

**G****GORDIAN**<sup>®</sup>

Building knowledge



# Job Order Contracting: An Alternative Delivery Method



# Construction Industry Challenges

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Only **2.5%** of all global projects are delivered on time and on budget

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Only **25%** of projects are completed within **10%** of the original schedule

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Only **31%** are completed within **10%** of the original budget

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# Construction Industry Challenges

Time

Procurement  
burden relative  
to job size and  
scope

Staff limitations

Cost control/  
change orders

Lack of  
transparency/  
auditability

Energy  
efficiency/  
sustainability

MBE/WBE  
inclusion

# Construction Procurement

In-house  
Staff

Term  
Agreements  
T&M

Unit  
Price  
Contracts

Design-  
Bid-Build

CM at  
Risk

Design-  
Build

Job Order  
Contracting

# Job Order Contracting

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- Alternative method for procuring construction
- Works for a variety of projects
- Generally used for small to medium sized projects
- Supplemental tool, not a replacement

# Job Order Contracting

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## Definition

- Indefinite Delivery/Indefinite Quantity (IDIQ) contract
- Enables contractors to complete a substantial number of individual projects with a **single bid**
- Competitively-bid, based on **unit prices**

## Value

- Saves time and money
- Provides transparency and auditability
- Simplifies pricing for changes, deletions, and extra work

# Contract Documents



## 1. Project Manual

- Form of Contract, Bid Forms, Bond Forms, General Conditions, etc.

## 2. Construction Task Catalog®

- Construction Tasks with Unit Prices
- Unit Prices Based on Local Wage Rates (Davis Bacon, Prevailing, or Market Rate), and Local Material and Equipment Costs

## 3. Technical Specifications



# Project Manual

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## **Contract Includes Measurable Performance Standards**

- Quality of Price Proposals
- Timeliness of Price Proposals
- Timely Construction
- Quality Construction
- Achievement of MBE/WBE Goals
- Achievement of Self Performance Goals

# Construction Task Catalog

Full description of Task		Unit Price includes direct cost of labor, material and equipment	
09 22 16	<b>Non-Structural Metal Framing</b> (09 22) Note: Includes all necessary framing studs, bridging, fasteners necessary to attach to floors, walls, ceilings and a metal stiffener at half height. Per SF of wall area measures one side. Do not deduct for openings of less than 25 SF when calculating total wall square footage.		
09 22 16 00-0004	SF 3-5/8" Width, 25 Gauge, Non Load Bearing, Non Structural Metal Framing Stud With Tracks And Runners, 16" On Center.....	1.67	0.34
	For Walls > 10' High, Add	0.33	
	For Soffit, Columns Or Beams Up To 10' High, Add	0.86	
	For Soffit, Columns Or Beams > 10' High, Add	1.11	
	For Horizontal Installation Up To 10' High, Add	0.30	
	For Horizontal Installation > 10' High, Add	0.38	
	For Curved Wall, Add	0.26	
	For 12" On Center, Add	0.29	
	For 24" On Center, Deduct	-0.29	
	For Up To 200, Add	0.51	
	For > 200 To 500, Add	0.25	

