



# Transportation & Public Works Meeting Agenda

August 4, 2022; 5:30 – 6:30 PM  
“Virtual Meeting”

**This meeting will be conducted in-person with remote options for public participation. The meeting will be broadcast on SeaTV Government Access Comcast Channel 21 and live-streamed on the City’s website <https://www.seatacwa.gov/seatvlive> and click play.**

Peter Kwon, Chair  
Takele Gobena  
Jake Simpson, Mayor

**Note: A quorum of the Council may be present**

Other Councilmembers present:

Staff Coordinators: Will Appleton, Public Works Director; Florendo Cabudol, City Engineer.

Other Staff participating:

TIME	TOPIC	PROCESS TYPE	WHO	Time
		Action, Consent Or Presentation		
1	Call to order		Chair	
2	PUBLIC COMMENTS: The committee will hear in-person public comments and is also providing remote oral and written public comment opportunities. All comments shall be respectful in tone and content. Providing written comments and registering for oral comments must be done <b>by 2:00 PM</b> the day of the meeting. Registration is required for remote comments and encouraged for in-person comments. Any requests to speak or provide written public comments which are not submitted following the instructions provided or by the deadline will not be included as part of the record. • Instructions for providing remote oral public comments are located at the following link: <a href="#">Registration for Oral Public Comments</a> - Council		Chair	5

	<p>Committees and Citizen Advisory Committees</p> <p>Submit email/text public comments to TPWPubliccomment@seatacwa.gov. The comment will be mentioned by name and subject and then placed in the committee handout packet posted to the website meeting calendar the next day.</p>			
4	Prior Minutes Approval	July 21 Minutes to approve	Chair	5
5	Utility Box Art Wrap Contract	Discussion/Action	Mason Giem	25
6	Department Updates		Will Appleton	15
7	<p><u>Future Meeting Topics:</u> PSE Power Easement on Sound Transit at S 204<sup>th</sup> Street; Right of Way Uses; Stormwater Code Updates; King County Landfill Fee Restructure;</p>			5
8	Adjourn	Adjourn Meeting	Chair	



# Transportation & Public Works Committee Meeting Minutes

July 21, 2022  
4:30 PM – 6:00 PM  
\*\* Hybrid Meeting \*\*

Members:	Present:	Absent:	Commence: 4:35 PM Adjourn: 5:37 PM
Peter Kwon, Chair	X		
Jake Simpson	X		
Takele Gobena	X		

Other Councilmembers participating:

Staff Coordinators: Will Appleton, Public Works Director; Florendo Cabudol, City Engineer

Other Staff Participating: Gwen Voelpel, Deputy City Manager

Public Comment	No Public Comment was submitted
1. Approve Prior Meeting's Minutes	June 16th minutes were approved
2. Memorial Markers in the Right of Way	<p>Discussion</p> <p>Public Works Director Will Appleton presented the discussion topic of memorial markers in the Right of Way.</p> <p>Staff is bringing the topic forward for discussion due to a recent pedestrian vehicle fatality, and community interest in placing some type of marker near the scene of the accident as a memorial.</p> <p>Staff is asking for a program (if Council is agreeable) that is implementable, consistent, addresses costs and maintenance; considers city funding and whether it benefits the public or places the burden on loved ones who want the memorial to fund.</p> <p>A program used by WSDOT was presented as an example that allows signage that has a safety message (like Don't</p>

Drink and Drive; with a marker In Memory Of beneath it). Costs are born by the requesting party.

Discussion ensued. Topics raised included: City Council considered this topic a few years ago when Council Member Ahmed was killed due to a vehicle accident in the city.

Committee members are favorable toward some type of program, that considers costs, a time limit for the memorial so that they are not there for too many years (maybe 5 years?); consider how many markers can be placed in a particular area at one time.

Concern was raised about too many signs in specific areas where multiple accidents have occurred and what that would say to the traveling public about our safety record. Instead, the Committee member felt identifying dangerous areas and planning imminent improvements was a better way to encourage the public. Projects underway that were noted were improvements being implemented at the areas of highest accidents, such as 2022 Overlays at South 188<sup>th</sup> near the Airport Tunnel where several fatalities have occurred. Also improvements currently being planned at the hair pin turn location, due to ongoing safety concerns. Also, the recently completed Military Road South and South 152<sup>nd</sup> Improvements that include a mid-block enhanced cross walk was noted.

Staff noted that the location of the most recent fatality near S 182<sup>nd</sup> and International Blvd, that an improvement has been made to the pedestrian crossing interval; several streetlights have been repaired that were reported out. The location meets the federal standard for the length of the crosswalk. One more streetlight is waiting for parts to be repaired.

A comment about memorial markers being offered through the Adopt A Street program, whereby loved ones could adopt a street with a free sign stating "In Memory Of." Committee members felt that this was one acceptable idea, but that not all grieving loved ones would want to Adopt a Street to remember their loved one.

A question was asked about how many fatalities have occurred in the city. City Engineer Florendo Cabudol looked up a few statistics for the Committee. Between 2015 and 2018, 136 vehicle/pedestrian collisions were reported, 65% of them along the International Blvd. corridor. These were collisions, not fatalities.

A question was raised about Pedestrian overpasses being installed along International Blvd. The city recently studied this possibility as a part of the International Blvd Safety Study.

	<p>It was concluded that the overpasses were essentially not feasible due to extreme costs and the need to purchase right of way from businesses. One location that might make sense for an ped overpass in the future, is over IB at the Tukwila Light Rail Station..</p> <p>To conclude the discussion at this meeting, Committee asked staff to research the following issues:</p> <p>How may fatalities over the last 10-20 years  What other cities are doing about memorial markers – what went well; what did not  Consider a pilot program to start with  What costs to consider; what cost to pass on to requester  What time limit to post a sign or marker  How may signs or marker in one area  What type of creative design to use for these markers  How do avoid sign fatigue?</p> <p>Staff will research the above items and return at a future T&amp;PW Meeting to bring forward the results.</p> <p>:</p>
<p>3. Public Works Department Update</p>	<p>A short Public Works update was given by Public Works Director Will Appleton.</p> <p>34<sup>th</sup> Ave South project is proceeding nicely. We anticipate substantial completion in November 2022.</p> <p>Lake to Sound Trail construction is underway.</p> <p>Next weekend – 29<sup>th</sup> to 31<sup>st</sup> – International Blvd at South 208<sup>th</sup> will be restored its original configuration, and the curved bypass road will be removed.</p> <p>The SeaTac Scrub down Event went well on the July 9<sup>th</sup>; it was a good community builder. The event is being planned again for next year.</p> <p>WSDOT land acquisition at the Des Moines Creek Park Trailhead has been finalized. Parks Department has selected an architect for the trailhead entrance expansion, and has reached 30% design choices. Please reach out to the Parks Director for further information. Could possibly be a 2023 construction.</p>
<p>5. Adjourn</p>	<p>Adjourn Meeting</p>



# MEMORANDUM

To: Transportation and Public Works Committee  
Through: Will Appleton, Public Works Director  
From: Mason Giem, Public Works Programs Coordinator  
Date: August 4<sup>th</sup>, 2022  
Subject: Awarding Contract for Artistic Wraps at Intersection Controller Boxes

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## **Purpose:**

To request a committee recommendation to approve a contract with Traffic Wrapz to install artistic vinyl wraps at intersection controller boxes and forward to City Council for approval.

## **Background:**

In response to a Council Request Form (CRF) submitted by then Councilmember Fernald, the City piloted art wrap installations on three utility cabinets located outside Taco Bell at the southeast corner of International Boulevard and South 188th Street. The City has received positive feedback and the artwork has remained graffiti-free. Additionally, per a Development Agreement to expand their corporate campus, Alaska Airlines installed art wraps on several utility cabinets along International Boulevard.

In 2021, Council approved and funded a project that will provide art wraps for up to 86 utility cabinets owned by SeaTac citywide. The art wraps can serve as an opportunity to showcase local artists and/or create neighborhood identities. The art wraps could, for example, feature images commemorating World War 1 along Des Moines Memorial Drive and local student's art installed along school streets.

There is a wide variation in the cost of individual art wraps, depending on the quality, installer and how many sides of the cabinet are wrapped. Current funding of \$266,000 is available for the project. Project costs are expected to include payment for original artwork, graffiti proofing material, professional printing, and installation. Costs range is approximately \$109,242 per utility box wrap. There are 33 signalized intersections in SeaTac, each having one or more traffic control cabinets of different sizes for a total of 67 boxes.

The art wrap material specified are rated for anti-graffiti protection, are weather durable, UV protected and chemical resistant. Installation must be done in dry conditions with temperatures in excess of 60 degrees F. The art wraps last between five to ten years, and on average will need to be replaced every seven years.

The project is scheduled to be completed over a two-year period, with an estimated 20 to 30 wraps being completed in 2022 and the balance in 2023. Staff has worked with the City's Arts, Culture and Library Advisory Committee to approve a palate of designs and to engage local artists.

A request for proposals was published and the City received four submissions. An evaluation system was used to determine if the company products would meet expectations. The Traffic Wrapz company was found to meet all of the requirements.

**Options/Recommendation:**

Recommend approval of a contract with Traffic Wrapz to install artistic vinyl wraps at intersection controller boxes and forward to City Council for approval.

Alternately, request that staff submit another Request for Proposals.

**SERVICE CONTRACT BETWEEN  
THE CITY OF SEATAC AND TRAFFIC WRAPZ  
FOR INSTALLATION OF UTILITY CABINET DECORATIVE WRAPS**

THIS CONTRACT is made and entered into by and between the CITY OF SEATAC, a municipal corporation of the State of Washington, hereinafter referred to as the “City”, and Traffic Wrapz, herein after referred to as the “Contractor”, effective when signed by all the Parties. The Parties agree to the following terms and conditions:

1. **EMPLOYMENT.** The City hereby agrees to retain and employ the Contractor, as an independent contractor, and the Contractor hereby agrees to serve the City pursuant to this Contract.
2. **SCOPE OF SERVICES.** The Contractor shall be responsible for the Scope of Work described in **Exhibit A** to this Contract.
3. **TERM.** *See Exhibit A.*
4. **COMPENSATION.** The Contractor shall be paid only for services actually rendered. The City shall pay the Contractor compensation not to exceed the amount of \$109,242.35. See **Exhibit A.**
5. **PROFESSIONAL STANDARDS.** The Contractor shall be responsible for the level of competency presently maintained by other practicing professionals in the same type of work in this community.
6. **RESTRICTION AGAINST ASSIGNMENT.** The Contractor shall not assign this Contract, or any interest herein, nor any money due, or, to become due hereunder, without first obtaining the consent of the City. The Contractor shall not subcontract part of the services to be performed under the terms of this Contract.
7. **CONTINUATION OF PERFORMANCE.** In the event that any dispute or conflict arises between the parties regarding the performance of the Contractor or this Contract while this Contract is in effect, the Contractor agrees that, notwithstanding such dispute or conflict, the Contractor shall continue to make a good faith effort to cooperate and continue work toward successful completion of assigned duties and responsibilities.
8. **TERMINATION OF CONTRACT.** Either the City or the Contractor may terminate the work in the event the other party fails to perform in accordance with the provisions of this Contract. Termination of this Contract is accomplished by either party giving the other party written notice of such termination, specifying the reason for the termination, the extent and effective date thereof, by not sooner than thirty (30) days from date of such notice, providing that the Contractor shall complete and be compensated for any duties previously assigned and accepted.
9. **OWNERSHIP AND USE OF DOCUMENTS.** All documents, reports, memoranda, diagrams, sketches, plans, surveys, design calculations, working drawings and any other materials



created or otherwise prepared by the Contractor as part of its performance of this Agreement (“Work Product”) shall be owned by and become the property of the City, and may be used by the City for any purpose beneficial to the City.

10. **PUBLIC RECORDS.** The Contractor acknowledges that the City is a public agency subject to the Public Records Act codified in Chapter 42.56 of the Revised Code of Washington and documents, notes, emails, and other records prepared or gathered by the Contractor in its performance of this Agreement may be subject to public review and disclosure, even if those records are not produced to or possessed by the City of SeaTac. Contractor agrees to cooperate fully in satisfying the City’s duties and obligations under the Public Records Act.

11. **CONTRACT ADMINISTRATION.** Any written notices required by terms of this Contract shall be served or mailed as follows:

**CITY OF SEATAC:**

City of SeaTac  
Attn.: Mason Giem  
Public Works Programs Coordinator  
4800 South 188th Street  
SeaTac, WA 98188-8605  
Telephone: (206) 973-4763  
E-mail: mgiem@seatacwa.gov

**CONTRACTOR:**

Traffic Wrapz  
Attn.: Daniel Gittere  
Exec. Vice President – Co- Owner  
3608 E. Industrial Way, Suite 3  
515 N. Flagler Drive, West Palm Beach FL  
Telephone: 1-855-559-7279 Ext. 100  
Email: dan@trafficwrapz.com

12. **VENUE AND DISPUTE RESOLUTION.** This Contract shall be construed in accordance with the laws of the State of Washington. It is agreed that King County, Washington shall be the venue for any arbitration or lawsuit arising out of this Contract.

13. **INDEMNIFICATION.** Contractor shall defend, indemnify and hold harmless the City, its officials, officers, directors, employees, volunteers and agents from any and all claims, injuries, damages, losses or suits, including all legal costs and attorney’s fees, arising out of or in connection with the Contractor’s performance of this Agreement, except for injuries and damages caused by the City’s sole negligence.

14. **INSURANCE.** The Contractor shall procure and maintain insurance for the duration of this Agreement. Any Commercial General Liability and Automobile Liability insurance policies obtained shall be underwritten by insurance companies which have an A.M. Best’s rating of A X or better, licensed to do business in the State of Washington. Any insurance, self-insurance, or self-insured pool coverage maintained by the City shall be in excess of the Contractor’s insurance policies and shall not contribute with it.

15. **MERGER AND AMENDMENT.** This Contract contains the entire understanding of the Parties with respect to the matters set forth herein and any prior or contemporaneous understandings are merged herein. This Contract shall not be modified except by written instrument executed by all Parties hereto.

IN WITNESS WHEREOF, the Parties hereto have executed this Contract.

