EORTIOND PUBLIC SCI PATHS SHOP RENOVE

196 Allen Avenue, Portland, Mai∾e (

RFP #01- 06

ISSUED FOR BID - APRIL 3, 2006

OWNER:

PORTLAND PUBLIC SCHOOLS

PORTLAND, MAINE 04103 196 ALLEN AVE.

207-874-8100

ARCHITECT:

SEMULE & DRANE ARCHITECTS O.A.

207-761-4231 Fax: 774-0152 PORTLAND, MAINE 04101 496 CONGRESS STREET

email: SDA@maine.rr.com

ENGINEERING

CASCO-BAY ENGINEERING, INC. PORTLAND, MAINE 04101 424 FORE STREET 207-842-2800

ABBREVIATIONS

MATL	5	ī 5	SNS	ND	H	×	GYP. BD.	FRMG.	7	7	FLR	EZ	<u>ት</u> ፀ	ETR	EXIST.	WW	ES	Ö	ELEV	ը	סדר	DR(S)	Z	DΙΑ	CORR	CONT	CONC	5	<u>င်</u>	BLT	BLKG	BLDG	æ
MATERIAL	LIGHT	JOINT	INSULATED	INDICATED	HEIGHT	HOLLOW METAL	GYPSUM WALL BOARD	FRAMING	FIELD VERIFY	FEET	FLOOR	HSINF	FIXED GLASS	EXISTING TO REMAIN	EXISTING	EACH WAY	EACH SIDE	EQUAL	ELEVATION	EXPANSION JOINT	DETAIL	DOORS	DOWN	DIAMETER	CORRIDOR	CONTINUOUS	CONCRETE	CENTERLINE	CEILING	BUILT	BLOCKING	BUILDING	ANCHOR BOLT
¥ĕ	*	≦	UON	U/S	TYP	TRTD	TRANS	THOLD THO	SYS	SURF	STL	STD	SPEC(D)	MIS	v	70 0	RET	REQ'D	RS	PTN	PT	PNT(D)	Z	OPG.	OPER	3	8	OBS OBS	5 10	X :	S	X	MAX
WOOD WATER FOUNTAIN	WITE	VERITY IN FIELD	UNLESS OTHERWISE NOTED	UNDERSIDE	TYPICAL	TREATED	TRANSLUCENT	THRESHOLD	SYSTEM	SURFACE	STEEL	STANDARD	SPECIFIED	SIMILAR	SEALANT	ROUGH OPENING	RETURNED	REQUIRED	RISERS		PRESSURE TREATED	PAIN (ED)	DANE	OPENING	OPERABLE	OF CENTER	ON DENTED	OBSCHEED OF ACC	MOOLONG	ASC DISTO	Ministration of the second	METAL	MAXIMIN

GENERAL NO

- 2. THE OWNER WILL REMOVE ALL FURNGE. TO COORDINATE WORK SCHEDL CONSTRUCTION. 1. ALL WORK TO MEET STATE, LOCAL 8
- 3. THE OWNER WILL PROVIDE TEMPOR. EMPLOYEES TO BE TEMPORARILY RE
- 4. CONTRACTOR SHALL SECURE ALL NE
- 5. CONTRACTOR SHALL COMPLY WITH,
- 6. DIMENSIONS INDICATED ARE FROM F
- 7. CONTRACTOR SHALL COORDINATE IN VENDORS AND SUBCONTRACTORS.
- 8. THE CONTRACTOR SHALL VERIFY ALI REPORT ALL DISCREPANCIES TO THE
- ALL WOOD IN CONTACT WITH CONCRUTREATED.
- 10. CONTRACTOR SHALL WORK FROM GF ONLY. DO NOT SCALE THE DRAWING!
- 1. DEMOLITION IS BY OWNER UNLESS NO

LEGEND

ACI 301 ASCE 7 AMERICAN SOCIETY OF CIVIL ENGINEERS, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES AMERICAN CONCRETE INSTITUTE SPECIFICATION FOR STRUCTURAL CONCRETE 2003 EDITION OF THE IBC INTERNATIONAL BUILDING CODE UNLINE COURS AND STANDARDS SHALL BE REFERENCED DURING CONSTRUCTION:

FEDERAL EMERGENCY MANAGEMENT AGENCY- COASTAL CONSTRUCTION MANUAL national design specifications for wood construction by national forest products association, 2001.

