

## **Falcon Heights City Council Workshop**

**City Hall  
2077 W Larpenteur Ave.  
6:30 p.m.**

### **AGENDA Wednesday, April 6, 2016**

- 1) North Suburban Communications Commission (CTV)  
Strategic Planning**
- 2) TIES-Telecommunication Shelter**
- 3) Community Solar Garden Update**

If you have a disability and need accommodation in order to attend this meeting, please notify City Hall 48 hours in advance between the hours of 8:00 a.m. and 4:30 p.m. at 651-792-7600. We will be happy to help.

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**The City That Soars!**

## REQUEST FOR COUNCIL ACTION

<b>Meeting Date</b>	April 6, 2016
<b>Agenda Item</b>	Workshop #1
<b>Attachment</b>	Strategic Planning Materials
<b>Submitted By</b>	Sack Thongvanh, City Administrator

<b>Item</b>	North Suburban Cable Commission (CTV) Strategic Planning
<b>Description</b>	<p>As part of its strategic planning process, the Board of Directors of CTV North Suburbs is looking at the services they provide. They want to ensure that, over the next few years, They are meeting the needs of their constituents as effectively and efficiently as possible.</p> <p>They appreciate the opportunity to have an informal conversation with the City Council about the video programming and technical services we provide to the city and to the residents of Falcon Heights. They are also seeking input from the Council of the other member cities, from the three school boards and from community organizations and agencies with whom they have worked. Their facilitator, Barbara Raye, the Executive Director of the Center for Policy, Planning and Performance, will be leading the discussion with you.</p> <p>They have prepared some material to help the Council understand the North Suburban Communications Commission and CTV North Suburbs, their sources of funding, and information on our primary services – programming/video production and training. They have also pulled out key findings from the two telephone surveys that were conducted on our behalf last year. (A list of programs produced last year and the complete survey reports are also attached for those who want more detail.)</p> <p>NSCC/CTV would also like the Council to think about the following questions once they have reviewed the informational material provided:</p> <ol style="list-style-type: none"> <li>1. Do you have any general questions about CTV that are not addressed in the materials?</li> <li>2. Of the services that CTV provides for local government, i.e., the city, which do you think are the most valuable?</li> <li>3. What additional services or programs could CTV offer that would enhance civic engagement and transparency in local government?</li> </ol>

	<p>4. Of the services that CTV provides for the community, which do you think are the most valuable?</p> <p>5. What additional services or programs could CTV offer to improve the sense of community or enhance the skills/knowledge that residents gain through our educational and community programming?</p> <p>6. What services and/or programs should CTV no longer provide?</p> <p>7. What changes would you like to see in the next three to four years?</p>
<b>Budget Impact</b>	This will have an impact on future budgets and the long range financial plan.
<b>Attachment(s)</b>	<ul style="list-style-type: none"> <li>• Strategic Planning Documents</li> </ul>
<b>Action(s) Requested</b>	No action required.



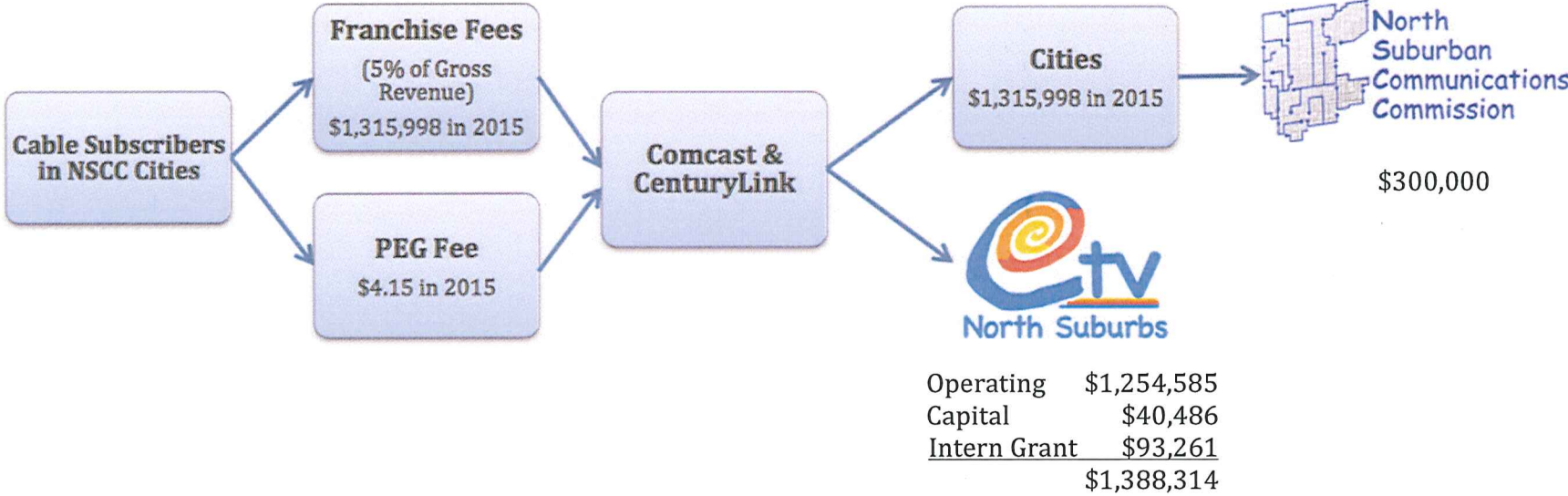
# What is NSCC/CTV?

## 2 Sides of the Cable Franchise Coin



- Joint Powers Agreement (JPA) formed by 9 cities: Arden Hills, Falcon Heights, Lauderdale, Little Canada, Mounds View, New Brighton, North Oaks, Roseville and St. Anthony
- State & federal laws allow cities to enforce non-exclusive cable TV franchises for use of city rights-of-way by cable providers
- Administers the cities' cable franchises
  - Handles complaints
  - Negotiates/renegotiates agreements
  - Audits cable providers' performance
    - Technical
    - Financial
- Nonprofit corporation formed by 9 NSCC cities
- Provides community programming and services
  - Administers the CTV Channels
  - Produces community programs
    - Staff produced
    - Volunteer produced
  - Provides studio, production truck and portable video equipment
  - Provides video education and training to community members

# NSCC/CTV Funding



**North Suburban Communications Commission (NSCC) & CTV North Suburbs/North Suburban Access Corporation Member Cities:**  
**Arden Hills • Falcon Heights • Lauderdale • Little Canada**  
**Mounds View • New Brighton • North Oaks • Roseville • St. Anthony**



# What Does CTV Do?

## Public, Education & Government Programming

### Public/Community Programming

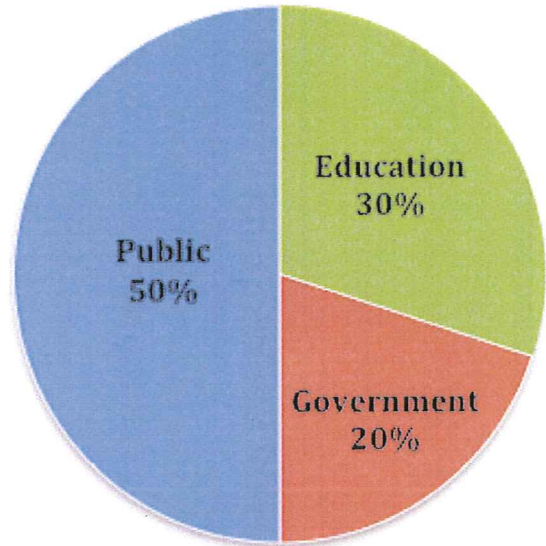
- Programs of local interest
- Examples of public/community programs:
  - *North Suburban Beat*
  - *Disability Viewpoints*
  - *Adventures in Public Speaking*
  - *4President Show*
- 362 programs in 2015
- **50% of total programs**

### Education Programming

- Coverage of high school/college sports, concerts & events
- Examples of education programs:
  - *Chalkboard Capers (Mounds View)*
  - *Graduation Ceremonies (all districts)*
  - *Roseville Adult Education Culture Fair*
  - *Bethel Women's Chorale*
- Coverage of meetings (*not included in total*)
  - 21 school meetings in 2015
- 218 programs in 2015
- **30% of total programs**

### Government Programming

- Coverage of local events, parades & festivals
- Examples of government programs:
  - *A Tale of the Cities*
  - *Candidates Speak Out*
  - *Mounds View Today*
  - *New Brighton Now*
- Coverage of meetings (*not included in total*)
  - 628 city meetings in 2015
  - 45 government meetings in 2015
- Municipal Assistance Program provides 100 hours of technical and production assistance per city per year at no charge
- Contractual services for cities & schools
  - Channel programming
  - Web streaming of meetings
- 146 programs in 2015
- **20% of total programs**



### The Value Proposition for CTV North Suburbs

- ❖ A community media center that serves the public/community, education and government is more effective and efficient, saving money on equipment and staff. And it
- ❖ Enables open government and transparency in government operations by providing television and web coverage of local government meetings and events;
- ❖ Cultivates civic engagement and community building by providing an environment for collaboration between public/community, education and government programmers;
- ❖ Facilitates the sharing of diverse opinions, ideas and cultures; and
- ❖ Provides training in media literacy for young people and new English speakers.





# Youth Media Program & Community Training

## Youth Media Program

170	Students involved in youth media programs
53	Programs produced by youth
37	Students taught Northstar Digital Literacy Standards
11	Teen interns hired by CTV worked 1,000 hours

## Community Training

### Classes Offered in 2015:

34	CTV 101
23	Camcorder
14	Basic Truck Crewing
11	Final Cut Pro Editing
9	Basic Studio Production
4	Adobe Premiere Pro Editing
3	CG/XPression/Score
1	Producers Club Workshop
1	Teen Production/Animation
<b>100</b>	<b>Total Classes Offered</b>

### Students Received Training in 2015:

170	CTV 101
126	Camcorder
57	Basic Studio Production
49	Basic Truck Crewing
31	Final Cut Pro Editing
28	Adobe Premiere Pro Editing
7	Producers Club Workshop
5	Teen Production/Animation
4	CG/XPression/Score
<b>477</b>	<b>Total Students Received Training *</b>

*\* 57 Students from Roseville Adult Education - English Learners Program*



# Community Survey Results

## Telephone survey results from the 2015 Addendum to the 2013 Community Needs Ascertainment Report, conducted by The Buske Group:

- ◆ **NEARLY HALF (47.3%)** of all cable subscribers have watched a program on a CTV North Suburbs channel. Of these viewers:
  - **52.4%** said they watched local sports, community and city programming on channels 14, 15 or 16 at least once a month (25.9% said at least once a week)
  - **84.7%** have watched City Council meetings (37% said at least monthly)
  - **64.1%** have watched local sports (29.6% said at least monthly);
  - **38.6%** have watched School Board meetings (4.2% said at least monthly); and
  - **37.6%** have watched "North Suburban Beat" (13.8% said at least monthly)
  - **40.7%** said they watched local government programming on channel 19 at least once a month (19% said at least once a week)
  - **23.3%** said they watched educational channels 18 or 20 at least once a month (7.9% said at least once a week)
- ◆ **A MAJORITY (72.5%)** gave grades of "A" or "B" regarding how well CTV North Suburbs "provides a valuable community service" and **61.9%** gave grades of "A" or "B" to "provides programming that deals with local issues."
- ◆ **A MAJORITY (69.8%)** of all telephone survey respondents said it is "important" or "very important" to have local cable TV channels that feature programs about area residents, organizations, schools, government, events and issues.

## Conclusions from the 2015 Morris Leatherman Cable Subscriber Survey:

- ❖ CTV North Suburbs' broad spectrum of programming over the three cable channels reaches an impressive **61%** of subscribers. **9%** would be considered "frequent" viewers, while **52%** are "occasional" viewers. *This is above the norm of 52% in the Twin Cities area.*
- ❖ Subscribers are split on the importance of local city, school district and public access channels. **49%** consider them either "very important" or "somewhat important," while **50%** think they are "not too important" or "not at all important." However among the **61%** viewers of CTV North Suburbs programming, **62%** indicate they are important with only **38%** considering them of less importance.

## **2015 CTV Programs**

**P = Public**

**E = Education**

**G = Government**

**S = Staff**

**V = Volunteer**

**O = Outside Producer**

**(non-resident producer, not  
Produced at CTV North Suburbs)**

<b>P/E/G</b>	<b>Public/Community</b>	<b>Episodes</b>	<b>S/V/O</b>
P	14AA Baseball	1	S
P	4Presidents show	13	V
P	7th Grade Football: St. Anthony vs. Spring Lake Park	1	V
P	A Day Trip To Mars	1	V
P	Adventures in Public Speaking	11	V
P	Amateur Baseball	4	V
P	Celebrity Jeopardy	1	S
P	Christ the King Annual Christmas Concert	1	V
P	Christ The King Christmas Pageant 2015	1	V
P	Christ the King Lutheran Church	50	V
P	Community Open House Promo	1	S
P	Community Survey Promo #1 verA	2	S
P	Community Survey Promo #2	1	S
P	Crocheting Flowers-short	1	V
P	CTV 2015 Volunteer Recognition Awards (Banquet VRAs)	1	S
P	CTV Promo - Only Takes 10 minutes	1	S
P	CTV Social Media Promo	1	S
P	Denny Ross Memorial Softball (NB)	1	V
P	Disability Viewpoints	34	V
P	EveretteSmithson-July 4 2015	1	V
P	Focus Forward	11	V
P	Fridley 1965 Tornado Open Mic	2	V
P	Gathering Place Stables-short	1	V
P	GenCTV Promo	1	S
P	Harriet Island Park - short	1	V
P	Health Now	13	V
P	House Calls	21	V
P	Housing Diversity Seminar	1	S

P	How to Make Magic	1	V
P	How to play Guitar	1	V
P	Juggle Balls	2	V
P	Kad's Deli -short	1	V
P	Kiwanis Youth Awards 2015	1	V
P	Korean War Picnic 2015	1	V
P	La Pirinola	2	V
P	Legion Baseball	2	S
P	Light on the Gospel	12	V
P	Lynne 03 26:01	1	V
P	Mass of Thanksgiving @ Benedictine Featuring Bishop Lee	1	S
P	Men's Bandy North American Cup	1	V
P	Minnesota Conversations The Voting Rights Act	1	V
P	MN Harvest Horse Show 2015	1	V
P	MOFAS LIVE!	4	S
P	N.O. Garden Club Lymne's Disease	1	V
P	NET Lifeline	18	V
p	North Metro Home & Garden Show Promo	1	V
P	North Suburban Beat	47	S
P	Official State of MN Veterans Day Program	1	O
P	Ordination to the Priesthood	1	V
P	Paranormal Crossover (UFOs and the Paranormal)	1	V
P	Performing Hmong Qeej-short	1	V
P	Princess Whatshername-SJB 2015	1	S
P	Public Safety Spotlight	8	V
P	Rand Paul Stand with Rand Iowa Rally	1	V
P	RBB at Como Park	1	V
P	Roller Derby - North Start Roller Girls	6	S
P	ROMAFH League of Women Voters (LWV) Part 2	1	S



P	Roseville Big Band	6	V
P	Roseville Open Figure Skating	3	V
P	Roseville String Ensemble	4	V
P	School of Rock	3	V
P	Senior Softball All Stars	1	S
P	Shakespeare & Co	3	V
P	Shoreview Northern Lights Variety Band Holiday Concert 2	1	V
P	Softball (NB 1-pitch)	3	V
P	Songs of Hope	1	V
P	SPACC present Transportation for the 21st Century	1	S
P	Special Gift	2	V
P	Speedskating America Cup	2	V
P	Speedskating John Rose Open	2	V
P	St. Anthony Civic Orchestra 40th Anniversary Concert 2015	1	V
P	St. Anthony Orch Spring Benefit Concert	1	V
P	St. Rose 75th Anniversary Diamond Jubilee Mass	1	V
P	St. Rose Holiday Concert	1	V
P	Sticky Rice with Banana	2	V
P	The Awful Truth "Equal"	1	S
P	The Messenger	3	V
P	The Real Deal in Real Estate	6	V
P	The Splatter Sisters	1	V
P	Transforming Stigma Into Strength with Mike Veny	3	V
P	UFO and the Paranormal	1	V
P	Water Festival-short	1	V
P	What's Brewin	7	S
P	Womens College Hockey: Gophers vs. Huskies	1	S

<b>Staff Produced</b>	<b>84</b>
<b>Volunteer Produced</b>	<b>277</b>
<b>Outside Produced</b>	<b>1</b>
<b>Public/Community Total</b>	<b>362</b>

<b>P/E/G</b>	<b>Education</b>	<b>Episodes</b>	<b>V/S</b>
E	Bethel Women's Chorale	1	V
E	Chalkboard Capers 2015	1	S
E	Culture Fair 2015 Roseville Adult Education	1	S
E	Fairview Alternative HS Graduation	1	V
E	Graduation Promo 2015	1	V
E	Heads and Tails (Adult Education)	1	V
E	IDHS Everyone's Watching PSA	1	V
E	IDHS Irondale Athlete Alumni	1	V
E	Irondale High School Graduation Ceremony	1	V
E	Irondale Pops Concerts	1	V
E	Mounds View High School Graduation	1	V
E	Mounds View High School Speech Showcase	1	V
E	MV Chippewa Middle School Presents 7th Grade Spring Co	1	V
E	Mounds View High School Graduation Ceremony	1	S
E	RAHS All District Orchestra Festival	1	V
E	RAHS Concert Series I	4	V
E	RAHS Concert Series III	3	V
E	RAHS Winter Jazz Concert	2	V
E	Roseville High School Graduation Ceremony	1	S
E	SAHS Senior Band Concert	1	V
E	School Chamber Musical Recital District 621	1	S
E	St. Anthony High School Graduation Ceremony	1	S
E	St. John the Baptist School Holiday Concert 2015	1	S
E	St. Rose 2015 School Play	1	V
<b>SPORTS</b>			
E	Baseball: Irondale vs. Blaine	1	O
E	Baseball: Irondale vs. Fridley	1	S
E	Baseball: St. Anthony vs. DeLa Salle	1	V

E	Baseball: St. Anthony vs. St. Agnes	1	V
E	Baseball: St. Anthony vs. St. Paul Academy	1	V
E	Boys Basketball: Irondale vs. Park Center	1	S
E	Boys Basketball: Irondale vs. So. St. Paul	1	S
E	Boys Basketball: Irondale vs. Totino Grace	1	S
E	Boys Basketball: Roseville vs. Anoka	1	V
E	Boys Basketball: Roseville vs. Cretin DH	1	V
E	Boys Basketball: Roseville vs. Forest Lake	1	V
E	Boys Basketball: Roseville vs. Kennedy	1	V
E	Boys Basketball: Roseville vs. N. St. Paul	1	V
E	Boys Basketball: Roseville vs. Woodbury	1	V
E	Boys Basketball: St. Anthony vs. Mpls Edison	1	V
E	Boys Basketball: St. Anthony vs. St. Agnes	1	V
E	Boys Hockey: Irondale vs. Anoka	1	O
E	Boys Hockey: Irondale vs. St. Louis Park	1	O
E	Boys Hockey: Roseville vs. Cretin DH	1	V
E	Boys Hockey: Roseville vs. East Ridge	1	V
E	Boys Hockey: Roseville vs. Hermantown	1	V
E	Boys Hockey: Roseville vs. Mounds View	1	V
E	Boys Hockey: Roseville vs. Park CG	1	V
E	Boys Hockey: Roseville vs. WBL	1	V
E	Boys Hockey: Roseville vs. White Bear Lake	1	V
E	Boys Hockey: TotinoGrace vs. Breck	1	O
E	Boys Lacrosse: Mounds View vs. Centennial	1	O
E	Boys Lacrosse: Roseville vs. Cretin DH	1	V
E	Boys Lacrosse: Roseville vs. Park CG	1	V
E	Boys Soccer: Centennial vs. St. Anthony/SLP	1	O
E	Boys Soccer: St. Croix Lutheran vs. Concordia Academy	1	O
E	Boys Soccer: Totino Grace vs. Maple Grove	1	O

E	Boys Swimming: Roseville vs. Park CG	1	V
E	College Football: Bethel vs. Carleton	1	V
E	College Football: Bethel vs. Gustavus	1	V
E	College Football: Bethel vs. Hamline	1	V
E	College Football: Bethel vs. St. John's	1	V
E	College Football: Bethel vs. Wartburg	1	V
E	College Football: Northwestern vs. Iowa Wesleyan	1	V
E	Football: Andover vs. Totino Grace	1	O
E	Football: Blaine vs. Totino Grace	1	O
E	Football: Burnsville vs. Roseville	1	V
E	Football: Coon Rapids vs. Totino Grace	1	O
E	Football: Roseville vs. Cretin DH	1	V
E	Football: Roseville vs. East Ridge	1	V
E	Football: Roseville vs. Mounds View	1	V
E	Football: Roseville vs. Stillwater	1	V
E	Football: St. Anthony vs. Highland Park	1	V
E	Football: St. Anthony vs. Mpls Southwest	1	V
E	Football: St. Anthony vs. Washburn	1	V
E	Football: St. Anthony vs. Westonka	1	V
E	Football: Totino Grace vs. Anoka	1	O
E	Girls Basketball: Irondale vs. Blaine	1	S
E	Girls Basketball: Irondale vs. Coon Rapids	1	S
E	Girls Basketball: Irondale vs. Elk River	1	S
E	Girls Basketball: Irondale vs. Osseo	1	S
E	Girls Basketball: Irondale vs. St. Louis Park	1	O
E	Girls Basketball: Irondale vs. St. Louis Park	1	O
E	Girls Basketball: Roseville vs. Anoka	1	V
E	Girls Basketball: Roseville vs. Cooper	1	V
E	Girls Basketball: Roseville vs. Cretin DH	1	V

E	Girls Basketball: Roseville vs. East Ridge	1	V
E	Girls Basketball: Roseville vs. Mounds View	1	S
E	Girls Basketball: Roseville vs. Stillwater	1	V
E	Girls Basketball: Roseville vs. White Bear Lake	1	V
E	Girls Basketball: St. Anthony vs. Apple Valley	1	V
E	Girls Basketball: Totino Grace vs. Armstrong	1	O
E	Girls Hockey: Irondale vs. Blaine	1	O
E	Girls Hockey: Irondale vs. Champlin Park	1	O
E	Girls Hockey: Irondale vs. Spring Lake Park	1	O
E	Girls Hockey: Roseville vs. Centennial	1	V
E	Girls Hockey: Roseville vs. Edina	1	V
E	Girls Hockey: Roseville vs. Minnetonka	1	V
E	Girls Hockey: Roseville vs. Mounds View	1	V
E	Girls Hockey: Roseville vs. Mounds View	1	V
E	Girls Hockey: Roseville vs. Tartan	1	V
E	Girls Hockey: Roseville vs. Woodbury	1	V
E	Girls Hockey: Totino Grace vs. North Metro	1	O
E	Girls Lacrosse: Irondale vs. Coon Rapids	1	O
E	Girls Lacrosse: Roseville vs. White Bear Lake	1	V
E	Girls Soccer: Centennial vs. St. Anthony/SLP	1	O
E	Girls Soccer: Totino Grace vs. Maple Grove	1	O
E	Girls Swimming: Roseville vs. Woodbury	1	V
E	Girls Swimming: St. Anthony vs. Mpls. South	1	V
E	High School Football: All-Star vs. Game	1	O
E	HS All-Star Baseball: West vs. North	1	O
E	JV Boys Basketball: Irondale vs. Coon Rapids	1	S
E	JV Boys Basketball: Irondale vs. Osseo	1	S
E	JV Boys Basketball: Irondale vs. Park Center	1	S
E	JV Boys Basketball: Irondale vs. So. St. Paul	1	S

E	JV Boys Basketball: Irondale vs. Totino Grace	1	S
E	JV Girls Basketball: Irondale vs. Elk River	1	S
E	JV Girls Basketball: Roseville vs. Mounds View	1	S
E	Robotics: FIRST Regionals vs. @ U of M	1	V
E	Section Baseball: Roseville vs. So. St. Paul	1	V
E	Section Baseball: St. Anthony vs. Harding	1	V
E	Section Boys Basketball: Roseville vs. Mahtomedi	1	V
E	Section Boys Hockey: Mounds View vs. Hill Murray	1	O
E	Section Boys Hockey: Roseville vs. Mounds View	1	S
E	Section Football: St Louis Park vs. Irondale	1	O
E	Section Girls Basketball: Irondale vs. Osseo	1	S
E	Section Girls Basketball: Roseville vs. Tartan	1	V
E	Section Girls Basketball: Roseville vs. White Bear Lake	1	V
E	Section Girls Hockey: Irondale vs. Champlin Park	1	O
E	Section Girls Hockey: Mounds View vs. Blaine	1	O
E	Section Girls Hockey: Roseville vs. Cretin DH	1	V
E	Section Girls Hockey: Roseville vs. Tartan	1	V
E	Section Girls Soccer: Coon Rapids vs. Irondale	1	O
E	Section Softball: Irondale vs. Spring Lake Park	1	O
E	Section Softball: Irondale vs. Totino Grace	1	S
E	Section Softball: St. Anthony vs. St. Paul Johnson	1	V
E	Section Volleyball: Irondale vs. Mahtomedi	1	O
E	Section Volleyball: Roseville vs. Mounds View	1	V
E	Section Volleyball: Roseville vs. Stillwater	1	V
E	Section Volleyball: Roseville vs. Totino Grace	1	V
E	Softball: Irondale vs. Coon Rapids	1	O
E	Softball: Irondale vs. Maple Grove	1	S
E	Softball: Roseville vs. Cretin DH	1	V
E	Softball: Roseville vs. Mounds View	1	V

E	Softball: Roseville vs. Stillwater	1	V
E	Softball: St. Anthony vs. Columbia Heights	1	V
E	Softball: TotinoGrace vs. Maple Grove	1	O
E	State Boys Basketball: Roseville vs. Shakopee	1	V
E	State Girls Soccer: Mounds View vs. Centennial	1	O
E	Volleyball: Andover vs. Irondale	1	O
E	Volleyball: Fridley vs. St. Anthony	1	V
E	Volleyball: Irondale vs. Coon Rapids	1	O
E	Volleyball: Roseville vs. Forest Lake	1	V
E	Volleyball: Roseville vs. Mpls Southwest	1	V
E	Volleyball: Roseville vs. Rosemount	1	V
E	Volleyball: Roseville vs. Stillwater	1	V
E	Volleyball: St. Anthony vs. Brooklyn Center	1	V
E	Volleyball: St. Anthony vs. Columbia Heights	1	V
E	Volleyball: Totino Grace vs. Osseo	1	O
E	Volleyball: White Bear Lake vs. Concordia Academy	1	O
E	Wrestling: Roseville vs. Park CG	1	V
E	Wrestling: TotinoGrace vs. Maple Grove	1	O

## YOUTH MEDIA

E	A Bad Day of Monster	1	V
E	Bullying	1	V
E	Cellists of Minnesota	1	V
E	CreaTV episode 5	1	V
E	CTV In Studio:Ryan Evans - White Spider	1	V
E	CTV In-Studio Elizabeth Bishop	1	V
E	CTV Tours Promo (Teen/Youth)	1	V
E	Deadringer Trailer	1	V
E	Disco Dance Party- Cub Scout Pack 419 (Teen/Youth)	1	V
E	East Side Documentary	1	V



E	Ego Death	4	V
E	GGAL	3	V
E	I Made the Earth to Shelter You	1	V
E	Kayode's Skateboard Documentary	1	V
E	Me & I	1	V
E	Military Teen Summit Promo	1	V
E	MN Weather PSA	1	V
E	Neighborhood Game Show	1	V
E	OSFNA 2015	1	V
E	Pack 167 Visits CTV 1:53	1	V
E	Quest for college Recruitment Promo	1	V
E	Retrovirus-Nick Henry	1	V
E	Summer Promo (Teen/Youth)	1	V
E	TCYMN Illuminate! 2015 Showcase Promo (Teen/Youth)	1	V
E	TCYMN Show	12	V
E	The Emperor of Ice Cream	1	V
E	The Normal-ish Cooking Show	1	V
E	The Tuesday Interviews (Youth/Teen)	1	V
E	The Wednesday Interviews (Youth/Teen)	1	V
E	The Worst Short Films Ever Competition 2015	1	V
E	Toothed Mammals vs. Finger Snots	1	V
E	Transition Plus Tour (Teen/Youth)	1	V
E	Troop 53102	1	V
E	Waite House News (Teen/Youth)	1	V
E	YL Promo	1	V

218

**Staff Produced 27**  
**Volunteer Produced 152**

<b>Outside Produced</b>	<b>39</b>
<b>Education Total</b>	<b>218</b>

<b>P/E/G</b>	<b>Government</b>	<b>Episodes</b>	<b>S/V/O</b>
G	A Tale of the Cities	28	V
G	AH City Tour Video	1	S
G	AH Clean Up Days Promo	1	S
G	AH Fall Clean Up	1	S
G	AH Fall Clean Up Promo	1	S
G	AH Lexington Station Promo	1	S
G	AH State of the City	1	S
G	Candidates Speak Out	5	S
G	Conversation with the Mayor	2	V
G	Election Results 2015	1	S
G	Electronics Recycling Tech Dump FH/LD	1	S
G	Falcon Heights Curtiss Playground Build	1	S
G	Falcon Heights Fire Dept Open House 2015	1	S
G	Falcon Heights Ice Cream Social 2015	1	S
G	FH Winterfest 2015	1	S
G	FH/LD 5K Fun Run 2015	1	S
G	FH/LD Winter Carnival Presentation	1	S
G	FH/LD/SA Sustainability Fair	1	S
G	FH/LD/SA Sustainability Fair 2015 Promo	1	S
G	Fourth of July at Central Park	1	V
G	Lauderdale 50th Anniversary Video Conversations	1	S
G	Lauderdale Citywide Garage Sale	1	S
G	Lauderdale Day in the Park 2015	1	S
G	Lauderdale DIP/RV Puppet Show 2015	1	S
G	Lauderdale Farmers Market	1	S
G	Lauderdale Farmers Market Promo	1	S
G	Lauderdale Halloween Party 2015	1	S
G	LC Arbor Day	1	S

G	LC Button Contest Winner	1	S
G	LC Public Works Facility Dedication	1	S
G	LCCC Mtg	1	S
G	LCFD Booya Sale	1	S
G	LCRA Ice Fishing Tourney	1	S
G	LCRA Ice Skating Party	1	S
G	Little Canada Parade 8-2-2015	1	V
G	Mounds View Bel Rae Opening	1	S
G	Mounds View Car show	1	V
G	Mounds View Community Center Fall Festival 2015	1	S
G	Mounds View Cookies with Santa	1	S
G	Mounds View Fall Family Fun Festival	1	S
G	Mounds View Festival Bike Race	1	S
G	Mounds View Festival in the Park 2015	1	S
G	Mounds View Festival in the Park 5k Promo	3	S
G	Mounds View Festival in the Park Parade 2015	1	V
G	Mounds View National Night Out Promo	1	V
G	Mounds View Today	3	V
G	Music in the Park	2	V
G	MV Citizen of the Year Nominations	1	V
G	MV Cookies with Santa 2015 promo	1	V
G	MV SBM Fire Santa parade	1	S
G	MV Volunteer Coach of the Year Nominations	1	V
G	MVCC Spring Dance Recital	1	S
G	MVCT Crazy for You Promo	1	S
G	NB/MV Rotary Easter Egg Hunt	1	S
G	New Brighton 2015 Stockyard Days Parade LIVE	1	V
G	New Brighton Bridge Construction Video	1	S
G	New Brighton Coronation 2015	1	V

G	New Brighton Now	25	V
G	New Brighton Stockyard Parade 2015	1	V
G	North Oaks Festival & Parade	1	S
G	Radon Safety in Your Home	1	V
G	RamCo Officer Memorial Ceremony 2015	1	S
G	Ramsey County Community Forum 2015	1	S
G	Ramsey County Sheriff's Medicine Drop	1	O
G	Rosefest Parade	1	V
G	Roseville Alzheimer/Dementia Video	1	S
G	Roseville Family Night Out	1	S
G	Roseville Night 2 Unite	1	S
G	Roseville Night to Unite 2015	1	S
G	Roseville Oval Time Lapse	1	S
G	Roseville OVALumination	1	S
G	Roseville Police Dept Behind the Badge #1	1	S
G	Roseville Rosefest Promo :50	1	S
G	Roseville State of the City	1	S
G	Roseville Taste of Rosefest	1	S
G	St. Anthony Candy Cane Hunt	1	S
G	St. Anthony Chamber Holiday Lights Contest	1	S
G	St. Anthony Field Trip Art Fair 2015	1	S
G	St. Anthony Much Ado About Nothing	1	S
G	St. Anthony Silverwood Art Festival 2015	1	S
G	St. Anthony Silverwood Gallery Art Video	1	S
G	St. Anthony Silverwood Park Egg Hunt	1	S
G	St. Anthony VillageFest Parade 7-31-2015	1	V
G	Sustainability Fair LD/FH/SA	1	S
G	Winter Problems for Fire Departments	1	V

Staff Produced	70
Volunteer Produced	75
Outside Produced	1
<b>Government Total</b>	<b>146</b>

**ADDENDUM TO THE  
2013 COMMUNITY NEEDS ASCERTAINMENT REPORT**

**NORTH SUBURBAN COMMUNICATIONS COMMISSION  
(Arden Hills, Falcon Heights, Lauderdale, Little Canada,  
Mounds View, New Brighton, North Oaks, Roseville,  
and St. Anthony, Minnesota)**

**November 17, 2015**

**Prepared by**

**THE BUSKE GROUP  
4808 T STREET  
SACRAMENTO, CA 95819  
(916) 441-6277**

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## APPENDICES

1. 2015 On-Line Survey Questionnaire
  - 1a. Questionnaire Open-Ended Responses: Comments about Comcast
  - 1b. Questionnaire Open-Ended Responses: Comments about CTV North Suburbs
2. 2015 Telephone Survey Report
3. 2015 CTV North Suburbs Video Facility Inventory
4. 2015 Updated CTV North Suburbs Equipment Replacement/Upgrade Packages



# **ADDENDUM TO THE COMMUNITY NEEDS ASCERTAINMENT**

## **NORTH SUBURBAN COMMUNICATIONS COMMISSION**

### **I. INTRODUCTION AND OVERVIEW**

The Buske Group was asked by the North Suburban Communications Commission (“NSCC”) -- a nine-city municipal joint powers consortium consisting of the Cities of Arden Hills, Falcon Heights, Lauderdale, Little Canada, Mounds View, New Brighton, North Oaks, Roseville, and St. Anthony, Minnesota (the “NSCC franchise area”) -- to prepare this Addendum to the Community Needs Ascertainment report that it submitted to the NSCC on July 15, 2013. The Buske Group was authorized to conduct the following research activities for this Addendum:

- Prepare and conduct an on-line survey to obtain up-to-date information about community needs and interests related to cable TV in the nine cities served by NSCC and CTV North Suburbs.
- Conduct a telephone survey of Comcast cable subscribers in the NSCC franchise area to obtain up-to-date information regarding the company’s service packages, customer service, and related matters; PEG Access awareness and viewership; and the importance of local PEG Access programming.
- Prepare updated recommendations regarding the PEG Access equipment packages, taking into consideration the equipment purchases made by CTV North Suburbs since The Buske Group evaluated its inventory and made the recommendations included in the July 15, 2013 Community Needs Ascertainment.