**CITY OF SEATAC:**

**TRAFFIC WRAPZ**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**APPROVED AS TO FORM:**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

## Exhibit A Scope of Work

The Contractor will provide the City with technical expertise, fabrication, and labor associated with installation of decorative art wraps for signal system utility cabinets as described in the Cost Proposal Worksheet. The contractor may also be requested to provide access to artwork if there are not enough submissions from resident artists. The City reserves the right to investigate, as it deems necessary, the financial resources and ability of any company to perform the work or services requested. Information the City deems necessary in order to make a determination shall be provided by the contractors upon request. The work to be undertaken includes:

### **Provide Technical Expertise and Guidance to the City**

Public Works staff; the City's Arts, Culture and Library Advisory Committee (ACLAC) will be responsible for selection of art that will be integrated into the decorative cabinet wraps at locations identified by the City of Seatac. The Contractor's will account for up to two (2) virtual meetings with Public Works staff and ACLAC to provide technical guidance and answer questions as necessary. ACLAC and the City will be soliciting the public for artwork. City staff will be responsible for providing the artwork and locations of installation to the Contractor using the Contractor's specified formatting.

### **Inspect Utility Box Locations for Wrap Installation Suitability**

The City will provide the contractor with a list of utility box locations thought suitable for wrap installation. The Contractor shall perform a pre-installation site visit to verify the exact size and condition of the utility boxes before installation. Images of these locations can be found here:

<https://app.box.com/s/rfkh0pyqrcmr75iy61s3un1xdahxd2b5>

### **Receive Artwork from City and Generate Proofs of Concept**

Upon receiving the art from the City, the Contractor shall generate a digital proof of concept for each decorative vinyl wrap installation that shows how the artwork will be applied to each cabinet for final City approval. The proofs shall show the front and side surfaces of cabinets being wrapped.

### **Provide Artwork for the City to Choose From**

The Contractor shall provide access to artwork that can be selected from for the balance of cabinet wraps not done using qualifying artistic submissions.

### **Fabrication of Vinyl Wraps**

Upon artwork proofs being approved by the City, the Contractor shall be responsible for the fabrication of the decorative cabinet wraps. The cabinet wraps shall be made of vinyl and have UV resistant, anti-graffiti, chemical resistant, and acid-etching resistant properties.

The vinyl wraps shall have a minimum design life of seven (7) years with Contractor providing a minimum two year warranty of workmanship and materials. Contractor shall provide material specifications for the vinyl cabinet wrap to be used. Painting of the signal cabinets shall not be permitted.

### **Cleaning of Boxes Prior to Installation**

Contractor is responsible for cleaning the cabinet prior to installation to ensure proper adhesion.

### **Installation of Vinyl Wraps**

The Contractor shall furnish all labor, materials, and equipment necessary to install the vinyl wraps. This shall include traffic control, if necessary. The Contractor shall submit for and attain a blanket, no fee Right of Way Use Permit for the work. Upon request, a site specific traffic control plan, to be used if needed, shall be included.

### **Timeline**

Contract Signed	8-22-22
Receive Artwork from City and Generate Proofs of Concept	8-23-22 through 9-5-22
Install Wraps first 20 intersections	9-5-22 through 8-17-22
Install remaining wraps	5-1-23 through 9-1-23

## Exhibit B: Cost Worksheet

### CITY OF SEATA ATTACHMENT 1, COST PROPOSAL WORKSHEET

DEPARTMENT OF PUBLIC WORKS

4800 SOUTH 188TH STREET

SEATAC, WA 98188-8605

TrafficWrapz



**CATALOGUE EXISTING UTILITY CABINETS AND PROVIDE TECHNICAL EXPERTISE AND GUIDANCE TO THE CITY**

Cost below shall be inclusive of all tasks outlined in section 6 (scope of work) of the RFP. Photos of the exact boxes to be wrapped can be found through this link; <https://app.box.com/s/rfkh0pyqrcmr75iy61s3un1xdahxd2b5>

<b>Total Project Cost:</b>	\$	109,242.35		
<b>Location</b>				
	<b>Intersection</b>	<b>Cabinet type</b>	<b>Number of Boxes</b>	<b>Location Cost</b>
1	28 AVE S & S 200 ST	TS-2 Type 2	2	\$ 3,158.83
2	INTERNATIONAL BLVD & S 152 ST	Ts2 Type-1	1	\$ 2,791.40
3	INTERNATIONAL BLVD S & S 176 ST	TS-2 Type 1	3	\$ 3,662.38
4	INTERNATIONAL BLVD S & S 182 ST	TS-2 Type 1 Battery Backup	3	\$ 3,598.85
5	INTERNATIONAL BLVD S & S 184 ST	TS-2 Type 1 Battery Backup	3	\$ 3,415.28
6	INTERNATIONAL BLVD S & S 200 ST	TS-2 Type 1 Battery Backup	3	\$ 4,021.83
7	INTERNATIONAL BLVD S & S 204 ST	TS-2 Type 1 Battery Backup	3	\$ 3,534.88
8	INTERNATIONAL BLVD S & S 208 ST	TS-2 Type 1 Battery Backup	3	\$ 3,826.26
9	MILITARY RD S & S 164 ST	TS-2 Type 1	1	\$2,287.66
10	MILITARY RD S & S 170 ST	TS-2 Type 2	2	\$ 3,627.99
11	MILITARY RD S & S 176 ST	TS-2 Type 2	2	\$ 3,469.31
12	26 AVE S & S 200 ST	TS-1	1	\$ 2,358.27
13	Military Rd S & S 152nd	TS-2 Type 2	3	\$ 2,842.00
14	36 AVE S & S 188 ST	TS-1	2	\$ 1,725.50
15	32 AVE S & S 176 ST	TS-1	2	\$ 1,725.54
16	32 AVE S & S 200 ST	TS-1	1	\$ 2,004.31
17	INTERNATIONAL BLVD & S 160 ST	TS-2 Type 1 (Battery Backup)	3	\$ 4,125.39
18	INTERNATIONAL BLVD & S 166 ST	TS-1	3	\$ 3,970.02
19	INTERNATIONAL BLVD & S 170 ST	TS-2 Type 1 (Battery Backup)	3	\$ 3,415.28
20	INTERNATIONAL BLVD S & S 180 ST	TS-1	3	\$ 3,552.09
21	INTERNATIONAL BLVD S & S 195 ST	TS-1	2	\$ 3,047.02
22	MILITARY RD S & S 188 ST	TS-1, Battery Backup Unit	1	\$ 1,941.34
23	24 AVE S & S 128 ST	TS-1	1	\$1,941.34
24	42 AVE S & S 188 ST	TS-2 Type1 Battery Backup Unit	1	\$ 2,319.14
25	46 AVE S & S 188 ST	TS-1	1	\$ 2,624.44
26	MILITARY RD S & S 216 ST	TS2 Type 1	1	\$3,047.02
27	17206 INTERNATIONAL BLVD S	TS-1	3	\$ 3,567.73
28	23 AVE S & S 200 ST	TS-2 "M" (smaller cabinet)	2	\$ 2,083.92
29	24 AVE S & S 154 ST	TS-2 Type 1	2	\$ 3,730.12
30	28 AVE S & S 188 ST	TS-1	2	\$ 3,383.80
31	2900 S 160 ST (CCRF)	TS-2 Type 2	2	\$ 3,576.85
32	MILITARY RD S & S 182 ST	TS-1	2	\$ 4,116.56
	CLEAN BOXES			\$ 3,000.00
	DESIGN			\$ 6,750.00
	MOBILIZATION / SITE INSPECTION / TRAFFIC CONTROL			\$ -
	PROJECT MANAGEMENT			\$ -
<b>Total</b>			<b>67</b>	<b>\$ 109,242.35</b>

**CITY OF SEATAC ATTACHMENT 1, COST PROPOSAL WORKSHEET**

DEPARTMENT OF PUBLIC WORKS

4800 SOUTH 163TH STREET

SEATAC, WA 98188-8605

TrafficWrapz

CATALOGUE EXISTING UTILITY CABINETS AND PROVIDE TECHNICAL EXPERTISE AND GUIDANCE TO THE CITY

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		DESIGN			\$ 6,790.00
		MOBILIZATION / SITE INSPECTION / TRAFFIC CONTROL			\$ -
		PROJECT MANAGEMENT			\$ -
<b>Total</b>				<b>67</b>	<b>\$ 109,242.35</b>

# TRAFFICWRAPZ PROPOSAL

7.14.2  
City Of SeaTac  
PFP Proposa





## City Beautification Meant To Last

We partner with cities, companies large and small, across North America to bring their ideas to life.

Our products are Caltrans Certified (NPE 16-03-009) and OEM product with many cabinet manufactures.

Wrapping structures such as Traffic and Utility Cabinets with vinyl, car / sign making wrap material or any film with a translucent protective film including our proprietary systems are protected by TrafficWrapz's US Patent US 10,093,076. Patent is attached

 515 North Flagler Drive Suite P300  
West Palm Beach, Florida 33401

 253.655.2383  
855.55.WRAPZ (Toll Free)

 [www.trafficwrapz.com](http://www.trafficwrapz.com)



# MEET TRAFFICWRAPZ

We use our experience, creativity, advanced technology, and attention to detail to focus exclusively on city beautification. We are a city beautification company that engineers products to beautify and protect city equipment and objects. We are endorsed by the largest traffic and utility companies in the nation for our quality, safety standards, longevity of product and the guarantee that our materials and process will not infringe on your equipment's operation.

From a small to large project, we manage everything within our organization. Our staff includes project specialists, designers, production specialists, artist implementation specialists and logistics specialists. This insures our high quality standards from concept to execution are met.



**Daniel Gittere**  
Executive Vice President



**Dayton Watts**  
Production Specialist



**Sara Segall**  
Project Specialist/Designer



**Libadiel Plazas**  
Artist Implementation Specialist

**Herb Kiekenapp**  
Global Sales Director

**Aaron**  
Artist Implementation Specialist

Herb Kiekenapp will be personally managing your project.  
Feel free to contact Herb at:  
1.855.55WRAPZ Ext 201  
Herb@trafficwrapz.com

# WHY TRAFFICWRAPZ

The idea of beautifying an object with any printed vinyl with a clear coating or the application of a graffiti proof/easy to clean durable product was founded by our team, and is patented protected (#10,093,076).

## THE FILM

We created the only true conformable graffiti and chemical resistant film in the world. Our team has exclusive partnerships with DuPont™ and co-developed this technology. Our technology and application is the only product that has been tested and listed for use on traffic and utility cabinets in the world.

### Protect your masterpieces from:

- Acid Etching
- Epoxy Paint
- Markers
- UV/Fading
- Dirt
- Environmental contaminants
- Chemicals
- Stickers/Adhesives

## WHAT TO EXPECT

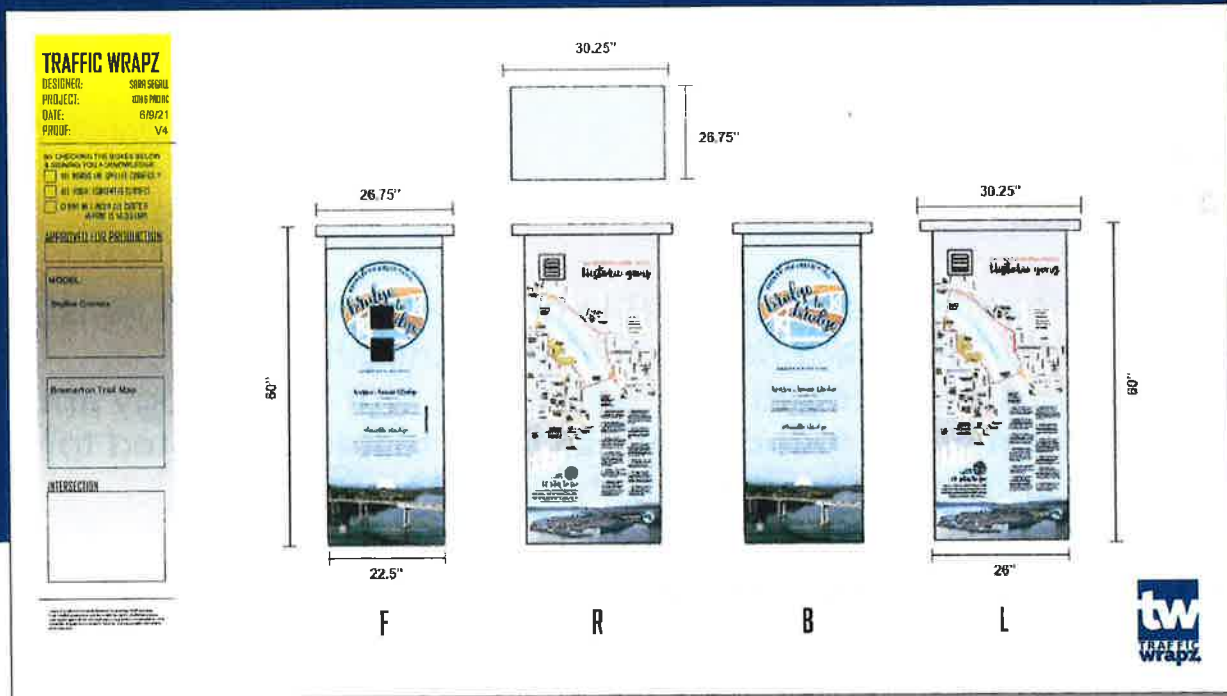
Professional project management, experienced designers, high-resolution printing, a dedicated and trained team. Installation is completed by TrafficWrapz certified installers.

We provide all technical specifications and warranties in writing and are certified to touch and wrap electrical equipment by manufacturers.



# PROOFING

Many times it is hard to visualize the final product, so we use proofs to show how the cabinets will look before we install the product. Below is an example of what we send our clients.



## EXAMPLES OF PROJECTS

Small or large, customized or creative, our team is ready. TrafficWrapz ONLY focuses on and does beautification projects on traffic cabinets and electrical fixtures.



# SPECIFICATIONS

## COVERAGE

- Cabinet will be covered on all 4 sides, including door lips, door frames, and doors. There is also an option to include the top of the cabinet.
- Door access to cabinets is not required, but does allow us to do a better coverage on the door opening edges.
- Will be cut/designed/installed to the specific cabinet type (NEMA, M Series, Etc.)

## MATERIAL

- Certified high definition/high quality graphic base material (Specific material may vary upon application)
- Certified TW 360hd exclusive protective finish with Anti-graffiti, graffiti proof & chemical resistant films.
- Multi layered exclusive film, with enhanced features protecting your investment such as:
  - UV Protected/fade resistant, 5-7 year rated protective coating
  - Acid rain/environmental toxin resistant
  - Will not degrade in ocean/high salt level communities
  - Rated for anti-graffiti protection
  - Rated/tested to use typical cabinet cleaners & natural cleaners
  - High Definition graphics/art reproduction
  - Material/process reviewed by major cabinet manufacturer
  - Everyday scratch resistant (not above normal wear and tear)

# FAQ's

Just because a company wrapped an object, does not mean they are qualified to wrap a sophisticated piece of city infrastructure. Ask for references and photos. Focus on seams, corners and rivets. Everything looks good from a distance; many cities do not take a closer look.

