25-B-5

2003-0199

135 Marginal Way

Plan Amendment

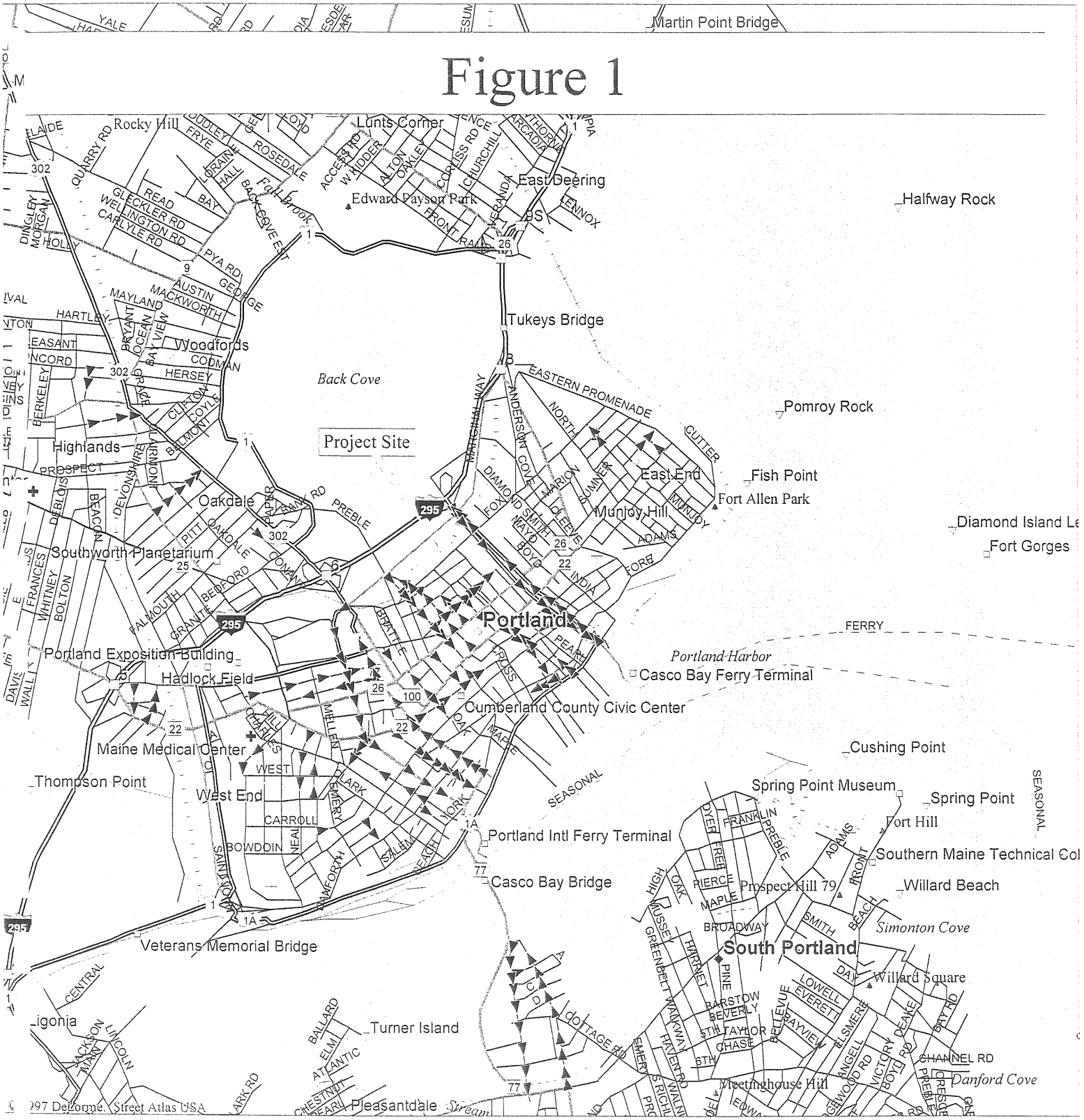
Five Liver Co.

APPENDIX A

Site Location Map

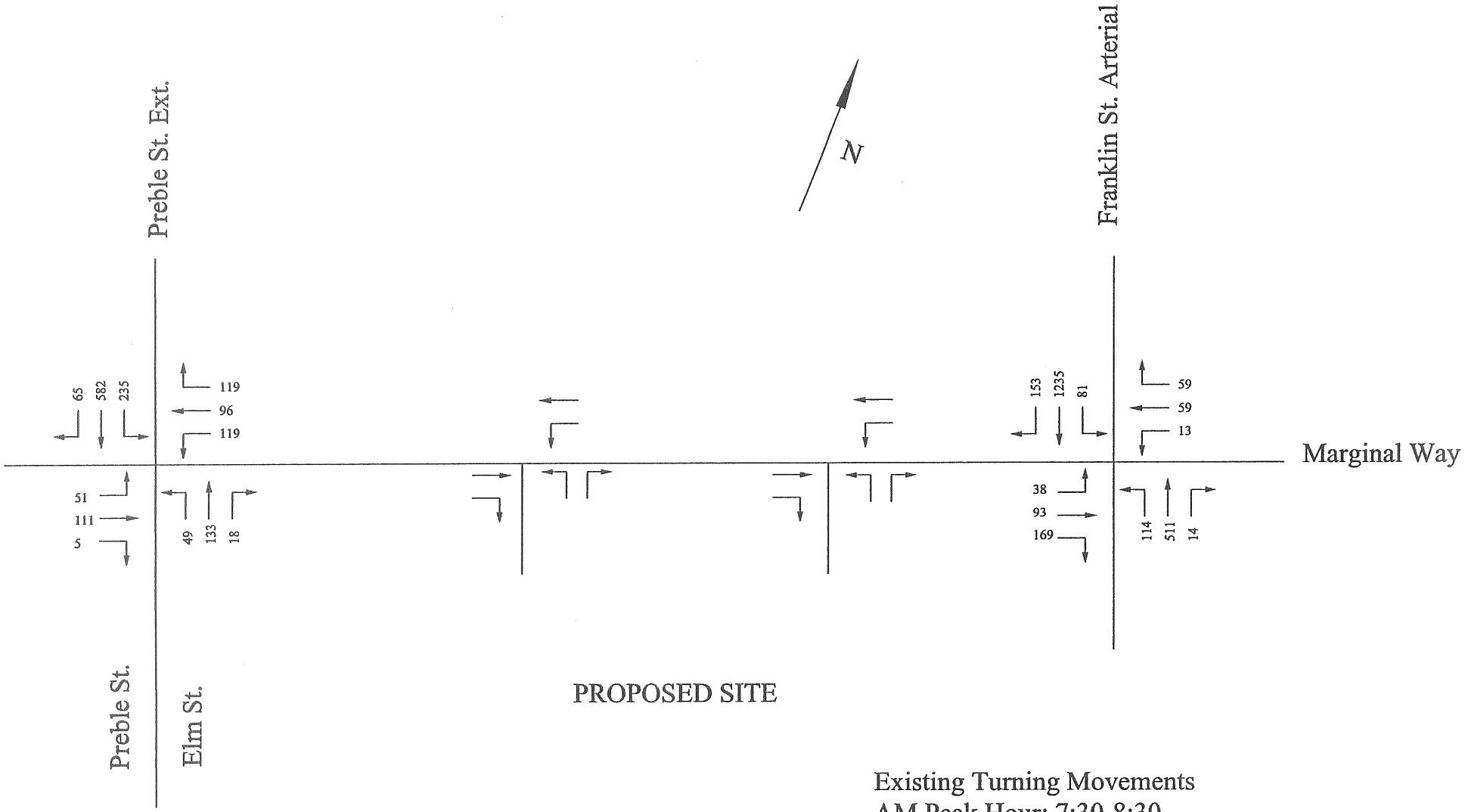
Turning Movement Diagrams

Figure 1



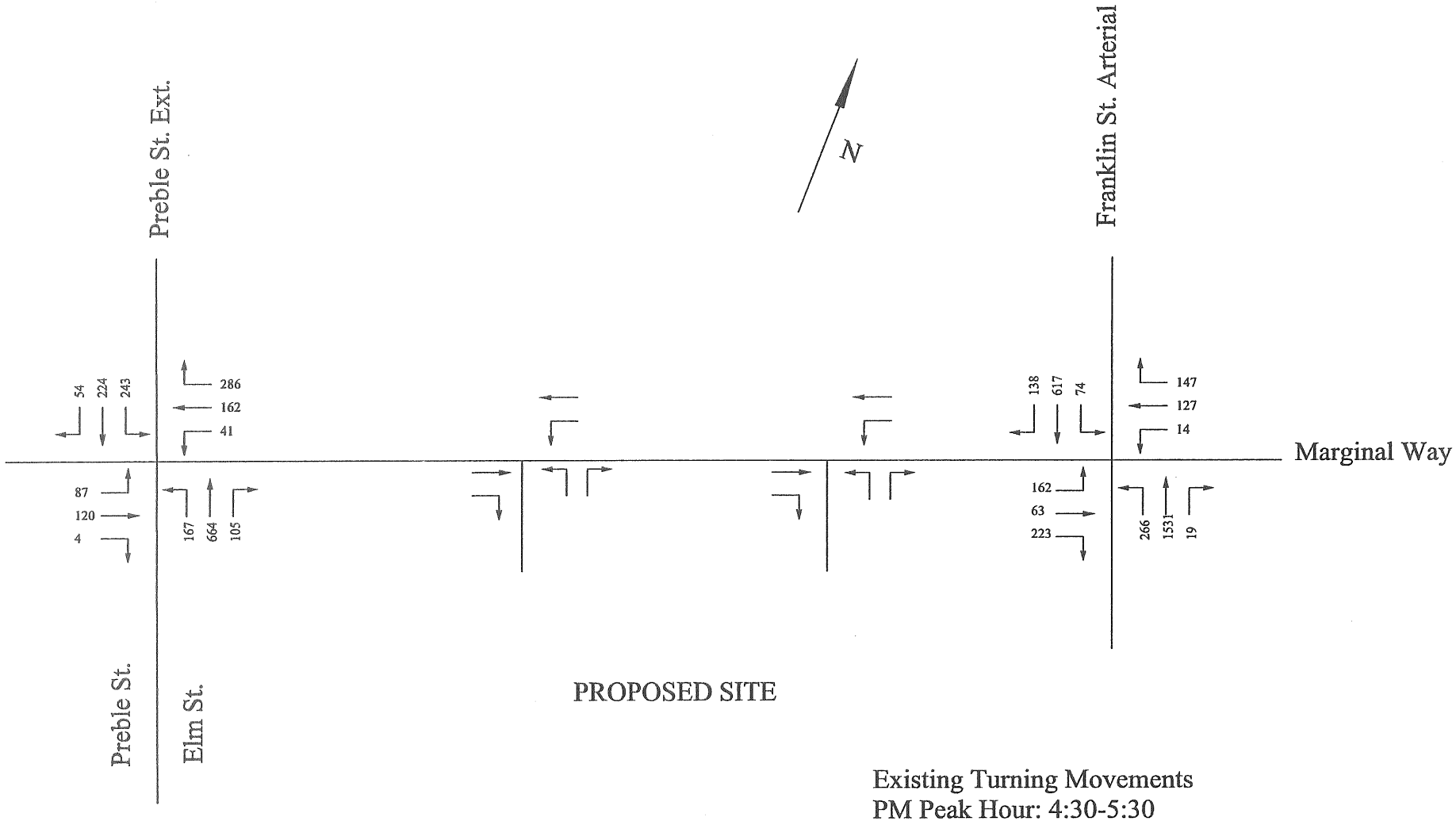
Mag 14.00
Tue Sep 01 08:07 1998
ale 1:31,250 (at center)
2000 Feet
1000 Meters

- Local Road
- Primary State Route
- Ferry
- Walkway/Stairway
- US Highway
- Interstate/Limited Access
- Major Connector
- State Route
- Exit
- Railroad
- Point of Interest
- Small Town
- Large City
- Summit
- Geographic Feature
- Hospital



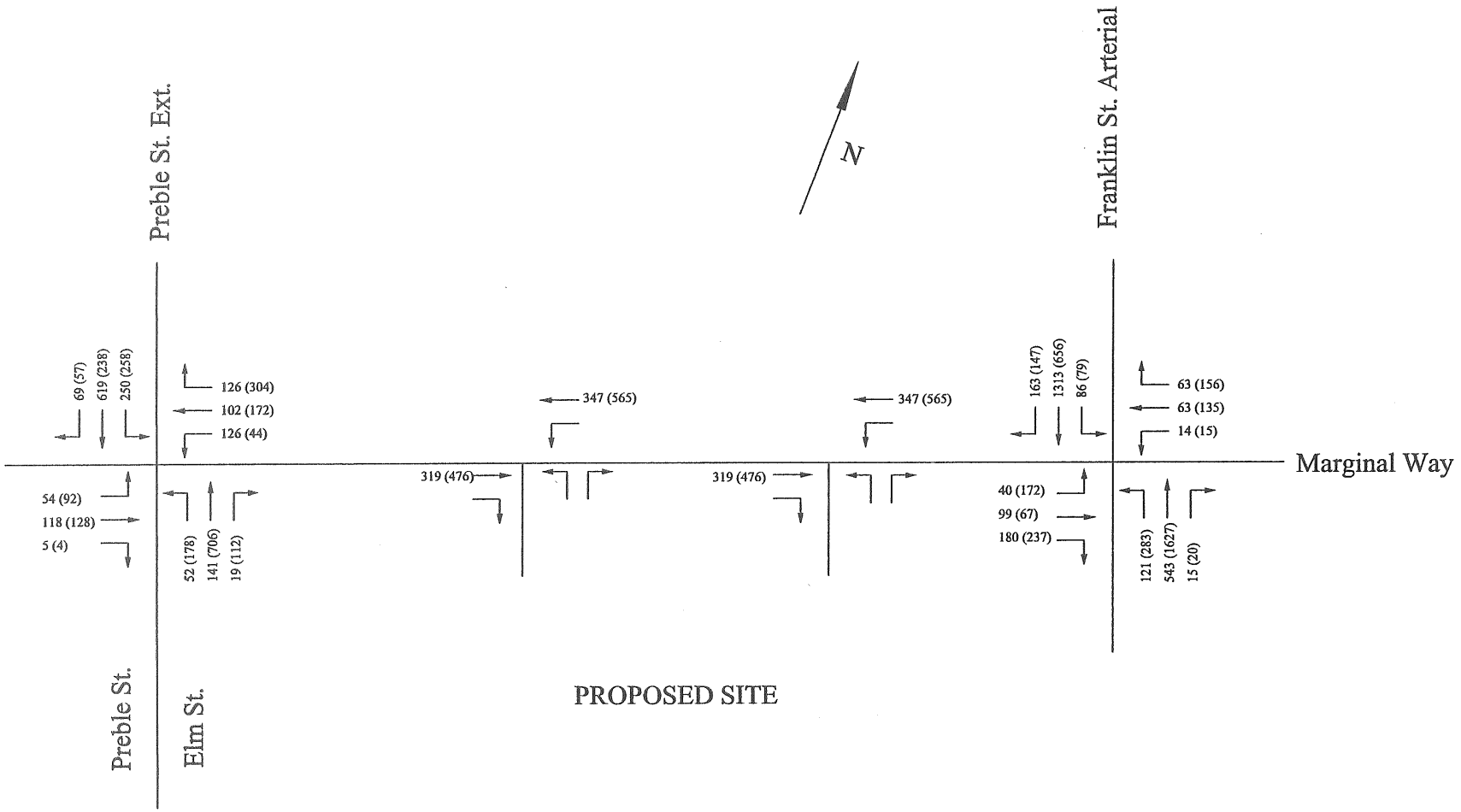
Existing Turning Movements
AM Peak Hour: 7:30-8:30
8/26/98
Figure 2

Prepared for: Fore River Company	Gorrill-Palmer Consulting Engineers, Inc. *Traffic and Civil Engineering Services*		
Project: Proposed Office Building	PO Box 1237, 22 Shaker Rd., Gray, Me 04039 — Tel: 207-657-6910, Fax: 207-657-6912, E-mail: Gor-PalCE@MSN.Com		
Location: Marginal Way	Designed: TLG	Date: 8/30/98	Figure: 2
	Drawn:	Scale: NTS	
	Checked:	Job No. 98035	



Existing Turning Movements
PM Peak Hour: 4:30-5:30
8/26/98
Figure 3

Prepared for: Fore River Company	Gorrill–Palmer Consulting Engineers, Inc.		
	Traffic and Civil Engineering Services		
Project: Proposed Office Building	PO Box 1237, 22 Shaker Rd., Gray, Me 04039 — Tel: 207–657–6910, Fax: 207–657–6912, E–mail: Gor–PalCE@MSN.Com		
Location: Marginal Way	Designed: TLG	Date: 8/30/98	Figure: 3
	Drawn:	Scale: NTS	
	Checked:	Job No. 98035	



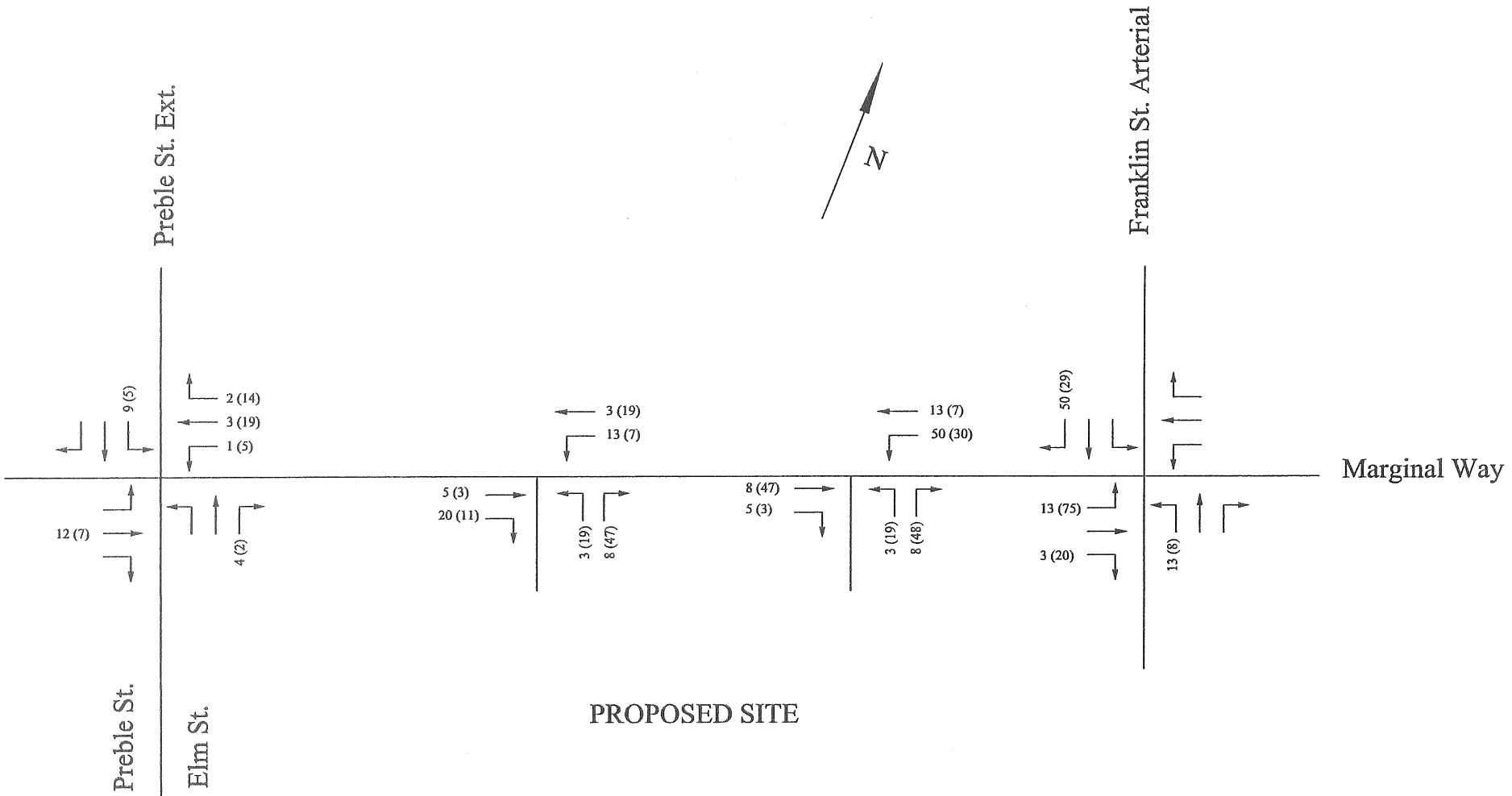
Adjustments: MDOT Weekly Group Mean Factor Gp1 0.91/0.89 = 1.022
Background Growth to 2000 2%/yr. = 1.04
Total Adjustment Factor 1.022 * 1.04 = 1.063
00 AM Peak Hour
(00) PM Peak Hour

2000 Pre-Development
Traffic Volumes
Figure 4

Prepared for:	Fore River Company
Project:	Proposed Office Building
Location:	Marginal Way

GP Gorrill-Palmer Consulting Engineers, Inc.
Traffic and Civil Engineering Services
PO Box 1237
22 Shaker Rd.
Gray, Me 04039
Tel: 207-657-6910
Fax: 207-657-6912
E-mail: Gor-PalCE@MSN.Com

Designed: TLG	Date: 8/30/98	Figure: 4
Drawn:	Scale: NTS	
Checked:	Job No. 98035	



TOTALS:

AM Peak Hour: 88 entering - 22 exiting = 110 total

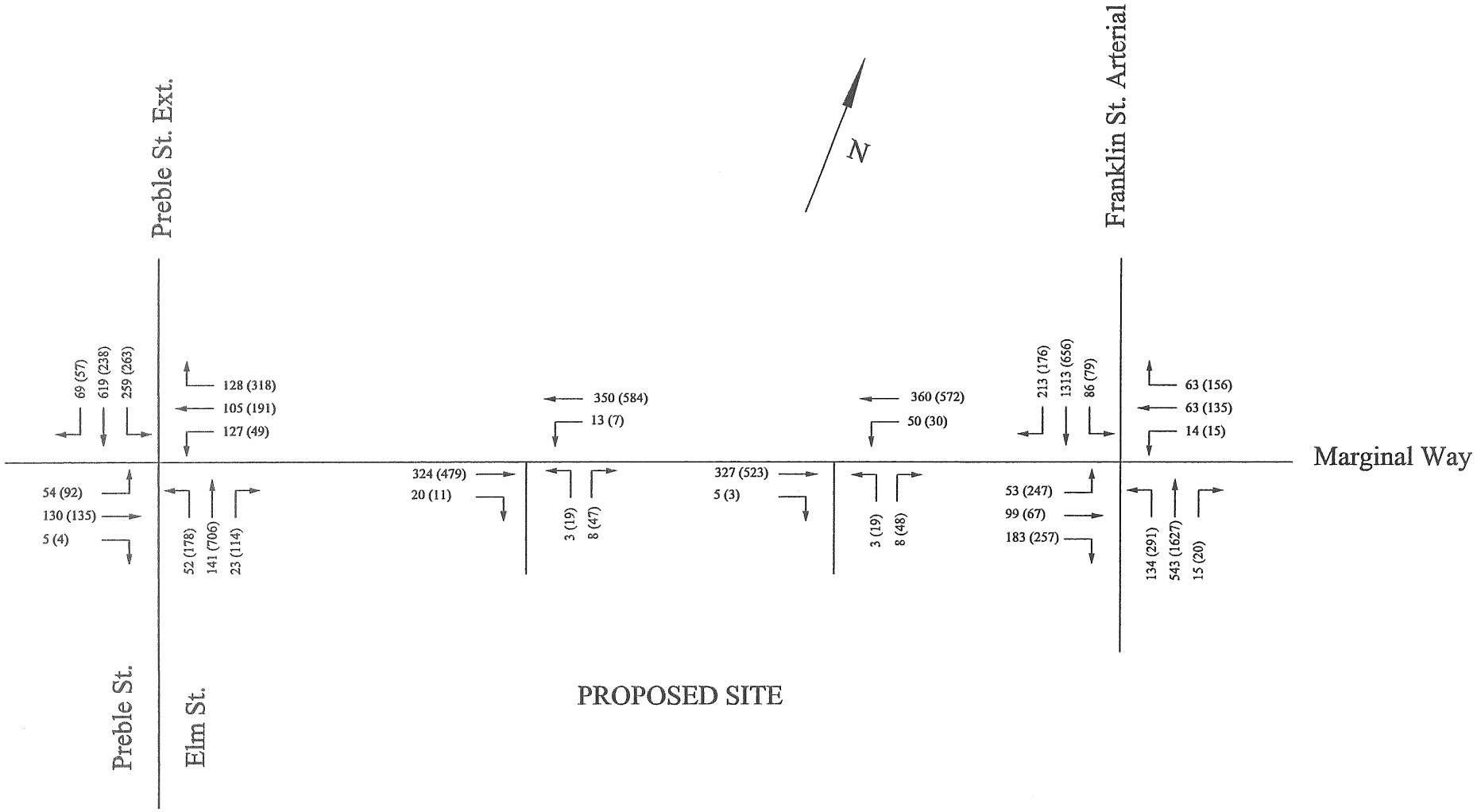
PM Peak Hour: 51 entering - 133 exiting = 184 total

00 AM Peak Hour

(00) PM Peak Hour

Trip Assignments
Figure 5

Prepared for: Fore River Company	GP Gorrill-Palmer Consulting Engineers, Inc. *Traffic and Civil Engineering Services*		
Project: Proposed Office Building	PO Box 1237, 22 Shaker Rd, Gray, Me 04039 — Tel: 207-657-6910, Fax: 207-657-6912, E-mail: Gor-PalCE@MSN.Com		
Location: Marginal Way	Designed: TLG	Date: 8/30/98	Figure: 5
	Drawn:	Scale: NTS	
	Checked:	Job No. 98035	



00 AM Peak Hour
(00) PM Peak Hour

2000 Post-Development
Combined Traffic Volumes
Figure 6

Prepared for: Fore River Company	GP Gorrill–Palmer Consulting Engineers, Inc.		
	Traffic and Civil Engineering Services		
	PO Box 1237, 22 Shaker Rd, Gray, Me 04039 — Tel: 207–657–6910, Fax: 207–657–6912, E–mail: Gor–PalCE@MSN.Com		
Project: Proposed Office Building	Designed: TLG	Date: 8/30/98	Figure: 6
Location: Marginal Way	Drawn:	Scale: NTS	
	Checked:	Job No. 98035	

APPENDIX B

Trip Assignment

Capacity Analyses

	TRIP ASSIGNMENT(%)					
ORIGIN	I-295	FRANKLIN	ELM	PREBLE	MARGINAL	
INTOWN		5	2.5			
WEST END			1		5.7	
EAST END		6.2				
WEST GATE	3.2					
RIVERTON					3	
NORTHGATE	2.7					
DEERING CTR				2.6		
BRIGHTON				2.6		
WOODFORD				2.3		
CUMB. WEST	11.7					
CUMB. COAST	8.8					
CUMB. NORTH	8.9					
CUMB. RTE 100	2.6					
YORK COUNTY	1.5					
SAGADAHOC CTY	0.1					
OXFORD CTY					0.2	
ANDROSCOGGIN CTY	0.3					
UPSTATE	0.6					
OUT OF STATE	0.1					
TOTAL	40.5	11.2	3.5	7.5	8.9	71.6
PERCENTAGE	**57**	**16**	**5**	**10**	**12**	**100**

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4f 09-01-1998
Center For Microcomputers In Transportation

Streets: (E-W) Marginal Way (N-S) Franklin Street
Analyst: Tom Gorrill File Name: MFAMPRE.HC9
Area Type: Other 8-30-98 AM peak
Comment: 2000 Predevelopment Traffic

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	1	0	> 1	1	1	2	< 0	1	2	1
Volumes	40	99	180	14	63	63	121	543	15	86	1313	163
Lane W (ft)		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	12.0
RTOR Vols			2			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*	*						
Thru	*	*						
Right	*	*						
Peds		*						
WB Left		*						
Thru		*						
Right		*						
Peds		*						
NB Right								
SB Right								
Green	16.0A	18.0A						
Yellow/AR	4.0	5.0						
NB Left							*	
Thru						*	*	
Right						*	*	
Peds						*		
SB Left					*			
Thru					*	*		
Right					*	*		
Peds						*		
EB Right								
WB Right								
Green					18.0A	45.0A	20.0A	
Yellow/AR					5.0	5.0	5.0	

Cycle Length: 141 secs Phase combination order: #1 #2 #5 #6 #7

Intersection Performance Summary

	Lane Group: Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LT	438	1544	0.372	0.284	26.4	D	27.2	D
	R	430	1517	0.488	0.284	27.8	D		
WB	LT	213	1502	0.394	0.142	36.2	D	36.0	D
	R	193	1361	0.357	0.142	35.8	D		
NB	L	271	1736	0.476	0.156	36.1	D	17.2	C
	TR	1806	3536	0.346	0.511	13.3	B		
SB	L	244	1719	0.377	0.142	35.9	D	21.3	C
	T	1831	3689	0.810	0.496	21.3	C		
	R	760	1531	0.230	0.496	13.1	B		

Intersection Delay = 21.7 sec/veh Intersection LOS = C

Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.657

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4f 09-01-1998

Center For Microcomputers In Transportation

Streets: (E-W) Marginal Way (N-S) Franklin Street
Analyst: Tom Gorrill File Name: MFAMPOST.HC9
Area Type: Other 8-30-98 AM peak
Comment: 2000 Postdevelopment Traffic

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	1	0	> 1	1	1	2	< 0	1	2	1
Volumes	53	99	183	14	63	63	134	543	15	86	1313	213
Lane W (ft)		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	12.0
RTOR Vols			2			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*	*			NB Left		*	
Thru	*	*			Thru	*	*	
Right	*	*			Right	*	*	
Peds		*			Peds	*		
WB Left		*			SB Left	*		
Thru		*			Thru	*	*	
Right		*			Right	*	*	
Peds		*			Peds		*	
NB Right					EB Right			
SB Right					WB Right			
Green	16.0A	18.0A			Green	18.0A	45.0A	20.0A
Yellow/AR	4.0	5.0			Yellow/AR	5.0	5.0	5.0

Cycle Length: 141 secs Phase combination order: #1 #2 #5 #6 #7

Intersection Performance Summary

	Lane Group:	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
	Mvmts Cap							
EB	LT 429	1511	0.415	0.284	26.9	D	27.5	D
	R 430	1517	0.495	0.284	27.9	D		
WB	LT 211	1490	0.397	0.142	36.2	D	36.0	D
	R 193	1361	0.357	0.142	35.8	D		
NB	L 271	1736	0.528	0.156	36.9	D	17.7	C
	TR 1806	3536	0.346	0.511	13.3	B		
SB	L 244	1719	0.377	0.142	35.9	D	21.1	C
	T 1831	3689	0.810	0.496	21.3	C		
	R 760	1531	0.301	0.496	13.6	B		

Intersection Delay = 21.8 sec/veh Intersection LOS = C

Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.667

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4f 09-01-1998
Center For Microcomputers In Transportation

Streets: (E-W) Marginal Way (N-S) Franklin Street
Analyst: Tom Gorrill File Name: MFPMPRE.HC9
Area Type: Other 9-1-98 PM peak
Comment: 2000 Predevelopment Traffic

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0 >	1	1	0 >	1	1	1	2 <	0	1	2	1
Volumes	172	67	237	15	135	156	283	1627	20	79	656	147
Lane W (ft)		12.0	12.0		12.0	12.0	12.0	14.0		12.0	12.0	12.0
RTOR Vols			2			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*	*			NB Left		*	
Thru	*	*			Thru	*	*	
Right	*	*			Right	*	*	
Peds		*			Peds	*		
WB Left		*			SB Left	*		
Thru		*			Thru	*	*	
Right		*			Right	*	*	
Peds		*			Peds		*	
NB Right					EB Right		*	
SB Right	*				WB Right	*	*	
Green	16.0A	22.0A			Green	15.0A	19.0A	45.0A
Yellow/AR	4.0	5.0			Yellow/AR	5.0	5.0	5.0

Cycle Length: 141 secs Phase combination order: #1 #2 #5 #6 #7

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LT	438	1405	0.600	0.312	28.2	D	17.6	C
	R	993	1538	0.260	0.645	6.9	B		
WB	LT	270	1586	0.670	0.170	39.7	D	26.6	D
	R	749	1553	0.251	0.482	13.9	B		
NB	L	596	1787	0.541	0.333	25.1	D	31.3	D
	TR	1978	3928	0.994	0.504	32.3	D		
SB	L	209	1736	0.435	0.121	38.1	D	29.7	D
	T	1062	3654	0.745	0.291	31.3	D		
	R	604	1468	0.280	0.411	17.9	C		

Intersection Delay = 28.8 sec/veh Intersection LOS = D

Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.791

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4f 09-02-1998
Center For Microcomputers In Transportation

Streets: (E-W) Marginal Way (N-S) Franklin Street
Analyst: Tom Gorrill File Name: MFPMPOST.HC9
Area Type: Other 9-1-98 PM peak
Comment: 2000 Postdevelopment Traffic

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	1	0	> 1	1	1	2	< 0	1	2	1
Volumes	247	67	257	15	135	156	291	1627	20	79	656	176
Lane W (ft)		12.0	12.0		14.0	12.0	12.0	14.0		12.0	12.0	12.0
RTOR Vols			2			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*	*					*	
Thru	*	*				*	*	
Right	*	*				*	*	
Peds		*				*		
WB Left		*						
Thru		*						
Right		*						
Peds		*						
NB Right								
SB Right	*							
Green	16.0A	22.0A			15.0A	19.0A	45.0A	
Yellow/AR	4.0	5.0			5.0	5.0	5.0	

Cycle Length: 141 secs Phase combination order: #1 #2 #5 #6 #7

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LT	434	1391	0.795	0.312	35.4	D	22.7	C
	R	993	1538	0.282	0.645	7.0	B		
WB	LT	275	1615	0.658	0.170	39.2	D	26.3	D
	R	749	1553	0.251	0.482	13.9	B		
NB	L	596	1787	0.556	0.333	25.3	D	31.3	D
	TR	1978	3928	0.994	0.504	32.3	D		
SB	L	209	1736	0.435	0.121	38.1	D	29.5	D
	T	1063	3654	0.745	0.291	31.3	D		
	R	604	1468	0.335	0.411	18.4	C		

Intersection Delay = 29.2 sec/veh Intersection LOS = D

Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.856

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4f 08-30-1998
Center For Microcomputers In Transportation

Streets: (E-W) Marginal Way (N-S) Preble Street
Analyst: Tom Gorrill File Name: MPAMPRE.HC9
Area Type: Other 8-29-98 AM peak
Comment: 2000 Predevelopment Traffic

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	< 0	1	2	< 0	1	2	< 0	1	2	< 0
Volumes	54	118	5	126	102	126	52	141	19	250	619	69
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
RTOR Vols			5			60			2			20
Lost Time	5.00	5.00	5.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	*				*			
	Thru		*					*	
	Right		*					*	
	Peds		*					*	
WB	Left	*				*			
	Thru		*					*	
	Right		*					*	
	Peds		*					*	
NB	Right								
SB	Right								
Green		15.0A	25.0A			5.0A	30.0A		
Yellow/AR		5.0	5.0			5.0	5.0		

Cycle Length: 115 secs Phase combination order: #1 #2 #5 #6 #7

Intersection Performance Summary

	Lane Group: Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	190	1456	0.369	0.130	30.1	D	25.7	D
	TR	765	3519	0.210	0.217	23.9	C		
WB	L	262	1770	0.619	0.148	32.8	D	27.3	D
	TR	796	3388	0.285	0.235	23.4	C		
NB	L	247	1671	0.267	0.148	28.2	D	22.4	C
	TR	1019	3662	0.205	0.278	20.5	C		
SB	L	411	1752	0.780	0.235	33.0	D	23.9	C
	TR	1345	3682	0.668	0.365	20.7	C		

Intersection Delay = 24.6 sec/veh Intersection LOS = C

Lost Time/Cycle, L = 12.0 sec Critical v/c(x) = 0.494

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4f 08-30-1998

Center For Microcomputers In Transportation

Streets: (E-W) Marginal Way (N-S) Preble Street
Analyst: Tom Gorrill File Name: MPAMPOST.HC9
Area Type: Other 8-29-98 AM peak
Comment: 2000 Postdevelopment Traffic

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	< 0	1	2	< 0	1	2	< 0	1	2	< 0
Volumes	54	130	5	127	105	128	52	141	23	259	619	69
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
RTOR Vols			5			60			2			20
Lost Time	5.00	5.00	5.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru		*			Thru		*	
Right		*			Right		*	
Peds		*			Peds		*	
WB Left	*				SB Left	*	*	
Thru		*			Thru		*	*
Right		*			Right		*	*
Peds		*			Peds			*
NB Right					EB Right			
SB Right					WB Right			
Green	15.0A	25.0A			Green	15.0A	5.0A	30.0A
Yellow/AR	5.0	5.0			Yellow/AR	5.0	5.0	5.0

Cycle Length: 115 secs Phase combination order: #1 #2 #5 #6 #7

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	190	1456	0.369	0.130	30.1	D	25.7	D
	TR	772	3551	0.229	0.217	24.0	C		
WB	L	262	1770	0.623	0.148	32.9	D	27.3	D
	TR	796	3389	0.293	0.235	23.4	C		
NB	L	247	1671	0.267	0.148	28.2	D	22.4	C
	TR	1015	3649	0.211	0.278	20.6	C		
SB	L	411	1752	0.807	0.235	34.6	D	24.5	C
	TR	1345	3682	0.668	0.365	20.7	C		

Intersection Delay = 24.9 sec/veh Intersection LOS = C

Lost Time/Cycle, L = 12.0 sec Critical v/c(x) = 0.496

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4f 09-01-1998
Center For Microcomputers In Transportation

Streets: (E-W) Marginal Way (N-S) Preble Street
Analyst: Tom Gorrill File Name: MPAMPOST.HC9
Area Type: Other 8-29-98 AM peak
Comment: 2000 Postdevelopment Traffic

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	< 0	1	2	< 0	1	2	< 0	1	2	< 0
Volumes	54	130	5	127	105	128	52	141	23	259	619	69
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
RTOR Vols			5			60			2			20
Lost Time	5.00	5.00	5.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left	*				NB	Left	*			
	Thru		*				Thru			*	
	Right		*				Right			*	
	Peds		*				Peds			*	
WB	Left	*				SB	Left	*	*		
	Thru		*				Thru		*	*	
	Right		*				Right		*	*	
	Peds		*				Peds			*	
NB	Right					EB	Right				
SB	Right					WB	Right				
Green		15.0A	25.0A			Green		15.0A	5.0A	30.0A	
Yellow/AR		5.0	5.0			Yellow/AR		5.0	5.0	5.0	

Cycle Length: 115 secs Phase combination order: #1 #2 #5 #6 #7

Intersection Performance Summary

	Lane Group: Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	190	1456	0.369	0.130	30.1	D	25.7	D
	TR	772	3551	0.229	0.217	24.0	C		
WB	L	262	1770	0.623	0.148	32.9	D	27.3	D
	TR	796	3389	0.293	0.235	23.4	C		
NB	L	247	1671	0.267	0.148	28.2	D	22.4	C
	TR	1015	3649	0.211	0.278	20.6	C		
SB	L	411	1752	0.807	0.235	34.6	D	24.5	C
	TR	1345	3682	0.669	0.365	20.7	C		

Intersection Delay = 24.9 sec/veh Intersection LOS = C
Lost Time/Cycle, L = 12.0 sec Critical v/c(x) = 0.496

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4f 08-30-1998
Center For Microcomputers In Transportation

Streets: (E-W) Marginal Way (N-S) Preble Street
Analyst: Tom Gorrill File Name: MPPMPOST.HC9
Area Type: Other 8-30-98 PM peak
Comment: 2000 Postdevelopment Traffic

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	< 0	1	2	< 0	1	2	< 0	1	2	< 0
Volumes	92	135	4	49	191	318	178	706	114	263	238	57
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
RTOR Vols			0			126			7			41
Lost Time	5.00	5.00	5.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	*				NB Left	*			
Thru		*			Thru			*	
Right		*			Right			*	
Peds		*			Peds			*	
WB Left	*				SB Left	*	*		
Thru		*			Thru		*	*	
Right		*			Right		*	*	
Peds		*			Peds			*	
NB Right					EB Right				
SB Right					WB Right				
Green	15.0A	17.0A			Green	18.0A	5.0A	35.0A	
Yellow/AR	5.0	5.0			Yellow/AR	5.0	5.0	5.0	

Cycle Length: 115 secs Phase combination order: #1 #2 #5 #6 #7

Intersection Performance Summary

	Lane Group: Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	210	1612	0.542	0.130	32.4	D	30.0	D
	TR	532	3602	0.340	0.148	28.6	D		
WB	L	249	1687	0.225	0.148	28.0	D	36.9	D
	TR	549	3325	0.843	0.165	38.0	D		
NB	L	308	1770	0.731	0.174	34.9	D	33.1	D
	TR	1173	3646	0.921	0.322	32.8	D		
SB	L	448	1719	0.638	0.261	26.5	D	20.2	C
	TR	1508	3689	0.192	0.409	14.1	B		

Intersection Delay = 30.8 sec/veh Intersection LOS = D

Lost Time/Cycle, L = 14.0 sec Critical v/c(x) = 0.766

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Streets: (N-S) Easterly Driveway (E-W) Marginal Way
Major Street Direction.... EW
Length of Time Analyzed... 15 (min)
Analyst..... Tom Gorrill
Date of Analysis..... 9/1/98
Other Information.....2000 Postdevelopment Am Peak Hour
Two-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2 <	0	0 >	2	0	0 >	1 <	0	0	0	0
Stop/Yield			N			N						
Volumes		327	5	50	360		3	0	8			
PHF		.85	.85	.85	.85		.85	.85	.85			
Grade		0			0			0				
MC's (%)				0								
SU/RV's (%)				0								
CV's (%)				4								
PCE's				1.04			1.10	1.10	1.10			

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.50	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.50	3.30
Left Turn Minor Road	7.00	3.40

Worksheet for TWSC Intersection

Step 1: RT from Minor Street	NB	SB
Conflicting Flows: (vph)	196	
Potential Capacity: (pcph)	1102	
Movement Capacity: (pcph)	1102	
Prob. of Queue-Free State:	0.99	

Step 2: LT from Major Street	WB	EB
Conflicting Flows: (vph)	391	
Potential Capacity: (pcph)	1057	
Movement Capacity: (pcph)	1057	
Prob. of Queue-Free State:	0.94	
TH Saturation Flow Rate: (pcphpl)	3400	
RT Saturation Flow Rate: (pcphpl)		
Major LT Shared Lane Prob. of Queue-Free State:	0.93	

Step 3: TH from Minor Street	NB	SB
Conflicting Flows: (vph)	871	
Potential Capacity: (pcph)	337	
Capacity Adjustment Factor due to Impeding Movements	0.93	
Movement Capacity: (pcph)	315	
Prob. of Queue-Free State:	1.00	

Step 4: LT from Minor Street	NB	SB
Conflicting Flows: (vph)	871	
Potential Capacity: (pcph)	294	
Major LT, Minor TH Impedance Factor:	0.93	
Adjusted Impedance Factor:	0.93	
Capacity Adjustment Factor due to Impeding Movements	0.93	
Movement Capacity: (pcph)	275	

Intersection Performance Summary

Movement		Flow Rate (pcph)	Move Cap (pcph)		Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)
NB	L	4	275	>					
NB	T	0	315	>	593	6.2	0.0	B	6.2
NB	R	10	1102	>					
WB	L	61	1057			3.6	0.0	A	0.4

Intersection Delay = 0.3 sec/veh

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Streets: (N-S) Easterly Driveway (E-W) Marginal Way
Major Street Direction.... EW
Length of Time Analyzed... 15 (min)
Analyst..... Tom Gorrill
Date of Analysis..... 9/1/98
Other Information.....2000 Postdevelment Pm Peak Hour
Two-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2 <	0	0 >	2	0	0 >	1 <	0	0	0	0
Stop/Yield			N			N						
Volumes		523	3	30	572		19	0	48			
PHF		.85	.85	.85	.85		.85	.85	.85			
Grade		0			0			0				
MC's (%)				0								
SU/RV's (%)				0								
CV's (%)				4								
PCE's				1.04			1.10	1.10	1.10			

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.50	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.50	3.30
Left Turn Minor Road	7.00	3.40

Worksheet for TWSC Intersection

Step 1: RT from Minor Street	NB	SB
Conflicting Flows: (vph)	310	
Potential Capacity: (pcph)	964	
Movement Capacity: (pcph)	964	
Prob. of Queue-Free State:	0.94	

Step 2: LT from Major Street	WB	EB
Conflicting Flows: (vph)	619	
Potential Capacity: (pcph)	798	
Movement Capacity: (pcph)	798	
Prob. of Queue-Free State:	0.95	
TH Saturation Flow Rate: (pcphpl)	3400	
RT Saturation Flow Rate: (pcphpl)		
Major LT Shared Lane Prob. of Queue-Free State:	0.94	

Step 3: TH from Minor Street	NB	SB
Conflicting Flows: (vph)	1325	
Potential Capacity: (pcph)	183	
Capacity Adjustment Factor due to Impeding Movements	0.94	
Movement Capacity: (pcph)	173	
Prob. of Queue-Free State:	1.00	

Step 4: LT from Minor Street	NB	SB
Conflicting Flows: (vph)	1325	
Potential Capacity: (pcph)	151	
Major LT, Minor TH Impedance Factor:	0.94	
Adjusted Impedance Factor:	0.94	
Capacity Adjustment Factor due to Impeding Movements	0.94	
Movement Capacity: (pcph)	143	

Intersection Performance Summary

Movement		Flow Rate (pcph)	Move Cap (pcph)		Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)
NB	L	24	143	>					
NB	T	0	173	>	370	12.7	0.9	C	12.7
NB	R	62	964	>					
WB	L	36	798			4.7	0.0	A	0.2

Intersection Delay = 0.8 sec/veh

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Major Street Direction.... EW
Length of Time Analyzed... 15 (min)
Analyst..... Tom Gorrill
Date of Analysis..... 9/1/98
Other Information.....2000 Postdevelopment Am Peak Hour
Two-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2 <	0	0 >	2	0	0 >	1 <	0	0	0	0
Stop/Yield			N			N						
Volumes		324	20	13	350		3	0	8			
PHF		.85	.85	.85	.85		.85	.85	.85			
Grade		0			0			0				
MC's (%)				0								
SU/RV's (%)				0								
CV's (%)				4								
PCE's				1.04			1.10	1.10	1.10			

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.50	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.50	3.30
Left Turn Minor Road	7.00	3.40

Worksheet for TWSC Intersection

Step 1: RT from Minor Street	NB	SB
Conflicting Flows: (vph)	202	
Potential Capacity: (pcph)	1094	
Movement Capacity: (pcph)	1094	
Prob. of Queue-Free State:	0.99	

Step 2: LT from Major Street	WB	EB
Conflicting Flows: (vph)	405	
Potential Capacity: (pcph)	1039	
Movement Capacity: (pcph)	1039	
Prob. of Queue-Free State:	0.98	
TH Saturation Flow Rate: (pcphpl)	3400	
RT Saturation Flow Rate: (pcphpl)		
Major LT Shared Lane Prob. of Queue-Free State:	0.98	

Step 3: TH from Minor Street	NB	SB
Conflicting Flows: (vph)	820	
Potential Capacity: (pcph)	361	
Capacity Adjustment Factor due to Impeding Movements	0.98	
Movement Capacity: (pcph)	355	
Prob. of Queue-Free State:	1.00	

Step 4: LT from Minor Street	NB	SB
Conflicting Flows: (vph)	820	
Potential Capacity: (pcph)	317	
Major LT, Minor TH Impedance Factor:	0.98	
Adjusted Impedance Factor:	0.98	
Capacity Adjustment Factor due to Impeding Movements	0.98	
Movement Capacity: (pcph)	311	

Intersection Performance Summary

Movement		Flow Rate (pcph)	Move Cap (pcph)	Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)
NB	L	4	311 >					
NB	T	0	355 >	636	5.8	0.0	B	5.8
NB	R	10	1094 >					
WB	L	16	1039		3.5	0.0	A	0.1

Intersection Delay = 0.2 sec/veh

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Major Street Direction.... EW
Length of Time Analyzed... 15 (min)
Analyst..... Tom Gorrill
Date of Analysis..... 9/1/98
Other Information.....2000 Postdevelment Pm Peak Hour
Two-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2 <	0	0 >	2	0	0 >	1 <	0	0	0	0
Stop/Yield			N			N						
Volumes		479	11	7	584		19	0	47			
PHF		.85	.85	.85	.85		.85	.85	.85			
Grade		0			0			0				
MC's (%)				0								
SU/RV's (%)				0								
CV's (%)				4								
PCE's				1.04			1.10	1.10	1.10			

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.50	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.50	3.30
Left Turn Minor Road	7.00	3.40

Worksheet for TWSC Intersection

Step 1: RT from Minor Street	NB	SB
Conflicting Flows: (vph)	288	
Potential Capacity: (pcph)	989	
Movement Capacity: (pcph)	989	
Prob. of Queue-Free State:	0.94	
Step 2: LT from Major Street	**WB**	**EB**
Conflicting Flows: (vph)	577	
Potential Capacity: (pcph)	840	
Movement Capacity: (pcph)	840	
Prob. of Queue-Free State:	0.99	
TH Saturation Flow Rate: (pcphpl)	3400	
RT Saturation Flow Rate: (pcphpl)		
Major LT Shared Lane Prob. of Queue-Free State:	0.99	
Step 3: TH from Minor Street	**NB**	**SB**
Conflicting Flows: (vph)	1266	
Potential Capacity: (pcph)	198	
Capacity Adjustment Factor due to Impeding Movements	0.99	
Movement Capacity: (pcph)	196	
Prob. of Queue-Free State:	1.00	
Step 4: LT from Minor Street	**NB**	**SB**
Conflicting Flows: (vph)	1266	
Potential Capacity: (pcph)	164	
Major LT, Minor TH Impedance Factor:	0.99	
Adjusted Impedance Factor:	0.99	
Capacity Adjustment Factor due to Impeding Movements	0.99	
Movement Capacity: (pcph)	162	

Intersection Performance Summary

Movement		Flow Rate (pcph)	Move Cap (pcph)		Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)
NB	L	24	162	>					
NB	T	0	196	>	405	11.2	0.8	C	11.2
NB	R	61	989	>					
WB	L	8	840			4.3	0.0	A	0.1

Intersection Delay = 0.7 sec/veh

APPENDIX C

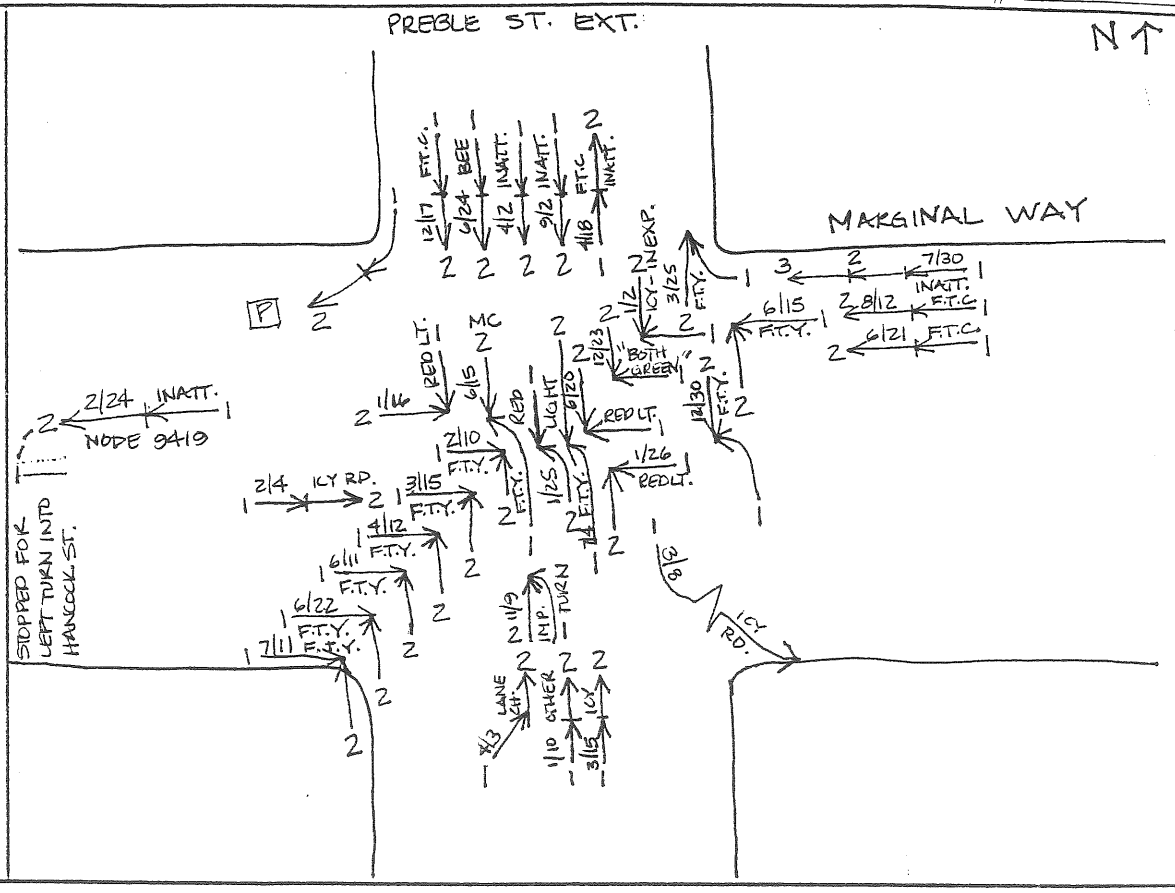
Collision Diagram

ACCIDENT COLLISION DIAGRAM

MUNICIPALITY PORTLAND LOCATION MARGINAL WAY / PREBLE INT.

