

Construction of a New Two-story Central Fire Station General **Contractor Bidding**

Category: Street Address: Fire and Police Stations

20 Stone St. Walpole MA 02081

County: Norfolk

10/6/2016, 11:00AM Bid Date:

Schwartz/Silver Architects Inc. Architect: Documents Available: Plans, Specs available in Insight

Last Update: 9/20/2016 Project ID #: Confirmed Value Stage:

1003849352 \$11.000.000.00 **Biddate Set**

Plans, Specs were Added/Updated

Notes

Scope

Site work and new construction of a fire / police facility in Walpole, Massachusetts. Completed plans call for the construction of a fire / police facility. Construction of a new 20,500 gross square foot two-story Central Fire Station with a construction schedule of 20 months. Project includes Temporary Operations and demolition of the existing facility. General Bid Deadline10/6/16 Time11:00 A.M. Contractor QualificationDCAM Certificate Questions regarding the website or project distribution should be directed to ProjectDog at 978-499-9014. Only pre-qualified General and trade subcontractors will be permitted to submit bids for the category of work in which they were pre-qualified.

Notes

Request for Qualifications - RFQ: 10/29/2015 11:00AM 135 School St. Walpole, MA 02081 Bid Date: 10/06/2016 11:00AM Rebid from 08/04/16. Town of Walpole Procurement Department 135 School St. Walpole, MA 02081 Pre-Bid Meeting: 09/15/2016 01:00PM at 20 Stone St., Walpole Development include(s): New Construction, Site Work

Details

[Division 2]: Building Demolition, Hazardous Material Abatement, Clearing, Dewatering, Earthwork, Grading, Slope Protection & Erosion Control, Paving & Surfacing, Water Systems, Wells, Sewerage & Drainage, Electric Power Transmission, Irrigation, Landscaping. [Division 3]: Architectural Concrete, Structural Precast Concrete, Architectural Precast Concrete. [Division 4]: Clay Unit Masonry, Concrete Unit Masonry, Granite. [Division 5]: Structural Steel, Metal Joists, Metal Decking, Cold Formed Metal Framing, Metal Fabrications, Metal Stairs, Metal Railings, Ornamental Metals. [Division 6]: Rough Carpentry, Prefabricated Structural Wood, Architectural Woodwork. [Division 7]: Waterproofing, Dampproofing, Insulation, Firestopping, Membrane Roofing. [Division 8]: Metal Doors, Wood Doors, Sectional Overhead Doors, Entrances & Storefronts, Metal Windows, Wood Windows, Hardware, Glass & Glazing. [Division 9]: Ceiling Suspension Systems, Lath & Plaster, Stucco, Drywall/Gypsum, Tile, Acoustical Ceilings, Resilient Flooring, Carpet, Painting. [Division 10]: Visual Display Boards, Louvers & Vents, Wall & Corner Guards, Flagpoles, Interior Signs, Lockers, Partitions, Toilet & Bath Accessories. [Division 11]: Vehicle Service Equipment, Fluid Waste Treatment/Disposal Equipment, Food Service Equipment. [Division 12]: Window Treatment. [Division 13]: Pre-Engineered Structures, Elevated Storage Tanks. [Division 14]: Elevators, Material Handling Systems. [Division 15]: Mechanical Insulation, Fire Protection Systems, Plumbing Piping, Plumbing Fixtures, Water Heaters, Hydronic Piping, Boilers, Cooling Towers, Packaged A/C Units, Air Handling, Ductwork, Testing & Balancing. [Division 16]: Service/Distribution, Interior Lighting, Exterior Lighting, Emergency Lighting, UPS Systems, Standby Power Generator Systems, Lightning Protection Systems, Alarm & Detection Systems, Electric Heating Cables & Mats, Electrical Controls. Systems, Electric Heating Cables & Mats, Electrical Controls.