## Is there a warranty?

There is a 2 year warranty on workmanship, 7 years fade and UV protectant. Although our materials are built to last (Up to 2X vinyl decal), certain exclusions apply. Please refer to product information sheet for detailed information.

Our technology has a life expectancy of 7-10 years

## What makes TrafficWrapz different?

Our products are not typical vinyl material or claimed graffiti-proof products found at sign manufacturers and wrap shops. Normal vinyl degrades faster when exposed to sun and typical UV protective laminates may fail in this type of application. Our exclusive protective film TW 360hd are true anti-graffiti / graffiti proof and chemical resistant films and will not be damaged when your city uses typical cleaning products on it. You can even use our own Soy based biodegradable natural cleaner.

## Watch out for non-specified TrafficWrapz solutions:



Rivet  
Issues



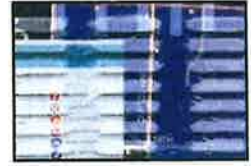
Lack of  
Coverage



Bad  
Installations



Pixelated  
Graphics



Graphics  
Failing

# OUR PROPOSAL

Our proposal includes design time, accesses to our image catalog, project management, our exclusive product, cleaning preparation and installation with no hidden charges.

Quote Based on applications of 20 intersections in 2022 and 12 intersections in 2023. Installations of Art to occur with at least 5 intersections at a time.

Location	Model	IN INCHES			Main Structure		Top of Structure		Art / Setup	Site Visit	Total
		H	W	D	Film	Install & Prep	Film	Install & Prep			
Location 10 Military & S 170th St	TS-2 Type 2	66	44	26	\$1,284.94	\$792.99	\$133.47	\$76.27	\$ 100.00		\$2,387.66
Location 10 Military & S 170th St	Service	67	26	16	\$781.67	\$482.40	\$48.53	\$27.73	\$ 100.00		\$1,440.33
Location 3 International Blvd S & S 176th St	TS-2 Type 1	39	24	20	\$472.06	\$291.33	\$56.00	\$32.00	\$ 100.00		\$951.39
Location 3 International Blvd S & S 176th St	TS-2 Type 1	48	21	14	\$465.50	\$287.28	\$34.30	\$19.60	\$ 100.00		\$906.68
Location 3 International Blvd S & S 176th St	TS-2 Type 2	57	44	26	\$1,109.72	\$684.86	\$133.47	\$76.27	\$ 100.00		\$2,104.31
Location 12 26th Ave S & S 200th St (1)	TS-1	66	44	28	\$1,318.63	\$813.78	\$143.73	\$82.13	\$ 100.00		\$2,458.27
Location 1 28th Ave S & S 200th St	TS-2 Type 2	55	44	26	\$1,070.78	\$660.83	\$133.47	\$76.27	\$ 100.00		\$2,041.34
Location 1 28th Ave S & S 200th St	TS-2 Type 2	64	24	16	\$709.33	\$437.76	\$44.80	\$25.60	\$ 100.00		\$1,317.49
Location 2 International Blvd S & S 152nd St	TS-2 Type-1	82	44	26	\$1,596.44	\$985.23	\$133.47	\$76.27	\$ 100.00		\$2,891.40
Location 4 International Blvd S & S 182nd St	P Cabinet	55	44	28	\$1,098.85	\$678.15	\$143.73	\$82.13	\$ 100.00		\$2,102.87
Location 4 International Blvd S & S 182nd St	Attached	46	20	11	\$397.47	\$245.30	\$25.67	\$14.67	\$ 50.00		\$733.10
Location 4 International Blvd S & S 182nd St	TS-2 Type 1 Battery	39	24	23	\$501.92	\$309.76	\$64.40	\$36.80	\$ 100.00		\$1,012.88
Location 5 International Blvd S & S 184th St	P Cabinet	56	44	26	\$1,090.25	\$672.84	\$133.47	\$76.27	\$ 100.00		\$2,072.82
Location 5 International Blvd S & S 184th St	TS-2 Type 1 Battery	46	20	11	\$397.47	\$245.30	\$25.67	\$14.67	\$ 100.00		\$783.10
Location 5 International Blvd S & S 184th St	TS-2 Type 1 Battery	48	21	12	\$441.00	\$272.16	\$29.40	\$16.80	\$ 100.00		\$859.36
Location 6 International Blvd S & S 200th St	P Cabinet	67	44	28	\$1,338.60	\$826.11	\$143.73	\$82.13	\$ 100.00		\$2,490.58
Location 6 International Blvd S & S 200th St	TS-2 Type 1 Battery	48	21	12	\$441.00	\$272.16	\$29.40	\$16.80	\$ 100.00		\$859.36
Location 6 International Blvd S & S 200th St	TS-2 Type 1 Battery	39	24	21	\$482.02	\$297.47	\$58.80	\$33.60	\$ 100.00		\$971.89
Location 7 International Blvd S & S 204th St	P Cabinet	57	44	26	\$1,109.72	\$684.86	\$133.47	\$76.27	\$ 100.00		\$2,104.31
Location 7 International Blvd S & S 204th St	TS-2 Type 1 Battery	46	11	20	\$382.38	\$235.98	\$25.67	\$14.67	\$ 100.00		\$758.69
Location 7 International Blvd S & S 204th St	TS-2 Type 1 Battery	39	24	21	\$482.02	\$297.47	\$58.80	\$33.60	\$ 100.00		\$971.89
Location 8 International Blvd S & S 208th St	P Cabinet	55	44	26	\$1,070.78	\$660.83	\$133.47	\$76.27	\$ 100.00		\$2,041.34
Location 8 International Blvd S & S 208th St	TS-2 Type 1 Battery	56	21	17	\$585.96	\$361.62	\$41.65	\$23.80	\$ 100.00		\$1,113.03
Location 8 International Blvd S & S 208th St	TS-2 Type 1 Battery	39	24	21	\$482.02	\$297.47	\$58.80	\$33.60	\$ 100.00		\$971.89
Location 9 Military Rd S & S 164th St	TS-2 Type 1	66	44	26	\$1,284.94	\$792.99	\$133.47	\$76.27	\$ 100.00		\$2,387.66
Location 11 Military Rd S & S 176th St	TS-2 Type 2	66	44	26	\$1,284.94	\$792.99	\$133.47	\$76.27	\$ 100.00		\$2,387.66
Location 11 Military Rd S & S 176th St	Service	62	24	16	\$687.17	\$424.08	\$44.80	\$25.60	\$ 100.00		\$1,281.65
Location 13 Military Rd & S 152nd St	TS-1	44	44	26	\$856.63	\$528.66	\$133.47	\$76.27	\$ 100.00		\$1,695.02
Location 13 Military Rd & S 152nd St	Service	63	20	22	\$721.22	\$445.10	\$51.33	\$29.33	\$ 100.00		\$1,346.98
Location 14 36th Ave S & S 188th St	TS-1	55	21	14	\$533.39	\$329.18	\$34.30	\$19.60	\$ 100.00		\$1,016.46
Location 14 36th Ave S & S 188th St	Service	48	23	12	\$469.00	\$289.44	\$32.20	\$18.40	\$ 100.00		\$909.04
Location 15 32nd Ave S & S 176th St (1)	TS-1	55	44	26	\$1,070.78	\$660.83	\$133.47	\$76.27	\$ 100.00		\$2,041.34
Location 15 32nd Ave S & S 176th St (1)	Service	48	22	12	\$455.00	\$280.80	\$30.80	\$17.60	\$ 100.00		\$884.20
Location 16 32nd Ave S & S 200th St	TS-1	57	44	26	\$1,109.72	\$684.86	\$133.47	\$76.27	\$ 100.00		\$2,104.31
Location 17 International Blvd S & S 160th St	P Cabinet	67	44	26	\$1,304.41	\$805.01	\$133.47	\$76.27	\$ 100.00		\$2,419.14
Location 17 International Blvd S & S 160th St	Attached	46	20	10	\$385.73	\$238.05	\$23.33	\$13.33	\$ 50.00		\$710.45
Location 17 International Blvd S & S 160th St	TS-2 Type 1 (Battery)	60	24	16	\$665.00	\$410.40	\$44.80	\$25.60	\$ 100.00		\$1,245.80
Location 18 International Blvd S & S 166th St	TS-1	56	44	26	\$1,090.25	\$672.84	\$133.47	\$76.27	\$ 100.00		\$2,072.82
Location 18 International Blvd S & S 166th St	Service #1	60	24	16	\$665.00	\$410.40	\$44.80	\$25.60	\$ 100.00		\$1,245.80
Location 18 International Blvd S & S 166th St	Service #2	39	24	20	\$472.06	\$291.33	\$56.00	\$32.00	\$ 100.00		\$951.39
Location 19 International Blvd S & S 170th St	P Cabinet	56	44	26	\$1,090.25	\$672.84	\$133.47	\$76.27	\$ 100.00		\$2,072.82
Location 19 International Blvd S & S 170th St	TS-2 Type 1 (Battery)	46	20	11	\$397.47	\$245.30	\$25.67	\$14.67	\$ 100.00		\$783.10
Location 19 International Blvd S & S 170th St	TS-2 Type 1 (Battery)	48	21	12	\$441.00	\$272.16	\$29.40	\$16.80	\$ 100.00		\$859.36
Location 20 International Blvd S & S 180th St	P Cabinet	55	44	26	\$1,070.78	\$660.83	\$133.47	\$76.27	\$ 100.00		\$2,041.34
Location 20 International Blvd S & S 180th St	TS-2 Type 1 (Battery)	48	21	12	\$441.00	\$272.16	\$29.40	\$16.80	\$ 100.00		\$859.36
Location 20 International Blvd S & S 180th St	TS-2 Type 1 (Battery)	39	24	20	\$472.06	\$291.33	\$56.00	\$32.00	\$ 100.00		\$951.39
Location 21 International Blvd S & S 195th St	P Cabinet	66	44	26	\$1,284.94	\$792.99	\$133.47	\$76.27	\$ 100.00		\$2,387.66
Location 21 International Blvd S & S 195th St	TS-1	48	21	12	\$441.00	\$272.16	\$29.40	\$16.80	\$ 100.00		\$859.36
Location 22 Military Rd S & S 188th St	TS-1, Battery Back	55	44	26	\$1,070.78	\$660.83	\$133.47	\$76.27	\$ 100.00		\$2,041.34
Location 23 24th Ave S & S 128th St	P Cabinet	55	44	26	\$1,070.78	\$660.83	\$133.47	\$76.27	\$ 100.00		\$2,041.34
Location 24 42nd Ave S & S 188th St	TS-2 Type1 Battery	67	44	26	\$1,304.41	\$805.01	\$133.47	\$76.27	\$ 100.00		\$2,419.14
Location 25 46th Ave S & S 188th St	TS-1	55	44	26	\$1,070.78	\$660.83	\$133.47	\$76.27	\$ 100.00		\$2,041.34
Location 25 46th Ave S & S 188th St	Attached	46	20	11	\$397.47	\$245.30	\$25.67	\$14.67	\$ 50.00		\$733.10

Location 26 Military Rd S & S 216th St	TS2 Type 1	66	44	25	\$1,284.94	\$792.99	\$133.47	\$76.27	\$ 100.00		\$2,387.66
Location 26 Military Rd S & S 216th St	Attached	48	21	12	\$441.00	\$272.16	\$29.40	\$16.80	\$ 50.00		\$809.36
Location 27 17206 International Blvd S	P Cabinet	55	44	26	\$1,070.78	\$660.83	\$133.47	\$76.27	\$ 100.00		\$2,041.34
Location 27 17206 International Blvd S	TS-1	39	20	24	\$466.38	\$287.82	\$56.00	\$32.00	\$ 100.00		\$942.20
Location 27 17206 International Blvd S	TS-1	48	22	12	\$455.00	\$280.80	\$30.80	\$17.60	\$ 100.00		\$884.20
Location 28 23rd Ave S & S 200th St	P Cabinet	50	24	12	\$503.13	\$310.50	\$33.60	\$19.20	\$ 100.00		\$966.43
Location 28 23rd Ave S & S 200th St	TS-2 "M" (smaller	64	24	16	\$709.33	\$437.76	\$44.80	\$25.60	\$ 100.00		\$1,317.49
Location 29 24th Ave S & S 154th St	P Cabinet	66	44	26	\$1,284.94	\$792.99	\$133.47	\$76.27	\$ 100.00		\$2,387.66
Location 29 24th Ave S & S 154th St	Attached	46	20	11	\$397.47	\$245.30	\$25.67	\$14.67	\$ 50.00		\$733.10
Location 29 24th Ave S & S 154th St	TS-2 Type 1	48	21	12	\$441.00	\$272.16	\$29.40	\$16.80	\$ 100.00		\$859.36
Location 30 28th Ave S & S 188th St	P Cabinet	55	44	26	\$1,070.78	\$660.83	\$133.47	\$76.27	\$ 100.00		\$2,041.34
Location 30 28th Ave S & S 188th St	Attached	46	20	11	\$397.47	\$245.30	\$25.67	\$14.67	\$ 50.00		\$733.10
Location 30 28th Ave S & S 188th St	TS-2 Type 1	48	21	12	\$441.00	\$272.16	\$29.40	\$16.80	\$ 100.00		\$859.36
Location 31 2900 S 160th St	P Cabinet	66	44	26	\$1,284.94	\$792.99	\$133.47	\$76.27	\$ 100.00		\$2,387.66
Location 31 2900 S 160th St	TS-2 Type 2	68	24	16	\$753.67	\$465.12	\$44.80	\$25.60	\$ 100.00		\$1,389.19
Location 32 Military Rd S & S 182nd St	P Cabinet	66	44	26	\$1,284.94	\$792.99	\$133.47	\$76.27	\$ 100.00		\$2,387.66
Location 32 Military Rd S & S 182nd St	Attached	46	20	11	\$397.47	\$245.30	\$25.67	\$14.67	\$ 50.00		\$733.10
Location 32 Military Rd S & S 182nd St	TS-1	60	24	16	\$665.00	\$410.40	\$44.80	\$25.60	\$ 100.00		\$1,245.80
<b>Other Charges</b>											
	Prevailing wage administration				None requested						
	Sales Tax				Will be added to final bill						
	Project Management Cost				None additional						
	Clean Boxes										\$3,000.00
	Design				Included Above						
<b>TOTAL</b>											<b>\$109,242.35</b>

Total **\$109,242.35**

**Total cost: \$109,242.35**

## TERMS

50% Upon Project start, 50% upon project complete

## PROPOSAL DOES NOT INCLUDE

Permits & local licenses

## PROPOSAL APPROVAL

A signature and approval is required to proceed.

