



MEMORANDUM

FROM: Carrie A. Swain, Clerk
Board of Education

DATE: April 3, 2018

TO: Michael J. Dalton, City Clerk

SUBJECT: Notice of Committee Meetings – Thursday, April 5, 2018,
5:30 p.m., Driggs School, Café
Notice of RESCHEDULED Regular Meeting – Thursday, April 26, 2018,
6:30 p.m., Waterbury Arts Magnet School Atrium

The Committees of the Board of Education will meet on Thursday, April 5, 2018, Driggs School, Café, 77 Woodlawn Terrace, Waterbury, CT.

AGENDA

SILENT PRAYER

PLEDGE ALLEGIANCE TO THE FLAG

- 1. Committee of the Whole/20 minutes ~ Principal’s Report (no backup)– Michael Theriault.

PUBLIC SPEAKING

- 2. Committee on Finance/5 minutes: Monthly Expenditure Report for February 2018 – D. Biolo.
- 3. Committee on Finance/5 minutes: Request approval of a Contract with Light Tower Fiber Networks II, LLC for wide area fiber network (to be distributed) – W. Zhuta.
- 4. Committee on Finance/5 minutes: Request approval to apply for the 2018-2020 CSDE Individuals with Disabilities Education (IDEA) Entitlement Grant – E. Skoronski.
- 5. Committee of the Whole/20 minutes ~ Bilingual Department Report – A. Jorge Nelson.
- 6. Committee of the Whole/20 minutes ~ Student Assessment Results – D. Schwartz, et al.
- 7. Committee on Curriculum/20 minutes ~ Discussion: Special Education and Alternative Programs (no backup) – D. Schwartz, M. Baldwin, R. Brenker.
- 8. Committee on School Facilities & Grounds/2 minutes ~ Use of school facilities by school organizations and/or City departments.
- 9. Committee on School Facilities & Grounds/3 minutes ~ Use of school facilities by outside organizations and/or waiver requests.

10. Superintendent's Notification to the Board/5 minutes:

a. Grant funded appointments effective immediately:

Ciochetti, Angela – H.R. Associate, \$16.26 p/hour, non-union with benefits governed by UPSEU #69, funded by Title II Part A.

Joseph, Renee – Assistant Talent Recruiter, \$23.08 p/hour, non-union with benefits governed by UPSEU #69, funded by Alliance Grant.

Marofsky, Etienne – H.R. Generalist, \$50,000 annually, non-union with benefits governed by the UPSEU #69, funded by Title II Part A.

White, Andrea – Prevention Specialist, \$18.14 p/hour, non-union with benefits governed by UPSEU #69, funded by Priority Schools Grant.

b. 21st Century After School Program Recreation Specialist appointments, part-time, \$12.00 p/hour, non-union and without benefits:

Patricia Alonso (sub)	Annette Goncalves	Edward Larose
Robert Lewis	Sabrina Martinez	Davon Robinson
Massiel Romero	James Santiago	Jeffrey Smith
Shaniqua Thomas	Husseiann Villanueva	

c. 21st Century After School program appointments, salary according to individual's contract:

Carrington School

Melissa Thompson – Site Admin.

Harley Gaafar – Teacher

Karen Renna – Site Admin. (Sub)

Patricia Theriault – Teacher

Kristen Gwiazdoski – Site Admin. (Sub)

Emily Wengertsman – Teacher (Sub)

Stephen Barone – Teacher (Sub)

Maura Kerns – Teacher (Sub)

Ashley Feliz – Teacher (Sub)

Scott McWhirt – Teacher (Sub)

Elisa D'Agostino – Teacher (Sub)

Elisa D'Agostino – Teacher (Sub)

Duggan School

Melissa DiGiovanni – Site Admin.

Kaitlyn Clough – Teacher

Patricia Frageau – Site Admin. (Sub)

Jennifer DiFronzo – Teacher

David Lucian – Teacher

Sarah Martin – Teacher (Sub)

Joseph Perrucci – Teacher (Sub)

Gilmartin School

Amy Petruzzi – Site Admin.

Christine Taylor-Braxton – Teacher

Jennifer Dwyer – Site Admin. (Sub)

Sybil Wynne P. Jones – Teacher

Brenda Falcone – Teacher

Kathryn Iaiennaro – Teacher (Sub)

Jessica Sconziano – Teacher (Sub)

Suzanne Newman – Teacher (Sub)

Reed School

Diurca Tomasella – Site Admin.

Denise Griffin – Teacher

Juan Mendoza – Site Admin. (Sub)

Kimberly Rock – Teacher

Jonna McKirryher – Teacher

Susan D'Amato – Teacher (Sub)

Emily Phillips – Teacher (Sub)

Jessica Boratko – Teacher (Sub)

Jessica Boratko – Teacher (Sub)

Robotics for 21st Century and SDE Programming

Charles Fareira – Teacher

Kathy Gaydosh – Teacher

Margaruite Pesce – Teacher

d. Middle School STEM After-school Program appointments, CPEP, stipend salary funded by Title IV:

Ford, Marnie	Carrington
Carpenter, Ryan	North End M.S.
Carpenter, Sarah	North End M.S.
Della Calce, Anthony	North End M.S.
Perrucci, Joe	Duggan
Gluz, Debra	Wallace M.S.
Kowalski, Erik	Wallace M.S.
Gaafar, Harley	West Side
Irizarry, Jorge	West Side

- e. Wilson Family Resource Center Books and Basketball Before School Program appointments, Monday through Thursday, 7 – 8 a.m., beginning 4/23/18, funded by Wilson FRC Grant:
 Jessica Reho – Coordinator
 Amy Densmore – Teacher
 Donna Orsatti – Para
 Tracy Trotman – Para Sub
 Kelly Fengler – Teacher
 Rebecca James – Para
 Linda Fitzgerald – Tutor
- f. Wilson FRC Arts After School Program appointments, Tuesday through Thursday, 3 – 4:30 p.m., beginning 4/24/18, funded by Wilson FRC Grant:
 Jessica Reho – Coordinator
 Kelly Pinho – Teacher
 Tara Healey – Teacher Sub
 Karyn Skinner – Teacher
 Melissa Dojnia – Teacher (Wed.)
 Rebecca James – Para Sub
- g. Reed FRC Books and Basketball Before School Program appointments, Monday through Thursday, 7 – 8 a.m., beginning 4/23/18, funded by Reed FRC Grant:
 Melissa Steffero – Teacher/ Coordinator
 Patricia McKenna – Para
 Zinnia Hensley – Para
 Debbie Price – Para
- h. Reed FRC Arts After School Program appointments, Monday through Thursday, 3 – 4:30 p.m., beginning 4/23/18, funded by Wilson FRC Grant:
 Latasha Martinez – Building Sub
 Gina Farrington – Para
 Tawanna Fisher – Para
 Zinnia Hensley – Para
 Debbie Price – Para
- i. Mayor’s Run Club Mentor appointments effective 03/23/18:
 Benjamin, Krista
 Hart, Richard
 Peschke, Marcy
 Wheeler, Kristen
 Cianfagna, Traci
 Ouellette, Bernadette
 Poulter, Dennis
 Guerrera, Sara
 Parks, Michele
 Rocco, Margaret
- j. Teacher hires:
- | <u>Name</u> | | <u>Assignment</u> | | <u>Effective</u> |
|-------------|---------|-------------------|------|------------------|
| Olaoye | Abioye | WAMS | Math | 03/08/18 |
| Rodriguez | Lynette | Wallace | Math | 03/08/18 |
- k. Academic Achievements effective 03/01/18:
- l. Retirements:
 Acevedo-Gordils, Nancy – Bilingual Science, CHS, effective 06/30/18.
 Bousaada, Doreen – Speech Language Pathologist, W. Cross, eff. 06/30/18.
 Howard, Kathleen – Special Education, Maloney, effective 06/30/18.
- m. Resignations:
 Cocuzzi, Matt – Grade 5, Wilson, effective 03/16/18.
 Leone, Holly – Grade 5, Sprague, effective 03/28/18.
 Simon, Michael – ROTC USMC teacher, WHS, effective 06/30/18.

EXECUTIVE SESSION

ADJOURNMENT

ATTEST: 
 Carrie A. Swain, Clerk
 Board of Education



Driggs Elementary School

Est 1899

Introducing the FLY Team and Forever Wave

Our goals are:

To take care of ourselves;

To take care of others;

To take care of our school.



VISION

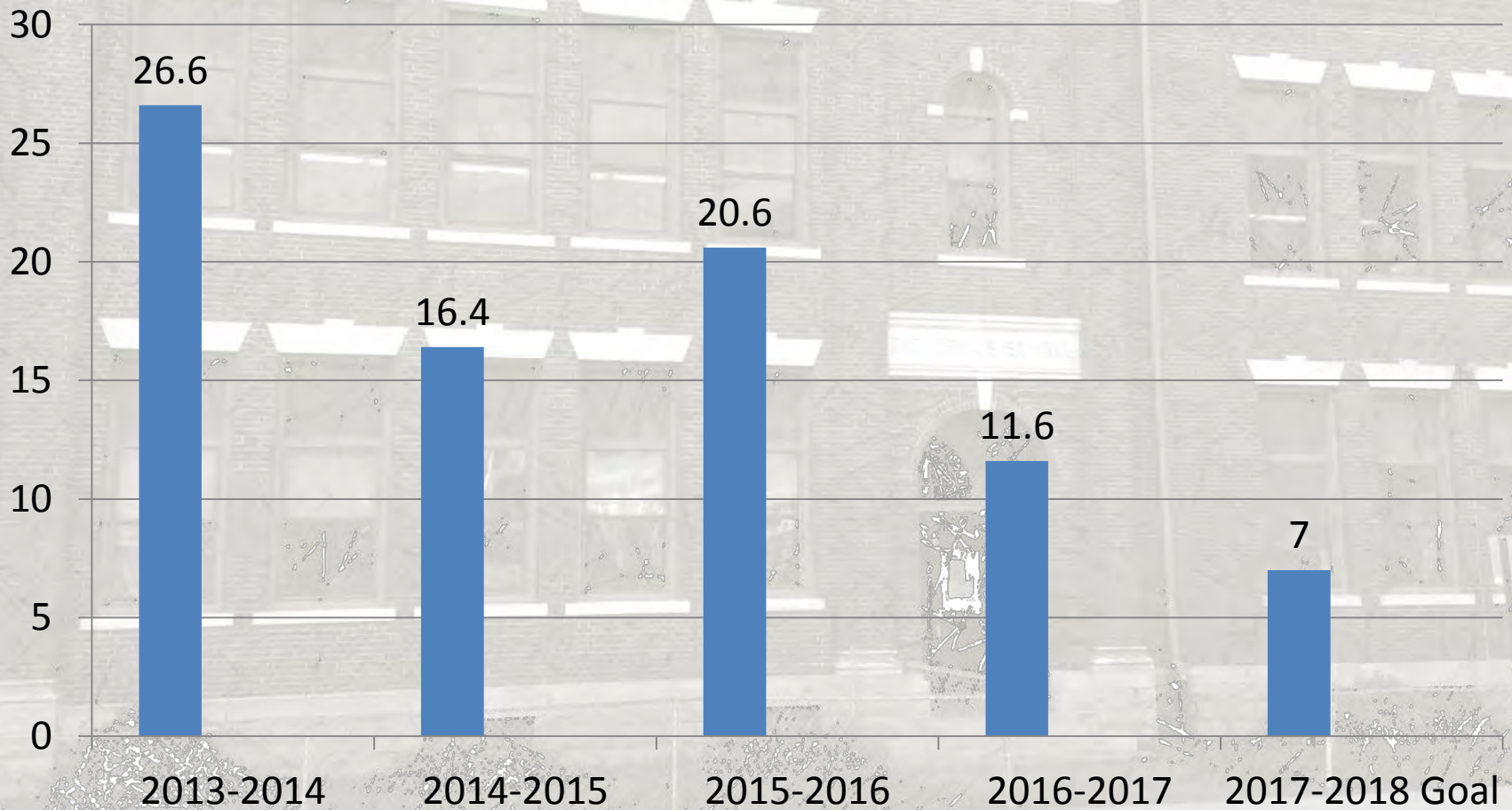
Driggs Elementary will be a vital component of our urban community that provides a safe and engaging environment where students learn the value and power of perseverance in developing the skills and habits that will make them successful now and in the future.

MISSION

We will...

- Establish **school-wide values** and procedures that foster **positive relationships** and an environment in which to learn and grow
- Strengthen student, family and community **partnerships** by maintaining open lines of **communication** and involving them in decision making
- Help students develop the mindset they need to achieve academic and personal excellence including **perseverance, empathy, responsibility, respect for self and others and self-reflection.**
- Use **data** and **evidence-based practices** to continuously improve instruction so that students meet and exceed **high expectations**
- **Motivate** and **inspire** all school community members to be their best and make every moment count!

Percentage of Students Chronically Absent Yearly



Improving Academics – Some Highlights

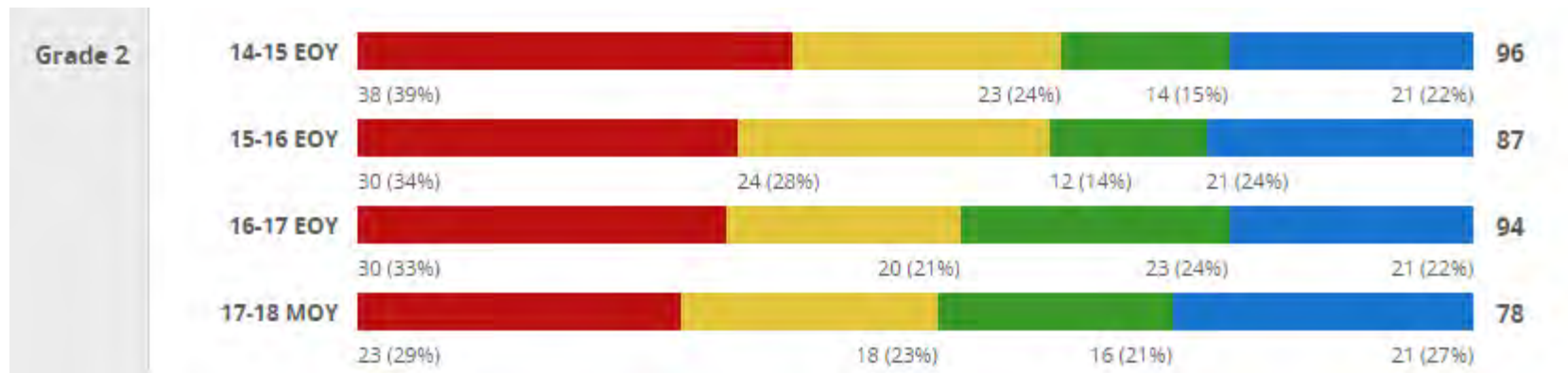
- STEM Scouts Donor – former Driggs student
- Funds for Teacher Grant used by Literacy teacher to pursue new training and materials to help our struggling readers
- Certified Foundations Literacy Facilitator
- New technology through grants:
 - 50 desk tops
 - 4 new Chromebook carts
 - New wireless access points
 - 17 new SMART tv
 - Coming soon – upgraded security system
- Generali Grant - 2 years in a row (gr. 2 yoga/mindfulness through literature and gr. 4 be an author program)
- Increased focused walk-throughs for classroom environment and small group instruction in literacy and numeracy

Academic Celebrations

Numeracy

Driggs School had a 9.1% growth in proficiency from previous year as measured by Smarter Balanced. We consistently have more than 80% of our students meeting the recommended usage on Iready.

Literacy



Increase School Safety and Positive Climate



- Contracted basketball program for gr. 4/5
- Newly created FLY Team
- Use of Class Dojo for PBIS and parent engagement
- Weekly SRBI meetings discuss individuals and goals
- “Blue Incentive” time to reward the students who are consistently meeting expectations
- Focus on SEL and Restorative Practices (in PD and practice)
- Student of the Quarter
- Citizenship Awards

Parent engagement



323

Class story posts



5200 parent views



887 parent likes



260 conversations



117 posts translated

Student engagement



4296

Moments recognized



87% positive



63 skills encouraged



On task (top skill)



0 group moments

Discipline Referrals

2016-2017 v 2017-2018 by Tiers



2016-2017

2017-2018

Percent of Population

2017

2018

Tier 3. 3+ Referrals

14.5%

8%

Tier 2. 1-2 Referrals

12.5%

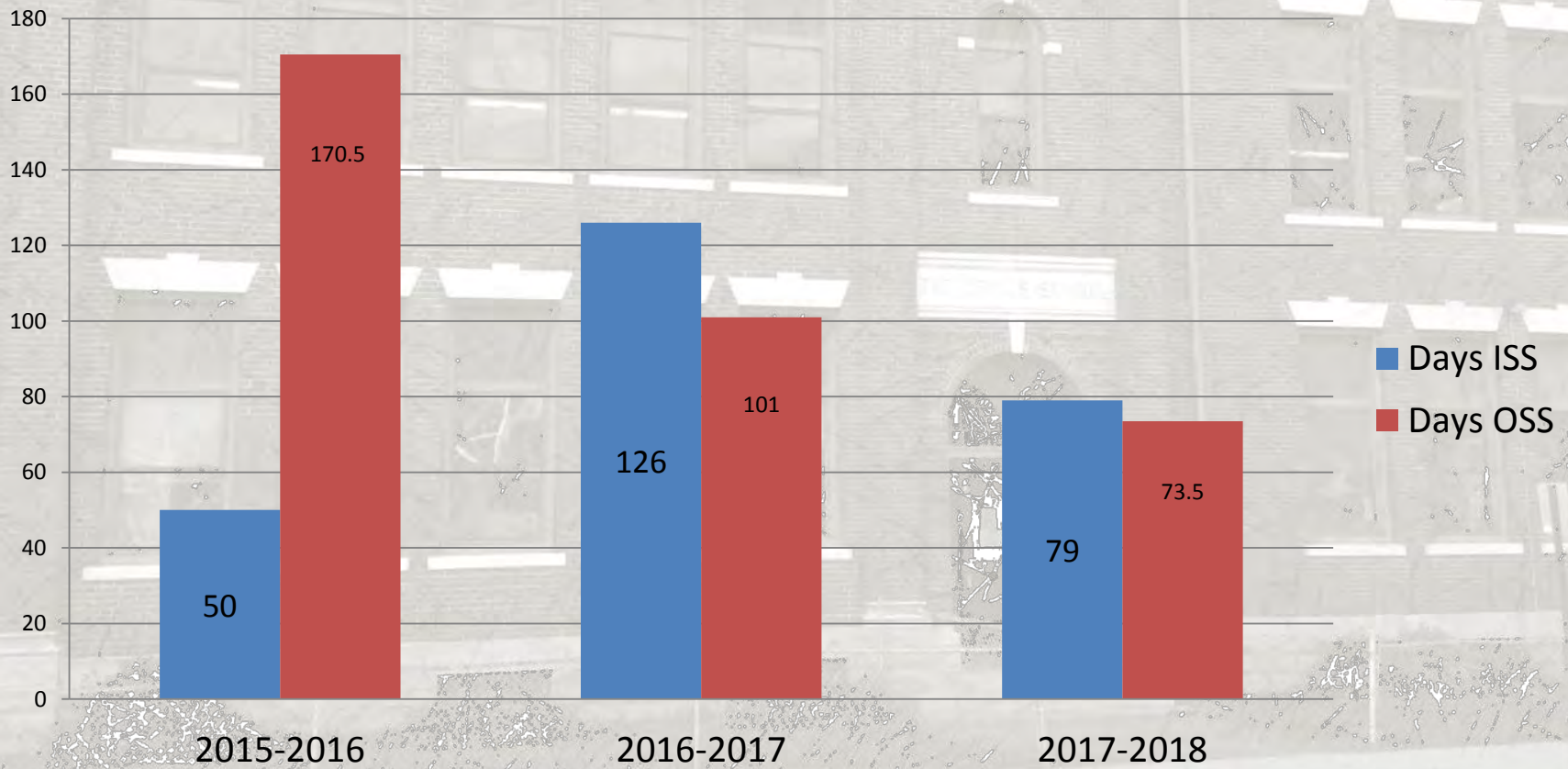
8%

Tier 1. 0 Referrals

73.0%

84%

ISS/OSS Comparison by Year



Building Community

- Earth Day Clean Up at Driggs
- Parent Teacher Organization
- Community resources that we are using frequently
 - Wellmore
 - EMPS
 - Family and Children's Aid
 - DCF Community
 - Officer Lemos
 - Juvenile Review Board
 - Waterbury Youth Squad
 - CHMA-Shine extended day program
- Turkey Basket Giveaway
- Adopt a Student Holiday Program (started and run by staff members)
- Breakfast & Picture with Santa
- Collaboration with Pomperaug High School and Quinnipiac during 21st Century Afterschool program
- Boy Scouts/Girl Scouts on site during lunch/recess weekly

Developing Partnerships

- PAL
- Grady and Riley
- Stop and Shop
- Costco (book bags)
- Staywell Health Clinic– 475 currently enrolled (21 receiving behavioral health, over 50 referred)
- 49 students enrolled in Food Bank “Back Pack Program”
- Webster Bank Mentor Program



Afterschool Programs



GREATER WATERBURY YMCA



WATERBURY
Public Schools

Today's Students, Tomorrow's Leaders

"Every child deserves a champion: an adult who will never give up on them, who understands the power of connection and insists they become the best they can possibly be."

- Rita Pierson, Educator



Board of Education

Monthly Expenditure Report

February 2018

ACCOUNT	CLASSIFICATION	FY 18 ORIGINAL BUDGET	FY 18 ADJUSTED BUDGET	FEBRUARY EXPENDITURE	FEBRUARY ENCUMBRANCE	CURRENT BALANCE	PROJECTED EXP.	PROJECTED DIFFERENCE
Salaries								
511101	Administrators	\$8,068,814	\$8,068,814	\$5,216,264	\$0	\$2,852,550	\$8,025,814	\$43,000
511102	Teachers	\$73,999,242	\$73,999,242	\$43,197,186	\$0	\$30,802,056	\$75,401,236	(\$1,401,994)
511104	Superintendent	\$228,220	\$228,220	\$202,743	\$0	\$25,477	\$277,307	(\$49,087)
511106	Early Incentive Certified	\$1,323,649	\$1,323,649	\$1,217,560	\$0	\$106,089	\$1,295,649	\$28,000
511107	Certified Coaches	\$685,000	\$685,000	\$251,947	\$0	\$433,053	\$725,000	(\$40,000)
511108	School Psychologists	\$1,782,033	\$1,782,033	\$906,047	\$0	\$875,986	\$1,687,033	\$95,000
511109	School Social Workers	\$1,932,753	\$1,932,753	\$1,071,916	\$0	\$860,837	\$1,932,753	\$0
511110	Speech Pathologists	\$2,269,315	\$2,269,315	\$1,256,477	\$0	\$1,012,838	\$2,269,315	\$0
511113	Extra Compensatory Stipend	\$85,000	\$85,000	\$0	\$0	\$85,000	\$96,000	(\$11,000)
511201	Non-Certified Salaries	\$2,136,138	\$2,136,138	\$1,176,308	\$0	\$959,830	\$2,136,138	\$0
511202	Clerical Wages	\$795,692	\$795,692	\$595,819	\$0	\$199,873	\$795,692	\$0
511204	Crossing Guards	\$386,099	\$386,099	\$230,316	\$0	\$155,783	\$386,099	\$0
511206	Educational	\$260,000	\$260,000	\$163,997	\$0	\$96,003	\$260,000	\$0
511212	Substitute Teachers	\$2,945,000	\$2,945,000	\$1,630,876	\$65,110	\$1,249,014	\$3,090,000	(\$145,000)
511215	Cafeteria Aides	\$80,000	\$80,000	\$27,953	\$0	\$52,047	\$80,000	\$0
511216	Library Pages	\$144,404	\$144,404	\$71,087	\$0	\$73,317	\$144,404	\$0
511217	Library Aides	\$169,950	\$169,950	\$93,992	\$0	\$75,958	\$169,950	\$0
511219	School Clerical	\$1,877,086	\$1,877,086	\$984,382	\$0	\$892,704	\$1,822,086	\$55,000
511220	Fiscal Administration	\$526,765	\$526,765	\$243,880	\$0	\$282,885	\$461,765	\$65,000
511222	Transportation Coordinator	\$99,058	\$99,058	\$60,196	\$0	\$38,862	\$99,058	\$0
511223	Office Aides	\$140,000	\$140,000	\$96,849	\$0	\$43,151	\$140,000	\$0
511225	School Maintenance Non-Certified	\$2,224,269	\$2,224,269	\$1,298,914	\$0	\$925,355	\$2,174,269	\$50,000
511226	Custodians Non-Certified	\$5,396,229	\$5,396,229	\$3,138,839	\$0	\$2,257,390	\$5,221,229	\$175,000
511227	Overtime - Outside Activities	\$200,000	\$200,000	\$153,786	\$0	\$46,214	\$200,000	\$0
511228	Paraprofessionals	\$10,252,396	\$10,252,396	\$5,392,215	\$0	\$4,860,181	\$10,122,396	\$130,000
511229	Bus Duty	\$250,000	\$250,000	\$806	\$0	\$249,194	\$250,000	\$0
511232	Attendance Counselors	\$328,928	\$328,928	\$165,712	\$0	\$163,216	\$328,928	\$0
511233	ABA Behaviorial Therapist	\$1,628,349	\$1,628,349	\$868,589	\$0	\$759,760	\$1,585,849	\$42,500
511234	Interpreters	\$138,511	\$138,511	\$71,245	\$0	\$67,266	\$138,511	\$0
511236	Snow Removal	\$0	\$0	\$24,751	\$0	(\$24,751)	\$28,000	(\$28,000)
511650	Overtime	\$740,000	\$740,000	\$510,027	\$0	\$229,973	\$740,000	\$0
511653	Longevity	\$25,200	\$25,200	\$23,900	\$0	\$1,300	\$23,040	\$2,160
511700	Extra Police Protection	\$500,516	\$500,516	\$0	\$0	\$500,516	\$500,516	\$0
529001	Car Allowance	\$81,000	\$81,000	\$42,628	\$0	\$38,372	\$81,000	\$0
529003	Meal Allowances	\$9,000	\$9,000	\$5,024	\$159	\$3,816	\$9,000	\$0
Subtotal Salaries		\$121,708,616	\$121,708,616	\$70,392,232	\$65,269	\$51,251,115	\$122,698,037	(\$989,421)