## II. ON-LINE SURVEY

The Buske Group prepared an on-line survey questionnaire, based upon the one that was used for the focus group/on-line survey in September-October, 2011. The 2015 on-line survey was conducted from October 5-31. Three hundred ninety-seven (397) people completed the survey, significantly more than the one hundred fifty-five (155) that responded to the 2011 survey.

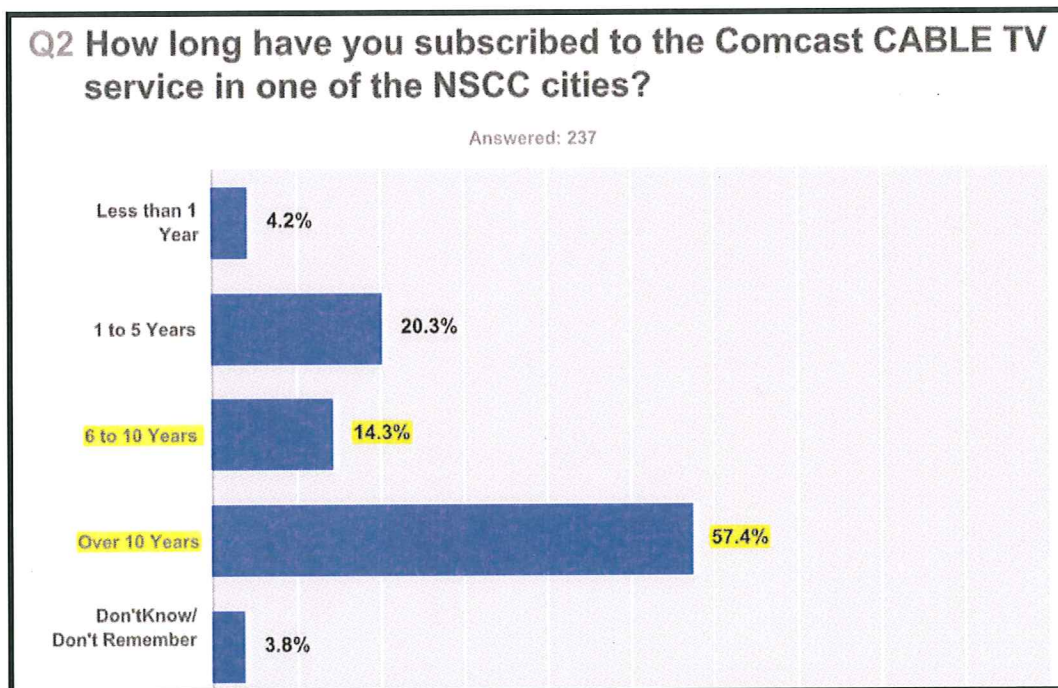
A list of the 36 organizational and institutional affiliations represented by the on-line survey respondents is provided below and on the following page. (Many of them did not indicate an organizational or institutional affiliation, and some of the organizations listed were identified by more than one participant.)

- Abbott Northwestern Hospital
- "Around Town" TV & Around Town Media, LLC
- Arthur's Residential Care
- Autism Works
- Bethel University
- Business - FIC
- City of Falcon Heights
- City of St. Anthony
- Fosston Townhomes
- Gausman & Moore Associates, Inc.
- Hamline University
- Hip Hope
- Kahler
- Kinyon Properties (Rental Twin Homes on Raymond Ave.)
- Mat Talk Online
- Metro State U
- Minnesota Organization on Fetal Alcohol Syndrome
- Minnesota State Horticultural Society
- Mounds View City Council
- Mounds View High School
- Mounds View Schools
- Ms.
- New Brighton City Council
- OneEyedHog

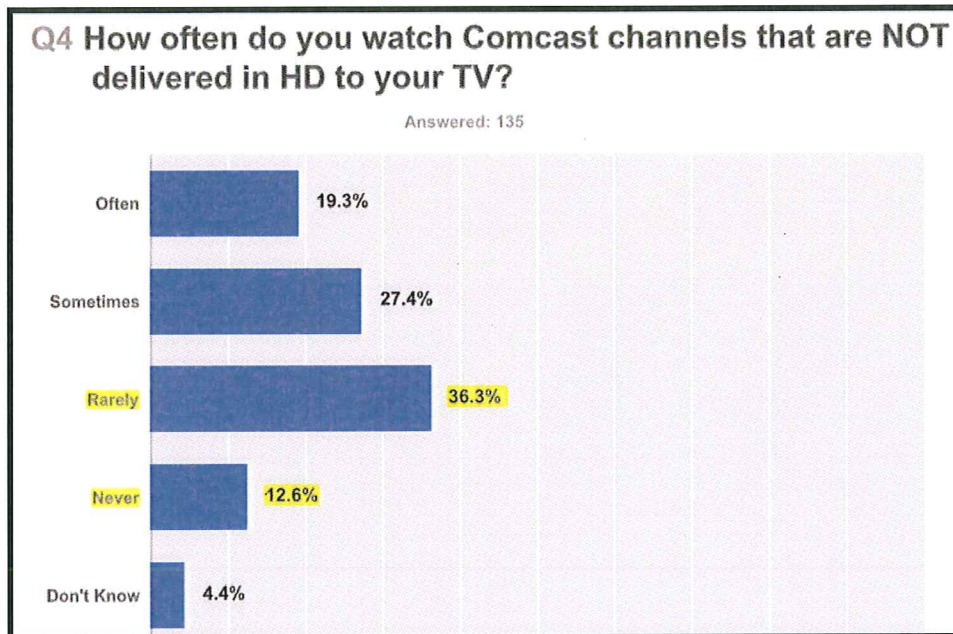
## Organizational Affiliations of Focus Group/On-Line Survey Participants (continued)

- RCBC
- Realife of Mounds View
- Roseville Area Schools / 623 Productions
- Roseville Big Band
- Roseville Rotary
- Roseville Schools
- Roseville String Ensemble
- Saltar Solutions
- Small Business Growth Alliance
- St. Jude Medical
- Twin Cities North Chamber of Commerce
- University of Northwestern

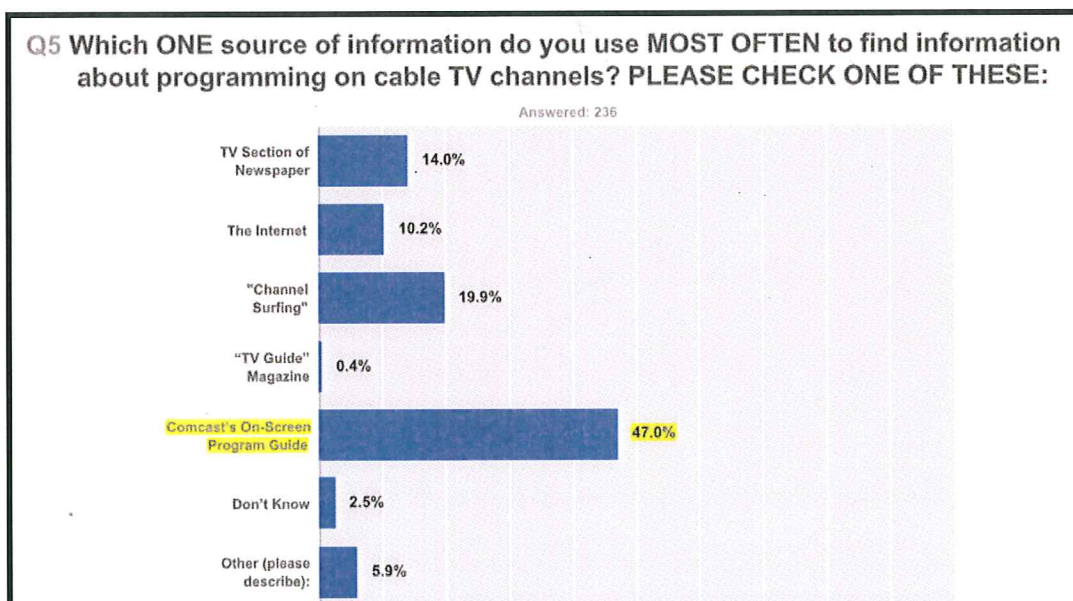
Over half (59.7%) of the online survey respondents said they subscribe to the Comcast cable TV service in one of the NSCC cities. Of these subscribers, 71.7% said they have been Comcast customers for more than five years.



Of the Comcast cable TV subscribers, 56.8% (up from 45% in the 2011 survey) indicated that they pay extra to receive Comcast's high definition ("HD") channels. These HD customers were asked to indicate how often they watch Comcast channels that are not delivered in HD. As illustrated below, nearly half (48.9%) answered "rarely" or "never."

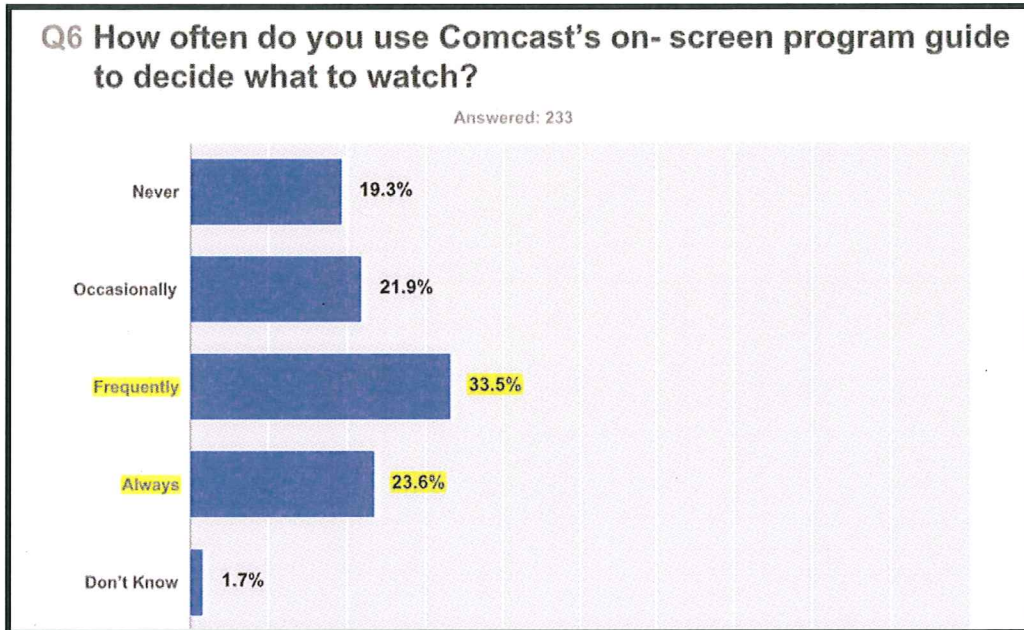


The Comcast subscribers were asked to indicate which one source they used most often to find information about programming on cable TV. The most frequently used source (47%, up from 44.2% in 2011) was Comcast's on-screen program guide, as shown below.





Over half (56.1%, up from 49.4% in 2011) of the Comcast subscribers said they use Comcast's on-screen program guide "frequently" or "always" to decide what to watch.

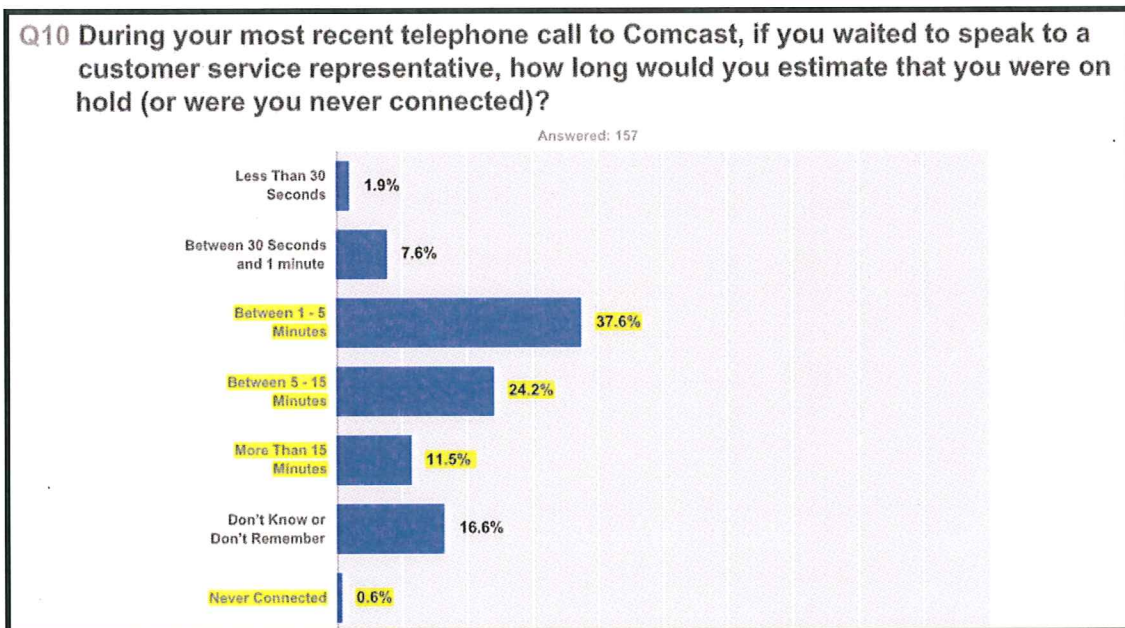


The Comcast subscribers were then asked to indicate their level of satisfaction with Comcast's service in 10 different areas. The chart on the next page displays their responses. The highest-rated items are the *quality of the picture and sound* (rated "Very Good" or "Good" by about 82% of these respondents, up from 79% in 2011) and the *reliability of the Comcast cable TV service* (rated "Very Good" or "Good" by about 68%, a drop from 79% in 2011). The lowest-rated item is the *rates charged by Comcast for cable TV service* (rated "Very Poor" or "Poor" by 63%, up from 52.7% in 2011). Other items for which there were notable increases in the "Very Poor" or "Poor" responses as compared to the 2011 online survey included: *ability to quickly speak to a customer service representative* (37%, up from 15.7% in 2011); *ease of getting services installed or changed by Comcast* (28.6%, up from 13.3% in 2011); and *helpfulness of customer service representatives* (26.2%, up from 18.5% in 2011).

**Q7 Please indicate your level of satisfaction with Comcast's CABLE TV service (NOT telephone or Internet service) in the following areas. If you don't know or the item is not applicable ("N/A") to you, just indicate that.**

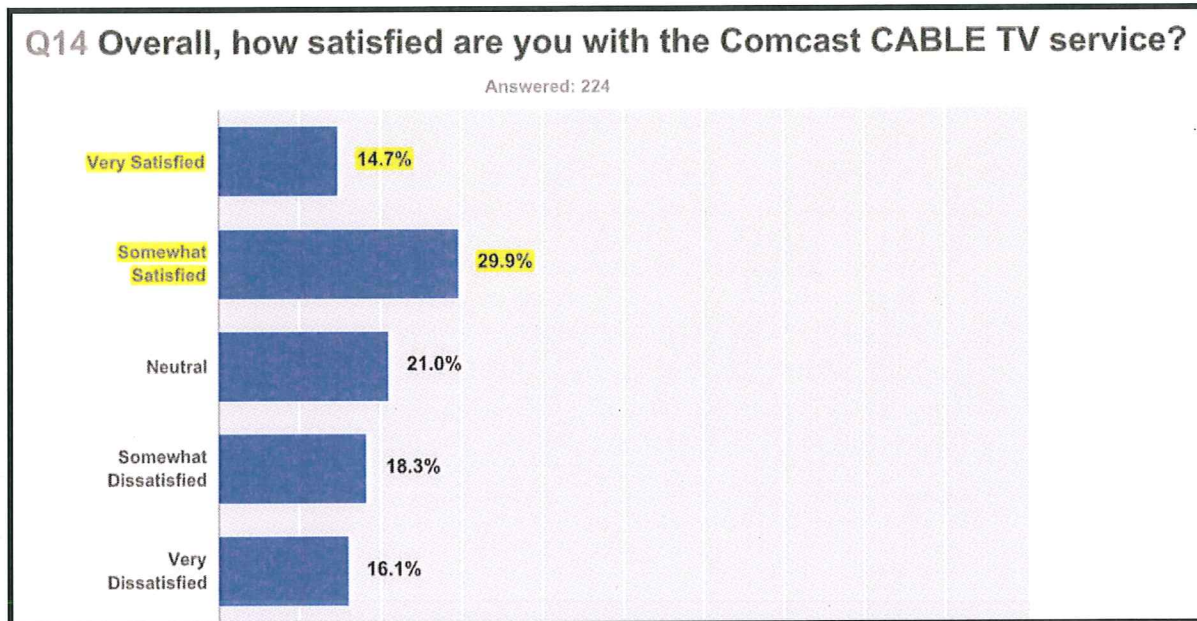
	VERY GOOD	GOOD	FAIR	POOR	VERY POOR	DON'T KNOW	Total
Quality of the picture and sound	34.2% 76	47.7% 106	13.5% 30	0.9% 2	2.3% 5	1.4% 3	222
Reliability of the Comcast cable TV service	24.3% 54	43.2% 96	20.7% 46	7.2% 16	3.2% 7	1.4% 3	222
Number & variety of channels offered	26.5% 59	38.6% 86	22.4% 50	6.7% 15	2.7% 6	3.1% 7	223
The rates charged by Comcast for CABLE TV service	3.7% 8	7.3% 16	24.7% 54	28.8% 63	34.2% 75	1.4% 3	219
Considering how much it costs and the quality of service you receive, the overall value of your cable TV service	4.1% 9	19.4% 43	33.3% 74	25.7% 57	16.7% 37	0.9% 2	222
Ability to quickly speak to a customer service representative when you call Comcast	8.1% 17	21.0% 44	31.0% 65	20.0% 42	17.1% 36	2.9% 6	210
Helpfulness of Comcast's customer service representatives	10.5% 22	29.5% 62	31.0% 65	16.2% 34	10.0% 21	2.9% 6	210
Ease of getting services installed or changed by Comcast	11.2% 22	22.4% 44	30.1% 59	14.3% 28	14.3% 28	7.7% 15	196
Comcast's ability to quickly get problems repaired or resolved	7.3% 15	26.7% 55	29.6% 61	17.5% 36	13.1% 27	5.8% 12	206
Ability of Comcast to respond to a service call within the promised time period	14.7% 28	34.7% 66	26.3% 50	8.4% 16	6.8% 13	8.9% 17	190

Subscribers were asked if they had tried to contact Comcast by telephone during the past year – about 78% said “Yes.” Of those who waited to speak to a customer service representative, 73.9% said they were on hold for one minute or more, or were never connected, as illustrated below.





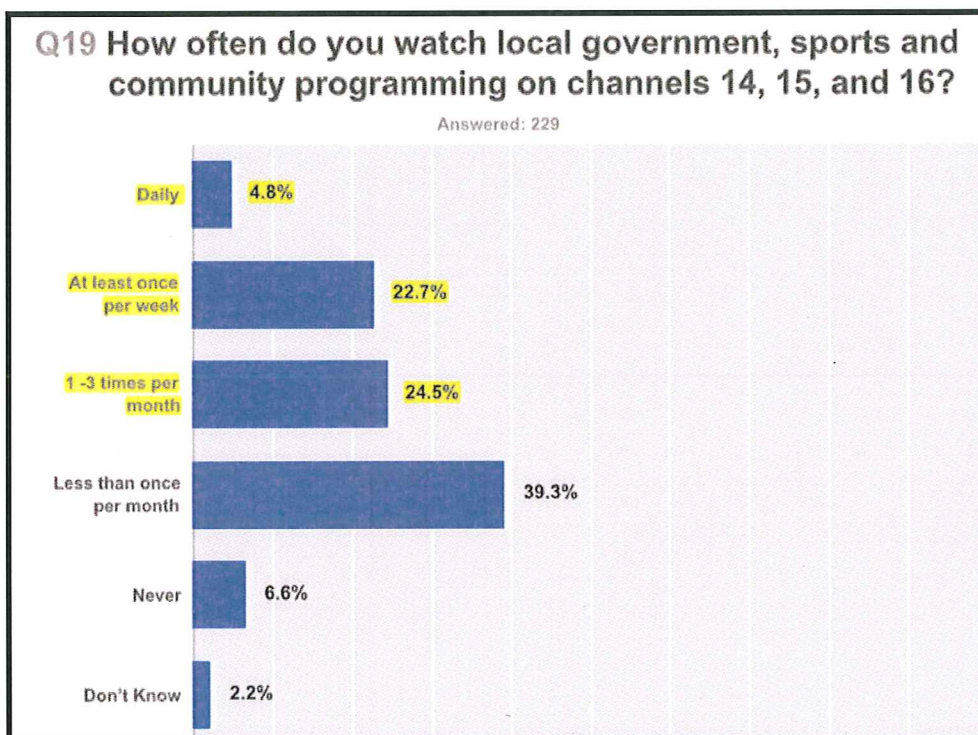
The Comcast subscribers were asked to indicate how satisfied they were with the Comcast cable TV service, overall. As illustrated below, 44.6% (down from 56% in 2011) indicated that they were “Very Satisfied” or “Somewhat Satisfied.”



The respondents could also provide any open-ended comments about the Comcast cable TV service, all of which are provided in Appendix 1a to this Addendum report. Negative comments outnumbered positive/neutral comments by four to one (five to one in 2011). Once again, common criticisms included too high rates and the lack of an a la carte option.

The online survey respondents who do not subscribe (or have never subscribed) to the Comcast cable TV service in the NSCC franchise area were asked to indicate the reasons why they do not subscribe. Of those who previously subscribed, the most frequently indicated reason was “Comcast’s cable TV service is too expensive,” followed by “I can watch programs that are delivered through the Internet” and “Comcast’s customer service was poor.” Of those who had never subscribed to the Comcast cable TV service, the most frequently indicated reasons were “Comcast’s cable TV service is too expensive” and “I can watch programs that are delivered through the Internet,” followed by “I’m not interested – I don’t watch TV enough to make it worthwhile.”

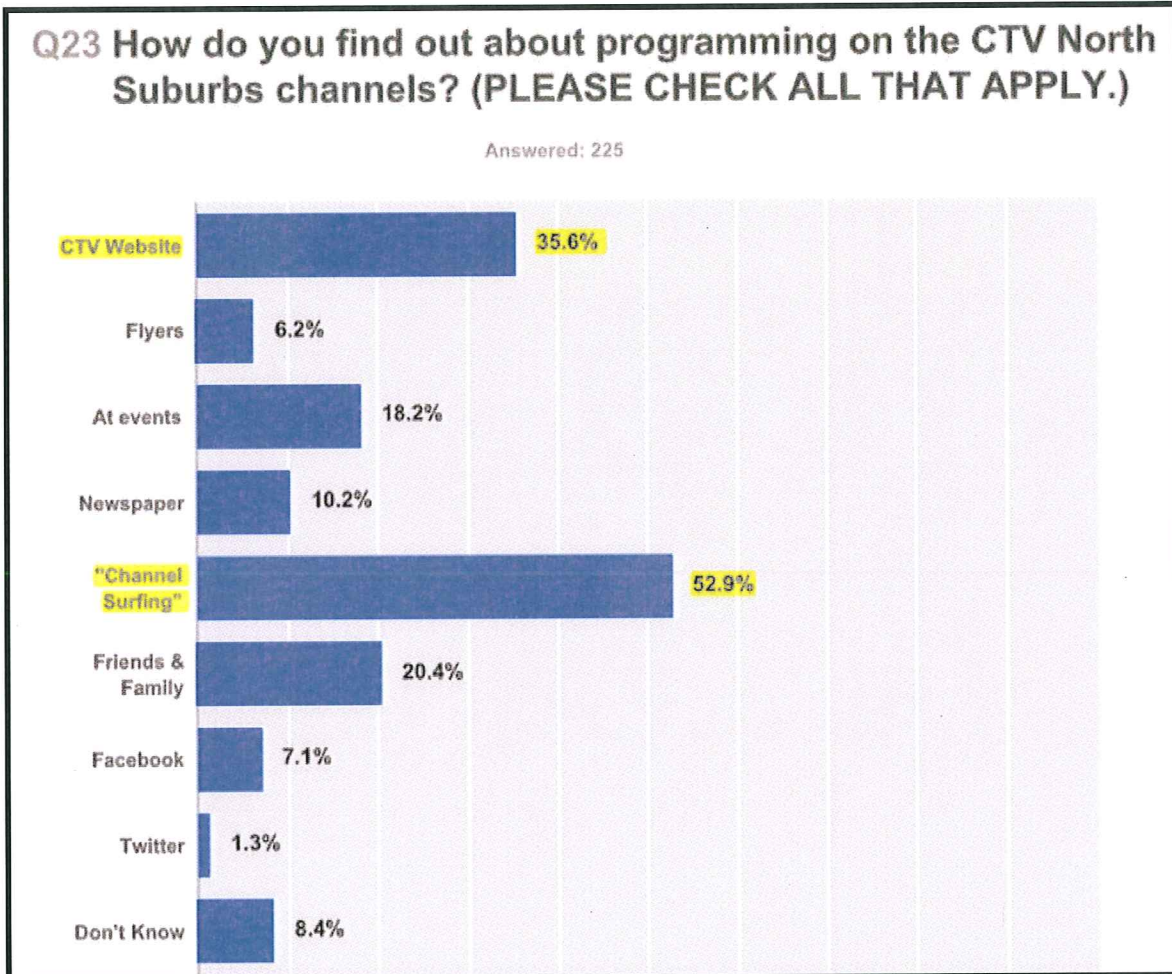
Next, all respondents (including Comcast subscribers and non-subscribers) were asked if they had ever watched programming on one of the channels delivered by CTV North Suburbs (i.e., local sports, community and city programming on channels 14, 15, and 16; local educational programming on channels 18 and 20; local government programming on channel 19; non-local programming on channel 21; and NASA TV on channel 98). 69.5% of them answered that they had watched a CTV North Suburbs channel. Of those who had ever watched a CTV North Suburbs channel, over half (52%) said they watched programming on channels 14, 15 and 16 at least once per month, as illustrated below:



In response to similar questions, 29.5% said they watched programming on channels 18, 19 and 20 at least once per month; 17.9% said they watched programming on channel 21 at least once per month; and 15% said they watched programming on channel 98 at least once per month.