Estimate Approval: _____ <div style="display: flex; justify-content: space-around; width: 100%;"> <span>Signature</span> <span>Date</span> </div> Print Name: _____ <div style="text-align: center; font-size: small;">Fax back to: 561-282-6075</div>
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## REFERENCES

**Jessie Kotarski**

**Economic Development Manager  
City of Renton Washington  
(425) 430-7271  
jkotarski@rentonwa.gov**

**Amy Dukes**

**Arts Program Administrator  
Issaquah Washington  
425.837.3024  
amyd@issaquahwa.gov**

**Claradell Shedd**

**Sammamish Arts Commissioner  
Sammamish, WA  
shedd@hshedd.com  
(425) 868-0260**

**Additional are available upon request**



## RFP Information

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Project Name: SeaTac Utility Cabinet Decorative Wraps  
Issue Date: July, 1st, 2022  
Closing Date: July 15th, 2022

## Contact

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Name: Mason Giem  
Phone: 206-730-2623  
Email: mgiem@seatacwa.gov

## Contractor Information

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Company Name: Traffic Wrapz  
Contact Name: Daniel Githere  
Address: 515 N Flayer Drive P300  
City: WEST Palm Beach State: FL Zip Code: 33401  
Phone: 561-228-1611 Fax: 561-228-1611  
Email: dan@trafficwrapz.com

## Return Proposals by 4:00 pm, July 15th 2022 to:

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City of SeaTac  
"RFP FOR SEATAC UTILITY CABINET DECORATIVE WRAPS"  
[seatacart@seatacwa.gov](mailto:seatacart@seatacwa.gov)

### 1.0 DESCRIPTION OF PROJECT

The City of SeaTac Public Works Department is seeking to install decorative vinyl wraps at 32 intersections throughout the City with at least 20 being done in 2022 and the remainder installed in 2023. Some locations have multiple utility boxes and some only contain one box. Contractor will evaluate

locations for wrap installation suitability and size, perform installation of wraps and provide artwork to choose from upon request. Pictures of the boxes to be wrapped can be found here:

<https://app.box.com/s/rfkh0pyqrcmr75iy61s3un1xdahxd2b5>

## 2.0 PROJECT BACKGROUND

There are 32 signalized intersections within City limits that have unwrapped utility cabinets. These utility cabinets house components critical to the operation of the traffic signals at each intersection and are prone to graffiti and tagging with spray paint. In 2021, City Council approved a project to provide art wraps for the City owned utility cabinets located within signalized intersections. The art wraps will serve to showcase local artists, create neighborhood identities, and act to deter tagging/graffiti. The City is aiming to install decorative wraps for utility cabinets at 20 intersections in summer 2022 and the remaining 12 intersections in summer 2023. However, a more aggressive schedule will be considered provided quality and safety are not compromised.

## 3.0 SUBMITTAL INSTRUCTIONS

All materials shall become a part of the proposal and may be incorporated in a subsequent contract between the Contractor and the City of SeaTac. Please submit one (1) digital copy of the proposal in PDF format via email to: [seatacarts@seatacwa.gov](mailto:seatacarts@seatacwa.gov)

Proposals received later than July 15th will not be considered.

Email subject line shall read: "RFP FOR SEATAC UTILITY CABINET DECORATIVE WRAPS".

Proposals shall contain all information as required under **Section 6.0**.

Submittals received after the posted deadline will not be considered for selection. No faxed, hard-copy or telephone submittals will be accepted. It is the intent of the City to select a single company to perform all services outlined in this RFP.

All documents, including proposals, submitted to the City become the property of the City. They will be received and are subject to the provisions of the Public Records Law.

The City of SeaTac shall not be responsible for proposal preparation costs, nor for costs including attorney fees associated with any (administrative, judicial or otherwise) challenge of award of contract and/or rejection of proposal. By submitting a proposal, each proposer agrees to be bound in this respect and waives all claims to such costs and fees.

## 4.0 RFP QUESTIONS AND CLARIFICATIONS

Questions shall be submitted to the City of SeaTac Public Works Department by email to [seatacarts@seatacwa.gov](mailto:seatacarts@seatacwa.gov) no later than the date and time referred in the timeline in Section 7.0 of this RFP. Please reference the RFP in the subject line of the email when submitting questions.

- A. Oral questions will not be received or answered. Questions must be in written form and submitted by email. An addendum to this RFP may be issued by the SeaTac Public Works Department as a result of questions generated under this RFP.
- B. A Silent Period is established between the time the City receives the RFP and the time the City recommend award of the RFP. The Silent Period includes the issuance, submittal receipt, and evaluation of the RFP. All proposers, consultants, or individuals acting on their behalf are hereby prohibited from contacting or lobbying any City employee, official, or representative regarding this RFP during the Silent Period other than the [seatacarts@seatacwa.gov](mailto:seatacarts@seatacwa.gov) email. All communications



regarding this RFP shall be directed to the email defined above. Failure to observe the Silent Period may disqualify the proposer and/or delay or void the RFP.

Any individual or firm failing to submit information in accordance with the procedures set forth in this RFP may be subject to disqualification. The City reserves the right to change the solicitation schedule or issue amendments to the solicitation at any time. The City reserves the right, at its sole discretion, to waive immaterial irregularities contained in this RFP. The City reserves the right to reject any and all proposals at any time, without penalty. The City reserves the right to refrain from contracting with any individual or firm. Individuals or firms eliminated from further consideration will be notified via email by the City as soon as practicable. The final decision is made at the sole discretion of the City of SeaTac, and the proposers to this formal request have no appeal rights or procedures guaranteed to them.

## **5.0 GENERAL INFORMATION**

Incorporated in February 1990, the City of SeaTac is located in the Pacific Northwest, approximately midway between the cities of Seattle and Tacoma in the State of Washington. The City has a population of 29,890 with a dramatic daily increase to 171,380 through employment, airport users and hotel guests. SeaTac is a vibrant community, economically strong, environmentally sensitive, and people-oriented. The City boundaries surround the Seattle-Tacoma International Airport, (approximately 3 square miles in area) which is owned and operated by the Port of Seattle.

## **6.0 REQUIREMENTS**

The Contractor must possess at least 5-years demonstrated experience in fabrication and installation of decorative cabinet wraps. The Contractor must possess the expertise essential to complete the project and perform the full range of services required for this scope of work. The successful contractor will be required to have a City of SeaTac business license prior to starting work. The Contractor shall submit a proposal that includes the following:

- A. Completed Cost Proposal Worksheet. Attachment 1.
- B. Project Team: Identify the proposed project manager and key project team members and their responsibilities.
- C. References: Provide the name and contact information for at least three (3) references (municipalities preferred) from whom the contractor has performed similar work.
- D. Format required by contractor for artwork submitted for use on vinyl wraps.

## **7.0 SCOPE OF WORK**

The Contractor will provide the City with technical expertise, fabrication, and labor associated with installation of decorative art wraps for signal system utility cabinets as described in the Cost Proposal Worksheet. The contractor may also be requested to provide access to artwork if there are not enough submissions from resident artists. The City reserves the right to investigate, as it deems necessary, the financial resources and ability of any company to perform the work or services requested. Information the City deems necessary in order to make a determination shall be provided by the contractors upon request. The work to be undertaken includes:

### **7.1 Provide Technical Expertise and Guidance to the City**

Public Works staff; the City's Arts, Culture and Library Advisory Committee (ACLAC) will be responsible for selection of art that will be integrated into the decorative cabinet wraps at locations identified by the City of Seatac. The Contractor's proposal shall account for up to two (2) virtual meetings with Public Works staff and ACLAC to provide technical guidance and answer questions as necessary. ACLAC and

the City will be soliciting the public for artwork. City staff will be responsible for providing the artwork and locations of installation to the Contractor using the Contractor's specified formatting.

**7.2 Inspect Utility Box Locations for Wrap Installation Suitability**

The City will provide the contractor with a list of utility box locations thought suitable for wrap installation. The Contractor shall perform a pre-installation site visit to verify the exact size and condition of the utility boxes before installation. Images of these locations can be found here:  
<https://app.box.com/s/rfkh0pyqrcmr75iy61s3un1xdahxd2b5>

**7.3 Receive Artwork from City and Generate Proofs of Concept**

Upon receiving the art from the City, the Contractor shall generate a digital proof of concept for each decorative vinyl wrap installation that shows how the artwork will be applied to each cabinet for final City approval. The proofs shall show the front, top, and side surfaces of cabinets being wrapped.

**7.4 Provide Artwork for the City to Choose From**

The Contractor shall provide access to artwork that can be selected from for the balance of cabinet wraps not done using qualifying artistic submissions.

**7.5 Fabrication of Vinyl Wraps**

Upon artwork proofs being approved by the City, the Contractor shall be responsible for the fabrication of the decorative cabinet wraps. The cabinet wraps shall be made of vinyl and have UV resistant, anti-graffiti, chemical resistant, and acid-etching resistant properties.

The vinyl wraps shall have a minimum design life of seven (7) years with Contractor providing a minimum two year warranty of workmanship and materials. Contractor shall provide material specifications for the vinyl cabinet wrap to be used. Painting of the signal cabinets shall not be permitted.

**7.6 Cleaning of Boxes Prior to Installation**

Contractor is responsible for cleaning the cabinet prior to installation to ensure proper adhesion.

**7.7 Installation of Vinyl Wraps**

The Contractor shall furnish all labor, materials, and equipment necessary to install the vinyl wraps. This shall include traffic control, if necessary. The Contractor shall submit for and attain a blanket, no fee Right of Way Use Permit for the work. Upon request, a site specific traffic control plan, to be used if needed, shall be included.

**8.0 TIMELINE**

RFP Issued	July 1st, 2022
Proposals Due	July 15th, 2022 (by 4:00pm local time)
Interviews	July 20th, 2022
Selection Notification	July 31st, 2022
Execution of Contract	August 30th, 2022

## 9.0 EVALUATION CRITERIA

The Cost Proposal Worksheet in conjunction with references shall be the primary basis for Contractor selection. The City reserves the right to reject any or all proposals if determined to be in the best interest of the City.

## 10.0 ADDENDA

If at any time the City changes, revises, deletes, clarifies, increases, or otherwise modifies the RFP, the City will issue a written addendum to the RFP and post on the City website. It is the Proposer's responsibility to check for addenda and other new documents online.

## 11.0 CONTRACTOR SELECTION AND AWARD

The City of SeaTac, in accordance with Washington State law, is bound to award the contract to the "lowest responsible bidder." In determining the lowest responsible bidder, the City is given discretion. Acceptable reasons for determinations of responsibility include the skill of the bidder involved, whether the bidder possess the financial ability and necessary labor and equipment to complete the contract, the general integrity, trustworthiness and promptness of the bidder, and any other particular reasons which a normal business would consider in determining whether an individual bidder is capable of completing the contract in the most satisfactory manner at the least cost to the City.

Upon selection of the lowest responsible bidder, the City will negotiate the terms of the agreement with such bidder. Upon successful completion of negotiations, a contract will be presented to the City Council for approval. If approval is not granted, the contract shall be void and neither party shall have any further obligations or liabilities hereunder. The City reserves the right not to negotiate a contract as a result of this RFP. A failure to award a contract will not result in a cause of action against the City. In other words, the RFP does not obligate the City to contract for services described herein.

## 12.0 INSURANCE REQUIRED

Any contract resulting from this RFP will require that the Contractor indemnify and save harmless the City, its employees and agents from and against all claims, demands, losses, damages, costs and expenses made against or incurred, suffered or sustained by the City at any time either before or after the expiration of the contract, where the same or any of them are based upon or arise out of or from anything done or omitted to be done by the contractor, or its servant, employee, officer, director or sub-contractor pursuant to the contract excepting always liability arising out of the independent act of the City.

Any contract resulting from this RFP may require the contractor, without limiting its obligations or liabilities, and at its own expense, provide and maintain through the contract terms, the following insurances with insurers licensed in the State of Washington in forms acceptable to the City. The contractor will provide the City with evidence of the required insurance naming the City as additional insured:

**COMMERCIAL GENERAL LIABILITY**-Comprehensive Form  
\$1,000,000 per occurrence liability /\$2,000,000 annual aggregate.  
Coverage to include Premise and Operations Liability  
Blanket Contractual  
OCP for subcontractor's liability  
Product and Completed Operations Liability  
Stop Gap Liability-\$1,000,000/\$1,000,000/\$1,000,000  
Primary-Non Contributory Additional Insured coverage for the City et.al.

AUTOMOBILE LIABILITY

\$1,000,000 per accident bodily injury and property damage liability, including any owned, hired or on-owned automobile.

WORKER'S COMPENSATION

Employees of Contractor and Subcontractors are to be insured under Washington State Industrial Insurance.

The General Aggregate provision of the Contractor's insurance policies shall be amended to show that the General Aggregate Limit of the policies applies separately to this contract.

**13.0 BID PROPOSAL DEPOSIT**

All bid proposals shall be accompanied by a bid proposal deposit in cash, certified check, cashier's check, or surety bond in an amount equal to five percent (5%) of the amount of such bid proposal. Should the successful bidder fail to enter into a contract and furnish satisfactory contract bond within the time stated in the specifications, the bid proposal deposit shall be forfeited to the City of SeaTac, Public Works Department. Nonconformance with the submittal of bid security will result in rejection of the bid. If a bidder is permitted to withdraw a bid before award, its bid security shall be returned.

**14.0 NONCOLLUSION AFFIDAVIT**

Each bidder may be required to warrant that their bid is genuine and that they have not entered into collusion with other bidders, by submitting with their bid an executed and notarized affidavit prior to contract award.

**15.0 TITLE VI STATEMENT**

The City of SeaTac, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this RFP, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this RFP and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

**16.0 AMERICAN WITH DISABILITY ACT (ADA) INFORMATION**

The City is committed to meeting the requirement of the American with Disabilities Act (ADA). To access this documentation in other formats please contact: Mason Gierm, Public Works Programs Coordinator at [seatacarts@seatacwa.gov](mailto:seatacarts@seatacwa.gov)

**Date of publication:**

First Publication: Seattle Times [13 days prior to the last date upon which bids will be received]

Second Publication: Seattle Times [7 days prior to the last date upon which bids will be received]

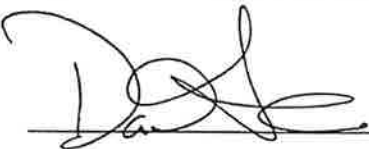
**REQUIRED SIGNATURE PAGE FOR PROPOSAL**

I, the undersigned, having carefully examined the Request for Proposals, propose to furnish services in accordance therewith as set forth in the attached proposal.