NODE NO(S) 8943 YEARS '95-'97 PAGE 1 OF ___

PREPARED BY SERA DATE 8.31.98 JOB # ___



ANGLE · TURNING · PEDESTRIAN · SLED · BICYCLE · ANIMAL · REAR END · SIDE SWIPE (SAME DIRECTION) · SIDE SWIPE (OPPOSITE DIRECTION) · HEAD ON · OUT OF CONTROL · BACKING

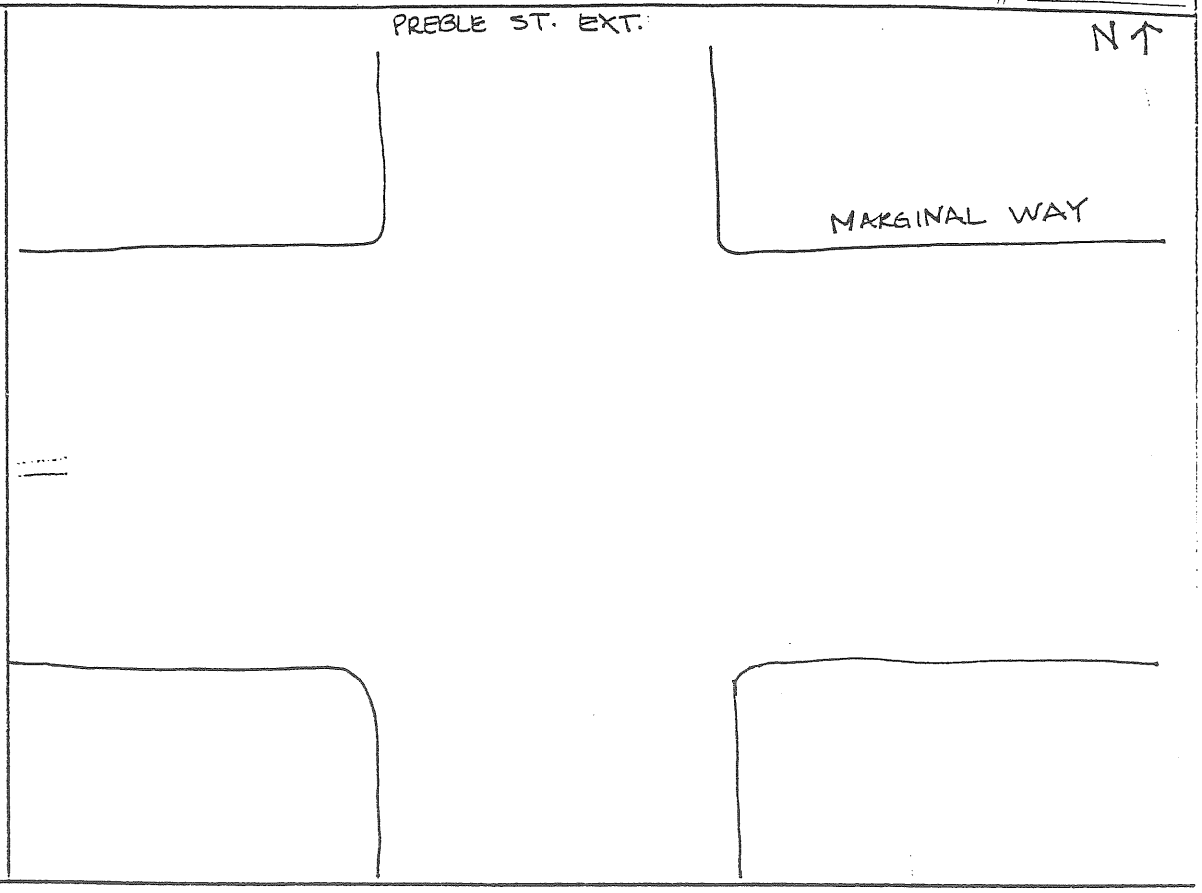
ITEM #	REPORT NUMBER	DATE	TIME	INJURIES #28 (1 / 2 / 3 / 4)	LIGHT COND #6	ROAD COND #8	CONTRIBUTING FACTOR #15	#16	#17	#18	PHYSICAL COND #19	#20	OTHER
1	01341	1/10/97	12:20	— — —	1	9	30	1	—		1	1	FOOT SLIPPED OFF BRAKE
2	03708	1/25/97	18:21	— — 1	4	2	1	1	—		1	1	EACH CLAIMS TO HAVE HAD THE RIGHT OF WAY
3	05621	2/4/97	07:35	— — —	2	2	14	1	—		1	1	ICY ROAD
4	10035	3/8/97	15:33	— — —	2	4	1	—	—		1	—	ICY ROAD
5	11100	3/15/97	09:48	— — 1	2	3	14	1	—		1	1	ICY ROAD
6	14212	3/25/97	08:10	— — —	4	10	2	1	—		1	1	R.O.R. - F.T.Y.
7	12957	4/2/97	11:20	— — 1	2	1	14	1	—		1	1	INATTENTION
8	13057	4/3/97	15:45	— — —	2	—	8	1	9	—	9	9	LANE CHANGE
9	21511	6/20/97	15:45	— 1 —	2	1	5	1	—		1	1	RAN RED LT.
10	30940	9/2/97	17:12	— — 1	2	1	14	1	30	—	1	1	INATTENTION

ACCIDENT COLLISION DIAGRAM

MUNICIPALITY PORTLAND LOCATION MARGINAL WAY / PREBLE INT.

NODE NO(S) 8943 YEARS '95-'97 PAGE 2 OF ___

PREPARED BY SERA DATE 8.31.98 JOB # ___



ANGLE

TURNING

P PEDESTRIAN

S SLED

B BICYCLE

A ANIMAL

REAR END

SIDE SWIPE (SAME DIRECTION)

SIDE SWIPE (OPPOSITE DIRECTION)

HEAD ON

OUT OF CONTROL

BACKING

ITEM #	REPORT NUMBER	DATE	TIME	INJURIES #28 (1 2 3 4)	LIGHT COND #6	ROAD COND #8	CONTRIBUTING FACTOR #15	#16	#17	#18	PHYSICAL COND #19	#20	OTHER
	48266	12/23/97	08:15		2	8	51	51			1	1	BOTH CLAIMED GREEN LT.
	04161	1/26/96	21:00		4	1	5	-	2	1	1	1	RAN FLASHING RED
	08066	2/10/96	21:45		4	1	2	-			1	1	F.T.Y.
	11451	3/15/96	22:43		4	2	2	-			1	1	F.T.Y. - FLASHING RED
	14392	4/12/96	22:13		4	1	2	-			1	1	"
	14976	4/18/96	16:56		2	1	4	-	14	-	1	1	
	20315	6/11/96	23:20		4	1	2	-			1	1	F.T.Y. - FLASHING RED
	20788	6/15/96	10:32	1	2	1	2	-	51	-	1	1	F.T.Y. V#2-MC
	20842	6/15/96	23:47		4	1	2				1	1	F.T.Y. FLASHING RED
	21832	6/24/96	16:06	1	2	1	30				1	1	SWATTING AT BEE; TOOK FOOT OFF BRAKE

ACCIDENT COLLISION DIAGRAM

MUNICIPALITY PORTLAND LOCATION MARGINAL WAY / PREBLE INT.
NODE NO(S) 8943 YEARS '95-'97 PAGE 3 OF ___
PREPARED BY SERA DATE 8.31.98 JOB # ___

CODE KEY

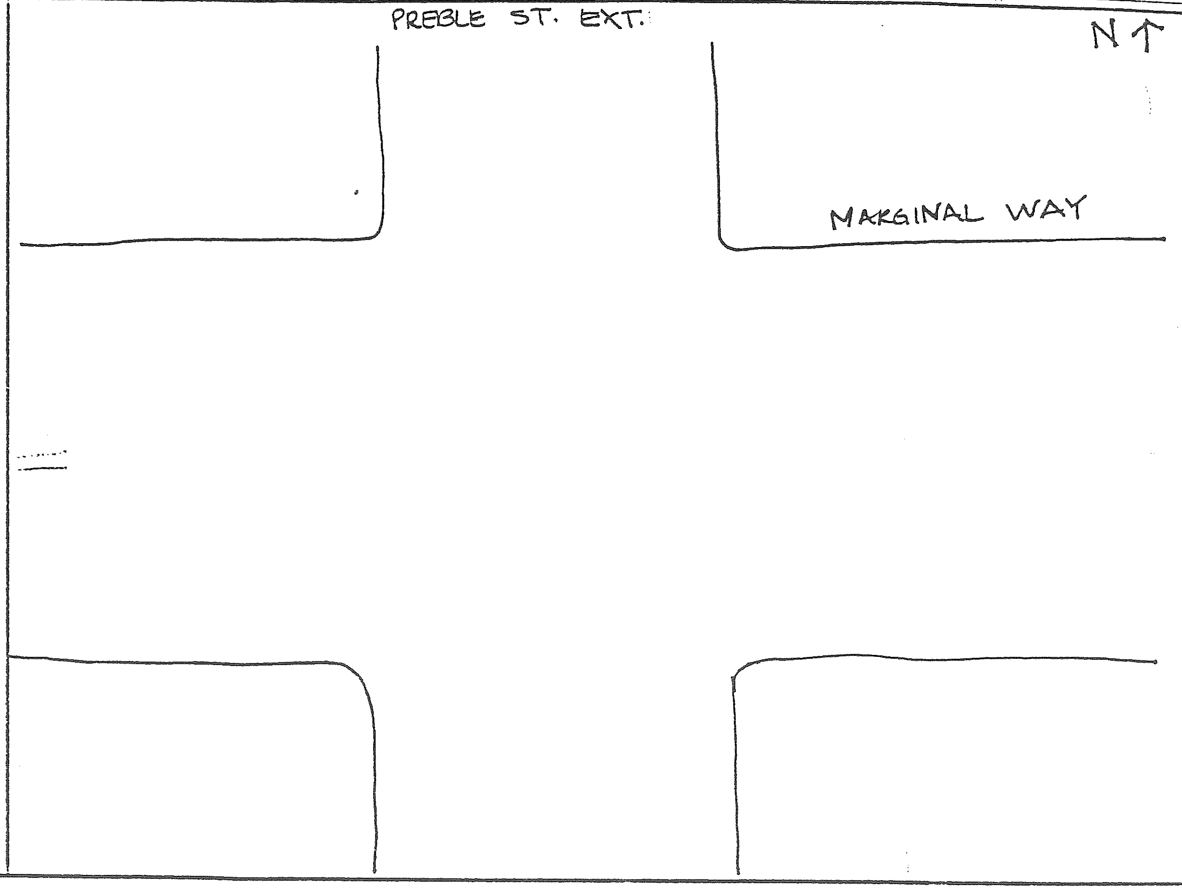
INJURY (#28)
1. KILLED
2. INCAPACITATING
3. NON-INCAPACITATING
4. POSSIBLE INJURY
5. NO INJURY

LIGHT CONDITION (#6)
1. DAWN
2. DAYLIGHT
3. DUSK
4. DARK (STREET LIGHTS ON)
5. DARK (NO STREET LIGHTS)
6. DARK (STREET LIGHTS OFF)
7. OTHER

ROAD CONDITION (#8)
1. DRY
2. WET
3. SNOW-SLUSH SANDED
4. ICE-PACKED SNOW SANDED
5. MUDDY
6. DEBRIS
7. OILY
8. SNOW-SLUSH NOT SANDED
9. ICE-PACKED SNOW NOT SANDED
10. OTHER

CONTRIBUTING FACTOR (#15-18)
1. NO IMPROPER ACTION
2. FAILURE TO YIELD RIGHT OF WAY
3. ILLEGAL UNSAFE SPEED
4. FOLLOW TOO CLOSE
5. DISREGARD TRAFFIC CONTROL DEVICE
6. DRIVING LEFT OF CENTER - NO PASSING
7. IMPROPER PASSING - NO OVERTAKING
8. IMPROPER UNSAFE LANE CHANGE
9. IMPROPER PASSING, START, STOP
10. IMPROPER TURN
11. UNSAFE BACKING
12. NO SIGNAL OR IMPROPER SIGNAL
13. IMPEDING TRAFFIC
14. DRIVER INATTENTION - DISTRACTION
15. DRIVER INEXPERIENCE
16. PEDESTRIAN VIOLATION
17. PHYSICAL IMPAIRMENT
18. VISION OBSCURED - WINDSHIELD
19. VISION OBSCURED - SUN, HEADLIGHTS
20. OTHER VISION OBSCUREMENT
30. OTHER HUMAN VIOLATION
31. HIT AND RUN
41. DEFECTIVE BRAKES
42. DEFECTIVE TIRE - TIRE FAILURE
43. DEFECTIVE LIGHTS
44. DEFECTIVE SUSPENSION
45. DEFECTIVE STEERING
50. OTHER VEHICLE DEFECT OR FACTOR
51. UNKNOWN

PHYSICAL CONDITION (#19-20)
1. NORMAL
2. UNDER THE INFLUENCE
3. HAD BEEN DRINKING
4. HAD BEEN USING DRUGS
5. ASLEEP
6. FATIGUED
7. ILL
8. HANDICAPPED
9. OTHER



ANGLE · TURNING · P PEDESTRIAN · S SLED · B BICYCLE · A ANIMAL · REAR END · SIDE SWIPE (SAME DIRECTION) · SIDE SWIPE (OPPOSITE DIRECTION) · HEAD ON · OUT OF CONTROL · BACKING

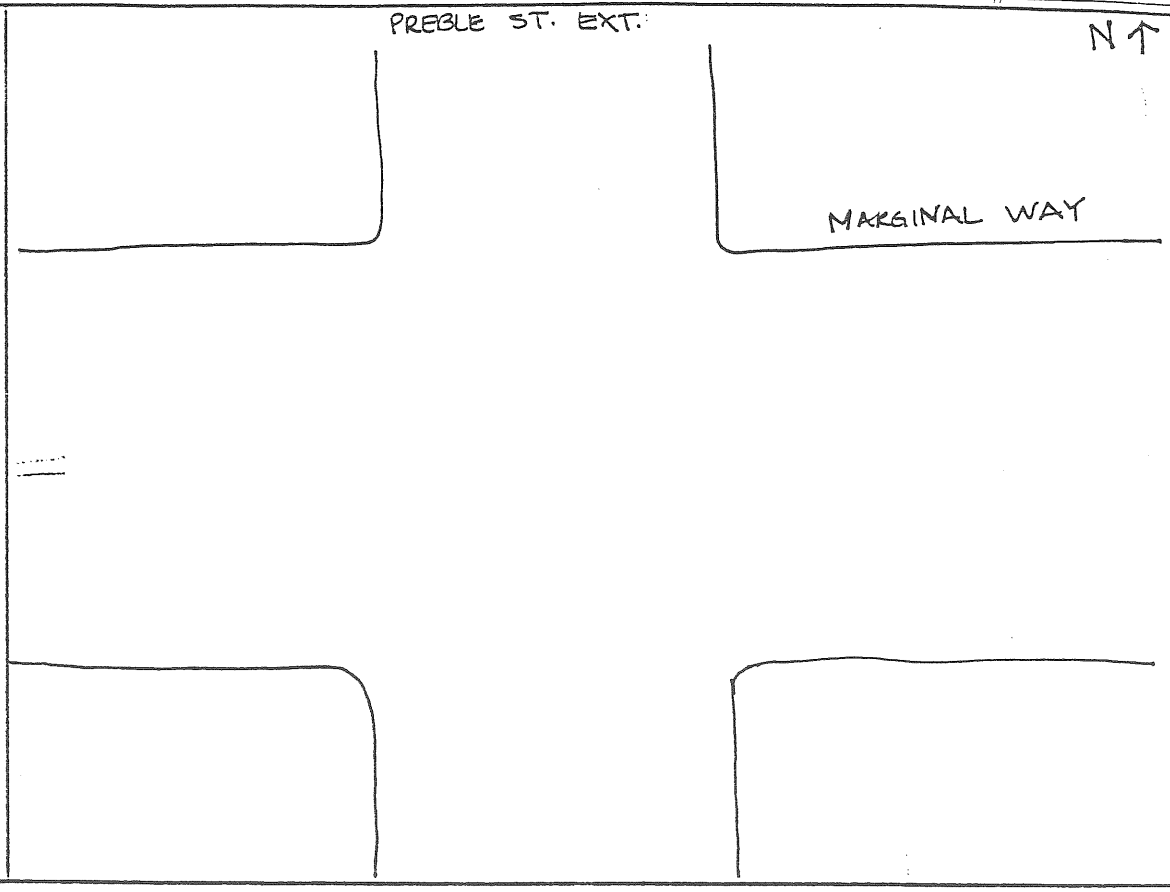
ITEM #	REPORT NUMBER	DATE	TIME	INJURIES #28 1	2	3	4	LIGHT COND #6	ROAD COND #8	CONTRIBUTING FACTOR #15	#16	#17	#18	PHYSICAL COND #19	#20	OTHER
	26180	7/30/96	17:15	—	—	—	3	2	1	14	—	—	—	9		
	27551	8/12/96	12:07	—	—	—	—	2	1	4	—	—	—	1	1	
	38374	11/9/96	22:26	—	—	—	—	4	2	2	—	10	—	1	1	
	44610	12/17/96	14:40	—	—	—	1	2	2	4	—	—	—	1	1	
	00615	1/2/95	10:30	—	—	—	—	2	9	15	—	—	—	1	1	ICY ROAD
	02684	1/16/95	07:15	—	—	—	—	1	2	5	—	14	—	1	1	RAN RED LT.
	19104	6/21/95	18:10	—	—	—	1	1	1	4	—	—	—	1	1	
	19267	6/22/95	21:16	—	—	—	1	4	1	2	—	—	—	1	1	F.T.Y. -FLASHING RED
	19893	6/27/95	12:20	—	—	—	—	2	1	14	—	—	—	1	1	V.2 HAD TO STOP FOR PED.
	20786	7/4/95	22:55	—	—	—	—	2	3	15	—	—	—	1	1	F.T.Y. -FLASHNG RED.

ACCIDENT COLLISION DIAGRAM

MUNICIPALITY PORTLAND LOCATION MARGINAL WAY / PREBLE INT.

NODE NO(S) 8943 YEARS '95-'97 PAGE 4 OF ___

PREPARED BY SERA DATE 8.31.98 JOB # ___



ANGLE

TURNING

P PEDESTRIAN

S SLED

B BICYCLE

A ANIMAL

REAR END

SIDE SWIPE (SAME DIRECTION)

SIDE SWIPE (OPPOSITE DIRECTION)

HEAD ON

OUT OF CONTROL

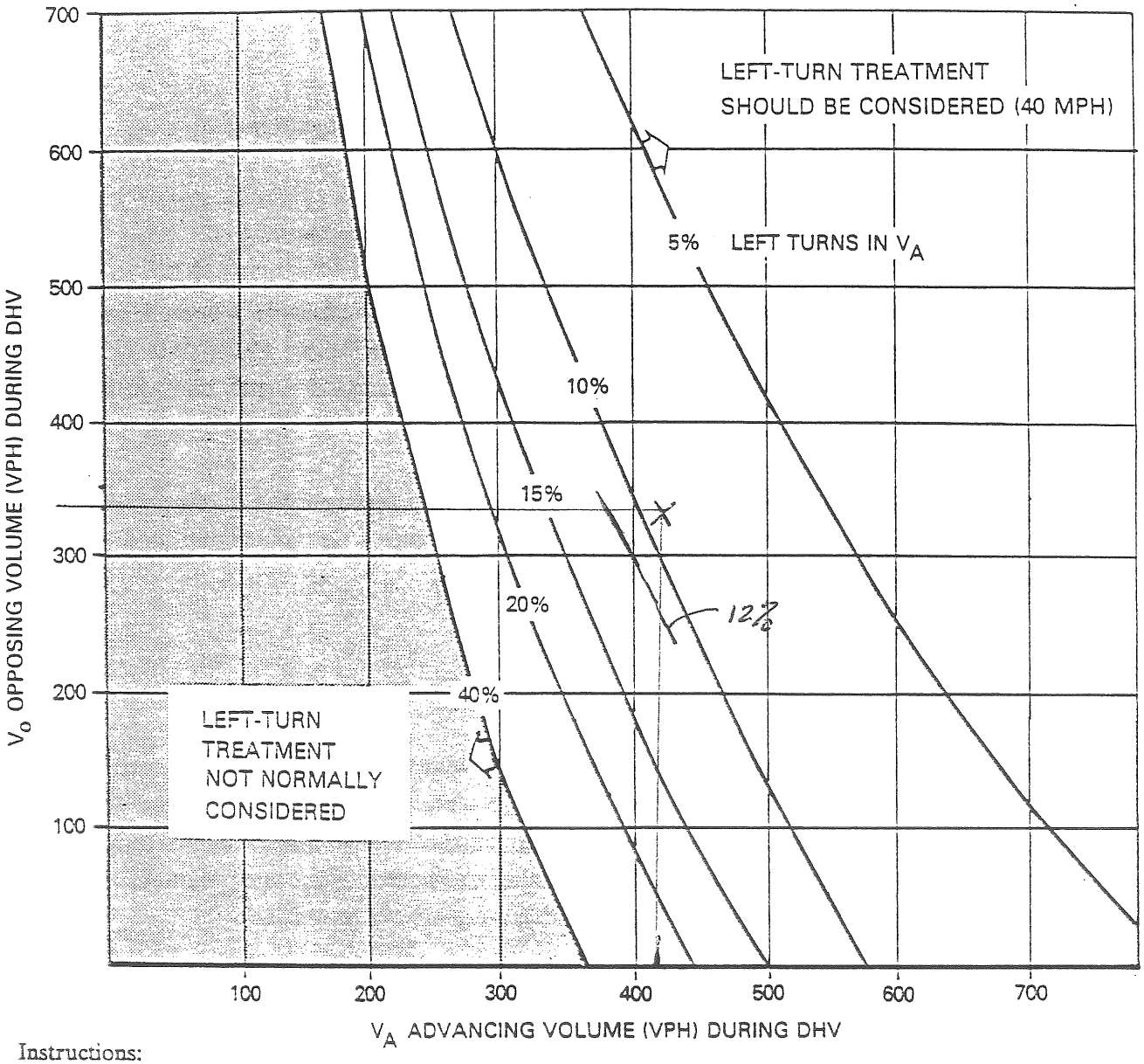
BACKING

ITEM #	REPORT NUMBER	DATE	TIME	INJURIES #28 (1 2 3 4)	LIGHT COND #6	ROAD COND #8	CONTRIBUTING FACTOR #15	#16	#17	#18	PHYSICAL COND #19	#20	OTHER
1	21539	7/11/95	22:30		4	1	2	1	14	-	1	1	F.T.Y. - FLASHING RED.
2	44390	12/30/95	21:32	2	4	1	2				1	1	"
3	07741	2/24/95	15:44		2	2	14				1	1	SUN IN EYES

APPENDIX D

Left Turn Warrant Analysis

Right Turn Warrant Analysis



Instructions:

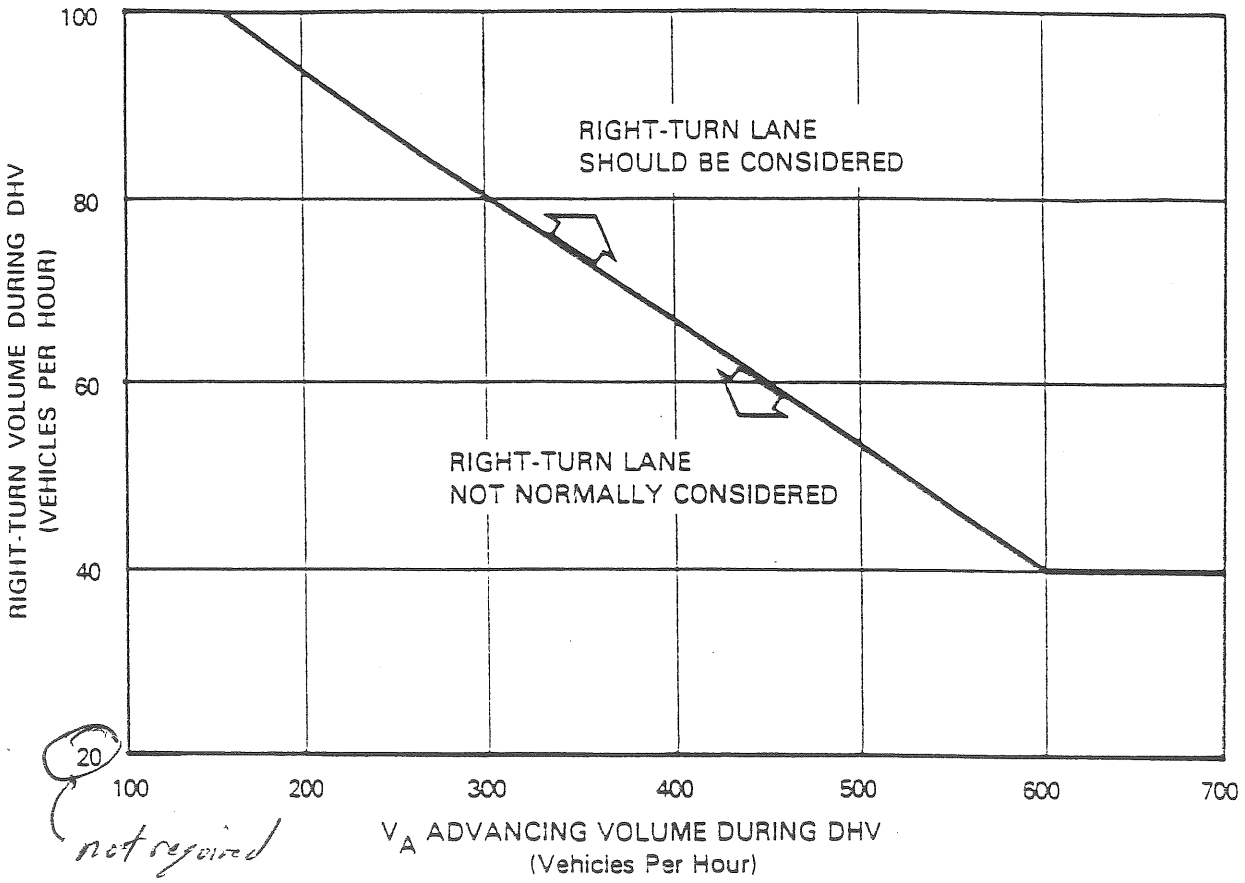
1. The family of curves represent the percent of left turns in the advancing volume (V_A). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.

2. Read V_A and V_O into the chart and locate the intersection of the two volumes.

3. Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn is not warranted based on traffic volumes.

VOLUME WARRANTS FOR LEFT-TURN LANES
AT UNSIGNALIZED INTERSECTIONS ON 2-LANE HIGHWAYS
(40 mph)

Figure 8-19



Note: For highways with a design speed below 50 mph *and* DHV <300 *and* Right Turns >40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.

Example

Given: Design Speed = 40 mph
V_A = 250 vph
Right Turns = 100 vph

Problem: Determine if a right-turn lane should be considered.

Solution: To read the vertical axis, use 100 - 20 = 80 vph. The figure indicates that a right-turn lane should not normally be considered, unless other factors (e.g., high-accident rate) indicate a lane is needed.

GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON 2-LANE HIGHWAYS

Figure 8-16

Fore River Company 5 Milk Street P.O. Box 7525 Portland, Maine 04112 (207) 772-6404

TRANSMITTAL NOTICE	DATE: August 11, 1998
TO: P. Samuel Hoffses Chief of Inspection Services Building Inspection City of Portland 389 Congress Street Portland, ME 04101	SUBJECT: Southern Maine Properties Company 161 Marginal Way

NO. OF COPIES:	DESCRIPTION:
7 7 7	Site Plan 1"=30' 8/11/98 Additional Information (Site Plan "B" and test boring data, SMRT Perspective Rendering, and parking lot light pole, fixture, and photometric data). Responses to §14-525(b)1 and §14-525(b) 2 Written Statements

REMARKS:

Dear Mr. Hoffses,

Attached is our application for Major Site Plan Review for a proposed new office building on Marginal Way for the State of Maine Department of Human Services. We have been working with Rick Knowland in the Planning Department. Plans to follow include a landscape plan, a final drainage plan including erosion and sedimentation control measures, and building elevations; a traffic study may be required. Because this is a project for a state building I believe by statute no municipal permit fees may be assessed; Rick is investigating this issue. Please call if you have any questions or problems.

Sincerely,

Bruce Kistler

cc: Rick Knowland, Planner w/o attachments

FORM C 7/97

NOTICE OF INTENT TO FILE

Please take notice that **Fore River Company, P. O. Box 7525, Portland, ME 04101, Tel. 772-6404**

(Name, Address and Phone Number of Applicant)

is intending to file a Site Location of Development permit application with the Maine Department of Environmental Protection pursuant to the provisions of 38. M.R.S.A. §§ 481-490 on or about **October 9, 1998**

(anticipated filing date)

The application is for **the development of a four story, 50,000 sq. ft. office building.**

(summary of project)

at the following location: 161 Marginal Way, Portland, ME

(project location)

A request for a public hearing or a request that the Board of Environmental Protection assume jurisdiction over this application must be received by the Department, in writing, no later than 20 days after the application is found by the Department to be complete and is accepted for processing. Public comment on the application will be accepted throughout the processing of the application.

The application will be filed for public inspection at the Department of Environmental Protection's office in (*Portland, Augusta or Bangor)* during normal working hours. A copy of the application may also be seen at the municipal offices in

Portland , Maine.

Written public comments may be sent to the Department of Environmental Protection, 312 Canco Road, Portland, ME 04103

8/11/98

Site Plan Review
New Office Building Facility at 161 Marginal Way, Portland, Maine

Below are responses to contents requirements as set forth in Portland's Land Use §14-525b. The numbers below correspond to the numbers given in the code.

§14-525(b)1)

a. Applicant: Southern Maine Properties Company
P.O. Box 7525
Portland, ME 04112

Development Name: 161 Marginal Way
New Office Building

b. See Site Plan.

c. See Site Plan.

d. See written statement.

e. See Site Plan.

§14-525(b)2)

a. Existing soils - sand, gravel, bricks, ash, grey silty clay, grey silty sand, and gravel. See attached test borings and Site Plan "B".

b. Site is 100% impervious and without rock outcroppings. See Site Plan "A" for easements, right of ways, and drainage.

c. See Site Plan "B" and "Perspective Rendering", elevations to follow.

d. See Site Plan.

e. See Site Plan.

f. See Site Plan and Site Plan "A".

g. See Site Plan.

h. Landscape plan to follow.

i. See Site Plan.

j. See Site Plan for pole locations and attached pole, fixture specifications, and photometric data.

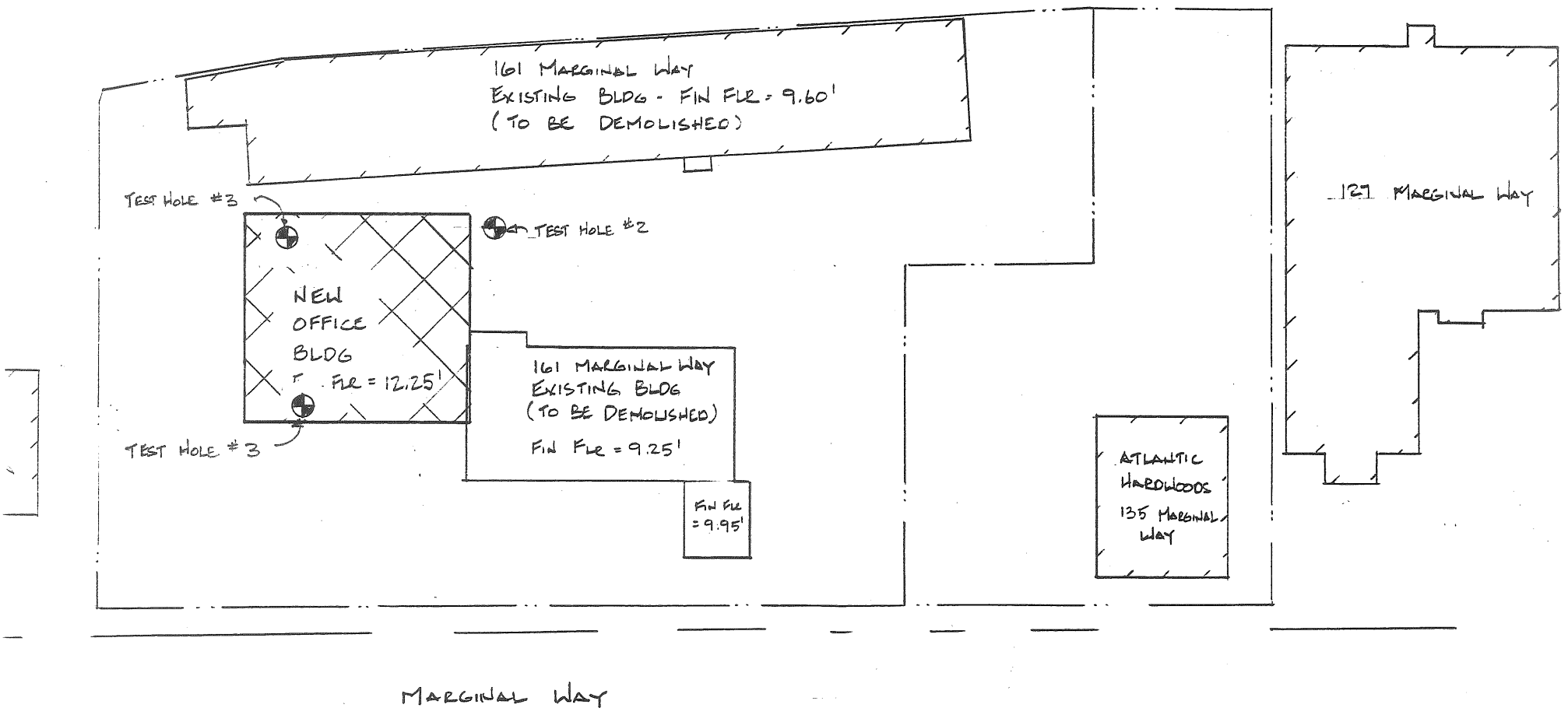
k. See Site Plan.

l. N/A.

m. See attached test borings and Site Plan "B".

n. To follow.

NOTE: TEST BORING HOLES SHOWN IN APPROX. LOCATIONS.



SITE PLAN "B" - 135 + 161 MARGINAL WAY - 0 25 50 FT - NORTH - 8.11.98

MAINE TEST BORINGS, INC. BREWER, MAINE 04412	CLIE ALLIED CONSTRUCTION	SHEET 1 OF 1 HOLE NO. B1
DRILLER MEL COFFIN	PROJECT NAME MARGINAL WAY BORINGS	LINE & STATION
M.T.B. JOB NUMBER 97-184	LOCATION PORTLAND, ME	OFFSET

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BARREL	DATE START	DATE FINISH
AT FT. AFTER HOURS	TYPE	HS			12/01/97	12/01/97
	SIZE I.D.	2 1/2"			SURFACE ELEVATION	
AT FT. AFTER HOURS	HAMMER WT.					
	HAMMER FALL					

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	VANE READING	DEPTH	STRATUM DESCRIPTION
										0.3	TAR
										20.0	SAND, GRAVEL, BRICKS AND ASH
										33.5	GRAY SILTY CLAY
										38.7	GRAY SILTY SAND AND GRAVEL
											REFUSAL @ 38.7'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
R = 2½" SHELBY TUBE

SOIL CLASSIFIED BY:
[XX] DRILLER-VISUALLY
[ ] SOIL TECHNICIAN-VISUALLY
[ ] LABORATORY TESTS

REMARKS:

HOLE NO. B1

MAINE TEST BORINGS, INC. BREWER, MAINE 04412	CLIENT ALLIED CONSTRUCTION	SHEET 1 OF 1 HOLE NO. B2
DRILLER MEL COFFIN	PROJECT NAME MARGINAL WAY BORINGS	LINE & STATION
M.T.B. JOB NUMBER 97-184	LOCATION PORTLAND, ME	OFFSET

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BARREL	DATE START	DATE FINISH
AT FT. AFTER HOURS	TYPE	HS			12/01/97	12/01/97
	SIZE I.D.	2 1/2"			SURFACE ELEVATION	
AT FT. AFTER HOURS	HAMMER WT.					
	HAMMER FALL					

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	VANE READING	DEPTH	STRATUM DESCRIPTION
										0.3	TAR
										15.0	SAND, GRAVEL, COOL ASH AND BRICKS
										32.0	GRAY SILTY CLAY
										36.7	GRAY SILTY SAND AND GRAVEL
											REFUSAL @ 36.7'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE

SOIL CLASSIFIED BY:
[XX] DRILLER-VISUALLY
[ ] SOIL TECHNICIAN-VISUALLY
[ ] LABORATORY TESTS

REMARKS:

HOLE NO. B2

MAINE TEST BORINGS, INC.
BREWER, MAINE 04412

CLIEN
ALLIED CONSTRUCTION

SHEET 1 OF 1

HOLE NO. B3

DRILLER
MEL COFFIN

PROJECT NAME
MARGINAL WAY BORINGS

LINE & STATION

M.T.B. JOB NUMBER
97-184

LOCATION
PORTLAND, ME

OFFSET

GROUND WATER OBSERVATIONS

AT FT. AFTER HOURS

AT FT. AFTER HOURS

	CASING	SAMPLER	CORE BARREL
TYPE	HS		
SIZE I.D.	2 1/2"		
HAMMER WT.			
HAMMER FALL			

DATE START	DATE FINISH
12/01/97	12/01/97

SURFACE ELEVATION

CASING BLOWS PER FOOT	SAMPLE NO.	SAMPLE O.D.	SAMPLE PEN.	SAMPLE REC.	SAMPLE DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	VANE READING	DEPTH	STRATUM DESCRIPTION
										0.3	TAR
											BROWN SAND, GRAVEL AND COAL ASH
										17.0	
											GRAY SILTY CLAY
										36.5	
											GRAY SILTY SAND AND GRAVEL
										39.2	

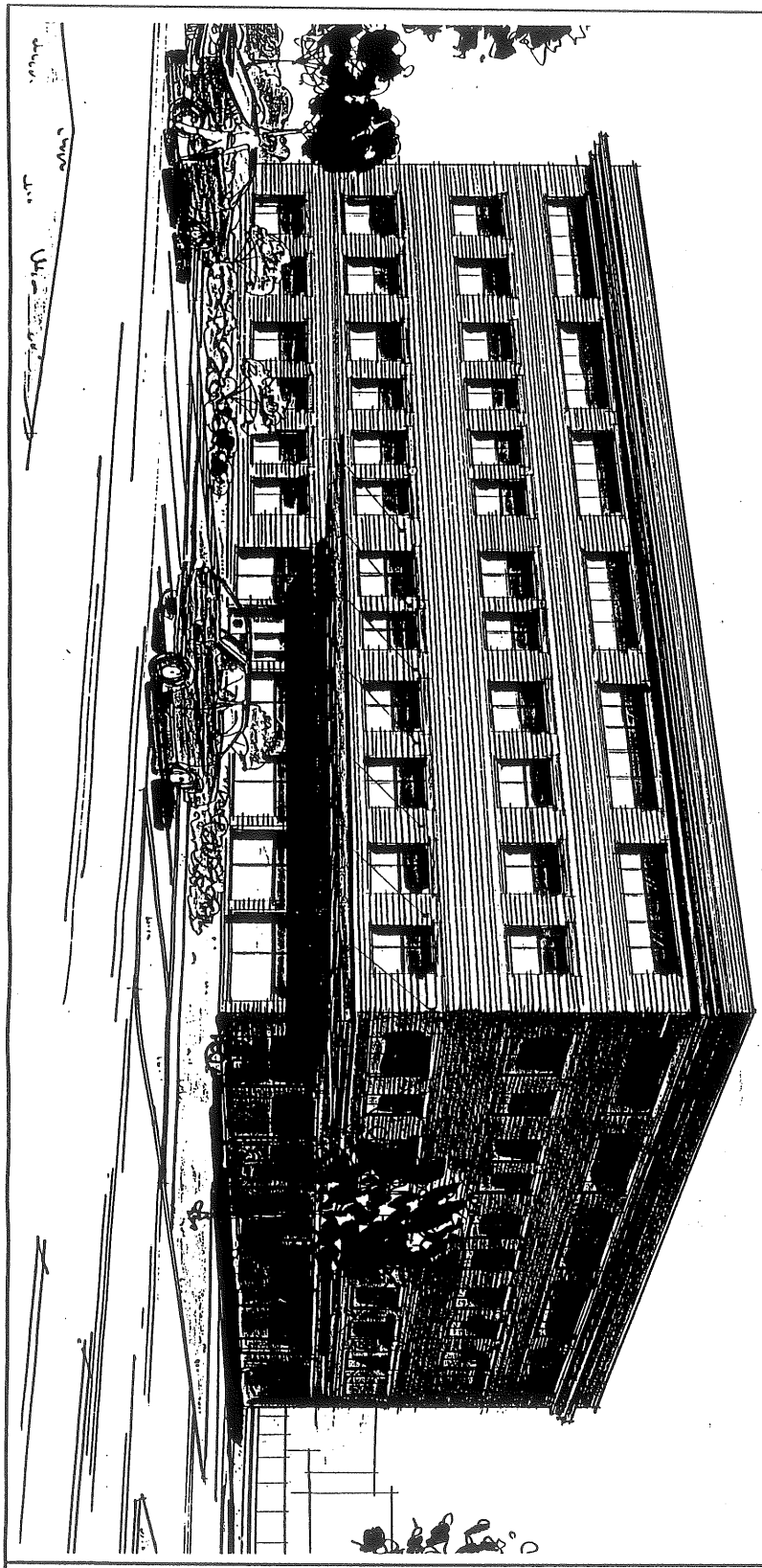
SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE

SOIL CLASSIFIED BY:
[ ] DRILLER-VISUALLY
[XX] SOIL TECHNICIAN-VISUALLY
[ ] LABORATORY TESTS

REMARKS: REFUSAL @ 39.2'

HOLE NO.

EXHIBIT C PERSPECTIVE OF THE DHS FACILITY



DHS MARGINAL WAY SITE

PROJECT No.97118 SCALE: 1/16"=1'-0" DATE: 12/8/97	FORE RIVER COMPANY 6 MILK STREET / P.O. BOX 7525 PORTLAND, MAINE 041112 tel. (207) 772-6404 / fax. (207) 772-9078	SMRT ARCHITECTURE ENGINEERING PLANNING 144 Fore St./P.O.Box 618 PORTLAND, MAINE 04104 tel. (207) 772-3846 / fax. (207) 772-1070	SM RT

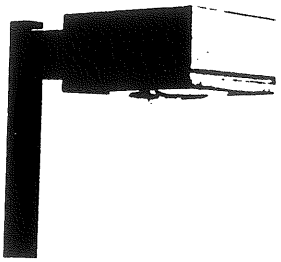
SUBJECT: PERSPECTIVE RENDERING

SMRT CAD FILE: PERSPECTIVE

REF CAD FILE: N/A

AREA/ROADWAY

MCGRAW-EDISON®



GMGALLERIA

250W-400W
High Pressure Sodium
Metal Halide

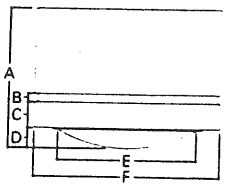
ARCHITECTURAL AREA LIGHT

- Formed aluminum housing with stamped reveal has interior-welded seams for structural integrity and is finished in polyester powder coat
- Ballast tray is hard-mounted to housing interior for cooler operation
- Long-life core and coil ballast
- Spun and stamped aluminum reflector in vertical lamp units, or hydroformed anodized aluminum reflector in horizontal lamp units
- Formed aluminum door has heavy-duty hinges, captive retaining screws and is finished in polyester powder coat (Spider mount unit has steel door)
- Convex tempered glass lens
- Mogul-base porcelain socket
- Approximate net weight: 64-69 lbs. (29-31 kgs.)

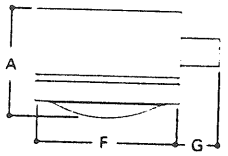
DESCRIPTION

The Galleria achieves superior light distribution by utilizing a seamless reflector system, making it the optimum choice for almost any small or medium area lighting application. U.L. listed for wet locations. CSA certified.