Unit of Measure


Modifiers for variations in material or for quantity

Demolition price, if applicable

# Construction Task Catalog

09 65 19 19-0001	Vinyl Composition Tile (VCT) <small>(09 65 19 19)</small>		
	Note: The following vinyl composition tiles are certified to ASTM F 1066 Class 1 solid color tile, Class 2 through pattern tile or Class 3 surface pattern tile as listed in the task description.		
09 65 19 19-0002	SF	1/8" Thick, Class 2 Through Pattern, Vinyl Composition Tile (VCT) (Armstrong® Standard Excelon Imperial Texture®).....	3.07
		For 3/32" Thick, Deduct	-0.09
		For Extra Stock, Material Only, Deduct	-2.04
		For Up To 20, Add	1.32
		For >20 To 40, Add	0.74
		For >40 To 100, Add	0.26
		For >1,000 To 3,000, Deduct	-0.07
		For >3,000 To 6,000, Deduct	-0.20
		For >6,000, Deduct	-0.38
22 42 13 13-0002	Floor Mounted Elongated Vitreous China Water Closets <small>(22 42 13 13-0001)</small>		
	Note: Includes wax seal and toilet seat. Excludes flush valve.		
22 42 13 13-0003	EA	Flush Valve Type, Siphon Jet, Floor Mounted, Floor Outlet, Elongated Vitreous China Water Closet (American Standard Madera™).....	517.35
			95.02
22 42 13 13-0004	EA	Flush Valve Type, Siphon Jet, Floor Mounted, Floor Outlet, Elongated Vitreous China Water Closet (American Standard Colorado).....	513.30
			95.02
22 42 13 13-0005	EA	Flush Valve Type, Siphon Jet, Floor Mounted, Wall Outlet, Elongated Vitreous China Water Closet (American Standard Priolo®).....	595.71
			95.02
26 51 13 00-0173	Wall Bracket, Fluorescent Fixtures <small>(26 51 13 00-0001)</small>		
26 51 13 00-0174	Wall Bracket, Fluorescent Fixtures (Lithonia W) <small>(26 51 13 00-0173)</small>		
	Note: Includes extruded aluminum housing with brushed finish, acrylic diffuser and solid-state electronic ballast.		
26 51 13 00-0175	2' Length, Wall Bracket, Fluorescent Fixtures (Lithonia W) <small>(26 51 13 00-0174)</small>		
26 51 13 00-0176	EA	1 T8 Lamp, 2' Length, Wall Bracket, Fluorescent Fixture (Lithonia W).....	232.79
			49.28
26 51 13 00-0177	EA	2 T8 Lamps, 2' Length, Wall Bracket, Fluorescent Fixture (Lithonia W).....	235.22
			49.28

# Construction Task Catalog



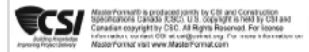
Using The Construction Task Catalog®

## About the CTC:

- ☑ This Construction Task Catalog® (CTC) was developed and customized by The Gordian Group, Inc. specifically for **The Town of Greece**, priced locally using current labor, material and equipment costs, and published in November 2016.
- ☑ The Gordian Group, Inc. licenses the use of this CTC and other proprietary information and software for the sole purpose of providing Job Order Contracting services to **The Town of Greece**. Use of this CTC and other proprietary information and software for any other purpose, or for any other entity, is expressly prohibited without the express written consent of The Gordian Group, Inc.

## MasterFormat™

- ☑ The tasks in this Construction Task Catalog are organized using CSI's *MasterFormat*.



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## The Unit Prices Include:

### LABOR COSTS:

- ☑ Labor costs include direct labor through the working foreperson level at straight-time prevailing wage rates including fringe benefits and an allowance for Social Security, Medicare taxes, worker's compensation, unemployment insurance, and employee benefits.
- ☑ Labor costs include unloading equipment, materials, and tools, and transporting the same up or down 2 1/2 stories and 125' to reach the project site; layout; measuring and cutting to fit; performing the task; disposal of excess material; and time for lunch and breaks.

### EQUIPMENT COSTS:

- ☑ Equipment costs include all equipment required to accomplish the task.
- ☑ Mobilization is included for all equipment except large equipment (e.g. cranes, bulldozers, excavators, backhoes, bobcats etc.), which exclude mobilization.
- ☑ Equipment costs include all operating expenses such as fuel, electricity, lubricants, etc.

### MATERIAL COSTS:

- ☑ Material costs include the cost of the material, delivery, and all incidentals and accessories integral to the installation.
- ☑ Material costs include manufacturer's and/or fabricator's shop drawings.
- ☑ Material costs for roofing, drywall, VCT, carpet, wall covering, ceiling tile, pipe, conduit, concrete, etc. include an allowance for waste. This list is not intended to be all inclusive, but descriptive of the types of construction materials that are typically sold in standard lengths, sizes and weights.
- ☑ Material costs for imported materials (e.g. aggregate, sand, soil, etc.) include delivery up to 15 miles from the closest approved source.

## The Adjustment Factors Include:

The Adjustment Factors include the following costs, unless specifically excluded by the terms of the Contract Documents:

### BUSINESS COSTS:

- ☑ Office overhead, including, but not limited to, office space, office equipment, office and management personnel, office supplies, and employee transportation.
- ☑ Insurance and bonding.
- ☑ Profit.