I further agree that this proposal will remain in effect for not less than sixty (60) calendar days from the date that proposals are due, and that this proposal may not be withdrawn or modified during that time.

Being first duly sworn, on my oath, I hereby certify that this proposal is genuine and not a sham or collusive proposal, or made in the interests or on behalf of any person not therein named; and I have not directly or indirectly induced or solicited any consultant or supplier on the above work to put in a sham proposal or any person or corporation to refrain from submitting a proposal; and that I have not in any manner sought by collusion to secure to myself an advantage over any other contractor(s) or person(s).

In order to induce the City to consider this proposal, the proposer irrevocably waives any existing rights which it may have, by contract or otherwise, to require another person or corporation to refrain from submitting a proposal to or performing work or providing supplies to City of SeaTac, and proposer further promises that it will not in the future directly or indirectly induce or solicit any person or corporation to refrain from submitting a bid or proposal to or from performing work or providing supplies to City of SeaTac.

Signature 

Printed Name and Title Daniel Gittere

Company Name Traffic Wrapz

Address 515 N Flayler DR P300

Phone 561-228-1611 ext 100

UBI No. 603-496-971



**CITY OF SEATTLE ATTACHMENT 1, COST PROPOSAL WORKSHEET**

DEPARTMENT OF PUBLIC WORKS

4800 SOUTH 188TH STREET

SEATTLE, WA 98188-8605

TrafficWapz

CATALOGUE EXISTING UTILITY CABINETS AND PROVIDE TECHNICAL EXPERTISE AND GUIDANCE TO THE CITY

Cost below shall be inclusive of all tasks outlined in section 6 (scope of work) of the RFP. Photos of the exact boxes to be wrapped can be found through this link: <https://drive.google.com/drive/folders/15V6h35ur3x8h3d7b5>

Location	Total Project Cost: \$	109,242.35	Cabinet type	Number of Boxes	Location Cost
<b>Intersection</b>					
1 28 AVE S & S 270 ST			TS-2 Type 2	2	3,158.83
2 INTERNATIONAL BLVD & S 182 ST			TS-2 Type-1	1	2,791.40
3 INTERNATIONAL BLVD S & S 176 ST			TS-2 Type 1	3	3,682.38
4 INTERNATIONAL BLVD S & S 182 ST			TS-2 Type 1 Battery Backup	3	3,598.85
5 INTERNATIONAL BLVD S & S 184 ST			TS-2 Type 1 Battery Backup	3	3,415.28
6 INTERNATIONAL BLVD S & S 200 ST			TS-2 Type 1 Battery Backup	3	4,021.83
7 INTERNATIONAL BLVD S & S 204 ST			TS-2 Type 1 Battery Backup	3	3,534.88
8 INTERNATIONAL BLVD S & S 208 ST			TS-2 Type 1 Battery Backup	3	3,828.28
9 MILITARY RD S & S 144 ST			TS-2 Type 1	1	\$2,287.66
10 MILITARY RD S & S 170 ST			TS-2 Type 2	2	3,627.99
11 MILITARY RD S & S 176 ST			TS-1	1	3,489.31
12 28 AVE S & S 200 ST			TS-2 Type 2	2	2,989.27
13 Military Rd S & S 152nd			TS-1	1	2,942.00
14 38 AVE S & S 188 ST			TS-1	2	1,728.50
15 37 AVE S & S 176 ST			TS-2 Type 2	2	2,775.54
16 37 AVE S & S 200 ST			TS-1	1	4,125.39
17 INTERNATIONAL BLVD S & S 160 ST			TS-2 Type 1 (Battery Backup)	3	2,004.31
18 INTERNATIONAL BLVD S & S 166 ST			TS-1	3	3,970.02
19 INTERNATIONAL BLVD S & S 170 ST			TS-2 Type 1 (Battery Backup)	3	3,415.28
20 INTERNATIONAL BLVD S & S 180 ST			TS-1	3	3,552.09
21 INTERNATIONAL BLVD S & S 188 ST			TS-1	2	3,047.02
22 MILITARY RD S & S 188 ST			TS-1, Battery Backup Unit	1	1,941.34
23 24 AVE S & S 208 ST			TS-1	1	\$1,941.34
24 42 AVE S & S 188 ST			TS-2 Type1 Battery Backup Unit	1	2,319.14
25 42 AVE S & S 168 ST			TS-1	1	2,624.44
26 MILITARY RD S & S 216 ST			TS-1 Type 1	3	\$3,047.02
27 11280 INTERNATIONAL BLVD S			TS-1	3	3,587.73
28 28 AVE S & S 200 ST			TS-2 "MT" (smaller cabinet)	2	2,083.92
29 28 AVE S & S 184 ST			TS-2 Type 1	2	3,730.12
30 28 AVE S & S 188 ST			TS-1	2	3,383.80
31 2900 S 160 ST (CHFT)			TS-2 Type 2	2	3,570.85
32 MILITARY RD S & S 182 ST			TS-1	2	4,118.89
DESIGN				4	3,000.00
MOBILIZATION, SITE INSPECTION, CRAMATIC CONTROL,				5	6,750.00
PROJECT MANAGEMENT				5	
<b>Total</b>		<b>109,242.35</b>		<b>67</b>	<b>\$ 109,242.35</b>

## TW 36ohd SERIES PRODUCT INFORMATION SHEET

Easy-to-clean conformable film that protects graphics and resists weathering, salt corrosion, UV, staining (even caused by graffiti), and chemicals

TW 36ohd Protective Overlaminates features an exclusive formulation of DuPont™ Tedlar® polyvinyl fluoride (PVF) film for beautification applications. This film is used exclusively to protect high-definition graphics applied to structures that may or may not contain electronic systems. The unique weather, chemical and stain-resistant properties of TW 36ohd makes it an ideal material to protect surfaces against fading, cracking, corrosion and graffiti. TW 36ohd is also ideal for applications requiring extended resistance to UV exposure to ensure thermal and color stability. TW 36ohd is a protective film that contains no plasticizers, and therefore resists chalking and color shifts for years. Film is also rated for applications on equipment that radiates heat.

## TYPICAL USES

TW 36ohd is a 1 mil. film specially formulated with a .8- 1 mil. permanent acrylic pressure sensitive adhesive on a overlay liner. This unique thin material is used as a protective overlaminates for graphics and allows usage on structures that are flat or have simple or near complex curves. TW 36ohd is optimized for industrial use in cities and municipalities for protecting high-definition graphical product from UV radiation, graffiti, staining and environmental contaminants.

The graphics manufactured with this film can only be installed by a TW360 Certified / Authorized Installer

## BASIC INFORMATION

**THICKNESS:** Film: 1.0 mil., Adhesive .80 to 1.0 mil., Liner 4.0 mil. (Thickness variation +/- 10%)

**APPLICATION TEMPERATURE:** Minimal application: 50° F. and a service temperature of -40° F. to +220° F.

**EXTERIOR DURABILITY:** 7 year rated, excellent UV resistance and protection (depending on climate zone).

**CHEMICAL RESISTANCE:** Surface unaffected by common acids, bases, or solvents.

**WARRANTY:** \*7-year fade warranty on vertical surfaces  
\*Some exclusions apply

**STAIN RESISTANCE:** All staining tested can be removed by standard procedures.

**MOLD & MILDEW:** TW 36ohd film does not contain any additive to kill mold or mildew but the surface is not ideal and does not help mold or mildew grow. Is ideal for damp / humid climates.

**CLEANABILITY:** Staining agents likely to be encountered in high- traffic areas or graffiti targeted areas will not affect the TW 36ohd finish. More importantly, the stains can easily be removed.

**SUPERIOR GRAPHIC PROTECTION:** TW 36ohd's superior properties and luster finish will ensure graphics will remain vibrant and protected for years outdoors and indoors.

**UV PROTECTION:** 7-10 year rated (depending on climate). TW 36ohd superior properties and luster finish will ensure surfaces will stay vibrant for years.

**LONG-LASTING PROTECTION:** Ability to withstand daily washing / cleaning and allows unsightly stains from dirt, bird droppings, unwanted ink, graffiti, grease and oil to easily be wiped or cleaned away, preserving signs and structures for years.

**ADHESIVEGUARD™:** Decals, stickers and other adhered items can be removed easier after weathering when following removal procedures.

**Note:** Technical information provided is based on experience and/or tests believed to be reliable but its accuracy is not guaranteed and the results may not be relevant to every user's application. TrafficWrapz does not accept responsibility or liability; direct or consequential, arising from reliance upon any information provided and the user should determine the suitability of the products for their intended use.

1.855.55WRAPZ - info@trafficwrapz.com. Visit us on the web at www.TrafficWrapz.com

## SELF CLEANING TECHNOLOGY

TW36ohd does not need monthly cleaning / washing from everyday dirt and grime. The film has a self-cleaning feature. Most dirt and grime wash off of vertical surfaces after a rain shower. Some salts may adhere better, but most salts also will wash right off.

## DAMAGE TO FILM WITH BLUNT OBJECTS OR PEELING

Blunt objects can harm your film and protective laminate. If there are minor scrapes, you can apply a graphical edge sealer to the damaged area. This will protect the area from further damage or peeling. Larger damaged panels can be replaced with a new graphical panel and installed by a certified TrafficWrapz Installer.

Although all edges and seams are adhered and treated to prevent unwanted peeling, constant picking of the seams bystanders could cause the seam to loosen. If peeling occurs slightly, re-seal the edge with edge sealer. Larger issues please contact a TrafficWrapz technical service representative for guidance.

## STAIN REMOVAL INFORMATION

Although you can use any traditional chemical cleaner on our technology, we recommend using our TrafficWrapz Adhesive & Graffiti Soy-based biodegradable cleaner. When cleaning, do not use an abrasive cloth or sponge. Always use a new clean towel or cloth. Try to keep cleaners away from vulnerable areas like edges and seams.

Staining Agent	Dry Cloth	Wet Cloth	91% Propanol	Chemical Graffiti Cleaner	TrafficWrapz Biodegradable Adhesive & Graffiti Remover
Acid Marker	R	R		R	R
Oil Marker			S	R	R
Permanente Marker			S	R	R
Bingo marker		S	R	R	R
Adhesives				R	R
Black Crayon				R	R
Shoe Polish	S	S	R	R	R
Lipstick	S	S	S	R	R
Spray Paint (Epoxy)				R	R
Spray Paint (Solvent)				R	R
Spray Paint (Acrylic)			S	R	R
Can paint (Gilmore)			S	R	R
Asphalt				R	R
Sodium chloride		R			
Calcium Chloride		R			
Potassium Chloride		R			
Magnesium Chloride		R			
Calcium Magnesium Acetate		R			
Brake Fluid	S	R			
Sodium Hydroxide	R	R			
30% Sulfuric Acid	R	R			
20% Hydrochloric Acid	R	R			
10% Nitric Acid	R	R			
Gasoline	R	R			
Toluene	R	R			
Acetone	R	R			
Glacial Acetic Acid	R	R			
MEK	R	R			
Diesel	R	R			

S = Left Slight Shadow After Cleaning

R = Stain Completely Removed





US010093076B2

(12) **United States Patent**  
**Gittere et al.**

(10) **Patent No.:** **US 10,093,076 B2**  
(45) **Date of Patent:** **Oct. 9, 2018**

(54) **MULTILAYER FILM**

(71) Applicants: **Daniel J. Gittere**, Wellington, FL (US);  
**Tracy R. George**, North Java, NY (US)

(72) Inventors: **Daniel J. Gittere**, Wellington, FL (US);  
**Tracy R. George**, North Java, NY (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 147 days.

(21) Appl. No.: **15/217,636**

(22) Filed: **Jul. 22, 2016**

(65) **Prior Publication Data**

US 2017/0021592 A1 Jan. 26, 2017

**Related U.S. Application Data**

(60) Provisional application No. 62/195,911, filed on Jul. 23, 2015.

(51) **Int. Cl.**

**B32B 7/12** (2006.01)  
**B32B 27/08** (2006.01)  
**B32B 27/30** (2006.01)  
**B32B 27/32** (2006.01)  
**B32B 27/36** (2006.01)  
**B32B 37/12** (2006.01)  
**B41M 7/00** (2006.01)

(52) **U.S. Cl.**

CPC ..... **B32B 7/12** (2013.01); **B32B 27/08** (2013.01); **B32B 27/30** (2013.01); **B32B 27/304** (2013.01); **B32B 27/308** (2013.01); **B32B 27/322** (2013.01); **B32B 27/36** (2013.01); **B32B 37/12** (2013.01); **B41M 7/0027** (2013.01); **B32B 225/24** (2013.01); **B32B 2307/412** (2013.01); **B32B 2307/414** (2013.01); **B32B 2307/546** (2013.01); **B32B 2307/584** (2013.01); **B32B 2307/71** (2013.01);

**B32B 2307/712** (2013.01); **B32B 2307/714** (2013.01); **B32B 2307/75** (2013.01); **B32B 2405/00** (2013.01); **B32B 2451/00** (2013.01); **B32B 2571/00** (2013.01)

(58) **Field of Classification Search**

USPC ..... 156/71, 247, 277; 428/40.1, 41.7, 41.8, 428/42.1, 195.1, 214, 343, 352  
See application file for complete search history.