ACCOUNT	CLASSIFICATION	FY 18 ORIGINAL BUDGET	FY 18 ADJUSTED BUDGET	FEBRUARY EXPENDITURE	FEBRUARY ENCUMBRANCE	CURRENT BALANCE	PROJECTED EXP.	PROJECTED DIFFERENCE
Purchased Services								
533009	Evaluation	\$55,000	\$55,000	\$12,585	\$14,750	\$27,665	\$55,000	\$0
533020	Consulting Services	\$371,935	\$371,935	\$199,769	\$131,615	\$40,551	\$371,935	\$0
533100	Auditing	\$54,000	\$54,000	\$49,088	\$0	\$4,912	\$54,000	\$0
539005	Sporting Officials	\$35,000	\$35,000	\$9,804	\$794	\$24,402	\$35,000	\$0
539007	Report Cards	\$18,000	\$18,000	\$922	\$17,399	(\$321)	\$18,321	(\$321)
539008	Messenger Service	\$27,280	\$27,280	\$16,308	\$10,912	\$60	\$27,280	\$0
543000	General Repairs & Maintenance	\$1,515,000	\$1,515,000	\$691,319	\$369,784	\$453,897	\$1,515,000	\$0
543011	Maintenance - Service Contracts	\$522,844	\$522,844	\$182,432	\$156,433	\$183,979	\$502,844	\$20,000
544002	Building Rental	\$557,278	\$557,278	\$417,610	\$60,011	\$79,657	\$557,278	\$0
545002	Water	\$240,000	\$240,000	\$108,757	\$0	\$131,243	\$251,200	(\$11,200)
545006	Electricity	\$3,309,855	\$3,309,855	\$1,733,930	\$0	\$1,575,925	\$3,209,855	\$100,000
545012	Inspections - Lead/Asbestos	\$10,000	\$10,000	\$5,916	\$2,150	\$1,935	\$10,000	\$0
545013	Security/Safety	\$102,500	\$102,500	\$34,486	\$58,733	\$9,281	\$102,500	\$0
551000	Pupil Transportation	\$13,930,521	\$13,930,521	\$7,921,208	\$5,857,187	\$152,126	\$14,250,521	(\$320,000)
553001	Postage	\$70,000	\$70,000	\$30,560	\$0	\$39,440	\$70,000	\$0
553002	Telephone	\$150,000	\$150,000	\$142,535	\$918	\$6,546	\$150,000	\$0
553005	Wide-area Network (SBC)	\$87,600	\$87,600	\$19,630	\$54,262	\$13,708	\$87,600	\$0
556055	Tuition - Outside	\$7,451,277	\$7,451,277	\$3,676,099	\$3,218,917	\$556,261	\$7,731,277	(\$280,000)
556056	Purchased Service - Outside	\$2,501,537	\$2,501,537	\$1,067,927	\$1,464,105	(\$30,495)	\$2,532,032	(\$30,495)
557000	Tuition Reimbursement	\$6,000	\$6,000	\$0	\$0	\$6,000	\$6,000	\$0
558000	Travel Expenses	\$18,000	\$18,000	\$4,737	\$573	\$12,690	\$18,000	\$0
559001	Advertising	\$30,000	\$30,000	\$18,310	\$675	\$11,015	\$30,000	\$0
559002	Printing & Binding	\$70,000	\$70,000	\$4,156	\$0	\$65,844	\$70,000	\$0
559104	Insurance - Athletics	\$19,000	\$19,000	\$18,906	\$0	\$94	\$19,000	\$0
Subtotal Purchased Services		\$31,152,627	\$31,152,627	\$16,366,994	\$11,419,218	\$3,366,415	\$31,674,643	(\$522,016)
Supplies/Materials								
561100	Instructional Supplies	\$1,860,000	\$1,860,000	\$992,310	\$355,203	\$512,487	\$1,860,000	\$0
561200	Office Supplies	\$71,840	\$71,840	\$30,138	\$20,035	\$21,666	\$61,840	\$10,000
561204	Emergency/Medical Supplies	\$8,000	\$8,000	\$935	\$3,004	\$4,060	\$8,000	\$0
561210	Intake Center Supplies	\$1,000	\$1,000	\$990	\$0	\$10	\$1,000	\$0
561211	Recruitment Supplies	\$65,000	\$65,000	\$24,350	\$12,643	\$28,007	\$65,000	\$0
561212	Medicaid Supplies	\$17,000	\$17,000	\$3,628	\$5,780	\$7,592	\$17,000	\$0
561501	Diesel	\$148,395	\$148,395	\$82,197	\$59,963	\$6,235	\$148,395	\$0
561503	Gasoline	\$64,920	\$64,920	\$18,672	\$8,952	\$37,296	\$64,920	\$0
561505	Natural Gas	\$1,716,000	\$1,716,000	\$556,814	\$0	\$1,159,186	\$1,636,000	\$80,000
561507	Janitorial Supplies	\$235,000	\$235,000	\$127,057	\$69,429	\$38,514	\$235,000	\$0
561508	Electrical Supplies	\$190,000	\$55,000	\$18,638	\$4,745	\$31,617	\$55,000	\$0
561509	Plumbing Supplies	\$100,000	\$100,000	\$38,883	\$15,314	\$45,803	\$80,000	\$20,000
561510	Building & Ground Supplies	\$55,000	\$190,000	\$102,145	\$30,247	\$57,608	\$190,000	\$0
561511	Propane	\$309,652	\$309,652	\$305,094	\$0	\$4,558	\$309,652	\$0
567000	Clothing Supplies	\$40,000	\$40,000	\$0	\$36,045	\$3,956	\$36,045	\$3,955
567001	Crossing Guard Uniforms	\$2,500	\$2,500	\$1,315	\$0	\$1,185	\$2,500	\$0
569010	Recreational Supplies	\$20,000	\$20,000	\$9,825	\$450	\$9,725	\$20,000	\$0
569029	Athletic Supplies	\$130,000	\$130,000	\$75,214	\$44,503	\$10,283	\$130,000	\$0
Subtotal Supplies/Materials		\$5,034,307	\$5,034,307	\$2,388,207	\$666,312	\$1,979,789	\$4,920,352	\$113,955

ACCOUNT	CLASSIFICATION	FY 18 ORIGINAL BUDGET	FY 18 ADJUSTED BUDGET	FEBRUARY EXPENDITURE	FEBRUARY ENCUMBRANCE	CURRENT BALANCE	PROJECTED EXP.	PROJECTED DIFFERENCE
Property								
575008	Furniture-Misc.	\$50,000	\$50,000	\$7,403	\$23,180	\$19,418	\$50,000	\$0
575200	Office Equipment	\$165,000	\$165,000	\$56,228	\$82,157	\$26,615	\$165,000	\$0
575408	Plant Equipment	\$30,000	\$30,000	\$5,580	\$2,756	\$21,664	\$23,000	\$7,000
Subtotal Property		\$245,000	\$245,000	\$69,211	\$108,093	\$67,696	\$238,000	\$7,000
Other/Miscellaneous								
589021	Mattatuck Museum	\$13,750	\$13,750	\$4,739	\$8,152	\$859	\$12,891	\$859
589034	Board of Ed Commissioners	\$20,700	\$20,700	\$13,800	\$0	\$6,900	\$20,700	\$0
589036	Emergency Fund	\$9,500	\$9,500	\$9,480	\$0	\$21	\$9,480	\$20
589201	Mileage	\$33,500	\$33,500	\$3,307	\$0	\$30,193	\$33,500	\$0
589205	Coaches Reimbursements	\$7,000	\$7,000	\$1,505	\$0	\$5,495	\$7,000	\$0
589900	Dues & Publications	\$60,000	\$60,000	\$39,865	\$1,295	\$18,840	\$60,000	\$0
591004	Athletic Revolving Fund	\$90,000	\$90,000	\$90,000	\$0	\$0	\$110,000	(\$20,000)
Total Other/Miscellaneous		\$234,450	\$234,450	\$162,696	\$9,447	\$62,307	\$253,571	(\$19,121)
GRAND TOTAL OPERATING BUDGET		\$158,375,000	\$158,375,000	\$89,379,339	\$12,268,339	\$56,727,321	\$159,784,603	(\$1,409,603)
Other Additional Funding								
	Alliance Non-Reform/Reform	\$11,859,472	\$11,859,472	\$6,812,161	\$5,047,311	\$0	\$11,859,472	\$0
	GF Surplus 15-16	\$1,000,000	\$1,000,000	\$0	\$0	\$1,000,000	\$0	\$1,000,000
	GF Surplus 14-15	\$1,000,000	\$1,000,000	\$0	\$0	\$1,000,000	\$0	\$1,000,000
	GF Surplus 16-17	\$450,000	\$450,000	\$0	\$0	\$450,000	\$0	\$450,000
	Contingency Surplus	\$500,000	\$500,000	\$0	\$0	\$500,000	\$0	\$500,000
	City Non Lapsing Account	\$675,000	\$675,000	\$0	\$0	\$675,000	\$0	\$675,000
Total Additional Funding		\$15,484,472	\$15,484,472	\$6,812,161	\$5,047,311	\$3,625,000	\$11,859,472	\$3,625,000
GRAND TOTAL ALL FUNDING		\$173,859,472	\$173,859,472	\$96,191,500	\$17,315,650	\$60,352,321	\$171,644,075	\$2,215,397

Memorandum

#3

To: Board of Aldermen

From: Will Zhuta, IT Director, Department of Education Computer Technology Center

Date: March 28, 2018

Re: **Board of Aldermen Approval Request / Executive Summary** - Contract for Wide Area Fiber Network between the City of Waterbury and Light Tower Fiber Networks II, LLC

The Department of Education Computer Technology Center respectfully requests your approval of the above-referenced contract in the amount of \$1,548,000 for Wide Area Fiber Network between the City of Waterbury and Light Tower Fiber Networks II, LLC.

This contract was initiated under the Invitation to Bid process (ITB #6048). There were several bidders for this project with Light Tower Fiber Networks II, LLC being the lowest responsible bidder (see attached Bid Summary as prepared by the Purchasing Department).

This contract will allow for a high speed fiber optic based services for 24 buildings that service Waterbury's 19,100 students and 3,500 staff members. The contract is five years in duration, from July 1, 2018 through June 30, 2023. Total compensation payable to Light Tower Fiber Networks II, LLC shall be ONE MILLION FIVE HUNDRED AND FORTY EIGHT THOUSAND DOLLARS (\$1,548,000.00), contingent upon full compliance/satisfaction of the following method of payments:

- i. Five (5) annual USF E-Rate payments direct from USAC to Light Tower Fiber Networks II, LLC estimate totaling the 5 year sum of \$1,393,200.00 to \$1,238,400.00, each of the five annual E-Rate payments estimated as being 80 to 90% of \$309,600.00 (\$1,548,000.00 / 5), to be billed by Light Tower Fiber Networks II, LLC to USAC on a monthly basis and paid by USAC in accordance with its payment algorithms and schedules; and
- ii. Sixty (60) monthly City payments to Light Tower Fiber Networks II, LLC totaling the 5 year sum of \$154,800.00 to \$309,600.00, or \$2,580.00 to \$5,160.00 per month.
- iii. Compensation payable to Light Tower Fiber Networks II, LLC under this Contract shall not exceed TWO HUNDRED THIRTY TWO THOUSAND AND TWO HUNDRED DOLLARS (\$232,200.00).

Accordingly, attached for your review and consideration are 17 copies of the proposed contract, plus the Bid Summary as prepared by the Purchasing Department, the Successful Bidder's Bid Form and Disclosure and Certification of Obligations Affidavit Regarding Outstanding Obligations Form plus a copy of the Tax Clearance issued by the Office of Tax Collections.

Please note further that one complete set of Documents, including Contract, Plans and Specifications, has been placed on file with the City Clerk's Office.

Thank you.

BID 6048 RESULTS FOR EDUCATION IT WIDE AREA NETWORK

1GB BANDWIDTH

3YEAR

5 YEAR

10GB BANDWIDTH

3 YEAR

5 YEAR

B&H FOTO	DIGITAL BACK OFFICE	LIGHTOWER FIBER NETWORK	COMCAST BUSINESS	FRONTIER BUSINESS
NO BID	\$ 39,701.00	NO BID	\$ 18,902.41	\$ 15,000.00
NO BID	\$ 27,794.00	NO BID	\$ 14,675.04	\$ 14,400.00
NO BID	\$ 54,705.00	\$ 31,080.00	\$ 107,712.00	\$ 38,400.00
NO BID	\$ 29,886.00	\$ 22,800.00	\$ 80,784.00	\$ 36,000.00

AGREEMENT
ITB No. 6048
for
WIDE AREA NETWORK
between
The City of Waterbury, Connecticut
and
Lighttower Fiber Networks II, LLC (“Lighttower”)

THIS AGREEMENT, effective on the date signed by the Mayor, is by and between the CITY OF WATERBURY, City Hall, 235 Grand Street, Waterbury, Connecticut (the "City") and Lighttower Fiber Networks II, LLC , located at 80 Central Street, Box Borough, Massachusetts 01719, a State of New York, duly registered foreign, Limited liability company (the "Lighttower").

WHEREAS, Lighttower submitted a proposal to the City responding to **ITB No. 6048** for Wide Area Network; and

WHEREAS, the City selected Lighttower to perform services regarding **ITB No. 6048**; and

WHEREAS, the City desires to obtain Lighttower's services pursuant to the terms, conditions and provisions set forth in this agreement (the “Project”).

NOW THEREFORE, THE PARTIES AGREE AND COVENANT AS FOLLOWS:

1. Scope of Services. Lighttower shall furnish all of the labor, services, equipment, materials, reports, plans, specifications, deliverables, incidentals, etc. necessary to complete the Project as specified in this agreement (also referred to herein as "Contract") and such shall be completed in a satisfactory manner, as reasonably determined by the City. All labor, services, equipment, materials, reports, plans, specifications, deliverables, incidentals, etc. shall comply with any and all applicable Local, State and Federal laws, statutes, ordinances and regulations and with generally accepted professional standards. Lighttower shall make such revisions or modifications to its work, at its own cost and expense, as the City may require in order to be deemed complete.

1.1. The Project consists of providing and delivering Wide Area Telephone and Network Services for 25 of the 32 City Public Schools and Administrative buildings which will cover elementary, middle, magnet, Pre K-8, and high schools. Said services will include, and not be limited to continuity of high speed communications for simultaneous IP voice, video and data connectivity. Services shall also include upgrading the network, planning, designing, installation and documentation, training

and maintenance of the system, assistance with future upgrades and as more particularly detailed and described in **Attachment A** which are hereby made material provisions of this Contract. All services must comply with E-Rate guidelines. **Attachment A** shall consist of the following, which are attached hereto, are acknowledged by Lightower as having been received, or are otherwise hereby incorporated by reference as noted below, and all are made a part hereof:

- i. City of Waterbury Invitation to Bid Number 6048, consisting of 14 pages, (Attached hereto).
- ii. Addendum #1 to City of Waterbury Invitation to Bid Number 6048, dated February 9, 2018, consisting of 3 pages, (Attached hereto).
- iii. Lightower's Response to City of Waterbury Invitation to Bid Number 6048, dated February 22, 2018, consisting of 30 pages,(Excluding Crown Castle Master Service Agreement, Crown Castle Dark Fiber Services Supplement , and Ethernet Services Agreement) (Attached hereto).
- iv. Any and all amendment(s) and Change Orders, issued by the City after execution of Contract (Incorporated by reference).
- v. Stockholder's Affidavit; Non-Collusion Affidavit; Debarment Certificate (Incorporated by reference).
- vi. Certificates of Insurance (Incorporated by reference).
- vii. All applicable Federal, State and local statutes, regulations charter and ordinances (Incorporated by reference).
- viii. All licenses. (Incorporated by reference)

1.2. The entirety of **Attachment A** plus this executed instrument are together deemed the Contract Documents (hereinafter collectively referred to as "Contract Documents"). The City's record copy of the Contract Documents shall control and shall be effective and binding on Lightower. In the event that any provision in the Contract Documents conflict with any other provision therein, the provision in the component part of the Contract Document first enumerated below shall govern over any other component part which follows it numerically:

- i. This Agreement
- ii. City of Waterbury Invitation to Bid Number 6048
- iii. Addendum #1 to City of Waterbury Invitation
- iv. Lightower's Response to City of Waterbury Invitation to Bid Number 6048

2. Lightower Representations Regarding Qualification and Accreditation. Lightower represents that, to the extent required by law, its employees are licensed to perform the scope of work set forth in this Contract. Lightower further represents that its employees have the requisite skill, expertise and knowledge necessary to perform the scope of work required under the terms of this Contract, including any supplementary work and the City relies upon these.

2.1. Representations regarding Personnel. Lightower represents that it has, or will secure at its own expense, all personnel required to perform the services under this Contract. Such personnel shall not be employees of or have any contractual relationship with the City, unless use of City employees or of personnel having a contractual relationship with the City is approved by the City in writing. As set forth above, all the services required hereunder shall be performed by Lightower under its supervision and all personnel engaged in the work shall be fully qualified and shall be authorized or permitted under state or local law to perform such services.

2.2. Representations regarding Qualifications. Lightower hereby represents that, to the extent required by Federal, State and Local statutes, regulations, codes, ordinances, and policies, that Lightower and/or its employees be licensed, certified, registered, or otherwise qualified, Lightower and all employees providing services under this Contract, are in full compliance with those statutes, regulations and ordinances. Upon City request, Lightower shall provide to the City a copy of Lightower's licenses, certifications, registrations, etc.

3. Responsibilities of Lightower. All data, information, etc. given by the City to Lightower and/or created by Lightower shall be treated by Lightower as proprietary to the City and confidential unless the City agrees in writing to the contrary and shall be used solely for the purposes of providing services under this Contract. Lightower agrees to forever hold in confidence all files, records, documents and other information which may come into the Contractor's possession during the term of this Contract, except where a disclosure is expressly stated as a requirement of this Contract. Notwithstanding the foregoing, where a Lightower disclosure is required to comply with statute, regulation, or court order, Lightower shall provide prior advance written notice to the City of the need for such disclosure. Lightower agrees to properly implement the services required in the manner herein provided.

3.1. Use of City Property. To the extent Lightower is required to be on City property to render its services hereunder, Lightower shall have access to such areas of City property as the City and Lightower agree are necessary for the performance of Lightower's services under this Contract (the "Site" or the "Premises") and at such times as the City and Lightower may mutually agree. Lightower shall perform all work in full compliance with Local, State and Federal health and safety regulations. All work hereunder shall be performed in a safe manner. Lightower shall immediately correct any dangerous condition caused by or resulting from its work. If it fails to correct, or to act diligently to correct, any condition which City reasonably believes to be a hazard to persons or property, then immediately upon oral or written notice to any supervisory or similar personnel of Lightower, City may, but shall not be required to, correct same at

Lighttower's expense. City shall confirm in writing any oral notice given within five (5) business days thereafter.

3.2. Working Hours. To the extent Lighttower is required to be on City property to render its services hereunder, Lighttower shall coordinate its schedule so that work on the Premises is performed during those hours the City sets forth in a written notice to Lighttower, unless written permission is obtained from the City to work during other times. This condition shall not excuse Lighttower from timely performance under the Contract. The work schedule must be agreed upon by the City and Lighttower.

3.3. Cleaning Up. To the extent Lighttower is required to be on City property to render its services hereunder, Lighttower shall at all times keep the Premises free from accumulation of waste materials or rubbish caused by Lighttower, its employees or subcontractors, and at the completion of the work shall remove all rubbish from and about the Project and all tools, scaffolding and surplus materials and shall leave the Premises "broom clean" or its equivalent, unless more exactly specified. In case of dispute, the City may remove the rubbish and charge the cost to Lighttower.

3.4. Publicity. Lighttower agrees not to deliberately disclose the fact that the City has entered into or terminated this Contract or disclose any of the terms of the Contract or use the City's name in connection with any publicity, unless the City gives prior written consent to such use of the City's name in each instance.

3.5. Standard of Performance. All workmanship, services, materials or equipment, either at the Premises or intended for it, shall conform in all respects with the requirements of all this Contract, and shall be the best obtainable from the crafts and trades. In all cases, the services, materials, equipment, reports, plans, specifications, deliverables, workmanship, etc. shall be equal to or better than the grade specified, and the best of their kind that is obtainable for the purpose for which they are intended. The standard of care and skill for all services performed by Lighttower shall be that standard of care and skill ordinarily used by other members of Lighttower's profession practicing under the same or similar conditions at the same time and in the same locality. Lighttower's services rendered hereunder shall be rendered completely and by qualified personnel in accordance with standard industry practice.

3.6. Lighttower's Employees. Lighttower shall at all times enforce strict discipline and good order among its employees, and shall not employ any unfit person or anyone not skilled in the work assigned.

3.7. Due Diligence Obligation. Lighttower acknowledges its responsibilities to examine and to be thoroughly familiar with the City's proposal document, including, but not limited to the specifications, and any addenda thereto. Lighttower hereby warrants and represents that prior to the submission of its proposal during the proposal process it reviewed or was afforded opportunity, by the City, to review all physical items, facilities, services or functions essential to the satisfactory performance of the

services required (“Due Diligence”) and thereby certifies that all such items facilities, services or functions are included in this Contract and thereby warrants that:

3.7.1 it conducted or had opportunity to conduct all Due Diligence prior to the submission of its proposal and, accordingly, any additional costs, services or products resulting from the failure of Lighttower to complete Due Diligence prior to submission of its proposal shall be borne by Lighttower. Furthermore Lighttower had the opportunity during the proposal process to ask questions it saw fit and to review the responses from the City;

3.7.2 its failure or omission to make investigation and verification of data shall, in no way, be cause for future claim of ignorance of such data or conditions nor shall such failure to investigate and verify be the basis for any claim whatsoever, monetary or otherwise;

3.7.3 it is solely responsible for resolving any issues resulting from the failure to conduct Due Diligence and shall assume any costs that may result during the implementation of the Project, including, but not limited to, adherence to specifications and pricing for the Project.

3.7.4 it was responsible for specifying any changes and disclosing any new costs prior to the submittal of its proposal. Thus, in the event any changes or costs are disclosed by Lighttower, or otherwise required, during the performance of its services, the sole responsibility for any modification, delay and cost of such changes shall reside with Lighttower.

3.7.5 has familiarized itself with the nature and extent of the Contract Documents, Work, locality, and with all local conditions and Federal, State and Local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work;

3.7.6 has given the City written notice of any conflict, error or discrepancy that Lighttower has discovered in the Proposal Documents; and

3.7.7 agrees that the Proposal Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

3.8. Reporting Requirement. Lighttower shall deliver periodic, monthly, written reports to the City's Using Agency setting forth **(i)** the issue date of the report, **(ii)** the time period covered by the report, **(iii)** a brief description of the work and services completed by Lighttower and/or delivered by Lighttower during the time period covered by the report, **(iv)** expressed as a percentage of the total work and services required under this Contract, the percentage of the total work represented by the work and services described in subsection iii above, **(v)** expressed as a percentage of this Contract's Section 6 total compensation, the percentage of the total compensation

represented by the work and services described in subsection iii above, (vi) Lightower's declaration as to whether the entirety of Lightower's work and services required in this Contract will be, or will not be, completed within the Contract's Section 6 total compensation amount, and (vii) any and all additional useful and/or relevant information. Each report shall be signed by the Lightower designated project manager.

NOTE: Lightower's failure to deliver any report required herein shall be deemed a material breach of this Contract, the City hereby reserving the right to exercise all available legal remedy(ies) to address said breach.

4. Responsibilities of the City. Upon the City's receipt of Lightower's written request, the City will provide Lightower with all documents, data and other materials the City agrees are necessary and appropriate to the service to be performed by Lightower hereunder and the City will endeavor to secure, where feasible and where the City agrees it is necessary and appropriate, materials or information from other sources requested by Lightower for the purpose of carrying out the services under this Contract.

5. Contract Time. Lightower shall complete all work and services required under this Contract within Five Years of Execution of this Contract by the Mayor and in accordance with the following Project Milestones ("Term"):

- i. Complete all Design, Construction, Hardware termination, installation and configuration will be completed within 6 months of execution of this Contract.
- ii. Lightower will provide 10 gigs of Managed Lit Services for Waterbury Public Schools Wide Area Network allowing interconnectivity, internet data network traffic for the Waterbury Public Schools as more specifically set forth in this contract for the entire five (5) year term.

At all times during the contract, Lightower shall be responsible for and ensure Continuity of IT Service for the applicable Department of Education System.

5.1. Time is and shall be of the essence for all Project milestones and completion dates for the Project. Lightower further agrees that the Work shall be prosecuted regularly, diligently and uninterruptedly and at such rate of progress as will insure full completion thereof within the Contract Time stated above. It is expressly understood and agreed, by and between Lightower and City, that the Contract Time is reasonable for the completion of the Work. Lightower shall be subject to City imposed fines and/or penalties in the event Lightower breaches the foregoing dates.

6. Compensation. The City shall compensate Lightower for satisfactory provision of all of the goods and services set forth in this Contract as follows in this Section 6.

6.1. Fee Schedule. The fee payable to Lightower shall not exceed ONE MILLION FIVE HUNDRED FORTY- EIGHT THOUSAND DOLLARS (\$1,548,000.00) for the

entire five-year term of this contract. It is anticipated that if awarded the USF E-Rate program will pay 90% of the above fee and the City will pay 10% of the fee. Therefore, the payment by the City is contingent upon the award and following payment schedule:

- i. Five (5) annual USF E-Rate payments, to be paid directly from USAC to LIGHTOWER in the amount up to TWO HUNDRED SEVENTY-EIGHT THOUSAND SIX HUNDRED FORTY DOLLARS (\$278,640.00) for a total of not to exceed ONE MILLION THREE HUNDRED NINETY-THREE THOUSAND TWO HUNDRED DOLLARS (\$1,393,200.00) for the entire five year term of this contract. Said fee will be billed by LIGHTOWER to USAC on a monthly basis and paid by USAC in accordance with its payment algorithms and schedules; and
- ii. The City shall pay Lighttower in an amount not to exceed ONE HUNDRED FIFTY-FOUR THOUSAND EIGHT HUNDRED DOLLARS (\$154,800.00) for the entire 5 year contract payable in an amount not to exceed THIRTY THOUSAND NINE HUNDRED SIXTY DOLLARS (\$30,960.00) per year, or TWO THOUSAND FIVE HUNDRED EIGHTY DOLLARS (\$2,580.00) per month. The City shall make payment yearly on or before June 30 of each year. Said payment is contingent upon the E-Rate payments as set forth in i. above.

NOTE: The foregoing Section 6.1 i and 6.1ii payment provisions are based upon City being granted and receiving BOTH City funding and USF E-Rate funding for each year of the five (5) year period of this contract. In the event (a) City funding (the event of no City funding as referred to herein as non-appropriation) is not appropriated and/or (b) E-Rate funding is not granted and/or received, then within sixty (60) days of any such event, the parties shall conduct good faith negotiations to amend this Contract to permit a reduction in the services and a commensurate reduction in the price for those services acceptable to the Parties. If the negotiations do not result in a jointly executed written amendment within such sixty (60) day period, then this Contract shall terminate on the date either or both City Funding and/or USF E-Rate Funding, is not appropriated, or in the case of USF E-Rate Funding, is not granted and/or received by the City, without the City incurring any LIGHTOWER imposed penalties, fees, or charges, etc.

6.3. Limitation of Payment. Compensation payable to Lighttower is limited to those fees set forth in Section 6.1 above. Such compensation shall be paid by the City upon review and approval of Lighttower's invoices for payment and review of the work, services, deliverables, etc. required in this Contract and review as may be further required by the Charter and Ordinances of the City. Lighttower's invoices shall describe the work, services, reports, plans, specifications, deliverables, etc. rendered and the compensation sought therefore in a form and with detail and clarity acceptable to the City.

6.3.1 Lighttower and its affiliates are hereby provided with notice that the City reserves the right, in the City's sole discretion, to offset, withhold, or otherwise

reduce City payment(s) to Lightower in an amount equaling the sum or sums of money Lightower and/or its affiliates is/are, or becomes delinquent or in arrears on, regarding Lightower's and/or its affiliate's real and personal tax obligations to the City.

6.3. Review of Work. Lightower shall permit the City to review, at any time, all work performed under the terms of this Contract at any stage of the work. Lightower shall maintain or cause to be maintained all records, books or other documents relative to charges, costs, expenses, fees, alleged breaches of the Contract, settlement of claims or any other matter pertaining to Lightower's demand for payment. The City shall not certify fees for payment to Lightower until the City has determines that Lightower has completed the work in accordance with the requirements of this Contract.

6.4. Proposal Costs. All costs of Lightower in preparing its proposal for **ITB No. 6048** shall be solely borne by Lightower and are not included in the compensation to be paid by the City to Lightower under this Contract or any other Contract.

6.5. Payment for Services, Materials, Employees. Lightower shall be fully and solely responsible for the suitability, and compliance with the Contract, of all labor, services, equipment, materials, reports, plans, specifications, deliverables, incidentals, etc. furnished to the City under this Contract. Lightower shall promptly pay all employees as their pay falls due, shall pay promptly as they fall due all bills for labor, services, equipment, materials, reports, plans, specifications, deliverables, incidentals, etc., going into the work, and all bills for insurance, bonds, Worker's Compensation coverage, Federal and State Unemployment Compensation, and Social Security charges applicable to this Project. Before final payment is made, Lightower shall furnish a legal statement to the City that all payments required under this subparagraph have been made.

6.6. Liens. Neither the final payment nor any part of the retained percentage, if any, shall become due until Lightower, if requested by the City, shall deliver to the City a complete release of all liens arising out of this Contract, or receipts in full in lieu thereof, and, if required, in either case, an affidavit that so far as Lightower has knowledge or information, the releases and receipts include all the labor and material for which a lien could be filed; but Lightower may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the City, to indemnify it against any lien. If any lien remains unsatisfied after all payments are made, Lightower shall refund to the City all moneys that the City may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

7. Passing of Title and Risk of Loss. Title to each item of equipment, material, reports, plans, specifications, supplies, services, etc. required to be delivered to the City hereunder shall pass to City upon City payment to Lightower for that item. Lightower and its insurer shall assume the risk of loss or damage up to and including the date title passes, except that City shall be responsible for loss or damage caused by City's negligence.

8. Indemnification.

8.1. Lightower shall indemnify, defend, and hold harmless the City and its boards, the City's Board of Education (if applicable), commissions, agents, officials and employees from and against all claims, suits, damages, losses, judgments, costs and expenses including attorney's fees arising out of or resulting from the delivery of the labor, services, equipment, materials, reports, plans, specifications, deliverables, incidentals, etc. provided that any such claims, suits, damages, losses, judgments, costs or expenses **(i)** are attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the services itself) including the loss of use resulting there from, and **(ii)** are caused in whole or in part by any willful or negligent act or omission of Lightower, its employees, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

8.2. In any and all claims against the City or any of its boards, agents, employees or officers by Lightower or any employee of Lightower, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 8.1, above, shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for Lightower or any subcontractor under Worker's Compensation Acts, disability benefit acts or other employee benefit acts.

8.3. Lightower understands and agrees that any insurance required by this Contract, or otherwise provided by Lightower, shall in no way limit the responsibility to indemnify, defend, keep and hold harmless the City as provided in this Contract.