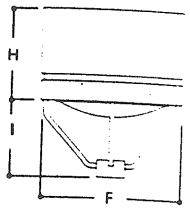
DIMENSIONS



ARM MOUNT



SPIDER MOUNT



	A	B	C	D	E	F	G	H	I
Medium	15" (381mm)	3/4" (19mm)	3" (76mm)	4" (102mm)	18 3/4" (476mm)	21 3/4" (552mm)	6" or 14" (152 356mm)	12" (305mm)	21" (533mm)

EPA-Effective Projected Area: 2.4

ORDERING INFORMATION

SAMPLE NUMBER: GMA251292D

G | M | A | 40 | 1 | 2 | 4 | 3D

- **Product Family**: G= Galleria
- **Housing Size**: M=Medium
- **Mounting Method**: A=Arm [1]; B=Spider for 2 3/8" O.D. tenon; C=Spider for 3 1/2" O.D. tenon
- **Lamp Wattage/Base**: 25=250W/ Mogul; 40=400W/ Mogul
- **Lamp Type**: 1=MH; 2=HPS
- **Ballast Type** [5]: 2=CWA; 5=CWI
- **Voltage** [5]: 1=120V; 2=208V; 3=240V; 4=277V; 5=480V; 6=Triple-Tap [4] wired 347V; 9=Multi-Tap [4] wired 277V
- **Distribution**: 1D=Type I MCO Horizontal; 2D=Type II MCO Horizontal; 3D=Type III MCO Horizontal; FT=Forward Throw Horizontal; AR=Area Round Vertical; AS=Area Square Vertical; RW=Rectangular Wide Vertical; 3V=Vertical Type III
- **Color**: BZ=Bronze; BG=Beige; BK=Black; BL=Blue; GR=Green; AP=Grey; RD=Red; SY=Silver; WH=White; YL=Yellow
- **Options & Accessories** (See Below)

400 Watt Shoe box
40' pole

PRODUCT INFORMATION

Catalog Number [2]	Lamp Wattage	Lamp Type [3]
Arm Mount (Order arm separately)		
GMA25229XX	250	HPS
GMA40229XX	400	HPS
GMA25129XX	250	MH
GMA40129XX	400	MH
Spider Mount (For 2 3/8" O.D. Tenon)		
GMB25229XX	250	HPS
GMB40229XX	400	HPS
GMB25129XX	250	MH
GMB40129XX	400	MH
GMC25129XX	250	MH
GMC40129XX	400	MH
Spider Mount (For 3 1/2" O.D. Tenon)		
GMC25229XX	250	HPS
GMC40229XX	400	HPS

Options (add as suffix)

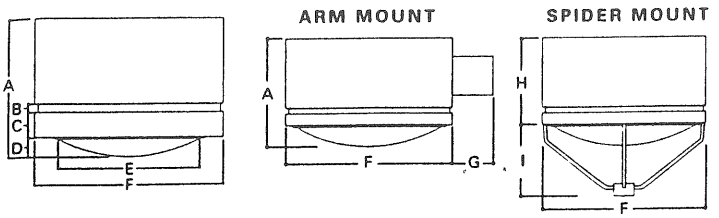
- F=Single Fuse (120, 277 or 347V)
- FF=Double Fused (208, 240 or 480V)
- R=NEMA Twistlock Photocontrol Receptacle
- Q=Quartz Restrike (Limit to 150W max. quartz lamp only. Lamp not included)
- HS=House Side Shield
- VS=Vandal Shield
- FG=Flat Glass (Reduced Lamp Envelope required AR, AS, RW and 3V)

Accessories (order separately)

- MA1004=14" Arm for Square Pole. 1.0 EPA
- MA1005=6" Arm for Square Pole. 0.5 EPA
- MA1006=Direct Mount Kit for Square Pole
- MA1007=14" Arm for Round Pole. 1.0 EPA
- MA1008=6" Arm for Round Pole. 0.5 EPA
- MA1009=Direct Mount Kit for Round Pole
- MA1010=Single-arm Tenon Adapter for 3 1/2" O.D. Tenon
- MA1011=2 @ 90° Tenon Adapter for 3 1/2" Tenon
- MA1012=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
- MA1013=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
- MA1014=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
- MA1015=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
- MA1016=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
- MA1017=Single-arm Tenon Adapter for 2 3/8" O.D. Tenon
- MA1018=2 @ 180° Tenon Adapter for 2 3/8" O. D. Tenon
- MA1029=Wall bracket
- OA1016=Photocontrol–Multi-Tap
- OA1027=Photocontrol–480V
- OA1201=Photoelectric Control, 347V NEMA Type
- LL=Lamp Included

NOTES: [1] Arm not included. See accessories. [2] Designate distribution by changing 9th and 10th digits. [3] All lamps are mogul base. Lamps are not included. [4] Multi-Tap ballast is 120/208/240/277V. Triple-Tap ballast is 120/277/347V. [5] Products also available in non-US voltages and 50Hz for international markets. Consult Cooper [illegible]

DIMENSIONS

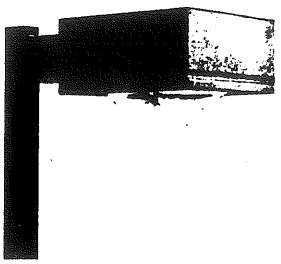


	A	B	C	D	E	F	G	H	I
Large	18 1/2" (464mm)	3/4" (19mm)	3 3/8" (85mm)	4" (102mm)	12 7/8" (327mm)	27" (686mm)	6" or 14" (152 or 356mm)	14 1/2" (362mm)	12" (305mm)

EPA-Effective Projected Area: 3.9

DESCRIPTION

The Galleria achieves superior light distribution by utilizing a seamless reflector system, making it the optimum choice for almost any large area lighting application. U.L. listed for wet locations. CSA certified.



GLGALLERIA

400W-1000W
High Pressure Sodium
Metal Halide

ARCHITECTURAL AREA LIGHT

ORDERING INFORMATION

SAMPLE NUMBER: GLA911292D

G | L | B | 91 | 1 | 2 | 4 | AR | | |

Product Family
G= Galleria

Housing Size
L=Large

Mounting Method
A=Arm [1]
B=Spider for 2 3/8" O.D. tenon
C=Spider for 3 1/2" O.D. tenon

Lamp Wattage/Base
40=400W/ Mogul
91=1000W/ Mogul

Lamp Type
1=MH
2=HPS

Ballast Type [5]
2=CWA
5=CWI

Voltage [5]
1=120V
2=208V
3=240V
4=277V
5=480V
6=Triple-Tap [4] wired 347V
9=Multi-Tap [4] wired 277V

Distribution
1D=Type I MCO Horizontal
2D=Type II MCO Horizontal
3D=Type III MCO Horizontal
FT=Forward Throw Horizontal
AR=Area Round Vertical
AS=Area Square Vertical
RW=Rectangular Wide Vertical
3V=Vertical Type III

Color
BZ=Bronze
BG=Beige
BK=Black
BL=Blue
GR=Green
AP=Grey
RD=Red
SY=Silver
WH=White
YL=Yellow

Options & Accessories
(See Below)

1000 watt pole Top

40' pole

PRODUCT INFORMATION

Catalog Number [2]	Lamp Wattage	Lamp Type [3]
Arm Mount (Order arm separately)		
GLA40229XX	400	HPS
GLA91229XX	1000	HPS
GLA40129XX	400	MH
GLA91129XX	1000	MH
Spider Mount (For 2 3/8" O.D. Tenon)		
GLB40229XX	400	HPS
GLB91229XX	1000	HPS
GLB40129XX	400	MH
GLB91129XX	1000	MH
Spider Mount (For 3 1/2" O.D. Tenon)		
GLC40229XX	400	HPS
GLC91229XX	1000	HPS
GLC40129XX	400	MH
GLC91129XX	1000	MH

Options (add as suffix)
F=Single Fuse (120, 277 or 347V)
FF=Double Fused (208, 240 or 480V)
R=NEMA Twistlock Photocontrol Receptacle
Q=Quartz Restrike (Limit to 150W max. quartz lamp only. Lamp not included)
HS=House Side Shield
VS=Vandal Shield (400W maximum)

Accessories (order separately)
MA1004=14" arm for square pole. 1.0 EPA
MA1005=6" arm for square pole. 0.5 EPA
MA1006=Direct mount kit for square pole
MA1007=14" arm for round pole. 1.0 EPA
MA1008=6" arm for round pole. 0.5 EPA
MA1009=Direct mount kit for round pole
MA1010=Single-arm tenon adapter for 3 1/2" O.D. tenon
MA1011=2 @ 90° tenon adapter for 3 1/2" O.D. tenon
MA1012=3 @ 120° tenon adapter for 3 1/2" O.D. tenon
MA1014=2 @ 90° tenon adapter for 3 1/2" O.D. tenon
MA1015=2 @ 120° tenon adapter for 3 1/2" O.D. tenon
MA1016=3 @ 90° tenon adapter for 3 1/2" O.D. tenon
OA1016=Photocontrol-Multi-Tap
OA1027=Photocontrol-480V
OA1201=Photoelectric Control, 347V NEMA Type
LL=Lamp Included

- Formed aluminum housing with stamped reveal has interior-welded seams for structural integrity and is finished in polyester powder coat
- Ballast tray is hard-mounted to housing interior for cooler operation
- Long-life core and coil ballast
- Spun and stamped aluminum reflector in vertical lamp units, or hydroformed anodized aluminum reflector in horizontal lamp units
- Formed aluminum door has heavy-duty hinges, captive retaining screws and is finished in polyester powder coat (Spider mount unit has steel door)
- Convex tempered glass lens
- Mogul-base porcelain socket
- Approximate net weight: 66-83 lbs. (30-37 kgs.)

NOTES: [1] Arm not included. See accessories. [2] Designate distribution by changing 9th and 10th digits. [3] All lamps are mogul base. Lamps are not included. [4] Multi-Tap ballast is 120/208/240/277V. Triple-Tap ballast is 120/277 347V. [5] Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information.

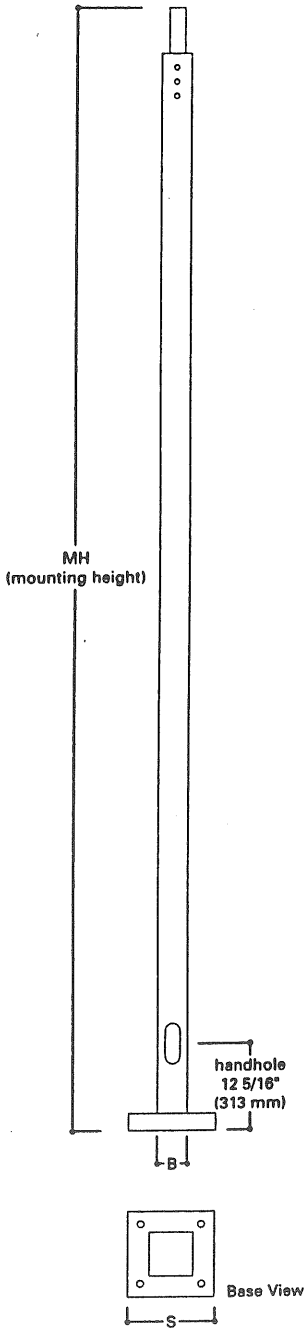
COOPER LIGHTING

SSSQUARE STRAIGHT STEEL

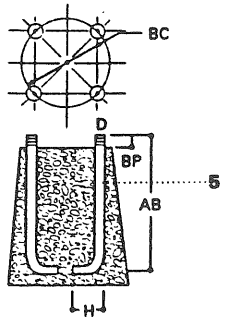
10'-39'
Mounting Height

SQUARE STRAIGHT STEEL

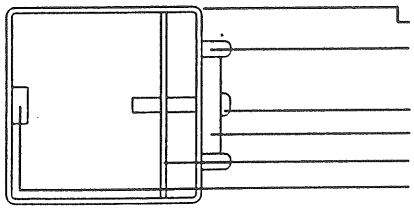
DETAILS
REFER TO CHART FOR DIMENSIONAL INFORMATION



39' poles



HANDHOLE (section through standard handhole)



FINISH COLORS

F=Dark Bronze
G=Galvanized
H=Red
I=Royal Blue
L=Buttercup Yellow
N=Olive Green
P=Prime
Q=Designer Beige
S=Silver
V=Grey
W=White
X=None
Y=Black

POLE SPECIFICATIONS

1 ···ASTM Grade steel base plate with ASTM A366 base cover.

2 ···Handhole assembly 3" x 5" (76 x 127 mm) on 5" (127 mm) and 6" (152 mm) pole; and 2" x 4" (51 x 102 mm) on 4" (102 mm) pole.

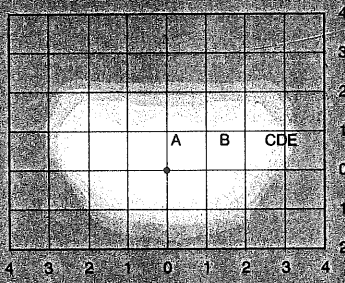
3 ···ASTM A500 grade "B" steel shaft. Shot blasted and painted with polyester powder coat.

4 ···Drilled or Tenon (specify).

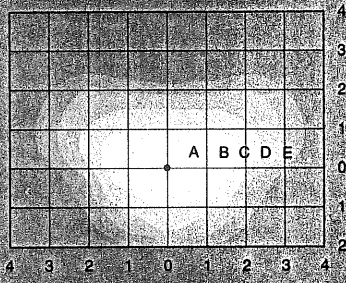
5 ···Anchor bolt per ASTM A576 with (2) nuts, (2) flat washer, and (1) lock washer. Nuts, washers and threaded portion of bolt are hot dip galvanized 3" (76 mm) hook for 3/4" (19 mm) bolt. 4" (102 mm) hook for 1" (25 mm) bolt.

PHOTOMETRICS

Catalog Number GMX402293D
400-Watt HPS
50,000-Lumen Clear Lamp
Type III Distribution



Catalog Number GMX401293D
400-Watt Metal Halide
40,000-Lumen Clear Lamp
Type III Distribution

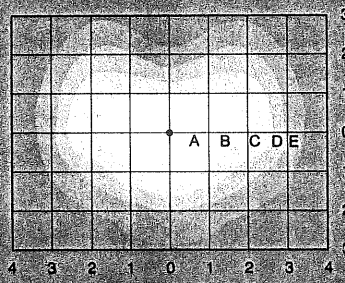


Lateral and Longitudinal Distance in Units of Mounting Heights

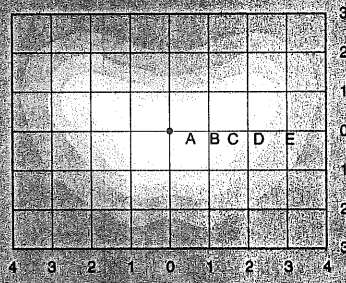
Footcandle Table
Select mounting height and read across for footcandle values of each isofootcandle line.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
20'	11.25	4.50	2.25	1.12	0.56
25'	7.20	2.88	1.44	0.72	0.36
30'	5.00	2.00	1.00	0.50	0.25
35'	3.65	1.46	0.73	0.36	0.18
40'	2.80	1.12	0.56	0.28	0.14

Catalog Number GLX912293D
1000-Watt HPS
140,000-Lumen Clear Lamp
Type III Distribution

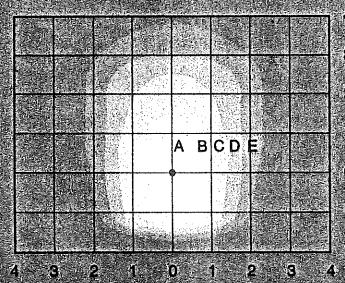


Catalog Number GLX911293D
1000-Watt Metal Halide
107,800-Lumen Clear Lamp
Type III Distribution

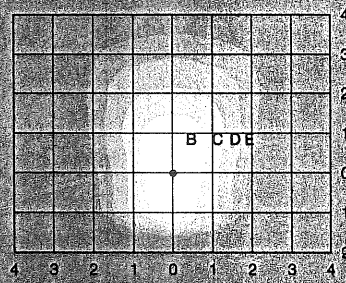


Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
30'	8.85	3.54	2.66	0.88	0.44
35'	6.50	2.60	1.95	0.65	0.32
40'	5.00	2.00	1.50	0.50	0.25
45'	3.95	1.58	1.18	0.39	0.19
50'	3.20	1.28	0.96	0.32	0.16

Catalog Number GMX40229FT
400-Watt HPS
50,000-Lumen Clear Lamp
Forward Throw Distribution

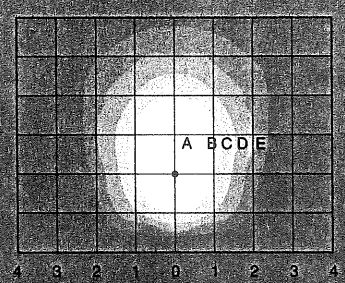


Catalog Number GMX40129FT
400-Watt Metal Halide
40,000-Lumen Clear Lamp
Forward Throw Distribution

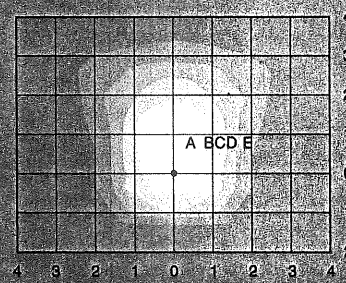


Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
20'	11.25	4.50	2.25	1.12	0.56
25'	7.20	2.88	1.44	0.72	0.36
30'	5.00	2.00	1.00	0.50	0.25
35'	3.65	1.46	0.73	0.36	0.18
40'	2.80	1.12	0.56	0.28	0.14

Catalog Number GLX91229FT
1000-Watt HPS
140,000-Lumen Clear Lamp
Forward Throw Distribution



Catalog Number GLX91129FT
1000-Watt Metal Halide
107,800-Lumen Clear Lamp
Forward Throw Distribution



Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
30'	8.85	3.54	2.66	0.88	0.44
35'	6.50	2.60	1.95	0.65	0.32
40'	5.00	2.00	1.50	0.50	0.25
45'	3.95	1.58	1.18	0.39	0.19
50'	3.20	1.28	0.96	0.32	0.16

8/11/98

Site Plan Review - Written Statements
New Office Building Facility at 161 Marginal Way, Portland, Maine

Below are responses to written statement requirements as set forth in Portland's Land Use §14-525c. The numbers below correspond to the numbers given in the code.

14-525c: Owners

Southern Maine Properties Company (SMPC)
P.O. Box 7525
Portland, ME 04112

Five Liver Company (FLC)
P.O. Box 7525
Portland, ME 04112

1) See "Proposed Site Plan with Property Lines", "Site Plan 'A'".

DHS site area - office building for DHS or another user.

Remaining SMPC area - surface parking (no improvements).

Remaining FLC area - Atlantic Hardwoods (exist. use to remain).

2)

Owner	Land Area	Coverage
SMPC/FLC	DHS site area = 123,186 ±SF	13,200 ±SF
SMPC	Remaining SMPC area = 15,026 ±SF	Ø SF
FLC	Remaining FLC area = 47,448	5,806 ±SF

3) See site plan for existing 1/2 interest by each company and for a portion of the FLC property to be leased to SMPC.

4) DHS site area - normal office waste.

Remaining SMPC area expected not to generate solid waste.

Remaining FLC area expected no change in solid waste generation.

5) Site is currently served by:
PWD - water & sprinklers
Portland Sewer Department - sewer & storm
CMP - electrical
Northern Utilities - natural gas
Bell Atlantic - telephone

6) DHS site area - office site currently 100% impervious: Install new catch basins for surface drainage.

Remaining SMPC area and remaining FLC area - existing drainage systems to remain.

7) Permitting - 2 months
Construction - 9 months
- Demolition
- Site work
- New building construction

8) Perhaps traffic review stats (100-200 PCEs?).

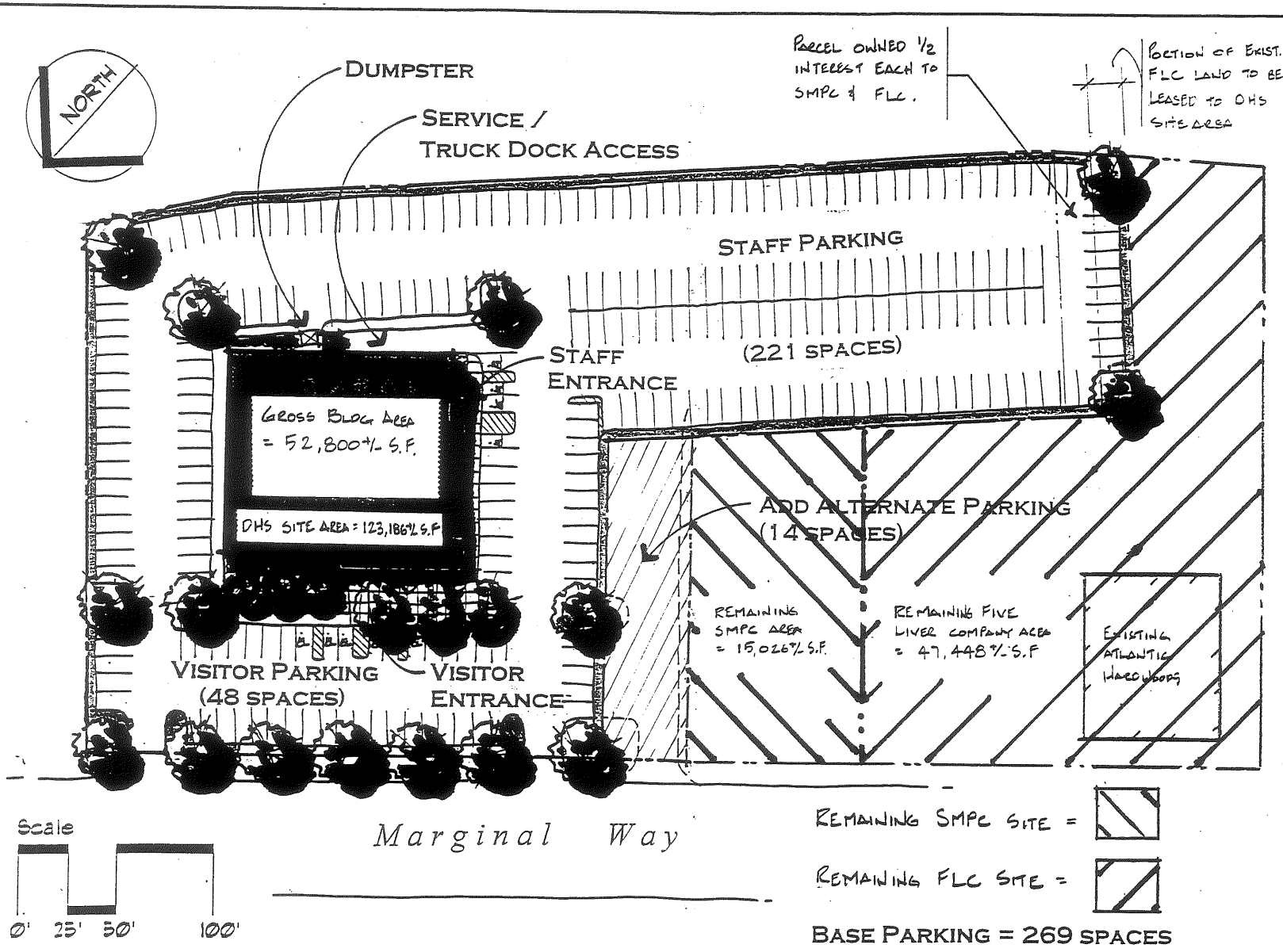
9) See letter from Realty Finance Corp. dated 12/3/97.

10) See attached tax bills.

11) None.

12) Any plans in this format will follow.

EXHIBIT A SITE PLAN



SMRT

SMRT
ARCHITECTURE ENGINEERING PLANNING
144 Fore St./P.O.Box 618 PORTLAND, MAINE 04104
tel. (207) 772-3846 / fax. (207) 772-1070

FORE RIVER COMPANY
5 MILK STREET / P.O. BOX 7625
PORTLAND, MAINE 04112
tel. (207) 772-6404 / fax. (207) 772-9078

PROJECT No. 97118
SCALE: 1/16"=1'-0"
DATE: ~~12/8/97~~ 8/11/98
~~7/10/98~~

SUBJECT: PROPOSED SITE PLAN W/ PROPERTY LINES

NOT CAD FILE: N/A

SITE PLAN "A"

REALTY FINANCE
CORPORATION, LLC

December 3,1997

Department of Human Services
State of Maine
Augusta, Maine

RE: Fore River Company/ Marginal Way Property

To whom it may concern:

We have been asked to provide you with an indication of Fore River Company's ability to finance the construction of the proposed "DHS" building on Marginal Way in Portland. I have personally known Peter and Rick Quesada, the principals of Fore River Company, for over fifteen years. Based upon my knowledge, Fore River Company clearly has the ability to finance this project in it's entirety. The Quesadas have successfully completed a number of development projects in Southern Maine over the past decade and are highly regarded in their field of expertise.

We are prepared to work with Fore River Company and one of our lenders to obtain debt financing for a portion of the project development cost, and based on our knowledge of these lenders' parameters, we believe a new DHS facility on Marginal Way is financable.

Sincerely,

John P. Flynn
Senior Vice President

24 CITY CENTER · PO BOX 100 · PORTLAND, ME 04112-0100
TELEPHONE: (207) 761-0700 · FAX: (207) 761-0022

City Portland

July 1, 1997 - June 30, 1998

DUE SEPT. 5, 1997	DUE MARCH 6, 1998	AMOUNT PAID	INTEREST DUE	PAY THIS AMOUNT
$6,394.68	$6,394.68	$6,394.68		$6,394.68

SECOND BILLIN(
S38420-98

LENDING INST:

ACCOUNT NUMBER S38420-98 025- - B-001-001

CBL

Assessed Property Description

25-B-1
MARGINAL WAY 149-171
52355 SQ FT

BRING COMPLETE TAX BILL WHEN PAYING IN PERSON.

Please Make Your Check Payable to: City of Portland

Send Copy of Bill to Mortgage Holder

PARTIAL PAYMENTS MAY BE MADE AT ANY TIME.

SOUTHERN MAINE PROPERTIES
COMPANY
5 MILK ST P O BOX 7525
PORTLAND ME 04112

161 Main Built
(R)

Change of Address

Name:

RETURN THIS TOP PORTION WITH PAYMENT

Credit cards are not accepted for property tax payments.

KEEP THIS PORTION

ACCOUNT NUMBER S38420-98

1998 REAL ESTATE PROPERTY TAX STATEMENT
City of Portland

CBL

025- - B-001-001

LENDING INST.

Fiscal Year 1998
July 1, 1997 - June 30, 1998

Owner of Record as of April 1, 1997

Assessed Property Description

SOUTHERN MAINE PROPERTIES
COMPANY
BOX 7525 DTS, 5 MILK ST
PORTLAND ME 04112

25-B-1
MARGINAL WAY 149-171
52355 SQ FT

CURRENT BILLING DISTRIBUTION

School	$ 6,676.06
Public Works	$ 920.83
Parks & Recreation	$ 358.10
Fire	$ 1,125.46
Police	$ 1,163.83
Debt Repayments	$ 1,099.88
General Government	$ 473.21
County	$ 422.05
Health & Human Services	$ 319.73-
Library	$ 422.05
Metro Transit District	$ 306.94
Enterprise Funds	$ 51.16-
Regional Waste Systems	$ 191.84

CURRENT BILLING INFORMATION

Land Value	$ 146,520.00
Building Value	$ 374,220.00
Total Value	$ 520,740.00
Exemptions	$ .00
Taxable Value	$ 520,740.00
Tax Rate	$ 24.56
TOTAL TAX	$ 12,789.36
AMOUNT PAID	$ 6,394.68

Remittance Instructions

To avoid standing in line, it is recommended that taxes be paid by mail. Please make check or money order payable to: *CITY OF PORTLAND*. Credit cards are not accepted for property tax payments.

Use enclosed envelope to return your payment or mail to:

City of Portland
P.O. Box 544
Portland, ME 04112 - 0544

Use top right margin for change of address and check off box on return envelope.

RECD IN
FEB 1 4 1998
FORE RIVER COMPANY

City ortland

July 1, 1997 - June 30, 1998

DUE SEPT. 5, 1997	DUE MARCH 6, 1998	AMOUNT PAID	INTEREST DUE	PAY THIS AMOUNT
$155.83	$155.83	$155.83		$155.83

SECOND BILLIN(
S38425-98

LENDING INST:

ACCOUNT NUMBER
S38425-98

CBL
025- - B-006-001

Assessed Property Description
25-B-6
R MARGINAL WAY 137
2676SF

BRING COMPLETE TAX BILL WHEN PAYING IN PERSON.

Please Make Your Check Payable to: City of Portland

Send Copy of Bill to Mortgage Holder

PARTIAL PAYMENTS MAY BE MADE AT ANY TIME.

SOUTHERN MAINE PROPERTIES COMPANY
5 MILK ST P O BOX 7525
PORTLAND ME 04112

161 Land behind 1101-05 (NR)

Change of Address
Name:

RETURN THIS TOP PORTION WITH PAYMENT

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KEEP THIS PORTION

1998 REAL ESTATE PROPERTY TAX STATEMENT
City of Portland

Fiscal Year 1998
July 1, 1997 - June 30, 1998

Owner of Record as of April 1, 1997

SOUTHERN MAINE PROPERTIES COMPANY
BOX 7525 DTS, 5 MILK ST
~~PORTLAND ME 04101~~

ACCOUNT NUMBER
S38425-98

CBL
025- - B-006-001

LENDING INST.

Assessed Property Description
25-B-6
R MARGINAL WAY 137
2676SF

CURRENT BILLING DISTRIBUTION

School	$ 162.70
Public Works	$ 22.44
Parks & Recreation	$ 8.73
Fire	$ 27.43
Police	$ 28.36
Debt Repayments	$ 26.80
General Government	$ 11.53
County	$ 10.28
Health & Human Services	$ 7.79-
Library	$ 10.28
Metro Transit District	$ 7.48
Enterprise Funds	$ 1.25-
Regional Waste Systems	$ 4.67

CURRENT BILLING INFORMATION

Land Value	$ 8,820.00
Building Value	$ 3,870.00
Total Value	$ 12,690.00
Exemptions	$ .00
Taxable Value	$ 12,690.00
Tax Rate	$ 24.56
TOTAL TAX	$ 311.66
AMOUNT PAID	$ 155.83

Remittance Instructions

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Use enclosed envelope to return your payment or mail to:

City of Portland
P.O. Box 544
Portland, ME 04112 - 0544

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RECEIVED
FEB 17 1998

1998 REAL ESTATE PROPERTY TAX STATEMENT
City of Portland

Fiscal Year 1998
July 1, 1997 - June 30, 1998

DUE SEPT. 5, 1997	DUE MARCH 6, 1998	AMOUNT PAID	INTEREST DUE	PAY THIS AMOUNT
$3,411.75	$3,411.75	$3,411.75		$3,411.75

SECOND BILLI
S38423-98

LENDING INST:

ACCOUNT NUMBER S38423-98 025- - B-004-001

CBL

Assessed Property Description

25-B-4-8-18
R MARGINAL WAY 139-179
59814SF

SOUTHERN MAINE PROPERTIES
COMPANY
BOX 7525 DTS, 5 MILK ST
PORTLAND ME 04101

161 Fear Ln (HP)

BRING COMPLETE TAX BILL WHEN PAYING IN PERSON.

Please Make Your Check Payable to: City of Portland

Send Copy of Bill to Mortgage Holder

PARTIAL PAYMENTS MAY BE MADE AT ANY TIME.

Change of Address

Name:

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KEEP THIS PORTION

1998 REAL ESTATE PROPERTY TAX STATEMENT
City of Portland

Fiscal Year 1998
July 1, 1997 - June 30, 1998

Owner of Record as of April 1, 1997

SOUTHERN MAINE PROPERTIES
COMPANY
BOX 7525 DTS, 5 MILK ST
PORTLAND ME 04101

ACCOUNT NUMBER S38423-98

CBL

025- - B-004-001

LENDING INST.

Assessed Property Description

25-B-4-8-18
R MARGINAL WAY 139-179
59814SF

CURRENT BILLING DISTRIBUTION

School	$ 3,561.86
Public Works	$ 491.29
Parks & Recreation	$ 191.06
Fire	$ 600.47
Police	$ 620.94
Debt Repayments	$ 586.82
General Government	$ 252.47
County	$ 225.18
Health & Human Services	$ 170.59-
Library	$ 225.18
Metro Transit District	$ 163.76
Enterprise Funds	$ 27.29-
Regional Waste Systems	$ 102.35

CURRENT BILLING INFORMATION

Land Value	$ 155,250.00
Building Value	$ 122,580.00
Total Value	$ 277,830.00
Exemptions	$ .00
Taxable Value	$ 277,830.00
Tax Rate	$ 24.56
TOTAL TAX	$ 6,823.50
AMOUNT PAID	$ 3,411.75

Remittance Instructions

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Use enclosed envelope to return your payment or mail to:

City of Portland
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Portland, ME 04112 - 0544

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FEB 17 1998
FORE RIVER

( ) Portland

July 1, 1997 - June 30, 1998

DUE SEPT. 5, 1997	DUE MARCH 6, 1998	AMOUNT PAID	INTEREST DUE	PAY THIS AMOUNT
$971.47	$971.47	$971.47		$971.47

SECOND BILLI
S38426-98

LENDING INST:

ACCOUNT NUMBER S38426-98 025- - B-007-001

CBL

Assessed Property Description

25-B-7-13
MARGINAL WAY 173-179

16901 SF

BRING COMPLETE TAX BILL WHEN PAYING IN PERSON.

Please Make Your Check Payable to: City of Portland

Send Copy of Bill to Mortgage Holder

PARTIAL PAYMENTS MAY BE MADE AT ANY TIME.

SOUTHERN MAINE PROPERTIES
COMPANY
PO BOX 7525
PORTLAND ME 04112

Change of Address

Name:

RETURN THIS TOP PORTION WITH PAYMENT

Credit cards are not accepted for property tax payments.

KEEP THIS PORTION

ACCOUNT NUMBER S38426-98

1998 REAL ESTATE PROPERTY TAX STATEMENT
City of Portland

CBL

025- - B-007-001

LENDING INST.

Fiscal Year 1998
July 1, 1997 - June 30, 1998

Owner of Record as of April 1, 1997

Assessed Property Description

SOUTHERN MAINE PROPERTIES
COMPANY
5 MILK ST
PORTLAND ME 04101

25-B-7-13
MARGINAL WAY 173-179

16901 SF

CURRENT BILLING DISTRIBUTION

School	$ 1,014.21
Public Works	$ 139.89
Parks & Recreation	$ 54.40
Fire	$ 170.98
Police	$ 176.81
Debt Repayments	$ 167.09
General Government	$ 71.89
County	$ 64.12
Health & Human Services	$ 48.57-
Library	$ 64.12
Metro Transit District	$ 46.63
Enterprise Funds	$ 7.77-
Regional Waste Systems	$ 29.14

CURRENT BILLING INFORMATION

Land Value	$ 63,000.00
Building Value	$ 16,110.00
Total Value	$ 79,110.00
Exemptions	$ .00
Taxable Value	$ 79,110.00
Tax Rate	$ 24.56
TOTAL TAX	$ 1,942.94
AMOUNT PAID	$ 971.47

Remittance Instructions

To avoid standing in line, it is recommended that taxes be paid by mail. Please make check or money order payable to: ***CITY OF PORTLAND***. Credit cards are not accepted for property tax payments.

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City of Portland
P.O. Box 544
Portland, ME 04112 - 0544

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FEB 17 1998
FORE RIVER COMPANY

City Portland

July 1, 1997 - June 30, 1998

DUE SEPT. 5, 1997	DUE MARCH 6, 1998	AMOUNT PAID	INTEREST DUE	PAY THIS AMOUNT
$133.73	$133.73	$133.73		$133.73

SECOND BILLIN
S38428-98

LENDING INST:

ACCOUNT NUMBER S38428-98 025- - B-022-002

CBL

Assessed Property Description

25-B-22
MARGINAL WAY 147
7/12 INT 7116 SF

BRING COMPLETE TAX BILL WHEN PAYING IN PERSON.

Please Make Your Check Payable to: City of Portland

Send Copy of Bill to Mortgage Holder

PARTIAL PAYMENTS MAY BE MADE AT ANY TIME.

SOUTHERIN MAINE PROPERTIES CO

5 MILK ST PO BOX 7525
PORTLAND ME 04112

161 Ballard
Land
(e)

Change of Address

Name:

RETURN THIS TOP PORTION WITH PAYMENT

Credit cards are not accepted for property tax payments.

KEEP THIS PORTION

ACCOUNT NUMBER S38428-98

1998 REAL ESTATE PROPERTY TAX STATEMENT
City of Portland

CBL 025- - B-022-002

LENDING INST.

Fiscal Year 1998
July 1, 1997 - June 30, 1998

Owner of Record as of April 1, 1997

Assessed Property Description

SOUTHERN MAINE PROPERTIES CO
5 MILK ST
PO BOX 7525
PORTLAND ME 04112

25-B-22
MARGINAL WAY 147
7/12 INT 7116 SF

CURRENT BILLING DISTRIBUTION

School	$ 139.60
Public Works	$ 19.26
Parks & Recreation	$ 7.49
Fire	$ 23.54
Police	$ 24.34
Debt Repayments	$ 23.00
General Government	$ 9.90
County	$ 8.83
Health & Human Services	$ 6.69-
Library	$ 8.83
Metro Transit District	$ 6.42
Enterprise Funds	$ 1.07-
Regional Waste Systems	$ 4.01

CURRENT BILLING INFORMATION

Land Value	$ 10,890.00
Building Value	$ .00
Total Value	$ 10,890.00
Exemptions	$ .00
Taxable Value	$ 10,890.00
Tax Rate	$ 24.56
TOTAL TAX	$ 267.46
AMOUNT PAID	$ 133.73

Remittance Instructions

To avoid standing in line, it is recommended that taxes be paid by mail. Please make check or money order payable to: ***CITY OF PORTLAND***. Credit cards are not accepted for property tax payments.

Use enclosed envelope to return your payment or mail to:

City of Portland
P.O. Box 544
Portland, ME 04112 - 0544

Use top right margin for change of address and check off box on return envelope.

RECEIVED
FEB 17 1998
FORE RIVER COMPANY

1998 REAL ESTATE PROPERTY TAX STATEMENT
City of Portland

Fiscal Year 1998
July 1, 1997 - June 30, 1998

DUE SEPT. 5, 1997	DUE MARCH 6, 1998	AMOUNT PAID	INTEREST DUE	PAY THIS AMOUNT
$3,334.39	$3,334.39	$3,334.39		$3,334.39

SECOND BILLIN
F15488-98

LENDING INST:

ACCOUNT NUMBER F15488-98 025- - B-005-001

CBL

Assessed Property Description

25-B-5
MARGINAL WAY 131-145
46632 SQ FT

BRING COMPLETE TAX BILL WHEN PAYING IN PERSON.

Please Make Your Check Payable to:
City of Portland

Send Copy of Bill to Mortgage Holder

PARTIAL PAYMENTS MAY BE MADE AT ANY TIME.

FIVE LIVER COMPANY

5 MILK ST
PORTLAND ME 04101

Change of Address

Name:

RETURN THIS TOP PORTION WITH PAYMENT

Credit cards are not accepted for property tax payments.

KEEP THIS PORTION

1998 REAL ESTATE PROPERTY TAX STATEMENT
City of Portland

Fiscal Year 1998
July 1, 1997 - June 30, 1998

Owner of Record as of April 1, 1997

FIVE LIVER COMPANY

5 MILK ST
PORTLAND ME 04101

ACCOUNT NUMBER F15488-98

CBL

025- - B-005-001

LENDING INST.

Assessed Property Description

25-B-5
MARGINAL WAY 131-145
46632 SQ FT

CURRENT BILLING DISTRIBUTION		CURRENT BILLING INFORMATION	
School	$ 3,481.11	Land Value	$ 132,840.00
Public Works	$ 480.15	Building Value	$ 138,690.00
Parks & Recreation	$ 186.73	Total Value	$ 271,530.00
Fire	$ 586.85	Exemptions	$ .00
Police	$ 606.86	Taxable Value	$ 271,530.00
Debt Repayments	$ 573.52	Tax Rate	$ 24.56
General Government	$ 246.74	TOTAL TAX	$ 6,668.78
County	$ 220.07	AMOUNT PAID	$ 3,334.39
Health & Human Services	$ 166.72-		
Library	$ 220.07		
Metro Transit District	$ 160.05		
Enterprise Funds	$ 26.68-		
Regional Waste Systems	$ 100.03		

Remittance Instructions

To avoid standing in line, it is recommended that taxes be paid by mail. Please make check or money order payable to: *CITY OF PORTLAND*. Credit cards are not accepted for property tax payments.

Use enclosed envelope to return your payment or mail to:

City of Portland
P.O. Box 544
Portland, ME 04112 - 0544

Use top right margin for change of address and check off box on return envelope.

1998 REAL ESTATE PROPERTY TAX STATEMENT
City of Portland

Fiscal Year 1998
July 1, 1997 - June 30, 1998

DUE SEPT. 5, 1997	DUE MARCH 6, 1998	AMOUNT PAID	INTEREST DUE	PAY THIS AMOUNT
$96.15	$96.15	$96.15		$96.15

SECOND BILL
F15489-98

LENDING INST:

ACCOUNT NUMBER F15489-98 025- - B-022-001

CBL

FIVE LIVER COMPANY

5 MILK ST
PORTLAND ME 04101

Assessed Property Description

25-B-22
MARGINAL WAY 147
5/12 INTEREST
7116 SF

BRING COMPLETE TAX BILL WHEN PAYING IN PERSON.

Please Make Your Check Payable to:
City of Portland

Send Copy of Bill to Mortgage Holder

PARTIAL PAYMENTS MAY BE MADE AT ANY TIME.

Change of Address

Name:

RETURN THIS TOP PORTION WITH PAYMENT

Credit cards are not accepted for property tax payments.

KEEP THIS PORTION

1998 REAL ESTATE PROPERTY TAX STATEMENT
City of Portland

Fiscal Year 1998
July 1, 1997 - June 30, 1998

Owner of Record as of April 1, 1997

FIVE LIVER COMPANY

5 MILK ST
PORTLAND ME 04101

ACCOUNT NUMBER F15489-98

CBL

025- - B-022-001

LENDING INST.

Assessed Property Description

25-B-22
MARGINAL WAY 147
5/12 INTEREST
7116 SF

CURRENT BILLING DISTRIBUTION

School	$	100.37
Public Works	$	13.85
Parks & Recreation	$	5.38
Fire	$	16.92
Police	$	17.50
Debt Repayments	$	16.54
General Government	$	7.12
County	$	6.35
Health & Human Services	$	4.81-
Library	$	6.35
Metro Transit District	$	4.62
Enterprise Funds	$	.77-
Regional Waste Systems	$	2.88

CURRENT BILLING INFORMATION

Land Value	$	7,830.00
Building Value	$	.00
Total Value	$	7,830.00
Exemptions	$	.00
Taxable Value	$	7,830.00
Tax Rate	$	24.56
TOTAL TAX	$	192.30
AMOUNT PAID	$	96.15

Remittance Instructions

To avoid standing in line, it is recommended that taxes be paid by mail. Please make check or money order payable to: *CITY OF PORTLAND*. Credit cards are not accepted for property tax payments.

Use enclosed envelope to return your payment or mail to:

City of Portland
P.O. Box 544
Portland, ME 04112 - 0544

Use top right margin for change of address and check off box on return envelope.

RECEIVED
FEB 19 1998
FORE RIVER COMPANY

ATTACHMENT 1

CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Chair Carroll and Members of the Portland Planning Board

FROM: Richard Knowland, Senior Planner

DATE: July 28, 1998

SUBJECT: New Office Building at 161 Marginal Way

Southern Maine Properties and Five Liver Company request workshop review for a proposed office building at 161 Marginal Way. This property is part of larger landholdings owned along Marginal Way by the Fore River Company. The proposed building is expected to be the area offices for Maine Department of Human Services. The site presently includes a large shed, the former Steego Auto Parts and Concord Trailways building which will all be removed from the site.

Background information, site plans and a building elevation are shown on Attachments A, B and C.

Development Summary

Zoning:	B-5 Urban Commercial Mixed Use Zone
Proposed Use:	Office Space
Building Floor Area:	52,800 sq. ft.
Building Footprint:	13,200 sq. ft.
Building Height:	4 Stories
Land Area:	123,186 sq. ft.
Parking:	269 Spaces

Office Building

The proposed building will be 4 stories. Concept building elevations are shown on Attachment C. The exterior facade will consist of brick. A steel canopy is proposed along portions of the southerly and westerly facade which provides cover for the visitors and employee entrances. There appears to be some type of lintel treatment above the windows. An "architectural cornice" is labeled on the plan above the fourth floor windows. A more detailed building elevation plan should be submitted but the concept design seems appropriate for the area.

The building will have the capability to accommodate a fifth story. If the addition were to be built, it is at least 3 years away so it could not be incorporated into the current review process since site plan approval lapses after two years. Any future addition will require site plan review. The building is setback about 100 feet from Marginal Way. A 30 foot wide landscaped plaza is shown in front of the building.

Parking

Under Sec. 14-526(2)(b) of the site plan ordinance, the Board determines the parking requirements for new buildings over 50,000 sq. ft. The applicant is proposing 269 spaces or 5.38 spaces per 1,000 sq. ft. of floor area. This is well above the normal zoning parking requirement of 2.5 spaces per 1,000 sq. ft. of floor area.

Circulation

The site will be served by two driveways along Marginal Way. Visitor parking (48 spaces) is shown on the site plan in the front yard area between the building and Marginal Way. The visitors entrance is located along the front of the building.

The remainder of the parking is for staff. A staff entrance is shown near the rear of the building.

The applicant indicates that there will be no wheel stops or curb guards for the rear parking spaces that abut the vacant lot along Marginal Way. Although the spaces will be striped, there will be no physical barrier to keep vehicles within the parking lot. Vehicles could therefore travel back and forth through the vacant lot to Marginal Way bypassing the designed driveway entrances on the site plan. The applicant would prefer this arrangement since future development is expected on the vacant property and he does not want to install a permanent improvement.

Larry Ash, City Traffic Engineer, has requested that a traffic analysis of the proposed development be submitted for review. This will need to be submitted prior to the public hearing.

A new sidewalk will need to be installed.

Special B-5 Site Plan Review Standards

The site plan ordinance has a series of standards for the B-5 Urban Commercial Mixed Use zone [Sec. 14-526(26)]. These standards are shown later in this section.

Since the applicant is proposing a 100 foot building setback from Marginal Way and incorporates parking within the building setback, review of standards (b), (d), and (e) is particularly relevant. These provisions are highlighted in shade. The Board may modify or waive these standards "as may be reasonably necessary to suit the operational or marketing needs of the user(s) of the property." Attachment D includes a narrative by the applicant in support of this modification.

To summarize, the applicant is proposing a more suburban form of development with an extended building setback from the street and parking in the front as contrasted with the B-5 related standards that encourage a more urban form of development (building close to streetline, parking in rear and side rather than the front yard.)

Sec. 14-526. Standards.

(a) *Requirements for approval.* The planning board or planning authority shall not approve a site plan unless it meets the following criteria:

(26) Development located in the B-5 and B-5b zones shall meet the following additional standards:

a. Shared infrastructure: Shared circulation, parking, and transportation infrastructure shall be provided to the extent practicable, with utilization of joint curb cuts, walkways, service alleys, bus pull out areas, and related infrastructure shared with abutting lots and roadways. Easements for access for abutting properties and shared internal access points at property lines shall be provided where possible to facilitate present or future sharing of access and infrastructure.

b. Buildings and uses shall be located close to the street where practicable. Corner lots shall fill into the corner and shall provide an architectural presence and focus to mark the corner.

c. Buildings shall be oriented toward the street and shall include prominent facades with windows and entrances oriented toward the street. Uses that include public access to a building or commercial/office uses in mixed-use developments shall be oriented toward major streets whenever possible.

d. Parking lots shall be located to the maximum extent practicable toward the rear or side of the property and shall be located along property lines where joint use or combined parking areas with abutting properties are proposed or anticipated.

e. *Modifications to siting standards for the B-5 zone.* In the B-5 zone, the planning board may modify or waive standards (a)-(d) of this subsection as may be reasonably necessary to suit the operational or marketing needs of the user(s) of the property.

Landscaping

Seven (7) street trees are shown along Marginal Way. An indeterminant number of trees is also shown near the plaza in front of the building. Only two trees are proposed along the 540 foot long rear property line. The plan says a continuous fence will be installed along the rear property line and a portion of the westerly side line.

Environmental

The applicant is proposing a 269 space parking lot. The plan should accommodate some type method to treat contaminated stormwater from the parking lot.

Attachments:

A. Background Information
B. Site Plan
C. Building Elevations
D. Applicant R-5 Siting Standard Narrative
E. Public Works Comments
F. Lighting

ATTACHMENT A-1

Site Plan Review - Written Statements
New Office Building Facility at 161 Marginal Way, Portland, Maine

Below are responses to written statement requirements as set forth in Portland's Land Use §14-525c. The numbers below correspond to the numbers given in the code.

14-525c: Owners

Southern Maine Properties Company (SMPC)
P.O. Box 7525
Portland, ME 04112

Five Liver Company (FLC)
P.O. Box 7525
Portland, ME 04112

1) See "Proposed Site Plan with Property Lines."

DHS site area - office building for DHS or another user.

Remaining SMPC area - surface parking (no improvements).

Remaining FLC area - Atlantic Hardwoods (exist. use to remain).

2)

Owner	Land Area	Coverage
SMPC/FLC	DHS site area = 123,186 ±SF	13,200 ±SF
SMPC	Remaining SMPC area = 15,026 ±SF	Ø SF
FLC	Remaining FLC area = 47,448	5,806 ±SF

3) See site plan for existing 1/2 interest by each company and for a portion of the FLC property to be leased to SMPC.

4) DHS site area - normal office waste.

Remaining SMPC area expected not to generate solid waste.

Remaining FLC area expected no change in solid waste generation.

5) Site is currently served by:
PWD - water & sprinklers
Portland Sewer Department - sewer & storm
CMP - electrical
Northern Utilities - natural gas
Bell Atlantic - telephone

6) DHS site area - office site currently 100% impervious: Install new catch basins for surface drainage.

Remaining SMPC area and remaining FLC area - existing drainage systems to remain.

7) Permitting - 2 months
Construction - 9 months
- Demolition
- Site work
- New building construction

8) Perhaps traffic review stats (100-200 PCEs?).