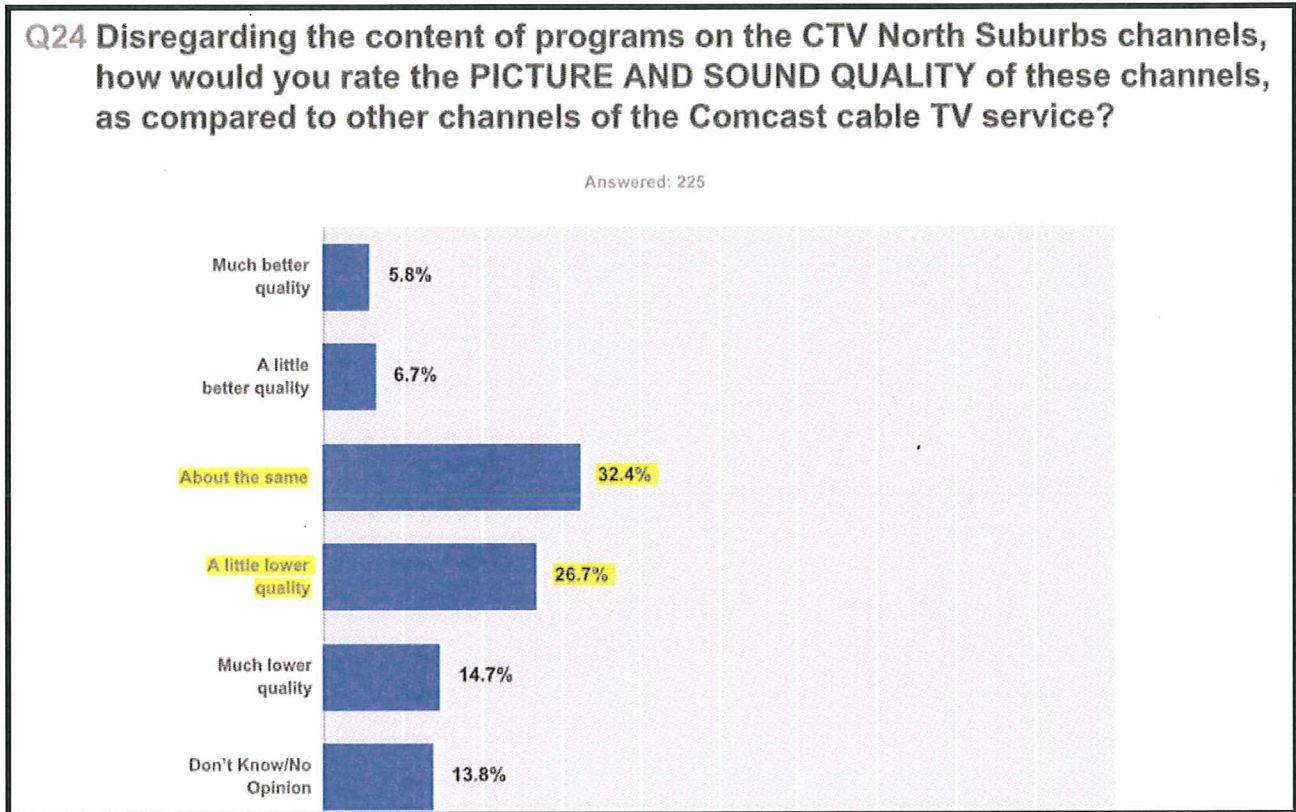


The on-line survey respondents who had watched a channel delivered by CTV North Suburbs were then asked how they found out about the programming on these channels.<sup>1</sup> As illustrated below, the most frequent method was “channel surfing,” followed by the “CTV North Suburbs website.”



<sup>1</sup> NOTE: Prior to September 21, 2015, Comcast did not provide information about the programming shown on any of the channels delivered by CTV North Suburbs on its on-screen program guide, which was indicated as the most frequently used source of cable programming information by the survey/questionnaire respondents.

The respondents who had watched programming on a channel delivered by CTV North Suburbs were then asked, disregarding the content of programs on these channels, to rate the picture and sound quality of these channels, as compared to the other channels of Comcast's cable TV service. As illustrated below, about three-fifths of them answered "about the same" (32.4%) or "a little lower quality" (26.7%).



Respondents who had watched a channel delivered by CTV North Suburbs were provided a list of programs that appear on these channels and were asked to indicate how many times they had watched them. The chart below display their responses, and shows that most often mentioned as being watched at least once per month were: (1) “City Council Meetings” [32.2%], (2) “Local Sports (football, baseball, hockey, etc.)” [31.6%], (3) “Tale of Our Cities” [21.7%], and (4) “North Suburban Beat” [21.1%].

**Q25 Please indicate if you have ever watched any of the following programs that are regularly shown on a CTV North Suburbs channel and how regularly you have watched them.**

	NEVER	LESS THAN MONTHLY	1-3 TIMES PER MONTH	AT LEAST WEEKLY	DON'T KNOW	Total
City Council Meetings	22.6% 47	44.2% 92	25.5% 53	6.7% 14	1.0% 2	208
Ramsay County Board Meetings	62.0% 116	25.7% 48	9.6% 18	0.5% 1	2.1% 4	187
Tale of Our Cities	52.3% 101	24.9% 48	15.5% 30	6.2% 12	1.0% 2	193
Local Sports (football, baseball, hockey, etc.)	26.5% 52	40.3% 79	17.3% 34	14.3% 28	1.5% 3	196
Disability Viewpoints	69.4% 129	15.1% 28	8.1% 15	3.2% 6	4.3% 8	186
North Suburban Beat	49.7% 97	26.7% 52	14.4% 28	6.7% 13	2.6% 5	195
NET Lifeline Mass	79.2% 145	8.7% 16	6.0% 11	1.6% 3	4.4% 8	183
WWA Talk Show	81.8% 153	5.3% 10	5.9% 11	0.5% 1	6.4% 12	187
Education Conversations (from MN Dept. of Education)	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0
School Board Meetings	45.5% 90	37.4% 74	13.1% 26	2.0% 4	2.0% 4	198
Democracy Now!	73.9% 139	9.0% 17	11.7% 22	3.2% 6	2.1% 4	188
In The Fight	83.1% 152	5.5% 10	3.8% 7	1.1% 2	6.6% 12	183

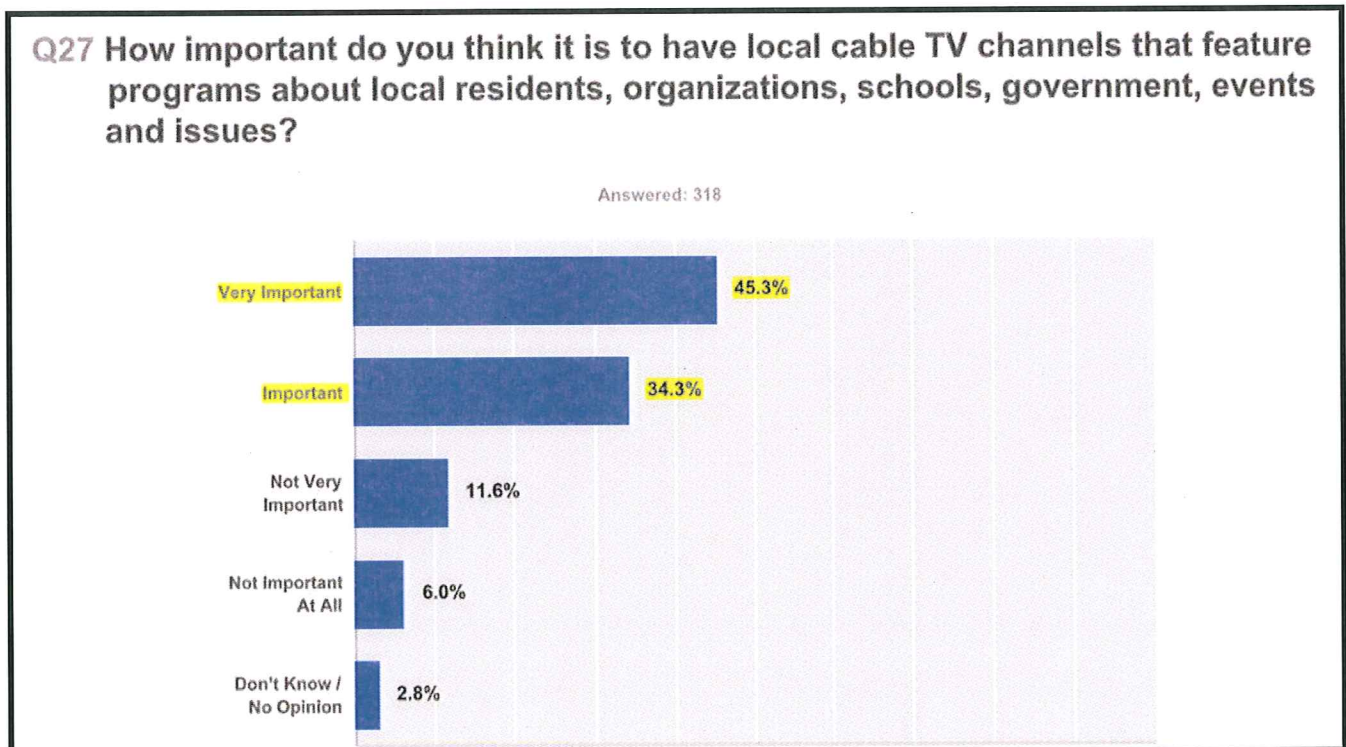


Respondents who had watched programming on a channel delivered by CTV North Suburbs were asked to indicate their opinion of four statements about the CTV North Suburbs channels. As illustrated below, 63% to 83% of them “strongly agreed” or “agreed” with each statement.

**Q26 Please indicate your opinion of the following statements about the CTV North Suburbs channels:**

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE	Total
Provides programming that deals with local issues	34.1% 74	49.3% 107	15.2% 33	1.4% 3	0.0% 0	217
Provides programming that publicizes local services	29.5% 64	45.2% 98	22.1% 48	3.2% 7	0.0% 0	217
Provides programming with diverse points of view	25.1% 54	38.1% 82	33.5% 72	3.3% 7	0.0% 0	215
Provides a valuable public service	44.0% 96	36.2% 79	17.0% 37	2.3% 5	0.5% 1	218

Next, all on-line survey respondents (cable subscribers and non-subscribers) were asked how important they think it is to have local cable TV channels that feature programs about local residents, organizations, schools, government, events and issues. As illustrated below, about 80% of them said that these channels are “Very Important” (45.3%) or “Important” (34.3%).



All on-line survey respondents were then asked if they had ever provided or helped to produce a program to show on a CTV North Suburbs channel, or appeared as a guest on a program shown on a CTV North Suburbs channel. One-third (33.1% -- 120 of the respondents) answered "Yes".

The following series of questions were asked of the 120 respondents who said that they had helped to produce or appeared as a guest on a program to show on a channel delivered by CTV North Suburbs.

- How would you describe the typical condition of the CTV North Suburbs equipment when you have used it?  
"Excellent" = 33%; "Good" = 57.7%
- Does the quantity and technical capability of the CTV North Suburbs equipment currently meet your needs?  
"Yes" = 84.5%

Finally, all on-line survey respondents were invited to provide any other comments about CTV North Suburbs, all of which are provided in Appendix 1b to this report. Positive/neutral comments outnumbered negative comments by about four to one.

### III. TELEPHONE SURVEY OF CABLE SUBSCRIBERS

During the period from October 19-28, 2015, Group W Communications conducted a telephone survey of 400 Comcast cable subscribers in the NSCC franchise area, drawn at random from active residential and cellular telephone numbers. The telephone survey questionnaire was similar to the one used by Group W for the September 21 - October 1, 2011 survey that it conducted. This telephone survey again included questions regarding aspects of Comcast's cable TV service and related matters, as well as awareness and viewership of the CTV North Suburbs channels and the importance of local PEG Access programming. Following are the primary findings of the survey.

The ratings given by the 2015 telephone survey respondents regarding several quality and service measures are very similar to those given to these items by the respondents to the 2011 telephone survey. Almost 90% rated the *reliability of Comcast's cable TV service* and the *quality of the picture and sound* as "good" or "very good." Over 70% of the respondents rated the *number & variety of channels offered* and the *helpfulness of Comcast's customer service representatives* as "good" or "very good." About two-thirds of them rated the *ability of Comcast to respond to a service call within the promised time period* as "good" or "very good." Over half rated the *ability to quickly speak to a customer service representative when you call Comcast*, the *ease of getting services installed or changed by Comcast*, and *Comcast's ability to quickly get problems repaired or resolved* as "good" or "very good." The items that received low ratings were the *rates charged by Comcast for cable TV service*, which was rated as "good" or "very good" by only 14.8% of the respondents (38.6% rated this item as "poor" or "very poor"), and the *overall value of your cable TV service, considering how much it costs and the quality of service you receive*, which was rated as "good" or "very good" by 38.3%.

- Overall, 68.3% of the telephone survey respondents said they are very or somewhat satisfied with their cable TV service (down from 73.1% in the 2011 survey).
- 41% of all cable subscribers (up from 36% in the 2011 telephone survey) pay extra to receive Comcast's high definition channels. This year's survey asked the HD subscribers how often they watch channels that are not delivered in HD. *Nearly half said they rarely (31.1%) or never (15.9%) watch the non-HD channels.*

- 50.5% of all cable subscribers (up from 45.3% in the 2011 telephone survey) say they *most often use Comcast's on-screen guide to find programming information, far more than any other method.*
- Nearly half (47.3%) of all cable subscribers have *watched a program on a CTV North Suburbs channel* (as compared to 49.5% in 2011). Of these viewers:
  - \* 52.4% (up from 46% in 2011) said they watched local sports, community and city programming on channels 14, 15 or 16 at least once a month (25.9% said they watch at least once a week).
  - \* 23.3% said they watched educational channels 18 or 20 at least once a month (7.9% said they watch at least once a week).
  - \* 40.7% said they watched local government programming on channel 19 at least once a month (19% said they watch at least once a week).
  - \* 8.5% (up from 5.7% in 2011) said they watched non-local programming on channel 21 at least once a month (3.2% said they watch at least once a week).
  - \* 12.2% (up from 12.1% in 2011) said they watched NASA TV on channel 98 at least once a month (3.7% said they watch at least once a week).
  - \* 84.7% (down from 86.9% in 2011) have watched City Council meetings (37% said at least monthly);  
64.1% (up from 57.1% in 2011) have watched local sports (29.6% said at least monthly);  
38.6 (up from 37.9% in 2011) have watched School Board meetings (4.2% said at least monthly); and  
37.6% (up from 26.8% in 2011) have watched "North Suburban Beat" (13.8% said at least monthly).
  - \* 45% (up from 37% in 2011) say the picture and sound quality on the CTV North Suburbs channels is equal to the picture and sound quality for the other channels of the cable system.
  - \* 72.5% (up from 59% in 2011) gave grades of "A" or "B" regarding how well CTV North Suburbs *"provides a valuable community service"* and 61.9% (up from 57.6% in 2011) gave grades of "A" or "B" to *"provides programming that deals with local issues."*
- As was the case in 2011, a very large majority (69.8%) of all telephone survey respondents said it is "important" or "very important" to have local cable TV channels that feature programs about area residents, organizations, schools, government, events and issues.

A complete analysis of the responses to the telephone survey, prepared by Group W Communications and The Buske Group, is included in Appendix 2 to this Addendum report.

#### IV. PEG ACCESS EQUIPMENT RECOMMENDATIONS

The findings and recommendations regarding the PEG Access equipment packages that were indicated in the 2013 Community Needs Ascertainment report were based upon: (1) our August 2011 inspection of the PEG Access facilities and equipment in the franchise area; and (2) the Video Facility Inventory forms completed by the CTV North Suburbs staff (as updated in April 2013). The 2013 report stated that “*CTV should upgrade much of its field production, editing, studio, master control, and the member cities’ Council Chambers equipment, based upon the observed age, condition, and limited functionality of the equipment. All PEG Access equipment should be able to record and transmit programs in both standard and high definition formats.*” The 2013 report also included a detailed set of equipment packages to address these needs, based upon the equipment inventories at that time.

The Buske Group was asked by the NSCC to prepare updated recommendations regarding the PEG Access equipment packages, taking into consideration the equipment purchases made by CTV North Suburbs and other developments since the 2013 Community Needs Ascertainment report was submitted. The major purchases included: (1) new cameras, tripods, production switcher, replay unit, audio mixer, and internal distribution equipment in one of the two production trucks; (2) new cameras, controllers and mounts for the Roseville City Council Chambers; and (3) new complete audio/video production package for the Little Canada City Council Chambers.

In October 2015, updated Video Facility Inventory forms (Appendix 3 to this Addendum report) were provided to The Buske Group by the CTV North Suburbs staff. After reviewing the updated inventories and having follow-up discussions with staff, we prepared an updated set of equipment replacement/upgrade packages (as shown in Appendix 4). The equipment replacement/upgrade packages in Appendix 4 reflect the impact of: (1) the recent equipment purchases by CTV North Suburbs; (2) the departure of the City of Shoreview from the NSCC (thereby removing the upgrade of an audio/video production package for that City’s council chambers); and (3) input from CTV North Suburbs staff regarding the current needs at the CTV facility and each City Hall location.



The factors described above resulted in an estimated cost for the equipment replacement/upgrade packages of approximately \$10,000,000 over the 10-year franchise term. This estimate is \$2,000,000 less than the amount indicated as the total cost for the equipment replacement/upgrade packages in the 2013 Community Needs Ascertainment report.

As stated in the 2013 Community Needs Ascertainment report, since media equipment is evolving very rapidly, the items identified in Appendix 4 are examples of what could currently satisfy the identified equipment needs, and are not intended to be specific items to be purchased.

## V. SUMMARY OF FINDINGS

The tasks conducted by The Buske Group for this Addendum to the 2013 Community Needs Ascertainment report yielded very useful, updated information about community needs and interests in the NSCC franchise area. Responses to both the on-line survey and the telephone survey, each of which were conducted during October 2015, were quite similar to the responses in the 2011 surveys, with a few interesting differences. In addition, while the vast majority of the aging PEG Access facilities and equipment in the franchise area has continued to be used (despite the fact that many items in the updated inventory are now 15-25 years old), much-needed upgrades have occurred for a few of the equipment packages. Therefore, *we believe that the recommendations outlined in the 2013 Community Needs Ascertainment report continue to apply, and in many cases have been strengthened by the findings from the tasks described in this Addendum to that report.*

### A. On-Line Survey.

Significantly more people (397) responded to the 2015 on-line survey, as compared to 155 respondents to the 2011 survey. Below are several findings from the 2015 on-line survey:

- Of the 237 respondents who are Comcast cable TV subscribers, 56.8% (up from 45% in the 2011 survey) indicated that they pay extra to receive Comcast's HD channels. Importantly, we learned that *almost half (48.9%) of Comcast's HD subscribers said that they rarely or never watch channels that are not in HD.*
- When all Comcast cable TV subscribers were asked to indicate the one source they used most often to find information about programming on cable TV, *most frequently mentioned was Comcast's on-screen program guide (47%, up from 44.2% in 2011).*
- When the Comcast subscribers were asked to indicate their level of satisfaction with Comcast's service in many areas, several items were ranked significantly lower than they were in the 2011 survey. The highest rated item was the *quality of the picture and sound*, and the lowest-rated item was the *rates charged by Comcast for cable TV service*. These were also the highest and lowest rated items in the 2011 survey.

- Overall, 44.6% of Comcast subscribers (down from 56% in 2011) indicated that they were “very satisfied” or “somewhat satisfied” with Comcast’s cable TV service.
- Of the subscribers who had tried to contact Comcast by telephone during the past year and waited to speak to a customer service representative, 73.9% said they were on hold for one minute or more, or were never connected.
- All on-line survey respondents were invited to provide comments about their Comcast cable TV service. Of the nearly 140 respondents who replied to this invitation, negative comments outnumbered positive/neutral comments by nearly four to one. As in the 2011 survey, common criticisms included too high fees and no a la carte option.
- The online survey respondents who do not subscribe to Comcast’s cable TV service in the NSCC franchise area most frequently indicated that they don’t subscribe because “Comcast’s cable TV service is too expensive”, followed by “I can watch programs that are delivered through the Internet.”
- 69.5% of all online survey respondents indicated that they had watched a CTV North Suburbs channel. Of these respondents:
  - \* 52% said they watched programming on channels 14, 15 and 16 at least once per month.
  - \* 29.5% said they watched programming on channels 18, 19 and 20 at least once per month.
  - \* 17.9% said they watched programming on channel 21 at least once per month.
  - \* 15% said they watched programming on channel 98 at least once per month.
  - \* The most frequently mentioned method that these respondents said they used to find out about the programming on a CTV North Suburbs channel was “channel surfing” (52.9%), followed by “CTV North Suburbs website” (35.6%).
  - \* Disregarding the content of programs, 32.4% said the picture and sound quality of the CTV North Suburbs channels, as compared to the other Comcast channels, was “about the same” and 26.7% said “a little lower quality.”
  - \* The most frequently mentioned CTV North Suburbs programs that these respondents said they had watched at least once per month were “City Council Meetings” (32.2%); “Local Sports (football, baseball, hockey, etc.” (31.6%); “Tale of Our Cities (21.7%); and “North Suburban Beat” (21.1%).
  - \* Very high percentages said they agreed or strongly agreed that the CTV North Suburbs channels provide programming that deals with local issues (83.4%) and provide a valuable public service (80.2%).

- About 80% of all online survey respondents (cable subscribers and non-subscribers) said it was “very important” (45.3%) or “important” (34.3%) to have local cable TV channels that feature programs about local residents, organizations, schools, government, events and issues.
- All on-line survey respondents were invited to provide comments about CTV North Suburbs. From the nearly 110 respondents who replied to this invitation, positive/neutral comments outnumbered negative comments by about four to one.

#### B. Telephone Survey of Cable Subscribers.

The 2015 telephone survey obtained the responses of 400 Comcast cable subscribers in the NSCC franchise area, drawn at random from active residential and cellular telephone numbers. Below are several findings from the 2015 telephone survey:

- Ratings given by the 2015 telephone survey respondents regarding several quality and service measures were very similar to those given to these items by the respondents to the 2011 telephone survey.
  - \* Almost 90% rated the *reliability of Comcast’s cable TV service* and the *quality of the picture and sound* as “good” or “very good.”
  - \* Over 70% of the respondents rated the *number & variety of channels offered* and the *helpfulness of Comcast’s customer service representatives* as “good” or “very good.”
  - \* About two-thirds of them rated the *ability of Comcast to respond to a service call within the promised time period* as “good” or “very good.”
  - \* Over half rated the *ability to quickly speak to a customer service representative when you call Comcast*, the *ease of getting services installed or changed by Comcast*, and *Comcast’s ability to quickly get problems repaired or resolved* as “good” or “very good.”
  - \* Low ratings were given to the *rates charged by Comcast for cable TV service* (rated “good” or “very good” by only 14.8% of the respondents -- 38.6% rated this “poor” or “very poor”), and the *overall value of your cable TV service, considering how much it costs and the quality of service you receive* (rated “good” or “very good” by 38.3% of the respondents).
  - \* Overall, 68.3% of the telephone survey respondents said they are very or somewhat satisfied with their cable TV service (down from 73.1% in 2011).
- 41% of all cable subscribers (up from 36% in the 2011 telephone survey) pay extra to receive Comcast's high definition channels. *Nearly half said they rarely (31.1%) or never (15.9%) watch the non-HD channels.*

- 50.5% of all cable subscribers (up from 45.3% in the 2011 telephone survey) say they *most often use Comcast's on-screen guide to find programming information, far more than any other method.*
- Nearly half (47.3%) of all cable subscribers have *watched a program on a CTV North Suburbs channel* (as compared to 49.5% in 2011). Of these viewers:
  - \* 52.4% (up from 46% in 2011) said they watched local sports, community and city programming on channels 14, 15 or 16 at least once a month (25.9% said they watch at least once a week).
  - \* 23.3% said they watched educational channels 18 or 20 at least once a month (7.9% said they watch at least once a week).
  - \* 40.7% said they watched local government programming on channel 19 at least once a month (19% said they watch at least once a week).
  - \* 8.5% (up from 5.7% in 2011) said they watched non-local programming on channel 21 at least once a month (3.2% said they watch at least once a week).
  - \* 12.2% (up from 12.1% in 2011) said they watched NASA TV on channel 98 at least once a month (3.7% said they watch at least once a week).
  - \* 84.7% (down from 86.9% in 2011) have watched City Council meetings (37% said at least monthly);  
64.1% (up from 57.1% in 2011) have watched local sports (29.6% said at least monthly);  
38.6 (up from 37.9% in 2011) have watched School Board meetings (4.2% said at least monthly); and  
37.6% (up from 26.8% in 2011) have watched "North Suburban Beat" (13.8% said at least monthly).
  - \* 45% (up from 37% in 2011) say the picture and sound quality on the CTV North Suburbs channels is equal to the picture and sound quality for the other channels of the cable system.
  - \* 72.5% (up from 59% in 2011) gave grades of "A" or "B" regarding how well CTV North Suburbs *"provides a valuable community service"* and 61.9% (up from 57.6% in 2011) gave grades of "A" or "B" to *"provides programming that deals with local issues."*
- As was the case in 2011, a very large majority (69.8%) of all telephone survey respondents said it is "important" or "very important" to have local cable TV channels that feature programs about area residents, organizations, schools, government, events and issues.

C. PEG Access Equipment Recommendations.

Since the 2013 Community Needs Ascertainment report was submitted by The Buske Group, significant equipment purchases by CTV North Suburbs and other developments occurred. Major purchases included: (1) new cameras, tripods, production switcher, replay unit, audio mixer, and internal distribution equipment in one of the two production trucks; (2) new cameras, controllers and mounts for the Roseville City Council Chambers; and (3) new complete audio/video production package for the Little Canada City Council Chambers.

After reviewing the updated equipment inventories prepared by the CTV North Suburbs staff, and having follow-up conversations with them, an updated set of equipment replacement/upgrade packages was prepared (see Appendix 4). The equipment replacement/upgrade packages reflect the impact of: (1) the recent equipment purchases by CTV North Suburbs; (2) the departure of the City of Shoreview from the NSCC (thereby removing the upgrade of an audio/video production package for that City's council chambers); and (3) input from CTV North Suburbs staff regarding the current needs at the CTV facility and each City Hall location. These factors resulted in an estimated cost for the equipment replacement/upgrade packages of approximately \$10,000,000 over the 10-year franchise term. This estimate is \$2,000,000 less than the amount indicated as the total cost for the equipment replacement/upgrade packages in the 2013 Community Needs Ascertainment report.

# **The Morris Leatherman Company**

## **CTV North Suburbs**

### **2015 Cable Subscriber Survey**

#### **Findings and Implications**

##### **Findings:**

1. Currently, 40% of the subscribers in the CTV North Suburbs communities subscribe to only Comcast cable television service. Sixty percent take a bundle of services.
2. The typical cable television household subscribed for 6.9 years. Eighteen percent subscribed during the past two years, while 11% subscribed over 15 years ago. Eighty-five percent rate their cable television service as “excellent” or “good;” sixteen percent see it as “only fair” or “poor.” When considering the monthly charge and quality of cable television service they receive, 80% think the general value is “excellent” or “good.” Twenty-one percent, however, think the value is “only fair” or “poor.”
3. Fifty percent of the subscribers had contact with the cable company either in person or by telephone during the past year. The typical subscriber waited on hold for 7½ minutes to reach a customer service representative. Seventy-seven percent rate the level of service they received as “excellent” or “good;” twenty-three percent see it as “only fair” or “poor.” Critical respondents point to a “long wait on hold” and “didn’t fix the problem” each at 24%, “rude,” at 13%, and “hung up on or disconnected” at 9%. Twenty-five percent also report they have experienced technical problems either “frequently” or “occasionally.”
4. Viewing of local government and sports Channel 14 varies with the type of programming. The table below summarizes the percentage of households tuning in during the past year:

<b><i>Programming</i></b>	<b><i>Viewership</i></b>
Your City Council meeting	25%
High School Sports	18%
Ramsey County Board meetings	17%
Other City Council meetings	9%
Roseville Skating Center events	5%
North Star Girls Roller Derby	3%

Overall, 43% of cable television subscribers report watching Channel 14 either “frequently” or “occasionally.”

5. Similarly, viewing of local programming on Channel 15 varies with the type of programming. The table below summarizes the percentage of households tuning in during the past year:

<b>Programming</b>	<b>Viewership</b>
City parades and festivals	22%
High School concerts	15%
CTV Election coverage	13%
City concerts	12%
Shoreview Northern Lights Variety Band Christmas concert	12%
High School graduations	11%
WWA Talk Show	10%
A Tale of Our Cities	9%
Roseville Strings Concert	8%
North Suburban Beat	7%
Disability Viewpoints	7%
UFO’s and the Paranormal	7%
High School Robotics Competition	4%

Not very different from the result in the case of Channel 14, 42% of cable television subscribers report watching Channel 25 at least “occasionally.”

6. Finally, viewing of non-local programming on Channel 21 varies with the type of programming. The table below summarizes the percentage of households tuning in during the past year:

<b>Programming</b>	<b>Viewership</b>
Saint Paul Saints’ games	21%
Classic arts	11%
Democracy Now	9%

Thirty percent of cable television subscribers report watching Channel 21 either “frequently” or “occasionally.”

5. Forty-nine percent of cable subscribers think local city, school district and public access channel are “very important” or “somewhat important.” Fifty percent do not share this perspective.



6. Sixty-two percent report using Comcast’s on-screen guide to find information about programming on cable television channels. Fifteen percent find the information through “channel surfing.” Only eight percent use the “television section in the newspaper,” while six percent use “TV Guide magazine.”

7. Forty-six percent “almost always” watch cable television programming in high definition. An additional 39% watch in high definition either “frequently” or “occasionally.” Only fifteen percent report they watch in high definition either “rarely” or “never.”

**Subscriber Demographics:**

The chart below shows the demographic characteristics of two groups – the population of cable subscribers and viewers of CTV North Suburbs programming – for comparison. The first column lists the demographic group, the second column shows the percentage of that group within the entire sample, and the third column indicates the percentage of that group within the sub-sample of viewers:

<i>Demographic Characteristic</i>	<i>Sample</i>	<i>Viewers</i>
Seniors in household	26%	27%
School-aged children and pre-schoolers in household	35%	37%
Home owners	69%	77%
Home renters	31%	23%
18-34 years old	19%	12%
35-44 years old	23%	24%
45-54 years old	20%	21%
55-64 years old	18%	23%
65 and over	21%	22%
High school or less education	27%	28%
Post-secondary experience	32%	34%
College graduate	42%	38%
Under \$35,000 yearly household income	12%	11%
\$35,000-\$50,000 yearly household income	35%	24%
\$50,000-\$75,000 yearly household income	33%	37%
Over \$75,000 yearly household income	19%	19%
Male	48%	51%
Female	52%	49%
Arden Hills residents	6%	7%
Falcon Heights residents	5%	5%
Lauderdale residents	2%	3%
Little Canada	10%	10%

<i>Demographic Characteristic</i>	<i>Sample</i>	<i>Viewers</i>
Mounds View residents	9%	10%
New Brighton residents	20%	17%
North Oaks residents	5%	4%
Roseville residents	34%	36%
Saint Anthony residents	9%	8%

In general, viewers are a general reflection of the cable subscriber population. This is unusual because most Metropolitan Area cable systems show significant deviations in age, household composition, or education level.

**Conclusions:**

A. CTV North Suburbs’ broad spectrum of programming over the three cable channels reaches an impressive 61% of subscribers. Nine percent would be considered “frequent” viewers, while 52% are “occasional” viewers. This is above the norm of 52% in the Twin Cities suburban area.

B. Forty-three percent of the cable subscribers at least “occasionally” turn to Channel 14, while another 42% watch Channel 15 on at least an “occasional” basis. Channel 21 draws a somewhat lower 30% of the city’s households. In the first two cases, viewership is higher than the suburban norm of 34%.

C. Subscribers are split on the importance of local city, school district and public access channels. Forty-nine percent consider them either “very important” or “somewhat important,” while 50% think they are “not too important” or “not at all important.” However among the 61% viewers of CTV North Suburbs programming, 62% indicate they are important with only 38% considering them of less importance.

D. Comcast’s On-Screen Guide is the most important source of information for a very high 62% of subscribers. Local programming needs a presence on this guide to broaden viewership in the future.

E. Two-thirds of subscribers currently watch cable television programming in high definition, while only 15% indicate they “rarely” or “never” watch. Any efforts to provide local programming in high definition should be strongly considered as the expectation for this option continues to grow in the coming years.

F. Customer ratings of the level of service prove to be lower than the norm. The threshold for high quality customer service in the public sector is 80% satisfaction; the cable company’s satisfaction rating is 77%. Complaints center on two areas: “the problem wasn’t fixed” and “long waiting time on hold.” Both of these areas should be improved.

***Methodology:***

This study contains the results of a survey administered to 400 randomly selected of CTV North Suburbs cable subscribers. Professional interviewers conducted the survey by telephone between August 24<sup>th</sup> and September 2<sup>nd</sup>, 2015. The typical respondent took 11 minutes to complete the questionnaire. The results of the study are projectable to all CTV North Suburbs cable subscribers within  $\pm 5.0\%$  in 95 out of 100 cases.