November 2016

EZIGC, The Town of Greece, New York

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## Explains What Costs are Included in the Unit Prices and in the Adjustment Factors

## Explains when Contractor will be paid for Scaffolding, Dumpsters, Fasteners, etc.

## Sets forth General Rules:

- Quantity Discounts Apply to Overall Project
- Contractor must use Most Efficient Tasks

# Technical Specifications

	04 - Masonry
SECTION 04 05 13 26 - UNIT MASONRY ASSEMBLIES	
1.1 GENERAL	
A. Description Of Work	1. This specification covers the furnishing and installation of materials for unit masonry assemblies. Products shall be as follows or as directed by the Owner. Installation procedures shall be in accordance with the product manufacturer's recommendations. Demolition and removal of materials shall be as required to support the work.
B. Summary	1. This Section includes unit masonry assemblies consisting of the following: <ul style="list-style-type: none"><li>a. Concrete masonry units (CMUs).</li><li>b. Decorative concrete masonry units.</li><li>c. Pre-faced concrete masonry units.</li><li>d. Concrete brick.</li><li>e. Face brick.</li><li>f. Building (common) brick.</li><li>g. Hollow brick.</li><li>h. Glazed brick.</li><li>i. Structural-clay facing tile.</li><li>j. Firebox brick.</li><li>k. Clay flue lining units.</li><li>l. Stone trim units.</li><li>m. Mortar and grout.</li><li>n. Reinforcing steel.</li><li>o. Masonry joint reinforcement.</li><li>p. Ties and anchors.</li><li>q. Embedded flashing.</li><li>r. Miscellaneous masonry accessories.</li><li>s. Masonry-cell insulation.</li><li>t. Cavity-wall insulation.</li></ul>
C. Definitions	1. Reinforced Masonry: Masonry containing reinforcing steel in grouted cells.
D. Performance Requirements	1. Provide structural unit masonry that develops indicated net-area compressive strengths ( $f_m$ ) at 28 days. 2. Determine net-area compressive strength ( $f_m$ ) of masonry from average net-area compressive strengths of masonry units and mortar types (unit-strength method) according to Tables 1 and 2 in ACI 530.1/ASCE 6/TMS 602 OR Tables 2105.2 in the International Building Code, as directed. OR Determine net-area compressive strength ( $f_m$ ) of masonry by testing masonry prisms according to ASTM C 1314 OR IBC Standard, as directed.
E. Submittals	1. Product Data: For each type of product indicated. 2. Shop Drawings: For reinforcing steel. Detail bending and placement of unit masonry reinforcing bars. Comply with ACI 315, "Details and Detailing of Concrete Reinforcement." Show elevations of reinforced walls. 3. Samples for each type and color of exposed masonry units and colored mortars.
December 2016	Unit Masonry Assemblies
EZIGC, The Town of Greece, New York	04 05 13 26 - 1

Sets forth the Quality of  
Materials and the Quality of  
Workmanship for each Task

# Bidding

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## **Prior to Bidding Owner Cannot:**

- Identify or Commit to any Specific Project or Location
- Identify or Commit to any Specific CTC Tasks or Quantities

## **There is a Defined Geographic Area**

- County, Group of Counties, City Limits, a Campus, etc.

## **Contract has fixed Term**

- e.g. 1 Year Term With a 1 Year, Bilateral Option Term

**Estimated Annual Value: \$1,000,000, \$2,000,000, etc.**

# Bidding

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## **Contractors Bid Adjustment Factors to be Applied to the Unit Prices**

- Normal Working Hours (Monday – Friday, 7:00am to 3:30pm)
- Other Than Normal Working Hours (Evenings, Weekends, Holidays)

**Adjustment Factors include Overhead, Profit, and an Adjustment to the Unit Prices**

**Most Owners Award based on Lowest, Responsive, Responsible Bidder**

**Some Owners Award based on Best Value**

# Bidding

	Adjustment Factor Name	Adjustment Factor Bid	X Multiplier	= Total
1.	Adjustment Factor for Normal Working Hours	<u>1.</u> <u>2</u> <u>1</u> <u>3</u> <u>6</u>	X 0.70	= <u>0.</u> <u>8</u> <u>4</u> <u>9</u> <u>5</u>
2.	Adjustment Factor for Other Than Normal Working Hours	<u>1.</u> <u>3</u> <u>3</u> <u>4</u> <u>9</u>	X 0.30	= <u>0.</u> <u>4</u> <u>0</u> <u>0</u> <u>4</u>
3.	<b>Add all the Total amounts in the right column.</b>  <b>The Sum of these Total amounts is the Award Criteria Figure.</b>			= <u>1.</u> <u>2</u> <u>4</u> <u>9</u> <u>9</u>