9) See letter from Realty Finance Corp. dated 12/3/97.

10) See attached tax bills.

11) None.

12) Any plans in this format will follow.

7/21/98

Site Plan Review
New Office Building Facility at 161 Marginal Way, Portland, Maine

Below are responses to contents requirements as set forth in Portland's Land Use §14-525b. The numbers below correspond to the numbers given in the code.

§14-525(b)1)

a. Applicant: Southern Maine Properties Company
P.O. Box 7525
Portland, ME 04112

Development Name: 161 Marginal Way
New Office Building

b. See Site Plan "A".

c. See Site Plan "A".

d. See written statement.

e. See Site Plan "B".

§14-525(b)2)

a. Existing soils - sand, gravel, bricks, ash, grey silty clay, grey silty sand, and gravel.

b. Site is 100% impervious and without rock outcroppings. See Site Plan "A" for easements and right of ways. See Site Plan "B" for drainage.

c. See Site Plan "C" and "Perspective Rendering".

d. See Site Plan "B".

e. See Site Plan "B".

f. See Site Plan "A".

g. See Site Plan "A" and "B"; sidewalk information to follow.

h. Landscape plan to follow.

i. See Site Plan "A".

j. See Site Plan "B" for pole locations and attached pole and fixture specifications.

k. See Site Plan "B".

l. N/A.

m. To follow.

n. To follow.

Note: Standard Boundary Survey prepared by a registered land surveyor to follow.

REALTY FINANCE
CORPORATION, LLC

December 3,1997

Department of Human Services
State of Maine
Augusta, Maine

RE: Fore River Company/ Marginal Way Property

To whom it may concern:

We have been asked to provide you with an indication of Fore River Company's ability to finance the construction of the proposed "DHS" building on Marginal Way in Portland. I have personally known Peter and Rick Quesada, the principals of Fore River Company, for over fifteen years. Based upon my knowledge, Fore River Company clearly has the ability to finance this project in it's entirety. The Quesadas have successfully completed a number of development projects in Southern Maine over the past decade and are highly regarded in their field of expertise.

We are prepared to work with Fore River Company and one of our lenders to obtain debt financing for a portion of the project development cost, and based on our knowledge of these lenders' parameters, we believe a new DHS facility on Marginal Way is financable.

Sincerely,

John P. Flynn
Senior Vice President

24 CITY CENTER · PO BOX 100 · PORTLAND, ME 04112-0100
TELEPHONE: (207) 761-0700 · FAX: (207) 761-0022

ATTACHMENT D-1

Fore River Company 5 Milk Street P.O. Box 7525 Portland, ME 04112 (207) 772-6404

July 20, 1998

Joe Gray
Director of Planning & Development
City of Portland
389 Congress Street
Portland, ME 04101

Re: 161 Marginal Way Site Plan Workshop

Dear Joe,

In preparation for our Planning Board workshop relating to the Site Plan Application for 161 Marginal Way (the former Haverty Buick), you have asked us for a written analysis of the building siting decision. Among the variables we considered were the following, based on the operational needs of the user with which we are now in negotiations, and the marketing and financing needs, given the possible termination of this user's lease at any time:

To maximize available parking on the lot, all parking rows have been designed as double loaded. Single loaded parking on this site would lose a row of parking and increase the land area which must be devoted to parking. Given this constraint, in theory the building could be located either on the street, on the back lot line, on the Noyes property line, or any number of units of double loaded parking to the west. We have located the building as close to the Noyes property and the street as possible with one double loaded row on the street and one on the property line. A location farther west (closer to the Whole Grocer) limits future flexibility on the remainder of the site. A location on the back lot line was deemed inconsistent with the pattern elsewhere on the street and limiting of future development options. A location on the Noyes lot line was inefficient from a circulation point of view, and unnecessarily put the windows facing east at risk of future development on the adjacent property. A location on the street was inconsistent with the current and future user needs and therefore not practicable, as explained below.

The Department of Human Services (DHS), as a prospective user, requires that customer and employee entrances and related parking be separate and distinct. A consistent theme of the design program of DHS is separation of client service areas from administrative employee areas. Our design puts the main public entrance and public parking at the front, facing the street, with the employee parking and entrance at the side and rear. Client parking on the side and rear, with the client entrance at the front was deemed to be confusing for clients, who might enter through the wrong door (see "DHS Security Policy" enclosed).

The DHS lease is terminable by the State at any time during its 15 year term or two 5 year option periods. We assume that future office users may not need the entire building. We have designed the building so that separate floor users can potentially have their own building entrance—one on the front, one on the side. If DHS terminates its lease, the assumption of our lender and ourselves is that the termination will occur at the bottom of an economic cycle when the State is "out of money." At such a time, if past is a guide to future, other leasing and subleasing alternatives will be available, and convenient parking will be a critical variable. A building located on the street, with all parking remote from the main entrance for that tenant, will not be perceived as convenient. Not everybody has to park right in front of the door, but the view that no one can will be immensely detrimental to marketing. It would not be practicable to put an entrance on the street without some adjacent parking.

Given DHS' termination option, the building has also been located to allow reuse of the ground floor as retail space if that is where the market is when DHS terminates its lease. The primary attraction of this location for retailers is on-site parking, and that on-site parking is vastly preferable if some of it is in front of the building. Hence we have located the building to allow some parking in front.

In summary based on our desire to have an entrance facing the street and to preserve the remainder of the site, on the current needs of DHS, on the prospective needs of future users, whether retail or office, and on the concerns of lenders with releasing in the event of DHS lease termination, we have located the building as shown on the site plan. We and DHS appreciate your willingness to schedule a prompt workshop and look forward to discussing this exciting Marginal Way redevelopment project with the Planning Board and staff.

Sincerely,

Peter W. Quesada

enclosure

DIIS SECURITY POLICY

P. BUILDING SECURITY:

The following features shall be included in the design of offices:

1. **Proximity card reader system to include card readers on all exterior doors.**

2. The main entrance will be unlocked, but secondary entrances and exits shall remain locked at all times, although they will allow one-way exiting at any time.

3. Separation, securing of staff areas from public areas through the use of the same **proximity card reader** system as above. These secured doors shall remain locked at all times. Each area is self-supporting, i.e. separate restrooms for public and employees.

4. Keyed locks shall be provided to secure program areas and individual rooms. Exempt are restrooms, interview rooms, and playrooms.

5. Receptionist located behind a full counter.

6. Audio-visual alarm system to enable receptionist to alert other employees in the building in the event of difficulties requiring further assistance.

7. Office manager located directly adjacent to receptionist work areas, with observation window in the common wall to enable office manager to periodically observe client activity at the receptionist window.

8. Interview rooms equipped with silent alarm trigger mechanisms, terminating at an audio/visual panel at the reception work station to enable to interviewer to signal for emergency assistance.

9. Interview rooms doors with glass side panels in doors to allow passers-by to recognize a violent situation.

10. Placement of interviewer desks so that the interviewer if closest to the exit door, with the client deepest into the room.

11. Family visitation room equipped with two-way mirror and speaker system to allow undetected observation. The room will have two doors, with one allowing self-locking exit into the adjacent observation room which is located in the secured staff area or into a secured staff hallway.

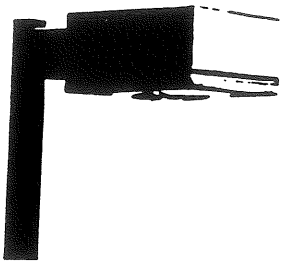
From: ANTHONY LOMBARDO
To: RICK KNOWLAND
Date: Tue, Jul 21, 1998 10:12 AM
Subject: D.H.S. Site @ 161 Marginal Way.....7/21/98

Rick,
Public Works biggest concerns will be relative to the entrance/exits on to Marginal Way and drainage quantity and quality. I will have more specific comments once we receive more detailed and complete construction plans.

AREA/ROADWAY

MCGRAW-EDISON®

ATTACHMENT F-1



GMGALLERIA

250W-400W
High Pressure Sodium
Metal Halide

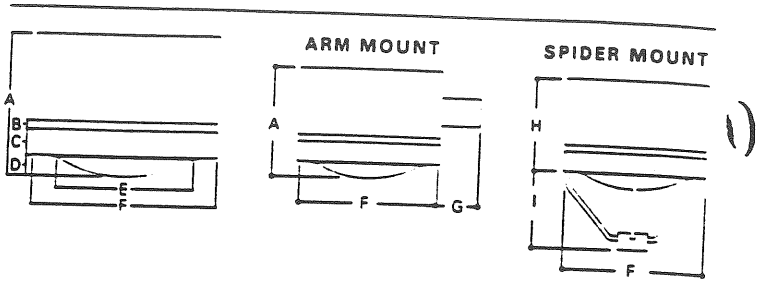
ARCHITECTURAL AREA LIGHT

- Formed aluminum housing with stamped reveal has interior-welded seams for structural integrity and is finished in polyester powder coat
- Ballast tray is hard-mounted to housing interior for cooler operation
- Long-life core and coil ballast
- Spun and stamped aluminum reflector in vertical lamp units, or hydroformed anodized aluminum reflector in horizontal lamp units
- Formed aluminum door has heavy-duty hinges, captive retaining screws and is finished in polyester powder coat (Spider mount unit has steel door)
- Convex tempered glass lens
- Mogul-base porcelain socket
- Approximate net weight: 64-69 lbs. (29-31 kgs.)

DESCRIPTION

The Galleria achieves superior light distribution by utilizing a seamless reflector system, making it the optimum choice for almost any small or medium area lighting application. U.L. listed for wet locations. CSA certified.

DIMENSIONS



	A	B	C	D	E	F	G	H	I
Medium	15" (381mm)	3/4" (19mm)	3" (76mm)	4" (102mm)	18 3/4" (476mm)	21 3/4" (552mm)	6" or 14" (152 356mm)	12" (305mm)	21" (533mm)

EPA-Effective Projected Area: 2.4

ORDERING INFORMATION

SAMPLE NUMBER: GMA251292D

G | M | A | 40 | 1 | 2 | 4 | 3D | | |

- **Product Family**: G= Galleria
- **Housing Size**: M=Medium
- **Mounting Method**: A=Arm [1]; B=Spider for 2 3/8" O.D. tenon; C=Spider for 3 1/2" O.D. tenon
- **Lamp Wattage/Base**: 25=250W/ Mogul; 40=400W/ Mogul
- **Lamp Type**: 1=MH; 2=HPS
- **Ballast Type** [5]: 2=CWA; 5=CWI
- **Voltage** [5]: 1=120V; 2=208V; 3=240V; 4=277V; 5=480V; 6=Triple-Tap [4] wired 347V; 9=Multi-Tap [4] wired 277V
- **Distribution**: 1D=Type I MCO Horizontal; 2D=Type II MCO Horizontal; 3D=Type III MCO Horizontal; FT=Forward Throw Horizontal; AR=Area Round Vertical; AS=Area Square Vertical; RW=Rectangular Wide Vertical; 3V=Vertical Type III
- **Color**: BZ=Bronze; BG=Beige; BK=Black; BL=Blue; GR=Green; AP=Grey; RD=Red; SY=Silver; WH=White; YL=Yellow
- **Options & Accessories** (See Below)

400 Watt Shoe box

40' pole

PRODUCT INFORMATION

Catalog Number [2]	Lamp Wattage	Lamp Type [3]
Arm Mount (Order arm separately)		
GMA25229XX	250	HPS
GMA40229XX	400	HPS
GMA25129XX	250	MH
GMA40129XX	400	MH
Spider Mount (For 2 3/8" O.D. Tenon)		
GMB25229XX	250	HPS
GMB40229XX	400	HPS
GMB25129XX	250	MH
GMB40129XX	400	MH
GMC25129XX	250	MH
GMC40129XX	400	MH
Spider Mount (For 3 1/2" O.D. Tenon)		
GMC25229XX	250	HPS
GMC40229XX	400	HPS

Options (add as suffix)

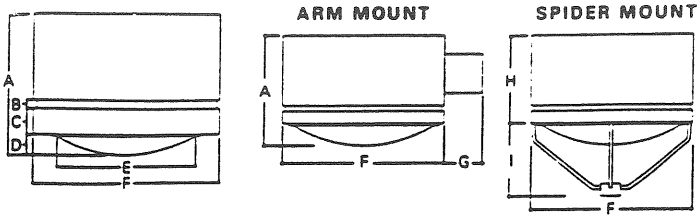
F=Single Fuse (120, 277 or 347V)
FF=Double Fused (208, 240 or 480V)
R=NEMA Twistlock Photocontrol Receptacle
Q=Quartz Restrike (Limit to 150W max. quartz lamp only. Lamp not included)
HS=House Side Shield
VS=Vandal Shield
FG=Flat Glass (Reduced Lamp Envelope required AR, AS, RW and 3V)

Accessories (order separately)

MA1004=14' Arm for Square Pole. 1.0 EPA
MA1005=6" Arm for Square Pole. 0.5 EPA
MA1006=Direct Mount Kit for Square Pole
MA1007=14' Arm for Round Pole. 1.0 EPA
MA1008=6" Arm for Round Pole. 0.5 EPA
MA1009=Direct Mount Kit for Round Pole
MA1010=Single-arm Tenon Adapter for 3 1/2" O.D. Tenon
MA1011=2 @ 90° Tenon Adapter for 3 1/2" Tenon
MA1012=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
MA1013=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
MA1014=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
MA1015=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
MA1016=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
MA1017=Single-arm Tenon Adapter for 2 3/8" O.D. Tenon
MA1018=2 @ 180° Tenon Adapter for 2 3/8" O. D. Tenon
MA1029=Wall bracket
OA1016=Photocontrol–Multi-Tap
OA1027=Photocontrol–480V
OA1201=Photoelectric Control, 347V NEMA Type
LL=Lamp Included

NOTES: [1] Arm not included. See accessories. [2] Designate distribution by changing 9th and 10th digits. [3] All lamps are mogul base. Lamps are not included. [4] Multi-Tap ballast is 120/208/240/277V. Triple-Tap ballast is 120/277/347V. [5] Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information.

DIMENSIONS

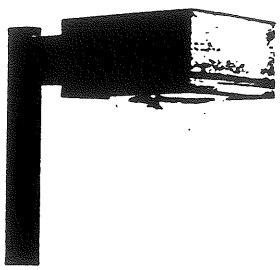


	A	B	C	D	E	F	G	H	I
Large	18 1/2" (464mm)	3/4" (19mm)	3 3/8" (85mm)	4" (102mm)	12 7/8" (327mm)	27" (686mm)	6" or 14" (152 or 356mm)	14 1/2" (362mm)	12" (305mm)

EPA-Effective Projected Area: 3.9

DESCRIPTION

The Galleria achieves superior light distribution by utilizing a seamless reflector system, making it the optimum choice for almost any large area lighting application. U.L listed for wet locations. CSA certified.



GLGALLERIA

400W-1000W
High Pressure Sodium
Metal Halide

ARCHITECTURAL AREA LIGHT

ORDERING INFORMATION

SAMPLE NUMBER: GLA911292D

G | L | B | 91 | 1 | 2 | 4 | AR | | |

- **Product Family**: G= Galleria
- **Housing Size**: L=Large
- **Mounting Method**: A=Arm [1]; B=Spider for 2 3/8" O.D. tenon; C=Spider for 3 1/2" O.D. tenon
- **Lamp Wattage/Base**: 40=400W/ Mogul; 91=1000W/ Mogul
- **Lamp Type**: 1=MH; 2=HPS
- **Ballast Type** [5]: 2=CWA; 5=CWI
- **Voltage** [5]: 1=120V; 2=208V; 3=240V; 4=277V; 5=480V; 6=Triple-Tap [4] wired 347V; 9=Multi-Tap [4] wired 277V
- **Distribution**: 1D=Type I MCO Horizontal; 2D=Type II MCO Horizontal; 3D=Type III MCO Horizontal; FT=Forward Throw Horizontal; AR=Area Round Vertical; AS=Area Square Vertical; RW=Rectangular Wide Vertical; 3V=Vertical Type III
- **Color**: BZ=Bronze; BG=Beige; BK=Black; BL=Blue; GR=Green; AP=Grey; RD=Red; SY=Silver; WH=White; YL=Yellow
- **Options & Accessories** (See Below)

1000 Watt pole Top

40' pole

PRODUCT INFORMATION

Catalog Number [2]	Lamp Wattage	Lamp Type [3]
Arm Mount (Order arm seperately)		
GLA40229XX	400	HPS
GLA91229XX	1000	HPS
GLA40129XX	400	MH
GLA91129XX	1000	MH
Spider Mount (For 2 3/8" O.D. Tenon)		
GLB40229XX	400	HPS
GLB91229XX	1000	HPS
GLB40129XX	400	MH
GLB91129XX	1000	MH
Spider Mount (For 3 1/2" O.D. Tenon)		
GLC40229XX	400	HPS
GLC91229XX	1000	HPS
GLC40129XX	400	MH
GLC91129XX	1000	MH

Options (add as suffix)

- F=Single Fuse (120, 277 or 347V)
- FF=Double Fused (208, 240 or 480V)
- R=NEMA Twistlock Photocontrol Receptacle
- Q=Quartz Restrike (Limit to 150W max. quartz lamp only. Lamp not included)
- HS=House Side Shield
- VS=Vandal Shield (400W maximum)

Accessories (order separately)

- MA1004=14° arm for square pole. 1.0 EPA
- MA1005=6° arm for square pole. 0.5 EPA
- MA1006=Direct mount kit for square pole
- MA1007=14° arm for round pole. 1.0 EPA
- MA1008=6° arm for round pole. 0.5 EPA
- MA1009=Direct mount kit for round pole
- MA1010=Single-arm tenon adapter for 3 1/2" O.D. tenon
- MA1011=2 @ 90° tenon adapter for 3 1/2" O.D. tenon
- MA1012=3 @ 120° tenon adapter for 3 1/2" O.D. tenon
- MA1014=2 @ 90° tenon adapter for 3 1/2" O.D. tenon
- MA1015=2 @ 120° tenon adapter for 3 1/2" O.D. tenon
- MA1016=3 @ 90° tenon adapter for 3 1/2" O.D. tenon
- OA1016=Photocontrol–Multi-Tap
- OA1027=Photocontrol–480V
- OA1201=Photoelectric Control, 347V NEMA Type
- LL=Lamp Included

- Formed aluminum housing with stamped reveal has interior-welded seams for structural integrity and is finished in polyester powder coat
- Ballast tray is hard-mounted to housing interior for cooler operation
- Long-life core and coil ballast
- Spun and stamped aluminum reflector in vertical lamp units, or hydroformed anodized aluminum reflector in horizontal lamp units
- Formed aluminum door has heavy-duty hinges, captive retaining screws and is finished in polyester powder coat (Spider mount unit has steel door)
- Convex tempered glass lens
- Mogul-base porcelain socket
- Approximate net weight: 66-83 lbs. (30-37 kgs.)

NOTES. [1] Arm not included. See accessories. [2] Designate distribution by changing 9th and 10th digits. [3] All lamps are mogul base. Lamps are not included. [4] Multi-Tap ballast is 120 208 240 277V. Triple-Tap ballast is 120 277 347V. [5] Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information.

COOPER LIGHTING

F-3

SSSSQUARE STRAIGHT STEEL

10'-39'
Mounting Height

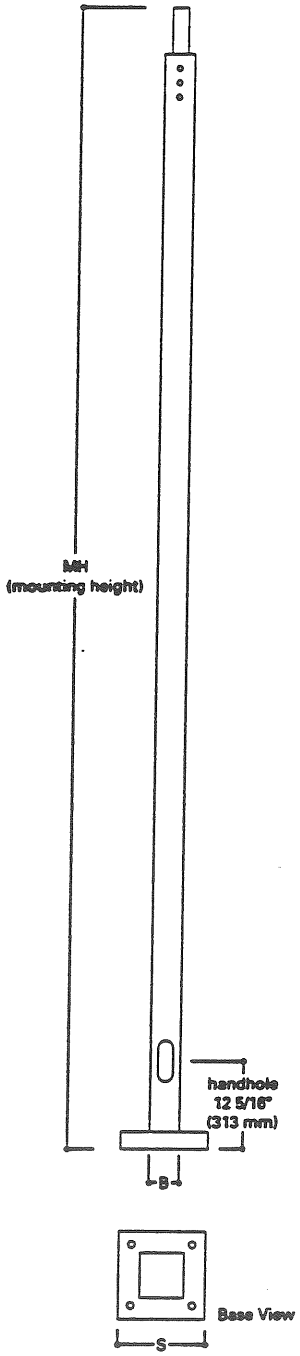
SQUARE STRAIGHT STEEL

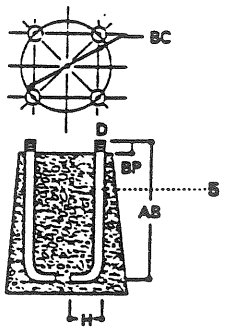
FINISH COLORS

F=Dark Bronze
G=Galvanized
H=Red
I=Royal Blue
L=Buttercup Yellow
N=Olive Green
P=Prime
Q=Designer Beige
S=Silver
V=Grey
W=White
X=None
Y=Black

DETAILS

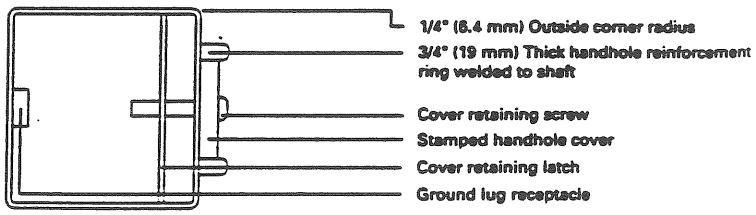
REFER TO CHART FOR DIMENSIONAL INFORMATION





39' poles

HANDHOLE (section through standard handhole)



POLE SPECIFICATIONS

1···ASTM Grade steel base plate with ASTM A366 base cover.

2···Handhole assembly 3" x 5" (76 x 127 mm) on 5" (127 mm) and 6" (152 mm) pole; and 2" x 4" (51 x 102 mm) on 4" (102 mm) pole.

3···ASTM A500 grade "B" steel shaft. Shot blasted and painted with polyester powder coat.

4···Drilled or Tenon (specify).

5···Anchor bolt per ASTM A576 with (2) nuts, (2) flat washer, and (1) lock washer. Nuts, washers and threaded portion of bolt are hot dip galvanized 3" (76 mm) hook for 3/4" (19 mm) bolt. 4" (102 mm) hook for 1" (25 mm) bolt.

Corporation Counsel
Gary C. Wood

Associate Counsel
Charles A. Lane
Elizabeth L. Boynton
Donna M. Katsiaficas
Penny Littell

CITY OF PORTLAND

August 24, 1998

Bill Stoddard
Chief Engineer, Bureau of General Services
77 State House Station
Augusta, ME 04333-0077

Re: Quesada/DHS Building

Dear Bill:

In follow-up to our telephone conversation of August 21, 1998 I am writing to confirm the following. On that date I inquired whether or not (under the scenario facing the City of Portland, namely Peter Quesada intending to contract with the DHS for the rental of units in an office building to be built on Marginal Way), the City needed to provide notice to the Bureau of General Services that the City intends to review and issue building permits on a "state construction project." See 5 M.R.S.A. §1742-B. You assured me that this was not a "state construction project" and that the State need not be informed of the City's review and permitting requirements regarding this project. You contrasted this situation with one where there were improvements being made to an existing State leased building where the State would be making the improvements. Under the latter, the City would be required to notify the Bureau pursuant to §1742-B.

I indicated that based on your representations the City would not be filing any further notice of this project with the State. You confirmed that this was the appropriate course of action for the City.

I very much appreciated speaking with you regarding this matter.

Sincerely,

Penny Littell
Associate Corporation Counsel

PL:j
cc: Joseph E. Gray, Director of Planning
Rick Knowland, Senior Planner
PL:ltrs:stodd824.doc

CITY OF PORTLAND, MAINE
M E M O R A N D U M

TO: Joseph E. Gray, Director of Planning
Rick Knowland, Senior Planner

FROM: Penny Littell, Associate Corporation Counsel
Ext. 8430

DATE: August 24, 1998

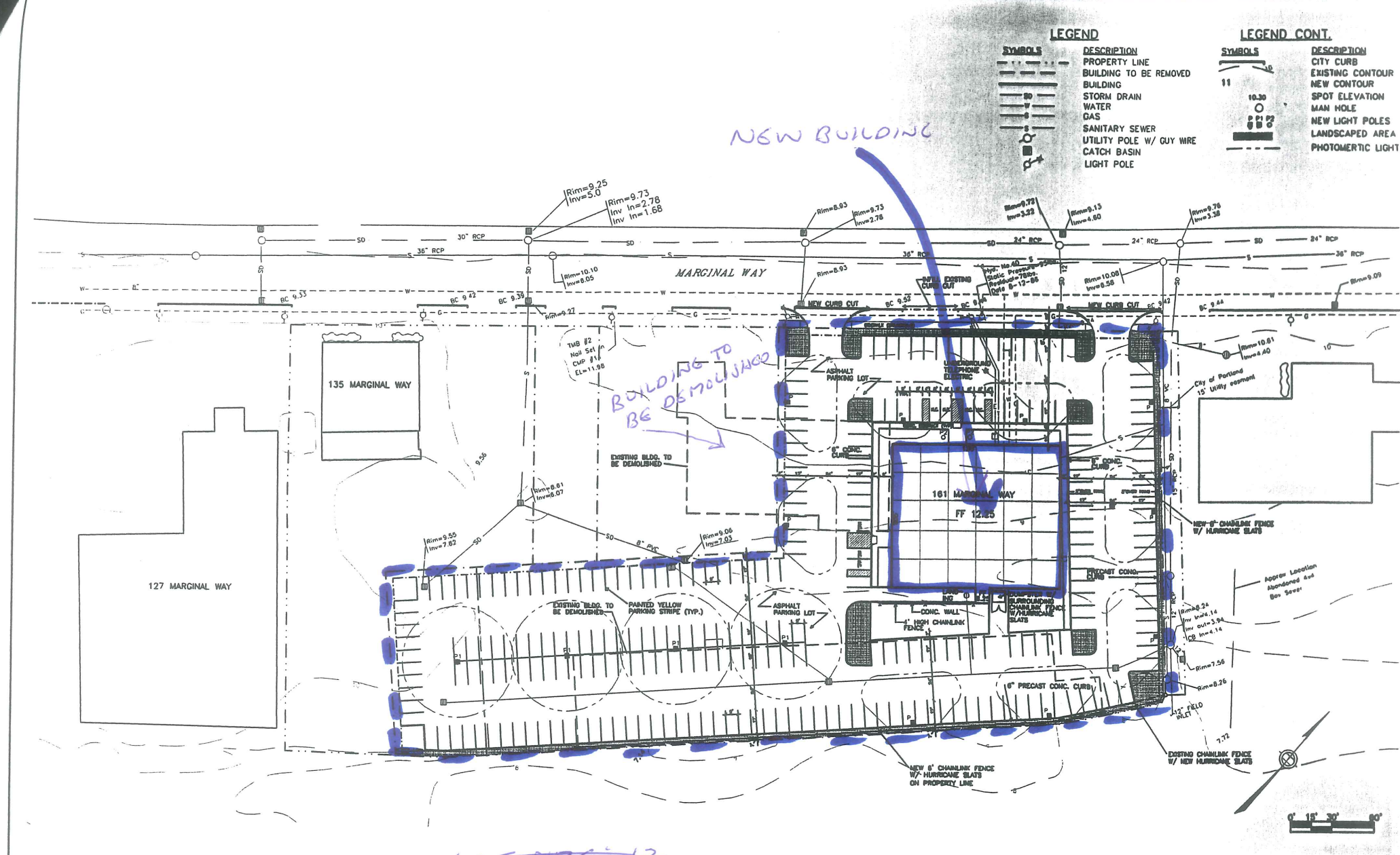
RE: **Quesada/DHS Building**

On August 21st I spoke with Bill Stoddard, Chief Engineer at the Bureau of General Services in Augusta, Maine. I inquired whether or not (in lilght of Peter Quesada's intent to contract with the DHS for the rental of units in an office building to be built on Marginal Way), the City needed to provide notice to the Bureau of General Services that the City will review and issue building permits on a "state construction project." See 5 M.R.S.A. §1742-B. Bill Stoddard assured me that this project is not a "state construction project" and the State need not be informed of the City's review and permitting requirements regarding the Quesada development. Bill contrasted this situation with one where there were some improvements being made to an existing State leased building and in which case the State would be making the improvements. Under the latter scenario, the City would be required to notify the Bureau pursuant to §1742-B. I indicated that based on his representations we would not be filing any further notice of this project with the State. He confirmed that this was the appropriate course of action.

PL:meg

PL:quesada.mmo

ATT



~~LOT SIZE: 1.2~~

LAND AREA OF LOT: 123,186 SQFT

BUILDING FLOOR AREA: 52,800 SQFT

BUILDING FOOTPRINT: 13,200 SQFT

PROPOSAL FOR: BUILDING 161 MARGINAL WAY PORTLAND, ME APPLICANT: SOUTHERN MAINE PROPERTIES COMPANY P.O. BOX 7525 PORTLAND, ME 04112	SITE PLAN DATE: 8-28-98 DWG. 1 OF 1

Fore River Company 5 Milk Street P.O. Box 7525 Portland, Maine 04112 (207) 772-6404

TRANSMITTAL NOTICE	DATE: 10.7.98
TO: RICK KNOWLAND SENIOR PLANNER	SUBJECT: 161 MARGINAL WAY

NO. OF COPIES:	DESCRIPTION:
1 1 1 1 1ell x 17 + 1 @ 24x36 " "	MEMO 10.5.98 ELEVATION 10.5.98 FENCE CATALOG (ORGINAL) STEEL LINTEL PHOTO (PHOTOCOPY) 10.2.98 SITE PLAN 10.6.98 LANDSCAPE PLAN 9.30.98

REMARKS:

DEAR RICK,

PLEASE REVIEW & CALL ME W/ QUESTIONS OR COMMENTS

THANKS

BRUCE KISTLER

Fore River Company 5 Milk Street P.O. Box 7525 Portland, Maine 04112 (207) 772-6404

TRANSMITTAL NOTICE	DATE: 10·13·98
TO: RICK KNOWLAND SENIOR PLANNER	SUBJECT: 161 MARGINAL WAY

NO. OF COPIES:	DESCRIPTION:
1	CONSTRUCTION DETAILS
1	EROSION CONTROL PLAN.

REMARKS:

DEAR RICK,

THE ATTACHED IS IN RESPONCE TO ANTHONY LAMBARDO'S OCT 9, 1998 MEMO. PLEASE CALL IF YOU HAVE ANY QUESTIONS OR PROBLEMS.

SINCERELY,

BRUCE KUSTLER

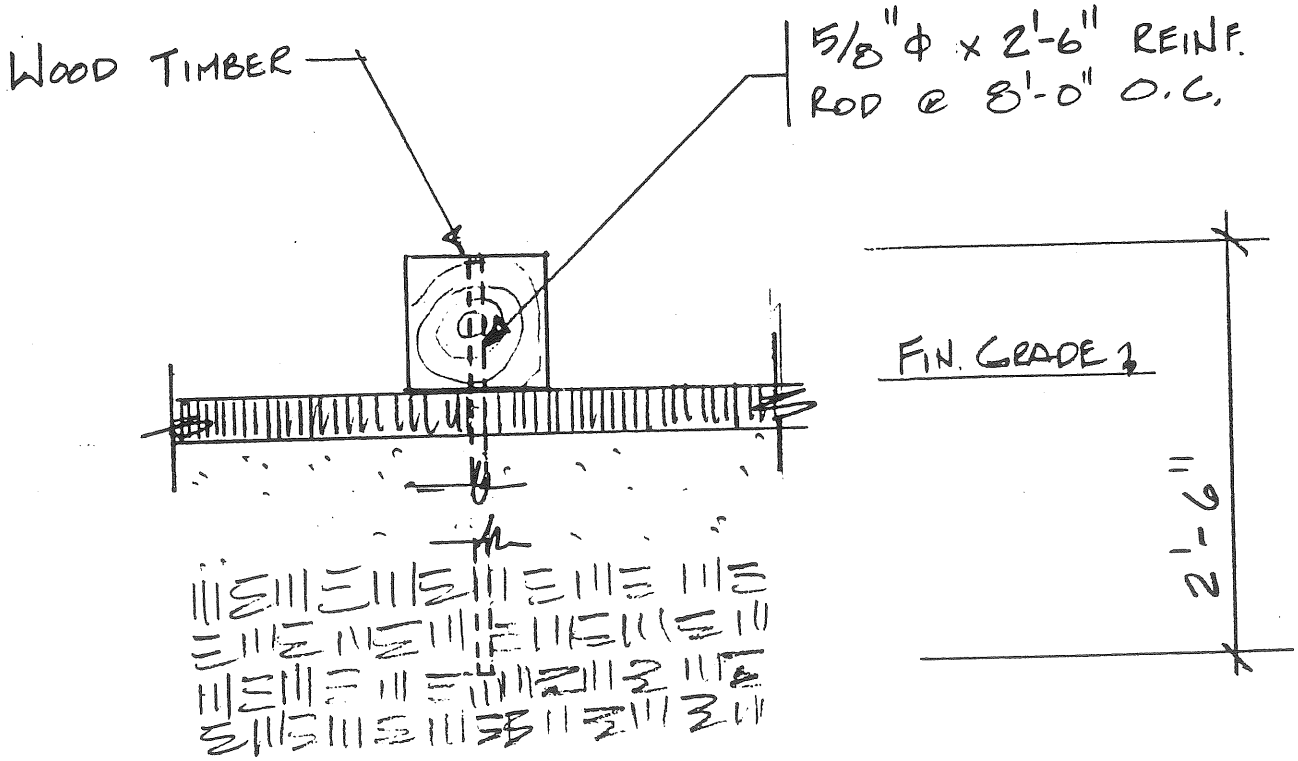
ATTACHMENT E

PUBLIC WORKS ENGINEERING MEMORANDUM

To: Rick Knowland, Senior Planner
From: Anthony Lombardo, P.E., Project Engineer
Date: October 9, 1998
Subject: 161 Marginal Way.....Proposed DHS Building

The following comments were generated during Public Works Engineering review of proposed DHS building as submitted by Southern Maine Properties Co. This set of plans are dated October 8, 1998.

- *applicant needs to supply "construction details" of the following:*
    1. *spiked timber curb*
    2. *granite curb installation within the Marginal Way r/w*
    3. *bituminous sidewalk detail within Marginal Way r/w*
    4. *conc. curb installation*
    5. *proposed sanitary connection into existing City sewer*
    6. *proposed connection into existing City storm manhole structure*
    7. *stormwater treatment tank*
- *applicant needs to include a "Temporary & Permanent Erosion and Sediment Control Plan" as part of the plan set.*



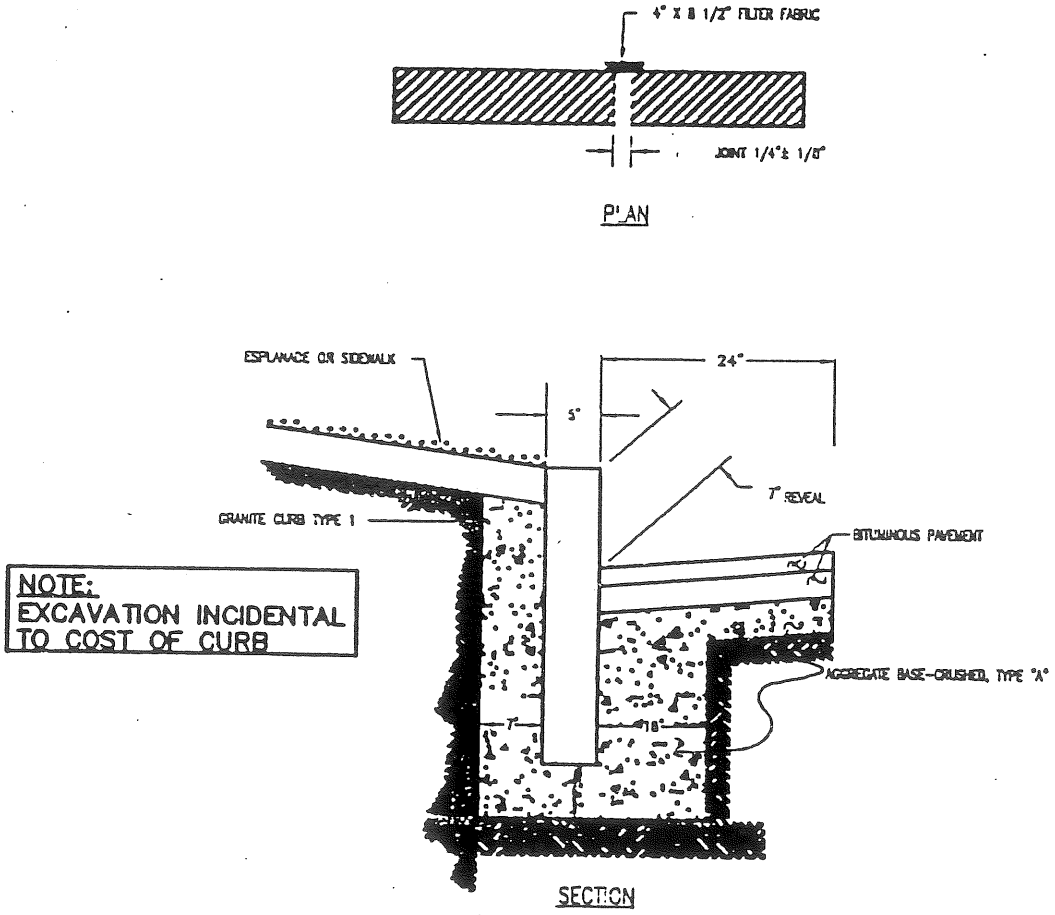
SECTION (TYPICAL)

NO SCALE

161 MARGINAL WAY PORTLAND, MAINE	SPIKED TIMBER DETAIL		10.14.98

10.14.98

GRANITE CURB INSTALLATION

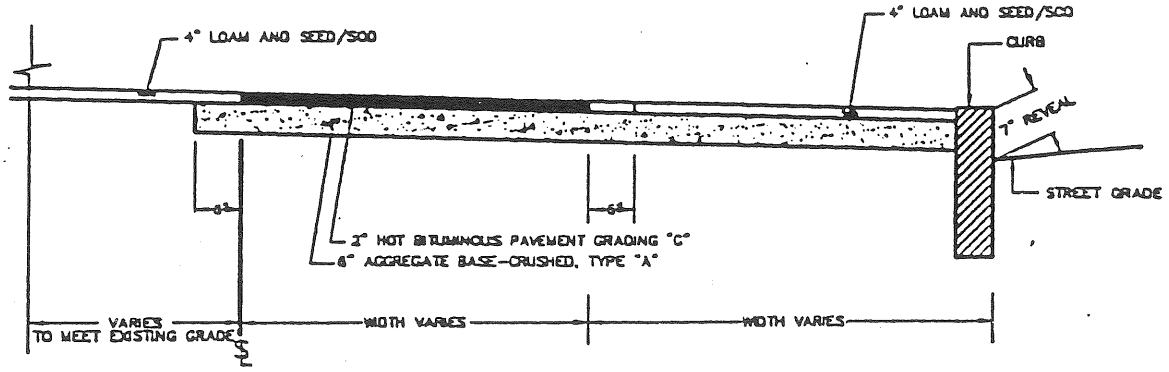


NOT TO SCALE

FIGURE I - 14
CURB REPLACEMENT DETAIL

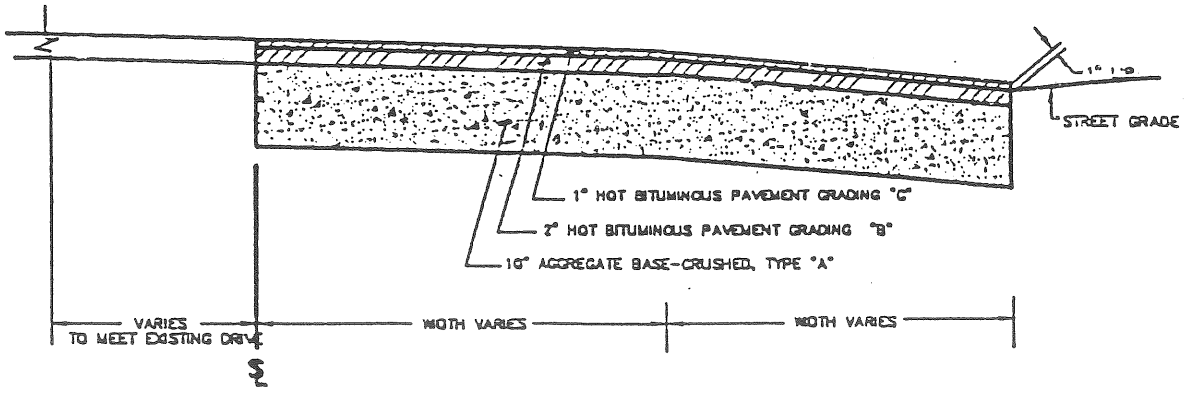
10.14.98

BITUMINOUS SIDEWALK DETAIL W/1 MARGINAL WAY R/W



SECTION AT SIDEWALK

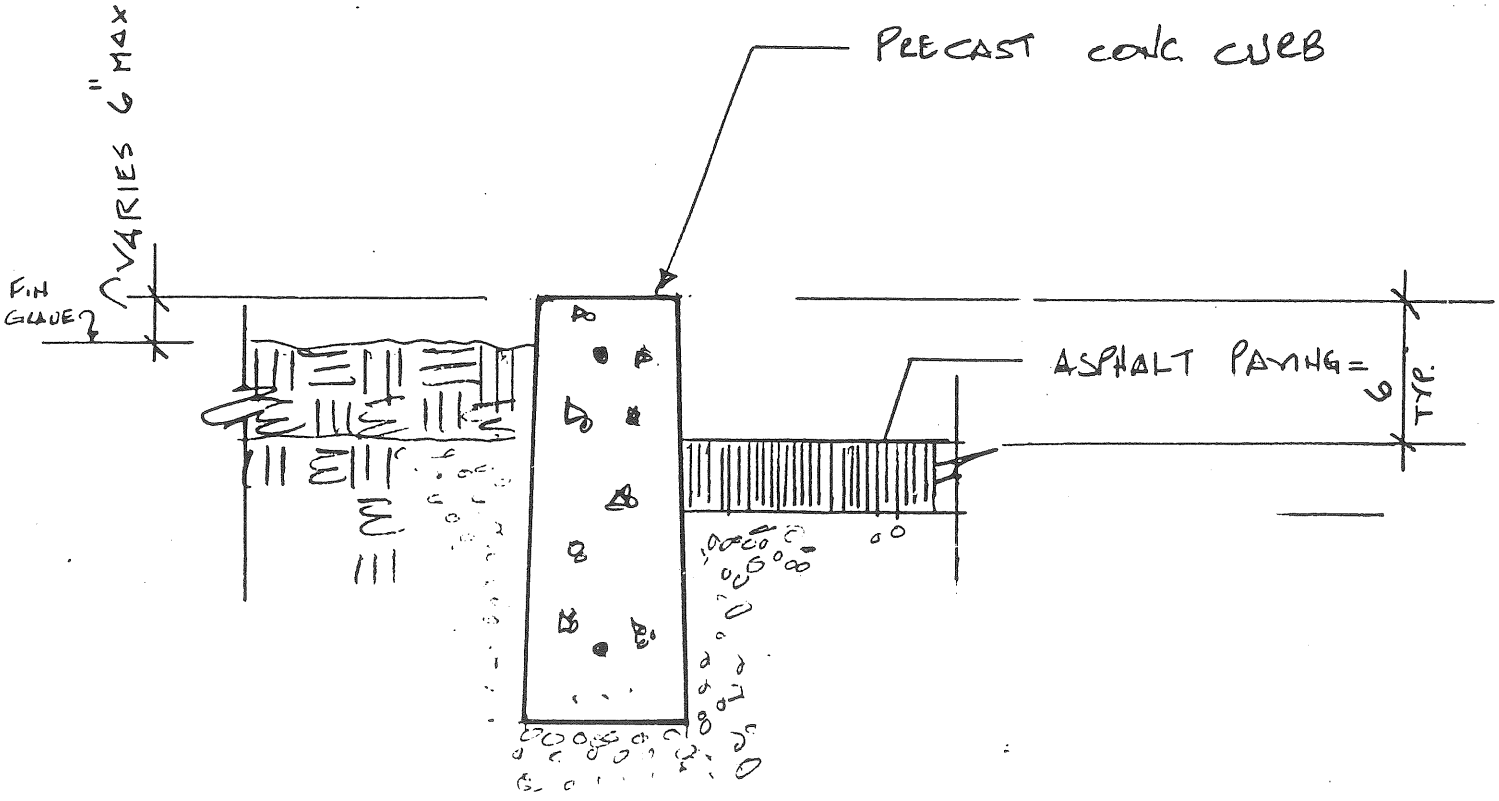
NOT TO SCALE



SECTION AT DRIVEWAY

NOT TO SCALE

FIGURE I - 12.
BITUMINOUS SIDEWALK AND DRIVEWAY CONSTRUCTION



SECTION (TYPICAL)

NO SCALE

161 MARGINAL WAY PORTLAND, MAINE	CONCRETE CURB DETAIL		10.13.98

10.14.98

PROPOSED SANITARY CONNECTION INTO EXISTING CITY SEWER

NOTE: LOCATION/WARNING TAPE SHALL BE INSTALLED OVER CENTERLINE OF PIPE AT A MAXIMUM OF 24 INCHES BELOW FINISH GRADE.