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*The City That Soars!*

## REQUEST FOR COUNCIL ACTION

<b>Meeting Date</b>	April 6, 2016
<b>Agenda Item</b>	Workshop #2
<b>Attachment</b>	Supporting Documents
<b>Submitted By</b>	Sack Thongvanh, City Administrator

<b>Item</b>	TIES-Telecommunication Shelter
<b>Description</b>	<p>The City has received a request from Patrick Lynch of Arvig Network Services for the construction of a telecommunication shelter in the southwest corner to TIES's property.</p> <p>Due to the size (120 square feet and less) of the building, it is regulated by City Code instead of Building Code. This means it is solely at the discretion of the City. This also brings a host of issues that will need to be address in the future due to regulation requirements to have consistency throughout the City.</p>
<b>Budget Impact</b>	The impact on the budget would be insufficient.
<b>Attachment(s)</b>	<ul style="list-style-type: none"> <li>• Company Profile</li> <li>• Proposed Building Site</li> <li>• Construction Plans</li> <li>• Example from the City of Albertville</li> </ul>
<b>Action(s) Requested</b>	Staff is seeking direction on how proceed with the application. There are two methods of approve. Either by the City Council or the City Administrator.

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## Making the **Connection**

Advanced broadband technology  
that brings the world together.

888.99.ARVIDG | [arvig.com](http://arvig.com)



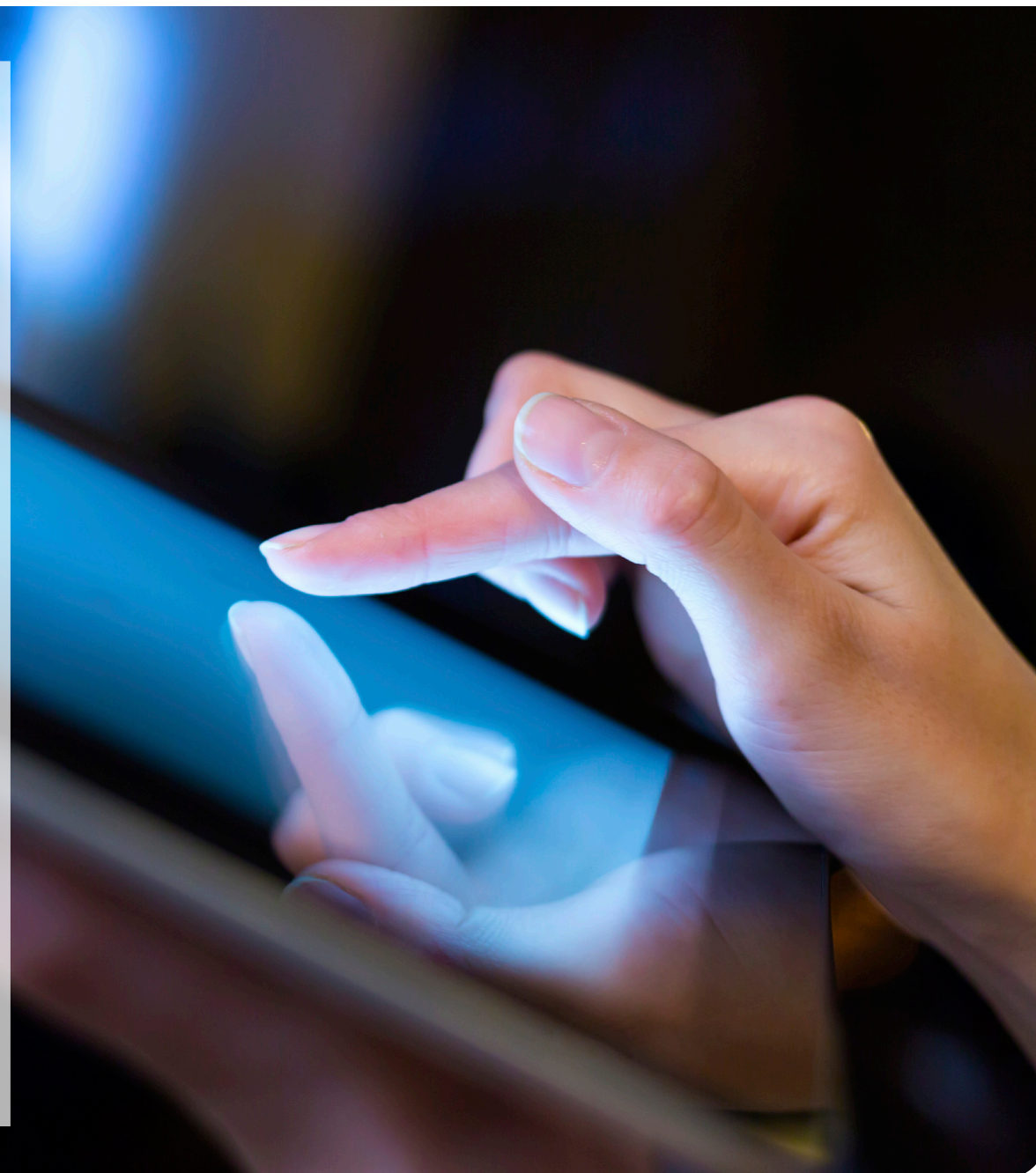


# It's All Here

Established in 1950, Arvig has grown from a small, family-owned East Ottertail Telephone Company to one of the largest independent telecommunications and broadband providers in the nation. Over the past 65 years, the company's leaders have been progressive risk-takers, delivering cutting-edge technology to residential and business customers. Reinvesting in technology and network operations allows us to continue to deliver next-generation communications services to a growing number of communities throughout Minnesota.

Arvig's diverse product portfolio has broadband and broadband-related services at the core of everything we do:

- High-speed Internet—up to 1 Gig
- Ethernet
- Managed Voice-VoIP and Hosted PBX
- Television, including IPTV and all the top channels, movie channels, HD service, DVR, Pay-Per-View and Stingray music
- Telephone service, long distance and a wide variety of feature that help simplify our customers' lives

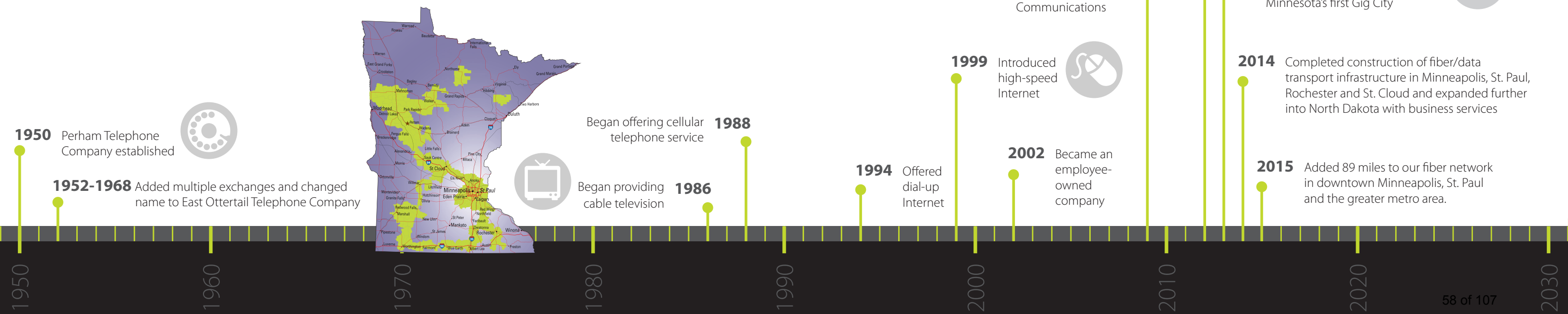


## Diverse Product Extensions

### Meet the Needs of 21st Century Businesses

Over the past decade, Arvig has focused on diversifying as the needs of our customers have evolved along with technology. Today, in addition to our Internet, Television and Telephone services, we bring industry leading solutions to our customers, including:

- Security Systems for homes and businesses, including cameras, access control and home automation products
- Managed Voice Solutions
- Managed Services
- Business Telephone Systems
- Communication and Data Wiring
- Website Development
- Digital Advertising
- Directory yellow pages advertising, including online and mobile opportunities
- Computer repair services by certified experts
- Call answering services and business support services provided by Time Communications, the call center company Arvig purchased in 2009.
- Construction services boring, plowing, trenching, splicing, dozer work, backhoe work, and other construction needs for Arvig and other businesses throughout the region.





# Arvig By The Numbers

65  
65 years of success

9,000  
square mile service area

27,120  
miles of facility

40,000  
Internet customers

24,000  
television customers

55,000  
telephone customers

156  
school's served

41  
Healthcare facilities served

700+  
employee-owners

26  
offices in 4 states

## Our Customers

Arvig's portfolio of customers includes brands like:

- 702 Communications
- Bell State Bank
- Central Minnesota Credit Union
- Fairview Health Systems
- Jostens
- KLN Companies
- Menards
- Minnesota State Colleges and Universities
- RDO
- Sanford Health
- State of Minnesota
- T-Mobile
- Titan Machinery
- Verizon
- Woodcraft Industries

## Leadership

The Arvig leadership team sets the strategic direction for the company and guides its progress:

Allen R. Arvig, President and CEO

David Arvig, Vice President and COO

Staci Malikowski, CFO

David Schornack, Director of Sales and Business Development

Andy Klinnert, Director of Network Operations

Lori Meader, Director of Human Resources

Mark Birkholz, Director of Southern Markets

Shaun Carlson, Director of Information Technology

Lisa Greene, Senior Manager, Marketing

## Employee Ownership

Arvig became an ESOP (Employee Stock Ownership Plan) company in 2002, and 37% of Arvig is now employee-owned.

Arvig's employee-owners are committed to achieving the company's vision—to be the Best service provider anywhere. Arvig customers can receive support, education, and technical assistance around the clock, every day of the year.

Arvig contributes financially to a wide variety of organizations in the communities we serve. Arvig employees live in the communities we serve and are active participants in local civic and community organizations.

## Board of Directors

Allen R. Arvig\*, President

David R. Arvig\*, Vice President

Carmen Arvig\*, Secretary

Rick Vyskocil, Treasurer

David Pratt, Director

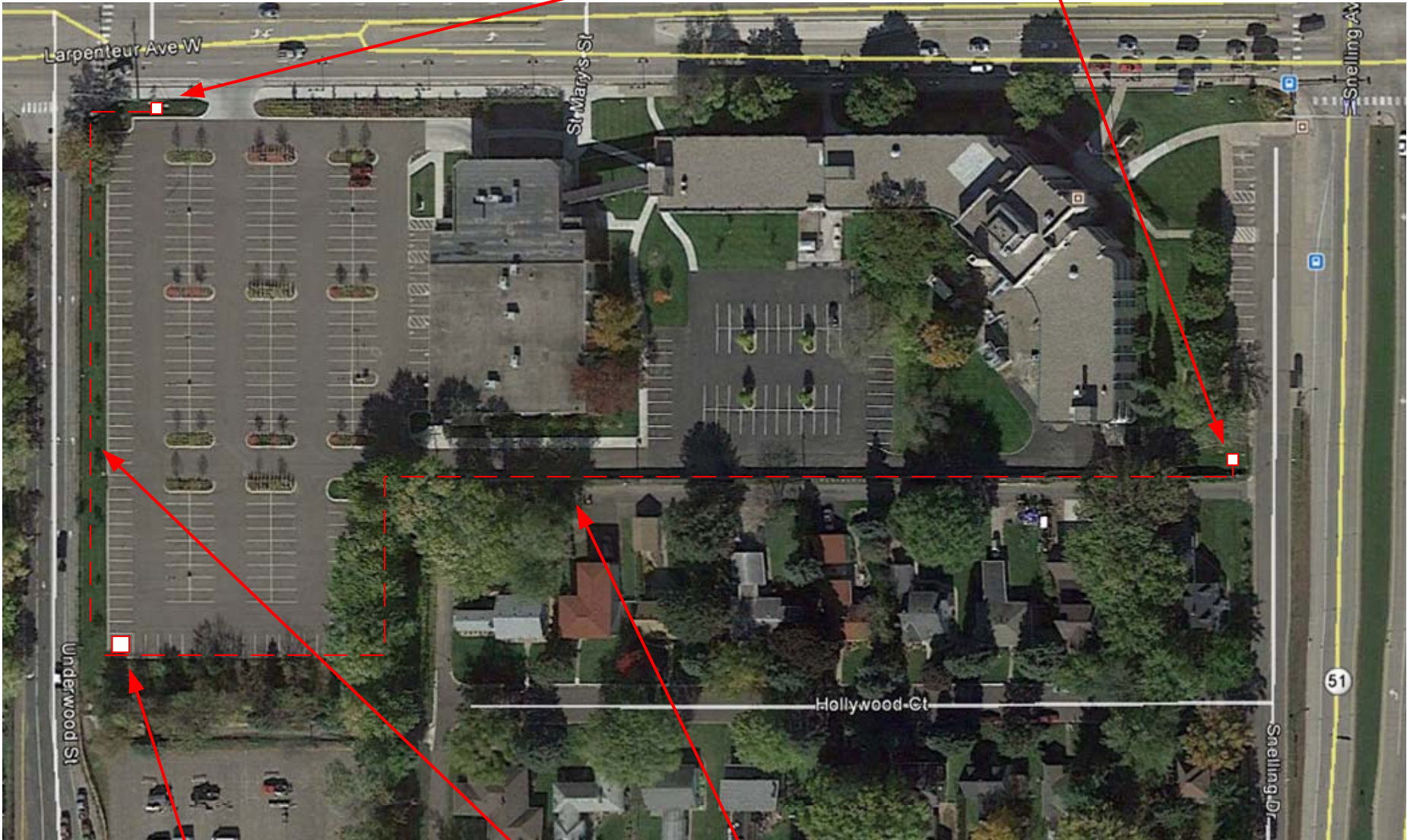
Marvin Ward\*, Director

Ashley Arvig\*, Director

\*Denotes family member. Other family members are employed in non-management roles.



Existing network  
interconnection points



Proposed building location  
10' x 12'  
(Not drawn to scale)

Proposed fiber construction







<u>BUILDING EXTERIOR</u>	
<input checked="" type="checkbox"/>	BUFF
<input type="checkbox"/>	OZARK
<input type="checkbox"/>	GREY
<input type="checkbox"/>	OTHER _____

PROJECT  
WISPER WIRELESS  
JOB NO.  
0809-10  
SITE NAME  
MELROSE, MN.  
SIZE  
10'W X 12'L X 9'H

<u>DRAWING TITLE</u>	<u>DRAWING NUMBER</u>	
DRAWING INDEX_____	AGB8146	PAGE 1 OF 10
INTERIOR OVERVIEW_____	AGB8146	PAGE 2 OF 10
INTERIOR WALL DETAILS_____	AGB8146	PAGE 3 OF 10
INTERIOR CEILING DETAIL_____	AGB8146	PAGE 4 OF 10
ELEVATION VIEWS_____	AGB8146	PAGE 5 OF 10
ELECTRICAL DRAWINGS & LOAD CENTER_____	AGB8146	PAGE 6 OF 10
GENERAL & GROUNDING NOTES_____	AGB8146	PAGE 7 OF 10
BUILDING CONSTRUCTION DETAILS_____	AGB8146	PAGE 8 OF 10
BUILDING CONSTRUCTION DETAILS_____	AGB8146	PAGE 9 OF 10
BUILDING CONSTRUCTION DETAILS_____	AGB8146	PAGE 10 OF 10
BUILDING SKID ASSEMBLY_____	15R1012	PAGE 1 OF 1
BUILDING FOUNDATION ASSEMBLY_____	S15R1012	PAGE 1 OF 1

NOTE:  
 THE LOCATION OF THE DOORS, AIR CONDITIONERS AND ENTRANCE PANEL  
 MAY VARY FOR EACH SITE.

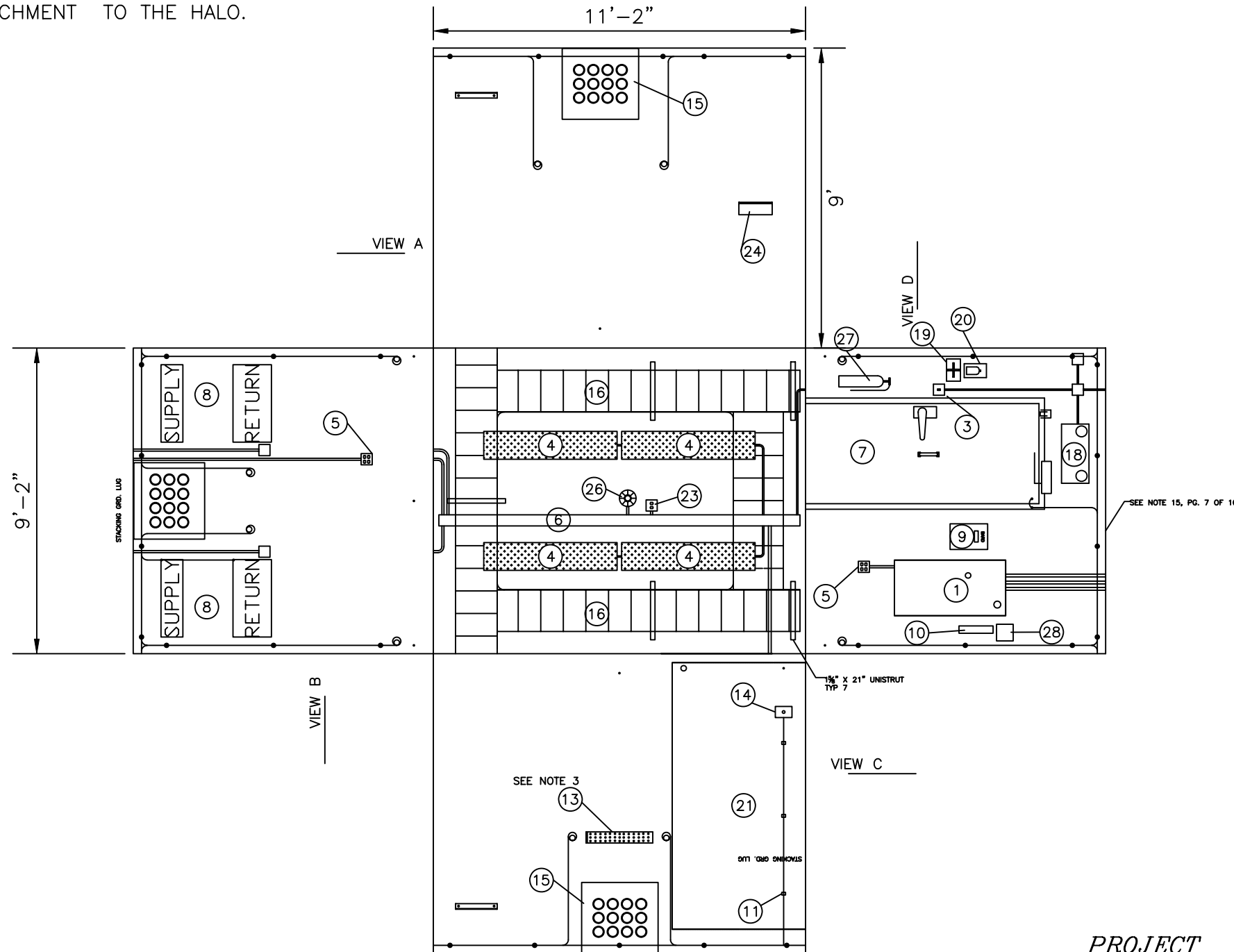
USAGE	UNMANNED TELECOMMUNICATION SHELTER
CONSTRUCTION TYPE	<u>VB</u>
OCCUPANCY GROUP	<u>S-2</u>
STORIES	<u>1</u>
BASIC WIND SPEED	<u>90 MPH</u>
FLOOR LOAD	<u>200 PSF</u>
SNOW LOAD	<u>100 PSF</u>
FLOOR AREA	<u>120 SQ.FT.</u>
BUILDING HGT.	<u>10'-11"</u>

CODES:  
 2006 INTERNATIONAL BUILDING CODE (IBC) / MN AMENDMENTS  
 MINNESOTA STATE ENERGY CODE  
 2008 NATIONAL ELECTRICAL CODE (NEC) / MN AMENDMENTS

<small>BUILDINGS, INC.</small>		
<b>THERMO BOND</b>		
P.O. Box 445 Elk Point, SD		
Scale:	NONE	Title:
Date:	9/25/08	DRAWING INDEX
Drawn By:	DRL	Revised:
Approved By:		Drawing Number:
		AGB8146
	COMPUTER AIDED DRAWING AGB8146F	PAGE 1 OF 10

**NOTES:**

1. ALL DIMENSIONS ARE INSIDE DIMENSIONS.
2. ALL CONDUIT RUNS ARE APPROXIMATE AND MAY NOT REFLECT RUNS IN ACTUAL BUILDING.
3. INSTALL 2 HALO DROPS W/ 3' PIGTAILS FOR MGB. SHIP MGB LOOSE IN BUILDING. CUSTOMER WILL INSTALL ON SITE. ATTACH TWO 2 HOLE LUGS TO MGB FOR ATTACHMENT TO THE HALO.



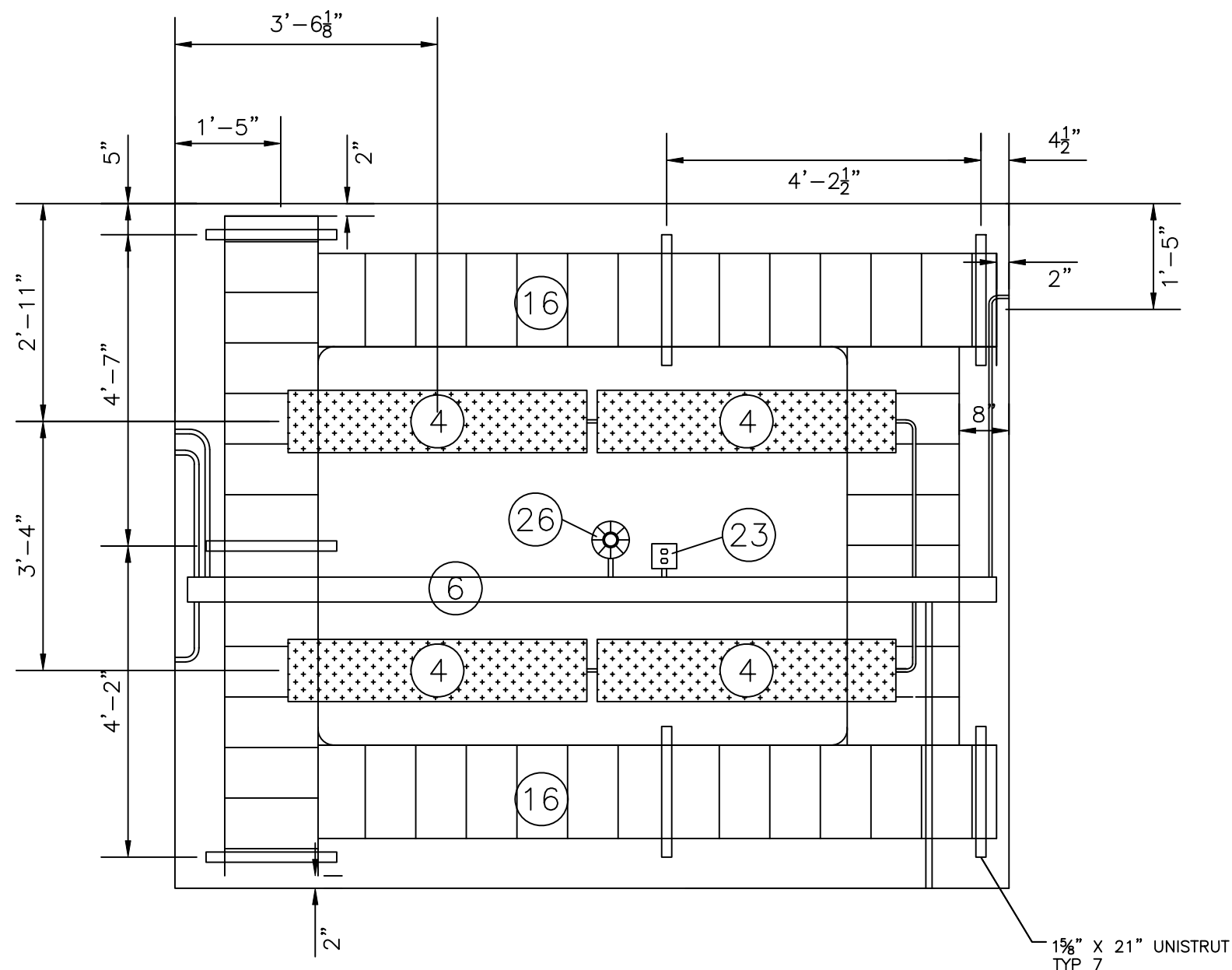
**PROJECT**  
**WISPER WIRELESS**  
**JOB NO.**  
**0809-10**  
**SITE NAME**  
**MELROSE, MN.**

29.		
28.	1	8" x 8" ALARM JUNCTION BOX & TERMINAL STRIPS
27.	1	FIRE EXTINGUISHER, 10# CO2
26.	1	SMOKE DETECTOR & RELAY #5KN56 & 5KN55
25.	1	ALUMINUM DOOR AWNING
24.	1	PLASTIC FILE FOLDER
23.	1	CEILING MOUNTED DUPLEX RECEPTACLE
22.		NOT USED
21.	1	4' X 8' X 3/4" PLYWOOD
20.	1	EYE WASH STATION #1KW78
19.	1	FIRST AID KIT #5X806
18.	1	EMERGENCY LIGHT #CC-2
17.	1	EXTERIOR GFI RECEPTACLE
16.	A/R	15" CABLE LADDER MOUNTED 90" A.F.F.
15.	3	ENTRANCE PANEL 12-4" PORTS, MICROFLECT OR EQUIV. # B1334
14.	1	GROUND BAR #GTI1446F-1 (1/4" X 4" X 6")
13.	2	MASTER GROUND BAR #GTI14424K (1/4" X 4" X 24")
12.	1	70 W. H.P.S. W/ PHOTO CELL # 70HPK W/ AA105 CELL
11.	A/R	TYRAP MOUNTING CLAMP W/ TYRAP #TY23M
10.	1	SEIMENS "66" TERMINAL BLOCK
9.		AIR CONDITIONER MASTER CONTROLLER, BARD #MC3000 W/ FOLLOWING ALARMS: POWER FAIL, HIGH & LOW TEMP
8.	2	WALL MOUNT AIR CONDITIONER, 3 TON W/5kw HEAT BARD #WA361-A05XPXXXJ
7.	1	3' X 7' STEEL INSULATED DOOR AND FRAME W/BAKED ON ENAMEL PAINT (PLYCO SERIES 88) W/S.S. BALL BEARING HINGES W/NON REMOVEABLE PINS, TRILOGY #DL2700 DIGITAL LATCH ASSY, NORTON DOOR CLOSER & TRIMCO 1207ES STOP & HOOK
6.	A/R	4" WIRE RACEWAY W/HINGED COVER
5.	2	110V., 20A. QUAD WALL MOUNTED RECEPTACLE
4.	4	4', 2 BULB FLOURESCENT LIGHT FIXTURE
3.	1	LIGHT SWITCH SPEC. GRADE
2.	1	200 A. GENERATOR RECEPTACLE APPLETON #AJA20034-200RS
1.	1	TRANSTECTOR LOAD PANEL
		PANEL INCLUDES 150 A. SURGE PROTECTOR, 200 A. MANUAL TRANSFER SWITCH AND 40 POSITION, 200 A SQUARE D ELECTRICAL PANEL
<b>NO.</b>	<b>QTY.</b>	<b>DESCRIPTION</b>

**LIST OF MATERIAL**

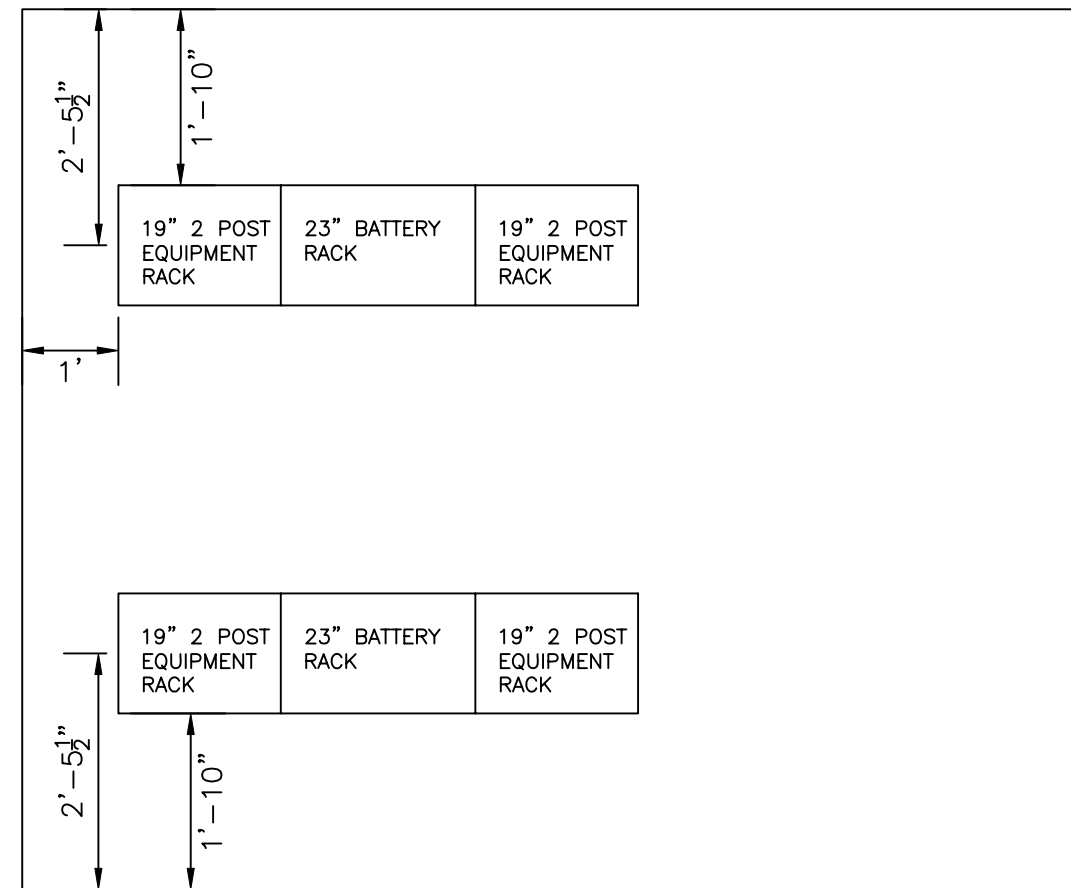
<b>BUILDINGS, INC.</b>			
<b>Thermo Bond</b>			
P.O. Box 445 Elk Point, SD			
Scale:	1/4" = 1'	Title:	INTERIOR LAYOUT FOR
Date:	9/25/08		10'W. X 12'L. X 9'H. BLDG.
Drawn By:	DRL	Revised:	
Approved By:		Drawing Number:	AGB8146
		COMPUTER AIDED DRAWING AGB8146J	PAGE 2 OF 10





CEILING LAYOUT

- NOTE:  
 1. CABLE RACK SHALL BE MOUNTED 90" A.F.F. TO THE BOTTOM OF THE RACK.  
 2. USE PVC END CAPS ON THE ENDS OF ALL LADDER RUNS.

