City Of Fraser

CENTENNIAL COMMUNITY

FRASER CITY COUNCIL – REGULAR MEETING
THURSDAY – November 10, 2016 – 7:00 P.M.

OPENING PRAYER:

1. CALL TO ORDER
2. PLEDGE OF ALLEGIANCE
3. APPROVAL OF AGENDA
4. CITIZEN PARTICIPATION ON AGENDA ITEMS
5. PRESENTATIONS:
    a. Presentation and update on Finance Department from Finance Director
6. PUBLIC HEARINGS:
    a. Transfer 3 IFT applications from M and M Turning Co/Alpha Precision Aerospace 34480 Commerce Road , Fraser, MI as follows:
        i. $1,225,000 Personal Property for 10 years upon transfer from Clinton Township.
        ii. $858,510 Personal Property for 8 years upon transfer from Clinton Township.
        iii. $1,383,000 Personal Property for 9 years upon transfer from Clinton Township.
7. CONSENT AGENDA
    a. Approval of Minutes of the Regular Council Meeting of October 13, 2016.
    b. Approval of Bills for the month of October 2016 in the amount of $1,173,625.41
    c. Receive and file the minutes of the June 2, 2016 Library Board meeting.
    d. Receive and file the minutes of the August 1, 2016 Historic Commission meeting.
8. REQUESTS FOR COUNCIL ACTION –
    a) Request Council approve the following for appointment to the Compensation Commission by the Mayor per City Ordinance:

        - Joe Chimenti term to end September 30, 2019.

- Frank Farina term to end September 30, 2021.
- Robert Brannon term to end September 30, 2020.
- Rosanne Menendez term to end September 30, 2018.

b) Request Council authorize the purchase of a 2017 Dodge from Galeana's Van Dyke Dodge for $26,055 and a 2017 Jeep from Sterling Heights Dodge Chrysler Jeep $26,581. These vehicles are for SIU investigative work and money to pay for them comes from Drug Forfeiture funds.

c) Request Council accept the grant from FEMA-Assistance to Firefighters Grant Program in the amount of $84,014 for the purchase of 14 Avon DeltAir air packs, cylinders and related equipment Douglas Safety Systems. Both product and vendor are Michigan firms. Full purchase includes a match of $4,200 from the adjudicated gambling fund. These are budgeted items.

d) Request Council award bid to M.L. Shoenherr Construction Sehby Township, MI for retaining wall repairs at Senior Activity Center in the amount of $15,460. Money to come from dedicated CDBG funds from Macomb County.

e) Request Council discuss to agree on language and any changes or additions to CM qualifications or ad provided by the City Attorney.

f) Request Council approve the RFP for Towing Services in the City of Fraser.

g) Request Council authorize the purchase of a replacement phone system for all City facilities. Cost of $46,139 to be paid for through savings of $1,000/month in our current monthly billing expenses. Item postponed from October 13, 2016 meeting.

h) Request Council authorize the committee reviewing the Water Rate proposals to interview the firms to gather more information prior to making a recommendation to the Council.

8. PENDING ITEMS OF UNFINISHED BUSINESS/ REPORT OF THE CITY ADMINISTRATION

9. REPORT OF MAYOR AND CITY COUNCIL/NEW BUSINESS

10. CITIZEN PARTICIPATION

11. ADJOURNMENT

(Posted Friday November 4, 2016 at 4:30p.m.)

THE CITY OF FRASER WILL PROVIDE NECESSARY REASONABLE AUXILIARY AIDS AND SERVICES TO INDIVIDUALS WITH DISABILITIES AT THE MEETING UPON FOUR DAYS NOTICE TO: RANDY WARUNEK, BUILDING DEPARTMENT (586) 293-3100 EXT 154 ~ IT IS THE POLICY OF THE CITY OF FRASER THAT NO PERSON, ON THE BASIS OF RACE, CREED, COLOR, RELIGION, NATIONAL ORIGIN, OR ANCESTRY, AGE, SEX, MARITAL STATUS, OR DISABILITY SHALL BE DISCRIMINATED AGAINST, EXCLUDED FROM PARTICIPATION, DENIED THE BENEFITS OF, OR OTHERWISE SUBJECTED TO DISCRIMINATION IN ANY PROGRAM OR ACTIVITY FOR WHICH IT IS RESPONSIBLE.

Transfer of Amendment to Certificate #2011-281
From Clinton Township to City of Fraser

Michigan Department of Treasury
1012 (Rev. 3-07)

Application for Industrial Facilities Tax Exemption Certificate

Issued under authority of P.A. 198 of 1974, as amended. Filing is mandatory.

INSTRUCTIONS: File the original and two copies of this form and the required attachments (three complete sets) with the clerk of the local government unit. The State Tax Commission (STC) requires two complete sets (one original and one copy). One copy is retained by the clerk. If you have any questions regarding the completion of this form or would like to request an informational packet, call (517) 373-3272.p

To be completed by Clerk of Local Government Unit	
Signature of Clerk	► Date received by Local Unit
STC Use Only	
► Application number	► Date received by STC

APPLICANT INFORMATION

All boxes must be completed.

► 1a. Company Name (Applicant must be occupant/operator of the facility) M and M Turning Company/Alpha Precision Aerospace	► 1b. Standard Industrial Classification (SIC) Code – Sec. 2(10) (4 or 6 Digit Code) 336413	
► 1c. Facility Address (City, State, ZIP Code) (real and/or personal property location) 34480 Commerce Road, Fraser, MI 48026	► 1d. City/Township/Village (indicate which) City of Fraser	► 1e. County Macomb
► 2. Type of Approval Requested [ ] New [X] Transfer (1 copy only) [ ] Speculative Building (Sec. 3(8)) [ ] Rehabilitation (Sec. 3(1)) [ ] Research and Development (Sec.2(9))	► 3a. School District where facility is located Fraser	► 3b. School Code 50100
	► 4. Amount of years requested for exemption (1 -12 years) 8 Years on Transfer	

5. Thoroughly describe the project for which exemption is sought: Real Property (Type of Improvements to Land, Building, Size of Addition); Personal Property (Explain New, Used, Transferred from Out-of-State, etc.) and Proposed Use of Facility. (Please attach additional page(s) if more room is needed).

The purchase of additional machinery will offer M and M Turning Company more efficiency and capabilities for a broader customer base. Currently in aerospace, M and M Turning will be diversifying into additional emerging sectors to strengthen their Clinton Township business while maintaining local suppliers in the immediate geographic area.

6a. Cost of land and building improvements (excluding cost of land) * Attach list of improvements and associated costs. * Also attach a copy of building permit if project has already begun.	► $ 0 . Real Property Costs
6b. Cost of machinery, equipment, furniture and fixture * Attach itemized listing with month, day and year of beginning of installation plus total costs	► $ 858,510 Personal Property Costs
6c. Total Project Costs * Round Costs to Nearest Dollar	► $ 858,510 Total of Real & Personal Costs

7. Indicate the time schedule for start and finish of construction and equipment installation. Projects must be completed within a two year period of the effective date of the certificate unless otherwise approved by the STC.

	Begin Date (M/D/Y)	End Date (M/D/Y)	
Real Property Improvements	N/A	N/A	► [ ] Owned [ ] Leased
Personal Property Improvements	5/16/11	5/16/13	► [X] Owned [ ] Leased

► 8. Are State Education Taxes reduced or abated by the Michigan Economic Development Corporation (MEDC)? If yes, applicant must attach a signed MEDC Letter of Commitment to receive this exemption. [ ] Yes [x] No

► 9. No. of existing jobs at this facility that will be retained as a result of this project. 16 Jobs Retained	►10. No. of new jobs at this facility expected to create within 2 years of completion. 3 Jobs Created

11. Rehabilitation applications only: Complete a, b and c of this section. You must attach the assessor's statement of valuation for the entire plant rehabilitation district and obsolescence statement for property. The SEV data below must be as of December 31 of the year prior to the rehabilitation.

a. SEV of Real Property (excluding land)	N/A
b. SEV of Personal Property (excluding inventory)	
c. Total SEV	

►12a. Check the type of District the facility is located in:
[x] Industrial Development District [ ] Plant Rehabilitation District

►12b. Date district was established by local government unit (contact local unit) 10/18/93	►12c. Is this application for a speculative building (Sec. 3(8))? [ ] Yes [x] No

APPLICANT CERTIFICATION - complete all boxes.

The undersigned, authorized officer of the company making this application certifies that, to the best of his/her knowledge, no information contained herein or in the attachments hereto is false in any way and that all are truly descriptive of the industrial property for which this application is being submitted.

It is further certified that the undersigned is familiar with the provisions of P.A. 198 of 1974, as amended, being Sections 207.551 to 207.572, inclusive, of the Michigan Compiled Laws; and to the best of his/her knowledge and belief, (s)he has complied or will be able to comply with all of the requirements thereof which are prerequisite to the approval of the application by the local unit of government and the issuance of an Industrial Facilities Exemption Certificate by the State Tax Commission.

13a. Preparer Name	13b. Telephone Number	13c. Fax Number	13d. E-mail Address
Mark J. LaForest	(586) 791-7188	(586) 791-4475	Charlie@alphaprecisionaerospace.com
14a. Name of Contact Person	14b. Telephone Number	14c. Fax Number	14d. E-mail Address
Mark J. LaForest	(586) 791-7188	(586) 791-4475	Charlie@alphaprecisionaerospace.com
►15a. Name of Company Officer (No Authorized Agents)			
Mark J. LaForest, President			
15b. Signature of Company Officer (No Authorized Agents)		15c. Fax Number	15d. Date
Mark J. LaForest		(586) 791-4475	9-20-16
►15e. Mailing Address (Street, City, State, ZIP Code)		15f. Telephone Number	14g. E-mail Address
34480 Commerce Rd., Fraser, MI 48026		(586) 791-7188	Charlie@alphaprecisionaerospace.com

LOCAL GOVERNMENT ACTION & CERTIFICATION - complete all boxes.

This section must be completed by the clerk of the local governing unit before submitting application to the State Tax Commission. Check items on file at the Local Unit and those included with the submittal.

►16. Action taken by local government unit

☐ Abatement Approved for _____ Years (1-12)

After Completion ☐ Yes ☐ No

☐ Denied (Include Resolution Denying)

16a. Documents Required to be on file with the Local Unit

Check or Indicate N/A if Not Applicable

☐ 1. Notice to the public prior to hearing establishing a district.
☐ 2. Notice to taxing authorities of opportunity for a hearing.
☐ 3. List of taxing authorities notified for district and application action.
☐ 4. Lease Agreement showing applicants tax liability.

16b. The State Tax Commission Requires the following documents be filed for an administratively complete application:

Check or Indicate N/A if Not Applicable

☐ 1. Original Application plus attachments, and one complete copy
☐ 2. Resolution establishing district
☐ 3. Resolution approving/denying application.
☐ 4. Letter of Agreement (Signed by local unit and applicant)
☐ 5. Affidavit of Fees (Signed by local unit and applicant)
☐ 6. Building Permit for real improvements if project has already begun
☐ 7. Equipment List with dates of beginning of installation
☐ 8. Form 3222 (if applicable)
☐ 9. Speculative building resolution and affidavits (if applicable)

16c. LUCI Code	16d. School Code
17. Name of Local Government Body	►18. Date of Resolution Approving/Denying this Application

Attached hereto is an original and one copy of the application and all documents listed in 16b. I also certify that all documents listed in 16a are on file at the local unit for inspection at any time.

19a. Signature of Clerk	19b. Name of Clerk	19c. E-mail Address
19d. Clerk's Mailing Address (Street, City, State, ZIP Code)		
19e. Telephone Number	19f. Fax Number	

State Tax Commission Rule Number 57: Complete applications approved by the local unit and received by the State Tax Commission by October 31 each year will be acted upon by December 31. Applications received after October 31 may be acted upon in the following year.

Local Unit: Mail one original and one copy of the completed application and all required attachments to:

State Tax Commission
Michigan Department of Treasury
P.O. Box 30471
Lansing, MI 48909-7971

(For guaranteed receipt by the STC, it is recommended that applications are sent by certified mail.)

STC USE ONLY				
►LUCI Code	►Begin Date Real	►Begin Date Personal	►End Date Real	►End Date Personal

M and M Turning Company/Alpha Precision Aerospace

Statement Attached To And Made Part Of
Form 1012
Application For Industrial Facilities Exemption Certificate

-AFFIDAVIT-
DATE OF PROJECT COMMENCEMENT

I, Mark J. LaForest, President of Alpha Precision Aerospace, do hereby certify that the commencement of the installation of the personal property described in this application occurred on 7/1/16.

9-20-16

SIGNATURE DATE

President

TITLE

CITY OF FRASER

33000 GARFIELD RD
FRASER, MI 48026

(586) 293-3100

Receipt: 358976 Entry Date: 09/20/2016
Post Date: 09/21/2016

Cashier: KELLY

Correct

Received Of: **ALPHA PRECISION AEROSPACE**
3117 AUTOMATION DRIVE
CLINTON TWP MI 48035

Description/Notes

TRANSFER O AMENDMENT TO
CERTIFICATEE 2011-281
APHA PRECISION AEROSPACE
FRASER, MI 48026

The sum of: **650.00**

		GL Account #	DEBIT	CREDIT
IFT	IFT APPLICATIONS	101-000-001.000	650.00	
		101-000-605.000		650.00
			Total	650.00
	TENDERED: CHECKS	2495		650.00

HUNTINGTON NATIONAL BANK

2495
74-347/724

Alpha Precision Aerospace

35117 Automation Drive – Clinton Twp., Michigan 48035
a Parent Company of M & M Turning Co.

9/20/2016

PAY TO THE ORDER OF CITY OF FRASER $ **650.00

Six Hundred Fifty and 00/100********** DOLLARS

CITY OF FRASER
FINANCE DEPARTMENT
33000 GARFIELD ROAD
P.O. BOX 10
FRASER, MI 48026-0010

MEMO IFT # 2011-281 AMMENDED

AUTHORIZED SIGNATURE

⑈002495⑈ ⑆072403473⑆ 0138225813 9⑈

Signed: Kelly Ann Dallas

CITY OF FRASER

33000 GARFIELD RD
FRASER, MI 48026

(586) 293-3100

Receipt: 358967 Entry Date: 09/20/2016
Post Date: 09/20/2016

Cashier: KELLY

Received Of: ALPHA PRECISION AEROSPACE
3117 AUTOMATION DRIVE
CLINTON TWP MI 48035

The sum of: 650.00

Description/Notes

TRANSFER OF AMENDMENT TO
CERTIFICATE 2011-281
ALPHA PRECISION AEROSPACE
FRASER, MI 48026

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		101-000-605.000		650.00
			Total	650.00
	TENDERED:	CHECKS	2495	650.00

HUNTINGTON NATIONAL BANK

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74-347/724

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9/20/2016

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FINANCE DEPARTMENT
33000 GARFIELD ROAD
P.O. BOX 10
FRASER, MI 48026-0010

MEMO IFT # 2011-281 AMMENDED

AUTHORIZED SIGNATURE

⑈002495⑈ ⑆072403473⑆ 0138225813 9⑈

Signed: Kay Ann

Transfer of IFEC #2013-140
From Clinton Township to City of Fraser

Michigan Department of Treasury
1012 (Rev. 3-07)

Application for Industrial Facilities Tax Exemption Certificate

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To be completed by Clerk of Local Government Unit	
Signature of Clerk	► Date received by Local Unit
STC Use Only	
► Application number	► Date received by STC

APPLICANT INFORMATION

All boxes must be completed.

► 1a. Company Name (Applicant must be occupant/operator of the facility) M and M Turning Company/Alpha Precision Aerospace	► 1b. Standard Industrial Classification (SIC) Code – Sec. 2(10) (4 or 6 Digit Code) 336413	
► 1c. Facility Address (City, State, ZIP Code) (real and/or personal property location) 34480 Commerce Road, Fraser, MI 48026	► 1d. City/Township/Village (indicate which) City of Fraser	► 1e. County Macomb
► 2. Type of Approval Requested [ ] New [X] Transfer (1 copy only) [ ] Speculative Building (Sec. 3(8)) [ ] Rehabilitation (Sec. 3(1)) [ ] Research and Development (Sec.2(9))	► 3a. School District where facility is located Fraser	► 3b. School Code 50100
	► 4. Amount of years requested for exemption (1 -12 years) 9 Years on Transfer	

5. Thoroughly describe the project for which exemption is sought: Real Property (Type of Improvements to Land, Building, Size of Addition); Personal Property (Explain New, Used, Transferred from Out-of-State, etc.) and Proposed Use of Facility. (Please attach additional page(s) if more room is needed).

The purchase of additional machinery will offer M and M Turning Company more efficiency and capabilities for a broader customer base. Currently in aerospace, M and M Turning will be diversifying into additional emerging sectors to strengthen their Clinton Township business while maintaining local suppliers in the immediate geographic area.

6a. Cost of land and building improvements (excluding cost of land) ► $ 0 . Real Property Costs
* Attach list of improvements and associated costs.
* Also attach a copy of building permit if project has already begun.

6b. Cost of machinery, equipment, furniture and fixture ► $ 1,383,000 Personal Property Costs
* Attach itemized listing with month, day and year of beginning of installation plus total costs

6c. Total Project Costs ► $ 1,383,000 Total of Real & Personal Costs
* Round Costs to Nearest Dollar

7. Indicate the time schedule for start and finish of construction and equipment installation. Projects must be completed within a two year period of the effective date of the certificate unless otherwise approved by the STC.

	Begin Date (M/D/Y)	End Date (M/D/Y)	
Real Property Improvements	N/A		► [ ] Owned [ ] Leased
Personal Property Improvements	9/27/12	9/26/14	► [X] Owned [ ] Leased

► 8. Are State Education Taxes reduced or abated by the Michigan Economic Development Corporation (MEDC)? If yes, applicant must attach a signed MEDC Letter of Commitment to receive this exemption. [ ] Yes [x] No

► 9. No. of existing jobs at this facility that will be retained as a result of this project. 16 Jobs Retained	►10. No. of new jobs at this facility expected to create within 2 years of completion. 3 Jobs Created

11. Rehabilitation applications only: Complete a, b and c of this section. You must attach the assessor's statement of valuation for the entire plant rehabilitation district and obsolescence statement for property. The SEV data below must be as of December 31 of the year prior to the rehabilitation.

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b. SEV of Personal Property (excluding inventory)
c. Total SEV

►12a. Check the type of District the facility is located in:
[x] Industrial Development District [ ] Plant Rehabilitation District

►12b. Date district was established by local government unit (contact local unit) 10/18/93	►12c. Is this application for a speculative building (Sec. 3(8))? [ ] Yes [x] No

APPLICANT CERTIFICATION - complete all boxes.

The undersigned, authorized officer of the company making this application certifies that, to the best of his/her knowledge, no information contained herein or in the attachments hereto is false in any way and that all are truly descriptive of the industrial property for which this application is being submitted.

It is further certified that the undersigned is familiar with the provisions of P.A. 198 of 1974, as amended, being Sections 207.551 to 207.572, inclusive, of the Michigan Compiled Laws; and to the best of his/her knowledge and belief, (s)he has complied or will be able to comply with all of the requirements thereof which are prerequisite to the approval of the application by the local unit of government and the issuance of an Industrial Facilities Exemption Certificate by the State Tax Commission.

13a. Preparer Name	13b. Telephone Number	13c. Fax Number	13d. E-mail Address
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Mark J. LaForest	(586) 791-7188	(586) 791-4475	Charlie@alphaprecisionaerospace.com
►15a. Name of Company Officer (No Authorized Agents)			
Mark J. LaForest, President			
15b. Signature of Company Officer (No Authorized Agents)		15c. Fax Number	15d. Date
Mark J. LaForest		(586) 791-4475	9-20-16
►15e. Mailing Address (Street, City, State, ZIP Code)		15f. Telephone Number	14g. E-mail Address
34480 Commerce Rd., Fraser, MI 48026		(586) 791-7188	Charlie@alphaprecisionaerospace.com

LOCAL GOVERNMENT ACTION & CERTIFICATION - complete all boxes.

This section must be completed by the clerk of the local governing unit before submitting application to the State Tax Commission. Check items on file at the Local Unit and those included with the submittal.

►16. Action taken by local government unit

☐ Abatement Approved for _____ Years (1-12)

After Completion ☐ Yes ☐ No

☐ Denied (Include Resolution Denying)

16a. Documents Required to be on file with the Local Unit

Check or Indicate N/A if Not Applicable

- ☐ 1. Notice to the public prior to hearing establishing a district.
- ☐ 2. Notice to taxing authorities of opportunity for a hearing.
- ☐ 3. List of taxing authorities notified for district and application action.
- ☐ 4. Lease Agreement showing applicants tax liability.

16b. The State Tax Commission Requires the following documents be filed for an administratively complete application:

Check or Indicate N/A if Not Applicable

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- ☐ 7. Equipment List with dates of beginning of installation
- ☐ 8. Form 3222 (if applicable)
- ☐ 9. Speculative building resolution and affidavits (if applicable)

16c. LUCI Code	16d. School Code
17. Name of Local Government Body	►18. Date of Resolution Approving/Denying this Application

Attached hereto is an original and one copy of the application and all documents listed in 16b. I also certify that all documents listed in 16a are on file at the local unit for inspection at any time.

19a. Signature of Clerk	19b. Name of Clerk	19c. E-mail Address
19d. Clerk's Mailing Address (Street, City, State, ZIP Code)		
19e. Telephone Number	19f. Fax Number	

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(For guaranteed receipt by the STC, it is recommended that applications are sent by certified mail.)

STC USE ONLY				
►LUCI Code	►Begin Date Real	►Begin Date Personal	►End Date Real	►End Date Personal

M and M Turning Company/Alpha Precision Aerospace

Statement Attached To And Made Part Of
Form 1012
Application For Industrial Facilities Exemption Certificate

-AFFIDAVIT-
DATE OF PROJECT COMMENCEMENT

I, Mark J. LaForest, President of Alpha Precision Aerospace, do hereby certify that the commencement of the installation of the personal property described in this application occurred on 7/1/16.

SIGNATURE	9-20-16 DATE
President TITLE	

CITY OF FRASER

33000 GARFIELD RD
FRASER, MI 48026

(586) 293-3100

Receipt: 358978 **Entry Date:** 09/20/2016
Post Date: 09/21/2016 correct

Cashier: KELLY

Received Of: **ALPHA PRECISION AEROSPACE**
3117 AUTOMATION DRIVE
CLINTON TWP MI 48035

Description/Notes

TRANSFER OF IFEC 2013-140
ALPHA PRECISION AEROSPACE
FRASER, MI 48026

The sum of: **650.00**

		GL Account #	DEBIT	CREDIT
IFT	IFT APPLICATIONS	101-000-001.000	650.00	
		101-000-605.000		650.00
			Total	650.00
	TENDERED:	CHECKS 2494		650.00

Alpha Precision Aerospace

35117 Automation Drive – Clinton Twp., Michigan 48035
Parent Company of M & M Turning Co.

HUNTINGTON NATIONAL BANK

2494
74-347/724

9/20/2016

PAY TO THE ORDER OF CITY OF FRASER $ **650.00

Six Hundred Fifty and 00/100********** DOLLARS

CITY OF FRASER
FINANCE DEPARTMENT
33000 GARFIELD ROAD
P.O. BOX 10
FRASER, MI 48026-0010

MEMO IFT # 2013-140

AUTHORIZED SIGNATURE

⑈002494⑈ ⑆072403473⑆ 0138225813 9⑈

Signed: Kelly Ann Dallas

CITY OF FRASER

33000 GARFIELD RD
FRASER, MI 48026

(586) 293-3100

Receipt: 358969 **Entry Date:** 09/20/2016
Post Date: 09/20/2016

Cashier: KELLY

Received Of: **ALPHA PRECISION AEROSPACE**
3117 AUTOMATION DRIVE
CLINTON TWP MI 48035

The sum of: **650.00**

Description/Notes

TRANSFER OF IFEC #2013-140
ALPHA PRECISION AEROSPACE
FRASER, MI 48026

		GL Account #	DEBIT	CREDIT
IFT	IFT APPLICATIONS	101-000-001.000	650.00	
		101-000-605.000		650.00
			Total	650.00
	TENDERED:	CHECKS 2494		650.00

HUNTINGTON NATIONAL BANK

2494
74-347/724

Alpha Precision Aerospace

3511 Automation Drive – Clinton Twp., Michigan 48035
A Parent Company of M & M Turning Co.

9/20/2016

PAY TO THE ORDER OF CITY OF FRASER $ **650.00

Six Hundred Fifty and 00/100********** DOLLARS

CITY OF FRASER
FINANCE DEPARTMENT
33000 GARFIELD ROAD
P.O. BOX 10
FRASER, MI 48026-0010

MEMO IFT # 2013-140

AUTHORIZED SIGNATURE

⑈002494⑈ ⑆072403473⑆ 0138225813 9⑈

Signed: _____

Transfer of IFEC #2014-237
From Clinton Township to City of Fraser

Michigan Department of Treasury
1012 (Rev. 3-07)

Application for Industrial Facilities Tax Exemption Certificate

Issued under authority of P.A. 198 of 1974, as amended. Filing is mandatory.

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Signature of Clerk	► Date received by Local Unit
STC Use Only	
► Application number	► Date received by STC

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► 2. Type of Approval Requested [ ] New [X] Transfer (1 copy only) [ ] Speculative Building (Sec. 3(8)) [ ] Rehabilitation (Sec. 3(1)) [ ] Research and Development (Sec.2(9))	► 3a. School District where facility is located Fraser	► 3b. School Code 50100
	► 4. Amount of years requested for exemption (1 -12 years) 10 Years on Transfer	

5. Thoroughly describe the project for which exemption is sought: Real Property (Type of Improvements to Land, Building, Size of Addition); Personal Property (Explain New, Used, Transferred from Out-of-State, etc.) and Proposed Use of Facility. (Please attach additional page(s) if more room is needed).

The purchase of additional machinery will offer M and M Turning Company more efficiency and capabilities for a broader customer base. Currently in aerospace, M and M Turning will be diversifying into additional emerging sectors to strengthen their Clinton Township business while maintaining local suppliers in the immediate geographic area.

6a. Cost of land and building improvements (excluding cost of land) ► $ 0 . Real Property Costs
* Attach list of improvements and associated costs.
* Also attach a copy of building permit if project has already begun.

6b. Cost of machinery, equipment, furniture and fixture ► $ 1,225,000 Personal Property Costs
* Attach itemized listing with month, day and year of beginning of installation plus total costs

6c. Total Project Costs ► $ 1,225,000 Total of Real & Personal Costs
* Round Costs to Nearest Dollar

7. Indicate the time schedule for start and finish of construction and equipment installation. Projects must be completed within a two year period of the effective date of the certificate unless otherwise approved by the STC.

	Begin Date (M/D/Y)	End Date (M/D/Y)	
Real Property Improvements	N/A		► [ ] Owned [ ] Leased
Personal Property Improvements	5/19/14	5/19/16	► [X] Owned [ ] Leased

► 8. Are State Education Taxes reduced or abated by the Michigan Economic Development Corporation (MEDC)? If yes, applicant must attach a signed MEDC Letter of Commitment to receive this exemption. [ ] Yes [x] No

► 9. No. of existing jobs at this facility that will be retained as a result of this project. 20 Jobs Retained	►10. No. of new jobs at this facility expected to create within 2 years of completion. 3 Jobs Created

11. Rehabilitation applications only: Complete a, b and c of this section. You must attach the assessor's statement of valuation for the entire plant rehabilitation district and obsolescence statement for property. The SEV data below must be as of December 31 of the year prior to the rehabilitation.

a. SEV of Real Property (excluding land) N/A
b. SEV of Personal Property (excluding inventory)
c. Total SEV

►12a. Check the type of District the facility is located in:
[x] Industrial Development District [ ] Plant Rehabilitation District

►12b. Date district was established by local government unit (contact local unit) 10/18/93	►12c. Is this application for a speculative building (Sec. 3(8))? [ ] Yes [x] No

APPLICANT CERTIFICATION - complete all boxes.

The undersigned, authorized officer of the company making this application certifies that, to the best of his/her knowledge, no information contained herein or in the attachments hereto is false in any way and that all are truly descriptive of the industrial property for which this application is being submitted.

It is further certified that the undersigned is familiar with the provisions of P.A. 198 of 1974, as amended, being Sections 207.551 to 207.572, inclusive, of the Michigan Compiled Laws; and to the best of his/her knowledge and belief, (s)he has complied or will be able to comply with all of the requirements thereof which are prerequisite to the approval of the application by the local unit of government and the issuance of an Industrial Facilities Exemption Certificate by the State Tax Commission.

13a. Preparer Name	13b. Telephone Number	13c. Fax Number	13d. E-mail Address
Dennis Irwin	(586) 791-7188	(586) 791-4475	dennis@alphaprecisionaerospace.com
14a. Name of Contact Person	14b. Telephone Number	14c. Fax Number	14d. E-mail Address
Dennis Irwin	(586) 791-7188	(586) 791-4475	dennis@alphaprecisionaerospace.com
▶ 15a. Name of Company Officer (No Authorized Agents)			
Mark J. LaForest, President			
15b. Signature of Company Officer (No Authorized Agents)		15c. Fax Number	15d. Date
		(586) 791-4475	9-20-16
▶ 15e. Mailing Address (Street, City, State, ZIP Code)		15f. Telephone Number	15g. E-mail Address
34480 Commerce Rd., Fraser, MI 48026		(586) 791-7188	charlie@alphaprecisionaerospace.com

LOCAL GOVERNMENT ACTION & CERTIFICATION - complete all boxes.

This section must be completed by the clerk of the local governing unit before submitting application to the State Tax Commission. Check items on file at the Local Unit and those included with the submittal.

▶ 16. Action taken by local government unit

- ☐ Abatement Approved for _____ Yrs Real (1-12), _____ Yrs Pers (1-12)
  - After Completion ☐ Yes ☐ No
- ☐ Denied (Include Resolution Denying)

16a. Documents Required to be on file with the Local Unit

Check or Indicate N/A if Not Applicable

- ☐ 1. Notice to the public prior to hearing establishing a district.
- ☐ 2. Notice to taxing authorities of opportunity for a hearing.
- ☐ 3. List of taxing authorities notified for district and application action.
- ☐ 4. Lease Agreement showing applicants tax liability.

16b. The State Tax Commission Requires the following documents be filed for an administratively complete application:

Check or Indicate N/A if Not Applicable

- ☐ 1. Original Application plus attachments, and one complete copy
- ☐ 2. Resolution establishing district
- ☐ 3. Resolution approving/denying application.
- ☐ 4. Letter of Agreement (Signed by local unit and applicant)
- ☐ 5. Affidavit of Fees (Signed by local unit and applicant)
- ☐ 6. Building Permit for real improvements if project has already begun
- ☐ 7. Equipment List with dates of beginning of installation
- ☐ 8. Form 3222 (if applicable)
- ☐ 9. Speculative building resolution and affidavits (if applicable)

16c. LUCI Code	16d. School Code
17. Name of Local Government Body	▶ 18. Date of Resolution Approving/Denying this Application

Attached hereto is an original and one copy of the application and all documents listed in 16b. I also certify that all documents listed in 16a are on file at the local unit for inspection at any time.

19a. Signature of Clerk	19b. Name of Clerk	19c. E-mail Address
19d. Clerk's Mailing Address (Street, City, State, ZIP Code)		
19e. Telephone Number	19f. Fax Number	

State Tax Commission Rule Number 57: Complete applications approved by the local unit and received by the State Tax Commission by October 31 each year will be acted upon by December 31. Applications received after October 31 may be acted upon in the following year.

Local Unit: Mail one original and one copy of the completed application and all required attachments to:

State Tax Commission
Michigan Department of Treasury
P.O. Box 30471
Lansing, MI 48909-7971

(For guaranteed receipt by the STC, it is recommended that applications are sent by certified mail.)

STC USE ONLY				
▶ LUCI Code	▶ Begin Date Real	▶ Begin Date Personal	▶ End Date Real	▶ End Date Personal

M and M Turning Company/Alpha Precision Aerospace

Statement Attached To And Made Part Of
Form 1012
Application For Industrial Facilities Exemption Certificate

-AFFIDAVIT-
DATE OF PROJECT COMMENCEMENT

I, Mark J. LaForest, President of Alpha Precision Aerospace, do hereby certify that the commencement of the installation of the personal property described in this application occurred on 7/1/16.

M J LaF 9-20-16

SIGNATURE DATE

President

TITLE

CITY OF FRASER

33000 GARFIELD RD
FRASER, MI 48026

(586) 293-3100

Receipt: 358966 Entry Date: 09/20/2016
Post Date: 09/21/2016

Cashier: KELLY

Received Of: **ALPHA PRECISION AEROSPACE**

3117 AUTOMATION DRIVE
CLINTON TWP MI 48035

The sum of: **650.00**

Description/Notes

TRANSFER OF IFEC #2014-237
APPHA PRECISION AEROSPACE
FRASER, MI

		GL Account #	DEBIT	CREDIT
IFT	IFT APPLICATIONS	101-000-001.000	650.00	
		101-000-605.000		650.00
			Total	650.00
	TENDERED:	CHECKS 2493		650.00

Alpha Precision Aerospace

35117 Automation Drive – Clinton Twp., Michigan 48035
a Parent Company of M & M Turning Co.

HUNTINGTON NATIONAL BANK

2493
74-347/724

9/20/2016

PAY TO THE ORDER OF CITY OF FRASER $ **650.00

Six Hundred Fifty and 00/100********** DOLLARS

CITY OF FRASER
FINANCE DEPARTMENT
33000 GARFIELD ROAD
P.O. BOX 10
FRASER, MI 48026-0010

MEMO IFT # 2014-237

AUTHORIZED SIGNATURE MP

⑈002493⑈ ⑆072403473⑆ 0138225813 9⑈

Signed: Kelly Ann Dale

if they were one of the top teams in the state, and we were one of the top teams in the state."

Although coach Gerry Haggarty was hoping Chippewa would survive its first-round match against Fraser, when evaluating the season as a whole, he offered a positive report.

"I think it was a pretty good season," Haggarty said. "We worked hard. We got better as the season went along. I was pretty happy with how we finished."

Haggarty thinks that some of the team's younger players, in particular the juniors, gained a lot of confidence this year. The increase in confidence may have been aided by a regular-season finale victory against Macomb Dakota that helped give Chippewa a third-place finish in the competitive Macomb Area Conference Red Division.

Haggarty also liked something else he saw from his team this year.

"There were a couple games that we played bad, then we bounced back and played well," he said. "So I was happy with the resiliency of the kids this year."

Call Sports Writer Mark Vest at (586) 279-1112. Follow him on Twitter @CandGMark.

a trustee, they don't have the authority to diminish those."

As far as the board's vote to keep Reynolds away from committees, Dolan clarified that "it's basically asking him, not telling him."

At the meeting, Cannon said it was pointless to go to the governor, which could take months before anything is decided. Gieleghem said the township has an "obligation" to protect itself and its residents.

Board chambers were crammed with residents and media outlets.

price, service and trash bins that have made aesthetic improvements in the community.

In 2010 a Rizzo contract was unanimously voted for, while a 4-3 vote took place in 2012. This past February, a contract extension was unanimously approved, which included the mandatory trash bins for residents.

Sowerby said there's "a lot more than what is on the surface" when discussing the past Rizzo contracts, and he alluded that things may have taken a turn in 2013.

"That's when things started

FROM THE CITY OF FRASER CITY CLERK'S OFFICE
PUBLIC NOTICE

Pursuant to 1974 PA 198, MCLA Sec. 207.551 et seq., notice is hereby given that a Public Hearing will be conducted at 7:00pm Thursday, November 10th, 2016 in the City of Fraser Council Chambers, located at 33000 Garfield Road, City of Fraser, County of Macomb, State of Michigan.

Said Public Hearing will be held for the purpose of reviewing an application by the following company for the transfer of three (3) industrial facilities tax exemption certificate for Personal Property in the City of Fraser Industrial Development District No. 1:

M and M Turning Company / Alpha Precision Aerospace
34480 Commerce Rd.
Fraser, MI 48026

Please note that the applicant or a duly appointed company representative MUST be present at this meeting in order to be given consideration by the City Council for approval of this application. The request will not be approved in the event of the petitioner's absence.

Questions and comments from the general public will be accepted at this appointed date and time.

Kelly Ann Dolland
City of Fraser, City Clerk

Published : Fraser Clinton Chronicle 10/26/2016

0449-1644

TOWNSHIP BOA

PLEASE BE ADVISED that the ap
meeting of October 3, 2016 are pc
the Township Clerk, Charter Town
Michigan 48038 and at the Charter

Pursuant to Township Board policy
for at least five days.

CHA

Published: Fraser-Clinton Chronicle

REGU
TUESDAY, N
CIVIC CENTE
TOWNS

NOTE: We encourage you to voice
be recognized by Chairman give yo
discussion is not encouraged.

Approval of Agenda

1. Request to be Recognized as a
   Learning Together
2. Request Approval to Transfer C
   Muer's Table and Bar) – 17470 I
3. Site Development Plan: Farnier
   Garfield, S/Moravian (Section 3
4. Revised Site Development Plan
   Piper's Broad Acres Subdivisior
   addressed as 33543 Gratiot Ave
   Center Addition
5. Site Development Plan: Clinton
   fronting E/Garfield, S/18 Mile Rc
6. Site Development Plan: Flagsta
   E/Garfield, S/18 Mile Road, add
7. Recommendation of the Person
8. Approval of Upgrade of Kitchen

Approval of Minutes of October 17, 2
Approval of Bills
Public Comments
Motion to Adjourn

Kim Meltzer, Clerk, Charter Townsl

Published: Journal, Fraser-Clinton Ch

Minutes
Fraser City Council
Thursday, October 13th, 2016 @ 7pm

A Regular meeting of the Fraser City Council was conducted on the above date at the City Municipal Building, located at 33000 Garfield Road, Fraser, County of Macomb, Michigan.

Present: Mayor Nichols and Council Members Blanke, Foster, Hemelberg, Lesich and Schornak
Absent: Member Carnagie
Also Present: Richard Haberman, City Manager
Kelly Dolland, City Clerk
Tim Tomlinson, City Attorney

1. Call Meeting to Order - Mayor Nichols called the regular meeting to order at **7:02pm.**

2. Pledge of Allegiance

3. Approval of Agenda

Member Hemelberg made the motion to excuse Member Carnagie from the October 13th, 2016 meeting.

Member HEMELBERG moved, seconded by Member FOSTER, TO EXCUSE MEMBER CARNAGIE FROM THE OCTOBER 13TH, 2016 FRASER COUNCIL MEETING DUE TO ILLNESS.

The motion carried 6-0.

Member HEMELBERG moved, seconded by Member LESICH TO APPROVE AGENDA AS SUBMITTED.

The motion carried 6-0.

4. Citizen Participation:

Mr. Paul Cilluffo, President of the Fraser Optimist Club presented a check to the City in the amount of $500.

5. Presentations:

a.Presentation and update on health insurance issues for the City of Fraser by Cornerstone Municipal.
Mark Manquen and John Vance of Cornerstone Municipal delivered a PowerPoint presentation of the many services, trends and accomplishments provided to the City of Fraser by Cornerstone. Topics included: implementation of MAPD, analyzing PA152 options, annual budget and financial assistance, collective bargaining, annual enrollment and retiree health care support.
Member Foster commented on presentation.
Member Lesich asked if they were a third party administrator – yes, confirmed 'stop loss' is $50,000 for individual contract – yes, and clarified the cost drop from 2015/2016 to 2016/2017 what do to the combination of active and pre-65 retiree plan.

6. Public Hearing: - None

7. Consent Agenda

a. Approval of Minutes of the Regular Council Meeting of September 8, 2016.
b. Approval of Bills for the month of September 2016 in the amount of $3,190,302.56.
c. Receive and file the minutes of June 2, 2016 meeting of the Zoning Board.
d. Receive and file the minutes of June 16, 2016 meeting of the Zoning Board.
e. Receive and file the minutes of August 3, 2016 meeting of the Planning Commission.

Member HEMELBRG moved, seconded by MAYOR NICHOLS, TO APPROVE CONSENT AGENDA AS PRESENTED.

The motion carried 6-0.

8. Requests for Council Action –

a. Request Council approve reappointment of Linda Champion to current Library Board seat for term that would expire on June 30, 2021.

Member Schornak stated she is a true asset to the Fraser Library.

Member SCHORNAK moved, seconded by Mayor NICHOLS, TO REQUEST COUNCIL APPROVE THE REAPPOINTMENT OF LINDA CHAMPION TO CURRENT LIBRARY BOARD SEAT FOR TERM THAT WOULD EXPIRE JUNE 30TH, 2021.

The motion carried 6-0.

b. Request Council set a Public Hearing for November 10, 2016 at 7:00 PM for the requested transfer of 3 IFT for M and M Turning Co/Alpha Precision Aerospace as follows:

- $1,225,000 Personal Property for 10 years upon transfer from Clinton Township.
- $858,510 Personal Property for 8 years upon transfer from Clinton Township.
- $1,383,000 Personal Property for 9 years upon transfer from Clinton Township.

Member LESICH moved, seconded by Member SCHORNAK, TO APPROVE THE REQUEST OF COUNCIL TO SET A PUBLIC HEARING FOR NOVEMBER 10TH, 2016 @ 7PM FOR THE REQUEST TRANSFER OF AN IFT FOR M AND M TURNING CO. / ALPHA PRECISION AEROSPACE IN THE AMOUNT OF $1,225,000 FOR A PERIOD OF 10 YEARS UPON TRANSFER FROM CLINTON TOWNSHIP.

The motion passed 6-0.

c. Request Council award bid for Library Roof improvements to Lutz Roofing Co., Inc. 4721 22 Mile Rd., Shelby Township, MI 48317 in the amount of $93,000.

Fraser Department of Public Works Director BJ VanFleteren spoke of the bid process and the companies who bid the Library and DPW roofs. The DPW roof must wait. Mr. VanFleteren stated the work is tentatively scheduled to begin November 1st, will take approximately 7 days to complete. The DPW staff will deal with the interior of the Library, covering shelves from debris. Library closed notice will be posted before and during this time.
Member Blanke asked if Lutz Roofing Co. had provided services to the City prior, ~ yes, repair work to the Activity Center.
Member Foster questioned the warranty ~ it is a 20 year warranty on materials only, no labor.

Member SCHORNAK moved, seconded by Mayor NICHOLS, TO APPROVE REQUEST OF COUNCIL TO AWARD BID FOR LIBRARY ROOF IMPROVEMENTS TO LUTZ ROOFING CO., INC. 4721 22 MILE RD., SHELBY TOWNSHIP, MI 48317 IN THE AMOUNT OF $93,000.

The motion carried 6-0.

d. Request Council authorize the purchase of a replacement phone system for all City facilities. Cost of $46,139 to be paid for through savings of $1,000/month in our current monthly billing expenses.

Mayor Nichols questioned if a Request for Proposal went to the public?
Michele Kwiatkowski, System Administrator for the City stated the phone system is very old and obsolete. It is difficult to find replacement parts and re-furbished parts for the 1999 phone system. Dispatch calls are dropped and when you call the DPW phone number, the phone display shows a dentist office in the 248 area code.
Mayor Nichols expressed his concern that the City did not follow protocol regarding the RFP to receive bids.
Mrs. Kwiatkowski stated the city did receive bids.
Member Schornak questioned the length of the renovation, - 4-5 week of re-cabling the buildings.
Member Lesich asked if the wiring would be done in house, - yes, saving $15,000.
Member Schornak stated the DPW is shorthanded, is there staff for this? – Yes.

Member LESICH moved, seconded by Member BLANKE, TO POSTPONE REQUEST COUNCIL AUTHORIZE THE PURCHASE OF A REPLACMENT PHONE SYSTEM FOR ALL CITY FACILITIES. COST OF $46,139 TO BE PAID TOR THROUGH SAVINGS OF $1,000 / MONTH IN OUR CURRENT MONTHLY BILLING EXPENSES.
Roll call vote:

Blanke	Yes
Foster	No
Hemelberg	No
Lesich	Yes
Nichols	No
Schornak	Yes

The motion fails 3-3.

Mr. Haberman stated Mrs. Kwiatkowski used the G.S.A. Government Service Agency to bid the phone system, using the G.S.A. confirms a formal bid process was used.

Mayor NICHOLS moved, seconded by Member LESICH, TO POSTPONE REQUEST A REQUEST FOR PROPOSAL FOR THE PURCHASE OF A REPLACEMENT PHONE SYSTEM FOR ALL CITY FACILITIES, COST OF $46,139 TO BE PAID FOR THROUGH SAVINGS OF $1,000/MONTH IN OUR CURRENT MONTHLY BILLING EXPENSES FOR NEXT MEETING.

The motion carries 6-0.

e.TABLED ITEM Request Council discuss and adopt final version of Rule 4.01 Agenda of the City Council Rules and Procedures.

Mayor NICHOLS moved, seconded by Member SCHORNAK, TO REMOVE TABLED ITEM REQUEST COUNCIL DISCUSS AND ADOPT FINAL VERSION OF RULE 4.01 AGENDA OF THE CITY COUNCIL RULES AND PROCEDURES.

The motion carries 6-0.

Member BLANKE moved to reinstate 4.01 Agenda of the City Council Rules and Procedures, the produce was three council members could communicate to the City Manager or Mayor to add or delete any agenda item from the agenda prior to the meeting.
Member Foster questioned previous practices.
Mr. Tomlinson spoke of the many revisions of 4.01 by previous councils.
Conversation ensured regarding revisions, formalities, past practices of agenda modifications and removal of items.

Member LESICH moved seconded by Member BLANKE, TO POSTPONE THE REQUEST OF COUNCIL TO DISCUSS AND ADOPT FINAL VERSION OF RULE 4.01 AGENDA OF THE CITY COUNCIL RULES AND PROCEDURES.

(Motion to Postpone means there can be discussion, Motion to table is non debatable, no further discussion)

Member Lesich withdrew his motion to postpone.

Member HEMELBERG moved, seconded by Member LESICH, TO CHANGE 4.01 AGENDA OF THE CITY COUNCIL RULES AND PROCEDURES TO ADD, BUT NOT REMOVE THREE (3) TO REMOVE.
Member Schornak stated to remove an agenda item from a published agenda that it is done at the meeting only.
Mr. Tomlinson stated language change to an item may be added by three people, that item may not be removed by the Mayor and may only be removed at the meeting itself. It was stated the Mayor can remove an item before the meeting.

No Public to be heard.

Member	
Roll call vote:	
Blanke	Yes
Foster	No
Hemelberg	Yes
Lesich	Yes
Nichols	Yes
Schornak	No

The motion carries 4-2.

Member Blanke asked for the record to show, ’27 minutes ago, I said to forget this’.

f. Request Council discuss to agree on language and any changes or additions to CM qualifications or ad provided by the City Attorney.
Mr. Tomlinson spoke of the job description of a City Manager. The trend of education ‘and’ experience is preferred over ‘or’.
Member Schornak asked what is a reasonable years of experience?
Member Foster stated she spoke to Department Heads in other cities and ten years of experience is reasonable.
Mr. Haberman stated five year experience is reasonable for a 12-18,000 city population.
Member Lesich stated he would like to see Finance experience also.
Member Hemelberg asked Mr. Haberman
Mr. Haberman spoke of his extensive qualifications, experiences and background. He also stated the city may consider as his replacement a City Manager as well as an Assistant City Manager or an Assistant to the City Manager because of the amount of responsibilities he currently has as City Manager. Mr. Haberman stated he made a lot of progress in the City of Fraser and is in a better position for my successor.
Member Blanke asked for a closed door meeting to discuss.
Mr. Tomlinson asked Council to bring their City Manager qualifications thoughts and concerns to the November 2016 Council meeting.

Mayor NICHOLS, moved, seconded by Member FOSTER, TO POSTPONE REQUEST OF COUNCIL TO DISCUSS TO AGREE ON LANGUAGE AND ANY CHANGES OR ADDITIONS TO CM QUALIFICATIONS OR ALL PROVIDED BY THE CITY ATTORNEY.

The motion carries 6-0.

g. Request Council approve the RFP for Towing Services in the City of Fraser, he looked at past examples, MML examples and provided to Council a broader version of qualifications.
Mayor Nichols suggested a one year contract.
Member Lesich stated
Member Blanke spoke on topic.
Conversation ensured.
Public to be heard:
Member of Maxx Towing spoke on topic.
Mr. Tomlinson stated he thoroughly reviewed and took into consideration the thoughts of Maxx Towing Attorney.

Mayor NICHOLS moved, second by Member HEMELBERG, TO APPROVE REQUEST OF COUNCILTO APPROVE THE RFP FOR TOWING SERVICES IN THE CITY OF FRASER.

5 minute recess, meeting resumed 10:14pm

Roll call vote:

Blanke	No
Foster	Yes
Hemelberg	Yes
Lesich	No
Nichols	Yes
Schornak	No

The motion fails 3-3.

9. REPORT OF THE CITY ADMINISTRATION/PENDING ITEMS

Mr. Haberman spoke of the three Water Rate Proposal Study bids were received by the city. The Committee will be made up of Council Members Hemelberg, Lesich and Foster, City Manager and the Finance Director.
The October 12th, 2016 addition of the Fraser Chronical will include the Public Safety Ballot Proposal language and question and answer supplement.
Discussion ensured regarding a Town Hall meeting to review the proposal.

10. REPORT OF MAYOR AND CITY COUNCIL/NEW BUSINESS

Member Blanke	Thanked the Recreation Department, Paid on Call Fire Fighters for the Fall Fest. Reminded citizens to vote and thanked the Veterans.
Mayor Pro-tem Carnagie	
Member Foster	Thanked all involved in the Fall Fest, spoke of Fraser Woods Craft Show October 22.
Acting Mayor Hemelberg	Thanked all involved in the Fall Fest, renovation of Fraser Woods, mentioned the Hope Center is closing in Fraser and there will be Trunk or Treat October 22 at the Rams Horn Restaurant.
Member Lesich	Thanked all involved in the Fall Fest, Fraser Booster received a $42,000 grand from Detroit Auto Dealers for the Boundless Park. The Water Committee has met and has great ideas.
Mayor Nichols	spoke of the Fraser High School Craft Show, Spoke at the Fraser Woods Renovation Grand Opening, thanked Marilyn Wright and mentioned the Good fellows Pasta Dinner and Auction November 4th, 2016.
Member Schornak	Baumgartner House Open House November 6th, 2016, The VFW Soup Cook Off was a success, the Good fellows Dinner Auction is the first Friday in November at the Vintage House, questioned the needed repair work for the Fraser Senior Housing.

11. CITIZEN PARTICIPATION

Representative from Maxx Towing spoke

12. ADJOURNMENT

Member Hemelberg moved, Mayor Nichols seconded by, to ADJOURN THE REGULAR COUNCIL MEETING OF OCTOBER 13TH, 2016 @ 11:00PM, OCTOBER 13TH, 2016.