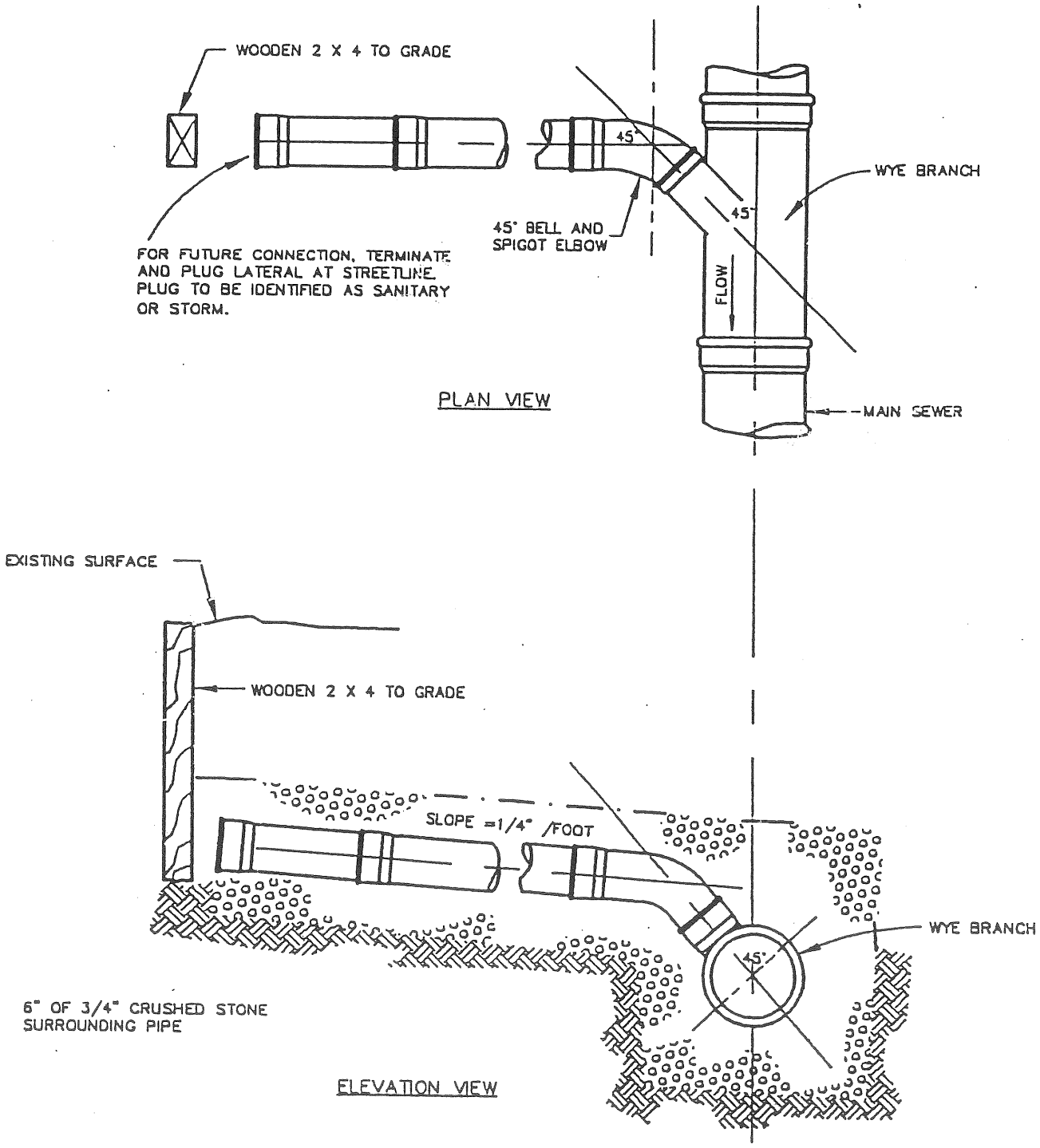
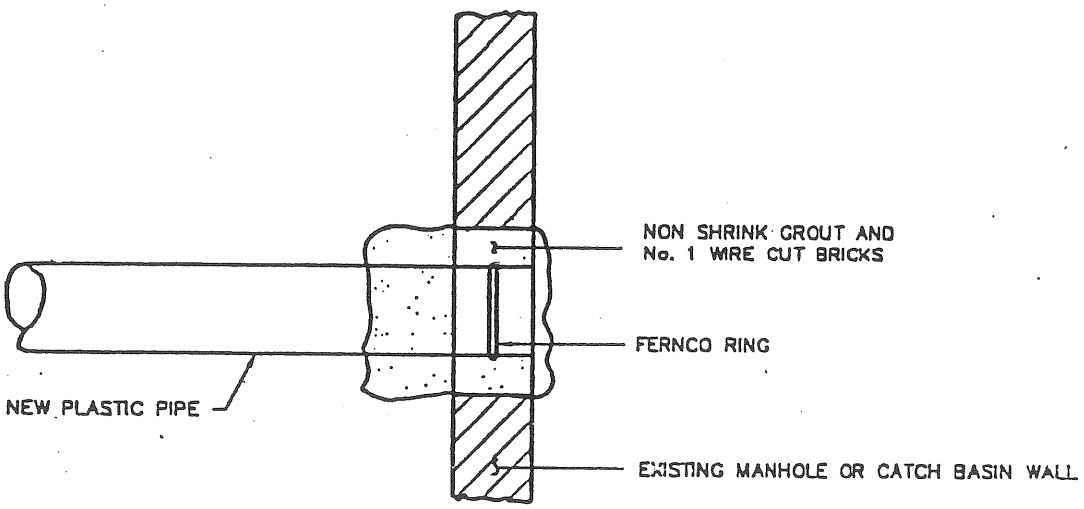


FIGURE II - 19
TYPICAL HOUSE LATERAL WYE CONNECTION DETAIL

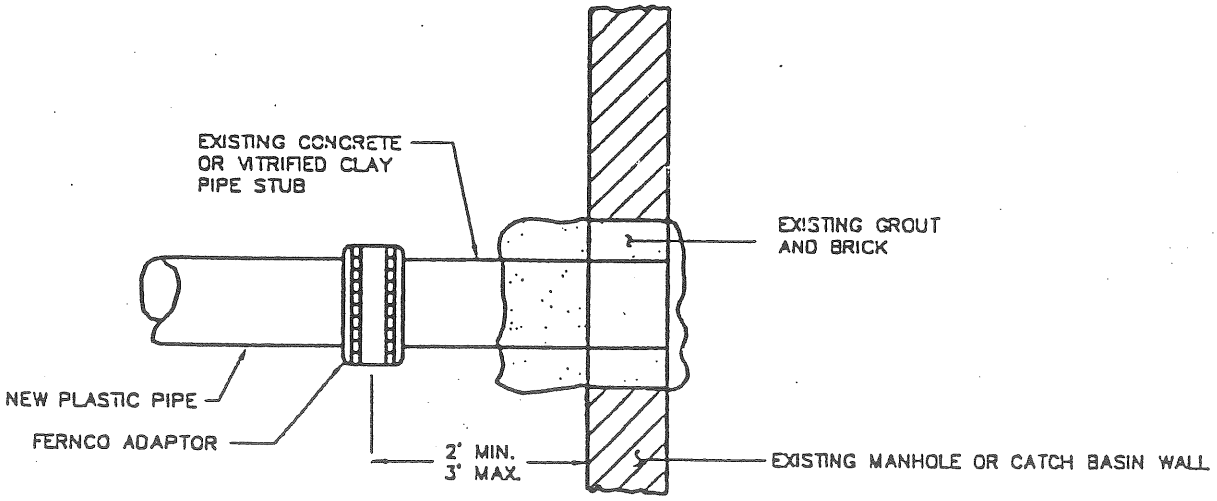
10.13.98

NOTE:
EXISTING MANHOLE OR CATCH BASIN SHALL BE CORE DRILLED FOR PIPE INSTALLATION

PROPOSED CONNECTION INTO CITY STORM MANHOLE STRUCTURE



METHOD 3 – NEW PIPE INTO EXISTING STRUCTURE



METHOD 4 – NEW PIPE TO EXISTING STUB

FIGURE II - 16 (Continued)
PIPE CONNECTION DETAILS

ATTACHMENT 6-A

98430

STORMWATER RUNOFF EVALUATION

Department of Human Services
Southern Maine Properties Co.
5 Milk Street
Portland, Maine

General

The following stormwater evaluation has been prepared for the Southern Maine Properties Co. to analyze stormwater runoff associated with the proposed facility located at 161 Marginal Way in Portland, Maine.

Southern Maine Properties is proposing a 120' x 105' office building for the Department of Human Services. Associated site work will include demolition of the old Concord Trailways terminal building and wood-framed building once used as a car dealership, reconstruction of the existing parking lot, and a new storm drain system. The storm drain system will include a grit separator for stormwater treatment (see attached specifications).

Site Characteristics

The property is mostly impervious with two vacant buildings; one was used as a terminal building for Concord Trailways bus company and the other by a car dealership. The surrounding land is mostly developed commercial properties. The land immediately to the rear of the proposed parking lot and behind the car dealership building is low-lying, herbaceous growth. Runoff is collected in an existing field inlet located off the east corner of the proposed parking lot. Drainage from the central portion of the site is collected in an existing catch basin system and piped to a drainage system in Marginal Way. The remaining front portion of the lot drains via overland flow to Marginal Way.

Stormwater Management

This report will focus on stormwater quality. The proposed impervious surface area is consistent with the pre-existing conditions which imposes no increase in runoff. Runoff from the site will be affected by the capacity of the drainage system in Marginal Way. The Marginal Way drainage is controlled by the elevation of the tides in Back Cove. The City Engineering Department reported minor flooding during peak tides and storm events. It is not anticipated that this project will have an adverse affect on the downstream receiving area. To achieve water quality, a Vortech (or approved equal) treatment tank is proposed. This system is anticipated to have an 80% net TSS removal efficiency. This is consistent with the MDEP water quality standards for sensitive watersheds most at risk.

Summary

The preceding stormwater evaluation has been prepared to address stormwater runoff for the proposed Department of Human Services building. Principal stormwater features include catch basins and a water quality treatment system. Because of the existing site limitations, a Vortech treatment tank is proposed to achieve water quality. An erosion control plan has been made an integral part of the overall project, and specific instructions and details have been placed directly on the plans.

Prepared by,

SEBAGO TECHNICS, INC.

Steven A. Groves
Project Engineer

SAG:jc
September 2, 1998

SEBAGO TECHNICS, INC.
12 Westbrook Common
P.O. Box 1339
WESTBROOK, MAINE 04098
(207) 856-0277 FAX (207) 856-2206

JOB Dept of Human Services 98430
SHEET NO. 1 of 3 OF 6-C
CALCULATED BY SAC DATE 9/1/98
CHECKED BY DATE
SCALE

TREATMENT TANK STRING

Q = AiCi RATIONAL FORMULA

Q = Runoff cfs.

A = area of watershed ac

C = Coefficient of runoff

i = intensity of rainfall

C = .9 (Pavement) see Table 21

A = 1.75 ac (impervious area)

i = 4.46 in/hr. (See Table 22) 10yr Storm Event

Q = .9 (1.75 ac)(.9)(4.46 in/hr)

Q = 7.02 cfs

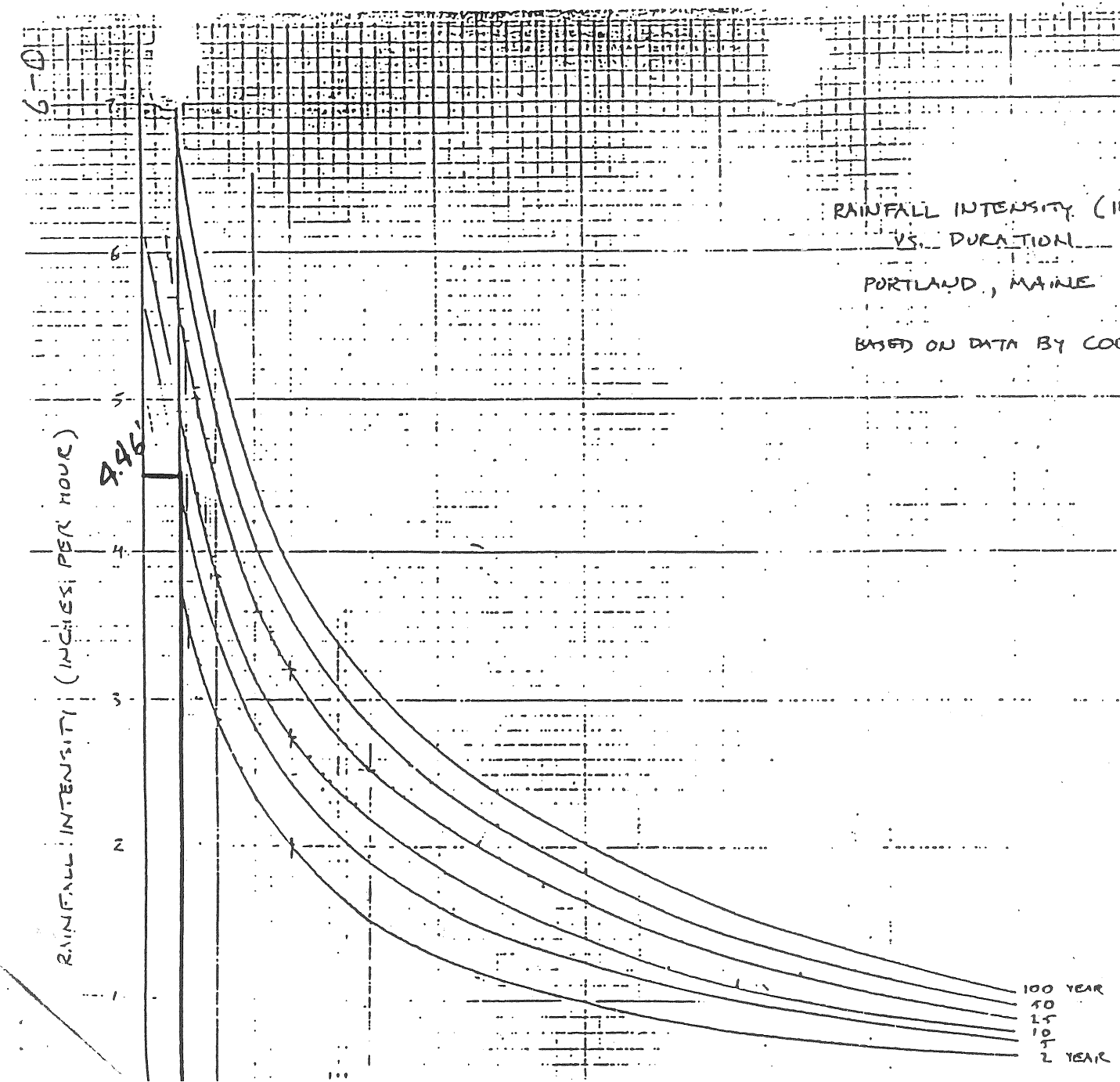
Vortechs Model 5000 Design Flow rate = 8.6 cfs
For 10yr. Storm Event

8.6 cfs > 7.02 cfs

Table 2.2

RAINFALL INTENSITY (INCHES/HOUR)
VS. DURATION
PORTLAND, MAINE

BASED ON DATA BY COG, 1981



CHKD BY DATE SUBJECT

JOB NO.

"C" Values

6-E

le 2.1 Runoff Coefficients for the Rational Formula	
e of Area	Runoff Coefficient
e earth	0.20 - 0.90
iness:	
owntown areas	0.70 - 0.95
eighborhood areas	0.50 - 0.70
idential:	
ingle-family areas	0.30 - 0.50
ulti-family detached units	0.40 - 0.60
ulti-family attached units	0.60 - 0.75
uburban	0.25 - 0.40
partment dwelling areas	0.50 - 0.70
ustrial:	
ight areas	0.50 - 0.80
eavy areas	0.60 - 0.90
ks, cemetaries	0.10 - 0.30
ygrounds	0.20 - 0.40
lroad yard areas	0.20 - 0.40
mproved areas	0.10 - 0.30
ns:	
andy soil, flat, 2%	0.05 - 0.10
andy soil, average, 2-7%	0.10 - 0.15
andy soil, steep, 7%	0.15 - 0.20
eavy soil, flat, 2%	0.13 - 0.17
eavy soil, average, 2-7%	0.18 - 0.22
eavy soil, steep, 7%	0.25 - 0.35
al:	
teep (2:1) grassed areas	0.50 - 0.70
urf meadows	0.10 - 0.40
orested areas	0.10 - 0.30
ultivated fields	0.20 - 0.40
eets:	
heet Asphalt	0.70 - 0.95
facadam	0.60 - 0.80
Concrete	0.80 - 0.95
Gravel	0.40 - 0.60
Brick	0.70 - 0.85
ives and walks	0.75 - 0.85
ofs	0.75 - 0.95
rce: Refs. 052 and 057	

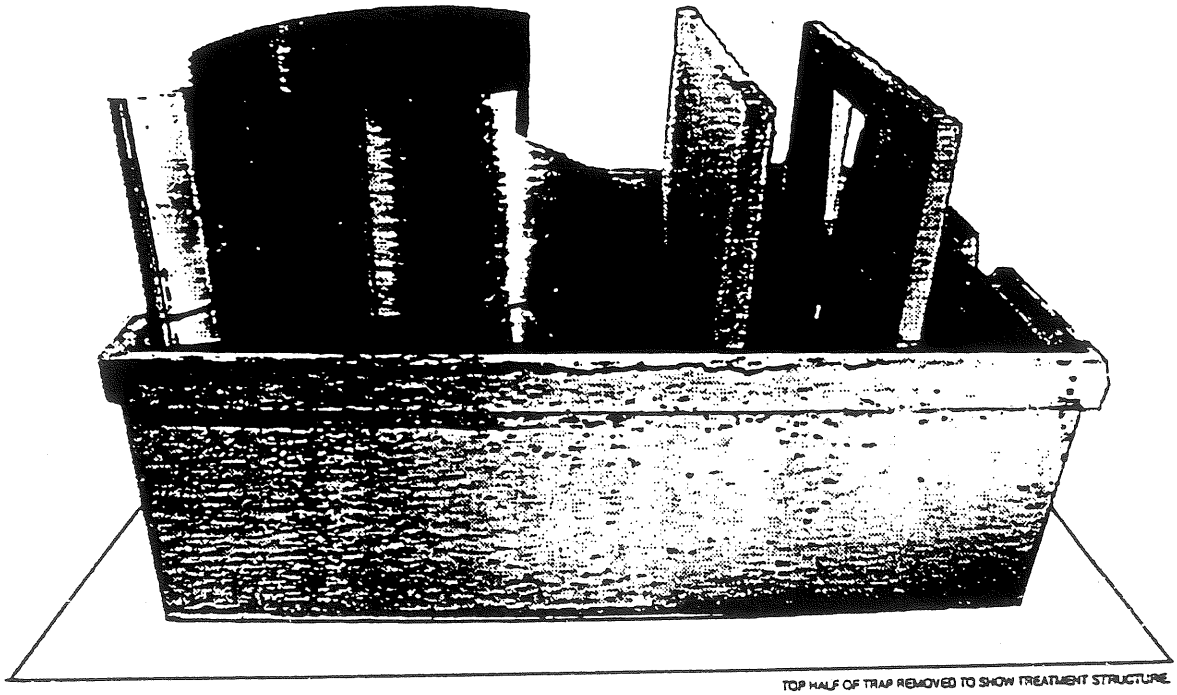
USE .90

fall Intensity, i

As with any design problem, design of hydraulic structures requires ification of a "design storm". Implicit in the approach taken here is probabilistic nature of the event upon which the design is based. The ired capacity (and hence cost) of the structure obviously depends on

Vortechnics

6-F



TOP HALF OF TRAP REMOVED TO SHOW TREATMENT STRUCTURE

VORTECHS™ STORMWATER TREATMENT SYSTEM

A major advancement in oil and grit separator (OGS) technology. the Vortechs™ Stormwater Treatment System efficiently removes grit. contaminated sediments, metals, hydrocarbons and other floating pollutants from surface runoff. This innovative design combines two unique treatment structures to eliminate turbulence within the system—ensuring proper physical separation and capture of sediment and oils.

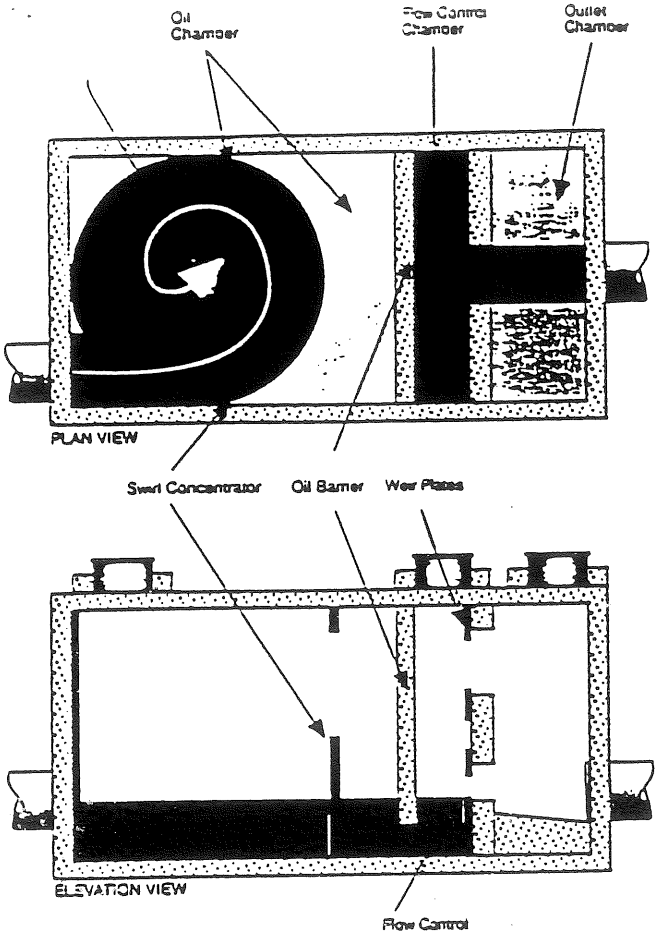
FEATURES:

- **High treatment efficiency:** Over 80% of contaminated sediment is removed during the "first flush".
- **Innovative flow control:** Seals off bottom of floatables barrier preventing loss of captured oils during clean-out.
- **Large treatment capacity:** Even the heaviest storms can be treated without bypassing peak flows.
- **Easy inspection—lower clean-out costs:** Dry weather volume significantly less than with conventional traps of the same size.

APPLICATIONS:

- Parking Lots
- Gas Stations
- Industrial Sites
- Retail Outlets
- Streets/Roadways
- Vehicle Maintenance Facilities
- Wetlands Protection

PATENT PENDING



FEATURES

6-6

Grit Chamber

The swirling motion created by the tangential inlet directs settleable solids toward the center. During peak storms this structure dissipates potentially disruptive flows—sediment is caught in the swirling flow path and settles back onto the pile after the storm event is over.

Oil Chamber

The center barrier traps floatables in the oil chamber. Unlike conventional oil traps that lack flow controls and extra tank capacity, the Vortechs™ System is highly resistant to flow surges.

Flow Control Chamber

As the storm event builds in intensity, the low-flow control within the Vortechs™ System will cause the inlet pipe to become submerged. This process floats oily pollutants up above the inlet pipe—and out of influent stream. Thus, the Vortechs™ System keeps captured pollutants in the trap by reducing forces which encourage resuspension and wash-out.

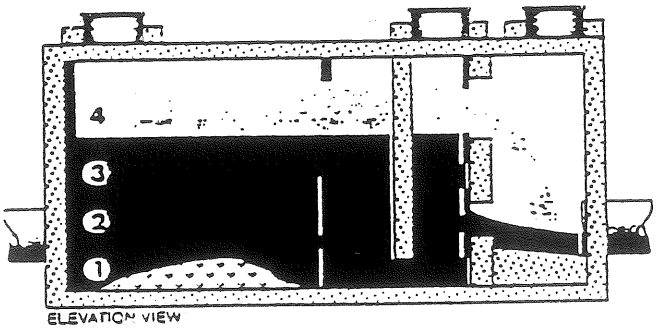
PHASES OF OPERATION

1) Dry weather/storm subsidence phase

Treated runoff is decanted out of the Vortechs™ System at a controlled rate restoring the water level to a low dry weather volume. This low dry weather level not only facilitates visual inspection of sediment and floatables accumulation but also significantly decreases maintenance costs by reducing pump-out volume.

2) Initial Wet Weather Phase

During this phase of operation a two-month storm event will cause the water level to rise above the top of the inlet pipe. This flow control effectively reduces inlet velocity and turbulence. 85% of storm events do not exceed the initial wet weather phase—sediment and floatables removal during this stage is very high.



3) Transition Phase

Flow attenuation achieved during this phase helps to utilize fully the storage capacity of storm sewer pipes and the Vortechs™ System. To increase storage volume further, on or off-line detention basins can be designed to fill during the transition phase. Swirling action increases at this stage capturing sediments and moving material which may have been deposited at inlet (during low flows) into the center of the chamber.

4) Full Capacity Phase

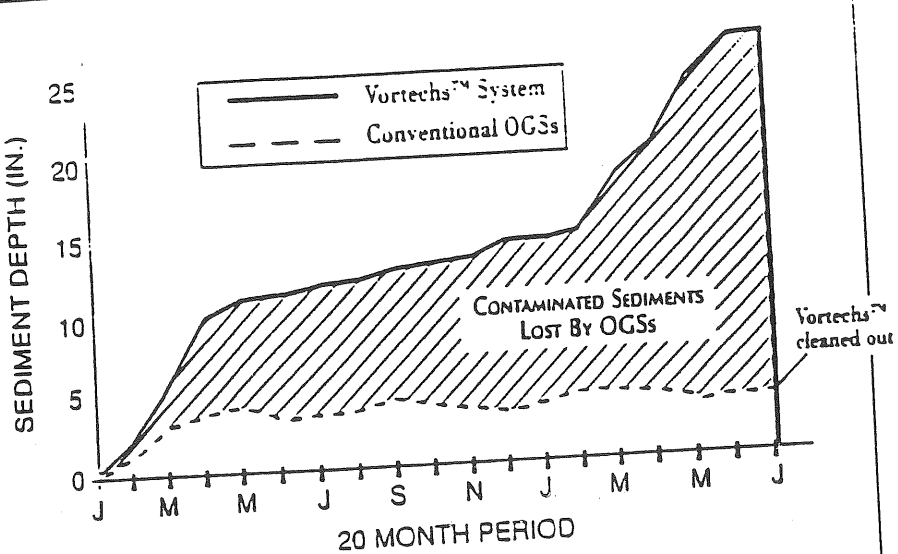
During this phase, the storm drains are operating at peak capacity, typically at 5 to 25 year storm flow rates. To accommodate greater volumes, Vortechnics can assist designers with configuring a peak flow by-pass. Treatment efficiencies for the Vortechs™ System remain constant during this phase, while conventional "plug flow" OGSs have been shown to fail and drop down to negative treatment efficiencies.

6-H

COMPARISON OF VORTECHS™ SYSTEM SEDIMENT REMOVAL TO CONVENTIONAL OIL GRIT SEPARATORS.

VORTECHS™ SYSTEM PRODUCT PERFORMANCE

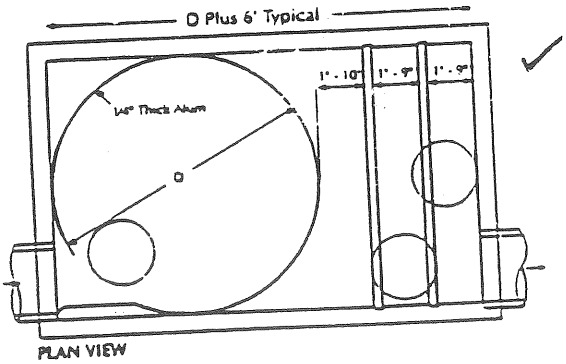
Data for Vortechs™ System obtained through in-field monitoring of actual installation in Freeport, Maine. OGS data taken from comprehensive testing of conventional systems by the department of Environmental Programs, Metropolitan Washington Council of Governments.



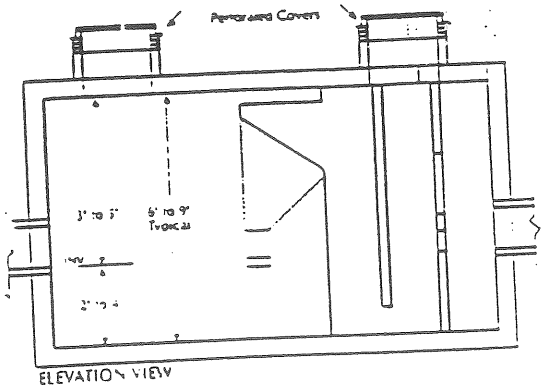
"The greatest environmental risk appears to occur when metal and hydrocarbon-laden sediments are deposited in downstream lakes and estuaries... Runoff from urban hot spots appears to be a major contributing factor to sediment contamination in these cases..."

- Schueler and Shepp. 1992
- McKenzie and Hunter. 1979

VORTECHS™ SYSTEM SPECIFICATION



PLAN VIEW



ELEVATION VIEW

Vortechs Model	Grit Chamber Diam. / Area (ft / ft²)	Design Flow Rate* (cfs / gpm)	Sediment Storage** (yd³)	Oil Storage** (gallons)	Size (L x W, ft)
2000	4 / 13	2.8 / 1,300	1.2	350	10 x 4
3000	5 / 20	4.4 / 2,000	1.8	510	11 x 5
4000	6 / 28	6.3 / 2,800	2.4	700	12 x 6
5000	7 / 38	8.6 / 3,800	3.2	920	13 x 7
7000	8 / 50	11.0 / 5,000	3.9	1,200	14 x 8
9000	9 / 64	14.0 / 6,400	4.7	1,500	15 x 9
11000	10 / 79	18.0 / 7,900	5.5	1,800	16 x 10
16000	12 / 113	25.0 / 11,000	7.5	2,500	18 x 12

* Design flow rate is based on a peak operating rate of 100 gpm/ft² in a 10-year storm.
** Oil and sediment storage volumes given assume a 3 ft deep sump and a 1 ft opening under the oil baffle. These dimensions may vary.

ATTENTION SPECIFIERS

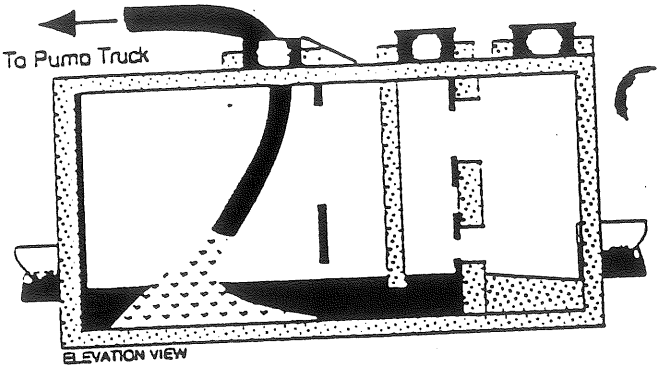
Use the enclosed Specifier's Worksheet to begin the design of your Vortechs™ System. Simply fax completed worksheet to the Vortechnics Engineering Office (Fax No: 207-878-8507) and we'll produce detailed scale drawings based on your site specific information (free of charge).

Note: Availability of models and actual dimensions may vary. Check with Vortechnics or your local licensed manufacturer for specific information.

PATENT PENDING

MAINTENANCE

The Vortechs™ System has no on-going maintenance requirements although routine inspections are necessary to schedule cleanings. To ensure proper performance and treatment efficiency the system must be cleaned when it is full. The Vortechs™ System is designed to effectively capture sediment and floatables —the rate at which the system accumulates contaminants is largely dependent on site activities.

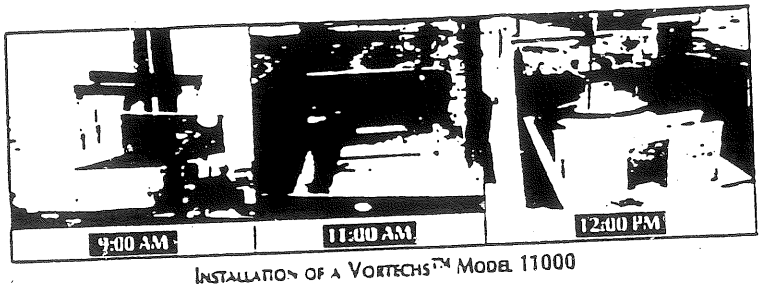


INSPECTION

In the first year of operation, Vortechnics recommends monthly inspections during periods of heavy contaminant loadings (e.g., winter sandings, soil disturbances or oil/fuel spills). The inspection schedule can then be modified in subsequent years according to experience or to meet specific stormwater permit requirements.

CLEANING

Clean-out of the Vortechs™ System with a vacuum truck is generally the best and most convenient method. Only the manhole cover above the grit chamber (the one farthest from the system outlet) needs to be opened to remove water and contaminants. As the grit chamber is pumped out, the oil and water drain back into it, so that oil scum, particulates and floatables are removed along with accumulated sediments. With the Vortechs™ System, a pocket of water between the grit chamber and flow controls seals the bottom of the oil barrier and prevents the loss of floatables to the outlet during cleanings. Manhole covers should be securely seated following cleaning activities to ensure surface runoff does not leak into unit from above.



INSTALLATION OF A VORTECHS™ MODEL 11000

VORTECHS™ STORMWATER TREATMENT SYSTEM

Vortechnics

VORTECHNICS
41 EVERGREEN DRIVE
PORTLAND, ME 04103
(207) 878-3662 FAX. 878-8507

161 MARGINAL WAY - 10.13.18

TEMPORARY & PERMANENT EROSION AND SEDIMENT CONTROL PLAN

1. ALL EROSION CONTROL METHODS SHALL CONFORM TO THE MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION BEST MANAGEMENT PRACTICES BY THE CUMBERLAND COUNTY SOIL WATER CONSERVATION DISTRICT, AND THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

2. PRIOR TO THE DISTURBANCE OF SOIL, THE CONTRACTOR SHALL PLACE THE SILT FENCE TO CONTROL EROSION. THE CONTRACTOR SHALL INSPECT THE BARRIER AFTER EACH STORM EVENT AND REMOVE ANY ACCUMULATED SILT AND/OR MAKE REPAIRS AS NECESSARY.

3. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE PERMANENTLY SEEDED. SEEDING SHALL BE PERFORMED IN ACCORDANCE WITH MDOT SPECIFICATION: LIME AT 3 TONS/ACRE: FERTILIZER: 10-10-10. 3 LBS/1000 SF: SEED MDOT PARK MIX, 3 LBS/1000 SF. SEEDING SHALL BE PERFORMED BETWEEN APRIL 15 - JUNE 15 OR AUGUST 15 - SEPTEMBER 15, WINTER RYE SHALL BE USED AS TEMPORARY SEED BETWEEN SEPTEMBER 15 - OCTOBER 15.

4. ALL AREAS TO BE SEEDED SHALL BE MULCHED. MULCH SHALL BE LONG FIBERED HAY OR STRAW AND SPREAD UNIFORMLY. 1.5 TO 2.0 TONS PER ACRE. TO BE MAINTAINED MOIST TO MINIMIZE BLOWING AS NECESSARY.

5. PLACE HAY BALE BARRIER (STACKED) AROUND CATCH BASINS. WRAP CATCH BASIN COVERS WITH EROSION CONTROL FABRIC DURING CONSTRUCTION.

6. ALL SEDIMENT CONTROL FENCING AND HAY BALE BARRIERS WILL REMAIN IN PLACE UNTIL SEEDLINGS HAVE BEEN ESTABLISHED.

7. ALL EARTH CHANGES WILL BE CONSTRUCTED AND COMPLETED IN SUCH A MANNER SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND WILL BE LIMITED TO THE SHORTEST PERIOD OF TIME POSSIBLE.

8. PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, OR ANY DISTURBED LAND AREA WILL BE COMPLETED WITHIN 15 DAYS AFTER FINAL GRADING HAS BEEN COMPLETED.

9. IN THE EVENT THAT TEMPORARY OR PERMANENT SEEDLINGS HAVE NOT BEEN ESTABLISHED (90% SURFACE COVERAGE) BY SEPTEMBER 15, TEMPORARY MULCHING SHALL BE APPLIED FOR PROTECTION OVER WINTER (PAST THE GROWING SEASON) IN ACCORDANCE WITH THE TEMPORARY MULCHING BMP OF THE MAINE EROSION AND SEDIMENT CONTROL HANDBOOK.

Fore River Company 5 Milk Street P.O. Box 7525 Portland, Maine 04112 (207) 772-6404

MEMORANDUM	DATE: May 25, 1999
TO: Rick Knowland, Senior Planner City of Portland 389 Congress Street Portland, ME 04101	SUBJECT: 161 Marginal Way DHS

REMARKS:

Dear Rick,

Following the format of your letter to me, I have the following responses:

Condition i: Ref catalogue cut for cut off fixture.

Condition ii & iii: Ref attached landscape plan.

Condition iv: 1. I will ask Sebago Tech. to add this information.

2. Dumpster enclosure fence/gate to match previously specified fencing on S.E. and N.E. property lines.

3. I am awaiting feedback from you and will reflect the resolution of this issue on the revised Sebago Tech. Drawings to follow.

Condition v: To be shown on Sebago Tech. drawing.

Condition vi: You will let me know staff comments of previously submitted elevations.

Note that I slightly shifted the three southerly parking lot pole light fixtures to locate two of the poles in the new islands and centered the remaining pole between the islands. I do not believe these shifts will significantly affect the previously submitted photometric plan. Please let me know if you need us to submit a revised photometric plan.

Finally, the revisions to the landscaping plan will require Sebago Tech. to make revisions to the grading plan in addition to those referred to above. I believe Sebago Tech. is quite busy and I fear these revisions may cause delays (I have a call in to them and will let you know the schedule for these revisions when I know). Therefore, I would appreciate your efforts to expedite the building permit subject to submittal and approval of a revised grading plan and details.

Sincerely,

Bruce Kistler

enclosures

Fore River Company 5 Milk Street P.O. Box 7525 Portland, Maine 04112 (207) 772-6404

TRANSMITTAL NOTICE	DATE: 10.21.98
TO: RICK KNOWLAND SENIOR PLANNER	SUBJECT: 161 MARGINAL WAY

NO. OF COPIES:	DESCRIPTION:
1	SITE LIGHTING PLAN & FIXT. CUTS
1	BLDG ELEVATION 1.21.98
7	"CONSTRUCTION DETAILS" 24x36 + (1@ 11"x 17")
7	SITE PLAN · 1.21.98 + (1@ 11"x 17")

REMARKS:

DEAR RICK,

I BELIEVE THESE PLANS ALONG WITH THE PLANS WE SUBMITTED FRIDAY, OCT 16TH, RESPOND TO THE "CONDITIONS" & "OTHER ISSUES" REFERRED TO IN YOUR "PLANNING BOARD REPORT #47-98" DATED OCT. 13, 1998. PLEASE CALL IF YOU HAVE ANY QUESTIONS OR PROBLEMS. THANKS AGAIN FOR YOU HELP.

SINCERELY,

BRUCE KISTLER

TYPE: W

CATALOG #: WL240219BZ-70

McGRAW-EDISON®

DESCRIPTION

The McGraw-Edison Mon-4 has a unique optical assembly combining easily adjusted optics with limitless beam control without light trespass or glare. U.L. listed for wet locations. CSA certified.

APPLICATION

The Mon-4 is designed to provide total design freedom in lighting parking areas, courtyards, office buildings, apartment complexes, hospitals and any other exterior space located adjacent to buildings.

SPECIFICATION FEATURES

A---Housing
One-piece, heavy-duty, die-cast aluminum housing has pleasing soft-corner design and is finished in dark bronze polyester powder coat.

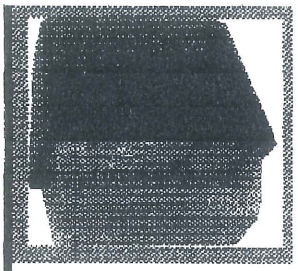
B---Reflector
Anodized aluminum reflector is designed for optimum light control and sharp cutoff (adjustable from 70° to 86°).

C---Socket
Porcelain-enclosed screw-shell type lamp socket has mogul base.

D---Gasketing
Closed-cell gas-filled high-temperature silicone gasketing seals out external contaminants.

E---Lens Retaining System
Lens lowers on spring-loaded retaining wires for quick access to internal components during relamping and maintenance.

F---Lens
Lens is of clear, impact-resistant polycarbonate or heat-resistant borosilicate glass.

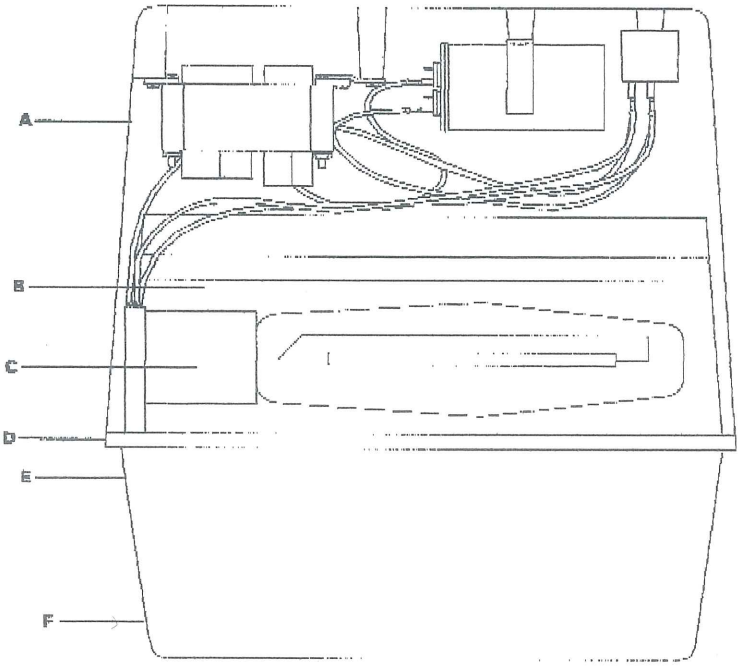


WLMON-4

70-400W

High Pressure Sodium
Metal Halide

WALL-MOUNTED



Post-it® Fax Note 7671

To Bruce — From Rick

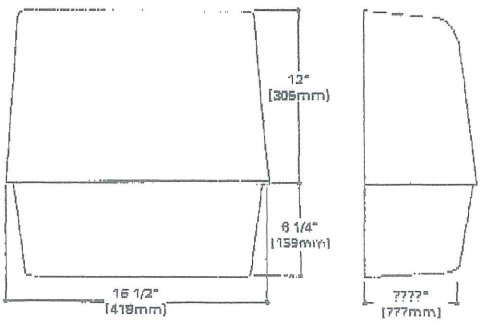
Co./Dept. — Co. BHM

Phone # — Phone #

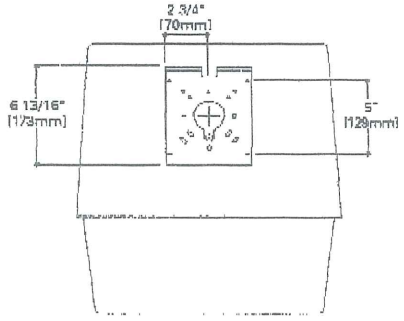
Fax # — Fax #

Date 5-24 — # of pages ▶ 2

DIMENSIONS



MOUNTING PLATE



ENERGY DATA

High Reactance Ballast Input Watts
70W HPS HPF (95 Watts)
70W MH HPF (94 Watts)
100W HPS HPF (130 Watts)
100W MH HPF (128 Watts)
150W HPS HPF (190 Watts)

CWI Ballast Input Watts
100W HPS HPF (134 Watts)
150W HPS HPF (192 Watts)
175W MH HPF (223 Watts)
250W HPS HPF (300 Watts)
250W MH HPF (300 Watts)
400W HPS HPF (465 Watts)
400W MH HPF (475 Watts)

CWA Ballast Input Watts
175W MH HPF (210 Watts)
250W MH HPF (295 Watts)
400W MH HPF (465 Watts)
400W HPS HPF (465 Watts)

Fore River Company 5 Milk Street P.O. Box 7525 Portland, Maine 04112 (207) 772-6404

TRANSMITTAL NOTICE	DATE: 5.12.99
TO: RICK KNOWLAND	SUBJECT: 161 MARGINAL WAY SITE PLAN REVISIONS / MODIFICATIONS.

NO. OF COPIES:	DESCRIPTION:
1	SITE GRADING PLAN
1	" " " DETAILS
1	LANDSCAPING PLAN
1	ELEVATIONS (2 SHTS)
1	SITE LIGHTING PLANS
1	11x17 COPIES OF ABOVE

REMARKS:

DEAR RICK,

I BELIEVE THE ENCLOSED ADDRESSES THE OUTSTANDING ISSUES AND ALSO CONTAINS SOME REVISIONS TO PREVIOUSLY SUBMITTED DRAWING. PLEASE CALL IF YOU HAVE ANY QUESTIONS OR PROBLEMS.

SINCERELY,

BRUCE KISTLER

Fore River Company 5 Milk Street P.O. Box 7525 Portland, Maine 04112 (207) 772-6404

TRANSMITTAL NOTICE	DATE: 6/11/99
TO: Rick Knowland City of Portland	SUBJECT: 161 Marginal Way

NO. OF COPIES:	DESCRIPTION:
7	24" x 36" Landscaping Plan Revised 6.9.99
1	11" x 17" copy of Above

REMARKS:

Rick -

Milliken Electric is working on the Bldg / Parking lot lights & I will forward information when I receive it. I believe the lighting should be the only remaining issue. Please call if you have any questions, comments or problems.

Sincerely

Bruce Kstreff

PLANNING REPORT #7-99

BOOKLAND SITE PLAN REVIEW

87 MARGINAL WAY

SOUTHERN MAINE PROPERTIES CO.

Submitted to:

Portland Planning Board
Portland, Maine

March 23, 1999

I. INTRODUCTION

A public hearing has been scheduled to consider a proposal by Southern Maine Properties Company for a retail development at 87 Marginal Way (corner of Marginal Way and Elm Street.) This development is intended to renovate the existing "Hot Shots" building into a Bookland retail store. This application is before the Board because it represents a change in use, exceeding 10,000 sq. ft. of floor area, which requires site plan review.

24 notices were sent to area property owners.

II. FINDINGS

Zoning:	B-5
Land Area:	102,000 sq. ft.
Existing Building Footprint:	23,594 sq. ft.
Proposed Building Footprint:	26,500 sq. ft.
Adjacent Uses:	Whole Grocer and West Marine (northerly); vacant railroad land (easterly); Elm Street (southerly); Marginal Way and city parking lot (westerly.)

117 PARKING SPACE

An outside terrace is proposed at the rear of the building as part of a cafe. A community room is also planned within the building for community meeting.

Building Elevations

Since the last workshop, the applicant has incorporated an architectural feature at the Marginal Way corner of the building as a gateway entrance. This is intended to address Sec. 14-526(26) - "buildings shall be oriented toward the street and shall include prominent facades, with windows and entrances toward the street." Staff had suggested at the last workshop that a gateway structure be added at this corner to emphasize a more visible entrance from Marginal Way. entryway

Below is a summary of previous design changes that were discussed at the March 9th workshop.

Marginal Way Elevation . . . On the right-hand side, a doorway has been added with windows on either side. The windows on the far corner have now been off-set to complement the door. The doorway will apparently serve as an emergency exit. To the left of the mural, a window has been added.

North (Main Entrance) Elevation . . . The Bookland tower entrance has been rotated 20 degrees (now 22.5 degrees) toward Marginal Way. This has been done to give the entrance more of a Marginal Way orientation. In addition, a plaza with landscaping and benches is planned from the entrance to Marginal Way as an "extended" entrance area.

Rear (East) Elevation . . . More windows have been added on the far corner of the facade (close to Elm Street). This portion of the facade was previously blank. Most of the rear facade will have a ½" square metal grid that helps break up the facade. A five foot high cedar fence will be placed along the outside of the cafe which will be raised several feet above the ground.

Elm Street (South) Elevation . . . An extra set of windows was added on the corner (Elm Street/Marginal Way). A large wall mural is shown on the opposite corner. A window was shifted to the left of the mural to provide more visual interest.

The building will have an exterior of dryvit. The dryvit will be green in color on two sides while the remaining sides will be blue and yellow. Corrugated metal canopies will be placed above each window opening. Metal siding will be used along a portion of the rear wall and loading area.

III. STAFF REVIEW

This development has been reviewed by staff for conformance with the standard of the site plan ordinance. Since the March 9th workshop, a revised site plan was submitted to staff on Tuesday, March 16th. With the limited time frame for review, the Development Review Coordinator and Public Works comments were not available at the writing of this report. We hope to have these comments for Tuesday's meeting.

1/2. Traffic

The site will be served by two driveways from Marginal Way. An existing driveway opening (nearest the building) will be shifted about 32 feet to the east. A second curb cut (although labeled as "new curb cut" on the plan) is an existing driveway opening that is being slightly modified. The circulation of the parking lot has been coordinated with the parking lot of the adjacent parcel (Whole Grocer), which is owned by the applicant.

Concrete curb stops will be installed for parking spaces adjacent to Marginal Way. We would normally require curb stops at the rear of the property but a note indicates that an existing fence will remain.

Larry Ash, City Traffic Engineer, has requested that a traffic analysis be submitted for this project but as of the writing of this report none has been received.

At the February 9th workshop, there was a concern expressed about how the turning movements of the Whole Grocer and the new parking lot would mesh. Mr. Ash's initial comment was that a modification in the Whole Grocer parking lot should be considered. The applicant expressed reservations concerning this change because it might change a curb cut location. Prior to Tuesday's meeting we will discuss this issue further with Mr. Ash.

3. Bulk, location, height of proposed structure, health and safety problems

There are no known health or safety problems associated with this project.

4. Bulk, location, height of proposed structures minimizes substantial diminution in the value or utility to surrounding structures

The applicant controls the Whole Grocer and West Marine parcel. Vacant railroad land is behind the property. This proposal redevelops a vacant and underutilized structure which should increase the value of nearby properties.

5. Sewers, storm drains, water

The applicant intends to use the existing utility lines in Marginal Way. The plan shows water, electric, gas, sewer and storm drain lines. Also, sewer capacity letters from Public Works have not been submitted.

The applicant apparently intends to use an existing overhead power line from Marginal Way. However, a note also on the plan indicates that all utilities shall be underground. This should be clarified.

6/7. Landscaping

The landscaping plan for the parking lot needs work. The islands within the parking lot and the green space between the parking spaces and the Marginal Way sidewalk show under story plantings. To effectively break-up the mass of black top within the parking lot, staff would suggest that deciduous trees be planted in each island plus additional trees along the street edge.

The landscaping plan directly adjacent to the building is more developed. The black top area between the building and Marginal Way would be removed and replaced with lawn and plantings. The landscaping utilizes three existing street trees along Marginal Way and four street trees along Elm Street. A variety of understory plantings are proposed between the building and Marginal Way.

Three Japanese Tree Lilacs (2 1/2" - 3" cal.) will be planted in the entryway plaza.

No significant vegetation exists on the site, except for the street trees referenced above.

The plan indicates that a fence will be placed around a dumpster toward the rear of the property. The type of fence (solid or partial screen) is not indicated.

Although a new sidewalk is shown along Marginal Way, the plan does not specify the surface cover of the esplanade. This should be grass.

8. Soil and drainage

Stormwater from the parking lot will flow into an existing storm drain line in Marginal Way via three catchbasins on site. The existing site is almost entirely covered with blacktop, building, or gravel. With the introduction of lawn area in front of the building, there will be a net reduction of impervious surface. About 15,000 sq. ft. of the parking lot which is currently gravel, will be resurfaced with blacktop. The remainder of the parking lot will have a new coating of asphalt.

A treatment system for dirty stormwater should be installed on this site.

The Development Review Coordinator and Public Works are in the process of reviewing the plan.

A note on the plan indicates that erosion and sedimentation control measures shall be designed in accordance with Best Management Practices of the Cumberland County Soil and Water Conservation District and DEP.

9. Lighting

The site plan indicates there will be seven light poles within the parking lot. A note on the plan indicates the light poles will be 30 feet high, with a two light fixtures per pole. A catalog cut of the fixture and a site plan with photometric values of the lighting pattern has not been submitted. The Department of Human Services building was approved by the Board with 25-foot high light poles. We would suggest a similar height for these poles.

A variety of exterior lighting fixtures are proposed along the building facade. This could provide an interesting design feature for nighttime viewing of the building. See Attachments in March 9th staff memo.

10. Fire

The Fire Department has reviewed the plan and finds it acceptable.

11. Infrastructure

The proposed development is designed so as to be consistent with off-premises infrastructure existing or planned by the city.

12. Impact on Natural Resources

There are no known adverse impacts upon the existing natural resources including groundwater quantity and quality, surface water quantity and quality, wetlands, unusual natural areas, and wildlife and fisheries habitat. This is an urban location with a site covered by building and parking lots.

13. Groundwater

This site is served by public water and sewer.

14. Signs

The signage and murals proposed for the building appear to complement and enhance the architectural attributes of the building. These elements help break up segments of the facade that are blank, creating some unusual interest. They are of an appropriate size and scale.

Two murals are proposed. The murals are described as "art work". The mural on the Elm Street side of the building is approximately 50 feet long. The mural along Marginal Way is a freestanding structure just a few feet in front of the building. At the widest point, the mural has a dimension of about 32 feet.