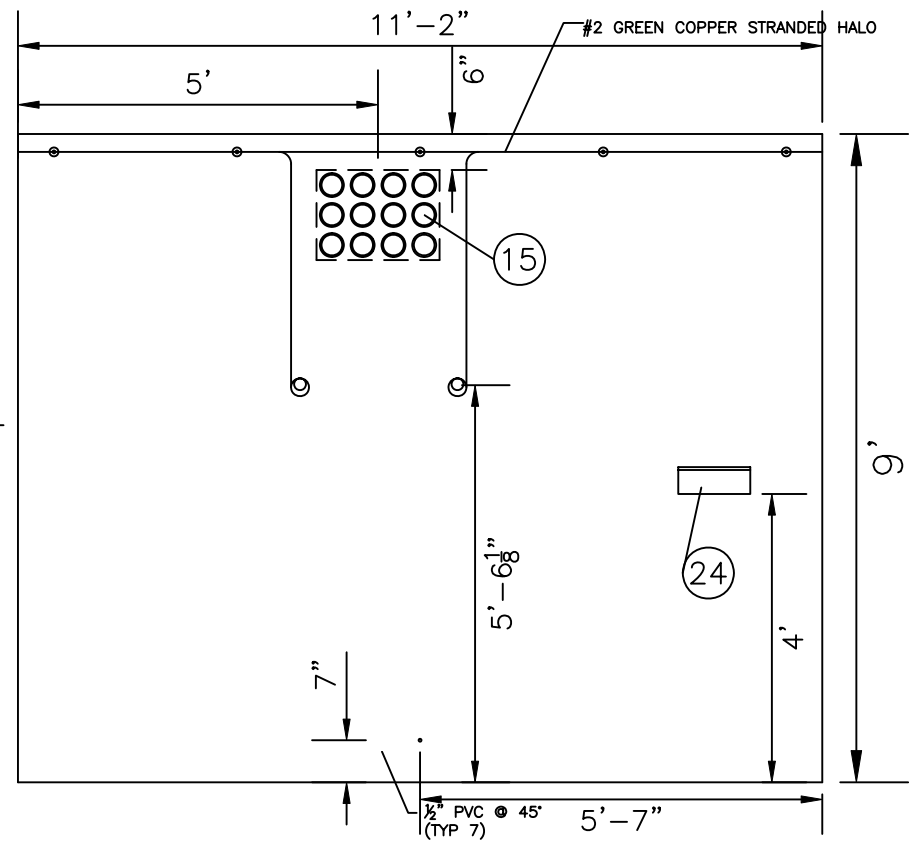


FLOOR LAYOUT

PROJECT  
 WISPER WIRELESS  
 JOB NO.  
 0809-10  
 SITE NAME  
 MELROSE, MN.

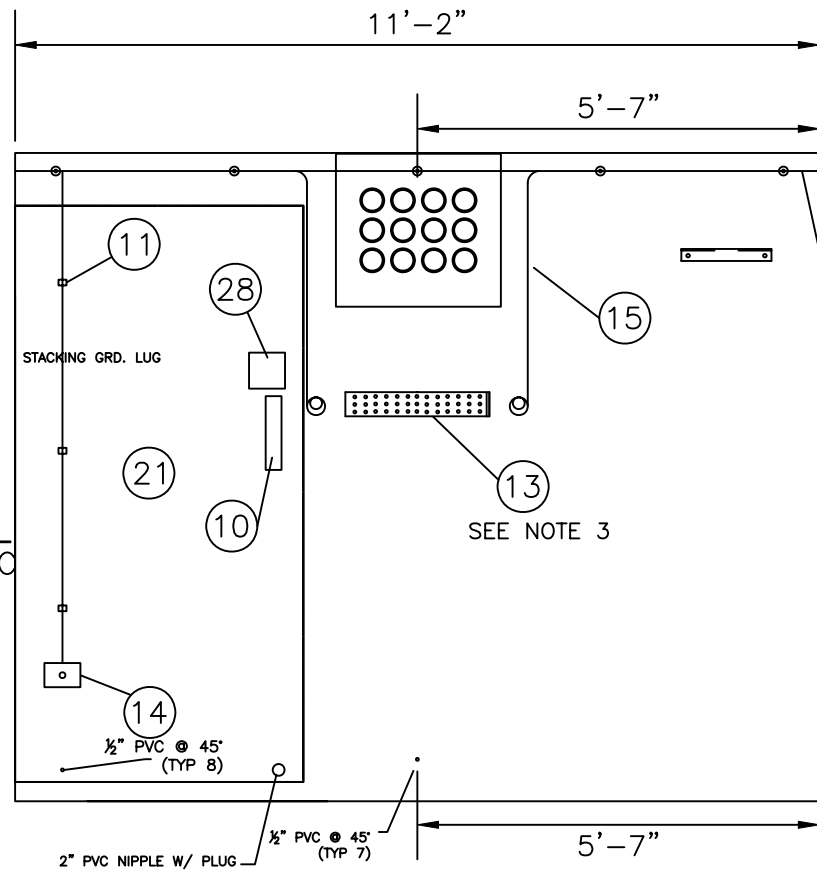
<b>BUILDINGS, INC.</b>		
<b>THERMO BOND</b>		
P.O. Box 445 Elk Point, SD		
Scale: 1/2" = 1'	Title: CEILING LAYOUT FOR 10'W. X 12'L. X 9'H. BLDG.	
Date: 9/25/08	Revised:	Drawing Number: AGB8146
Drawn By: DRL	Approved By:	PAGE 4 OF 10
<small>COMPUTER AIDED DRAWING AGB8146C</small>		

VIEW A

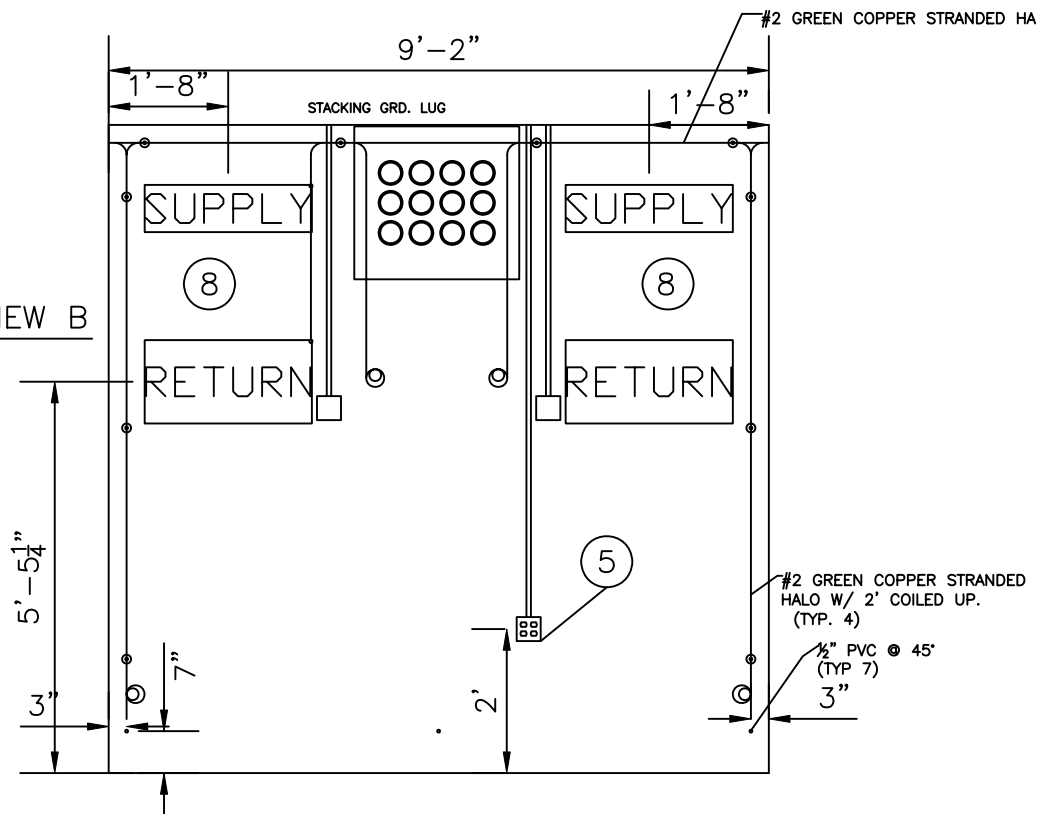


- NOTES:**
1. ALL DIMENSIONS ARE INSIDE DIMENSIONS.
  2. ALL CONDUIT RUNS ARE APPROXIMATE AND MAY NOT REFLECT RUNS IN ACTUAL BUILDING.
  3. INSTALL 2 HALO DROPS W/ 3' PIGTAILS FOR MGB. SHIP MGB LOOSE IN BUILDING. CUSTOMER WILL INSTALL ON SITE. ATTACH TWO 2 HOLE LUGS TO MGB #2 G FOR ATTACHMENT TO THE HALO.

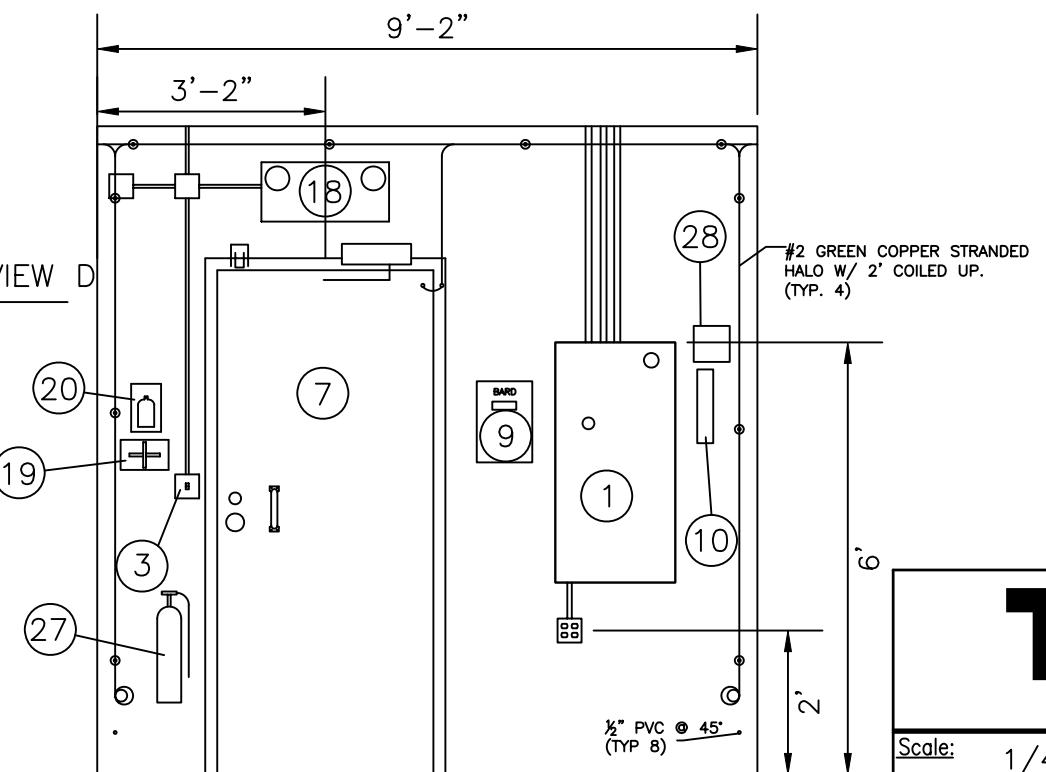
VIEW C



VIEW B



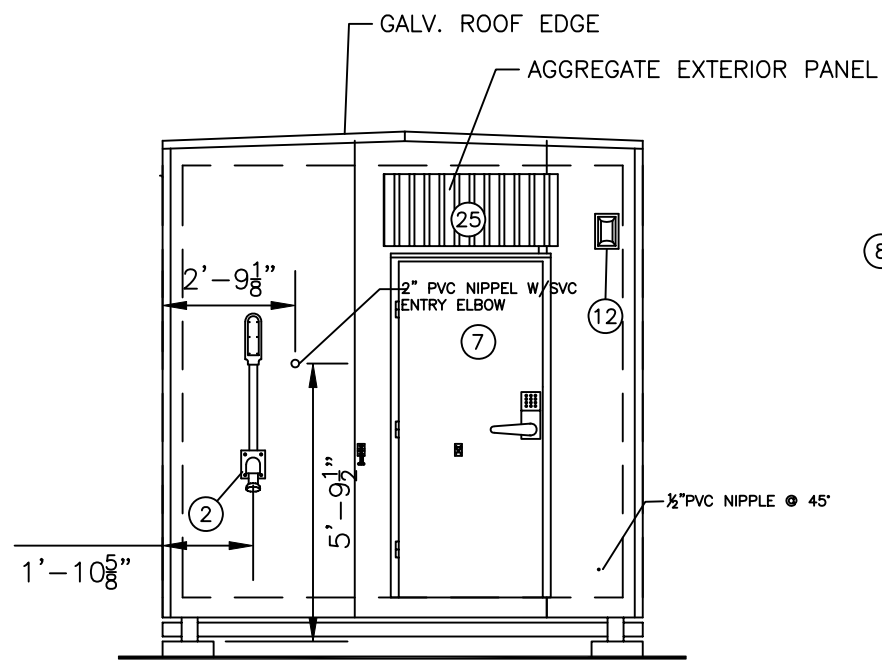
VIEW D



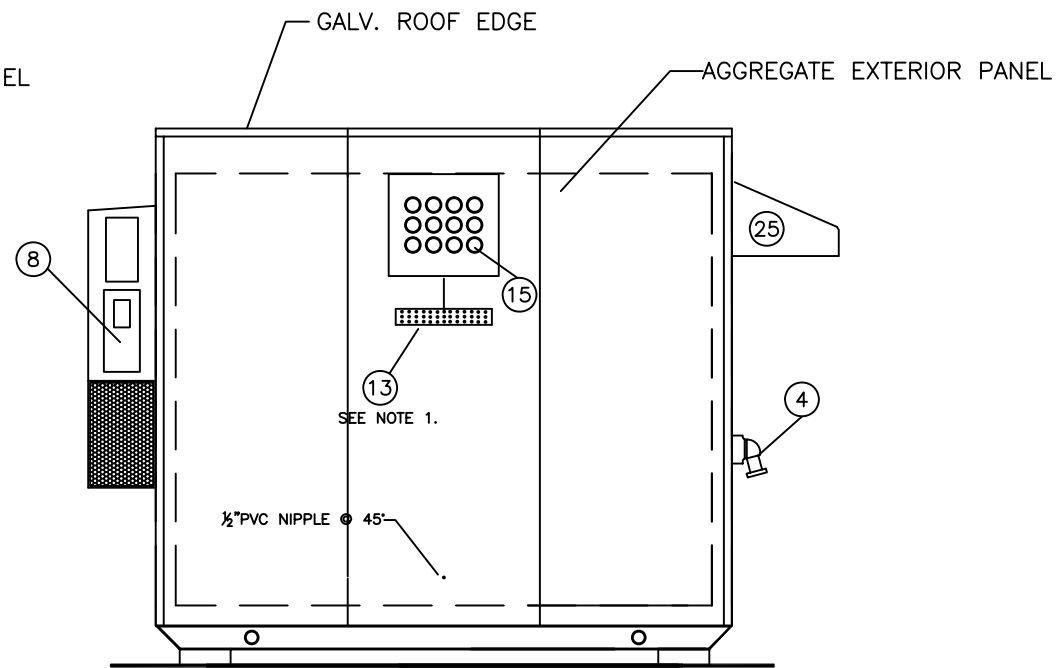
*PROJECT*  
**WISPER WIRELESS**  
*JOB NO.*  
**0809-10**  
*SITE NAME*  
**MELROSE, MN.**

BUILDINGS, INC.  
**Thermo Bond**  
P.O. Box 445 Elk Point, SD

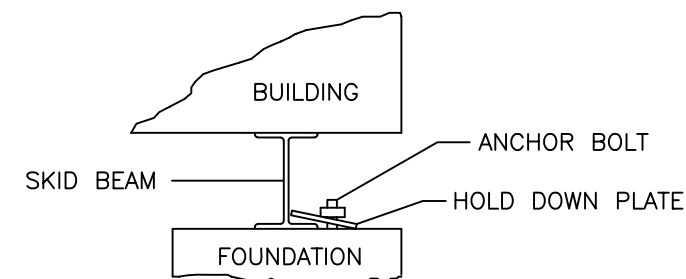
<b>Scale:</b> 1/4" = 1'	<b>Title:</b> INTERIOR LAYOUT FOR 10'W. X 12'L. X 9'H. BLDG.	<b>Drawing Number:</b> AGB8146
<b>Date:</b> 9/25/08	<b>Revised:</b>	<b>PAGE 3 OF 10</b>
<b>Drawn By:</b> DRL	<b>Approved By:</b>	COMPUTER AIDED DRAWING AGB7581A



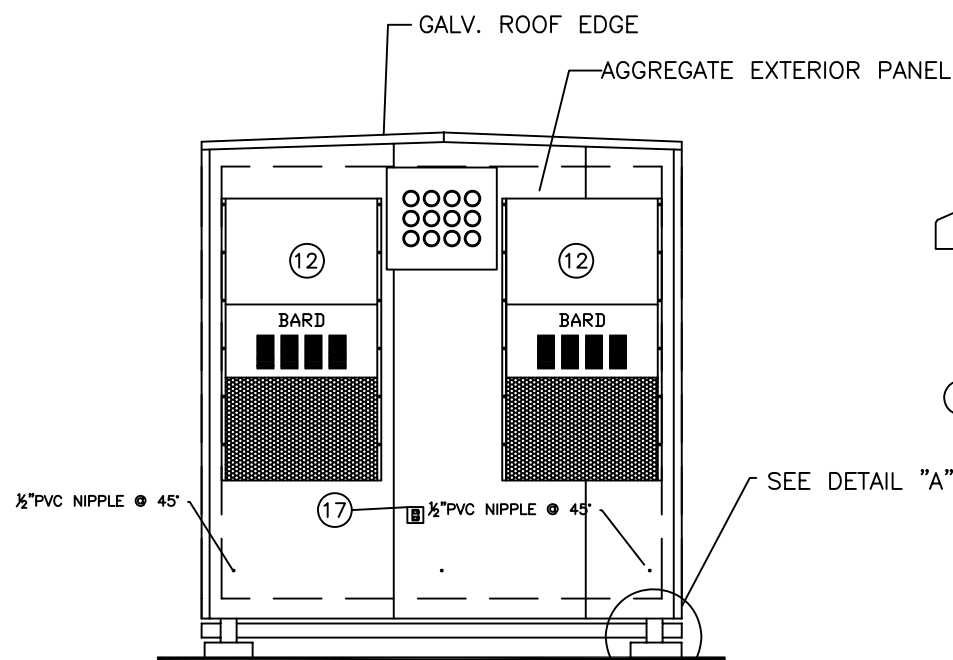
*FRONT ELEVATION*



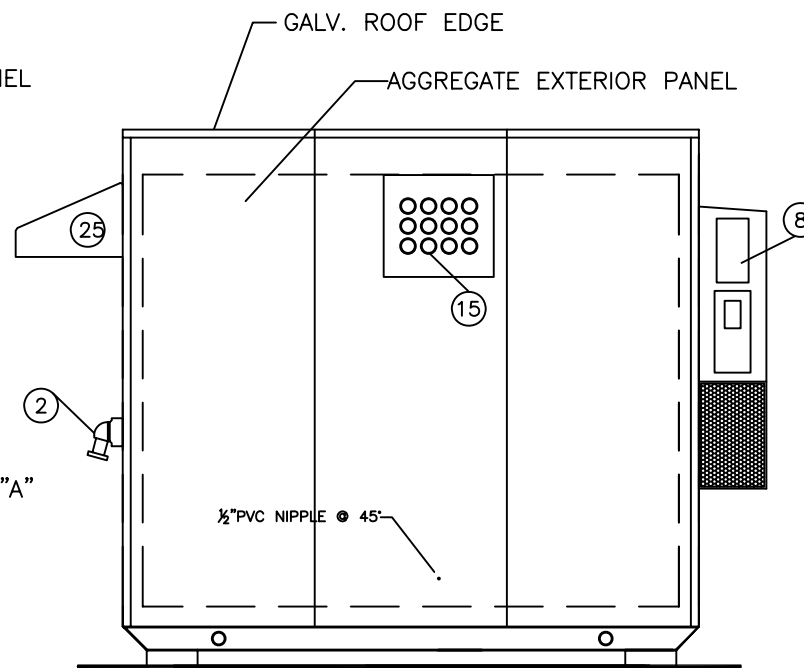
*LEFT ELEVATION*



*DETAIL "A"*



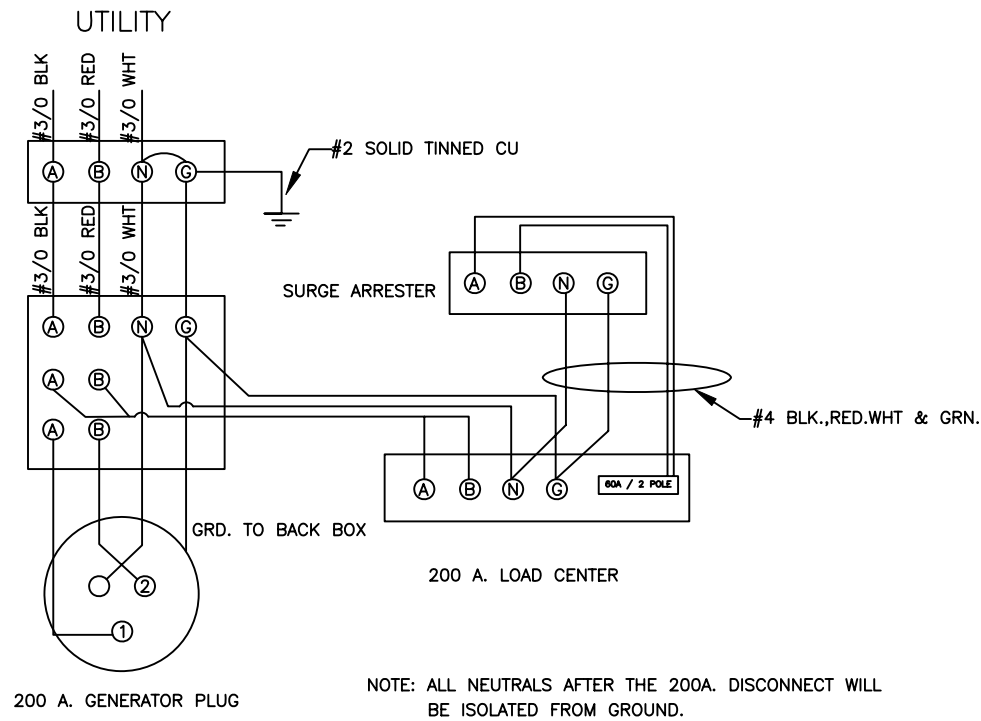
*REAR ELEVATION*



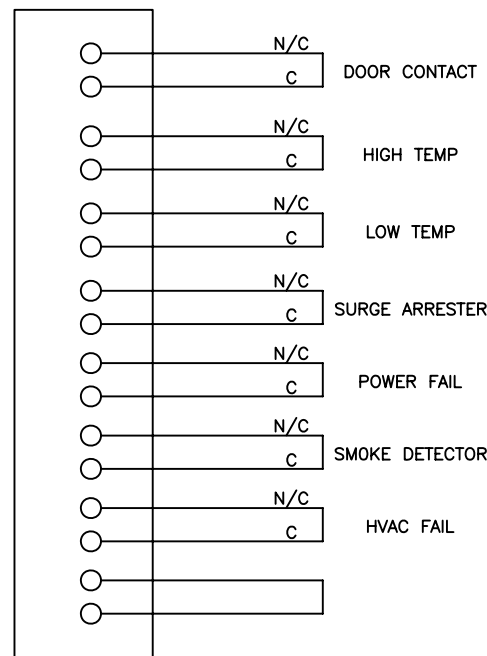
*RIGHT ELEVATION*

*PROJECT  
WISPER WIRELESS  
JOB NO.  
0809-10  
SITE NAME  
MELROSE, MN.*

<b>BUILDINGS, INC.</b>		
<b>THERMO BOND</b>		
P.O. Box 445 Elk Point, SD		
Scale: 1/4" = 1'	Title: EXTERIOR LAYOUT FOR 10'W. X 12'L. X 9'H. BLDG.	
Date: 9/25/08	Revised:	Drawing Number: AGB8146
Drawn By: DRL	Approved By:	PAGE 5 OF 10
COMPUTER AIDED DRAWING AGB8146D		66 of 107

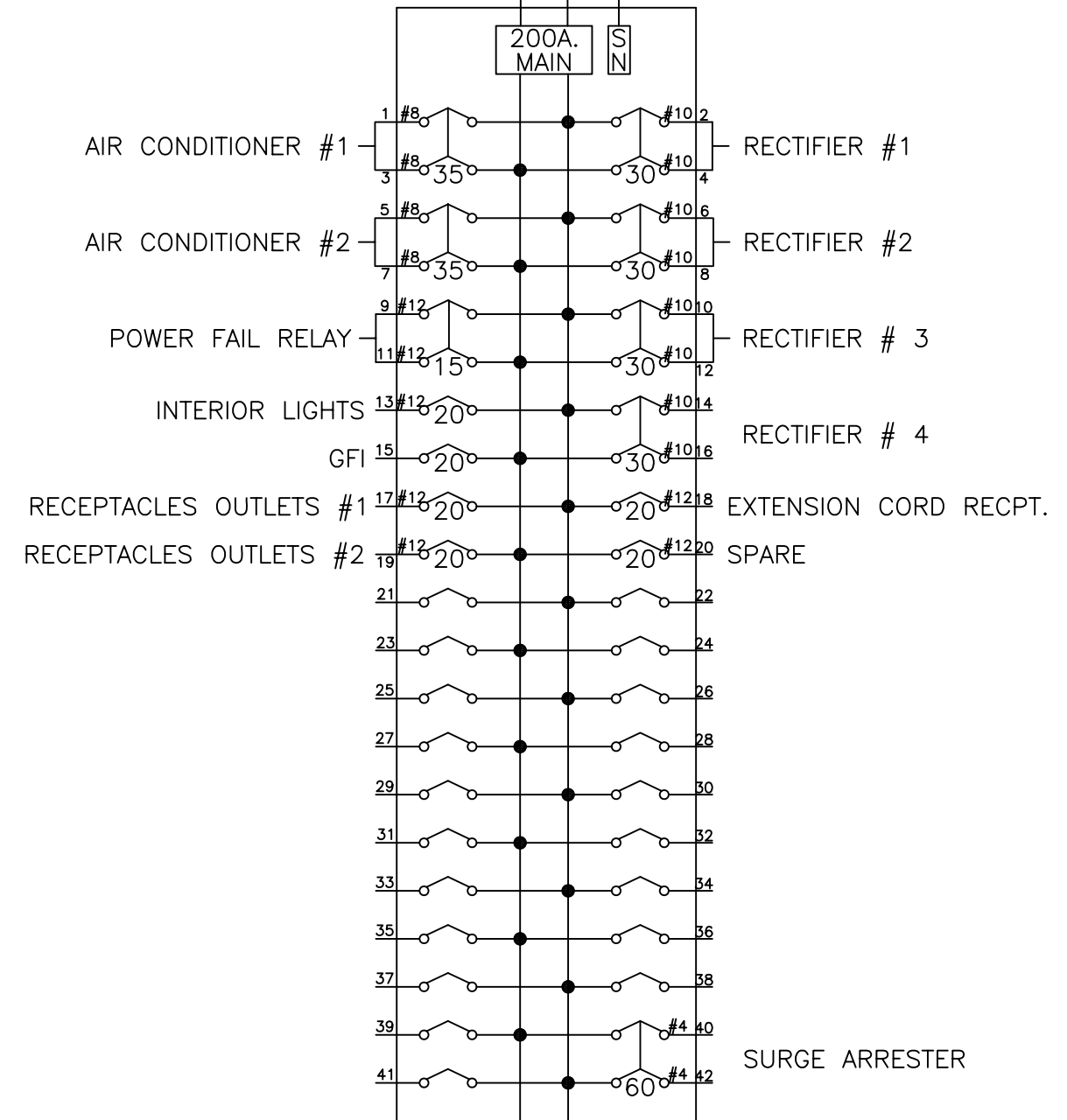


POWER WIRING DETAIL



TERMINAL STRIP DETAIL

120/240 A.C. 60 HZ  
1 PHASE, 200A. 3 WIRE



AC LOAD CENTER

PROJECT  
WISPER WIRELESS  
JOB NO.  
0809-10  
SITE NAME  
MELROSE, MN.

BUILDINGS, INC.		
<b>THERMO BOND</b>		
P.O. Box 445 Elk Point, SD		
Scale:	NONE	Title:
Date:	9/25/08	GENERAL ELECTRICAL NOTES AND AC LOAD CENTER
Drawn By:	DRL	Revised:
Approved By:		Drawing Number:
		AGB8146
	COMPUTER AIDED DRAWING AGB8146E	PAGE 6 OF 10

CONSTRUCTION NOTES:

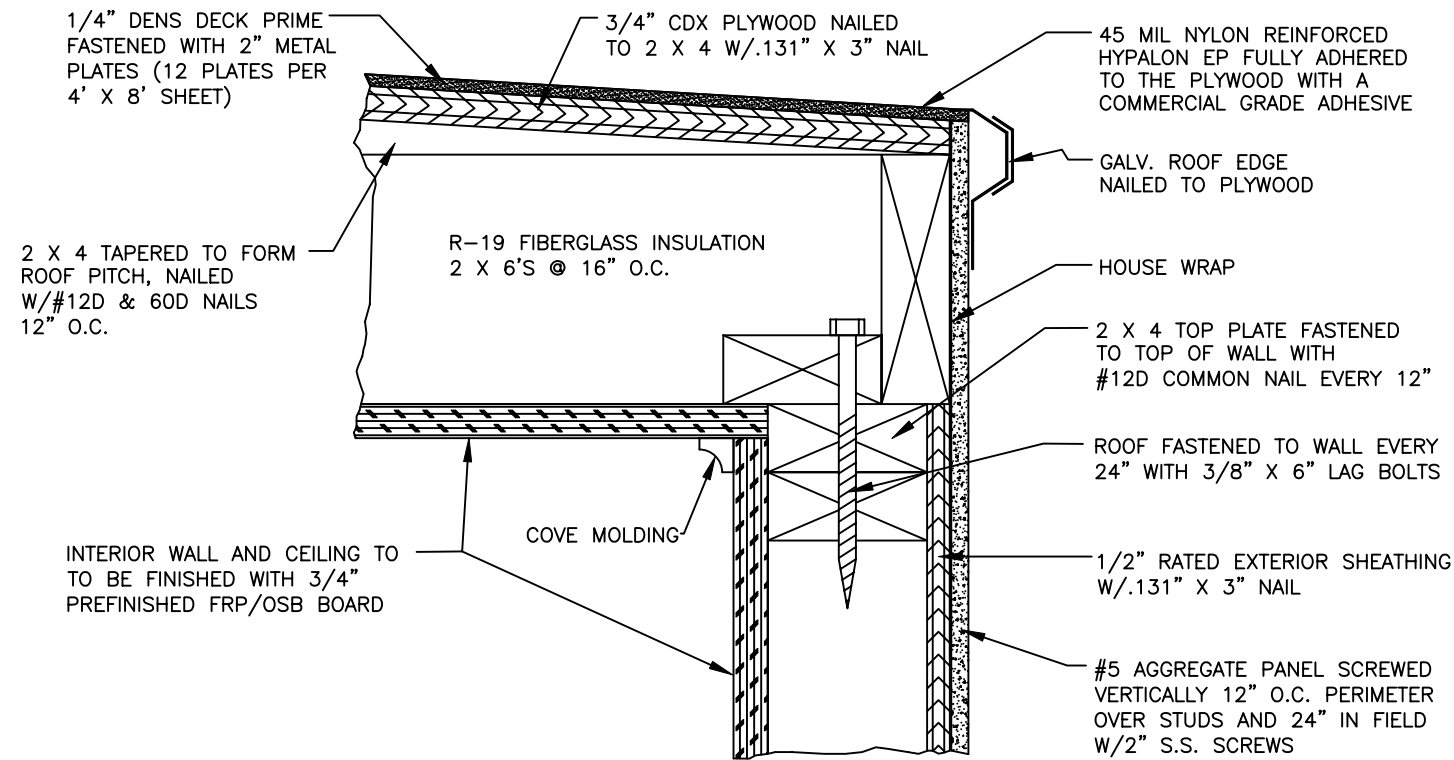
1. SKID ASSEMBLY: THE SKID ASSEMBLY SHALL CONSIST OF 6" X 9# BEAM WELDED TO 3 1/2" O.D. SCHEDULE 40 PIPES RUNNING THROUGH THE BEAMS AND 2" X 2" X 1/4" ANGLES PLACED BETWEEN THE BEAMS EVERY 4'-0" ON CENTER. THE COMPLETE SKID ASSEMBLY SHALL BE PAINTED WITH RUST PREVENTATIVE PAINT AND SECURED TO THE FLOOR WITH 3/8" X 3" LAG BOLTS EVERY 12".
2. REFER TO DRAWINGS 5, 6 AND 7 FOR CONSTRUCTION DETAILS.

