building contractor shall provide three (3) copies of a detailed construction schedule to the attending City representatives. It shall be the contractor's responsibility to arrange a mutually agreeable time for the pre-construction meeting.

6. If work will occur within the public right-of-way such as utilities, curb, sidewalk and driveway construction, a street opening permit(s) is required for your site. Please contact Carol Merritt at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)

7. The Development Review Coordinator must be notified five (5) working days prior to date required for final site inspection. The Development Review Coordinator can be reached at the Planning Division at 874-8632. Please make allowances for completion of site plan requirements determined to be incomplete or defective during the inspection. This is essential as all site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

If there are any questions, please contact Kandice Talbot at 874-8901.

Sincerely,

Lee Lowry III, Chair  
Portland Planning Board

cc: Lee D. Urban, Planning and Development Department Director

Alexander Jaegerman, Planning Division Director  
Sarah Hopkins, Development Review Services Manager  
Kandice Talbot, Planner

Jay Reynolds, Development Review Coordinator  
Marge Schmuckal, Zoning Administrator  
Inspections Division

Michael Bobinsky, Public Works Director  
Traffic Division

Eric Labelle, City Engineer  
Jeff Tarling, City Arborist

Penny Littell, Associate Corporation Counsel

October 20, 2005

Submitted by:  
Kandice Talbot, Planner

Submitted to:  
Portland Planning Board  
Portland, Maine

WAREHOUSE BUILDING  
LOT 4 OF 400 RIVERSIDE STREET  
SITE PLAN AND SITE LOCATION OF DEVELOPMENT REVIEW  
RIST/BRUNET FAMILY TRUST, APPLICANT

PLANNING REPORT #55-05

4# 7.1

Att. 7.2

**I. INTRODUCTION**

Rist/Brunet Family Trust is requesting major site plan review of a proposal to develop a 23,140 sq. ft. office/warehouse building on Lot 4 of the 400 Riverside Street Properties, formerly the Donald D. Butler Subdivision, at 400 Riverside Street.

Lot 4 of the 400 Riverside Street Properties is zoned I-M Industrial Moderate and is approximately 14.5 acres in size.

The applicant is proposing to construct a one (1) story, 23,140 sq. ft. office building/warehouse on Lot 4 of the 400 Riverside Street Properties. The site is currently developed and includes an existing 26-foot-wide paved access drive from Riverside Street, a two (2) story, 20,000 sq. ft. office building/warehouse, and a two (2) story 35,250 sq. ft. office building/warehouse.

90 notices were sent to neighborhood property owners. A neighborhood meeting was held, with one attendee. The neighborhood information is included as Attachment 10.

**II. STAFF REVIEW**

The proposed development has been reviewed by staff for conformance with the relevant review standards of the site plan ordinance and DEP Site Location of Development Act. Staff comments are highlighted in this report.

**III. SITE PLAN REVIEW**

1/2. Traffic

Lot 4 contains an existing 26 ft. wide paved access drive from Riverside Street. No changes are planned for this existing drive. Access to the site will be provided from an existing 30 ft. wide paved access drive within the development.

The site currently has 89 parking spaces. The applicant is proposing 45 new parking spaces for a total of 126 parking spaces.

Since the Presumpscot River borders Lot 4, staff is recommending that the applicant provide a pedestrian trail easement along the river. Portland Trails has acquired a trail easement from Lucas Tree and Sani Clean located at 470 Riverside Street, and this would allow for future connection of trails. A proposed condition of approval is:

- that the applicant provide a trail easement to the City along the rear of the property to connect to the trail easements, prior to issuance of a building permit.

3. Bulk, Location, Height of Proposed Buildings

The proposed structure will be typical metal-framed buildings similar in design to nearby buildings.

Att. 2.3

4. Sewers, Stormdrains, Water

The utility service for water to the proposed development will come from Riverside Street. Two existing 2-inch domestic water lines extend along the existing access drive to the 400 Riverside Street Properties from the 12-inch water main in Riverside Street. A water capacity letter has been submitted.

The applicant has requested that the Westbrook/Portland interlocal sewer agreement be amended to allow Lot 4 to connect into the sewer within Riverside Street. Wastewater flows from the existing and proposed buildings on Lot 4 will be conveyed by 8-inch gravity sewer laterals to a proposed private pump station. Discharge will be via a proposed 3-inch force main to the municipal sewer system on Riverside Street. Alternatively, each existing and proposed building may be serviced by individual low-pressure pump systems that each connect to the 3-inch force main to be installed and connected to the municipal sewer system on Riverside Street.

To amend the Westbrook/Portland interlocal agreement, Public Works must hold a public hearing to redefine the Westbrook Inter municipal Sewer Service Area. Public Works will be recommending at this public hearing that Lot 4 be included within the Inter municipal Sewer Service Area on Riverside Street. This service area has a total capacity of 150,000 gallons of wastewater that may be discharged to the City of Westbrook's Bridge Street Pump Station. However, due to the capacity limitation, Public Works is recommending that they be included in this service area with the condition that the wastewater generation be limited to the flows as defined in their current capacity letter request for sanitary flows and not be eligible to use these facilities for any high volume production discharge. A potential condition of approval is:

- that the wastewater generation from Lot 4, 400 Riverside Street shall be limited to the flows as defined in their current capacity letter request for sanitary flows and not be eligible to use these facilities for any high volume production discharge. In the event the City adopts an amendment to the Westbrook/Portland inter-local agreement, the applicant shall connect and discharge to the Westbrook system.

Electrical service will include the installation of underground electric service.

5. Landscaping and Existing Vegetation

The applicant is proposing that the existing mature trees will be maintained along the property lines of the project site to the extent practicable. Tree plantings and shrubs are being proposed adjacent to some of the paved area. The City Arborist has reviewed and approved the plans.

6. Soils and Drainage



7.4.4

A stormwater collection system will serve the planned development and will collect stormwater runoff from the site's impervious surfaces and convey it into two water quality treatment units prior to discharge to riprap plunge pools. The first riprap plunge pool will discharge adjacent to a natural marsh and the second will discharge to a natural tributary swale to the north. Both swales are tributary to the Presumpscot River.

The applicant had previously requested a waiver of the stormwater standards because there appeared to be an increase in the post development conditions. However, since the last workshop, new calculations were completed and there is no need for a waiver because the post development runoff is less than the pre development runoff.

The Development Review Coordinator has reviewed the plans and the review memo is included as Attachment 9. The DRC is recommending that the applicant revisit the site of a proposed level lip spreader and provide some clarification of the design of the Stormwater Treatment units. The DRC is also requesting additional information shall be provided regarding the Historic Sites standard of Site Location and additional information be provided for the maintenance and inspection of the facilities. A potential condition of approval is:

- that the developer address the Development Review Coordinator's memo dated September 27, 2005 regarding stormwater, historic sites and maintenance and inspection of facilities.

7. Exterior Lighting

The applicant is proposing pole-mounted shoebox fixtures and wall-pack units. Catalogue cuts of the lights are included as Attachment 7. A photometric plan has been submitted and the lighting appears to meet the lighting standards.

8. Fire

Sprinkler service will be provided by the development. There is also a hydrant proposed in the vicinity of the proposed building. The hydrant location will have to be approved by the Fire Department. A potential condition of approval is:

- that the hydrant location shall be reviewed and approved by the Fire Department prior to issuance of a building permit.

IV. STAFF RECOMMENDATION

This project, as proposed meets the Site Plan ordinance and the Site Location of Development Law. Staff is recommending that the Planning Board approve this proposal with conditions.

Att. 7.5

Warehouse Building  
Lot 4, 400 Riverside Street

Planning Report #55-05  
October 25, 2005 Public Hearing

V. MOTIONS FOR THE BOARD TO CONSIDER

On the basis of plans and materials submitted by the applicant and on the basis of information contained in Planning Report 55-05 relevant to standards for site plan regulations, Site Location of Development Law and other findings as follows:

A. That the proposed development [is/is not] in conformance with the Site Location of Development Review.

i. that the developer address the Development Review Coordinator's memo dated September 27, 2005 regarding stormwater, historic sites and maintenance and inspection of facilities.