9. Lightower's Insurance.

9.1. Lightower shall not commence work under this Contract until all insurance required under this Section 9 has been obtained by Lightower and such insurance has been approved by the City. Lightower shall not allow any subcontractor to commence work on any subcontract until all insurance required of any such subcontractor has been so obtained and approved by the City. Insurance shall be provided by insurers that are satisfactory to the City, authorized to do business in the State of Connecticut, that have at least an "A-" Best's Rating, and are in an A.M. Best financial size category of VII or higher. The A.M. Best classifications are based on the most current A.M. Best Company ratings or an equivalent City approved rating system.

9.2. At no additional cost to the City, Lightower shall purchase and maintain the insurance coverages set forth below which shall protect the City from claims which may arise out of or result from Lightower's obligation under this Contract, whether such obligations are Lightower's or subcontractor or person or entity directly or

indirectly employed by said Lighttower or subcontractor, or by any person or entity for whose acts said Lighttower or subcontractor may be liable.

9.3. Each insurance policy shall state that the insurance company shall agree to investigate and defend the insured against all claims for damages, even if groundless. If any insurance required herein is to be issued or renewed on a claims made form as opposed to an occurrence form, the retroactive date for coverage shall be no later than the commencement date of this Contract and shall provide that in the event of cancellation or non-renewal, the discovery period for insurance claims ("Tail Coverage") shall be available for at least 60 months.

9.4. The following policies with stated limits shall be maintained, in full force and effect, at all times during which the services are to be performed by Lighttower:

9.4.1 General Liability Insurance: \$1,000,000.00 per occurrence,
\$2,000,000.00 aggregate and **\$2,000,000.00** Products and completed operations
aggregate

Providing coverage to protect the City for all damages arising out of bodily injuries, sickness to or death of all persons in any one accident or occurrence and for all damages arising out of destruction of property in any one accident or occurrence.

9.4.2 Automobile Liability Insurance: \$1,000,000.00 combined single limit (CSL)

Providing coverage to protect the City with respect to claims for damage for bodily injury and or property damage arising out of ownership, maintenance, operation, use or loading and unloading of any auto including, owned and hired autos.

9.4.3 Workers' Compensation: Statutory Limits within the State of Connecticut: Employers' Liability:

EL Each Accident **\$500,000.00**

EL Disease Each Employee **\$500,000.00**

EL Disease Policy Limit **\$500,000.00**

Lighttower shall comply with all State of Connecticut statutes as it relates to workers' compensation.

9.4.4 Professional Liability Insurance: \$1,000,000.00 each Wrongful Act.
\$1,000,000.00 Aggregate

Professional liability (also known as, errors and omissions) insurance providing coverage to Lighttower.

9.5. Failure to Maintain Insurance: In the event Lighttower fails to maintain the minimum required coverage as set forth herein, the City may at its option purchase same, and offset Lighttower's invoices for the cost of said insurance.

9.6. Cancellation: The City of Waterbury shall receive written notice of cancellation from Lightower at least thirty (30) calendar days prior to the date of actual cancellation, regardless of the reason for such cancellation.

9.7. Certificates of Insurance: Lightower's General and Automobile Liability Insurance policies shall be endorsed to add the City and Board of Education as an additional insured and provide a waiver of subrogation on all lines of coverage except Professional Liability. The insurance afforded the additional insured shall be primary and non-contributory insurance and the coverage and limits provided under Lightower's policies shall not be reduced or prorated by the existence of any other insurance applicable to any loss the additional insured may have suffered. At the time Lightower executes this Contract, it shall furnish to the City, subject to City approval, certificate(s) of insurance and Additional Insured Endorsement and Waiver of Subrogation Endorsement verifying the above coverages, including the naming of the City of Waterbury, as follows: **"The City of Waterbury and Board of Education are listed as additional insured on all lines of coverage except Workers Compensation and Professional Liability and include a waiver of subrogation on all lines of coverage except Professional Liability."** The City's request for proposal number must be shown on the certificate of insurance. Lightower must supply replacement/renewal certificates at least thirty (30) calendar days prior to the expiration of the policy(ies). Said certificates shall contain a provision that coverage afforded under the policies shall not be cancelled or reduced for any reasons unless notice of not less than thirty (30) calendar days has been mailed to the Office of Corporation Counsel, 235 Grand Street, Waterbury, CT 06702.

9.8. No later than thirty (30) calendar days after Lightower receipt, Lightower shall deliver to the City a copy of Lightower's insurance policies, endorsements, and riders.

10. Conformance with Federal, State and Other Jurisdictional Requirements. By executing this Contract, Lightower represents and warrants that, at all pertinent and relevant times to the Contract, it has been, is and will continue to be in full compliance with all applicable statutes, acts, ordinances, guidelines, resolutions, orders, judgments, decrees, injunctions, rules, and regulations of all government authorities applicable to performance by Lightower of services hereunder, including those having jurisdiction over its registration and licensing to perform services hereunder; including, but not limited to, the following: *EQUAL EMPLOYMENT OPPORTUNITY ACT*; *COPELAND ANTI-KICKBACK ACT*, as supplemented in the Department of Labor Regulations (29 CFR Part 3); *DAVIS-BACON ACT* as supplemented by Department of Labor Regulations (29 CFR Part 5); Section 103 and 107 of the Contract Work Hours and Safety Standards Act, as supplemented by the Department of Labor Regulations (29 CFR Part 5); the *HOUSING and COMMUNITY DEVELOPMENT ACT of 1974*, as amended; TITLE 31 and Section 12-430(7) of the State of Connecticut General Statutes. All applicable sections of the City Charter and Code of Ordinances are incorporated by reference and made a part hereof.

10.1. Permits, Laws, and Regulations. Permits and licenses necessary for the delivery and completion of Lightower's work and services shall be secured in advance and paid by Lightower. Lightower shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work and services as specified.

10.2. Taxes-Federal, State and Local. The City is exempt from Federal Excise and Transportation, State and Local Sales and Use Taxes, including without limitation, taxes that would otherwise be imposed upon Lightower for transactions required or necessitated hereunder between it and its subcontractors, suppliers, etc. Lightower remains liable, however, for any applicable tax obligations it incurs. Moreover, Lightower represents that the proposal and pricing contained in this Contract do not include the amount payable for said taxes.

10.3. Labor and Wages. Lightower and its subcontractors shall conform to the labor laws of the State of Connecticut, and all other laws, ordinances, and legal requirements affecting the work in Connecticut.

10.3.1 Lightower is aware of the provisions of Title 31, §53 of the Connecticut General Statutes, latest revision (the "Act"), concerning the payment of minimum wages and other payments or contributions established by the State of Connecticut Labor Commissioner for work on public facilities. The provisions of the Act are incorporated by reference and made a part of this Contract. The Act provides that the Connecticut prevailing wage law applies to certain remodeling, refurbishing, alteration, repair and new construction. The wages paid on an hourly basis to any person performing the work of any mechanic, laborer or worker on the work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such person to any employee welfare fund, as defined in Conn .Gen. Statute 31-53(i), shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the town in which such public works project is being constructed. Any contractor who is not obligated by agreement to make payment or contribution on behalf of such persons to any such employee welfare fund shall pay to each mechanic, laborer or worker as part of such person's wages the amount of payment or contribution for such person's classification on each pay day.

10.3.2 Lightower is aware of, and shall comply with, the provisions of both the Federal Davis-Bacon Act and the Federal American Recovery and Reinvestment Act of 2009, the provisions of both acts hereby incorporated by reference and made a part of this Contract. The Federal Davis-Bacon Act provides that Federal wage rate laws apply to certain federally funded contracts. The American Recovery and Reinvestment Act ("ARRA") provides that Federal wage rate laws apply to all ARRA funded contracts regardless of the contract's dollar value.

11. Discriminatory Practices. In performing this Contract, Lightower shall not discriminate against any employee or applicant for employment, with respect to his or her hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of race, color, sex, age, religious creed, disability, national origin or ancestry, marital status, family status, prior psychiatric treatment, health care, military status or source of income or because of a handicap that is unrelated to the employee's or the applicant's ability to perform the duties of a particular job or position. Subcontracts with each subcontractor shall contain a provision requiring non-discrimination in employment as herein specified. This covenant is required pursuant to §93.04 of the Code of Ordinances of the City and any breach thereof may be regarded as a material breach of this Contract. Said provisions with subcontractors shall require conformity and compliance with all Local, State and Federal laws, rules and regulations and Executive orders pertaining to discrimination and equal opportunity requirements.

11.1. Discrimination Because of Certain Labor Matters. No person employed on the work covered by this Contract shall be discharged or in any way discriminated against because such person has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or related to the labor standards applicable hereunder to its employer.

11.2. Equal Opportunity. In its execution of the performance of this Contract, Lightower shall not discriminate and shall comply with applicable laws prohibiting discrimination on the grounds of race, color, religion, sex, national origin or citizenship status, age or handicap. Lightower agrees to comply with all Local, State and Federal laws, rules and regulations and Executive orders pertaining to discrimination and equal opportunity requirements, and will require the same of all subcontractors.

12. This Section Left Intentionally Blank.

13. Termination.

13.1. Termination of Contract for Cause. If, through any cause, in part or in full, not the fault of Lightower, Lightower shall fail to fulfill in a timely and proper manner its obligations under this Contract, or if Lightower shall violate any of the covenants, agreements, or stipulations of this Contract, the City shall thereupon have the right to terminate this Contract by giving written notice to Lightower of such termination and specifying the effective date thereof, at least two weeks before the effective date of such termination.

13.1.1 In the event of such termination, all finished or unfinished documents, data, studies, reports, specifications, deliverables, etc. prepared by Lightower under this Contract shall, at the option of the City, become the City's property, and Lightower shall be entitled to receive just and equitable compensation for any satisfactory work completed for such.

13.1.2 Notwithstanding the above, Lighttower shall not be relieved of liability to the City for damages sustained by the City by virtue of any breach of this Contract by Lighttower, and the City may withhold any payments to Lighttower for the purpose of setoff until such time as the exact amount of damages due the City from Lighttower is determined.

13.2. Termination for Convenience of the City. The City may terminate this Contract for Convenience, with 30 days 'written notice to Lighttower, after two (2) years of Execution of this Contract by the Mayor. If this Contract is terminated by the City as provided herein, Lighttower will be paid an amount which bears the same ratio to the total compensation as the services actually performed bear to the total services of Lighttower covered by this Contract, less payments of compensation previously made.

13.3. Termination for Non-Appropriation or Lack of Funding. Lighttower acknowledges that the City is a municipal corporation and that this Contract is subject to the full satisfaction of Paragraph 6 herein, requiring approval and receipt by the City of funds for this project through USF E-Rate funding, for each contact year and the appropriation of funds by the City sufficient for this Contract for each budget year in which this Contract is in effect. Lighttower therefore agrees that the City shall have the right to terminate this Contract in whole or in part without penalty in the event sufficient funds to provide for City payment(s) under this Contract is not appropriated, not authorized or not made available pursuant to law, or such funding has been reduced pursuant to law.

13.3.1 Effects of Non-Appropriation. If funds to enable the City to effect continued payment under this Contract are not appropriated, authorized or otherwise made available by law, the City shall have the right to terminate this Contract without penalty at the end of the last period for which funds have been appropriated, authorized or otherwise made available by law by giving written notice of termination to Lighttower.

13.3.2 Effects of Reduced Levels of Funding. If funding is reduced by law, or funds to pay Lighttower for the agreed to level of the products, services and functions to be provided by Lighttower under this Contract are not appropriated, authorized or otherwise made available by law, the City may, upon seven (7) calendar days written notice to Lighttower, reduce the level of the products, services or functions in such manner and for such periods of time as the City may elect. The charges payable under this Contract shall be equitably adjusted to reflect such reduced level of products, services or functions and the parties shall be afforded the rights set forth in this Contract.

13.3.3 No Payment for Lost Profits. In no event shall the City be obligated to pay or otherwise compensate Lighttower for any lost or expected future profits.

13.4. Rights Upon Cancellation or Termination.

13.4.1 Termination for Cause. In the event the City terminates this Contract for cause, Lightower shall relinquish to the City any applicable interest, title and ownership including, but not limited to, perpetual use of any proprietary rights in and to the documents, data, studies, reports, specifications, deliverables, etc. provided to, in possession of, and properly invoiced and paid for by (except to the extent such invoiced amount is disputed) the City. With regard to third party products, Lightower shall transfer all licenses to the City which Lightower is permitted to transfer in accordance with the applicable third party license. The City shall have no financial obligation to compensate Lightower for such terminated documents, data, studies, reports, specifications, deliverables, etc. unless payment is otherwise approved by the City prior to such termination. Lightower shall be liable for costs incurred by the City, including but not limited to reasonable attorney fees and all court awarded fees and costs incurred in terminating this agreement in whole or in part.

13.4.2 Termination for Lack of Funding or Convenience. In the event of termination of this Contract by the City for lack of funding or convenience, the City shall pay Lightower for all documents, data, studies, reports, specifications, deliverables, etc. (including any holdbacks), installed and delivered to the City as of the Termination Date and Lightower shall relinquish to the City any applicable interest, title and ownership including, but not limited to perpetual use of any proprietary rights in and to said documents, data, studies, reports, specifications, deliverables, etc. in possession of and paid for by the City (except to the extent any invoiced amount is disputed). Lightower shall be required to exercise commercially reasonable efforts to mitigate damages. In the event of a termination for Lack of Funding or Convenience the City and Lightower may negotiate a mutually acceptable payment to Lightower for reasonable demobilization expenses. Said demobilization expenses, if any, shall be handled in accordance with the provision of this Contract pertaining to Changes in the Work.

13.4.3 Termination by Lightower. Lightower may, by written notice to the City, terminate this Contract if the City materially breaches, provided that Lightower shall give the City thirty (30) calendar days prior written notice and an opportunity to cure by the end of said thirty (30) day period. In the event of such termination, Lightower will be compensated by the City for work performed prior to such termination date and Lightower shall deliver to the City all deliverables as otherwise set forth in this Contract.

13.4.4 Assumption of Subcontracts. In the event of termination of this Contract, the City shall have the right to assume, at its option, any and all subcontracts for products, services and functions provided exclusively under this Contract, and may further pursue completion of the work under this Contract by replacement contract or otherwise as the City may in its sole judgment deem expedient.

13.4.5 Delivery of Documents. In the event of termination of this Contract, (i) Lightower shall promptly deliver to the City, in a manner reasonably specified by the City, all labor, services, equipment, materials, reports, plans, specifications, deliverables, incidentals, etc. and other tangible items furnished by, or owned, leased, or licensed by, the City, and (ii) the City shall pay Lightower for all services performed and deliverables completed and accepted (pro-rated for deliverables partially completed) prior to the effective date of the termination (except to the extent any invoice amount is disputed).

14. Ownership of Instruments of Professional Services. The City acknowledges Lightower's documents, data, studies, reports, specifications, deliverables, etc. created and to be created pursuant to this Contract, including electronic files, are Instruments of Professional Services. Nevertheless, the final Instruments of Professional Services, including, but not limited to documents, data, studies, reports, specifications, deliverables, etc. prepared for the City under this Contract shall become the property of the City upon City payment for that Instrument of Professional Services and the City reserves the right to use the Instruments of Professional Services.

15. Force Majeure. Lightower shall not be held responsible for delays nor be subject to liquidated damages when such delays are caused by conditions beyond its control, including without limitation:

15.1. Acts of God, fire, explosion, epidemic, cyclone, flood, war, strikes, revolution, civil commotion, or acts of public enemies.

15.2. Change of law and order, proclamation, regulation, ordinance, or governmental requirement.

Upon cessation of work for reason of force majeure delays, Lightower shall use its best efforts to meet the schedule set forth in Section 5 of this Contract.

16. Subcontracting. Lightower shall not, without the prior written approval of the City, subcontract, in whole or in part, any of Lightower's services. Any subcontractor so approved shall be required to secure and maintain insurance coverage equal to or better than that required of Lightower and shall name the City as an additional insured party and said subcontractors shall deliver to the City a certificate of insurance evidencing such coverages. All subcontractors shall comply with all Federal, State and Local, laws, regulations and ordinances but such requirement shall not relieve Lightower from its requirement that all work and services provided or required hereunder shall comply with all Federal, State and Local, laws, regulations and ordinances.

16.1. Lightower shall be as fully responsible to the City for the acts and omissions of Lightower's subcontractors, and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by Lightower.

17. Assignability. Lightower shall not assign any interest in this Contract, and shall not

transfer any interest in the same (whether by assignment or novation) without the prior written approval of the City; provided, however, that claims for money due or to become due Lighttower from the City under this Contract may be assigned to a bank, trust, company, or other financial institution, or to a Trustee in Bankruptcy, without such approval. Notice of any such assignment or transfer shall be furnished promptly to the City.

18. Audit. The City reserves the right to audit Lighttower's books of account in relation to this Contract any time during the period of this Contract or at any time during the twelve month period immediately following the closing or termination of this Contract. In the event the City elects to make such an audit, Lighttower shall immediately make available to the City all records pertaining to this Contract, including, but not limited to, payroll records, bank statements and canceled checks.

19. Risk of Damage and Loss. Lighttower shall be solely responsible for causing the timely repair to and/or replacement of, City property or item(s) intended to become City property hereunder, where the need for repair or replacement was caused by Lighttower, by someone under the care and/or control of Lighttower, by any subcontractor of Lighttower, or by any shipper or delivery service. Lighttower shall be solely responsible for all costs and expenses, including but not limited to shipping, delivery, insurance, etc. associated with the foregoing repair and replacement obligation. Further, Lighttower shall be solely responsible for securing the City's written acceptance of all completed repairs and replacements required hereunder. The City hereby retains sole discretion to determine whether a repair or a replacement is the proper remedy.

20. Interest of Lighttower. Lighttower covenants that it presently has no interest and shall not acquire any interest, direct or indirect, in the project or any parcel of land therein or any other interest which would conflict in any manner or degree with the performance of its services hereunder. Lighttower further covenants that in the performance of this Contract no person having any such interest shall be employed.

21. Entire Agreement. This Contract shall constitute the complete and exclusive statement of the contract between the parties as it relates to this transaction and supersedes all previous agreements and understandings, whether written or oral, relating to such subject matter. Any amendment to this Contract must be in writing and agreed to and executed by the City and Lighttower.

22. Independent Contractor Relationship. The relationship between the City and Lighttower is that of client and independent contractor. No agent, employee, or servant of Lighttower shall be deemed to be an employee, agent or servant of the City. Lighttower shall be solely and entirely responsible for its acts and the acts of its agents, employees, servants and subcontractors during the performance of this Contract. It is the express intention of the parties hereto, and Lighttower hereby agrees and covenants, that it and any and all third party(ies) and subcontractor(s) retained by Lighttower hereunder is/are not and shall not be deemed an employee of the City of Waterbury, but is/are and shall remain an independent contractor relative to the City and that nothing herein shall be interpreted or construed as creating or establishing the relationship of employer-employee between the City of Waterbury and

Lighttower or between the City of Waterbury and any third party(ies) or subcontractor(s). Thus, Lighttower hereby covenants that it, its subcontractor(s) and third party(ies) shall not be entitled to the usual characteristics of employment, such as income tax withholding, F.I.C.A. deductions, pension or retirement privileges, Workers Compensation coverage, health benefits, etc. and that Lighttower shall be solely and entirely responsible for its acts and the acts of its agents, employees, servants, representatives, subcontractors and third party(ies).

23. Severability. Whenever possible, each provision of this Contract shall be interpreted in such a manner as to be effective and valid under applicable law. If any provision of this Contract, however, is held to be prohibited or invalid under applicable law, such provision shall be deemed restated to reflect the original intentions of the parties, as nearly as possible in accordance with applicable law, and if capable of substantial performance, the remaining provisions of this Contract shall be enforced as if this Contract was entered into without an invalid provision. If the ruling and/or controlling principle of law or equity leading to the ruling is subsequently overruled, modified or amended by legislation, judicial or administrative action, then the provision(s) in question as originally set forth in this Contract shall be deemed valid and enforceable to the maximum extent permitted by the new controlling principal of law or equity.

24. Survival. Any provisions of this Contract that impose continuing obligations on the parties shall survive the expiration or termination of this Contract for any reason.

25. Contract Change Orders.

25.1. At the sole discretion of the City, a Change Order may be issued solely by the City to modify an existing party obligation set forth in this Contract where the scope of the Change Order is:

25.1.1 within the scope of the original Contract OR is made pursuant to a provision in the original Contract, AND

25.1.2 the Change Order monetary cost is charged solely against those funds encumbered for and at the time the Contract was originally executed by the City, that is those funds set forth in the original Contract as a not to exceed payment amount OR within the original Contract's contingency / allowance / reserve amount (if any is stated therein), AND

25.1.3 the Final Completion Date has not been changed.

25.2. Notwithstanding the foregoing subsection A, a Change Order shall not include:

25.2.1 an upward adjustment to a Lighttower's payment claim, or

25.2.2 a payment increase under any escalation clause set forth in the original contract, or any Change Order, or any amendment.

25.3. That the work and/or services contemplated are necessary does not, in itself, permit a Change Order. Should the need for a Change Order arise, the request shall be reviewed, and if agreed to, approved by the City's Using Agency and any City designated representative(s). To be binding and enforceable, a Change Order shall thereafter be signed by both Lightower, any City designated representative(s), and a duly authorized representative of the City's Using Agency prior to Lightower's delivery of the services, etc. contemplated in said Change Order. All Change Orders are governed by the provisions of this Contract. Any contract change NOT fully complying with this Section 25 shall be effectuated solely by an amendment to this Contract complying with Section 38.073 of the City's "Centralized Procurement System" ordinance.

26. Conflicts or Disputes. This Contract represents the full and complete concurrence between the City and Lightower and governs all disputes between them. In the instance of a conflict or dispute over issues not specifically referenced within the Contract, the following documents shall be used as historical documents. Without regard to the order of precedence, to resolve such conflicts or disputes, the historical documents are **(i)** the City's aforementioned **ITB No. 6048** and **(ii)** Lightower's proposal responding to the aforementioned **ITB No. 6048**.

26.1. Procedure. This procedure supersedes all statements to the contrary occurring either in proposals or other prior agreements, oral or written, and all other communications between the parties relating to this subject.

26.2. Presumption. This Contract or any section thereof shall not be construed against any party due to the fact that the Contract or any section thereof was drafted by such party.

27. Disputes; Legal Proceedings; Waiver of Trial by Jury and Continued Performance. Lightower agrees that its waives a trial by jury as to any and all claims, causes of action or disputes arising out of this Contract or services to be provided pursuant to this Contract. Notwithstanding any such claim, dispute or legal action, Lightower shall continue to perform services under this Contract in a timely manner, unless otherwise directed by the City.

28. Binding Agreement. The City and Lightower each bind themselves, and their successors, assigns and legal representatives to the other party to this Contract and to the successors, assigns and legal representatives of such other party with respect to all covenants of this Contract.

29. Waiver. Any waiver of the terms and conditions of this Contract by either of the parties hereto shall not be construed to be a waiver of any other term or condition of this Contract.

30. Governing Laws. This Contract, its terms and conditions and any claims arising there from shall be governed by the laws of the State of Connecticut.

31. Notice. Except as otherwise specifically prohibited in this Contract, whenever under this Contract approvals, authorizations, determinations, notices, satisfactions or waivers are required or permitted, such items shall be effective and valid only when given in writing signed by a duly authorized officer of the City's Using Agency or Lighttower, and delivered in hand or sent by mail, postage prepaid, to the party to whom it is directed, which until changed by written notice, are as follows:

Lighttower: Lighttower Fiber Networks II, LLC
c/o Crown Castle
80 Central Street
Boxborough, MA 01719
Attn: General Counsel
With a copy to same address, Attn: COO

City: City of Waterbury
c/o Computer Technology Center
236 Grand Street, 3rd floor
Waterbury, CT 06702

32. City Code of Ordinances, Ethics and Conflict of Interest Code, Provisions.

The Person (the term "Person" shall herein be as defined in Section 38 of the City's Code of Ordinances) supplying the documents, data, studies, reports, specifications, deliverables, etc. under this Contract shall comply with all applicable Federal, State and Municipal statutes, regulations, charters, ordinances, rules, etc. whether or not they are expressly stated in this Contract, including but not limited to the following:

32.1. It shall be a material breach of this Contract, and, except as may be permitted by regulations or rulings of the City of Waterbury Board of Ethics it shall be a violation of the City's Code of Ordinances, for any Public Official, City Employee or Member of a Board or Commission who is participating directly or indirectly in the procurement process as set forth in the City's Code of Ordinances, including those participating in exempt transactions, to become or be the employee of any person contracting with the governmental body by whom the Official, Employee, or Board or Commission member is employed or is a member.

32.2. It shall be a material breach of this Contract, and it shall be a violation of the City's Code of Ordinances for any Person to offer, give, or agree to give any current or former Public Official, Employee or Member of a Board or Commission, or for such current or former Public Official, Employee or Member of a Board or Commission to solicit, demand, accept or agree to accept from another Person, a gratuity or an offer of employment in connection with any: decision; approval; disapproval; recommendation; preparation of any part of a program requirement or a requisition; influencing the content of any specification or procurement standard; or rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular

matter, pertaining to any program requirement or a Contract or Purchase Order, or to any solicitation or proposal therefore.

32.3. It shall be a material breach of this Contract and it shall be a violation of the City's Code of Ordinances for any payment, Gratuity, or offer of employment to be made as an inducement for the award of a subcontract or order, by or on behalf of a subcontractor, the prime Lighttower or higher tier subcontractor or any Person associated therewith, under a Contract or Purchase Order to the City.

32.4. The value of anything transferred or received in violation of the City's Charter, Code of Ordinances, and/or regulations promulgated there under, by any Person subject to said Charter and/or Ordinances may be recovered by the City.

32.5. Upon a showing that a subcontractor made a kickback to the City, a prime Lighttower or a higher tier subcontractor in connection with the award of a subcontract or order there under, it shall be conclusively presumed that the amount thereof was included in the price of the subcontract or order and ultimately borne by the City and will be recoverable hereunder from the recipient. In addition, said value may also be recovered from the subcontractor making such kickbacks. Recovery from one offending party shall not preclude recovery from other offending parties.

32.6. It shall be a material breach of this Contract and it shall be a violation of the City's Code of Ordinances for a Person to be retained, or to retain a Person, to solicit or secure a contract with the City upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee; and every Person, before being awarded a City contract, shall deliver to the City, on a City authored form, a representation that such Person has not retained anyone in violation of this subsection 32.6, the failure to deliver said form being a material breach of this Contract and a violation of the City's Code of Ordinances. Note, however, this subsection 32.6 shall not apply to full-time Employees who, as a condition of their employment, may be entitled to bonuses or other fees in accordance with their employment relationship.

32.7. The Person hereby expressly represents that he/she/it has complied with those sections of the City's Code of Ordinances requiring that said Person has **(i)** delivered to the City an affidavit, on a City authored form, stating that the Person and its affiliates have no delinquent taxes or other financial obligations owed to the City; **(ii)** filed the City authored financial disclosure statement form as set forth in the City's Code of Ordinances regarding disclosure of financial interests; **(iii)** delivered to the City a written acknowledgement, on a City authored form, evidencing receipt of a copy of the "Ethics and Conflict of Interest" ordinance for the City of Waterbury and hereby expressly represents that said Person is in full compliance with the entirety of said Code of Ordinances; and **(iv)** filed a current list of all taxable personal and real property as required by the State of Connecticut General Statutes. Any violation of this subsection 32.7 shall be deemed a material breach of this Contract and shall be a violation of the City's Code of Ordinances.

32.8. The definitions set forth in the City's Code of Ordinances shall be the primary source for interpretation of the forgoing subsections 32.1-32.7.

32.9. Lightower is hereby charged with the requirement that it shall have knowledge of, and shall fully comply with, all relevant provisions of the City's Charter and all relevant provisions of the City's Code of Ordinances, including without limitation Chapters 93, titled "Discriminatory Practices", Chapter 38 titled "Centralized Procurement System", and Chapter 39 titled "Ethics and Conflict of Interest", of said Code as may be amended from time to time.

32.10. Lightower hereby acknowledges receipt of a copy of the Chapters 38 and 39 of City's Ordinance regarding Procurement, Ethics, and Conflicts of Interest and has familiarized itself with said Code and hereby agrees to adhere to said Code. The text of Chapters 38 and 39 of said Code may be obtained from the Office of the City Clerk of the City and on the internet at the City Clerk's web site: <http://www.waterburycct.org/content/9569/9605/9613/default.aspx> [click link titled "The City of Waterbury Code of Ordinances *Current to 12/31/2015*". For Chapter 38, click on "Title III: Administration", then click on "Chapter 38: Centralized Procurement System". For Chapter 39, click on "Title III: Administration", then click on "Chapter 39: Ethics and Conflicts of Interest"].

32.11. Lightower is hereby charged with the requirement that it shall have knowledge of, and shall fully comply with, the City's Ordinance Sections 34.15 through 34.99 entitled, "Ordinance Concerning the Hiring of Waterbury Residents on Certain Publicly-Funded Construction Projects" and the State of Connecticut Legislature's Special Act No. 01-1.