ELECTRICAL NOTES:

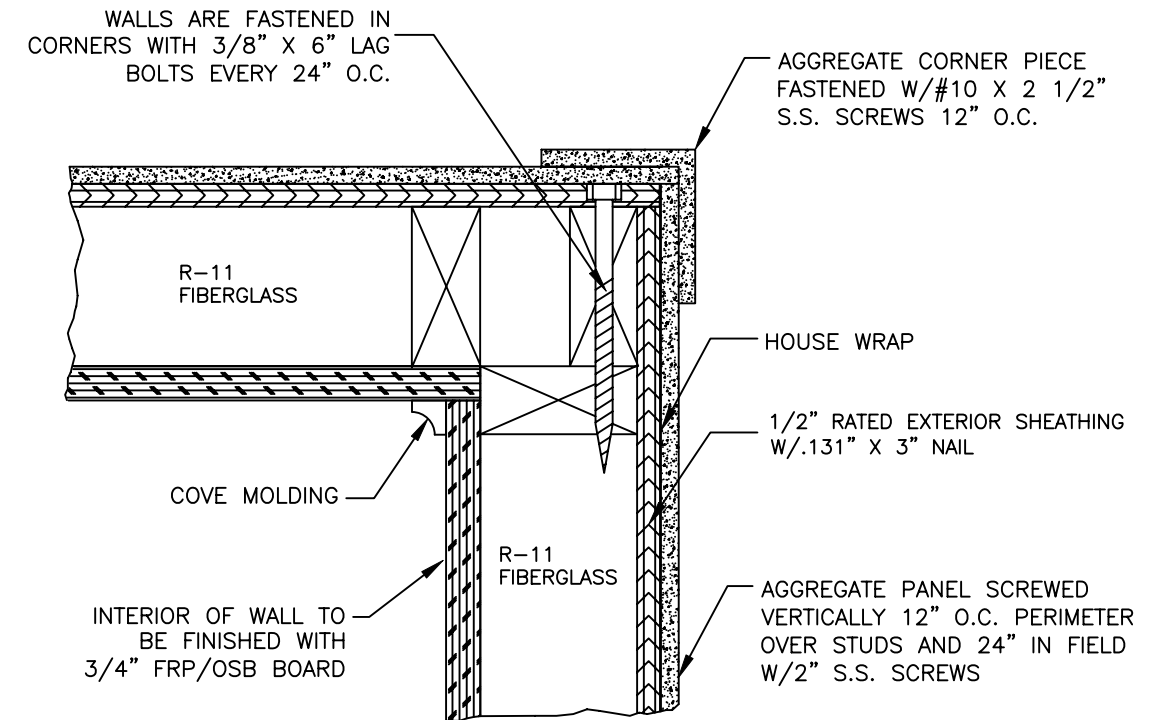
1. ALL WIRING SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NFPA700, NEC-2005).
2. ALL ELECTRICAL MATERIALS SHALL BE U.L. LISTED AND CLASSIFIED AS SUITABLE FOR THE PURPOSE SPECIFIED.
3. ALL WIRING SHALL BE SURFACE MOUNTED IN A RACEWAY OR EMT CONDUIT USING APPROVED CONNECTORS, COUPLINGS, AND CLAMPS, ALL CONDUIT SHALL BE ANCHORED IN PLACE AT APPROXIMATELY EVERY 4 FT.
4. ALL WIRING SHALL BE A SOLID CONDUCTOR, THHN OR THWN COPPER, NO SMALLER THAN A #12.
5. ALL WIRE RUNS SHALL BE CONTINUOUS.
6. LOW VOLTAGE WIRE MAY BE STRANDED.
7. ALL WIRING SHALL BE TESTED AND INSPECTED PRIOR TO SHIPMENT.
8. GREEN GROUND CONDUCTORS SHALL BE RUN TO ALL OF THE BUILDINGS A/C POWERED DEVICES. CONDUIT SHALL NOT BE USED AS THE SOLE SOURCE OF GROUND.
9. ALL ALARM DEVICES WIRING SHALL BE RUN IN ITS OWN CONDUIT TO THE ALARM CABINET.
10. LOAD CENTER GROUND WIRE MUST BE ATTACHED TO GROUNDING SYSTEM BEFORE APPLING POWER.
11. ALL EXTERIOR FIXTURES ARE TO BE WEATHERPROOF.
12. COIL UP 15' OF EXCESS WIRE TO EACH RECTIFIER CIRCUIT FOR CUSTOMER CONNECTION.
13. ALL GROUND BARS ARE TO BE DRILLED TO ACCEPT 2 HOLE LUGS.
14. PHOTO CELL IS TO BE ADJUSTED SO THAT THE LIGHT WILL WORK ONLY AT NIGHT.
15. INSTALL #6 STRANDED GREEN GROUND WIRES FROM THE MANUAL TRANSFER SWITCH & LOAD CENTER GROUND BUSES AND TELCO GROUND PLATE TO THE CABLE RACK ABOVE. COIL UP 25' FOR THE LOAD CENTER & 30' FOR THE MTS & TELCO GROUND BAR. TYRAP 2 HOLE COPPER LUG FOR #6 WIRE TO EACH WIRE & LABEL.
16. GROUND ALL METAL OBJECTS GREATER THAN 4" X 4" TO THE HALO USING #6 AWG STRANDED GREEN WIRE. GROUND ANY CONDUITS THAT CROSS THE HALO OR PASS WITHIN 12" OF THE HALO TO THE HALO USING #6 AWG STRANDED GREEN WIRE.
17. INTERIOR AND EXTERIOR MGB ARE TO BE SHIPPED LOOSE IN THE BUILDINGS. CUSTOMER WILL INSTALL ON SITE AFTER THE CABLE ENTRANCE HAS BEEN DETERMINED. ATTACH TWO HOLE LUGS TO THE MGB WITH TIEWRAPS FOR ATTACHMENT TO THE HALO GROUND RING. INSTALL DROPS FROM THE HALO NEXT TO EACH ENTRANCE W/ 3' PIGTAILS. HALO IS TO BE INSTALL AS A CONTINUOUS RING.

*PROJECT*  
*WISPER WIRELESS*  
*JOB NO.*  
*0809-10*  
*SITE NAME*  
*MELROSE, MN.*

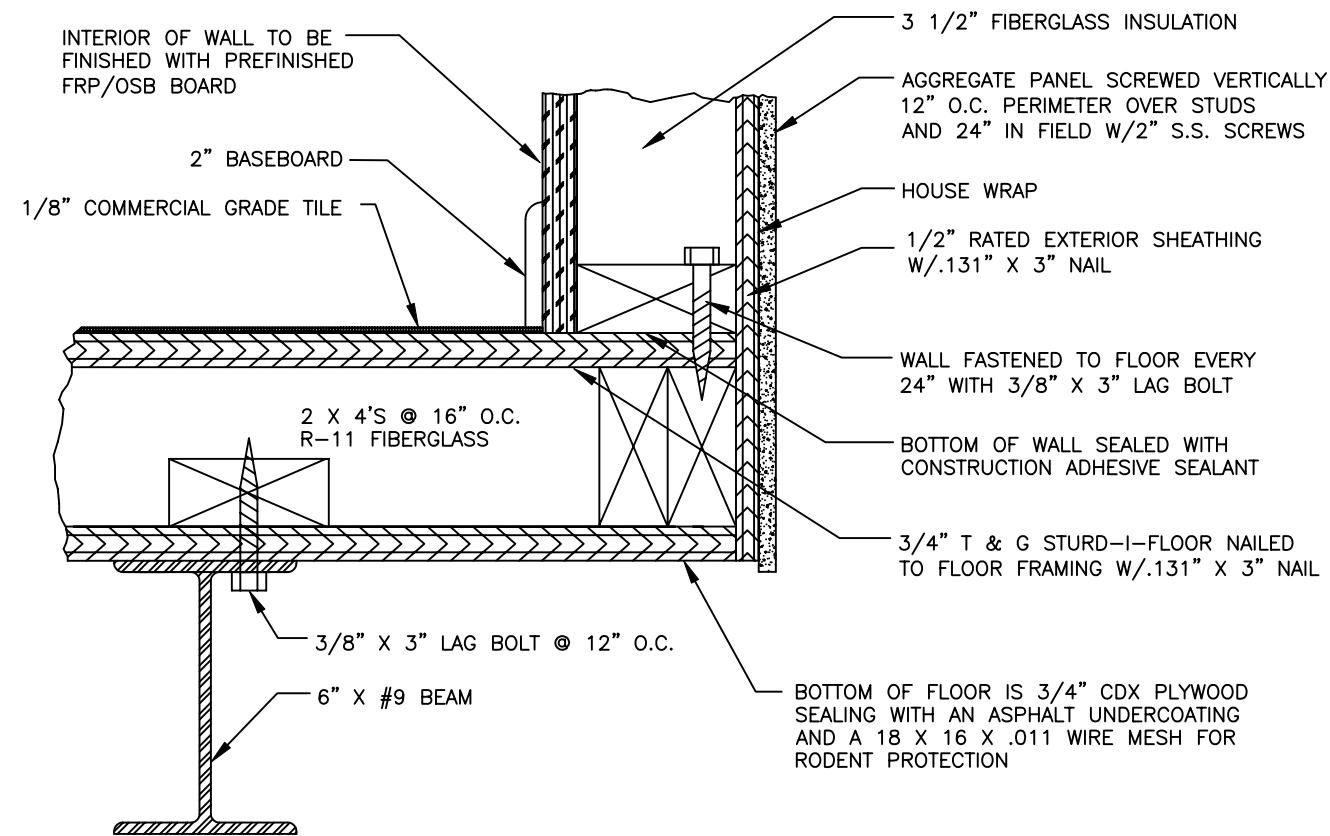
<b>BUILDINGS, INC.</b> <b>THERMO BOND</b> P.O. Box 445 Elk Point, SD			
Scale:	NONE	Title:	GENERAL NOTES AND GROUNDING NOTES
Date:	9/25/08	Revised:	
Drawn By:	DRL	Drawing Number:	AGB8146
Approved By:		COMPUTER AIDED DRAWING AGB8146G	PAGE 7 OF 10



WALL TO ROOF DETAIL



WALL CORNER DETAIL



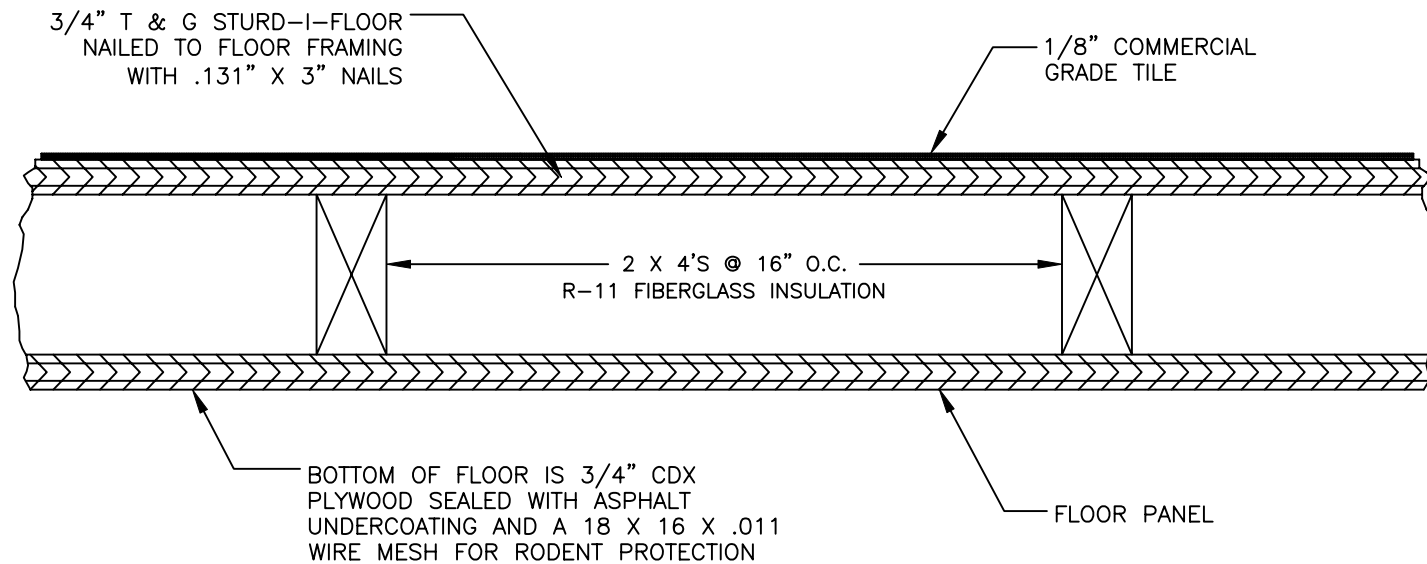
WALL TO FLOOR DETAIL

NOTES:

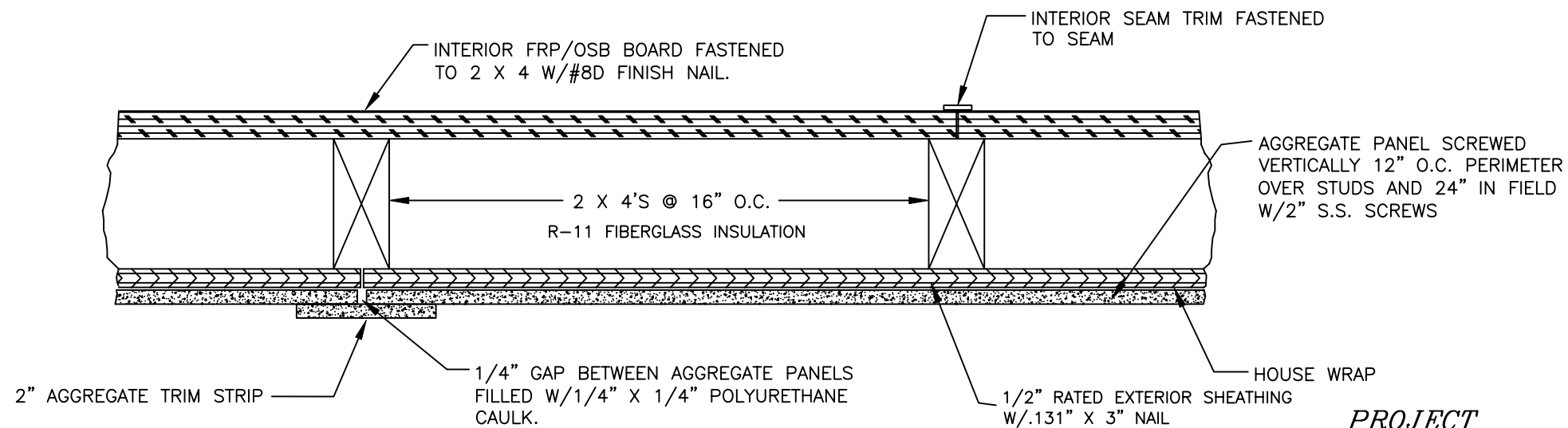
1. ALL PLYWOOD SHALL BE NAILED EVERY 6" AROUND PERIMETER AND EVERY 12" IN FIELD.
2. HOUSE WRAP TO BE INSTALLED 1/8" BELOW SHEETING AND EXTEND TO TOP OF TOP PLATE. ALL SEAMS TO BE LAPPED 6" AND TAPED W/SEAM TAPE.
3. ALL SCREW HOLES THROUGH PANELS FILLED WITH POLYURETHANE CAULK PRIOR TO SCREW BEING INSTALLED.
4. ALL STRUCTURAL LUMBER SHALL BE SPF #1 OR #2

*PROJECT*  
*WISPER WIRELESS*  
*JOB NO.*  
*0809-10*  
*SITE NAME*  
*MELROSE, MN.*

<b>BUILDINGS, INC.</b>		
<b>Thermo Bond</b>		
P.O. Box 445 Elk Point, SD		
Scale:	NONE	Title:
Date:	9/25/08	BUILDING CONSTRUCTION DETAILS
Drawn By:	DRL	Revised:
Approved By:		Drawing Number:
		AGB8146
	COMPUTER AIDED DRAWING AGB8146H	PAGE 8 OF 10



FLOOR DETAIL



WALL DETAIL

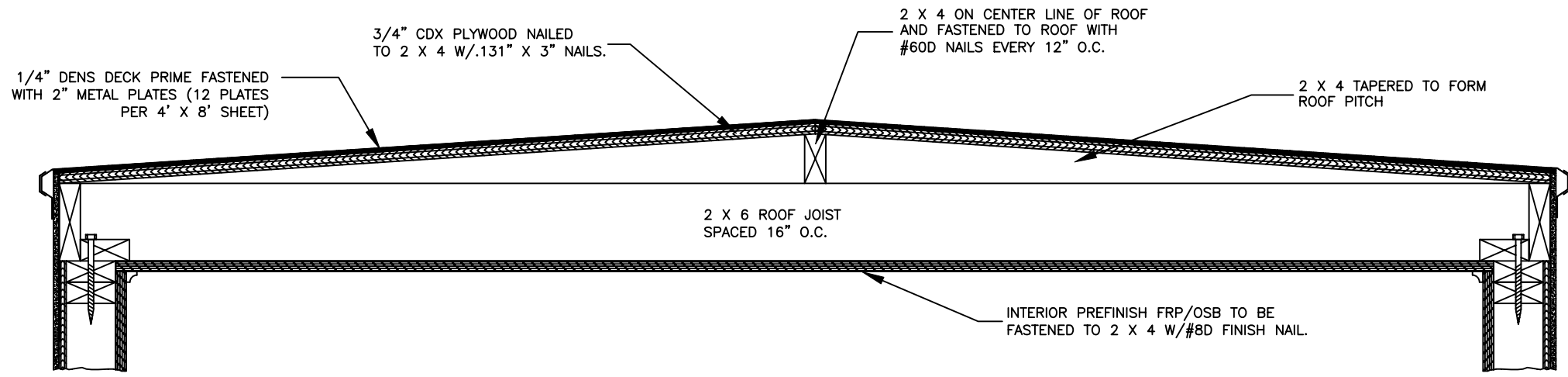
NOTES:

1. ALL PLYWOOD SHALL BE NAILED EVERY 6" AROUND PERIMETER AND EVERY 12" IN FIELD.
2. HOUSE WRAP TO BE INSTALLED 1/8" BELOW SHEETING AND EXTEND TO TOP OF TOP PLATE. ALL SEAMS TO BE LAPPED 6" AND TAPED W/SEAM TAPE.
3. ALL SCREW HOLES THROUGH PANELS FILLED WITH POLYURETHANE CAULK PRIOR TO SCREW BEING INSTALLED.
4. ALL STRUCTURAL LUMBER SHALL BE SPF #1 OR #2.

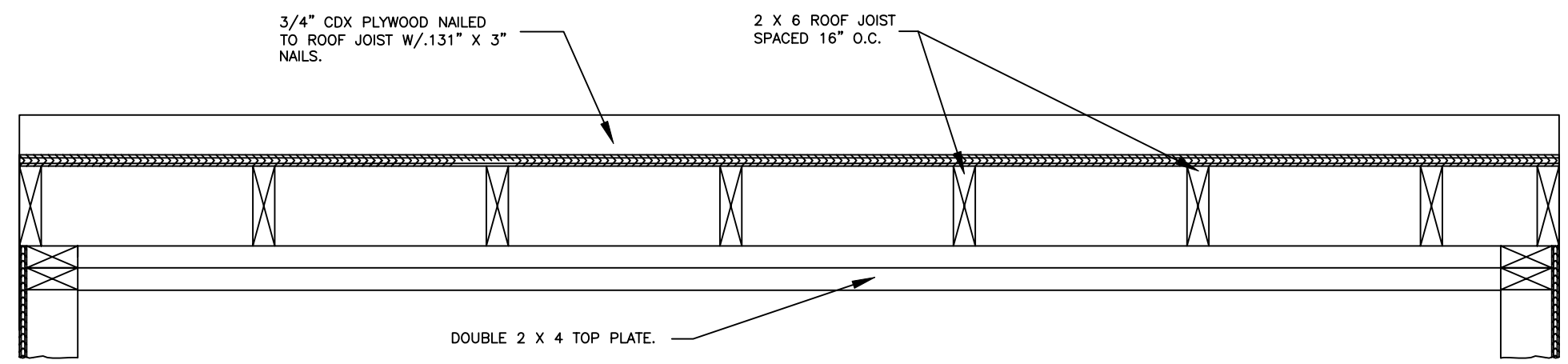
*PROJECT*  
*WISPER WIRELESS*  
*JOB NO.*  
*0809-10*  
*SITE NAME*  
*MELROSE, MN.*

<b>BUILDINGS, INC.</b>		
<b>THERMO BOND</b>		
P.O. Box 445 Elk Point, SD		
Scale:	NONE	Title:
Date:	9/25/08	BUILDING CONSTRUCTION DETAILS
Drawn By:	DRL	Revised:
Approved By:		Drawing Number:
		AGB8146
	COMPUTER AIDED DRAWING AGB8146I	PAGE 9 OF 10





ROOF STRUCTURE END DETAIL



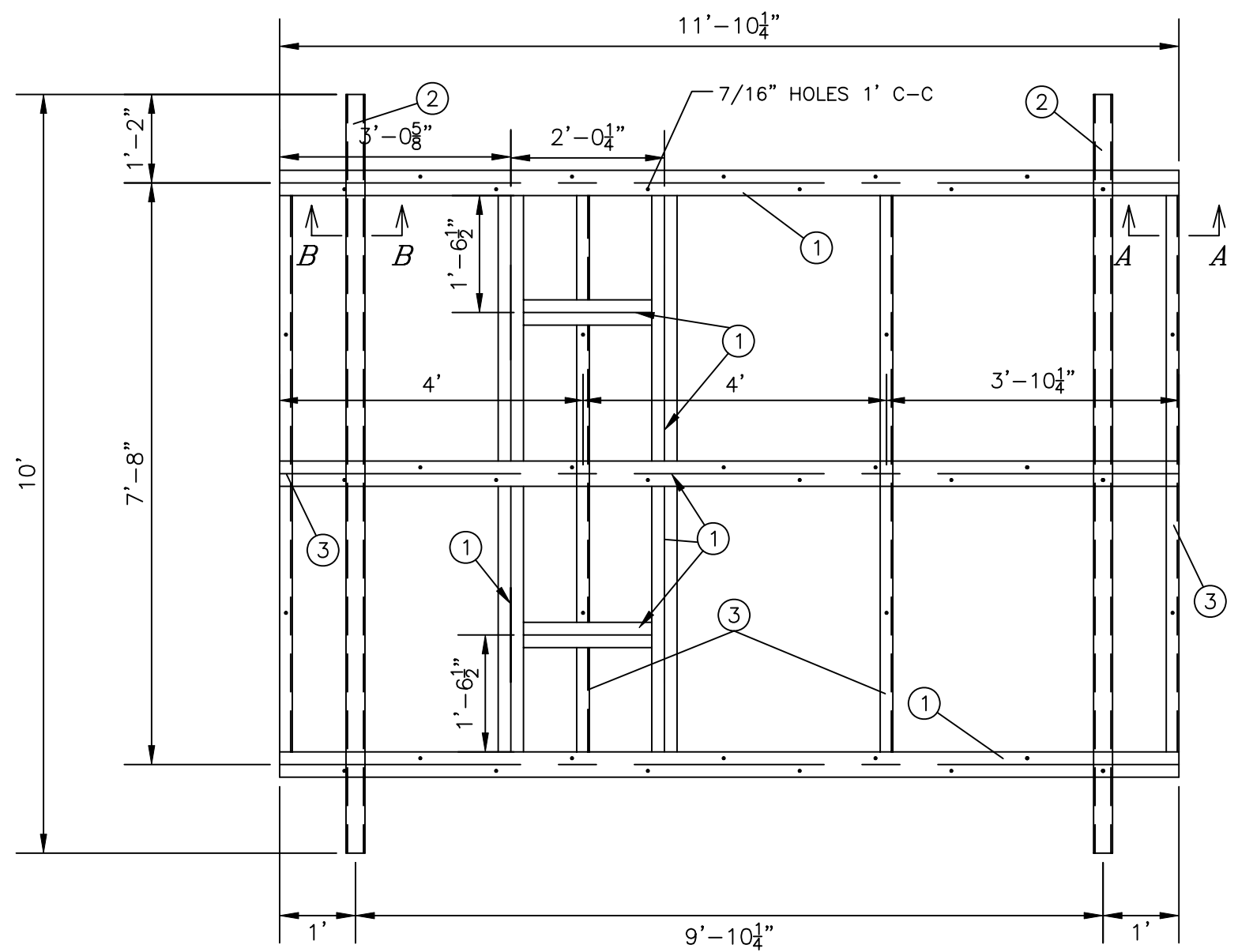
ROOF STRUCTURE SIDE DETAIL

NOTES:

1. ALL PLYWOOD SHALL BE NAILED EVERY 6" AROUND PERIMETER AND EVERY 12" IN FIELD.
2. HOUSE WRAP TO BE INSTALLED 1/8" BELOW SHEETING AND EXTEND TO TOP OF TOP PLATE. ALL SEAMS TO BE LAPPED 6" AND TAPED W/SEAM TAPE.
3. ALL SCREW HOLES THROUGH PANELS FILLED WITH POLYURETHANE CAULK PRIOR TO SCREW BEING INSTALLED.
4. ALL STRUCTURAL LUMBER SHALL BE SPF #1 OR #2

*PROJECT*  
*WISPER WIRELESS*  
*JOB NO.*  
*0809-10*  
*SITE NAME*  
*MELROSE, MN.*

<small>BUILDINGS, INC.</small>		
<b>THERMO BOND</b>		
P.O. Box 445 Elk Point, SD		
Scale:	NONE	Title:
Date:	9/25/08	BUILDING CONSTRUCTION DETAILS
Drawn By:	DRL	Revised:
Approved By:		Drawing Number:
	COMPUTER AIDED DRAWING AGB8146J	AGB8146
		PAGE 10 OF 10



DOOR →

1/2" = 1' SCALE

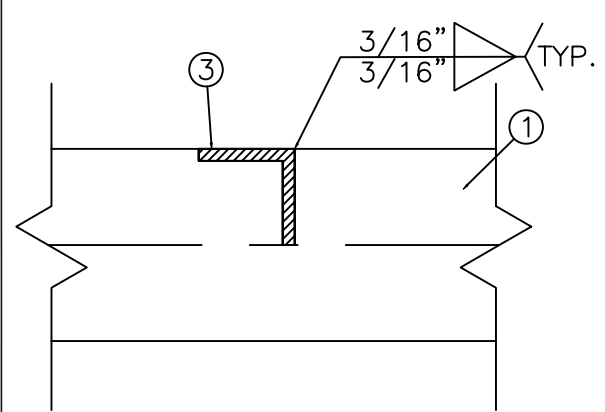
TOP VIEW

**WELDED ASSEMBLY**

**NOTES:**

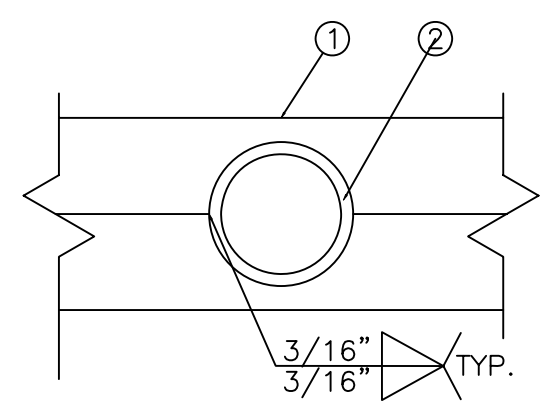
1. FINISH: PAINTED WITH RUST PREVENTATIVE PAINT.

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS SHOWN ON THIS DRAWING SHALL HAVE THE FOLLOWING TOLERANCE:  
 FRACTION ± 1/8"  
 ANGLE ± 2°



3" = 1' SCALE

**SECTION "A-A"**



3" = 1' SCALE

**SECTION "B-B"**

				TOTAL BLACK STEEL WEIGHT	743.7#
NO.	QTY.	DWG NO.	DESCRIPTION	WEIGHT	
3.	5	15B7002	ANGLE, SUPPORT (2 X 2 X 1/4)	117.0#	
2.	2		PIPE SUPPORT (3" NOM. SCH 40)	151.6#	
1.	2	15B6020	BEAM SUPPORT (W6 X 9#)	475.1#	

**LIST OF MATERIAL**

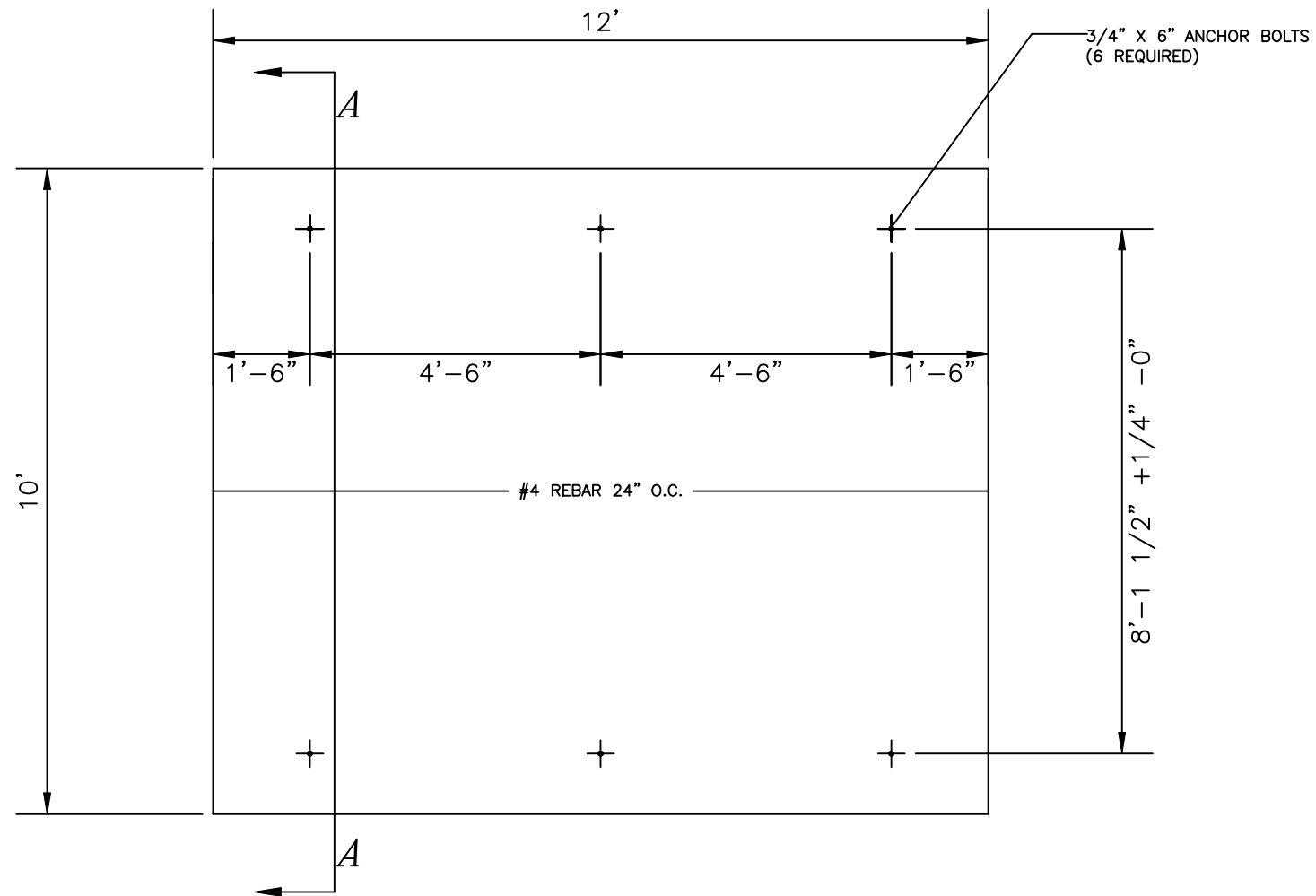
BUILDINGS, INC.