The motion carried unanimously,

Respectfully submitted,

_____
Kelly Dolland, City Clerk

_____
Joe Nichols, Mayor

/KD

City of Fraser

Check Disbursement Report

November 10, 2016

EXPENDITURES FOR APPROVAL

101	GENERAL FUND	$	532,353.91
202	MAJOR STREET FUND	$	6,407.15
203	LOCAL STREET FUND	$	4,567.85
210	AMBULANCE FUND	$	3,739.47
226	GARBAGE AND RUBBIUSH COLLECTION	$	60,241.67
265	DRUG FORFEITURE	$	4,470.19
267	GAMBLING FORFEITURE	$	4,889.61
270	SENIOR HOUSING	$	12,386.45
402	2015 STREET BONDS CONSTRUCTION	$	62,965.40
592	WATER & SEWER FUND	$	411,237.55
661	MOTOR POOL	$	40,507.01
701	TRUST AND AGENCY	$	27,702.47
703	SUMMER TAX COLLECTION FUND	$	2,156.68
	VENDOR EXPENDITURES	**$**	**1,173,625.41**

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
10/07/2016	PNC	122880	AFLAC	DUE TO OTHER/AFLAC/LEGAL	231.000	000	1,608.10
10/07/2016	PNC	122885	B. B. TROPHY & AWARDS COMPANY, LLC	MATERIALS & SUPPLIES	742.000	691	979.80
				MATERIALS & SUPPLIES	742.000	691	197.10
				CHECK PNC 122885 TOTAL			1,176.90
10/07/2016	PNC	122888*#	CINTAS CORPORATION #354	REPAIRS & MAINTENANCE	937.000	265	1,561.19
				REPAIRS & MAINTENANCE	937.000	265	310.19
				REPAIRS & MAINTENANCE	937.000	266	157.82
				REPAIRS & MAINTENANCE	937.000	268	98.92
				CHECK PNC 122888 TOTAL			2,128.12
10/07/2016	PNC	122889	CINTAS FIRST AID & SAFETY	MATERIALS & SUPPLIES	742.000	265	46.88
10/07/2016	PNC	122891	COMSOURCE, INC	PROFESSIONAL SERVICES	801.100	258	3,000.00
10/07/2016	PNC	122896	DANIELLE DEBOER	REFUND/CANCELLATION	694.100	000	85.00
10/07/2016	PNC	122897*#	DELTA DENTAL OF MICHIGAN	HEALTH/LIFE/DENTAL INS	715.000	136	68.22
				HEALTH/LIFE/DENTAL INS	715.000	171	66.08
				HEALTH/LIFE/DENTAL INS	715.000	215	31.97
				HEALTH/LIFE/DENTAL INS	715.000	260	122.31
				HEALTH/LIFE/DENTAL INS	715.000	301	4,445.14
				HEALTH/LIFE/DENTAL INS	715.000	371	121.32
				HEALTH/LIFE/DENTAL INS	715.000	441	131.56
				HEALTH/LIFE/DENTAL INS	715.000	691	363.96
				HEALTH/LIFE/DENTAL	715.000	738	127.88
				HEALTHCARE PAYMENTS	801.000	861	5,496.07
				CHECK PNC 122897 TOTAL			10,974.51
10/07/2016	PNC	122899	DEMCO, INC.	LIBRARY PROCESSING SUPPLIES	726.000	738	59.13
				LIBRARY PROCESSING SUPPLIES	726.000	738	243.01
				CHECK PNC 122899 TOTAL			302.14
10/07/2016	PNC	122900	DETROIT ENERGY STREET LIGHTS	PUBLIC UTILITIES	920.000	448	9,918.92

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
				PUBLIC UTILITIES	920.000	448	120.78
				PUBLIC UTILITIES	920.000	448	11,128.63
				CHECK PNC 122900 TOTAL			21,168.33
10/07/2016	PNC	122902	ERIC JANSON	REFUND/CANCEL PROGRAM	694.000	000	44.00
10/07/2016	PNC	122903	FIRE EXTINGUISHER SALES & SERVICE	OPERATING SUPPLIES	746.000	301	23.05
10/07/2016	PNC	122904	CINDY FRAKES-ZIEGER	CONTRACTUAL SERVICE	803.100	691	464.00
10/07/2016	PNC	122908	JILL WOLBER	HEALTHCARE PAYMENTS	801.000	861	225.00
10/07/2016	PNC	122909	JOHN C. ELLIS	HEALTHCARE PAYMENTS	801.000	861	225.00
10/07/2016	PNC	122911*#	JOHNSON THERMOL TEMP INC	REPAIRS & MAINTENANCE	937.000	265	337.50
				REPAIRS & MAINTENANCE	937.000	265	1,165.24
				REPAIRS & MAINTENANCE	937.000	266	383.54
				REPAIRS & MAINTENANCE	937.000	268	337.05
				REPAIRS & MAINTENANCE	937.000	269	205.68
				CHECK PNC 122911 TOTAL			2,429.01
10/07/2016	PNC	122913	MARK KING	HEALTHCARE PAYMENTS	801.000	861	225.00
10/07/2016	PNC	122914	KUCHENMEISTER LIGHTING &	MATERIALS & SUPPLIES	742.000	268	583.10
10/07/2016	PNC	122915*#	LEBRO PRODUCTS, LLC	MATERIALS & SUPPLIES	742.000	265	169.85
10/07/2016	PNC	122918	MEADOW BROOK THEATRE	CONTRACTUAL SERVICE	803.100	750	245.00
10/07/2016	PNC	122919	METCOM	OFFICE SUPPLIES	727.000	136	283.95
10/07/2016	PNC	122920	MICH TEL	TELEPHONE	850.000	258	991.80
10/07/2016	PNC	122922	MICHIGAN FIRE INSPECTORS SOCIETY	TRAINING	861.000	301	350.00
10/07/2016	PNC	122925	MORE COMPUTER SUPPLIES	OFFICE SUPPLIES	727.000	136	853.20
10/07/2016	PNC	122927*#	OFFICEMAX INCORPORATED	OFFICE SUPPLIES	727.000	738	64.32
10/07/2016	PNC	122929	PATTY MARTIN	REFUND/CANCEL PROGRAM	694.000	000	40.00

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
10/07/2016	PNC	122930	MICHAEL PETTYES	OPERATING SUPPLIES	746.000	301	162.67
10/07/2016	PNC	122932	CITY OF ROSEVILLE	POSTAGE	728.000	136	354.30
10/07/2016	PNC	122933	SHREDCORP	OFFICE SUPPLIES	727.000	691	30.00
10/07/2016	PNC	122935*#	SPEED CLEAN SERVICE	REPAIRS & MAINTENANCE	937.000	265	194.94
				REPAIRS & MAINTENANCE	937.000	266	75.00
				REPAIRS & MAINTENANCE	937.000	268	174.16
				MATERIALS & SUPPLIES	742.000	690	160.00
				MATERIALS & SUPPLIES	742.000	690	160.00
				CHECK PNC 122935 TOTAL			764.10
10/07/2016	PNC	122936	STEVEN TRINER	HEALTHCARE PAYMENTS	801.000	861	225.00
10/07/2016	PNC	122937#	TAG TINTZ & GRAPHX LLC	COMMUNITY PROMOTION	882.000	101	375.00
				MATERIALS & SUPPLIES	742.000	265	72.80
				CHECK PNC 122937 TOTAL			447.80
10/07/2016	PNC	122938	TEAM FINANCIAL GROUP, INC	CONT MAINT-OFF EQUIP	933.000	738	238.46
10/07/2016	PNC	122939	TERA DMYTRYSZYN	REFUND/CANCELLED PROGRAM	694.000	000	40.00
10/07/2016	PNC	122941#	THE WOODHILL GROUP	PROFESSIONAL SERVICES	712.000	136	1,126.25
				PROFESSIONAL SERVICES	712.000	136	892.50
				PROFESSIONAL SERVICES	801.100	260	7,273.75
				PROFESSIONAL SERVICES	801.100	260	3,673.75
				PROFESSIONAL SERVICES	801.100	260	1,426.25
				ACCOUNTING TRANSACTION	801.150	260	170.00
				ACCOUNTING TRANSACTION	801.150	260	1,050.00
				ACCOUNTING TRANSACTION	801.150	260	1,083.75
				CHECK PNC 122941 TOTAL			16,696.25
10/07/2016	PNC	122944	TRI-COUNTY AQUATICS, INC	POND MAINTENACE	930.000	690	565.00
10/07/2016	PNC	122946	TIMOTHY WESTPHAL	HEALTHCARE PAYMENTS	801.000	861	225.00
10/07/2016	PNC	122947	YATES CIDER MILL	MATERIALS & SUPPLIES	757.000	750	45.00

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
10/14/2016	PNC	122949	KENEWELL PRINTING CORPORATION	OFFICE SUPPLIES	727.000	136	239.50
10/14/2016	PNC	122950	CHRISTOPHER ALAYAN & ASSC, PLLC	INDIGENTS-ATTY FEES	810.000	136	275.00
10/14/2016	PNC	122951	ALECIA MARIE GOLM	INDIGENTS-ATTY FEES	810.000	136	175.00
10/14/2016	PNC	122952	AMERICA'S FINEST	PUBLICATIONS	900.000	101	1,610.00
10/14/2016	PNC	122953	AMERIGAS-STERLING HEIGHTS	GAS	921.000	265	806.78
10/14/2016	PNC	122954	AUSILIO LAW GROUP	INDIGENTS-ATTY FEES	810.000	136	175.00
				INDIGENTS-ATTY FEES	810.000	136	125.00
				CHECK PNC 122954 TOTAL			300.00
10/14/2016	PNC	122957	CAMILLA BARKOVIC	INDIGENTS-ATTY FEES	810.000	136	225.00
10/14/2016	PNC	122959	ELAINE BEZAS	INDIGENTS-ATTY FEES	810.000	136	75.00
10/14/2016	PNC	122961	BOBS SANITATION SERVICE, INC	MATERIALS & SUPPLIES	742.000	690	320.00
10/14/2016	PNC	122962	JAMES P. BRENNAN	INDIGENTS-ATTY FEES	810.000	136	175.00
				INDIGENTS-ATTY FEES	810.000	136	175.00
				CHECK PNC 122962 TOTAL			350.00
10/14/2016	PNC	122963	LEONARD J. BUCZKOWSKI	INDIGENTS-ATTY FEES	810.000	136	275.00
10/14/2016	PNC	122964	CALENDARWIZ, LLC	PROFESSIONAL SERVICES	801.000	738	154.00
10/14/2016	PNC	122965	CAPUTO BROSNAN PC	INDIGENTS-ATTY FEES	810.000	136	175.00
10/14/2016	PNC	122966	JENNIFER CHUPA		810.000	136	125.00
10/14/2016	PNC	122968	COMCAST	PROFESSIONAL SERVICES	801.100	258	13.56
10/14/2016	PNC	122969	JAMES P. CONRAD	INDIGENTS-ATTY FEES	810.000	136	300.00
10/14/2016	PNC	122970*#	CONSUMERS ENERGY	GAS	921.000	265	309.27
				GAS	921.000	266	81.38
				GAS	921.000	267	26.34
				GAS	921.000	268	26.75

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
				GAS	921.000	269	58.41
				CHECK PNC 122970 TOTAL			502.15
10/14/2016	PNC	122972	CORNERSTONE MUNICIPAL	PROF SERVICES/TRAINING	801.300	171	833.33
10/14/2016	PNC	122973*#	CAPITAL ONE COMMERCIAL	MATERIALS & SUPPLIES	742.000	691	172.42
				MATERIALS & SUPPLIES	742.000	691	171.84
				CHECK PNC 122973 TOTAL			344.26
10/14/2016	PNC	122974	CRESSWELL & FROBERGER PC	INDIGENTS-ATTY FEES	810.000	136	125.00
10/14/2016	PNC	122976#	CVS PHARMACY	HEALTH/LIFE/DENTAL INS	715.000	136	79.98
				HEALTH/LIFE/DENTAL INS	715.000	171	39.99
				HEALTH/LIFE/DENTAL INS	715.000	260	39.99
				HEALTH/LIFE/DENTAL INS	715.000	301	399.90
				HEALTH/LIFE/DENTAL INS	715.000	371	119.97
				HEALTH/LIFE/DENTAL INS	715.000	441	399.90
				HEALTH/LIFE/DENTAL INS	715.000	691	39.99
				HEALTH/LIFE/DENTAL	715.000	738	39.99
				CHECK PNC 122976 TOTAL			1,159.71
10/14/2016	PNC	122977*#	DETROIT ENERGY	ELECTRIC	922.000	265	745.34
				ELECTRIC	922.000	265	610.53
				ELECTRIC	922.000	266	2,307.97
				ELECTRIC	922.000	266	1,900.08
				ELECTRIC	922.000	267	187.58
				ELECTRIC	922.000	267	196.53
				ELECTRIC	922.000	268	1,611.90
				ELECTRIC	922.000	268	1,337.77
				ELECTRIC	922.000	269	1,007.78
				ELECTRIC	922.000	269	1,037.13
				ELECTRIC	922.000	448	144.13
				ELECTRIC	922.000	448	206.63
				CHECK PNC 122977 TOTAL			11,293.37
10/14/2016	PNC	122979	DOTY LAW	INDIGENTS-ATTY FEES	810.000	136	275.00

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
10/14/2016	PNC	122980	ELECTION SOURCE	MATERIALS & SUPPLIES	757.000	215	136.96
10/14/2016	PNC	122981	ELISHA OAKES	INDIGENTS-ATTY FEES	810.000	136	125.00
10/14/2016	PNC	122983	EXOTIC ZOO	PROGRAMS	803.000	738	225.00
10/14/2016	PNC	122984	FIRE EXTINGUISHER SALES & SERVICE	OPERATING SUPPLIES	746.000	301	7.40
10/14/2016	PNC	122985	FIRST CHOICE SERVICES	MATERIALS & SUPPLIES	757.000	750	121.84
10/14/2016	PNC	122986	FISCHER, GARON, HOYUMPA, RANCILIO	INDIGENTS-ATTY FEES	810.000	136	250.00
				INDIGENTS-ATTY FEES	810.000	136	175.00
				INDIGENTS-ATTY FEES	810.000	136	225.00
				CHECK PNC 122986 TOTAL			650.00
10/14/2016	PNC	122988	FRASER STAR LANES	CONTRACTUAL SERVICE	803.100	691	612.00
10/14/2016	PNC	122989	STEVEN G. FREERS	INDIGENTS-ATTY FEES	810.000	136	75.00
10/14/2016	PNC	122992	ERIC GOZE	INDIGENTS-ATTY FEES	810.000	136	175.00
10/14/2016	PNC	122993	GRANICUS, INC	PROFESSIONAL SERVICES	801.100	258	406.85
				PROFESSIONAL SERVICES	801.100	258	717.91
				CHECK PNC 122993 TOTAL			1,124.76
10/14/2016	PNC	122994#	GREAT LAKES PEST CONTROL CO. INC	MATERIALS & SUPPLIES	742.000	265	75.00
				MATERIALS & SUPPLIES	742.000	266	50.00
				MATERIALS & SUPPLIES	742.000	268	50.00
				MATERIALS & SUPPLIES	742.000	269	50.00
				CHECK PNC 122994 TOTAL			225.00
10/14/2016	PNC	122996	MICHAEL HENNIGAN	INDIGENTS-ATTY FEES	810.000	136	225.00
10/14/2016	PNC	122997	ANDREA C. IRONS	INDIGENTS-ATTY FEES	810.000	136	75.00
10/14/2016	PNC	122998	LAW OFFICES OF JANADIA JANADIA	INDIGENTS-ATTY FEES	810.000	136	200.00
10/14/2016	PNC	122999	KATHY VOGT	INDIGENTS-ATTY FEES	810.000	136	75.00

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
10/14/2016	PNC	123000	KERR ALBERT OFFICE SUPPLY	OFFICE SUPPLIES	727.000	441	98.35
10/14/2016	PNC	123001	MICHEAL B. KILPATRICK	INDIGENTS-ATTY FEES	810.000	136	300.00
10/14/2016	PNC	123002	MELISSA M. KING, P.C.	PROFESSIONAL SERVICES	712.000	136	1,200.00
10/14/2016	PNC	123003	KIRK, HUTH, LANGE & BADALAMENTI	CITY ATTORNEY	803.000	210	139.70
10/14/2016	PNC	123004	LIANE KUFCHOCK	INDIGENTS-ATTY FEES	810.000	136	175.00
10/14/2016	PNC	123005	LAKESIDE LEGAL GROUP	INDIGENTS-ATTY FEES	810.000	136	250.00
				INDIGENTS-ATTY FEES	810.000	136	250.00
				CHECK PNC 123005 TOTAL			500.00
10/14/2016	PNC	123006	LEGALSHIELD	DUE TO OTHER/AFLAC/LEGAL	231.000	000	87.65
				DUE TO OTHER/AFLAC/LEGAL	231.000	000	87.65
				CHECK PNC 123006 TOTAL			175.30
10/14/2016	PNC	123008	MATTHEW A. LICATA	INDIGENTS-ATTY FEES	810.000	136	225.00
				INDIGENTS-ATTY FEES	810.000	136	175.00
				CHECK PNC 123008 TOTAL			400.00
10/14/2016	PNC	123009	LUCIDO & MANZELLA PC	INDIGENTS-ATTY FEES	810.000	136	225.00
				INDIGENTS-ATTY FEES	810.000	136	225.00
				INDIGENTS-ATTY FEES	810.000	136	125.00
				CHECK PNC 123009 TOTAL			575.00
10/14/2016	PNC	123010	MACOMB COMMUNITY COLLEGE	TRAINING	861.000	301	800.00
10/14/2016	PNC	123011	MACOMB COUNTY FINANCE DEPARTMENT	RADIO EXP-VEHICLES	865.000	301	117.42
10/14/2016	PNC	123012	JASON MALKIEWICZ	INDIGENTS-ATTY FEES	810.000	136	175.00
10/14/2016	PNC	123013	MERS	ER PENSION DEDUCTION PAYABLE	228.600	000	220,746.80
				EE PENSION CONTRIBUTION PAYABLE	228.601	000	38,023.24
				CHECK PNC 123013 TOTAL			258,770.04

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Fund: 101 GENERAL FUND							
10/14/2016	PNC	123014	MICH TEL	TELEPHONE	850.000	258	375.00
10/14/2016	PNC	123015*	STATE OF MICHIGAN	CLEARANCE FEES-D.C.	658.000	000	1,130.00
10/14/2016	PNC	123016	MICHIGAN MUNICIPAL	PREPAID EXPENSES	123.000	000	29,779.00
10/14/2016	PNC	123017	MOORE, PENNA & ASSOC.	INDIGENTS-ATTY FEES	810.000	136	225.00
10/14/2016	PNC	123018	NADEAU LAW	INDIGENTS-ATTY FEES	810.000	136	175.00
10/14/2016	PNC	123019	JACQUELINE G. NANNI	INDIGENTS-ATTY FEES	810.000	136	125.00
10/14/2016	PNC	123020	OAKLAND COUNTY	CLEMIS	851.100	301	6,721.75
10/14/2016	PNC	123021#	OFFICEMAX INCORPORATED	OFFICE SUPPLIES	727.000	136	89.42
				OFFICE SUPPLIES	727.000	215	21.12
				OFFICE SUPPLIES	727.000	301	85.41
				CHECK PNC 123021 TOTAL			195.95
10/14/2016	PNC	123024	PITNEY BOWES	POSTAGE CLERK	728.000	215	215.18
10/14/2016	PNC	123027	ALICIA M. PUTMAN	INDIGENTS-ATTY FEES	810.000	136	150.00
10/14/2016	PNC	123028#	RECREATION PETTY CASH	OFFICE SUPPLIES	727.000	691	22.95
				MATERIALS & SUPPLIES	742.000	691	96.19
				MATERIALS & SUPPLIES	757.000	750	150.22
				CHECK PNC 123028 TOTAL			269.36
10/14/2016	PNC	123030	ROBERT TENUTO	MATERIALS & SUPPLIES	757.000	750	125.00
10/14/2016	PNC	123031	JAMES B. ROONEY	INDIGENTS-ATTY FEES	810.000	136	150.00
10/14/2016	PNC	123032	ROYAL OAK NAME PLATE CO.	OPERATING SUPPLIES	746.000	301	10.00
10/14/2016	PNC	123033	LAW OFFICES OF KEVIN SCHNEIDER	INDIGENTS-ATTY FEES	810.000	136	175.00
10/14/2016	PNC	123034	ANTHONY SCOTTA	INDIGENTS-ATTY FEES	810.000	136	275.00
10/14/2016	PNC	123035	KEN SHEPARD	REPAIRS & MAINTENANCE	937.000	265	1,210.00
10/14/2016	PNC	123036	JAMES SHIMKO	PLUMBING INSP.	703.200	371	337.00

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
10/14/2016	PNC	123037	SHREDCORP	OPERATING SUPPLIES	746.000	301	50.00
10/14/2016	PNC	123038	SIRCHIE FINGER PRINT LABORATORIES	OPERATING SUPPLIES	746.000	301	108.01
10/14/2016	PNC	123039	SPEED CLEAN SERVICE	OPERATING SUPPLIES	746.000	301	125.00
10/14/2016	PNC	123041	SLC PROPRIETARY FUND	PROFESSIONAL SERVICES	801.000	738	10,119.00
10/14/2016	PNC	123043	ROY TRANSIT	INDIGENTS-ATTY FEES	810.000	136	250.00
10/14/2016	PNC	123044#	TYCO INTEGRATED SECURITY	REPAIRS & MAINTENANCE	937.000	268	302.63
				REPAIRS & MAINTENANCE	937.000	268	171.00
				REPAIRS & MAINTENANCE	937.000	269	173.77
				CHECK PNC 123044 TOTAL			647.40
10/14/2016	PNC	123046	ARTHUR M. YOUNG	INDIGENTS-ATTY FEES	810.000	136	175.00
10/21/2016	PNC	123048	ABSOPURE WATER COMPANY	OFFICE SUPPLIES	727.000	738	20.85
				OFFICE SUPPLIES	727.000	738	8.00
				OFFICE SUPPLIES	727.000	738	1.55
				CHECK PNC 123048 TOTAL			30.40
10/21/2016	PNC	123051	AMERICA'S FINEST	MATERIALS & SUPPLIES	757.000	746	110.00
10/21/2016	PNC	123053	AT&T	TELEPHONE	850.000	258	2,930.21
				TELEPHONE	850.000	258	100.98
				CHECK PNC 123053 TOTAL			3,031.19
10/21/2016	PNC	123055	AT&T LONG DISTANCE	TELEPHONE	850.000	258	9.99
10/21/2016	PNC	123058	BEST BUY BUSINESS ADVANTAGE ACCT	MATERIALS & SUPPLIES	757.000	371	127.46
10/21/2016	PNC	123059	BLUE CROSS/BLUE SHIELD OF MICHIGAN	HEALTHCARE PAYMENTS	801.000	861	13,933.86
				HEALTHCARE PAYMENTS	801.000	861	34,419.45
				CHECK PNC 123059 TOTAL			48,353.31
10/21/2016	PNC	123060*#	BOUND TREE MEDICAL	MATERIALS & SUPPLIES	742.000	266	80.58

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
				MATERIALS & SUPPLIES	742.000	268	80.58
				REPAIRS & MAINTENANCE	937.000	268	442.99
				MATERIALS & SUPPLIES	742.000	269	80.58
				REPAIRS & MAINTENANCE	937.000	269	442.99
				REPAIRS & MAINTENANCE	937.000	750	442.99
				CHECK PNC 123060 TOTAL			1,570.71
10/21/2016	PNC	123061	BULLDOG RECORDS MANAGEMENT	MATERIALS & SUPPLIES	757.000	215	105.00
10/21/2016	PNC	123062	BURKE'S SPORT HAVEN, INC	MATERIALS & SUPPLIES	742.000	691	938.00
10/21/2016	PNC	123063	C & G NEWSPAPERS	OPERATING SUPPLIES	900.000	101	227.02
10/21/2016	PNC	123064*#	C.O.P.S. HEALTH TRUST PLAN	HEALTH/LIFE/DENTAL INS	715.000	301	161.50
				HEALTHCARE PAYMENTS	801.000	861	21.00
				CHECK PNC 123064 TOTAL			182.50
10/21/2016	PNC	123065	CHRISTINE S. DALTON	BUILDING PERMITS	483.000	000	11.00
10/21/2016	PNC	123066*#	CINTAS CORPORATION #354	REPAIRS & MAINTENANCE	937.000	266	349.09
				REPAIRS & MAINTENANCE	937.000	266	196.72
				REPAIRS & MAINTENANCE	937.000	268	137.82
				MATERIALS & SUPPLIES	742.000	269	21.24
				REPAIRS & MAINTENANCE	937.000	269	1,600.09
				MATERIALS & SUPPLIES	742.000	690	300.00
				CHECK PNC 123066 TOTAL			2,604.96
10/21/2016	PNC	123067	COMMUNITY PLANNING & MANAGEMENT,	PLANNING	817.000	801	850.00
				PLANNING	817.000	801	850.00
				CHECK PNC 123067 TOTAL			1,700.00
10/21/2016	PNC	123073	SCOTT EOVOLDI	TRAINING	861.000	301	703.32
10/21/2016	PNC	123079	FRASER COMMAND OFFICERS ASSOC	UNION DUES PAYABLE	234.000	000	630.00
10/21/2016	PNC	123080	FRASER DISPATCHERS ASSOCIATION	UNION DUES PAYABLE	234.000	000	412.50
10/21/2016	PNC	123081	FRASER LIEUTENANTS ASSOCIATION	UNION DUES PAYABLE	234.000	000	120.00

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
10/21/2016	PNC	123082	FRASER POLICE OFFICERS ASSOCIATION	UNION DUES PAYABLE	234.000	000	2,022.50
10/21/2016	PNC	123083*#	CITY OF FRASER	WATER/SEWER	920.000	265	5.66
				WATER/SEWER	920.000	265	1,178.33
				WATER/SEWER	920.000	266	350.59
				WATER/SEWER	920.000	267	112.60
				WATER/SEWER	920.000	268	146.15
				WATER/SEWER	920.000	269	148.18
				CHECK PNC 123083 TOTAL			1,941.51
10/21/2016	PNC	123087	HONEYWELL INTERNATIONAL INC	OPERATING SUPPLIES	746.000	301	365.78
10/21/2016	PNC	123088	21ST CENTURY MEDIA - MICHIGAN	PUBLICATIONS	900.000	101	336.68
10/21/2016	PNC	123089	INGRAM LIBRARY SERVICES	BOOKS & MATERIALS	744.000	738	9.89
				BOOKS & MATERIALS	744.000	738	10.44
				BOOKS & MATERIALS	744.000	738	7.14
				BOOKS & MATERIALS	744.000	738	109.86
				BOOKS & MATERIALS	744.000	738	138.52
				BOOKS & MATERIALS	744.000	738	174.02
				BOOKS & MATERIALS	744.000	738	549.54
				BOOKS & MATERIALS	744.000	738	580.70
				BOOKS & MATERIALS	744.000	738	7.69
				BOOKS & MATERIALS	744.000	738	14.08
				BOOKS & MATERIALS	744.000	738	27.25
				CHECK PNC 123089 TOTAL			1,629.13
10/21/2016	PNC	123091	JILL WOLBER	HEALTHCARE PAYMENTS	801.000	861	225.00
10/21/2016	PNC	123092	JIM WAGNER	REFUND	675.000	000	15.00
10/21/2016	PNC	123093	JOHN C. ELLIS	HEALTHCARE PAYMENTS	801.000	861	225.00
10/21/2016	PNC	123095	JOHNSON THERMOL TEMP INC	REPAIRS & MAINTENANCE	937.000	266	7,400.00
10/21/2016	PNC	123096*	KAPOTE ENTERPRISES LLC	DUE TO TAXPAYERS	275.000	000	21.57
10/21/2016	PNC	123097	KERR ALBERT OFFICE SUPPLY	OFFICE SUPPLIES	727.000	260	64.99

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
10/21/2016	PNC	123098	KIMBERLY GOODWIN	PROGRAMS	803.000	738	115.00
10/21/2016	PNC	123099	KONICA MINOLTA BUSINESS SOLUTIONS	R&M SUPPLIES - DPW	757.000	441	73.32
10/21/2016	PNC	123101	LIBRARY PETTY CASH	PROGRAMS	803.000	738	10.98
10/21/2016	PNC	123102#	MACOMB COUNTY FINANCE DEPARTMENT	OFFICE SUPPLIES	727.000	171	49.40
				OFFICE SUPPLIES	727.000	209	37.05
				OFFICE SUPPLIES	727.000	260	24.70
				OFFICE SUPPLIES	727.000	301	99.76
				OFFICE SUPPLIES	727.000	371	37.05
				CHECK PNC 123102 TOTAL			247.96
10/21/2016	PNC	123104#	MAIL PLUS	POSTAGE	728.000	260	0.50
				POSTAGE	728.000	738	6.40
				CHECK PNC 123104 TOTAL			6.90
10/21/2016	PNC	123106	MICHIGAN MUNICIPAL LEAGUE	PUBLICATIONS	900.000	101	87.40
10/21/2016	PNC	123108	OFFICEMAX INCORPORATED	OFFICE SUPPLIES	727.000	738	54.61
				OFFICE SUPPLIES	727.000	738	9.00
				CHECK PNC 123108 TOTAL			63.61
10/21/2016	PNC	123109	PETTY CASH	OPERATING SUPPLIES	746.000	301	21.19
				OPERATING SUPPLIES	746.000	301	9.08
				OPERATING SUPPLIES	746.000	301	4.00
				CHECK PNC 123109 TOTAL			34.27
10/21/2016	PNC	123110	PRINTING SYSTEMS, INC	MATERIALS & SUPPLIES	757.000	215	368.70
10/21/2016	PNC	123111*#	REINDEL TRUE VALUE	MATERIALS & SUPPLIES	742.000	265	85.11
				MATERIALS & SUPPLIES	742.000	268	15.36
				CAPITAL-BUILDING	975.000	746	15.19
				CHECK PNC 123111 TOTAL			115.66

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
10/21/2016	PNC	123112*#	S&S SPRINKLER SERVICE	MATERIALS & SUPPLIES	742.000	265	180.00
				MATERIALS & SUPPLIES	742.000	266	80.00
				MATERIALS & SUPPLIES	742.000	267	50.00
				MATERIALS & SUPPLIES	742.000	268	50.00
				MATERIALS & SUPPLIES	742.000	690	180.00
				CHECK PNC 123112 TOTAL			540.00
10/21/2016	PNC	123115#	SPEED CLEAN SERVICE	R&M SUP-CONSTRUCTION	937.000	265	375.00
				R&M SUP-CONSTRUCTION	937.000	265	375.00
				REPAIRS & MAINTENANCE	937.000	266	371.08
				REPAIRS & MAINTENANCE	937.000	269	594.90
				MATERIALS & SUPPLIES	742.000	690	160.00
				MATERIALS & SUPPLIES	742.000	690	99.00
				MATERIALS & SUPPLIES	742.000	690	160.00
				CHECK PNC 123115 TOTAL			2,134.98
10/21/2016	PNC	123117	STATE OF MICHIGAN	MISC. EXPENSE	956.000	136	5,490.00
10/21/2016	PNC	123119	STEVEN TRINER	HEALTHCARE PAYMENTS	801.000	861	225.00
10/21/2016	PNC	123122	TEAMSTERS LOCAL 214	UNION DUES-DIST CT	234.000	000	119.75
				UNION DUES-DPW	234.000	000	521.00
				UNION DUES-CLERICAL	234.000	000	519.87
				CHECK PNC 123122 TOTAL			1,160.62
10/21/2016	PNC	123125	UNIQUE MANAGEMENT SERVICES, INC	PROFESSIONAL SERVICES	801.000	738	14.75
				PROFESSIONAL SERVICES	801.000	738	26.85
				CHECK PNC 123125 TOTAL			41.60
10/21/2016	PNC	123127*#	VERIZON	MOBILE PHONES	852.000	441	15.20
				MOBILE PHONES	852.000	691	13.98
				CHECK PNC 123127 TOTAL			29.18
10/21/2016	PNC	123130	TIMOTHY WESTPHAL	HEALTHCARE PAYMENTS	801.000	861	225.00

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
10/21/2016	PNC	123131	WINDER POLICE EQUIPMENT	OPERATING SUPPLIES	746.000	301	33.99
10/21/2016	PNC	123133	YORK, DOLAN & TOMLINSON, P.C.	CITY ATTORNEY	803.000	210	8,000.00
10/31/2016	PNC	123135*#	AEW	CAP.CONST.LIBRARY	975.000	268	960.00
				MCKINLEY PARK	975.001	691	530.00
				CHECK PNC 123135 TOTAL			1,490.00
10/31/2016	PNC	123138#	AMERICA'S FINEST	PUBLICATIONS	900.000	101	652.00
				OFFICE SUPPLIES	727.000	441	106.00
				CHECK PNC 123138 TOTAL			758.00
10/31/2016	PNC	123139	APOLLO FIRE EQUIPMENT	OPERATING SUPPLIES	746.000	301	47.18
				OPERATING SUPPLIES	746.000	301	591.72
				CHECK PNC 123139 TOTAL			638.90
10/31/2016	PNC	123140	AT&T	TELEPHONE	850.000	258	2,663.77
10/31/2016	PNC	123141	BLANCO WILCZYNSKI, PLLC	INDIGENTS-ATTY FEES	810.000	136	225.00
10/31/2016	PNC	123143	THOMAS M. BRENNAN	INDIGENTS-ATTY FEES	810.000	136	175.00
10/31/2016	PNC	123144	KIMBERLY T. BROWN	INDIGENTS-ATTY FEES	810.000	136	175.00
10/31/2016	PNC	123145	C & G NEWSPAPERS	OPERATING SUPPLIES	900.000	101	54.00
10/31/2016	PNC	123146	THOMAS CALDER	INDIGENTS-ATTY FEES	810.000	136	175.00
10/31/2016	PNC	123147	MARK CARDELLIO	INDIGENTS-ATTY FEES	810.000	136	175.00
10/31/2016	PNC	123149*#	CINTAS CORPORATION #354	REPAIRS & MAINTENANCE	937.000	265	267.01
				REPAIRS & MAINTENANCE	937.000	266	72.25
				REPAIRS & MAINTENANCE	937.000	268	41.81
				REPAIRS & MAINTENANCE	937.000	269	122.28
				CHECK PNC 123149 TOTAL			503.35
10/31/2016	PNC	123150*#	CONSUMERS ENERGY	GAS	921.000	265	487.77

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
				GAS	921.000	266	74.82
				GAS	921.000	267	37.51
				GAS	921.000	268	84.38
				GAS	921.000	269	86.78
				CHECK PNC 123150 TOTAL			771.26
10/31/2016	PNC	123151	CORNERSTONE MUNICIPAL	PROF SERVICES/TRAINING	801.300	171	833.33
10/31/2016	PNC	123153	DEMCO, INC.	LIBRARY PROCESSING SUPPLIES	726.000	738	448.06
10/31/2016	PNC	123154	DES MOINES STAMP	OFFICE SUPPLIES	727.000	301	89.85
10/31/2016	PNC	123155	DOTY LAW	INDIGENTS-ATTY FEES	810.000	136	175.00
				INDIGENTS-ATTY FEES	810.000	136	175.00
				CHECK PNC 123155 TOTAL			350.00
10/31/2016	PNC	123157	EAST POINTE PRINTING	OFFICE SUPPLIES	727.000	209	207.00
10/31/2016	PNC	123159#	FIRE EXTINGUISHER SALES & SERVICE	REPAIRS & MAINTENANCE	937.000	265	69.15
				MATERIALS & SUPPLIES	742.000	266	101.90
				CHECK PNC 123159 TOTAL			171.05
10/31/2016	PNC	123161	KATHLEEN G. GALEN	INDIGENTS-ATTY FEES	810.000	136	50.00
10/31/2016	PNC	123163	GRANICUS, INC	PROFESSIONAL SERVICES	801.100	258	717.91
				PROFESSIONAL SERVICES	801.100	258	406.85
				CHECK PNC 123163 TOTAL			1,124.76
10/31/2016	PNC	123165	JILL WOLBER	HEALTHCARE PAYMENTS	801.000	861	225.00
10/31/2016	PNC	123166	JOHN C. ELLIS	HEALTHCARE PAYMENTS	801.000	861	225.00
10/31/2016	PNC	123167	JOHNSON THERMOL TEMP INC	REPAIRS & MAINTENANCE	937.000	266	150.00
10/31/2016	PNC	123168	MARK KING	HEALTHCARE PAYMENTS	801.000	861	225.00
10/31/2016	PNC	123169	DENNIS KOENDERS	MECHANICAL INSP.	703.100	371	6,027.00
10/31/2016	PNC	123170	DANA KRAUSE	INDIGENTS-ATTY FEES	810.000	136	175.00

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
10/31/2016	PNC	123171	KRISTINA JOSEPH	INDIGENTS-ATTY FEES	810.000	136	100.00
10/31/2016	PNC	123172	L.N. NAUMENKO, ATTORNEY AT LAW	INDIGENTS-ATTY FEES	810.000	136	75.00
10/31/2016	PNC	123173	LAKESIDE LEGAL GROUP	INDIGENTS-ATTY FEES	810.000	136	125.00
10/31/2016	PNC	123174	LAURA E. POLIZZI, ATTORNEY AT LAW	INDIGENTS-ATTY FEES	810.000	136	250.00
10/31/2016	PNC	123176	ROBERT C. LEITHAUSER JR	INDIGENTS-ATTY FEES	810.000	136	175.00
10/31/2016	PNC	123177	LIBRARY PETTY CASH	PROGRAMS	803.000	738	19.00
				PROGRAMS	803.000	738	4.99
				PROGRAMS	803.000	738	2.99
				PROGRAMS	803.000	738	11.00
				PROGRAMS	803.000	738	54.86
				CHECK PNC 123177 TOTAL			92.84
10/31/2016	PNC	123178	LUCIDO & MANZELLA PC	INDIGENTS-ATTY FEES	810.000	136	125.00
10/31/2016	PNC	123179	MACOMB COMMUNITY COLLEGE	TRAINING	861.000	301	1,800.00
				TRAINING	861.000	301	1,560.00
				CHECK PNC 123179 TOTAL			3,360.00
10/31/2016	PNC	123180	MACOMB COUNTY FINANCE DEPARTMENT	RADIO EXP-VEHICLES	865.000	301	242.63
10/31/2016	PNC	123181*	MICHAEL KANAKARY	PLUMBING PERMITS/CANCELLED	480.000	000	175.00
10/31/2016	PNC	123182	MICHIGAN MUNICIPAL LEAGUE	PUBLICATIONS	900.000	101	43.50
10/31/2016	PNC	123186#	OFFICEMAX INCORPORATED	OFFICE SUPPLIES	727.000	209	248.32
				OFFICE SUPPLIES	727.000	738	3.50
				OFFICE SUPPLIES	727.000	738	68.33
				OFFICE SUPPLIES	727.000	738	10.42
				OFFICE SUPPLIES	727.000	738	(48.81)
				CHECK PNC 123186 TOTAL			281.76
10/31/2016	PNC	123188	PITNEY BOWES	POSTAGE	728.000	215	269.48

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
10/31/2016	PNC	123189	PLANTE MORAN	PROFESSIONAL SERVICES	801.100	260	300.00
10/31/2016	PNC	123192#	RAY ELECTRIC	MATERIALS & SUPPLIES	742.000	266	123.96
				MATERIALS & SUPPLIES	742.000	269	111.07
				CHECK PNC 123192 TOTAL			235.03
10/31/2016	PNC	123193	JAMES B. ROONEY	INDIGENTS-ATTY FEES	810.000	136	275.00
10/31/2016	PNC	123194	CITY OF ROSEVILLE	POSTAGE	728.000	136	457.43
10/31/2016	PNC	123195	ROYAL OAK NAME PLATE CO.	OPERATING SUPPLIES	746.000	301	22.50
10/31/2016	PNC	123197	SHREDCORP	OPERATING SUPPLIES	746.000	301	80.00
10/31/2016	PNC	123198	G. DENO SKURAS	INDIGENTS-ATTY FEES	810.000	136	75.00
10/31/2016	PNC	123199*#	SPEED CLEAN SERVICE	MATERIALS & SUPPLIES	742.000	690	160.00
10/31/2016	PNC	123201	STEVEN TRINER	HEALTHCARE PAYMENTS	801.000	861	225.00
10/31/2016	PNC	123202	SUPPLY DEN	MATERIALS & SUPPLIES	742.000	269	64.14
10/31/2016	PNC	123204	MARK TORRICE	INDIGENTS-ATTY FEES	810.000	136	175.00
10/31/2016	PNC	123206*#	VERIZON	MOBILE PHONES	852.000	371	475.91
				MOBILE PHONES	852.000	441	330.43
				MOBILE PHONES	852.000	691	50.14
				MOBILE PHONES	852.000	750	58.41
				CHECK PNC 123206 TOTAL			914.89
10/31/2016	PNC	123207	TIMOTHY WESTPHAL	HEALTHCARE PAYMENTS	801.000	861	225.00
10/31/2016	PNC	123208	WINDER POLICE EQUIPMENT	CROSSING GUARDS	707.000	301	42.83
				OPERATING SUPPLIES	746.000	301	42.83
				OPERATING SUPPLIES	746.000	301	13.11
				CHECK PNC 123208 TOTAL			98.77
10/31/2016	PNC	123210	THE WORKS CAR WASH & DETAIL, LLC	OPERATING SUPPLIES	746.000	301	109.00

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL FUND							
10/31/2016	PNC	123211	WOW INTERNET-CABLE-PHONE	PROFESSIONAL SERVICES	801.100	258	3,000.00
10/31/2016	PNC	123212	THE ZALEWSKI LAW FIRM	INDIGENTS-ATTY FEES	810.000	136	175.00
				INDIGENTS-ATTY FEES	810.000	136	175.00
				CHECK PNC 123212 TOTAL			350.00
				Total for fund 101 GENERAL FUND			532,353.91

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 202 MAJOR STREET FUND							
10/07/2016	PNC	122897*#	DELTA DENTAL OF MICHIGAN	HEALTH/LIFE/DENTAL INS	715.000	463	306.71
10/07/2016	PNC	122916	MACOMB COUNTY DEPARTMENT OF ROADS	R & M CONST.	931.000	463	1,077.66
10/21/2016	PNC	123068	COMPASS MINERALS	WINTER MAINT.	935.000	463	4,962.12
10/21/2016	PNC	123111*#	REINDEL TRUE VALUE	R & M SUPPLIES-CONST	757.000	463	60.66
				Total for fund 202 MAJOR STREET FUND			6,407.15

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 203 LOCAL STREET FUND							
10/07/2016	PNC	122882*#	AMERICAN BUILDERS SUPPLY	R&M SUP-CONSTRUCTION	757.000	463	1,341.10
10/07/2016	PNC	122897*#	DELTA DENTAL OF MICHIGAN	HEALTH/LIFE/DENTAL INS	715.000	463	185.39
10/07/2016	PNC	122910	JOHN'S LUMBER	R&M SUP-CONSTRUCTION	757.000	463	29.54
10/07/2016	PNC	122915*#	LEBRO PRODUCTS, LLC	WINTER MAINTENANCE	935.000	463	758.75
10/21/2016	PNC	123071	DALE'S LANDSCAPING SUPPLY, INC	R&M SUP-CONSTRUCTION	757.000	463	105.00
				R&M SUP-CONSTRUCTION	757.000	463	760.82
				CHECK PNC 123071 TOTAL			865.82
10/21/2016	PNC	123107*#	MINI MIX, INC	R&M SUP-CONSTRUCTION	757.000	463	210.00
10/21/2016	PNC	123112*#	S&S SPRINKLER SERVICE	R&M SUP-CONSTRUCTION	757.000	463	160.00
10/31/2016	PNC	123175	LEBRO PRODUCTS, LLC	WINTER MAINTENANCE	935.000	463	758.75
10/31/2016	PNC	123185	NEWMAN TRAFFIC SIGNS	R&M SUP-CONSTRUCTION	757.000	463	258.50
				Total for fund 203 LOCAL STREET FUND			4,567.85

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 210 AMBULANCE FUND							
10/07/2016	PNC	122897*#	DELTA DENTAL OF MICHIGAN	HEALTH/LIFE/DENTAL INS	715.000	301	586.32
10/14/2016	PNC	122982	SCOTT EOVOLDI	OPERATING SUPPLIES			** VOIDED **
10/14/2016	PNC	122991	JERRY GORNEY	OPERATING SUPPLIES	746.000	301	54.66
10/14/2016	PNC	123026	9YU-PRAXAIR DISTRIBUTION INC	OPERATING SUPPLIES	746.000	301	175.88
10/21/2016	PNC	123049	ACCUMED BILLING, INC	PROFESSIONAL SERVICES - ACCUMED	801.200	301	2,390.05
10/21/2016	PNC	123064*#	C.O.P.S. HEALTH TRUST PLAN	HEALTH/LIFE/DENTAL INS	715.000	301	24.50
10/21/2016	PNC	123127*#	VERIZON	MOBILE PHONES	852.000	301	13.98
10/31/2016	PNC	123142	BOUND TREE MEDICAL	HEALTHCARE PAYMENTS	746.000	301	494.08
				Total for fund 210 AMBULANCE FUND			3,739.47

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 226 GARBAGE AND RUBBISH COLLECTION FUND							
10/14/2016	PNC	123029	RIZZO SERVICES	REGULAR REFUSE COLL	808.000	528	42,790.80
				CURBSIDE RECYCLING	810.000	528	7,523.20
				GRASS COMPOSTING	811.000	528	9,927.67
				CHECK PNC 123029 TOTAL			60,241.67
				Total for fund 226 GARBAGE AND RUBBISH COLLECTION			60,241.67

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 265 DRUG FORFEITURE							
10/06/2016	PNC	122878	CITY OF FRASER	OPERATING SUPPLIES			** VOIDED **
10/06/2016	PNC	122879	CASH	OPERATING SUPPLIES	746.000	310	3,000.00
10/14/2016	PNC	122958	BEST BUY BUSINESS ADVANTAGE ACCT	DRUG FORFEITURE	656.000	000	109.98
10/21/2016	PNC	123123	THOMSON REUTERS - WEST	OPERATING SUPPLIES	746.000	310	386.59
10/21/2016	PNC	123127*#	VERIZON	CELLULAR PHONES	851.000	310	973.62
				Total for fund 265 DRUG FORFEITURE			4,470.19

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 267 GAMBLING FORFEITURE							
10/14/2016	PNC	123040	STRYKER	EQUIPMENT RENTAL	941.000	301	3,436.80
10/21/2016	PNC	123054	AT&T CAPITAL SERVICES, INC.	CAPITAL OUTLAY	975.000	301	1,452.81
				Total for fund 267 GAMBLING FORFEITURE			4,889.61

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 270 SENIOR HOUSING							
10/07/2016	PNC	122888*#	CINTAS CORPORATION #354	REPAIRS & MAINTENANCE	937.000	265	99.74
10/07/2016	PNC	122892*#	CONTRACTORS PIPE & SUPPLY CORP	REPAIRS & MAINTENANCE	937.000	265	7.83
				REPAIRS & MAINTENANCE	937.000	265	18.52
				CHECK PNC 122892 TOTAL			26.35
10/07/2016	PNC	122911*#	JOHNSON THERMOL TEMP INC	REPAIRS & MAINTENANCE	937.000	265	1,145.00
				REPAIRS & MAINTENANCE	937.000	265	155.10
				REPAIRS & MAINTENANCE	937.000	265	804.00
				REPAIRS & MAINTENANCE	937.000	265	150.00
				CHECK PNC 122911 TOTAL			2,254.10
10/07/2016	PNC	122935*#	SPEED CLEAN SERVICE	MATERIALS & SUPPLIES	742.000	265	99.00
10/14/2016	PNC	122970*#	CONSUMERS ENERGY	GAS	921.000	265	22.35
10/14/2016	PNC	122977*#	DETROIT ENERGY	ELECTRIC	922.000	265	1,175.27
				ELECTRIC	922.000	265	1,931.79
				CHECK PNC 122977 TOTAL			3,107.06
10/21/2016	PNC	123060*#	BOUND TREE MEDICAL	MATERIALS & SUPPLIES	742.000	265	80.58
				REPAIRS & MAINTENANCE	937.000	265	442.99
				CHECK PNC 123060 TOTAL			523.57
10/21/2016	PNC	123066*#	CINTAS CORPORATION #354	MATERIALS & SUPPLIES	742.000	265	138.64
10/21/2016	PNC	123070*#	CONTRACTORS PIPE & SUPPLY CORP	REPAIRS & MAINTENANCE	937.000	265	266.21
10/21/2016	PNC	123083*#	CITY OF FRASER	UTILITIES	920.000	265	1,751.74
10/21/2016	PNC	123085	HD SUPPLY FACILITIES MAINTENANCE	REPAIRS & MAINTENANCE	937.000	265	1,139.00

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 270 SENIOR HOUSING							
10/21/2016	PNC	123111*#	REINDEL TRUE VALUE	MATERIALS & SUPPLIES	742.000	265	575.24
10/21/2016	PNC	123112*#	S&S SPRINKLER SERVICE	MATERIALS & SUPPLIES	742.000	265	130.00
10/21/2016	PNC	123124	TYCO INTEGRATED SECURITY	REPAIRS & MAINTENANCE	937.000	265	342.00
10/21/2016	PNC	123128	WARREN PIPE & SUPPLY CO.	MATERIALS & SUPPLIES	742.000	265	23.71
10/31/2016	PNC	123149*#	CINTAS CORPORATION #354	REPAIRS & MAINTENANCE	937.000	265	56.56
10/31/2016	PNC	123150*#	CONSUMERS ENERGY	GAS	921.000	265	37.12
10/31/2016	PNC	123162	GAYLE TAYLOR	SECURITY DEPOSITS	291.000	000	555.00
10/31/2016	PNC	123199*#	SPEED CLEAN SERVICE	REPAIRS & MAINTENANCE	937.000	265	99.00
10/31/2016	PNC	123205	ULTRA FLOORS	CAP IMP CONST	937.000	265	1,089.92
10/31/2016	PNC	123206*#	VERIZON	MOBILE PHONES	852.000	265	50.14
				Total for fund 270 SENIOR HOUSING			12,386.45

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 402 2015 STREET BONDS CONSTRUCTION FUND							
10/31/2016	PNC	123135*#	AEW	CAPITAL	975.000	463	383.70
				CAPITAL	975.000	463	1,059.50
				CHECK PNC 123135 TOTAL			1,443.20
10/31/2016	PNC	123184	NATIONAL HIGHWAY MAINTENANCE	CAPITAL	975.000	463	13,400.60
10/31/2016	PNC	123190	PRO-LINE ASPHALT PAVING	CAPITAL	975.000	463	48,121.60
				Total for fund 402 2015 STREET BONDS CONSTRUCTION			62,965.40

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 592 WATER AND SEWER FUND							
10/07/2016	PNC	122882*#	AMERICAN BUILDERS SUPPLY	MATERIALS & SUPPLIES	757.000	526	1,079.10
10/07/2016	PNC	122883	AUDIO SENTRY CORPORATION	R & M LIFT STATION	931.000	527	190.00
10/07/2016	PNC	122886*#	BEST BUY BUSINESS ADVANTAGE ACCT	MATERIALS & SUPPLIES	757.000	526	89.95
10/07/2016	PNC	122887	CHRISTIAN CONCRETE CUTTING INC.	MATERIALS & SUPPLIES	757.000	526	673.10
				R & M CONSTRUCTION	930.000	526	275.00
				CHECK PNC 122887 TOTAL			948.10
10/07/2016	PNC	122890	CLANCY EXCAVATING CO	MATERIALS & SUPPLIES	757.000	526	337.80
10/07/2016	PNC	122892*#	CONTRACTORS PIPE & SUPPLY CORP	MATERIALS & SUPPLIES	757.000	526	118.29
10/07/2016	PNC	122895	DALIDA, CHRIS	70-RECYCLING	602.000	000	1.58
				READY TO SERVE	603.000	000	18.93
				METER CHARGE	610.000	000	1.42
				CHECK PNC 122895 TOTAL			21.93
10/07/2016	PNC	122897*#	DELTA DENTAL OF MICHIGAN	HEALTH/LIFE/DENTAL INS	715.000	526	526.21
				HEALTH/LIFE/DENTAL INS	715.000	527	162.25
				CHECK PNC 122897 TOTAL			688.46
10/07/2016	PNC	122901	GREAT LAKES WATER AUTHORITY	WATER PAYMENT	922.000	526	118,947.14
10/07/2016	PNC	122906*#	GRAINGER	MATERIALS & SUPPLIES	757.000	526	44.85
10/07/2016	PNC	122907	HD SUPPLY WATERWORKS, LTD	MATERIALS & SUPPLIES	757.000	526	1,368.40
10/07/2016	PNC	122917	MACOMB COUNTY TREASURER	SEWER PAYMENT-VARIABLE	921.000	527	7,883.66
10/07/2016	PNC	122923	MILLER, CANFIELD,	CAPITAL IMPROVEMENT	977.200	527	25,000.00
10/07/2016	PNC	122927*#	OFFICEMAX INCORPORATED	MATERIALS & SUPPLIES	757.000	526	93.29

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 592 WATER AND SEWER FUND							
10/07/2016	PNC	122935*#	SPEED CLEAN SERVICE	R & M CONSTRUCTION	930.000	526	686.31
10/07/2016	PNC	122943	TITLE SOURCE INC - COMMERCIAL	10-WATER USAGE	600.000	000	74.88
10/14/2016	PNC	122967	CLANCY EXCAVATING CO	MATERIALS & SUPPLIES	757.000	526	390.84
10/14/2016	PNC	122971	CONTRACTORS PIPE & SUPPLY CORP	MATERIALS & SUPPLIES	757.000	526	4.31
10/14/2016	PNC	122977*#	DETROIT ENERGY	ELECTRIC	922.000	527	208.77
				ELECTRIC	922.000	527	245.62
				CHECK PNC 122977 TOTAL			454.39
10/14/2016	PNC	122990	GAULT, SANDRA	READY TO SERVE	446.000	000	443.93
				10-WATER USAGE	446.000	000	8.98
				50-SEWER TREATMENT	446.000	000	3.08
				METER CHARGE	446.000	000	0.25
				CHECK PNC 122990 TOTAL			456.24
10/14/2016	PNC	122995	GUNNERS METERS & PARTS, INC	MATERIALS & SUPPLIES	757.000	526	25.00
10/14/2016	PNC	123045#	WHITLOCK BUSINESS SYSTEMS	POSTAGE	728.000	526	1,021.26
				POSTAGE	728.000	526	844.01
				POSTAGE	728.000	527	1,021.27
				CHECK PNC 123045 TOTAL			2,886.54
10/21/2016	PNC	123052	ASPHALT UNLIMITED, INC	R & M CONSTRUCTION	930.000	526	4,855.00
10/21/2016	PNC	123070*#	CONTRACTORS PIPE & SUPPLY CORP	MATERIALS & SUPPLIES	757.000	526	72.35
				MATERIALS & SUPPLIES	757.000	526	29.75
				MATERIALS & SUPPLIES	757.000	526	402.57
				MATERIALS & SUPPLIES	757.000	526	34.50
				CHECK PNC 123070 TOTAL			539.17
10/21/2016	PNC	123072	DPW PETTY CASH	R & M CONSTRUCTION			** VOIDED **
10/21/2016	PNC	123083*#	CITY OF FRASER	UTILITIES	920.000	526	75.84

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 592 WATER AND SEWER FUND							
10/21/2016	PNC	123084	GUNNERS METERS & PARTS, INC	MATERIALS & SUPPLIES	757.000	526	1,275.00
10/21/2016	PNC	123086	HD SUPPLY WATERWORKS, LTD	MATERIALS & SUPPLIES	757.000	526	519.52
10/21/2016	PNC	123094	JOHN'S LUMBER	MATERIALS & SUPPLIES	757.000	526	48.19
10/21/2016	PNC	123103	MACOMB COUNTY TREASURER	SEWER PAYMENT-VARIABLE	921.000	527	2,113.53
				SEWER PAYMENT-VARIABLE	921.000	527	301.43
				SEWER PAYMENT-FIXED	921.100	527	208,338.09
				CHECK PNC 123103 TOTAL			210,753.05
10/21/2016	PNC	123107*#	MINI MIX, INC	MATERIALS & SUPPLIES	757.000	527	1,133.00
				MATERIALS & SUPPLIES	757.000	527	609.00
				CHECK PNC 123107 TOTAL			1,742.00
10/21/2016	PNC	123111*#	REINDEL TRUE VALUE	MATERIALS & SUPPLIES	757.000	526	204.28
10/21/2016	PNC	123127*#	VERIZON	MOBILE PHONES	852.000	526	31.19
				MOBILE PHONES	852.000	527	31.19
				CHECK PNC 123127 TOTAL			62.38
10/31/2016	PNC	123135*#	AEW	ENGINEERING	800.000	526	121.50
				ENGINEERING	800.000	526	2,956.00
				CAP IMP CONST	977.000	526	250.00
				CAP IMP CONST	977.000	526	5,870.70
				CAP IMP CONST	977.000	526	7,130.00
				CAPITAL IMPROVEMENT	977.200	527	1,125.60
				CAPITAL IMPROVEMENT	977.200	527	1,020.00
				CAPITAL IMPROVEMENT	977.200	527	919.20
				CHECK PNC 123135 TOTAL			19,393.00
10/31/2016	PNC	123148#	CHRISTIAN CONCRETE CUTTING INC.	R & M CONSTRUCTION	930.000	526	275.00
				R & M CONSTRUCTION	930.000	527	637.50
				CHECK PNC 123148 TOTAL			912.50