B. That the plan [is/is not] in conformance with the site plan standards of the land use code.

i. that the wastewater generation from Lot 4, 400 Riverside Street shall be limited to the flows as defined in their current capacity letter request for sanitary flows and not be eligible to use these facilities for any high volume production discharge. In the event the City adopts an amendment to the Westbrook/Portland inter-local agreement, the applicant shall connect and discharge to the Westbrook system.

ii. that the developer address the Development Review Coordinator's memo dated September 27, 2005 regarding stormwater, historic sites and maintenance and inspection of facilities.

iii. that the hydrant location shall be reviewed and approved by the Fire Department prior to issuance of a building permit.

Attachments:

1. Applicant's Submittal Letter dated June 20, 2005
2. Letter from Public Works regarding Riverside Street Sewer Service Area
3. Amended Hydrologic Computations
4. Stormwater Management System Inspection and Maintenance Manual
5. Tier 1 NRP Application
6. Applicant's Submittal dated September 13, 2005
7. Lighting Catalogue Cuts
8. Typical Building Elevation
9. DRC's Memo dated September 27, 2005
10. Neighborhood Meeting Information
11. Plans

**A#8.1**

**Tasks:** Determine Required treatment volume capacity for underdrain filter beds for commercial expansion at 410 Riverside Street Portland, ME

**References:** Maine DEP - Stormwater BMP's Chapter 7  
 Chapter 500 Stormwater regulations

**Design Data:** New Impervious Area

- Subcatchment 2 - 0.53 acres
- Subcatchment 4 - 0.08 acres
- Subcatchment 5 - 0.86 acres

Total New Impervious - 1.47 acres

Computations

1) Determine storage capacity and treatment volume for each BMP

A) Subcatchment 5 draining to underdrain filter bed #1

Required Treatment Volume

Impervious area =  $0.86 \text{ ac} \times 43,560 \text{ sq ft/ac} \times 1/12 = 3,122 \text{ CF}$

Landscape Area =  $4,000 \text{ sq ft} \times 0.4''/12 = 133 \text{ CF}$

Required Treatment Vol. =  $3,255 \text{ CF}$

B) Available Volume

Surface storage (Assume 12" max) =  $2,424 \text{ CF}$

Filter media =  $1936 \text{ sq ft} \times 1.5' \times 0.33 = 958 \text{ CF}$

Available Storage =  $3,382 \text{ CF}$

$3,382 \text{ CF} > 3,255 \text{ CF}$  ; OK

**Att 8.2**

Tasks: Determine Required treatment volume capacity for underdrained filter beds for commercial expansion of 410 Riverside Street Portland, ME

References: Maine DEP - Stormwater BMP's Chapter 7

Chapter 500 Stormwater regulations

Design Data: New Impervious Area

- Subcatchment 2 - 0.53 ac
- Subcatchment 4 - 0.08 ac
- Subcatchment 5 - 0.86 ac

Total New Impervious - 1.47 acres

COMPUTATIONS

1) Determine storage capacity and treatment volume for each BMP

A) Subcatchment 5 draining to underdrain filter bed #1

Required treatment volume

Impervious area =  $0.86 \text{ ac} \times 43560 \text{ sf/ac} \times 1/2 = 3,122 \text{ sf}$

Landscape Area =  $4,000 \text{ sf} \times 0.4 \text{ ft} \times 1/2 = 1,533 \text{ sf}$

Required Treatment Vol. = 3,255 cf

B) Available volume

Surface storage (Assumes 12" max) =  $2,424 \text{ cf}$

Filter media =  $1936 \text{ sf} \times 1.5' \times 0.33 = 958 \text{ cf}$

Available Storage = 3,382 cf

$3382 \text{ cf} > 3255 \text{ cf}$  **1.0X**

c) Submittal # 224 draining to underdrain Filter Bed # 2

Required treatment Volume  
 New impervious area = 0.53 (814sq) + 0.1 (pavement)  
 Existing impervious area = 0.8

Total = 1.43 acres

$1.43 \times 43560 \times 1" / 12 = 5,191 \text{ CF}$

Landscape area =  $0.2 \text{ acres} \times 43560 \times 0.4" / 12 = 290 \text{ CF}$

Required treatment vol. = 5411 CF

b) Available volume for filter bed # 2

Surface Storage: (Assuming 11" max) = 4120 CF

Filter media =  $2975 \text{ sf} \times 1.5' \times 0.55 = 2472 \text{ CF}$

Available storage = 5,672 CF

5672 CF > 5411 CF ∴ OK  
 Note that Bed # 2 is also treating  
 0.8 acres of existing impervious

2) Determine % impervious area treated

New impervious = 1.47 acres

new landscape = 0.50

Developed Area treated =  $1.76 \text{ acres} \div 1.97 = 0.89 \%$

89% > 80% required ∴ OK

**DELUCA-HOFFMAN ASSOCIATES, INC.**

Consulting Engineers  
778 Main Street Suite 8  
SOUTH PORTLAND, MAINE 04106  
(207) 775-1121  
FAX (207) 879-0896

JOB \_\_\_\_\_  
SHEET NO. \_\_\_\_\_  
OF \_\_\_\_\_  
DATE \_\_\_\_\_  
CHECKED BY \_\_\_\_\_  
SCALE \_\_\_\_\_

2314.03

3

OCT 07

**Att. 8.4**

Impervious Area treated =  $1.47 \text{ Acres} \div 1.47 = 100\%$

100% > 95% ✓ OK

**Att. 8.5**

Summary of Pre & Post Development Hydroco Computations

Pre Development	Post Development
25 yr	2 yr
20.26 cfs	7.17 cfs
17.9 cfs	8.58 cfs
22.29 cfs	15.03 cfs

Conclusion:  
 The applicant is seeking a waiver for the flooding standards since the development site is located at low end of the Presumpscot River watershed. The development site discharges directly to the Presumpscot River. There are no downstream properties of concern.

Att. 9.1.

Neighborhood Meeting Certification

I, Stephen R. Bushey hereby certify that a neighborhood meeting was held on November 7, 2007 at the offices of 410 Riverside Street, LLC, C/O Eastman Industries, located at 78 Ingersoll Drive off Riverside Street in Portland, Maine at 5:00 p.m. I also certify that on October 30, 2007 invitations were mailed to all addressees on the mailing list provided by the Planning Division, including property owners within 500 feet of the proposed development and the residents on the "interested parties" list.

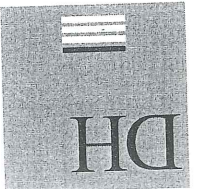
Signed,



November 7, 2007 (date)

- Attached to this certification are
1. Copy of the invitation sent
  2. Sign-in sheet (one attendee)
  3. Meeting minutes (none – one attendee)





DELUCA-HOFFMAN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
778 MAIN STREET  
SUITE 8  
SOUTH PORTLAND, MAINE 04106  
TEL. 207 775 1121  
FAX 207 879 0896

- SITE PLANNING AND DESIGN
- ROADWAY DESIGN
- ENVIRONMENTAL ENGINEERING
- PERMITTING
- AIRPORT ENGINEERING
- CONSTRUCTION ADMINISTRATION

AH.9.2

October 30, 2007

Project Abutter/Interested Party

Subject: Public Information Meeting  
410 Riverside Street LLC

Proposed Site Development at 410 Riverside Street

Dear Sir or Madam:

On behalf of 410 Riverside Street LLC, Deluca-Hoffman Associates, Inc. is inviting you to a Public Information Meeting to be held on Wednesday, November 7, 2007 at 5:00 pm. The meeting will be held at the office of Eastman Industries located at 410 Riverside Street.

410 Riverside Street LLC has submitted a Site Plan application to the City of Portland Planning Authority for the construction of new office/warehouse building space on the existing 15.5-acre site. The development site is located within the Industrial I-M zoning district. The project requires Site Plan approval and Site Location of Development approval under the City's delegated review authority.

The project is tentatively scheduled for a Public Hearing at the City of Portland Planning Board on November 27, 2007.