32.12. Every Person who conducts business with, contracts, with or provides commodities or services to the City, is charged with notice of the extent of the powers and authority, and the limitations thereon, of the Public Officials and Employees of the City, as set forth in the charter of the City, the Code of Ordinances and any Regulations or Policies pertaining thereto. In particular, and without implying any limitation as to its applicability, it applies to all Persons who participate in the procedures pertaining to the Centralized Procurement System as set forth in Chapter 38, and the Ethics and Conflict of Interest provisions set forth in Chapter 39 of the Code of Ordinances.

32.13. INTEREST OF CITY OFFICIALS. No member of the governing body of the City, and no other officer, employee, or agent of the City who exercises any functions or responsibilities in connection with the carrying out of the Project to which this Contract pertains shall have any personal interest, direct or indirect, in this Contract.

32.14. PROHIBITION AGAINST CONTINGENCY FEES. Lightower hereby represents that it has not retained anyone to solicit or secure a contract with the City upon an agreement or understanding for a commission, percentage, brokerage or contingency fee.

32.15. FREEDOM OF INFORMATION ACT NOTICE. Pursuant to State statute, in the event the total compensation payable to Lighttower set forth in Section 6 herein is greater than \$2,500,000.00, the City is entitled to receive a copy of any and all Lighttower records and files related to the performance of this Contract and those records and files are subject to the Freedom of Information Act ("the Act") and may be disclosed by the City pursuant to the Act.

IN WITNESS WHEREOF, the parties hereto execute this Contract on the dates signed below.

WITNESSES:

CITY OF WATERBURY

By: _____
Neil M. O'Leary, Mayor

Date: _____

WITNESSES:

LIGHTTOWER FIBER NETWORKS II, LLC

By: _____

Its _____

Date: _____

ATTACHMENT A

- i. City of Waterbury Invitation to Bid Number 6048, consisting of 14 pages, (Attached hereto).
- ii. Addendum #1 to City of Waterbury Invitation to Bid Number 6048, dated February 9, 2018, consisting of 3 pages, (Attached hereto).
- iii. Lighttower's Response to City of Waterbury Invitation to Bid Number 6048, dated February 22, 2018, consisting of 30 pages,(Excluding Crown Castle Master Service Agreement, Crown Castle Dark Fiber Services Supplement , and Ethernet Services Agreement) (Attached hereto).

THE CITY OF WATERBURY
WIDE AREA NETWORK # 6048

INVITATION TO BID

Sealed Bids for **WIDE AREA NETWORK** will be received by the City of Waterbury at the office of the Director of Purchasing, Room 103, City Hall Building, 235 Grand Street, Waterbury, CT 06702 until **10:30 a.m. on March 1st, 2018** and at that time and place will be publicly opened and read aloud. No bids will be received after **10:30 a.m.** on the day the bids are to be opened.

The Work (or Item(s) to be procured) consist(s) of: **WIDE AREA NETWORK**

Bids must be enclosed in an opaque sealed envelope and plainly marked with the name of the Project Title ("**WIDE AREA NETWORK** ") and shall contain the name and address of the Bidder on the envelope.

Complete instructions for filing Bids are included in the Instructions to Bidders.

After review of the factors set forth in the Instructions to Bidders, the City reserves the right to reject any and all Bids, to make an award, or to decline to make an award.

Contact Rocco Orso, Director of Purchasing, at 203-574-6748 for further information.

END OF SECTION

THE CITY OF WATERBURY
WIDE AREA NETWORK # 6048
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THE CITY OF WATERBURY
WIDE AREA NETWORK # 6048

SECTION 00100

INSTRUCTIONS TO BIDDERS

ARTICLE 1. QUALIFICATIONS OF BIDDERS

- 1.1 In evaluating Bids, the City of Waterbury ("the CITY") will consider the qualifications of only those Bidders whose Bids, among other factors, are in compliance with the requirements set forth elsewhere in the Bid Documents.

ARTICLE 2. COPIES OF BID DOCUMENTS

- 2.1 Complete sets of Bid Documents shall be used in preparing Bids; neither the CITY nor its representative assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bid Documents.
- 2.2 The CITY and its representative in making copies of Bid Documents available do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

ARTICLE 3. EXAMINATION OF BID DOCUMENTS AND SITE

- 3.1 Before submitting a Bid, each Bidder must (a) examine the Bid Documents thoroughly, (b) familiarize itself with all Federal, State and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the Work; and (c) study and carefully correlate the Bidder's observations and findings with the requirements of the Bid Documents.
- 3.2 The submission of a Bid will constitute an incontrovertible representation by the Bidder that it has complied with every requirement of this Article 3 and that the Bid Documents are sufficient in scope and detail to indicate and convey all terms and conditions necessary for the Bidder's proposed performance of the Work.

ARTICLE 4. INTERPRETATIONS

- 4.1 All questions about the meaning or intent of the Bid Documents must be submitted to the CITY's eProcurement website **by February 9th, 2018 by 2:00 p.m.**
- 4.2 The CITY will issue written clarifications or interpretations by Addenda online at the CITY's eProcurement website not later than **by February 13, 2018 by 2:00 p.m.** Only information issued by such City written Addenda will be binding. Oral and other clarifications or interpretations will not be binding and will be without legal effect.
- 4.3 Each Bidder shall be responsible for determining that it has received all Addenda issued and shall acknowledge receipt of all Addenda on the Addendum Acknowledgment Form and the Bidder shall list therein all written Addenda number(s) issued by the CITY.

ARTICLE 5. PRE-BID CONFERENCE

5.1 -“ NOT USED”

ARTICLE 6. BID FORM

- 6.1 Each Bid shall be submitted on the Bid Form included in Section 00400 of the Bid Documents. The Bid Form shall be removed from the Bid Documents, filled in as required below, and submitted to the CITY. Bidders must fill in all blank spaces on the Bid Form for Bid prices, including without limitation unit prices, extended prices and total price or the Bid will not be considered and shall be void
- 6.2 Bid Forms shall be completed in ink. The Bid price of each item on the form shall be stated in words and in figures. If unit prices are required on the Bid Form, discrepancies between unit prices and their respective total amounts will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.
- 6.3 All names shall be typed or printed below the signature.
- 6.4 The name and address to which communications regarding the Bid are to be directed shall be shown.
- 6.5 One (1) original and one (1) copy of each Bid shall be submitted in a sealed opaque envelope bearing on the outside the name of Bidder, its address, and the Project Title for which the Bid is submitted. **Any bidder who fails to provide the required copy of the bid maybe disqualified.**(If forwarded by mail, Bid and sealed envelope marked as described above shall be enclosed in another envelope with the notation "BID ENCLOSED" on the face and addressed as indicated in the Invitation to Bid.)

ARTICLE 7. RECEIPT OF BIDS

- 7.1 Sealed Bids for the Work of this Project will be received at the time and place indicated in the Invitation to Bid.
- 7.2 The CITY, in its sole discretion, may refuse to consider any Bid not prepared and/or not submitted in accordance with the Bid Documents.
- 7.3 Bidders are cautioned that it is the responsibility of each individual Bidder to assure that its Bid is in the possession of Rocco Orso, Director of Purchasing, or an alternate designated by him, prior to the stated time and at the place of the Bid Opening. The CITY is not responsible for Bids delayed by mail and/or delivery services of any nature.

ARTICLE 8. MODIFICATION AND WITHDRAWAL OF BIDS

- 8.1 Bids may be modified only by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to that time scheduled by the CITY for the opening of Bids.
- 8.2 A Bid may be withdrawn by the Bidder prior to the scheduled time (or authorized postponement thereof by the CITY) for the opening of Bids.
- 8.3 **Any Bid received after the time and date specified as the time for the CITY's opening of Bids shall not be considered. Once bids are opened by the CITY, no**

Bidder may withdraw its Bid for a period of ninety (90) days {as needed}, excluding Saturdays, Sundays and legal holidays, after the actual date of the CITY's opening of the Bids.

ARTICLE 9. LOWEST RESPONSIBLE BIDDER

- 9.1 A contract may be awarded to the Lowest Responsible Bidder. The term "Lowest Responsible Bidder" as used herein shall mean the Bidder whose Total Bid Price is the lowest of those Bidders possessing, without limitation, the skill, ability, expertise, experience, qualifications and integrity necessary for the faithful performance of the Work, as determined by the CITY.
- 9.2 After review of these and other factors, including without limitation, responsiveness, qualifications and price, the CITY reserves the right to reject any and all Bids, to decline to make an award, to waive any and all informalities if it is in the CITY's best interest to do so. The CITY reserves the right to disregard all nonconforming, nonresponsive, conditional Bids, and Bids taking exception(s) to the Bid Documents.
- 9.3 A Bid which includes, for any Item(s), a Bid Price that is abnormally low or high may be rejected in its entirety.
- 9.4 The CITY reserves the right to reject the Bid of any Bidder that the CITY considers not to possess the qualities set forth in Article 11.1 herein.

ARTICLE 10. PURCHASE ORDER ISSUANCE/AWARD AND EXECUTION OF CONTRACT (AS APPLICABLE)

- 10.1 If a purchase order(s) is to be issued, it will be issued within ninety (90) calendar days, excluding Saturdays, Sundays, and legal holidays, after the actual date of the opening of the Bids.
- 10.2 -" NOT USED"
- 10.3 -" NOT USED"

ARTICLE 11. ACCESS TO SITE

- 11.1 -" NOT USED"

ARTICLE 12. SALES TAX

- 12.1 The goods and services to be provided under any contract or purchase order awarded pursuant to this Invitation to Bid is exempt from the sales taxes of the State of Connecticut.

ARTICLE 13. INSURANCE

- 13.1. The Contractor shall not commence work under this Contract until all insurance required under this Section 13 has been obtained by the Contractor and such insurance has been approved by the City. The Contractor shall not allow any subcontractor to commence work on any subcontract until all insurance required of any such subcontractor has been so obtained and approved by the City. Insurance shall be provided by insurers, satisfactory

to the City and authorized to do business in the State of Connecticut, an "A-" Best's Rating and at least a Class V3 or better financial size category as shown in the most current A.M. Best Company ratings.

13.2. At no additional cost to the City, the Contractor shall purchase and maintain the insurance coverages set forth below which shall protect the City from claims which may arise out of or result from the Contractor's obligation under this Contract, whether such obligations are the Contractor's or subcontractor or person or entity directly or indirectly employed by said Contractor or subcontractor, or by any person or entity for whose acts said Contractor or subcontractor may be liable.

13.3. Each insurance policy shall state that the insurance company shall agree to investigate and defend the insured against all claims for damages, even if groundless. If any insurance required herein is to be issued or renewed on a claims made form as opposed to an occurrence form, the retroactive date for coverage shall be no later than the commencement date of this Contract and shall provide that in the event of cancellation or non-renewal, the discovery period for insurance claims ("Tail Coverage") shall be available for at least 60 months.

13.4. The following policies with stated limits shall be maintained, in full force and effect, at all times during which the services are to be performed by the Contractor:

13.4.1 General Liability Insurance: \$1,000,000.00 per occurrence, \$2,000,000.00 aggregate and \$2,000,000.00 Products and completed operations aggregate

Providing coverage to protect the City for all damages arising out of bodily injuries, sickness to or death of all persons in any one accident or occurrence and for all damages arising out of destruction of property in any one accident or occurrence.

13.4.2 Automobile Liability Insurance: \$1,000,000.00 combined single limit (CSL)

Providing coverage to protect the City with respect to claims for damage for bodily injury and or property damage arising out of ownership, maintenance, operation, use or loading and unloading of any auto including hired & non-owned autos.

13.4.3 Workers' Compensation: Statutory Limits within the State of Connecticut: Employers' Liability:

EL Each Accident \$500,000.00

EL Disease Each Employee \$500,000.00

EL Disease Policy Limit \$500,000.00

Contractor shall comply with all State of Connecticut statutes as it relates to workers' compensation.

13.4.4 Excess/Umbrella Liability Insurance: Excess or Umbrella insurance coverage that follows form or sits over General Liability, Automobile Liability and Workers Compensation insurances. \$1,000,000.00 each occurrence and \$1,000,000.00 Aggregate.

13.4.5 Builder's Risk Insurance: coverage equaling \$_____, the monetary value of the construction component of the Project.

"All Risk" Builders Risk insurance (also know as "course of construction") coverage with limits equal to or better than the maximum possible loss of all materials of construction used or contemplated under this Contract, including all materials in transit and all materials in storage wherever stored and the value of any and all subsequent Contract changes. This insurance shall include the interests of the City, the Contractor and any and all subcontractors. If deemed necessary by the City's Risk Manager, this insurance shall also include coverage for the total value of the Project's constructed property and shall be valid until a certificate of occupancy is issued. Upon the issuance of said certificate, the City will assume responsibility for insuring said property.

13.4.6 Contractors Pollution Liability Insurance: \$1,000,000.00 each claim, \$2,000,000.00 aggregate coverage.

The foregoing per claim coverage plus appropriate aggregate coverage depending on the size of the job for contractor caused pollution events such as asbestos or lead abatement, but not limited to only these pollution causes of loss.

13.5. Failure to Maintain Insurance: In the event the Contractor fails to maintain the minimum required coverage as set forth herein, the City may at its option purchase same, and offset the Contractor's invoices for the cost of said insurance.

13.6. Cancellation: The City of Waterbury shall receive written notice of cancellation from the Contractor at least thirty (30) calendar days prior to the date of actual cancellation, regardless of the reason for such cancellation.

13.7. Certificates of Insurance: The Contractor's General, Automobile, Builder's Risk and Excess/Umbrella Liability Insurance policies shall be endorsed to add the City and _____ as an additional insured and provide waiver of subrogation on all policies except Builder's Risk and Pollution Liability. The insurance afforded the additional insured shall be primary and non-contributory insurance and the coverage and limits provided under the Contractor's policies shall not be reduced or prorated by the existence of any other insurance applicable to any loss the additional insured may have suffered. Prior to the execution of this Contract by the City, the Contractor shall furnish to the City, subject to City approval, certificate(s) of insurance and Additional Insured Endorsement and Waiver of Subrogation Endorsement verifying the above coverages, including the naming of the City of Waterbury, as follows: **"The City of Waterbury and _____ are listed as additional insured on all lines of coverage except Pollution Liability and waiver of subrogation applies to all lines of coverage except Pollution Liability and Builder's Risk as their interest may appear"**. The City's Invitation to Bid Number must be shown on the certificate of insurance to assure correct filing. The Contractor must supply replacement/renewal certificates at least 30 days prior to the expiration of the policy(ies). Said certificates shall contain a provision that coverage afforded under the policies shall not be cancelled or reduced for any reasons unless notice of than thirty (30) calendar days has been mailed to the City's Using Agency and a copy to the City's Office of Corporation Counsel, 235 Grand Street, Waterbury, CT 06702.

13.8. No later than thirty (30) calendar days after receipt by the Contractor, the Contractor shall deliver to the City a copy of the Contractor's insurance policies and endorsements and riders.

ARTICLE 14. PURCHASE ORDER/CONTRACT TIME

- 14.1 BIDDER agrees and covenants that the Contract Time shall commence upon issuance and terminate on 6/30/2017, unless the purchase order provides otherwise.

ARTICLE 15. BID DOCUMENTS.

- 15.1 Bid Documents shall be any and all sections, terms, conditions, forms, drawings, data, etc., listed in the Table of Contents of the Bid Documents.

ARTICLE 16. Federal, State and Local Employment Requirements.

- 16.1 Contractors, if applicable, shall be obligated to fully comply with the attached Hiring of Waterbury Residents on Certain Publicly-Funded Construction Projects, i.e. City of Waterbury Ordinances Chapter 34 ("Good Jobs Ordinance"), Federal Davis-Bacon Act, Federal American Recovery and Reinvestment Act of 2009, and the Housing and Urban Development Section 3 Clause, all as further specified in the attached City of Waterbury Contract form. Also attached hereto, is a full copy of the aforesaid City of Waterbury Ordinance, commonly referred to as the "Good Jobs Ordinance".

16.2 **-" NOT APPLICABLE"**

The contractor who is selected to perform this municipal public works project, funded in whole or part by the State, must comply with CONN. GEN. STAT. §§ 4a-60, 4a-60a, 4a-60g, and 46a-68b through 46a-68f, inclusive, as amended by June 2016 Special Session Public Act 15-5. An Affirmative Action Plan must be filed with and approved by the Commission on Human Rights and Opportunities prior to the commencement of construction.

State law requires a minimum of twenty-five (25%) percent of the state-funded portion of the contract for award to subcontractors holding current certification from the Connecticut Department of Administrative Services ("DAS") under the provisions of CONN. GEN. STAT. § 4a-60g, as amended. (25% of the work with DAS certified Small and Minority owned businesses and 25% of that work with DAS certified Minority, Women and/or Disabled owned businesses.) The contractor must demonstrate good faith effort to meet the 25% set-aside goals.

For municipal public works contracts, the contractor must file a written or electronic non-discrimination certification with the Commission on Human Rights and Opportunities. Forms can be found at

http://www.ct.gov/opm/cwp/view.asp?a=2982&q=390928&opmNav_GID=1806.

END OF SECTION

THE CITY OF WATERBURY
WIDE AREA NETWORK # 6048
SECTION 00300

ADDENDUM ACKNOWLEDGEMENT FORM

NOTE: The Bidder is to complete, sign and date this form. The completed form shall be submitted with the BID FORM in accordance with ARTICLE 6 of the INSTRUCTIONS TO BIDDERS.

The undersigned, as Bidder's Authorized Representative, acknowledges receipt of the following Addenda and that the modifications to the Bid Documents noted therein have been considered and all costs related thereto are included in the Bid Prices:

Addendum # _____	Dated Issued _____
Addendum # _____	Dated Issued _____
Addendum # _____	Dated Issued _____
Addendum # _____	Dated Issued _____
Addendum # _____	Dated Issued _____
Addendum # _____	Dated Issued _____

Business Name of Bidder: _____
(Print or Type)

By Bidder's Authorized Representative:

Signature: _____

Name: _____
(Print or Type)

Title: _____
(Print or Type)

Date: _____
(Print or Type)

END OF SECTION

THE CITY OF WATERBURY
WIDE AREA NETWORK # 6048
BID SHEET
SECTION 00400

BID SHEET

			Cost	Cost
NAME	Address	Bandwidth	3 Yr	5Yr
Adult Education	11 Draher Street	1GB		
Bunker Hill School	170 Bunker Hill Avenue	1GB		
Carrington School	24 Kenmore Avenue	1GB		
Chase School	40 Woodtick Road	1GB		
Driggs School	77 Woodlawn Terrace	1GB		
Duggan School	38 West Porter Street	1GB		
Enlightenment School	30-A Church Street	1GB		
Generali School	3196 East Main Street	1GB		
Gilmartin School	94 Spring Lake Road	1GB		
Hopeville School	2 Cypress Street	1GB		
Kingsbury School	220 Columbia Boulevard	1GB		
Maloney School	233 South Elm Street	1GB		
Reed School	33 Griggs Street	1GB		
Rotella School	380 Pierpont Road	1GB		
Sprague School	1448 Thomaston Avenue	1GB		
State Street School	58 Griggs Street	1GB		
Tinker School	809 Highland Avenue	1GB		
Walsh School	55 Dikeman Street	1GB		
Washington School	685 Baldwin Street	1GB		
Waterbury Career Academy	175 Birch Street	1GB		
Wendell Cross School	1255 Hamilton Avenue	1GB		
West Side Middle School	483 Chase Parkway	1GB		
Wilson School	235 Birch Street	1GB		
Food Services/Supply	62 Harper Ave	1GB		
Chase Building	236 Grand Street	1GB		
		TOTAL:		

			Cost	Cost	
NAME	Address	Bandwidth	3 Yr	5Yr	
Adult Education	11 Draher Street	10 GB			
Bunker Hill School	170 Bunker Hill Avenue	10 GB			
Carrington School	24 Kenmore Avenue	10 GB			
Chase School	40 Woodtick Road	10 GB			
Driggs School	77 Woodlawn Terrace	10 GB			
Duggan School	38 West Porter Street	10 GB			
Enlightenment School	30-A Church Street	10 GB			
Generali School	3196 East Main Street	10 GB			
Gilmartin School	94 Spring Lake Road	10 GB			
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Kingsbury School	220 Columbia Boulevard	10 GB			
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Washington School	685 Baldwin Street	10 GB			
Waterbury Career Academy	175 Birch Street	10 GB			
Wendell Cross School	1255 Hamilton Avenue	10 GB			
West Side Middle School	483 Chase Parkway	10 GB			
Wilson School	235 Birch Street	10 GB			
Food Services/Supply	62 Harper Ave	10 GB			
Chase Building	236 Grand Street	10 GB			
		Total			

QUALIFICATIONS

Please provide responses to the following questions as well as details to offer a comprehensive representation of your company and its services.

Yes/No

1. Can the vendor be able to guarantee network availability at least 99.5% of the time in a calendar month, and packet delivery of 99.5% or greater, except for outages caused by the customer's equipment, fiber or copper cuts by third parties, acts of God, or other Force Majeure events.	
Please elaborate:	
2. Does your company monitor all telecommunication and/or Internet services 24 hours per day, seven days per week, 365 days per year?	
Please elaborate:	
3. Can your company ensure Waterbury School District 99.95% for all telecommunication and/or Internet service availability during, each week of service provided with telecommunication and/or Internet service latency across your company's network, facilities and services not to exceed 30 milliseconds	
Please elaborate:	
4. Is your company able to provide immediate notification to Waterbury School District network department representative of any and all telecommunication and/or Internet service outages or anomalies which affect the use of the facilities, circuits, or network within Waterbury School District? What method do you	
Please elaborate:	
5. Please provide the process for Waterbury School District to report any problems with the facilities, circuits, network or telecommunication and/or Internet services including the minimum response time.	

Payment and Funding

The District intends to partially fund the services contemplated herein by leveraging the federal E-Rate program. Vendors should be familiar with and compliant with all applicable federal E-Rate policies. Bids from vendors that are not E-Rate eligible will not be considered for this RFP. Vendors must provide a response to the ITB that is compliant with E-Rate.

Bids from vendors that are not E-Rate eligible will not be considered for this ITB. Vendors must provide a response to the ITB that is compliant with E-Rate. Vendors must submit their E-Rate Service Provider Identification Number (SPIN) in the vendor response. Vendors must submit their E-Rate Federal Communications Commission Registration Number (FCCRN) in the vendor response along with proof of FCC Green Light Status. The successful bidder also must abide by the requirements for vendors under the E-Rate program as set forth by the E-Rate program administrators. These requirements include, but are not limited to; filing of all Form 474 forms, extension of appropriate discounts to the participating eligible entities, careful record keeping for auditing purposes, and the provision of any information participating eligible entities must submit as part of their filing requirements. The bidder must identify and separate any costs that are associated with non E-Rate eligible entities and services as identified in the scope of work herein.

In the event of mathematically incorrect calculations of individual items or totals, the mathematically correct amount using the estimated quantities and unit prices (in words) shall govern in determining the TOTAL BID PRICE.

The undersigned also agrees that the quantities indicated are for Bid comparison purposes only and are not represented to be actual quantities for completion of the Work.

The undersigned hereby certifies under the penalties of perjury that this Bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this section, the work "person" shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity.

Social Security Number
or Federal Identification Number

Signature of Individual or
Corporate Name:

Corporate Officer
(if applicable)

Notice of acceptance should be mailed, telegraphed or delivered to the (undersigned Bidder at the following address):

(Name)

By: _____
(Title)

(Business Address)

(City, State, Zip Code)

Date: _____

Note: If the Bidder is a corporation, indicate State of incorporation under signature, and affix corporate seal; if a partnership, give full names and residential addresses, if different from business address.

The following documents are attached to and made a condition of the Bid:

- a. Instructions to Bidders – Section 00100
- b. Addendum Acknowledgement – Section 00300
- c. Bid Form – Section 00400
- d. Technical Specifications – Section 00500

THE CITY OF WATERBURY

WIDE AREA NETWORK # 6048
Technical Specs

SECTION 00500

Purpose:

The Waterbury Public Schools is seeking a common carrier to allow the Waterbury Public School District to apply for ERATE Managed or Unmanaged services discounts. The selected common carrier will assist in the upgrading of the Waterbury Public School District Wide Area Network, including planning, design, installation, documentation, training, maintenance and any future upgrades.

It is the intent of Waterbury Public Schools to select a single vendor to provide a scalable point-to-point service with a uniform set of network hardware to be installed. Waterbury's goal is to facilitate a complete communications network, where data of all types are carried between facilities, resulting in higher productivity, lower costs, a higher level of services, and a more enriching educational experience for the students of the Waterbury Public Schools.

Review Criteria:

The selected common carrier will demonstrate a similar type of deployment and network within a comparable size school district in the State of Connecticut. That school system will be made available for the Waterbury staff to visit and interview.

Cost - TCO

1. Product Performance

- Products or equipment selected on basis of recommendations of current users, compatibility with existing products or equipment, superior features or other technically advantageous reasons.

2 Capabilities of responders and their performance, such as:

- References from clients, Performance history of submitting accurate estimates and bids.
- Producing quality work.
- Financial stability.
- Experience of key staff in performing comparable projects or services.
- Status of required licensing or certification.

3 Delivery Schedule/Completion Schedule

- Performance history in meeting deadlines.

Scope of Services:

The Waterbury Public Schools network currently consists of 32 schools and administrative buildings within the district which cover elementary, middle, magnet, Pre-K- 8 and high schools. Waterbury is currently using AT&T's- OPT-e-MAN solution, along with a private dark fiber network to tie the schools and administrative facilities together.

The Waterbury Public Schools is seeking a solution that will continue to allow for high speed communications for simultaneous IP voice, video and data connectivity. The response to this ITB should include all requirements to create a network with the Quality of Service (QOS) to handle all of the requested technologies.

The project shall consist of providing and delivering Wide Area Network Services for 25 of the 32 City Public Schools and Buildings. Project milestones and dates will be understood and agreed upon prior to execution of the contract.

- The selected vendor **MUST ENSURE CONTINUITY of service during the transition to a new solution.** As the cut over date for any new vendor is July 1st, 2018. This plan is to include a transition plan to be provided with any response. The plan is to include the resources to be dedicated to the transition, all costs associated, a timeline for action with completion dates and target dates.

Vendors must submit their E-Rate Service Provider Identification Number (SPIN) in the vendor response. Vendors must submit their E-Rate Federal Communications Commission Registration Number (FCCRN) in the vendor response along with proof of FCC Green Light Status. The successful bidder also must abide by the requirements for vendors under the E-Rate program as set forth by the E-Rate program administrators. These requirements include, but are not limited to; filing of all Form 474 forms, extension of appropriate discounts to the participating eligible entities, careful record keeping for auditing purposes, and the provision of any information participating eligible entities must submit as part of their filing requirements. The bidder must identify and separate any costs that are associated with non E-Rate eligible entities and services as identified in the scope of work herein.

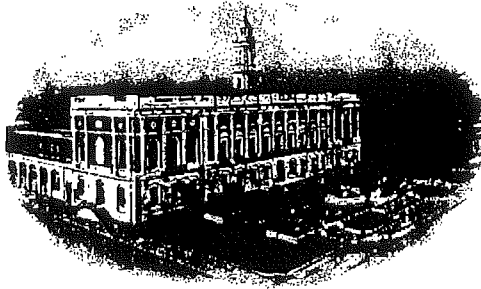
- Payment provisions will be based upon the City being granted and receiving USF E-Rate Funding. The District intends to partially fund the services contemplated herein by leveraging the federal E-Rate program. Vendors should be familiar with and compliant with all applicable federal E-Rate policies. Bids from vendors that are not E-Rate eligible will not be considered for this ITB. Vendors must provide a response to the ITB that is compliant with E-Rate. Vendors must submit their E-Rate Service Provider Identification Number (SPIN) in the vendor response. Vendors must submit their E-Rate Federal Communications Commission Registration Number (FCCRN) in the vendor response along with proof of FCC Green Light Status. The successful bidder also must abide by the requirements for vendors under the E- Rate program as set forth by the E-Rate program administrators. These requirements include, but are not limited to; filing of all Form

474 forms, extension of appropriate discounts to the participating eligible entities, careful record keeping for auditing purposes, and the provision of any information participating eligible entities must submit as part of their filing requirements. The bidder must identify and separate any costs that are associated with non E- Rate eligible entities and services as identified in the scope of work herein.

Quote must include all costs for:

- Design
- Construction – special construction costs should be amortized over the initial contract term as part of the bid. The Waterbury Public Schools will not be responsible for any easement/Right of Way Costs incurred by the proposer. The Demarcation Point and Point of Entry will be determined by the Waterbury Public Schools technical staff. All costs must include pricing and installing services to the point of entry and demarcation point.
- Hardware needed to terminate the circuit and light circuit
- Software
- Installation
- Configuration
- Ongoing Annual Service and Maintenance
- Network Diagrams in Visio or Similar Format

ROCCO ORSO
PURCHASING DIRECTOR



OFFICE OF THE DIRECTOR OF PURCHASING
THE CITY OF WATERBURY
CONNECTICUT
ADDENDUM #1

February 9, 2018

Bid: 6048

Project: Education IT - Wide Area Network

The following questions have been received about this project.