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 592 WATER AND SEWER FUND							
10/31/2016	PNC	123156	DPW & SON, LLC	R & M CONSTRUCTION	930.000	526	7,300.00
10/31/2016	PNC	123164	HD SUPPLY WATERWORKS, LTD	MATERIALS & SUPPLIES	757.000	527	743.00
10/31/2016	PNC	123183	NATIONAL FIRE PROTECTION, INC	R & M CONSTRUCTION	930.000	526	950.00
10/31/2016	PNC	123206*#	VERIZON	MOBILE PHONES	852.000	526	37.57
				MOBILE PHONES	852.000	527	37.57
				CHECK PNC 123206 TOTAL			75.14
				Total for fund 592 WATER AND SEWER FUND			411,237.55

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 661 MOTOR POOL							
10/07/2016	PNC	122881	INTERSTATE BILLING SERVICES INC.	R & M PARTS-DPW	864.000	249	652.70
10/07/2016	PNC	122884	AUTO MOTIVE ENHANCERS, INC	R & M PARTS-PS	865.000	249	227.15
10/07/2016	PNC	122886*#	BEST BUY BUSINESS ADVANTAGE ACCT	R & M PARTS-PS	865.000	249	54.99
10/07/2016	PNC	122894	CRUISERS	R & M PARTS-PS	865.000	249	789.55
				R & M PARTS-PS	865.000	249	816.63
				CHECK PNC 122894 TOTAL			1,606.18
10/07/2016	PNC	122897*#	DELTA DENTAL OF MICHIGAN	HEALTH/LIFE/DENTAL INS	715.000	249	100.47
10/07/2016	PNC	122906*#	GRAINGER	R & M PARTS-PS	865.000	249	32.25
10/07/2016	PNC	122921	MICHIGAN CAT	R & M PARTS-DPW	864.000	249	60.11
10/07/2016	PNC	122924	MORBARK, LLC	R & M PARTS-DPW	864.000	249	138.64
10/07/2016	PNC	122926	NICKEL & SAPH, INC	AUTO INSURANCE	913.000	249	862.00
10/07/2016	PNC	122928	PALCO CAMPER	R & M PARTS-DPW	864.000	249	110.72
				R & M PARTS-DPW	864.000	249	43.50
				CHECK PNC 122928 TOTAL			154.22
10/07/2016	PNC	122934	SMART	R & M PARTS-DPW	864.000	249	155.00
10/07/2016	PNC	122940	TERMINAL SUPPLY	R & M PARTS-PS	865.000	249	707.85
10/14/2016	PNC	122955	AUTO MOTIVE ENHANCERS, INC	924.44	865.000	249	924.44
				R & M PARTS-PS	865.000	249	39.78
				R & M PARTS-PS	865.000	249	1,296.34
				R & M PARTS-PS	865.000	249	124.75
				R & M PARTS-PS	865.000	249	286.57
				R & M PARTS-PS	865.000	249	70.38
				R & M PARTS-PS	865.000	249	70.49
				R & M PARTS-PS	865.000	249	42.03

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 661 MOTOR POOL							
				CHECK PNC 122955 TOTAL			2,854.78
10/14/2016	PNC	122975	CRUISERS	R & M PARTS-PS	865.000	249	447.64
10/14/2016	PNC	122987	FRASER AUTO BODY, INC	R & M PARTS-PS	865.000	249	6,870.07
10/14/2016	PNC	123007	LESLIE TIRE SERVICE, INC.	R & M PARTS-DPW	864.000	249	516.00
				R & M PARTS-PS	865.000	249	619.00
				CHECK PNC 123007 TOTAL			1,135.00
10/17/2016	PNC	161(E)	ENTERPRISE FM TRUST	ENTERPRISE FLEET MANAGEMENT	805.000	249	10,307.59
				R & M PARTS-DPW	864.000	249	1,734.50
				R & M PARTS-PS	865.000	249	1,224.17
				CHECK PNC 161(E) TOTAL			13,266.26
10/21/2016	PNC	123050	AIRGAS USA, LLC	R & M PARTS-PS	865.000	249	157.00
				R & M PARTS-PS	865.000	249	116.20
				R & M PARTS-PS	865.000	249	65.05
				CHECK PNC 123050 TOTAL			338.25
10/21/2016	PNC	123056	AUTO MOTIVE ENHANCERS, INC	R & M PARTS-PS	865.000	249	471.26
10/21/2016	PNC	123057	BELL EQUIPMENT COMPANY	R & M PARTS-DPW	864.000	249	156.69
10/21/2016	PNC	123069	CONTRACTORS CONNECTION	R & M PARTS-DPW	864.000	249	60.70
10/21/2016	PNC	123074	FIRE EXTINGUISHER SALES & SERVICE	R & M PARTS-PS	865.000	249	24.00
10/21/2016	PNC	123075	FISHER AUTO PARTS, INC	R & M PARTS-DPW	864.000	249	35.70
				R & M PARTS-DPW	864.000	249	71.70
				CHECK PNC 123075 TOTAL			107.40
10/21/2016	PNC	123077	FOUR SEASONS RADIATOR SERVICE, INC	R & M PARTS-DPW	864.000	249	495.00
10/21/2016	PNC	123078	FRASER AUTO BODY, INC	R & M PARTS-DPW	864.000	249	866.59
10/21/2016	PNC	123100	LESLIE TIRE SERVICE, INC.	R & M PARTS-DPW	864.000	249	840.00

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 661 MOTOR POOL							
10/21/2016	PNC	123111*#	REINDEL TRUE VALUE	R & M PARTS-DPW	864.000	249	18.31
				R & M PARTS-PS	865.000	249	39.10
				CHECK PNC 123111 TOTAL			57.41
10/21/2016	PNC	123114	SPARTAN DISTRIBUTORS	R & M PARTS-DPW	864.000	249	48.30
10/21/2016	PNC	123116	SPENCER OIL COMPANY	R&M SUP-CONSTRUCTION	862.000	249	1,425.67
				R&M SUP-CONSTRUCTION	862.000	249	2,912.05
				CHECK PNC 123116 TOTAL			4,337.72
10/21/2016	PNC	123120	TAG TINTZ & GRAPHX LLC	R & M PARTS-DPW	864.000	249	60.00
10/21/2016	PNC	123126	UNITED AUTO PARTS	R & M PARTS-DPW	864.000	249	170.95
10/21/2016	PNC	123129	WEINGARTZ	R & M PARTS-DPW	864.000	249	181.91
				R & M PARTS-DPW	864.000	249	778.00
				R & M PARTS-DPW	864.000	249	76.45
				R & M PARTS-DPW	864.000	249	(230.91)
				R & M PARTS-DPW	864.000	249	(10.99)
				CHECK PNC 123129 TOTAL			794.46
10/21/2016	PNC	123132	WOLVERINE FREIGHTLINER-EASTSIDE	R & M PARTS-DPW	864.000	249	203.87
10/31/2016	PNC	123137	AIRGAS USA, LLC	R & M PARTS-PS	865.000	249	52.89
10/31/2016	PNC	123152	CRUISERS	R & M PARTS-PS	865.000	249	702.50
10/31/2016	PNC	123187	OLD DOMINION BRUSH COMPANY	R & M PARTS-DPW	864.000	249	490.83
10/31/2016	PNC	123191	DON PYKE	R & M PARTS-DPW	864.000	249	492.90
10/31/2016	PNC	123200	STATE INDUSTRIAL PRODUCTS	R & M PARTS-DPW	864.000	249	218.25
10/31/2016	PNC	123203	TAG TINTZ & GRAPHX LLC	R & M PARTS-DPW	864.000	249	60.00
10/31/2016	PNC	123206*#	VERIZON	MOBILE PHONE	852.000	249	50.25
10/31/2016	PNC	123209	WOLVERINE H-D	OIL	863.000	249	81.48
				Total for fund 661 MOTOR POOL			40,507.01

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 701 TRUST & AGENCY FUND							
10/07/2016	PNC	122893	CREATIVE BRICK	HISTORICAL COMM	214.000	000	112.62
10/07/2016	PNC	122905	FRANK VALENTI	SECURITY FEE 5%	228.500	000	405.00
10/07/2016	PNC	122931	PRIME OFFICE INNOVATIONS	TECHNOLOGY FUND-DISTCT	228.600	000	179.71
10/07/2016	PNC	122945	US TOY CO./CONSTRUCTION PLAYTHINGS	LIBRARY DONATIONS	214.200	000	59.94
10/14/2016	PNC	122948	PRO AUDIO & LIGHTING	REC PROGRAM REVOLVING	243.000	000	969.45
10/14/2016	PNC	122960	DAVID BISBY	D.A.R.E.	214.400	000	13.97
10/14/2016	PNC	122973*#	CAPITAL ONE COMMERCIAL	REC PROGRAM REVOLVING	243.000	000	163.52
10/14/2016	PNC	123015*	STATE OF MICHIGAN	CRIME VICTIM FUND	208.000	000	4,193.10
				JUROR COMP REIMBURSE	228.300	000	1,130.00
				JUSTICE SYSTEM	228.400	000	16,219.40
				CHECK PNC 123015 TOTAL			21,542.50
10/14/2016	PNC	123022	PAIGE PERTILE	D.A.R.E.	214.400	000	75.00
10/14/2016	PNC	123023	MICHAEL PETTYES	D.A.R.E.	214.400	000	12.53
10/14/2016	PNC	123025	POWER VAC OF MICHIGAN	BUILDING BONDS	283.100	000	1,200.00
10/14/2016	PNC	123042	TAYLOR BURR	D.A.R.E.	214.400	000	75.00
10/21/2016	PNC	123047	ABC PARTY ENTERTAINMENT	REC PROGRAM REVOLVING	243.000	000	300.00
10/21/2016	PNC	123076	FOUNDATION SYSTEMS OF MICHIGAN	BUILDING BONDS	283.100	000	100.00
10/21/2016	PNC	123105	MARK WINKELMAN	BUILDING BONDS	283.100	000	100.00
10/21/2016	PNC	123113	SHERRI ISKRA	BUILDING BONDS	283.100	000	100.00
10/21/2016	PNC	123118	STERLING HEIGHTS PUBLIC LIBRARY	DUE TO OTHER LIBRARIES	214.225	000	10.98
10/21/2016	PNC	123121	TASER INTERNATIONAL	OWI ENFORCEMENT	248.000	000	710.60
10/31/2016	PNC	123158	ERIC AND BARBARA GRAVES	BUILDING BONDS	283.100	000	100.00
10/31/2016	PNC	123160	FRANK VALENTI	SECURITY FEE 5%	228.500	000	405.00

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 701 TRUST & AGENCY FUND							
10/31/2016	PNC	123181*	MICHAEL KANAKARY	MISC REFUNDABLE BONDS	283.000	000	1,000.00
10/31/2016	PNC	123196	SHOWCASES	LIBRARY DONATIONS	214.200	000	66.65
				Total for fund 701 TRUST & AGENCY FUND			27,702.47

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 703 SUMMER TAX COLLECTION FUND							
10/21/2016	PNC	123096*	KAPOTE ENTERPRISES LLC	DUE TO TAXPAYERS	275.000	000	2,156.68
				Total for fund 703 SUMMER TAX COLLECTION FUND			2,156.68
			TOTAL - ALL FUNDS				1,173,625.41

'*'-INDICATES CHECK DISTRIBUTED TO MORE THAN ONE FUND
'#'-INDICATES CHECK DISTRIBUTED TO MORE THAN ONE DEPARTMENT

Fraser Public Library Board

Minutes of Monday, June 20, 2016

Meeting convened: 1:06 p.m. by Linda.
Attendance: Lorena McDowell, Director; Linda Champion; Bill Kelley; & Joan Lowes.
Absent: Dee Laramie & Tina Bullis.
Agenda approval: A motion was made by Bill & seconded by Joan to approve agenda. Motion carried.
Approval of minutes: Minutes from our previous meeting were tabled until our September 12th meeting, as not everyone had read them & Joan had at least one correction.
Secretary's/Chairperson's Report: Nothing.
Treasurer's Report: Lorena had the fund report, ending on May 31, 2016. The trust fund is probably at about $25,000 (not the reported $27,104.48), as the chairs are currently on order & their cost will be deducted from this account.
Chair Report: Linda distributed the photocopied information she had from the Small & Rural Libraries conference which she attended in early May. She reiterated that it would be a good idea if Lorena could give the Board members an email account to use for only library business, versus using our personal accounts. Lorena will check with the City, as well as the SLC, to see which email account would be more cost efficient.

Director's Report

Lorena McDowell reported on the following items: ◆**May Statistics:** She gave the Board the May statistics. They dipped a bit from last year's. ◆**Fund Reports:** Discussed earlier. ◆ **Upcoming Programming, 1,000 books before Kindergarten, & SRC:** Lorena has a lot of summer programs for all coming up. There is a kids' summer reading program, but also an Adult Program, all which include reading books, attending activities, participating in trivia contests, & etc. ◆**Staffing:** Kara is leaving in late August/early September, so at least one new employee will be hired. ◆**Chairs for Various Staff Areas:** Have been ordered. ◆**RFID Tags & CD Cases:** Both items have been purchased. More of these same items will have to be bought using our City Budget. ◆**Budget News & Roof:** The City Budget was increased by 1.6 mils; the Library received 1 mil. The roof will be fixed, & DPW thinks the Library may be able to remain open while repairs are happening. ◆**Website:** Ken is almost done with this project, & should be completed within the week. He has built it during his time on desk duty. ◆**Annual Picnic/Parade:** Tabled since Tina is in charge & wasn't at this meeting. [*Update: Tina assured me during email chats that the Library will have an entry into the City Parade]*. ◆**Website:** fraserpubliclibrary.org

Old Business: Joan asked about the patron who had written us a letter about not paying for a damaged book. Lorena assured us that this patron did pay for the material.

New Business: Linda's term on the Board expires at this end of this month. It is crucial that we have a quorum at September's meeting to approve her reappointment by the City. Lorena had distributed our Library Board members' names & pertinent information, including expiration dates, for all of us.

Audience Participation: None.

Adjournment: At 1:53 p.m.

Next Meeting: ***Monday, September 12, 2016, 1:00 p.m., at the Library.***

Respectfully submitted,

Linda S. Champion, Chair
LSC:6/27/16

Fraser Historical Commission

Minutes
Monday, August 1, 2016

Present: Kathy Pirtle; Harry Hodgson; Nancy Ehrke; Linda Champion; Marilynn Wright; Joe Chimenti;; Betty Slominski; Karen Hodges; Debra Szpulak; Lorraine Fradle, Society President; & Lorena McDowell, liaison.
Absent: Vince Calabrese & Dori Guoin (member-at-large)

1. Call to order at 7:02 p.m. by Marilynn.
2. Pledge to Flag
3. Approve Agenda: Nancy made the motion, seconded by Linda, to approve the agenda. Motion carried.
4. Approve Minutes: On a motion made by Linda to approve the minutes as amended, seconded by Jim, minutes were approved.
5. Liaison report: Lorena said that the City budget passed. The Commission got $2,100. No one's been contacted by the DPW about the Barn leak. Per Joe, Vince was looking into this.
6a) Builders Corp Report: Per Joe, nothing has been done.
7a) Barn Sale: See Budget Sheet for break-down.
7b) Barn Roof Leak: Discussed earlier.
7c) Policies: Commissioners made changes to Linda's policies. She will have the changes made & printed for our next meeting.
7d) Porch Railing: Has anything been done to it? It is leaning on the door. Per Joe, Vince is taking care of it.
8a) Barn Sale: This is scheduled for Sunday, September 11. Betty distributed flyers to the Commissioners for us to give to local businesses.
8b) Sign: Vince is working on this, per Joe.
8c) Dinner Show: Betty wanted a 5-year accounting of our dinner shows. Marilynn said she did that last year & gave it to the Commissioners, who should have it. Because she did it last year, & because it's time-consuming to complete, she will not do it again, after doing it last year. After some discussion, it was decided that the Commission would NOT have an October dinner show this year. Karen made the motion, seconded by Nancy, & it carried. It, or other fundraising ideas, may be revisited for 2017.

9. Commissioners' Reports: ❑ Marilynn told us of Chesterfield Twp. Having Civil War reenactors on 8/13-14, & Crocker House, on 8/7, is having a talk about Hudson's. We had 25 dealers for our rain date, which was successful. August 1st budget will be available at our next meeting. Debra's been vacuuming the Barn. The Garden Bridge is finished. The new paver brick has been installed. The bird house has been built & is up! There were 19 guests for a special tour conducted by Karen & Linda. There was $12.55 in the Kitchen's donation box. ❑ Betty's been working in the garden. We need rain. The trees are too big & need to be trimmed, as much as they can be. (Nick) ❑ Linda mentioned the "Rosie the Riveter" statue in Royal Oak's Memorial Park & a function happening there on Sunday, August 14, 1-3. ❑ Karen mentioned the special tour. ❑ Nancy sold 2 more books. We have about 80 books left to sell, which is 100% profit. ❑ Lorraine volunteered the Society to make the Lottery Board for the Flea Market on 9/11.
10. Adjourned at 8:20 p.m. on a motion made by Betty.

Next meeting: Monday, August 29, 2016, 7 p.m. (in lieu of our September meeting)

Respectfully submitted,

Linda S. Champion, Recording Secretary
LSC:8/13/16:REV8/19/16:REV9/3/16

DIVISION 1. - GENERALLY

Secs. 2-45—2-55. - Reserved.

DIVISION 2. - LOCAL OFFICERS' COMPENSATION COMMISSION

FOOTNOTE(S):

--- (4) ---

State Law reference— Authority to create, MCL 117.5c, MSA 5.2084(3).

Sec. 2-56. - Established.

The city council does hereby establish a local officers' compensation commission for the city.

(Ord. No. 95, § 1, 4-13-72)

Sec. 2-57. - Purpose.

The purpose and function of the local officers' compensation commission is to determine the salaries of all local elected officials.

(Ord. No. 95, § 2, 4-13-72)

Sec. 2-58. - Composition; eligibility and restrictions on eligibility.

The local officers' compensation commission shall consist of five (5) members, who are registered electors of the city, who shall be appointed by the mayor, subject to confirmation by the majority of the city council. However, no member or employee of the legislative, judicial or executive branch of any level of government or member of the immediate family of such member or employee shall be eligible to be a member of the commission.

(Ord. No. 95, § 3, 4-13-72)

Sec. 2-59. - Terms of office.

(a)

The members of the local officers' compensation commission shall be initially appointed as follows:

(1)

One (1) member for a term of five (5) years;

(2)

One (1) member for a term of four (4) years;

(3)

One (1) member for a term of three (3) years;

(4)

One (1) member for a term of two (2) years;

(5)

One (1) member for a term of one (1) year.

(b)

Annually thereafter, the mayor, with the approval of the council, shall appoint one (1) member of the commission for a term of five (5) years.

(c)

Members shall be appointed before October first of the year of appointment.

(Ord. No. 95, § 4, 4-13-72)

Sec. 2-60. - Compensation.

The members of the local officers' compensation commission shall receive no compensation, but shall be entitled to their actual and necessary expenses incurred in the performance of their duties.

(Ord. No. 95, § 6, 4-13-72)

Sec. 2-61. - Filling of vacancies.

Vacancies on the local officers' compensation commission occasioned by removals, resignations or otherwise, shall be reported to the city council and shall be filled for the remainder of the unexpired term in the same manner as original appointments.

(Ord. No. 95, § 5, 4-13-72)

Sec. 2-62. - Authority to organize; final vote; session days.

(a)

Immediately after their appointment, the members of the local officers' compensation commission shall meet and organize by electing one of their members chairperson and electing such other officers as they may deem necessary.

They shall also have the power to adopt such bylaws and regulations as they deem necessary for the carrying on of the business of the commission.
(b)
A majority of the members of the commission shall constitute a quorum for conducting its business. However, the commission shall take no action or make determinations without a concurrence of a majority of the members appointed and serving on the commission.
(c)
The commission shall meet for not more than fifteen (15) session days in every odd-numbered year. A "session day" means any calendar day on which the commission meets and a quorum is present.
(Ord. No. 95, § 7, 4-13-72)
Sec. 2-63. - Powers and duties.
(a)
The local officers' compensation commission shall have the power to and shall determine the salaries of all elected officials of the city. The determination of such salaries shall become effective thirty (30) days after being filed with the city clerk, unless rejected by a vote of two-thirds of the city council. In case of such rejection, the existing salary shall prevail. The commission shall make its determination within forty-five (45) calendar days of its first meeting.
(b)
The commission shall not be responsible for review, approval or accounting for routine expense allowances or other expenses paid to elected officials in addition to salary.
(Ord. No. 95, § 8, 4-13-72)
Sec. 2-64. - Supersedes conflicting charter and ordinance provisions.
This division shall supersede and take precedence over all existing Charter provisions and other ordinances of the city relating to either the fixing of salaries of elected officials or establishing a procedure for the fixing of such salaries.
(Ord. No. 95, § 9, 4-13-72)
Secs. 2-65—2-75. - Reserved.
DIVISION 3. - CITIZENS ADVISORY COMMITTEE

Sec. 2-76. - Established.
A citizens advisory committee is hereby established.
(Res. of 3/27/75)
Sec. 2-77. - Chairperson and executive board.
The city council shall appoint a chairperson of the citizens advisory committee and members of an executive board who shall be empowered to appoint persons as members of the committee, so that the various segments of the community-at-large may be represented.

Kelly Dolland
Update Commission members
3-2016

City Of Fraser

CENTENNIAL COMMUNITY

CITY MANAGER
Richard E. Haberman

CITY CLERK
Kelly Ann Dolland

MAYOR
Joseph Nichols
COUNCIL
Mayor Pro Tem Michael Carnagie
Acting Mayor Matt Hemelberg
Patrice M. Schornak
Yvette Foster
Kathy Blanke
Michael Lesich

LOCAL OFFICERS COMPENSATION COMMISSION

NAME	TELEPHONE	TERM LENGTH & EXPIRES
Frank Farina 15485 Rambling Rd Fraser, MI 48026	Res: 293-1763 Cell: 219-8092 *Note: when term expires, register for five year term.	**1YR** / 9-30-2014 (appointed 1-10-13)
Open		**2YR / OPEN**
Joe Chimenti 33716 Janet Fraser, MI 48026	Res: 293-8252 Cell: 943-4440 *Note: when term expires, register for four year term.	**3YR** / 9-30-2016 (reappointed 1-10-2013)
Anna Cameron 34273 Garfield Circle Fraser, MI 48026	Res: 294-4847	**4YR** / 9-30-2017 (reappointed 1-10-2013)
Open		**5YR / OPEN**

Sec. 2-56 pg. 174 – Local Officers Compensation Commission was established by City Council. They meet in odd numbered years. Five (5) members appointed to a five (5) year term. Annually thereafter, the mayor, with approval of council shall appoint one 1) member of the commission for a term of five (5) years. Terms expire in September if the corresponding year (s2-59).

APPLICATION FOR APPOINTMENT TO CITY BOARDS & COMMISSIONS

APPLICATION MAY BE SUBJECT TO PUBLIC VIEW

City of Fraser
33000 Garfield Road
Fraser, Michigan

LAST NAME	FIRST NAME	MIDDLE INITIAL
CHIMENTI	JOSEPH	S.

ADDRESS (number & street): 33716 JANET AVE.

CITY	STATE	ZIP CODE	HOME PHONE	CELL PHONE
FRASER	MI	48026	586-293-8258	586-703-4440

NAME OF BOARD/COMMISSION APPLYING FOR: ZONING BOARD OF APPEALS

REASON FOR INTEREST IN THIS BOARD (please list activities & special qualifications):
THE FACTS AND CONDITIONS FOR GRANTING APPEALS IS MOST IMPORTANT TO BE A PART OF. I. BLUE PRINT READING

EDUCATION (please list schools, diplomas, degrees, professional certificates, etc.):
HIGH SCHOOL DIPLOMA - 3 YRS H.F.C.C.
FORD MOTOR COMPANY. CERTIFIED. TRAINED SERVICE TECHNICIAN. 37 YEAR. SERVICE.

CURRENT EMPLOYMENT

COMPANY NAME	YOUR TITLE/POSITION
RETIRED FROM FORD MOTOR COMPANY	/

COMPANY ADDRESS (number & street): PART-TIME ROYAL OAK FORD

CITY	STATE	ZIP CODE	OFFICE PHONE	PAGER

PLEASE LIST YOUR RESPONSIBILITIES

Include compensation commission

PLEASE ATTACH YOUR RESUME TO THIS APPLICATION

Rev 5/2009

Received by L Braun Date 12/2/16

APPLICATION FOR APPOINTMENT TO CITY BOARDS & COMMISSIONS

APPLICATION MAY BE SUBJECT TO PUBLIC VIEW

City of Fraser
33000 Garfield Road
Fraser, Michigan

LAST NAME	FIRST NAME	MIDDLE INITIAL
ARNOLD	BEVERLY	J.

ADDRESS (number & street)

15338 RAMBLING DR.

CITY	STATE	ZIP CODE	HOME PHONE	CELL PHONE
FRASER	MI	48026	(586) 296-0697	(586) 690-1155

NAME OF BOARD/COMMISSION APPLYING FOR

Compensation Committee

REASON FOR INTEREST IN THIS BOARD (please list activities & special qualifications)

I have followed the citys finances and I realize the struggles we have. At the same time I realize the amount of time and involvement that is required to do a competant job for the city and officials should be compensated.

EDUCATION (please list schools, diplomas, degrees, professional certificates, etc.)

Redford High School
Henry Ford Community College - 2 years
HOA management Certificate
PLANNING & ZONING ESSentials CERTIFICATE
INCOME TAX PREPARER
BOOKKEEPER

CURRENT EMPLOYMENT

COMPANY NAME	YOUR TITLE/POSITION
Retired / G.M.	

COMPANY ADDRESS (number & street)

CITY	STATE	ZIP CODE	OFFICE PHONE	PAGER

PLEASE LIST YOUR RESPONSIBILITIES

PLEASE ATTACH YOUR RESUME TO THIS APPLICATION

Rev 5/2009

Received by Kelly Date 3-17-2016

COMMUNITY INTERESTS

- Member City of Fraser Zoning Board of Appeals 1999 - Present
    - Vice Chairman City of Fraser Zoning Board of Appeals abt. 2008-present
    - Secretary City of Fraser Zoning Board of Appeals 2005 – 2008
- Member City of Fraser Compensation Committee since abt. 2011- present
    - Current Chairman 2015- present
- Member of St. Malachy Parish since 1971
    - Served on Stewardship Commission / Budget (Property Management) and Finance Council abt. 1990 – present
    - Current Chairman of Finance Council 2012 - present
- Active Committee Chairperson St. Malachy Festival abt. 1990- present
- Member John F. Kennedy Council of the Knights of Columbus 2011- present
    - K of C Building Corp Member 2014-2015
- St. Malachy Parish C.S.A. Chairman 1983 - 1999
- Boy Scouts of America –
    - District Representative 1980's
    - Merit Badge Counselor 1980's
    - Committee Chairman 1980's
    - Eagle Project Review Committee 1980's

1982 – 1987 General Dynamics
Plant Industrial Engineer Detroit Tank Plant

1979 – 1982 Williams International Corporation Walled Lake, MI
Supervisor of Operation Planning

1970 – 1979 Vought Corporation– Michigan Division Sterling Heights, MI
Manager/ Superintendent of Production/Fabrication/Finishing

EDUCATION

1995 – 1998 Baker College Flint, MI
Master of Business Administration

1965 - 1969 Lawrence Technological University Southfield, MI
Bachelor of Science Degree in Management

2000 Lead Institute Ann Arbor, MI
Advanced Leadership Training

2005 University of Michigan / General Dynamics
Advanced Program Managers Training

Seminar City Zoning Board of Appeals- Completed abt 1999

APPLICATION FOR APPOINTMENT TO CITY BOARDS & COMMISSIONS

RECEIVED
CITY MANAGER'S OFFICE
JUN 20 REC'D

APPLICATION MAY BE SUBJECT TO PUBLIC VIEW

Initials ____ Time ____

City of Fraser
33000 Garfield Road
Fraser, Michigan

LAST NAME	FIRST NAME	MIDDLE INITIAL
Farina	Francis	M.

ADDRESS (number & street)

15485 Rambling Dr.

CITY	STATE	ZIP CODE	HOME PHONE	CELL PHONE
Fraser	MI	48026	(586) 293-1763	(586) 219-8092

NAME OF BOARD/COMMISSION APPLYING FOR

Compensation Commission

REASON FOR INTEREST IN THIS BOARD (please list activities & special qualifications)

I am interested in the Compensation Commission because I would like to help Fraser stay competitive with other communites.

See attached resume for qualifications and activities

EDUCATION (please list schools, diplomas, degrees, professional certificates, etc.)

See attached resume for details

CURRENT EMPLOYMENT

COMPANY NAME	YOUR TITLE/POSITION
General Dynamics Land Systems	Director/Engineering/Retirec

COMPANY ADDRESS (number & street)

38500 Mound Rd.

CITY	STATE	ZIP CODE	OFFICE PHONE	PAGER
Sterling Heights	MI	48310		(586) 219-8092

PLEASE LIST YOUR RESPONSIBILITIES

See attached resume

PLEASE ATTACH YOUR RESUME TO THIS APPLICATION

Rev 5/2009

Received by KD **Date** 6·20·16

FRANK M. FARINA

15485 Rambling Dr. Fraser, Mi. 48026 Home: 586-293-1763 Cell: 586-219-8092

EXPERIENCE

June 1982 – June 2010 General Dynamics Land SystemsSterling Heights, MI

Division Director of Engineering- Business Planning and Resource Management. 2004-2010

- Direct, plan and coordinate the facilities and resources requirements for 2000 engineers over 7 locations in 4 states.
- Establish strategies, coordinate and lead the proposal preparation team activities totaling $800 million to $1 billion annually
- Coordinate the establishment, distribution, monitoring and the coordination of corrective actions on approximately $1 billion of labor and $52 million of administrative labor costs annually.
- Responsible for the development and control of all Information Technologies for Engineering totaling $60 million annually.
- Responsible for the Engineering Quality Control programs including all new products, and Documentation controls.

1990 – 2004

Division Manager Industrial Engineering

- Supervised a staff of Industrial Engineers supporting four manufacturing facilities
- Established strategies coordinated and led manufacturing proposal team.
- Responsible for the development and control of all manufacturing support manpower, overhead costs in excess of $73 million annually.

1987 – 1990

Plant Manager – Industrial Engineering Detroit Tank Plant

- Managed the activities of 5 Supervisors and 35 IE.'s
- Plant activity included machining, welding, finishing and assembly of tanks and components.
- Implemented programs to streamline production and reduced overtime from 35% to 5%, which resulted in a savings of over $2 million yearly.
- Responsible for the design and development of all Ind. Eng. Computer Systems on IBM Mainframe and personal computers

1982 – 1987 General Dynamics
Plant Industrial Engineer Detroit Tank Plant

1979 – 1982 Williams International Corporation Walled Lake, MI
Supervisor of Operation Planning

1970 – 1979 Vought Corporation– Michigan Division Sterling Heights, MI
Manager/Superintendent of Production/Fabrication/Finishing

EDUCATION

1995 – 1998 Baker College Flint, MI
Master of Business Administration

1965 - 1969 Lawrence Technological University Southfield, MI
Bachelor of Science Degree in Management

2000 Lead Institute Ann Arbor, MI
Advanced Leadership Training

2005 University of Michigan / General Dynamics
Advanced Program Managers Training

Seminar City Zoning Board of Appeals- Completed abt 1999

COMMUNITY INTERESTS

- Member City of Fraser Zoning Board of Appeals 1999 - Present
    - Vice Chairman City of Fraser Zoning Board of Appeals abt. 2008-present
    - Secretary City of Fraser Zoning Board of Appeals 2005 – 2008
- Member City of Fraser Compensation Committee since abt. 2011- present
    - Current Chairman 2015- present
- Member of St. Malachy Parish since 1971
    - Served on Stewardship Commission / Budget (Property Management) and Finance Council abt. 1990 – present
    - Current Chairman of Finance Council 2012 - present
- Active Committee Chairperson St. Malachy Festival abt. 1990- present
- Member John F. Kennedy Council of the Knights of Columbus 2011- present
    - K of C Building Corp Member 2014-2015
- St. Malachy Parish C.S.A. Chairman 1983 - 1999
- Boy Scouts of America –
    - District Representative 1980's
    - Merit Badge Counselor 1980's
    - Committee Chairman 1980's
    - Eagle Project Review Committee 1980's

APPLICATION FOR APPOINTMENT TO CITY BOARDS & COMMISSIONS

APPLICATION MAY BE SUBJECT TO PUBLIC VIEW

RECEIVED
CITY MANAGER'S OFFICE
SEP 0 1 REC'D
Initials LD Time

City of Fraser
33000 Garfield Road
Fraser, Michigan

LAST NAME	FIRST NAME	MIDDLE INITIAL
MENENDEZ	ROSANNE	M

ADDRESS (number & street)

15762 TOULOUSE AVE

CITY	STATE	ZIP CODE	HOME PHONE	CELL PHONE
FRASER	MI	48026	(586) 296-2456	(586) 996-1958

NAME OF BOARD/COMMISSION APPLYING FOR

LOCAL OFFICERS COMPENSATION COMMISSION

REASON FOR INTEREST IN THIS BOARD (please list activities & special qualifications)

I WOULD LIKE TO HELP THE CITY OF FRASER REMAIN COMPETITIVE WITH NEIGHBORING COMMUNITIES.

EDUCATION (please list schools, diplomas, degrees, professional certificates, etc.)

EDWIN DENBY TECHNICAL & PREPARATORY HIGH SCHOOL- DIPLOMA, CPR, STATE OF MICHIGAN SPECIAL TRIBUTE. PREVIOUSLY SERVED ON THE FOLLOWING BOARDS; FRASER PARKS AND RECREATION COMMISSION, FRASER HISTORICAL PRESERVATION COMMISSION, FRASER DOWNTOWN DEVELOPMENT AUTHORITY AND MACOMB COUNTY DRAIN COMMISSION BOARD OF DETERMINATION. I AM CURRENTLY A MEMBER OF THE ZBA.

CURRENT EMPLOYMENT

COMPANY NAME	YOUR TITLE/POSITION
RETIRED	

COMPANY ADDRESS (number & street)

CITY	STATE	ZIP CODE	OFFICE PHONE	PAGER
				(586) 996-1958

PLEASE LIST YOUR RESPONSIBILITIES

PREVIOUS EMPLOYMENT: MANAGEMENT PROCURMENT, OFF SHORE SOURCING, INTERNATIONAL LIASON FOR FORTUNE 500 COMPANY SUPPLYING THE AUTOMOTIVE INDUSTRY, PURCHASING AGENT, MANAGEMNT, SALES AND RECRUITER.

PLEASE ATTACH YOUR RESUME TO THIS APPLICATION

Rev 5/2009

Received by KJ **Date** 9-26-16

APPLICATION FOR APPOINTMENT TO CITY BOARDS & COMMISSIONS

RECEIVED
CITY MANAGER'S OFFICE
SEP 27 REC'D

APPLICATION MAY BE SUBJECT TO PUBLIC VIEW

Initials_____ Time_____

City of Fraser
33000 Garfield Road
Fraser, Michigan

LAST NAME	FIRST NAME	MIDDLE INITIAL
Dudek	Dawn	

ADDRESS (number & street)

15765 Toulouse

CITY	STATE	ZIP CODE	HOME PHONE	CELL PHONE
Fraser	Mi	48026		

NAME OF BOARD/COMMISSION APPLYING FOR

Local Officers Compensation Commission

REASON FOR INTEREST IN THIS BOARD (please list activities & special qualifications)

I've been interested in the operations of the city and would greatly appreciate the opportunity to serve. I'm the current Chairperson of the Fundraising Committee for The Fraser Optimist Club.

EDUCATION (please list schools, diplomas, degrees, professional certificates, etc.)

Graduated from East Detroit High, Associate of Applied Science of Nursing, Registered Nurse for the State of Michigan.

CURRENT EMPLOYMENT

COMPANY NAME	YOUR TITLE/POSITION
Beaumont Home Care	RN Case Manager

COMPANY ADDRESS (number & street)

1410 E 14 Mile Rd

CITY	STATE	ZIP CODE	OFFICE PHONE	PAGER
Madison Heights	MI	48071	248-709-4565	

PLEASE LIST YOUR RESPONSIBILITIES

Nursing care for homebound patients.

PLEASE ATTACH YOUR RESUME TO THIS APPLICATION

Rev 5/2009

Received by _____ **Date** 9-27-2016

APPLICATION FOR APPOINTMENT TO CITY BOARDS & COMMISSIONS

RECEIVED
CITY MANAGER'S OFFICE
SEP 29 REC'D
Time
Initials

APPLICATION MAY BE SUBJECT TO PUBLIC VIEW

Compensation

City of Fraser
33000 Garfield Road
Fraser, Michigan

LAST NAME	FIRST NAME	MIDDLE INITIAL
Brannon	Robert	S.

ADDRESS (number & street)
31139 East Wind Drive

CITY	STATE	ZIP CODE	HOME PHONE	CELL PHONE
Fraser	MI	48026	586-285-9866	586-871-4568

NAME OF BOARD/COMMISSION APPLYING FOR
Compensation Commission

REASON FOR INTEREST IN THIS BOARD (please list activities & special qualifications)
I worked in business for over 20 years!

EDUCATION (please list schools, diplomas, degrees, professional certificates, etc.)
High School, College. EMT. Clergy.

CURRENT EMPLOYMENT

COMPANY NAME	YOUR TITLE/POSITION
Retired (part time call pastor Bethlehem Lutheran Church	Minister

COMPANY ADDRESS (number & street)
345000 Union Lake Harrison Twp.

CITY	STATE	ZIP CODE	OFFICE PHONE	PAGER
Harrison Twp	MI		586-871-4568	

PLEASE LIST YOUR RESPONSIBILITIES

PLEASE ATTACH YOUR RESUME TO THIS APPLICATION

Rev 5/2009

Received by KD

Date 9-29-16

Local Officers Compensation Commission Meeting
Thursday – JUNE 4TH, 2015 – 4:00P.M.

DRAFT MINUTES

Fraser Local Officers Compensation Commission was conducted on the above date at the City Municipal Building located at 33000 Garfield Road, Fraser, County of Macomb, Michigan.

Present: Anna Cameron, Joseph Chimenti and Frank Farina

Absent: Karen Silverthorn

Also Present: Kelly Dolland, Recording Secretary

1. **Call Meeting to Order**

The meeting was called to order at 4:05 p.m.

Motion was made by Member Cameron, seconded by Member Chimenti, to APPROVE THE ELECTION OF FRANK FARINA AS CHAIRPERSON.

The motion carried unanimously.

Motion was made by Member Cameron, seconded by Member Farina, to APPROVE THE ELECTION OF JOE CHIMENTI AS VICE CHAIRPERSON.

The motion carried unanimously.

2. **Approval of Minutes of March 28th, 2013 Minutes**

Motion was made by Chairman Farina, seconded by Member Cameron, to APPROVE THE MINUTES OF MARCH 28TH, 2013 AS SUBMITTED.

The motion carried unanimously.

Motion was made by Chairman Farina, seconded by Member Chimenti, to APPROVE THE AGENDA AS PRESENTED.

The motion carried unanimously.

3. **Discussion of Salaries of Mayor and Council**

Member Farina reviewed the mayor and council salaries in each community and calculated the cost to each resident. He suggested the salaries remain as is.

Motion was made by Member Chimenti, seconded by Member Cameron, to KEEP COUNCIL MEMBER AND MAYOR ANNUAL SALARIES AT:
$3835 COUNCIL MEMBER'S ANNUAL SALARY
$125 PER MEETING COMPENSATION
LIMIT OF 24 MEETING PER FISCAL YEAR
TRAVEL MILEAGE
$4531 MAYOR'S ANNUAL SALARY
$125 PER MEETING COMPENSATION
LIMIT OF 24 MEETING PER FISCAL YEAR
TRAVEL MILEAGE

The motion carried unanimously.

- Discussion ensued regarding fees for wedding services, will review at later date.
- Administration to place Local Officers Compensation Commission position available on city cable station.
- Commission requested Administration to make available other City Commission meeting compensation.

4. **Citizen Participation**- none

5. **Adjournment**

Motion was made by Chairman Farina, seconded by Member Cameron, to ADJOURN THE LOCAL OFFICERS COMPENSATION COMMISSION MEETING OF THURSDAY, JUNE 4TH, 2015 AT 4:45 P.M.

The motion carried unanimously.

Respectfully submitted,

_____
Kelly Dolland, City Clerk

/kd

FRASER DEPARTMENT OF
PUBLIC SAFETY

MEMO

To: Rich Haberman, City Manager
Fr: Director George T. Rouhib Jr.
Date: October 27, 2016
RE: City Council Agenda-November 2016

Rich,

I am requesting that council approve the purchase of two (2) SIU vehicles to be used for covert operations. The one vehicle that is being used is almost seven years old with 116,000 miles. The second vehicle was removed from service due to a blown engine and subsequently sold. SIU has been borrowing a CID vehicle to conduct surveillance and other operations which is not a good practice.

For safety and **confidentiality** reasons, I am requesting to purchase the following two vehicles without listing their models.

2017 Dodge
2017 Jeep

Pricing has been obtained from the MiDeal purchase program but I also obtained two other bids.

2017 Dodge

Galeana's Van Dyke Dodge	$26,055
MIDeal Extended Purchase Program	$26,553
Ray Laethem Dodge Jeep Ram	$29,642

2017 Jeep

MiDeal Extended Purchase Program	$26,539
Sterling Heights Dodge Chrysler Jeep	$26,581
Ray Laethem Dodge Jeep Ram	$32,217

I am recommending that the 2017 Dodge be purchased from **Galena's Van Dyke Dodge** and the 2017 Jeep be purchased from **Sterling Heights Dodge Chrysler Jeep**. If the vehicle was purchased through the MIDeal Purchase Program, there is an average delivery charge of $360. It will take approximately 8-10 weeks to build the vehicles.

I am also recommending that both vehicles be purchased with drug forfeiture monies. The sale of the one undercover vehicle will offset the purchase of the new vehicles. If you have any questions or concerns, please let me know. If you would like to review the specification sheets on each vehicle, please advise.

FRASER DEPARTMENT OF PUBLIC SAFETY

MEMO

To: Rich Haberman, City Manager
Fr: Director George T. Rouhib Jr.
Date: October 27, 2016
RE: Council Agenda-November 2016

Mr. Haberman,

In respect to the fire division, all of our self contained breathing apparatus (SCBA) have exceeded their service life (15) years and do not comply with the new NFPA standards. As a result of this, our agency applied for a grant through FEMA-Assistance to Firefighters Grant Program-Grant EMW-1015-FO-00063. The grant involved purchasing (14) air packs, (14) cylinders, and (1) RIT pack.

On August 26, 2016, our agency was notified that our grant request was approved in the following manner:

Approved Project Cost	$84,014.00
Required Contribution Match	$4,200.00

As a result of the grant approval, our agency had three companies provide us with a quote on the equipment we requested. In addition, each vendor brought their product here to demonstrate. All of our public safety officers had the opportunity to don the equipment and provide their input. The following vendors were involved with the process.

Avon DeltAir	(Provided by Douglas Safety Systems, LLC)
MSA	(Provided by Apollo fire Equipment Co., Inc.)
Scott	(Provided by Argus-Hazco)

The following quotes were obtained:

Avon DeltAir	$87,595.35
MSA	$94,650.00
Scott	$88,868.00

The feedback from the public safety employees are as follows:

The public safety employees unanimously chose the **Avon Delt Air** Product because of the field of vision regarding the facemask and the exceptional communication ability when the mask is worn by the firefighter. In addition, DeltAir is made in Michigan and also serviced in Michigan. They are the world's largest supplier of breathing air protection for the military. Because the price was the lowest, we will be able to

purchase a service agreement that will include fit testing for our employees on a yearly base. The warranty for the Avon SCBA is for 15 years. It will take approximately 30 days to receive the air packs.

I am requesting that the $4,200 match be taken out of the adjudicated gambling fund. If you have any questions or concerns regarding this grant and/or the purchase of this equipment, feel free to contact me.

U.S. Department of Homeland Security
Washington, D.C. 20472

FEMA

Mr. Michael Pettyes
City of Fraser
Fraser Fire Department
Fraser, Michigan 48026-1858

Re: Award No.EMW-2015-FO-00063

Dear Mr. Pettyes:

Congratulations, on behalf of the Department of Homeland Security, your application for financial assistance submitted under the Fiscal Year (FY) 2015 Assistance to Firefighters Grant has been approved in the amount of $84,014.00. As a condition of this award, you are required to contribute a cost match in the amount of $4,200.00 of non-Federal funds, or 5 percent of the Federal contribution of $84,014.00.

Before you request and receive any of the Federal funds awarded to you, you must establish acceptance of the award through the Assistance to Firefighters Grant Programs' e-grant system. By accepting this award, you acknowledge that the terms of the following documents are incorporated into the terms of your award:

- Summary Award Memo
- Agreement Articles (attached to this Award Letter)
- Obligating Document (attached to this Award Letter)
- FY 2015 Assistance to Firefighters Grant Notice of Funding Opportunity.

Please make sure you read, understand, and maintain a copy of these documents in your official file for this award.

Prior to requesting Federal funds, all recipients are required to register in the System for Award Management (SAM.gov). As the recipient, you must register and maintain current information in SAM.gov until you submit the final financial report required under this award or receive the final payment, whichever is later. This requires that the recipient review and update the information annually after the initial registration, and more frequently for changes in your information. There is no charge to register in SAM.gov. Your registration must be completed on-line at https://www.sam.gov/portal/public/SAM/. It is your entity's responsibility to have a valid DUNS number at the time of registration.

In order to establish acceptance of the award and its terms, please follow these instructions:

Step 1: Please go to https://portal.fema.gov to accept or decline your award. This will take you to the Assistance to Firefighters eGrants system. Enter your User Name and Password as requested on the login screen. Your User Name and Password are the same as those used to complete the application on-line.

Once you are in the system, the Status page will be the first screen you see. On the right side of the Status screen, you will see a column entitled Action. In this column, please select the View Award Package from the drop down menu. Click Go to view your award package and indicate your acceptance or declination of award. PLEASE NOTE: your period of performance has begun. If you wish to accept your grant, you should do so immediately. When you have finished, we recommend printing your award package for your records.

Step 2: If you accept your award, you will see a link on the left side of the screen that says "Update 1199A" in the Action column. Click this link. This link will take you to the SF-1199A, Direct Deposit Sign-up Form. Please complete the SF-1199A on-line if you have not done so already. When you have finished, you must submit

the form electronically. Then, using the Print 1199A Button, print a copy and take it to your bank to have the bottom portion completed. Make sure your application number is on the form. After your bank has filled out their portion of the form, you must fax a copy of the form to FEMA's SF-1199 Processing Staff at 301-998-8699. You should keep the original form in your grant files. After the faxed version of your SF 1199A has been reviewed you will receive an email indicating the form is approved. Once approved you will be able to request payments online. If you have any questions or concerns regarding your 1199A, or the process to request your funds, please call (866) 274-0960.

Sincerely,

Brian E. Kamoie
Assistant Administrator for Grant Programs

A TSS COMPANY
CHESTERFIELD, MI 48047-5206
LOCAL: 586-840-3200
TOLL-FREE: (800) 332-0435
FAX: 586-840-3201
www.argus-hazco.com

October 6, 2016

Quote Number: 04018523
Customer: 1002170

Jerry Gorney
Fraser Fire Department
33000 Garfield Rd
Fraser, MI 48026-1858

Jerry Gorney:

Thank you for your interest in Argus-Hazco. Argus-Hazco provides the experience, expertise and equipment required to help solve your specific industrial-hygiene, environmental, respiratory, sampling, monitoring, confined-space and safety challenges. This quote contains information about the products and services requested:

Number	Description	Qty	UOM	Unit Price	Ext Price
*SCOTTSCBA	SCOTT 4.5 AIR-PAK X3 WITH CGA, STANDARD HARNESS AND BELT, NO ESCAPE ROPE, REGULATOR W/ QUICK CONNECT HOSE, DUAL EBSS, PASS INCLUDES: AV-3000HT FACEPIECE AND 4500PSI, 45-MIN CYLINDER AND VALVE	14	EA	$6,183.00	$86,562.00
SC804722-01	CARBON CYLINDER W/VALVE ASSY 45MN 4500PS	14	EA	$0.00	$0.00
SC200954-02	RIT-PAK III 4.5 WITH REGULATOR AND RIT FCPC	1	EA	$2,306.00	$2,306.00
SC201215-02	SCOTT AV-3000 HT FACEPIECE MEDIUM (SPARE)	1	EA	$245.00	$245.00
SC804722-01	CARBON CYLINDER W/VALVE ASSY 45MN 4500PS (SPARE)	1	EA	$969.00	$969.00

Merchandise Total: $90,082.00

Argus-Hazco has solutions to your needs, both simple and complex. We look forward to working with you on your Sales, Rental, Repair, or Consultation needs. This quote is valid for 30 Days and is subject to Availability and Prior Credit Approval. THIS IS ONLY A QUOTE FOR MERCHANDISE AND SERVICES. THIS QUOTE DOES NOT INCLUDE ANY FREIGHT CHARGES OR APPLICABLE TAXES.

Terms:	Net 30 Days
F.O.B.:	Shipping Point
Freight Terms:	Prepay & Add
Delivery:	4 Weeks
Expiration Date:	30 Days
Taxable Status	Non-Taxable

If you have any questions please give me a call.

Sincerely,
TOM MAYNE
TMAYNE@ARGUS-HAZCO.COM
ACCOUNT EXECUTIVE

APOLLO
FIRE EQUIPMENT COMPANY
FIRE APPARATUS REPAIR INC.

12584 Lakeshore Dr.
Romeo, MI 48065

Phone: (800) 626-7783 • Fax: (586) 752-6907 • E-mail: apollo@apollofire.com • www.apollofire.com

SEPTEMBER 7, 2016

ATTN: MIKE PETTYES
FRASER D.P.S.

DEAR MIKE,

WE ARE PLEASED TO QUOTE YOU ON THE FOLLOWING EQUIPMENT:

QTY.	DESCRIPTION	PRICE EA.	TOTAL
14	MSA 4500 G1 NFPA 2013 SCBA # A-G1FS422MA2C2LAR TO CONSIST OF: G1 HARNESS WITH CHEST STRAP, ADJUSTABLE SWIVELING LUMBAR PAD, METAL CYLINDER BAND, HARD COVER 2nd STAGE REGULATOR, SPEAKER MODULE LEFT CHEST, CONTROL MODULE RIGHT CHEST, RECHARGEABLE BATTERY PACK, EBS II (BUDDY BREATHING)	4,425.00	61,950.00
28	#10156424-SP 4500 PSI 45 MINUTE G1 CYLINDER WITH VALVE	900.00	25,200.00
14	G1 FACEPIECE WITH NOSE CUP, 4 POINT PULL HEAD HARNESS SMALL, MEDIUM, LARGE	250.00	3,500.00
1	#10158385 G1 CHARGER	445.00	445.00
1	#10161130 G1 RESCUE AIRE II WITH 60 MINUTE CYLINDER AND RED TRUE NORTH RIT BAG	4,000.00	4,000.00

TERMS: NET 30 DAYS

F.O.B.: DELIVERED

THANK YOU FOR THE OPPORTUNITY TO QUOTE ON YOUR DEPARTMENT NEEDS.

PLEASE CONTACT US IF YOU NEED ANY ADDITIONAL INFORMATION.

SINCERELY,

TERRY EMERICK
MSA SPECIALIST

Douglass Safety Systems LLC **
2655 N. M-30
Suite #6
Sanford, MI 48657

Phone 800-316-3255

Quotation

Quote Number:
32129

Quote Date:
Sep 27, 2016

Customer ID
F028

Quoted to:

FRASER FIRE DEPT.
33000 GARFIELD
FRASER, MI 48026

Shipping Terms	Quote Good Thru	Payment Terms	Sales Rep
NOT INCLUDED	10/27/16	Net 30 Days	SN001-SR

Quantity	Item	Description	Unit Price	Extension
14.00	2 CYLINDER 1-MASK	#DEL-3-03-21-31-40-50-B-G - Avon - Deltair 4500 psi, 45 Min Carbon Cylinder, Med Dbl Curve w/ Head Harness, PASS/VAS, Buddy Breather and Mask Bag.	5,452.04	76,328.56
14.00		#CYL-03 - Avon - Deltair Spare Cylinder 4500 psi, 45 Minute. (INCLUDED)		
14.00		#AIR-02-B - Avon - Deltair Spare Facemask, Medium Double Curve w/ Head Harness and Mask Bag.	646.85 MASKS Included	9,055.90
1.00		#H3-03-08-02-G - Avon - Rescuer Combo, True North Bag, 60 Min Carbon Cylinder, 6ft Charging Hose, Facemask Socket, Buddy Breather Socket and Plug	2,210.89	2,210.89

Subtotal	$ 87,595.35
Sales Tax	
Freight/Handling	
Total	$ 87,595.35

City of Fraser

31250 KENDALL • FRASER, MICHIGAN 48026

From the Office of
BERNARD J. VAN FLETEREN
PUBLIC WORKS SUPERINTENDENT
WATER & SEWER

MEMORANDUM

TO: Richard Haberman, City Manager
FROM: Bernard J. Van Fleteren BJV
DATE: November 4, 2016
RE: **2016 SENIOR CENTER RETAINING WALL REPAIR**

We received one bid from M. L. Schoenherr Construction.