Marge Schmuckal, Zoning Administrator, has reviewed the submitted signage plans and offers the following comments (Attachment D.) She indicates that murals as a work of art, are exempt from the sign ordinance assuming there is no commercial message/name.

> This memo is to address issues as shown on the submitted Bookland plans. The City Sign Ordinance exempts works of art from requiring a permit if they do not include a commercial message. I interpret that to mean that no commercial message/name, trademark, logo, or symbol should be located on the art work.
>
> A work of art is required to be permitted (i.e., to have a sign permit) if it contains a commercial message/name, trademark, logo, or symbol. That commercial message etc. would be restricted to no more than ten (10) percent of the total area of the artwork.
>
> It is my interpretation that the two art work murals could meet the art work exemption if the proposed magazine/book and wall murals were not a real magazine or book cover. It should be non-specific to a product and contain no logo.

15. B-5 Development Standards

a. Shared Infrastructure:

Circulation on the site has been planned and coordinated with the Whole Grocer parcel which is controlled by the applicant. This includes parking and vehicular access.

b. Buildings and uses shall be located close to the street:

The applicant is proposing to renovate an existing building. The building footprint is virtually on the Elm Street roadway line while on Marginal Way the building is set back about 30 feet.

c. Buildings shall be oriented toward the street and shall include prominent facades with windows and entrances oriented toward the street. Uses that include public access to a building or commercial/office uses in mixed-use developments shall be oriented toward major streets whenever possible.

This issue has been discussed in some detail at previous workshops. Staff has suggested some type of architectural element be designed at the Marginal Way corner of the building that would serve as a gateway or entryway to the building. We were concerned that the earlier changes were not strong enough to address the goal of the standard. The details of the building elevations are described in Section II of this report.

With the inclusion of a gateway detail, the Marginal Way front door (accessory), and the large mural, the design has evolved to be more responsive as a prominent facade adjacent to a major street.

d. Parking lots shall be located toward the rear of the property and shall be located along property lines where joint use or combined parking areas with abutting properties are proposed or anticipated.

Parking is located along the side of the building. The applicant indicates that in the long term a building will be constructed in the parking lot toward Marginal Way which would push the parking further to the rear.

e. Standards for increasing front setback.

This standard does not apply since the applicant is proposing to renovate an existing building.

16. Land Survey

A land survey was submitted by the applicant; but the seal, date, and some of the detail are difficult to read. A legible land survey needs to be submitted.

IV. MOTIONS FOR THE BOARD TO CONSIDER

On the basis of plans and material submitted by the applicant and on the basis of information provided in Planning Report #7-99, the Planning Board finds:

A. That the plan is in conformance with the Site Plan Ordinance of the Land Use Code.

1. The applicant submit additional information on the exterior lighting including a photometric plan, a catalog cut of the parking lot light fixtures, and a reduction in the light pole height to a maximum of 24 feet, for city staff review and approval.

2. That a revised landscaping plan be submitted for staff review and approval.

3. That the site plan be revised reflecting the comments of the Development Review Coordinator and Public Works.

ref date of memos

4. That the applicant submit a legible land survey for staff review and approval.

5. That a traffic analysis report be submitted for review and approval by the City Traffic Engineer.

6. That the site plan be revised to reflect a gross esplanade adjacent to the Marginal Way sidewalk.

7 Applicant submit a letter of financial capability for review and approval

8. See condition 8

Attachments

A. Background Information
B. Site Plan
C. Building Elevations
D. Memo from Marge Schmuckal, Zoning Administrator

ATTACHMENT A-1

3/15/99

Site Plan Review
Renovations to an Existing Building for a New Retail Facility at 87 Marginal Way, Portland, Maine

Below are responses to contents requirements as set forth in Portland's Land Use §14-525b. The numbers below correspond to the numbers given in the code.

§14-525(b)1)

a. Applicant: Southern Maine Properties Company
P.O. Box 7525
Portland, ME 04112

Development Name: 87 Marginal Way
New Office Building

b. See Site Plan "A".

c. See Site Plan "A".

d. See Site Plan "A";

e. See Grading / Site Plan.

§14-525(b)2)

a. Existing soils – sand, gravel, bricks, ash, grey silty clay, grey silty sand, and gravel.

b. Site is 100% impervious and without rock outcroppings. No easements or rights of way. See Grading / Site Plan.

c. See Grading / Site Plan and Elevations.

d. See Grading / Site Plan.

e. See Grading / Site Plan.

f. None.

g. See Grading / Site Plan.

h. See Landscaping Plan.

i. See Grading / Site Plan and outdoor café fence details.

j. See site lighting photometrics plan to follow.

k. See Grading / Site Plan.

l. N/A.

m. See written statement.

n. All temporary erosion control measures to follow Cumberland County SWCD guidelines. Temporary erosion control devices will be in place before commencing other construction and sediment removal measures will be taken before runoff water leaves the site. See Grading / Site Plan.

3/15/99

Site Plan Review – Written Statements
Renovation to an Existing Building for a Retail Facility at 87 Marginal Way, Portland, Maine

Below are responses to written statement requirements as set forth in Portland's Land Use §14-525c. The numbers below correspond to the numbers given in the code.

14-525c: Owners

Southern Maine Properties Company (SMPC)
P.O. Box 7525
Portland, ME 04112

1) Site to be used for retail sales and café.

2) Land Area
102,000 ±sf

Existing Coverage
Bldg. & loading platform = 26,300± sf
Proposed Coverage
Bldg, Bldg. Additions, & platform = 26,500± sf

3) None.

4) Normal retail waste.

5) Site is currently served by:
PWD – water & sprinklers
Portland Sewer Department – sewer & storm
CMP – electrical
Northern Utilities – natural gas
Bell Atlantic – telephone

6) Site currently impervious except for the tree wells and landscaped strip along southerly side of building: Install new catch basins for surface drainage. Grading plan to follow.

7) Permitting – 1 month
Construction – 5 months
- Site work
- New building construction

8) None.

9) Whereas Key Bank has recently decided not to finance this project it is unknown at this time whether or not a financial institution would finance this project.

10) See attached tax bills.

11) None.

12) Any plans in this format will follow.

A-3

SEPT. 11, 1998	DUE MARCH [redacted]			PAY THIS AMOUNT
$7,415.53	$7,415.53			$7,415.53

FIRST BILLING
S38427-99

LENDING INST:

CBL
034- - D-007-001

ACCOUNT NUMBER S38427-99

Assessed Property Description
34-D-7-1
MARGINAL WAY 87
PREBLE ST
101987 SF

SOUTHERN MAINE PROP CO

PO BOX 7525
PORTLAND ME 04112

BRING COMPLETE TAX BILL WHEN PAYING IN PERSON.

Please Make Your Check Payable to: City of Portland

Send Copy of Bill to Mortgage Holder

PARTIAL PAYMENTS MAY BE MADE AT ANY TIME.

Change of Address

Name:

RETURN THIS TOP PORTION WITH PAYMENT

Credit cards are not accepted for property tax payments.

KEEP THIS PORTION

ACCOUNT NUMBER S38427-99

1999 REAL ESTATE PROPERTY TAX STATEMENT
City of Portland

CBL
034- - D-007-001

Fiscal Year 1999
July 1, 1998 - June 30, 1999

LENDING INST.

Owner of Record as of April 1, 1998

SOUTHERN MAINE PROP CO

5 MILK ST
PORTLAND ME 04101

Assessed Property Description
34-D-7-1
MARGINAL WAY 87
PREBLE ST
101987 SF

CURRENT BILLING DISTRIBUTION

School	$ 7,845.64
Public Works	$ 1,067.84
Parks & Recreation	$ 385.61
Fire	$ 1,171.65
Police	$ 1,453.44
Debt Repayments	$ 1,364.46
General Government	$ 593.34
County	$ 474.59
Health & Human Services	$ 489.42-
Library	$ 459.76
Metro Transit District	$ 341.11
Enterprise Funds	$ 88.99-
Regional Waste Systems	$ 252.13

CURRENT BILLING INFORMATION

Land Value	$ 204,570.00
Building Value	$ 381,870.00
Total Value	$ 586,440.00
Exemptions	$ .00
Homestead	$ .00
Taxable Value	$ 586,440.00
Tax Rate	$ 25.29
TOTAL TAX	$ 14,831.06
AMOUNT PAID	$ .00

Remittance Instructions

~~To avoid standing in line,~~ it is recommended that taxes be paid by mail. Please make check or money order payable to: ***CITY OF PORTLAND.*** **Credit cards are not accepted for property tax payments.**

Use enclosed envelope to return your payment or mail to:

City of Portland
P.O. Box 9544
Portland, ME 04112 - 0544

Use this receipt to report change of address and check off box on return envelope.

RECEIVED
AUG 17 1998
FORE RIVER COMPANY

ATTACHMENT D

Zoning Division
Marge Schmuckal
Zoning Administrator

Department of Urban Development
Joseph E. Gray, Jr.
Director

CITY OF PORTLAND

TO: Rick Knowland, Senior Planner

March 10, 1999

FROM: Marge Schmuckal, Zoning Administrator

SUBJECT: Bookland Project - 87 Marginal Way - 34-D-1 & 7

This memo is to address signage issues as shown on the submitted Bookland plans. The City Sign Ordinance exempts works of art from requiring a permit if they do not include a commercial message. I interpret that to mean that no commercial message/name, trademark, logo, or symbol should be located on the art work.

A work of art is required to be permitted if it contains a commercial message/name, trademark, logo, or symbol. That commercial message etc. would be restricted to no more that ten (10) percent of the total area of the artwork.

It is my interpretation that the two art work murals could meet the art work exemption if the proposed magazine/book and wall murals were not a real magazine or book cover. It should be non-specific to a product and contain no logo.

cc: Penny Littell, Corporation Council
file

CITY OF PORTLAND, MAINE
PLANNING BOARD

March 29, 1999

Mr. Ricardo Quesada
Southern Maine Properties Company
P.O. Box 7525
Portland ME 04112

re: Bookland, 87 Marginal Way

Dear Mr. Quesada:

On March 25, 1999, the Portland Planning Board voted 5-0 (Carroll opposed, Cole absent) to approve the site plan for a Bookland retail store at 87 Marginal Way. The approval was granted for the project with the following conditions:

1. The applicant submit additional information on the exterior lighting including a photometric plan, a catalog cut of the parking lot light fixtures, and a reduction in the light pole height to a maximum of 24 feet, for city staff review and approval.

not submitted 2. That a revised landscaping plan be submitted for staff review and approval.

3. That the site plan be revised reflecting the comments of the Development Review Coordinator (memo dated 3-19-99) and Public Works (memo dated 3-25-99).

full sig and complete not submitted 4. That the applicant submit a legible land survey for staff review and approval.

5. That a traffic analysis report be submitted for review and approval by the City Traffic Engineer.

OK 6. That the site plan be revised to reflect a grass esplanade adjacent to the Marginal Way sidewalk.

OK 7. Applicant shall submit a letter from a financial institution regarding their financial capability to complete the project for staff review and approval.

Penny reviewing 8. That the applicant submit a joint use agreement for access between 127 Marginal Way and 87 Marginal Way.

The approval is based on the submitted site plan and the findings related to site plan review standards as contained in Planning Report #7-99, which is attached.

Planning & Urban Development

Joseph E. Gray Jr.
Director

CITY OF PORTLAND

Langasha comments!
Updated ped. signals
+ countdown counters
@ Preble + Marginal Way
$ 15K 3 vehicle detect loop
cost difference

August 12, 1999

Bruce Kistler
Southern Maine Properties
P O Box 7525
Portland ME 04112

re: Bookland (87 Marginal Way)

Dear Bruce:

Thank you for submitting a revised site plan for Bookland. I have outlined staff comments on the plan related to the Planning Board's conditions of approval.

1. Lighting

   Photometric plan has been submitted. A catalog cut of the VFT2-22 has been received and appears to be OK. However, catalog cuts of the remaining fixtures have not been received. A transmittal dated 3-1-99 from David Lloyd included catalog cuts for other exterior lighting fixtures on the site but it's not clear whether these are the same fixtures. Please clarify. If they are not, we will need the revised catalog cuts.

2. Landscaping

   A revised landscaping plan was not submitted.

3. Development Review Coordinator and Public Works Comments

   They are in the process of reviewing the plan.

4. Land Survey

   We have not received a legible full-size land survey.

5. Traffic Analysis

   The City Traffic Engineer is in the process of reviewing the traffic report.

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OK 6. Esplanade

An esplanade is shown in the plan.

OK 7. Financial Capability

The submitted financial capability letter addresses this condition.

8. Joint Use Agreement

Corporation Counsel is in the process of reviewing this letter.

9. The A-O plan dated 2-3-99 included "additional notes" regarding site standard/specifications. This should be incorporated into the revised submission.

Should you have any questions on this letter, please call me.

Sincerely,

Richard Knowland /lec

Richard Knowland
Senior Planner

cc: Joseph E. Gray, Jr., Director of Planning and Urban Development
Alexander Jaegerman, Chief Planner

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7-28-98

MARGINAL WAY WORKSHOP

JOHNSON CONTROLS EXECUTIVE SUMMARY

P.Q. not a final lease yet
lease reserves the right to move parking to the rear

mentions schedule

C.H. Chestnut St question

P.Q. think there going to own to river
if a street goes through, value
minimum site becomes smaller
impact on DNJ
future reconfigure of DNJ parking lot possible

Ken brownfields concept not any legal status
reasonable waiver standard & intended to be extremely flexible

J.C. standard

E.N. location of the site

D.K. why so much parking?
main administrative center + client services

P.Q. DNJ wanted more parking

D.K. shared parking in the future?

C.H. like the location would like Chestnut extended
need a full site plan wants another workshop
E is not a high hurdle
the standard is low

J.C.

* get history of the amendment
* ADA [memo on] universal standards

M.M. no concern on building location

parking is messy

P.Q. DNU new surface ~ parking lot integrated

circulation ... [illegible] curbs ... [illegible]

barriers

M.M. parking is not an [illegible] landscaping

buffering to separate the parking areas

needs a demarcation

islands or some type of landscaping

U. wants to see a conceptual plan

K.C. parking must be [illegible] [illegible] [illegible]

is submitted

D.K. should look at an alternative to make sure

options have been looked at

J.C. should look at an alternative

will be on a main bike street in the future

integrate in with existing + planned

infrastructure

should be [illegible] by [illegible]

[illegible] [illegible] [illegible]

E.M. [illegible]

D.K.

[illegible]

MARGINAL WAY OFFICE BLDG

SEPT 22 P.H

RICK QUIJADA

JASON WENTWORTH 411 PITT ST

ORIENTATION OF THE BUILDING - A PROPONENT

DOESN'T PROMOTE A PEDESTRIAN FRIENDLY ENVIRONMENT

TOO AUTO ORIENTED .. PEDESTRIANS SECOND

PEDESTRIANS GO THRU A SEA OF PARKING

DANOM EMBRACE OTHER FORMS OF TRANSPORTATION

DHS SHOULD HAVE TRAIN DISCUSSION

RUDY NAPLES

75% come by car

7% public transportation

15% walking

1% bike

160 people per day

"a hazard"

RAY JUNIOR WINTON JR.

a DHS employee

parking in the rear would be better

discretion, confidentiality ← don't put them in front

it's discriminatory

wants to see an improved gateway

Bayside could really grow

Mark Chase needs of client haven't been looked at — no

direct ped. access from the street
wheelchair
Cites D.N.U study 20% non motor vehicle
looks like a mall development
too many parking spaces
the front door of Portland
raise the bar on the design of the buildings

Rich Q comments

Cyrus original recommendation was build to street
mention C.C. modification
sloppy site plan - lacks info incomplete

John C. standard says "may" not "shall"
never presented DNU proposal - no options presented
never had any evidence or documentation
mentions d.t. scenario no parking in front
a gateway location
an unremarkable bldg - city can do better
no shared infrastructure
* asked about Metro accommodation
"character" not great
should be carefully light
signage
unworthy of review
flouts the intent of the ordinance
"a mockery"

Planning & Urban Development

Joseph E. Gray Jr.
Director

CITY OF PORTLAND

August 26, 1999

Bruce Kistler
Southern Maine Properties
PO Box 7525
Portland ME 041125u

RE: Bookland (87 Marginal Way)

Dear Bruce:

Thank you for your recent submission of updated plans for Bookland.

1. Landscaping

   The City Arborist is on vacation. I hope to meet with him on Monday, August 30th to discuss the revised plan.

2. Development Review Coordinator Comments

   See memo from Jim Wendel dated August 20, 1999 (attached).

   Comment #8 - The dumpster area is much larger than the original plan. Is the screening fence the same material as the original? How is the dumpster going to have access if there is a parking space in front of it?

   Public Works Comments - These will be forwarded to you as soon as possible.

3. Land Survey

   The land survey is acceptable.

4. Traffic Analysis

   Larry Ash, City Traffic Engineer, has reviewed the submitted traffic analysis. His approval is conditioned upon LED pedestrian signals and pedestrian countdown counters being installed at the Preble Street/Marginal Way intersection. For more details see the attached memo from Mr. Ash.

5. The A-O plan dated 2-3-99 included "additional notes" regarding site standard/specifications. These notes should be put on one of the plans. Attached are a list of the notes that should be on the plan.

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6. Please re-review the performance guarantee sub totals, particularly the unit costs. It seems low, particularly the lighting budget.

7. The City Manager has recently indicated that the City sidewalk policy for Bayside should be brick. A concrete sidewalk was approved for your site plan. We should discuss whether it makes sense for you to put in a blacktop base for a future brick sidewalk (to be built by the city) or depending on the condition of the existing Marginal Way sidewalk, contribute money allocated towards the concrete to do a brick sidewalk for the City to do at a later date.

Should you have any questions concerning this letter, please call me.

Sincerely,

Richard Knowland
Senior Planner

cc: Joseph E. Gray, Jr., Director of Planning and Urban Development
Alexander Jaegerman, Chief Planner
Larry Ash, Traffic Engineer
Anthony Lombardo, Public Works

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DeLUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS

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SOUTH PORTLAND, MAINE 04106
TEL. 207 775 1121
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- ROADWAY DESIGN
- ENVIRONMENTAL ENGINEERING
- TRAFFIC STUDIES AND MANAGEMENT
- PERMITTING
- AIRPORT ENGINEERING
- SITE PLANNING
- CONSTRUCTION ADMINISTRATION

MEMORANDUM

TO: Rick Knowland, Senior Planner

FROM: Jim Wendel, PE, Development Review Coordinator

DATE: August 20, 1999

RE: Site Plan Review
Bookland
87 Marginal Way

A review of the latest submission dated August 8, 1999 has been completed. We offer the following comments:

OK 1. The parking spaces along the frontage are only 17' deep; the standard is 19'.

2. The new sidewalk along Marginal Way is vague on grading; the grades should be based on the City's standards with the elevation at the back edge of the sidewalk being in this case 1.1' above the gutter grade. The calculation is based a 7" curb reveal and a slope of the esplanade and sidewalk of 1/4"-3/8"/ft. and the back edge of the sidewalk being 17' from the face of curb. The grades of the parking stalls along the frontage should be appropriately matched with the sidewalk grades. Also the entrance grade should be revised to match this standard. When the City resets the curb in the future, then the sidewalk will be in the correct vertical relationship to the road. Tony may have some thoughts on this item.

3. The minimum entrance curve radius is 20'; Larry Ash may have some comments on this item.

4. Item 2 of our previous memo to you dated March 19, 1999 regarding failed pavement and thickness of an overlay has not been addressed.

A RECOMMENDATION NOT A REQUIREMENT.

5. We recommend that a barrier be installed between the parking area and the Maine Rock Gym Climbing Tower along the paved and unpaved line to separate the uses and prevent vehicle movements between the two areas.

6. The plan should be clear as to where granite and concrete curb are used, particularly at the entrances.

7. The concrete sidewalk within the right of way does not have a detail; it should conform to the City standard.

8. The dumpster is in a poor location; it can not be accessed if vehicles are parked in the spaces on either side.

Should you have any questions, please call.

From: Larry Ash
To: Rick Knowland
Date: Fri, Aug 13, 1999 7:33 AM
Subject: Bookland @ 87 Marginal Way

Rick: I have reviewed the traffic report on Bookland and have the following recommendation. The developer/Bookland should pay for the following:

1. LED pedestrian signals and pedestrian countdown counters for each direction on all 4 corners at the intersection of Preble St/Marginal Way.

2. Replacement of 3 vehicle detection loops at the same intersection.

The total estimated cost for these improvements will be approximately $15,000.

Should you have any questions pleae call me at 8894.

CC: Gary Dobson, William Bray

SITE PLAN AND SUBDIVISION NOTES

Listed below are notes typically required on all site plans. These notes are listed in an effort to assist the applicant in preparing a site plan. This list is intended to supplement but not substitute the specific submission requirements of the site plan, subdivision, and other ordinances. The specific submission requirements are found in each ordinance and should be reviewed carefully by the applicant. Please note that different sites and developments may pose different site plan issues which affect the content of a site plan submission.

- [x] Landscaping shall meet the "Arboricultural Specifications and Standards of Practice and Landscape Guidelines" of the City of Portland Technical and Design Standards and Guidelines.

- [x] The entire site shall be developed and/or maintained as depicted on the site plan. Approval of the Planning Authority or Planning Board shall be required for any alteration to or deviation from the approved site plan, including, without limitation: topography; drainage; landscaping; retention of wooded or lawn areas; access; size, location, and surfacing of parking areas; and location and size of buildings.

- [x] All powerline utilities shall be underground.

- [x] Sidewalks and curbing shall be designed and built with tip down ramps at all street corners, crosswalks and driveways in conformance with the City of Portland Technical and Design Standards and Guidelines.

- [x] All erosion and sediment control measures shall be designed in accordance with Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices published by the Cumberland County Soil and Water Conservation District and Maine Department of Environmental Protection, March 1991 or latest edition. [Note: the site plan should specify the erosion control device to be employed (silt fence, hay bale, etc.) as well as their location.]

- [x] All erosion control measures shall be installed prior to any site excavation or regrading.

- [x] All disturbed areas on the site not covered by buildings or paved areas shall be stabilized with loam and seed or other methods as required by Best Management Practices [see above.]

Planning & Urban Development

Joseph E. Gray Jr.
Director

CITY OF PORTLAND

August 26, 1999

Bruce Kistler
Southern Maine Properties
PO Box 7525
Portland ME 041125u

RE: Bookland (87 Marginal Way)

Dear Bruce:

Thank you for your recent submission of updated plans for Bookland.

1. Landscaping

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2. Development Review Coordinator Comments

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Should you have any questions concerning this letter, please call me.

Sincerely,

Richard Knowland

Richard Knowland
Senior Planner

cc: Joseph E. Gray, Jr., Director of Planning and Urban Development
Alexander Jaegerman, Chief Planner
Larry Ash, Traffic Engineer
Anthony Lombardo, Public Works

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DeLUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS

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MEMORANDUM

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SITE PLAN AND SUBDIVISION NOTES

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ATTACHMENT 7

DeLUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS

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MEMORANDUM

TO: Rick Knowland, Senior Planner

FROM: Jim Wendel, P.E., Development Review Coordinator

DATE: September 3, 1998

RE: Site Plan Review
DHS Building
161 Marginal Way

Review of the site plan submission has been completed. I offer the following comments.

1. Require boundary survey.

2. Require full details of site infrastructure; i.e. pavement structure, trench details, catch basins, etc.

3. Public Works does not allow pipe connections to catch basins.

4. Stormwater report mentions that some flooding has occurred in this system. Where has that flooding occurred? If this site floods through a surcharge of the system than the site may need to be raised. Runoff/hydraulic analysis of the system is needed to establish that elevation.

5. Show the whole storm drain system alignment to the outlet in Back Cove with pipe sizes, etc. The roof drains should connect to the storm system that flows to the Vortechnics unit.

6. The applicant should provide a fully integrated design plan set.

7. Based on apparent new lot lines, is this a subdivision?

8. Insufficient cover exists on some storm drain pipe.

Should you have any questions please call.

JN1359.19/1350.10disk6/DHSmarg

ATTACHMENT 8

Planning & Urban Development

Joseph E. Gray Jr.
Director

CITY OF PORTLAND

August 14, 1998

Mr. Peter Quesada
Fore River Company
P O Box 7525
Portland ME 04112

re: Marginal Way Office Development

Dear Peter:

As we discussed previously on the phone, I am enclosing a memo from Corporation Counsel regarding the issue you raised about local review fees and state projects. I think it's clear that this project is not exempt from such fees. We would greatly appreciate you formally applying at the Building Inspection Department with the project site plans and a check for $500.

When we met on July 29, after the Planning Board workshop, we discussed with you the possibility of moving the building up and introducing angled parking along Marginal Way. Based on your expression of interest in this idea, we had Tom Gorrill evaluate its feasibility. I would like to meet with you as soon as possible to show you what Tom has come up with.

This letter is intended also to summarize and update you on staff comments regarding the proposed office building at 161 Marginal Way. Some of the comments were previously discussed with you, referenced in the staff workshop or were generated from the site plan (one page) submitted on August 11th.

1. A traffic study needs to be submitted.

2. Dimensioned elevations of the proposed building (on all four sides) indicating proposed material.

3. Lighting . . . Photometric pattern of the light fixtures superimposed on the site plan. Have you looked into the possibility of lower light poles?

4. Details of stormwater treatment from the parking lot (i.e.; location and type of device, such as oil and grit separator.)

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5. Landscaping plan . . . size, number, type of plant material species.

6. Catalog cut of chain link fence with hurricane slots. What will be used to screen the dumpster?

7. Show in better detail existing curb openings for the adjacent parcel (by Atlantic Hardwood)

8. Site plan should include notes from the site plan development review checklist previously distributed to you.

9. Indicated surface material of the plaza . . . landscaping, concrete.

10. Sidewalk adjacent to parking spaces and building. Please show whether sidewalk is elevated or if there is a curb stop so cars don't roll into pedestrians on the sidewalk.

11. Sanitary sewer connection into Marginal Way.

12. Surface material of parking area. I assume blacktop, but indicate on the plan.

13. Indicate power and telephone lines are underground.

14. Please refer to the Technical and Design Standards and Guidelines for details on sidewalk construction cross section, curb radius with granite curb, handicapped tip down, or driveway opening. These details should be shown on the plan.

15. Typical parking space dimensions and aisle width.

16 Erosion and sedimentation control.

I would anticipate there will be technical engineering comments that will arise as the Development Review Coordinator and Public Works review the updated plan.

We will forward other staff comments when the become available, or when the plans are revised.

Please call me should you have any questions.

Sincerely,

Alexander Jaegerman
Chief Planner

Enc.

cc: Joseph E. Gray, Jr., Director of Planning and Urban Development
Richard Knowland, Senior Planner
Bruce Kistler; Fore River Company

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CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Chair Carroll and Members of the Portland Planning Board

FROM: Richard Knowland, Senior Planner

DATE: August 25, 1998

SUBJECT: New Office Building at 161 Marginal Way

At Tuesday's workshop, the applicant will be updating the Board on the latest revisions to the site plan. This item was initially reviewed at the Board's July 28th workshop. Please refer to the staff memo for that meeting.

Since the workshop, the applicant has submitted the information shown on Attachments 2 and 3.

Attachments

1. Staff Memo dated 7-28-98
2. Applicant Submission
3. Revised Site Plan (dated 8-11-98)
4. Planning Staff Letter dated 8-14-98 to Applicant

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CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Chair Carroll and Members of the Portland Planning Board

FROM: Richard Knowland, Senior Planner

DATE: July 28, 1998

SUBJECT: New Office Building at 161 Marginal Way

Southern Maine Properties and Five Liver Company request workshop review for a proposed office building at 161 Marginal Way. This property is part of larger landholdings owned along Marginal Way by the Fore River Company. The proposed building is expected to be the area offices for Maine Department of Human Services. The site presently includes a large shed, the former Steego Auto Parts and Concord Trailways building which will all be removed from the site.

Background information, site plans and a building elevation are shown on Attachments A, B and C.

Development Summary

Zoning:	B-5 Urban Commercial Mixed Use Zone
Proposed Use:	Office Space
Building Floor Area:	52,800 sq. ft.
Building Footprint:	13,200 sq. ft.
Building Height:	4 Stories
Land Area:	123,186 sq. ft.
Parking:	269 Spaces

Office Building

The proposed building will be 4 stories. Concept building elevations are shown on Attachment C. The exterior facade will consist of brick. A steel canopy is proposed along portions of the southerly and westerly facade which provides cover for the visitors and employee entrances. There appears to be some type of lintel treatment above the windows. An "architectural cornice" is labeled on the plan above the fourth floor windows. A more detailed building elevation plan should be submitted but the concept design seems appropriate for the area.

The building will have the capability to accommodate a fifth story. If the addition were to be built, it is at least 3 years away so it could not be incorporated into the current review process since site plan approval lapses after two years. Any future addition will require site plan review. The building is setback about 100 feet from Marginal Way. A 30 foot wide landscaped plaza is shown in front of the building.

Parking

Under Sec. 14-526(2)(b) of the site plan ordinance, the Board determines the parking requirements for new buildings over 50,000 sq. ft. The applicant is proposing 269 spaces or 5.38 spaces per 1,000 sq. ft. of floor area. This is well above the normal zoning parking requirement of 2.5 spaces per 1,000 sq. ft. of floor area.

Circulation

The site will be served by two driveways along Marginal Way. Visitor parking (48 spaces) is shown on the site plan in the front yard area between the building and Marginal Way. The visitors entrance is located along the front of the building.

The remainder of the parking is for staff. A staff entrance is shown near the rear of the building.

The applicant indicates that there will be no wheel stops or curb guards for the rear parking spaces that abut the vacant lot along Marginal Way. Although the spaces will be striped, there will be no physical barrier to keep vehicles within the parking lot. Vehicles could therefore travel back and forth through the vacant lot to Marginal Way bypassing the designed driveway entrances on the site plan. The applicant would prefer this arrangement since future development is expected on the vacant property and he does not want to install a permanent improvement.

Larry Ash, City Traffic Engineer, has requested that a traffic analysis of the proposed development be submitted for review. This will need to be submitted prior to the public hearing.

A new sidewalk will need to be installed.

Special B-5 Site Plan Review Standards

The site plan ordinance has a series of standards for the B-5 Urban Commercial Mixed Use zone [Sec. 14-526(26)]. These standards are shown later in this section.

Since the applicant is proposing a 100 foot building setback from Marginal Way and incorporates parking within the building setback, review of standards (b), (d), and (e) is particularly relevant. These provisions are highlighted in shade. The Board may modify or waive these standards "as may be reasonably necessary to suit the operational or marketing needs of the user(s) of the property." Attachment D includes a narrative by the applicant in support of this modification.

To summarize, the applicant is proposing a more suburban form of development with an extended building setback from the street and parking in the front as contrasted with the B-5 related standards that encourage a more urban form of development (building close to streetline, parking in rear and side rather than the front yard.)

Sec. 14-526. Standards.

(a) *Requirements for approval.* The planning board or planning authority shall not approve a site plan unless it meets the following criteria:

(26) Development located in the B-5 and B-5b zones shall meet the following additional standards:

a. Shared infrastructure: Shared circulation, parking, and transportation infrastructure shall be provided to the extent practicable, with utilization of joint curb cuts, walkways, service alleys, bus pull out areas, and related infrastructure shared with abutting lots and roadways. Easements for access for abutting properties and shared internal access points at property lines shall be provided where possible to facilitate present or future sharing of access and infrastructure.

b. Buildings and uses shall be located close to the street where practicable. Corner lots shall fill into the corner and shall provide an architectural presence and focus to mark the corner.

c. Buildings shall be oriented toward the street and shall include prominent facades with windows and entrances oriented toward the street. Uses that include public access to a building or commercial/office uses in mixed-use developments shall be oriented toward major streets whenever possible.

d. Parking lots shall be located to the maximum extent practicable toward the rear or side of the property and shall be located along property lines where joint use or combined parking areas with abutting properties are proposed or anticipated.

e. *Modifications to siting standards for the B-5 zone.* In the B-5 zone, the planning board may modify or waive standards (a)-(d) of this subsection as may be reasonably necessary to suit the operational or marketing needs of the user(s) of the property.

Landscaping

Seven (7) street trees are shown along Marginal Way. An indeterminant number of trees is also shown near the plaza in front of the building. Only two trees are proposed along the 540 foot long rear property line. The plan says a continuous fence will be installed along the rear property line and a portion of the westerly side line.

Environmental

The applicant is proposing a 269 space parking lot. The plan should accommodate some type method to treat contaminated stormwater from the parking lot.

Attachments:

A. Background Information
B. Site Plan
C. Building Elevations
D. Applicant R-5 Siting Standard Narrative
E. Public Works Comments
F. Lighting

ATTACHMENT D-1

Fore River Company 5 Milk Street P.O. Box 7525 Portland, ME 04112 (207) 772-6404

9678

July 20, 1998

Joe Gray
Director of Planning & Development
City of Portland
389 Congress Street
Portland, ME 04101

Re: 161 Marginal Way Site Plan Workshop

Dear Joe,

In preparation for our Planning Board workshop relating to the Site Plan Application for 161 Marginal Way (the former Haverty Buick), you have asked us for a written analysis of the building siting decision. Among the variables we considered were the following, based on the operational needs of the user with which we are now in negotiations, and the marketing and financing needs, given the possible termination of this user's lease at any time:

To maximize available parking on the lot, all parking rows have been designed as double loaded. Single loaded parking on this site would lose a row of parking and increase the land area which must be devoted to parking. Given this constraint, in theory the building could be located either on the street, on the back lot line, on the Noyes property line, or any number of units of double loaded parking to the west. We have located the building as close to the Noyes property and the street as possible with one double loaded row on the street and one on the property line. A location farther west (closer to the Whole Grocer) limits future flexibility on the remainder of the site. A location on the back lot line was deemed inconsistent with the pattern elsewhere on the street and limiting of future development options. A location on the Noyes lot line was inefficient from a circulation point of view, and unnecessarily put the windows facing east at risk of future development on the adjacent property. A location on the street was inconsistent with the current and future user needs and therefore not practicable, as explained below.

The Department of Human Services (DHS), as a prospective user, requires that customer and employee entrances and related parking be separate and distinct. A consistent theme of the design program of DHS is separation of client service areas from administrative employee areas. Our design puts the main public entrance and public parking at the front, facing the street, with the employee parking and entrance at the side and rear. Client parking on the side and rear, with the client entrance at the front was deemed to be confusing for clients, who might enter through the wrong door (see "DHS Security Policy" enclosed).

The DHS lease is terminable by the State at any time during its 15 year term or two 5 year option periods. We assume that future office users may not need the entire building. We have designed the building so that separate floor users can potentially have their own building entrance—one on the front, one on the side. If DHS terminates its lease, the assumption of our lender and ourselves is that the termination will occur at the bottom of an economic cycle when the State is "out of money." At such a time, if past is a guide to future, other leasing and subleasing alternatives will be available, and convenient parking will be a critical variable. A building located on the street, with all parking remote from the main entrance for that tenant, will not be perceived as convenient. Not everybody has to park right in front of the door, but the view that no one can will be immensely detrimental to marketing. It would not be practicable to put an entrance on the street without some adjacent parking.

Given DHS' termination option, the building has also been located to allow reuse of the ground floor as retail space if that is where the market is when DHS terminates its lease. The primary attraction of this location for retailers is on-site parking, and that on-site parking is vastly preferable if some of it is in front of the building. Hence we have located the building to allow some parking in front.

In summary based on our desire to have an entrance facing the street and to preserve the remainder of the site, on the current needs of DHS, on the prospective needs of future users, whether retail or office, and on the concerns of lenders with releasing in the event of DHS lease termination, we have located the building as shown on the site plan. We and DHS appreciate your willingness to schedule a prompt workshop and look forward to discussing this exciting Marginal Way redevelopment project with the Planning Board and staff.

Sincerely,

Peter W. Quesada

enclosure

DHS SECURITY POLICY

P. BUILDING SECURITY:

The following features shall be included in the design of offices:

1. **Proximity card reader system to include card readers on all exterior doors.**

2. The main entrance will be unlocked, but secondary entrances and exits shall remain locked at all times, although they will allow one-way exiting at any time.

3. Separation, securing of staff areas from public areas through the use of the same **proximity card reader** system as above. These secured doors shall remain locked at all times. Each area is self-supporting, i.e. separate restrooms for public and employees.

4. Keyed locks shall be provided to secure program areas and individual rooms. Exempt are restrooms, interview rooms, and playrooms.

5. Receptionist located behind a full counter.

6. Audio-visual alarm system to enable receptionist to alert other employees in the building in the event of difficulties requiring further assistance.

7. Office manager located directly adjacent to receptionist work areas, with observation window in the common wall to enable office manager to periodically observe client activity at the receptionist window.

8. Interview rooms equipped with silent alarm trigger mechanisms, terminating at an audio/visual panel at the reception work station to enable to interviewer to signal for emergency assistance.

9. Interview rooms doors with glass side panels in doors to allow passers-by to recognize a violent situation.

10. Placement of interviewer desks so that the interviewer if closest to the exit door, with the client deepest into the room.

11. Family visitation room equipped with two-way mirror and speaker system to allow undetected observation. The room will have two doors, with one allowing self-locking exit into the adjacent observation room which is located in the secured staff area or into a secured staff hallway.

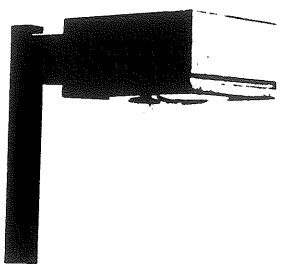
From: ANTHONY LOMBARDO
To: RICK KNOWLAND
Date: Tue, Jul 21, 1998 10:12 AM
Subject: D.H.S. Site @ 161 Marginal Way.....7/21/98

Rick,
Public Works biggest concerns will be relative to the entrance/exits on to Marginal Way and drainage quantity and quality. I will have more specific comments once we receive more detailed and complete construction plans.

AREA/ROADWAY

MCGRAW-EDISON®

ATTACHMENT F-1



GMGALLERIA

250W-400W
High Pressure Sodium
Metal Halide

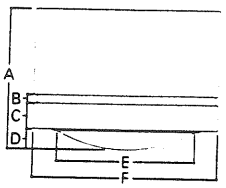
ARCHITECTURAL AREA LIGHT

- Formed aluminum housing with stamped reveal has interior-welded seams for structural integrity and is finished in polyester powder coat
- Ballast tray is hard-mounted to housing interior for cooler operation
- Long-life core and coil ballast
- Spun and stamped aluminum reflector in vertical lamp units, or hydroformed anodized aluminum reflector in horizontal lamp units
- Formed aluminum door has heavy-duty hinges, captive retaining screws and is finished in polyester powder coat (Spider mount unit has steel door)
- Convex tempered glass lens
- Mogul-base porcelain socket
- Approximate net weight: 64-69 lbs. (29-31 kgs.)

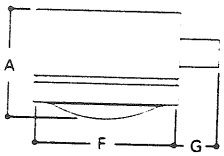
DESCRIPTION

The Galleria achieves superior light distribution by utilizing a seamless reflector system, making it the optimum choice for almost any small or medium area lighting application. U.L. listed for wet locations. CSA certified.

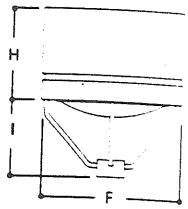
DIMENSIONS



ARM MOUNT



SPIDER MOUNT



	A	B	C	D	E	F	G	H	I
Medium	15" (381mm)	3/4" (19mm)	3" (76mm)	4" (102mm)	18 3/4" (476mm)	21 3/4" (552mm)	6" or 14" (152 356mm)	12" (305mm)	21" (533mm)

EPA-Effective Projected Area: 2.4

ORDERING INFORMATION

SAMPLE NUMBER: GMA251292D

G	M	A	40	1	2	4	3D		

Product Family
G= Galleria

Housing Size
M=Medium

Mounting Method
A=Arm [1]
B=Spider for 2 3/8" O.D. tenon
C=Spider for 3 1/2" O.D. tenon

Lamp Wattage/Base
25=250W/ Mogul
40=400W/ Mogul

Lamp Type
1=MH
2=HPS

Ballast Type [5]
2=CWA
5=CWI

Voltage [5]
1=120V
2=208V
3=240V
4=277V
5=480V
6=Triple-Tap [4] wired 347V
9=Multi-Tap [4] wired 277V

Distribution
1D=Type I MCO Horizontal
2D=Type II MCO Horizontal
3D=Type III MCO Horizontal
FT=Forward Throw Horizontal
AR=Area Round Vertical
AS=Area Square Vertical
RW=Rectangular Wide Vertical
3V=Vertical Type III

Color
BZ=Bronze
BG=Beige
BK=Black
BL=Blue
GR=Green
AP=Grey
RD=Red
SY=Silver
WH=White
YL=Yellow

Options & Accessories
(See Below)

400 Watt Shoe box
40' pole

PRODUCT INFORMATION

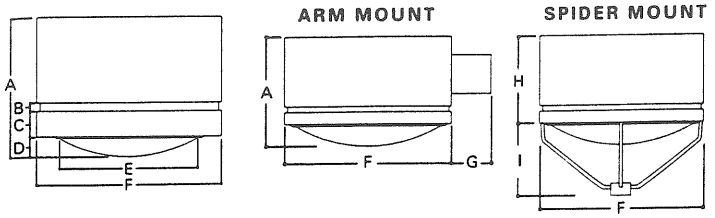
Catalog Number [2]	Lamp Wattage	Lamp Type [3]
Arm Mount (Order arm separately)		
GMA25229XX	250	HPS
GMA40229XX	400	HPS
GMA25129XX	250	MH
GMA40129XX	400	MH
Spider Mount (For 2 3/8" O.D. Tenon)		
GMB25229XX	250	HPS
GMB40229XX	400	HPS
GMB25129XX	250	MH
GMB40129XX	400	MH
GMC25129XX	250	MH
GMC40129XX	400	MH
Spider Mount (For 3 1/2" O.D. Tenon)		
GMC25229XX	250	HPS
GMC40229XX	400	HPS

Options (add as suffix)
F=Single Fuse (120, 277 or 347V)
FF=Double Fused (208, 240 or 480V)
R=NEMA Twistlock Photocontrol Receptacle
Q=Quartz Restrike (Limit to 150W max. quartz lamp only. Lamp not included)
HS=House Side Shield
VS=Vandal Shield
FG=Flat Glass (Reduced Lamp Envelope required AR, AS, RW and 3V)

Accessories (order separately)
MA1004=14" Arm for Square Pole. 1.0 EPA
MA1005=6" Arm for Square Pole. 0.5 EPA
MA1006=Direct Mount Kit for Square Pole
MA1007=14" Arm for Round Pole. 1.0 EPA
MA1008=6" Arm for Round Pole. 0.5 EPA
MA1009=Direct Mount Kit for Round Pole
MA1010=Single-arm Tenon Adapter for 3 1/2" O.D. Tenon
MA1011=2 @ 90° Tenon Adapter for 3 1/2" Tenon
MA1012=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
MA1013=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
MA1014=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
MA1015=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
MA1016=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
MA1017=Single-arm Tenon Adapter for 2 3/8" O.D. Tenon
MA1018=2 @ 180° Tenon Adapter for 2 3/8" O. D. Tenon
MA1029=Wall bracket
OA1016=Photocontrol–Multi-Tap
OA1027=Photocontrol–480V
OA1201=Photoelectric Control, 347V NEMA Type
LL=Lamp Included

NOTES: [1] Arm not included. See accessories. [2] Designate distribution by changing 9th and 10th digits. [3] All lamps are mogul base. Lamps are not included. [4] Multi-Tap ballast is 120/208/240/277V. Triple-Tap ballast is 120/277/347V. [5] Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information.

DIMENSIONS

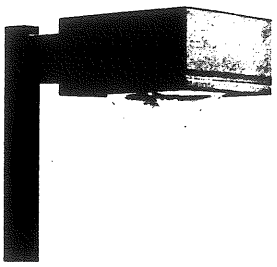


	A	B	C	D	E	F	G	H	I
Large	18 1/2" (464mm)	3/4" (19mm)	3 3/8" (85mm)	4" (102mm)	12 7/8" (327mm)	27" (686mm)	6" or 14" (152 or 356mm)	14 1/2" (362mm)	12" (305mm)

EPA-Effective Projected Area: 3.9

DESCRIPTION

The Galleria achieves superior light distribution by utilizing a seamless reflector system, making it the optimum choice for almost any large area lighting application. U.L. listed for wet locations. CSA certified.



GLGALLERIA

400W-1000W
High Pressure Sodium
Metal Halide

ARCHITECTURAL AREA LIGHT

ORDERING INFORMATION

SAMPLE NUMBER: GLA911292D

G | L | B | 91 | 1 | 2 | 4 | AR | | |

Product Family
G= Galleria

Housing Size
L=Large

Mounting Method
A=Arm [1]
B=Spider for 2 3/8" O.D. tenon
C=Spider for 3 1/2" O.D. tenon

Lamp Wattage/Base
40=400W/ Mogul
91=1000W/ Mogul

Lamp Type
1=MH
2=HPS

Ballast Type [5]
2=CWA
5=CWI

Voltage [5]
1=120V
2=208V
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4=277V
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Distribution
1D=Type I MCO Horizontal
2D=Type II MCO Horizontal
3D=Type III MCO Horizontal
FT=Forward Throw Horizontal
AR=Area Round Vertical
AS=Area Square Vertical
RW=Rectangular Wide Vertical
3V=Vertical Type III

Color
BZ=Bronze
BG=Beige
BK=Black
BL=Blue
GR=Green
AP=Grey
RD=Red
SY=Silver
WH=White
YL=Yellow

Options & Accessories
(See Below)

1000 Watt pole Top
40' pole

- Formed aluminum housing with stamped reveal has interior-welded seams for structural integrity and is finished in polyester powder coat
- Ballast tray is hard-mounted to housing interior for cooler operation
- Long-life core and coil ballast
- Spun and stamped aluminum reflector in vertical lamp units, or hydroformed anodized aluminum reflector in horizontal lamp units
- Formed aluminum door has heavy-duty hinges, captive retaining screws and is finished in polyester powder coat (Spider mount unit has steel door)
- Convex tempered glass lens
- Mogul-base porcelain socket
- Approximate net weight: 66-83 lbs. (30-37 kgs.)

PRODUCT INFORMATION

Catalog Number [2]	Lamp Wattage	Lamp Type [3]
Arm Mount (Order arm separately)		
GLA40229XX	400	HPS
GLA91229XX	1000	HPS
GLA40129XX	400	MH
GLA91129XX	1000	MH
Spider Mount (For 2 3/8" O.D. Tenon)		
GLB40229XX	400	HPS
GLB91229XX	1000	HPS
GLB40129XX	400	MH
GLB91129XX	1000	MH
Spider Mount (For 3 1/2" O.D. Tenon)		
GLC40229XX	400	HPS
GLC91229XX	1000	HPS
GLC40129XX	400	MH
GLC91129XX	1000	MH

Options (add as suffix)
F=Single Fuse (120, 277 or 347V)
FF=Double Fused (208, 240 or 480V)
R=NEMA Twistlock Photocontrol Receptacle
Q=Quartz Restrike (Limit to 150W max. quartz lamp only. Lamp not included)
HS=House Side Shield
VS=Vandal Shield (400W maximum)

Accessories (order separately)
MA1004=14" arm for square pole. 1.0 EPA
MA1005=6" arm for square pole. 0.5 EPA
MA1006=Direct mount kit for square pole
MA1007=14" arm for round pole. 1.0 EPA
MA1008=6" arm for round pole. 0.5 EPA
MA1009=Direct mount kit for round pole
MA1010=Single-arm tenon adapter for 3 1/2" O.D. tenon
MA1011=2 @ 90° tenon adapter for 3 1/2" O.D. tenon
MA1012=3 @ 120° tenon adapter for 3 1/2" O.D. tenon
MA1014=2 @ 90° tenon adapter for 3 1/2" O.D. tenon
MA1015=2 @ 120° tenon adapter for 3 1/2" O.D. tenon
MA1016=3 @ 90° tenon adapter for 3 1/2" O.D. tenon
OA1016=Photocontrol-Multi-Tap
OA1027=Photocontrol-480V
OA1201=Photoelectric Control, 347V NEMA Type
LL=Lamp Included

NOTES: [1] Arm not included. See accessories. [2] Designate distribution by changing 9th and 10th digits. [3] All lamps are mogul base. Lamps are not included. [4] Multi-Tap ballast is 120:208:240/277V. Triple-Tap ballast is 120/277 347V. [5] Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information.