Question: What is the name/address of the hub location?

Answer: Computer Technology Center- 236 Grand Street

Question: What is the port/bandwidth required at the hub location?

Answer: Vendor must submit, in their proposal, a number that will be sufficient to handle all traffic that will traverse the hub.

Question: Can the Corporate Officer signature be provided via DocuSign or does it need to be wet inc?

Answer: Live signature is preferable. DocuSign if necessary.

Question: In Section 14.1 is the date supposed to be 6/30/2018?

Answer: Termination date will be determined by the contract length

Question: On page 12 under Qualifications, questions 3 and 4 both seem to be cut off, can you provide the questions in their entirety?

3. Can your company ensure Waterbury School District 99.95% for all telecommunication and/or Internet service availability during, each week of service provided with telecommunication and/or Internet service latency across your company's network, facilities, and services not to exceed 30 milliseconds maximum?

4. Is your company able to provide immediate notification to Waterbury School District network department representative of any and all telecommunication and/or Internet service outages or anomalies which affect the use of the facilities, circuits, or network within Waterbury School District? What method do you propose for outage contact?

Question: 6.2 in the ITB states "The bid price of each item on the form shall be stated in words and in figures." Should we add additional rows to the Bid Sheet Section 400 to accommodate the written pricing?

Answer: Yes.

Question: Where is the file for specifications, item part #s and quantities for the above bid. Can you please add them?

Quote must include all costs for:

- Design
- Construction – special construction costs should be amortized over the initial contract term as part of the bid. The Waterbury Public Schools will not be responsible for any easement/Right of Way Costs incurred by the proposer. The Demarcation Point and Point of Entry will be determined by the Waterbury Public Schools technical staff. All costs must include pricing and installing services to the point of entry and demarcation point.
- Hardware needed to terminate the circuit and light circuit
- Software
- Installation
- Configuration
- Ongoing Annual Service and Maintenance

Network Diagrams in Visio or Similar Format

Question: Will you accept a Board Authorized Rep signature instead of an Officer on that form?

Answer: Yes. The successful bidder may be asked by our Corporation Council for other signatures if the ones provided are not satisfactory.

Question: Can the Corporate Seal be waived if we provide a Legal statement?

Answer: Yes.

Question: In addition to the 3 and 5 year terms, is the City interested in considering 20-year fiber IRUs and/or owning the fiber? Besides the locations specified in the RFP, are there other points-of-presence that the City would like to be built to?

Answer: Vendor may submit as many proposals as they choose, with varying term.

Thanks

Kevin McCaffery

Buyer – City of Waterbury



THE CITY OF WATERBURY
WIDE AREA NETWORK # 6048
Invitation to Bid Response

Lighttower Fiber Networks II, LLC ("Lighttower")
80 Central Street
Boxborough, MA 01719
www.lighttower.com

Joe Paluso
Senior Account Executive
Lighttower Fiber Networks
Cheshire, CT
Office 585-743-1704
Mobile 860-810-8018
jpaluso@lighttower.com

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Executive Summary

Company Profile

Lighttower (a Crown Castle company) owns and operates approximately 40,000 cell towers and 60,000 route miles of fiber supporting small cells and fiber solutions across every major US market. This nationwide portfolio of communications infrastructure connects cities and communities to essential data, technology and wireless service – bringing information, ideas and innovations to the people and businesses that need them. Custom built networking solutions tailored to specific customer needs enable the highest levels of diversity, security, and protection. Lighttower is committed to providing exceptional support and care to customers while ensuring industry-leading levels of service and reliability for their networks.

Crown Castle is an S&P 500 company that is dedicated to long-term ownership and operation of communications infrastructure. At a time when the fiber industry is going through great changes, we're committed to being a dependable, stable partner that you can count on today, tomorrow, and for many years to come. Since we own our entire fiber network, we are directly invested in its integrity and can provide faster response times and issue resolution.

Company Experience

Lighttower is a fiber solutions provider with a 20-year history of owning and operating communications infrastructure across the country. We work closely with our customers to build a solution that allows them to run their organizations today, while setting the stage for tomorrow's most transformative innovations. Through organic growth, strategic mergers and acquisitions, and an unwavering commitment to customer support and satisfaction, Lighttower has positioned itself as a top provider of mission critical networking and broadband services utilizing end-to-end fiber connectivity.

Lighttower continually receives the highest marks and reviews in the industry for our operations and customer support. Since 2009, Atlantic-ACM has ranked us first in the industry in categories including Network Performance, Provisioning, and Customer Service.

Lighttower's network also offers unparalleled local density and route diversity. Lighttower is also proud to be one of the only fiber providers who can operate in the power space and diverse power line routes throughout most of our footprint. This makes it possible for customers to have diverse routing for their mission critical services. Lighttower offers customers a complete suite of fiber-based networking solutions including Dark Fiber, Ethernet, Wavelengths, SONET, Video, Internet Access, and Collocation.

Partnership Approach

Lighttower views every customer as a partner, each with unique and mission critical business requirements. Lighttower has partnered with some of the largest and most prestigious companies in the Fortune-500 including giants in financial services, telecommunications, healthcare, and enterprise business. Many of the solutions provided to these partners are custom engineered and crafted into our network before being deployed.

Lighttower is the perfect size – big enough to be a leader and on the forefront of new technology, while still agile and responsive to our customer's ever changing requirements.

Product Overview

Lightower Ethernet Benefits

Lightower's Ethernet services combine the reliability and ubiquity of Carrier Ethernet with next-generation metro area transport technology. The result is services that deliver an efficient, fully restorable, easily managed network that's ready for any vertical or application requirement. Additionally, the natural flexibility of Carrier Ethernet allows you to decide the amount of bandwidth you need to support your applications within your budget now with the assurance that it can scale in the future.

Lightower's Ethernet service includes:

- No protocol conversion is required, ensuring interoperability between LAN and MAN, simplifying installation & turn-up.
- Easier installation and management allows for rapid provisioning compared to other platforms.
- Flexible bandwidth allows you to grow as your business needs grow. Scalable for long term network evolution connectivity. Resilient, high availability core transport services for high reliability.
- Standards-based IEEE Ethernet service for Layer 2 transport.
- 802.1Q VLAN and 802.1 QinQ tunnelling supported.
- MEF 9 and MEF 14 certified technology.

Lightower Dark Fiber Benefits

Lightower's unique fiber assets, routes and secure rights-of-way provide the network infrastructure that your business needs, where you need it, to support mission-critical applications.

- Allows customers with in-house optical expertise to manage their own network
- Enables customers to select the equipment best suited to support their applications
- Flexibility to support a large number of configurations, services, and applications
- Delivers virtually unlimited bandwidth at a fixed cost with the potential of capitalizing your network as an asset
- Dark Fiber networks are under your control, completely secure, and are tailored to your connectivity requirements
- Lightower's fiber network leverages unique rights-of-way providing added resilience to your infrastructure
- Ability to leverage Lightower's networking expertise and benefit from its award winning customer service
- Strong ROI for companies that use substantial bandwidth and utilize numerous services

Qualifications

QUALIFICATIONS

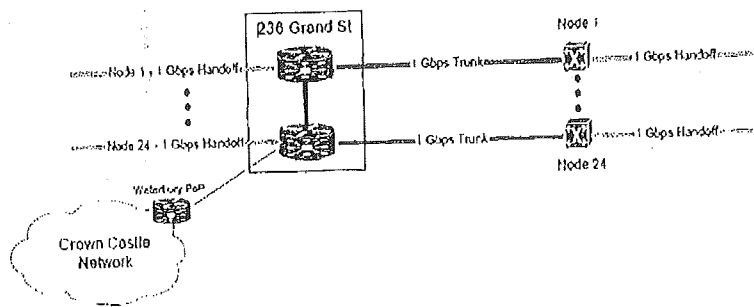
Please provide responses to the following questions as well as details to offer a comprehensive representation of your company and its services.

Yes/No

1. Can the vendor be able to guarantee network availability at least 99.5% of the time in a calendar month, and packet delivery of 99.5% or greater, except for outages caused by the customer's equipment, fiber or copper cuts by third parties, acts of God, or other Force Majeure events.	Yes						
Please elaborate: Please refer to Lighttower Services Supplements for SLA details.							
2. Does your company monitor all telecommunication and/or Internet services 24 hours per day, seven days per week, 365 days per year?	Yes						
Please elaborate: Service will be monitored through a connection from the hub site to the Lighttower POP.							
3. Can your company ensure Waterbury School District 99.95% for all telecommunication and/or Internet service availability during, each week of service provided with telecommunication and/or Internet service latency across your company's network, facilities and services not to exceed 30 milliseconds maximum?	Yes						
Please elaborate: Please refer to Lighttower Services Supplements for SLA details.							
4. Is your company able to provide immediate notification to Waterbury School District network department representative of any and all telecommunication and/or Internet service outages or anomalies which affect the use of the facilities, circuits, or network within Waterbury School District? What method do you propose for outage contact?	Yes						
Please elaborate: Lighttower operates 3 diversely located Network Operations Centers (NOCs) to monitor the network 24x7x165 and upon notification of failure or alarm condition immediately begin restoration actions. Customers are notified through email or phone contact.							
5. Please provide the process for Waterbury School District to report any problems with the facilities, circuits, network or telecommunication and/or Internet services including the minimum response time.							
Please elaborate: Customers experiencing an issue can call into the NOC, email the NOC or use the Lighttower Customer Portal to notify the NOC of the condition. Trouble tickets are designated based on the severity. Severity 1 would indicate a hard down condition. Severity 2 would be impaired service. Severity 3 would be customer change requests or informational tickets. The MTTR target and Update Frequency is below: <table border="0"> <tr> <td>Max time to repair Severity 1 – 4 hrs</td> <td>Status Update Frequency Severity 1 – 60 Min</td> </tr> <tr> <td>Max time to repair Severity 2 – 6 hrs</td> <td>Status Update Frequency Severity 2 – 2-4 hrs</td> </tr> <tr> <td>Max time to repair Severity 3 – 8 hrs</td> <td>Status Update Frequency Severity 3 – 8 hrs</td> </tr> </table>	Max time to repair Severity 1 – 4 hrs	Status Update Frequency Severity 1 – 60 Min	Max time to repair Severity 2 – 6 hrs	Status Update Frequency Severity 2 – 2-4 hrs	Max time to repair Severity 3 – 8 hrs	Status Update Frequency Severity 3 – 8 hrs	
Max time to repair Severity 1 – 4 hrs	Status Update Frequency Severity 1 – 60 Min						
Max time to repair Severity 2 – 6 hrs	Status Update Frequency Severity 2 – 2-4 hrs						
Max time to repair Severity 3 – 8 hrs	Status Update Frequency Severity 3 – 8 hrs						

Logical Diagrams

24 - 1Gbps Metro-E Advanced Private Lines. Each node location will be installed with a 1Gbps switch. Fiber will be spliced from node location directly to the hub location at 236 Grand Street. At 236 Grand St, two MRV 9244s will be installed. These will accommodate the trunks to the nodes and a handoff per P2P to the customer's network. Customer may choose copper or fiber handoffs per location. 236 Grand St will also have fiber spliced to the nearest Crown Castle PoP for management of the private network.



MRV 905 (1Gbps Switch)

MRV 9244 (1Gbps Aggregation Switch)

CROWN CASTLE

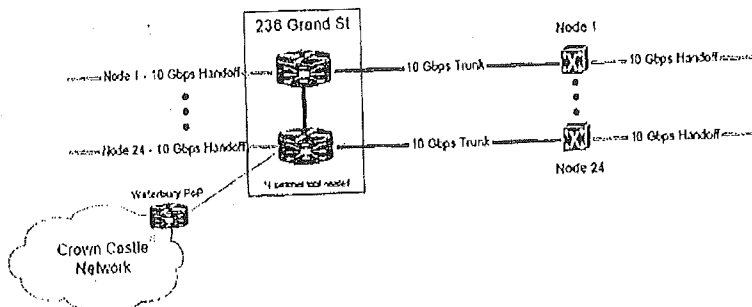
Waterbury Public Schools

Tony Fazio

01/05/2011

7/13/2017

24 - 10Gbps Metro-E Advanced Private Lines. Each node location will be installed with a 10Gbps switch. Fiber will be spliced from node location directly to the hub location at 236 Grand Street. At 236 Grand St, four MRV 9244s will be installed. These will accommodate the trunks to the nodes and a handoff per P2P to the customer's network. 236 Grand St will also have fiber spliced to the nearest Crown Castle PoP for management of the private network.



MRV 905-N8 (10Gbps Switch)

MRV 9244 (10Gbps Aggregation Switch)

CROWN CASTLE

Waterbury Public Schools

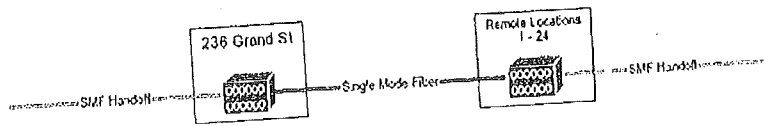
Tony Fazio

01/05/2011

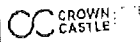
7/13/2017

Logical Diagrams

24 Dark Fiber P2Ps. 2 Strands of fiber each. Crown Castle provides dark fiber services over a Single Mode fiber backbone. Fiber is spliced direct from node location to hub location. Fiber routes are estimated prior to sale and provided as a KMZ. Installed routes can be provided as a KMZ after installation.



Fiber Distribution Panel



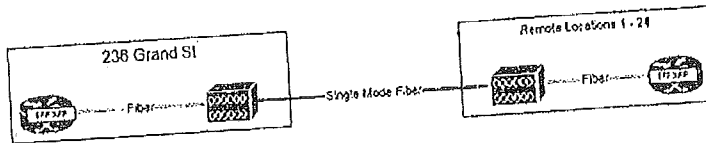
Waterbury Public Schools

Tony Lee

CA 02024-01

1-10-2013

24 Flexible Private Lines. 2 Strands of fiber each. Crown Castle provides dark fiber services over a Single Mode fiber backbone. Fiber is spliced direct from node location to hub location. Fiber routes are estimated prior to sale and provided as a KMZ. Installed routes can be provided as a KMZ after installation. Crown Castle will procure optics to provide to the customer.



Crown Castle Provided Optic



Customer Equipment



Fiber Distribution Panel



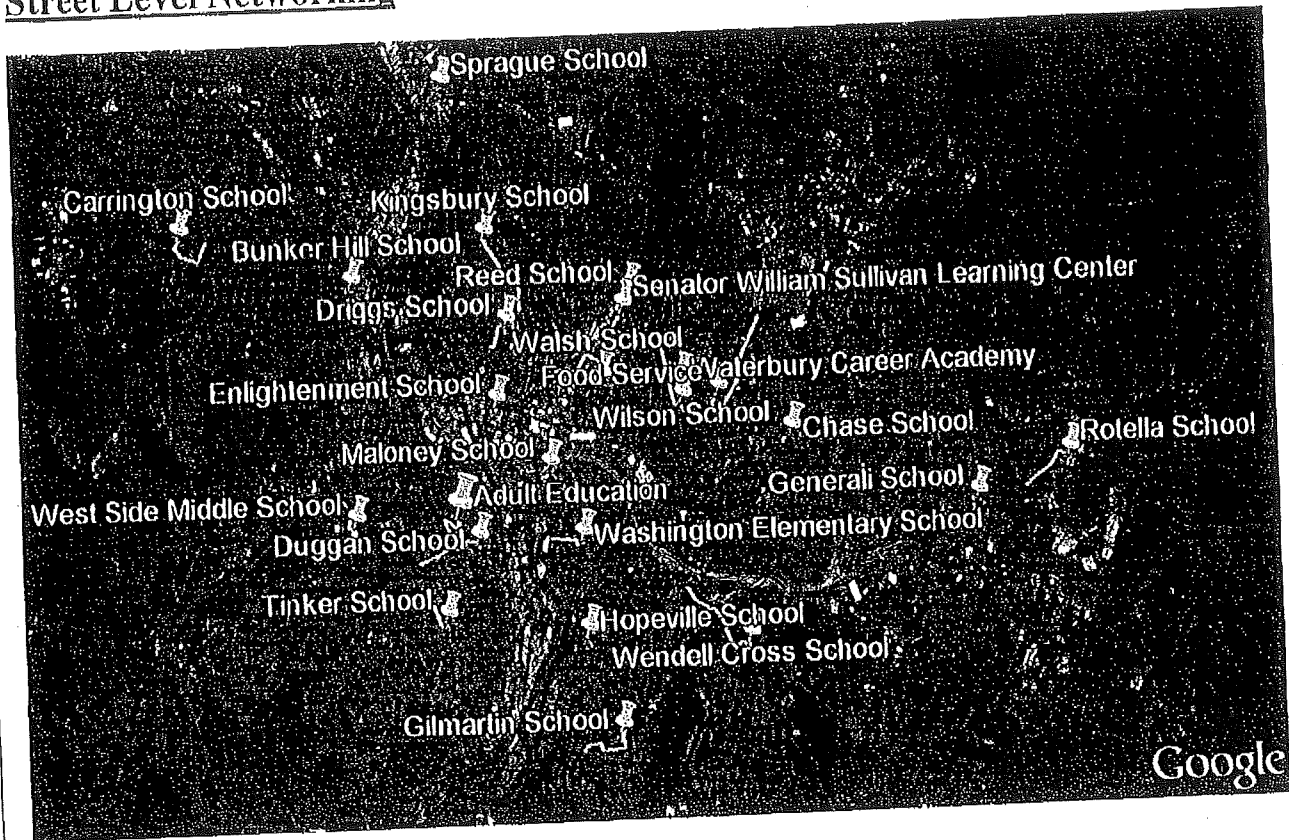
Waterbury Public Schools

Tony Lee

CA 02024-01

1-10-2013

Street Level Networking



Account Management

Lighttower will provide City of Waterbury with a dedicated account team that will support the newly proposed solution from Point of Sale and through Implementation.

- Regional Vice President of Sales – Tim Smith
- Director of Sales – Curt Fox
- Senior Account Executive – Joe Paluso
- Vice President of Sales Engineering – Brian Cunningham
- Manager of Sales Engineering – Tim Ford
- Sales Engineer – Anthony Tucci
- Director of Project Management – Darrin Smith
- Sr. Billing Analyst – Carolynne Miller
- VP of Client Services – Michael Nicolosi

Pricing

Lighttower has attached City of Waterbury pricing document to this response.

SPIN, FCCRN and Green Light Status

SPIN (498 ID): 143005274

FRN: 0006-2544-03

The screenshot displays the Red Light Display System (RLDS) interface. At the top, it shows the FCC logo and the text "Red Light Display System (RLDS)". Below this, there is a section titled "Red Light Display System" with a sub-header "FCC | Tax | Red Light Display System". The main content area shows the "Current Status of FRN 0006254403" as "STATUS: Green". A message states: "You have no delinquent bills which would restrict you from doing business with the FCC." Below this, a note explains: "The Red Light Display System checks all FRNs associated with the same Taxpayer Identification Number (TIN). A green light means that there are no outstanding delinquent non-tax debts owed to the Commission by any FRN associated with the requester's TIN. The Red Light Display System was last updated on 07/15/2018 at 6:05 AM. It is updated once each business day at about 2 AM EST." The bottom of the screen shows the date and time "7/15/2018 10:10 AM" and navigation links "Back | Help | Help".

Implementation Services Plan

Project Managers (PMs) are responsible for managing the delivery of services to Lighttower customers. The PM role is comprised of four stages - Order Validation, Order Kickoff, Service Provisioning and Order Completion.

Project Managers (PMs) will:

- Coordinate and lead customer meetings, including customer kick-off calls and regularly scheduled customer status update calls.
- Manage the activities of internal Lighttower operational and engineering groups to ensure proper planning, communications, and implementation of solutions.
- Communicate customer requirements to other project stake holders to achieve required results.
- Perform critical path analysis for projects to identify, and manage all aspects of the service deployment and mitigate identified risks.

- Develop a relationship with the customer and serve as the primary point of contact for project status and deliverables.
- Resolve issues in a timely fashion as they present themselves during the project interval.
- Upon project completion insure project documents are complete, accurate, and archived appropriately. Deliver all required customer turn-up documentation to identified point of contact.

Order Record Creation and Validation

- A. **Sales** - Upon receipt of a submitted ASR, the Order Entry (OE) group is responsible for creating the new order record in OSSCAR. The order record will contain a unique order number. The ASR, associated MSA, deal sheet, and any additional documentation associated with the ASR are attached to the Order record in OSSCAR. Service Option records are created for each service associated with the ASR. Order Entry will enter a unique Service Option number. At this time, the Order status is "**Validation**" and the Service Option records status will be "**Creation**" and will follow the Order Validation process flow starting with Sales Engineering (SE) Validation.
- B. **Sales Engineering (SE) Validation** - Within 1-2 days of the order being entered, the Sales Engineering team will review the Order Record in OSSCAR to ensure it correctly reflects the information from the signed Submitted ASR. Upon completion of SE Validation, the order is moved to Operations Validation.

Operations Validation - Project Management is responsible for sign off of the Operations Validation stage in OSSCAR. During the Order Validation, the PM initiates a call with the customer to make an introduction and review the ASR and Service Options. Prior to concluding this conversation, the PM reviews the next steps in the process, all pertinent Kick Off information, and also establishes the agreed upon Firm Order Commitment (FOC) date.

Service Provisioning - The Project Management team is responsible for chairing the weekly **Operations and Construction Meetings** within each Lighttower region. At these meetings, the status of each ASR will be communicated and discussed. It is the Project Manager's responsibility to analyze the information provided and communicate the project status to the customer.

Milestones to be tracked shall include the following:

1. Fiber Engineering
 - a. Dark Fiber DLR completion dates
 - b. Utility permitting progress
 - c. Building agreement progress
 - d. Construction progress
 - e. Splicing and testing completion dates
2. Provisioning:
 - a. Lit Service DLR completion dates
 - b. Capacity issues
 - c. Network or Optical Engineering requirements
 - d. Provisioning completion dates
 - e. CFA/LOA
3. Field Operations:
 - a. Installation dates
 - b. Test Dates
 - c. Circuit test results posted to OSSCAR
 - d. Circuit A and Z demarcation locations posted in OSSCAR.

It is the responsibility of the Project Manager to make sure all teams are working towards the dates committed to and recorded during the Kickoff meeting. If a date will not be met and a resolution cannot be developed to keep the FOC date, the issue will be escalated to the Manager of the Project Management team. The customer will be notified by email, followed by a phone call each time an **Adjusted FOC Date** is established. As dates are adjusted, the Project Manager will communicate the changes to the Engineering and Operations teams.

Test and Turn Up

At the completion of the Fiber Engineering and Provisioning OSSCAR tasks, Field Operations will be dispatched to complete the required Customer Premise Equipment (CPE) installation and testing of the circuit. Field Operations is responsible for posting test results in Notes/Attachments tab of the Provisioning Details within OSSCAR. Field Operations will also verify the correct demarcation information is entered in the Provisioning Details record in OSSCAR.

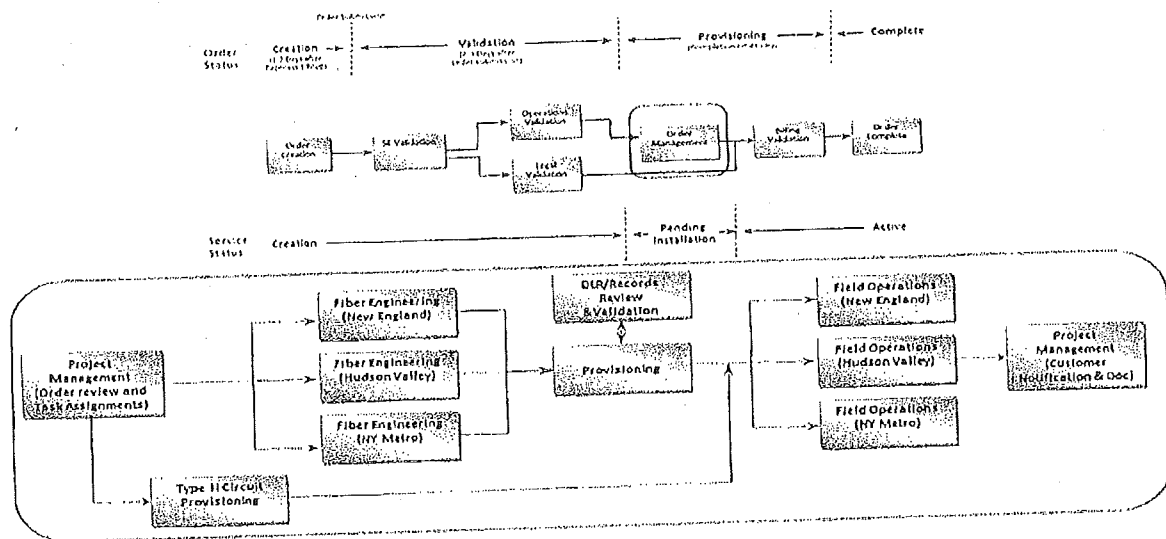
Order Completion

Upon Field Operations completion of testing, Project Management will begin the Order Completion process. The Project Manager will verify that all documentation is attached to the Provisioning Detail and demarcation information is populated.

The Project Manager will then complete the following in the Service Options:

- 1) **Installation Date** - Date Field Operations completed testing and posted test results.
- 2) **Service Expiration Date** - Date the service will expire. This is based on the service term, found in the Service Order Terms tab of the Order.
- 3) **Customer Acceptance / Billing Start Date** - Acceptance grace period as detailed in the customer's signed MSA. In the case that the ASR is written against a Terms and Conditions agreement, the Customer Acceptance/Billing Start date is 2 business days post circuit turn-up.

The Project Manager will generate a Completion Notice for each Service. The Completion Notice will be emailed to the customer and followed up with a phone call. The Completion Notice memorializes the successful turn-up of the service.



Test and Accept

At the completion of the Fiber Engineering and Provisioning OSSCAR tasks, Field Operations will be dispatched to complete the required Customer Premise Equipment (CPE) installation and RFC 2544 testing of the circuit (sample RFC testing below). Lightower dedicated Test and Turn Up group will work with Field Operation in the testing stages and with the customer for turn-up. Field Operations is responsible for posting test results in Notes/Attachments tab of the Provisioning Details within OSSCAR. Field Operations will also verify the correct demarcation information is entered in the Provisioning Details record in OSSCAR. Once the circuit has been accepted the Test and Turn Up group will be responsible for any tickets for 15 days after acceptance.