The City code requires that property owners within 500 feet of the proposed development and residents on an "interested parties list" be invited to participate in a neighborhood meeting. A sign-in sheet will be circulated and minutes of the meeting will be taken. Both the sign-in sheet and minutes will be submitted to the Planning Board.

Sincerely,

DELUCA-HOFFMAN ASSOCIATES, INC.

Stephen R. Bushey, P.E.  
Senior Engineer

SRB/sq/2314.03/publicmeeting notice10-29-07

c: Bill Needelman - City of Portland  
Nick Nakazmerad - 410 Riverside Street LLC (c/o Eastman Industries)  
Donna Verrill - Eastman Industries

Att. 9.3

Alan Parks  
N. Deering Neigh. Housing  
44 Pineloch Drive  
Portland, ME 04103

Anne Pringle  
Western From Neigh. Assoc.  
44 Neal Street  
Portland, ME 04101

Barb Wood  
125 Emery Street  
Portland, ME 04102

Carol Schiller  
Univ. Neigh. Organization  
7 Longfellow Street  
Portland, ME 04103

Chris Busby  
11 Cushman Street  
Portland, ME 04102

Dan Anderson  
1831 Washington Avenue  
Portland, ME 04103

David Nurse  
The Sheridan Corporation  
739 Warren Avenue  
Portland, ME 04103

Deb Keenan  
28 Dorothy Street  
Portland, ME 04101

Donna Carr, City Councilor  
Portland City Hall  
389 Congress Street  
Portland, ME 04101

Elizabeth Hoglund  
Stroudwater Village Assoc.  
138 Stroudwater Road  
Portland, ME 04102

Citizen's Mailing List

Alan Holt  
Holt & Lachman Architects  
165 State Street  
Portland, ME 04102

Alfred Waxler  
PO Box 6681  
Portland, ME 04103

Anthony Donovan  
27 Riverview Street  
Portland, ME 04102

Bob Greenlaw  
643 Forest Avenue  
Portland, ME 04101

Cheryl Leeman, City Councilor  
Portland City Hall  
389 Congress Street  
Portland, ME 04101

Crystal Canney  
WGME TV  
1335 Washington Avenue  
Portland, ME 04103

David Nowlin  
77 Spruce Street  
Portland, ME 04102

Dawn Carrigan, Principal  
Longfellow School  
432 Stevens Avenue  
Portland, ME 04101

Don Webster  
Peaks Island Neigh. Assoc.  
29 Centennial Street  
Peaks Island, ME 04108

Edward Suslovic, City Councilor  
Portland City Hall  
389 Congress Street  
Portland, ME 04101

Alan Fishman  
Fishman Realty  
2 Cotton Street  
Portland, ME 04101

Alex Landry  
PO Box 7625  
Portland, ME 04112

Anne Weigel  
92 Hamblet Avenue  
Portland, ME 04103

Betsy Sawyer-Wanter  
34 Wellstone Drive  
Portland, ME 04103

Catherine Martin  
114 W. Commonwealth Drive  
Portland, ME 04103

Cliff Ginn  
Back Cove Neigh. Assoc.  
79 Deerfield Road  
Portland, ME 04101

David Marshall, City Councilor  
Portland City Hall  
389 Congress Street  
Portland, ME 04101

David Very  
Back Cove Neigh. Assoc.  
67 Godman Street  
Portland, ME 04103

Devon and Pamela Platte  
26 North Street, #3  
Portland, ME 04101

Ed Democracy  
PO Box 4189  
Portland, ME 04101-0398

Att. 9.4

Glen Coombs  
Nason's Corner Neigh. Assoc.  
56 Kent Street  
Portland, ME 04102

Henry Leclair  
209 Range Road  
Windham, ME 03087

Jaime Parker  
73 Atlantic Street  
Portland, ME 04101

James Cohen, City Councilor  
Portland City Hall  
389 Congress Street  
Portland, ME 04101

Jennifer Dorr  
Portland City Hall  
389 Congress Street  
Portland, ME 04101

Joe Malone  
Deering Highlands Neigh. Association  
30 Highland Street  
Portland, ME 04103

John Leavitt  
NE Regional Council of Carpenters  
183 Middle Street  
Portland, ME 04101

Kerry Anderson  
5 Frederick Thompson Drive  
Scarborough, ME 04074

Kevin Donoghue, City Councilor  
44 North Street, Apt. 1  
Portland, ME 04101

Linda Koke Mueller  
Maine DEP  
312 Canco Road  
Portland, ME 04103

Citizen's Mailing List

Frank Schoenthaler  
Goldwell Broker  
1601 Trapelo Rd., Suite 24  
Waltham, MA 02451

Greg McNally  
235 Riverside Ind. Parkway  
Portland, ME 04103

Jack Lufkin  
Gorham Savings Bank  
71 Marginal Way  
Portland, ME 04101

James Clouter, City Councilor  
Portland City Hall  
389 Congress Street  
Portland, ME 04101

Jed Rathband  
9 Everett Street  
Portland, ME 04101

Jill Duson, City Councilor  
Portland City Hall  
389 Congress Street  
Portland, ME 04101

John Hume  
Riverton Community Association  
48 Harris Avenue  
Portland, ME 04103

Kathleen Spahn  
Boulevard Park Association  
95 Deerfield Road  
Portland, ME 04101

Kevin Butterfield  
643 Main Street  
Gorham, ME 04038

Len Anderson  
543 Allen Avenue  
Portland, ME 04103

Ethan Strimling  
211 Spring Street  
Portland, ME 04102

Greater Portland Council of Governments  
68 Marginal Way  
Portland, ME 04101

Hugh Nazor  
50 Federal Street  
Portland, ME 04101

Jaimy Caron  
North Deering Neigh. Assoc.  
19 Old Barn Lane  
Portland, ME 04103

Janice Carpenter  
9 West Commonwealth Drive  
Portland, ME 04103

Jennifer Micoleau  
61 Mountfort Street  
Portland, ME 04101

John Anton  
63 Spruce Street  
Portland, ME 04102

Kate Bucklin  
PO Box 66797  
Falmouth, ME 04105

Kerry Anderson  
PO Box 6799  
Scarborough, ME 04074

Kim Strondak  
Libbytown Neighborhood  
340 Park Avenue  
Portland, ME 04102

Att. 9.5

Lynn Clarkson  
145 Marborough Road  
Portland, ME 04103

Mark Sengelmann  
Port City Design  
43 Deering Street  
Portland, ME 04101-2211

Meredith Springer  
39 Maple Street  
Peaks Island, ME 04108

Mrs. Kimmel  
Brookside Neighborhood  
31 Brookside Road  
Portland, ME 04103

Nancy Bartlett  
PO Box 7965  
Portland, ME 04112

Paul Leblond  
55 Stevens Avenue  
Portland, ME 04102

Peggy Morin  
66 Farnham Street  
Portland, ME 04101

Raymond Penfold  
129-137 Fox Street  
Portland, ME 04101

REP Boyd Marley  
District 36  
11 Maplewood Street  
Portland, ME 04103

REP Joseph Brannigan  
District 35  
168 Concord Street  
Portland, ME 04103

Citizen's Mailing List

10/25/2007

Liz Holton  
18 Victoria Street  
Portland, ME 04103

Marc Foster  
29 Taylor Street, #1  
Portland, ME 04102

Markos Miller  
Munjoy Hill Neigh. Association  
17 Atlantic Street  
Portland, ME 04101

Michael Carey  
PO Box 200  
Portland, ME 04112-0200

Munjoy Hill Neigh. Organization  
Colleen Bedard  
20 Morning Street  
Portland, ME 04101

Nicholas Mavodones, Jr., City Councilor  
Portland City Hall  
389 Congress Street  
Portland, ME 04101

Paul Queltie  
Woodfords/Cakdale Neighborhood Assoc.  
83 Noyes Street  
Portland, ME 04103

Peter Eiermann  
415 Congress St., Suite 202  
Portland, ME 04101

Rebecca Halla  
Waste Management  
2000 Forest Avenue  
Portland, ME 04103

REP Glenn Cummings  
District 37  
24 Nevens Street  
Portland, ME 04103

Lou Christen  
The Twone Place Suites  
700 Roundwood Drive  
Scarborough, ME 04074