NATIONAL FLOOD INSURANCE PROGRAM— TECHICAL BULLETINS 9-99, 5-93, AND 8-96 TECHICAL BULLETINS 9-99, 5-93, AND 8-96

Ð Š AISC ACI 318

MISV

AMERICAN SOCIETY OF TESTING AND MATERIALS

AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE MAKERICAN INSTITUTE OF STEEL CONSTRUCTION, MANUAL OF STEEL CONSTRUCTION, MINTH EDITION.

REFERENCE ARCHITCHEM, PLANS FOR DIAPISONS MOT SHOWN, DETRIBUX LECHANCA,
LECTROLL, AND ACHTECHEM, PLANS FOR SEES AND LOCATIONS OF WILL AND SLID GROWING,
DUCTS, PIPMS, CARES, AND EQUIPMENT PADS. IN THE EVENT OF A COMPLICT BETWEEN THE
DRAMMASS, SPECIFICATIONS, OR NOTES ON THE DRAMMASS, THE ENGINEER SHALL BE NOTHED PROFE
TO CONSTRUCTION.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF DEVATIONS OR CHANGES ARE REQUIRED TO THE CONTRACT DOCUMENTS OR APPROVED SHOP DRAWNOS DUE TO INTERFERENCES, FABRICATION ERRORS, EXISTING DIMENSIONS AND CONDITIONS ARE FOR REFERENCE ONLY. CONTRACTIOS WALL YESTEY ALL EXERTING CONSTRUCTION AND DIMENSIONS IN THE FELD PRIOR TO COMMENCIFICAL OR FABRICATION, ALL DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER PRIOR TO COMMENCING WORK.

THE STRUCTURE IS SELF-SUPPORTING AND STABLE AFTER THE ENTIRE BILLIONE IS COMMETTELY CONSTRUCTED.
THE CONTRICTION AND DECITION TO PROMISE AND ENSURE LOCAL AND ORSTALL STUDIATES ON UNRESHED AND TIS COMPONENTS AND DESCRIPT OF THE BILLIONE AND TIS COMPONENTS AND OR OTHER CAUSES. Bracing/Shoring is Needed

GENERAL NOTES - SCALE: NTS

LIVE LOVE

SNOW LOADS: SLAB-ON-GRADE = 125

HAIN WHOTORICE—RESISTING SYSTEM:
BASIC WIND SPEED = 100 MPH
EXPOSURE B

SEISMIC CRITERIA: WANDWARD + LEEWARD = 22 psf

SOIL SITE CLASSPICATION = D (SEE S.M. COLE GEOTECH REPORT DATED 8/5/2005)
SOBRI SPECIFICA RESPONSE ACCELERATION
Sobil = 0.37
Soft = 0.16 OCCUPANCY IMPORTANCE FACTOR....... 1 = 1.25

DESIGN CRITERIA - SCALE: NTS

REFERNICE GEOTECHNICAL REPORT BY S.W. COLE ENGINEERING DATED AUGUST 05, 2005.

SUBGRADE PREPARATION AND DETERMINATION (INCLUDING ALLOWABE BEARING PRESSURE STRUCTURAL FILL GROUNDER REQUIREMENTS, AND COLUPACTION REQUIREMENTS DEBERTH FOOTINGS AND SLASS-OH-GRADE AND BEHAVE FOUNDER THAN THE PROVIDED BY CROTTCHANCAL DISBURET. ALL FILL USED TO SUPPORT FOUNDATIONS AND SLASS-OH-GRADE SHALL CHARLES THAN THE FOUNDATIONS AND SLASS-OH-GRADE SHALL CHARLES THAN THE FOUNDATION OF THE CONTENT OF THE CONTENT OF THE FOOTING HARDER. STRUCTURAL SLASS SHALL BE CONSTRUCTED ON HE RECOMBERING OF THE RECOMBERT OF THE FOOTING HARDER OF THE GENERAL SHADE SHALL BE CONSTRUCTED ON HE SEE SECTION 4.90 OF THE CONTENT OF THE

PRESUMED ALLOWABLE SOIL BEARING PRESSURE USED IN DESIGN = 2000 PST.
BEARING CAPACITIES SHALL BE VERFIED BY GEOTECHNICAL ENGINEER.
BIMBAUNI PROST DEPTH COVER = 4-6", UNO FOR EXTERIOR FOOTINGS BELOW FINAL EXTERIOR GRADE. CONTRACTOR SHALL NOTEY ENGINEER OF ANY DISCREPANCIES.