Sample Test Results

RFC 2544 Ethernet Test Report

Configuration Name	1g test
Customer	NYSE-Euronext
Technician	Adam Cohen
Location	777 Central Blvd
Comments	36244-et
Date	09/28/2012
Time Start	04:54:17 PM
Time End	05:09:46 PM
RFC 2544 Mode	Symmetric
Test Instrument Name	T-BERD/MTS5800
Serial Number	WMDF0100820045
Software Revision	BERT 3.0

RFC 2544 Ethernet Test Report

Test Set Setup

Termination	1GigE Layer 2 Traffic Term
Pause Advrt	Both
FDX Capable	Yes
HDX Capable	Yes
Framing	DIX
Encapsulation	None
Source Address	00:80:16:8A:69:90
Destination Address	00:80:16:8A:69:9D

Auto Negotiation Status

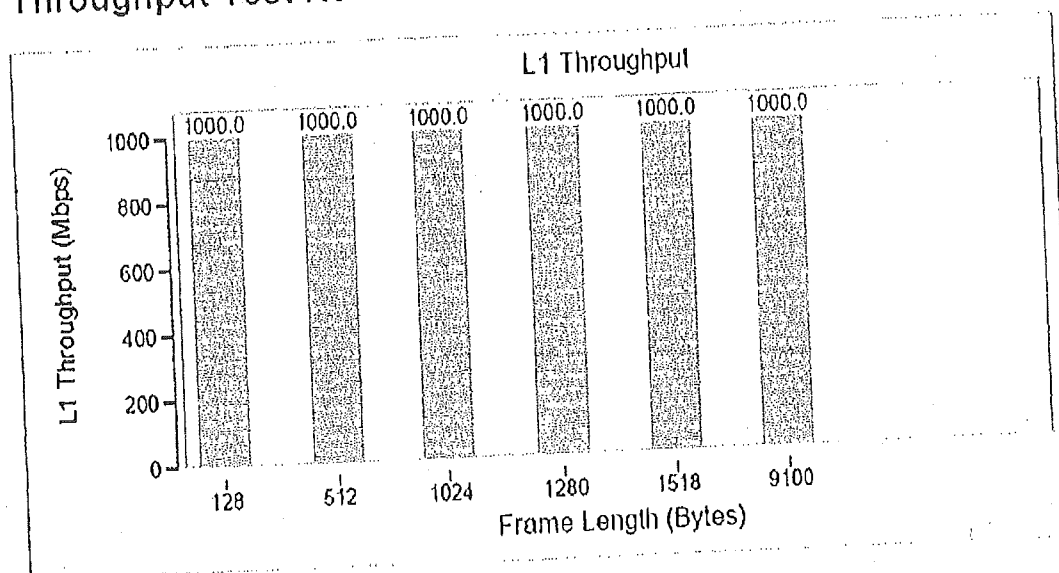
Pause Capable	Both Rx and Tx
FDX Capable	Yes
HDX Capable	Yes

Test Configuration

Tests to Run	Throughput
Maximum Test Bandwidth	Latency (RTD)
Frame Lengths	Frame Loss Rate
Bandwidth Measurement Accuracy	1000.00 Mbps
Throughput Zeroing-in Process	128, 512, 1024, 1280, 1518, 9100
Throughput Frame Loss Tolerance	To within 0.01 (Mbps)
Throughput Trial Duration	RPC 2544 Standard
Throughput Pass Threshold	0%
Number of Latency (RTD) Trials	20 seconds
Latency (RTD) Trial Duration	Not Selected
Latency (RTD) Load	2 trials
Latency (RTD) Pass Threshold	20 seconds
Frame Loss Test Procedure	100%
Frame Loss Trial Duration	Not Selected
Frame Loss Bandwidth Granularity	RPC 2544
	20 seconds
	100 Mbps

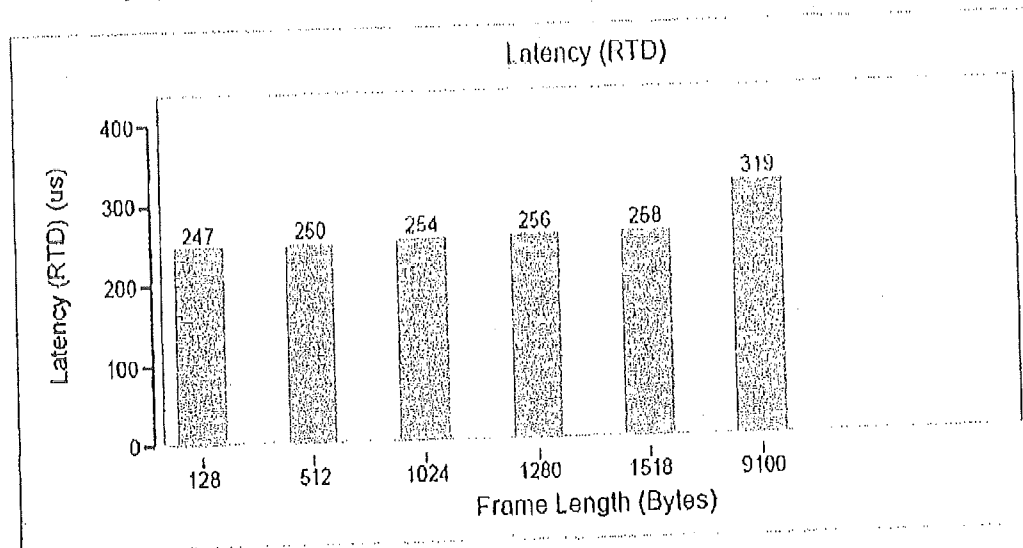
RFC 2544 Ethernet Test Report

Throughput Test Results:



RFC 2544 Ethernet Test Report

Latency (RTD) Test Results:



Frame Length (Bytes)	Latency (us)	Measured L1 Rate (Mbps)	Measured L1 (% of Line Rate)	Measured Rate (frms/sec)	Pause Detected
128	247	999.96	99.996	844561	No
512	250	999.96	99.996	234953	No
1024	254	999.96	99.996	119727	No
1280	256	999.96	99.996	96150	No
1518	258	999.97	99.997	81272	No
9100	319	999.99	99.999	13706	No

Sample Circuit Activation Notification



Circuit Completion and Activation Notice Design Layout Record (DLR)

March 3, 2017

Best Customer Ever
1234 Anystreet
Anywhere, MA 12345

It is a pleasure to inform you that your Lighttower Fiber Network service as described below has been completed. Your Service/Circuit ID is listed below. Please refer to this ID number for all future inquiries regarding this service. The billing commencement date is 03/17/2017.

Sincerely,

Anyone Positive
Project Manager
Phone: 123-456-7890
E-mail: apositive@lighttower.com

ORDER DETAILS

Summary:	Install 10Gig MPON protected with single lateral into 1234 Acme Rd, 6th Fl, Arlington VA 22206		
Service Number:	S111111	Customer Order #:	
Lighttower CID:	111111-ET-AAAAAA2-AAAAAA6	Cust Circuit ID:	
Order Type:	New Service	NRC:	\$0.00
Service Category:	Wavelength	MRC:	\$9,250.00
Service Type:	MPON Node	Term:	60
Service Speed:	10Gbps	Bill Start:	03/17/2017
VLAN ID:		Service Exp:	03/16/2022

Location A: 1234 Acme Rd
6th Floor
Arlington, VA 22206

Location Z: 1625 N Roadrunner Dr
1st Floor
Arlington, VA 22205

Demarc:
Rack: customer rack
Shelf: AAAAAA2N71
Port: Slot 1 port 17/18
Other CFA:
Client Interface: 10 Gige (Single Mode) -LC
Extended Demarc:

Demarc:
Rack: customer rack
Shelf: AAAAAA6N71
Port: Slot 1 port 17/18
Other CFA:
Client Interface: 10 Gige (Single Mode) -LC
Extended Demarc: One lateral in via 1625 Roadrunner,
one in via 1701 Roadrunner

Comment

CUSTOMER CONTACT INFORMATION

Name:	Wile E. Coyote	E-mail:	wecoyote@bce.com
Job Title:	Network Architect	Phone:	123-456-7890
Type:	Primary Technical Contact	Cell:	987-654-3210
Name:	Road Runner	E-mail:	rrunner@acme.com
Job Title:	Network Administrator	Phone:	222-333-4444
Type:	Secondary Technical Contact	Cell:	N/A

Lightower Customer Portal

The performance matrix in the Customer Portal can provide account information regarding network connections hourly, weekly, monthly, and annually however it does not support jitter and latency.

Lightower Website Contact Us Welcome FIOROII 1/15/2015

lightower

Home Orders Trouble Tickets Network Invoice Account Maintenance Bbeenhouwer's Account

Submit Trouble Ticket

View Announcements

No announcement exists.

View Scheduled Maintenance Tickets

Ticket Number	Start Date	More Info
Ticket Number: SM140409-05	Start Date: 4/13/2014 12:00:00 AM	More Info
Ticket Number: SM150826-06	Start Date: 8/27/2015 12:00:00 AM	More Info
Ticket Number: SM150924-02	Start Date: 9/1/2015 12:00:00 AM	More Info
Ticket Number: SM150821-06	Start Date: 9/1/2015 12:00:00 AM	More Info

Below are some sample screen shots.

Orders Screen: Here you will find pending and completed order information. Need status of a current order? Simply click on the Job ID that is listed and it will then show all information pertaining to that order. Also listed will be any and all completed orders under that tab.

Lightower Website Contact Us Welcome FIOROII 1/15/2015

lightower

Home Orders Trouble Tickets Network Invoice Account Maintenance Bbeenhouwer's Account

Completed Orders Show All

Pending Orders 123

Job ID	Excluded Date	Cust ID	Sales Person	End User Name	View Documents
15-9075NPMIG	07/15/15		Internal Order		View Documents
15-9056NPLIG	07/15/15		Internal Order		View Documents
15-8705INT	07/15/15		Internal Order	Cogent IP - OCM BDCES	View Documents
15-9072HP10	07/01/15		Internal Order		View Documents
15-9001HPLT	07/01/15		Internal Order		View Documents
15-9076NP10	06/23/15	Zaya 6620	Internal Order		View Documents
15-9071HP10	06/23/15		Internal Order		View Documents
15-9071HP0K	06/23/15		Internal Order		View Documents
15-9083NP10	06/23/15		Internal Order		View Documents

Trouble Tickets Screen: This section of the site will allow you to create a new ticket, view pending tickets and view closed tickets. Also included in this section are any scheduled maintenance notifications and our escalation list.

All All [Home](#)[Orders](#)[Troubleshooting](#)[Network](#)[Invoice](#)[Account Maintenance](#)[Bbeenhouwer's Account](#)[Submit Trouble Ticket](#)[Pending Ticket](#)[Closed Ticket](#)[Scheduled Maintenance](#)[Escalation List](#)

Submit Trouble Ticket

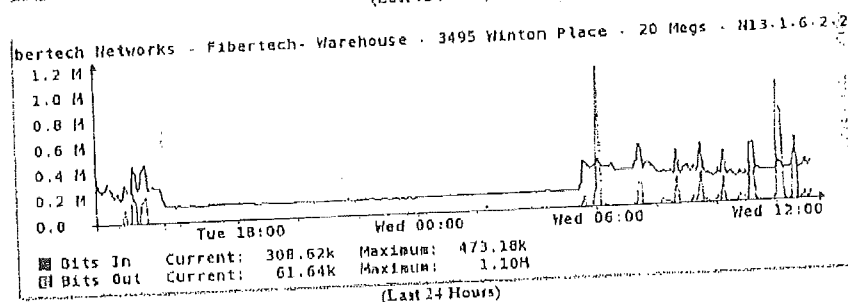
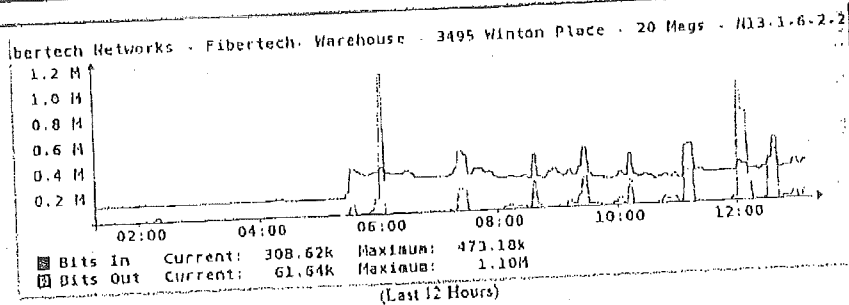
If you would like to notify Lightower's NOC with any service trouble please submit the following form with as much information as possible. A NOC representative will contact you shortly. Or call Lightower's NOC direct at 800-497-5579

Circuit ID:	<input type="text" value="-- Please Select --"/>	Company:	<input type="text" value="FiberTech Networks, LLC"/>
End User:	<input type="text"/>		
Service Type:	<input type="text"/>	Service Size:	<input type="text"/>
Street Address A:	<input type="text"/>	Street Address Z	<input type="text"/>
	<input type="text"/>		<input type="text"/>
*Contact Name:	<input type="text" value="-- Please Select --"/>	Secondary Contact Name:	<input type="text" value="-- Please Select --"/>
	Add New Contact		Add New Contact
Contact Job Title:	<input type="text"/>	Secondary Contact Job Title:	<input type="text"/>
Contact Phone:	<input type="text"/>	Secondary Contact Phone:	<input type="text"/>
Contact Email:	<input type="text"/>	Secondary Contact Email:	<input type="text"/>

Reports / Network Statistics Screen: Under this section you will find documents such as our network availability report (which is update monthly), and other marketing documents on the products and services we offer, and the ability to see real time statistics on your circuits.

Network Statistics is a real-time, web-based product that allows you to monitor and manage your bandwidth more effectively. You will be able to see your information in easy-to-view graphs, and you can display your information across time; hourly, weekly, monthly, and annually. This easy to use, on-line application gives our customers the power to manage capacity by:

lighttower

 All ☐ All ☒ All ☐
[Home](#)
[Network](#)
[Network Availability](#)
[Orders](#)
[Trouble Tickets](#)
[Network](#)
[Invoice](#)
[Account Maintenance](#)
[Bbeanhouwer's Account](#)


- Long Term Capacity Planning - Analyze your bandwidth across time to plan long-term resource allocation across your entire network.
- Short Term Capacity Management - View real-time graphs to understand how data is traversing your network, and optimize your connections accordingly.
- End-User Experience Management - Make sure your internal customers are satisfied by detecting performance fall-off early and taking preemptive action to resolve service degradations before end-users are impacted.
- Non-Intrusive Visibility - Unlike other network reporting tools, Lighttower's Network Statistics does not need an in-line probe. The equipment that we deliver your bandwidth on supports Network Reporting.
- Executive Reporting - Provide easy-to-view graphs of your network to your internal customers.

Lighttower's Network Statistics is just one more tool that Lighttower provides. It empowers you and your organization to more effectively deploy, manage, solve, and optimize your network environment.

Account Maintenance Screen: This section of the website is to be maintained by each customer's dedicated Administrator. That Administrator has top-level rights within your company. They may add users, delete users or change information for the users.

Network Management Services for Monitoring and Alerting

Geographic Diverse Locations

Generator & UPS Protected Facilities
On-Net Network Connectivity

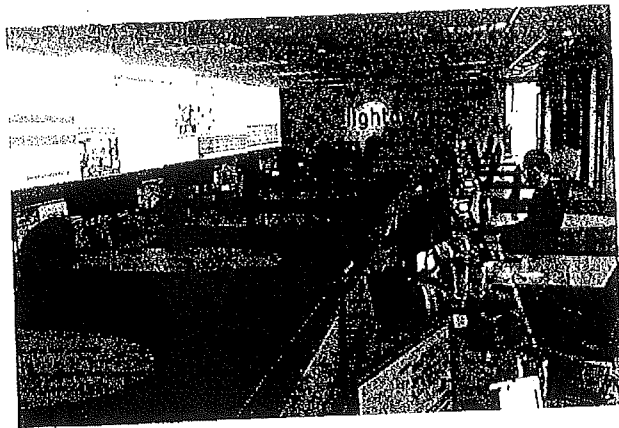
- Boxborough, Massachusetts
- Melville, New York
- Rochester, New York

Systems & Tools

- Microsoft CRM
- NETCRACKER
- OSP Insight GIS System
- Operations Data Warehouse
- Traffic / Taper Reporting Tool

Trouble Ticket Management

- 24x7 Onsite Management Support
- Tier I & II Troubleshooting
- Incident Management
- Customer Communications & Escalations
- Technical Support Engineers
- Tier III Troubleshooting
- Vendor TAC Engagement
- Engineering Engagement



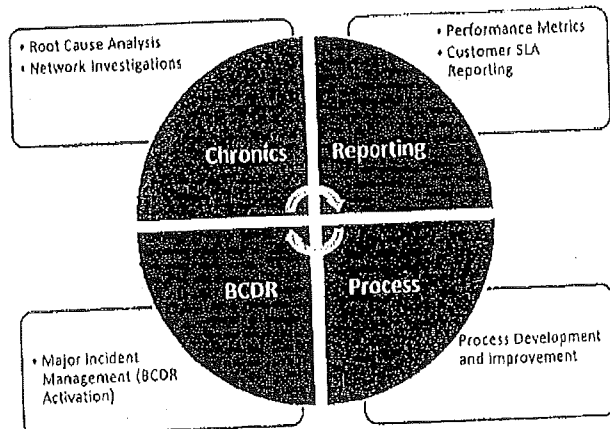
Network Operations Center Systems and Tools

IBM Tivoli NETCOOL Network Management System

- Automation & Enhancements
- Alarm Filtering
- Alarm Enrichment
- Backbone Topology MAPS
- Customizable, dedicated customer alarm views

Microsoft Dynamics CRM Ticketing System

- Automation & Enhancements
- Automatic Notification upon ticket creation
- Standardize Templates for Communication
- Automatic Ticket Assignments
- Automated management escalation of unresolved
- Trouble tickets.



Lighttower NOC Escalation List

#	NOC	Name	Email	Office #	Cell #
				Primary: 808-503-4237 Secondary: 844-503-4237	
1st	Shift Managers	On Duty	SUPPORT@lighttower.com		
	Sr. Manager, NOC	Kyle Ramirez	KRamirez@lighttower.com	585-697-5119	585-775-5380
2nd	Sr. Manager, NOC	Steve Cassiano	SCassiano@lighttower.com	212-337-4083	347-443-2288
	Director, NOC	Miles O'Shaughnessy	MOshaughnessy@lighttower.com	631-300-3781	631-774-2412
3rd	Director, Tier III	Tim Young	TYoung@lighttower.com	585-697-5102	685-305-4593
	Sr. Director Tier III	Ben Davis	BDavis@lighttower.com	212-324-5077	848-468-0146
4th	VP, Network Assurance	Stephen George	SGeorge@lighttower.com	978-268-9370	781-264-8795
5th	SVP, Customer Operations	Ravindra Marcharan	RMarcharan@lighttower.com	212-337-4088	917-217-1136
6th	Chief Operating Officer	Jason Campbell	JCampbell@lighttower.com	978-264-6033	978-264-6033

Lighttower Business Continuity

Today, there are many steps already being taken and actions defined within Lighttower's standard operating policies and procedures that serve or act as business continuity guidelines.

- Diversity in Network Operations Centers from a systems and connectivity perspective, as well as geography.
- All NOC systems are supported by secondary power supplies, both UPS and generator.
- All NOC technicians are equipped with full remote secure logins and voice capability for remote access in all regions to perform their duties and responsibilities.
- Each region maintains maintenance spares depot for all core equipment technology hardware deployed within the network and region. Lessens our dependency on the manufacturer and decreases MTTR (mean time to repair).
- Operations team has a clear escalation and call-out policy and plan that is updated and reviewed weekly to determine coverage and back-up requirements.
- Emergency call-out agreements with retainer fees are established with prime vendors in all regions for support of the physical plant. This includes spare components and fiber cable to handle any network impact.
- All network equipment configurations are backed up and archived to facilitate immediate restoration in the event of network element failure.
- Establish a crisis conference bridge for all updates and information sharing during any event.

Response Highlights

HIGHLIGHT	YES/NO	COMMENTS
100% Owned Fiber	YES	All fiber spans/routes included in the Lightower response are owned and maintained by Lightower.
Dedicated Project Team	YES	Lightower will provide a dedicated Project Management team that will assist the City of Waterbury from start to completion, providing timely updates throughout the deployment of the new Network.
Implemented Networks of Similar Scope	YES	Lightower has deployed and is currently managing several large enterprise customers of similar size and scope.
Competitive Advantages	YES	<ul style="list-style-type: none"> • Lightower has extensive expertise and is solely focused on designing and deploying large, complex data networks for commercial corporations across all verticals, and other network providers. • Lightower designs networks for optimal latency measurements. • Lightower operates its own fiber plant and is not reliant on other network providers. We design our networks without reliance on carrier Central Offices. • Lightower core competency is building fiber into customer locations to create a complete design for the managed service. • Lightower will provide an experienced implementation team and 7x24x365 post cutover NOC support.

THE CITY OF WATERBURY
WIDE AREA NETWORK # 6048

SECTION 00300

ADDENDUM ACKNOWLEDGEMENT FORM

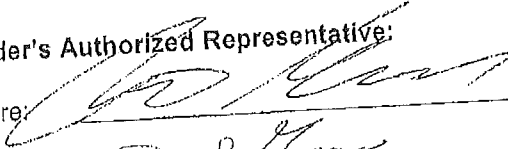
NOTE: The Bidder is to complete, sign and date this form. The completed form shall be submitted with the BID FORM in accordance with ARTICLE 6 of the INSTRUCTIONS TO BIDDERS.

The undersigned, as Bidder's Authorized Representative, acknowledges receipt of the following Addenda and that the modifications to the Bid Documents noted therein have been considered and all costs related thereto are included in the Bid Prices:

Addendum # <u>1</u>	Dated Issued <u>02/09/2018</u>
Addendum # _____	Dated Issued _____
Addendum # _____	Dated Issued _____
Addendum # _____	Dated Issued _____
Addendum # _____	Dated Issued _____
Addendum # _____	Dated Issued _____

Business Name of Bidder: Lighttower Fiber Networks II, LLC
(Print or Type)

By Bidder's Authorized Representative:

Signature: 

Name: David Hays

(Print or Type)

Title: Fiber Solution General Counsel

(Print or Type)

Date: February 22, 2018

(Print or Type)

END OF SECTION

THE CITY OF WATERBURY
WIDE AREA NETWORK # 6048
BID SHEET
SECTION 00400

BID SHEET – Lighttower No Bid

			Cost	Cost
NAME	Address	Bandwidth	3 Yr	5Yr
Adult Education	11 Draher Street	1GB		
Bunker Hill School	170 Bunker Hill Avenue	1GB		
Carrington School	24 Kenmore Avenue	1GB		
Chase School	40 Woodtick Road	1GB		
Driggs School	77 Woodlawn Terrace	1GB		
Duggan School	38 West Porter Street	1GB		
Enlightenment School	30-A Church Street	1GB		
Generali School	3196 East Main Street	1GB		
Gilmartin School	94 Spring Lake Road	1GB		
Hopeville School	2 Cypress Street	1GB		
Kingsbury School	220 Columbia Boulevard	1GB		
Maloney School	233 South Elm Street	1GB		
Reed School	33 Griggs Street	1GB		
Rotella School	380 Pierpont Road	1GB		
Sprague School	1448 Thomaston Avenue	1GB		
State Street School	58 Griggs Street	1GB		
Tinker School	809 Highland Avenue	1GB		
Walsh School	55 Dikeman Street	1GB		
Washington School	685 Baldwin Street	1GB		
Waterbury Career Academy	175 Birch Street	1GB		
Wendell Cross School	1255 Hamilton Avenue	1GB		
West Side Middle School	483 Chase Parkway	1GB		
Wilson School	235 Birch Street	1GB		
Food Services/Supply	62 Harper Ave	1GB		
Chase Building	236 Grand Street	1GB		
		TOTAL:		

Lighttower Dark Fiber Option			Cost	Cost
NAME	Address	Bandwidth	3 Yr	5Yr
Adult Education	11 Draher Street	10 GB	\$1,295.00	\$950.00
Bunker Hill School	170 Bunker Hill Avenue	10 GB	\$1,295.00	\$950.00
Carrington School	24 Kenmore Avenue	10 GB	\$1,295.00	\$950.00
Chase School	40 Woodtick Road	10 GB	\$1,295.00	\$950.00
Driggs School	77 Woodlawn Terrace	10 GB	\$1,295.00	\$950.00
Duggan School	38 West Porter Street	10 GB	\$1,295.00	\$950.00
Enlightenment School	30-A Church Street	10 GB	\$1,295.00	\$950.00
Generali School	3196 East Main Street	10 GB	\$1,295.00	\$950.00
Gilmartin School	94 Spring Lake Road	10 GB	\$1,295.00	\$950.00
Hopeville School	2 Cypress Street	10 GB	\$1,295.00	\$950.00
Kingsbury School	220 Columbia Boulevard	10 GB	\$1,295.00	\$950.00
Maloney School	233 South Elm Street	10 GB	\$1,295.00	\$950.00
Reed School	33 Griggs Street	10 GB	\$1,295.00	\$950.00
Rotella School	380 Pierpont Road	10 GB	\$1,295.00	\$950.00
Sprague School	1448 Thomaston Avenue	10 GB	\$1,295.00	\$950.00
State Street School	58 Griggs Street	10 GB	\$1,295.00	\$950.00
Tinker School	809 Highland Avenue	10 GB	\$1,295.00	\$950.00
Walsh School	55 Dikeman Street	10 GB	\$1,295.00	\$950.00
Washington School	685 Baldwin Street	10 GB	\$1,295.00	\$950.00
Waterbury Career Academy	175 Birch Street	10 GB	\$1,295.00	\$950.00
Wendell Cross School	1255 Hamilton Avenue	10 GB	\$1,295.00	\$950.00
West Side Middle School	483 Chase Parkway	10 GB	\$1,295.00	\$950.00
Wilson School	235 Birch Street	10 GB	\$1,295.00	\$950.00
Food Services/Supply	62 Harper Ave	10 GB	\$1,295.00	\$950.00
Chase Building	236 Grand Street	10 GB * 24	Included	Included
Total			\$31,080.00	\$22,800.00

For the 3 year pricing on this option each location would be Twelve Hundred and Ninety-Five Dollars Per Month. There are a total of 24 Point to Point Connections so the total monthly charge for this option would be Thirty-One Thousand and Eighty Dollars Per month

For the 5 year pricing on this option each location would be Nine Hundred and Fifty Dollars Per Month. There are a total of 24 Point to Point Connections so the total monthly charge for this option would be Twenty-Two Thousand Eight Hundred Dollars Per month

Lighttower 10G Flexible Private Line			Cost	Cost
NAME	Address	Bandwidth	3 Yr	5Yr
Adult Education	11 Draher Street	10 GB	\$1,295.00	\$950.00
Bunker Hill School	170 Bunkor Hill Avenue	10 GB	\$1,295.00	\$950.00
Carrington School	24 Kenmore Avenue	10 GB	\$1,295.00	\$950.00
Chase School	40 Woodtick Road	10 GB	\$1,295.00	\$950.00
Driggs School	77 Woodlawn Terrace	10 GB	\$1,295.00	\$950.00
Duggan School	38 West Porter Street	10 GB	\$1,295.00	\$950.00
Enlightenment School	30-A Church Street	10 GB	\$1,295.00	\$950.00
Generali School	3196 East Main Street	10 GB	\$1,295.00	\$950.00
Gilmartin School	94 Spring Lake Road	10 GB	\$1,295.00	\$950.00
Hopeville School	2 Cypress Street	10 GB	\$1,295.00	\$950.00
Kingsbury School	220 Columbia Boulevard	10 GB	\$1,295.00	\$950.00
Maloney School	233 South Elm Street	10 GB	\$1,295.00	\$950.00
Reed School	33 Griggs Street	10 GB	\$1,295.00	\$950.00
Rotella School	380 Pierpont Road	10 GB	\$1,295.00	\$950.00
Sprague School	1448 Thomaston Avenue	10 GB	\$1,295.00	\$950.00
State Street School	58 Griggs Street	10 GB	\$1,295.00	\$950.00
Tinker School	809 Highland Avenue	10 GB	\$1,295.00	\$950.00
Walsh School	55 Dikeman Street	10 GB	\$1,295.00	\$950.00
Washington School	685 Baldwin Street	10 GB	\$1,295.00	\$950.00
Waterbury Career Academy	175 Birch Street	10 GB	\$1,295.00	\$950.00
Wendell Cross School	1255 Hamilton Avenue	10 GB	\$1,295.00	\$950.00
West Side Middle School	483 Chase Parkway	10 GB	\$1,295.00	\$950.00
Wilson School	235 Birch Street	10 GB	\$1,295.00	\$950.00
Food Services/Supply	62 Harper Ave	10 GB * 24	Included	Included
Chase Building	236 Grand Street			
Total			\$31,080.00	\$22,800.00

For the 3 year pricing on this option each location would be Twelve Hundred and Ninety-Five Dollars Per Month. There are a total of 24 Point to Point Connections so the total monthly charge for this option would be Thirty-One Thousand and Eighty Dollars Per month

For the 5 year pricing on this option each location would be Nine Hundred and Fifty Dollars Per Month. There are a total of 24 Point to Point Connections so the total monthly charge for this option would be Twenty-Two Thousand Eight Hundred Dollars Per month

Lighttower 10G MAPL's			Cost	Cost
NAME	Address	Bandwidth	3 Yr	5Yr
Adult Education	11 Draher Street	10 GB	\$1,475.00	\$1,075.00
Bunker Hill School	170 Bunker Hill Avenue	10 GB	\$1,475.00	\$1,075.00
Carrington School	24 Kenmore Avenue	10 GB	\$1,475.00	\$1,075.00
Chase School	40 Woodtick Road	10 GB	\$1,475.00	\$1,075.00
Driggs School	77 Woodlawn Terrace	10 GB	\$1,475.00	\$1,075.00
Duggan School	38 West Porter Street	10 GB	\$1,475.00	\$1,075.00
Enlightenment School	30-A Church Street	10 GB	\$1,475.00	\$1,075.00
General School	3196 East Main Street	10 GB	\$1,475.00	\$1,075.00
Gilmartin School	94 Spring Lake Road	10 GB	\$1,475.00	\$1,075.00
Hopeville School	2 Cypress Street	10 GB	\$1,475.00	\$1,075.00
Kingsbury School	220 Columbia Boulevard	10 GB	\$1,475.00	\$1,075.00
Maloney School	233 South Elm Street	10 GB	\$1,475.00	\$1,075.00
Reed School	33 Griggs Street	10 GB	\$1,475.00	\$1,075.00
Rotella School	380 Pierpont Road	10 GB	\$1,475.00	\$1,075.00
Sprague School	1448 Thomaston Avenue	10 GB	\$1,475.00	\$1,075.00
State Street School	58 Griggs Street	10 GB	\$1,475.00	\$1,075.00
Tinker School	809 Highland Avenue	10 GB	\$1,475.00	\$1,075.00
Walsh School	55 Dikeman Street	10 GB	\$1,475.00	\$1,075.00
Washington School	685 Baldwin Street	10 GB	\$1,475.00	\$1,075.00
Waterbury Career Academy	175 Birch Street	10 GB	\$1,475.00	\$1,075.00
Wendell Cross School	1255 Hamilton Avenue	10 GB	\$1,475.00	\$1,075.00
West Side Middle School	483 Chase Parkway	10 GB	\$1,475.00	\$1,075.00
Wilson School	235 Birch Street	10 GB	\$1,475.00	\$1,075.00
Food Services/Supply	62 Harper Ave	10 GB * 24	Included	Included
Chase Building	236 Grand Street			
Total			\$35,400.00	\$25,800.00

For the 3 year pricing on this option each location would be Fourteen Hundred Seventy-Five Dollars Per Month. There are a total of 24 Point to Point Connections so the total monthly charge for this option would be Thirty-Five Thousand and Four Hundred Dollars Per month

For the 5 year pricing on this option each location would be One Thousand and Seventy-Five Dollars Per Month. There are a total of 24 Point to Point Connections so the total monthly charge for this option would be Twenty-Five Thousand Eight Hundred Dollars Per month

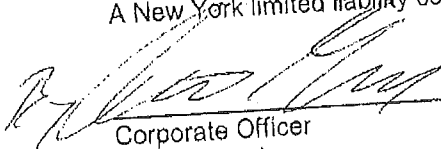
In the event of mathematically incorrect calculations of individual items or totals, the mathematically correct amount using the estimated quantities and unit prices (in words) shall govern in determining the TOTAL BID PRICE.