The contractor is M. L. Schoenherr Construction. The total cost of the project with alternate one is as follows: $15,460.00

My recommendation is to accept the bid from M. L. Schoenherr Construction to replace the wall at the Fraser Senior Center in the front of the building. This will be paid from the CDBG money through the County.

ANDERSON, ECKSTEIN AND WESTRICK, INC.
51301 Schoenherr Road, Shelby Township, Michigan 48315
Civil Engineers • Surveyors • Architects 586-726-1234

November 4, 2016
10:00 AM
AEW Project No. 0190-0375

SENIOR CENTER RETAINING WALL REPAIR

CITY OF FRASER

	Name of Bidder	Bid Bond	Add. No. 1	Total Amount of Bid	Alternate No. 1
	Arisco Contracting Group				
	D. C. Byers Company				
	Landscape Services, Inc.				
✓	M. L. Schoenherr Construction	X	X	$14,700	+$760.00
	Tollis Development Inc.				
	WCI Contractors, Inc.				

BID RESULTS WILL BE AVAILABLE ON OUR WEBSITE: AEWINC.COM UNDER BID LIST; PROJECT NAME

M:\0190\0190-0375\Specs\Bidders List.docx

Name of Bidder

00410

BID FORM

BID FORM:

Name of Bidder (Firm) M.L. SCHOENHERR CONSTRUCTION, INC.

Legal Address 48380 VAN DYKE, STE 500

SHELBY TWP., MI

Zip Code 48317

Telephone Number 586-739-2010

Email Address MLSCHOENHERRCONSTRUCTION @ YAHOO.COM

BID TO: **City of Fraser**
33000 Garfield Road
Fraser, Michigan 48026
City Manager, Richard Haberman

PROJECT: **City of Fraser**
Senior Center Retaining Wall Repair
AEW Project No. 0190-0375

We, the undersigned Bidder, hereby declare that this bid is made in good faith without fraud or collusion with any persons bidding, in compliance with your Advertisement for Bids for the Project described above, having examined the plans, specifications and having made the site inspection as required, is fully informed as to the nature of the work and the conditions relating to its performance, hereby propose to furnish all labor, materials and supplies and to construct the Project in accordance with the Contract Documents; at the Base Bid Price, Alternate Prices, Unit Prices and Completion Time stated below:

A. **Lump Sum Bid** : for the complete general construction and all related trades (including labor, material, bond costs, and owner directed contingency of $2,000.00) for the sum of:

FOURTEEN THOUSAND, SEVEN HUNDRED & 00/100 $14,700.00 Dollars

SENIOR CENTER RETAINING WALL REPAIR
CITY OF FRASER
AEW #0190-0375

Name of Bidder

B. Fees for additional work: the fees for additional work, upon instruction of the Architect shall be the actual cost of all labor and materials plus: 15 % for additional work performed by sub-contractors and/or undersigned, which shall include all the undersigned's charges. (This shall include all charges for overhead, profit, workmen's' compensation and other insurances and taxes.)

C. Time of Completion:
We will complete the work covered by this proposal within 45* calendar days which includes Saturdays, Sundays, and Holidays and to run consecutively after date of notice to proceed with work. * WEATHER PERMITTING - NO WINTER CONDITIONS / TEMP HEAT INCLUDED.

D. Addenda: the undersigned acknowledge receipt of the following addenda:
1. Addendum No. 1 Dated 10/31/16
2. Addendum No. _____ Dated

E. Alternate No1: Pre-finished aluminum metal cap (match existing) in lieu of solid concrete cap (including labor, material, bond costs)
ADD SEVEN HUNDRED, SIXTY ——— 00/100 ($760.00) Dollars

F. Voluntary Alternate Schedule:
N/A
($) Dollars

G. The Bidder shall complete and attached the following forms to this bid form:
a. Certification Regarding Debarment, Suspension and Other Responsibility Matters
b. Notification of Construction Contract Award
c. Project Wage Rate Sheet

H. The undersigned understands and hereby agrees to comply with and be bound by the conditions set forth in the Bidding Documents issued for this work:

Signed and sealed this 4TH day of NOVEMBER, 2016.

Respectively submitted:
By: _____ Title: PRESIDENT (Seal)
(Authorized signature of Bidder)

END OF BID FORM

Certification Regarding
Debarment, Suspension, and Other Responsibility Matters

The prospective participant certifies, to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in transactions under federal nonprocurement programs by any federal department or agency;

(2) Have not, within the three year period preceding the proposal, had one or more public transactions (federal, state, or local) terminated for cause or default; and

(3) Are not presently indicted or otherwise criminally or civilly charged by a government entity (federal, state, or local) and have not, within the three year period preceding the proposal, been convicted of or had a civil judgment rendered against it:

(a) For the commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public transaction (federal, state, or local) or a procurement contract under such a public transaction;

(b) For the violation of federal or state antitrust statutes, including those proscribing price fixing between competitors, the allocation of customers between competitors, or bid rigging; or

(c) For the commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.

I understand that a false statement on this certification may be grounds for the rejection of this proposal or the termination of the award. In addition, under 18 U.S.C. §1001, a false statement may result in a fine of up to $10,000 or imprisonment for up to five years, or both.

TIMOTHY J. SHINE, PRESIDENT
Name and Title of Authorized Representative

M.L. SCHOENHERR CONSTRUCTION, INC.
Name of Participant Agency or Firm

Signature of Authorized Representative

11/4/16
Date

☐ I am unable to certify to the above statement. Attached is my explanation.

MACOMB COUNTY
Community Action Agency
Community Development

Notification of Construction Contract Award

Project Name/Number FRASER - SENIOR CENTER RETAINING WALL REPAIR

Contract Award Date

Contract Dollar Amount:

Company Legal Name M.L. SCHOENHERR CONSTRUCTION, INC.

Owner Legal Name

Address 48380 VAN DYKE, SHELBY TWP, MI **Contact** TIM SHINE

Telephone # 586.739.2016 **Fax #** 586.739.2043

Tax ID # 38-2349602 **Email Address** MLSCHOENHERRCONSTRUCTION@YAHOO.COM

Total # Employees 2 **# Minority** 0 **# Women** 0

% Company Minority Owned 0 **% Company Women Owned**

Section 3 Accomplishments **# LI Employees** **# Businesses**

Subcontractor Name	Amount	Type of Work to be Performed
1 SMALL TIME MASONRY		MASONRY
2 T.D. PAINTING		PAINTING
3		
4		
5		
6		
7		
8		

Notice to Contractors

The contractor and all subcontractors awarded contracts or are employed on this federally-assisted construction project agree to:

A. Comply with all equal employment opportunity and affirmative action requirements as set forth in the bid documents.

B. Required to solicit bids for supplies and subcontractors from the small business concerns located within the boundaries of the municipality awarding the contract.

C. Employ, if and when applicable, a *predetermined number of low-income residents in the project area in order to meet Section 3 requirements.

Authorized Signature

Title TIMOTHY J. SHINE, PRESIDENT

* Determined by the U.S. Department of Housing and Urban Development in conjunction with the U.S. Department of Labor

IMPORTANT

This notice is to be completed by the general contractor and all subcontractors PRIOR TO the contract signing.

Revised July 2014

Project Wage Rate Sheet

U.S. Department of Housing and Urban Development
Office of Labor Relations

PROJECT NAME:	WAGE DECISION NUMBER/MODIFICATION NUMBER:
SENIOR CENTER RETAINING WALL REPAIR	MI20150091
PROJECT NUMBER:	PROJECT COUNTY: MACOMB.

WORK CLASSIFICATION	BASIC HOURLY RATE (BHR)	FRINGE BENEFITS	TOTAL HOURLY WAGE RATE	LABORERS FRINGE BENEFITS: GROUP #	BHR	$ TOTAL WAGE
Bricklayers	32.67	18.40	51 $07			
Carpenters			$			$
Cement Masons			$			$
Drywall Hangers			$			$
Electricians			$			$
Iron Workers			$			$
Painters	26.06	17.66	43 $72	OPERATORS FRINGE BENEFITS:		$
Plumbers			$	GROUP #	BHR	TOTAL WAGE
Roofers			$			$
Sheet Metal Workers			$			$
Soft Floor Layers			$			$
Tapers			$			$
Tile Setters			$	TRUCK DRIVERS FRINGE BENEFITS:		$
OTHER CLASSIFICATIONS				GROUP #	BHR	TOTAL WAGE
LABORER # 1191	24.10	20.27	44 $37			$
			$			$
			$			$

ADDITIONAL CLASSIFICATIONS (HUD Form 4230-A)

WORK CLASSIFICATION	BASIC HOURLY RATE	FRINGE BENEFITS	TOTAL HOURLY WAGE RATE	DATE OF HUD SUBMISSION TO DOL	DATE OF DOL APPROVAL
			$		
			$		
			$		
			$		

Bond No.: B 1179621

Selective Insurance Company of America
40 Wantage Avenue
Branchville, New Jersey 07890
973-948-3000

AIA Document A310

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we
M.L. Schoenherr Construction, Inc.
48380 Van Dyke Shelby Township, MI 48317 (Here insert full name and address or legal title of contractor)
as Principal, hereinafter called the Principal, and Selective Insurance Company of America

a corporation duly organized under the laws of the State of New Jersey
as Surety, hereinafter called the Surety, are held and firmly bound unto
City of Fraser
33000 Garfield Road Fraser, MI 48026 (Here insert full name and address or legal title of owner)
as Obligee, hereinafter called the Obligee, in the sum of
5 % Percent of the Total Bid (**$ 5 % Percent**)
for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for

Senior Center Retaining Wall Repair

(Here insert full name and address and description of project)

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and Sealed this **4th** day of **November** **2016**

M.L. Schoenherr Construction, Inc.

(Witness)

(Principal) (Seal)

(Title)
TIMOTHY J. SHINE, PRESIDENT

(Witness)

SELECTIVE INSURANCE COMPANY OF AMERICA

(Surety) (Seal)

(Title) Attorney-in-Fact
Jane Haller

"Printed in cooperation with the American Institute of Architects (AIA) by the Selective Insurance Company of America. The language in this document conforms exactly to the language used in AIA Document A310, February 1970 edition."

SELECTIVE®

Selective Insurance Company of America
40 Wantage Avenue
Branchville, New Jersey 07890
973-948-3000

BondNo.B 1179621

POWER OF ATTORNEY

Public Bid

SELECTIVE INSURANCE COMPANY OF AMERICA, a New Jersey corporation having its principal office at 40 Wantage Avenue, in Branchville, State of New Jersey ("SICA"), pursuant to Article VII, Section 1 of its By-Laws, which state in pertinent part:

> The Chairman of the Board, President, Chief Executive Officer, any Executive Vice President, any Senior Vice President or any Corporate Secretary may, from time to time, appoint attorneys in fact, and agents to act for and on behalf of the Corporation and they may give such appointee such authority, as his/her certificate of authority may prescribe, to sign with the Corporation's name and seal with the Corporation's seal, bonds, recognizances, contracts of indemnity and other writings obligatory in the nature of a bond, recognizance or conditional undertaking, and any of said Officers may, at any time, remove any such appointee and revoke the power and authority given him/her.

does hereby appoint **Jane Haller**

, its true and lawful attorney(s)-in-fact, full authority to execute on SICA's behalf fidelity and surety bonds or undertakings and other documents of a similar character issued by SICA in the course of its business, and to bind SICA thereby as fully as if such instruments had been duly executed by SICA's regularly elected officers at its principal office, in amounts or penalties not exceeding the sum of: **One Million Two Hundred Thousand Dollars**

Signed this 4th day of November, 2016

SELECTIVE INSURANCE COMPANY OF AMERICA

By: _____
Brian C. Sarisky
Its SVP, Strategic Business Units, Commercial Lines

SELECTIVE INSURANCE COMPANY OF AMERICA CORPORATE SEAL 1926 NEW JERSEY

CERTIFIED COPY

STATE OF NEW JERSEY :
:ss. **Branchville**
COUNTY OF SUSSEX :

On this 4th day of November, 2016 before me, the undersigned officer, personally appeared Brian C. Sarisky, who acknowledged himself to be the Sr. Vice President of SICA, and that he, as such Sr. Vice President, being authorized to do, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself as Sr. Vice President and that the same was his free act and deed and the free act and deed of SICA.

Charlene Kimble
Notary Public of New Jersey
My Commission Expires 6/2/2021

_____
Notary Public

CHARLENE KIMBLE NOTARY PUBLIC NEW JERSEY

BO 1179621

The power of attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of SICA at a meeting duly called and held on the 6th of February 1987, to wit:

"RESOLVED, the Board of Directors of Selective Insurance Company of America authorizes and approves the use of a facsimile corporate seal, facsimile signatures of corporate officers and notarial acknowledgements thereof on powers of attorney for the execution of bonds, recognizances, contracts of indemnity and other writing obligatory in the nature of a bond, recognizance or conditional undertaking."

CERTIFICATION

I do hereby certify as SICA's Corporate Secretary that the foregoing extract of SICA's By-Laws and Resolution is in full force and effect and this Power of Attorney issued pursuant to and in accordance with the By-Laws is valid.

Signed this 4th day of November, 2016.

_____
Michael H. Lanza, SICA Corporate Secretary

SELECTIVE INSURANCE COMPANY OF AMERICA CORPORATE SEAL 1926 NEW JERSEY

Important Notice: If the bond number embedded within the Notary Seal does not match the number in the upper right-hand corner of this Power of Attorney, contact us at 973-948-3000.

B91 (4-14)

CITY OF FRASER

JOB DESCRIPTION AND QUALIFICATIONS

JOB TITLE: City Manager **AFFILIATION:** None

REPORTS TO: The Mayor and City Council

SUMMARY

Serves as the Chief Administrative officer of the City, implementing the policies and directives of the City Council. Directs all internal services, programs and operations, with particular emphasis on financial and personnel management. Serves as liaison between department heads and the City Council. Prepares related reports and assures proper and efficient administration of all operational areas. Performs other administrative duties as designated in the City Charter, Code of Ordinances and State Law.

PRINCIPAL DUTIES AND RESPONSIBILITIES

(1) Unless provided otherwise by resolution of City Council, the City Manager shall appoint and when he/she deems it necessary for the good of the service, suspend or remove all employees and officers other than administrative officers, except as otherwise provided by Charter or ordinance. The City Manager may authorize any administrative officer or employee serving in a supervisory capacity subject to his/her direction and supervision, to exercise these powers with respect to subordinates, administrative officers or supervisory employees, departments or office.

(2) The City Manager shall have sufficient experience with the internal operations of all departments in order to direct and supervise the administration of all departments, offices and agencies of the City, except as otherwise provided by the Charter or by ordinance.

(3) The City Manager shall attend all Council meetings, and shall have the right to take part in discussion, but may not vote.

(4) The City Manager shall see that all laws, provisions of the Charter, and acts of the Council, subject to enforcement by him/her or by officers subject to his/her direction and supervision, are faithfully executed.

(5) The City Manager shall prepare and submit the annual budget and capital program to the Council.

(6) The City Manager shall submit to the Council and make available to the public a complete report on the finances and administrative activities of the City at the end of each fiscal year.

(7) The City Manager shall make such other reports as the Council may require concerning the operation of the City departments, offices and agencies subject to his/her direction and supervision.

(8) The City Manager shall keep the Council advised as to the financial condition and future needs of the City, and make such recommendations to the Council concerning the affairs of the City as he/she deems necessary or appropriate for the improvement of the City or its services.

(9) The City Manager shall possess such further powers and perform such additional duties as may be granted or required from time to time by the Council, including serving as Clerk, so far as may be consistent with the provisions of the Charter or ordinances.

The above statements are intended to describe the general nature and level of work being performed by a person in this position. They are not to be construed as an exhaustive list of all job duties that may be performed by such a person.

QUALIFICATIONS

Education: A bachelor's degree in a curriculum related to the management and administration of municipal services and administration is desired. Appropriate degrees may include, but are not necessarily limited to, public administration, business administration, employee and labor relations, engineering, and urban planning or related experience.

A master's degree specifically oriented to public sector and local government management, such as public administration, is preferred.

- AND -

Experience: At least five (5) years of progressively more responsible experience in the management and administration of local government (i.e., city, township, county) operations and services in a similar or greater size community. Experience should include department head level position(s) with responsibility for professional and supervisory level staff. Previous experience as the top manager or administrator of a township or municipal government jurisdiction is desirable.

Demonstrated experience in finance, long-range budgeting, and intergovernmental and personnel administration is also necessary.

Other Knowledge, Skills and Abilities:

- Effective interpersonal and communication skills, e.g., one-on-one, group meetings, public presentations.

- Knowledge of administrative law governing the enforcement of municipal ordinances, and compliance with other local, state and federal statutes or regulations.

The qualifications listed above are guidelines for selection purposes; alternative qualifications may be substituted if sufficient to perform the duties of the job.

CERTIFICATION OR LICENSURE

None required.

POSITION:	City Manager
EMPLOYER:	City of Fraser
POPULATION:	14,636
COMPENSATION:	Salary negotiable (DOQ)
CLOSING DATE:	_____ at 4:00 p.m. EST
HOW TO APPLY:	Submit a cover letter, salary history and resume to: Kelly Dolland, Human Resources Director, City of Fraser, 33000 Garfield Rd., Fraser, MI 48026; Phone: 586-293-3102; Fax: 586-293-7470 or email: kdolland@fraser.govoffice.com. Michigan law allows resumes to remain confidential only if so requested by the applicant. EOE

The City of Fraser was incorporated in 1957 and is 4.2 sq. miles. It is a full service, charter city with a council/manager form of government. The City Council is composed of the Mayor as elected and six (6) members elected at-large to four (4) year overlapping terms on a non-partisan basis. Council selects a Mayor Pro-Tem. The City Council appoints the City Manager who is responsible for implementing Council policy and managing the day-to-day municipal operations. The City employs _____FTE's and has a current budget of $_____(all funds). Visit the City's website at www.fraser.govoffice.com.

Requirements include: Candidates must have at least five (5) years municipal experience, a bachelor's degree in public administration or related field preferred combined with successful experience as a local government manager, full assistant or departmental head in a similar or greater size community. Critical strengths include: finance and budget; union/labor relations; strategic planning; clerk/elections experience; economic development; staff leadership; development and effective management; zoning and planning; innovative problem solving; interpersonal relations (internal and external); and effective decision making. A complete Job Description and Qualifications is attached.

City of Fraser

REQUEST FOR PROPOSAL

TOWING, STORAGE AND AUCTION OF ACCIDENT, IMPOUNDED AND OTHER VEHICLES

City of Fraser, 33000 Garfield Road, Fraser, MI 48026

Contact Person: Richard Haberman, City Manager

Telephone: 586-291-9300 x101

Email: richh@micityoffraser.com

SPECIFICATIONS AND INSTRUCTIONS FOR TOWING, STORAGE AND AUCTION OF ACCIDENT IMPOUNDED AND OTHER VEHICLES

I. INTRODUCTION.

The City of Fraser is accepting sealed proposals from qualified companies for the towing and storage of certain motor vehicles. The City will grant to the successful Contractor, a contract for the period commencing on approximately _____ at 12:00 a.m. and ending on _____, unless terminated earlier as provided in the contract awarded.

A. Definitions.

1. "City" refers to the City of Fraser, through the action of City Council, its City Manager, or his/her designee.
2. "Contractor" refers to the vendor and all its personnel.
3. "RFP" refers to this Request for Proposal.
4. “Agreement” refers to the Agreement entered into between the City and Contractor as a result of the RFP process.
5. "Vehicle" refers to all types of motor vehicles including City owned or leased vehicles.
6. "Lot" refers to the storage yard/impound lot as described herein.
7. "Shall" means mandatory.
8. "May" means discretionary.
9. "Employee" means a person who is currently in an employment relationship with the City of Fraser.

B. Purpose. The purpose of the Agreement to be awarded pursuant to this process is to ensure prompt, adequate service with reasonable and uniform cost for towing and storage for the City and the public when requested by the City and to provide periodic auctions to dispose of abandoned and other unclaimed vehicles.

C. Scope. The City requests proposals for the towing and storage of vehicles and other services as described in this document which will be performed when authorized by a representative of the City.

D. Term of Agreement. The Agreement shall commence _____, 2016 at 12:00 a.m. and end on _____, 2017 at 12:00 p.m. The City Council, prior to expiration, may extend the Agreement for up to an additional three (3) years.

II. INSTRUCTIONS TO CONTRACTORS.

A. Pre-proposal Meeting. All interested and proposed Contractors may meet on _____, at the offices of the City, 33000 Garfield Rd., Fraser, Michigan 48026, at which time questions will be addressed regarding the proposal and proposed scope of services.

B. Submission of Proposals.

1. Seven copies of the proposal shall be enclosed in a sealed envelope or carton marked "RFP Towing and Storage Document City of Fraser" and delivered in person by messenger or U.S. mail no later than _____, at 2:00 p.m. at which time proposals received will be publicly opened and read out loud. Late proposals will be rejected. Contractors shall furnish an email address for contact purposes.

2. Proposal packing must be clearly marked with the following information:

   Contractor's Name: _____
   Date Due: _____

3. The proposal is to be mailed and must be conspicuously marked "RFP Document." All proposals regardless of the method for delivery are to be delivered to the following address: **City of Fraser, Office of City Clerk, Attention: City Clerk, 33000 Garfield Rd., Fraser, MI. 48026.**

4. All RFP's **must be delivered** to the office of the City Clerk before the due date and time so they can be stamped, received and filed appropriately. Proposals are considered received when they are in the possession of the City Clerk. Proposals not received before the due date and time will be disqualified and not opened or considered.

5. Costs are to be compiled on the pricing form attached as an exhibit. The pricing form shall be placed in a separate sealed envelope and marked as follows:

   Contractor's Name: _____
   City of Fraser Towing and Storage Contract
   Date Due: _____
   Confidential Pricing Envelope

6. No faxed or electronically delivered RFPs will be accepted.

7. It is the responsibility of the Contractor to see that the RFP arrives on time, at the right place and in the right format.

C. Communications. Questions must be directed in writing or email to: Richard Haberman, City of Fraser, 33000 Garfield Rd., Fraser, MI 48026, (richh@micityoffraser.com). All questions regarding the process must be submitted on or before 4:00 p.m. five (5) business days prior to the RFP due date in order to be given consideration.

Changes, if any, in interpretation, or RFP documents will be expressed in the form of an addendum which if issued, will be sent to all prospective Contractors who notify the City Manager in writing or by email of their intent to receive interpretations no later than three (3) business days before the RFP due date. Oral responses are not authoritative. Only written changes issued in this manner shall be considered as interpretive.

D. Selection Process.

1. The City Council reserves the absolute unqualified right to accept or reject any and all proposals or parts of proposals. The City Council reserves the absolute unqualified right to accept any and all alternates which may be offered.

2. Any and all Contractors shall be prepared to present themselves to City Council at a meeting open to the public if the City Council deems it necessary. Contractors shall permit an audit and/or inspection of the vehicles and/or premises to be utilized by the Contractor as proposed herein. RFP's will be evaluated with respect to qualifications, experience, location, capacity, price and other factors. The City Council reserves the right to select and award the proposed service it deems best fits the needs of the City. Experience, capacity, proposed method of approach, references and costs are factors which the City Council will utilize along with other relevant factors as determined by the City Council.

III. SPECIFICATIONS.

A. Timely Execution of Agreement. The successful Contractor shall execute and deliver an Agreement incorporating the terms herein within seven (7) days after award of the Agreement is made by the City Council. Failure to execute the Agreement may result in forfeiture of all rights under the RFP as deemed by the City Council, including the Contractor's deposit. The City Council shall have the right to award the Agreement to the next qualified Contractor or reject all RFPs and re-advertise.

B. Volume of Service and Typical Vehicle Storage and Auction. The Public Safety Department required the towing of approximately 600 vehicles in calendar year 2014. This figure is to be used for comparison purposes only, representing an approximation of the volume of services anticipated to be needed. The City will not be penalized for the volume of services required if either more or less. For comparison purposes only, storage typically involves less than twenty (20) days for all vehicles except those held for evidentiary purposes or abandonment. This information is for comparison purposes only, the City will not be penalized if storage time is more or less.

C. Minimum Towing Requirements.

1. Each Contractor must provide the address of its dispatching center and the location or locations where its vehicles will be stationed. Vehicles necessary to perform the Agreement must be located within three (3) miles of the City's limits."

2. The Contractor agrees to have a tow truck at the scene and to tow vehicles as requested. Requests shall be responded to at the scene within fifteen minutes of request for light duty or medium wrecker, and within thirty (30) minutes of the request for a heavy duty wrecker. The Contractor agrees to clean up all accident debris, including but not limited to, vehicle coolant, oil, transmission fluid as described in MCLA 324.8902 from the street upon response to the accident scene, whether or not towing a vehicle. The cleanup will be deemed complete when inspected and approved by a City Employee in charge of the scene. If response time is unreasonably long in the judgment of the City Employee in charge of the scene, another towing service may be called.

3. The Contractor shall have available at all times, light duty, medium duty, and heavy duty wreckers, fully licensed with fully licensed experience drivers. Light duty flatbed – 10,000 to 19,500 GVWR-DOT Class 3, 4 and 5 manufactured bed rating of 8,000 pounds minimum; medium duty wrecker – 16000 to 33,000 pounds GVWR-DOT Class 5, 6 and 7, manufacturers boom rating of 24,000 pounds minimum; heavy duty wrecker 30,000 plus pounds GVWR-DOT Class 8 manufacturers boom rating 40,000 pounds minimum. Heavy duty wrecker availability may be provided by lease or subcontract.

4. The Contractor shall have two-way radio dispatch for its tow trucks.

5. The Contractor shall keep the City informed of the number of tow trucks it owns or leases which will be used in performance of this Agreement, including the year, make, model and capacity.

6. Vehicles used in the performance of the contract, shall be clearly and permanently marked with the Contractor’s name and telephone number. No removable signs or other towing names, or other wording such as “police towing” are permitted.

7. The Contractor must abide by the standard table of fees established by the contract.

8. The Contractor shall charge only for equipment actually needed and requested by the City at the scene.

9. Copies of all billing invoices for services rendered shall be forwarded to the City on a monthly basis in electronic form. Invoicing for special equipment or added service fees which exceed the standard towing fees must be specifically itemized and contain written justification for such fees, including the name and badge number of any officer in charge at the scene who approves such charges.

10. The City reserves the right to hire specialized equipment outside the scope of this Agreement when needed.

11. The Contractor shall establish, maintain and operate a storage/impound lot at a site within two miles of the City limits conforming with the applicable ordinances of the municipality where the lot is located throughout the duration of this Agreement. The lot must be available to hold at a minimum, 100 passenger vehicles and three (3) semi-trucks with trailers from activity related to the City.

12. The storage lot shall be staffed with the Contractor's own employees seven (7) days a week, and the lot shall be open from 8:00 a.m. to 8:00 p.m. for the public to retrieve their vehicles and/or property.

13. The Contractor shall furnish towing service at no charge for the removal of all City owned or leased vehicles and equipment when requested by the City as authorized by the City Manager, Public Safety Director, or other authorized City Employees on a twenty-four (24) hour basis.

14. The Contractor shall obtain and maintain at its own sole expense licenses, endorsements and approvals required by federal, state or local laws necessary to operate vehicles or equipment and perform the work required by this proposal. Employees of the Contractor shall have all licenses and endorsements required by federal, state, or local laws to operate vehicles and equipment utilized in the performance of the Agreement. Contractor upon hiring a new employee, shall provide within 72 hours to the Director of Public Safety, the name, address and date of birth of the employee so that the City may complete a background investigation.

15. The Contractor shall have tow trucks adequate for towing and/or pushing vehicles each of which shall contain necessary equipment and shall be maintained in good working order to safely perform the services required by the Agreement.

16. Vehicles and equipment shall be maintained in good mechanical condition and shall be subject to periodic inspection and made available for inspection by the City. Towing vehicles shall be equipped with two-way radios capable of covering all the territory within the City.

17. The Contractor shall maintain and have available for inspection by the City detailed records covering services rendered pursuant to this proposal. The Contractor shall utilize forms required in the processing of vehicles as approved by the City.

18. In five (5) days following the last day of each month, the Contractor shall provide an inventory of all vehicles stored at the lots as of the last day of the month. Such information shall be stored electronically and furnished electronically to the City.

19. The Contractor will be required to permit Public Safety Officers, the City Manager or his/her designee, or an elected official, so long as the City Manager or his/her designee or a Public Safety Officer is present, to inspect the lot, stored vehicles, the office or other structures, tow trucks, invoices and impound sheets relative to this proposal when it is deemed reasonably necessary by the City.

20. The City reserves the right to conduct an audit at least twice a year of bills and records relative to the Agreement and Contractor agrees to furnish the City access to such records.

D. Abandoned Vehicles.

1. Vehicles designated as abandoned as defined by statute shall be removed at the Police Agency's request and held in the lot until disposed of by public sale or retrieved by the owner.

2. Vehicles designated by the Public Safety Department as “scrapped abandoned” shall be removed by the most expedient means available. Such vehicles shall be disposed of pursuant to statutory procedures.

E. Disposal of Vehicles by Auction.

1. The Contractor shall hold periodic auctions at no cost to the City to dispose of vehicles as directed by the City, or deliver the vehicles to a location designated by the City for auction by others. The City reserves the right to remove any vehicles from the Contractor’s auction list. If the Contractor is selected to proceed with the auction, the Contractor shall arrange to conduct auctions on a date approved in advanced by the Public Safety Department. The Contractor shall furnish all required personnel as determined by the City. The money received from the public sale of the vehicle shall be applied in the order of priority provided by statute (MCL 257.252(g)(2)).

2. If vehicles are not sold at auction, the Contractor shall become the owner of the vehicle or group of vehicles and shall be responsible for its disposal.

3. All sales shall comply with state law. The Public Safety Department shall provide and complete documentation required by the Public Safety Department under the applicable state law in connection with the disposal of such vehicles.

4. The Contractor shall allow the City access to the lot and to be present in connection with preparation for the conduct of any auction.

F. Storage of Vehicles. Vehicles or other items towed to the lot shall be stored with at least two feet of space between them and shall be marked and kept orderly as required at all times so that vehicles can be located easily by the City. The lot shall be located within two miles of the City boundaries and have the capacity for at least 100 passenger vehicles and three semi-trucks with trailers, for storage related to City activity. Vehicles which are subject to forfeiture (examples: gambling, narcotic and operating while impaired vehicles) shall be stored in the impound lot without the accumulation of storage fees in excess of One Hundred Fifty and 00/100 Dollars ($150.00). Vehicles subject to police hold shall not be disposed of unless and then until the police hold is removed. When the police hold is removed by the police agency, normal tow and storage fees would be applied to the owner. Any and all vehicles towed pursuant to the Agreement shall be disposed of according to the requirements of statute. The Contractor shall be responsible for the maintenance and repair of the lot and the furnishing of security for vehicles impounded which shall include fencing. City stored vehicles shall be in a separate area. Proper lighting, drainage and surface materials shall be provided.

G. Claiming of Property. Whenever impounded vehicles are claimed by the owner, the Contractor shall provide the owner an itemized statement of charges relating to the impounded vehicle, including an explanation for fees in excess of the standard towing fee established by the Agreement. The Contractor shall make every effort to verify that the party claiming a stored vehicle, is the actual owner or authorized representative of the owner prior to vehicle release. The Contractor is solely liable and responsible for the vehicle release. The Contractor shall permit, at all times the storage lot is opened, the retrieval of items from towed vehicles by persons with an ownership interest in the vehicle without charge.

H. Fees and Charges.

1. All fees and charges are to be collected from the owners of the vehicles. The City assumes no responsibility for collecting or guaranteeing payments for towing or storage.

2. The City is not liable for any charges for towing or storage of any private vehicle, the loss of any items contained inside the vehicle, or for damage or loss incurred

in the moving of any vehicle. This extends to all vehicles whether impounded as a result of collision, or evidence, or other purposes.

3. The Contractor shall prominently post at the lot a list of towing and storage charges and hours of operation as well as the Contractor's telephone contact numbers.

4. Additional tows within the lot shall be at Contractor's sole expense.

I. Collection Charges. The City shall not be responsible for the collection or payment of any charge for service rendered by reason of the City having requested or dispatched the service. All such services rendered shall be charged only to the owner/lessee of the towed vehicle or other lawful claimant of possession. The Contractor shall have no claim against the City for any towing or storage charges unless otherwise authorized by the Agreement.

J. Financial Arrangements.

1. For services rendered to non-city owned vehicles and others, the Contractor shall directly bill and collect fees from the vehicle's owner. It is not the responsibility of the City to collect, pay, or guarantee payment for any such charges. The Contractor shall accept credit cards as an alternative form of payment. The Contractor may, but shall not be required to, accept credit card payments for any vehicle towed as the result of an arrest.

2. The Contractor shall collect all towing, service and storage fees for non-city owned vehicles, towed or impounded at the direction of the City from the vehicle's owner or agent.

K. Service Call Cancellation.

1. The City reserves the right to cancel a request for services of the Contractor at any time including up to the time of hook-up without either the City, owner, or operator incurring any charges. If the owner of the vehicle arrives on the scene before the vehicle is towed and the vehicle can be safely moved by the owner in the opinion of the City Employee in charge at the scene, no charges will be incurred. The Contractor agrees that the mere response to a service call without providing towing service does not constitute a service call for which charges are applicable.

2. The City may call another towing company if the Contractor does not provide adequate equipment to provide the services contemplated by the Agreement, or

does not respond in a timely manner, meaning within 15 minutes for light duty or medium duty wreckers and within 30 minutes for a heavy duty wrecker.

L. Owners Request for Tow. Nothing in this Agreement shall prevent the owner or operator of the motor vehicle from calling a wrecker or tow truck of its own choice at its own expense or requesting that its vehicle be towed to a garage or compound other than that of the Contractor provided such service can be promptly provided as determined by the City Employee present. If the vehicle has already been hooked up or placed upon the wrecker or tow truck, the Contractor can charge the fee as prescribed in the contract for hook up, except for abandoned vehicles. The Contractor shall under no circumstance recommend or suggest a repair or collision shop to a vehicle owner. As required by state law for abandoned vehicles, if the owner or other person who is legally entitled to possess the vehicle arrives at the location where a vehicle is located, before the actual towing or removal of a vehicle, the vehicle shall be disconnected from the tow truck and the owner or other person who is legally entitled to possess the vehicle may take possession and remove it without interference upon the payment of the service fee established by the Agreement for which a receipt shall be provided. The Contractor shall accept payment for this and other services in the form of either cash or a credit card.

M. Cancellation by City. The Agreement issued pursuant to this RFP may be cancelled by the City Council, furnishing thirty (30) days written notice addressed to the Contractor sent by certified mail or hand delivered to the Contractor's address as shown in the Agreement. The Agreement may be cancelled if deemed necessary by the City Council without cost or penalty.

N. Cancellation by Contractor. The Agreement may be cancelled by the Contractor upon ninety (90) days written notice delivered by certified mail with return receipt requested addressed to the City Clerk.

O. Responsibility for Vehicles and Contents; Hold Harmless; Insurance. The Contractor assumes full and exclusive responsibility for any vehicle and its contents during towing and storage. The Contractor agrees to hold harmless and indemnify the City, its agents and Employees against claims for damage or loss to vehicles or their contents in accordance with hold harmless language set forth in the attached Agreement. The Contractor shall procure and maintain insurance and bonding as specified in these proposed specifications.

P. Contractor to Provide Insurance Coverage for City Vehicles. The Contractor shall maintain insurance coverage to protect the City vehicles against comprehensive and collision losses while in its care, custody and control.

Q. Hold Harmless and Indemnity. The Contractor agrees to indemnify and hold harmless the City from any and all claimed suits, actions, damages and cause of action arising directly or indirectly relating to services furnished under this Agreement during the term of this Agreement for any bodily injury, personal injury, loss of life and property damage sustained and to defend any action or proceeding brought thereon. The attached indemnity Agreement must be signed and included with our RFP.

R. Non Collusion Affidavit. The Contractor shall submit a non-collusion affidavit in the form attached as an appendix with their proposal and list any other businesses with which they have any direct or indirect affiliation business interest, ownership or other relationship.

S. Fair Employment Practices Act. The Contractor agrees that it will not discriminate against any employee or applicant for employment to be employed in the performance of this proposal with respect to their hire, tenure, terms, conditions, or privileges of employment, or any matter directly or indirectly related to employment because of gender, race, color, religion, national origin, sexual preference, or ancestry. Breach of this covenant may be regarded as a material breach of the Agreement.

T. Qualifications for Employment. All persons employed as a driver by the Contractor shall meet the requirements of all federal and state laws regarding licensing. Neither the Contractor nor its drivers shall have been suspended or revoked within the prior 12 months for any vehicle licenses. Neither the Contractor nor its employees shall have been convicted of a felony within the previous 10 years.

U. Suspension of Services. Any decision to suspend services temporarily shall be made by the City Manager with subsequent City Council action at the next regular City Council meeting.

IV. INSURANCE REQUIREMENTS.

A. Insurance Requirements. The Contractor shall obtain and have in place prior to commencement, insurance meeting the specifications below. The Contractor is solely responsible for prompt payment of any deductible or self-insured retention. The Contractor shall procure, maintain and deliver throughout the life of this Agreement, the actual policy, as well as well as a certificate of insurance which shall be delivered to the Clerk of the City. Insurance shall be provided as follows:

1. Workers Compensation Insurance during the duration of the Agreement for all its employees.

2. Commercial General Liability Insurance on an occurrence basis with limits of liability not less than Two Million and 00/100 Dollars ($2,000,000.00) per occurrence covering personal injury, bodily injury and property damage and including the following extensions:

    a. Contractual Liability.
    b. Products and completed operations.
    c. Independent Contractor's coverage.
    d. Broad form general liability extensions or equivalent.

3. Contractor's motor vehicle Insurance maintained during the duration of this Agreement for all vehicles including no-fault coverages for all vehicles with limits of liability not less than Two Million and 00/100 Dollars ($2,000,000.00) per occurrence covering bodily injury and property damage.

4. Garage liability insurance with limits not less than Two Million and 00/100 Dollars ($2,000,000.00) per occurrence covering bodily injury and property damage.

5. Commercial general liability, motor vehicle liability insurance and garage liability insurance as described shall include an endorsement providing that the City of Fraser, its elected and appointed officials and Employees are additional insureds primary and non-contributory.

6. Cancellation or non-renewal shall only occur upon thirty (30) days advanced written notice of cancellation, non-renewal, reduction, or material change to City Clerk, City of Fraser.

V. BID BOND.

The RFP shall be accompanied by a money order or cashier's check in the amount of One Thousand and 00/100 Dollars ($1,000.00) payable to the City of Fraser which shall be returned to unsuccessful Contractors after the award of the Agreement. The Contractor shall have this money returned after it has executed the Agreement and furnish required insurance. The selected Contractor who fails to execute and proceed with the contract shall forfeit this bond.

City of Fraser

Memo

To: Rich Haberman

From: Michele Kwiatkowski

Date: November 3, 2016

Re: IP Phone Bids

On today's date, 11/03/16, 4 RFP responses were received by the City of Fraser, regarding IP Business Telephone System & Voice Processing System quote issued on 10/21/16 and due on this date. The companies submitting were:

- Michtel,
- Complete Interactive Technologies Inc. (CIT),
- Telephone Support Systems (TSS)
- Vertical Wave IP.

After reviewing the returned RFP documents it was found that only TSS and Vertical Wave IP had completed the RFP, answering all question posed therein. The other companies returned incomplete documents with varying levels of response regarding the questions posed.

Michtel and CIT supplied responses did not meet the parameters for the specified VOIP system requested. Due to their inability to meet the RFP as requested and their lack of response it is my thought that those parties be removed from the process at this time.

The total expense proposed by TSS is $46,139.27.
The total expense proposed by Vertical Wave IP is $72,254.06.

TSS operates out of Farmington Hills, MI and the RFP guarantees a response time, due to malfunction or emergency, of 3 hours. Vertical Wave IP Indicates an office "will be" in Columbus OH, with a guaranteed emergency response time of 2 hours.

After reviewing all 4 bids I recommend the Toshiba Phone System submitted by TSS for $46,139.27 as I feel this system will meet the needs of the city the best all around.

Sincerely,

Michele Kwiatkowski
Systems Administrator

10:04 am - 11-3-2016
Open Bid.

THURSDAY, 11-03-2016 @10AM PUBLIC BID OPENING

Project: R.F.P. IP BUSINESS TELEPHONE SYSTEM

	Contact Person	Phone Number	Company Name	Cost
1	K. Spicer	248.636.1100	MichTel	2 options C monthly
2	Walter Barrell	248.489.0808 208	TSS Telephone	46139.27 out Buy
3	Aisha Sumler	770.446.3100	Vertical com Rozell GA	Cash price 72,254.04
4	Michael Weatherly	800 713.2242	Complete Interactive Tech	44,525.00 Purchase price
5				

City of Fraser

Request for Proposal

for

IP Business Telephone System
& Voice Processing System

Date Issued: October 21, 2016

Date Due: November 3, 2016

Table of Contents

I. Introduction

City of Fraser is soliciting bids from reputable manufacturers and distributors of business telephone systems and voice mail equipment. The selected vendor will be our primary source for the following:

- Business telephone system hardware and software and voice mail equipment to be used in our office. Feature requirements are detailed in Section IV & V and configuration requirements are detailed in section VI.
- Installation and configuration services for this equipment.
- Training of users and administrators.
- Maintenance of purchased and installed equipment and software.
- Upgrades to the installed systems as necessary.

II. RFP Instructions

A. Completing the RFP

Each question requires a written response. If you would like to attach documentation to support your answers, please do so. However, the summary answers should stand on their own. The quality of the response to the RFP will be viewed as an example of the vendor's capabilities.

The RFP asks questions about functionality, approach, and pricing. If you require any clarification, provide the questions in writing email to Michele Kwiatkowski @ michelek@micityoffraser.com

Only existing business telephone and voice mail systems will be considered. Telephone or voice mail systems under development, in planning, or at beta test will not be considered. However, vendors can include additional information about future developments or plans under separate attachment.

Quoted prices and discounts should be guaranteed for at least 60 days from the response date.

B. Format, Due Date

Proposals are due **no later than 10:00 am November 3, 2016**. Late responses may not be considered. Submit responses to:

Kelly Dolland
City of Fraser
33000 Garfield Rd
Fraser MI 48026
Phone 586-293-3100
kellyd@micityoffraser.com

All submitted proposals will be considered the property of **City of Fraser**.

All proposals should include copies of product descriptions for the proposed equipment.

This request for proposal was sent to you on hard copy, and on diskette as a Microsoft Word compatible document. **Two (2) copies** of your completed proposal should be submitted on hard copy, and **one (1)** as a Word compatible document on diskette.

Name one person to be the coordinator for your RFP response and for any clarification activities, which might be necessary.

Walter F. Barrett
Telephone Support Systems Inc.
Director of Sales
27300 Haggerty Road., Ste. F7 Farmington Hills, MI 48331
248 893-3608
248 489-7834
walterb@telsupsys.com

C. Contract

The proposal should include a contract for all proposed equipment and services. If the vendor does not wish to submit an actual contract with the proposal, due to different alternatives proposed and pending choices from those alternatives, a sample contract should be submitted with the proposal.

"Understood and a copy of the contract has been included with this RFP".

D. Confidentiality

All material supplied to potential bidders by City of Fraser must be treated as confidential and cannot used for any other purpose than the response to this RFP. Information submitted by any bidder will be considered confidential to City of Fraser and will not be used for any other purpose than evaluating vendor responses.

"Understood and expected".

E. Selection Process

A number of factors will influence City of Fraser's decision in selecting the product and the vendor providing it. In addition to cost considerations, proposals will be evaluated on the basis of the following factors:

1. Functionality of standard equipment and features to meet our specific needs
2. Availability of additional optional capabilities to add as needed
3. System growth and expansion
4. Ease of use
5. Ease of System administration
6. Product quality, reliability, and warranty plan
7. A credible commitment by the vendor to the product and to ongoing enhancement of both feature capabilities and service
8. Vendor qualification including:
    a. Overall experience and reputation in the industry
    b. Experience with the proposed system
    c. Service and support resources, including training of vendor installation and maintenance personnel
    d. Verifiable quality of service provided by vendor to area customers

Please note that City of Fraser will select the vendor based upon the best overall solution and value, and is not obligated to select the lowest price bidder.

"Understood and expected".

F. Disclaimer

This RFP does not commit City of Fraser to any specific course of action. City of Fraser reserves the right to not select any vendor or purchase any goods and services resulting from this RFP.

"Understood and expected".

III. Vendor Background

A. Company Information

1. List your company's legal name, address, and telephone number. Include parent company information if applicable.

   Telephone Support Systems Incorporated.
   27300 Haggerty Road, Suite F7
   Farmington Hills, MI 48331
   248 489-0000 Main Number

2. How long has your company been in business?

   Thirty-seven Years.

3. How long has your company or division been providing business telephone systems and related equipment?

   Thirty-seven Years.

4. Indicate whether your company is the manufacturer or the distributor of the proposed equipment. If your company is a distributor of the product, describe the terms of your agreement with the manufacturer, whether you are the sole local authorized representative of the manufacturer, the manufacturer's level of support, and what contingencies they have in place should your company fail to continue to support the product for any reason.

   Telephone Support Systems, Inc. is a licensed authorized Toshiba distributor. As a licensed Toshiba dealer, TSS is offered all the training and technical support necessary for installation, maintenance and support of distributed equipment. Toshiba guarantees seven years of support available through all Authorized Toshiba regardless of your relationship with your original vendor. The Metro-Detroit area has three additional authorized Toshiba dealers within the servicing area of Fraser.

5. If your company is a distributor of the product, how long has your company been distributing the specific products being proposed?

   Thirty-three Years.

6. How many employees do you have?

   Telephone Support Systems has twenty-four employees here at the Farmington Hills headquarters. We have twelve employees at the Ft. Myers branch, and seven more at the Gaylord Michigan location.

7. How many technicians do you have certified on the proposed equipment?

We have four certified technicians here at the Farmington Hills location.

8. When were the models of systems you are proposing first installed at customer sites?

* Business telephone system?

The Toshiba IP*edge* IP communication systems represent the latest in business telephone system technology. IP*edge* systems were first introduced in April 2011. Since introduction many are being installed every month.

* Voicemail system?

Automated attendant, voice messaging, unified messaging, IVR, and related voice processing options are integrated applications on the IP*edge* server and do not require a separate hardware platform. Customer installations of the voice processing applications began with initial introduction of the IP*edge*.

B. Manufacturing Quality Certification

Is the manufacturer of the proposed systems ISO 9001 certified as compliant with quality manufacturing standards? Is the manufacturer of the proposed systems ISO 14001 certified as compliant with environmental manufacturing standards?

Toshiba has maintained ISO certification for many years. Toshiba is both ISO 9001 certified for its manufacturing excellence and ISO 14001 certified for its environmental conscientiousness.

Toshiba has always been known as one of the world's leaders in manufacturing quality. This is not only reflected by ISO 9001 certification, but by impressive MTBF statistics, and an overall reputation for building reliable products.

Achieving ISO 14001 environmental certification is less common than ISO 9001 manufacturing certification and much more difficult to achieve. ISO environmental certification demonstrates a commitment to community awareness as part of the manufacturing process. This includes compliance with laws and regulations as well as emergency preparedness and response.

Toshiba has built a solid reputation and has been a long time leader in both manufacturing excellence and environmental conscientiousness.

C. References

Provide a minimum of 3 references for customers with operations similar to ours that use the equipment being proposed. Include contact names, telephone numbers, email, and addresses.

Otsego County
225 W. Main
Gaylord, MI 49735
Rachel Frisch
989 731-7523
Multiple Toshiba Systems connected with fiber across town

City of Orchard Lake Village
3955 Orchard Lake Road
Orchard Lake, MI 48323
Carol Daugherty
248 682-2400
Loyal Toshiba User +20 Years

Emmet County
200 Division St
Petoskey, MI 49770
231 348-1706
Matt Hellens
Toshiba systems networked between 3 buildings

Central Lake Public Schools
8190 West State St
Central Lake, MI 49622
231-544-3141
Steven Groll Ext. 224
Large Reliable Toshiba System

IV. Business Telephone System Product Requirements

A. General Requirements

1. Use the product requirement information listed in this document to provide detailed pricing for the proposed IP business telephone system configuration specified in section VII.

2. Please provide product descriptions and brochures for the proposed IP business telephone system, voice mail system, telephone sets, attendant consoles, and other related equipment.

3. Describe any special environmental considerations with regards to installation of hardware, such as power requirements, minimum and maximum acceptable temperature and humidity ranges, power consumption, heat dissipation, rack mounting space requirements, etc.

   The Toshiba IP*edge* system AC power requirements are the following:

   - The system operates with a standard 115+/-10 VAC, 20 amp electrical circuit. AC frequency is 50/60 Hz.
   - The system also operates with a 208 or 240+/-20 VAC, 20 amp electrical circuit. AC frequency is 50/60 Hz.

   A dedicated circuit is required to protect from another appliance overloading the circuit and potentially interrupting AC power.

   There are no special temperature requirements for Toshiba IP*edge* systems. They operate within a temperature range of 50-95 degrees Fahrenheit, and within a humidity range of 8-90% relative humidity without condensation.

   Toshiba IP*edge* systems have a lower power consumption level compared to most systems of similar size. The IP*edge* also generates less heat than most similar size systems. This is one of the important factors that make the IP*edge* such a reliable system. For example, the IP*edge* power supply only consumes a maximum of 480 watts of AC power with heat dissipation of 785 BTUs per server.

   The Toshiba IP*edge* low power consumption and efficient heat tolerance prolongs the life and enhances the reliability of the system. In telephone systems, like all electronic components in general, less power consumption + less heat generation = greater reliability.

   There are no special physical space requirements of Toshiba IP*edge* systems, only simple common sense placement as you would with any server equipment. The location is recommended to be dry and clean, well ventilated, and accessible, and should not be subject to extreme heat or cold, corrosive fumes, dust, or other airborne contaminants, or subject to excessive vibration. IP*edge* servers are designed to be rack mounted in a 19" equipment rack.

4. The proposed system must be UL approved and listed. Please state the UL listing compliance of the proposed system.

   Toshiba IP*edge* systems are listed with Underwriters Laboratory (UL) and comply with all safety requirements.

B. System Requirements

1. System Capacities

The proposed system must be able to accommodate up to 200 users at full capacity. This includes capacity for at least 100 trunk lines and 100 telephones or endpoint devices. List these capacities of the proposed system.

The Toshiba IP*edge* EC system can support up to 200 users at full capacity. This includes maximum capacity for up to 96 trunk lines and 200 telephones/endpoint devices.

2. Endpoint Device Configuration Flexibility

The proposed system must be able to configure at its full capacity whether using IP desk telephones, analog telephones, wireless endpoints, or any combination of each. List the maximum capacities using each of these type devices.

The **Toshiba IP*edge* EC** system can support up to 200 telephones per server, regardless of the type of telephones configured. The system can be configured for any combination of IP desk telephones, IP wireless endpoints, or analog telephones at maximum capacity. This enables the use of any type of endpoint device configuration without losing any telephone capacity.

3. North American Transmission Standards

The proposed system must have complete compliance with the North American Numbering Plan standards. Describe the attributes of the proposed system as it relates to this.

All IP*edge* systems conform to all current North American Numbering Plan standards. This includes all provisions for new area codes, dialing patterns, and equal access codes.

4. Multiple FCC Registration

The proposed system must be FCC registered. Our organization uses various types of trunk services so the business telephone system must be capable of being classified or tariffed as a Key system, Hybrid system, or PBX system as defined by the FCC. List the types of FCC registration available with the proposed system.

The Toshiba IP*edge* systems can be configured as either a key, hybrid, or PBX system with separate FCC registration numbers for each type.

Multiple-registration ensures compliance with FCC regulations, regardless of how the system is configured. The appropriate configuration for an individual system depends on its function. Systems configured only for manual selection of lines may be registered as key systems; systems with Automatic Line Selection, Least Cost Routing (LCR), etc., usually must be registered as hybrid or PBX systems.

5. Hearing Aid Compatible

All proposed telephone equipment must comply with rules adopted by the Federal Communications Commission that specify all telephones in workplaces of 20 employees or more must be hearing aid compatible. Describe the attributes of the proposed system and telephone sets as it relates to this.

All Toshiba IP telephones are hearing aid compatible and will not interfere with the operation of a hearing device. These telephones conform to all FCC requirements. Toshiba IP telephones also have a handset volume control to increase the volume while on a call.

6. Manufacturer's Support

All hardware and software must be the current offering provided by the manufacturer, and that which receives the highest level of support available from the manufacturer. State whether the proposed system is the latest available version of both hardware and software and if not, explain what is being proposed and why.

The IP*edge* contains the latest version of software and hardware available from Toshiba. This current version, as well as all previous versions, are fully supported by the manufacturer.

7. Mean Time Between Failure

What are the manufacturer's stated "Mean Time Between Failure" statistics for the business telephone system and telephone sets being proposed? Explain the methodology for how these statistics are calculated. Explain any design factors that promote product reliability.

Mean Time Between Failure (MTBF) rates for Toshiba 5000-series IP telephones are available to assist you in substantiating Toshiba's reputation for producing high quality and very reliable telecommunication products. Toshiba has established a well deserved reputation for quality and reliability as a world-wide manufacturer of all types of electronic equipment.

MTBF Rates: Based on actual field data compiled over six months, the minimum MTBF rates for the Toshiba IP telephones are 53.5 years.

Toshiba Product Reliability: Every manufacturer claims their products are the most reliable. In most cases they have no way to substantiate their claims. Some manufacturers offer MTBF rate statistics, but differences in methodology can often result in wide variations in outcome and make comparisons difficult between various manufacturers' products.

Toshiba provides MTBF rates and they are indeed very impressive. However, to get an appreciation of why Toshiba products are so reliable, it is important to note some engineering and design considerations.