Additional Details

Listed On: 7/22/2016 **Contract Type:**

Stage Comments 1: Stage Comments 2:

Bid Date: 10/6/2016 Invitation #: 2017-04

Structures: Single Trade Project:

Floors:

20,500 Floor Area: Work Type: New Floors Below Grade:

Owner Type: City Mandatory Pre Bid Conference:

Commence Date: 11/7/2016 Completion Date: 7/6/2018

Site Area:

LEED Certification Intent:

Units:

Parent Project ID: Parking Spaces:

Project Partici	pants					
Company Role	Company Name	Contact Name	Address	Phone	Email	Fax
Architect	Schwartz/Silver Architects Inc.		75 Kneeland St. , Boston, MA 02111	(617) 542- 6650	arch@schwartzsilver. com	(617) 951- 0779
Owner	Town of Walpole	Susan Abate	135 School St	(508) 660-	sabate@walpole-	(508) 660-
Report Date: 9/20/2016 1	0:50:01 AM	© 2016 Constru	ctConnect. All Rights Res	erved.		Page 1 c

Bidders								
Company Name	Added Date	Address	Phone	Email	Bidding Role	Bid Rank	Bid Value	Fax Number
WES Construction Corp.	9/17/20 16	650 Industrial Dr. , Halifax, MA 02338	(781) 294- 1080	kvogel@wesconst ructioncorp.com	General Contractor			(781) 294- 4597
M. O'Connor Contracting Inc	16	19 Ledge Hill Rd, P. O. Box 320277, West Roxbury, MA 02132	(617) 327- 3070		General Contractor			(617) 327- 9731
E. Amanti & Sons	9/17/20 16	390 Highland Ave. , Salem, MA 01970	(978) 745- 4144	vin@eamanti.com	General Contractor			(978) 745- 8833
Brite-Lite Electrical Co	16	11 Front Street , Weymouth, MA 02188	(781) 340- 9102		General Contractor			(781) 340- 1674
Marmelo Bros	9/17/20 16	13 Ventura Dr , North Dartmouth, MA 02747	(508) 995- 6582	sandy@marmeloc onstruction.com	General Contractor			(508) 995- 6926
Boston Building & Bridge Corp.	16	1094 Bluehill Ave. , Milton, MA 02186	(617) 333- 0342	info@bbbcorp.co m	General Contractor			(617) 333- 6895
John F. Shea Co. Inc.	9/17/20 16	41 Hollingsworth St. P.O. Box 365, Mattapan, MA 02126	(617) 298- 0356	csears@johnfshea .com	General Contractor			(617) 296- 8859
Capeway Roofing Systems	16	664 Sandford Road , Westport, MA 02790	(508) 674- 0800		General Contractor			(508) 678- 2670
PJ Spillane Company Inc		97 Tileston St , Everett, MA 02149	(617) 389- 6200		General Contractor			(617) 389- 4138
Kneeland Plumbing & Heating, Inc.	9/17/20 16	63 Hammond St. PO Box 311, Rowley, MA 01969	(978) 948- 2282		General Contractor			(978) 948- 5068
Cam HVAC & Construction Inc.	9/17/20 16	116 Lydia Ann Road , Smithfield, RI 02917	(401) 232- 7230	info@camhvac.co m	General Contractor			(401) 232- 7290
Chabot & Burnett Construction Co Inc	16	36 Ramah Circle North Agawam , Agawam, MA 01001	(413) 567- 7681	zcolson@chabota ndburnett.com	General Contractor			(413) 786- 1354
G&R Construction Inc.	9/17/20 16	253 Centre St., Quincy, MA 02169	(781) 849- 9093		General Contractor			(781) 849- 9094
Homer Contracting Inc.	9/17/20 16	195 Broadway , Arlington, MA 02474	(781) 648- 3372	info@homercontr acting.com	General Contractor			(781) 648- 4915
Murphy Specialty	9/17/20 16	158 Arlington St, P.O. Box 292, Hyde Park, MA 02136	(617) 361- 3242	info@murphyspec ialty.com	General Contractor			(617) 364- 3830
Greenwood Industries Inc.	9/17/20 16	640 Lincoln Street, , Worcester, MA 01605	(508) 865- 4040		General Contractor			(508) 865- 1123
General Mechanical Contractors	9/17/20 16	29A Sword St., Auburn, MA 01501	(508) 754- 7366		General Contractor			(508) 756- 6750
Richard T Losordo Electrical	9/17/20 16	244 Liberty St st 8a, Brockton, MA 02301	(508) 436- 4848		General Contractor			(508) 436- 4849
Stanley Roofing Co Inc	9/17/20 16	42 Mitchell Rd , Ipswich, MA 01938	(978) 356- 7958		General Contractor			(978) 356- 1499
CJM Services, Inc	16	50 Kerry Pl P.O. Box 424, Norwood, MA 02062	(781) 440- 0000	info@cjmservicesi nc.com	General Contractor			(781) 440- 0046
Silktown Roofing, Inc.	9/17/20 16	134 Ferry Street , South Grafton, MA 01560	(508) 887- 8908		General Contractor			(860) 646- 0775
LaPan	9/17/20	3 Bethanv Street .	(508) 793-	business@lapan	General			(508) 793-