Mark Rellly  
12 Pitt St., Apt. 5  
Portland, ME 04103-4845

Mary Griffith  
6 E. Promenade, Unit #2  
Portland, ME 04101

Mike and Sandy Conroy  
63 Plymouth Street  
Portland, ME 04103

Nan Cumming  
Portland Trails  
305 Commercial Street  
Portland, ME 04101

Pam Burnside  
64 Lester Drive  
Portland, ME 04103

Peaks Island Land Preserve  
PO Box 99  
Peaks Island, ME 04108

Portland Society of Architects  
c/o James Sterling, AIA  
PO Box 7305  
Portland, ME 04112

REP Benjamin Dudley III  
District 30  
9 Ponce Street  
Portland, ME 04101

REP Herb Adams  
District 33  
231 State Street  
Portland, ME 04101-2361

Att. 9.6

Ron Spinella  
Bayside Neigh. Association  
377 Cumberland Avenue  
Portland, ME 04101

Steve Rose  
44 Federal Street  
Portland, ME 04102

Tom Almsworth  
Stroudwater Neigh. Association  
12 Garrison Street  
Portland, ME 04102

Vincent Velligor  
Parksde Neigh. Association  
61 Sherman Street  
Portland, ME 04101

Robert O'Brien  
267 York Street  
Portland, ME 04102

Stephen Parazone  
47 Bolton Street  
Portland, ME 04102

The Forecaster  
Chris Busby  
PO Box 66797  
Falmouth, ME 04105

Vinal Thompson  
Bolton Street Neigh. Association  
130 Bolton Street  
Portland, ME 04103

William Robizek, Chair  
Island Development Committee  
129 Lisbon Street, P.O. Box 961  
Lewiston, ME 04243-0961

Robert Hains  
250 Holm Avenue  
Portland, ME 04102

Sandra Donahue  
E. Deering Neigh. Association  
9 Wordsworth Street  
Portland, ME 04103

Steven Scharf  
PO Box 4135  
Portland, ME 04101

Tom Foran  
Park Street Townhouse Owners Assoc.  
94 Park Street  
Portland, ME 04101

William Meridian  
105 Stonecrest Drive  
Portland, ME 04103

Att. 9.7

410 RIVERSIDE ST LLC  
70 INGERSDR DR  
PORTLAND, ME 04103

508 RIVERSIDE STREET LLC  
20 CONTINENTAL DR  
PORTLAND, ME 04103

AHEARN EDWIN J  
18 GROVE ST  
PORTLAND, ME 04103

AHEARN EDWIN J WWII VET  
18 GROVE ST  
PORTLAND, ME 04103

ANDRE REBECCA W  
286 SOUTH GREAT RD  
LINCOLN, MA 01773

BENWELL JOHN H  
21 LEIGHTON AVE  
PORTLAND, ME 04103

CASEY & PAIGE LLC  
583 WARREN AVE  
PORTLAND, ME 04103

CLARK ROY  
68 LITTLE RIVER DR  
GORHAM, ME 04038

CP & S ASSOCIATES LLC  
583 WARREN AVE  
PORTLAND, ME 04103

CROCKETT RIVERSIDE LLC  
39 GRAYSTONE LN  
PORTLAND, ME 04103

CUMMINGS ORMAN F  
202 US RT 1 BOX 366  
FALMOUTH, ME 04105

DRAKE FRANCIS P  
PO BOX 1378  
PORTLAND, ME 04104

HARVEY INDUSTRIES INC  
1400 MAIN ST  
WALTHAM, MA 02451

HATT CLINTON JR  
84 EASTMAN RD  
CAPE ELIZABETH, ME 04107

HAWKES CARLITA E WID WWII VET  
427 RIVERSIDE ST  
PORTLAND, ME 04103

INGALLS JEAN C  
419 RIVERSIDE ST  
PORTLAND, ME 04103

INGRAHAM SANDRA J  
109 ELMWOOD AVE  
WESTBROOK, ME 04092

KIMCO REALTY LLC  
65 GRAY RD BOX 4  
FALMOUTH, ME 04105

MAINE TURNPIKE AUTHORITY  
430 RIVERSIDE ST  
PORTLAND, ME 04103

NECOMM PROPERTIES INC  
480 RIVERSIDE ST  
PORTLAND, ME 04103

NORTHERN N E DISTRICT COUNCILS  
ASSEMBLIES OF GOD  
PO BOX 3775  
PORTLAND, ME 04104

NORTHERN NE DIST COUNCIL OF  
ASSEMBLIES OF GOD  
PO BOX 611  
PORTLAND, ME 04104

NORTHERN NEW ENGLAND DIST  
COUNCIL ASSEMBLIES OF GOD  
PO BOX 611  
PORTLAND, ME 04104

NORTHERN NEW ENGLAND DISTRICT  
COUNCIL ASSEMBLIES OF GOD  
PO BOX 611  
PORTLAND, ME 04104

PATTLE CAROL A  
423 RIVERSIDE ST  
PORTLAND, ME 04103

PENDE ASSOCIATES INC  
42 SOUTH ST  
YARMOUTH, ME 04096

PERRY BARBARA C BLIND LIFE INT  
12 GROVE ST  
PORTLAND, ME 04103

PINE TREE PAPER CO INC  
633 WARREN AVE  
PORTLAND, ME 04102

PORTLAND WATER DISTRICT  
225 DOUGLASS ST  
PORTLAND, ME 04102

PTC DEVELOPMENT CORP  
1400 JAMES ST  
SYRACUSE, NY 13203

AH.9.8

RIST MARTIN & BARNYSUE J BRUNET  
TRUSTEES  
201 US ROUTE 1  
SCARBOROUGH, ME 04074

THE TRUST FOR PUBLIC LAND  
33 UNION ST 4TH FLOOR  
BOSTON, MA 02108

THERIO EUGENE & GEORGIA M JTS  
457 RIVERSIDE ST  
PORTLAND, ME 04103

THERIO EUGENE W & GEORGIA M JTS  
457 RIVERSIDE ST  
PORTLAND, ME 04103

THERIO W EUGENE KW VET &  
GEORGIA M JTS  
457 RIVERSIDE ST  
PORTLAND, ME 04103

TROTT STEPHANIE M & JOHN B TROTT  
JTS  
15 GROVE ST  
PORTLAND, ME 04103

WENDY'S OLD FASHIONED  
HAMBURGERS OF NEW YORK INC  
PO BOX 256  
DUBLIN, OH 43017

REYNOLDS MARIANNE M  
PO BOX 99  
GORHAM, ME 04038

SCALA JAMES F TRUSTEE  
27 NORMAC RD  
WOBURN, MA 01801

THERIO EUGENE & GEORGIA M JTS  
JTS  
457 RIVERSIDE ST  
PORTLAND, ME 04103

THERIO EUGENE W & GEORGIA M JTS  
457 RIVERSIDE ST  
PORTLAND, ME 04103

THERIO W EUGENE AND GEORGIA M  
OR SURV  
457 RIVERSIDE ST  
PORTLAND, ME 04103

TRAVERS NATHAN A & SHANE E  
FENTON JTS  
14 GROVE ST  
PORTLAND, ME 04103

WATSON REALTY LLC  
357 RIVERSIDE ST  
PORTLAND, ME 04103

WORCESTER ALTHEA M HEIRS  
144 GROVE ST  
PORTLAND, ME 04103

REGISTE MCMORRIS  
PO BOX 1081  
WESTBROOK, ME 04098

RIVERSIDE SPIRITS LLC  
396 FORE ST  
PORTLAND, ME 04101

THERIO EUGENE & GEORGIA M JTS  
JTS  
457 RIVERSIDE ST  
PORTLAND, ME 04103

THERIO EUGENE W & GEORGIA  
457 RIVERSIDE ST  
PORTLAND, ME 04103

THERIO EUGENE W & GEORGIA M  
THERIO JTS  
457 RIVERSIDE ST  
PORTLAND, ME 04103

TOPSPIN LLC  
470 RIVERSIDE ST  
PORTLAND, ME 04103

U S POSTAL SERVICE USPS FACILITIES  
SERVICE OFFICE  
6 GRIFFIN RD NORTH  
WINDSOR, CT 06006

WHITAKER REAL ESTATE  
INVESTMENTS LLC  
84 BROOK RD  
FALMOUTH, ME 04105

The meeting adjourned at 5:20 pm.