* Large Scale Integration (LSI) technology enables circuit design to be compact and efficient. Toshiba proprietary gate arrays save vast amounts of space by using the latest LSI technology. More circuitry fits onto smaller circuit cards for a more compact design and less heat generation. In any electronic product, less heat means longer life and greater reliability.
* Very strict design standards are used by Toshiba engineers. Component selection is made after substantial evaluation assuming high temperatures and other severe conditions affecting reliability.
* Before manufacturing, all equipment is put through a series of tests proprietary to Toshiba. This includes full environmental, EMI, electrostatic, and stress tests.
* After product release, failure data is constantly monitored to ensure that high reliability is maintained.

C. System Architecture

1. Scalability and Expansion

The proposed system must be expandable in design, with little or no loss of original equipment utility resulting from physical or software expansion. Physical capacity must be expandable by the simple addition of equipment or software without losing the original investment. Describe the attributes of the proposed system as it relates to scalable design and expansion.

The scalable design of the IP*edge* enables it to meet a variety of customer sizes and needs in one server platform. For example, the IP*edge* can be cost effectively configured as a smaller system with just a few trunk lines and telephones. It can be expanded with the simple addition of software licensing to accommodate connecting additional IP telephones and trunks. Additional gateways may also be required depending upon the type of trunks added to the system. This provides flexibility and cost effective expansion for growing organizations.

2. Single or Multiple Site Configuration

The proposed system must be able to function as one integrated system in either single or multiple site distributed configurations. Describe how the proposed system works in this regard.

IP*edge* Net networks multiple systems together to work as one large system. This include the capability to share a centralized voice mail system between all locations, answer incoming calls for all locations at the main location, dial between locations using a coordinated dialing plan, feature transparency, and voicemail messaging within and between all locations.

3. Survivability and Redundancy

The proposed system must be able to automatically fail over to an alternative or backup system if the primary VoIP system fails, while continuing to make and receive calls, continuing to have access to voicemail, and then automatically switch back to the primary system when it becomes operational again. Describe how the proposed system works in this regard and any special equipment or setup required to enable these capabilities.

The IP*edge* provides survivability of IP telephones, SoftIPT soft phones, and Call Manager UC clients enabling both the outgoing and incoming calls to automatically follow the IP telephones to an alternative backup system if the primary system fails. Survivability requires the use of an AudioCodes gateway, specified programming in the IP*edge* and the IP telephones.

Survivability can scale from one IP telephone to all the IP telephones in the primary system. Some companies may choose to only program survivability for certain IP telephones for key individuals, for entire departments such as Customer Service or Technical Support, or for all users in the system.

The IP*edge* survivability and redundancy requires that the secondary backup system has enough licenses and available IP resources to accommodate all the IP telephones IP*edge* failure. IP telephones can be selectively made to failback to the primary IP*edge* when the primary IP*edge* becomes operational again.

4. Rack Mounting Options

The proposed system must have a cabinet design that accommodates mounting in a standard 19" rack. Describe the attributes of the proposed system as it relates to cabinet mounting options.

IP*edge* servers rack mount in a standard 19" rack. IP*edge* EC and EM server are 1U high, so they occupy minimum rack space.

5. Server Requirements

As part of our server consolidation efforts to ease maintenance and control, our IT department seeks to keep the number of servers required to support voice applications to a minimum. Describe the number and type of servers required to support the proposed system.

The IP*edge* integrates multiple communication applications on one optimized server platform. Standard applications include call processing, voicemail with unified messaging, Call Manager Standard, and centralized system administration. Optional applications include meet-me audio/video conferencing with web collaboration (EC and EM servers), and a Call Manager Advanced unified communications client application. Running multiple applications on one unified server, instead of requiring an individual server for each application, delivers significant savings on equipment purchasing and ongoing maintenance costs.

D. System Power

1. Power Consumption

What AC voltage is required to run the system? What amp circuit is required? Does it require a dedicated circuit? Provide the estimated maximum power consumption of the telephone system.

The Toshiba IP*edge* system AC power requirements are the following:

- The system operates with a standard 115+/-10 VAC, 20 amp electrical circuit. AC frequency is 50/60 Hz.
- The system also operates with a 208 or 240+/-20 VAC, 20 amp electrical circuit. AC frequency is 50/60 Hz.

A dedicated circuit is required to protect from another appliance overloading the circuit and potentially interrupting AC power.

Toshiba IP*edge* systems have a lower power consumption level compared to most systems of similar size. The IP*edge* also generates less heat than most similar size systems. This is one of the important factors that make the IP*edge* such a reliable system. For example, the IP*edge* power supply only consumes a maximum of 480 watts of AC power with heat dissipation of 785 BTUs per server.

The Toshiba IP*edge* low power consumption and efficient heat tolerance prolongs the life and enhances the reliability of the system. In telephone systems, like all electronic components in general, less power consumption + less heat generation = greater reliability.

2. Power Surge Protection

Are there any special surge protection requirements of the system beyond normal devices typically used with servers?

The IP*edge* server does not have any special power surge protection requirements. Standard external surge protectors will provide adequate protection to the IPedge the same as with other servers with similar specifications.

3. System Battery Backup or UPS

Describe the type battery backup or uninterruptible power supply (UPS) you recommend to power the proposed system for 2 hours at peak traffic load during an AC power outage. What equipment is required? Does the system immediately switch over from AC to battery or UPS power, or does the system have to be restarted? What occurs to the calls in progress during a loss of AC power? How long will the battery or UPS hold the system up before a complete shut down occurs?

Toshiba recommends an uninterruptible power supply (UPS) with power conditioning for the IP*edge* server. Various recommended UPS models from ONEAC are available

according to the approximate amount of time the system needs to be kept operational without AC power (from 30 minutes to 8 hours).

If the AC power fails, the IP*edge* system automatically switches over to UPS battery power without any interruption in operation. Calls in progress are not interrupted.

4. Grounding

Discuss what grounding alternatives are available to protect the proposed system from "ground loops," "pickup noise," and excessive "ground current." Are secondary protectors required?

The IP*edge* requires a solid earth ground for proper operation. System AC power cords already contain a conductor for the "third wire ground" provided by the commercial AC outlet. In addition, an insulated conductor must be connected between the frame ground on any cabinet power supply and a cold water pipe or the building ground.

Solid state secondary protectors must be installed to protect against transient voltages and currents if there is outside wiring used. These protectors, which contain fast semiconductors in addition to fuses, must be well grounded to a reliable earth ground. This is not due to any special requirements of the IP*edge*, but mainly to comply with the regulatory requirements of UL 497A.

E. System Administration

1. Maintenance Administration

Describe how maintenance administration is accomplished by the service technicians, system administrator, and individual telephone users. Can live system programming be done? Can both programming and trouble shooting be performed remotely? Describe the programming interface for the proposed system and what attributes make it user-friendly.

System administration, programming, and maintenance can be performed from a PC using the browser-based Enterprise Manager application as a programming terminal either on-site or at a remote location.

Live system programming can be done so there is no interruption in service in most cases. The only service interruption would be for hardware upgrades in which server power must be off during installation.

Service technicians and system administrators can perform system administration, programming, and maintenance using Enterprise Manager to set system configuration data (program options, speed dial, LCD messages, telephone settings, etc.).

- This data can be downloaded to a PC and stored on a disk.
- The data can be added to or changed by the PC independent of the IP*edge*.
- The data stored on the PC disk can be uploaded from the PC to the IP*edge* (on-site or remotely) to restore or change the IP*edge* customer configuration.

- The Enterprise Manager program is easy to use in a user-friendly browser format.
- Active Directory Services syncs databases with import/export capabilities that saves significant data entry time.
- Database entry via import from an Excel spreadsheet also saves significant data entry time.
- Perform system maintenance via modem, direct connection, or the LAN/WAN from any location.

Enterprise Manager can manage a single site or a group of IP*edge* systems simultaneously in a single session. Centralized administration provides many advantages:

- Simultaneous System-wide Back-ups save time by eliminating the need to back-up each system individually.
- Simultaneous System Changes to all the systems, regardless of the type of IP*edge* server or location, to ensure data consistency across all systems.
- Simultaneous Log-in to all systems or any combination of systems at the same time.
- Simultaneous Upgrades push new software to all the IP*edge* systems, eliminating the need to individually upgrade each system.

Individual telephone users can use Enterprise Manager to program buttons and other functions on their telephone using their PC's Web browser. This gives users more control and frees the system administrator from routine tasks to focus on more mission critical work.

2. System Fault Finding and Diagnostics
Describe the system's diagnostic capabilities. Can system faults be detected, alerted, logged, and traced? How are fault alarms alerted and to whom?

The IP*edge* can detect problems in the system. These conditions can be detected, alerted, logged, and traced. The IP*edge* server includes many useful diagnostic tools:

- **Alarm Notification of System Faults:** The IP*edge* can send alarm notifications to a Monitoring PC/Server or send an alarm notification to a telephone. Alarms include trunk failures on ISDN PRI, T1, or IP interfaces. System resource alarms include SMDR memory buffer full, SMDR link down (LAN/RS-232c), SMDI link down (LAN only), and CTI link down (Attendant Console, external ACD system).
- **Fault Detection and Error Logs:** The system detects and logs abnormalities encountered during operation. These error logs are monitored by Enterprise Manager. Examples are trunk failure detection and auto busy-out; IP telephone connection failure detection and auto busy-out; power supply failure alarm and error log; and SMDI and SMDR error detection recorded to an admin log. This function presents data useful to software support engineers for troubleshooting purposes

- **Event and System Administration Logs:** Activities such as telephone buttons pushed or trunk lines accessed are stored in an Event Log. All system administration user actions are also logged. Both logs can be accessed at any time and presents data useful to software support engineers for troubleshooting purposes.
- **Automatic Fault Recovery:** The system can automatically correct certain conditions detected during operation. This enables the system to continue operating normally without requiring immediate correction.
- **System Trace:** The system records key strokes and other high-level events, and presents data useful to software support engineers for troubleshooting purposes.
- **Manual Test:** The maintenance technician can perform certain test functions using Enterprise Manager to determine proper operation of the system.
- **Backup/Restore:** The customer database can be backed up and restored. The customer database is a file that can be stored on the IP*edge* hard drive, transferred to the administrator's PC hard drive, e-mailed, etc.
- **Maintenance and Administration:** The Enterprise Manager PC can be connected to the IP*edge* via direct connection to your local area network (LAN), as well as remotely via the LAN/WAN from any location.
- **Software Upgrade:** The IP*edge* operating software can be upgraded from a remote location. The operating software is a file that can be stored on the IP*edge* hard drive, transferred to the administrator's PC hard drive, e-mailed, etc.

3. Traffic Measurement and Reporting

Describe the system's traffic measurement and reporting capabilities. What additional hardware or software, if any, is required to support these capabilities?

Technicians and system administrators can monitor the effectiveness of the system resources for proper traffic balance. New traffic reports include outgoing and incoming trunk group usage, "all circuits busy" reporting for DTMF and conference circuits. The reports are stored on the system's hard drive locally, and reports can also be sent to a remote device over a TCP/IP. Traffic reporting is set up based on day of week and time of day. Reports are easy to read, time-stamped files that are generated and sent out hourly. No additional hardware is needed to support the new Traffic Measurement features.

G. System Interfaces

1. Analog CO Line/Trunk Interface

Can the proposed system support both ground start and loop start analog lines? Can both be supported from the same gateway interface? Describe what equipment is required.

Both ground start and loop start analog trunk lines are supported on the IP*edge* via SIP connection to analog FXO trunk gateways.

2. Digital Trunk T1 Interface
Can the proposed system support T1 interface? How many T1 interfaces and trunks will the system support in relation to the maximum trunk capacity?

Digital T1 trunk lines are supported on the IP*edge* via SIP connection to digital trunk gateways that support T1/PRI and E1.

The IP*edge* EC supports up to 5 T1 interface gateways, providing 96 trunk circuits of the maximum 96 trunk capacity.

The T1 interface provides economic advantages through the high-traffic carrying capacity of its 24 channels and the cost-effectiveness of its digital transmission facilities. Users also benefit from the increased quality and no loss nature of digital transmission. Access to trunks via the T1 interface is completely transparent to telephone users.

3. Digital Trunk ISDN Primary Rate Interface (PRI)
Can the proposed system support ISDN Primary Rate Interface? How many PRI interfaces and trunks will the system support in relation to the maximum trunk capacity?

Digital PRI trunk lines are supported on the IP*edge* via SIP connection to digital trunk gateways that support T1/PRI and E1.

The IP*edge* EC supports up to 5 PRI interface gateways, providing 96 trunk circuits of the maximum 96 trunk capacity.

The PRI interface provides economic advantages through the high-traffic carrying capacity of its 23 channels and the cost-effectiveness of its digital transmission facilities. Users also benefit from the increased quality and no loss nature of digital transmission. Access to trunks via the PRI interface is completely transparent to telephone users.

4. DID Interface
Does the proposed system support Direct Inward Dialing? How does it work? Are DID trunks available on an analog interface as well as the proposed system's digital T1 or PRI interface? What additional system equipment is required?

DID trunk lines are supported on the IP*edge* via SIP connection to analog or digital trunk gateways.

Based on the final digits of the telephone number that are dialed, DID enables incoming calls over a single trunk line to directly ring one or a number of telephones which share

a common directory number. DID numbers can be assigned to ring one or a number of destinations.

Each DID number can be assigned a Name tag which will display on LCD telephones that ring when the DID number is called. Each DID line has a single office code and a block of extension numbers (the final digits) that can be individually assigned to ring telephones in system programming.

5. SIP Trunk Interface

Can the proposed system support SIP trunk connection? What additional system equipment is required to support SIP trunks?

SIP Trunks are supported in IP*edge* systems and enable communication with a service provider over an IP circuit, which can be used to carry voice and data simultaneously.

Key product features and benefits include:

- Offers ISDN-like features over a data connection
- Eliminates the need to buy separate circuit cards for voice and data
- Potentially eliminates the need and cost of a separate service
- Allows bandwidth to be used for data when no calls are active
- Ability to host other services in addition to SIP Trunking, including IP telephones, SIP telephones, Toshiba's IP*edge* Net IP networking, Voicemail and ACD resources

The use of SIP trunks works natively with the IPedge. SIP Trunking is meant to simplify IP PBX trunking capability by replacing multiple types traditional PSTN lines with SIP Trunking.

6. SIP Telephone Interface

Does the proposed system support SIP telephones? Do SIP telephones provide the same feature set as proprietary telephones proposed? What additional system equipment is required to support SIP telephones?

The IP*edge* supports SIP telephones. SIP telephones provide a reduced feature set from the comprehensive features supported by Toshiba MEGACO+ IP telephones. Lower cost, third-party SIP telephones are useful in areas not requiring extensive features or heavy use areas requiring frequent replacement, like lobby, loading dock, etc.

SIP telephones works natively with the IPedge and do not require any gateway equipment.

7. Analog Telephone Interface

Does the proposed system support analog telephones? Do analog telephones provide the same feature set as proprietary telephones proposed? What additional system equipment is required to support analog telephones?

> The IP*edge* supports analog telephones. Analog telephones provide a reduced feature set from the comprehensive features supported by Toshiba IP telephones. Lower cost, third-party analog telephones are useful in areas not requiring extensive features or heavy use areas requiring frequent replacement, like lobby, loading dock, etc.

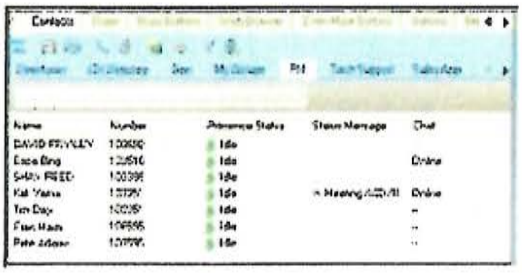
Up to eight analog port positions are supported on the IP*edge* via the Adtran PRI gateway recommended for the City of Fraser. This can be expanded as needed with add-on analog gateways.

H. Unified Communications (UC)

Unified communications helps improve business efficiency by imbedding communications capabilities within commonly used business applications. Describe the UC applications available with the proposed telephone system and any additional hardware or software required to support them.

> The Toshiba quote for the City of Fraser includes 20 Unified Communications licenses. The unified solution can help the city respond to the challenges it faces every day. With solutions like presence, instant messaging, mobile unified messaging, customized call handling, CRM integration, mobility applications, and more, the Toshiba Unified Communications Suite helps your business improve employee productivity and streamline business processes that enable you to make better decisions, provide improved customer service, generate more sales, reduce costs, improve profits, and create a competitive advantage.
>
> Most businesses already have several ways to communicate with their customers, suppliers, and each other. Toshiba's Unified Communications Suite includes the structure and intelligence to enable these various forms of communication to work together, so information reaches recipients quicker and through the most appropriate medium. This type of communications-enabled business process (CEBP) integration requires business applications and information databases to have imbedded communications capabilities that become part of the business application.

The Toshiba Unified Communications Suite provides the applications you need for effective communications:



- **Presence and Instant Messaging:** A presence viewer in the Call manager enables you to see the status of other users, both their telephone busy/idle status and calendar status from Outlook integration, with the ability to click on the name to either call or instant message chat with them. You can decide the best way to contact someone to maximize efficiency.
- **Outbound Dialing from Any Application:** Making a call is as easy as highlighting a number and clicking the mouse. You can also launch electronic documents, applications and web pages directly from the Call Manager interface for quick access to the most frequently used communications tools. This saves you valuable time.
- **Desktop Call Control:** Using the Toshiba Call Manager application, you can combine the capabilities of your computer and telephone to dial, answer, or transfer calls, and more, using your mouse without ever picking up the telephone. Drag and drop features make call transfer, speed dialing, and other functions faster and easier. Call Manager can be used at your desk with your desk telephone or as a stand-alone IP soft phone providing mobility and remote access. You get the efficiency of combining your telephone and computer into one integrated communication tool.

- **CRM Integration and Screen-pops:** Your call answering personnel can provide better service by immediately knowing which customer is calling with screen-pop integration to your customer relationship management applications and databases. This saves you time and serves your customers better.
- **Meet-me Audio/Video Conferencing and Web Collaboration:** The Meeting application provides audio and video conferencing, scheduling, application and desktop sharing, audio recording, usage reporting, Outlook Calendar integration, conference view (who's there), and more. It's Web-based, so there's no client software to download onto users' PCs. It's easy to set up conferences from anywhere and users can attend the conference from anywhere via the network. Best of all, you get a fast ROI compared to monthly conference service fees.
- **One Number Access (find me follow me sequential ringing):** Your customer dials your number, and either rings your desk telephone and mobile/cell phone simultaneously, or it tries your desk telephone, then your cell phone, etc. until it finds you wherever you are. If you don't answer at any of the programmed destinations, your office voice mail takes the message.

The intelligent routing to any destination and only having one voice mail to check is what provides the efficiency and value.

- **Off-premise Call Forwarding:** Enables your incoming calls to reach you when you're out of the office, and enables you to change your forwarding destination from any remote location. After all, what good is forwarding your calls off-premise if you can't tell the system where you are when you change locations? You can stay in touch no matter where you are.
- **Personal Call Handling:** You can define the way your calls are routed by combining the features of schedule-based and caller-based routing of incoming calls, one number access (find me follow me sequential ringing), call screening (announcing the caller name), simultaneous ringing of desk and mobile phones, and the ability to transfer a call back to the office from a cell phone. It's the perfect combination of accessibility and mobility.

- **Fixed Mobile Convergence:** Toshiba's uMobility solution empowers mobile workers to make and answer their PBX calls from virtually anywhere. The user's smart cell phone functions as their PBX extension phone both while in the office via the wireless LAN and while out of the office via a cellular network. This is the most advanced level of mobility and insures the most expeditious handling of your incoming calls.
- **Unified Messaging:** You can access your voice and fax messages from your email inbox. This saves time and provides the convenience of accessing your email, voice messages, and faxes from one place. Plus, it's easy to forward voice and fax messages via email.
- **Exchange 2007 Integration:** IP*edge* voicemail integration with Microsoft Exchange 2007 provides unified messaging, in which voice and fax messages are accessible from your Outlook email inbox, when you are using Exchange 2007 as the email/voicemail/unified messaging server. Turn your Exchange 2007 application into a unified messaging application to save money and maximize efficiency.
- **Office Communication Server 2007 (OCS) Integration:** IP*edge* integration with Microsoft Office Communications Server 2007 (OCS) provides Remote Call Control from the OCS client and other Microsoft applications and enhances presence applications with "on-demand" telephony presence status. This increases the value of your OCS application with more comprehensive presence capabilities.
- **Remote Connection and Mobility:** You may have a mix of on-site employees, telecommuters who work at home, mobile employees, and personnel in remote branch offices. It's important to improve employee productivity for all of them no matter where they are. Toshiba provides the tools for remote connectivity and mobility to make them all operate as if they were right there in the office.

Most Toshiba Unified Communications applications run on the IP*edge* server for maximum ROI.

Along with call processing functions, Toshiba integrates the Unified Communications Suite applications within one IP*edge* server platform. This includes Presence, IM/Chat, PC call control, Auto Attendant, Voicemail, Automated Speech Recognition, Text-to-Speech, Unified Messaging, Interactive Voice Response, Meet-me Conferencing and Web Collaboration, browser-based Enterprise Manager centralized system administration, and browser-based My Phone Manager personal telephone administration.

I. Computer Telephony Integration (CTI)

Both desktop CTI applications and system-wide CTI applications must be supported on the proposed telephone system. Desktop CTI would typically be applications running on individual PCs. System-wide CTI applications would typically be applications running on a PC server connected to the telephone system, that all user PCs access through the LAN.

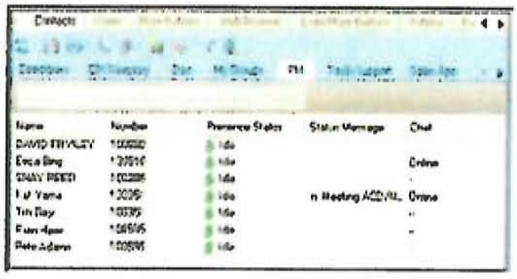
1. Desktop CTI

Describe desktop Computer Telephony Integration (CTI) capabilities available with the proposed telephone system. Elaborate on the hardware interfaces and software necessary to run a computer application with the proposed telephone system. Indicate what PC based software the proposed system presently supports.

Twenty Call Manager licenses have been included with this proposal. Call Manager offers advanced call management, CRM integration with Screen Pops, Personal Call Handler, Presence Viewer, IM Chat, VoIP Soft Phone option, along with many other features, and can be used on a desktop PC or on a laptop for local use via LAN and remote use via Internet. Call Manager leverages the power of the computer and telephone to provide desktop call control from your PC. Call manager manages incoming and outgoing call functions and synchronizes with a company's operations, CRM, or contact software. The versatility of the Call Manager enables you to control calls, capture important customer data, and provide customers with superior service.

- Advanced Call Management and Desktop Call Control – provides users with telephone features and call-handling functions directly from the computer. Dialing, answering, transferring, placing a call on hold, and ending calls are all accessible from the compact or expanded Call Manager view. Intelligent call keys display the Caller ID and status of each call, enabling users to efficiently manage multiple calls. Call Manager also enables you to dial a phone number from most Windows programs including contact managers, CRM, word processing, spreadsheets, etc. The Call Notes feature enables user's attach important customer information to a call, which then follows the caller if they are transferred to another department or extension, eliminating the need to ask the caller for the same information multiple times. Call notes can also display information collected from the Interactive Voice Response (IVR) system.

- CRM Integration and Screen Pops – integrates with many of the leading contact manager and CRM programs with its flexible, multi-protocol software interface. When a phone call comes in, the Call Manager triggers the software's database and automatically launches (pops-up) the caller's corresponding contact information.
- Personal Call Handler – saves time by automatically performing routine call handling events. Using a combination of triggering events, conditions and actions, Call Manager addresses each call or function based on the user or supervisor preferences. Call Manager can announce VIP calls with a particular tone from the PC, forward incoming calls from a specific number directly to voicemail, and launch email or contact programs.
- Presence Viewer – displays the status of other users within the system. This includes telephone status (busy/idle, do-not-disturb), user status (such as "in meeting" and availability of each Outlook user according to their calendar), chat availability status, and click to initiate a call or request a chat with another user.



- IM Chat – provides instant messaging communication with other Call Manager users within the system.
- Programmable Feature Buttons – on Call Manager and two-sided windows enable the optimizing of call flow and eliminating the need to switch from computer to telephone for call processing functions. When used with an ACD application, the ACD keys provide easy log in/out, especially when multiple groups are involved, and the agent has the ability to go "Unavailable" with one of ten reason codes. Other keys could be DSS keys, Web keys, Speed Dial keys, Run Program keys, or PBX

feature keys. Call Manager combines the power of your communication system and desktop computer to improve call processing management and provide better service to your customers.

- VoIP Soft Phone option – can be assigned to one of the companion application windows, and the entire IP telephone features can be accessible for remote connectivity.

The Call Manager is a software option that is licensed and runs on the IP*edge* server. All you need is a Call Manager license for each user and you're ready to use this valuable application. No additional hardware equipment is required.

2. System-wide CTI

Describe system-wide CTI capabilities available with the proposed telephone system. Describe any additional software or hardware required to support these capabilities. Is a software developer's kit available for third party custom development?

The IP*edge* supports system-wide CTI applications through an open architecture interface (OAI) link based upon ECMA standard "CSTA." This provides call control and telephone support for CTI applications.

The system OAI uses system 10/100-baseT LAN connection between the IP*edge* system and external application server.

CTI call control is further enhanced using Pilot DNs. A Pilot DN is a pseudo location assigned a directory number where calls may be directed. It does not have a physical appearance in the system, but it is used as a device where calls can ring and/or be held while an external application using the OAI can control the call. This feature provides a safeguard operation for external CTI applications to ensure all calls are handled, even when an unexpected event takes place.

To ensure calls do not get lost in the system, a time-out and overflow service is provided to redirect the call when the link is down. The overflow destinations may be any telephone DN, a pilot number for Hunting, another Pilot DN, an Attendant Group, a Paging Group, or Voice Mail. Calls being held on the Pilot DN using the OAI link can specify any of the 15 music sources that are possible on the IP*edge*.

The system currently supports two CSTA applications. This includes ACD/Call Center Reporting and the PC-based Attendant Console. Call Manager, previously described in the Desktop OAI section above, is an excellent companion application for ACD applications.

J. Voice Over Internet Protocol (VoIP)

In addition to SIP Trunks discussed in the "System Interfaces" section, the proposed business telephone system must support remote user applications that support employees working off-site or at home with the same feature/function capabilities as if they were locally connected extensions in the telephone system.

1. IP Telephone Local Users

Describe how local IP telephones are connected to the Local Area Network (LAN) and the proposed telephone system. Describe the additional hardware/software options required to support these locally connected IP telephones.

Toshiba IP telephones are connected locally to the LAN via standard RJ45 Ethernet jack and 10BaseT/100BaseTX cable supplied with the telephone. The IP telephones operate on the network at10/100 Mbps and can be connected to a fast switch hub, router, LAN, WAN, etc. These IP telephones interface to the IP*edge* through Ethernet connection to the IP network.

Each Toshiba IP telephone has a second RJ45 Ethernet jack specifically for connection of a PC to the same IP channel. Some IP telephone models have Gigabit Ethernet PC connection and some have a 10/100 connection. This enables the connected PC to pass data at either 1GB or 10/100 speed simultaneously while the phone uses less bandwidth. An IP telephone typically uses about 80k for a voice call, only a fraction of its 10/100 throughput capability.

2. IP Telephone Remote Users

Describe how remote IP telephones are connected to the Wide Area Network (WAN) and the proposed telephone system. Describe the additional hardware/software options, if any, required to support these remotely connected IP telephones.

Toshiba IP telephones extend the functionality of the IP*edge* system to remote locations supported over an IP network. This allows users to take advantage of the features and capabilities of the IP*edge* from remote locations, such as home or regional offices. The remote IP telephones interface to the IP*edge* through the IP network and provide the same functionality as locally connected IP telephones.

To connect a remote IP telephone or SoftIPT soft phone to an IP*edge* node, either of the following mechanisms can be used:

- **Media Relay Server (MRS)** – Within the Firewall and the NAT router at the main office, the following ports need to be opened and forwarded; in order for the remote IPT to communicate to the IP*edge* system:
    - H.225 – UDP (1718 ?1719)
    - Megaco – TCP 2944
    - Media Relay Server – UDP port range (21000 - 22999)
    - FTP, FTP Data – TCP ports (20-21)

- **IPSec VPN** – An IPSec VPN session needs to be setup between the remote location and the main office. In case of a SoftIPT the IPSec VPN connection is established by a soft VPN client back to the main office.

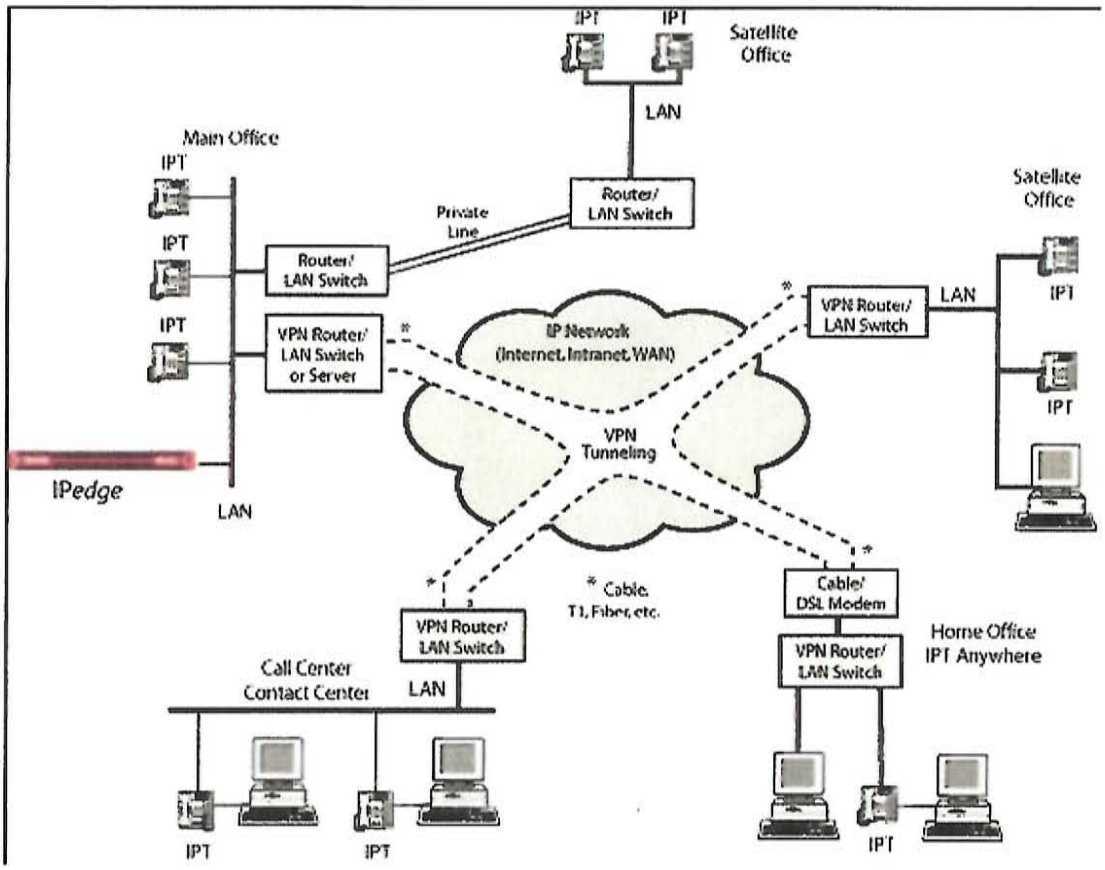
Toshiba IPT Anywhere enables you to connect IP telephones remotely through the Internet and use all telephone system features (except Speaker OCA). IP telephone remote connections can be set with or without the use of Virtual Private Network (VPN). VPN connections provide increased security and are recommended for permanent type IP telephone remote connections. When moving IP telephones frequently to different locations (hotels, conferences, etc.), non-VPN connections are more practical.

When using home type xDSL or cable connections, only one or two IPTs may be connected because of xDSL and cable bandwidth limitations. Broadband is required when installing two or more phones at a remote site.

- No VPN, and thus, no security.
- Third party VPN software residing on DHCP gateway server. To connect IP telephones over the Internet, using third party or Microsoft VPN software residing on a DHCP gateway server.
- ATM (IP over ATM virtualization by VC/VP).
- Broadband Ethernet virtualization by Virtual LAN (VLAN).
- IP-VPN (IP-VPN based on Multi-protocol Label Switching (MPLS).
- Private line connection.

For an access line to link the user's location with the access point of the carrier or provider, using a private line, broadband line (xDSL, CATV), or fiber optics is recommended.

The IPT Anywhere feature enables remote IP telephone users working in branch offices or home offices to make full use of the extension features of the IP*edge*. The diagram below shows IPT Anywhere connections using the optional VPN connection.



3. Remote User Setup

Can a remote user install and setup their own IP telephone? What does a remote user need to do to make their IP telephone work?

Remote users can setup their own IP telephones. There are a few items that need to be entered from the IP telephone. If the installer does not perform these operations before the user takes the telephone to the remote location, the user can do it providing they have been given the information by the installer or IT personnel. These include:

- Whether the phone will use a static address or DHCP
- IP address and subnet mask of the telephone
- IP address and subnet mask of the default gateway
- The node ID where the IP*edge* is located (if in a IP*edge* Net multi-system network)
- The telephone ID of the phone (the DN or extension number)

The procedure for this is simple and is outlined in IP*edge* User Guide.

4. Virtual Private Network (VPN)

Is a VPN required to support remote IP telephone communication via the private IP network or the Internet? What is gained or lost by using a VPN? What VPN router is recommended or required?

NAT Traversal allows VoIP calls to take place easily while each telephone device and the telephone system are all safely behind firewalls.

The IP*edge* only requires the use a VPN if a public IP address is not available for its connection. However, a VPN is strongly recommended in all cases because a VPN provides security for the voice connection, and eliminates the possibility of "eavesdropping" by capturing the voice packets. In a Corporate environment, a VPN is always employed for data, and will probably become a standard for voice in the future. VPN/firewall products are ideal for applications requiring a high level of security, performance and features, but still requiring ease-of-use and an affordable price.

Toshiba does not make recommendations on specific makes or models of routers, because we have not tested all of them. However, we have used various routers and they all seem to work fine in creating the necessary VPN. Make sure that the router is capable of establishing the number of VPNs you require for your application. For example, if you have multiple remote workers in different locations, you will need to create multiple VPNs at the host site in order to tunnel to the multiple remote locations. Most manufacturers have models which can create one or more VPNs.

5. Network Address Translation (NAT)

Does the proposed system support NAT for remote IP telephone communication via the private IP network or the Internet? What are the advantages/disadvantages of NAT vs VPN?

NAT Traversal allows VoIP calls to take place easily while each telephone device and the telephone system are all safely behind firewalls. NAT Traversal is supported for remote IP telephone communication within private IP networks in which there is no need for establishing a Virtual Private Network (VPN). However, for security reasons discussed in item 4 above, a VPN is advantageous and recommended.

6. Virtual Local Area Network (VLAN)

Does the proposed system support 802.1Q Virtual Local Area Network (VLAN) capabilities? How is VLAN used in the proposed system?

The IP*edge* supports 802.1Q Virtual Local Area Network (VLAN) technologies. For sites with LANs that have a large number of IP devices, VLANs can be used to separate voice traffic from data traffic on the network virtually rather than physically. VLANs prevent the broadcast and other traffic from one virtual LAN (typically a data LAN) from impairing the performance of equipment on another virtual LAN (for example a VoIP LAN), even though the devices are plugged into the same physical network.

VLAN for the IP telephone, and a PC connected through the telephone's switch port, can each be programmed separately. This provides configuration flexibility of each device.

Also, within VLANs or without VLANs, 802.1P and Diffserv can be used to provide Quality of Service for voice by allowing voice packets to be prioritized over data packets. Note that when using 802.1Q or 802.1P, all network Ethernet switches and routers must be capable of supporting these capabilities.

7. IP Protocols Supported

Which IP protocols does the proposed system use with its IP telephones (MEGACO, MGCP, H.323, SIP, etc.)? What are the advantages/disadvantages?

The IP*edge* uses an industry standard IP communication protocol, RFC3015 Media Gateway Control MEGACO+, to support IP telephones. Toshiba uses the MEGACO+ protocol because it provides better stimulus response that makes the telephone work efficiently over the IP network (LAN or WAN) and enable more comprehensive implementation of features than could be done using other protocols.

IP*edge* systems also support SIP telephones with a reduced feature set for basic user applications. SIP telephones are typically used in wireless applications or areas requiring less expensive desk telephones not requiring extensive feature use, as alternatives to the full level of feature functionality the Toshiba IP telephones provide using the MEGACO+ protocol.

SIP telephones on IP*edge* systems include feature support for Caller ID Number, Message Waiting Indicator, Hold, Transfer, Conference, Redial, Park and Retrieve, and Connect Tone for dialing feature access codes. Feature availability varies by telephone model and some models support multi-line functionality.

Some manufacturers will want to argue which protocol is best to support telephony over IP networks. None of these manufacturers support all the IP protocol standards (MGCP, MEGACO, H.323, and SIP). They will simply argue that whichever one they support is better than the others.

The truth is, the breadth of IP telephone functionality is determined by what the manufacturer does with it, not the protocol format itself. Telephone functionality is what matters, not the IP protocol used to deliver the features.

8. IP Telephone Auto-registration

When either new IP telephones are added to the IP network or existing IP telephones are relocated, does the proposed telephone system provide auto-registration to automatically assign or move the telephone in system programming?

The IPT Anywhere function enables the system to automatically register an IP telephone. DHCP enables a newly added IP telephone to automatically enable it to be

found by the system after the primary directory number is entered into the programming database. Existing IP telephones relocated are automatically registered when re-plugged into the network.

9. Powering IP Telephone Sets over Ethernet LAN

Can IP telephones be powered over Ethernet as an alternative to local AC power for each individual telephone? What equipment is required?

Toshiba IP telephones can be powered locally or over the Ethernet LAN at your option. The IP telephone requires local AC power for operation unless connected to a LAN that has been equipped with a PoE switch to provide telephone power over the LAN.

10. PC Connection to IP Telephones

Can the proposed IP telephones be used as an Ethernet hub/switch for connection of a PC? How is this connected?

A RJ45 Ethernet PC jack is available to connect the Toshiba IP telephone to the user's PC. The IP telephone can operate like a switch, as opposed to a hub, so the telephone can be connected directly to the LAN or Cable/DSL modem, and then a PC can be connected to the telephone PC jack to connect to the LAN through the telephone. This enables both the IP telephone and the PC to share the same Ethernet LAN connection.

Each Toshiba IP telephone has a second RJ45 Ethernet jack specifically for connection of a PC to the same IP channel. Some IP telephone models have Gigabit Ethernet PC connection and some have a 10/100 connection. This enables the connected PC to pass data at either 1GB or 10/100 speed simultaneously while the phone uses less bandwidth. An IP telephone typically uses about 80k for a voice call, only a fraction of its 10/100 throughput capability.

11. Bandwidth Requirements and CODECs

How much bandwidth on the IP network is required for each IP telephone? If multiple choices, what are the advantages/disadvantages? What CODECs are supported? Can the proposed system support the use of multiple CODECs simultaneously? (For example, a call originating and terminating within the same LAN segment uses G.711, while another call that traverses the WAN uses G.729a.)

The customer's network administrator must determine the appropriate level of voice quality they wish to deploy, and the impact of that choice on their network requirements.

Toshiba IP telephones can use G.711 or G.729A CODECs. The CODEC determines the IP telephone voice quality and network bandwidth requirements. The G.711 requires the most bandwidth, but provides the best voice quality. The G.729a requires less bandwidth, but provides less voice quality.

The IP*edge* supports software selectable variable interval compression timing. The following ranges (high and low) are conservative estimates, as bandwidth consumption can be impacted by many factors. The lower number is the voice requirement per channel (single direction), and the higher number adds bandwidth for header and control information plus a 25% margin to account for data traffic on the network:

- G.729A compression at 80 ms intervals requires 14-22 kbps
- G.729A compression at 40 ms intervals requires 20-29 kbps
- G.711 compression at 40 ms intervals requires 76-99 kbps
- G.711 compression at 20 ms intervals requires 88-115 kbps

The desired CODEC is selectable for each IP telephone individually in system programming. This ability to simultaneously support the use of multiple CODECs provides complete flexibility.

12. Quality of Service (QOS)

Discuss how quality of service is handled in the proposed system. What QOS protocols/standards does the proposed system support?

In any telephone system, deploying many IP telephones on a data LAN can have some unexpected pitfalls if the network does not have the bandwidth and speed required to handle VoIP traffic. To prevent delay, jitter, and data loss for VoIP traffic and retain the performance of your other business-critical network applications a Network Voice Readiness Assessment must be completed before installing VoIP.

IP*edge* provides a number of adjustable tuning parameters dealing with the sharing of network resources, collectively referred to as Quality of Service (QoS). These voice quality adjustable parameters in the system enable you to set QoS to levels you choose.

The system supports TOS (Type of Service), 802.1p, and Diffserve (Differentiated Services) QOS protocols. The following system-wide parameters can be set in the system.

- Software selectable G.711 or G.729A codecs with variable interval timing.
- Type of Service (TOS) precedence, delay, throughput, and reliability types can be individually selected.
- Differentiated Services (Diffserv) can be enabled.

IP Telephone Group Parameters (256 groups) are provided.

- Voice Packet Transmission Interval
- Jitter buffer type
- Jitter buffer length
- Maximum acceptable delay

- Packet loss threshold
- IEEE802.1p

Priority Control can be enabled system wide. Priority control provides a framework in which voice traffic flowing on an IP network is given priority for processing. The system supports IEEE802.1p and Differentiated Services "Diffserv" priority control protocols- selectable. In order to have priority control processing work accurately, network equipment (router, switch, etc.) must support this function and appropriate service must be ordered from the ISP provider or carrier.

QoS Measurement of the following IPT parameters can be done using Enterprise Manager.

- Packets (sent/received)
- Delay (msec.)
- Jitter (msec.)
- Loss (%)

13. VoIP Network Readiness Assessment

Describe any network readiness assessment required or recommended to make sure our network will handle the addition of voice traffic over the IP data network. Do you provide this service? If not, who does?

In any telephone system, deploying many IP telephones on a data LAN can have some unexpected pitfalls if the network does not have the bandwidth and speed required to handle VoIP traffic. Voice over Internet Protocol (VoIP) can also be affected by numerous factors related to network structure and design. To prevent delay, jitter, and voice data packet loss for VoIP traffic, achieve optimum VoIP traffic performance, and retain the performance of your other business-critical network applications, a Network Voice Readiness Assessment must be completed before installing VoIP.

Toshiba highly recommends that the installing dealer assess the existing network for proper handling of voice traffic and make sure it provides the required bandwidth per the number of deployed VoIP instruments.

14. IP Interoperability Standards

Indicate in the chart below the IP interoperability standards supported by the proposed telephone system.

	Interoperability Standard:	Support: Yes/No?	Comments or Explanation: (Partial, Future, etc.)
1.	802.11b	Yes	
2.	802.1d	No	
3.	802.1p	Yes	
4.	802.1q	No	
5.	802.3	Yes	
6.	802.3af	Yes	
7.	CBWFQ	N/A	This is a function pertaining to LAN network eqpt.
8.	Committed Access Rate	N/A	This is a function pertaining to LAN network eqpt.
9.	CRTP	N/A	This is a function pertaining to LAN network eqpt.
10.	DCL	N/A	This is a function pertaining to LAN network eqpt.
11.	DHCP	Yes	
12.	DiffServ	Yes	
13.	DNS	N/A	This is a function pertaining to LAN network eqpt.
14.	FAX - Group 3	Yes	
15.	FAX - Group 4	Yes	
16.	G.711	Yes	G.711 μ-law and a-law
17.	G.723.1	No	
18.	G.726	No	
19.	G.728	No	
20.	G.729	Yes	G.729 μ-law and a-law
21.	G.729a	Yes	G.729a μ-law and a-law
22.	H.225	Yes	
23.	H.245	No	
24.	H.323	Yes	
25.	IP Precedence	Yes	Call Manager
26.	Ipv6	No	
27.	MEGACO	Yes	MEGACO+ enhanced version
28.	MGCP	No	
29.	Policy Based Routing	N/A	This is a function pertaining to LAN network eqpt.
30.	PQWFQ	N/A	This is a function pertaining to LAN network eqpt.
31.	Q.931	Yes	
32.	Q.SIG	Yes	
33.	RED	N/A	This is a function pertaining to LAN network eqpt.
34.	RSVP	N/A	This is a router protocol.
35.	RTCP	Yes	
36.	RTP	Yes	
37.	RTSP	N/A	This is a function pertaining to LAN network eqpt.
38.	SCCP	No	
39.	SIP	Yes	Various Polycom and Motorola SIP telephones

40.	SNMP	Yes	
41.	T.120	No	
42.	T.37	Yes	
43.	T.38	Yes	
44.	TAPI	Yes	
45.	TFTP		
46.	TCP/IP	Yes	
47.	UDP/IP	Yes	
48.	Weighted Fair Queuing	N/A	This is a function pertaining to LAN network eqpt.
49.	Weighted RED	N/A	This is a function pertaining to LAN network eqpt.

K. System Features

1. Account Codes

Describe the use of account codes on a voluntary, forced, and forced & verified basis for the proposed system. Indicate the maximum number of digits and the minimum number of digits. Where in the dialing sequence is the code input? Discuss account codes as they relate to SMDR or call accounting.

Account Codes provide a method of tracing and categorizing trunk line calls on the Station Message Detail Recording (SMDR) report. They may even be used to temporarily change a restricted telephone's class of service to allow long distance calling after an Account Code is entered. Account Codes may be required before dialing calls (Forced) or can be optionally entered during calls (Voluntary). Account Codes can be as long as 15 digits and can be verified or non-verified. If a printer is connected to the system, a record of each Account Code will be printed out on the SMDR report.

Note: The 911 emergency number and two other optional customer-designated numbers (up to four digits long) can be assigned to bypass Forced Verified Account Code requirements.

An Account Code button can be programmed on a Toshiba IP telephone. It enables the telephone user to enter Voluntary Account Codes (verified or non-verified), during conversations without interrupting the talk path. It can also be used to enter Verified Account Codes to allow normally restricted telephones to dial long distance calls.

2. Contact Center and Automatic Call Distribution (ACD)

Provide a brief overview of Contact Center capabilities. Discuss ACD functional routing capabilities, historical reporting capabilities, multi-media contact functionality, and what options are available. Describe any additional equipment or software required to support these capabilities.

Automatic Call Distribution (ACD) is an Optional software. The optional software runs both the ACD call processing application and the call center reporting application.

The ACD application is available in basic and enhanced feature functionality, along with the number of groups and active agent size increments to provide cost-effective pricing levels according to the user's needs. Enhanced ACD includes all basic capabilities plus multiple group login, skills-based routing, priority queuing, time scheduled ACD queues, agent and call priority escalation handling, balanced call count agent search, and intelligent announcements.

Telephones in the IP*edge* system can be arranged in ACD groups. Such an arrangement allows incoming calls over a trunk line to be distributed among a group of ACD agents. This is ideal in a situation where several staff members receive the same types of calls, since calls can be automatically distributed among the members.

Incoming calls that are not directly connected to agents wait in queue for the first available agent in the called group. While waiting, callers hear programmed announcements and music at certain intervals to encourage them to remain on hold. When the number of ACD calls waiting in queue reaches a predetermined threshold, calls can overflow to another ACD group or destination.

The ACD feature also allows supervisory telephones to offer call assistance to ACD agents, and to monitor agent calls. The Supervisor's LCD telephone will display ACD Group status, Agent's status (available/unavailable, on an ACD call, etc.) and the ACD Call Status (the number of calls in queue, longest call in queue, etc.).

Network ACD is also optional software for applications to enhance multi-site contact centers enabling them to work together as one integrated call routing system. Network ACD enables contact centers to distribute agents over the network and route calls to available agents on any IP*edge* system on the network.

Network ACD provides look ahead routing to check the status of agents in other nodes before it routes the call to those agents. The call center reports include agents and calls over the network. It also extends the functionality of Call Manager over the network to support features such s Network DSS/BLF and/or Chat between users in multiple nodes.

Multimedia Web Callback and Web Chat capabilities is also optional software that provide web site visitors with the option to contact the contact center through the Internet. ACD uses web callback in which the user initiates the callback request from the web site, and ACD automatically calls the user's phone number specified when an available agent becomes available. Web chat enables customers to initiate an instant messaging chat session with a contact center agent. These multimedia web applications can provide better service to customers by adding other methods to access the contact center and reduce call center hold times and operations cost.

Uniform Call Distribution (UCD) is a standard feature of the IP*edge*. The built-in UCD standard feature is ideal for simple call processing applications not justifying the cost or sophistication of the optional ACD and reporting capabilities available with IP*edge* systems.

* UCD functionality provides call flow to distribute calls more efficiently through a call center. UCD enables calls to be answered by the auto attendant, which prompts the caller to dial the correct UCD group number. The call is then sent to the UCD agent or queue, but never to a busy number.
* Calls sent to agents are managed by distributed hunt to find the next available agent.
* Callers in queue can receive music and announcements imbedded in one of the systems music-on-hold sources, and each UCD group can share or have a separate music source.
* Overflow timing is controlled by a unique overflow timer for each UCD group.
* Agent log-in and log-out buttons make it easy for agents to sign in and out of the system so that calls can be routed appropriately..

3. Automatic Off-hook Line Selection

Can telephones automatically select a specific line, line group, or directory number when the handset is lifted or the speaker button is depressed? Is it programmable by individual telephone?

An IP telephone can be programmed to automatically access an outside line, line group, internal Directory Number line, or any combination of the three, whenever the handset is lifted or the speaker button is pressed. Each telephone can be individually programmed to suit the preferences of each telephone user.

4. Automatic Station Relocation

Can a telephone be easily relocated within the proposed system by the system administrator without reprogramming? Specify which features and characteristics are retained and lost in the move.

Telephone relocation is automatic using IP telephones. Simply unplug from one jack and plug into another and the telephone is reconnected and identified within the network with no additional programming or administration. All telephone button assignments, directory numbers (DNs), and attributes are automatically moved with the telephone.

5. Automatic Number Identification (ANI)

Does the proposed system support Automatic Number Identification, to display the caller's telephone number on the telephone LCD? Will it send the ANI digits to an attached computer or voicemail system? What type trunks are required for ANI? Can ANI digits be received simultaneously with Dialed Number Identification Service (DNIS) called number digits? Does the system capture call history for both abandoned (unanswered) and answered calls for later viewing or speed dialing? What additional equipment is required to support these ANI capabilities?

The telephone number of the calling party can be displayed on the Liquid Crystal Display (LCD) of a ringing telephone and attendant console display, and/or sent to an application computer or to voice mail. The information will be displayed on direct, incoming, transferred, and Call Forwarded calls. The system supports ANI on analog (DID and tie) or digital (T1) lines and provides helpful call identification information to answering parties.

Normally ANI is associated with "1-800" type calls offered by various long distance carriers through T1 facilities. However, the system also provides ANI information received over analog DID and tie line circuits.

ANI digits can be received independently or simultaneously with Dialed Number Identification Service (DNIS) called number digits. When received with DNIS digits, calls can be routed to unique destinations for each DNIS number. If ANI is received without DNIS, all ANI calls ring the same selected destination. When ANI calls are received with or without DNIS, calls can be routed to a unique destination for each system ringing mode (Day, Day 2, Night).

For computer applications, ANI, Caller ID number/names and/or DNIS digits can be sent to an individual PC connected via a PC Interface Unit (BPCI). This allows users to receive pop-up screens on their PC that provide information regarding the calling/called party before answering and during the call.

Caller ID/ANI call history is provided. Incoming calls with ANI information may be optionally recorded into a rolling list for the telephone where the call is ringing. The call is placed in the list along with the number, name (if provided), time and date of the call, and status of the call (answered, abandoned, or redirected).

- This list is accessible by the user and any call may be selected and redialed.
- IP telephones are assigned memory for creating the Call History list, up to 100 call records, and up to a total of 2,000 per system.

6. Caller ID

Does Caller ID display name, number, or both? Is Caller ID supported on both analog and digital trunk lines? Is Caller ID supported on IP telephones and analog telephones? Does the system capture call history for both abandoned (unanswered) and answered calls for later viewing or speed dialing? If a second call rings while on the first call, can the Caller ID display the second call information? Describe the hardware and software requirements, if any, to add Caller ID to the proposed system.

The system supports Caller ID and displays the name, if sent by the local central office, or telephone number of the caller. While the call is ringing, the telephone user can toggle between the name display and number display at the press of a button, but the name and number cannot both be displayed at the same time.

The telephone number or name of the calling party can be displayed on the ringing telephone's Liquid Crystal Display (LCD), the attendant console display, and/or sent to an application computer or voice mail. The information displays on direct, incoming, transferred, and Call Forwarded calls.

Caller ID is similar to Automatic Number Identification (ANI) except that Caller ID is a feature offered by local central offices on ground or loop start lines whereas ANI is delivered by long distance providers.

These Caller ID capabilities work using Toshiba IP telephones. Caller ID can also be provided to analog telephones through an analog FXS gateway connected to the system.

Caller ID can be provided on digital ISDN lines. Both Caller ID name, if available from service provider, and number are supported for incoming calls using PRI lines.

Caller ID can be provided on analog lines through an analog FXO gateway connected to the system.

Caller ID call history is provided. Incoming calls with Caller ID or Automatic Number Identification (ANI) information may be optionally recorded into a rolling list for the telephone where the call is ringing. The call is placed in the list along with the number, name (if provided), time and date of the call, and status of the call (answered, abandoned, or redirected).

- This list is accessible by the user and any call may be selected and redialed.
- Toshiba IP telephones are assigned memory for creating the Call History list, up to 100 call records, and up to a total of 2,000 per system.