F-3

COOPER LIGHTING

SSSSQUARE STRAIGHT STEEL

10'-39'
Mounting Height

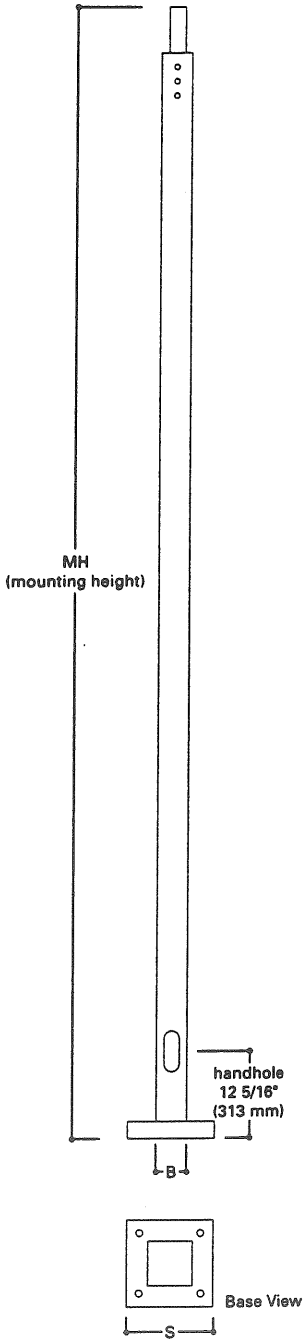
SQUARE STRAIGHT STEEL

FINISH COLORS

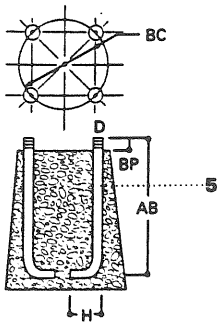
F=Dark Bronze
G=Galvanized
H=Red
I=Royal Blue
L=Buttercup Yellow
N=Olive Green
P=Prime
Q=Designer Beige
S=Silver
V=Grey
W=White
X=None
Y=Black

DETAILS

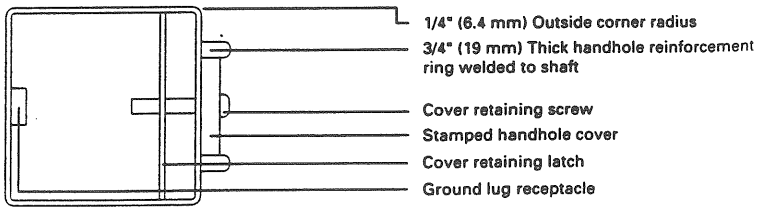
REFER TO CHART FOR DIMENSIONAL INFORMATION



39' poles



HANDHOLE (section through standard handhole)



POLE SPECIFICATIONS

1···ASTM Grade steel base plate with ASTM A366 base cover.

2···Handhole assembly 3" x 5" (76 x 127 mm) on 5" (127 mm) and 6" (152 mm) pole; and 2" x 4" (51 x 102 mm) on 4" (102 mm) pole.

3···ASTM A500 grade "B" steel shaft. Shot blasted and painted with polyester powder coat.

4···Drilled or Tenon (specify).

5···Anchor bolt per ASTM A576 with (2) nuts, (2) flat washer, and (1) lock washer. Nuts, washers and threaded portion of bolt are hot dip galvanized 3" (76 mm) hook for 3/4" (19 mm) bolt. 4" (102 mm) hook for 1" (25 mm) bolt.

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4f 08-13-1998

Center For Microcomputers In Transportation

Streets: (E-W) Marginal Way (N-S) Preble Street

Analyst: Tom Gorrill File Name: 98MARPRB.HC9

Area Type: Other 8-13-98 PM peak

Comment: 1998 Existing DHV Traffic('97 vols adjusted by 3%)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	< 0	1	2	< 0	1	2	< 0	1	2	< 0
Volumes	59	151	7	45	371	49	530	55	116	254	212	96
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru		*			Thru		*	
Right		*			Right		*	
Peds					Peds			
WB Left	*				SB Left	*		
Thru		*			Thru		*	
Right		*			Right		*	
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	10.0A	18.0A			Green	33.0A	11.0A	
Yellow/AR	0.0	4.0			Yellow/AR	0.0	4.0	

Cycle Length: 80 secs Phase combination order: #1 #2 #5 #6

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	141	1612	0.468	0.087	24.2	C	18.1	C
	TR	854	3594	0.217	0.237	15.9	C		
WB	L	148	1687	0.352	0.087	22.8	C	18.9	C
	TR	845	3556	0.606	0.237	18.5	C		
NB	L	670	1787	0.879	0.375	24.1	C	23.1	C
	TR	512	3413	0.389	0.150	20.1	C		
SB	L	677	1805	0.417	0.375	12.2	B	18.3	C
	TR	533	3551	0.676	0.150	23.1	C		

Intersection Delay = 20.1 sec/veh Intersection LOS = C

Lost Time/Cycle, L = 12.0 sec Critical v/c(x) = 0.725

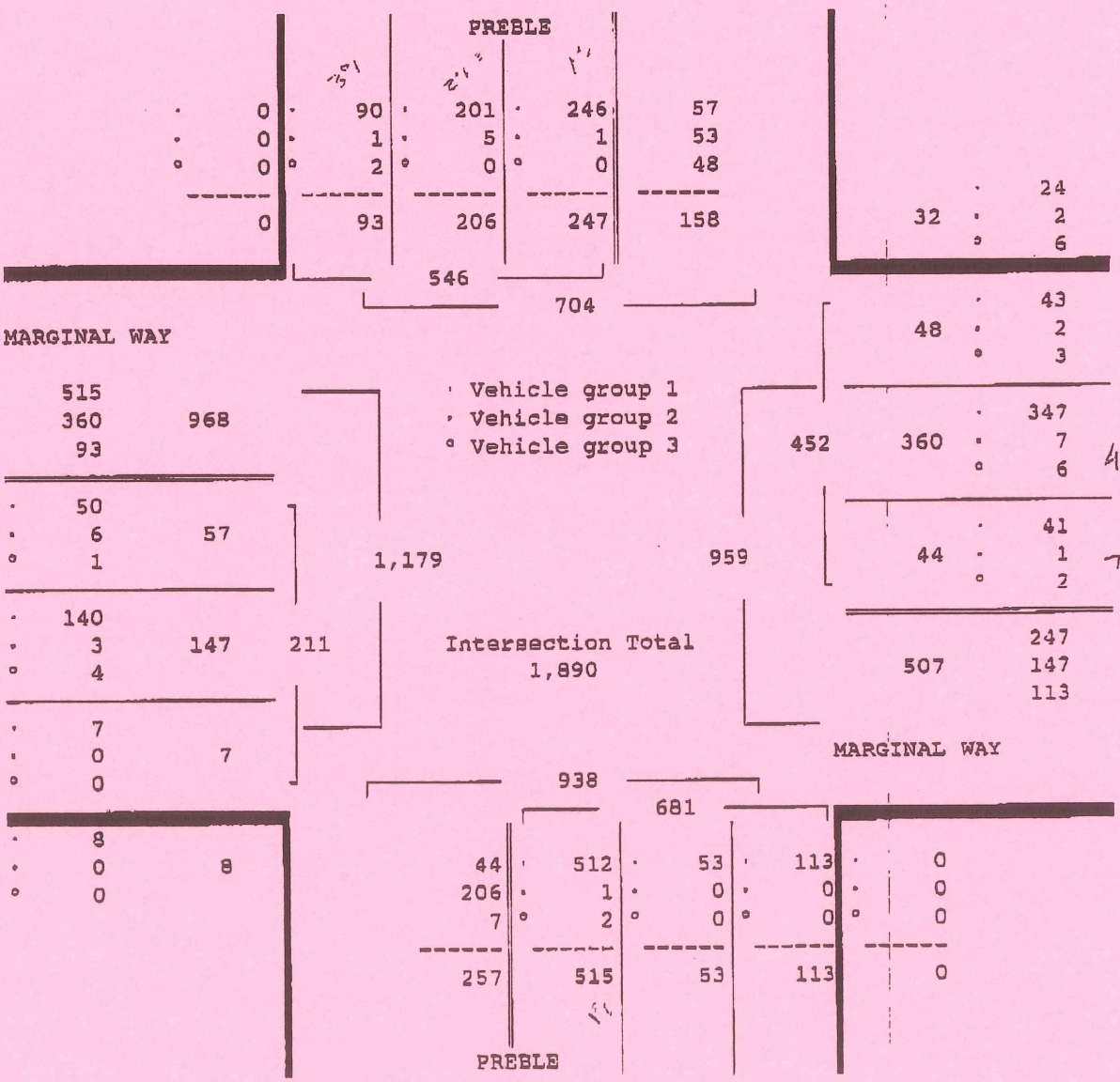
Deluca-Hoffman Associates, Inc.
778 Main Street, Suite 8
South Portland, ME 04106
(207) 775-1121

Weather :
Counter :
Counted by :
Intersection:

Site Code : 00000000
Start Date: 06/09/97
File I.D. : TURN0003
Page : 2

Vehicle group 1, Vehicle group 2, Vehic

	PREBLE Southbound				MARGINAL WAY Westbound				PREBLE Northbound				MARGINAL WAY Eastbound				
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Total
Date 06/09/97																	
Peak Hour Analysis By Entire Intersection for the Period: 15:30 to 18:00 on 06/09/97																	
Peak start	16:30				16:30				16:30				16:30				
Volume	247	206	93	0	44	360	48	32	515	53	113	0	57	147	7	8	
Percent	45%	38%	17%	0%	9%	74%	10%	7%	76%	8%	17%	0%	26%	67%	3%	4%	
Pk total	546				484				681				219				
Highest	17:15				17:00				17:15				17:15				
Volume	70	54	23	0	9	115	12	5	140	23	25	0	11	44	4	2	
Hi total	147				141				188				61				
PHF	.93				.86				.91				.90				



HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4f 08-13-1998
Center For Microcomputers In Transportation

Streets: (E-W) Marginal Way (N-S) Preble Street
Analyst: Tom Gorrill File Name: 98MARPRE1.HC9
Area Type: Other 8-13-98 PM peak
Comment: 1998 Existing DHV Traffic('97 vols adjusted by 3%) – only 1 EB Thru lane

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	2	< 0	1	2	< 0	1	2	< 0
Volumes	59	151	7	45	371	49	530	55	116	254	212	96
Lane W (ft)	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	*				NB Left	*		
	Thru		*			Thru		*	
	Right		*			Right		*	
	Peds					Peds			
WB	Left	*				SB Left	*		
	Thru		*			Thru		*	
	Right		*			Right		*	
	Peds					Peds			
NB	Right					EB Right			
SB	Right					WB Right			
Green		10.0A	18.0A			Green	33.0A	11.0A	
Yellow/AR		0.0	4.0			Yellow/AR	0.0	4.0	

Cycle Length: 80 secs Phase combination order: #1 #2 #5 #6

Intersection Performance Summary

	Lane Group: Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	141	1612	0.468	0.087	24.2	C	18.8	C
	T	430	1810	0.391	0.237	16.9	C		
	R	384	1615	0.021	0.237	15.1	C		
WB	L	148	1687	0.352	0.087	22.8	C	18.9	C
	TR	844	3556	0.606	0.237	18.5	C		
NB	L	670	1787	0.879	0.375	24.1	C	23.1	C
	TR	512	3413	0.389	0.150	20.1	C		
SB	L	677	1805	0.417	0.375	12.2	B	18.3	C
	TR	533	3551	0.676	0.150	23.1	C		

Intersection Delay = 20.2 sec/veh Intersection LOS = C

Lost Time/Cycle, L = 12.0 sec Critical v/c(x) = 0.725

City of Portland, Maine
Planning Department

City Hall
389 Congress Street, 4th Floor
Portland, Maine 04101
Fax Number: 756-8258

also sent by mail 10-28-98

cc: TOM L.

FAX TRANSMISSION COVER SHEET

TO: BRUCE KINSLOW

COMPANY: FORE RIVER CO

FAX #: 772-9078

FROM: RICK KNOWLAND

 # OF PAGES: 2

DATE: 10-28-98

RE: BRUCE - COMMENTS FROM THE DEVELOPMENT REVIEW COORDINATION ON THE MOST RECENT SITE PLAN REVISIONS.

RK

If you do not receive all of the pages, please call 874-8721 or 874-8719.

DeLUCA-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

MEMORANDUM

TO: Rick Knowland, Senior Planner

FROM: Jim Wendel, PE, Development Review Coordinator

DATE: October 27, 1998

RE: Site Plan Review
DHS Building
161 Marginal Way

Review of the site plan submission dated 10/21/98 has been completed and based on previous comments made 9/3/98.

1. No response or submission of material requested in previous comments numbered 4 and 5 have been made. No runoff/hydraulic analysis has been provided that shows that the storm drain connection in the drainage easement will work. Has Public Works accepted this connection?

2. Comment number 8 in previous comments have not been resolved.

3. There is no detail for the concrete sidewalk on site.

4. There should be a point on the plan that denotes where the curbing transition from granite to concrete.

5. A detail of the dumpster chain link fence enclosure is recommended.

6. DMH #2 should conform to City standards since it is located within a City easement.

7. A detail of the bollards at the front entrance is recommended.

8. The uses of curb at the two handicap entrances are different; is that the intent? Also it is not clear that curb transition pieces are required.

9. No details of the site lighting are in the submission; i.e. fixture units, bases, layout of the underground conduit to the units.

10. Radii of the curb work is not noted

11. Recommend that a specific shop drawing of the Vortex TSS structure installation is provided to the City at the time of the pre-construction meeting. Recommend that the standard City drainage maintenance agreement be required for the Vortex TSS treatment system.

Should you have any questions, please call.
1359.19/1350.10/disk#8/dhsmarg1

City of Portland, Maine
Planning Department

City Hall
389 Congress Street, 4th Floor
Portland, Maine 04101
Fax Number: 756-8258

FAX TRANSMISSION COVER SHEET

TO: BRUCE KISTLER

COMPANY: FORE RIVER CO

FAX #: 772-9078

FROM: R. KNOWLTON

 # OF PAGES: 2

DATE: 10-2-98

RE: COMMENTS FROM CITY ARBORIST

If you do not receive all of the pages, please call 874-8721 or 874-8719.

ATTACHMENT

...NT LIST

Item		Size
	Brouwer's Beauty Andromeda	2-2.5' ht.
B	Cleveland Flowering Pear	2.5-3" cal.
C	Cranberry Cotoneaster	15-18" sprd.
D	Doublefile Viburnum	3-4' ht.
E	Dwarf Burning Bush	2-2.5' ht.
F	Emerald Queen Maple	2.5-3" cal.
G	Euonymus "Country Gold"	18-24" sprd.
H	Fairview Honeylocust	2.5-3" cal.
J	Karpick Red Maple	2.5-3" cal.
K	Redvein Enkianthus	4-5' ht.
L	Miss Kim Lilac	2-2.5' ht.
M	Cornelian Cherry	5-6' ht.
N	Summit Ash	2.5-3" cal.
O	Scandia Juniper	2-2.5' sprd.
P	Spreading Yew	2-2.5' sprd.
Q	Microbiota decussata	4" pots
R	Stella de Oro Daylily	1 gallon

NEW STREET TREES

SIDEWALK

161 Marginal Way

NEW 6' CHAIN
W/ HURRICAN

1 AUSTRIAN PINE

1 AUSTRIAN PINE

1 AUSTRIAN PINE

NEW 6' CHAINLINK FENCE
W/ HURRICANE SLATS

NOTE: REF SITE PLAN FOR EXACT SITE DIMENSIONS
REF " " " GENERAL / ADDITIONAL NOTES.

ADD NOTE: LANDSCAPING SHALL MEET THE ARBORICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE AND LANDSCAPE GUIDELINES" OF THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES

0' 20' 40' 60'

SCALE: 1"=20'

772-9078

Landscape Pla...

for: Fore River Company
Five Milk Street
Portland, Maine

by: Davis Landscape Co.,
78 Lisbon Street
Lisbon, Maine

Design By: PJB

REVISED 9/1/16
Date: 7/15/98

Department of Public Works

William J. Bray, P. E.
Director

CITY OF PORTLAND

23 September, 1998

Mr. Bruce Kistler
Fore River Company
P.O. Box 7525
Portland, Maine 04112

RE: Sanitary Sewer Capacity to Handle Anticipated Wastewater Flows from the Proposed Four Story Office/Retail Building at 161 Marginal Way

Dear Mr. Kistler:

The existing thirty-six inch diameter reinforced concrete sanitary sewer pipe located in Marginal Way, and the sewage treatment facilities, in the City of Portland, have adequate capacity to transport and treat the anticipated wastewater flows of 7,370 GPD, from your proposed office/retail building, to be located at 161 Marginal Way, City of Portland.

Proposed Wastewater Flows from the Proposed Office/Retail Building	
Proposed 13,200 SF Retail Space, at 10 GPD/100 SF	= 1,320 GPD
Proposed 350 Office Employees, at 15 GPD/Employee	= 5,250 GPD
Proposed 160 Visitors, at 5 GPD/Visitor	= 800 GPD
Total Proposed Increase in Wastewater Flows for this Project	= 7,370 GPD

If I can be of further assistance, please call me at 874-8832.

Sincerely,
CITY OF PORTLAND

Frank Brancely

Frank J. Brancely, B.A., M.A.
Senior Engineering Technician

FJB:jw

pc: Joseph E. Gray, Director, Department of Planning & Urban Development, City of Portland
Richard Knowland, Sr. Planner, Dept. of Planning & Urban Development, City of Portland
Katherine A. Staples, P.E., City Engineer, City of Portland
William B. Goodwin, P.E., Environmental Projects Engineer, City of Portland
Anthony W. Lombardo, P.E., Project Engineer, City of Portland
desk file

161Mgway.doc
Sansewcap
Engineering

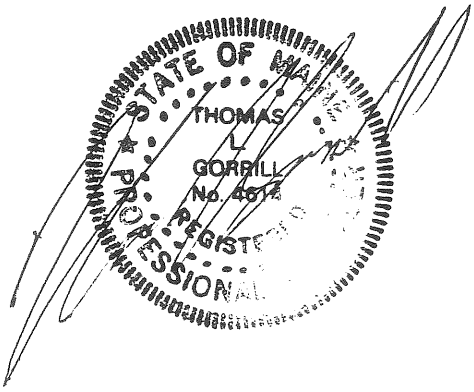
ATTACHMENT 4

TRAFFIC IMPACT STUDY
FOR
PROPOSED OFFICE BUILDING
MARGINAL WAY
PORTLAND, MAINE

Prepared for

FORE RIVER COMPANY

Prepared by
GORRILL-PALMER CONSULTING ENGINEERS INC.
22 Shaker Road
Gray, Maine 04039
Tel: 207-657-6910



September 1, 1998

Traffic Impact Study

Index

Executive Summary

The following executive summary is prepared for the reader's convenience, but is not intended to be a substitute for reading the full report.

Gorrill-Palmer Consulting Engineers, Inc. has been retained by Fore River Company to complete a traffic impact study for a planned office building on Marginal Way in Portland. The proposed site is located on the southeasterly side of Marginal Way between Atlantic Lumber and NAPA. Prior tenants of the existing 11,100 s.f. building on the site which have been relocated so the building can be razed and the site redeveloped include Trailways, Steego Auto Parts, and AMI Truck Lease. The proposed building is planned to be four stories with a total gross square footage of 50,000 (12,500 s.f. per floor). Fore River Company is currently negotiating with the Department of Human Services (DHS) to lease this space, however, if the space is not leased to DHS, Fore River Company plans to develop the 4 story building as all office with the potential for retail use(s) on the first floor. Parking associated with the site will be located on site and accessed by two driveways off Marginal Way.

The following is a summary of the major findings of the traffic study:

1. The proposed development is forecast to generate 110 and 184 trip ends (a trip end is defined as a trip in or out of the site. Thus, one round trip equals two trip ends) during the AM and PM peak hours respectively. This level of trip generation will require filing an application for a traffic permit with the Maine Department of Environmental Protection. This trip forecast is based on development of the building as retail on the first floor and office on the remaining floors. Development of the building as all office will generate slightly less traffic but still require a traffic permit. The former uses were estimated to generate 59 PM peak hour trip ends, thus, the proposed project represents a net increase of 125 trip ends.

2. The level of service analyses show that the proposed development can be accommodated by the existing street system.

3. In Gorrill-Palmer Consulting Engineers, Inc.'s opinion, the proposed site is not forecast to generate sufficient traffic to justify a left or right turning lane into the site.

4. The intersection of Preble Street and Marginal Way is defined by the Maine Department of Transportation (MDOT) as a High Accident Location (HAL). Based on examination of the collision diagram for the intersection, Gorrill-Palmer Consulting Engineers, Inc. recommends that the city consider reducing the number of hours the signal is on the flash mode since several accidents occurred during this period.

5. The sight lines at the proposed driveways are adequate.

Based on these findings, it is the opinion of Gorrill-Palmer Consulting Engineers, Inc. that the traffic generated by the proposed development can be adequately and safely accommodated on the surrounding street system.

I. Existing Conditions

Site:

The site is currently occupied by two buildings, the former McDonald Lumber building, consisting of approximately 21,000 s.f. located at the rear of the site and a 11,100 s.f. building at the front of the site. The project location is shown in Figure 1 following this page. Until recently, the 11,100 s.f. buildings were occupied by the following tenants:

Tenant	Departure		Space (s.f.)
AMI Truck Lease	2/28/98		4542
Steego Auto Parts	6/30/98		4989
Trailways	1/31/97		1576
		Total	11107

These tenants relocated to allow the site to be redeveloped.

Adjacent Roads

Marginal Way fronting the site is approximately 58 feet wide in front of the site consisting of four 12.5 foot lanes (two in each direction) and a four foot shoulder on either side. Granite curbing is installed on both sides of Marginal Way.

Marginal Way is oriented in a northeast southwest direction and is in good condition. Marginal Way intersects Franklin Arterial at a signalized intersection approximately 700 feet to the northeast. Preble Street and Elm Street intersect Marginal Way at a signalized intersection approximately 900 feet to the southwest.

II. Background Traffic Conditions

Gorrill-Palmer Consulting Engineers, Inc. based the study on the following information:

- An undated preliminary site plan prepared by others.
- Computerized accident information for the period 1995 to 1997 supplied by the MDOT.
- Turning movement counts collected by Gorrill-Palmer Consulting Engineers, Inc. at the following signalized locations from 7:00 – 9:00 AM and again from 3:30 – 6:00 PM.
    - Marginal Way/Franklin Arterial
    - Marginal Way/Preble Street/Elm Street

These counts were collected by Gorrill-Palmer Consulting Engineers, Inc. on Wednesday, August 26, 1998.

The results of these turning movement counts are shown for the AM and PM peak hours in Figures 2 and 3 respectively of Appendix A. These counts were adjusted to the estimated buildout year of 2000 as follows:

- 2% per year background growth on Marginal Way (total adjustment 4%).
- 2.2% increase to represent the peak time of year. This increase was derived by utilizing adjustment factors, called weekly group mean factors, published by the MDOT.

Pre-development volumes take into consideration projects that have been approved but not yet constructed. The City of Portland was contacted to determine whether there are any projects whose traffic should be added into this project's pre-development volumes and no projects were determined to be applicable.

The adjustments stated above were applied to the existing AM and PM volumes shown in Figure 2 and 3 and the resulting 2000 pre-development volumes are shown in Figure 4.

III. Trip Generation

The proposed building is planned to be four stories with a total gross square footage of 50,000 (12,500 s.f. per floor). Fore River Company is currently negotiating with the Department of Human Services (DHS) to lease this space. If the space is not leased to DHS, Fore River Company plans to develop the building as all office with the potential for retail use(s) on the first floor.

Gorrill-Palmer Consulting Engineers, Inc. has computed the potential trip generation for three scenarios; DHS offices, general office on all floors by a non-DHS user, retail on the first floor and offices on the upper floors. Using information published by the Institute of Transportation Engineers, in Trip Generation, 6th Edition, and a traffic count of the existing 56,934 s.f. facility on Forest Avenue, Gorrill-Palmer Consulting Engineers, Inc. has estimated the traffic for each of the scenarios in Table 1 below:

Table 1			Peak Hour Trip Ends	
Scenario	**Source**	**Gross s.f.**	**AM**	**PM**
#1 DHS Office	Existing DHS building	50,000	144	93
#2 General Office	ITE LUC* 710	50,000	107	135
#3 General Office & Retail	ITE LUC 710	37,500	85	121
	ITE LUC 816**	12,500	25	63
	TOTAL #3	50,000	110	184

*LUC = Land Use Code ** This Land Use Code corresponds to a hardware or paint store. Although this is unlikely to be the retail use, it is expected to be similar in trip characteristics.

Table 1 shows the highest trip rate occurs for the general office and retail scenario with 184 trip ends in the PM peak hour. Gorrill-Palmer Consulting Engineers, Inc. will utilize the trips for this scenario in the remainder of the study since it represents the highest generation rate.

Gorrill-Palmer Consulting Engineers, Inc. estimates the existing 11,107 square foot building generated approximately 59 PM peak hour trip ends before the uses relocated, thus, the proposed project represents a net increase of 125 trip ends in the PM peak hour.

IV. Trip Composition

Gorrill-Palmer Consulting Engineers, Inc. has treated all the trips as primary trips for the purpose of the traffic study to be conservative, although some of the retail trips could be pass-by trips. A primary trip is a trip made for the sole purpose of going to or from the site and would not have been generated if the development did not occur. A pass-by trip is a trip already passing by the site today which will stop by the site.

V. Trip Distribution and Assignment

Based on information published in the 6th Edition of the ITE "Trip Generation", Gorrill-Palmer Consulting Engineers, Inc. estimates the arrivals and departures to the site will be distributed as shown in Table 2.

Table 2 – Trip Distribution			
Time	**Entering**	**Exiting**	**Total**
AM Peak Hour (7:30 – 8:30)	88	22	110
PM Peak Hour (4:30 – 5:30)	51	133	184

The trip assignment for the site was completed using a reception survey from the existing DHS building on Forest Avenue. Traffic to and from the site was distributed by Gorrill-Palmer Consulting Engineers, Inc. using this survey and resulted in the assignments shown in Table 3 below:

Table 3– Trip Assignment	
Route	**Percent of Traffic**
I-295	57
Franklin Arterial	15
Preble/Elm	3.5
Preble Extension	10.5
Marginal Way West	14
TOTAL	100

The detailed trip assignment calculations are included in Appendix B. The proposed development will be served by two driveways, a reduction from the current three. The trip distribution and assignments have been applied to the trip generation discussed in Section III and the resulting peak hour turning movements are shown in Figure 5 of Appendix A.

VI. Study Area

The Maine Department of Environmental Protection (MDEP) Site Location of Development Law traffic statute applies to facilities projected to generate 100 or more trip ends during the peak hour of the generator. Between 100 and 200 trip ends, the extent of the traffic study is determined based on conversations with MDOT and MDEP. However, if the project is forecast to create more than 200 trip ends during the peak hour of the generator, a full traffic study and permit application are required. The study area analyzed in the traffic study is required to include the following:

(1) The development entrance(s) or exit(s);

(2) The first major intersection in either direction from the development entrance(s) and exit(s); and

(3) All intersections where, during any one-hour period, traffic attributable to the proposed development equals or exceeds;

a) 25 vehicles in a left-turn only lane;

b) 35 vehicles in a through lane, right-turn lane, or a combined through and right-turn lane; or

c) 35 vehicles (multiplying the left-turn volume by 1.5) in a combined left-turn and through lane, or a combined left-turn, through and right-turn lane.

Generally, the vicinity as defined by the above criteria would be limited to a radius of 2 miles from the site unless the department, at the scoping meeting, with input from MDOT, determines that the proposed development will impair safe and efficient flow of traffic beyond a two mile radius due to the development's scale, location, or nature.

Examination of Figure 5 and Section III shows the proposed development is expected to generate a net increase of 125 trip ends during the PM peak hour and, therefore, be required to file an application for a scoping meeting but the higher level of study does not appear to be required.

The project also requires site plan approval from the City of Portland and a traffic impact study is usually required. Gorrill-Palmer Consulting Engineers, Inc. discussed the scope of the study with the City Traffic Engineer and it was preliminarily agreed the study should include the following intersections:

- Preble/Elm/Marginal Way
- Development Driveways (2)
- Marginal Way/Franklin Arterial

VII. Capacity Analysis

Gorrill-Palmer Consulting Engineers, Inc. performed capacity analyses for the intersections contained in the study area. The signalized and unsignalized intersections were evaluated using the Highway Capacity Software computer program.

The capacity analysis assesses the quality of traffic flow at intersections and provides a ranking based upon its delay and Level of Service (LOS). Level of service rankings are similar to the academic grading system where an "A" indicates very little delay and an "F" indicates very poor or extreme conditions. Level of service "D" is generally acceptable at signalized intersections. At an unsignalized intersection, if the level of service falls below a "D", the intersection should be examined further to determine if it meets one or more of the warrants set forth in the Manual on Uniform Traffic Control.

Gorrill-Palmer Consulting Engineers, Inc. based our analyses on the existing roadway configuration unless otherwise noted. The analyses have been based on Figure 6 of Appendix A. which was derived by adding the pre-development volumes shown in Figure 4 to the trip assignments shown in Figure 5, to yield the 2000 post-development volumes.

The following tables summarize the relationship between delay and level of service at both signalized and unsignalized intersections:

Level of Service Criteria for Unsignalized Intersections	
Level of Service	**Stopped Delay per Vehicle (sec)**
A	Up to 5.0
B	5.1 to 10.0
C	10.1 to 20.0
D	20.1 to 30.0
E	30.1 to 45.0
F	Greater than 45.0

Level of Service Criteria for Signalized Intersections	
Level of Service	**Stopped Delay per Vehicle (sec)**
A	Less than 5.0
B	5.1 to 15.0
C	15.1 to 25.0
D	25.1 to 40.0
E	40.1 to 60.0
F	Greater than 60.0

The results of the capacity analyses are summarized below and the detailed calculations are presented in Appendix B.

MarginalWay/Preble Street/Elm Street (signalized)				
	Pre-development		Post-development	
Approach/Movement	AM Peak hour	PM Peak hour	AM Peak hour	PM Peak hour
Marginal Way (EB)				
LT	D	D	D	D
TR	C	C	C	C
Marginal Way (WB)				
L	D	D	D	D
TR	C	C	C	D
Preble Street (NB)				
L	D	D	D	D
TR	C	C	C	D
Preble/Elm Street (SB)				
L	D	D	D	D
TR	C	C	C	B

L - left T - through R - right

These analyses show the proposed development will not have a significant effect on the operation of this intersection which will continue to operate at an acceptable level of service.

MarginalWay/Franklin Arterial (signalized)				
	Pre-development		Post-development	
Approach/Movement	AM Peak hour	PM Peak hour	AM Peak hour	PM Peak hour
Marginal Way (EB)				
LT	D	D	D	D
R	D	B	D	B
Marginal Way (WB)				
LT	D	D	D	E
R	D	B	D	B
Franklin Arterial (NB)				
L	D	D	D	D
TR	B	D	B	D
Franklin Arterial (SB)				
L	D	D	D	D
T	C	D	C	D
R	B	C	B	C

These analyses show the proposed development can be accommodated by the existing intersection, with the minor timing modification shown on the printout to give Franklin Arterial more green time. The modification should be made whether or not the project moves forward.

Proposed Westerly Driveway (unsignalized)		
	Post-development	
Approach/Movement	AM Peak hour	PM Peak hour
Proposed Driveway	B	C
Left turn into driveway	A	A

Proposed Easterly Driveway (unsignalized)		
	Post-development	
Approach/Movement	AM Peak hour	PM Peak hour
Proposed Driveway	B	C
Left turn into driveway	A	A

VIII. Safety Analysis

Gorrill-Palmer Consulting Engineers, Inc. has based the accident analysis of this study area on data obtained from the MDOT for the period of 1995 to 1997.

In order to evaluate whether a location has an accident problem, MDOT uses two criteria to define High Accident Locations (HAL). Both criteria must be met in order to be classified as an HAL.

1. A critical rate factor of 1.00 or more for a three year period. (A Critical Rate Factor {CRF} compares the actual accident rate to the rate for similar intersections in the State. A CRF of less than 1.00 indicates a rate less than average) and:
2. A minimum of 8 accidents over a three year period.

Accident data was provided by the MDOT for the study area and is summarized below:

Location	Accident History 1995-1997 Number of Accidents	Critical Rate Factor	HAL?
Marginal Way/Elm Preble	33	1.13	Yes
Marginal Way/Franklin	33	0.84	No
Hanover St./Marginal Way	0	0	No
Marginal Way between Preble & Franklin	3	0.20	No
Marginal Way between Preble & Hanover	1	1.33	No

Based on this information, the intersection of Marginal Way, Elm Street, and Preble Street, as well as Marginal Way between Preble and Hanover are HAL's. Collision diagrams have been prepared for these locations by Gorrill-Palmer Consulting Engineers, Inc. and are included in Appendix C of this report. Examination of the collision diagrams show two basic patterns of collisions; rear end and angle collisions. The sight line at the intersection is adequate and there is a two-second clearance interval when the signal is operating which should be adequate. Eight of the 33 accidents or 24% did occur due to failure to yield when the signal was operating on the flash mode. Gorrill-Palmer Consulting Engineers, Inc. recommends that the City consider reducing the number of hours the signal is on the flash mode to reduce these types of collisions which should reduce the Critical Rate Factor to less than 1.00.

IX. Auxiliary Lane Warrant Analyses

Auxiliary lanes are sometimes needed to separate traffic turning into a site from through traffic if the combination of turning traffic and through traffic are high enough to warrant this treatment.

Left-Turn Lane - Gorrill-Palmer Consulting Engineers, Inc. has reviewed the left-turn warrant criteria for Marginal Way at the site driveway in accordance with Figure 8-19 of the MDOT Highway Design Guide as shown in Appendix D. For the posted speed of 35mph, the easterly proposed driveway just meets the criteria for consideration of a left turn lane. However, since Marginal Way is currently four lanes, two in each direction, there is adequate room for vehicles to maneuver around left turning traffic. In addition, no queues are expected as discussed in the next section.

Right-Turn Lane - Gorrill-Palmer Consulting Engineers, Inc. has also reviewed the right-turn warrant criteria for Marginal Way at the site driveways in accordance with Figure 8-16 of the MDOT Highway Design Guide as shown in Appendix D. For the posted speed of 35mph, neither of the two proposed driveways meet the criteria for consideration of a right-turn lane.

X. Storage Length Analysis

Gorrill-Palmer Consulting Engineers, Inc. completed an analysis of the queue on Marginal Way at the driveways. These results are presented below for the 95% queue length which is expected to be exceeded 5% of the time during the peak hour.

Marginal Way 95% Queue Lengths for Left Turns into the Driveway

	Required Length (ft)	
Location	**AM**	**PM**
West Driveway	0	0
East Driveway	0	0

XI. Sight Lines

The Maine Department of Transportation publication "Access Management, Improving the Efficiency of Maine Arterials" provides recommended sight distances based on driveway classifications. The classifications are as follows:

Low Volume Driveways: Driveways with a traffic volume of less than 500 vehicle trips per day, or 50 or less vehicle trips per peak hour.

Medium Volume Driveways: Driveways with a traffic volume of 500 to less than 1500 vehicle trips per day, or 50 to less than 150 trips per peak hour.

High Volume Driveways: Driveways with a traffic volume of 1500 or more vehicle trips per day, or 150 more vehicle trips per peak hour.

The traffic volume associated with the site is 184 trip ends during the PM peak hour. Therefore, for the purpose of sight distance analysis, Gorrill-Palmer Consulting Engineers, Inc. has evaluated the Marginal Way driveways high volume driveways. The guidelines set forth by MDOT for sight distance criteria for a high volume driveway area are as follows:

Table 4 MDOT Standards for Sight Distance For a High Volume Driveway	
Speed (mph)	**Desirable Sight Distance (ft)**
25	300
30	380
35	480
40	580
45	710
50	840
55	990

Gorrill-Palmer Consulting Engineers, Inc. has evaluated the available sight lines at the proposed driveways in accordance with MDOT standards.

The MDOT standards are as follows:

Driveway observation point: 10 ft. off major street travelway
Height of eye at driveway: 3.5 ft. above ground
Height of approaching vehicle: 4.25 ft. above road surface

The design speed used for the major road is generally the 85th percentile travel speed. This is the speed which 85% of the traffic is traveling at or below. The posted speed on Marginal Way is 35mph. The estimated travel speed along this road is 5mph above the posted speed or 40 mph. The results of the sight line analysis along Marginal Way are as follows:

Driveway Sight Line Evaluation			
Direction	**85th Percentile Travel Speed**	**Required Sight Line (ft)**	**Actual Sight Line (ft)**
Westerly D/W looking East	40	580	700
Westerly D/W looking West	40	580	700
Easterly D/W looking East	40	580	700
Easterly D/W looking West	40	580	700

Based on the above information, the sight distance at the sight driveway meets the MDOT sight distance standards.

It is recommended that any planting to be located within the sight triangle not exceed 3 feet in height and be maintained at that height. Signage shall be placed where it will not obstruct sight lines.

XII. Conclusion

Gorrill-Palmer Consulting Engineers, Inc. has examined the impact of the traffic associated with the proposed 50,000 s.f.. office building and reached the following conclusions:

1. The proposed development is forecast to generate 110 and 184 trip ends (a trip end is defined as a trip in or out of the site. Thus, one round trip equals two trip ends) during the AM and PM peak hours respectively. This level of trip generation will require filing an application for a traffic permit with the Maine Department of Environmental Protection. This trip forecast is based on development of the building as

retail on the first floor and office on the remaining floors. Development of the building as all office will generate slightly less traffic but still require a traffic permit. The former uses were estimated to generate 59 PM peak hour trip ends, thus, the proposed project represents a net increase of 125 trip ends.

2. The level of service analyses show that the proposed development can be accommodated by the existing street system.

3. In Gorrill-Palmer Consulting Engineers, Inc.'s opinion, the proposed site is not forecast to generate sufficient traffic to justify a left or right turning lane into the site.

4. The intersection of Preble Street and Marginal Way is defined by the Maine Department of Transportation (MDOT) as a High Accident Location (HAL). Based on examination of the collision diagram for the intersection, Gorrill-Palmer Consulting Engineers, Inc. recommends that the city consider reducing the number of hours the signal is on the flash mode since several accidents occurred during this period.

5. The sight lines at the proposed driveways are adequate.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.

Thomas L. Gorrill, P.E.
President

TLG/ams/JN 98035/TIS Marg.Way 8-31-98

Enc.

APPENDIX A

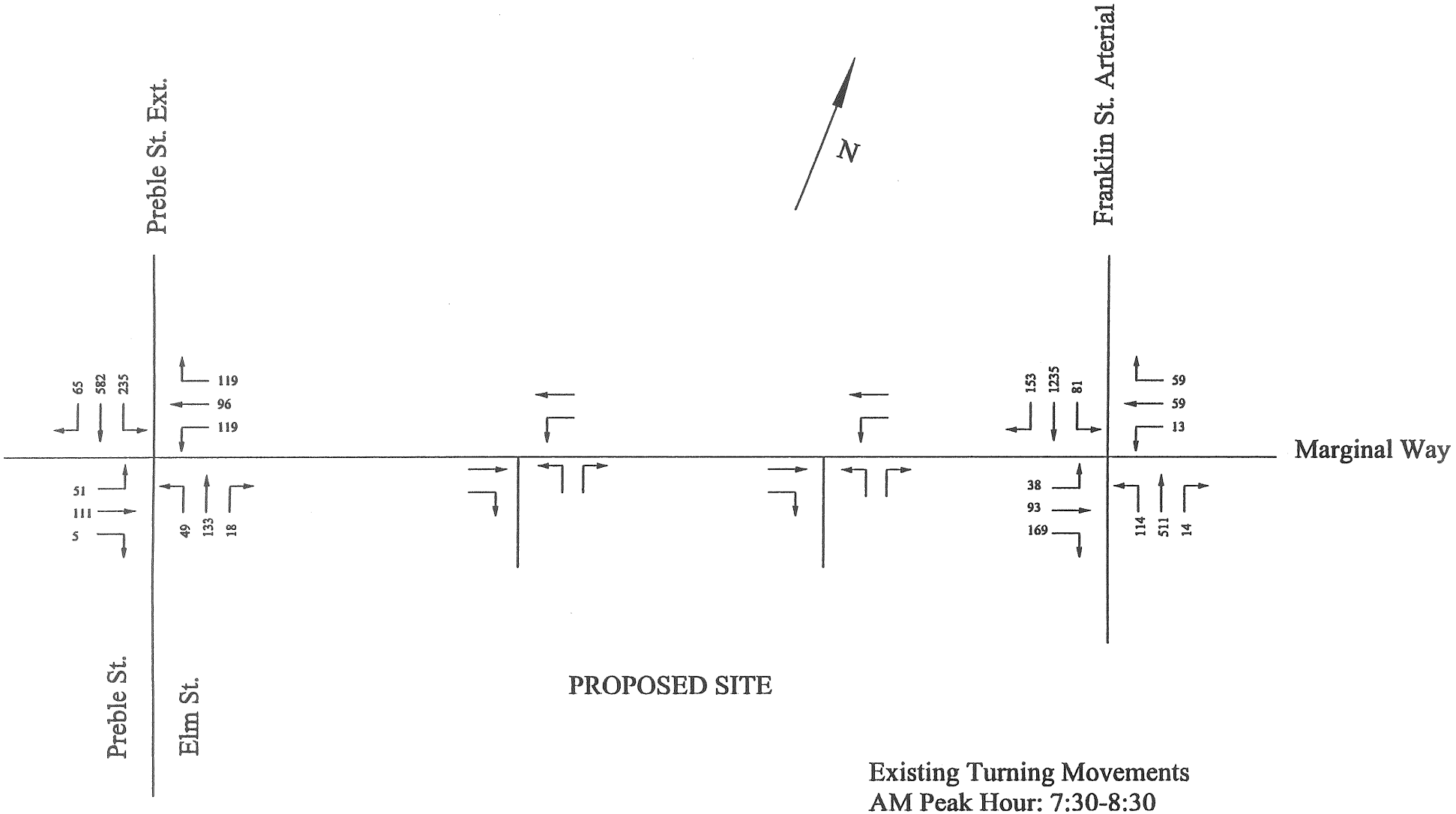
Site Location Map

Turning Movement Diagrams

Figure 1

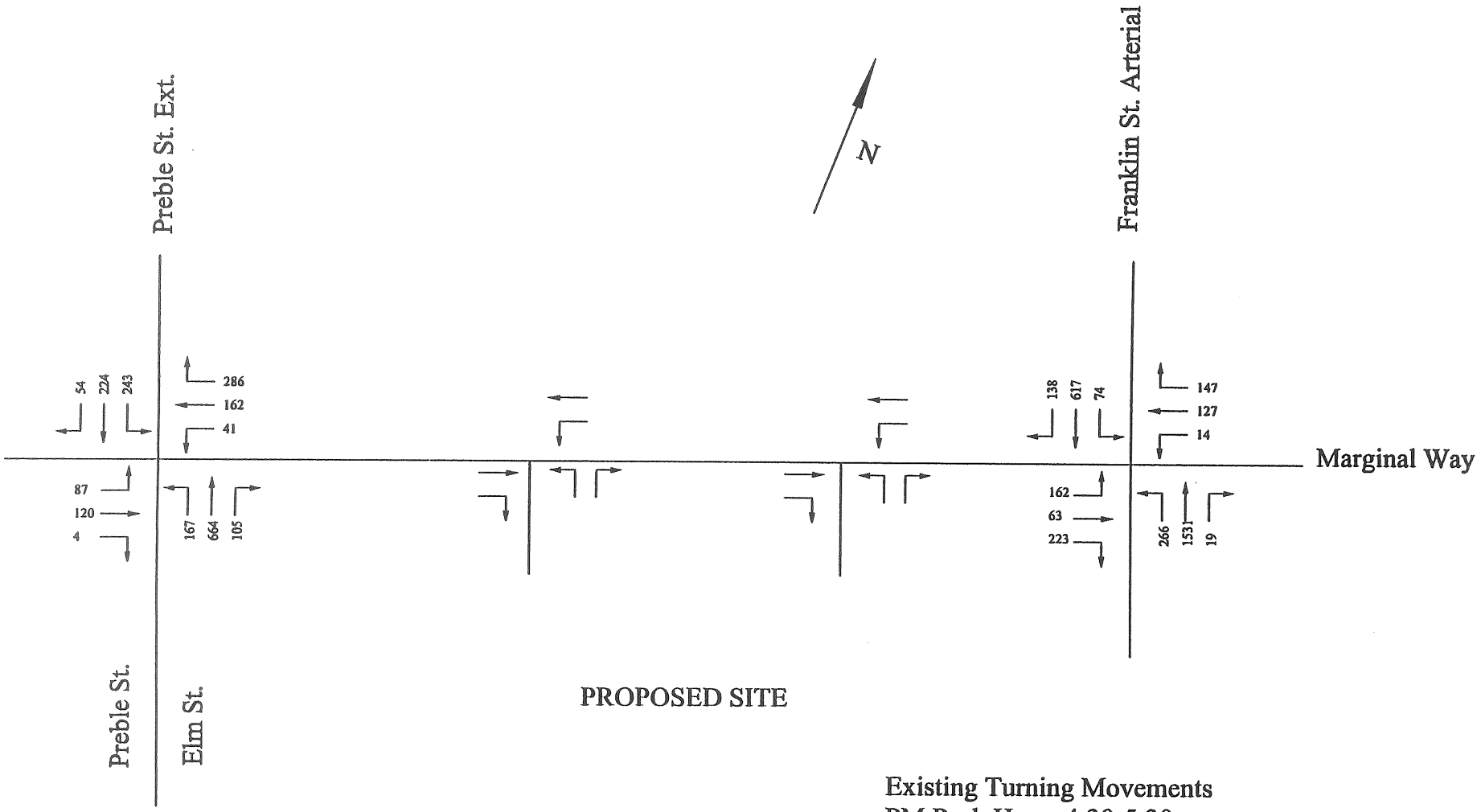
Mag 14.00
Tue Sep 01 08:07 1998
Scale 1:31,250 (at center)
2000 Feet
1000 Meters

Local Road	Exit
Primary State Route	Railroad
Ferry	Point of Interest
Walkway/Stairway	Small Town
US Highway	Large City
Interstate/Limited Access	Summit
Major Connector	Geographic Feature
State Route	Hospital



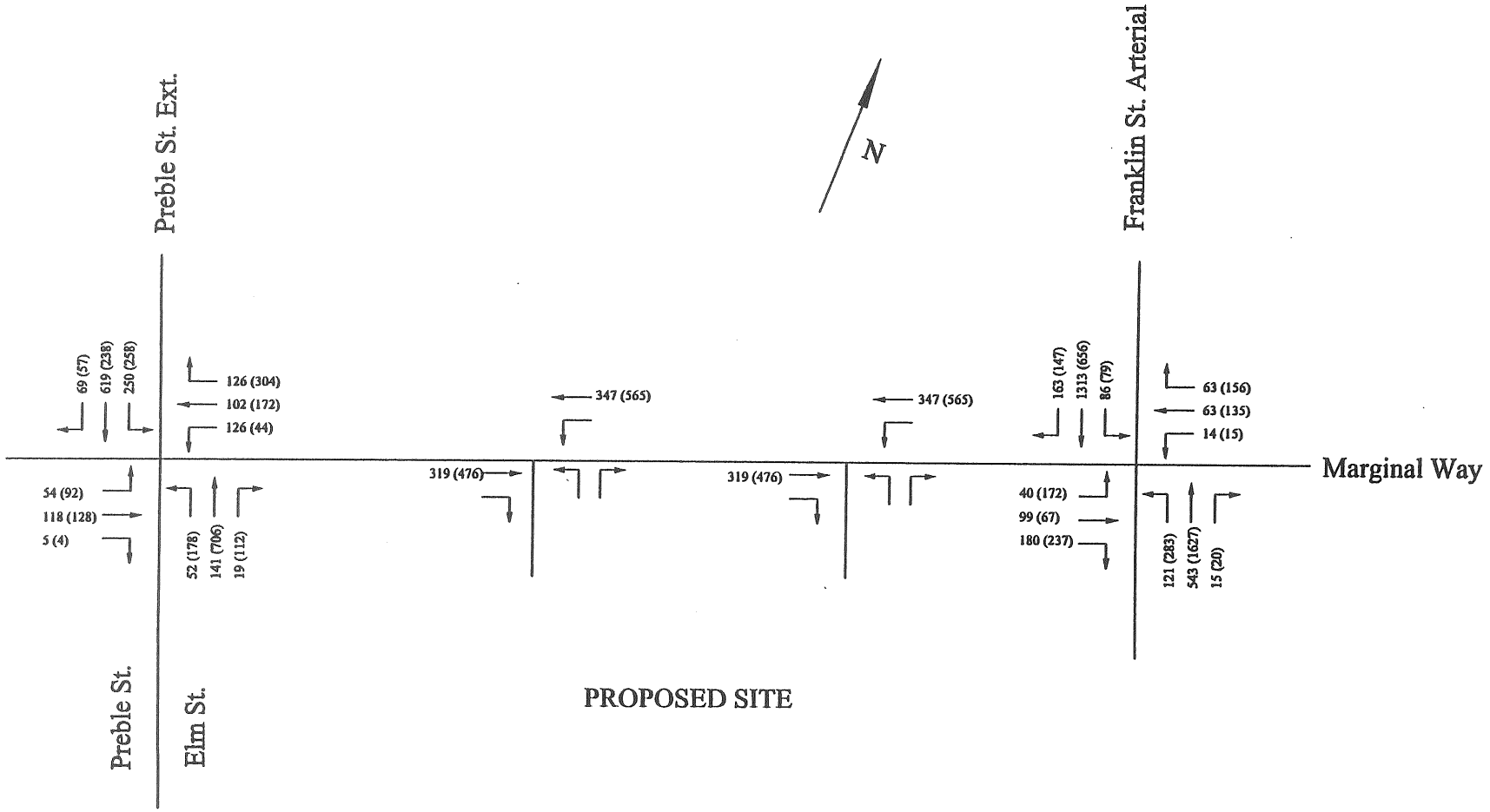
Existing Turning Movements
AM Peak Hour: 7:30-8:30
8/26/98
Figure 2

Prepared for: Fore River Company	GP Gorrill-Palmer Consulting Engineers, Inc. *Traffic and Civil Engineering Services*		
Project: Proposed Office Building	PO Box 1237, 22 Shaker Rd, Gray, Me 04039 — Tel: 207-657-6910, Fax: 207-657-6912, E-mail: Gor-PalCE@MSN.Com		
Location: Marginal Way	Designed: TLG	Date: 8/30/98	Figure: 2
	Drawn:	Scale: NTS	
	Checked:	Job No. 98035	