Mr. Dale Akeley was the lone attendee and was representing the owner of the 400 Riverside Street property (William Cummings). We briefly went over the proposed project and discussed the proposed utilities. Mr. Akeley stated that the 400 Riverside Street owner is looking to cooperate with 410 Riverside Street LLC for the installation of the proposed sewer connection to Riverside Street. When the system from the Eastman Industries building is installed it would be the intent to also have the buildings at 400 Riverside Street connected to the same force main pipe that will discharge to Riverside Street. We discussed timing for the work and other related activities.

Steve Bushey has prepared the following meeting minutes to the best of his understanding. The purpose of the meeting was to comply with the City of Portland Site Plan Review standards for projects requiring a public hearing.

### MEETING MINUTES

DATE:

November 7, 2007

LOCATION:

Eastman Industries Conference Room  
78 Ingersoll Drive

PREPARED BY:

Stephen R. Bushey, P.E.

ATTENDEES:

Stephen Bushey, DHA  
Nick Nakamezrad, Eastman Industries (Applicant)  
Dale Akeley, Project Resources

SUBJECT:

410 Riverside Street LLC Site Plan application



D.L. LUCA-HOFFMAN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
778 MAIN STREET  
SUITE 8  
SOUTH PORTLAND, MAINE 04106  
TEL. 207 775 1121  
FAX 207 879 0896

- ROADWAY DESIGN
- ENVIRONMENTAL ENGINEERING
- TRAFFIC STUDIES AND MANAGEMENT
- PERMITTING
- AIRPORT ENGINEERING
- SITE PLANNING
- CONSTRUCTION ADMINISTRATION

A.H. 9.9





DELUCA-HOFFMAN ASSOCIATES, INC.  
CONSULTING ENGINEERS

778 MAIN STREET  
SUITE 8  
SOUTH PORTLAND, MAINE 04106  
TEL. 207 775 1121  
FAX 207 879 0896

- SITE PLANNING AND DESIGN
- ROADWAY DESIGN
- ENVIRONMENTAL ENGINEERING
- PERMITTING
- AIRPORT ENGINEERING
- CONSTRUCTION ADMINISTRATION

August 9, 2007

Mr. Bill Needleman  
City of Portland, Planning Department  
389 Congress Street  
Portland, Maine 04101

**Subject:** Lot 4 - 410 Riverside Street  
410 Riverside Street LLC  
(Formerly Lot 4 of the 400 Riverside Street Properties)  
ID #2004-0074, CBL #320-A-002

Dear Bill:

I am enclosing our long-awaited resubmission of plans associated with the proposed development at 410 Riverside Street. In response to our meeting back in May, we have prepared revised plans that incorporate changes to the drainage system for the proposed project. As we had discussed, the lapsing of the Site Plan Approval impacted the project's stormwater requirements. We contacted Linda Kokenuller at the Department of Environmental Protection office and she advised that the project is subject to the current DEP stormwater rules (as revised in November 2005 and December 2006). These latest rules contain substantial changes to the standards applied to development projects and the techniques to address water quality treatment on qualifying projects. Since the enactment of the latest Chapter 500 regulations, the DEP has also withdrawn the City of Portland's delegated authority to review projects meeting the Chapter 500 permitting thresholds. The proposed development project triggers the need for a stormwater permit under the Chapter 500 regulations; hence, we will be filing a stormwater permit application with the DEP for this project.

The major revisions to the plans include the measures to capture and treat stormwater runoff from the proposed development's new impervious surfaces. The original approved design consisted of a closed drainage system that contained catch basins, drainage pipe and two manufactured water quality treatment devices to remove suspended sediment from runoff. This system was generally consistent with the old stormwater standards. The proposed plans now depict two underdrained soil filter beds that will capture and filter runoff from the new pavement areas. In accordance with the DEP's stormwater guidelines, these measures are sized to detain runoff volume equal to 1.0 inch times the contributing impervious area plus 0.4 inch times the contributing landscaped area. As with the original design, measures to provide quantity control are not warranted at this site due to its location at the low end of the Presumpscot River watershed. We continue to request that the project be granted a waiver of the stormwater quantity standards, given these conditions.

Mr. Bill Needleman  
August 9, 2007  
Page 2

The remaining aspects of the development remain unchanged with respect to the proposed building location and size. We have reduced the limits of new pavement on the north end of the site since additional area is necessary to fit in the proposed undrained filter bed in that area. The original plans depicted 17 additional parking spaces in this area and the revised plans only include 11 new spaces. The grading limits have been revised modestly to account for the construction of the filter beds for stormwater treatment. You will note that the limits of work for clearing have been identified on the plans. Given the site's secluded location, we have not provided any substantive landscape measures other than a few tree plantings.

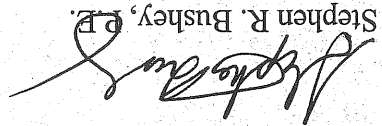
We are also including catalog cuts of the proposed lighting for the project. Swaney Lighting is in the process of preparing a photometrics plan that, when completed, will be forwarded to you for review. I have also included several photos of the existing buildings. As we discussed, the proposed building is intended to be a block-and-metal style building similar in scale and design to the two existing structures.

We trust that the bulk of our original application package remains applicable and no further submission of these materials is necessary. We have included ten sets of updated plans for your distribution to staff. We look forward to your continued review and processing of our application.

If you have any further comments or if additional information is required, please call this office.

Sincerely,

DELUCA-HOFFMAN ASSOCIATES, INC.



Stephen R. Bushey, P.E.  
Senior Engineer

SRB/sq/JN2314.03/Needleman-8-8-07

Attachments

c: Mr. Nickolas Nikazmerad, Owner/Applicant  
Eastman Industries  
410 Riverside Street  
Portland, ME 04103



Submitted by Swaney Lighting Associates Inc

Job Name: 400 RIVERSIDE STREET (LOT 4) SITE - Architect: DELUCA HOFFMAN

Catalog Number: CR1-A-H17-H4-F-Q-HS-DB-L Notes: LAMP INC

Type: D

SLA07-8158

CIMARRON SERIES

Table with columns: Cat #, Job, Type, Approvals

APPLICATIONS

Area and wall lighting.

IES Type II, III, IV, V (square) light

Flat lens design for full cutoff

Super MH, and Pulse Start for

design flexibility

Mounts on upswept, straight arms

for poles or on wall bracket for a

uniform project look

5 standard, 2 premium, and custom

colors are available

ORDERING INFORMATION

ORDERING EXAMPLE

CR1 Series - A Mounting - H17 Wattage/Source - H2 Lamp Orientation/Distribution - F Lens - Q Voltage - DB Color - PR1 Options

SERIES

CR1 Cimarron

MOUNTING

A Arm Mount Construction (6" straight rigid arm included & acceptable for 90° configurations)

AD Decorative Arm Mount Const. (6" decorative upswept arm incl. & acceptable for 90° configurations)

WB Wall Bracket Const. (includes Wall Bracket & 6" straight arm unless WBAD option is chosen)

0 No Arm or Wall Bracket (only order without arm or wall bracket when they are ordered as accessory)

WATTAGE/SOURCE

METAL HALIDE

H17 175W (ED-28)

H25 250W (ED-28)

H40 400W (ED-28)

SUPER METAL HALIDE

MS17 175W (ED-28)

MS25 250W (ED-28)

MS40 400W (ED-28)

PULSE START METAL HALIDE

P10 100W (ED-17)

P12 125W (ED-17)

P15 150W (ED-28)

P20 200W (ED-28)

P25 250W (ED-28)

P32 320W (ED-28)

P35 350W (ED-28)

P40 400W (ED-28)