			Υ		2	Y
Mechanical Contractors	16	Worcester, MA 01604	2164	mechanical.com	Contractor	2193
Mello Electric Co	9/17/20 16	138 Morgan St , Fall River, MA 02721	(508) 679- 3100		General Contractor	(508) 679- 1221
Five Star Building Corp.	9/17/20 16	123 Union Street Suite 200, Easthampton, MA 01027	(413) 527- 4060	admin@fivestarco rp.net	General Contractor	(413) 527- 4061
W.T. Rich Company	9/17/20 16	29 Crafts St. Ste. 300, Newton, MA 02458	(617) 467- 6010	wtrich@wtrich.co m	General Contractor	(617) 467- 6011
DDC Construction Inc.	9/17/20 16	20 Query Street , New Bedford, MA 02745	(508) 992- 7112		General Contractor	(508) 992- 7429
Dandis Contracting Inc	9/17/20 16	1020 Turnpikr Street, Unit 12, Canton, MA 02021	(781) 828- 9313	info@dandiscontr acting.com	General Contractor	(781) 828- 9314
Tyco SimplexGrinnell	9/17/20 16	50 Technology Dr , Westminster, MA 01441	(800) 746- 7539		General Contractor	(615) 493- 2996
Jupiter Electric Inc	9/17/20 16	142 B Lafayette Road , Salisbury, MA 01952	(978) 499- 7776		General Contractor	(978) 499- 3838
CTA Construction Co. Inc.	9/17/20 16	1432 Main St. , Waltham, MA 02451	(781) 786- 6600	info@ctaconstruct ion.com	General Contractor	(781) 786- 6670
American Electrical Construction, Inc.	9/17/20 16	180 South Meadow Road Unit C, Plymouth, MA 02360	(508) 747- 5600	aec@americanele ctricalconstructio n.com		(508) 747- 5601
Ponch Excavation LLC	9/17/20 16	3841 Washington St., Boston, MA 02131	(508) 454- 1165		General Contractor	(508) 454- 1165
Vanguard Modular Building Systems, LLC	9/17/20 16	152 Sylvan Street , Danvers, MA 01923	(978) 580- 0585	info@vanguardm odular.com	General Contractor	(978) 856- 3131
Bello Painting Company Inc	9/17/20 16	585 East St. , Weymouth, MA 02189	(617) 479- 4056		General Contractor	(617) 479- 4081