(56) **References Cited**

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428/202  
2014/0050901 A1 \* 2/2014 Adams ..... B64D 45/00  
428/196

**FOREIGN PATENT DOCUMENTS**

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\* cited by examiner

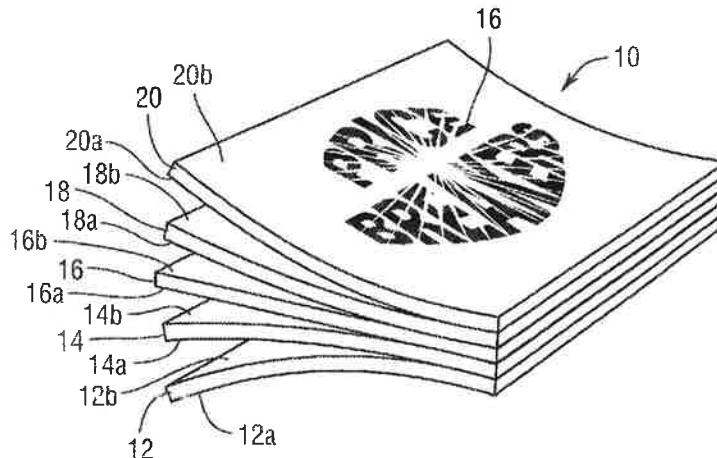
*Primary Examiner* — Sing P Chan

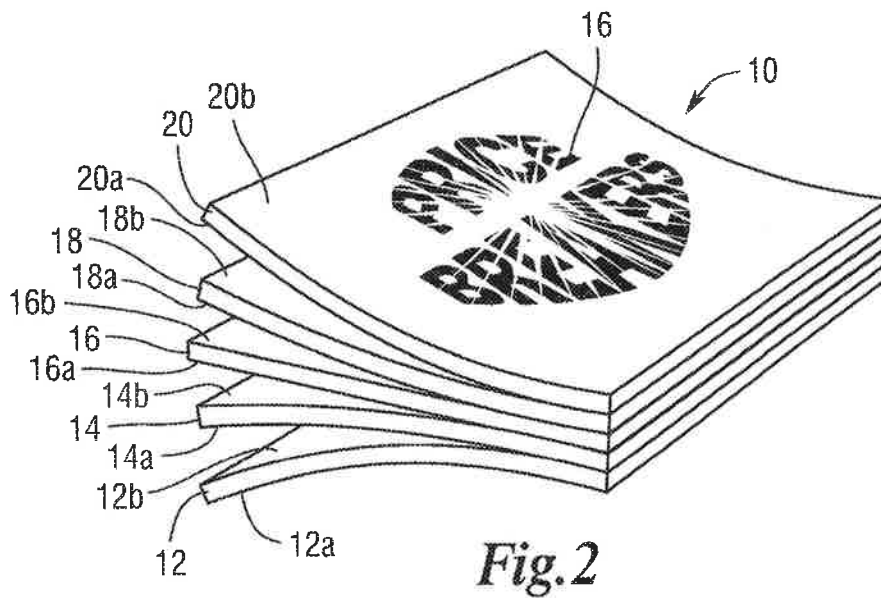
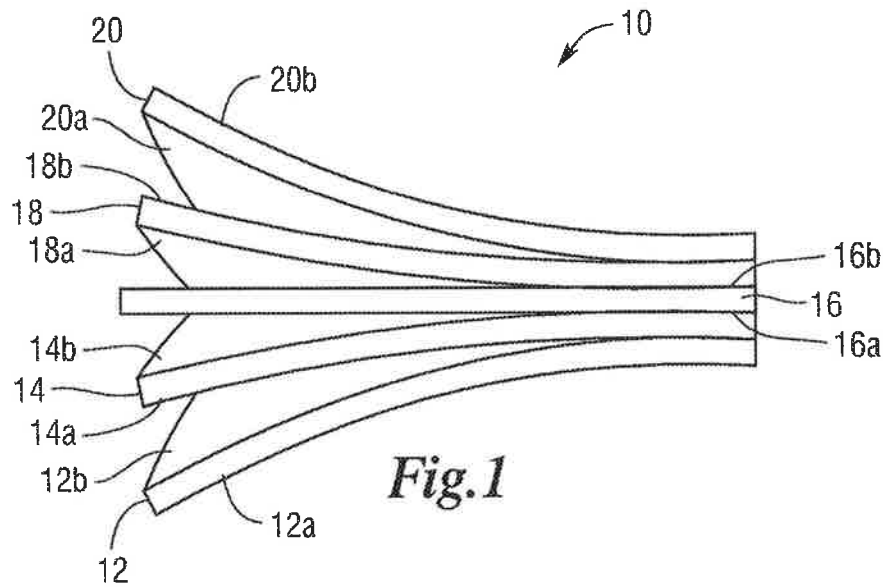
(74) *Attorney, Agent, or Firm* — Del Vecchio and Stadler LLP

(57) **ABSTRACT**

A multilayer film, method of making a multilayer film, and method of applying the multilayer film to objects, wherein the multilayer film is comprised of a first adhesive layer; a flexible printable vinyl layer; an ink layer; a second adhesive layer; and a translucent polyvinyl fluoride film layer, and wherein the multilayer film has anti-graffiti, chemical resistant, and adhesive resistant capable of withstanding impairments.

**20 Claims, 2 Drawing Sheets**





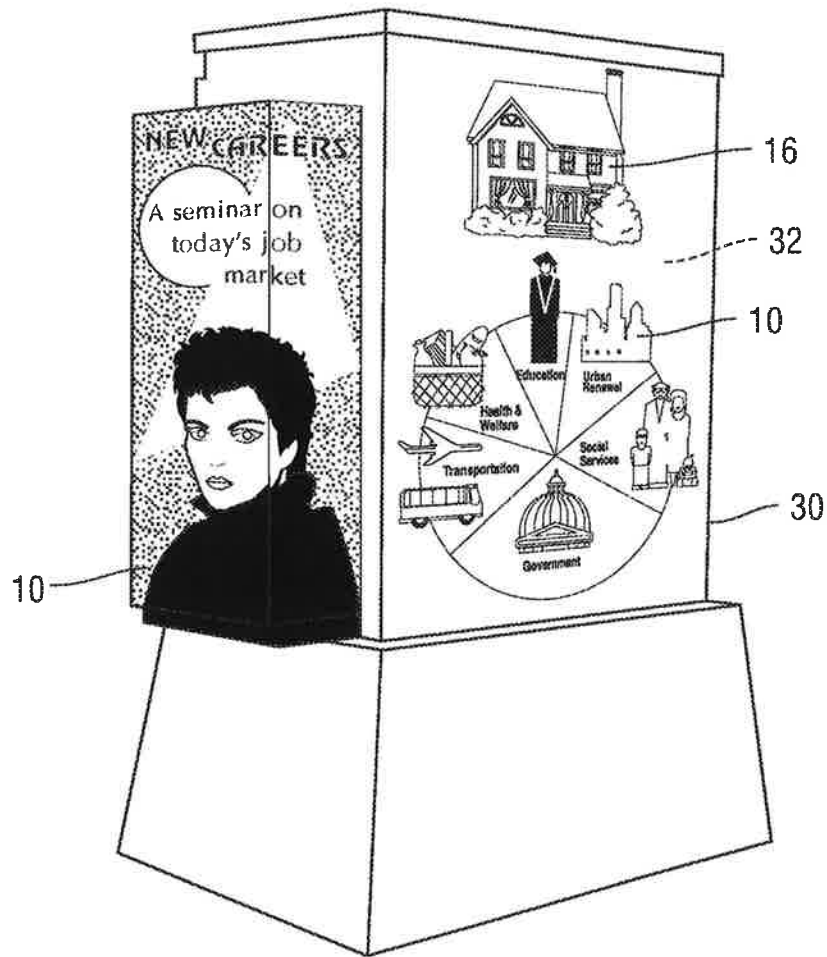


Fig.3

## MULTILAYER FILM

## CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of, and incorporates by reference, U.S. Provisional Application No. 62/195,911, filed Jul. 23, 2015.

## FIELD OF INVENTION

This invention is directed to a multilayer film for use in covering objects and protecting the objects from impairments, a method of assembling the multilayer film, and a method for applying the multilayer film to objects.

## BACKGROUND OF INVENTION

While graffiti can be a form of art, graffiti is often unwanted, and includes tagging and other methods of marking an object with acid, markers, paints, stickers, and other items. As such, cities are in a constant battle with graffiti. In fact, many cities have very large budgets dedicated solely to removing graffiti. Objects around cities, public parking lots, private parking lots, and roadways are prime targets for graffiti. Graffiti is found on city walls, dumpsters, garbage cans, municipal vehicles including garbage trucks, parked train cars, busses, municipal transportation vehicles, weather shelters, traffic cabinets, utility cabinets, light poles, light control cabinets, connection boxes, electrical boxes, parking meters, bus shelters, cable access boxes, railroad electrical and control boxes, other objects that protect city infrastructure, and other city-owned objects.

In response to graffiti on objects, a city, municipality, or private owner may choose to do nothing, allowing the object to stay defaced, or they may choose to remove the graffiti. Currently, in order to remove graffiti, the owner of the object must send out a crew to clean and remove or paint over the graffiti. This process usually involves using harsh chemicals or natural based cleaners, usually resulting in noticeable damage to the object or possible fading of the original color of the object or an unsuccessful full graffiti removal, thereby causing color match issues and further visual eyesores. If there are electronics inside the object, use of a harsh chemical may cause damage to the electronic components or may be a fire hazard to the electronic components. Moreover, these chemicals are often flammable and are hazardous to humans. Overall, this process often requires the crew to spend several hours to complete.

As can be imagined, once the graffiti is removed from the object, it is still exposed to possible vandalism in the form of additional graffiti.

An alternative response to the graffiti problem is to beautify an object before graffiti can be applied or be reapplied. This beautification can be in the form of artwork such as a painted mural applied to the object. Additionally, objects may be beautified by placing advertisements thereon or blending the objects into nature by way of a placing a bush or a tree graphic on the object. Because the object is beautified in advance, it reduces, but does not eliminate, the likelihood that the object will have graffiti applied.

In addition to combatting unsightly graffiti, cities are generally looking for ways to beautify their city in order to increase the living standard for residents and to attract more people to their city. As a result, cities are paying attention to their surroundings and embracing the arts and city beauti-

fication movement. Many cities are involving local artists and businesses to come up with ideas to make their city a better place to live.

In every city, utility boxes are necessary for purposes of safely storing electrical wiring and electronic devices necessary to power and run different parts of the city or neighborhood. In some cases, the utility boxes store other wiring, including, cable wiring and telephone wiring.

The boxes are small (around 20") all the way up to large fixtures (up to 8' tall) and often placed out in the open. Because the city or utility companies do not want the contents of the utility boxes tampered with, the utility boxes are typically made of sheets of metal and include a lock. The result is typically an unsightly box in the middle of an otherwise attractive street.

Starting in the 1960s, many communities contemplated different methods for making the boxes and other municipal objects more attractive.

One such method includes establishing a beautification program and hiring an artist to paint the objects. The object will typically look good for a few years, but after some time, the paint starts to flake or discolor. The paint also offers no or very little resistance or clean ability if someone defaces the object. Painting also can harm items, such as traffic cabinets, by sealing access doors shut, sealing locks, or interfering with ventilation systems that are built into the cabinets.

Another method for making objects more attractive includes placing graphical products (such as graphical decals or graphical wraps) on the object. The graphical product is typically made of vinyl and has artwork on it. It is applied to the object, providing the object with a more pleasant artistic appearance.

The typical graphical products that are placed on the object are not intended to protect the object against graffiti and the graphical products are not made specifically for this use. Rather, the commercially available signs and films are typically made to be applied to a sign or an automobile for advertising, design, styling, or color change purposes and are incapable of protecting against graffiti.

As a result, the graphical products fail for a variety of reasons including, improper installation of the film, poor printing techniques, cheap or incorrect materials being used, and discoloration or damage of the graphical product when graffiti is removed. Discoloration may arise because the cleaner damaged the film, or the item used to deface the object (paint, marker, adhesive stickers, acid etching et cetera) never fully came off after cleaning.

As can be imagined, after time, various impairments would cause the graphical products to peel off of the utility box. The impairments include, but are not limited to, inclement weather, environmental variables such as dust, vandalism, impurities, heat, ultra violet radiation, moss, mold, corrosion, and general wear.

Moreover, the graphical product covered utility boxes may still be a target for graffiti artists. If the graphical product becomes covered by graffiti, then the result would be even more unsightly than the utility box on its own.

The current method for making a graphical product, such as a graphical wrap or film, includes the steps of selecting a printable flexible material typically made out of vinyl and having a pressure sensitive adhesive thereon. Depending on the requirements of the graphical product, the printable flexible material can be high or a low quality. The material can be more flexible and also have different adhesive properties such as removable, permanent, or temporary and also can be more aggressive and less aggressive from an adhe-

3

sion standpoint. The next step is to design the image or use local photography and scan the artist's work, create the image on a computer, wherein the image on the computer is suitable for a wide grand format printer. Next the image from the computer is transferred onto the material by way of a wide-format printer, silk screen, or other methods of transferring the design onto the vinyl material. The inks may be high quality inks or low quality. The next step is to optionally apply a pressure sensitive clear laminate on the vinyl material. This is done by a lamination machine, a cold laminator, or a heat assist laminator that is automatic or hand powered, that applies the pressure sensitive laminate onto the vinyl material. Alternatively, a liquid is applied to the vinyl material, which creates a protective laminate upon drying. Also alternatively, a liquid laminate that is applied automatically or hand applied by a pressurized device (such as a spray can). This method is less effective than the pressure sensitive laminate.

The pressure sensitive laminate (or overlamine) typically provides a finish (matte, semi-gloss, satin, or gloss) overlamine film and the liquid laminates protect the graphics from abrasion, some chemicals, and UV exposure. It also typically protects the vinyl material and image thereon from ultraviolet rays, water, and some chemicals. The pressure sensitive laminate can be selected from a range of high to low quality, which may have a short outdoor durability of three to five years in a normal use situation, but is reduced when used in these certain applications to about one to two years depending on the climate zone and may have limited or no warranty on horizontal surfaces. The resulting processed graphical product (decal or film) is applied or installed onto the surface of an object. The surface of the object can be flat, have curves, or have angles.

In many cases, the application or installation of the processed graphical product isn't performed properly. In this case, the object isn't adequately protected and the beautification objective isn't reached and the processed graphical product may fail over time.

While there are some overlaminates and clear laminates that offer better protection and may be used as anti-graffiti, these and the typical processed graphical products are not recommended to place over the complex curves (90 degree angles, rivets, bends, et cetera) of city objects because they are thicker (2.5 mm-10 mm) or not conforming or use complex curves/simple curves and will have visual failures. These processed graphical films are traditionally used for a flat surface such as a sign. There are anti graffiti films available to place over the processed graphical products, but most have a limited life of one to three years outdoors, the film can be less effective after multiple cleanings from graffiti cleaners, still have a staining after certain types of graffiti or may be damaged when typical chemical based cleaners are used on its surface, have poor UV protection, are damaged by heat (130+/-F degrees), or are not made for this type of use and are unable to withstand environments, weather, and salt.

Thus, there is a need to provide a protective multilayer film that can withstand the above-mentioned impairments. In particular, it is desirable that the multilayer film is capable of withstanding these impairments for at least five years while protecting objects such as traffic and utility cabinets.

#### SUMMARY OF THE INVENTION

Accordingly, it is the subject of this invention to provide a multilayer film, method of making the multilayer film, and method of applying the multilayer film to objects, wherein

4

the multilayer film is capable of withstanding fading for at least five and is capable of withstanding other impairments for at seven years.

#### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 depicts a cross-section side view of a multilayer film.

FIG. 2 depicts a perspective view of a multilayer film.

FIG. 3. depicts an object protected by a multilayer film.