1 When ordering poles, specify Pole Drill Pattern #2 for A and AD mounting.

WATTAGE/SOURCE con't

S10 100W (ED-23 1/2)

S15 150W (ED-23 1/2)

S25 250W (ED-18)

S40 400W (ED-18)

LAMP ORIENTATION/DISTRIBUTION

H2 Horizontal II

H3 Horizontal III

H4 Horizontal IV

H5 Horizontal V (square)

LENS

F Flat

VOLTAGE

Q Quad-Tap (120, 208, 240, 277V)

V Five-Tap (120, 208, 240, 277, 480V)

S 480V

T 120, 277, 347V

0 No Ballast

E 50 Hz 220/240V

(250 & 400 MH, 250 & 400 HPS only)

COLOR

DB Dark Bronze

BL Black

WH White

GR Gray

PS Platinum Silver

RD Red (premium color)

FG Forest Green (premium color)

CC Custom Color (premium color)

OPTIONS

WBAD Substitutes Decorative Upswept Arm when WB wall bracket mounting is chosen

RPA2 Round Pole Adapter (2 3/4" - 3 3/8")

RPA3 Round Pole Adapter (3 3/8" - 3 3/4")

RPA4 Round Pole Adapter (3 3/8" - 4 1/2")

RPA5 Round Pole Adapter (5")

RPA6 Round Pole Adapter (6")

F1 Fusing - 120V

F2 Fusing - 208V

F3 Fusing - 240V

F4 Fusing - 277V

F5 Fusing - 480V

F6 Fusing - 247V

P1 Photo Button - 120V

P2 Photo Button - 208V

P3 Photo Button - 240V

P4 Photo Button - 277V

P6 Photo Button - 347V

PR1 Photo Cell Receptacle - 120V

PR2 Photo Cell Receptacle - 208V

PR3 Photo Cell Receptacle - 240V

PR4 Photo Cell Receptacle - 277V

PR5 Photo Cell Receptacle - 480V

PR6 Photo Cell Receptacle - 347V

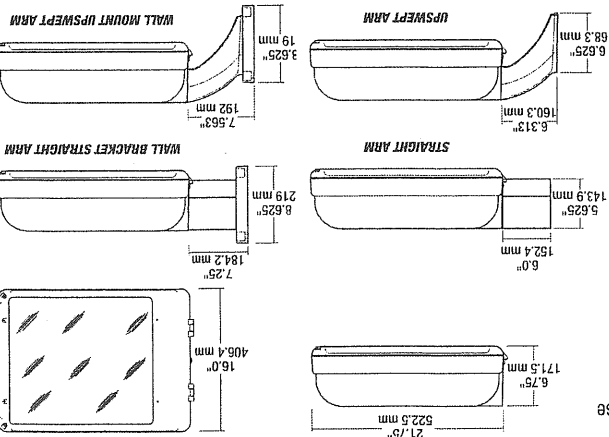
Q2 Quartz RS with Lamp

HS Internal House Side Shield (available for H2, H3 & H4 distributions)

VG Polycarbonate Vandal Guard

L Lamp

SELECT UNITS ARE STOCKED FOR IMMEDIATE SHIPMENT.



LISTINGS • UL and CSA certified for outdoor use in wet locations.



For more detail, see back.

EPA = 1.2 ft (single unit with arm)

colors are available



Submitted by Swaney Lighting Associates Inc

Job Name: 400 RIVERSIDE STREET (LOT 4) SITE - INITIAL Architect: DELUCA HOFFMAN

Notes: LAMP INC

Catalog Number: CR1-A-H17-H4-F-Q-HS-DB-L

Type: D

SLA07-8158

ACCESSORIES

CIMARRON ACCESSORIES

Table with 2 columns: CATALOG #, DESCRIPTION. Lists various accessories like CR1-HS-4, CR1-PVG, ARM-CR-K-TA-XX, etc.

1 Replace XX with color choice, eg: DB for Dark Bronze 2 When ordering poles, specify Pole Drill Pattern #2

CIMARRON TENON TOP POLE BRACKET ACCESSORIES

Table with 2 columns: CATALOG #, DESCRIPTION. Lists tenon top pole bracket accessories like SSS-490-XX, RSS-3120-XX, etc.

ADDITIONAL ACCESSORIES

Table with 2 columns: CATALOG #, DESCRIPTION. Lists additional accessories like PTL-1, PTL-8, PTL-5, etc.

Due to our continued efforts to improve our products, product specifications are subject to change without notice.



Spartanburg Lighting • 101 Corporate Drive, Suite L • Spartanburg, SC 29303 • PHONE: 864-599-6000 For more information visit our web site: www.spartanburglighting.com

HOUSING Architecturally styled, one piece die-cast aluminum housing with normal .125" wall thickness. Low profile design reduces the overall wind loading while providing a sleek, unobtrusive look which complements most building architectural styles.

DOOR Die-cast aluminum door hinges to housing and secures with two captive screws providing four points on contact ensuring a clean lens and optical assembly. Both the flat tempered glass and door are sealed with one-piece extruded silicone gaskets.

OPTICS Specular, anodized aluminum reflectors provide LES type II, III, IV, and V distributions with a horizontal lamp orientation. The type II, III, and V reflectors are one-piece hydroformed while the type IV is a multi-piece design. All meet IESNA Full Cutoff classification and are field rotatable in 90 degree increments. House side shields available as either factory installed options or field installed accessories.

MOUNTING Two arm designs are available providing maximum design flexibility. The die-cast aluminum arm offers a sleek upswept look while the extruded straight arm includes the housings contoured lines for continuity of style. A wall bracket and pole/tenon accessories are also available allowing easy mounting for virtually any application.

ELECTRICAL Energy efficient HID lamps up to 400 watts. Pulse rated porcelain sockets have spring loaded, nickel plated center contact. All units offer factory or field-installable photocell options and fusing. BALLAST HPF ballast circuit, starting rated at -20 deg F (-40 deg F for HP5), Ballast and other electrical components mounted directly to housing for excellent heat dissipation and long life.

FINISH Durable Lektrocote™ TGI/C thermoset polyester powder paint finish assures long life and maintenance free service. Standard finishes include Dark Bronze, Black, White, Gray, and Platinum Silver. Also available are Red, Forest Green, and custom colors.

LISTING UL 1598 approved and CSA Certified for wet location applications.



Submitted by Swaney Lighting Associates Inc

Job Name: 400 RIVERSIDE STREET (LOT 4) SITE - INITIAL  
Architect: DELUCA HOFFMAN

Notes:

Catalog Number: SSS-30-40-7-A2-DB

Type: D

SLA07-8158

# Poles

Hubbell Lighting and Spaulding Lighting's complete line of poles offer simple solutions for all your lighting needs from 6-60 feet in height. Pole applications include general floodlighting, sports lighting, auto dealerships, commercial site lighting, and roadways. Mounting configurations include tenon top, side mount, pad mount, or open top models to match any luminaire style.

## Pole Logic

1	2	3	4	5	6	7	8
Cross Section	Style	Material	Nominal Length	Nominal Shaft Diameter	Shaft Dia. Nominal	Shaft Thickness	Mount Type
S Square	S Straight	S Steel	10	40	1	A1	DB

⊗ This pole logic is for reference use only. The appropriate pole table should be used when sizing and ordering poles.

Constructed with exacting standards, both our aluminum and steel poles meet strict guidelines for quality, strength, and finish. Protecting your investment is our Lektrocote paint or galvanized finish. Both guarantee your investment for years. From shaft cutting through painting, quality control inspections are conducted throughout a highly automated process. Lastly, to ensure the finish is not damaged during shipment, all poles are protected with either carboard or double-wrapped in foam and plastic.