Planholders				
Company Name	Address	Phone	Email	Fax
Grasseschi Plumbing & Heating Inc.	1299 Grafton St , Worcester, MA 01604	(508) 753- 3028		(508) 799- 4953
Tri-State Fire Protection Co. Inc.	11 Industrial Drive , Smithfield, RI 02917	(401) 232- 5960		(401) 231- 5508
Marathon Fire Protection Inc	485 Pine Stereet PO BOX 160, Seekonk, MA 02771	(508) 761- 4695	mpeter@marathonfire.com	(508) 639- 9020
Srs Contractors Inc	153 Winthrop Avenue , Lowell, MA 01851	(978) 455- 0249		(978) 455- 0016
Xcel Fire Protection Inc.	11A Industrial Way Unit 1, Salem, NH 03079	(800) 537- 3331	info@xcelfire.com	(603) 898- 9999
Roman Iron Works Inc.	55 Mystic Avenue , Somerville, MA 02145	(617) 625- 4855		(617) 625- 3012

Buyer	Buyer Activity Report										
Status	Activity Level	Contac t	Company Name	Source	Phone	Email	Business Type	Trades	Last Active		
New		Todd Livolsi	Briggs Engineering & Testing	CONSTRUCTION DATA	(617) 871- 6040	tlivolsi@brig gsengineeri ng.com	Service Provider	Survey and Photography, Quality Requirements, Existing Conditions, Assessment, Subsurface Investigat	9/19/2016		
New		Estimati na	HD Supply Waterworks		(413) 732-	kristen.wag ner@hdsup	Supplier	Utilities, Water	9/19/2016		

	Depart ment			8400	ply.com		Utilities, Wells, Sanitary Sewerage Utilities, Storm Drainage Utilities, Ponds and	
New	Michael Niland	F W Webb Company Waterworks Division	CONSTRUCTION DATA	(781) 322- 1238	michael.nila nd@fwwebb .com	Supplier	Water Utilities, Wells, Sanitary Sewerage Utilities, Storm Drainage Utilities, Ponds and Reservoirs,	9/16/2016
New	Karen Beaureg ard	Laborers International Union	CONSTRUCTION DATA	(617) 479- 4275	karen@mld ctrust.com	Other	General Requirements, Summary, Price and Payment Procedures, Administrativ e Requirements, Survey and	9/14/2016
New	Joosep h Nogueir a	Guarino Site Development	CONSTRUCTION DATA	(781) 820- 2887	jn@guarino site.com	Subcontract or		9/11/2016
New	Michael Portno	Gmh Fence Company	CONSTRUCTION DATA			Subcontract or	Metals, Metal Restoration and Cleaning, Structural Metal Framing, Metal Joists, Metal Decking, Cold	9/9/2016
New	Priscilla Lasky	Donnegan Systems	CONSTRUCTION DATA	(508) 393- 5700	plasky@don negan.com	Supplier	Equipment, Special Construction	9/9/2016
New	Debbie Dutra	Lopes Const Inc; G	CONSTRUCTION DATA	(508) 824- 4834	ddutra@glo pesconst.co m		Demolition and Structure Moving, Utilities, Water Utilities, Wells, Sanitary Sewerage Utilities, Sto	8/31/2016
New	John Davis	Overhead Door Co. Of Boston	CONSTRUCTION DATA	(781) 871- 3850	jdavis@over headdoorbo ston.com	Subcontract or	Coiling Doors and Grilles, Folding Doors and Grilles, Overhead Doors	
New	Aqil Unia	Visual Citi Inc	Insight	631- 482- 3030	aqil@visual citi.com	Subcontract or		9/19/2016
New	Gretche n Foht	GearGrid- 161615821		(651) 464- 4468	gfoht@msn. com	Other	Specialties, Chalkboards, Markerboards	9/19/2016