# Bidding

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## Importance of Adjustment Factors

- Determines Winning Bidder AND
- Used to Price Individual Job Orders
- Price Proposal Total Becomes the Job Order Price

Unit Price	x	Quantity	x	Adjustment Factor	=	Total for Task
+						
Unit Price	x	Quantity	x	Adjustment Factor	=	Total for Task
+						
Unit Price	x	Quantity	x	Adjustment Factor	=	Total for Task
						<hr/>
						Total Job Order Price

# The Process



1. Joint Scope Meeting with Owner, Contractor, and others to discuss the Detailed Scope of Work
2. Issue Detailed Scope of Work – Describing the work to be completed
3. Contractor Prepares Price Proposal Package – Price Proposal, Schedule, List of Subcontractors
4. Review Price Proposal Package – Request Changes
5. Owner Issues Job Order

# The Process

- Changes, Deletions, Extra Work Priced from CTC as a Supplemental Job Order. No Negotiation.
- Items not in the CTC, Priced according to the following Formula:

*A = Labor Costs (Trades not in Construction Task Catalog)*

*B = Direct Material Costs (supported by three quotes)*

*C = Direct Equipment Costs (Equipment not in Construction Task Catalog)*

*D = Subcontractor Costs (supported by three quotes)*

*E = Allowable Overhead and Profit =  $(A + B + C) \times 15\%$*