# THERMO BOND

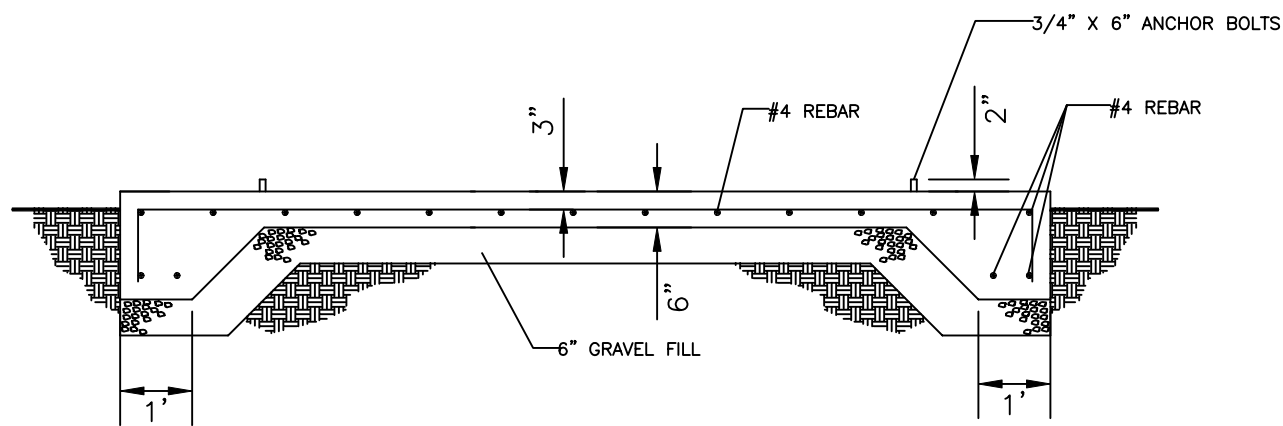
P.O. Box 445 Elk Point, SD

Scale: NONE	Title: BUILDING SKID ASSEMBLY FOR 10' X 12' BUILDING
Date: 10/8/03	
Drawn By: TLH	Revised:
Approved By:	Drawing Number: 15R1012
	COMPUTER AIDED DRAWING 15R1012

PAGE 1 OF 1



PLAN VIEW



SECTION "A-A"

NOTES:

1. CONCRETE SHALL ATTAIN A MINIMUM ULTIMATE COMPRESSION STRENGTH OF 4000 PSI WITHIN 28 DAYS.
2. ALL WIRE MESH TO HAVE A MINIMUM OF 2" CONCRETE COVER.

BUILDINGS, INC. <b>THERMO BOND</b> P.O. Box 445 Elk Point, SD		
Scale: 3/8" = 1'	Title: BUILDING FOUNDATION FOR 10' X 12' BUILDING	
Date: 10/8/03	Revised:	Drawing Number: S15R1012
Drawn By: TLH	Approved By:	PAGE 1 OF 1
COMPUTER AIDED DRAWING S15R1012		

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**The City That Soars!**

## REQUEST FOR COUNCIL ACTION

<b>Meeting Date</b>	April 6, 2016
<b>Agenda Item</b>	Workshop #3
<b>Attachment</b>	Cost Saving Analysis and Agreement
<b>Submitted By</b>	Sack Thongvanh, City Administrator

<b>Item</b>	Community Solar Garden Update
<b>Description</b>	<p>We have received our cost saving analysis from Geronimo Energy. Based on our demand load, we can expect a potential savings of \$23,730.27 over 25 years with an allocation of 100,740 kwh. The City of Falcon Heights would retain \$.01 per kilo watt hour that is produced by Geronimo Energy. I am currently trying to confirm numbers with Geronimo Energy and Xcel Energy. There seems to be some confusion with energy used and energy produced at the City Hall Building.</p> <p>I had initial conversation with Doug Wester solar representative from Geronimo Energy and a representative from Xcel and both cannot clarify the numbers for City Hall. I would like to get my questions answered before the City moves forward with the proposal. Due to the complexity of the City Hall building and the current solar panels on the roof, I would like to be accurate with the information provided by Geronimo Energy and Xcel Energy before we commit to a twenty-five (25) year agreement.</p>
<b>Budget Impact</b>	Involvement in the program with help reduce energy cost and provide a benefit to Xcel's power grind with solar energy production.
<b>Attachment(s)</b>	<ul style="list-style-type: none"> <li>• Geronimo Energy Cost Savings Analysis</li> <li>• Generic Agreement</li> </ul>
<b>Action(s) Requested</b>	No action required, but expected approve in the next two months.

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## The City of Falcon Heights Solar Rewards Cost Savings Analysis

March 10, 2016

### XCEL ENERGY SOLAR\*REWARDS PROGRAM OVERVIEW

In 2013, Minnesota State legislation directed Minneapolis-based utility, Xcel Energy, to create a program for community solar gardens (Minnesota Statute # 216b.1641). Xcel named the program the Xcel Energy Solar\*Rewards Program, and it is overseen by the state's Public Utilities Commission. A community solar garden is a centralized, shared solar project connected to the energy grid that has multiple subscribers. Each subscriber receives a credit on their Xcel Energy electric bill based upon the production of the solar facility and their subscription share of that facility.

*Xcel Energy Program Rules (apply to all community solar garden developments)*

- Eligible gardens are up to 1 MW, and up to five gardens may be located next to one another.
- The program is limited to Xcel Energy customers in the state of Minnesota.
- Subscribers must be located within the same county, or within an adjacent county, to the subscribed solar garden location(s).
- Each subscriber may be allocated up to 40% of a single community solar garden.
- There is a minimum requirement of 5 subscribers per solar garden.

### ABOUT GERONIMO ENERGY

Geronimo Energy is a North American utility-scale wind and solar development company based in Minneapolis, Minnesota. Geronimo has developed over 1,500 megawatts of contracted wind farms and solar projects throughout the United States and has a pipeline of projects that boast an aggregate nameplate capacity exceeding 3,000 megawatts of clean energy – roughly enough to power one million American homes. Geronimo solar projects provide clean electricity to utilities and other large energy consumers. Recent Geronimo Energy solar developments include the multi-store Slumberland Furniture installation and the internationally recognized Aurora Utility-Scale Distributed Solar Generation Project.

Geronimo's current community solar garden (CSG) subscribers span a variety of industries and geographic locations and include non-profits, colleges and universities, corporations, government agencies and residential units. Presently, Geronimo serves residential customers through its executed subscriptions with our non-profit, education and government organizations, which together make up nearly half of Geronimo's CSG subscription base.

### GERONIMO ENERGY'S COMMUNITY SOLAR GARDENS

Geronimo Energy is actively working with and seeking subscribers. Like all Minnesota community solar garden developments, the energy produced by Geronimo's solar gardens will be delivered to Xcel's local distribution system under Xcel Solar\*Rewards Community program.

Together with its finance partner, Geronimo provides a complete set of services to guarantee a superior level of service and reliability for subscribers. Subscribers under Geronimo's community solar garden program are ensured smooth implementation and operation of community solar garden projects, including subscription management, real-time solar production monitoring, and lifetime maintenance and facility upkeep.





**GERONIMO ENERGY PROGRAM BENEFITS FOR SUBSCRIBERS**

- **No upfront investment** or future capital requirements.
- **Annual energy savings** through a simple, straight-forward pricing structure.
- Xcel Energy remains your electricity provider.
- Geronimo’s CSG subscriptions are transferable.
- Work with one of the nation’s best and most **landowner-friendly** development companies.
- Enjoy the security of the financial backing from a global powerhouse.
- **Support renewable energy.**
- **Keep your energy dollars’ local.**
- Geronimo’s projects are *real* – advanced site control, permitting, and interconnection.
- **No maintenance or overhead** - each solar facility is professionally maintained.

**GERONIMO ENERGY PROGRAM BENEFITS FOR THE CITY OF FALCON HEIGHTS**

- There are (3) 1MW gardens open for new subscriptions within your County or adjacent Counties.
- Your average annual usage for the premises that you provided was approximately 100,740 kWh
- Subscribing to your lottery results allows you to offset of that load, however we have a total of 201,480 kWh available for you to use for your allocation to the program if you’d like to provide more premises.
- **First Year savings of \$1,007.40 OR 2,014.80** – at one penny (\$0.01) per kWh.
- **25 year savings of \$23,730.27 OR 47,460.53** – including a slight degradation factor of the garden at one half of one percent (0.5%) per year.

**COMMUNITY SOLAR REWARDS PROGRAM COST SAVINGS**

**ALLOCATION OF 100,740 kWh (6% of 1MW)**

Garden	Argo Navis 2	Annual Total
Year 1	\$ 1,007.40	\$ 1,007.40
Year 2	\$ 1,002.36	\$ 1,002.36
Year 3	\$ 997.35	\$ 997.35
Year 4	\$ 992.36	\$ 992.36
Year 5	\$ 987.40	\$ 987.40
Year 6	\$ 982.47	\$ 982.47
Year 7	\$ 977.55	\$ 977.55
Year 8	\$ 972.67	\$ 972.67
Year 9	\$ 967.80	\$ 967.80
Year 10	\$ 962.96	\$ 962.96
Year 11	\$ 958.15	\$ 958.15
Year 12	\$ 953.36	\$ 953.36
Year 13	\$ 948.59	\$ 948.59
Year 14	\$ 943.85	\$ 943.85
Year 15	\$ 939.13	\$ 939.13
Year 16	\$ 934.43	\$ 934.43
Year 17	\$ 929.76	\$ 929.76
Year 18	\$ 925.11	\$ 925.11
Year 19	\$ 920.49	\$ 920.49
Year 20	\$ 915.88	\$ 915.88
Year 21	\$ 911.30	\$ 911.30
Year 22	\$ 906.75	\$ 906.75
Year 23	\$ 902.21	\$ 902.21
Year 24	\$ 897.70	\$ 897.70
Year 25	\$ 893.21	\$ 893.21
<b>25 Year Total</b>	<b>\$ 23,730.27</b>	<b>\$ 23,730.27</b>

**ALLOCATION OF 201,480 kWh (12% of 1MW)**

Garden	Argo Navis 2	Annual Total
Year 1	\$ 2,014.80	\$ 2,014.80
Year 2	\$ 2,004.73	\$ 2,004.73
Year 3	\$ 1,994.70	\$ 1,994.70
Year 4	\$ 1,984.73	\$ 1,984.73
Year 5	\$ 1,974.81	\$ 1,974.81
Year 6	\$ 1,964.93	\$ 1,964.93
Year 7	\$ 1,955.11	\$ 1,955.11
Year 8	\$ 1,945.33	\$ 1,945.33
Year 9	\$ 1,935.60	\$ 1,935.60
Year 10	\$ 1,925.93	\$ 1,925.93
Year 11	\$ 1,916.30	\$ 1,916.30
Year 12	\$ 1,906.72	\$ 1,906.72
Year 13	\$ 1,897.18	\$ 1,897.18
Year 14	\$ 1,887.70	\$ 1,887.70
Year 15	\$ 1,878.26	\$ 1,878.26
Year 16	\$ 1,868.87	\$ 1,868.87
Year 17	\$ 1,859.52	\$ 1,859.52
Year 18	\$ 1,850.22	\$ 1,850.22
Year 19	\$ 1,840.97	\$ 1,840.97
Year 20	\$ 1,831.77	\$ 1,831.77
Year 21	\$ 1,822.61	\$ 1,822.61
Year 22	\$ 1,813.50	\$ 1,813.50
Year 23	\$ 1,804.43	\$ 1,804.43
Year 24	\$ 1,795.41	\$ 1,795.41
Year 25	\$ 1,786.43	\$ 1,786.43
<b>25 Year Total</b>	<b>\$ 47,460.53</b>	<b>\$ 47,460.53</b>

*\*Solar garden electric savings analysis is an estimate only. Variations will depend upon amount of allocation, available gardens, space in available gardens, permit approvals from cities and counties, interconnection agreement with Xcel Energy, and terms agreed upon with financial partner.*

## SOLAR GARDEN SUBSCRIPTION AGREEMENT

This Solar Garden Subscription Agreement (“**Agreement**”) is entered into as of the [●] day of [●], 20[●] (the “**Effective Date**”) by and between [Community Solar Garden], a [●] limited liability company (“**Owner**”), and [●], a [●] (the “**Subscriber**”). In this Agreement, Owner and Subscriber are sometimes referred to individually as a “**Party**” and collectively as the “**Parties**.”

### RECITALS

A. Owner intends to develop, own, operate and maintain a photovoltaic generation facility qualified as a “Community Solar Garden” pursuant to Minn. Stat. 216B.1641 (“**CSG Program**”) to be located at [●] (the “**Facility**”) and has entered or will enter into a Standard Contract for Solar Rewards Community (“**CSG Contract**”) with the local electric distribution company (the “**LDC**”). The designed capacity of the Facility shall be approximately 1000 kW<sub>AC</sub> (subject to adjustment as described herein, the “**Facility Capacity**”);

B. The energy produced by the Facility will be delivered by Owner to the LDC via interconnection of the Facility to the electric grid, and the LDC will calculate the monetary value of the energy received from the Facility per the applicable utility tariff and convert that amount into credits per kilowatt hour (the “**Bill Credit Rate**” as defined in the CSG Contract) on the bills from LDC to the subscribers to the Facility (“**Credits**”);

C. Owner will, in accordance with the terms hereof, and through the administrative process established by the LDC as approved by the Minnesota Public Utilities Commission (“**MPUC**”), allocate and sell the right to receive Credits to its subscribers according to their respective Allocations (as defined below);

D. Subscriber is an LDC customer ([●] Premise. No. [●]) and desires to purchase Credits from Owner in proportion to its expected consumption of electricity at [●], [●], Minnesota [●] (“**Customer Site**”).

**NOW, THEREFORE**, in consideration of the foregoing recitals, the mutual premises, representations, warranties, covenants, conditions herein contained, and the Exhibits attached hereto, Subscriber and Owner agree as follows.

1. **Term.** The term of this Agreement shall commence on the Effective Date and, unless terminated earlier pursuant to the provisions hereof, shall terminate on the 25<sup>th</sup> anniversary of the Commercial Operation Date (as defined below) (the “**Term**”). The Term shall not be extended by virtue of any period of disconnection or event of Force Majeure experienced by the Facility.

2. **Operation of the Facility.**

a. Owner shall operate the Facility during the Term so as to deliver all energy generated by the Facility to LDC in accordance with the CSG Contract and applicable LDC tariffs.

b. Owner shall maintain the Facility in good working order at all times during the Term, and shall operate the Facility in a manner reasonably intended to maximize the amount of Credits allocable to Subscriber, consistent with good custom and practice for operation of utility generating facilities.

### 3. Sale and Purchase of Credits; Allocation.

a. Owner shall promptly notify Subscriber of the date commercial operation of the Facility commences as established pursuant to the CSG Contract (“**Commercial Operation Date**”). In the event that the Commercial Operation Date is not achieved by December 31, 2017, and any of the following events or circumstances occur, either Party may terminate this Agreement, without liability, upon delivery of notice of termination to the other Party:

i. after timely application to the LDC (or other applicable distribution service provider whose system the Facility connects to deliver energy (the “**Distribution Provider**”) and commercially reasonable efforts to secure interconnection services, Owner has not received written confirmation and evidence that interconnection services will be available for the energy generated by the Facility at the Facility Capacity; or

ii. the LDC or another party with the authority to do so disqualifies Owner or the Facility from participating in the CSG Program.

b. Owner shall allocate a portion of Facility Capacity to Subscriber equal to [●] percent ([●] %) of Facility Capacity (the “**Allocation**”). Owner shall provide to LDC the Allocation along with Subscriber’s name, LDC account number(s), and service address(es) (“**Subscriber Data**”).

c. Owner shall sell to Subscriber and Subscriber shall purchase from Owner, the right to receive an amount of Credits calculated on the basis of that portion of the total kilowatt<sub>ac</sub> hours delivered by the Facility to LDC which corresponds to the Allocation. The Allocation shall be effective for each and every LDC Production Month (as defined in the CSG Contract) during the Term. Owner shall post Credits to Subscriber’s account monthly for invoicing pursuant to Section 4 of this Agreement (“**Subscriber’s Monthly Credits**”). Thus, where  $x$  = number of Subscriber’s Monthly Credits,  $y$  = kilowatt<sub>ac</sub> hours delivered in an LDC Production Month, and  $a$  = Allocation,  $x = y * a$ .

### 4. Price and Payment.

a. For the right to receive Subscriber’s Monthly Credits generated by the Facility each month, Subscriber shall pay to Owner an amount equal to the product of (i) the corresponding Subscriber’s Monthly Credits, and (ii) the Bill Credit Rate then applicable to the LDC’s Solar Rewards Community Program minus one cent (\$.01) (the “**Monthly Allocation Payment**”).

b. Beginning with the second calendar month following the Commercial Operation Date, Owner shall invoice Subscriber for the Monthly Allocation Payment for the Credits posted to Subscriber’s account since the prior invoice date. Subscriber shall make its payments to Owner no later than thirty (30) days following receipt of the applicable invoice.

Owner shall include with each invoice, a copy of the LDC statement delivered to Owner that indicates the kWh<sub>AC</sub> upon which the LDC calculates the Credit to Subscriber.

5. **Records and Audits.**

a. Upon request by Subscriber, Owner shall provide (i) reasonable evidence of the accuracy of its metering equipment for the Facility and/or (ii) such other information and records reasonably requested by Subscriber to enable Subscriber to verify the accuracy of the Credits awarded by the LDC and any other calculation and/or measurements described in this Agreement.

b. Owner shall provide reports to Subscriber (i) monthly, containing the energy produced by the Facility, and (ii) annually, containing an audited financial statement of Owner, and a current statement of management, financing parties, and operatorship of Owner. Subscriber may provide comments to Owner on the accuracy and completeness of the annual reports, and shall provide a copy of any such comments to LDC.

c. As required by Minnesota Statutes, section 16C.05, subdivision 5, the records, books, documents, and accounting procedures and practices of CSGI and of any subcontractor of CSGI relating to work performed pursuant to this Agreement shall be subject to audit and examination by the Subscriber and the Legislative Auditor or State Auditor as described in such subdivision. CSGI and any subcontractor of CSGI shall permit, upon reasonable advance written notice, the Subscriber or its designee to inspect, copy, and audit its accounts, records, and business documents at any reasonable time during regular business hours, as they may relate to the performance under this Agreement. Audits conducted by the Subscriber under this provision shall be in accordance with generally accepted auditing standards.

6. **Taxes.**

a. Subscriber shall be solely liable for sales or similar taxes imposed by a governmental entity, if any, attributable to the sale of Credits allocated to the Subscriber.

b. Subscriber shall have no interest in and have no entitlement to claim any investment tax credit or other tax benefits related to the construction, ownership, operation or maintenance of the Facility.

7. **Representations, Warranties and Covenants.**

a. Each Party represents and warrants to the other Party:

i. The Party is duly organized, validly existing, and in good standing in the jurisdiction of its organization and is qualified to do business in the State of Minnesota;

ii. The Party has full legal capacity to enter into and perform this Agreement;

iii. The execution of the Agreement has been duly authorized, and each person executing the Agreement on behalf of the Party has full authority to do so and to fully bind the Party; and

iv. To the best of its knowledge, there is no litigation, action, proceeding or investigation pending before any court or other Governmental Authority by, against, affecting or involving its ability to carry out the transactions contemplated herein.

b. Owner represents, warrants, and covenants to Subscriber:

i. Owner has, or in the ordinary course will obtain, all licenses, permits and any other required documents to construct and operate the Facility;

ii. Owner shall perform its obligations under the CSG Contract and otherwise comply with all provisions of the CSG Program and other applicable tariffs.

iii. Except as specifically provided for in this Agreement and may be required by law or regulation, or with Subscriber's consent, Owner will not publicly disclose Subscriber's LDC account information, energy usage data, or Credits.

c. Subscriber represents, warrants, and covenants to Owner:

i. Subscriber's average annual energy consumption for its subscribing account(s) over the two year period prior to the Effective Date is [●] kWh<sub>ac</sub>;

ii. Subscriber shall not install or procure any other distributed generation resource(s) serving Subscriber's premises to which energy is delivered by LDC under Account No. [●], which resource(s), when combined with the Allocation, may generate energy (including energy upon which the Credits are based) exceeding one hundred twenty percent (120%) of Subscriber's average annual energy consumption over the twenty-four (24) months prior to such installment or procurement.

iii. Within thirty (30) days of request by Owner, Subscriber shall complete, execute, and deliver to Owner the Subscriber Agency Agreement in the form attached hereto as Exhibit A. Upon execution, all of the information and statements of Subscriber provided therein shall be accurate.

iv. Subscriber understands and agrees it will have no interest in or entitlement to (a) benefits or derivatives of "Unsubscribed Energy" or "RECs" associated with the Facility as each is defined in the CSG Contract; and (b) incentives under the MN Department of Commerce's Made in Minnesota program and LDC's Solar Rewards program associated with the Facility.

8. **Performance Guarantee**. Owner hereby guarantees that in every period of two consecutive calendar years during the Term, beginning with the first full calendar year, Owner will provide Credits from operation of the Facility in an amount not less than ninety percent (90%) of Expected Deliveries (weather adjusted) which will be set forth on Exhibit B hereto (the "***Guaranteed Performance***") not later than the date of commencement of construction of the

Facility. Owner shall pay Subscriber one cent (\$.01) per Credit to the extent the actual number of Credits purchased by Subscriber during any such two year period (the “*Measurement Period*”) is less than the Guaranteed Performance for the entire Measurement Period (combining the Expected Deliveries for both calendar years). Such payment shall be Subscriber’s sole remedy for default by Owner under this Section 8. Owner shall have no liability under this Section 8 if the Facility’s failure to achieve Guaranteed Performance is due to an event of Force Majeure.

**9. Default and Force Majeure.**

a. Events of Default. The following shall each constitute an Event of Default by a Party:

i. The Party fails to make any payment due under this Agreement within thirty (30) days after delivery of notice from the other Party that such payment is overdue.

ii. The Party materially fails to perform or comply with any material representation, warranty, obligation, covenant or agreement set forth in this Agreement and such failure continues for a period of thirty (30) days after delivery of notice thereof from the other Party.

iii. The Party is subject to a petition for dissolution or reorganization, voluntary or involuntary, under the U.S. Bankruptcy Code or any state law (including appointment of a receiver or assignment for the benefit of creditors), which is not terminated within sixty (60) days of commencement.

b. Force Majeure. Except as specifically provided herein, if by reason of *Force Majeure*, a Party is unable to carry out, either in whole or in part, any of its obligations herein contained, such Party shall not be deemed to be in default during the continuation of such inability, provided that: (i) the non-performing Party, within a reasonable time after the occurrence of the *Force Majeure* event, gives the other Party notice describing the particulars of the occurrence and the anticipated period of delay; (ii) the suspension of performance be of no greater scope and of no longer duration than is required by the *Force Majeure* event; (iii) no obligations of the non-performing Party which were to be performed prior to the occurrence causing the suspension of performance shall be excused as a result of the occurrence; and (iv) the non-performing Party shall use reasonable efforts to remedy the cause(s) preventing it from carrying out its obligations. “*Force Majeure*” as used in this Agreement shall mean an event or circumstances beyond the reasonable control of a Party, which was not reasonably foreseeable and not resulting from the Party’s negligence, gross negligence or intentional acts, including, but not limited to fire, acts of God, earthquake, flood or other casualty or accident; break down or failure of the Distribution Provider’s electric distribution system; serial equipment defect; strikes or labor disputes; war, civil strife or other violence; and any law, order, proclamation, regulation, ordinance, action, demand or requirement of any government agency or utility. Force Majeure does not include the lack of funds, inability to make a payment or general change in the economy or particular markets.

10. **Remedies; Limitation of Liability; Waiver.**

a. Remedies. Subject to the limitations set forth in this Agreement, the Parties each reserve and shall have all rights and remedies available to it at law or in equity with respect to the performance or non-performance of the other Parties hereto under this Agreement. Under no circumstances shall Owner's liability under this Agreement exceed, in any one calendar year, an amount equal to (i) the Allocation percentage times (ii) \$15,000; provided, however that such limitation shall not apply to damages arising out of the sale or allocation by Owner to a third party of the Credits allocated and committed to Subscriber hereunder. For example, if the Allocation is 40%, then the limit described in the preceding sentence shall equal 40% x \$15,000 or \$6,000 total.

b. Owner Damages. In the event of Subscriber's breach, repudiation, or termination of this Agreement in violation of the provisions hereof, Owner shall be entitled to recover from Subscriber (subject to Owner's duty to mitigate damages including its duty to try and find a replacement subscriber): (i) the unpaid Monthly Allocation Payments due at the time of termination; and (ii) Owner's actual, reasonable, and verifiable damages resulting from Subscriber's breach. Any post-termination Monthly Allocation Payments that may qualify as damages under this section, will be calculated-based upon the Schedule of Expected Deliveries of Credits (Exhibit B, hereto), and the Bill Credit Rate at the time of Subscriber's breach of this Agreement.

c. Limitation of Liability. EXCEPT AS EXPRESSLY ALLOWED HEREIN, NO PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR SPECIAL, INDIRECT OR PUNITIVE DAMAGES OF ANY CHARACTER, RESULTING FROM, ARISING OUT OF, IN CONNECTION WITH OR IN ANY WAY INCIDENT TO ANY ACT OR OMISSION OF A PARTY RELATED TO THE PROVISIONS OF THIS AGREEMENT, IRRESPECTIVE OF WHETHER CLAIMS OR ACTIONS FOR SUCH DAMAGES ARE BASED UPON CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY AT LAW OR EQUITY.

d. Exclusions. NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS SECTION 10, THE LIMITATIONS OF THIS SECTION 10 DO NOT APPLY TO A CLAIMS FOR (i) GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, (ii) FAILURE TO COMPLY WITH LAWS, (iii) INDEMNIFICATION, (iv) BREACH OF CONFIDENTIALITY OR (v) INTELLECTUAL PROPERTY INFRINGEMENT.

11. **Early Termination.**

a. Owner may terminate this Agreement on notice thereof to Subscriber in the event that Owner is unable to obtain financing or adequate subscriptions for the Facility on commercially reasonable terms on or before December 31, 2017.

b. If Owner fails to perform under this Agreement due to an event of Force Majeure that lasts more than twelve (12) months or fails to restore the Facility to full operation at Capacity within twelve (12) months following an event of Force Majeure causing damage to the Facility, Subscriber shall have the right to terminate this Agreement by giving Owner at least



sixty (60) days prior written notice of its intent to terminate based on such failure(s). Any such notice of termination shall be given within three (3) months of such failure(s). In the event of termination pursuant to this Section 11(b), Owner shall pay to Subscriber, as liquidated damages, one cent (\$.01) for each Credit expected to have been allocated to Subscriber for the six month period following the expiration of such twelve (12) month period.

c. In the event (i) the CSG Contract is terminated based on Owner's breach thereof or (ii) Owner materially breaches its obligations of performance in this Agreement and such breach is not cured within thirty (30) days after Owner receives written notice of such breach from Subscriber (provided, however, that if such breach is not capable of being cured within such thirty-day period and Owner has commenced and diligently continued actions to cure such breach within such thirty-day period, the cure period shall be extended to 180 days, so long as Owner is making diligent efforts to do so), then Subscriber may terminate this Agreement as provided in this Section 11. In the event of a termination by Subscriber described in the preceding sentence, Owner shall pay to Subscriber, as liquidated damages, one cent (\$.01) for each Credit expected to have been allocated to Subscriber for the calendar year following termination according to the Schedule of Expected Deliveries, Exhibit B.

d. The Parties agree that actual damages in the event of termination of this Agreement as specified in Sections 11(b) and 11(c), would be difficult to calculate and that the liquidated damages specified herein are a reasonable approximation of such actual damages.

12. **Assignment.** No Party shall assign or in any manner transfer this Agreement or any part thereof except in connection with (a) Subscriber's assignment to a party approved in advance by Owner, with such approval not unreasonably withheld, on the bases of (i) creditworthiness, (ii) the party's eligibility under the Solar Rewards Community Program, (iii) Subscriber's payment to Owner of seven hundred fifty dollars (\$750) to cover Owner's administrative expenses associated with the transfer (the "**Transfer Fee**") and (iv) other factors evidencing an increase in a material risk of a breach of this Agreement, (b) Owner's assignment of this Agreement to any Affiliate that owns or, by long-term lease, controls the Facility, provided that such Affiliate has the same or better credit strength and has agreed in writing to recognize Subscriber's rights under this Agreement and to comply with the terms of this Agreement; (c) Owner's collateral assignment of this Agreement to any financial institution that provides financing for the Facility (including a financial institution that enters into a sale/leaseback transaction with respect to the Facility) that has agreed in writing to recognize Subscriber's rights under this Agreement and to comply with the terms of this Agreement upon the foreclosure or conveyance in lieu thereof, and, in connection with any collateral assignment of this Agreement, Subscriber agrees to comply with the lender accommodations set forth in Exhibit C to this Agreement; (d) Owner's assignment of this Agreement, prior to the Commencement of Operations Date, to another operator/owner of a community garden facility, in the same County and qualified under the Solar Rewards Community Program which has sufficient capacity to accept Subscriber's Allocation, has the same or better credit strength, and agrees in writing to recognize Subscriber's rights under this Agreement and to comply with the terms of this Agreement; or (e) Subscriber's assignment of this Agreement to any of its Affiliates or successor entity if the Minnesota legislature reassigns responsibility for the services provided by Subscriber (without change of service address) provided that such Affiliate or successor entity has the same or better credit strength and pays the Transfer Fee.