							and Tackboards, Display Cases, Directories and Plaques, Traff	
New	Phil Coracci o	CSI Pipe LLC	CONSTRUCTION DATA	(860) 564- 9000	pcoraccio@ csipipe.com		Earthwork, Site Clearing, Earth Moving, Earthwork Methods, Shoring and Underpinning, Excavation Supp	9/19/2016
New	Ken McNam ara	Kelley Bros	bidclerk	(603) 881- 5559	kmcnamara @kelleybros .com	Subcontract or	Doors and Frames	9/19/2016
New	Donna Mithen	DWC Designs Inc.	bidclerk	(603) 880- 4562	dwcdesignsi nc@hotmail .com		Windows, Chalkboards, Markerboards and Tackboards, Cubicle Track and Hardware, Wardrobe and Closet S	9/17/2016
New	Robert Andrew s	Stonetrade- 165965315	Molnsight	(401) 885- 6608	randrews@s tonetrade.c om	Supplier	Masonry, Unit Masonry, Stone Assemblies, Refractory Masonry, Corrosion- Resistant Masonry, Manufactur	9/16/2016
New	marge kendall	ACO Polymer Products, Inc	iSqFt'	(440) 639- 7230	mkendall@ aco- online.com	Supplier	Concrete, Concrete Forming and Accessories, Fire Suppression, Water-Based Fire- Suppression Systems,	9/14/2016
New	Tim Quill	D. Cronin's Welding Service	CONSTRUCTION DATA	(978) 664- 4488	TQUILL@CR ONINSWEL DING.COM	Subcontract	-	7/21/2016
New	Franco Fresilli	Fresilli & Sons Masonry Contr	CONSTRUCTION DATA	(401) 942- 5193	fresilli.sons @cox.net	or	Masonry, Unit Masonry, Stone Assemblies, Refractory Masonry, Corrosion- Resistant Masonry, Manufactur	9/19/2016
New	Bruce Maxwell	HD Supply Waterworks	CONSTRUCTION DATA	(860) 826- 0517	Bruce.maxw ell@hdsuppl y.com		Utilities, Water Utilities, Wells, Sanitary Sewerage Utilities, Storm	9/19/2016

								Drainage Utilities, Ponds and	
New		Rita Oliveira	South Dartmouth Construction	CONSTRUCTION DATA	(508) 984- 3347	RITA@SDCD RYWÄLL.CO M		Cold-Formed Metal Framing, Exterior Insulation and Finish Systems	9/19/2016
New		Ron Defusco	Union Fence	CONSTRUCTION DATA	(401) 729- 0011	rondefusco @gmail.co m	Subcontract or	General Requirements, Summary, Price and Payment Procedures, Administrativ e Requirements,	
New		Tanveer Devji	Visual Citi Inc	Minsight	631- 482- 3030	tanveer@vis ualciti.com		Survey and	9/16/2016
New		Maurici o Baiense	Contract Framing Builders, Inc.	bidclerk	(781) 874- 2032	info@contra ctframingbu ilders.com	Subcontract or		9/16/2016
New		Lisa Herman son	Aggregate Industries	CONSTRUCTION DATA	(781) 941- 7200	lisa.herman son@aggre gate-us.com		Concrete, Concrete Forming and Accessories, Concrete Reinforcing, Cast-in-Place Concrete, Concrete P	9/16/2016
New		Tom Ogden	T.J. Ogden Well & Pump	CONSTRUCTION DATA	(978) 453- 8200	TDOGDEN@ COMCAST. NET	Subcontract or	Water Utilities, Wells	9/15/2016
New		Don Holzwor th	LMV Constrution Svcs	CONSTRUCTION DATA	(781) 340- 7404		Subcontract or	Cast-in-Place Concrete, Concrete Cutting and Boring, Earthwork, Site Clearing, Earth Moving, Earthwo	
New		Kevin Nichols	Building Specialties/ar ch Hardware	CONSTRUCTION DATA	(413) 788- 9686	knichols@b sahinc.com	Supplier	Openings, Doors and Frames, Specialty Doors and Frames, Access Doors and Panels, Coiling Doors and G	9/13/2016
New		Tina Polley	Building Specialties/ar ch Hardware	CONSTRUCTION DATA	(413) 788- 9686	tpolley@bsa hinc.com	Supplier	Openings, Doors and Frames, Specialty Doors and Frames, Access Doors and Panels, Pressure- Resistant	9/13/2016
New		Nabin Bhattari	Riccelli Enterprises		(315) 433-	nabinb@ric cellienterpri		Contaminate d Site	9/13/2016
Report Date	: 9/20/2016 10:50:	01 AM	© 20	16 ConstructConnect	. All Rights	Reserved.			Page 6 of