*F = Subcontractor Allowance =  $D \times 10\%$*

*$A + B + C + D + E + F = \text{Total of NonPrepriced Task}$*

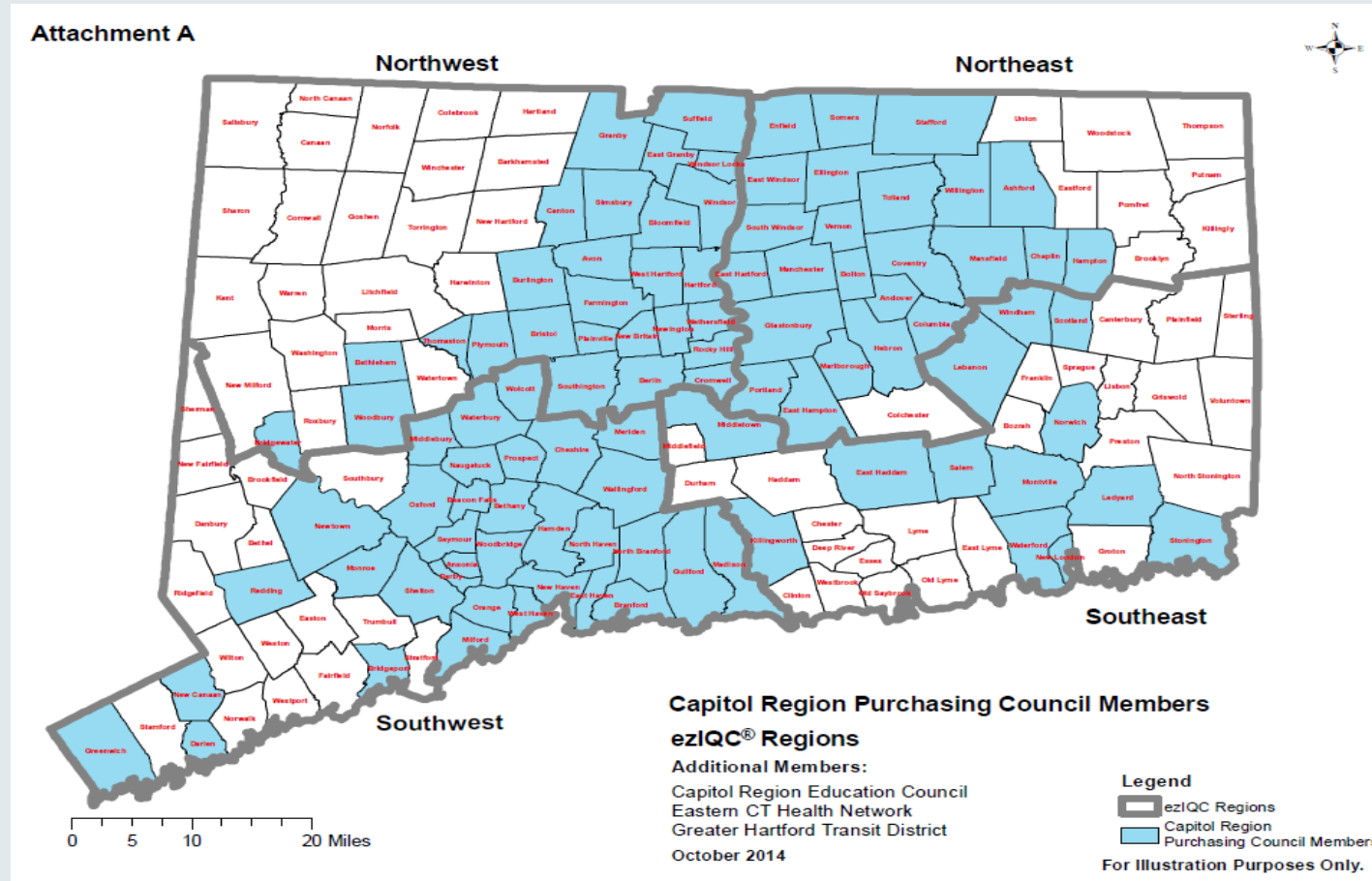
# The Process

- Each Job Order
  1. Sets forth the work the contractor must perform – Detailed Scope of Work
  2. Establishes when the work must be performed – approved Construction Schedule
  3. Includes the price the Owner will pay for work completed on time – amount of the Approved Price Proposal

# Cooperative Purchasing

- Can be set up for an Individual Owner to perform work at its facilities or infrastructure assets
  - New York City Department of Education – 1,200 school buildings
  - The Pennsylvania State University – State College Campus
  - District of Columbia Housing Authority – 8,000 apartment units
- Can be shared cooperatively - Put in place by one Owner, accessed by Others

# Cooperative Purchasing



# Cooperative Purchasing

## ESCNJ CONTRACTOR SERVICE AREAS:

### REGION 1

General: Lighton Industries, Inc.  
Electrical: Facilities Solutions Group  
HVAC: Lighton Industries, Inc.  
Plumbing: Magic Touch  
Paving: Murray Paving & Concrete, LCC

### REGION 2

General: Lighton Industries, Inc.  
Electrical: Facilities Solutions Group  
HVAC: Lighton Industries, Inc.  
Plumbing: Magic Touch  
Paving: Murray Paving & Concrete, LCC