The undersigned also agrees that the quantities indicated are for Bid comparison purposes only and are not represented to be actual quantities for completion of the Work.

The undersigned hereby certifies under the penalties of perjury that this Bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this section, the work "person" shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity.

01-0570431
Social Security Number
or Federal Identification Number

Signature of Individual or
Corporate Name:
Lighttower Fiber Networks II, LLC
A New York limited liability company


Corporate Officer
(if applicable)

Notice of acceptance should be mailed, telegraphed or delivered to the (undersigned Bidder at the following address):

David L. Mayer
(Name)

By: Exec VP and GC
(Title)

80 Central Street, Suite 200
(Business Address)

Boxborough, MA 01719
(City, State, Zip Code)

Date: February 22, 2014

Note: If the Bidder is a corporation, indicate State of incorporation under signature, and affix corporate seal; if a partnership, give full names and residential addresses, if different from business address.

- The following documents are attached to and made a condition of the Bid:
- a. Instructions to Bidders – Section 00100
 - b. Addendum Acknowledgement – Section 00300
 - c. Bid Form – Section 00400
 - d. Technical Specifications – Section 00500

WIDE AREA NETWORK # 6048
Technical Specs

SECTION 00500

Purpose:

The Waterbury Public Schools is seeking a common carrier to allow the Waterbury Public School District to apply for ERATE Managed or Unmanaged services discounts. The selected common carrier will assist in the upgrading of the Waterbury Public School District Wide Area Network, including planning, design, installation, documentation, training, maintenance and any future upgrades.

It is the intent of Waterbury Public Schools to select a single vendor to provide a scalable point-to-point service with a uniform set of network hardware to be installed. Waterbury's goal is to facilitate a complete communications network, where data of all types are carried between facilities, resulting in higher productivity, lower costs, a higher level of services, and a more enriching educational experience for the students of the Waterbury Public Schools.

Review Criteria:

The selected common carrier will demonstrate a similar type of deployment and network within a comparable size school district in the State of Connecticut. That school system will be made available for the Waterbury staff to visit and interview.

Cost - TCO

1. Product Performance

- Products or equipment selected on basis of recommendations of current users, compatibility with existing products or equipment, superior features or other technically advantageous reasons.

2 Capabilities of responders and their performance, such as:

- References from clients, Performance history of submitting accurate estimates and bids.
- Producing quality work.
- Financial stability.
- Experience of key staff in performing comparable projects or services.
- Status of required licensing or certification.

3 Delivery Schedule/Completion Schedule

- Performance history in meeting deadlines.

Scope of Services:

The Waterbury Public Schools network currently consists of 32 schools and administrative buildings within the district which cover elementary, middle, magnet, Pre-K- 8 and high schools. Waterbury is currently using AT&T's- OPT-e-MAN solution, along with a private dark fiber network to tie the schools and administrative facilities together.

The Waterbury Public Schools is seeking a solution that will continue to allow for high speed communications for simultaneous IP voice, video and data connectivity. The response to this ITB should include all requirements to create a network with the Quality of Service (QOS) to handle all of the requested technologies.

The project shall consist of providing and delivering Wide Area Network Services for 25 of the 32 City Public Schools and Buildings. Project milestones and dates will be understood and agreed upon prior to execution of the contract.

- The selected vendor MUST ENSURE CONTINUITY of service during the transition to a new solution. As the cut over date for any new vendor is July 1st, 2018. This plan is to include a transition plan to be provided with any response. The plan is to include the resources to be dedicated to the transition, all costs associated, a timeline for action with completion dates and target dates.

Vendors must submit their E-Rate Service Provider Identification Number (SPIN) in the vendor response. Vendors must submit their E-Rate Federal Communications Commission Registration Number (FCCRN) in the vendor response along with proof of FCC Green Light Status. The successful bidder also must abide by the requirements for vendors under the E-Rate program as set forth by the E-Rate program administrators. These requirements include, but are not limited to; filing of all Form 474 forms, extension of appropriate discounts to the participating eligible entities, careful record keeping for auditing purposes, and the provision of any information participating eligible entities must submit as part of their filing requirements. The bidder must identify and separate any costs that are associated with non E-Rate eligible entities and services as identified in the scope of work herein.

- Payment provisions will be based upon the City being granted and receiving USF E-Rate Funding. The District intends to partially fund the services contemplated herein by leveraging the federal E-Rate program. Vendors should be familiar with and compliant with all applicable federal E-Rate policies. Bids from vendors that are not E-Rate eligible will not be considered for this ITB. Vendors must provide a response to the ITB that is compliant with E-Rate. Vendors must submit their E-Rate Service Provider Identification Number (SPIN) in the vendor response. Vendors must submit their E-Rate Federal Communications Commission Registration Number (FCCRN) in the vendor response along with proof of FCC Green Light Status. The successful bidder also must abide by the requirements for vendors under the E-Rate program as set forth by the E-Rate program administrators. These requirements include, but are not limited to; filing of all Form

474 forms, extension of appropriate discounts to the participating eligible entities, careful record keeping for auditing purposes, and the provision of any information participating eligible entities must submit as part of their filing requirements. The bidder must identify and separate any costs that are associated with non E- Rate eligible entities and services as identified in the scope of work herein.

Quote must include all costs for:

- Design
- Construction – special construction costs should be amortized over the initial contract term as part of the bid. The Waterbury Public Schools will not be responsible for any easement/Right of Way Costs incurred by the proposer. The Demarcation Point and Point of Entry will be determined by the Waterbury Public Schools technical staff. All costs must include pricing and installing services to the point of entry and demarcation point.
- Hardware needed to terminate the circuit and light circuit
- Software
- Installation
- Configuration
- Ongoing Annual Service and Maintenance
- Network Diagrams in Visio or Similar Format



Waterbury Public Schools

ELAINE M. SKORONSKI

IDEA COORDINATOR

236 Grand St. Second Floor

Waterbury, CT 06702

PHONE: 203-346-3505 FAX: 203-573-6694

April 3, 2018

Honorable Commissioners
Waterbury Board of Education
236 Grand St.
Waterbury, CT 06702

Re: Request for Permission to apply for the Individual with Disabilities Education Act (IDEA) Grant.

To the Honorable Commissioners
of the Waterbury Board of Education:

The Connecticut State Department of Education is accepting applications for the Individuals with Disabilities Education Act (IDEA) Grant. The grant deadline is May 12, 2018. The grant period covers 2018-2020 and is broken down into two sections, one for all students (Section 611) and one for preschool students (Section 619), all with disabilities. The IDEA grant is a federal grant which is awarded and administered by the State Board of Education. Each district is entitled to a share of IDEA funds as determined by the State Board of Education but an annual application is required to be filed by the district.

The amount requested is determined by the State Board of Education and is the same amount that we received last year; \$5,281,210 for Section 611 and \$ 130,568 for Section 619 for a total amount requested of \$5,411,778. The focus of the grant is to provide funds to local educational agencies (LEAs) to supplement the costs of providing educational services and materials to students with disabilities. A description of the grant is attached for your review. I respectfully request your permission to apply for this grant.

Sincerely,

A handwritten signature in cursive script that reads "Elaine M. Skoronski".

Elaine M. Skoronski

Cc Melissa Baldwin
Suzanne Pleasant

Individuals with Disabilities Education Act (IDEA) Grant Program
Connecticut State Department of Education

April 3, 2018

GRANT PROGRAM HIGHLIGHTS

Name of Grant: Individuals with Disabilities Education Act (IDEA)

Entitlement Grant Program

Grant Deadline: May 12, 2018

Grant Period: 2018-2020

Total Funding Available: Waterbury Public Schools was awarded a total amount of \$5,411,778 for the last grant period. The State directs us to request the same funding for this grant application for 2018-2020.

Cost Sharing or Matching: No local fund match is required to receive the grant funds. However, under the IDEA funding rules, the Local Educational Agency (LEA) must meet the Maintenance of Effort and Excess Cost requirements of the grant funding under federal law. The funds are meant to supplement, not supplant, local funding for special education. In addition, the LEA must service students with disabilities in non-public schools and is required to spend a proportional share of the grant funds on those students. Waterbury provides special education services to students in non-public schools to meet the proportional share requirement. Non-public students represent 2% of the total population of 3559 students with disabilities in Waterbury.

Purpose of the Grant: To assist the LEA with funding needed to educate students with disabilities in the Waterbury Public Schools.

Mandatory Activities: No specific mandatory activities are required but the federal government through the State Board of Education monitors the District's special education program for compliance with the Special Education Indicators set forth by the federal and state education agencies.

Planned Activities: The grant funds are primarily used for paying for staff to provide instruction or related services to students with disabilities. The grant also covers some related special education costs including software programs, supplemental services, academic materials, testing materials, assistive technology, equipment and professional development.

Grant Employees: The grant pays for two special education supervisors, the grant manager and most of the special education office staff and some of the District's special education teachers, behavior technicians, related service providers and paraprofessionals who provide services to students with disabilities in compliance with their individual education plans.

Budget: Of the total Grant budget request, over \$3,724,000 will be used to pay for employee salaries and benefits and approximately \$1,230,000 for the autism program and an additional Board Certified Behavior Analyst. The remaining funds of approximately \$458,000 will be used to purchase supplemental services, instructional and administrative supplies, evaluation and testing materials, assistive technology, equipment and repairs, the web-based IEP system, supplies for a supplemental reading program, staff professional development and parent and student activities.



Bilingual/ESOL Education Department

April 5, 2018

**Waterbury Public Schools
Bilingual/ESOL Education Department**

Adela Jorge
Supervisor

Jackie Matos
Bilingual Staff Developer



WATERBURY
Public Schools

Today's Students, Tomorrow's Leaders

Bilingual/ESOL Education Department

Vision

The Bilingual/ESOL Education Department will provide a superior continuum of services and support for English Learners (ELs), promoting the development of academic and social English in an emotionally safe and nurturing environment that promotes self-efficacy and cultivates leadership skills.

Mission

The Bilingual/ESOL Education Department will provide English Learners with talented and highly qualified personnel who are invested in their students' academic, social and emotional success. Partnerships established between students, families, schools and the community will ensure English Learners continue to learn and grow beyond the school setting. Through individualized support, English Learners will develop the necessary social and academic English skills that promote high achievement and encourage self-efficacy while developing essential skills required of future leaders for life-long success.



Symbol

The tree, like many of our students and staff, has deep roots. Our roots can be traced back to many countries. Trees start from tiny little seeds, each one containing the potential for growth and expansion. Resilient branches can reach far into the sky while strong roots provide a firm, solid foundation, anchoring them safely to the ground. Under the right conditions, each one can grow and blossom to its full potential.

Colors: Blue and Green

Together, **blue** and **green** are reminiscent of the planet earth. Our students' roots are far reaching, encompassing places all over the world. **Blue** represents confidence and intelligence. **Green** symbolizes growth and harmony, and is associated with safety.

Bilingual/ESOL Education Department 236 Grand Street Waterbury, Connecticut 06702

Phone: (203) 574-8288 Fax (203) 573-6687 Email: bilesol@waterbury.k12.ct.us

Vision and Mission Statement



Vision

The Bilingual/ESOL Education Department will provide a superior continuum of services and support for English Learners (ELs), promoting the development of academic and social English in an emotionally safe and nurturing environment that promotes self-efficacy and cultivates leadership skills.

Who are English Learners?

Students who:



- have a **first language other than English.**
- are in **the process of learning English.**
- need **additional support** to acquire language and learn grade level content



**How does a student get identified as an
English Learner (EL) ?**



Just Wondering...

Identification Process

If the Home Language Survey and Parent Interview indicate that a language other than English is spoken at home, the student is tested for English Proficiency

- LAS-Placement test is administered
- If test results indicate limited English proficiency, program options are offered and explained to the parents.
- After the program options (Bilingual, English as a Second Language (ESL), and LEP in Regular) are offered and explained to the parents, the parents sign consent forms for placement.



WATERBURY Public Schools

Today's Students. Tomorrow's Leaders

Home Language Survey

Welcome to the Waterbury Public Schools!

We have a few questions about languages spoken at home. We are required by the US Department of Education to ask for this information because it will help us know how we can best support your child. The language information also helps us know how we can best communicate with you. Please share with us about the language(s) spoken by your family and in your home.

Student Information

Student First Name: _____ Student Last Name: _____

Date of birth: _____

1) What is the primary language used in the home, regardless of the language spoken by the student?

2) What is the language most often spoken by the student?

3) What is the language the student first acquired?

Parent/guardian name (please print) _____

Parent/guardian Signature _____

Date _____

Thank you for answering the questions. We look forward to working with your child.

Bilingual/ESOL Education Department 238 Grand Street Waterbury, Connecticut 06702
Phone: (203) 574-8288 Fax: (203) 573-6687 Email: bilesol@waterbury.k12.ct.us

EL English Learners

- Any student who has been identified as having limited English proficiency
- Per Federal and local mandates, ALL ELs **must** take the LAS Links every year
- ELs must be monitored until the Connecticut English Mastery Standard is met
- All ELs are entitled to receive accommodations on a regular basis

Bilingual

Students identified as EL who receive native language support in the content areas while acquiring English
Students receive accommodations on a regular basis
After the first 30 months, participation can be extended up to 60 months in 10 months increments
Parent must provide consent

LTSS

Language Transition Support Services
If a student does not meet the CT English Mastery Standard at the end of 30 months, they continue to receive support (ESL or Sheltered classes as needed) until they meet the English mastery standard. They are entitled to receive accommodations in mainstream classes on a regular basis.

ESL

Students identified as EL who receive support through an ESL class as needed
Students are placed in regular education classes for the majority of the day and are entitled to receive accommodations in mainstream classes on a regular basis

LEP in Regular

Students identified as EL, but do not receive support due to parental request
Student **can not** enroll in an ESL or sheltered class, but **can** receive accommodations in mainstream classes on a regular basis

Connecticut English Mastery Standard

LAS Links: Grades Overall Level 4 or 5
And

Grades K-12

Reading Score 4 or Higher
Writing Score 4 or Higher

Accommodations include, but are not limited to:

- Differentiated Instruction based on English proficiency levels (LAS Links)
- Assessment based on English proficiency levels (LAS Links) and CT ELL Framework
- Time Extension
- Native Language support

Growth Pattern

October 1st Collection

Collection Year	Total English Learners
October 1, 2010	2026
October 1, 2011	1952
October 1, 2012	2061
October 1, 2013	2121
October 1, 2014	2354
October 1, 2015	2432
October 1, 2016	2553
October 1, 2017	2729

New EL Registrations/Re-entries

Growth Pattern

Annual Academic Year

Academic Year	EL Programs				
	Bilingual	ESL	LTSS	LEP Reg	Total
2010-11	241	324	11	19	595
2011-12	310	287	4	17	618
2012-13	315	323	19	14	671
2013-14	356	323	4	29	712
2014-15	378	318	10	15	721
2015-16	372	357	14	25	768
2016-17	407	429	28	31	895

English Learners by Program

The Bilingual/ESOL Education Department serves over 2,700 students identified as English Learners. As mandated by Connecticut General Statutes, Section 10-17, we offer Bilingual Education, Language Transition Support Services, and English as a Second Language (ESL).

Level	BIL	ESL	LTSS	LEP REG	Grand Total
ES K-5	490	785	150	71	1,496
MS 6-8	171	277	126	36	610
HS 9-12	142	286	204	37	669
Grand Total	803	1,348	480	144	2,775 (3/16/18)

Waterbury Public Schools

English Learners

2,775 English Learners

37 Languages Spoken

Spanish (2,458)

Portuguese (78)

Albanian (73)

Albanian (73)

Farsi (3)

Khmer (3)

Pashto (3)

Serbo-Croatian (2)

Turkish (3)

Arabic (29)

French (3)

Kurdish (9)

Persian (1)

Spanish (2,458)

Twi/Fante (4)

Bengali (8)

Gujarati (3)

Lao (1)

Polish (2)

Swahili (1)

Urdu (19)

Bosnian (1)

Guyanese-Creole (4)

Macedonian (2)

Portuguese (78)

Tagalog (4)

Vietnamese (1)

Cape Verde-Creole (3)

Haitian-Creole (11)

Mandarin (9)

Punjabi (6)

Tamil (4)

Yoruba (3)

Dari (5)

Italian (1)

Montenegrin (1)

Russian (1)

Thai (1)

Zulu (5)

Karen (10)

Bilingual/ESOL Education Department Educators

The Bilingual/ESOL Education Staff consist of 84 teachers and 3 Bilingual Instructional Aides. Our certified staff includes one Bilingual Social Worker and one Bilingual Staff Developer.

EL Teachers by Program					
Level	BIL	ESL	RDG	Other	Total
Elementary K-5/8	19	28	6	0	53
Middle School 6-8	7	8	0	0	15
High School 9-12	8	6	0	0	14
K-12	0	0	0	2	2
Total	34	42	6	2	84

EL Teachers/Students by Program

Level	Teachers	Students
ES K-5	53	1496
MS 6-8	15	610
HS 9-12	14	669
K-12	2	
Total	84	2775

What is LAS Links?

LAS Links is an assessment designed for English Learners.

- LAS Links is a **language proficiency test** designed to determine a student's abilities in English when their primary language is other than English.
- Designed to meet **Federal** requirements for testing English Learners in English proficiency.

LAS Measures...

Language Domains:



Listening



Reading

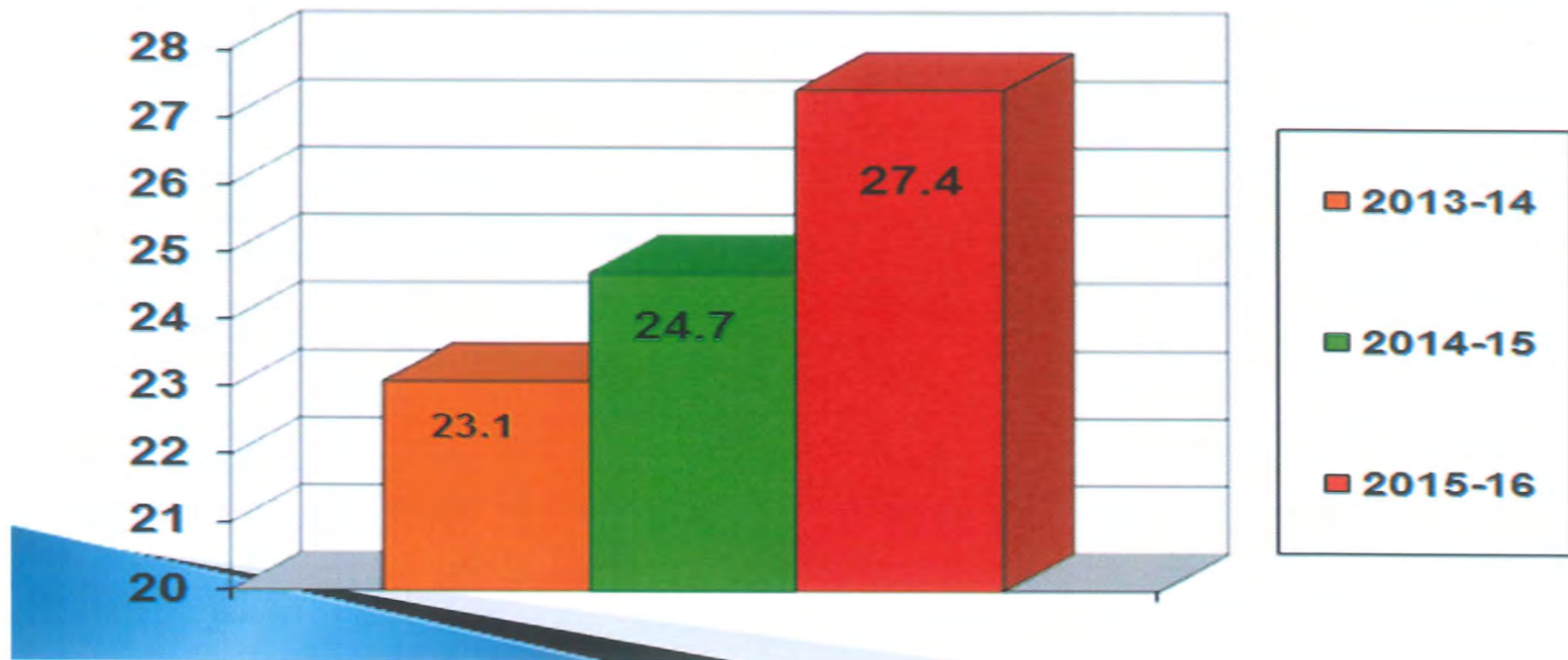


Speaking

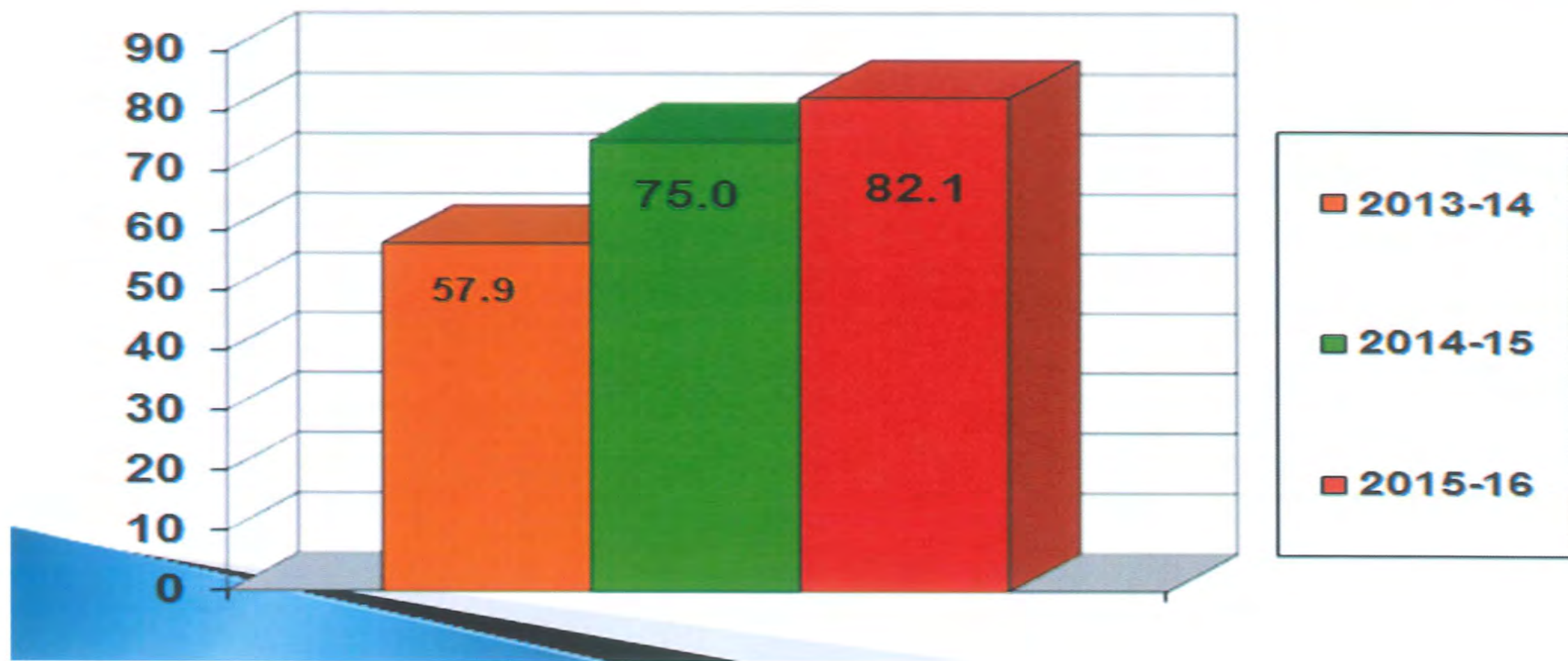


Writing

LAS Links Proficiency Un-weighted



LAS Links Making Progress Un-weighted



Connecticut's Approach to Measuring English Language Proficiency (ELP) Growth

- Similar to approach used for Smarter Balanced growth model
- Uses LAS Links vertical scale that spans grades/years
- Provides ambitious yet achievable individual student targets
- Can be aggregated for group level results



EL Growth In Next Generation Accountability System?

- EL growth toward ELP proficiency will be added to Indicator 2 (Growth) starting with SY 2017-18
 - Up to 100 possible points
- Growth will be measured on:
 - Oral Scale Score (Listening and Speaking)
 - Literacy Scale Score (Reading and Writing)
- All grades included
- Students with two assessments



Oral Growth Targets, Grades K-5

Grade in Yr. 1		Level 1	Level 2	Level 3	Level 4	Level 5
K	Range	300-429	430-460	461-486	487-525	526-555
	Target	61	36	28	Maintain	Maintain
1	Range	300-431	432-462	463-489	490-529	530-555
	Target	68	33	25	Maintain	Maintain
2	Range	330-442	443-469	470-494	495-539	540-580
	Target	59	32	26	Maintain	Maintain
3	Range	330-443	444-470	471-504	505-547	548-580
	Target	79	32	28	Maintain	Maintain
4	Range	355-449	450-477	478-513	514-574	575-637
	Target	82	44	32	Maintain	Maintain
5	Range	355-451	452-484	485-515	516-579	580-637
	Target	76	38	25	Maintain	Maintain

Example: Starting ORAL score in K is 335.