		Inc		5115	ses.com		Material Removal, Concrete	
New	sal monarc a	fmonarcama sonry	bidclerk	(860) 883- 6161	smonarca@ fmonarcam asonry.com	or	Masonry, Unit Masonry, Stone Assemblies, Refractory Masonry, Corrosion- Resistant Masonry, Manufactur	9/12/2016
New	Dave Perry	Union Fence	CONSTRUCTION DATA	(401) 729- 0011	dave.unionf ence@aol.c om		Temporary Facilities and Controls	9/12/2016
New	Jeffrey Dunn	Manet Contracting	CONSTRUCTION DATA	(617) 777- 7913	MANETCON TRACTINGL LC@YAHOO .COM		Requirements, Summary, Price and Payment Procedures, Administrativ e Requirements,	9/10/2016
New	Tina Larson	Costello Dismantling Co., Inc.	7. iSqFt'	(508) 291- 2324	odismantlin g.com	Subcontract or	Survey and Existing Conditions, Subsurface Investigation, Water-Based Fire- Suppression Systems, Earthwork, Driv	9/9/2016
New	Chris Proctor	MBO Precast	bidclerk	(508) 866- 6900	cproctor@m boprecast.c om	Supplier	Precast Concrete	9/9/2016
New	Yamilett Tejada	Boston Concrete Forms, Inc.	bidclerk	(6178) 748- 3541	bostoncfi@ gmail.com	Subcontract or	General Requirements, Summary, Price and Payment Procedures, Administrativ e Requirements, Survey and	
New	Jean Oliveira	Trust Painting,Inc.	7 iSqFt	(781) 853- 9032	trust.paintin g@hotmail. com	Subcontract or		9/8/2016
New	Kevin Crowley	Comley Excavating Company LIc	CONSTRUCTION DATA	(978) 466- 3804			General Requirements, Summary, Price and Payment Procedures, Administrativ e Requirements, Survey and	
New	Joe Abely	Viewpoint	bidclerk	(508) 904- 3185	jabely@view pointcrm.co m	Other	General Requirements, Summary, Price and Payment Procedures, Administrativ e Requirements, Survey and	9/8/2016
New	Steve Mullan	Turnkey Lumber Corporation	bidclerk	(978) 798- 1370	steve@turnk eylumber.bi z		Wood, Plastics, and Composites, Rough Carpentry	9/8/2016