### REGION 3

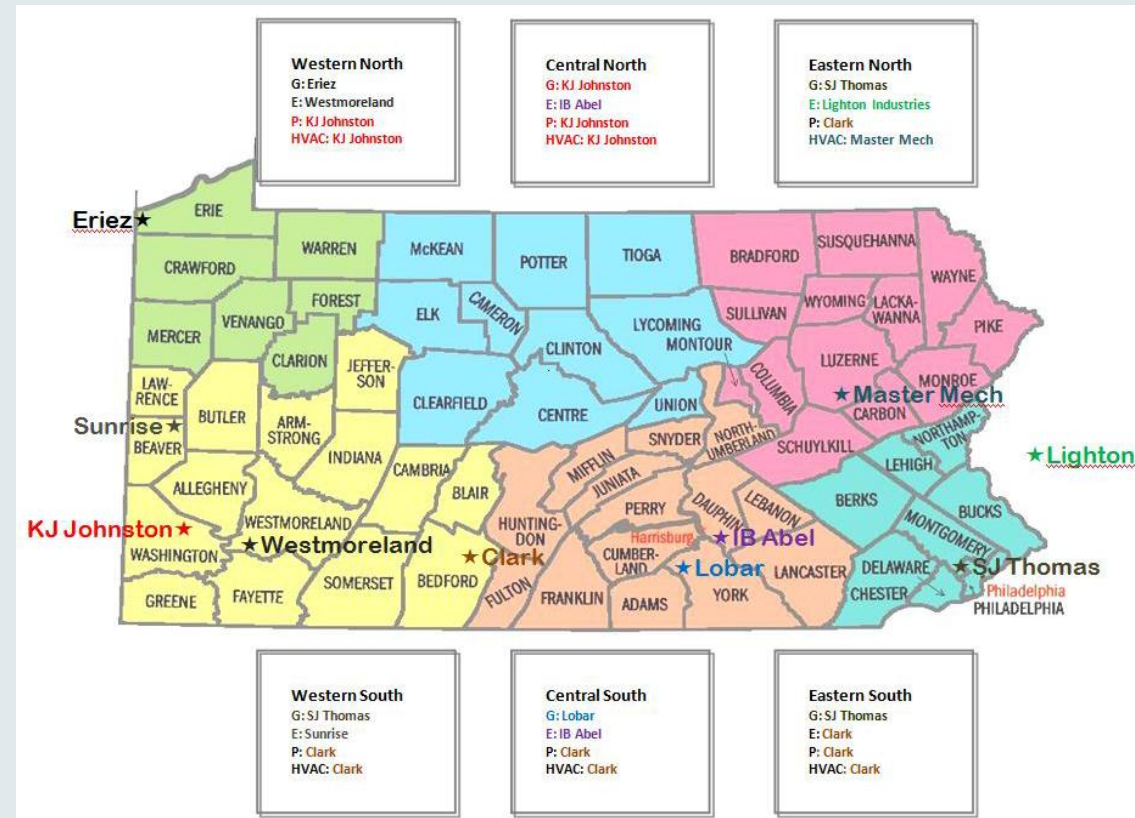
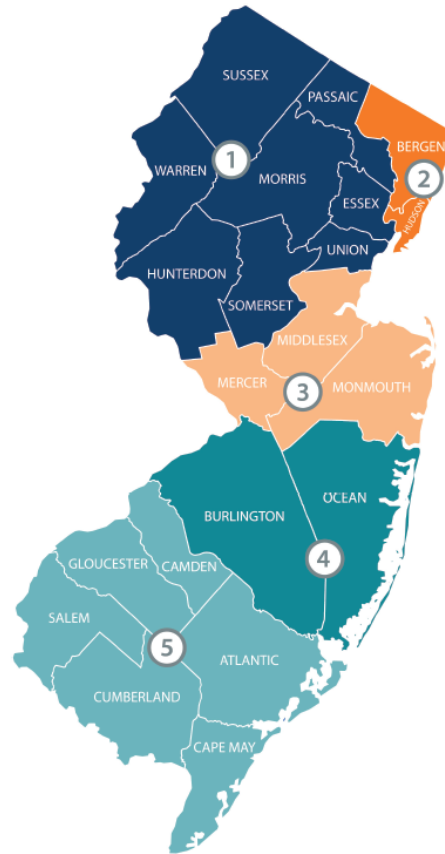
General: Ascend Construction Management, Inc.  
Electrical: Facilities Solutions Group  
HVAC: Lighton Industries, Inc.  
Plumbing: Magic Touch  
Paving: Murray Paving & Concrete, LCC

### REGION 4

General: Ascend Construction Management, Inc.  
Electrical: Facilities Solutions Group  
HVAC: Lighton Industries, Inc.  
Plumbing: Ascend Construction Management, Inc.  
Paving: Ascend Construction Management, Inc.