1	2	3	4
Cross Section	Style	Material	Nominal Length
H Round	S Straight	S Steel	60

5	6
Nominal Shaft Diameter	Shaft Thickness
30 3 inch <sup>2</sup>	1 12 inch <sup>2</sup>

7	8
Finish	Options
DB Dark Bronze	Q55 Internal Coating (Hubbell Seal)

1	2	3	4	5	6	7	8	
Round Tapered Steel Poles Only	Round Straight Poles Only	Tapered Poles Only	DRILL PATTERNS: Replace X with the following: 1 = Spaulding luminaires with a straight pole (4-bolt), 2 = Spaulding luminaires for tapered pole (2-bolt) plus new Cimarron CR1 and Raven Series, 4 = Hubbell DS and MSS luminaires, 5 = Detroit III 4-bolt design (square poles only), 6 = Hubbell MSV, RCS, RCL & DM luminaires (including tapered poles), 9 = Devine luminaires.	Specify option location using logic found in pole introduction pages.	Optional base cover only needed when not provided as standard.	Optional round base cover.	SSS Poles Only	Removable tenon used in conjunction with side arm mounting. First specify desired arm configuration followed by "TR" notation.

Example: SSS-25-40-7-C6-TR-DB



**Job Name:** 400 RIVERSIDE STREET (LOT 4) SITE - INITIAL  
**Architect:** DELUCA HOFFMAN

Notes:

**Catalog Number:** SSS-30-40-7-A2-DB

SLA07-8158

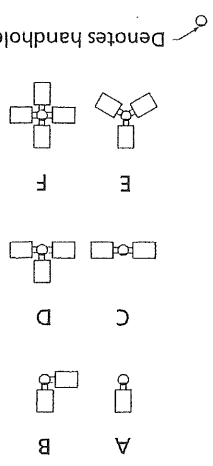
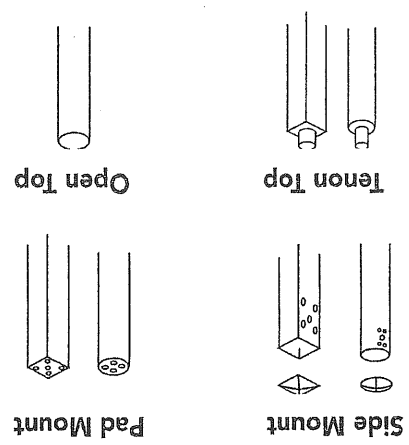
**D**

**Type:**

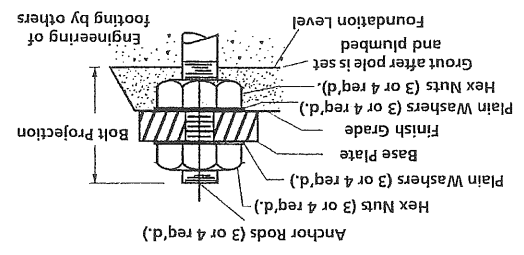
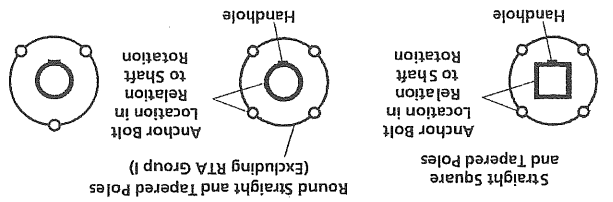
# Poles

## Luminaire Mounting

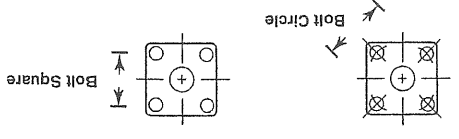
## Side Mounting Locations



## Anchor Bolt Detail Base Diagram



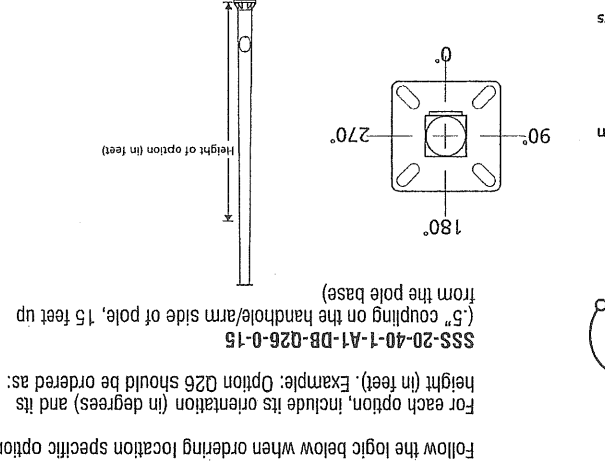
## Standard Anchor Bolts and Template



TAB-15	.5 x 15 x 3" (Non-Galvanized)
TAB-30-M38	.75 x 30 x 3" (Galvanized)
TAB-36-M38	1 x 36 x 4" (Galvanized)
TAB-42-M38	1.25 x 42 x 6" (Galvanized)

Note: Fabricated from high tensile steel, each anchor bolt has two nuts and two washers. Galvanized anchor bolts are hot dipped. (Galvanizing includes threaded portion plus six inches.)

Catalog Number	Description
SBC-4-XX	10.5" Sq x 5" Deep (use on 4" Sq Poles)
SBC-4L-XX	12.25" Sq x 5" Deep (use 4" Sq Poles)
SBC-5-XX	12.25" Sq x 5" Deep (use on 5" Sq Poles)
SBC-6-XX	12.25" Sq x 5" Deep (use on 6" Sq Poles)
SBC-3R-XX	9" Sq x 5" Deep (use on 3" Round Poles)
SBC-4R-XX	10.5" Sq x 5" Deep (use on 4" Round Poles)
SBC-45R-XX	10.5" Sq x 5" Deep (use on 4.5" Round Poles)
SBC-5R-XX	10.5" Sq x 5" Deep (use on 5" Round Poles)
SBC-6R-XX	10.5" Sq x 5" Deep (use on 6" Round Poles)
RBC-4R-XX	10.91" Dia. x 5" Deep (use on 4" Round Poles)
RBC-45R-XX	10.91" Dia. x 5" Deep (use on 4.5" Round Poles)
RBC-5R-XX	11.91" Dia. x 5" Deep (use on 5" Round Poles)
RBC-55R-XX	11.91" Dia. x 5" Deep (use on 5.5" Round Poles)
RBC-6R-XX	11.91" Dia. x 5" Deep (use on 6" Round Poles)
RBC-65R-XX	14.35" Dia. x 5" Deep (use on 6" Round Poles)





Submitted by Swaney Lighting Associates Inc

Job Name: 400 RIVERSIDE STREET (LOT 4) SITE -  
Architect: DELUCA HOFFMAN

Catalog Number: SSS-30-40-7-A2-DB  
Notes:

Type: D  
SLA07-8158

# Poles-SSS Square Straight Steel

- Square Straight Steel Shaft
- One-piece construction
- Side, Tenon, or Pad mounting available
- Ground lug standard
- Galvanized anchor bolts and template included (4-bolt design)
- Base cover standard (Square)
- Gasketed hand hole cover standard
- Lektrocote finish standard
- CSA certification available

Pole #	Pole Ht.	Wind Load Rating			Bolt	Bolt Circle	Bolt Sq.	Base Plate	Anchor Bolt Size	Bolt Wt.
		70 MPH	80 MPH	100 MPH						
106	10.3	22	22	22	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
91	10.3	22	22	22	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
104	12.3	21	21	21	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
106	12.3	21	21	21	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
116	12.3	21	21	21	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
122	12.3	21	21	21	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
128	14.3	20	20	20	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
138	14.3	20	20	20	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
143	14.3	20	20	20	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
144	14.3	20	20	20	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
148	14.3	20	20	20	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
158	14.3	20	20	20	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
166	16.3	19	19	19	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
173	16.3	19	19	19	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
191	16.3	19	19	19	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
266	20.3	17	17	17	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
286	20.3	17	17	17	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
312	20.3	17	17	17	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
288	20.3	17	17	17	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
266	20.3	17	17	17	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
231	25.3	15	15	15	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
324	25.3	15	15	15	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
437	25.3	15	15	15	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
497	25.3	15	15	15	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
537	25.3	15	15	15	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
467	25.3	15	15	15	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
630	25.3	15	15	15	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
538	25.3	15	15	15	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
726	25.3	15	15	15	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
614	25.3	15	15	15	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4
802	25.3	15	15	15	11	8-11	5.6-7.8	10.25x0.75	7.5x30x3	4

Note: Allowable EPA with 1.3 gust factor. To determine max. pole loading weight, multiply allowable EPA by 30 lbs. Factory supplied template must be used when setting anchor bolts. Hubbell Lighting will deny any claim for incorrect anchorage placement resulting from failure to use factory supplied template and anchor bolts.