New	Paul McGow an	Pro Cut Inc	CONSTRUCTION DATA	(781) 899- 0006	pmcgowan @protoolan dsupply.co m	Supplier	Demolition and Structure Moving, Site Remediation, Facility Remediation, Concrete Forming and Access	9/6/2016
New	Ken Gropma n	J-Mac Building Specialties	CONSTRUCTION DATA	(617) 361- 0600	Ken@jmacb uilding.com	Supplier	Concrete, Concrete Forming and Accessories, Concrete Reinforcing, Cast-in-Place Concrete, Concrete P	8/23/2016
New	David Bowlby	Stucco Depot	bidclerk	(203) 430- 9186	stuccodepot .org@gmail. com		Manufactured Masonry, Dampproofin g and Waterproofin g, Exterior Insulation and Finish Systems	8/22/2016
New	Aejoo Park	Haks Engineering	CONSTRUCTION DATA		apark@hak s.net	Architect	General Requirements, Summary, Price and Payment Procedures, Administrativ e Requirements, Survey and	8/17/2016
New	Mike Harn	Bay State Gas Co	CONSTRUCTION DATA	(800) 552- 3047	mharn@nis ource.com	Service Provider	Plumbing, Plumbing Piping and Pumps, Plumbing Equipment, Plumbing Fixtures, Pool and Fountain Plumbi	8/16/2016
New	Ron Jodice	Pds Engineering & Construction	CONSTRUCTION DATA		RONJ@PDS EC.COM	Design / Builder	Special Construction	8/1/2016
New	David Lasky	Major THeatre Equipment Corp.	M Insight	(617) 464- 0444	dlasky@maj ortheatre.co m	Other	Equipment, Theater and Stage Equipment	7/26/2016
New	Andre Dubois	AVD Construction Corp.	7. iSqFt'	(603) 566- 3828	avdconstruc tion@gmail. com	Subcontract or	Concrete, Concrete Reinforcing, Post- Tensioned Concrete, Mass Concrete	7/25/2016
New	ux	Kalwall Corp Kal-lite Div.	Insight	(603)- 627- 3861	dlheureux@ kalwall.com		Openings, Doors and Frames, Specialty Doors and Frames, Access Doors and Panels, Coiling Doors and G	7/25/2016
New	or	New Quality Fence Corp	bidclerk	(978) 589- 9980	@nqfence.c om		Facilities and Controls	7/25/2016
New	Ray	Pittcon		(301)	rhoran@pro	Other	General	7/22/2016

	Horan	Industries	insignt	927-´ 1000	techspec.co m		Requirements, Summary, Price and Payment Procedures, Administrativ e Requirements, Survey and	
New	Joe Chandle r	Net Technologies	CONSTRUCTION DATA		jchandler@ ntisys.com	Service	Telephone Specialties, Fire Protection Specialties, Safety Specialties	7/22/2016

					Specialties
Contracts					
Classification	Conditions	Bonding	Bid Date	Bids To	Bid Type
General Contractor			10/6/2016	Owner	Open Bidding
History					
User	Viewed	First V	iewed Date Cu	rrently Tracked?	Date Tracked
Adam Sweet	True	9/20/20	016 Fal	se	

SECTION 335643.13 ABOVE GROUND FUEL-STORAGE TANK

PERFORMANCE SPECIFICATION

- 1. <u>The Insulated Secondary Containment Aboveground Storage Tank Systems for Flammable and Combustible Liquids, Protected Type: Vehicle Impact Protected, and Projectile Resistant shall be tested to and listed for the following:</u>
 - A. **UL 142**, aboveground steel tanks for flammable and combustible liquids.
 - B. **UL 2085**, two-hour furnace fire test and two hour simulated pool fire test for insulated and protected tanks.
 - C. **UL 2085 and UFC Test Standard (Article 79 or APPENDIX #A-II-F-1),** for both Vehicle Impact Protection and Projectile Resistance.
 - D. **UL 2085**, Protected aboveground tanks for flammable and combustible liquids.
 - E. **UL 2085**, Non-Metallic Secondary Containment protected tanks for flammable and combustible liquids with secondary containment Emergency Venting by "Form of Construction".
 - F. **CAN/ULC S601 (ORD 142.18)**, Standard for shop fabricated steel aboveground horizontal tanks for flammable and combustible liquids.
 - G. CAN/ULC S655 (ORD C 142.16), Standard for protected aboveground tank assemblies for flammable and combustible liquids
 - H. CAN/ULC (ORD C 142.5), Standard for concrete encased aboveground tank assemblies for flammable and combustible liquids.
 - I. **CAN/ULC (ORD C 142.16),** the furnace burn requirements for two hour fire rating.
 - J. CAN/ULC (ORD C 142.25), the open (pool) fire testing for two-hour flammable liquid fire test.
 - K. CAN/ULC (ORD 142.23), for aboveground tanks for used oil.
 - L. The requirement for Uniform Fire Code (UFC) for two-hour (firewall) test.
 - M. **To be tested and certified** by the California Air Resources Board (CARB) for Balanced Phase 1 and Phase 2 Vapor Recovery including methanol and ethanol.
 - N. **High Explosive (HE) Blast Resistance:** The tank system design shall be the subject of a Blast Effects Analysis (BEA) for resistance under the following blast threat load scenarios:

TOWN OF WALPOLE WALPOLE CENTRAL FIRE STATION SCHWARTZ/SILVER ARCHITECTS INC.

- 1. a 50-pound HE man-portable improvised explosive device (MPIED) at the standoff distance of 5 feet:
- a 500-pound HE vehicle-born improvised explosive device (VBIED) at the standoff distance of 20 feet; and
- 3. a vapor cloud explosion (VCE) with a load of 10 psi.

The BEA shall conclude that the tank system shall resist the explosion loads and remain intact, without failure of the primary tank. The engineering consultants performing the BEA shall be a nationally recognized firm with over 10 years experience offering comprehensive services related to blast and impact effects analysis, explosive safety design, vulnerability assessments and threat mitigation.

- 2. The primary steel tank shall be rectangular in shape and have continuous welds on all exterior seams, manufactured in accordance with UL listing requirements and UL Standard 142.
- 3. The primary steel tank shall be pressure tested at 5 psig for 24 to 48 hours.
- 4. The primary steel tanks shall have "emergency vent" system as per NFPA 30 Code requirements.
- 5. The protected and insulated AST systems shall have a thru-tank leak detector tube to allow for physical checkup and monitoring capability between the primary and the secondary containment.
- 6. The primary steel tank shall be pressurized at 5 psig during concrete encasement.
- 7. The outer surface of the primary steel tank shall be covered by a minimum of 1/4" thick (6.4 mm) Styrofoam insulation panels.
- 8. The secondary containment shall consist of a 30 Mil thick (0.76 mm) High-Density Polyethylene membrane enclosing the steel tank and insulation material.
- 9. The primary steel tank and the secondary containment shall be encased in six inches of monolithic reinforced concrete, with minimum design strength of 4,000 and 5,000 psi at 28 days depending on the tank size. The concrete design shall include the following for long-term durability: air entrainment, water reducing admixture, and steel reinforcement. Concrete encasements with seams will not be approved.
- 10. The protected and insulated AST systems shall be of concrete exterior and a continuous and visually verifiable monolithic (seamless) pour on top, bottom, ends, and sides and contain no cold joints or heat sinks (heat transfer points). The AST must be shop fabricated and tested in accordance with the UL listings. Designs that use two layers of steel with insulation material between them will not be approved.
- 11. No steel or insulating material shall come in contact with the concrete or other corrosive material.
- 12. All openings shall be from the top only.
- 13. All exposed metal with the exception of stainless steel must be powder coated to inhibit corrosion.

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- 14. The protected and insulated AST systems shall include a 7 or 15-gallon powder coated or stainless steel, UL listed spill containment, and shall include normally closed valve to release spilled product into the primary steel tank. Spill containment which route the spilled product into interstitial area will not be approved.
- 15. The protected and insulated AST systems shall have a coated concrete exterior to resist weather and reflect sunlight. Models with steel exteriors will not be approved.
- 16. The protected and insulated AST systems shall have a warranty of 30 years for systems 2,000 gallon capacity and larger and 20 years for systems 1,000 gallon capacity and smaller with optional 30-year warranty.
- 17. The protected and insulated AST systems design shall have been in use for a minimum of twenty (20) years. The manufacturer must stipulate no reportable AST containment system failure in 30,000 units produced.
- 18. The protected and insulated AST systems shall have two (2) bolts for connecting grounding conductors for lightning protection in accordance with NFPA 780.