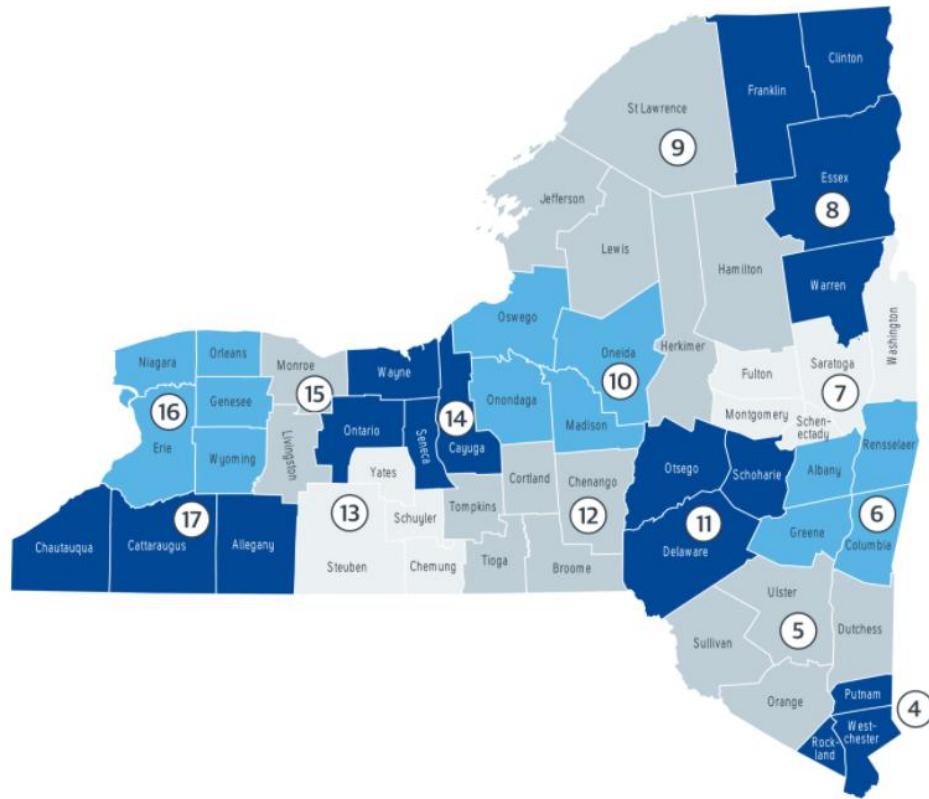
### REGION 5

General: Ascend Construction Management, Inc.  
Electrical: Facilities Solutions Group  
HVAC: Lighton Industries, Inc.  
Plumbing: Ascend Construction Management, Inc.  
Paving: Ascend Construction Management, Inc.



# Cooperative Purchasing

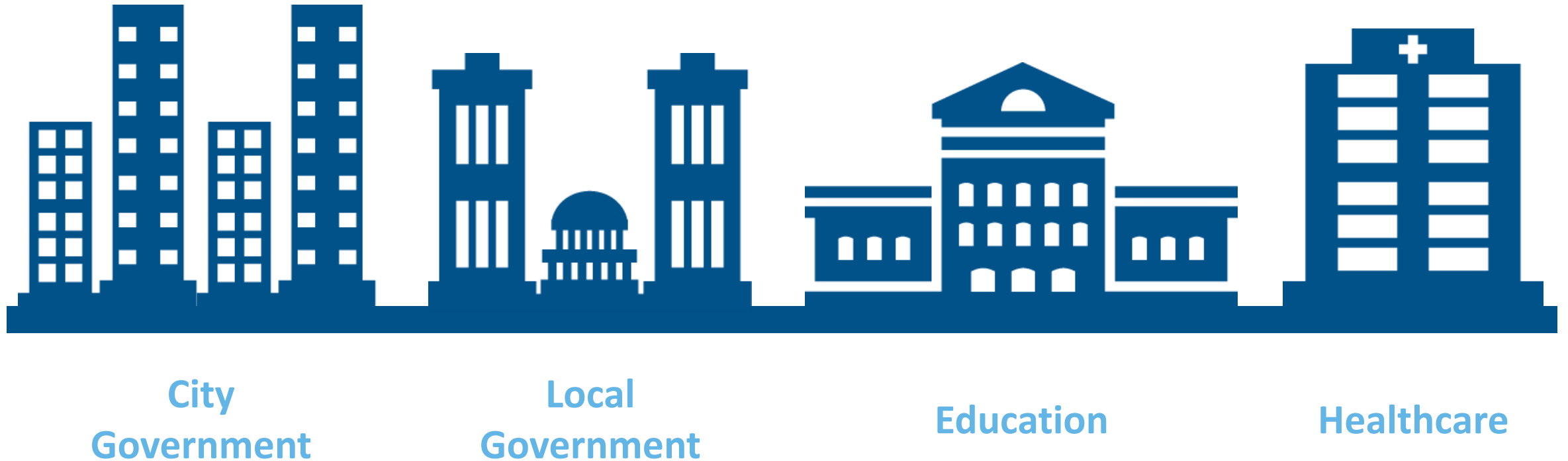
Regional Map



Town of Greece, NY



# Who Uses Job Order Contracting?



# The Benefits

- Simplifies the procurement process
- Faster response time
- Improves the quality of construction
- Increases MBE/WBE/DBE/VBE participation
- Virtually eliminates defaults, terminations and claims
- Streamlines change order process
- Fully transparent and auditable





Questions?