BEARNA ELPYATONS SHALL BE LOWERED WHERE SUTFABLE SOILS ARE NOT ENCOUNTERED. THE CONTRACTOR SHALL NOTITY THE GEORECHACAL AND STRUCTURAL ENGAGER IF ANY UNSITIABLE SOILS ARE ENCOUNTERED PRIOR TO PLACES FOUNDATIONS.

THE OTHER SHALL SUBMIT REPREDENCES SHOP DRAWNES TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PROOF COMMERCING FARRICATION. REPREDENCEMENT SHALL BE DETAILED IN ACCORDANCE WITH AND "LANGUL PERFECUENCE" CONCRETE STRUCTURES". SHOP DRAWNES SHALL SHOW REPREDENCE PLACEMENT DETAILS AND SECTIONS. SHALL SECURED AGAINST DISPLACEMENT, AND SUPPORTED PRIOR TO CONCRETE PLACEMENT, AND

	THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW
1-1/2 NOHES	CUMPURIE NOT EXPOSED TO EARTH OF WEATHER IN COLUMNS AND BEAMS
1-1/2 INCHES	FOR MARY PENFORCEMENT, TIES, AND STRENUES)
2 NOHES	CONVERTE EXPOSED TO EARTH OR WEATHER
3 INCHES	COMPANY CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH
	MINIMUM CONCRETE COVER FOR RENFORCEMENT

UNLESS THERMISE NOTED.

THE SUCK TENCH LYBRE

REINFORFUENT HOOKS SHALL COMEDON TO STADD HOOKS ACCOUNT	MAN LA SPLICE (INCHES)	PAR OF
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9	ક્ર	8
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:	\$	*
	92	8
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Welding $_{\mathbf{F}}$ reinforcement is not permitted, unless otherwise noted TO STARDARD HOOKS ACCORDING TO ACI 318, UNLESS OTHERWISE NOTED

ALL STRUCTION STEEL WORK SHALL CONFORM TO: CONCRETE REINFORCING NOTES - SCALE: NTS

HAL STEEL MEMBERS SHALL BE IN CONFORMANCE WITH THE FOLLOWING. american institute of steel construction, manual of steel construction, whith edition code of standard practice for steel buildings and bridges

AS S

ALL STEEL, UNO ANGLES, PLATES STRUCTURAL TUBING STEEL PIPE ASTN A572, GRADE 50 ASTN A36, Fy=36 KSI ASTN A500, GRADE 8, Fy=46 KSI ASTN A53, TIPPE E OR S, GRADE 8, Fy=35 KSI

shop (Ammics Shall be submitted to the structural engineer for renew price to composity fabrication Shop (Ammics Submittals Shall include) CEPTED MILL TEST REPORTS OF SITUCTURAL STEEL (INCLIDING MAJES AND LOCATIONS OF MILLS AND SHOPS).

OWNER HALL RETAIN A QUALIFIED TESTING AGENCY TO PERFORM AND VERIFY THE FOLLOWING SHOPS).

STICHUL STEEL FABRICATION AND ERECTION DRAWNES WHICH INCLUDE BOLTED CONNECTIONS (SHOP AND FIELD)

AND WELLED CONNECTIONS (SHOP AND FIELD) DEPICTING ANS WELLONG SYMBOLS.

ME'LL DECK SHOP DRAWNES DEPICTING SHEAR STUD LAYOUT ON BEAMS AND GROERS.

NSU, INSPECTION OF ALL WEIDS.

L'ASSING TESTING, IN ACCORDANCE WITH ASTIN E-164, ON 100% OF ALL FELD PULL PENETRATION WEIDS.
PRANCE RANDOM MEDIFICATION YAS ULTRASCING DESING OF SHOP FILL PENETRATION WEIDS.
PRINCE CHAPTERONG, MICHONIC REPRINCATION OF BOLL FORMES.

SHER STUD QUANTITY, PROPER INSTALLATION, SIZE, AND SPACING. SHEAR STUDS SHALL CONFIDEN TO ANS DIT.