#### DETAILED DESCRIPTION OF THE INVENTION

The term "anti-graffiti" as used herein and in the appended claims means that graffiti can be removed effortlessly without damaging or staining while utilizing common natural or chemical based graffiti cleaners, moreover, dirt and dust and rainfall can be easily cleaned off. "Extreme weather resistant" means able to withstand temperatures in the range of -75 F degrees to +225 F degrees. "Ultraviolet radiation resistant" means able to withstand exposure to ultraviolet radiation without fading and includes "fade resistant" means absorption of more than 95% of ultra violet rays and is capable of absorbing more than 50% ultra violet radiation after 5 years, in particular, 6-8% ultra violet absorption losses per year. "Salt resistant" means able to withstand exposure to salt without corroding or discoloring. "Chemical resistant" means able to withstand exposure to chemicals without corroding, discoloring, or effecting the performance. "Acid etching resistant" means able to withstand exposure to acid etching without deterioration and changing the visual appearance. "Adhesive resistant" means that impairments such as stickers can be removed without causing damage, in particular, impairments such as stickers can be removed after they have been sitting on the surface for some time. "Conformable" means having the ability to be applied and formed on objects (through installation techniques using tools and heat) over a surface with curves, angles, compound curves, complex curves, circular raised objects, raised surfaces, concave curves, slight curves, corrugated surfaces, set around rivets, and flat surfaces without film distortion and protection loss. From a technical standpoint, a multilayer film that is conformable has technical specifications of film elasticity/elongation between 90-250% of its original structure and conformability around an object with X, Y, Z axis (3 dimensional). "Non-interfering" means that it will not effect the operations of electrical devices.

As shown in FIGS. 1 and 2, a multilayer film 10 that is easily removable after being subjected to the elements or after a period of time, wherein the multilayer film 10 is useful for extending the lifetime of printed indicia and includes a first adhesive layer 12 having opposed first and second adhesive layer surfaces 12a and 12b, a flexible printable vinyl layer 14 having opposed first and second printable vinyl layer surfaces 14a and 14b, wherein the first flexible printable vinyl surface 14a abuts and is adhered to the second adhesive layer surface 12b, an ink layer 16 having opposed first and second ink layer surfaces 16a and 16b, wherein the first ink layer surface 16a abuts and is supported by the second flexible printable vinyl layer surface 14b, a second adhesive layer 18 having opposed first and second adhesive layer surfaces 18a and 18b, wherein the first adhesive layer surface 18a of the second adhesive layer 18 abuts and is disposed on the second ink layer surface 16b, and a translucent polyvinyl fluoride film layer 20 having opposed first and second translucent polyvinyl fluoride film

layer sides **20a** and **20b**, wherein the first translucent polyvinyl fluoride film layer side **20a** abuts and is adhered to the second adhesive layer surface **18b** of the second adhesive layer **18**.

In another embodiment, the translucent polyvinyl fluoride film layer may be a translucent polyester film layer, a translucent extruded polyester film layer, a translucent polymer film layer, a translucent polychlorotrifluoroethylene film layer, a translucent polyvinyl fluoride film layer, a translucent fluoride resin film layer, or a translucent fluoropolymer film layer.

In one embodiment, the multilayer film is comprised of at least five separate layers, wherein the layers comprise:

- (a) a first adhesive layer;
- (b) a flexible printable vinyl layer;
- (c) an ink layer;
- (d) a second adhesive layer; and
- (e) a translucent polyvinyl fluoride film layer.

Optionally, a laminate layer may be included between the ink layer (c) and the translucent polyvinyl fluoride film (d). This provides an additional protectant layer.

First Adhesive Layer and Flexible Printable Vinyl Layer

In a preferred embodiment, the first adhesive layer **10** is optically clear, semi-permanent, and is a pressure-sensitive layer similar to double-sided tape. The first adhesive layer **10** may be wet or may be applied to the protective layer. In one embodiment, the adhesive layer is 54" wide (or wider or narrower as required for different applications). The first adhesive layer **10** attaches the other layers to the surface (not shown, but indicated by reference number **32** in dashed lines in FIG. 3) of the object **30** (see FIG. 3) that is being protected. Commercially, the first adhesive layer **10** is pre-applied to the flexible printable vinyl layer **12** and the combination is sold together and is known in the industry as printable wrap film. The printable wrap films may be removable or permanent. Printable wrap films and the manufacture of printable wrap films are well known to those having ordinary skill in the art and are commercially available from many manufacturers and suppliers, including: 3M® based in Maplewood, Minn., MacTAC® based in Stow, Ohio, Avery® based in Painesville, Ohio, and Orajet® based in Black Creek, Ga. Thus, printable wrap films are not described in greater detail herein.

Selection of the printable wrap film is based on several factors, including, but not limited to: how many curves the surface of an object has that the multilayer film **10** is being applied to, whether the surface **32** of the object **30** is smooth or rough, and the geographic location of the object that is being covered. If the surface **32** of object **30** is flat, then a non conformable printable wrap film is selected. However, if the surface **32** of object **30** has a lot of curves, then a conformable printable film wrap is selected. Additionally, a thinner and more flexible printable wrap film is selected for uses on electrical and traffic cabinets so that the performance of the cabinets would not be effected.

Several examples of preferred printable film wraps for different applications are listed below. All of the printable film wraps have a pressure-activated removable or permanent adhesive.

For applications requiring a multilayer film **10** that is conformable for use in traffic applications, one preferred printable film wrap is 3M® Controltac® Graphic Film with Comply® v3 Adhesive IJ180Cv3. This printable film wrap is versatile, conformable, high quality, has excellent printability, and gray pigment block resulting in perfect looking graphics. Gray pigment block is used to stop any items from showing through the film after it is applied.

For applications requiring conformability and involving a wall or textured flat surface, 3M® Envision® Print Wrap FilmSV480Cv3 or 3M® Envision® Print Wrap FilmLX480Cv3 are preferred printable film wraps.

For applications on flat walls, requiring less conformability, two options for the printable film wrap are 3M® Scotchcal® Graphic Film with Comply® Adhesive IJ35C and 3M® Scotchcal® Graphic Film with Comply® Adhesive IJ40C

Essentially, any printable film wraps may be used as long as the printable film wrap is high quality, has a five to twelve year durability, accepts high resolution imagery for digital printing, is suitably heat sensitivity, and has a pressure-sensitive removable adhesive.

Ink Layer

In a preferred embodiment, the ink layer **16** is an original equipment manufacturer (OEM) layer that includes a graphic. Alternatively, the ink layer **16** may be an off brand or otherwise not an OEM ink layer **16**. The ink layer **16** is applied using different types of inks or different types of digital and non-digital transfer methods such as: screen printing, Aqueous Inkjet Printing, Latex ink printing, Solvent Inkjet Printing, eco-solvent Inkjet Printing, thermal transfer printing, UV-based Printing. The ink layer **16** is preferably either cured on top of layer **14b** or absorbs into layer **14b**.

In another embodiment, individual designs can be created by way of the ink layer **16**. In this way, each object **30** that is covered with a multilayer film **10** can be specifically designed or can be part of a cohesive design that is the same for all of the objects **30** in a certain region.

The combination of the printable wrap film and the ink layer is called a printed wrap film.

Second Adhesive Layer and Translucent Polyvinyl Fluoride Film Layer

The combination of the second adhesive layer **18** translucent polyvinyl fluoride film **20** is called the protective layer.

In one embodiment of the present invention, the second adhesive layer **18** is optically clear, acrylic-based, permanent, and pressure-sensitive. In a second embodiment, the second adhesive layer **18** is optically clear, permanent, and heat-activated.

In another embodiment, the second adhesive layer **18** is 0.7 to 1.0 mm in thickness for graphics and 1.0-1.3 mm in thickness for applications with a semi-smooth surface such as a printed stop sign.

Preferably, the second adhesive layer **18** should meet or exceed the following requirements: PSTC-1 or ASTM D3330 standards; keep its integrity for ten-twelve years; be optically clear; and be cold laminate and heat assist compatible.

Preferably, the translucent polyvinyl fluoride film layer **20** protects the ink layer **16** from ultraviolet rays, harsh chemicals, chemical etching, acid etching, weathering, and graffiti. This layer also does not promote the growth of mold, mildew, or any other organic growth. In another embodiment, the protective layer provides enhanced ultraviolet ray protection that prevents fading of the ink layer **16**. In one embodiment, the translucent polyvinyl fluoride film layer **20** is adhesive resistant (adhesive resistant is understood to mean that the layer is capable of easy removal of stickers or items placed on the layer with adhesive). The translucent polyvinyl fluoride layer **20** is adhesive resistant when the adhesive has been left on the film layer for an extended period of time. In another embodiment, the translucent polyvinyl fluoride film layer **20** is not adhesive resistant.

In another preferred embodiment, the translucent polyvinyl fluoride layer **20** is Tedlar®, which is commercially available from Dupont®. Tedlar® is a clear or pigmented, stick or non-stick, polyvinyl fluoride film, which provides resistance to harsh environments and is capable of being processed under high temperature and high pressure.

In another preferred embodiment, the translucent polyvinyl fluoride layer **20** is treated on at least one side so that the translucent polyvinyl fluoride layer **20** adheres to the second adhesive layer **18**. The treatment is done by oxidizing the translucent polyvinyl fluoride layer **20** with a propane flame. Without treatment, the translucent polyvinyl fluoride layer **20** is non-stick. The translucent polyvinyl fluoride layer **20** may be single-side treated or double-side treated.

In another preferred embodiment, the translucent polyvinyl fluoride layer **20** is single-side treated meaning that only one side can accept an adhesive. The second adhesive layer **18** is placed on the adhesive accepting side of the translucent polyvinyl fluoride layer **20a** creating the protective layer. The first adhesive surface **18a** of the protective layer is adhered to the printed film wrap combination, thereby creating the multilayer film **10**. This embodiment provides for a multilayer film **10** having adhesive resistance because the exposed side **20b** of the translucent polyvinyl fluoride layer **20** will not accept an adhesive and will slowly repel anything that is placed on the non-treated side **20b**.

In another preferred embodiment, the translucent polyvinyl fluoride layer **20** is double sided treated meaning it can accept adhesives on any side. The second adhesive layer **18** is placed on either side **20a** or **20b** of the translucent polyvinyl fluoride layer **20** creating the protective layer. The first adhesive surface **18a** of the protective layer is adhered to the printed film wrap combination, thereby creating the multilayer film **10**. This embodiment does not provide for a multilayer film **10** having adhesive resistance.

In another preferred embodiment, a liner (not shown) is added to the first adhesive surface **18a** of the protective layer so that the protective layer can be rolled and stored. When the protective layer is ready to be used, a machine removes the liner as it applies the protective layer to the printed wrap film.

In a preferred embodiment the multilayer film **10** is capable of withstanding impairments such as inclement weather, environmental variables such as dust, vandalism, graffiti, general wear, acid etching, growth of organic plants, and can withstand multiple cleanings using natural or organic and non-organic based chemicals typically used to clean graffiti.

In another preferred embodiment, the use of a natural cleaner made from orange peel extract or a soy-based cleaner both of which biodegrade after use, will safely remove harsh graffiti including epoxy paints, bingo markers, felt tip markers and other such tough inks or stains from the multilayer film **10**. Other known traditional graffiti cleaning chemicals will also remove stains on the multilayer film. These chemicals include, but are not limited to, 30% sulfuric acid, 20% hydrochloric acid, 10% nitric acid, methyl ethyl ketone, gasoline, toluene, acetone, glacial acetic acid, 10% citric acid, ethylene glycol, ethyl alcohol, soy based cleaners, isopropyl alcohol, muriatic acid, paint thinner, mineral spirits, et cetera. In some cases, a simple mild detergent can be used.

In another embodiment, impairments such as stickers can be easily removed from the multilayer film **10** without causing damage, and any remaining residue can be wiped off with a natural cleaner or traditional adhesive removers.

In another embodiment the multilayer film **10** is flexible such that it can be applied to existing structures on-site or installed directly onto a new object at a manufacturer's facility.

Many protectant laminates claiming anti-graffiti and chemical resistance properties were tested, but are less preferred than the translucent polyvinyl fluoride layer **20**/Tedlar® layer. Translucent polyvinyl fluoride layers **20** that are less preferred include: Avery® DOL 6060; Seal® Print Shield Anti-Graffiti Overlamine; Vandal Guard Laminate; 3M® 1170; 3M® 1150; 3M® 8991 Surface Protection; Honeywell® HydroBlock® AG2500; and others.

Avery® DOL 6060 is less preferred because it can only be applied to simple curves, is only rated for three years outdoors and typical graffiti cleaners like methyl ethyl ketone ("MEK") discolored and deformed the material. This layer also did not meet the requirements of being adhesive resistant.

Seal® Print Shield Anti-Graffiti Overlamine is less preferred because it is not adhesive resistant and can only be applied on simple curves.

Vandal Guard Laminate is less preferred because it can only be applied to simple curves and is only rated for three years outdoors. It also was not adhesive resistant and has an ultra violet absorption capability that is lower than preferred.

3M® 8991 Surface Protection and 3M®8993 Surface Protection are less preferred because it can only be applied to simple curves or to flat surfaces (this film is 4 mm thick), is only rated for one to two years outdoors and typical graffiti cleaners such as MEK discolored and deformed the material. It also was not adhesive resistant.

3M® ElectroCut® Film Series 1170c is less preferred because it can only be applied to simple curves or to flat surfaces. It is not recommended for graphical overlamine applications and typical graffiti cleaners like MEK discolored and deformed the material. It also was not adhesive resistant.

3M® Anti-Graffiti Film is less preferred because it can only be applied to simple curves or to flat surfaces and windows. It is not recommended for graphical overlamine applications and typical graffiti cleaners like MEK discolored and deformed the material. It also was not adhesive resistant. Long term use, long term UV ratings were not available or verified.

3M® Premium Protective Overlay Film with Premask 1160 is less preferred because it can only be applied to simple curves or to flat surfaces such as signs, it is not recommended for graphical overlamine applications. Although typical graffiti cleaners such as MEK did not discolor and deform the material, it could be damaged easily by scratching it with a fingernail making it not durable and not suitable. Moreover, the long term UV ratings were not available or verified.

3M® Protective Overlay Film Series 1150 is less preferred because it can only be applied to simple curves or to flat surfaces, it cannot withstand repeated cleanings, and typical graffiti cleaners such as MEK discolored and deformed the material over time. It also was not adhesive resistant. Long term UV ratings were not available or verified.

Honeywell® HydroBlock® AG2500 or other polychloro trifluoroethylene (PCTFE) technology is less preferred because it is only listed for applications of flat surfaces. It can be conformable with certain heat points in testing. Conformability difficult to obtain because the film is thicker (between 2 mm-3 mm). Although the technology

resists most chemicals and adhesives, it is sensitive to heat especially an open flame such as a lighter, and the ultra violet absorption is less than desirable. It's less reliable because the ultra violet absorption is not in the film, rather it's in the adhesive. The high gloss tendency of this film is also less desirable because of reflection and glare. The film's ability to perform in higher temperatures and weather (like California and Arizona) make it less desirable because of performance issues.