When a telephone is busy with a call and another call is being received, a tone will be given to alert the caller of this pending call. On LCD telephones, the Caller ID information will also be displayed for 10 seconds to notify the caller who is calling. This combines both the convenience of alerting for calls waiting and the convenience of displaying the Caller ID information to identify if the call is important before interrupting the existing call.

- Multiple calls can be queued to a single telephone waiting for that telephone to become free, only the next waiting call will provide the Call Waiting signal. The other calls can wait in queue and a Call Waiting signal is given once they reach the head of the queue.
- This feature works with both IP and analog single-line telephones. The tone (two beeps) signaling Call Waiting is provided through the speaker by the IP telephone. For analog telephones, the tone is inserted into the speech path.

7. Dialed Number Identification Service (DNIS)

Does the proposed system support DNIS? Are DNIS digits passed through the system as calls are transferred or forwarded? Is DNIS routing sensitive to day/night modes? Can DNIS route calls outside the system? Can DNIS digits be received simultaneously with ANI digits? What additional equipment, if any, is required to support DNIS?

Incoming DNIS (called party) telephone numbers can be correlated in the system database with assigned DNIS names which will display on ringing telephone Liquid Crystal Display (LCD) and the attendant console display. DNIS names will display on direct incoming, transferred, and Call Forward calls. This allows incoming calls to be identified and appropriately answered. Each DNIS name can be up to 16 alphanumeric characters. DNIS digits can also be sent to an attached application PC or voice mail system.

The system supports DNIS on analog or digital (T1/PRI) lines. Normally DNIS is associated with "1-800" type calls offered by various long distance carriers. DNIS allows multiple numbers to ring into the same line or line group, providing a much more efficient usage of lines than the traditional usage of 800-numbers. Traditionally, each 800-number is assigned to its own line group, often resulting in a large number of under-used lines. DNIS solves this problem by using each DNIS line on an as-needed basis for different 800-number calls.

DNIS numbers can be assigned to ring a number of destinations. DNIS numbers can be assigned to ring a unique destination in the Day, Day2, and Night Ring modes.

External Telephone Network Numbers: All DNIS numbers that ring into the system can be routed externally to any outside telephone number. Depending on the application, the caller DNIS name may be passed to the destination system when routed over the telephone network.

Voice Mail: If assigned in the system database, incoming calls for each unique DNIS number can be directly routed or Call Forwarded to a designated voice mailbox. This allows callers of each DNIS number to receive immediate personal custom greetings.

The DNIS (called number) digits can be received independently or simultaneously with Automatic Number Identification (ANI) "calling number" digits.

8. Background Music and Music On Hold

What type of music interface is provided or available with the proposed system? Is additional equipment required? Are there separate interfaces for background music and music on hold? How many music source interfaces are supported on the proposed system? Can individual telephones turn on/off background music playing over telephone set speakers? Can they turn it on/off over external page speakers? Do they have volume control?

Classical music WAV files are already stored on the IP*edge* hard drive to provide music to user's on-hold on trunk lines or on directory numbers. The IP*edge* can provide interface for up to 15 separate music on hold sources.

Private Background Music via WAV files can be created by the City of Fraser and played through the telephone on hold program. The Background Music can be applied in a flexible manner. One music source can feed both types of speakers, or both types

can have their own separate source. The source used for Music-on-hold can also be played to telephone speakers for Background Music or an alternate BGM music source can played so callers on-hold have a separate music/announcement.

IP telephone users can control Background Music (BGM) playing over their telephone speakers. Only a designated telephone can control BGM over External Page speakers. Besides being able to turn the music on or off, telephone users can also adjust the volume level. Background music can use a separate music source than music on hold.

9. Barge-in/Executive Override

Does the proposed telephone have the capability of monitoring another telephone engaged in a telephone conversation? Is the barge-in tone detected? By both parties? Describe how barge-in would be controlled by class of service. Can the barge-in tone be activated or deactivated?

Telephones with the Executive Override feature programmed can enter any conversation in the system by dialing an access code or pressing a Feature Prompting Soft Key. An optional warning tone notifies all conversing parties that an additional party is about to conference into their conversation. Executive Override can be blocked selectively to any telephone in system programming to provide security for modem (data) calls, voice mail calls, Fax machine calls, etc.

10. Busy Override Tone

Can a telephone that calls a busy telephone, override a busy signal with a tone burst, indicating a call is waiting?

The Busy Override feature enables a telephone user to send tone bursts to a busy telephone by dialing a 1 or pressing a feature button. The tone burst can either be sent two times (four seconds apart) or repeated continuously every four seconds.

Both IP and analog telephones can receive this tone. The Toshiba IP telephone users can adjust their telephones to receive the tone over their handset or headset receiver as well as the speaker. Analog telephones will receive the tone from the handset receiver.

11. Busy Telephone Transfer Ringing

Can a busy telephone optionally provide ringing to an incoming or transferred call when the telephone is busy on an existing call? The desire is to use this feature in lieu of camp-on at some telephones, and the concern is to not send a busy tone and transfer the call back to the auto attendant or voice mail from which it just came.

The Busy Telephone Transfer and Busy Telephone Ringing features operate together to ensure that a busy IP telephone always receives transferred calls along with distinct LED and tone indications. A typical application is when an Auto Attendant device transfers calls frequently to a busy answering position telephone.

12. Call Duration Display

Does the LCD display of the proposed telephone display the amount of time the call has been in progress? Is it updated on a real-time basis on the display? Can call duration display be turned on/off while on a call?

When an LCD telephone user is on an outgoing or incoming trunk line call, the LCD displays the elapsed time of the call. Is it updated on a real-time basis on the display. Call duration may be toggled with time and date display via the Page button when not in feature prompting Soft Key mode.

13. Call Forward

Describe the call forward options available from the telephone. Include the options of All Calls, Busy, No Answer, Busy No Answer, Fixed, System-wide default, External, Follow-me, etc. Can the call forward external destination be changed remotely by the user? Can call forward be overridden?

Outside Line and internal Directory Number calls to telephones in the Call Forwarding mode are routed to an alternate telephone or voice mail device. Telephones in call forwarding mode can originate calls as usual. Call forwarding can be set by a feature button or access code. LCD telephones display the Directory Number that is set to Call Forward and the destination.

There are several Call Forwarding modes available:

* **All Calls:** All calls to a busy or idle telephone with this mode will forward immediately, and the v will not ring.
* **Busy:** When this mode is set, All calls to a busy or Do Not Disturb (DND) telephone will immediately forward. When a telephone is not in the DND mode and has an idle Primary DN, incoming calls will ring normally. If a telephone has an idle Primary DN, but is busy on a DN or trunk line call, calls to the Primary DN will not forward. If all the telephone's Primary DNs are in use, then calls to the Primary DN will forward.
* **No Answer:** Calls to an idle telephone set with this mode will ring for 8 to 60 seconds and then forward. The Ring No Answer time (8 to 60 seconds) can be set by the telephone user. Call Forward No Answer is optional on Hands-free Answerback or Off-Hook Call Announce (OCA) calls.
* **Busy/No Answer:** When a telephone is idle and in this mode, calls to it will ring for 8 to 60 seconds and then forward. The ring no answer time can be set by the telephone user. When all the telephone's Primary DNs are busy or when the telephone is in the DND mode, incoming calls will forward immediately. If the telephone is busy on a call but has an idle Primary DN, calls will mute-ring the idle Primary DN until the Call Forward No Answer timer expires and then the call will forward.
* **Fixed:** Calls to an idle or busy IP telephone in this mode will forward immediately to a Primary DN assigned in system programming.

* **External with Remote Change:** Users can set their telephones so that incoming calls via private lines or DID lines can be forwarded to numbers outside the IP*edge* system. They can later cancel or change the forwarding destination, either remotely or from their telephone, such as to another outside number or on their internal voice mailbox. Internal and transferred calls will not call forward externally, but will forward internally if another Call Forward mode is set with CF-external.
* **Follow-me:** Incoming calls to your number route to your desk telephone, then cell phone, etc. until it finds you. If you don't answer, at any of the programmed destinations, your office voicemail takes the message. The intelligent routing to any destination and only having one voicemail to check is what provides the efficiency and value.

Note: Call Forwarding can be set for Primary Directory Numbers and Phantom Directory Numbers individually, with the exception of Call Forward External and fixed Call Forward which applies only to Primary DNs.

In addition to the above call forwarding modes available, there is also a programmable system-wide default available to forward unanswered calls to voice mail or some pre-determined destination. This applies to telephone users that do not have any type of call forwarding set on their telephone. This ensures efficient call handling and better service to callers even when telephone users do not have forwarding set at their telephone. Call Forwarding can be set up by department, special mailbox or destination with the use of Phantom Directory Numbers (PhDNs). Using PhDNs, Call Forwarding can be set up by department, special mailbox or destination.

14. Call Pickup

Can a telephone pickup calls ringing at other telephones? Can a telephone pickup calls ringing at other telephones when the telephone number is unknown? How many telephone pickup groups are available? How many trunk line pickup groups are available? Is a telephone capable of picking up calls from hold, park, and the paging system?

Calls placed on hold or parked by a telephone can be picked up selectively by another telephone by pressing a feature button or dialing an access code. Any telephone can pick up the following type of calls:

* Calls on hold at other telephones (Directed Call Pick-up).
* Calls ringing at other telephones, either all lines or designated lines (CO Trunk Line Call Pickup Groups).
* External or Telephone Group Page.
* CO trunk line ringing during the Night mode over External Page or night bell.
* Door phone calls.
* Incoming Trunk Line calls.
* Parked Calls.
* Any ringing line or designated Tenant Group lines.

Up to 32 Telephone Call Pickup groups can be created to enable telephone users to pickup calls ringing at other telephones with the touch of a Pickup button or by dialing an access code. Telephone users can pickup a call that is ringing or transferred to any telephone in their own group with a single access code or feature button, and can pickup calls ringing telephones in other groups with selected codes. Any telephone can be in all of the different pickup groups.

15. Call Transfer Options

Can calls be transferred either immediately, without waiting for the destination party to answer, or after announcing the call to the answering party? Will a transferred call recall to the transferring telephone if the destination does not answer within a programmable amount of time?

Any trunk line or internal call can be transferred to any telephone DN. A telephone does not need a specific trunk line's appearance in order to transfer or answer the call. Calls can be transferred with or without announcement to the destination telephone.

Calls can transfer immediately after the final digit of the destination is dialed. If the called telephone is not available or is busy, the call will automatically camp-on to it. This feature is an aid for telephones that process a large number of calls with no time to wait for transferred calls to be answered by the destination telephone.

Trunk line calls that are transferred (internal or over tie lines) will recall to the transferring telephone if the called telephone does not answer within the programmable recall time.

16. Camp-on

Does the telephone user have the ability to send transferred calls to a busy or idle telephone? If the recipient's telephone is busy can the telephone user be sent a ringing tone or camp-on tone? Can the frequency that the camp-on tone is heard be programmed? Can calls to either idle or busy telephone s recall after a preprogrammed number of seconds?

A telephone user can transfer a trunk line or internal call to a busy telephone, which will receive an alert tone indicating that a call is camped-on. If the busy telephone fails to answer, the camped-on call will recall the telephone that transferred it after a programmed amount of time.

17. CO Trunk Line Identification

Can individual trunk lines be assigned an alphanumeric identifier that displays at the telephone where the call is ringing? How many characters long can the identifier be? How does work in conjunction with ANI or DNIS display?

Each trunk line can be identified by a 16-character name. When a telephone user with an LCD telephone selects a trunk line or receives a trunk line call, the name of the trunk line will be displayed instead of the trunk line number. Names are assigned to the trunk

lines in system programming. DNIS and ANI displays have priority over trunk line ID displays.

18. CO Line/Trunk Groups

How many CO line or trunk groups are supported on the proposed system? How are they accessed? Can individual line appearances be programmed on buttons on the telephone for easy trunk line access?

Up to 220 trunk line groups are provided by the IP*edge*. For easy access, various types of outside lines can be assigned to groups (normally for pooled line and Least Cost Routing applications). All local lines, for example, can be assigned to one group and WATS lines in another group. Telephone users access line groups by dialing an access code or by pressing a feature button programmed with access to either trunk groups or individual trunk lines.

19. Conference

A minimum of 8-party conferencing capabilities must be built into the system, with at least 6 parties being external. How many internal and external parties can be on a conference in the proposed system? How many simultaneous conferences can occur? Can voicemail be included in a conference call to play messages for another party? Can a conference call be split between two outside callers to speak to them separately, and switch between them? Is meet-me conference scheduling available? Is web collaboration an option? Is video conferencing an option?

A variety of conferencing combinations are available to all telephone users. Telephones and outside lines can be added in any order. A conference can have up to eight parties, with a maximum of six outside lines in the standard IP*edge* software.

The maximum simultaneous conference calls that can be in progress at one time are shown in the table below.

Feature	IP*edge*
Conference Circuits	128
3-party Simultaneous Conferences*	40
8-party Simultaneous Conferences*	16

* Conference circuits are used dynamically, so the maximum number of simultaneous conferences is affected by the number of conference members in each conference. The total number of members in simultaneous conferences cannot exceed the total number of conference circuits. Each conference can have up to eight members.

The Voicemail Control During Conference Call feature enables Toshiba IP telephones to transmit DTMF tones during trunk line conference calls. The basic application of this feature is to allow a user to call voice mail during a conference call and play messages to all parties in the conference. The DTMF tones can be sent from any telephone in the conference. When DTMF tones are sent, all parties in the conference (trunk lines and telephones) receive the tones.

The Split feature provides flexibility in establishing and maintaining conference calls. It allows private conversations out of the hearing of the remaining conferees. Split separates a conference call into Source and Destination parties and allows the controlling telephone to speak to either separately. The caller can switch back and forth between parties indefinitely. The conference call can be either a three-party or multi-party conference.

20. Trunk-to-Trunk Connections

Does the proposed system support trunk-to-trunk connections that are left joined from a conference? How does this work? How many such connections can be simultaneously supported on the system? Can analog telephones and voicemail/auto attendant ports also set up trunk-to-trunk conferences?

This feature on the IP*edge* system allows up to 20 unattended CO trunk line-to-line connections, freeing the originating telephone for other calls and important tasks. When a tandem connection is set up with a directory number button only, the directory number button must appear on the originating telephone. When a tandem connection is set up with CO Trunk Line buttons, the originating telephone must have both CO Trunk Line or Pooled Line Group button appearances to allow tandem operation.

Analog telephones and voicemail/auto attendant ports can also setup a conference with two trunk lines and then drop out of the conference leaving the two trunk lines connected. The telephone that sets up the two-line connection can re-connect to the Tandem connection by dialing a pickup code. If more than one Tandem connection is setup by a telephone, the pickup code will re-connect that telephone to the Tandem connection that has the lowest trunk line number as a priority. The pickup code function applies only to the telephone that sets up the Tandem connection. A telephone cannot pickup a Tandem connection which was setup by another telephone.

21. Credit Card Calling

Does the proposed system allow "0+" dialing to bypass toll restriction for credit card calls? What safeguards are built into the system to help prevent this feature from being used to circumvent toll restriction?

Callers can make credit card calls (0 + telephone number + credit card number) that bypass Toll Restriction. The calls are billed to the credit card, not to the IP*edge* trunk line. The system requires that a specific quantity of digits be dialed. Otherwise, the call will be dropped within 20 seconds to prevent operator-placed calls that would be billed to the system's trunk line.

22. Delayed Ringing

Describe the delayed ring assignments that can be programmed into the system to enable calls unanswered at a telephone to ring at other telephones at a later time.

If an incoming trunk or internal [DN] call rings a telephone [DN] and is unanswered, alternate telephones can be programmed to ring at a later time. A separate delayed ring time can be set for each trunk line group. The telephones that were ringing initially will continue to ring after the Delayed Ringing begins. This feature is assigned for each line or [DN] button independently for each IP telephone.

You can also assign Delayed Ringing to voice mail and auto attendants. This feature can also be used to ring multiple (25 max.) telephones immediately or with a delay to voice mail, auto attendant and/or standard telephones by dialing a group pilot number. Each group member can have Immediate, Delayed Ring 1 or Delayed Ring 2. Delayed Ring times are adjustable (1~180 seconds) for each Multiple Call Group.

23. Direct Inward System Access (DISA)

Indicate whether the proposed system provides DISA. Specify the maximum number of digits that can be used to password protect DISA. Can the DISA port be turned off in software?

Outside callers using a Dual-tone Multi-frequency (DTMF) capable telephone can dial internal telephones or outgoing lines directly, without going through a receptionist or operator. A DISA security code and/or a verified account code, each up to 15 digits, can be assigned to prevent undesired access to lines. DISA is available to any number of lines, either directly or through an auto attendant. It enables privileged users to take advantage of the benefits of the IP*edge* system even when they are not on the premises. DISA capabilities can be turned off in programming.

24. Disconnect Supervision

What type of disconnect supervision does the proposed system provide, if a holding caller hangs up? What type of calls does it work with? Is it programmable by trunk line? What additional software or equipment, if any, is required to use this capability?

With the Automatic Release from Hold feature, if an outside caller on hold hangs up, the system will automatically disconnect the call and free the line for other calls. This feature applies to Direct Inward System Access (DISA), ACD, DNIS and/or ANI external routed calls, auto attendant, and voice mail calls, as well as regular voice calls. Automatic Release from Hold is available on a line-by-line basis and operates only with Central Offices that provide a disconnect (Calling Party Control) signal. No additional software or equipment is required on the IP*edge* system.

25. Distinctive Ringing

Can telephone ringing be different tones for incoming line calls and internal calls. State the number of different telephone ring settings available with the system. Is the ring setting programmable by the user or system administrator or both?

The incoming line ring tone to Toshiba IP telephones is distinct from the internal tone indicating the nature of the call as either incoming line or internal. Users sometimes need to distinguish the ringing of one button on their phone from another button and sometimes telephones in close proximity to one another need to distinguish the calls on

one desk from another. The ring tone of a transferred trunk line call also sounds different than the ring tone of a direct trunk line call on the same telephone. Multiple ringing sounds are used to provide this distinction.

Distinctive ringing can be assigned to each trunk line button or DN button on each telephone. You can set up to ten different incoming ringing tones for internal, as well as external calls.

26. Do Not Disturb

Discuss the proposed telephones use of Do Not Disturb. How are intercom calls treated versus external calls from an inbound and outbound perspective? Is there any additional messaging that can accompany a Do Not Disturb message that intercom callers might see in their display?

Telephone users can activate the Do Not Disturb (DND) feature to prevent any calls from ringing them. Callers will hear a fast busy tone when calling telephones in the DND mode.

Telephones can originate calls while in the DND mode. When they go off-hook to originate calls, they can receive DND stutter dial tone (optional in programming) to remind them they are still in DND mode.

Call Forward-Busy will forward calls directed to a telephone with DND set, even if the telephone has idle [DNs]. Telephones with DND Override capability can ring DND telephones.

27. Do Not Disturb Override

Can Do Not Disturb be overridden? Does class of service or some other method determine which telephones have the do-not-disturb override abilities?

Telephones programmed for DND override can ring other telephones in the DND mode with a tone that indicates that somebody is trying to contact them. This is defined on a per telephone basis in programming.

A override-privileged caller may invoke the DND Override feature after dialing an internal telephone and receiving a DND indication. If that privilege is granted to the calling telephone and the called telephone permits its DND to be overridden, the call will ring on that phone.

28. Door Phones

Does the proposed system interface with door phones? Are the door phones proprietary or third-party products? How do they interface with the system? Can they be located anywhere in the network? Describe the features available from the door phone.

The IP*edge* supports the connection of door phones, which are frequently mounted near a building entrance to help screen visitors. The door phone can also operate as a sound monitor. Telephone users can call the door phone and listen to the surrounding area. It

can also act as a hot line link where, for example, warehouse staff can access a pre-assigned telephone or telephones with a common directory number in an office with the touch of a button on the door phone. Door phones can be assigned to ring Primary and/or Phantom Directory Numbers.

These door phones are third-party products not manufactured by Toshiba.For example, the CyberData SIP Door Phone provides SIP-based, two-way, voice and door control, full-duplex voice operation, network adjustable speaker volume and microphone sensitivity. It is useful for two-way communications or as a paging speaker. It operates over a local area network (LAN), supports Power-over-Ethernet (PoE) 802.3af, and is ideal for remote location anywhere on the network.

29. Door Lock Control

Does the proposed system interface with electronic door lock devices to provide remote unlock functions? Can a button be programmed on a telephone to remotely unlock the door at the press of a single button? What additional system equipment is required for this capability?

IP telephone users can unlock a customer-supplied electronic door lock at the touch of a programmable button on their telephone or by dialing a code on an analog telephone.

Additional interface equipment is required. The IP*edge* does not have relays, so this function must be provided by a trunk gateway connected to the system.

30. DSS Buttons with Busy Lamp Field

Are buttons available on the proposed telephones that give auto dialing to other telephones within the system? Do DSS buttons have an LED that can indicate telephone busy/idle status? How many buttons on a telephone can be programmed for "DSS/BLF"?

IP telephone users can ring selected telephones by pressing a flexible feature button assigned for a DSS function. The LED associated with the button provides the busy status of the telephone. Each flexible button can be assigned as a DSS/BLF button to a different telephone, so up to either 10 or 20 buttons on a IP telephone can be assigned for DSS, depending upon the model.

For answering applications requiring more, DSS/BLF buttons can also be assigned to IP telephone Add-on Modules. For answering positions requiring many DSS/BLF buttons a 60-button DSS Console is available.

31. Enhanced 911 Operation

Does the proposed system support Enhanced 911 operation to provide locator information to Public Safety 911 Agencies? How does this work? What additional equipment is required?

IP*edge* systems support enhanced 911 (E911) locator services, sending the DN locator information of the telephone dialing 911 to the Public Safety Answering Point (PSAP) so that the dispatcher can determine the exact location (building, floor, office number, etc.) from which the call is originating. This locator information is then cross referenced

with name/number/address data in the E911 central database, and the E911 operator receives precise location along with the basic information.

The system enables emergency 911 calls to be delivered over ISDN PRI trunks. In the ISDN call setup for both cases, the Called Party Information will be "911" and the Calling Party Information will be CESID. .

32. Flexible Button Assignment

Discuss how features are assigned to programmable buttons on the telephone. Can most, if not all, features be assigned under feature buttons? Which features, if any, cannot be assigned under a feature button? Can individual users program their own feature buttons on their telephone?

Each of the flexible buttons on IP telephones can be assigned for feature, directory number, or trunk line access, enabling telephone users access to features and lines with the touch of a button. Telephones are available in 10 and 20-button models. Add-on Modules and DSS/BLF Consoles can be added to telephones to provide additional 10, 20, or 60 additional buttons.

Button assignments are done in system programming at the time the system is installed or when new telephones are added. In addition, individual telephone users can program buttons on their telephone. All flexible button functions can be assigned by the user with the exception of CO Trunk Line buttons. However, parameters on Line buttons may be changed such as Ring Tone and Voice or Tone First.

33. Feature Sequence Buttons

Does the proposed system allow telephone set buttons to be programmed to perform a sequence of operation like a "macro key" on a computer? What type of features, numbers, digit length, etc. can be programmed on these buttons? Are they user programmable?

IP telephone users can program their own flexible buttons to perform sequences of operation at the press of one button. This is done by enabling the speed dial function to dial features as well as extension numbers or outside telephone numbers.

As many as 20 digits can be stored on a button, and fixed feature button functions (such as Directory Number access, Conference/Transfer, and Hold) can be stored. In addition, more than one feature can be linked together under one button. For example, a user can program a button to place the call on hold, access a directory number, and dial a page access code, so with one push of a button, the user is ready to make an announcement.

In addition to being stored on speed dial buttons, feature sequences and numbers can also be stored in speed dial codes.

To prevent a user from bypassing Toll Restriction, some feature button sequences are not available to restricted telephones.

34. Flexible Intercom Directory Number Assignments

Can intercom directory numbers be flexibly assigned as any numbers? Discuss how intercom directory number assignments are made. What are the available digit lengths? Can the intercom directory number assignment match a DID assignment and voice mailbox assignment?

A telephone directory number (DN) can be programmed to have from two to five digits. The numbering sequence can be flexibly assigned in programming. This can be used to make them match DID assignments, voice mail assignments, etc.. DNs may also be coupled with node ID numbers to accommodate coordinated numbering and dialing between multiple IP*edge* systems networked together. Single-digit DNs, such as "0", can be assigned to attendant consoles or attendant telephones.

35. Flexible Line Ringing Assignments

Can trunk lines be programmed to ring any telephone or group of telephones? Describe the programming parameters of a line ringing assignment.

Each trunk line can be programmed to ring the Auto Attendant, night bell, or any telephone in the system. A different ringing assignment may be created for each of three ringing modes, Day, Day2 or Night. Also, telephones assigned to ring can do so with any of the following three timing designations:

* Immediate: Telephones assigned immediate timing ring as soon as the line rings into the system.
* Delay 1: If telephones with immediate timing have not answered within 12 seconds (3 rings), telephones assigned Delay 1 timing also begin ringing.
* Delay 2: If the above telephones have not answered within 24 seconds (6 rings), telephone s assigned Delay 2 timing also begin ringing.

36. Hands-free Intercom

Is a telephone user able to answer an intercom call without lifting the handset? Can each telephone be programmed uniquely to use this feature?

All Toshiba IP telephones are equipped with a full-duplex speakerphone. When a voice-announced internal directory number call comes in to a IP telephone, the user can answer without lifting the handset. The hands-free answerback feature can be allowed or disallowed on a per telephone basis in programming.

37. Headset Compatible

Are the proposed telephones capable of connecting a headset? What additional equipment or interface is required?

All Toshiba 5000-series IP telephone models are equipped with a built-in headset jack.

38. Hold Options

Can a telephone be programmed to either automatically place an existing call on hold or release the existing call when a button is pressed to answer another incoming call? Is it programmable by telephone? Can a telephone put a call on exclusive hold so it can only be picked up by that

telephone or another phone using directed call pickup? Will a holding call recall the telephone after a programmable amount of time?

Each telephone can be individually set in programming for either Automatic Hold or Automatic Release of an existing call when another incoming call is answered.

The Automatic Hold option enables a user to place a call on a CO Trunk Line button or DN button on hold by pressing another Line or DN button. The user can then alternate between the new and the old call by pressing the desired line or DN button.

Automatic Release automatically releases an existing trunk line or internal call when another incoming call is answered. If the telephone is set for Auto Release, users must press the Hold button before accessing another line and switching between calls.

Both Auto Hold and Auto Release can be overridden by pressing the Release or Hold button, respectively, before answering another incoming call.

Exclusive Hold enables a IP telephone user to place a call on hold so that the call can only be picked up at that telephone or at another telephone using Directed Call Pickup. No other telephone can pick up the call by simply pressing the line button that the call is being held on.

A holding call that has not been answered within a programmable amount of time will recall the telephone that placed the call on hold. Recall time is programmable by telephone.

39. Hot Desk

Can any user use a shared office telephone by signing in with his/her own directory number and have the telephone take on their specific identity and programming? Explain how this feature works.

The Toshiba Hot Desk feature provides cost effective operation for a shared office environment. Hot Desk allows users to share telephones in the office by assigning their directory number (DN) to one of the pre-assigned shared telephones though a login process. Once assigned, all calls to the user's DN terminate at that telephone, the message waiting indicator shows the user's message status, and the telephone will assume all of the user's feature button assignments.

When use of the shared telephone is no longer required, it is recommended that the user log out. The telephone is then released for another user, and calls to the logged-out DN will be routed to voice mail. If the user does not log out, but logs in to another telephone, the old telephone's assignment is automatically released, and the user can use his/her DN from the new telephone.

40. LED Indicators

Describe all the different LED indications available from the proposed telephones. Describe the flash rates and colors used for In Use, Incoming Call, On-Hold, Camp-On, and Busy Telephone Ringing, etc. conditions.

Each of the line/feature buttons on a IP telephone has an associated two-color LED. If a button is assigned to a CO trunk line button or DN, the LED provides an indication of the status of that line. Green indicates the line or DN buttons you are using, and red indicates use by another telephone.

If a button is assigned to a feature, the LED indicates the status of the feature. For example, the LED associated with the Do Not Disturb button lights when the DND feature has been activated on the telephone. Most of the feature buttons will either light steadily as red or flash as red when activated.

LEDs on Toshiba IP telephones will flash at varying rates to indicate calling status. For example different flash rates are activated for Line In-use, Incoming Call, On Hold, Consultation Hold, Exclusive Hold, Hold Recall, Intercom Call, and Busy Telephone Transfer.

41. LCD Alphanumeric Messaging

Is the proposed telephone capable of displaying messages on the LCD of another internal calling telephone? How many messages are available by telephone? Can the user customize their messages?

If an IP telephone has an advisory message set, the message can be displayed on the LCD of an internal calling telephone or attendant console. The message is displayed when the called telephone is either busy or does not answer.

Ten messages are available for use by all LCD IP telephones in the system. For example, a message might be: "Out to lunch." Five of the ten messages are pre-established, but can be customized by individual telephone users. For example, a user can complete the message "Back at _____." The other five messages are custom created by the system administrator using Enterprise Manager, and are available for all telephones to use, but are not customizable by individual telephones. Advisory messages are an effective way to inform other internal users of their status.

42. LCD Feature Prompting

Does the telephone's LCD provide instructions to the user during feature operation? Can the user press "soft" keys to make selections during feature operation? Describe how this procedure works.

Feature access is easy on IP*edge* systems using feature prompting. As an alternative to dialing access codes and using pre-programmed feature buttons, telephone users with LCD IP telephones can use "soft keys" beneath their LCD to easily access features. The label of a different feature will appear on the LCD above each of the soft keys during a

call, in either the ring or talk state, and available features change according to call state to provide the most logical options during the call and various call processing states. Users can select the feature they want just by pressing the key below the label.

43. LCD Integrated Directory Dialing

Does the telephone's LCD provide an integrated directory dialing capability for display and speed dialing of names and telephone numbers? Describe how this procedure works.

Telephone users can dial by name using Toshiba LCD IP telephones. The Dial by Name feature searches for names much like a cell phone directory and then allows the user to press on button to dial. This feature includes speed dialing and internal directory names. Your telephone will display names (First Name, Last Name or vice versa) depending on the way they have been programmed in the telephone system. All directory names are sorted alphabetically.

44. Least Cost Routing (LCR)

Does the proposed system provide full least cost routing that includes individual route plans, time schedules, and telephone LCR classes? How many route plans, time schedules, and telephone LCR classes are available? Describe the internal procedures that take place in the routing of calls. Does LCR conform to all current North American Numbering Plan requirements? Does LCR require any additional software or equipment?

IP*edge* systems provide Least Cost Routing as a standard feature. No additional software or equipment is required.

LCR operates as follows:

* Up to 16 different route plans may be designed to automatically place outgoing calls over the most cost-efficient routes.
* Three different LCR time schedules with their own priority schedules can be set up for the business day.
* Telephones can be grouped into one of 16 LCR classes, each with its own routing priority.

Selected users may have priority use of a line, even when the route with the lowest cost is not available. LCR is compatible with Automatic Busy Redial (ABR) and line-to-line connections.

LCR and Toll Restriction conform to all current North American Numbering Plan requirements. This includes the following functions:

* To allow "Assume 9" Centrex users to dial four digit Centrex numbers and be routed locally, even if the number conflicts with restricted long distance area codes.
* To allow dialing of special area codes without dialing the "1" prefix to be unrestricted and routed as a local 7-digit number.

* To allow dialing at special codes that begin or end with * or # to override Toll Restriction and routed locally in either normal or Centrex environments.
* To enable universal 976 number blocking. Four other office codes can be stored in a table to provide universal blocking.

45. Lost Call Treatment

Can calls that are not answered with the usual calling patterns be routed to an alternate destination for call handling on the proposed system? Is there a timer for routing calls lost in the system to a specified destination?

Lost Call Treatment provides a mechanism for terminating calls that cannot be terminated with the usual calling patterns. One scenario would be a call that is recalled to a telephone, the telephone user is no longer there to answer the recall and no forwarding pattern is programmed. The call will ring at the recalled telephone until the Lost Call Timer has expired after which the system will direct the call to the Lost Call Destination.

46. Message Waiting

Can a message waiting light be set on IP and analog telephones on the proposed system? How does the user retrieve a message? How many messages can each telephone store? Can the proposed telephones also display message waiting on the LCD? If a message waiting light cannot be set on an analog telephone, is stutter dial tone supported?

Any telephone and most voicemail devices can leave a message waiting indication on a designated LED of an IP telephone. Message waiting indication can be turned on by the calling telephone, or if the telephone has been forwarded to voicemail, the message waiting indication will be activated once the calling telephone leaves a message in voicemail. The IP telephone user can retrieve the message just by pressing the button associated with the LED. A telephone can store up to four message waiting indications.

When an LCD telephone user activates message waiting at another LCD telephone, the calling LCD shows the number of the telephone at which the message was left. When an LCD telephone user receives a message waiting signal, the display shows up to four telephone numbers that left messages. The messages may be scrolled through by pressing a soft key on the telephone.

The Message Waiting feature of the system also applies to analog telephones with a message waiting lamp. However, unlike the IP telephone users who can retrieve messages by simply pressing a button, the analog telephone user is simply notified by an activated message waiting lamp on the telephone. The analog telephone user can enter an access code to retrieve the messages.

For analog telephones not equipped with a message lamp, stutter dial tone is supported. When a telephone user goes off-hook, two different available stuttered-dial tones indicate whether a Message Waiting (MW) or DND condition exists. The MW-stutter dial tone indicates a message is waiting for the telephone. The DND-stutter dial tone

indicates DND is set at the telephone. If both conditions exist simultaneously, the MW-stutter dial tone has priority over DND-stutter dial tone.

47. Microphone Control

Can the proposed telephone's microphone be turned off/on by the press of a button? Is a microphone sensitivity control available to compensate for different room noise levels?

Toshiba IP telephones can be programmed with a Microphone Cut-off button which can be used to turn the microphone inside the telephone on and off while idle. This enables or disables Hands-free Answerback to the telephone. This is a "push-on/push-off" button.

The microphone sensitivity of a Toshiba IP speakerphone can be adjusted for room noise level. The high setting compensates for high room noise level that can cause people cutting off while talking to you on your speakerphone. The normal setting is for speakerphone use in normal or low room noise conditions.

48. Multiple Directory Number Call Coverage

Describe how multiple appearing directory numbers and flexible ringing patterns can be used for call coverage and group answering applications.

A Directory Number (DN) is the number someone must call to reach a destination within the system. This is sometimes also referred to as an "extension number." To maximize call coverage flexibility, telephone DNs can appear on multiple telephones and individual telephones can have multiple telephone directory numbers.

All DNs can be used to originate and answer calls. A DN button can also be used to release an existing call and originate another call at the press of one button. While on a call, simply press the DN button you are using. It will automatically release the existing call and give dial tone to make another call. The system provides three types of DNs.

Primary Directory Number (PDN): The IP*edge* supports Primary Directory Numbers, in which each telephone in the system has a unique Primary DN. This PDN can appear on up to four buttons of the primary telephone.

Secondary Directory Number (SDN): When the PDN of a telephone appears on another telephone, it becomes a Secondary Directory Number. Any PDN can appear as a SDN button on all Toshiba telephones in the system, and can ring on up to 120 telephones simultaneously. Each telephone can be assigned up to four of the same SDN button. The maximum number of PDN plus SDN buttons on each telephone is 16.

Phantom Directory Number (PhDN): This is an additional directory number that can be dedicated to a telephone or to a group of telephones, usually in the same area or department. Each unique Phantom DN can only appear once on a given telephone, but each telephone can be assigned with up to eight different Phantom DN buttons. Any

Phantom DN can appear on all Toshiba IP telephones in the system, and a Phantom DN can ring on up to 120 telephones simultaneously.

Each Phantom DN must be assigned to a designated telephone owner via system programming. The owner telephone of a Phantom DN controls the following functions:

* Set Call Forward for that Phantom DN.
* Set Call Forward Mailbox destination for that Phantom DN.
* Receive Message Waiting indication for up to four Phantom DNs on individual Phantom Message Waiting button LEDs.

49. Multiple Language Choices

Can the proposed system display telephone LCD information in multiple language choices? What languages are supported (minimum requirements English and Spanish)?

Telephone LCD display and feature prompting information can be displayed in either English, Spanish, or French, as a programmable option within the system.

50. Networking of Multiple Systems

The proposed telephone system must be capable of networking multiple systems together to work as one large system. This must include the capability to distribute voicemail messages between all locations, answer incoming calls for all locations at the main location, and dial between locations using a coordinated dialing plan. Describe how these needs will be met with the proposed system.

IP*edge* Net is the optional private networking application for the interconnection of up to 128 IP*edge* systems. IP*edge* Net delivers a rich set of calling features across multiple systems distributed throughout the enterprise. Users benefit from transparent dialing and simple feature operation.

- **Coordinated Numbering Plan:** IP*edge* Net can be configured to allow users to call each other across network nodes with simple network directory numbers. This eliminates the user's need for access codes and network maps. Calls that encounter a busy or unanswered destination can be forwarded to any node in the network, including a centralized voice mail system or attendant.
- **Basic Call Control:** The Basic Call Control provides for connection, dialing, identification of calling and called parties' names and numbers and message waiting indications among other features.
- **Alternate Routing:** Each IP*edge* system can be programmed for thousands of routing patterns. This allows the creation of networks in which calls can be automatically re-routed around network disruptions. Centralized facilities and features can continue to work and users will be unaware of problems while they are being repaired. Alternate Routing also permits Toll Bypass in which IP*edge* Net can be used to deliver a public call from a point in the network where toll charges are minimized. Such a scheme is known as "Hop Off" for the ability of the private network to determine the point at which the call will hop off to the public network.

- **Centralized Attendant:** One attendant can serve an entire IP*edge* Net grouping of node systems. Telephone users only need to dial "0" to reach the centralized attendant regardless of the node in which they reside. The attendant can reach any telephone in the network using its Network Directory Number. Trunks attached to any network node can be programmed to terminate to the centralized attendant and their source and calling party information will be delivered to the attendant's display.
- **Networked Voicemail:** A single network can support multiple IP*edge* nodes each with its own voicemail application supporting the users programmed for that system. This serves voice messaging for all users throughout the enterprise, including forwarding messages across nodes and message waiting indications throughout the network as messages are left and retrieved.
- **Telephone DSS Buttons:** Telephone DSS buttons can appear across the IP*edge* Net network. This enables a user's DSS button to function in all nodes in an IP*edge* network. The DSS function works within or across the network.
- **Distributed Network SMDR:** An external IP*edge* Net call will generate a call record at the terminating node for that call. Transit nodes will not generate records. The records can be stored in customer-supplied external buffers at each node. Third party polling call accounting software can gather and organize the data from multiple nodes. Local buffering provides survivability in the event of network disruption.
- **Centralized Network SMDR:** An external IP*edge* Net call will generate a call record at the terminating node for that call. Call Accounting software on a single server can receive SMDR call data from each IP*edge* node via TCP/IP on the IP*edge* Net network. Users with third party Call Accounting client software can retrieve reports from the server from any location. Traffic reports can be sent from IP*edge* systems to remote locations over a WAN or the Internet from any IP*edge* location.

IP*edge* systems support IP*edge* Net multi-system networking over a variety of network types.

- Systems can be interconnected with DS1 (T-1) circuits to provide ISDN-type interconnectivity. IP*edge* Net networking is interfaced through Primary Rate Interface cards (BPTU) installed in IP*edge* systems.
- IP*edge* Net networking over IP provides full IP*edge* Net connectivity and capabilities over an IP network (VPN WAN, Internet, intranet, Frame Relay, fiber, or wireless). IP*edge* Net over IP operates per ECMA-336 standards and supports Network Address Translation (NAT).

51. Night Service

Indicate the number of day and night modes available. State the differences between day and night ringing and answering. Indicate which telephones can place the system in the night mode and which telephones can answer night calls. Can different trunk groups be placed into night service at different times? Can night ringing occur over the paging speakers? Can system switching between day and night modes be programmed for automatic activation by time of day and day of week?

The system has three available modes (Day, Day2, and Night) for routing incoming trunk line calls to telephones, Auto Attendant, DISA, and night bell ringing. Each mode can be assigned a distinct line-to-telephone ringing arrangement. The system can be programmed with either two or three modes which can be changed by any telephone programmed with a Night Transfer button. A supervisor's Night Lock button can be provided to prevent unauthorized changes in modes.

Day/Night call routing applies to all incoming line types: Automatic Number Identification (ANI), Dialed Number Identification Service (DNIS), Caller ID, DID, Ground, and/or Loop Start lines.

Incoming line or door phone calls can be programmed to ring over an external speaker when the system is in the Night mode. The call can be picked up from any telephone. After-hours employees who are not near a ringing telephone or external page are easily able to answer calls with this feature.

52. Off-hook Call Announce

Describe how off-hook call announce is initiated to and received from the telephone. Does the announcement come through the handset or the speaker on the telephone? How is control provided over the use of off-hook voice announce? Is additional equipment required to send or receive off-hook call announcements? Can availability of this feature be programmed by telephone?

Off-hook Call Announce (OCA) allows a telephone user to send a voice announcement to a busy IP telephone. The call must be directed to a telephone's Primary DN or Phantom DN. OCA will not occur when the called telephone is not the owner of the dialed Primary DN or Phantom DN. The announcement is only audible to the telephone user receiving the OCA call, not to the other party in the original conversation. In order for a telephone to receive OCA, the telephone must be assigned with OCA-receive capability in system programming.

An OCA announcement can be sent through the telephone's speaker to a called party who is off-hook and engaged in a conversation. The OCA called telephone will hear an OCA announcement over the speaker. The called telephone user can respond to the OCA caller by talking into the telephone microphone.

53. On-hook Dialing with Hot Dial Pad

Is the telephone user able to dial and monitor an external number before having to lift the handset? Is this feature available on all proposed telephone models? Do the proposed telephones have a hot dial pad, meaning that it is not necessary for the telephone user to press an intercom or outside line button first to begin on-hook dialing?

Users of all Toshiba IP telephones can dial calls without lifting the handset, freeing their hands for other tasks. System dial tone, dial pulsing, ringing, and the voice of the answering party are all heard over the telephone speaker. The handset does not need to

be lifted until after the party answers, and on speakerphone models does not need to be lifted at all.

Toshiba IP telephones also accommodate hot dial pad dialing. The telephone can be programmed to automatically select a trunk line, Primary Directory Number (PDN), PhDN, etc., when the dial pad is pressed while the telephone is idle. This saves a keystroke by not requiring the telephone user to press a DN button or CO trunk line button to begin on-hook dialing.

54. Paging - Internal

Indicate whether the proposed system offers paging through the telephones. Can the ability to receive a page be programmed by individual telephone? How many telephones can simultaneously receive paging? How many internal page zones are available?

A telephone user or attendant console operator can make a voice announcement through the speakers of up to 120 IP telephones on the system. The user can press a button or dial an access code to make the announcement from their telephone. Telephones that are busy on-hook or off-hook will not receive the page announcement. Through programming, telephones can be excluded from receiving page announcements on an individual telephone basis.

Group telephone paging is also available. Telephones can be divided into as many as 24 Paging groups. Up to 120 telephone s can be in a paging group, and a telephone can be in up to four paging groups. Any telephone user can make an announcement to just one or all of these groups.

55. Paging - External

State whether the proposed system offers overhead paging through speakers. Can overhead paging be initiated by each individual user via their telephone? How many external page zones are available? What additional equipment is required for these paging capabilities?

The IP*edge* system can support up to eight External Page Zones. Telephone users can access just one zone or all of them simultaneously by pressing a button or dialing an access code. The zones are composed of customer-supplied speaker(s) and amplifier(s) which interface with third-party paging equipment connected to the IP*edge*.

56. Park Zones

Does the proposed system offer park orbit zones? How many zones are available system wide? Do individual telephone user have access to the park zones as well as the attendant? Can calls be parked at single line telephones as well as IP telephones? How are calls retrieved from Park?

The Call Park feature enables a telephone user or attendant console operator to place a call temporarily in an orbit so that the call can be retrieved by any user, from the same telephone or from a different telephone. There are 32 General Park Orbits for the IP*edge* EC system, 96 General Park Orbits for the IP*edge* EM system, and one Personal Park Orbit for each telephone. Personal Park Orbits are available to any types of

telephones, including standard telephones. If a call is parked, but not retrieved within a preprogrammed time period, it will recall the parking telephone.

A user can park a call in any of the General Park Orbits or in a personal Park Orbit, then enter a Page Zone or Group access code and announce to the paged party the orbit number of the waiting call. The user's telephone can be connected to a pre-designated External Paging circuit, a Telephone Paging group or both. For speed and convenience, Park and Page can be combined into one feature programmed at the touch of one button.

Park Pickup or Page Pickup is quickly and easily accomplished by pressing a Pickup button (or dialing an access code) and dialing the orbit number announced.

57. Pooled Line Button Access

Can a group of trunk lines be grouped under a single button? Is there any limit to the number of lines that can be grouped under a button? How many line groups are available?

Several lines can be pooled to appear under one IP telephone or attendant console CO trunk line group button. The lines are usually pooled in categories. A telephone can have as many as four buttons for the same group to facilitate the handling of several calls in the same group. The IP*edge* EC system can support as many as 50 line groups and the IP*edge* EM can support up to 220.

58. Private Trunk Lines

Can the proposed telephones support private lines, so that they only ring and can only be answered by that telephone?

The system can be programmed to allow certain "private" trunk lines to appear only on one IP telephone and be accessed only by that telephone.

59. Privacy/Non-Privacy

Can the proposed system be set as either private or non-private? Can CO trunk line buttons be either private or non-private on an individual telephone basis? Can privacy/non-privacy be changed at a telephone by pressing a button or dialing a code on a call-by-call basis? Can certain users be programmed to override privacy?

Privacy can be enabled or not, as established in system programming. When enabled, Privacy prevents intrusion on calls that appear on shared (common) DN buttons or CO trunk line buttons. If a telephone has a call on a DN or line button that appears on other telephones, the other telephones cannot intrude on the call by pressing the shared button, unless the intruding telephone is programmed with the Privacy Override feature or the telephone with the call activates the Privacy Release button.

In a case where Privacy Override is normally allowed, a telephone can have a Privacy button on their telephone to block Privacy Override (intrusion) to the call. The Do Not Disturb feature does *not* block Privacy Override. In the case where Privacy Override is

not normally allowed, a telephone can have a "Privacy Release" button to allow intrusion to the call by any telephone with the shared button appearance.

60. Release/Answer Button

Can a call be disconnected by pressing a Release button? Can it also be programmed to release the current call and answer the next at the press of one button?

The Release button enables users to complete a transfer or disconnect from a call and become idle just by pressing a Release button that can be programmed on their telephones. This feature is useful for headset-equipped telephones.

The Release/Answer button enables a telephone user that is talking on a call to release and transfer or disconnect the active call, and automatically answer a new incoming call on CO Trunk Line, Pooled Line Group, and/or DN buttons with incoming Auto Line Selection. The Release and Answer button is especially useful for attendant consoles or telephones that process a high volume of incoming calls.

61. Redial Capabilities

Can the proposed telephone store a specified number dialed in memory and offer the telephone user the opportunity to redial the number by pressing a key? Can the telephone store the last number dialed in memory and offer the user the opportunity to redial the number by pressing a key? Does the proposed system afford the user the ability to automatically redial busy outside telephone numbers at preprogrammed intervals? Does this auto busy redial feature work through Least Cost Routing?

Repeat Last Number Dialed: The last number dialed by an IP telephone is stored in system memory, and may be redialed automatically by accessing a trunk line and pressing the Redial button or dialing an access code.

Automatic Busy Redial: IP telephone users who dial a busy outside telephone number can set Auto Busy Redial (ABR), which automatically redials the number at preprogrammed intervals. Busy tone must consist of standard tones. The system will callback the telephone when it successfully dials the number. ABR is compatible with Least Cost Routing. ABR is not compatible with outgoing DID or tie line calls.

62. Ringing Line Preference

Can a telephone be programmed to answer the ringing line by simply depressing the speaker button or lifting the handset? Is it programmable by telephone?

An IP telephone user can answer an incoming trunk line call ringing at their telephone simply by lifting the handset or pressing the speaker button, without having to press the button or dial the access code associated with the line. This Ringing Line Preference feature is programmable-by-telephone (on or off) so individual telephone users can choose the method they prefer.

63. Hunting

Describe the different types of hunting available with the proposed system. Can a telephone be in more than one hunt group simultaneously? How many hunt groups can be defined within the proposed system? Can calls to busy hunt groups camp on?

A series of Directory Numbers (DNs) can be organized in groups in such a way that if a called DN is busy the call will try to ring another DN in the group. If that DN is busy it will hunt to a third DN, etc. Telephones in the same department, voice mail ports and boss/assistant call coverage situations are typical applications for hunt groups. Hunt group members can remove themselves from the group by placing their telephone into the Do Not Disturb mode.

Three types of hunting are supported:

Serial Hunting: Calls hunt DNs in a series from first to last in a specific order. When any DN in the series is called, the system will ring the first idle DN in the series, starting with the called DN, hunting to the last [DN] in the series. As an option, this type of hunt group can have a unique Pilot DN assigned to it. When callers dial the Pilot DN to reach a telephone in the group, calls will hunt all DNs from first to last.

Circular Hunting: Calls hunt DNs in a series in a specific order; however, the series forms a loop, which enables the last DN to hunt to the first DN. When any DN in the series is called, the system will ring the first idle DN in the series, starting with the called DN, hunting to all DNs in the series. As an option, this type of hunt group can have a unique Pilot DN assigned to it. When callers dial the Pilot DN to reach a telephone in the group, calls will hunt all DNs from first to last.

Distributed Hunting (DH): This type of hunt group always has a unique Pilot DN assigned to it. Callers dial the pilot DN to reach a telephone in the group. Calls hunt in such a way so as to distribute the calls evenly to each DN in the group. Hunting rotation always starts in sequence with the DN that follows the DN that received the last call, even if all other DNs are idle.

Camp-on to Hunt Groups: On incoming trunk line calls to busy hunt groups, the caller automatically camps on to the called DN or Pilot DN and the caller receives ring-back-tone.

On internal calls to busy hunt groups, the caller may get busy tone. The caller can then dial a digit to initiate Camp On-Busy to the called, busy DN or the Pilot DN, if used. As an option, for each hunt group that uses a Pilot DN, calls will automatically camp on to the called Pilot DN.

With the Automatic Camp On option, the caller does not get busy tone, instead the caller receives confirmation tone followed by ring-back-tone. When using hunt group Pilot DNs, camped on calls queue onto all DNs in the group and will connect to any DN in the group that becomes available. When not using Pilot DNs, Camp On is only applied to the called DN.

When more than one party is camped on (queued) to a hunt group, the party with the highest Queuing Priority Level (QPL) will be connected first when the destination becomes available. If the parties have the same QPL, the longest waiting call will be connected first.

64. Station Message Detail Recording (SMDR)

Can the proposed system output SMDR data on all calls made and received to a printer or call accounting application? What information does the SMDR output contain? What additional system equipment is required for printer connection or call accounting interface?

The system produces calling information that is sent to a printer or call accounting device connected to the IP*edge* system. The report includes time and duration of a call, as well as the called number. Customers can select what type of calls (all calls, outgoing only, long distance calls) they want to appear on the report. Account Code information can also be included. Automatic Number Identification (ANI) numbers, Caller ID numbers, and Dialed Number Identification Service (DNIS)/DID/tie numbers/names can be programmed to appear on the system SMDR report. If present, the names take the place of the system Account Codes on SMDR reports.

65. Personal Speed Dial

How many speed dial numbers does the proposed system provide per telephone? How many characters per speed dial bin? Can speed dial bins be logically linked to one another? How is the telephone speed dial accessed, by code, by button, or by LCD directory? If an LCD internal directory is available, describe its operation.

Each telephone user can create as many as 100 of their own personal Station Speed Dial numbers. These numbers are not available to other telephone users as System Speed Dial numbers are. Speed dial numbers can be programmed on One Touch buttons on the telephone.

Speed Dial enables users to dial frequently called telephone numbers (up to 32 digits per number) quickly by dialing a brief access code or by pushing a feature button. If more than 32 digits are required, two speed dialing codes can be chained together to provide up to 64 digits.

LCD directory dialing can be performed. The user can program a 12-character name for each of the 100 speed dial numbers. The LCD telephone user can then scroll through the station speed dial names on the LCD. When the desired name and number appears, the user can press the corresponding LCD soft key button to automatically dial the number.

66. System Speed Dial

How many system speed dial numbers does the proposed system provide? How many characters per speed dial bin? Can speed dial bins be logically linked to one another? How are the system speed dials accessed, by code, by button, or by LCD directory? If an LCD internal directory is available, describe its operation.

A designated telephone or attendant console can create System Speed Dial numbers that are available to every telephone on the system. 800 system speed dial numbers are available.

Speed Dial enables users to dial frequently called telephone numbers (up to 32 digits per number) quickly by dialing a brief access code or by pushing a feature button. If more than 32 digits are required, two speed dialing codes can be chained together to provide up to 64 digits.

LCD directory dialing can be performed. A designated telephone or attendant can program a 12-character name for each of the system speed dial numbers. The LCD telephone user can then scroll through the speed dial directory on the LCD. When the desired name and number appears, the user can press a line button or directory number button to automatically dial the number.

67. Telephone Queuing

Can an internal caller to a busy telephone in the proposed system set queuing to automatically call when the busy telephone becomes idle? How is this set?

Telephone users that call busy telephones can set the Automatic Callback feature by pressing a button or dialing an access code to have the system call them back when the busy telephone becomes available. When the originating telephone answers the former busy telephone is called.

68. Trunk Queuing

Can an internal caller trying to access a busy trunk line or line group set queuing? How does this work?

A telephone user can use the Automatic Callback feature to enter the queue for a busy outgoing trunk line. When the line becomes available, the system calls the telephone back. Queuing applies to single lines, line groups, and when calling via Least Cost Routing.