BOLTED CONNECTIONS

THE CONNECTIONS SHALL UTILIZE MINIMIN 3/4-MICH DIAMETER A325 HIGH STRENGTH BOLTS, UNO.
BOED CONNECTION SHALL BE SIZE DRIVING (S2) AT ALL MOMENT FRAMES, BRACED FRAMES, AND AT ADDITIONAL CONTROL IN THE DRAWNOS. SUP CRITICAL CONNECTIONS SHALL UTILIZE LOAD INDICATOR MASHERS DESIGN CONTROL BOLTS. BOLT HOLES SHALL BE STANDARD SIZE, UNO.

 $_{
m MH}^{
m MH}$ OR BOLTS SHALL CONFORM TO ASTM A307, GRADE A, STANDARD HEX HEAD FURNISHED WITH HEAVY HEX AND LOCK WASHERS. Strength Bolts shall be installed and tightened per aisc specification for structural joints as astimases bolts.

WELDED XXMMECTIONS COPACTOR SHALL DESIGN CONNECTIONS NOT ALFRADY DETAILED ON STRUCTURAL DRAWNOS. DESIGN IS BE TAMPED BY A LICENSED STRUCTURAL ENGINEER AND SUBMITTED PRIOR TO COMMENCING FABRICATION. WEING SHALL CONFORM TO AWS DI.1. USE LOW-HYDROGEN SMAW ELECTRODES WITH MINIMAIN TENSILE STRENGTHOR

DESIGN SHALL

STRUCTIVAL STEEL SHALL RECEIVE THE FOLLOWING PROTECTIVE COATMICS:

ON OF PANT SUPPACES TO RECENE WETAL DECK AND/ OR SHEAR CONNECTORS FASTENED BY WEDNIG, CON NOT SUPPACES OF HIGH STRENGTH BOLTED CONNECTIONS, FINISHED BEARING SUPPACES, AND SUPPACES, TO WEDED IN THE FEEL IF RECURRED, PROTECT THESE SUPPACES BY RUST-IMMEDITING COATING THAT CAN'EL REDOYED EASILY PRIOR TO ERECTION

UNEOSED STRUCTURAL STEEL SHALL BE CLEANED IN ACCORDANCE WITH SSPC-5P3 AND PANTED WITH PRIMER PAIL, THERE (10-59, OR EQUIVALENT, UNO.

SHEAR (NUNECTOR STUDS EXPIED STRUCTURAL STEEL TO BE HOT-DIPPED GALVANIZED SHALL BE IN ACCORDANCE WITH ASTN 4123. FINIT COAT PER ARCHITECT. ENEXTS STRUCTURAL STEEL TO RECEIVE ZINC-RICH EPOXY PAINT SHALL BE FIRST CLEANED IN ACCORDANCE MIT SSPC-SP6. COMMETICAL BLAST CLEANING, USE THEBLEC ZIN-RICH EPOXY PAINT, OR EQUIVALENT. APPLY

SMEAR STUDS, WHERE REQUIRED, ARE INDICATED ON THE DRAMMICS AS [XX] WHERE XX IS THE NUMBER OF STUDS EQUALLY SPACED BETWEEN SUPPORTS ON A BEAM OR GROER. SHE, COMMECTOR STUDS SHALL BE NELSON, OR EQUIVALENT, 3/4-NCH DAMETER, UNC. WELD STUDS PER STUD MANUFACTURER'S RECOMMEDIATIONS THROUGH METAL DECICING. STUD LENGTH SHALL BE 1-NICH BELOW FOR CONCRETE SLAB ON DECK.

STRUCTURAL STEEL NOTES - SCALE SE

QUALITY ASSURANCE: CONTRACTOR SHALL PROVIDE QUALITY CONTROL OVER ACTIVITIES.

STANDARDS: WORK SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STA AMERICAN ROW AND STEEL HISTITUTE (A.I.S.I.), LATEST EDITION OF The STRUCTURAL MELBERTS. AMERICAN WELDING SOCIETY (A.W.S.) D.1.3, LATEST EDITION OF "STRUC" SHEET"

PRODUCT HANDLING (PROTECTION OF PRODUCTS): MATERIAL SHALL BE PROT AMERICAN INSTITUTE OF STEEL CONSTRUCTION (A.L.S.C.)

1. ALL FRAMING MATERIALS SHALL BE MANUFACTURED AND SUPPLED BY DE AND SE OF TIME AND SIZE AS SHOWN ON THE STRUCTURAL DRAWNINGS.