The below are additional alternative protective laminates that were tested, but are less preferred because they are not resistant to typical graffiti cleaners and some of the cleaners such as MEK actually dissolved the protectant film. The films were also not adhesive resistant and typical types of graffiti stained the film itself. Thus, these protective laminates are less preferred for anti-graffiti protection. The films include: 3M® 8508 overlamine film; BriteLine® Shield UV film; 3M® 8914 overlamine film (this material also has a limited life expectancy in outdoor environments); 3M® 8519 overlamine film; 3M® 8518 overlamine film; 3M® 8509 overlamine film; GF Automark Concept® 231 overlamine film; GF Concept® 100 overlamine film; 3M® 8520 overlamine film; 3M® 8548G; 3M® 85491; Oracle 240; Oracle 5095; Oraguard® 240; and Oraguard® 372. Finally Avery® DOL 1060, 1080, 1560, 1360, 1370 films are all less preferred for the same reasons as noted above.

In another embodiment, a method of assembling the multilayer film includes the steps of:

Applying an ink layer 16 to a combination first adhesive layer 10 and flexible printable vinyl layer 12, wherein the ink layer 16 is applied onto the flexible printable vinyl layer 14 and the first adhesive layer 10 is below the flexible printable vinyl layer 14; applying a second adhesive layer 18 onto a translucent polyvinyl fluoride film layer 20; combining the first adhesive layer 10, flexible printable vinyl layer 12, ink layer 14, and the second adhesive layer 18 and translucent polyvinyl fluoride layer 20, and cold or heat laminating the above layers together to create a multilayer film 10.

In another embodiment, a method of assembling the multilayer film 10 includes the steps of: selecting an appropriate base layer comprised of a first adhesive layer 10 and a flexible printable vinyl layer 12 and a temporary paper liner (not shown) on the first adhesive surface 10a; printing a graphic image by way of an ink layer 14 on the base layer; assemble a protective layer comprised of a translucent polyvinyl fluoride film layer 20 and a second adhesive layer 18; adding a temporary paper removable liner (not shown); and laminate the protective layer to the top of the base layer with graphic image by using pressure to laminate.

In one embodiment, the base layer selected is to be a conformable product. In another embodiment, the base layer selected is a less conformable product. The conformable product is suitable for covering objects that have a lot of bends and angles and require a pliable multilayer film. The less conformable product is suitable for signs and flat surfaces.

The multilayer film 10 can be wet applied to an object 30. Alternatively, the translucent polyvinyl film layer 20 can be mechanically applied to the ink layer 16 or the translucent polyvinyl film layer can be wet applied to an object such as a stop sign.

The multilayer film can be applied virtually any object in need of protection from graffiti, chemicals, weather, water, acids, salt, acid rain, pollution, vandalism, and other deleterious environmental conditions from any source. For

example, the multilayer film can be applied to and protect objects such as mass transit vehicles, city objects, traffic and utility cabinets, buses, cars, walls, subways, railings, sidewalks, buildings (both interior and exterior), streets, poles, stairs, hallways, rooms, park buildings, playgrounds and all other objects located in a city or town or virtually anywhere. Thus, it is to be understood that the types of objects to which the multilayer film can be applied in order to protect the objects is virtually limitless.

In another embodiment, a method of applying the multilayer film 10 to the surface 32 of an object 30 includes the steps of: inspecting the object; removing any graffiti, chipped paint, adhesives, or adhesive residue from the object; cleaning the surface 32 for installation; optionally priming all edges of the object 30 including welds and complex curves with a primer; installing multi layered vinyl containing a protective coating; heating surface of the multilayer film 10; sealing all edges with an edge sealer; applying seam tape to any seams on the top of the object. Of note, if the multilayer film 10 is being applied to an object 30 that contains electrical components, a non flammable cleaner is used to clean the surface.

In one embodiment, the primer is 3M® primer 94.

In a preferred embodiment, the ink layer 14 is installed following normal 3M®/PDAA/USAG guidelines and additional guidelines to ensure proper installation. These guidelines are well known to those of ordinary skill in the art and thus will not be further described. In particular, all horizontal seams are faced downward to reduce open exposure during installation. Vertical seams, if any, face away from streets or away from potential environmental hazards such as lawn irrigation sprinklers. Preferably, at least 1" of multilayer film 10 is adhered to a flat surface before and after a complex curve, weld or hinge.

In another embodiment, a method of pretreating overlapping seam areas includes the steps of: applying the first portion of the multilayer film 10 and using a propane blow torch with a flame to treat the surface 32 that will have to accept the overlapping material. A primer may also be used to treat the top surface 20b of the multilayer film 10.

Preferably, a 1" width should be treated with a fast exposure to the tip of the flame moving horizontally, diagonally or vertically at a rate of approximately 0.25-1 sec exposure per 2 square inches of material. This step will treat the material and make it adhesive accepting.

In another embodiment, a method of pretreating overlapping seam areas includes the steps of: applying the first portion of the multilayer film 10 and using 3M® primer 94 to treat the surface that will have to accept the overlapping material.

Because the multilayer film 10 of the instant disclosure has anti-adhesive qualities, any overlapping seams require special treatment so that the portion that overlaps another portion of the multilayer film 10 is no longer anti-adhesive and can thusly accept a portion of multilayer film 10. Preferably, a 1" width should be treated, thereby making the material adhesive accepting.

In another preferred embodiment, the multilayer film 10 is treated to set the film. The multilayer film is treated by heating it to a temperature between 250° F. and 330° F. degrees and for a time sufficient to conform around and protect any complex bends, welds, or curves of the object 30, the multilayer film 10 will be heated for a longer time. In one example, the temperature selected was 300° F. degrees. In a preferred embodiment, the surface of the multilayer film 10 is heat treated with a non-direct flame heat source, preferably, with a heating gun or a torch with a flame



diffuser. It is important to ensure that an open flame does not make contact with the visible areas of the multilayer film 10 since it will change the structure of the film to accept adhesives.

In another preferred embodiment, the edge sealer is 3M® 3950 Edge Sealer and the seam tape is made from poly vinyl fluoride. In some cases, it is preferable to apply edge tape on all seams.

In a preferred embodiment, the objects 30 suitable for film application include utility boxes, garbage cans, garbage dumpsters, parking meters, light poles, utility poles, electric boxes, control boxes, phone boxes, air conditioner units, walls, pay stations, railroad controller boxes, signs, traffic cabinets, traffic boxes, utility cabinets, sanitation vehicles, sanitation equipment, and sanitation containers, trash cans, trash dumpsters, mass transit, public transportation vehicles, public areas, interior and exterior wall surfaces and any other object that is in need of beautification.

In another embodiment, a method of installing a multilayer film 10 on an object 30 includes the steps of: manufacturing a multilayer film 10 and installing the multilayer film on an object 30.

In a preferred embodiment, the multilayer film 10 includes an ink layer 16 and a laminate/over-laminate (not shown), with claims of easy graffiti removal. Preferably, the multilayer film 10 has anti-graffiti and adhesive removal qualities and is capable of being installed onto complex curved surfaces 32 or objects 30. Moreover, the multilayer film 10 is capable of withstanding multiple cleanings using natural or organic and non-organic based chemicals.

In another preferred embodiment, the multilayer film 10 is used for beautification of city objects 30. Alternatively, the multilayer film 10 may contain advertising and may be installed onto city and privately owned objects.

In another preferred embodiment, the method provides a multilayer film 10 having the following properties: anti-graffiti, acid etching resistant, chemical resistance to natural, organic, and inorganic cleaners, is capable of being installed onto simple and complex curves, and has adhesive resistance, wherein the multilayer film 10 withstands impairments for at least three years.

Benefits of the present disclosure include the ability of the multilayer film 10 to transform defaced public utility objects 30 and other structures into more aesthetically appealing objects. Moreover, because the multilayer film 10 is capable of withstanding common impairments and fading, maintenance and renewal costs are reduced.

It will be appreciated by those skilled in the art that while the multilayer film has been described in detail herein, the invention is not necessarily so limited and other examples, embodiments, uses, modifications, and departures from the embodiments, examples, uses, and modifications may be made without departing from the process and all such embodiments are intended to be within the scope and spirit of the appended claims.

What is claimed is:

1. A multilayer film for extending a lifetime of printed indicia, the multilayer film comprising:

- (a) a first adhesive layer having opposed first and second adhesive layer surfaces;
- (b) a flexible printable vinyl layer having opposed first and second printable vinyl layer surfaces, wherein the first flexible printable vinyl surface abuts and is adhered to the second adhesive layer surface;

(c) an ink layer having opposed first and second ink layer surfaces, wherein the first ink layer surface abuts and is supported by the second flexible printable vinyl layer surface;

(d) a second adhesive layer having opposed first and second adhesive layer surfaces, wherein the first adhesive layer surface of the second adhesive layer abuts and is disposed on the second ink layer surface;

(e) a translucent polyvinyl fluoride film layer having opposed first and second translucent polyvinyl fluoride film layer sides, wherein the first translucent polyvinyl fluoride film layer side abuts and is adhered to the second adhesive layer surface of the second adhesive layer; and

(f) wherein at least one overlapping seam of the second translucent polyvinyl film layer side is treated such that the at least one overlapping seam is adhesive accepting.

2. The multilayer film of claim 1, wherein the first adhesive layer surface of the first adhesive layer is capable of being adhered to an object such that printed indicia can be displayed on an object.

3. The multilayer film of claim 1, wherein the first adhesive layer is optically clear, semi-permanent, is acrylic-based, and is pressure-sensitive.

4. The multilayer film of claim 1, wherein the second adhesive layer is optically clear, acrylic based, permanent, and pressure-sensitive.

5. The multilayer film of claim 1, wherein the second adhesive layer is optically clear, permanent, and heat-activated.

6. The multilayer film of claim 1, wherein the at least one overlapping seam of the second translucent polyvinyl film layer side has a one inch width.

7. The multilayer film of claim 6, wherein the translucent polyvinyl fluoride film layer is treated with a propane flame.

8. A multilayer film for extending a lifetime of printed indicia, the multilayer film comprising:

(a) a first adhesive layer having opposed first and second adhesive layer surfaces;

(b) a flexible printable vinyl layer having opposed first and second printable vinyl layer surfaces, wherein the first flexible printable vinyl surface abuts and is adhered to the second adhesive layer surface;

(c) an ink layer having opposed first and second ink layer surfaces, wherein the first ink layer surface abuts and is supported by the second flexible printable vinyl layer surface;

(d) a second adhesive layer having opposed first and second adhesive layer surfaces, wherein the first adhesive layer surface of the second adhesive layer abuts and is disposed on the second ink layer surface;

(e) a translucent film layer having opposed first and second translucent film layer sides, wherein the first translucent film layer side abuts and is disposed on the second adhesive layer surface of the second adhesive layer;

(f) wherein at least one overlapping seam of the second translucent film layer side is treated such that the at least one overlapping seam is adhesive accepting.

9. The multilayer film of claim 8, wherein the translucent film layer is selected from the group consisting of: a polyester film layer, an extruded polyester film layer, a polychlorotrifluoroethylene film layer, a fluoride resin film layer, a fluoropolymer film layer, and a polyvinyl fluoride film layer.

10. The multilayer film of claim 9, wherein the multilayer film has anti-graffiti properties.

## 13

11. The multilayer film of claim 9, wherein the multilayer film has chemical resistant properties.

12. The multilayer film of claim 9, wherein the multilayer film has adhesive-resistant properties.

13. The multilayer film of claim 9, wherein the multilayer film is conformable. 5

14. A method of protecting a surface of an object comprising the steps of:

providing a multilayer film having anti-graffiti and chemical resistant properties, wherein the multilayer film is comprised of at least five separate layers and is formed by: 10

(a) providing a first adhesive layer having opposed first and second first adhesive layer surfaces; 15

(b) providing a flexible printable vinyl layer having opposed first and second printable vinyl layer surfaces, and adhering the first flexible printable vinyl surface to the second adhesive layer surface of the first adhesive layer; 20

(c) providing an ink layer having opposed first and second ink layer surfaces, and disposing the the first ink layer surface the on second flexible printable vinyl layer surface; 25

(d) providing a second adhesive layer having opposed first and second adhesive layer surfaces, and adhering the first adhesive layer surface of the second adhesive layer to the second ink layer surface;

## 14

(e) providing a translucent film layer having opposed first and second translucent film layer sides, and adhering the first translucent film layer side the second adhesive layer surface of the second adhesive layer, wherein the translucent film layer is selected from the group consisting of a polyester film layer, an extruded polyester film layer, a polychlorotrifluoroethylene film layer, a fluoride resin film layer, a fluoropolymer film layer, and a polyvinyl fluoride film layer;

(f) providing at least one overlapping seam of the second translucent film layer that is treated such that the at least one overlapping seam is adhesive accepting; and

(g) adhering the first adhesive layer surface of the first adhesive layer to the surface of the object to be protected such that the surface of the object is protected.

15. The method of claim 14, wherein the multilayer film also has adhesive resistant properties.

16. The method of claim 14, wherein the multilayer film also has extreme weather resistant properties.

17. The method of claim 14, wherein the multilayer film also has acid etching resistant and salt resistant properties. 20

18. The method of claim 14, wherein the multilayer film also has ultraviolet radiation resistant properties.

19. The method of claim 14, wherein the multilayer film also has non-interfering properties.

20. The method of claim 14, wherein the multilayer film also has conformable properties.

\* \* \* \* \*

**DEPARTMENT OF TRANSPORTATION**

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*Making Conservation  
a California Way of Life.*

January 29, 2018

Mr. Herb Kiekenapp  
TrafficWrapz  
515 N. Flagler Dr. Ste. P300  
W. Palm Beach, FL. 33401

Dear Mr. Kiekenapp:

The California Department of Transportation (Caltrans) has reviewed the following product:

<u>Product</u>	<u>Tracking Number</u>
TrafficWrapz Protective Overlay Film TW 360c	NPE 16-03-009

After careful evaluation of this product for Graffiti Removal and Preventative Materials, it has been determined that this product meets the AML. This product has been added to the Authorized Material List (AML).

Thank you for giving Caltrans the opportunity to review this product. If you have any questions regarding the new products review process, please contact the New Products Desk at (916) 227-7073.

Sincerely,

BONNI WALTER  
Product Evaluation Coordinator  
Material Engineering and Testing Services &  
Geotechnical Services  
Division of Engineering Services

Enclosure

cc: Andrew Morse