Oral Growth Targets, Grades 6-12

Grade in Yr. 1		Level 1	Level 2	Level 3	Level 4	Level 5
6	Range	362-454	455-480	481-517	518-574	575-662
	Target	78	46	31	Maintain	Maintain
7	Range	362-459	460-484	485-520	521-579	580-662
	Target	73	43	32	Maintain	Maintain
8	Range	362-464	465-491	492-524	525-581	582-662
	Target	60	30	14	Maintain	Maintain
9	Range	370-464	465-489	490-524	525-560	561-690
	Target	60	28	22	Maintain	Maintain
10	Range	370-467	468-494	495-526	527-565	566-690
	Target	63	33	25	Maintain	Maintain
11	Range	370-470	471-496	497-529	530-566	567-690
	Target	53	31	24	Maintain	Maintain
12	Range	370-471	472-499	500-530	531-568	569-690



Literacy Growth Targets, Grades K-5

Grade in Yr. 1		Level 1	Level 2	Level 3	Level 4	Level 5
K	Range	220-350	351-398	399-453	454-494	495-590
	Target	111	75	68	Maintain	Maintain
1	Range	230-356	357-409	410-455	456-506	507-590
	Target	96	68	61	Maintain	Maintain
2	Range	285-429	430-472	473-500	501-544	545-625
	Target	75	49	40	Maintain	Maintain
3	Range	285-431	432-478	479-515	516-553	554-625
	Target	80	51	44	Maintain	Maintain
4	Range	325-450	451-500	501-533	534-585	586-680
	Target	87	53	40	Maintain	Maintain
5	Range	325-451	452-501	502-536	537-586	587-680
	Target	82	46	31	Maintain	Maintain



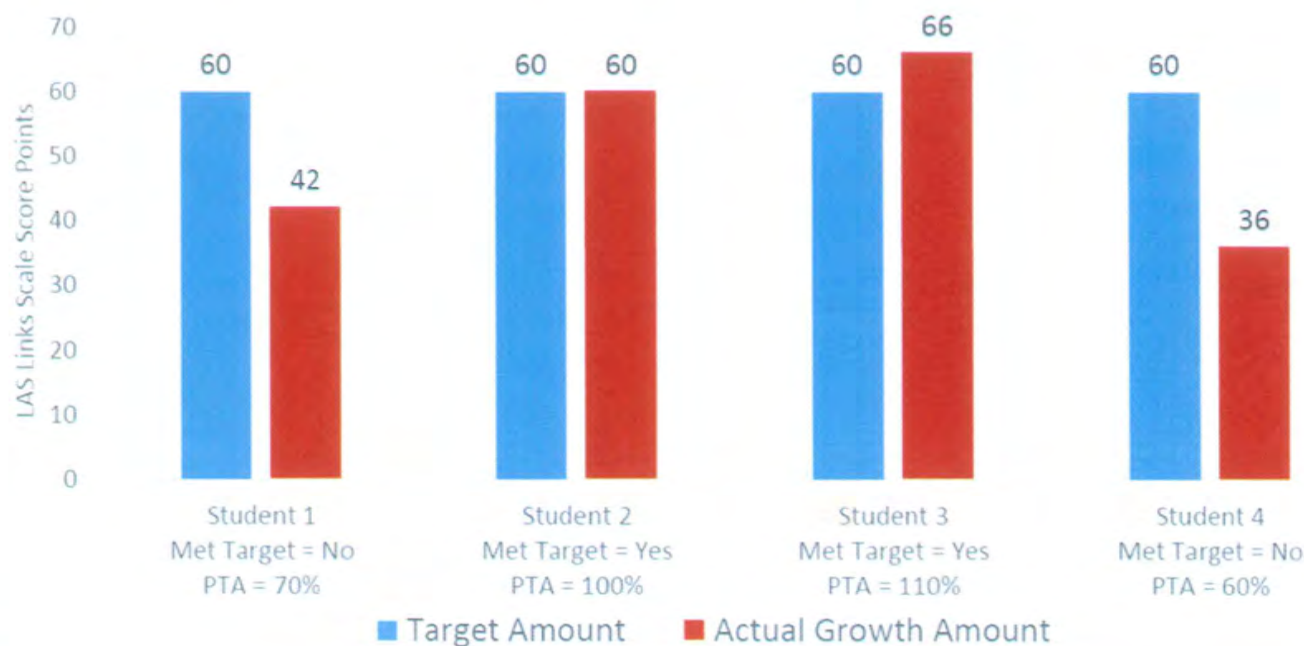
Literacy Growth Targets, Grades 6-12

Grade in Yr. 1		Level 1	Level 2	Level 3	Level	Level 5
6	Range	340-473	474-512	513-552	553-598	599-700
	Target	80	47	37	Maintain	Maintain
7	Range	340-473	474-513	514-553	554-599	600-700
	Target	75	48	39	Maintain	Maintain
8	Range	340-474	475-514	515-553	554-599	600-700
	Target	59	38	26	Maintain	Maintain
9	Range	350-477	478-521	522-564	565-612	613-717
	Target	63	38	26	Maintain	Maintain
10	Range	350-477	478-522	523-564	565-612	613-717
	Target	60	36	25	Maintain	Maintain
11	Range	350-478	479-523	524-565	566-613	614-717
	Target	60	33	23	Maintain	Maintain
12	Range	350-479	480-524	525-566	567-614	615-717



Hypothetical Example: ELP Growth Metrics

Growth Rate = 50% (2 out of 4 students met target)
Average Percent of Target Achieved (PTA) = 85%



Sample K-5 School Accountability Report: SY 2017-18

No:	Indicator	Index/ Rate		Target	Points Earned	Max Points	% Points Earned	State Avg Index/Rate	
1a.	ELA Performance Index – All Students	57.9		75	38.6	50	77.2%	67.7	
1b.	ELA Performance Index – High Needs Students	55.0		75	36.6	50	73.3%	56.7	
1c.	Math Performance Index – All Students	53.0		75	35.3	50	70.7%	61.4	
1d.	Math Performance Index – High Needs Students	50.4		75	33.6	50	67.2%	49.9	
1e.	Science Performance Index – All Students	45.0		75	30.0	50	60.0%	57.5	
1f.	Science Performance Index – High Needs Students	42.0		75	28.0	50	55.9%	47.0	
2a.	ELA Avg. Percentage of Growth Target Achieved – All Students	52.0%		100	52.0	100	52.0%	63.8%	
2b.	ELA Avg. Percentage of Growth Target Achieved – High Needs Students	50.1%		100	50.1	100	50.1%	58.3%	
2c.	Math Avg. Percentage of Growth Target Achieved – All Students	57.3%		100	57.3	100	57.3%	65.0%	
2d.	Math Avg. Percentage of Growth Target Achieved – High Needs Students	55.9%		100	55.9	100	55.9%	57.4%	
2e.	English Learner Progress (Oral) Avg. Percentage of Growth Target Achieved			100		50			
2f.	English Learner Progress (Literacy) Avg. Percentage of Growth Target Achieved			100		50			
4a.	Chronic Absenteeism – All Students	14.5%		<=5%	31.0	50	62.1%	9.6%	
4b.	Chronic Absenteeism – High Needs Students	17.1%		<=5%	25.7	50	51.4%	15.6%	
11	Physical Fitness (estimated part rate) and (fitness rate)	86.8%	43.5%	75%	14.5	50	29.0%	89.2%	50.5%
	Accountability Index					950			



Collaborations

ESSA allows for transfer of funds between

Tittle I and Tittle III

WPD Education Dept. Human Resources

School Business Office

ACES/ARCTELL

ARC

Highlights

- **Recruitment and support of Bilingual/ESOL Teachers**
- **Parent Empowerment Workshops**
- **Access to Technology (Google Classroom)**
- **Curriculum Alignment and Development**

Human Capital: Creative Pathways to Certification

Step 1: Complete a Teacher Preparation Program:

Traditional

Accelerated: ARC, RELAY: We work closely with candidates, with veteran Bilingual/ESL teachers serving as mentors and cooperating teachers

DSAP: Candidates are supported through job-embedded PD, and guidance is provided and progress is closely monitored to ensure success

Step 2: ARCTELL: Through Title III/Title I, we provide financial and job-embedded support for candidates

Step 3: TEAM: Veteran Bilingual/ESL teachers serve as mentors to new teachers

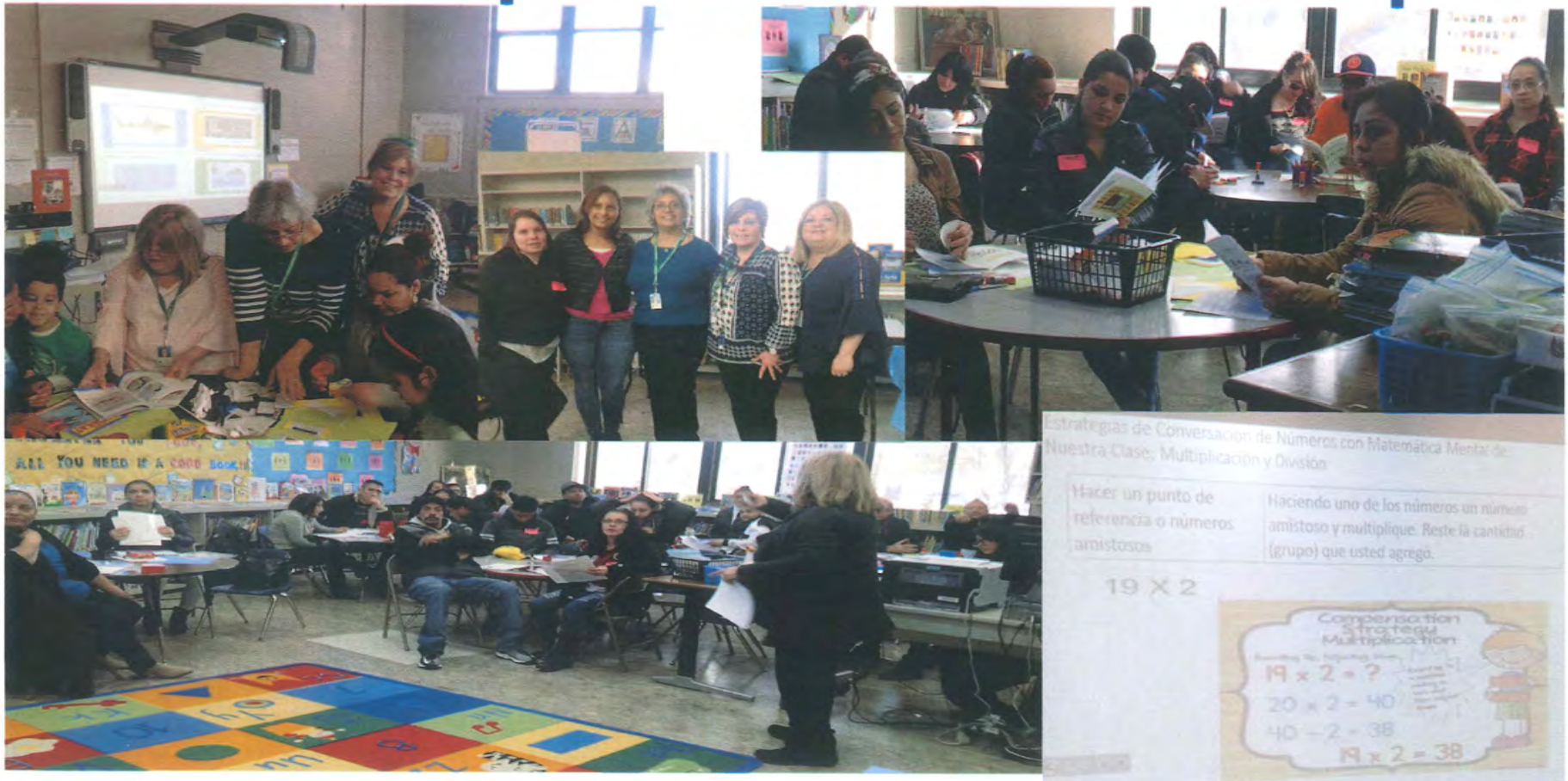
Human Capital

"Grow Your Own" Model

2014-2015 ~ 3 ~	2015-2016 ~ 9 ~	2016-2017 ~ 7 ~	2017-2018 ~ 5 ~
3 New Bilingual/ESL Teachers <ul style="list-style-type: none"> • 3 new hires • 2 were tutors 	9 New Bilingual/ESL Teachers <ul style="list-style-type: none"> • 8 new hires • 6 started their careers as substitute teachers in Waterbury Public Schools • 1 transferred in from other departments 	7 New Bilingual/ESL Teachers <ul style="list-style-type: none"> • 5 new hires • 2 started their careers as substitute teachers in Waterbury Public Schools • 2 were paraprofessionals • 2 transferred in from other departments 	5 New Bilingual/ESL Teachers <ul style="list-style-type: none"> • 5 new hires • All 5 started their careers as substitute teachers in Waterbury Public Schools

We are currently working with 5 potential candidates seeking certification

Parent Empowerment Workshops



Access to Technology

- One set of 30 Chromebooks have been purchased for each middle school and high school
- We are in the process of purchasing one set of six chromebooks for each ESL teacher at the elementary level
- The goal is to increase access to technology as an instructional tool for English Learners

Curriculum Alignment and Development

Newcomers Curriculum

- **CT Common Core of Teaching**
- **Unit Sample**
- **Lesson Planning Guide**

@'Newcomers Curriculum

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Scope and Sequence ([Click Here](#))

New Beginnings

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Common Formative Assessment ([Click Here](#))

Section 2: Meeting and Greeting ([Click Here](#))

Common Formative Assessment ([Click Here](#))

Section 3: Personal Information ([Click Here](#))

Common Formative Assessment ([Click Here](#))

Section 4: Describing Myself and Others ([Click Here](#))

Common Formative Assessment ([Click Here](#))

Section 5: Everyday Conversation ([Click Here](#))

Common Formative Assessment ([Click Here](#))

Performance Assessment ([Click Here](#))





Student Portfolio ([click here](#))

Academic Behaviors Rubrics

<https://drive.google.com/drive/folders/0B4O4c94Mq95eUlpKRnFYWENINVU>([English](#),
[Spanish](#), [Albanian](#), [Portuguese](#))

Reading Checklist ([English](#), [Spanish](#), [Albanian](#), [Portuguese](#))

Connecticut Common Core of Teaching (CCT) Rubric for Effective Teaching 2016 — At a Glance

Evidence Generally Collected Through In-Class Observations	Evidence Generally Collected Through Non-Classroom/Reviews of Practice
<p> Domain 1: Classroom Environment, Student Engagement and Commitment to Learning</p> <p><i>Teachers promote student engagement, independence and interdependence in learning and facilitate a positive learning community by:</i></p> <p>1a. Creating a positive learning environment that is responsive to and respectful of the learning needs of all students.</p> <p>1b. Promoting developmentally appropriate standards of behavior that support a productive learning environment for all students.</p> <p>1c. Maximizing instructional time by effectively managing routines and transitions.</p>	<p> Domain 2: Planning for Active Learning</p> <p><i>Teachers plan instruction to engage students in rigorous and relevant learning and to promote their curiosity about the world at large by:</i></p> <p>2a. Planning of instructional content that is aligned with standards, builds on students' prior knowledge and provides for appropriate level of challenge for all students.</p> <p>2b. Planning instruction to cognitively engage students in the content.</p> <p>2c. Selecting appropriate assessment strategies to monitor student progress.</p>
<p> Domain 3: Instruction for Active Learning</p> <p><i>Teachers implement instruction to engage students in rigorous and relevant learning and to promote their curiosity about the world at large by:</i></p> <p>3a. Implementing instructional content for learning.</p> <p>3b. Leading students to construct meaning and apply new learning through the use of a variety of differentiated and evidence-based learning strategies.</p> <p>3c. Assessing student learning, providing feedback to students and adjusting instruction.</p>	<p> Domain 4: Professional Responsibilities and Teacher Leadership</p> <p><i>Teachers maximize support for student learning by developing and demonstrating professionalism, collaboration and leadership by:</i></p> <p>4a. Engaging in continuous professional learning to impact instruction and student learning.</p> <p>4b. Collaborating to develop and sustain a professional learning environment to support student learning.</p> <p>4c. Working with colleagues, students and families to develop and sustain a positive school climate that supports student learning.</p>

Visit the State Department of Education's Educator Effectiveness and Professional Learning website for the complete [Connecticut Common Core of Teaching Rubric for Effective Teaching 2014](#).

The 10 CELP Standards

For the purposes of clarity, the 10 CELP Standards are organized according to a schema that represents each standard's importance to ELs' participation in the practices called for by college- and-career-ready ELA & Literacy, mathematics, and science standards (G. Bunch, personal communication, August 15, 2013; Bunch, Kibler, & Pimentel, 2013).

1	Construct meaning from oral presentations and literary and informational text through grade-appropriate listening, reading, and viewing
2	Participate in grade-appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions
3	Speak and write about grade-appropriate complex literary and informational texts and topics
4	Construct grade-appropriate oral and written claims and support them with reasoning and evidence
5	Conduct research and evaluate and communicate findings to answer questions or solve problems
6	Analyze and critique the arguments of others orally and in writing
7	Adapt language choices to purpose, task, and audience when speaking and writing
8	Determine the meaning of words and phrases in oral presentations and literary and informational text
9	Create clear and coherent grade-appropriate speech and text
10	Make accurate use of standard English to communicate in grade-appropriate speech and writing

Waterbury Public Schools
Lesson Planning Guide 2016-2017

Lesson Title/Unit; Timeline	Family and Friends; Unit 3 Section 1: Family Conceptual Lens: Family and Friends: Identity
<p style="text-align: center;">CT Core Standards (Grade Specific Standards)</p>	<p>All standards from unit 1 plus:</p> <p>Anchor Standards for Reading:</p> <p>CCSS.ELA-Literacy.CCRA.R.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.</p> <p>Anchor Standards for Writing:</p> <p>CCSS.ELA-Literacy.CCRA.W.2 Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.</p> <p>Speaking and Listening:</p> <p>CCSS.ELA-Literacy.SL. 2 Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.</p> <p>Language 1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p>
<p style="text-align: center;">Core Content Standards</p>	<p>CELP Standards</p> <ol style="list-style-type: none"> 1. Construct meaning from oral presentations and literary and informational text through grade-appropriate listening, reading, and viewing with prompting and supports, use a very limited set of strategies to: <ul style="list-style-type: none"> • identify a few key words and phrases in oral communications and simple written texts 2. Participate in grade-appropriate oral and written exchanges of

	<p>information, ideas, and analyses, responding to peer, audience, or reader comments and questions with prompting and supports</p> <ul style="list-style-type: none"> • actively listen to others • participate in short conversational and written exchanges on familiar topics using academic and domain specific vocabulary • present basic information • respond verbally and nonverbally to simple questions and some "wh" questions <p>3. Speak and write about grade-appropriate complex literary and informational texts and topics with prompting and supports</p> <ul style="list-style-type: none"> • communicate basic information using words and phrases acquired in conversations, reading, and being read to about familiar texts, topics, and experiences <p>8. Determine the meaning of words and phrases in oral presentations and literary and informational text with prompting and supports</p> <ul style="list-style-type: none"> • recognize the meaning of a few frequently occurring words and phrases, and formulaic expressions
<p>Academic Behavior Focus/Standards</p>	<p style="text-align: center;">Preparation:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Comes to discussions prepared having read or studied the required material(s) <input type="checkbox"/> Is prepared and ready to work on time, based on the defined task and purpose <input type="checkbox"/> Can clearly and specifically describe expectations for success <input type="checkbox"/> Brings necessary materials to class <p style="text-align: center;">Active Learning:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Follows agreed upon rules and norms for productive discussions and decision making <input type="checkbox"/> Defines and carries out assigned role(s), including effectively playing leadership roles as well as taking direction from others <input type="checkbox"/> Follows oral and written directions <input type="checkbox"/> Tracks progress toward specific goals, deadlines and learning expectations <p style="text-align: center;">Academic Effort</p> <ul style="list-style-type: none"> <input type="checkbox"/> Applies a self-reflective and constructive perspective to learning <input type="checkbox"/> Asks and answers relevant and thought-provoking questions to clarify, build upon, and/or connect ideas <input type="checkbox"/> Expresses relevant ideas and, when possible, makes connections to broader concepts and larger ideas <input type="checkbox"/> Explicitly draws on preparation by referring to evidence and additional information about the topic when exploring ideas under discussion <p style="text-align: center;">Positive Contribution</p> <ul style="list-style-type: none"> <input type="checkbox"/> Demonstrates ability to work and apply knowledge independently and collaboratively <input type="checkbox"/> Is accountable for own actions <input type="checkbox"/> Actively encourages others to succeed <input type="checkbox"/> Conveys respect for diverse perspectives through words and actions

	See Academic Behaviors Rubric
<p>Learning Target(s): What do we want students to know, understand and do? Note applicable Depth of Knowledge (DOK).</p>	<p>Know (content):</p> <p style="text-align: center;"><u>Family</u></p> <p>Do (skills): Ex: (basic skills, thinking skills, planning skills, uses verbs or phrases) Example: Students solve problems requiring multiplication.</p> <p>Students will:</p> <ul style="list-style-type: none"> • identify immediate and extended family members • create a family tree presentation • research different types of family structures • explain the relationship between family members and their role • identify future tense verb be + "going to" statements and questions <p>Understand (generalization/EU):</p> <p>*Content Objectives</p> <p>I want students to understand how to:</p> <ul style="list-style-type: none"> • label family members with correct titles • compare and contrast immediate versus extended family members • write a memoir about a special family member <p>*Language Objectives:</p> <p>I want students to:</p> <ul style="list-style-type: none"> • converse about our family relationships • converse about family history • have discussions to discuss family members • write complete sentences using be verbs + going to
<p style="text-align: center;">Vocabulary</p>	<p><u>Language Vocabulary</u></p> <p>Everyday conversation: Family, Mother, father, brother, sister, son, daughter, niece, nephew, grandmother, grandfather, step-relatives, relatives, cousins, aunt, uncle, siblings , in-laws, godparents, foster parents, adopted.</p> <p><u>Academic Vocabulary:</u> Compare, Contrast, Define, List, Classify, Discuss, Explain, Labeling.</p> <p><u>Grammar:</u> Proper VS Common Nouns, Capital Letters, Verb+ Going to, yes/no & informational questions, statements, commands.</p>
<p>Timeline – i.e. Placement of Lesson within the Broader Curriculum/Context: How does this build on prior knowledge from previous lessons? How will the outcomes of this lesson and student learning impact subsequent instruction?</p>	<p style="text-align: center;">After Unit 2</p>

Essential Question(s): Coherent progression tied to larger unit/course EQ(s)/EU(s).

How do we construct meaning from oral presentations and literary and informational text through grade-appropriate listening, reading, and viewing?

How do we speak and write about grade-appropriate complex literary and informational texts and topics?

Why do we need to use accurate standard English to communicate in grade appropriate speech and writing?

What is the importance of exploring and describing cultures?

How do we conduct research and evaluate and communicate findings to answer questions or solve problems?

LAS Links Forms A and B

Name: _____

Date: _____

Directions: Write the words from the box in the correct column.

mother Maria family brother Waterbury Bic grandmother

Proper Nouns

Common Nouns

LAS Links Preparation:
What specific LAS Links preparation Skill Practice(s) are you addressing in this unit?

Name: _____

Date: _____

Directions: Write the sentences from the box in the correct column.

Go to your seats. My family lives in Waterbury. Stand up.
My mother is a nurse. Open the door. I have three brothers.

Commands

Statements

	<div style="border: 1px solid black; width: 100%; height: 40px; margin-bottom: 10px;"></div> <div style="display: flex; justify-content: space-between;"> Name: _____ Date: _____ </div> <p>Directions: Turn each statement into a question.</p> <p>1. I live in Waterbury.</p> <p>_____</p> <p>2. I have a sister.</p> <p>_____</p> <p>3. He is not a student.</p> <p>_____</p> <p>4. She is not in school today.</p> <p>_____</p>
<p>Description of Learning Tasks/ Strategies:</p> <p>Identify the methods that will allow students to <u>activate prior knowledge</u>, <u>integrate new ideas</u>, and <u>self-regulate</u> to improve learning in meaningful contexts (Why is today's learning important/relevant?). How will engagement/learning be <u>visibly evident</u> (in relation to adult practice AND student response)?</p>	<p>Activate Prior Knowledge</p> <ul style="list-style-type: none"> Guiding Questions and Discussions Video Clips Advanced Organizers Visuals <p>Guiding Questions</p> <ul style="list-style-type: none"> How can I discuss daily activities? How can I describe the weather in casual conversations? How can I use prepositions to locate items in the classroom? <p>Integrate New Ideas</p> <ul style="list-style-type: none"> Compare and Contrast Survey family about leisure activities in their native countries Survey family about scheduling in their native countries Survey family about weather in native countries Connect new learning to background knowledge Discussion about leisure activities, scheduling, and weather Video clips of weather reports Video clips of school and leisure activities Student demonstrations

	<p>How does the unit connect to the theme?</p> <p>Graphic Organizers Presentations Gallery Walk Weather Reports Video recording of a weather report</p> <p>How will engagement be evident?</p> <p>Teachers will facilitate the learning Students will actively participate in discussion about the topic Students will write about the topic and read each other's responses and respectfully critique their writing</p>
<p>Materials, Resources, Technology Needed: Note the learning materials in each learning activity, including any digital literacy resources. How does resource utility cognitively engage students and extend new learning?</p>	<p>Video: Questions Start with these Song (click here) Video: Close Reading Questions (Click Here) Video: Yes/No Questions (Click Here) Video: Common vs Proper Nouns, Khan Academy (click here) Read Works: Twins Story- Compare and Contrast (click here) Venn Diagrams PowerPoint: (click here) Video: Introducing the Family (Click Here) Video: Talking about your family in English (Click Here) Practice: Reading a Family Tree (Click Here) Family tree with career goals (Click Here) Practice: Reading a Family Tree Part 1 (Click here) Part 2 (Click Here) Video: Going to + Infinitive (Click Here)</p>
<p>Note: anticipated misconceptions, ambiguity, misunderstandings or challenges. What learner-centered problems are <u>specifically</u> addressed?</p>	<p>Content (subject specific):</p> <ul style="list-style-type: none"> • Slang words such as "gonna" and "wanna" will be used for verbs • Blended families • Forming Questions Correctly • Forming affirmative statements <p>Skill-based:</p> <ul style="list-style-type: none"> • Sentence Syntax • Spelling/ Writing • Academic behavior • Close Reading and Annotating • Building on prior knowledge • Context Clues • Citing Evidence
<p>Suggested Differentiation: Note opportunities for <u>varied modes of learning</u> to accommodate varied learning profiles. Describe how the differentiated instruction will be <u>visible</u>.</p>	<p>Anticipate (including contingencies for on-the-spot adjustments) for student(s) who may:</p> <ul style="list-style-type: none"> • Struggle <p>Language Objectives Bilingual Picture Dictionary (Dictionary) Sentence Starters (Starters) Word Cards with Pictures Intentional Grouping of Students Audio Books Video Clips Visuals and Manipulatives Interactive Websites Concept-Based Games Cognates</p>

Word/Phrase Banks
 Graphic Organizers With a Word Bank
 Story Map with Pictures
 Culminating Projects (such as weather PPT, Creating Videos)
 Acrostic Poem (<http://www.acrosticpoem.org/>)
 Fill in the Blanks with pictures and word bank
 Posters with matching words and pictures
 Dictation (<http://www.readingrockets.org/strategies/dictation>)
 Provide matching sentence and pictures

- On-Level

with prompting and supports

Language Objectives
 Teach key survival phrases (ex. [Key Phrases](#))
 Provide a picture dictionary ([Picture Dictionary](#))
 Sentence Starters (ex [Starters](#), [Starters 2](#))
 Simplify Written and Verbal Instruction
 Audio Books
 Video Clips
 Interactive Websites
 Concept-Based Games
 Cognates
 Word/Phrase Banks
 Graphic Organizers
 Culminating Projects (such as weather PPT, Creating Videos)
 Acrostic Poem (<http://www.acrosticpoem.org/>)
 Fill in the Blanks with a word bank
 Posters
 Dictation (<http://www.readingrockets.org/strategies/dictation>)
 Use sentences frame to create dialogues for use in role-playing activities
 Provide sentences and pictures to put in chronological order or mix-n- match

- Need opportunities for enrichment:

(Content (standards aligned), Product (targeted learning styles), Process, Learning Environment)

Interactive Websites
 Independent Assignments
 Individual and Group Projects: Such as PowerPoint presentations
 Peer Review
 Cognates
 Video Clips with English subtitles
 Word/Phrase Banks
 Describe Visuals in Complete Sentences
 Anchor Activities
 Graphic Organize
 Acrostic Poem Tier-2 words
 Fill in the Blanks without a word bank

	<p>Posters with descriptive sentences</p> <p>Interview various individuals</p> <p>Create dialogues for use in role-playing activities</p> <p>Use paragraph frame to write about activities</p> <p>Use Venn-Diagram with a paragraph frame to make comparisons</p> <p>Provide sentences to put in chronological order or mix-n-match</p> <p>Provide pictures to write sentences in chronological order</p>
<p>Formative Lesson-Based Assessment (including strategies to engage students in using assessment criteria to self-monitor): How will you know students have learned in <u>measurable</u> contexts?</p>	<p>Assessment/Scoring Measure:</p> <p>What will be the next steps (including on-the-spot modifications) if students exhibit that they:</p> <ul style="list-style-type: none"> ▪ Learn: <p>Teacher Made Assessments (Needs to be created)</p> <p>Exit tickets</p> <p>Projects</p> <p>Portfolio</p> ▪ Struggle to learn: <p>Oral assessment</p> <p>Multiple Choice with pictures</p> <p>Projects</p> ▪ Need to extend learning: <p>Projects</p> <p>Quil Assessment (Click Here)</p>
<p>Multicultural Goal(s):</p>	<ul style="list-style-type: none"> • Teachers focus attention on students from traditionally marginalized backgrounds, who are also at the risk of failing, to become empowered "intellectual leaders" in classroom. • Teachers involve students meaningfully and fully into the learning community, instead of teaching them in isolated ways. • Teachers acknowledge and utilize students' true-life experiences as legitimate parts of the curriculum. This requires compassion and understanding of the lives students lead. • Teachers view literacy as not only the written words but the oral contributions. • Teachers and students work together to learn how to overcome the dominant social and political culture in order to succeed. • Teachers realize that the education of students involves more than just the written mechanics of passing on knowledge. Teachers are also part social worker, part therapist, and part advocate. The unjust lives that students may lead cannot be ignored in the continuum of education.

Challenges

- **Increase in population**
- **Need for additional classrooms**

Next Steps

- **Purchase of additional chromebooks at the elementary level**
- **Increase parent workshops at the secondary level**
- **Continue recruitment/support of teachers**



**“Individually, we are
one drop. Together,
we are an ocean.”**

– Ryunosuke Satoro



VOICES FOR CHILDREN

speakupnow.org