69. Toll Restriction

Describe all the toll restriction alternatives available with the proposed system. How many levels are available? Does the system conform to current North American Numbering Plan requirements?

Telephone s can be individually restricted from making toll calls. Up to 16 separate restriction levels can be defined, each allowing or denying specific area and office codes, long distance information calls, international calls, and/or operator-assisted calls. Each telephone is assigned any one of the available restriction levels or no restriction. Individual lines can be defined as unrestricted.

All IP*edge* systems conform to the current North American Numbering Plan requirements.

70. Toll Restriction Override

Can toll restriction be overridden by entering an authorization code? By speed dial? By through dialing, in which a non-restriction telephone can connect a toll restricted telephone?

Two toll restriction override codes can be defined. When dialed at a toll restricted telephone, these codes enable the telephone user to override the toll restriction at that telephone. The codes may be changed by certain telephones that are selected in programming.

Traveling Class of Service enables the normal Toll Restriction class of a telephone to be temporarily changed to another class. Each of the Toll Restriction classes can be assigned a four-digit code. If one of these codes is entered at a telephone, the telephone will assume the class associated with the code for the next dialed number. The telephone will revert back to its normal Toll Restriction class for subsequent calls. Traveling Class codes can be added, deleted, or changed by users from telephones selected in programming. Traveling Class codes will not appear on the Station Message Detail Recording (SMDR) report. However, Account Codes, which can also override Toll Restriction, will print out on the SMDR report.

System Speed Dial numbers can be programmed to override Toll Restriction. When users need to access a toll number that falls into a restricted area/office code for work purposes, an administrator can assign the particular toll number as a System Speed Dial number.

A non toll-restricted telephone user can connect a toll-restricted telephone to a trunk enabling temporary access to an outside line. The connected telephone can then use external dial tone to complete the call, and reverts back to toll-restricted status after the call is completed. This maintains the integrity of toll restriction, while still extending outgoing calling privileges when necessary.

71. Outgoing Call Restriction

Can selected vs on the proposed system be restricted from making any outgoing calls? Is flexibly programmable by telephone and by trunk line?

Telephone can be selectively restricted from originating calls over any number of trunk lines. This feature is programmable by telephone and by trunk line. The same restricted telephones can receive incoming calls on those restricted trunk lines.

72. Tenant Service

Our organization may in the future wish to share the system with another division in our building. Does the proposed system support multi-tenant applications in which each organization can operate their portion of the system as if it were their own separate system? What functions of the system can be kept separate between tenants? How many tenants are supported?

Businesses in the same office building can share a communication system (eight tenants maximum). Tenants can have separate Least Cost Routing and Toll Restriction plans, Night Transfer ringing assignments, and flexible door phone and trunk line ringing assignments. If zone paging is installed, the tenant CO trunk line groups can ring over different paging zones at night.

73. Volume Control

Are individual telephone volume settings available for the handset, speaker, and ringing? How does the telephone user adjust these volume settings?

Toshiba IP telephones have an electronic volume control button (volume up/down) that provide independent control of the handset, speaker, and ring volumes. The user simply presses and holds the button to achieve the desired volume.

74. Voice or Tone Calling Option

Can the proposed system be programmed for either ringing or voice signaling when an internal telephone calls another? Can individual telephone users switch between methods?

The system can be programmed for either Voice First Signaling or Tone First Signaling as the standard method of internal directory number call signaling. Voice First allows hands-free talk back from the called telephone on internal and private network tie line calls. With Voice First, telephone users will hear a tone burst followed by the caller's voice over their telephone speaker when called by another telephone user. Tone Signaling better ensures privacy. Users will hear repetitive ringing when called by other users with Tone Signaling. Callers can always select the alternative method immediately after dialing a telephone number by dialing a digit "1".

L. Attendant Console Features

1. Single-screen Call Processing

The attendant console must be quick and simple to use. This means the operator must be able to perform all call processing functions without navigating through a series of menus. Does the proposed attendant console perform all call processing from a single screen?

The Toshiba PC-based Attendant Console is optional software and designed to handle all call activity within a single Call Monitor screen, shown below. All calls will appear in a single list and are marked with icons to show the current status.

2. Answer Button

Can an answer button be used to automatically answer the next call ringing regardless of what line or other button it is ringing in on? How does the proposed attendant console or system determine which call is next if multiple calls are ringing? Is it just first come first served, or is

this programmable by the user to give priority to certain types of calls? Does this function also apply to recalls or transferred calls?

The answer button on the Attendant Console can be used to automatically answer the next ringing call based upon the system defined priority (incoming trunk, recall, transferred, etc. Multiple ringing calls are automatically queued to the Answer button.

3. Incoming Call Identification and Selective Answering

Does the proposed attendant console identify the type of call ringing? Can the operator override the answer button priority to selectively answer a certain call? How is this accomplished?

Incoming Call Identification provides selective answering of all categories of calls to the Attendant (internal DN, transferred, park recall, hold recall, transfer recall, emergency, operator, and incoming trunk for CO trunk line groups).

4. Answer Prompting by Type of Call

Our operators answer calls differently based upon the type of call or department they are calling. Can the proposed attendant console display information on the screen to tell the operator how to answer based upon the number the caller dialed?

The CO trunk line identification or DNIS (dialed number) information is displayed on the ringing console's screen. The console can store prompts showing how to answer the various line or DNIS calls. The appropriate prompt for the line or number dialed will be displayed.

5. Call Transfer Operation

The operator needs a fast and efficient method of transferring calls as their primary function. Describe the methods available for transferring calls with the proposed attendant console.

The attendant can press a button or point and click the mouse button on the telephone directory number, located on the internal directory screen to perform direct telephone calling or transfer operation. This is a fast and easy one-step operation.

6. Attendant Conference Setup

Can the attendant set up a conference call for other telephone users by calling outside parties and then adding internal telephones to the call? How does this work?

The attendant can set up a conference call with up to four members. Conference members can either be another console, telephones, or trunk lines. The conference can be originated by the attendant or requested by a telephone user or outside party.

7. Auto Dialing

The operator needs the ability to auto dial both internal telephones and external telephone numbers. Can the proposed attendant console provide this capability? Does the console's dialing directory have a search capability by name, partial name, or initial?

For internal telephone auto dialing, the names/number search function will automatically dial the telephone directory number of the matched name or number when the Auto Dial option is on. If Auto Dial is off or no match is found, the attendant can still use the directory and press a button to call the party or enter a number to be dialed.

8. Busy Lamp Field (BLF) Display

Does the proposed attendant console display telephone status to indicate if telephones are busy on a call or in Do-not-disturb (DND) mode? Does it display the telephone directory number, name, or both?

The console screen displays the busy/idle/DND status of telephone s so the Attendant can see who is busy at a glance. The busy/idle/DND status data is displayed in the directory area of the screen either with or without telephone names.

9. Call Waiting Count

Our operator sometimes gets overloaded with incoming calls and must request assistance. How does the proposed attendant console tell the operator how many calls are waiting to be answered? Screen display? Audible alarm?

The number of calls waiting to be answered in the attendant console answer queue is displayed and constantly updated.

10. Color CRT Display

Attendant applications must use color to distinguish different functions, display areas, status, etc., making them easier to use. Does the proposed attendant console provide a color display to accomplish this?

Console text information is displayed on the monitor screen in full color. Various colors indicate different status or conditions, making them more distinguishable to the attendant.

11. Dial "0" For Attendant

Our telephone users want to just dial "0" to reach the operator. This is easier than looking up the telephone number, especially when transferring calls to the operator. Does the proposed attendant console provide 0 dialing for the operator? What if there are more than one attendant console?

Up to four attendant consoles can be installed per system. To call any available console, telephone users dial 0. To call a specific console, dial the specific console Directory Number.

12. Dial Outside Number For Telephone User

Can the operator of the proposed attendant console dial an outside telephone number for a telephone user? How does this work?

Attendant outside dialing provides convenience for telephone users. The Attendant can access a trunk line and dial an outside destination number for a telephone user. To perform this operation, the Attendant must be in the talking state with either a telephone user, an outside caller, or a caller on an incoming tie trunk.

13. Direct Station Selection (DSS)

Can the proposed attendant console call a telephone directory number simply by pressing a DSS button? Can these DSS buttons be used to transfer calls to these telephones? How does this work?

The attendant can press a button or point and click the mouse button on the telephone directory number, located on the internal directory screen to perform direct telephone calling or transfer operation.

14. Directory Display and Dialing

Does the proposed attendant console display a directory of telephone users? Can the directory display names, numbers, or both? Can the directory display be used for DSS calling and call transferring as well as display BLF status? How does this work?

The directory listing area of the screen can display both names and numbers of internal telephone users. The Attendant can point and click on a name to automatically dial the number.

15. DTMF Signaling From Dial Pad

The operator needs to be able to interact with outside devices via DTMF signaling. Can DTMF tones be generated from the keyboard of the proposed attendant console?

The attendant console can generate DTMF tones from the dial pad to signal external devices such as voice mail, auto attendants, answering machines, etc. By pressing a button, the attendant will send DTMF tones to the distant end.

16. Emergency Calls

Telephone users need a way to get through to the operator immediately even if the operator is busy on an existing call. Does the proposed attendant console provide a way for telephone users to place emergency calls to the operator? How is the operator notified that the call is an emergency call?

Emergency calls from internal telephones that arrive at an attendant console receive higher priority call treatment than other calls. The emergency call will display on the screen in the incoming call area. If the call is placed on hold, the hold time appears in red to highlight this call for easy retrieval.

17. Emergency Page

Can the proposed attendant console provide a fast and efficient method to page all telephones and/or over external paging speakers? How is this done?

An attendant console assigned with an Emergency Page button can page the All Call page group. The page sounds over the speakers of all idle telephones in the All Call page group, but does not sound over the external paging speakers. If the operator desires paging to external speakers, a button can be programmed to perform this function.

18. Feature On-Line Help

Does the proposed attendant console provide on-line user instructions and help information? How is it accessed?

On-line Help provides feature use instructions at the touch of a button or a click of the mouse. This functions the same as other Windows PC applications. On-line Help provides information that is more detailed than routine feature prompting soft key instructions, but less detailed than the examples and instructions contained in the Attendant Console User Guide.

19. Headset Operation

Can a headset be plugged into the proposed attendant console? Does it require any additional or optional interfaces?

In addition to the handset, the console can be used with a headset. The headset can be plugged into the Attendant Console Interface Unit (BATI) or a telephone.

20. Hold Button and Display Functions

When the operator puts calls on hold on the proposed attendant console, how are holding calls displayed? Can one be distinguished from another to know who they are holding for? Is a timer available to show how long they have been holding? Will held calls recall and ring after they have been on hold for a programmable amount of time?

When the Hold button is selected, the current call is placed on hold. If the call is not answered within a preprogrammed time period, the Attendant will be reminded by an on-screen ring indicator.

21. Incoming Attendant Call Statistics

Can the proposed attendant console or system collect statistics on incoming calls to the operator? What statistics are collected and for what period of time?

Incoming call statistics are collected by the PC on calls received at the attendant console. Data can be displayed on the screen and can be printed.

22. Maintenance & Administration From Console

Can routine maintenance and administration functions be performed from the proposed attendant console? What functions can be performed?

The operator at the attendant console can be assigned to perform routine system administrator functions using the Enterprise Manager application.

23. Message Center

Does the proposed attendant console provide a message database in which the operator can enter typed messages for other telephones users? How does the operator notify telephone users that they have a message? Can messages be displayed on-screen or printed on demand?

The attendant can also light the message light at the telephone to notify them they have a message. The telephone user can later press the Message button and call the attendant. If the telephone is an LCD phone, the display will show that the attendant called.

24. Multiple Console Operation and Load Sharing

How many attendant consoles can be in simultaneous operation on the proposed system? If more than one console is in operation, how are incoming calls distributed between them?

In a multiple-console environment, incoming calls will be distributed among the available consoles (up to four) on a call by call rotation basis. The call rings on the next console in turn to receive the call and appears in the Call Monitor display of all attendant consoles. This increases the efficiency and flexibility of call coverage.

25. Multi-tasking

Is the proposed attendant console a dedicated workstation, or can it also be used for administration and other purposes? What other functions can the console be used for? If the attendant console is a PC-based platform, can other applications run simultaneously in a Windows environment? How will this affect the performance of the attendant console application?

Most functions of the attendant console can be operated either from clicking the mouse on screen buttons or equivalent buttons on the keyboard. This allows attendants to use whichever method is easiest for them. The console commands are similar to other Windows applications, making learning easier for previous Windows users.

26. Overflow

Can the proposed attendant console re-route ringing calls to another destination if they have not been answered within a designated amount of time? Is the amount of time programmable?

Calls that have been waiting in the ringing queue too long will be re-routed to another telephone. This feature is controlled by the overflow timer, and can be manually activated by the attendant during high-traffic conditions via the overflow button.

27. Override

The operator often needs to reach telephone users even if they are busy on a call or in Do Not Disturb (DND) mode. Does the proposed attendant console enable the operator to override DND or busy status when calling a telephone?

There are three different ways for the attendant console operator to override calls:

- Busy Override lets the Attendant send a tone to a busy telephone to signal a call is waiting.
- Do Not Disturb (DND) Override lets the Attendant send a tone to an idle telephone in the DND mode to indicate that an important call is coming in.
- * Executive Override lets the Attendant enter an established conversation.

28. Position Busy Mode

When the operator takes a break or is away from the console, how is it placed into an unattended mode? Where do the calls ring during this unattended mode?

The Position Busy feature allows the attendant to place the console in an unattended mode. This feature is intended to be used when more than one attendant console is installed and only when more than one attendant console shares the load of incoming calls

29. Split Button

Can the proposed attendant console split the source and destination parties from each other on a conference call? How does this work?

The Split button allows the attendant to alternate between source and destination positions while keeping the two parties separate on the console. This feature can be performed only when the attendant console is involved in a three-way conference with a source and destination party.

30. Through Dialing

Some telephones are toll restricted and cannot call long distance unless they go through the operator. Does the proposed console enable the operator to extend otherwise denied trunk line access to telephone users? Can this be done on a selective or call-by-call basis?

This feature lets an attendant provide a restricted telephone user with outgoing call privileges. On a call-by-call basis, the attendant can access otherwise denied trunks and then pass the dial tone to the telephone user. The telephone user can then complete the call dialing procedure.

31. Transfer Direct to Voice Mail

If the operator knows the requested telephone user is not available, they need to transfer the call directly to the requested party's mailbox rather than to the telephone because it may not be

properly forwarded to voice mail. Does the proposed attendant console have the ability to transfer the call directly to an individual mailbox? How does this work?

The attendant console has a button to transfer to Voice Mail. Outside callers can be transferred directly to a telephone user's voice mailbox, rather than to their telephone which would forward to voice mail if busy or not answered.

32. Volume Control

Does the proposed attendant console provide independent controls for handset/headset volume and ringing volume? Can the volume be increase while active on a call?

These buttons adjust the console's ringing volume and handset/headset volume. The Up button increases the volume while the Down button decreases the volume. Volume can be controlled while on a call.

M. Telephone/Endpoint Equipment

1. Telephones, consoles, and accessories

List the different type IP and analog telephones available with the proposed system. Identify which telephones offer a speakerphone capability and which telephones offer a display. Include DSS consoles and other accessories that can be used in conjunction with these telephones. Also describe attendant consoles available for answer position use with the proposed system.

Toshiba IP telephones are available for use with all models of IP*edge* systems, providing complete telephone set compatibility throughout the Toshiba business communication system product line.

Toshiba 5000-series IP telephones have a modern and attractive design in black color with adjustable silver swivel base, built-in headset interface, and the durability and quality for which Toshiba is known. The electronic volume control independently adjusts the volume of the handset, speaker, and ringing.

All models of Toshiba IP telephones have fixed buttons for Message, Microphone, Speaker, Speed Dial, Redial, Conference/Transfer, Hold, and Volume, and have either 10 or 20 line/feature buttons that are programmable. Each programmable button has an associated two-color (red/green) LED status indicator.

Among the many important features included in the Toshiba IP telephones, and not found in many competitors' IP telephones, include:

- Busy Lamp Field (BLF) display of other telephone status
- Background music through telephone speakers
- Paging over telephone speakers
- Intercom capabilities with the main office from any remote location
- Off-hook call announce over telephone speaker
- Adjustable tilt-stand base
- Backlit LCD (available on some models)

Toshiba IP telephones are available in various models for use on IP*edge* systems:

- The **IP5022-SD** is a full-duplex speakerphone with 10 programmable buttons, a 4-line by 24-character display, and Gigabit Ethernet switch for PC connection.
- The **IP5122-SD** is a full-duplex speakerphone with 10 programmable buttons, a 4-line by 24-character backlit display with contrast adjustment, and Gigabit Ethernet switch for PC connection.
- The **IP5122-SDC** is a full-duplex speakerphone with 10 programmable buttons, 4-line by 24-character backlit display with contrast adjustment, Gigabit Ethernet switch for PC connection, and analog trunk interface that enables direct access to a local trunk line for emergency calls or local calls.
- The **IP5132-SD** is a full-duplex speakerphone with 20 programmable buttons, a 4-line by 24-character backlit display with contrast adjustment, and Gigabit Ethernet switch for PC connection.
- The **IP5131-SDL** is a full-duplex speakerphone with 20 programmable buttons (10-button display with Shift function for second group of 10), a 9-line by 24-character backlit display for feature interaction and LCD display of programmable button labels, and Gigabit Ethernet switch for PC connection.
- The **IP5522-SD** is a full-duplex speakerphone with 10 programmable buttons, a 4-line by 24-character display, and 10/100 Ethernet switch for PC connection.
- The **IP5622-SD** is a full-duplex speakerphone with 10 programmable buttons, a 4-line by 24-character backlit display with contrast adjustment, and 10/100 Ethernet switch for PC connection.
- The **IP5531-SDL** is a full-duplex speakerphone with 20 programmable buttons (10-button display with Shift function for second group of 10), a 9-line by 24-character display for feature interaction and LCD display of programmable button labels, and 10/100 Ethernet switch for PC connection.
- The **IP5631-SDL** is a full-duplex speakerphone with 20 programmable buttons (10-button display with Shift function for second group of 10), a 9-line by 24-character

backlit display for feature interaction and LCD display of programmable button labels, and 10/100 Ethernet switch for PC connection.

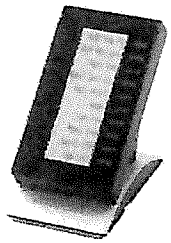
A RJ45 Ethernet PC jack is available to connect the IP telephone to the user's PC. The IP telephone can operate like a switch, as opposed to a hub, so the telephone can be connected directly to the LAN or Cable/DSL modem, and then a PC can be connected to the telephone PC jack to connect to the LAN through the telephone. This enables both the IP telephone and the PC to share the same Ethernet LAN connection.

Note that Gigabit Ethernet capability enables the PC connected to this RJ45 Ethernet PC jack to pass data at 1GB speed simultaneously while the phone uses less bandwidth. An IP phone typically uses about 80k for a voice call, only a fraction of its 10/100 throughput capability. The Gigabit Ethernet is specifically for connection of a PC to the same IP channel, which allows the PC to pass data at higher speed. If an IP phone does not have Gigabit Ethernet capability, the companion PC passes data at 100 mbps maximum.

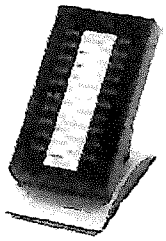
All IP telephones models provide the following capabilities:

- 802.3af Power-over-Ethernet compliant.
- Peer to Peer communication.
- Built-in tilt stand base.
- Full-duplex speakerphone.

A **10-button Add-on Module with LCD labels** (LM5110) can be attached to a Toshiba IP5130-SDL and IP5631-SDL telephone to add 10 buttons that can be programmed for outside line access, System or Personal Speed Dial, or Direct Station Selection. One to two Add-on Modules can be attached to the telephone to provide 10 or 20 additional buttons to the telephone's 10 buttons.

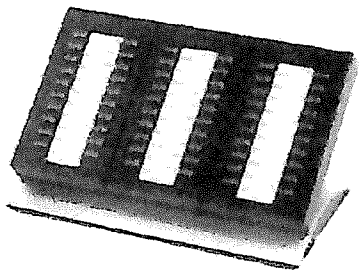


A **20-button Add-on Module** (KM5020) can be attached to a Toshiba telephone to add 20 buttons that can be programmed for outside line access, System or Personal Speed Dial, or Direct Station Selection. One to two Add-on Modules can be attached to a telephone to provide 20 or 40 additional buttons to the telephone's 10 or 20 buttons.



A **60-button Direct Station Selection (DSS) Console** (IDM5060) can be attached to a Toshiba IP telephone providing 60 buttons for answer position use. DSS consoles, operating with IP telephones, offer the following features:

* DSS with Busy LED Indication
* Outside Line Access Buttons
* Automatic CO Trunk Line Hold
* Speed Dial
* Feature Buttons
* All Call Voice Page
* Night Transfer
* Voice First or Tone Signaling
* Call Forward Override



The **IP*edge* Attendant Console** enables operators to process a heavy load of incoming calls quickly and efficiently. The streamlined functions of the attendant console can be operated either from the keyboard or clicking the mouse on screen buttons. This allows operators to use whichever method is easiest for them. The mouse and keyboard may be used interchangeably or in combination with each other.

The Attendant Console consists of a personal computer, Microsoft Windows software, color monitor, and mouse, along with a keyboard, handset/headset cradle, Attendant Console Interface unit, and special Toshiba-proprietary software. The console connects to the IP*edge* system via the LAN/WAN IP network, so it can be located at the front desk or located remotely anywhere on the network.

The IP*edge* EC system can support up to two attendant consoles and the IP*edge* EM supports up to six. Multiple consoles work well together, automatically sharing the load of incoming calls on a call by call rotation basis. Features such as Overflow, Position Busy Mode, and Interposition Call Transfer also add to the efficiency of multiple console applications. Though designed to be a dedicated console, the PC can also be used for other applications and serve as a multi-purpose Windows work station when call traffic is light.

The Attendant Console provides similar capabilities of other attendant consoles, plus many important additional features. This includes Caller ID, ANI, DNIS, answer prompting, call monitor display, message center, internal name/extension directory, name or number dialing, DSS calling or transfer by mouse click on BLF, an outgoing speed dial directory, auto day/night mode switching, feature on-line help, incoming call statistics, Windows multi-tasking, transfer to voice mail, and employee profile information.

The PC's color monitor displays detailed call information, including call identification, calling/called numbers and name indications, answer prompting, call waiting count, hold timer, and much more. The display provides an internal name/extension directory, an outgoing speed dial directory, and a busy lamp field, which enables the operator to see telephone status at a glance. Various colors indicate different status or conditions, making them more distinguishable to the operator. The display unit also enables the attendant operator to see call progress messages and soft key prompts, making the IP*edge* Attendant Console very easy to use.

Other powerful features include Call Answer Priority and Queuing, Direct Station Selection, DTMF Tone Signaling from Dialpad, Emergency Call, Flexible Programmable Buttons, and headset or handset operation with volume control.

The Attendant Console also enables efficient outgoing calling utilizing DTMF and Flash signaling, individual trunk access or trunk group access by programmable button, and system speed dial access. These features make outgoing calls easier and more functional on the Attendant Console than on many attendant consoles provided by other manufacturers.

Cyberdata SIP Door Phones are supported to accommodate two-way, full-duplex, voice and door control to local or remote locations connected anywhere via the LAN or external IP network. These SIP door phones can be powered by AC or PoE 802.3af. The IP*edge* can support as many as 24 door phones.

A door phone is frequently mounted near a building entrance and associated with a customer-provided door lock to help screen visitors. The door phone can also operate as a sound monitor, in which telephone users can call the door phone and listen to the surrounding area. It can also act as a hot line link where, for example, warehouse staff can access a pre-assigned telephone with a common directory number in an office with the touch of a button on the door phone.

Analog single-line telephones can also be used on IP*edge* systems. Toshiba does not manufacture an analog single-line telephone, but an analog gateway can provide interface to standard telephones and other analog devices.

2. IP Softphone

Is a softphone version of the IP telephone available for operation on computers and smart phones? What functionality does it provide compared to a desktop IP telephone? What is required for connection and use of the softphone locally or remotely?

The Toshiba SoftIPT is a soft phone client that works with a wired or wireless (Wi-Fi) desktop or laptop PC. The Toshiba SoftIPT soft phone integrates the power of a PC with all of the features available on a Toshiba IP desk telephone, except background music.

With the Toshiba SoftIPT installed on a Wi-Fi-enabled laptop PC, users can have true mobility with access to voice mail, programmable feature buttons, and a directory that works with Microsoft® Outlook®. Users can access the Internet on the same laptop PC that has the Toshiba SoftIPT.

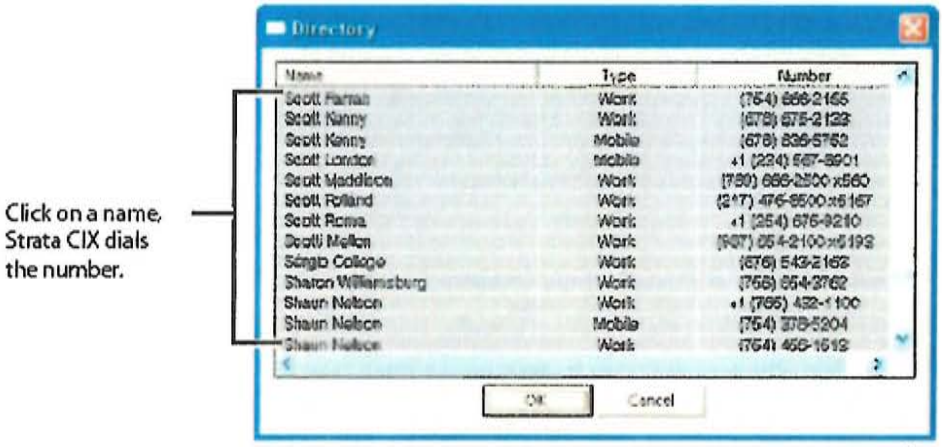
SoftIPT operation requires a wired or wireless connection over the IP network (Internet, WAN, LAN, etc.) to the IP*edge*. The voice communications uses the MEGACO+ protocol for call control signaling and RTP for voice transmission.

The Toshiba SoftIPT phone works on desktop, laptop, or tablet PCs with Windows XP, Vista, or Windows 7 operating software.

The Toshiba SoftIPT phone operates much the same as a Toshiba IP desk telephone.

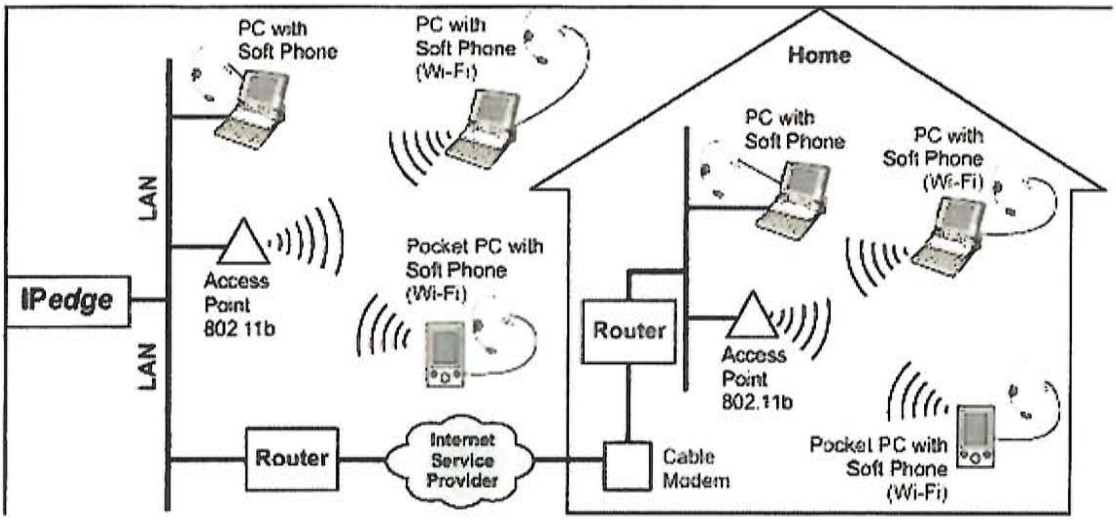
A mouse or stylus is used to click or select the buttons. The **Call** button operates the same as the Toshiba desk telephone **Spkr** button. Additionally, there are programmable feature buttons that can be customized from telephone programming mode.

With Outlook, you can create a directory for the SoftIPT phone. Once a directory is created, the user can click on a name in the directory to automatically dial their number.



The SoftIPT softphone can be connected to the system in several different ways:

- Intranet – A wired or wireless PC can connect to the office LAN that connects to an IP telephone that connects to the IP*edge*.
- Internet – A wired or wireless PC at a remote site can connect to a Cable or DSL modem, to an Internet Service Provider (ISP), to a router, to the IP*edge*. See diagram below.
- Wireless – The wireless PCs need a Wi-Fi system that uses the 802.11b standard. The IP Soft Phone wireless units can operate within 300 feet of an access point. Toshiba does not provide or recommend access point equipment.



3. Wireless telephone equipment

Describe wireless telephone equipment that can be used with the proposed system.

Toshiba offers a variety of wireless solutions to meet the needs of every wireless application. This includes wireless telephones that work over your existing wireless LAN or over a separate proprietary in-building network.

Toshiba's IP4100 SIP DECT solution provides a cost-effective in-building wireless solution, built on proven DECT 6.0 secure technology. The IP4100 DECT solution is a complete in-building mobility solution that supports growth flexibility up to 200 handsets and 40 access points, with seamless roaming between bases in a multi-base configuration. A 2 inch color TFT back-lit display, colored LED status indication, and high-quality speaker phone provide ease of use.

Toshiba's strategic relationship with Polycom provides a variety of wireless telephones that fully integrate with Toshiba IP*edge* systems.

Polycom SpectraLink mobility solutions for IP*edge* systems can operate within a micro-cellular architecture within your facility or over your wireless Local Area Network. This includes 6000-series and 8400-series WiFi telephone models. This relationship with SpectraLink is a part of Toshiba's commitment to be a leader in mobility solutions.

Every Polycom SpectraLink product offers the following benefits:

- Excellent voice quality
- Durable handset
- Text messaging
- High reliability
- Minimal maintenance and administration

Polycom Wireless LAN solutions operate over the customer's existing IEEE 802.11b/g WLAN infrastructure and does not require any proprietary base telephones or access points, combining voice and data applications on the same network. Customers can leverage their investment in their existing wireless voice-data LAN with no additional infrastructure cost to support 6000-series and 8000-series wireless telephones, using Session Initiation Protocol (SIP), registering directly to the IP*edge* system without any gateway requirements. This requires adequate access point coverage and bandwidth.

4. Fixed Mobile Convergence (FMC)

Describe the FMC application available with the proposed system. FMC is presumed to enable the user of smart cellular telephones to use these devices as PBX extensions both locally via the wireless LAN and remotely via a cellular network, and have the ability to handoff between the WLAN and cellular networks during an active call. Describe any additional software or hardware required to support this capability.

Toshiba's uMobility Fixed Mobile Convergence (FMC) solution empowers mobile workers to make and answer their PBX calls and conduct business conversations from virtually anywhere. The user's smart cell phone functions as their PBX extension phone both while in the office via the wireless LAN and while out of the office via a cellular network.

- A single device (smart cell phone) can connect through and be switched between wire line (PBX wireless LAN network) and wireless (cellular) networks.
- This includes the ability to seamlessly move calls between the wire line and wireless networks during a call, and provide roaming and handoff between networks.
- One number reach enables callers to dial your PBX DID extension number and reach you on your desk telephone or cell phone, so you only have one number to give out for business purposes.
- Missed business calls go to the enterprise (PBX) voice mail to leave messages, rather than the cell phone voice mail, so you have only one to check for all your business calls.
- PBX features extended to the cell phone include one number reach, enterprise dialing, call hold, call transfer, enterprise message waiting indication, and many more, over a cellular network.

By allowing the user's smart phone to function as a business telephone, users get the best of both VoIP and cellular calling, including access to the device's telephone book contacts and call history functions. These functions are natively integrated with the uMobility client resulting in a single application that meets the user's needs. There is virtually no learning curve with uMobility since the user is using his or her smart phone.

Using uMobility with Toshiba IP*edge* systems helps enterprises reduce communication costs. By using the enterprise wireless LAN Wi-Fi network for voice calls instead of costlier cellular minutes, enterprises get the best of both Wi-Fi and cellular coverage in a single device. When the user is in the cellular network, uMobility continues to reduce costs by routing calls through the enterprise network thus securing optimal costs for both domestic and international connections. IP*edge* users gain increased mobility without needing to purchase an additional cell phone, change carriers or buy expensive data plans to use their smart phone as a mobile PBX extension.

uMobility FMC provides a compelling proposition for enterprises for achieving cost optimization, better accessibility for its mobile users resulting in improved business efficiency and effectiveness of the organization.

The uMobility e-FMC solution is very flexible. It is compatible with all cellular service providers. It is compatible with many models of smart cell phones using the Windows Mobile or Symbian operating systems, Apple iPhone devices, RIM Blackberry devices, and Google Android devices.

The uMobility solution consists of client and server software.

- The uMobility client is easily downloadable and configurable for WLAN capable Windows Mobile, Symbian, Apple iPhone, RIM Blackberry, and Google Android devices. The uMobility client provides a user-friendly and intuitive dialer-based single telephone interface for Enterprise, VoIP and normal Cellular calls. Native phonebook contacts and call history logs and other such functions are integrated with the client resulting in a single application for all voice call related needs of the enterprise user.
- The uMobility server, called the uMobility Controller (uMC), connects the enterprise network and provides interface to uMobility clients and the IP*edge* with many other clients on the remote side.

The uMobility client along with its VPN Client offers a compelling proposition for enterprise users who would like to have secure VoIP communication with enterprise network from anywhere in the world.

5. Simultaneous Ringing (Twinning)

Describe the twinning application available with the proposed system that will enable simultaneous ringing of multiple devices and/or destinations. Describe any additional software or hardware required to support this capability.

The Toshiba IP*edge* supports this capability as a standard feature of the system's Find-me Follow-me capability. It enables a single phone number to reach a user's multiple endpoints, e.g. desk phone, mobile phone, outside phone number, another extension in the system, or any combination of these devices and/or destinations either in succession or all at once (simultaneous ringing). Presence status enables a user to designate how to handle incoming calls if busy or out of the office.

N. Telephone System Feature Summary Chart

The chart that follows summarizes feature availability of the IP business telephone system. Answer with a check mark signifying feature availability as Standard (Std), Optional (Opt.), or Not Available (N/A). The column to the far right is provided for comments if needed.

System Features:	Standard	Optional	Not Available	Comments:
Account Codes - Voluntary	X			
Account Codes - Forced	X			
Account Codes – Verified	X			
Automatic Call Distribution (ACD)		X		
ACD Multiple Group Agent Login		X		
ACD Priority Queuing		X		
ACD Skills-based Routing		X		
Automatic Number Identification (ANI)		X		
Automatic Off-hook Line Selection	X			
Automatic Recall (Hold, Transfer)	X			
Automatic Station Relocation	X			
Background Music Interface	X			
Backgr. Music/MOH Separate Interfaces		X		
Background Music Through Telephones	X			
Battery Backup - System		X		
Battery Backup - Memory	X			
Barge-in Override	X			
Busy Override Tone	X			
Busy Station Transfer/Ringing	X			
Call Duration Display	X			
Call Forward - All Calls	X			
Call Forward - Busy	X			
Call Forward - No Answer	X			
Call Forward - Busy/No Answer	X			
Call Forward - Fixed	X			
Call Forward - External & Remote Change	X			
Call Forward - Follow Me				
Call Forward - System-wide Default	X			
Call Forward Override	X			
Call Pickup - Directed Telephone	X			
Call Pickup - Telephone Group	X			
Call Pickup - Ringing CO Trunk Line	X			
Call Pickup - Ringing CO Trunk Group	X			
Call Pickup - Holding/Parked	X			
Call Transfer Immediate	X			
Call Transfer with Announcement	X			
Call Transfer with Camp-on	X			
Call Transfer Recall	X			
Call Record to Voice Mail	X			
Call Waiting with Camp-On Tone	X			
Caller ID		X		
Caller ID History	X			
Centrex/PBX Feature Buttons	X			
Centrex Ringing Repeat	X			
Class of Service - Telephone	X			
Class of Service - Traveling	X			
CO Trunk Line Identification	X			
CO Line/Trunk Groups	X			
CTI Desktop TAPI Support		X		

CTI System-wide CSTA Link		X		
Conference	X			
Conference Split	X			
Continuous DTMF Signal Tone	X			
Credit Card Calling ("0+" Dialing)	X			
Delayed Ringing	X			
Dialed Number ID Service (DNIS)		X		
Direct Inward Dialing (DID)		X		
Direct Inward System Access (DISA)		X		
Disconnect Supervision	X			
Distinctive CO/Intercom Ringing	X			
Distinctive Telephone Ringing	X			
Do Not Disturb	X			
Do Not Disturb Override	X			
Door Lock Control		X		
Door Phone Interface		X		
DSS/BLF Buttons	X			
DTMF and Dial Pulse Compatible	X			
DTMF Continuous Tone	X			
Enhanced 911 Operation		X		
Feature Sequence Buttons	X			
Flexible Button Assignment by User	X			
Flexible Extension Numbering	X			
Flexible Line Ringing Assignment	X			
Hands-free Answerback on Intercom	X			
Handset Volume Control	X			
Headset Compatible		X		
Hearing Aid Compatible	X			
Hold - Automatic	X			
Hold - Exclusive	X			
Hold - Recall	X			
Hot Desk	X			
Instant Messaging		X		Call Manager
Least Cost Routing	X			
Live System Programming	X			
LED Two-Color Indicators	X			
LED Flash Rates By Condition	X			
LED Line in Use (I-Use) Indication	X			
LED Line on Hold (I-Hold) Indication	X			
LCD Alphanumeric System Messages	X			
LCD Alphanumeric Personal Messages	X			
LCD Absence Messaging	X			
LCD Busy Telephone Messaging	X			
LCD Feature Prompting with Soft Keys	X			
Message Waiting – IP Telephones	X			
Message Waiting – Analog Telephones	X			
Message Stutter Dial Tone –Analog phones	X			
Microphone Control Button	X			
Microphone Sensitivity Control	X			
Modular Expansion System Design	X			

Multiple Directory Numbers	X			
Multi-language LCD Display	X			
Multiple FCC Registration (KF,MF,PF)	X			
Networking of Multiple Systems		X		
Network Coordinated Numbering		X		
Network Centralized Attendant Service		X		
Network Centralized Voice Mail		X		
Network Centralized Network SMDR		X		
Network Distributed Network SMDR		X		
Night Service Scheduled Auto Activation	X			
Night Ringing Call Pickup	X			
Night Ring Over External Page		X		
Night Ring Over External Page Zones		X		
Non-blocking Architecture & Dialing	X			
Off-Hook Call Announce	X			
On-hook Dialing with Hot Dialpad	X			
Outgoing Call Restriction	X			
Paging - Internal Telephone Speakers	X			
Paging - Internal Telephone Groups	X			
Paging - External Interface		X		
Paging - External Zones		X		
Park Zones	X			
Personal Admin for Individual Users		X		
Pooled Line Keys	X			
Power Failure Transfer		X		
Presence		X		Call Manager
Privacy/Non Privacy Option	X			
Privacy Button	X			
Privacy Release Button	X			
Private CO Trunk Lines	X			
PC Programming & Upload/Download		X		
Redial - Last Number Dialed	X			
Redial - Automatic Busy Redial	X			
Release Key	X			
Release/Answer Key	X			
Remote Maintenance/Administration		X		
Ringing Line Preference	X			
Speakerphone		X		
Speed Dial Buttons	X			
Speed Dial Directory Dialing on LCD	X			
Station Hunting - Voice Calls	X			
Station Hunting - Data Calls	X			
Station Message Detail Recording (SMDR)		X		
Station Queuing	X			
Station Speed Dialing	X			
System Speed Dialing	X			
System Fault Finding & Diagnostics	X			
System Alarms		X		eMonitor function
Telephone Set Upward Compatibility	X			
Tenant Service	X			

Through Dialing	X			
Toll Restriction	X			
Toll Restriction Override Codes	X			
Toll Restriction Speed Dial Override	X			
Traffic Measurement & Reporting	X			
Trunk Queuing	X			
Trunk-to-Trunk Connections	X			
Trunk types:				
- Analog Loop-start		X		
- Analog Ground-start		X		Gateway dependent
- Analog DID		X		Gateway dependent
- Primary Rate Interface (PRI)		X		
- T1 Interface		X		
- SIP Trunks		X		
Uniform Call Distribution (UCD)	X			
Voice Mail Conference	X			
Voice Mail LCD Feature Display/Prompts		X		
Voice or Tone Calling Options	X			
Volume Control - Handset	X			
Volume Control - Ringing	X			
Volume Control - Speaker	X			
Wireless Fixed Mobile Convergence (FMC		X		
Wireless/Desk Phone Simultaneous Ring	X			
Attendant Console Features:				
Answer Button with Priority	X			
Answer Prompting by Type of Call	X			
Attendant Conference Setup	X			
Auto Dialing - Internal Telephones	X			
Auto Dialing - Outgoing Speed Dial	X			
Busy Lamp Field Display	X			
Call Transfer	X			
Call Waiting Count Display	X			
Caller ID/ANI Display	X			
Color CRT Display	X			
Dial "0" For Attendant	X			
Dial Outside Number for Telephone User	X			
Direct Station Selection	X			
Directory Display and Dialing	X			
DTMF Tone Signaling from Dialpad	X			
Emergency Call	X			
Emergency Page	X			
Feature Help On-line	X			
Headset Compatible	X			
Hold Button and Display	X			
Hold Timer Display	X			
Hold/Park and Page Combined	X			
Incoming Call Identification	X			
Incoming Attendant Call Statistics	X			
Multiple Console Operation & Load Share	X			
Keyboard or Mouse Operation	X			

Maint./Admin. from Attendant Console	X			
Message Center	X			
Message Waiting	X			
Multi-tasking	X			
Night Transfer	X			
Overflow	X			
Override	X			
Position Busy Mode	X			
Release Button	X			
Split Button	X			
Selective Answering by Call Type	X			
System Speed Dial Access	X			
Through Dialing	X			
Transfer Direct to Voice Mail Box	X			
Volume Control	X			

V. Voicemail/Unified Messaging Product Requirements

This section presents questions regarding the voicemail and unified messaging requirements of The City of Fraser Michigan. Refer to configuration requirements in Section VI.

A. General Requirements

1. System Environmental Requirements

The voicemail/unified messaging capabilities must reside within the telephone system platform and not require any additional equipment or additional environmental requirements beyond that of the proposed telephone system. Describe what is required to support the voicemail/unified messaging capabilities, and additional environmental requirements, if any, for operating temperatures, relative humidity, power considerations, grounding requirements, etc.

The Messaging application which includes auto attendant, voicemail, unified messaging, and other related capabilities resides on the IP*edge* server. Messaging capabilities are simply activated with licensing and does not require any additional equipment or additional environmental requirements beyond that of the IP*edge* system. **The proposed IPEdge EC system is licensed for 23 ports with room for up to 5,000 mailboxes**. The system can expand up to 32 ports, (32 calls at the same time) when at maximum capacity.

2. System Registration

The proposed system must be both UL approved and FCC registered.

Toshiba IP*edge* systems are listed with Underwriters Laboratory (UL) and complies with all safety requirements.

B. System Requirements

1. System Expansion

The proposed voicemail/unified messaging must be expandable for future growth. Describe the expansion capabilities by ports, mailboxes, disk storage, etc.

The Messaging application meets the needs of any size configuration. Because Messaging is contained in the IP*edge* server and there is no additional equipment required, simply apply the number of user mailbox licenses required. Start small and add as many in the future as required.

3. System Capacities
The proposed system must be able to accommodate the minimum capacities shown below. Please indicate maximum capacities of the proposed system:

Capacity Criteria	Minimum Capacity	Maximum Capacity
Number of voicemail ports	16	32
Number of mailboxes	No Minimum	Up to 5,000
Length of message	Unlimited	Unlimited
Amount of message storage	Limited only by available hard disk space	Limited only by available hard disk space

C. System Administration

1. Security Features
Describe the security features of the voicemail/unified messaging system.

* Minimum/maximum password length? Who controls the length?

  The security code length can be a minimum of 1 and maximum of 9 digits. The minimum length is determined by the system administrator during setup.

* Can they be viewed by the system administrator?

  User mailbox passwords cannot be viewed by the administrator. However, the administrator can change the password at any time.

* Can passwords be reset? By whom?

  Yes, passwords can be changed by the user and reset by the system administrator.

* Can they be locked after a certain number of invalid attempts?

  The Messaging system will hang-up on or disconnect from a caller using an invalid security code to access a mailbox after a defined number of attempts. This helps prevent automated dialers which try to expose passwords by repeated attempts. When the maximum number of password entry attempts per mailbox is exceeded, the Messaging system locks the mailbox to prevent further use and notifies the system administrator via email.

* What notification is provided when a mailbox is locked out due to excessive repeated invalid attempts?

  When the maximum number of password entry attempts per mailbox is exceeded, the Messaging system locks the mailbox to prevent further use and notifies the system administrator via email.

* Can the number of dial-out digits be controlled to help prevent toll fraud?

  A limited number of digits are allowed in a dial-out according to class of service to prevent international toll fraud.

2. Mailbox Options

Describe the mailbox options of the proposed voicemail/unified messaging system.

* Minimum/maximum greeting length?

  The personal greeting length of a mailbox is flexible and can be any length. There is no minimum or maximum limit. However, it is useful to set minimum message length to prevent "hang-up" messages. Maximum length is also useful to avoid excessive storage.

* Are mailbox users allowed to send messages to mailbox groups?

  Yes. There is a setting for each mailbox allowing or preventing them from sending messages to mailbox groups.

* Are mailbox users allowed to receive reminder/wake-up calls?

  Yes. There is a setting for each mailbox allowing or preventing them from receiving timed wake-up calls.

* Can each mailbox be set to determine the order of message playback (newest first, oldest first, etc.)? Can each type of message have its own playback preference (new, saved, etc.)?

  The message playback order can be flexibly be set for each mailbox for various types of messages, including general, saved, email, and deleted messages. This flexible setting determines the order of message playback to the mailbox owner. If set to FIFO (first in first out), the oldest message will play first and the most current message will play last. If set to LIFO (last in first out), the newest message will play first, and the oldest message will play last.

* Can each mailbox be limited to a maximum number of messages to avoid excessive storage?

  Mailboxes can be set with the maximum number of messages they may receive. If the maximum is reached the caller will be notified there is no room in the mailbox.

3. Internal Maintenance

Can the system be set to automatically purge messages on a system wide basis after a designated amount of time? What is the range of time that can be set? Can the system automatically selectively purge different types of messages (heard, unheard, saved, fax etc.)?

The Messaging application can be configured to automatically "purge" or delete messages on a system-wide level after a designated number of number of days. The purge setting is very flexible and can be different for new, saved, fax, and deleted

messages. These values can be any number of days, with no minimum or maximum amount of time for automatic purging.

4. System Backup

Describe system backup procedures available with the proposed voicemail system. The proposed system must provide an auto backup capability to automatically save the database on a scheduled basis.

The system can perform a daily or weekly backup of all system data including messages, greetings and configuration. The system can also automatically upload a backup to a remote FTP site and create multiple stored backup files.

5. Remote Administration

Describe the remote administration capabilities of the proposed system. What monitoring capabilities are provided?

All voicemail administration is done through the IP*edge* Enterprise Manager application resident on the system. System administration, programming, and maintenance can be performed from a PC using the browser-based Enterprise Manager application as a programming terminal either on-site or at a remote location.

Live system programming can be done so there is no interruption in service in most cases. The only service interruption would be for hardware upgrades in which server power must be off during installation.

The system monitor monitors the activity of the channels to display which channel is in use or on stand-by, which mailbox is in use and which mode Messaging is using.

6. Reports

Discuss your system's ability to provide reports. Discuss what reports could be used for securing the voice mail system and providing management information. Can reports be stored, printed on demand, and emailed?

The system records all activity from calls coming in or out of the Messaging application. By collecting this information, administrators can generate various reports. These reports help the system administrator manage and maintain the system to ensure optimum performance. Reports are available for viewing, printing or emailing and can be accessed from the reports menu on the WebController.

- **Full Report** is a comprehensive report that includes date, channel, time, department, mailbox number, duration of call, type of call (external caller or internal user), incoming or outgoing call, call result (answered or unanswered) and caller ID.
- **Mailbox List** report displays a detailed list of all mailboxes and includes mailbox, extension, subscriber name, department, COS, usage, new messages, saved messages, email messages, fax messages, deleted messages and total messages.

- **Mailbox Usage by Date** report displays the mailbox usage by date. The usage report records any activity made from the mailbox extension, which includes any calls received or made, whether they are external or internal.
- **Mailbox Usage Daily** report displays mailbox usage information by date.
- **Message by Mailbox** report provides a history of all messages by mailbox.
- **Message Activity** report displays message activity by mailbox.
- **Outbound calls** report provides information on all outbound calls placed by the Messaging application. The report includes mailbox number, date, time, result (answered/unanswered), call duration and number dialed.
- **Port Statistics** This report indicates summary activity per port on specified dates. Information includes the port or channel number, number of internal versus external calls, total number of calls, total duration, number of transfers and completions.
- **Script Logging Reports** report displays a list of all the calls to a script mailbox including time, date, caller information and key presses.
- **System Group List** report displays all broadcast groups in the system and shows if they are system groups or personal groups and whether they have recorded the group name.
- **System Hourly Statistics** report displays the total activity of the Messaging application on an hourly basis for the dates specified.
- **System Statistics** summary report displays the total activity of the voicemail for the dates specified.
- **Unattended Mailboxes** report lists all the mailboxes that have been created but not yet activated through the subscriber's menu.

5. Customization Tools

Does the proposed system provide customization capabilities to create feature customization and additional applications? Please describe these capabilities and give some examples how these tools can be used.

In addition to the standard department menus and mailbox greetings, the Messaging application allows for customized routines, called Scripts, which are used for directing callers around the system. Scripts can also be used to provide various choices to the caller as well as being the standard tool for setting up "Audio Text" mailboxes and building custom IVR applications.

Any mailbox can be defined as a script. As such, it can be constructed to provide interactive information to the caller, ask questions and save the recorded answers as incoming messages, or present the caller with options in the script to access other areas of the system. A script can be used to replace the standard opening greetings of a department. It resides in an already created mailbox and is referenced
by diverting a call to the mailbox. Once a caller is routed to the mailbox that holds the script, a list of choices is provided to the caller.

Scripts have many different applications, including:

- Providing callers access to other departments.
- Transferring callers to other mailboxes.
- Allowing callers to interactively answer a questionnaire.
- Providing callers with access to recorded information, etc.

D. Features

1. Audiotext (Information Only Mailboxes)

Does the proposed system have mailboxes designed only to dispense information without the option for the caller to reply to the message? Will the system automatically disconnect the caller after the information has been delivered? Could the caller be transferred to another mailbox/extension at the conclusion of the message? How many mailboxes can be created to dispense information? Is the message length programmable?

By entering select DTMF digits, as directed by audio prompts, a caller can play prerecorded information greetings. This information can consist of general information about the company, such as its address, telephone number, hours of operation, etc., or it can include specific product descriptions or other information that may be of interest to callers. The information/greetings are recorded in each of the applicable mailboxes as desired. Recordings can be configured to change on an automatic, scheduled basis (e.g., holiday greetings, etc.). There is no limit to the number of informational mailboxes or message length. If desired, the system can be set to automatically disconnect the caller after playing the message, or the system can be set to allow transfer of the caller. This can be flexibly set on a per mailbox basis.

2. Automated Attendant

The voice mail system is required to have automated attendant as part of its platform. Will the automated attendant offer supervised and unsupervised transfers, which could be automatically changed by time of day, day of week, and holidays? If a caller, using the automated attendant, finds they are going into voice mail, what must they do to call another extension or return to the operator?

The Messaging application supports all of the above required auto attendant features. The system answers incoming lines and lets callers route their own calls by entering a mailbox number. The call is routed according to the configuration of that mailbox. This configuration may dial an extension and, after performing Call Screening (if enabled), pass the call on to the user. When a caller stays on the line and does not enter any DTMF digits to choose a specific mailbox user, the call is transferred to the operator for assistance. If a caller goes into voice mail, they can leave a message, dial another extension number, dial 0, or stay on the line. The Automated Attendant call routing

feature provides supervised, blind and other types of Call Transfers to the destination extension in the telephone system.

3. Broadcast Messages

Does the system administrator have the ability to create and deliver system wide messages? Does the individual subscriber have that same capability? Can that be controlled through class of service?

Yes to all of the above. Any user on the system can create lists for group messaging.

4. Called Identification

Does the proposed system offer the capability of announcing the called party prior to connecting a call?

Yes. The Called Identification feature announces the called party prior to connecting the call. This feature can be used by a person answering a single extension for two people or departments. For example, calls directed to a single extension for both "Sales" and "Service" can be answered appropriately, since the words "Sales" or "Service" play before the caller is connected.

5. Call Screening

Describe the call screening capabilities of the proposed system.

When a caller enters the mailbox number of a user with Call Screening enabled, the system requests the caller state his/her name. The system records the information, dials the extension, and announces the calling party by playing the recording. The user enters DTMF digits to accept or reject the call. A rejected caller is prompted to leave a voice mail message for the user.

6. Directory

Indicate whether the proposed system offers a directory of all extension/mailboxes within the system? How and when can the directory be accessed? How are the names logged into the directory? Describe the procedure undertaken by the system to look for a match.