**13. Miscellaneous.**

a. LDC Disputes. Owner shall be solely responsible for resolving any dispute with LDC regarding the production of energy by the Facility. Subscriber shall be solely responsible for resolving any dispute with LDC regarding the calculation of the Bill Credit Rate.

b. Notices.

i. All notices and other formal communications which any Party may give to another under or in connection with this Agreement shall be in writing (except where expressly provided for otherwise), shall be deemed delivered upon mailing, deposit with a courier for hand delivery, or electronic transmission, and shall be sent by any of the following methods: hand delivery; reputable overnight courier; certified mail, return receipt requested; or email transmission.

ii. Subscriber shall promptly notify Owner of any changes in Subscriber Data.

The notices and communications shall be sent to the following addresses:

If to Owner:

Owner  
c/o BHE Renewables, LLC  
Program Manager – MN Community Solar Gardens  
1850 N. Central Ave. Suite 1025  
Phoenix, AZ 85004  
Phone: 515-252-6677  
Email: BHERenewables@bherenewables.com

If to Subscriber:



c. Severability. If any term, covenant or condition in the Agreement shall, to any extent, be invalid or unenforceable in any respect under Applicable Law, the remainder of the Agreement shall not be affected thereby, and each term, covenant or condition of the Agreement shall be valid and enforceable to the fullest extent permitted by Applicable Law, unless such invalidity or unenforceability frustrates or negates an essential purpose of this Agreement.

d. Governing Law. This Agreement shall be governed by and construed in accordance with the domestic laws of the State of Minnesota without reference to any choice of law principles.

e. Dispute Resolution.

i. Amicable Settlement. The Parties shall attempt in good faith to resolve all disputes arising in connection with the interpretation or application of the provisions of this Agreement or in connection with the determination of any other matters arising under this Agreement by mutual agreement.

ii. Continuation of Performance. During the pendency of any dispute hereunder, the Parties shall continue to perform their respective obligations under this Agreement.

iii. Equitable Relief. Nothing in this Agreement shall be construed to preclude either Party from seeking or obtaining urgent equitable or injunctive relief from a court of law in relation to this Agreement.

iv. Venue and Jurisdiction. The Parties agree that the courts of the State of Minnesota and the Federal Courts sitting therein shall have jurisdiction over any action or proceeding arising under the Agreement to the fullest extent permitted by Applicable Law.

v. Waiver of Jury Trial. TO THE FULLEST EXTENT PERMITTED BY LAW, EACH OF THE PARTIES HERETO WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT. EACH PARTY FURTHER WAIVES ANY RIGHT TO CONSOLIDATE ANY ACTION IN WHICH A JURY TRIAL HAS BEEN WAIVED WITH ANY OTHER ACTION IN WHICH A JURY TRIAL CANNOT BE OR HAS NOT BEEN WAIVED.

f. Insurance. With respect to the services provided pursuant to this Agreement, CSGI shall at all times during the term of this Agreement and beyond such term when so required have and keep in force the following insurance coverages and limits:

i. Commercial General Liability on an occurrence basis with contractual liability coverage:

General Aggregate	\$2,000,000
Products—Completed Operations Aggregate	\$2,000,000
Personal and Advertising Injury	\$1,500,000
Each Occurrence—Combined Bodily Injury and Property Damage	\$1,500,000

ii. Workers' Compensation and Employer's Liability:

Workers' Compensation	Statutory
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(If CSGI is based outside the state of Minnesota, coverage must comply with Minnesota Law).

iii. Employer's Liability. Bodily injury by:

Accident—Each Accident	\$500,000
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Disease—Policy Limit	\$500,000
Disease—Each Employee	\$500,000

An umbrella or excess policy over primary liability insurance coverages is an acceptable method to provide the required insurance limits.

The above establishes minimum insurance requirements. It is the sole responsibility of CSGI to determine the need for and to procure additional insurance which may be needed in connection with this Agreement. Upon written request, CSGI shall promptly submit copies of insurance policies to Subscriber.

iv. CSGI shall not commence work until it has obtained required insurance and filed with Subscriber a properly executed Certificate of Insurance establishing compliance. The certificate(s) must name Subscriber as the certificate holder and as an additional insured for the liability coverage(s) for all operations covered under this Agreement. CSGI shall furnish to Subscriber updated certificates during the term of this Agreement as insurance policies expire.

g. Compliance with Law. Owner shall comply with all applicable laws (including common laws), ordinances, codes, tariffs, rules and regulations (collectively, “*Laws*”) regarding Owner’s obligations and performance under this Agreement. Owner shall obtain and maintain any and all permits, licenses, bonds, certificates and other similar approvals required in connection with this Agreement. In the event of an allegation that Owner has failed to comply with any Laws or failed to obtain any and all permits, licenses, bonds, certificates and/or any other similar approvals required in connection with this Agreement, Owner shall pay any fines or penalties imposed upon Subscriber as a result of such failure and shall reimburse Subscriber for any expenses (including attorneys’ fees) incurred by Subscriber in responding to such allegation.

h. Entire Agreement. This Agreement, and all documents referenced herein, contain the entire agreement between Parties with respect to the subject matter hereof, and supersede all other understandings or agreements, both written and oral, between the Parties relating to the subject matter hereof.

i. No Joint Venture. Each Party will perform all obligations under this Agreement as an independent contractor. Nothing herein contained shall be deemed to constitute any Party a partner, agent or legal representative of another Party or to create a joint venture, partnership, agency or any relationship between the Parties. The obligations of Subscriber and Owner hereunder are individual and neither collective nor joint in nature.

j. Amendments; Binding Effect. This Agreement may not be amended, changed, modified, or altered unless such amendment, change, modification, or alteration is in writing and signed by each Party to this Agreement or its successor in interest. This Agreement inures to the benefit of and is binding upon the Parties and their respective successors and permitted assigns.

k. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement.

l. Further Assurances. From time to time and at any time at and after the execution of this Agreement, each Party shall execute, acknowledge and deliver such documents and assurances, reasonably requested by the other for the purpose of effecting or confirming any of the transactions contemplated by this Agreement.

m. Survival. The provisions of Sections 10, (Remedies, Limitation of Liability; Waiver), 13(c) (Severability), 13(d) (Governing Law), 13(e) (Dispute Resolution), and 13(g) (Indemnity) and 13(p) (Confidentiality) shall survive the expiration or earlier termination of this Agreement.

n. No Third-Party Beneficiaries. This Agreement is intended solely for the benefit of the Parties hereto. Except as expressly set forth in this Agreement, nothing in this Agreement shall be construed to create any duty to or standard of care with reference to, or any liability to, or any benefit for, any person not a party to this Agreement.

o. Confidentiality. Each Party agrees that it will not disclose Not Public Data (as hereinafter defined), directly or indirectly, under any circumstances or by any means (excluding disclosures to the LDC or as are required as a participant in the CSG Program), to any third person without the express written consent of the other Party unless such disclosure is permitted by the Minnesota Government Data Practices Act, Minn. Stat. ch. 13, or required by applicable Law. “*Not Public Data*” means, not public data as defined in Minnesota Statutes § 13.02, subd. 8a (2014).

p. Data Practices.

i. Consistent with Minnesota Statutes, section 13.05, subdivision 6, if any data on individuals is made available to Owner by the Subscriber under this Agreement, Owner will administer and maintain any such data in accordance with Minnesota Statutes, Chapter 13 (the “*Minnesota Government Data Practices Act*”), and any other statutory provisions applicable to the data. If and to the extent that Minnesota Statutes, section 13.05, subdivision 11, is applicable to this Agreement, then: (A) all of the data created, collected, received, stored, used, maintained, or disseminated by Owner in performing this Agreement are subject to the requirements of the Minnesota Government Data Practices Act; (B) Owner must comply with those requirements as if it were a government entity; and (C) the remedies in Minnesota Statutes, section 13.08 apply to Owner.

ii. Consistent with Minnesota Statutes, section 13.055, if “private data on individuals,” “confidential data on individuals” or other “not public data” are provided to or made accessible to Owner by the Subscriber, Owner must: (A) have safeguards to ensure private or confidential data on individuals or other not public data are only accessible or viewable by Owner employees and agents whose work assignments in connection with the performance of this Agreement reasonably require them to have access to the data; (B) immediately notify the Subscriber of any unauthorized access by Owner employees and agents, and unauthorized access by third parties; (C) fully cooperate with Subscriber investigations into any breach in the security of private or confidential data on individuals or other not public data that may have occurred in connection with Owner’s access to or use of the data; and (D) fully cooperate with the Subscriber in fulfilling the notice and reporting requirements of Minnesota Statutes, section 13.055. The

penalties in Minnesota Statutes, section 13.09 governing unauthorized acquisition of not public data apply to Owner and Owner employees and agents. If Owner is permitted to use a subcontractor to perform Owner's work under this Agreement, Owner shall incorporate these data practices provisions into the subcontract.

iii. If Owner receives a request to release data referred to in this section, Owner must immediately notify the Subscriber. The Subscriber will give Owner instructions concerning the release of the data to the requesting party before the data is released.

*[Signature page follows]*

**IN WITNESS WHEREOF**, the Parties have executed this Agreement as of the Effective Date.

**SUBSCRIBER**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**Owner**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**EXHIBIT A**

**Subscriber Agency Agreement and Consent Form**



**Solar\*Rewards Community**

**Subscriber Agency Agreement and Consent Form**

The undersigned (“*Subscriber*”) has a Subscription to the following Community Solar Garden:

Community Solar Garden Name:	_____
Community Solar Garden Address:	_____
Community Solar Garden Operator:	_____
Community Solar Garden contact information for Subscriber questions and complaints:	<u>BHE Renewables, LLC</u>
Address (if different from above):	<u>1850 N. Central Avenue, Suite 1025, Phoenix, AZ 85004</u>
Telephone number:	<u>515-281-6677</u>
Email address:	<u>BHERenewables@bherenewables.com</u>
Web Site URL:	<u>http://www.bherenewables.com/</u>

Subscriber Name:	_____
Subscriber’s Account Number with Northern States Power Company:	_____
Subscriber Service Address where receiving electrical service from Northern States Power Company:	_____

By signing this Solar Rewards Community Subscriber Agency Agreement and Consent Form, the Subscriber agrees to all of the following:

1. Assignment of Renewable Energy Credits (“RECs”), Energy and Capacity to Northern States Power Company, a Minnesota corporation. The Subscriber agrees that the Community Solar Garden Operator has authority to assign all energy produced and capacity associated with the photovoltaic energy system at the Community Solar Garden to Northern States Power Company, and the Subscriber agrees that all energy produced, and capacity associated with the photovoltaic energy system at the Community Solar Garden shall belong to Northern States Power Company. The Subscriber also agrees that the Community Solar Garden Operator has authority to assign all RECs associated with the photovoltaic energy system at the Community Solar Garden to Northern States Power Company, and that if the Community Solar Garden or a person or entity on its behalf has assigned the RECs to Northern States Power Company, then all RECs associated with the photovoltaic energy system at the Community Solar Garden shall belong to Northern States Power Company.

2. Tax Implications. The Community Solar Garden Operator has provided the Subscriber with a statement that Northern States Power Company makes no representations concerning the taxable consequences to the Subscriber with respect to its Bill Credits to the Subscriber or other tax issues relating to participation in the Community Solar Garden.

3. Northern States Power Company hereby discloses to the Subscriber that it recognizes that not all production risk factors, such as grid-failure events or atypically cloudy weather, are within the Community Solar Garden Operator's control.

4. Information Sharing. Participating in the Solar\*Rewards Community Program will require sharing Subscriber's Account Information (name, account number, service address, telephone number, email address, web site URL, information on Subscriber participation in other distributed generation serving the premises of the Subscriber, Subscriber specific Bill Credit(s)) and Subscriber's Energy Use Data (the past, present and future electricity usage attributable to the Subscriber for the service address and account number identified for participation in the Community Solar Garden). The following outlines the type of information that will be shared, and how that information will be used.

a. Subscriber's Account Information and Subscriber Energy Usage Data. The Subscriber authorizes Northern States Power Company to provide the Community Solar Garden Operator (and the Community Solar Garden Operator's designated subcontractors and agents) with the Subscriber's Account Information and Subscriber's Energy Usage Data as described in Section 4 above. This information is needed to allow the Community Solar Garden Operator determine the extent to which the Subscriber is entitled to participate in the Community Solar Garden, and to validate the amount of the Bill Credits to be provided by Northern States Power Company to the Subscriber. The current data privacy policies of Northern States Power Company applicable to its Solar\*Rewards Community Program provided to the Subscriber by the Community Solar Garden Operator pursuant Section 3 above are attached as Exhibit 1 of this Solar\*Rewards Community Subscriber Agency Agreement and Consent Form. These

privacy policies include definitions of “Subscriber's Account Information” and "Subscriber's Energy Usage Data."

b. Subscriber's Subscription Information: The Subscriber authorizes the Community Solar Garden Operator to provide information to Northern States Power Company identifying the Subscriber (with the Subscriber's name, service address, and account number) and detailing the Subscriber's proportional share in kilowatts of the Community Solar Garden and to provide additional updates of this information to Northern States Power Company as circumstances change. This information is needed to allow Northern States Power Company to properly apply Bill Credits for the photovoltaic energy generated by the Community Solar Garden. Also, this information is needed to allow Northern States Power Company to send to the Subscriber notices or other mailings pertaining to their involvement in the Solar\*Rewards Community Program. The Community Solar Garden Operator shall not disclose Subscriber information in annual reports or other public documents absent explicit, informed consent from the Subscriber. The Community Solar Garden Operator will not release any Subscriber data to third parties except to fulfill the regulated purposes of the Solar\*Rewards Community Program, to comply with a legal or regulatory requirement, or upon explicit, informed consent from the Subscriber.

c. Aggregate Information. Aggregate information concerning production at the Community Solar Garden may be publicly disclosed to support regulatory oversight of the Solar\*Rewards Community Program. This includes annual reports available to the public related to specific Community Solar Gardens, including but not limited to production from the Community Solar Gardens; size, location and the type of Community Solar Garden subscriber groups; reporting on known complaints and the resolution of these complaints; lessons learned and any potential changes to the Solar\*Rewards Community Program; reporting on Bill Credits earned and paid; and reporting on the application process. Aggregated information will not identify individual Subscribers or provide Subscriber-Specific Account Information, Subscriber-Specific Energy Usage Data or Subscriber-specific Bill Credits unless a Subscriber provides explicit informed consent. Depending on the nature of the aggregated information, however, it may still be possible to infer the amount of production attributed to individual Subscribers to the Community Solar Garden. The Subscriber agrees to the inclusion of its production information in the creation of the aggregated information. The Community Solar Garden Operator will not use aggregated information for purposes unrelated to the Solar\*Rewards Community Program without first providing notice and obtaining further consent, unless the aggregated information is otherwise available as public information. The policies of Northern States Power Company related to sharing aggregated information are part of the data privacy policies contained in the attached Exhibit 1 of this Solar\*Rewards Community Subscriber Agency Agreement and Consent Form and should be provided to the Subscriber by the Community Solar Garden Operator pursuant Section 3 above.

d. Information Requests from the MPUC or the Department of Commerce. The Subscriber agrees that the Community Solar Garden Operator and Northern States Power Company are authorized to provide any information they possess related to the

Subscriber or the Subscriber's participation in the Community Solar Garden to the Minnesota Public Utilities Commission (MPUC), the Minnesota Department of Commerce, or the Minnesota Office of Attorney General. This information is needed to allow proper regulatory oversight of Northern States Power Company and of the Solar\*Rewards Community Program.

e. Liability Release. Northern States Power Company shall not be responsible for monitoring or taking any steps to ensure that the Community Solar Garden Operator maintains the confidentiality of the Subscriber's Account Information, the Subscriber's Energy Usage or the Bill Credits received pertaining to the Subscriber's participation in the Community Solar Garden. However, Northern States Power Company shall remain liable for its own inappropriate release of Subscriber's Account Information and Subscriber's Energy Use Data.

f. Duration of Consent. The Subscriber's consent to this information sharing shall be ongoing for the Term of the CSG Contract between the Community Solar Garden Operator and Northern States Power Company, or until the Subscriber no longer has a Subscription to the Community Solar Garden and the Community Solar Garden Operator notifies Northern States Power Company of this fact through the CSG Application System. Provided, however, the Subscriber's consent shall also apply thereafter to all such information of the Subscriber pertaining to that period of time during which the Subscriber had a Subscription to the Community Solar Garden.

g. Modification. The above provisions addressing data privacy and in Exhibit 1 shall remain in place until and unless other requirements are adopted by the MPUC in its generic privacy proceeding, Docket No. E,G999/CI-12-1344, or other MPUC Order. Northern States Power Company shall file necessary revisions to its tariffs and contracts within thirty (30) days of such Order.

Subscriber's Name: \_\_\_\_\_

Subscriber's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Exhibit 1 to  
Solar\*Rewards Community Subscriber Agency Agreement and Consent Form**

**Data Privacy Policies of Northern States Power Company Pertaining to the Solar\*Rewards  
Community Program**

The data privacy policies of Northern States Power Company pertaining to the Solar\*Rewards Community Program are as follows and may be changed from time to time as filed in the Company's tariff or as otherwise may be authorized by the Minnesota Public Utilities Commission ("MPUC"):

**Definitions**

Unless indicated otherwise, the same definition and meaning of terms in this document are the same as contained in the Standard Contract for Solar\*Rewards Community. For ease of reference, here are some of the specific definitions:

“Company” means Northern States Power Company, a Minnesota Corporation, and its affiliates and agents.

“Subscribed Energy” means electricity generated by the PV System attributable to the Subscribers' Subscriptions and delivered to the Company at the Production Meter on or after the Date of Commercial Operation.

“Subscriber” means a retail customer of the Company who owns one or more Subscriptions of a community solar garden interconnected with the Company.

“Subscriber’s Account Information” consists of the Subscriber's name, account number, service address, telephone number, email address, web site URL, information on Subscriber participation in other distributed generation serving the premises of the Subscriber, and Subscriber specific Bill Credit(s).

“Subscriber's Energy Usage Data” includes the past, present and future electricity usage attributable to the Subscriber for the service address and account number identified for participation in the Community Solar Garden.

## Overview

This section addresses how Subscriber's Account Information and Subscriber's Energy Usage Data will be collected, used and shared as part of participation in the Solar\*Rewards Community Program.

### **1. How Subscriber's Account Information and Energy Usage Data Will Be Exchanged**

#### a. Subscriber Specific Information

Once a Subscriber has executed a Subscriber Agency Agreement and Consent Form, an ongoing data exchange will occur between the Company and a Community Solar Garden Operator (and their designated subcontractors and agents):

(i) The Company will disclose the following Subscriber-specific information to the Community Solar Garden Operator:

- Subscriber's Account Information
- Subscriber's Energy Usage Data
- Bill credits

(ii) The Community Solar Garden Operator will disclose to the Company the following Subscriber-specific information:

- Subscriber's Account Information
- Community Solar Garden Allocation for each Subscriber's Subscription stated in kW
- Production data related to the PV System
- Monthly Subscription Information

#### b. Aggregated Subscriber Information

Aggregated Subscriber information will be reported as part of Permitted Public Reporting, outlined in Section 2(b) below.

To be considered "aggregated" the reported information must include information attributable to all Subscribers participating in a specific Solar\*Rewards Community program site, which based on program requirements will contain a minimum of five Subscribers. Depending on the nature of the aggregated information, however, from this information alone or in combination with other publicly available information it may still be possible to infer the amount of production attributed to individual Subscribers to the Community Solar Garden.

## 2. **How Subscriber's Information Will Be Used**

The following outlines how the Subscriber's Account Information and Subscriber Energy Usage Data will be used as part of the Solar\*Rewards Community Program.

### a. Program Management

As part of administering the Solar\*Rewards Community program, the Solar Garden Operator and the Company may provide information related to the Subscriber and/or the Community Solar Garden to:

- the MPUC
- the Minnesota Department of Commerce
- the Minnesota Office of Attorney General
- Other governmental or private entities as required by law or regulation

Account Information and Subscriber's Energy Usage Data to service providers, agents, or contracted agents who support the program on its behalf. The Company prohibits these service providers from using or disclosing the Subscriber's information except as necessary to perform these specific services or to comply with legal requirements. More information about the Company's general privacy practices is explained in its Privacy Policy available on [www.xcelenergy.com](http://www.xcelenergy.com).

### b. Permitted Public Reporting

The Subscriber's Energy Usage Data of each participating Subscriber to a Community Solar Garden will be combined and reported in the aggregate by the Community Solar Garden Operator in its annual report on the Solar\*Rewards Community program. The identity of specific Subscribers, the specific Subscriber's Account Information, Subscriber's Energy Usage Data and Subscriber-specific Bill Credit will not be listed in the public annual report unless the Subscriber has provided the Community Solar Garden Operator with prior written consent.

Per the requirements of the MPUC, the Company will provide to the MPUC annual reports which will include information or data requested by the MPUC or Minnesota Department of Commerce, including the following:

- Reporting on Solar\*Rewards Community program costs, including an analysis of the deposit, application, participation and metering fees and further justification for these fees going forward;
- Reporting on the Solar\*Rewards Community Gardens, including but not limited to size, location and the type of Solar\*Rewards Community subscriber groups;
- Reporting on known complaints and the resolution of these complaints;

- A copy of each contract signed with a Community Solar Garden Operator, if not previously filed;
  - Lessons learned and any potential changes to the program;
  - Report on bill credits earned and paid; and the
  - Application process
- c. Prohibited Reporting or Sharing

Except as otherwise provided in this document, the Company will not disclose the Subscriber's Account Information, Subscriber's Energy Usage Data or Subscriber-specific Bill Credits to a third party without first obtaining the Subscriber's written consent.

Any requests by the Community Solar Garden Operator to the Company for information about a Subscriber that is not Subscriber's Account Information or Subscriber's Energy Usage Data will require execution of a separate written consent by the Subscriber. Notwithstanding the previous statement, the Company will not provide the Community Solar Garden Operator with the Subscriber's Social Security Number unless directed to do so by the MPUC or Minnesota Department of Commerce or compelled by law or regulation.

### **3. Subscriber Data Access and Correction**

The following outlines what information is available to the Subscriber from the Company and the Community Solar Garden Operator, and methods of correcting any inaccuracies.

a. Information Available from the Company

Subscribers can contact the Company's call center to obtain information pertaining to their specific Bill Credit attributable to their participation in Solar\*Rewards Community Program. The correction of any allocation of previously-applied Bill Credits among Subscribers or payments to the Community Solar Garden Operator for Unsubscribed Energy, pertaining to a particular month due to any inaccuracy reflected in such Monthly Subscription Information with regard to a Subscriber's Subscription in the PV System and the beneficial share of photovoltaic energy produced by the PV System, or the share of Unsubscribed Energy, shall be the full responsibility of the Community Solar Garden Operator, unless such inaccuracies are caused by the Company .

Subscribers may also obtain from the Company the following information related to the Solar\*Rewards Community Program without obtaining written consent from the Community Solar Garden Operator:

- Site location
- Operator name
- Nameplate capacity



- Production data related to the PV system
- Bill Credit Rate and total amount of Bill Credits applied to the PV System
- Any other information pertaining to the Subscriber's Subscription

Other information regarding the Community Solar Garden Operator known to the Company will not be disclosed unless the Subscriber obtains prior explicit informed consent from the Community Solar Garden Operator or unless directed to do so by the MPUC or Minnesota Department of Commerce or compelled by law or regulation.

b. Information Available from the Community Solar Garden Operator

Subscribers and prospective subscribers can contact the Community Solar Garden Operator to obtain the following information:

- Future costs and benefits of the Subscription, including:
  - i. All nonrecurring (i.e., one-time) charges;
  - ii. All recurring charges;
  - iii. Terms and conditions of service;
  - iv. Whether any charges may increase during the course of service, and if so, how much advance notice is provided to the Subscriber;
  - v. Whether the Subscriber may be required to sign a term contract;
  - vi. Terms and conditions for early termination;
  - vii. Any penalties that the Community Solar Garden may charge to the Subscriber;
  - viii. The process for unsubscribing and any associated costs;
  - ix. An explanation of the Subscriber data the Community Solar Garden Operator will share with Northern States Power Company and that Northern States Power Company will share with the Community Solar Garden Operator;
  - x. The data privacy policies of Northern States Power Company and of the Community Solar Garden Operator;
  - xi. The method of providing notice to Subscribers when the Community Solar Garden is out of service, including notice of estimated length and loss of production;

- xii. Assurance that all installations, upgrades and repairs will be under direct supervision of a NABCEP-certified solar professional and that maintenance will be performed according to industry standards, including the recommendations of the manufacturers of solar panels and other operational components;
  - xiii. Allocation of unsubscribed production; and
  - xiv. A statement that the Community Solar Garden Operator is solely responsible for resolving any disputes with Northern States Power Company or the Subscriber about the accuracy of the Community Solar Garden production and that Northern States Power Company is solely responsible for resolving any disputes with the Subscriber about the applicable rate used to determine the amount of the Bill Credit.
- Copy of the contract with Northern States Power Company for the Solar\*Rewards Community Program
  - Copy of the solar panel warranty
  - Description of the compensation to be paid for any underperformance
  - Proof of insurance
  - Proof of a long-term maintenance plan
  - Current production projections and a description of the methodology used to develop production projections
  - Community Solar Garden Operator contact information for questions and complaints
  - Demonstration to the Subscriber by the Community Solar Garden Operator that it has sufficient funds to operate and maintain the Solar\*Rewards Community Program

The Community Solar Garden Operator is solely responsible for the accuracy of the Subscriber's share of the Community Solar Garden production information forwarded to the Company, and should resolve with the Subscriber any dispute regarding the accuracy of such information.

Subscribers can submit comments to the Company on the accuracy and completeness of its annual report by contacting [solarrewardscommunity@xcelenergy.com](mailto:solarrewardscommunity@xcelenergy.com).

**4. Data Retention**

The Company will retain the Subscriber's Account Information, Subscriber's Energy Usage Data and information on Bill Credits for as long as required under applicable law.

**EXHIBIT B**

**Schedule of Expected Deliveries of Credits  
[pro forma; final to be provided prior to commencement of construction]**

Subscriber's Share (kWh)

Year 1

Year 2

Year 3

Year 4

Year 5

Year 6

Year 7

Year 8

Year 9

Year 10

Year 11

Year 12

Year 13

Year 14

Year 15

Year 16

Year 17

Year 18

Year 19

Year 20

Year 21

Year 22

Year 23

Year 24

Year 25

## **Weather Adjustment Protocol for Expected Deliveries**

For any two-year Measurement Period respecting application of the Performance Guarantee, Expected Deliveries shall be adjusted to reflect any negative difference (shortfall) between Expected Solar Irradiation (“*ESI*”) and Actual Solar Irradiation (“*ASI*”). The ratio of ASI to ESI for the Measurement Period shall be applied to Expected Deliveries as a weather adjustment prior to comparing Actual Deliveries to Expected Deliveries for the purposes of the Performance Guarantee.

The method of the weather adjustment is as follows.

1. The ESI for the Facility is 1390 KWh per square meter.
2. The ASI is to be determined by monthly pyranometer readings at the Facility. The monthly readings are to be averaged for each of the two calendar years in the Measurement Period.
3. The weather adjustment factor for the measurement period is the ratio of (i) ASI, determined per Step 2 of this method to (ii) ESI, determined per Step 1 of this method. The Expected Deliveries for the Measurement Period is multiplied by this factor to derive the Guaranteed Performance.

## EXHIBIT C

### Lender Accommodations

Subscriber acknowledges that Owner may be financing the installation of the Facility either through a lessor, lender or with financing accommodations from one or more financial institutions and that Owner may sell or assign the Facility and/or may secure Owner's obligations by, among other collateral, a pledge or collateral assignment of this Agreement and a first security interest in the Facility. In order to facilitate such sale, conveyance, or financing, and with respect to any such financial institutions of which Owner has notified Subscriber in writing Subscriber agrees as follows:

(a) Consent to Collateral Assignment. Provided the Financing Party has agreed in writing to recognize Subscriber's rights under this Agreement and to comply with the terms of the Agreement with respect to any of Subscriber's rights thereunder upon the foreclosure or conveyance in lieu thereof, Subscriber consents to either the sale or conveyance by Owner to a Financing Party that has provided financing of Owner's right, title and interest in the Facility and to this Agreement.

(b) Notices of Default. Subscriber will deliver to the Financing Party, concurrently with delivery thereof to Owner, a copy of each notice of default given by Subscriber under the Agreement, inclusive of a reasonable description of Owner default. Subscriber will not mutually agree with Owner to terminate the Agreement without the written consent of the Financing Party.

(c) Rights Upon Event of Default. Notwithstanding any contrary term of this Agreement, during the continuation of an event of default by Owner under its agreements with Financing Party, provided that the Financing Party has agreed in writing to recognize Subscriber's rights under the Agreement and to not disturb any of Subscriber's rights thereunder:

i. The Financing Party, as collateral assignee, shall be entitled to exercise, in the place and stead of Owner, any and all rights and remedies of Owner under this Agreement in accordance with the terms of this Agreement and the Financing Party shall also be entitled to exercise all rights and remedies of secured parties generally with respect to this Agreement.

ii. The Financing Party shall have the right, but not the obligation, to pay all sums due under this Agreement and to perform any other act, duty or obligation required of Owner thereunder or cause to be cured any default of Owner thereunder in the time and manner provided by the terms of this Agreement. Nothing herein requires the Financing Party to cure any default of Owner under this Agreement or (unless the Financing Party has succeeded to Owner's interests under this Agreement) to perform any act, duty or obligation of Owner under this Agreement, but Subscriber hereby gives it the option to do so.

iii. The exercise of remedies under its security interest in the Facility, including any sale thereof by the Financing Party, whether by judicial proceeding or under any power of sale contained therein, or any conveyance from Owner to the Financing Party (or any assignee of the Financing Party), shall not constitute a default under this Agreement.

iv. Upon any rejection or other termination of this Agreement pursuant to any process undertaken with respect to Owner under the United States Bankruptcy Code or any similar state law, at the request of the Financing Party made within ninety (90) days of such termination or rejection, Subscriber shall enter into a new agreement with the Financing Party or its assignee having the same terms and conditions as this Agreement.

(d) Right to Cure.

i. Except for termination pursuant to Section 3(a) of the Subscription Agreement in connection with a failure to achieve commercial operation by December 31, 2017, Subscriber will not exercise any right to terminate or suspend this Agreement unless it shall have given the Financing Party prior written notice by sending notice to the Financing Party (at the address provided by Owner) of its intent to terminate or suspend this Agreement, specifying the condition giving rise to such right, and the Financing Party shall not have caused to be cured the condition giving rise to the right of termination or suspension within thirty (30) days after such notice or (if longer) the periods provided for in this Agreement. The Parties respective obligations will otherwise remain in effect during any cure period; provided that if such Owner default reasonably cannot be cured by the Financing Party within such period and the Financing Party commences and continuously pursues cure of such default within such period, such period for cure will be extended for a reasonable period of time under the circumstances, such period not to exceed additional sixty (60) days.

ii. If the Financing Party (including any transferee), pursuant to an exercise of remedies by the Financing Party, shall acquire title to or control of Owner's assets and shall, within the time periods described in Sub-section (d)(i) above, cure all defaults under this Agreement existing as of the date of such change in title or control in the manner required by this Agreement and which are capable of cure by a third person or entity, then such person or entity shall no longer be in default under this Agreement, and this Agreement shall continue in full force and effect.

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