## Pole Logic

Section	Material	Finish	Style	Length	Shaft Dia.	Options
AX	Side - Single	DB	DB	25	40	Q18
BX	Side - Double at 90°	BL	BL	25	40	Q22
CX	Side - Double at 180°	WH	WH	25	40	Q26
DX	Side - Triple at 90°	GR	GR	25	40	Q27
FX	Side - Quad at 90°	PS	PS	25	40	Q30
P1	Pad Mount - Spider Type	RD	RD	25	40	Q40
P2	Pad Mount - Yoke Type	FG	FG	25	40	Q32
P3	Pad Mount - XL only	CC	CC	25	40	Q40
TA	Tenon (2.375" OD)	PR	PR	25	40	LAB
TB	Tenon (2.875" OD)	PR	PR	25	40	LAB
TR	Removable Tenon (2.375 x 4.25)	PR	PR	25	40	LAB
CD	Concord Luminaire	PR	PR	25	40	LAB
OT	No drilling (includes pole cap)	PR	PR	25	40	LAB

1 = Spaulding luminaires with a straight pole (4-bolt). 2 = Cameron CR1 and Raven Series luminaires. 3 = Spaulding Detail III luminaires. 4 = MSS & DS luminaires. 5 = Spaulding Detail III luminaires. 6 = MSV, RCS, RCL & DM luminaires. Removable tenon used in conjunction with side arm mounting. First specify desired arm configuration followed by the "TR" notation. Example: SSS-25-40-7-C6-TR-DB Specify option location using logic found in pole introduction pages.

150S	150W
70S	70W
<b>HPS</b>	
84F	2x42, 2x32, 2x26W
42F	42/32/26W
<b>ELECTRONIC FLUORESCENT</b>	
100E	100W
70E	70W
<b>ELECTRONIC MH</b>	
175H	175W
<b>METAL HALIDE</b>	
175P	175W
150P	150W
100P	100W
70P	70W
50P	50W (120/277V only)
<b>PULSE START METAL HALIDE</b>	
<b>WATTAGE/SOURCE</b>	
LMC	Laredo Medium Cutoff

(order as separate part #)

**ACCESSORIES**

120 or 277V (specify voltage)	BBU-XXX	Ballast Back-Up
Two MR11 or MR16 Two Pin Sockets (for 12V power by others)	2EM12	Two MR11 or MR16 Two Pin Sockets (for 12V power by others)
MR11/MR16 Two Pin Socket (for remote power by others)	EM12	MR11/MR16 Two Pin Socket (for remote power by others)
DC Bayonet Socket	EM	DC Bayonet Socket
Time Delay Quartz stand by system less lamp	QST	Time Delay Quartz stand by system less lamp
Fusing replace X with voltage, i.e.: F(120)	F(XXX)	Fusing replace X with voltage, i.e.: F(120)
Lamp included	LP	Lamp included
Touch Latch, Tool-free Entry i.e.: PC(120)	TL	Touch Latch, Tool-free Entry i.e.: PC(120)
Button Photocontrol replace X with voltage, i.e.: PC(120)	PC(XXX)	Button Photocontrol replace X with voltage, i.e.: PC(120)

- For "Lamp included" option on fluorescent, indicate desired wattage: 42E - LP42, LP32, LP26; 84E - LP84 (2x42W), LP64 (2x32W), LP52 (2x26W).
- Lamps not included.
- BBU option provides integral ballast back-up and operates one fluorescent lamp at up to 1250 lumens for a minimum of 90 minutes. Operation is reliable between -4°F and +131°F. Maximum output is achieved when the lamp temperature is 77°F. Eliminates the need for remote batteries or additional fixtures. On two lamp units (2x26W, 2x32W, 2x42W) battery powers one lamp to 1250 lumens. Two lamp fluorescent units have two electronic ballasts.
- Two lamp fluorescent units can provide switching for 50% fixture output if desired.
- 480 volt available on 100P, 150P, 175P, 175H, 150S only.
- Standard on electronic MH or Fluorescent.

8	Quad-Tap <sup>®</sup> (120, 208, 240, 277V)
6	Tri-Tap <sup>®</sup> (120, 277, 347V)
5	480V
E	220/240V 50Hz (standard on Electronic or Fluorescent ballasts)
9	120/277V (50W PS only)
0	Less Ballast
<b>FINISH</b>	
1	Bronze
2	Black
3	Gray
4	White
5	Platinum

Series	LMC
Series	LMC
Wattage/Source	175P
Voltage	8
Finish	1
Options	TL

**ORDERING EXAMPLE**

**ORDERING INFORMATION**



- CSA certified to UL 1598 for use in wet locations.
- Decorative cast aluminum housing and door. Rugged protection for internal components. Provides heat sink and long ballast life.
- Full cutoff distribution - flat glass and segmented reflector provide wide spread with an environmentally-friendly light control. Standard, removable front shield on single lamp units, reduces forward beam projection while maintaining lateral throw, if desired.
- Vertical lamp position (lamp is optional) provides maximum performance and life.
- Three point lag over recessed wiring boxes. Three 1/2" conduit hubs allow feed-thru surface wiring capability.
- Wide selection of wattage and sources including pulse start, electronic metal halide and two-lamp fluorescent systems.
- 800 Series powder paint for lasting appearance in outdoor environments.
- Multiple options customize including a tool-free latch, which allows re-lamping of H.I.D. units from the ground, photocontrol for energy savings, integral ballast back-up battery for fluorescent units, fusing, quartz standby and EM sockets for remote power, lamps and five standard finishes.

**LISTINGS**

**SPECIFICATIONS**

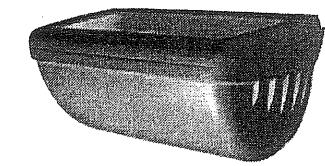
- Full cutoff perimeter lighting.

**APPLICATIONS**

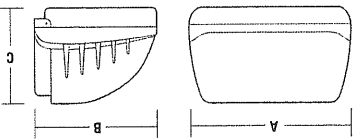
- Full cutoff perimeter lighting.

LAREDO SERIES

Cat #	Approvals
Job	Type



A	16"	406 mm
B	12 1/8"	308 mm
C	9"	229 mm



SLA07-8158

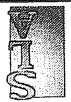
E

Type:

Catalog Number: LMC-175P8-1-LP

Notes: LAMP INC

Job Name: 400 RIVERSIDE STREET (LOT 4) SITE - INITIAL Architect: DELUCA HOFFMAN



Submitted by Swaney Lighting Associates Inc





Submitted by Swaney Lighting Associates Inc

Job Name: 400 RIVERSIDE STREET (LOT 4) SITE -  
INITIAL Architect: DELUCA HOFFMAN

Catalog Number: LMC-175P8-1-LP  
Notes: LAMP INC

Type: E  
SLA07-8158

### PHOTOMETRICS

IES File #	Unit Description
10168	175W Metal Halide with Shield
10163	175W Metal Halide - Shield removed
10178	175W Pulse Start with Shield
10169	175W Pulse Start - Shield removed
10176	150W Pulse Start with Shield
10171	150W Pulse Start - Shield removed
10179	100W Pulse Start with Shield*
10184	100W Pulse Start - Shield removed*
10190	70W Pulse Start with Shield*
10191	70W Pulse Start - Shield removed*
10177	150W HPS with Shield
10170	150W HPS - Shield removed
10180	42W Fluorescent with Shield
10185	42W Fluorescent - Shield removed
10339	2x42W Fluorescent - no Shield

\* Output for magnetic pulse start or electronic ballast.

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

Outdoor Lighting



Hubbell Outdoor Lighting • 101 Corporate Drive • Spartanburg, SC 29303 • PHONE: 864-599-6000  
For more information visit our web site: [www.hubbell-ltg.com](http://www.hubbell-ltg.com)