2. GALVANIZED MATERIAL:

A. ALL GALVANIZED STUDS AND JOSTS SHALL BE FORMED FROM STIEL INNAMIN REQUIREMENTS OF ALSL. STANDARDS.

B. ALL GALVANIZED STUDS, AND STIES THANDARDS.

B. ALL GALVANIZED STUDS AND JOSTS SHALL BE FORMED FROM STIELL BROWN.

B. ALL GALVANIZED STUDS AND JOSTS SHALL BE FORMED FROM JOSTS

3. THE PHYSICAL AND STRUCTURAL PROPERTIES LISTED BY DETRICH MOUSTRY MINIMUM PERMITTED FOR FRAMING MEMBERS. ANY SUBSTITUTIONS SHALL BE: STRUCTURAL ENGINEER. REPORT DISCREPANCIES TO STRUCTURAL ENGINEER.

Power actuated fasteners in comprete shall be 0.145° diameter hilli und. Provide Manmain 1–36° embédiment into concrete. Protective coas shall be compatible with licht gaze frammig.

TEMPORARY BRACING SMALL BE PROMDED BY AND BE THE RESPONSIBILITY OF PERLAMENT BRACING AND BRIDGING SMALL BE IN ACCORDANCE WITH MANUFAC AND APPLICABLE CODES. BRIDGING SMALL BE SPACED FOR MANUFACTURERY'S BLOCKING SMALL BE PROMDED FOR STEEL JOSTS WIEDE JOST BNDS ANE NOT AGAINST ROTATION.

MACK STINDS SHALL BE NSTALLED BELOW WINDOW SILES, ABOVE WINDOW AND SUPPORT AND SHALL BE SECURELY A TITACHED TO SUPPORTING MEMBERS. PROTIAT SPECIFED IN ACCHIECTURAL DRAWINGS WILL DOWN EOR ON MORE JAMB WILL NOT BE ACCESSIBLE TO THE INSULATION CONTRACTOR. al track but Jonns, Abuting Peces of Track Shall be Securely an Structural Eldbert, Such as a Stud, or they shall be butt welded to Mejabers is not permitted, Unio.

STEEL TRUSSES SHALL BE LATERALLY SUPPORTED AT ALL PANEL POINTS AND REQUIRED X-BRACKHO SHALL BE INSTALLED MANEDIATELY AFTER ERECTION OF A ALL WELDING SHALL BE TOUCHED UP WITH A ZINC RICH PAINT.

LIGHT GAGE STL

ALL CONCRETE WORK, HICLIDING MATERIAL SELECTION, ADMITTURES, MICHAG, AND I CONCRETE SHALL BE IN CONFORMANCE WITH APPLICABLE BUILDING CODES. IN AD THE FOLLOWING CONCRETE STANDARDS AND SPECIFICATIONS:

SLAB-ON-GRADE FOUNDATIONS, FOOTINGS & FOUNDATION WALLS REQUIRED CONCRETE PARAMETERS ARE AS FOLLOWS 発한성점점 LOCATION MEDICAM COMORTE INSTITUTE BUILDING CODE REQUIREMENTS FO MARCIAM COMORTE INSTITUTE SPECIFICATIONS FOR STRUCTURAL STANDARD SPECIFICATION FOR HOT MATHER COMORTING STANDARD SPECIFICATION FOR COLD MEATHER COMORTING STANDARD PRACTICE FOR CURRING CONCRETE MAX W/C RATIO ġ ĸ 4,000 PSI 3,000 PS

W/C = WATER TO CEMENT RATIO AND

"C = COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS

HAMMAN AGRECATE SIZE SHALL BE 3/4 NOY, IN ONFORMANCE WITH ASTIN CX3 USE PORTLAND CERENT TYPE II, IN CONFORMANCE WITH ASTIN 150. ARE ENTRANGED ANNOUTURES SHALL CONFORM TO ASTIN C 260. ANNOUTURES SHALL CONFORM TO ASTIN C 260. ADMIXTURES SHALL CONFORM TO ASTIN C 260. ADMIXTURES SHALL CONFORM TO ASTIN C 260. ADMIXTURES CONTANING CALCIUM CHLORDE IS NOT PERMIT CALCIUM CHLORDE IS NOT PERMIT CALCIUM CHLORDE IS NOT PERMIT

MAXIMUM SLUMP AFTER THE ADDITION OF A WATER-REDUCING ADMIXTURE IS 8 INC