Existing Turning Movements
PM Peak Hour: 4:30-5:30
8/26/98
Figure 3

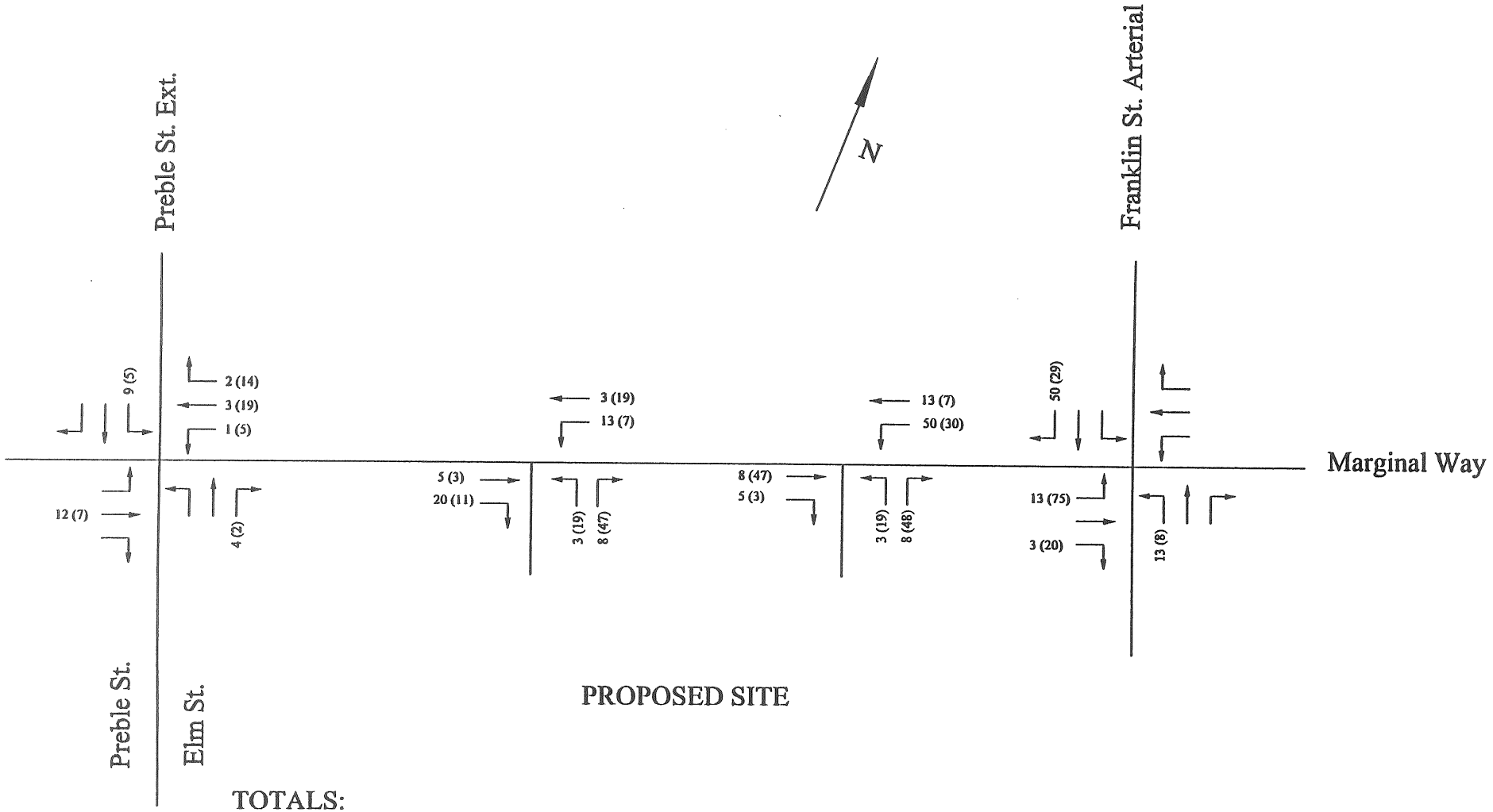
Prepared for: Fore River Company	Gorrill-Palmer Consulting Engineers, Inc.		
	Traffic and Civil Engineering Services		
Project: Proposed Office Building	PO Box 1237, 22 Shaker Rd, Gray, Me 04039	Tel: 207-657-6910	Fax: 207-657-6912
Location: Marginal Way	E-mail: Gor-PalCE@MSN.Com		
	Designed: TLG	Date: 8/30/98	Figure: 3
	Drawn:	Scale: NTS	
	Checked:	Job No. 98035	



Adjustments: MDOT Weekly Group Mean Factor Gp1 0.91/0.89 = 1.022
Background Growth to 2000 2%/yr. = 1.04
Total Adjustment Factor 1.022 * 1.04 = 1.063
00 AM Peak Hour
(00) PM Peak Hour

2000 Pre-Development
Traffic Volumes
Figure 4

Prepared for: Fore River Company	GP Gorrill-Palmer Consulting Engineers, Inc. *Traffic and Civil Engineering Services*		
Project: Proposed Office Building	PO Box 1237, 22 Shaker Rd, Gray, Me 04039 — Tel: 207-657-6910, Fax: 207-657-6912, E-mail: Gor-PalCE@MSN.Com		
Location: Marginal Way	Designed: TLG	Date: 8/30/98	Figure: 4
	Drawn:	Scale: NTS	
	Checked:	Job No. 98035	

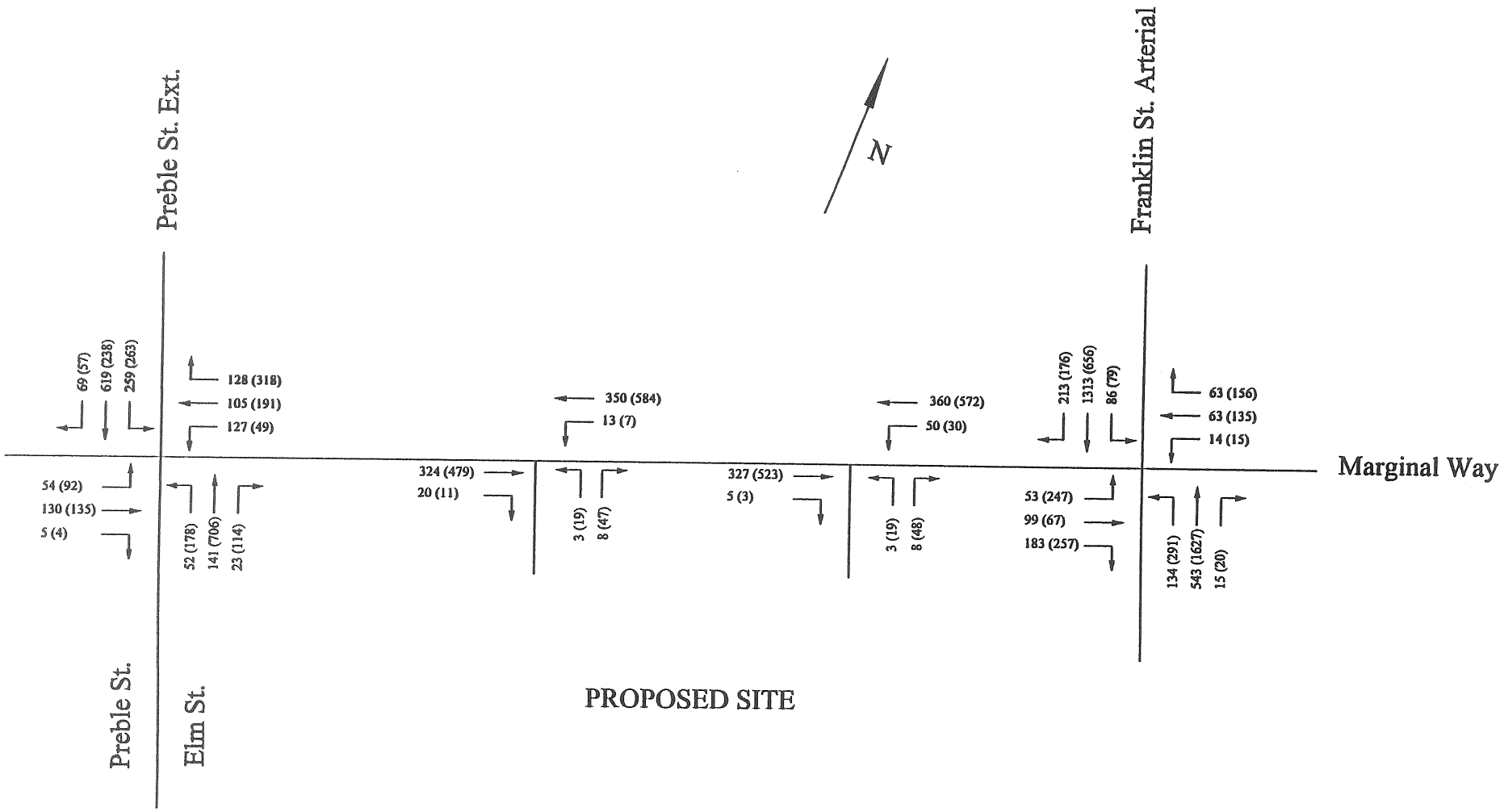


TOTALS:

AM Peak Hour: 88 entering - 22 exiting = 110 total
PM Peak Hour: 51 entering - 133 exiting = 184 total
00 AM Peak Hour
(00) PM Peak Hour

Trip Assignments
Figure 5

Prepared for: Fore River Company	Gorrill-Palmer Consulting Engineers, Inc.		
	Traffic and Civil Engineering Services		
Project: Proposed Office Building	PO Box 1237, 22 Shaker Rd., Gray, Me 04039	Tel: 207-657-6910, Fax: 207-657-6912, E-mail: Gor-Pal@MSN.Com	
Location: Marginal Way	Designed: TLG	Date: 8/30/98	Figure: 5
	Drawn:	Scale: NTS	
	Checked:	Job No. 98035	



00 AM Peak Hour
(00) PM Peak Hour

2000 Post-Development
Combined Traffic Volumes
Figure 6

Prepared for: Fore River Company	GP Gorrill-Palmer Consulting Engineers, Inc.		
	Traffic and Civil Engineering Services		
Project: Proposed Office Building	PO Box 1237, 22 Shaker Rd., Gray, Me 04039	Tel: 207-657-6910, Fax: 207-657-6912, E-mail: Gor-PalCE@MSN.Com	
Location: Marginal Way	Designed: TLG	Date: 8/30/98	Figure: 6
	Drawn:	Scale: NTS	
	Checked:	Job No. 98035	

ATTACHMENT 6-A

98430

STORMWATER RUNOFF EVALUATION

Department of Human Services
Southern Maine Properties Co.
5 Milk Street
Portland, Maine

General

The following stormwater evaluation has been prepared for the Southern Maine Properties Co. to analyze stormwater runoff associated with the proposed facility located at 161 Marginal Way in Portland, Maine.

Southern Maine Properties is proposing a 120' x 105' office building for the Department of Human Services. Associated site work will include demolition of the old Concord Trailways terminal building and wood-framed building once used as a car dealership, reconstruction of the existing parking lot, and a new storm drain system. The storm drain system will include a grit separator for stormwater treatment (see attached specifications).

Site Characteristics

The property is mostly impervious with two vacant buildings; one was used as a terminal building for Concord Trailways bus company and the other by a car dealership. The surrounding land is mostly developed commercial properties. The land immediately to the rear of the proposed parking lot and behind the car dealership building is low-lying, herbaceous growth. Runoff is collected in an existing field inlet located off the east corner of the proposed parking lot. Drainage from the central portion of the site is collected in an existing catch basin system and piped to a drainage system in Marginal Way. The remaining front portion of the lot drains via overland flow to Marginal Way.

Stormwater Management

This report will focus on stormwater quality. The proposed impervious surface area is consistent with the pre-existing conditions which imposes no increase in runoff. Runoff from the site will be affected by the capacity of the drainage system in Marginal Way. The Marginal Way drainage is controlled by the elevation of the tides in Back Cove. The City Engineering Department reported minor flooding during peak tides and storm events. It is not anticipated that this project will have an adverse affect on the downstream receiving area. To achieve water quality, a Vortech (or approved equal) treatment tank is proposed. This system is anticipated to have an 80% net TSS removal efficiency. This is consistent with the MDEP water quality standards for sensitive watersheds most at risk.

Summary

The preceding stormwater evaluation has been prepared to address stormwater runoff for the proposed Department of Human Services building. Principal stormwater features include catch basins and a water quality treatment system. Because of the existing site limitations, a Vortech treatment tank is proposed to achieve water quality. An erosion control plan has been made an integral part of the overall project, and specific instructions and details have been placed directly on the plans.

Prepared by,

SEBAGO TECHNICS, INC.

Steven A. Groves
Project Engineer

SAG:jc
September 2, 1998

SEBAGO TECHNICS, INC.
12 Westbrook Common
P.O. Box 1339
WESTBROOK, MAINE 04098
(207) 856-0277 FAX (207) 856-2206

JOB Dept of Human Services 98430
SHEET NO. 1 of 3 OF 6-C
CALCULATED BY SAC DATE 9/2/98
CHECKED BY DATE
SCALE

TREATMENT TANK SIZING

Q = AciRATIONAL FORMULA

Q = Runoff cfs.

A = area of watershed ac

c = Coefficient of runoff

i = intensity of rainfall

c = .9 (Pavement) see Table 2.1

A = 1.75 ac (impervious area)

i = 4.46 in/hr. (see Table 2.2) 10yr Storm Event

Q = (1.75 ac)(.9)(4.46 in/hr)

Q = 7.02 cfs

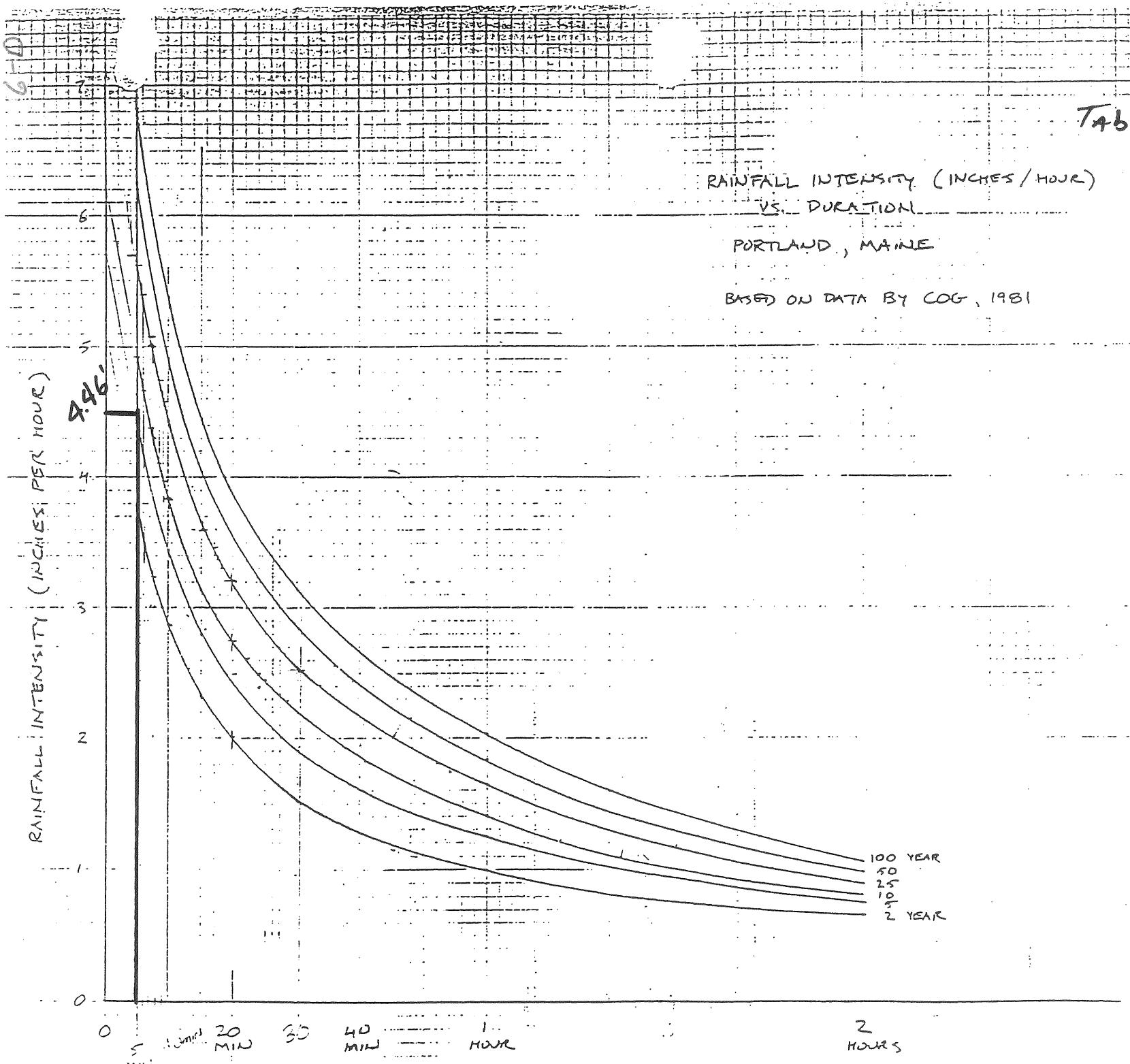
Vortechs Model 5000 Design flow rate = 8.6 cfs
For [redacted] 10yr. Storm Event

8.6 cfs > 7.02 cfs

Table 2.2

RAINFALL INTENSITY (INCHES/HOUR)
VS. DURATION
PORTLAND, MAINE

BASED ON DATA BY COG, 1981



BY
CHKD. BY
DATE
DATE
SUBJECT
SHEET NO
JOB NO
OF

"C" VALUES

6-E

Table 2.1 Runoff Coefficients for the Rational Formula	
Type of Area	Runoff Coefficient
Bare earth	0.20 - 0.90
Business:	
Downtown areas	0.70 - 0.95
Neighborhood areas	0.50 - 0.70
Residential:	
Single-family areas	0.30 - 0.50
Multi-family detached units	0.40 - 0.60
Multi-family attached units	0.60 - 0.75
Suburban	0.25 - 0.40
Apartment dwelling areas	0.50 - 0.70
Industrial:	
Light areas	0.50 - 0.80
Heavy areas	0.60 - 0.90
Parks, cemetaries	0.10 - 0.30
Playgrounds	0.20 - 0.40
Railroad yard areas	0.20 - 0.40
Unimproved areas	0.10 - 0.30
Lawns:	
Sandy soil, flat, 2%	0.05 - 0.10
Sandy soil, average, 2-7%	0.10 - 0.15
Sandy soil, steep, 7%	0.15 - 0.20
Heavy soil, flat, 2%	0.13 - 0.17
Heavy soil, average, 2-7%	0.18 - 0.22
Heavy soil, steep, 7%	0.25 - 0.35
Rural:	
Steep (2:1) grassed areas	0.50 - 0.70
Turf meadows	0.10 - 0.40
Forested areas	0.10 - 0.30
Cultivated fields	0.20 - 0.40
Streets:	
Sheet Asphalt	0.70 - 0.95
Macadam	0.60 - 0.80
Concrete	0.80 - 0.95
Gravel	0.40 - 0.60
Brick	0.70 - 0.85
Drives and walks	0.75 - 0.85
Roofs	0.75 - 0.95
Source: Refs. 052 and 057	

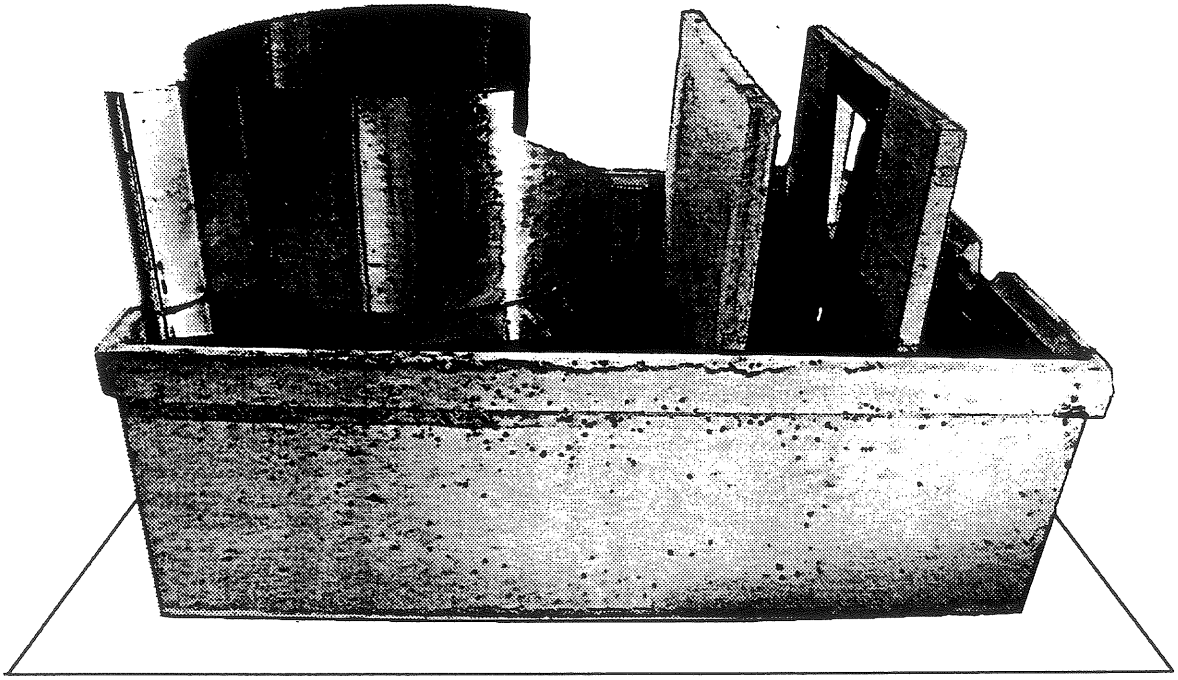
USE .90

Rainfall Intensity, i

As with any design problem, design of hydraulic structures requires specification of a "design storm". Implicit in the approach taken here is the probabilistic nature of the event upon which the design is based. The required capacity (and hence cost) of the structure obviously depends on

Vortechnics

6-F



TOP HALF OF TRAP REMOVED TO SHOW TREATMENT STRUCTURE.

VORTECHS™ STORMWATER TREATMENT SYSTEM

A major advancement in oil and grit separator (OGS) technology, the Vortechs™ Stormwater Treatment System efficiently removes grit, contaminated sediments, metals, hydrocarbons and other floating pollutants from surface runoff. This innovative design combines two unique treatment structures to eliminate turbulence within the system—ensuring proper physical separation and capture of sediment and oils.

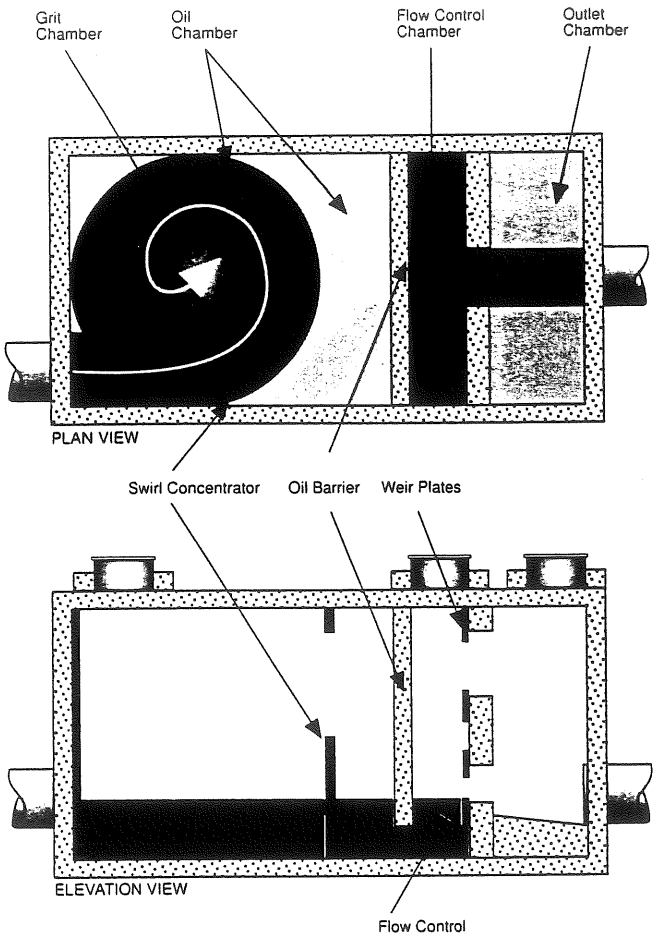
FEATURES:

- **High treatment efficiency:** Over 80% of contaminated sediment is removed during the "first flush".
- **Innovative flow control:** Seals off bottom of floatables barrier preventing loss of captured oils during clean-out.
- **Large treatment capacity:** Even the heaviest storms can be treated without bypassing peak flows.
- **Easy inspection—lower clean-out costs:** Dry weather volume significantly less than with conventional traps of the same size.

APPLICATIONS:

- Parking Lots
- Gas Stations
- Industrial Sites
- Retail Outlets
- Streets/Roadways
- Vehicle Maintenance Facilities
- Wetlands Protection

PATENT PENDING



FEATURES

6-6

Grit Chamber

The swirling motion created by the tangential i directs settleable solids toward the center. Durin peak storms this structure dissipates potentially disruptive flows—sediment is caught in the swirling flow path and settles back onto the pile after the storm event is over.

Oil Chamber

The center barrier traps floatables in the oil chamber. Unlike conventional oil traps that lack flow controls and extra tank capacity, the Vortechs™ System is highly resistant to flow surges.

Flow Control Chamber

As the storm event builds in intensity, the low-flow control within the Vortechs™ System will cause the inlet pipe to become submerged. This process floats oily pollutants up above the inlet pipe—and out of influent stream. Thus, the Vortechs™ System keeps captured pollutants in the trap by reducing forces which encourage resuspension and wash-out.

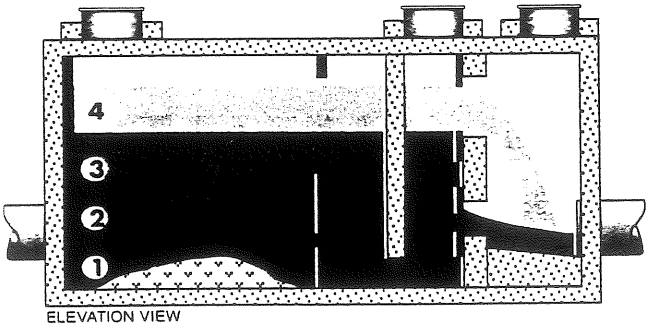
PHASES OF OPERATION

1) Dry weather/storm subsidence phase

Treated runoff is decanted out of the Vortechs™ System at a controlled rate restoring the water level to a low dry weather volume. This low dry weather level not only facilitates visual inspection of sediment and floatables accumulation but also significantly decreases maintenance costs by reducing pump-out volume.

2) Initial Wet Weather Phase

During this phase of operation a two-month storm event will cause the water level to rise above the top of the inlet pipe. This flow control effectively reduces inlet velocity and turbulence. 85% of storm events do not exceed the initial wet weather phase—sediment and floatables removal during this stage is very high.



3) Transition Phase

Flow attenuation achieved during this phase helps to utilize fully the storage capacity of storm sewer pipes and the Vortechs™ System. To increase storage volume further, on or off-line detention basins can be designed to fill during the transition phase. Swirling action increases at this stage capturing sediments and moving material which may have been deposited at inlet (during low flows) into the center of the chamber.

4) Full Capacity Phase

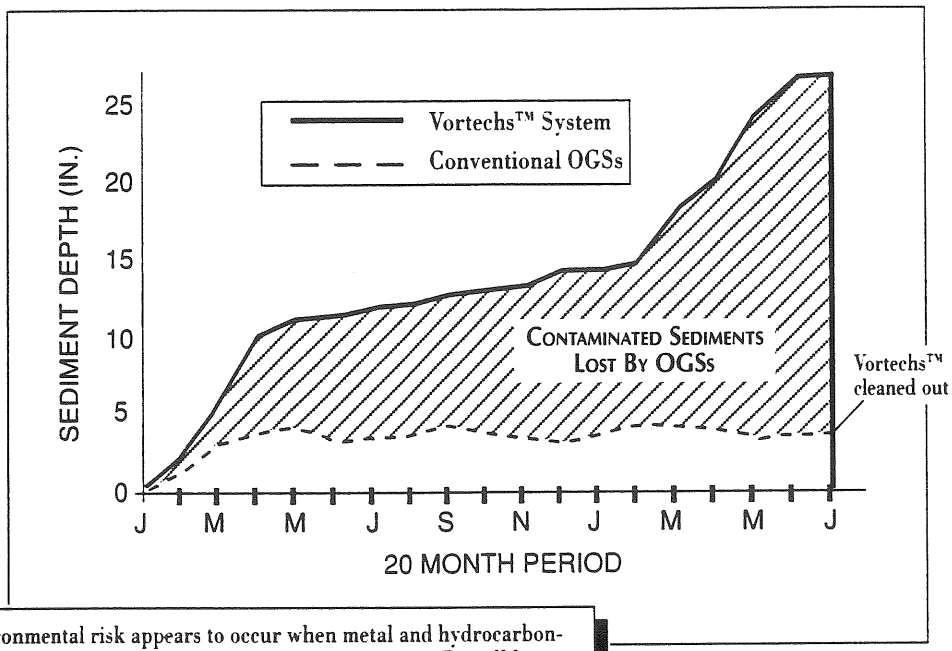
During this phase, the storm drains are operating at peak capacity, typically at 5 to 25 year storm flow rates. To accommo greater volumes, Vortechnics can assist designers with configuring a peak flow by-pass. Treatment efficiencies for the Vortechs™ System remain constant during this phase, while conventional "plug flow" OGSs have been shown to fail and drop down to negative treatment efficiencies.

COMPARISON OF VORTECHS™ SYSTEM SEDIMENT REMOVAL TO CONVENTIONAL OIL GRIT SEPARATORS.

6-H

VORTECHS™ SYSTEM PRODUCT PERFORMANCE

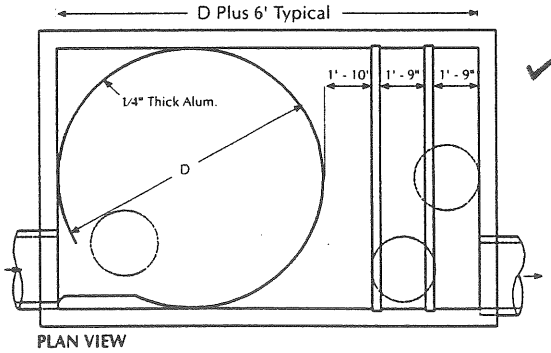
Data for Vortechs™ System obtained through in-field monitoring of actual installation in Freeport, Maine. OGS data taken from comprehensive testing of conventional systems by the department of Environmental Programs, Metropolitan Washington Council of Governments.



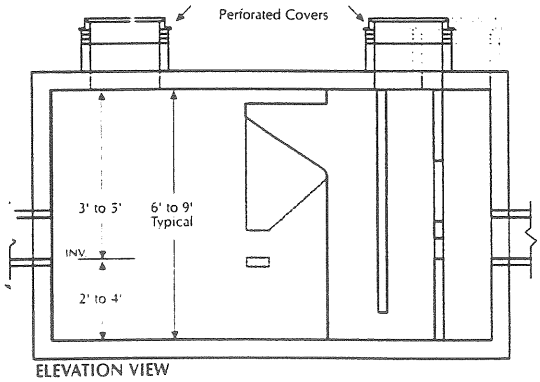
"The greatest environmental risk appears to occur when metal and hydrocarbon-laden sediments are deposited in downstream lakes and estuaries... Runoff from urban hot spots appears to be a major contributing factor to sediment contamination in these cases..."

- Schueler and Shepp, 1992
- McKenzie and Hunter, 1979

VORTECHS™ SYSTEM SPECIFICATION



PLAN VIEW



ELEVATION VIEW

Vortechs™ Model	Grit Chamber Diam. / Area (ft / ft²)	Design Flow Rate* (cfs gpm)	Sediment Storage** (yd³)	Oil Storage** (gallons)	Size (LxW, ft)
2000	4 / 13	2.8 / 1,300	1.2	350	10 x 4
3000	5 / 20	4.4 / 2,000	1.8	510	11 x 5
4000	6 / 28	6.3 / 2,800	2.4	700	12 x 6
5000	7 / 38	8.6 / 3,800	3.2	920	13 x 7
7000	8 / 50	11.0 / 5,000	3.9	1,200	14 x 8
9000	9 / 64	14.0 / 6,400	4.7	1,500	15 x 9
11000	10 / 79	18.0 / 7,900	5.5	1,800	16 x 10
16000	12 / 113	25.0 / 11,000	7.5	2,500	18 x 12

* Design flow rate is based on a peak operating rate of 100 gpm/ft² in a 10-year storm.
** Oil and sediment storage volumes given assume a 3 ft deep sump and a 1 ft opening under the oil baffle. These dimensions may vary.

ATTENTION SPECIFIERS

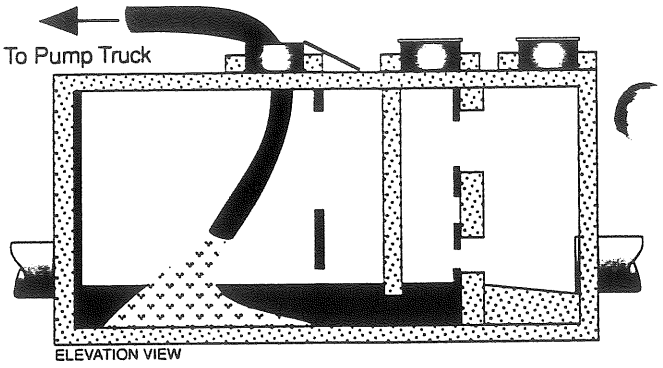
Use the enclosed Specifier's Worksheet to begin the design of your Vortechs™ System. Simply fax completed worksheet to the Vortechnics Engineering Office (Fax No: 207-878-8507) and we'll produce detailed scale drawings based on your site specific information (free of charge).

Note: Availability of models and actual dimensions may vary. Check with Vortechnics or your local licensed manufacturer for specific information.

PATENT PENDING

Maintenance

The Vortechs™ System has no on-going maintenance requirements although routine inspections are necessary to schedule cleanings. To ensure proper performance and treatment efficiency the system must be cleaned when it is full. The Vortechs™ System is designed to effectively capture sediment and floatables —the rate at which the system accumulates contaminants is largely dependent on site activities.



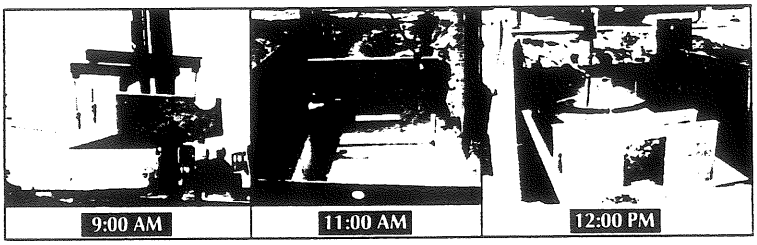
ELEVATION VIEW

Inspection

In the first year of operation, Vortechnics recommends monthly inspections during periods of heavy contaminant loadings (e.g., winter sandings, soil disturbances or oil/fuel spills). The inspection schedule can then be modified in subsequent years according to experience or to meet specific stormwater permit requirements.

Cleaning

Clean-out of the Vortechs™ System with a vacuum truck is generally the best and most convenient method. Only the manhole cover above the grit chamber (the one farthest from the system outlet) needs to be opened to remove water and contaminants. As the grit chamber is pumped out, the oil and water drain back into it, so that oil scum, particulates and floatables are removed along with accumulated sediments. With the Vortechs™ System, a pocket of water between the grit chamber and flow controls seals the bottom of the oil barrier and prevents the loss of floatables to the outlet during cleanings. Manhole covers should be securely seated following cleaning activities to ensure surface runoff does not leak into unit from above.



Installation of a Vortechs™ Model 11000

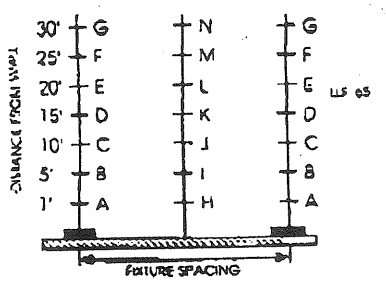
VORTECHS™ STORMWATER TREATMENT SYSTEM

Vortechnics

VORTECHNICS
41 EVERGREEN DRIVE
PORTLAND, ME 04103
(207) 878-3662 FAX: 878-8507

Type W Fixture - 161 Marginal Way Portland, ME

Photometrics



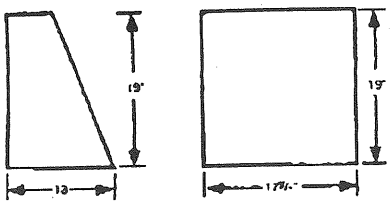
SND 19-400MH-1
Fixture Spacing 15'

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
15'	20.2	17.8	11.9	4.7	1.9	7	.2	34.4	31.6	16.1	7.2	2.7	9	4
MTG. 20'	13.5	13.8	9.8	6.5	3.1	1.6	.7	18.3	18.7	12.3	7.2	3.0	2.0	.8
HEIGHT 25'	9.8	10.5	8.1	5.7	3.8	2.1	1.2	11.1	10.9	8.1	5.5	3.2	3.4	1.4
30'	7.2	7.7	6.3	4.8	3.6	2.4	1.5	7.6	7.2	5.6	4.7	3.1	3.6	1.6

Fixture Spacing 45'

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
15'	12.2	10.8	7.4	2.9	1.2	.4	2	7.6	6.4	4.1	2.1	.9	5	2
MTG. 20'	7.2	7.6	5.2	3.7	1.7	.9	.4	7.6	7.1	5.6	3.5	1.6	9	5
HEIGHT 25'	5.0	5.5	4.0	3.1	2.2	1.2	.7	7.0	6.7	5.8	4.2	2.7	1.6	9
30'	3.8	4.2	3.3	2.7	2.2	1.4	.7	5.8	6.0	5.6	4.6	3.3	2.1	1.3

Dimensions



NOTE: 7" minimum clearance from hinge side of fixture for canopy removal.

Specifications/Features

GENERAL
- Sharp cutoff, wall mounted HID luminaire suitable for low glare applications and light trespass code compliance.
- Utilizes Metal Halide and High Pressure Sodium HID lamps up to 400W for best design options available.
- Wet location applications.
- Uplight mounting available.(Damp Location)

CONSTRUCTION
- Corrosion resistant .06" low copper content aluminum canopy and .09" back plate finished in baked bronze polyester powder coat.
- Easy one man installation with quick leveling, gasketed 18 ga 304 stainless steel mounting bracket; has extra holes for additional wall anchors; fixture simply attaches to 4 threaded studs on mounting plate
- Canopy hinged and easily removable from back plate; enhances ease of installation.
- Prop rod included to hold fixture open and free hands for lamp replacement and maintenance.
- Specular aluminum reflectors produce front cutoff at 85 degree and S/MH 2.75:1.
- Canopy sealed to back plate with extruded [illegible] temperature, silicone gasket.
- Corrosion resistant stainless steel external [illegible]
- 5/32" tempered diffused glass lens silicone [illegible] prevent entrance of water, and minimize insect [illegible]
- Canopy secured by two captive stainless [illegible] optional tamper resistant screws.

LISTINGS
- Listed 1572 Wet location for downlight [illegible] location for uplight versions

ELECTRICAL
- Standard ballasts are 120V. HPF, maximum [illegible] mogul base HID lamp in vertical position.
- Ballast mounted to backplate with stake[illegible] positive grounding and secure mounting
- Ground wire attached to backplate for [illegible] and quick installation
- Optional button type photocell mount[illegible]
- All fixtures are IBEW. Union made to insure [illegible]

SUNDOWNER 19 Catalog Numbers

CATALOG NUMBER	DESCRIPTION	INITIAL WATTS
SND19-150HP-1	Downlight Version, 150W HPS, 120V	188
SND19-250HP-1	Downlight Version, 250W HPS, 120V	300
SND19-400HP-1	Downlight Version, 400W HPS, 120V	457
SND19-175MH-1	Downlight Version, 175W MH, 120V	215
SND19-250MH-1	Downlight Version, 250W MH, 120V	295
SND19-400MH-1	Downlight Version, 400W MH, 120V	458
SNU19-150HP-1	Uplighting Version, 150W HPS, 120V	188
SNU19-250HP-1	Uplighting Version, 250W HPS, 120V	300
SNU19-400HP-1	Uplighting Version, 400W HPS, 120V	457
SNU19-175MH-1	Uplighting Version, 175W MH, 120V	215
SNU19-250MH-1	Uplighting Version, 250W MH, 120V	295
SNU19-400MH-1	Uplighting Version, 400W MH, 120V	458

Note: All include a Mogul Base

Accessories

OPTIONS	ADD/CHANGE	EXAMPLE
Units listed for 120volt. For 277V	change last "-1" to "-2"	[illegible]
Tamper Resistant Screws	add "/TP"	[illegible]
Button Photo-electric cell	add "/PEC"	[illegible]
Cast Aluminum Outlet Box	add "/CAB"	[illegible]
For lamps included	add "/L"	[illegible]
Fixture Fuse	add "/FF"	[illegible]
Surface wiring collar	add "/OBC"	[illegible]
For Quartz Restrike	add "/ISL"	[illegible]

GUTH
A SUBSIDIARY [illegible]

Specifications and data are subject to change without notice.
Guth utilizes the services of both U.L. and ETL for listings

Sht. F in

Engineer Review and Site Inspection Fee Invoice Worksheet

Address: *161 Marginal Way..... Proposed DHS Building.....DATE: 9/16/98*

Engineering Review

To be filled out by Development Review Coordinator and Public Works at time of application.

Planning	**Public Works**
# of Hours Estimated: (Private Improvements)	**# of Hours Estimated: (Public Improvements)**
Field Work _____	Field Work *1.0*
Memos/Corresp. ~~3.0~~ _____	_____ Memos/Corresp.
Review/Analysis _____	Review/Analysis *3.0*
Meetings/phone calls _____	Meetings/phone calls *1.0*
Total Hours _____ at _____ per hour	Total Hours *8.0* at *$35* per hour
Review Fee (Private): $ 459.90	Review Fee (Public): $ *$280*
LK	
Development Review Coordinator Signature	Public Works Engineer Signature

Site Inspection

To be filled out by DRC and Public Works at time of Performance Guarantee approval.

Planning	**Public Works**
____ Accept 1.7% of Private Improvements P.G. $ _____ (dollar amount)	**___ Accept 1.7% of Private Improvements P.G. $ _____**
(dollar amount)	
# of Hours Estimated:	**# of Hours Estimated:**
Field Work _____	Field Work *8.0*
Memos/Corresp. _____	Memos/Corresp. *1.0*
Review/Analysis _____	Review/Analysis _____
Meetings/phone calls _____	Meetings/phone calls *1.0*
Total Hours _____ at _____ per hour	Total Hours *10.0* at *$35* per hour
Alternate Inspection Fee (Private): $ 768	Alternate Inspection Fee (Public): $ *$350*
RK	
Development Review Coordinator Signature	Public Works Engineer Signature

Fore River Company 5 Milk Street P.O. Box 7525 Portland, Maine 04112 (207) 772-6404

TRANSMITTAL NOTICE	DATE: 9.2.99
TO: Rick Knowland Senior Planner City of Portland	SUBJECT: 161 Marginal Way

NO. OF COPIES:	DESCRIPTION:
1	Lighting Levels Plan 11"x17"
7	" " " Full Size
1	Catalog Cut for Fixture "W"

REMARKS:

Rick

The attached plans show the revised photometrics for the North East side of the Bldg with the wall mounted type "W" Fixtures. I believe this is the last outstanding Site Plan Review issue. Please call me with any questions or comments.

Thanks.

Sincerely,

Bruce Kuttler

Fore River Company 5 Milk Street P.O. Box 7525 Portland, ME 04112 (207) 772-6404

August 17, 1999

Alex Jaegerman
Director of Planning
City of Portland
389 Congress Street
Portland, ME 04101

Re: 87 Marginal Way

Dear Alex,

Rick Knowland told me he would be on vacation this week, so in order to keep this project moving I am responding to you. The numbers below correspond to the numbers on Rick's letter to me dated August 12, 1999 (copy enclosed).

1) The photometric plan was generated by the manufacturer of the parking lot light fixtures. The manufacturer does not have the exact photometrics of the light fixtures specified for the light fixtures near the building because they are by different manufacturers. Therefore he substituted the photometrics of the fixtures he had that most closely approximated the photometrics of the specified fixtures. The catalog cuts previously submitted by David Lloyd remain the fixtures to be used near the building. The catalog cut of the parking lot fixture is the fixture to be used in the parking lot.

2) I thought that revised landscaping plans had been submitted but Rick never received them. Attached are seven full size plans and seven sets of reduced plans.

4) As discussed with Rick, attached are four full size copies and one reduced copy of an old plan with a legible surveyor stamp and signature. This plan is for survey (metes and bounds) information only. Please refer to previously submitted site and grading plans for additional information including "Additional Notes" previously submitted on sheet "A-O" dated 2/3/99.

9) See #4 above.

Your efforts to keep this project moving will be appreciated. Please call if you have any questions, comments, or problems.

Sincerely,

Bruce Kistler

enclosures

cc: Rick Knowland w/o enclosures

Fore River Company 5 Milk Street P.O. Box 7525 Portland, Maine 04112 (207) 772-6404

TRANSMITTAL NOTICE	DATE: 8.5.99
TO: RICK KNOWLAND SENIOR PLANNER CITY OF PORTLAND	SUBJECT: 87 MARGINAL WAY
NO. OF COPIES: 1 SET 7 SETS	DESCRIPTION: 11"x17" GRADING PLAN & DTLS, TRAFFIC STUDY, FINANCIAL & TECHNICAL CAPACITY LETTER, SHARED USE AGREEMENT, STORMWATER RUNOFF EVALUATION, COST ESTIMATE OF IMPROVEMENTS, PHOTOCOPY OF SEAL FROM SURVEY, & PHOTOMETRICS PLAN GRADING PLAN & DTLS, & PHOTOMETRICS PLAN

REMARKS:

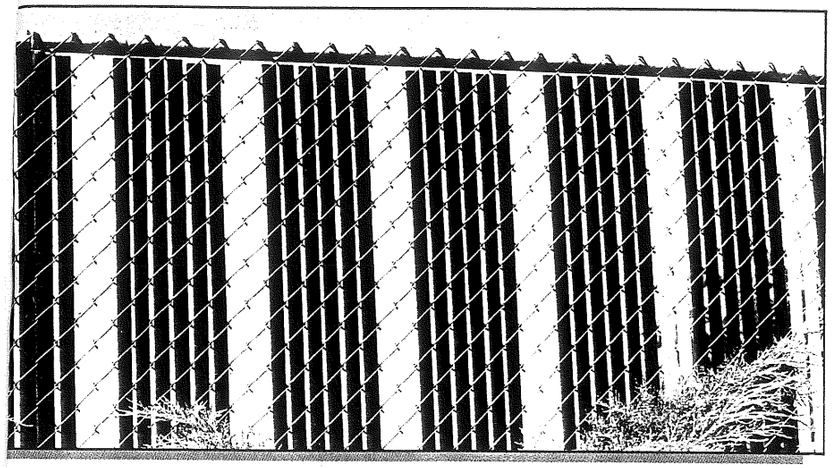
DEAR RICK,

I BELIEVE THE ATTACHED COMPLETES OUR REQ'D SITE PLAN REVIEW SUBMISSIONS. PLEASE REVIEW/ DISTRIBUTE AS REQUIRED AND CALL ME W/ ANY QUESTIONS OR PROBLEMS.

SINCERELY,

BRUCE KISTLER

...other Pretty Fence.



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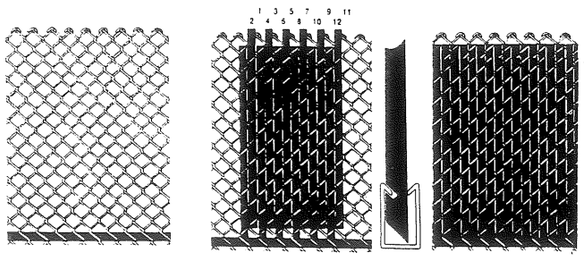
Material Specifications

Property	Effect
Melt Index .34	Low melt index values indicate improved stress and crack resistance which produce a longer lasting slat.
Density .951	In the range of polyethylene density from .914 to .960 the .951 was chosen because it yields the required stiffness without danger of brittleness.
Low Temperature Brittleness Temperature –76°F	Polyethylene does not become brittle at low temperatures like many materials such as vinyl.
Tensile Strength 3700 P.S.I.	This insures the materials will not distort under load or impact.
Resistance to heat 250°F	This insures a long life without distortion under high temperature.

10 YEAR WARRANTY

Installation Instructions



STEP 1 — Insert bottom horizontal channel open side up. Leading end of channel may be trimmed to a 45° angle to make installation easier.

STEP 2 — Insert vertical slats with the angled and notched end down.

STEP 3 — Push the vertical slat into the horizontal channel to Lock-In place.

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING PATENTS:
U.S. PAT. 4085954, 4995591

161 MARGINAL WAY
PROPOSED FENCE
(OR EQUAL)
10.7.98

PDS

Privacy Decorative Slatting

FOR ALL CHAIN LINK APPLICATIONS

Residential Commercial Industrial