Yes. A caller enters the DTMF digits corresponding to the first few letters of a user's name and the system plays the recorded name that matches the entered digits. The caller is offered the option of selecting the name and being transferred or hearing the next name. These names are entered into the automated directory by the System Administrator and enhance the directory's search/find capabilities. Common choices for the names are the first and last names of the user or the last name of the user and a commonly misspelled version of the last name. In some cases, users may not wish to be listed or mailboxes that are used for special purposes should not appear. The directory can also be evoked by an internal user when addressing a message to another user on the system.

7. Distribution Lists

Indicate whether the proposed system offers group distribution lists. How many system-wide lists can be created? How many group distribution lists can be created by an individual subscriber from their mailbox? Is there any limit to the number of mailboxes that can be included in either distribution list? Can a mailbox be in any number of different group distribution lists both personal and system wide?

A message can be sent or redirected to multiple individuals, without having to input individual mailbox numbers. Distribution groups are either global, available to all mailboxes, or private, in which each mailbox owner can establish their own groups. The system can manage up to 99,999 distribution groups, private and/or global, with unlimited members and groups within groups.

8. Do Not Disturb

Does the proposed system provide do-not-disturb feature capabilities? Describe.

Yes. When the Do Not Disturb feature is activated, calls are processed as if the called extension is not available (Ring No Answer), and the caller is given the chance to leave a voice mail message for the user. Each mailbox user can turn this feature on and off as desired.

9. Forwarding Messages

Does the proposed system enable the user to forward a message with or without comments to another user or group of users? Can the message be re-forwarded by other users upon their receipt? Will all the introductory remarks attached to the message be retained?

Yes. A user can send a played message to other users. In forwarding the message, the originating user can optionally record comments that precede the message when it is played by the recipient(s). A message cannot be forwarded if the original message is marked "private."

10. Follow-me Call Routing

Can the proposed system forward a call to another extension or an external telephone number before the call is unanswered and transferred to voicemail?

A mailbox can be set up to forward a call to an external telephone number before the call is unanswered and transferred to voicemail. For example, you may be out of the office but are expecting an important call and want all calls to be transferred to your cell phone.

When using supervised follow-me, the mailbox owner can perform functions such as record the call, conference in another user, or send the caller back to the mailbox owner's voicemail box.

Follow-me is a feature that may or may not be available in your organization depending on how the system is set up.

11. Caller ID Routing

Can calls be routed, based on caller ID information? Is the routing flexible by department and/or individual mailbox?

Calls can be routed, based on caller ID information, to a designated mailbox or application. A complete or partial number (which includes only the area code, or area code + exchange) can be used. Caller ID routing tables are available at the system level, departmental level, and for every voicemail box.

12. Greetings

How many different greetings are available per mailbox with the proposed voice mail? Can the greetings be affected by time of day, day of week, holiday, and change automatically?

Each user may record two standard personal greetings (regular and temporary) which are played when the user is unavailable. Nine additional greetings are available if needed. Only one greeting can be in effect at any one time, the user can switch between the greetings as needed.

A mailbox can be configured to play a specific greeting automatically at pre-scheduled times and/or days of the week. Time of day greeting is a time-dependent greeting (e.g., good morning, good afternoon, good evening). Holiday messages and their dates can be pre-programmed into the system. When the internal calendar matches one of these dates, the appropriate holiday greeting will replace the main greeting.

13. Guest Mailboxes

Describe the use of guest mailboxes on the proposed system. Is there a limit to the number of guest mailboxes the system can have? What functionality does the subscriber of the guest mailbox have? Can the system administrator control subscriber's use of guest mailboxes?

Temporary guest mailboxes can be created and deleted as needed by the System Administrator with no maximum limit. A common example of temporary guest mailboxes are hotel guests. A hospitality mailbox is a streamlined mailbox that allows guests (users) to retrieve room messages from any phone on or off the property and access voicemail and faxes through a web browser. The front desk can also retrieve messages for a guest as well as retrieve messages from the archive for a guest that has already checked out.

14. LCD Feature Prompting with Soft Key Operation

Does the proposed system support LCD feature prompting display of voice mail features? Is soft key functionality provided to facilitate easy operating of these visual control features? Does LCD operating replace or supplement voice prompts?

Many voicemail functions can be displayed on the IP telephone LCD and operated by soft keys. Voicemail soft keys provide LCD telephone users with an active set of soft keys that prompt the user with available commands to play voice mail messages and to manage their mailboxes. Feature prompting makes these voice mail functions easy to

use via visual displays on the telephone in place of listening to voice prompts over the handset, although the voice prompts still play when soft keys are used. The number of New/Saved messages displays on the LCD when the telephone is idle and has at least one new message.

15. Future Delivery Options

Does the proposed system offer the delivery of messages at a preprogrammed time in the future? Can the message be canceled? Is there confirmation back to the sender of the message that the message was sent and received?

A user can create and address a message to another user, and then mark it for future delivery. The message is not delivered until the designated date and time has been reached by the system clock. A user can also review and/or delete a future delivery message.

When a user sends or forwards a message to another user, the message can be marked for receipt verification. When the message is played, the system automatically sends a notification message to the sender, informing him/her of the time the message was heard.

16. Message Type

Will the proposed system offer the user the ability to differentiate between regular, urgent, private, fax, etc.? Indicate how many different options and priorities of messages a subscriber might receive.

Yes. The Messaging user's mailbox will differentiate between regular, priority, private, priority and private, and fax messages that are in the new message queue.

17. Private Messages

Will the proposed system offer the party leaving the message the option to mark it private, so it cannot be forwarded to other users?

A caller can mark a message "confidential," meaning the message cannot be forwarded by the recipient to other users. When sending a message as confidential, the system will also provide you with the option to send the message with return receipt request. When a message is marked as confidential, the recipient will be informed that it is confidential before the message plays.

18. Return Receipt Request

Will the proposed system offer the party leaving the message the option request receipt confirmation so they know the recipient listened to the message?

When sending a message to a user's mailbox, you can request a confirmation that the recipient received and listened to the message. A notification will be delivered to your mailbox after the message has been listened to.

19. Message Playback Order

Are saved messages separated from new messages enabling the subscriber to not be burdened by listening to both? Will urgent messages be sent to the head of the message queue to ensure expeditious treatment by the subscriber?

All voice messages are presented in one of two message queues: new messages or saved messages. All messages remain in the new message queue unless they are saved or deleted by the user or automatically saved by the system. Messages flagged to be saved are moved to the saved message queue after the user has logged out of the mailbox. A user may transfer between the new and saved message queues by entering the appropriate DTMF digits.

A caller can mark a message Urgent. The message is placed at the beginning of the subscriber's message queue and the recipient, upon entering their mailbox is informed of the Urgent message.

20. Message Playback Controls

Can the user skip messages, pause during messages, speed up or down during messages? Can the user fast forward a predetermined number of seconds ahead or behind? Can the user replay or cancel the review of messages? Can the volume of the message be adjusted during review? Can the user adjust the speed of playback to decrease listening time?

While listening to a message, you can skip to the next, rewind, fast forward in increments of five seconds or as programmed by the system administrator), pause and resume (it automatically resumes after 60 seconds or as programmed by the administrator.

Users can make volume and speed adjustments during message playback. Settings are available for Low Volume, Normal Volume, High Volume, Low speed, Normal speed, and High speed.

21. Volume Control

Can mailbox users increase/decrease volume while listening to messages?

A mailbox user can increase or decrease volume during message playback. This is useful to compensate for variations in voice volume, telephone handsets, and other factors which can cause messages to be recorded at low or varying volumes.

22. Message Purging

Describe the system's procedure for purging messages. When does purging occur?

The system can be configured to automatically "purge" or delete messages on a system-wide level after a designated number of number of days after they have been heard. Only messages that have been listened to will be automatically purged. Unheard messages are never purged. A user, logging into their mailbox, is informed of any messages that will be purged. Unless the messages are saved, they are deleted upon log out. The system default value for purging is zero days, meaning that no purging is ever

automatically performed, and the maximum amount of time for automatic purging is 99 days.

23. Message Undelete

Can deleted messages be retrieved? How long after deletion are they accessible? How does this function work??

Deleted messages are stored in a special folder that can be accessed. Deleted messages can be undeleted and moved back into the user's mailbox. Deleted messages are accessible until the system performs automatic purging of old messages according to the programmable system settings.

24. Recall/Delete Sent Message

Can the proposed system recall and delete messages sent but not yet listened to by the recipient?

Yes. A message may be deleted from another user's mailbox by the user who sent it, if it has not yet been listened to.

25. Message Reply

Will the proposed system enable the user to reply to a message sent within the system by simply depressing a single digit, thus eliminating the need to input the message originator's mailbox number? Does the message have all the same delivery options that a newly created message has, i.e., urgent and confidential?

Yes. When one voicemail user sends a voice message to another, the recipient can send a reply without entering the sender's mailbox number. While listening to the message, a single DTMF digit can be entered and a reply message recorded. Delivery options are the same as for newly created messages.

26. Callback

Does the proposed system enable callback of the person who left a message in the user's mailbox? Does this work for both internal and external callers? What callback options are available?

The Messaging application supports both call back to an internal voicemail user and call back to an external caller who left the message.

As an alternative to replying directly to another internal user who left you a message, you can also call back the sender of a message. This option will ring their telephone rather than send a message to their mailbox. Options available include, call the number and delete the message, call the number and save the message, or call the number and keep the message as new.

You can also call back an external caller who left you a message. While listening to a message, a mailbox owner can initiate a call back to the caller based on their caller ID. In a

supervised call back the Messaging system remains on the call, allowing the use of functions such as call record, transfer to voicemail, or transfer to another mailbox owner.

27. Message Date and Time

Does the proposed voice processing system play the time and date of messages?

Prior to playing a message, the system normally plays the date and time of when it was recorded. If the mailbox is not configured to play the date/time automatically or the user wants it replayed after hearing the message, this feature enables the user to enter a DTMF command and play the date/time of the current message.

28. Message Length Control

Can the system administrator control the length of incoming messages in an effort to manage hard disk space usage?

The System Administrator can set the maximum message length (in seconds) of each incoming message for a given mailbox. If a caller attempts to leave a message longer than the maximum time allotted, the system stops recording and informs the caller that the maximum message length has been reached.

29. Message Notification

Describe the proposed system's message notification capabilities. Can the destination of message notifications be controlled by time of day and day of week?

Message notification allows you to set up a schedule where you are notified through additional devices when new messages are received to your mailbox. Examples of message notification include:

- Receiving a text message to your cell phone
- A notification to a pager
- A call-out to another phone number (e.g., home phone)

Message notification enables you to set a day/time schedule whereby these notifications are sent. For example, if you work from home one day a week, you may wish to be notified at your home number if a message is left in your office mailbox. On the weekends you may still want to know when a new message arrives, but only wish to be notified by a text message to your cell phone. Each separate notification is set up through a separate "notification Line."

Depending on your organization, you may have access to set up message notification directly, or your system administrator may need to set up message notification for you. Once message notification is set up, you can activate and deactivate this feature through your mailbox.

30. Message Retrieval Control
What order are messages played when retrieving messages from a user mailbox? Can this be changed?

The Message Retrieval Control feature selects the order in which messages play. By default, the system plays messages marked Urgent first, followed by all other messages in the order received ("FIFO" first-in first-out order). "LIFO" (last-in first-out order) is also available. Using this feature, the Urgent messages still play first but the user can elect to have all other messages played in reverse order, from most recent to least recent.

31. Message Waiting Indication
Does the proposed system activate a message waiting light on the mailbox user's telephone? Does the LCD display the number of new messages in their mailbox? Is there a delay or is the message delivered immediately?

The system will activate a light on the mailbox user's IP telephone when a new message is received. In addition, the telephone display shows the number of new messages are in the mailbox. The light is activated immediately when a new message is received without delay.

32. Networking (AMIS)
Describe the networking capabilities of the proposed voice processing system to link multiple voicemail systems. Does it use the AMIS or VPIM networking methods? If not, what?

The Messaging application supports both industry standard Audio Messaging Interchange Specification (AMIS) analog networking and VPIM networking as a standard feature. The AMIS analog networking protocol enables the exchange of messages between multiple messaging systems. Mailbox users can transparently send and reply to messages from mailbox users located on other but AMIS-enabled or VPIM-enabled voicemail systems.

33. Receiving Messages/Message Review
Will the proposed system notify the mailbox user of the total number of messages to be heard upon the request for the password? How will the system treat messages that have been listened to but not acted upon?

Upon completion of the log-in process, the user is notified of the number of new and saved messages in their mailbox. The number of new messages is also displayed on the telephone's LCD. If a user listens to an entire message, that message will be saved in the saved message queue without requiring any action from the user. If a user plays a message, but does not listen to it in its entirety, or does not choose to save it, that message will remain in the new message queue.

34. Recording Telephone Calls in Voicemail box

Can the proposed system record telephone calls in voicemail and store them as messages in a voice mailbox? Does the user have start/stop controls? Can the recorded calls be listened to and processed as any other voice message? Does the record feature also work on conference calls?

While on an active call, a telephone user can record the conversation and store it in their voice mailbox by pressing the Record button on the IP telephone. To stop the recording, the user only has to press the Record button again. Recordings can also be paused or restarted by pressing the Pause/Resume button.

Users can replay recorded messages by calling the voice mailbox that has the stored recording and play it back as any other message. The "record to" mailbox can be any mailbox number and can be accessed automatically when the Record button is pressed or dialed after the Record button is pressed.

The Record to Voice Mail feature is available on two-party calls and multi-party conference calls.

35. Transfer Direct to Voice Mailbox

Can the proposed system transfer callers directly to a voice mailbox without waiting for the call to ring their telephone and then forward to their mailbox?

The transferring party can transfer a call directly to a person's voice mailbox without waiting for the call to ring their telephone and then forward from the called party's telephone. The voice mailbox does not even need to be associated with an active telephone in the telephone system. The transferring party enters the Transfer to Voice Mail feature access code and the mailbox number followed by the # sign, and the call transfers immediately on receipt of the last digit. The transferred party hears the greeting associated with the specified mailbox and can then leave a message. Transfer to Voice Mail simplifies getting a call for a busy or absent employee to his/her mailbox. It eliminates the need for the caller to enter the desired mailbox number after being connected to the voice mail system.

36. Single Digit Menus

Is there the capability of single digit dialing to specified groups or departments? Can multiple menu layers be accessed by single digit selections? How many menu layers are offered?

The System Administrator can define the single-digit menu number(s) for each mailbox. While a user's greeting plays, a caller can enter one of these single DTMF digits to select an option on the menu, such as Audiotext, a personal assistant, Call Queuing or the operator.

37. Reminder and Wake-up Calls

Does the proposed system enable mailbox users to set reminder or wake-up calls? Can they ring either locally connected telephones or outside telephone numbers? Can they be either one-time or re-occurring at the user's option?

You can set a reminder or wake up call to ring a telephone at a specific time during the day. It can be set for a one-time or re-occurring basis on either a weekday or weekend. The wake-up ring will repeat every day as programmed until you turn it off.

The reminder or wakeup call can ring an extension in the system or can dial an external telephone number (like your cell phone).

E. Interactive Voice Response (IVR)

1. Describe the IVR capabilities of the proposed voicemail/unified messaging system.

The IP*edge* Messaging application has a number of powerful features which enable them to be used for Interactive Voice Response (IVR) applications.

Using scripting tools, the system prompts the user for input (using a custom prompt), waits for the user to enter a DTMF response (stored as a variable), and then uses that information to access a database to formulate a response.

2. What additional hardware or software is required to support IVR? Does the IVR application run on the same hardware platform as the voicemail and unified messaging applications? Can all of these applications run concurrent on the same hardware platform?

Using Scripts to create custom applications, the IVR application runs on the same IP*edge* hardware platform concurrently with call processing, voicemail and unified messaging applications and do not require any additional equipment. All that is needed is software licensing that enables the use of scripting tools. This provides one unified communications platform.

3. Does the proposed system provide a programming capability through which custom voice prompt and response entries can be created?

Yes. Programming is done through Scripts to create IVR related functions.

4. Can programmed IVR responses be combined with variable responses? For example, "Your order for 6 items will be shipped on October 5". The number 6 and the date are provided by the database, while the phrases "your order for" and "items will be shipped on" would be recordings that the system administrator makes.

Using scripting tools, the system prompts the user for input (using a custom prompt), waits for the user to enter a DTMF response (stored as a variable), and then uses that information to access a database to formulate a response.

5. Do you provide complete custom IVR application development services? What is provided and how does the program work?

IVR development applications are built as custom applications for each client. Toshiba offers "Optional" custom IVR programming and application development services that are add-on billable services. They can create an application that meets your specific needs. With the Toshiba IVR solution, you have a complete system fully supported by one trusted source. Toshiba will provide all the expert implementation, user training and system maintenance you need. A Toshiba project manager with extensive IVR experience will work closely with you to develop custom IVR solutions.

F. Unified Messaging

1. Describe the unified messaging capabilities of the proposed voicemail system.

Unified messaging allows a mailbox owner to access voice and email messages directly through their email inbox. Emails may also be listened to through your telephone or PC speakers.

You can listen to your voice messages with any audio player. The subject line of voice messages will include caller ID. The voice messages will include the duration of voicemail.

Each time you receive a voicemail an email will be sent to your inbox with an attachment that includes a recording of the voicemail. You can open this attachment with any audio player installed on your computer to listen to the recording or on your telephone.

2. Does unified messaging run on the same hardware platform as the voicemail and other applications? Can all of these applications run concurrent on the same hardware platform?

Unified Messaging runs on the same IP*edge* hardware platform concurrently with call processing, voicemail and IVR applications and does not require any additional equipment. All that is needed is software licensing that enables the use of Unified Messaging. This provides one multi-application unified communications platform.

3. Does unified messaging on the proposed voicemail system support IMAP4 Synchronization?

The IP*edge* Messaging application supports IMAP4 synchronization to provide the following abilities:

- Messages deleted from a Unified Messaging enabled voice mailbox via the telephone are deleted from the user's e-mail inbox.
- Messages listened to, but not deleted via the telephone user interface are marked as "read" in the user's e-mail inbox.
- Messages deleted from the user's e-mail inbox can be deleted or moved to a selected folder within voicemail.

4. Does unified messaging on the proposed voice processing system support other email servers in addition to Outlook?

The IP*edge* Messaging application does not require Microsoft Exchange as the email server. Any email server/service that is compatible with the Simple Message Transport Protocol (SMTP) and Post Office Protocol version 3 (POP3) Internet protocols is supported.

G. *Facsimile Services*

1. Describe the fax capabilities of the proposed voicemail/unified messaging system. Does it include Fax on Demand?

Fax applications run on the IP*edge* hardware platform concurrently with voicemail and other applications. Although Fax service is available through the Toshiba IPEdge EC system, TSS highly recommends that all fax service stay separated from the phone system server.

H. Feature Summary Chart

The chart that follows summarizes feature availability of the voice processing system. Answer with a check mark signifying feature availability as Standard (Std), Optional (Opt.), or Not Available (N/A). The column to the far right is provided for comments if needed.

Voice Processing System Features:	Standard	Optional	Not Available	Comments:
Audiotext	X			
Automated Attendant	X			
Broadcast Messages	X			
Busy Greetings	X			
Callback	X			
Called Identification	X			
Call Screening	X			
Caller ID Call Routing	X			
Directory	X			
Distribution Lists	X			
Do Not Disturb	X			
Follow-me Call Routing	X			
Forwarding Messages	X			
Future Delivery	X			
Guest Mailboxes	X			
LCD Feature Prompting with Soft Keys	X			
Message Type	X			
Message Notification	X			
Message Waiting Indication	X			
Message Date & Time by Request	X			
Message Date & Time	X			
Message Forwarding	X			
Message Length Control	X			
Message Playback Controls	X			
Message Playback Order	X			
Message Purging	X			
Message Reply	X			
Message Retrieval Control	X			
Private Messages	X			
Networking (AMIS)	X			
Receiving Messages/Message Review	X			
Recall/Delete Sent Message	X			
Record to Voice Mailbox	X			
Return Receipt Request	X			
Reminder and Wake-up Calls	X			
Single-Digit Menus	X			
Transfer Direct to Voice Mailbox	X			
Volume Control	X			

VI. System Requirements

A. Required Capacities of Proposed Business Telephone System

The following are the stated capacities of the system to be installed at 5 City of Fraser buildings.

IP BUSINESS TELEPHONE SYSTEM CONFIGURATION

The Toshiba IPedge EC System Components

Equipment and Licenses:

Part No.	Description	Qty
1700341F1	Adtran fixed port secure access Ethernet router -rackmount	1
1703595G1	Adtran 24 Port POE Managed Layer 2 Fast Ethernet	3
1703599G1	Adtran 48 Port POE Managed Layer 2 Fast Ethernet	1
4212908L1	TA 908 - 1-T1,8-FXS,1-DSX-1,10/100 and IP router	1
DELL-770-BBIF	R220 standard size rail kit.	1
I-CP-TRUNK	Trunk License - per channel of SIP, PRI or Analog Gateway	7
I-CP-TRUNK-DISC	IPedge Discount Trunk License	8
I-CP-USR	IPedge User or Endpoint License - per endpoint on server	47
I-EC4UR1-VL	IPedge EC VS (ACD Ready) on Dell R220 R1 with Windows 2012.	1
I-MSG-ADV	Mailbox license including IPMobility for each user and other mailboxes.	56
I-MSG-CH	IPedge Messaging Simultaneous Channel License	17
IP4100-BASE	Wireless SIP DECT 6.0 Base Station for IP4100 Handset	1
IP4100-BATTERY	3.7V 1100mA Li-Ion Battery	2
IP4100-STARTKIT	IP4100-DECT and IP4100-BASE bundle	1
IP5122-SDC-SPC	10-button IP Speakerphone 4-line Backlit LCD, GigE, CO Line Intf.	20
IP5631-SDL-SPC	20-button IP Speakerphone 9-line Backlit LCD, 100Mbps	45
I-UC-CLIENT	UCedge client license	20
LADP2000-3A	IP5000 Power Adapter	1

Software Support/Upgrade Service and Extended Hardware Warranty:

Part No.	Description	Qty
SUS**	5 years Software Support and Upgrade Service for EC R1 (Flat Rate)	
DELL-R220-5PS	Upgrade Dell R220 to five years pro-support	1
EXTNDWAR2YR-5YR	5 Yrs Phone Extended Warranty	1

Installation:

Part No.	Description	Qty
IN-EXISTIPPHON	Install & Program IP telephone phone - existing cable.	65
IN-I-CM-1	1Pedge Install Call Mgr and/or VoIP option	20
IN-I-CP-SIPGW	Inst. SIP Gateway	1
IN-I-CP-SIP-S2	IPedge Install 2 SIP User	4
IN-I-CP-TRUNK	IPedge Install Trunk	15
IN-I-CP-USR	IPedge Setup of one user or station	47
IN-I-MSG-ADV	IPedge Install Adv. Mbox	56
IN-IP4100-BASE	Install and program the IP4100-BASE wireless phone	2
IN-IP4100-DECT	Install and program the IP4100-DECT wireless phone	2
IN-IPTPHONE-PT	Program and license one IP Telephone end point port.	65
IN-I-RAID1-NEW	Installation of RAID1 drive kit for NEW I-EC server.	1
IN-I-SYS-EC	IPedge Install EC base	1

OTHER REQUIREMENTS

- Message waiting lamps on all telephones "Yes" Included and Available.
- System administration hardware and software "Yes" Included and Available.
- Hardware and software for modem pooling "Optional"
- ACD software and hardware. Include capability for reports. "Optional"
- LCR software "Included"
- Battery backup, 2 hours minimum. "Optional" City of Fraser Power Failure Strategy for all IT Equipment is recommended.

VII. Pricing

A. Equipment & Installation

Provide a full equipment and software listing with component pricing. If applicable, attach a copy of an Auto-Quote. Break out pre-cutover and post-cutover pricing. Break out installation costs as required.

Toshiba IPedge Communication System Quote: City of Fraser

Customer: City of Fraser

Contact Name: Michele D. Kwiatkowski

Contact Tel:

Prepared By: Walter Barrett

Site Name:

Quote Date: 08/23/16

System Name: IPedge

Server Model: EC

GSA Pricing

Version: R7.20e

IPedge Equipment and Licenses:

Part No.	Description	Qty	Price	Extension
1700341F1	Adtran fixed port secure access Ethernet router -rackmount	1	$622.40	$622.40
1703595G1	Adtran 24 Port POE Managed Layer 2 Fast Ethernet	3	$1,053.60	$3,160.80
1703599G1	Adtran 48 Port POE Managed Layer 2 Fast Ethernet	1	$1,600.80	$1,600.80
4212908L1	TA 908 - 1-T1,8-FXS,1-DSX-1,10/100 and IP router	1	$858.40	$858.40
DELL-770-BBIF	R220 standard size rail kit.	1	$104.00	$104.00
I-CP-TRUNK	Trunk License - per channel of SIP, PRI or Analog Gateway	7	$92.00	$644.00
I-CP-TRUNK-DISC	IPedge Discount Trunk License	8	$68.00	$544.00
I-CP-USR	IPedge User or Endpoint License - per endpoint on server	47	$59.20	$2,782.40
I-EC4UR1-VL	IPedge EC VS (ACD Ready) on Dell R220 R1 with Windows 2012.	1	$4,944.00	$4,944.00
I-MSG-ADV	Mailbox license including IPMobility for each user and other mailboxes.	56	$12.00	$672.00
I-MSG-CH	IPedge Messaging Simultaneous Channel License	17	$0.80	$13.60
IP4100-BASE	Wireless SIP DECT 6.0 Base Station for IP4100 Handset	1	$312.00	$312.00
IP4100-BATTERY	3.7V 1100mA Li-Ion Battery	2	$32.00	$64.00
IP4100-STARTKIT	IP4100-DECT and IP4100-BASE bundle	1	$686.40	$686.40
IP5122-SDC-SPC	10-button IP Speakerphone 4-line Backlit LCD, GigE, CO Line Intf.	20	$212.00	$4,240.00
IP5631-SDL-SPC	20-button IP Speakerphone 9-line Backlit LCD, 100Mbps	45	$176.80	$7,956.00
I-UC-CLIENT	UCedge client license	20	$63.20	$1,264.00
LADP2000-3A	IP5000 Power Adapter	1	$8.20	$8.20
	Total IPedge Equipment and License Charges:			$30,477.00

Software Support/Upgrade Service and Extended Hardware Warranty:

Part No.	Description	Qty	Price	Extension
SUS**	5 years Software Support and Upgrade Service for EC R1 (Flat Rate)	1099	$1.25	$1,373.75
DELL-R220-5PS	Upgrade Dell R220 to five years pro-support	1	$456.00	$456.00
EXTNDWAR2YR-5YR	5 Yrs Phone Extended Warranty	1	$1,348.52	$1,348.52
	Total Software Support/Upgrade Service and Extended Hardware Warranty:			$3,178.27

IPedge Installation:

Part No.	Description	Qty	Price	Extension
IN-EXISTIPPHONE	Install & Program IP telephone phone - existing cable.	65	$75.00	$4,875.00
IN-I-CM-1	IPedge Install Call Mgr and/or VoIP option	20	$55.00	$1,100.00

IN-I-CP-SIPGW	IPedge Inst. SIP Gateway	1	$220.00	$220.00
IN-I-CP-SIP-US2	IPedge Install 2 SIP User	4	$66.00	$264.00
IN-I-CP-TRUNK	IPedge Install Trunk	15	$55.00	$825.00
IN-I-CP-USR	Setup of one user or station	47	$28.00	$1,316.00
IN-I-MSG-ADV	IPedge Install Adv. Mbox	56	$17.00	$952.00
IN-IP4100-BASE	Install and program the IP4100-BASE wireless phone	2	$79.00	$158.00
IN-IP4100-DECT	Install and program the IP4100-DECT wireless phone	2	$50.00	$100.00
IN-IPTPHONE-PT	Program and license one IP Telephone end point port.	65	$19.00	$1,235.00
IN-I-RAID1-NEW	Installation of RAID1 drive kit for NEW I-EC server.	1	$350.00	$350.00
IN-I-SYS-EC	IPedge Install EC base	1	$1,089.00	$1,089.00
	Total IPedge Installation Charges:			$12,484.00

Total Charges:

Applications Equipment Charges	$30,477.00
Total Software Support/Upgrade Service and Extended Warranty	$3,178.27
Total Installation Charges	$12,484.00
Total Price:	$46,139.27

B. Leasing

Provide leasing costs. 60 Months $1 buy-out option has been provided.

SEE ATTACHED LEASING DOCUMENTS

C. Training

End user training will be required. Final pricing should include pre- and post-cutover training costs.

"All user training is included". Including all initial training requirements, up to 16 hours of user training is available throughout the lifetime of the installation.

VIII. Installation Service and Maintenance

1. Explain in detail the installation and warranty coverage, and time period of the warranty.

- Standard warranty Includes: **Standard first year warranty includes all labor costs, programming, service call visits, and training re-visits. (up to 16 hours of training)**

  Five Year Extended Warranty Plan for the City of Fraser Includes:

  a) **Toshiba 5 Year Software Support and Upgrade Service for IPEdge EC**
  b) **Toshiba 5 Year Hardware Warranty on all Toshiba Telephones**
  c) **Dell Server 5 Year Pro Support Warranty**

2. After the warranty period, what does your company offer in regards to the following optional service arrangements?

After warranty period, Telephone Support Systems offers multiple annual maintenance service options as follows:

* **Software Support & Upgrade Service Only**	**$1,250.00**
Labor Only Warranty	**$2,500.00**
Telephone Handset Warranty Only	**$1,750.00**
Telephone Support Systems Full Warranty	**$5,500.00**

***Software support is required minimum to stay current to maintain proper service levels expected by the City of Fraser. * Rates for SUS software support may pro-rate higher as increased by Toshiba, amount not to exceed 10% of price listed above.**

3. What are your standard maintenance hours? What are your optional plans, if any? Cost?

Standard Maintenance is 7:30 AM – 6:30 PM
If the City of Fraser is under using a maintenance agreement the day of the week, or the time of the day does not matter. The event is under coverage. There will be no charge. If the City of Fraser is without a maintenance plan or using a parts only plan, a truck roll and labor charges may apply. Those potential charges are listed below under break down service costs.

6. Does cabling provided under a separate contract (through your company or another) effect maintenance or warranty plans and costs? If so, how?
No.

7. **Break down service costs as follows:**

- Per call basis (Service Call without Maintenance Agreement)

After the first year of standard warranty coverage - Telephone Support Systems bills $123 per truck roll for each service visit. Each visit includes ½ hour of labor time. Additional ½ hour increments are billed at $50. Quarter hour increments are billed at $25. Weekends and/or after hours service that falls beyond the standard TSS hours that is stated above in question (4) is considered time and one half and is priced at $182.5/hour.

If the Toshiba 5 year parts warranty is included, TSS will not charge for any defective parts or components during the planned coverage period.

- Per call basis (Moves, Add, or Changes without Maintenance Agreement)

Same rates as listed above; with the additional cost of the component that was ordered.

- Annual Maintenance Agreement (quote should be for the year immediately following expiration of warranty)

Telephone Support Systems offers a full variety of coverage choices, (parts, software, labor, or full coverage), as the optional plans listed above.

- Five-year Maintenance Agreement (quote should be for the five year period immediately following expiration of warranty)
-

After initial warranty period has expired, only annual maintenance options are available.

6. Is your maintenance rate based upon a per port charge, a device charge, or a combination of the two? If not solely per port, list each item and its monthly charge.

Extended maintenance purchase from Telephone Support Systems is based on Server port configuration and type of system selected.

7. If the long-term service agreements are subject to price increases, please state the basis on which these increases can be made.

TSS pledges to keep service and labor prices consistent for seven years; as stated below under question 8. Essentially, as components become obsolete telephone support systems may need to share the potential market increases because of unavailable or limited components to keep a product healthy. The recommended Toshiba parts warranty is very useful in the initial endeavor to keep service and warranty prices to a minimum.

8. Explain in detail how additional equipment added to the basic system will increase service costs.

Telephone Support Systems will not increase our stated service call or labor prices for the City of Fraser for a period of 7 years from installation. The recommended Toshiba seven year parts warranty will help protect a customer from unnecessary increases in unexpected maintenance costs when adding components to the existing system.

9. How often would service rates be adjusted due to additions to the system?
Service rates stated in this RFP will remain constant for seven years.

10. Is preventive maintenance included during the warranty period and while the system is under a maintenance agreement? **YES**

- How often is preventive maintenance performed? **Quarterly**
- What, specifically, is performed during each preventive maintenance session? **System Emanager review and software upgrade if they are available.**

11. Does your company offer a software maintenance plan which assures the user will have the most current version of system features installed? **YES**

12. What are your response times during and after the warranty period? Any differences? Explain.

Telephone Support Systems Inc., response times listed directly below this question are identical regardless of the customers warranty situation.

13. Service Calls — What are your *response times* for?

- Complete system failure (define a system failure) **Guaranteed within three hours.**

  System failure defined as 50% of line or extension, or voice mail problem
- Major Service malfunction (define a major failure) **Guaranteed within three hours.**

  Major Service failure is considered the same as above; however, heath care facilities government buildings and senior citizen centers, like the City of Fraser, receive a three hour response for situations that fall under the 50% rule.
- Minor service malfunction (define a minor failure) **Guaranteed within 24 hours.**

A failure that can wait for repair beyond three hours – as described and agreed upon by City of Fraser authorities.

- Telephone outages (define a telephone outage) **Telephone outages are responded to based on the explanations above.**

14. Explain in detail your *service capabilities* on:

- A major problem. (as defined above) **Guaranteed 3 hour response time.**
- A minor problem. (as defined above) **Guaranteed 24 hour response time.**

15. Is service available 24 hours a day, 7 days per week?

YES

16. What is your guaranteed response time for Move and Change activity? Define exceptions, if any.

TSS typically expects to complete Move and Change activities within 48 hours. Emergency situations depending on "acts of God" or new installation traffic urgencies can occasionally push our response beyond 72 hours.

17. Where is your local installation/maintenance office located?

27300 Haggerty Road, Suite F7 Farmington Hills, Michigan.

18. How many installation/maintenance personnel do you have located within the local area of Detroit who are factory authorized to work on the system(s)? **Four at Telephone Support Systems Inc. Other Toshiba dealers in Detroit would build that number to 12 or more.**

19. Do you stock adequate spare parts to meet your service agreement commitments? Explain.

Yes. TSS consistently keeps over $250,000 of redundant parts and supplies allowing quick easy access to replacement cards, processors, power supplies, and telephones.

City of Fraser

Request for Proposal

for

IP Business Telephone System
& Voice Processing System

Date Issued: October 21, 2016

Date Due: November 3, 2016

Table of Contents

I. Introduction

City of Fraser is soliciting bids from reputable manufacturers and distributors of business telephone systems and voice mail equipment. The selected vendor will be our primary source for the following:

- Business telephone system hardware and software and voice mail equipment to be used in our office. Feature requirements are detailed in Section IV & V and configuration requirements are detailed in section VI.
- Installation and configuration services for this equipment.
- Training of users and administrators.
- Maintenance of purchased and installed equipment and software.
- Upgrades to the installed systems as necessary.

II. RFP Instructions

A. Completing the RFP

Each question requires a written response. If you would like to attach documentation to support your answers, please do so. However, the summary answers should stand on their own. The quality of the response to the RFP will be viewed as an example of the vendor's capabilities.

The RFP asks questions about functionality, approach, and pricing. If you require any clarification, provide the questions in writing email to Michele Kwiatkowski @ michelek@micityoffraser.com

Only existing business telephone and voice mail systems will be considered. Telephone or voice mail systems under development, in planning, or at beta test will not be considered. However, vendors can include additional information about future developments or plans under separate attachment.

Quoted prices and discounts should be guaranteed for at least 60 days from the response date.

B. Format, Due Date

Proposals are due **no later than 10:00 am November 3, 2016**. Late responses may not be considered. Submit responses to:

Kelly Dolland City
of Fraser 33000
Garfield Rd
Fraser MI 48026
Phone 586-293-3100
kellyd@micityoffraser.com

All submitted proposals will be considered the property of **City of Fraser**.

All proposals should include copies of product descriptions for the proposed equipment.

This request for proposal was sent to you on hard copy, and on diskette as a Microsoft Word compatible document. **Two (2) copies** of your completed proposal should be submitted on hard copy, and **one (1)** as a Word compatible document on diskette.

Name one person to be the coordinator for your RFP response and for any clarification activities, which might be necessary.

Aisha Sumler
Vertical Communication
Account manager
8840 Stanford Boulevard, Suite 4100
Columbia, MD 21045
Phone: 410-782-3497
Fax: 410-312-0896
asumler@vertical.com

C. Contract

The proposal should include a contract for all proposed equipment and services. If the vendor does not wish to submit an actual contract with the proposal, due to different alternatives proposed and pending choices from those alternatives, a sample contract should be submitted with the proposal.

D. Confidentiality

All material supplied to potential bidders by City of Fraser must be treated as confidential and cannot used for any other purpose than the response to this RFP. Information submitted by any bidder will be considered confidential to City of Fraser and will not be used for any other purpose than evaluating vendor responses.

E. Selection Process

A number of factors will influence City of Fraser's decision in selecting the product and the vendor providing it. In addition to cost considerations, proposals will be evaluated on the basis of the following factors:

1. Functionality of standard equipment and features to meet our specific needs
2. Availability of additional optional capabilities to add as needed
3. System growth and expansion
4. Ease of use
5. Ease of System administration
6. Product quality, reliability, and warranty plan
7. A credible commitment by the vendor to the product and to ongoing enhancement of both feature capabilities and service
8. Vendor qualification including:

a. Overall experience and reputation in the industry
b. Experience with the proposed system
c. Service and support resources, including training of vendor installation and maintenance personnel
d. Verifiable quality of service provided by vendor to area customers

Please note that City of Fraser will select the vendor based upon the best overall solution and value, and is not obligated to select the lowest price bidder.

F. Disclaimer

This RFP does not commit City of Fraser to any specific course of action. City of Fraser reserves the right to not select any vendor or purchase any goods and services resulting from this RFP.

III. Vendor Background

A. Company Information

1. List your company's legal name, address, and telephone number. Include parent company information if applicable.

Vertical Communications, Inc.
100 Holcomb Woods Parkway
Building 300, Suite 300
Roswell, GA 30076

2. How long has your company been in business?

Fulton Communications is based in Atlanta, Georgia with offices across the United States. Fulton Communications was originally founded in 1964 as a Motorola two-way radio business. In 1981, we grew to include and provide Mitel Telecommunications solutions for our clients, and by the mid-90's became a leading provider of integrated communications systems and solutions, ranking in the top 10 Mitel firms in the U.S. Fulton entered into its relationship with Vertical Communications in early 2012. In 2012, Fulton entered into an agreement with Vertical to become one of Vertical's newest dealers. According to Fulton, within a short timeframe Fulton achieved sales figures that exceeded all of Vertical's other partners. All of Fulton's Vertical-related sales were completely new installations, with no legacy Vertical technologies on-site. Fulton was named Vertical's number one channel partner in 2012 and 2013.

3. How long has your company or division been providing business telephone systems and related equipment?

Fulton has been providing business telephone systems and related equipment for the past 60 years. On June 2, 2014, Vertical Communications®, a leading provider of business communications software and solutions, announced that it has merged with Fulton Communications, one of the Inc. 5000 "fastest growing companies in North America." The new combined company has offered business customers vendor-direct communications technology solutions, including cloud and premise-based enterprise telephony, unified communications, and vertical-market voice applications, as well as a local presence for direct sales, support and professional services in major markets across the United States.

Post-merger, the new Vertical communications will double in size. Vertical will now be one of the largest providers of communications equipment, software and network in the United States. With this merger we are positioned for explosive growth.

4. Indicate whether your company is the manufacturer or the distributor of the proposed equipment. If your company is a distributor of the product, describe the terms of your agreement with the manufacturer, the manufacturer's level of support, and what contingencies they have in place should your company fail to continue to support the product for any reason.

   Vertical Communication is a manufacturer and the developer in the areas of telecom, PBX support; Voice, Data, IP, SIP and Video Solutions; Security provisions; Infrastructure Management and Finance Management.

5. If your company is a distributor of the product, how long has your company been distributing the specific products being proposed?

   Vertical is the manufacturer.

6. How many employees do you have?

Currently, at Vertical Communication there are 600 employees.

7. How many technicians do you have certified on the proposed equipment?

   Currently, at Vertical Communication there are 30 Field Technicians .

8. When were the models of systems you are proposing first installed at customer sites?

   - Business telephone system?

   - Voice processing system?

   The Vertical product Wave was first installed into a customer site for Business telephone system and Voice Processing System is 2004.

B. Manufacturing Quality Certification

Is the manufacturer of the proposed systems ISO 9001 certified as compliant with quality manufacturing standards? YES. Is the manufacturer of the proposed systems ISO 14001 certified as compliant with environmental manufacturing standards? YES

C. References

Provide a minimum of 3 references for customers with operations similar to ours that use the equipment being proposed. Include contact names, telephone numbers, email, and addresses.

City of Dayton
Peter M. Hager
101 W Third Street
Dayton, Ohio 45402
937-333-4205
Pete.hager@daytonohio.gov

Town of Yarmouth, MA
Shawn Macinnes
1146 Route 28
South Yarmouth, MA 02664
508.388.2231. Ext 1297
Smacinnes@yarmouth.ma.us

Dartmouth Public School
Jonathan Gallishaw
8 Bush Street
Dartmouth, MA 01748
508.997.3391. Ext 1119
Jonathangallishaw@dartmouthschools.org

IV. Business Telephone System Product Requirements

A. General Requirements

1. Use the product requirement information listed in this document to provide detailed pricing for the proposed IP business telephone system configuration specified in section VII.

2. Please provide product descriptions and brochures for the proposed IP business telephone system, voice mail system, telephone sets, attendant consoles, and other related equipment.

   The Vertical Wave Solution is a hybrid digital/IP solution. All native Wave IP UC applications are available at no extra cost and ready to use when you are, thanks to Vertical's unique single licensing model. The base user license included with every Wave IP system gives everyone at City of Milford access to Vertical's award-winning ViewPoint desktop Unified Communications client and to 100% mobility via the ViewPoint Mobile app, as well as features and tools they need to:

   - **Communicate and collaborate quickly with the ability to see customized personal statuses and the availability of everyone in your company directory across all of their devices**
   - **Build personalized voice greetings and customized customer routing rules, including VIP Call Handling**
   - **Improve customer service with screen-popped caller information and contact center queue callbacks**
   - **Easily record, search and retrieve calls to enhance customer service, ensure compliance with industry standards and regulations, and support employee training and performance**
   - **Record and broadcast targeted messages to groups or all City of Milford employees**
   - **Add notes to and prioritize messages at a glance with Visual Voice Mail**
   - **Enhance safety and emergency response times with custom emergency Caller ID**
   - **Customize, extend and integrate Wave IP applications with your own third-party software packages such as CRM systems, billing applications, contact center reporting packages, IVR and more**

3. Describe any special environmental considerations with regards to installation of hardware, such as power requirements, minimum and maximum acceptable temperature and humidity ranges, power consumption, heat dissipation, rack mounting space requirements, etc.

Environmental requirements

For the Wave Server to operate properly, the environmental specifications in the following table must be met

All models.

Requirement	Value or range
Operating temperature	32° to 104° F (0° to 40° C)
Operating humidity	80% maximum relative humidity, noncondensing
Operating altitude	Up to 10,000 ft (3050 m)
Storage temperature	-4° to 140° F (-20° to 60° C)
Storage humidity	85% maximum relative humidity, noncondensing
Clearance for servicing	Minimum 24 in (61 cm) front and back
Clearance for cooling	Minimum 4 in (10 cm) on all sides
AC power requirements, E1 internal power supply	Base unit: 100-240 VAC, 50/60 Hz, 9A EXU: 6A

4. The proposed system must be UL approved and listed. Please state the UL listing compliance of the proposed system.

This equipment is Safety Listed by MET Laboratories, Baltimore, Maryland and complies with Underwriters Laboratories Standard UL 60950-1 (USA) and CSA C22.2 No. 60950-1.

B. System Requirements

1. System Capacities

The proposed system must be able to accommodate up to 200 users at full capacity. This includes capacity for at least 100 trunk lines and 100 telephones or endpoint devices. List these capacities of the proposed system.

The Vertical Wave can support well over 500 Users, 150 Trunks and 500 Telephones.

2. Endpoint Device Configuration Flexibility

The proposed system must be able to configure at its full capacity whether using IP desk telephones, analog telephones, wireless endpoints, or any combination of each. List the maximum capacities using each of these type devices.

IP Telephones- 250
Analog Telephones - 250

3. North American Transmission Standards

The proposed system must have complete compliance with the North American Numbering Plan standards. Describe the attributes of the proposed system as it relates to this.

The entire Transmission and FCC Registration Statement is below.

4. Multiple FCC Registration

The proposed system must be FCC registered. Our organization uses various types of trunk services so the business telephone system must be capable of being classified or tariffed as a Key system, Hybrid system, or PBX system as defined by the FCC. List the types of FCC registration available with the proposed system.

The entire Transmission and FCC Registration Statement is below.

Federal Communication Commission (FCC) statement

The following statements are provided in accordance with the Federal Communications Commission (FCC) regulations. Please read these statements carefully before installing your System.

FCC Part 15

This device complies with Part 15 of the FCC rules. Operation is subject to the following two Conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Changes or modifications not expressly approved by Vertical Communications, Inc. could void your authority to operate the equipment.
Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own Expense.

FCC Part 68

This equipment complies with Part 68 of the FCC rules. Located on the equipment is a label that contains, among other information, the FCC registration number and Ringer Equivalence Number (REN). If requested, this information must be provided to the telephone company.
The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of the RENs should not exceed five (5.0).
To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.
This equipment cannot be used on the telephone company-provided coin service. Connection to Party Line Service is subject to State tariffs.
If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.
The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.
If problems are experienced with this equipment, please contact your reseller.
If the problem is causing harm to the telephone network, the telephone company may require you to remove the equipment from the network until the problem is resolved.

It is recommended that the customer install an AC surge arrester in the AC outlet to which this device is connected. This is to avoid damaging the equipment caused by local lightning strikes and other electrical surges.
If your facility has specially wired alarm equipment connected to the telephone line, ensure the installation of Vertical equipment does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.
Wave Server models
The following table lists the FCC registration number and REN for each supported Wave Server model.
Wave Server FCC registration number REN
Wave IP 2500 6FJ-USA-33307-PF-E 0.9
Wave IP 500 6FJ-USA-33307-PF-E 0.9

5. Hearing Aid Compatible

All proposed telephone equipment must comply with rules adopted by the Federal Communications Commission that specify all telephones in workplaces of 20 employees or more must be hearing aid compatible. Describe the attributes of the proposed system and telephone sets as it relates to this.

This equipment is Hearing-Aid Compatible (HAC).

6. Manufacturer's Support

All hardware and software must be the current offering provided by the manufacturer, and that which receives the highest level of support available from the manufacturer. State whether the proposed system is the latest available version of both hardware and software and if not, explain what is being proposed and why.

The system will be installed with the latest Software Available Currently the Wave is on Version 5.0 SP1

7. Mean Time Between Failure

What are the manufacturer's stated "Mean Time Between Failure" statistics for the business telephone system and telephone sets being proposed? Explain the methodology for how these statistics are calculated. Explain any design factors that promote product reliability. **75 Years**

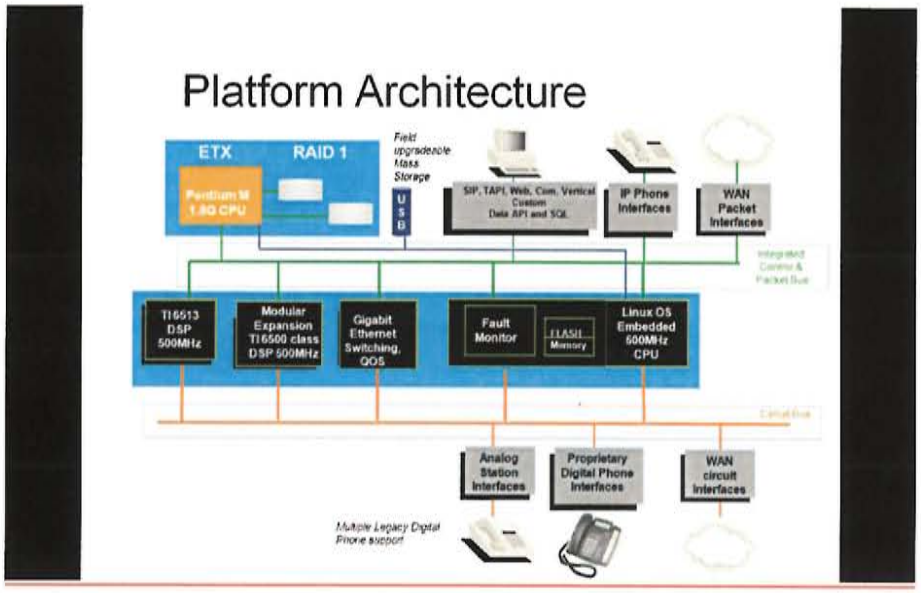
8. Cross Equipment Compatibility

The proposed system shall also be capable of interfacing with a Motorola Positron Viper 911 System, allowing the digital system to be answered along with analog 911 emergency lines on the Viper system. The proposed system will need to be compatible with current Digital Recording System for all lines maintained by a party vendor (DSS).

The proposed system will work in Tandem with The 911 system, T1 connection or Analog Trunks can be connected between the two systems to allow interaction.

C. *System Architecture*

Vertical Wave is a core IP platform with integrated blades for both analog and/or digital endpoints. All primary trunk options integrate including: analog CO, PRI/BRI/T-1 as well as SIP on the VoIP side for protocol integration. The hallmark of Wave is "Applications Inside" which includes all primary core applications: ViewPoint, ViewPoint Mobile, WaveNet, Call Classifier, Contact Center, Call Recording/Archiver, Unified Messaging, Global Administrator, and the API Client Integration package.



1. Scalability and Expansion

The proposed system must be expandable in design, with little or no loss of original equipment utility resulting from physical or software expansion. Physical capacity must be expandable by the simple addition of equipment or software without losing the original investment. Describe the attributes of the proposed system as it relates to scalable design and expansion.

The Vertical Wave System is expandable On the IP side by adding software licenses per user. The Wave is also expandable on the hardware side to support additional analog phones and (up to 240) and T1 cards (up to 6)

2. Single or Multiple Site Configurations

The proposed system must be able to function as one integrated system in either single or multiple site distributed configurations. Describe how the proposed system works in this regard.

In a Multiple site installation Wave-Net allows for inter location dialing and Voicemail networking. Voicemail networking is a distributed topology, allowing for voicemail redundancy in the event of network outage.

3. Rack Mounting Options

The proposed system must have a cabinet design that accommodates mounting in a standard 19" rack. Describe the attributes of the proposed system as it relates to cabinet mounting options.

The system was designed to comply with this requirement.

4. Server Requirements

As part of our server consolidation efforts to ease maintenance and control, our IT department seeks to keep the number of servers required to support voice applications to a minimum. Describe the number and type of servers required to support the proposed system.

Vertical Wave- is configured on a proprietary server with an "all in one" box setup, meaning the phone system, Voicemail and applications are included in the one server.

D. System Power

1. Power Consumption

What AC voltage is required to run the system? **110** What amp circuit is required? **15AMP**Does it require a dedicated circuit? **Yes** Provide the estimated maximum power consumption of the telephone system. **1400 WATTS**

2. Power Surge Protection

Is there any special surge protection requirements of the system beyond normal devices typically used with servers?

An Uninterruptible Power Supply (UPS) is strongly recommended in case of a site power failure.

3. System Battery Backup or UPS

Describe the type battery backup or uninterruptible power supply (UPS) you recommend powering the proposed system for 2 hours at peak traffic load during an AC power outage. What equipment is required?

APC Smart-UPS XL 1000VA USB & Serial 120V + (4)SUA24XLBP Battery Unit

Does the system immediately switch over from AC to battery or UPS power, or does the system have to be restarted?

Immediate

What occurs to the calls in progress during a loss of AC power?

Systems should not falter

How long will the battery or UPS hold the system up before a complete shutdown occurs?

2 hours

4. Grounding

Discuss what grounding alternatives are available to protect the proposed system from "ground loops," "pickup noise," and excessive "ground current." Are secondary protectors required?

The protective ground lug (earth contact) on the Wave Server base unit must be permanently connected to earth ground.
The National Electrical Code requires that the telephone and electrical services have a common ground. If separate grounds are used for telephone and electrical services, a voltage differential could develop between the two services. This could expose you to an electrical shock and damage the equipment.

E. System Administration

1. Maintenance Administration

Describe how maintenance administration is accomplished by the service technicians, system administrator, and individual telephone users. Can live system programming be done? **Yes** Can both programming and troubleshooting be performed remotely? **Yes** Describe the programming interface for the proposed system and what attributes make it user-friendly. **The Programming interface is a Web connection to the Wave Server that allows you phone system trouble shooting and server maintenance.**

2. System Fault Finding and Diagnostics

Describe the system's diagnostic capabilities. Can system faults be detected, alerted, logged, and traced? **Yes** How are fault alarms alerted and to whom?
Alarms can be reported to a local SNMP server and also logged to a file on the system and accessed remotely

3. Traffic Measurement and Reporting

Describe the system's traffic measurement and reporting capabilities. What additional hardware or software, if any, is required to support these capabilities?
The system comes equipped to track all calls into a call log. No additional hardware is required.

G. System Interfaces

1. Analog CO Line/Trunk Interface

Can the proposed system support both ground start and loop start analog lines? **Yes**
Can both be supported from the same gateway interface? **Yes**
Describe what equipment is required. **VWU-8AT-M2 8 Port Analog Trunk Module**

2. Digital Trunk T1 Interface

Can the proposed system support T1 interface? **Yes** How many T1 interfaces and trunks will the system support in relation to the maximum trunk capacity? **6 T1/PRI boards can be connect or a system total of 150 trunks.**

3. Digital Trunk ISDN Primary Rate Interface (PRI)

Can the proposed system support ISDN Primary Rate Interface? **Yes** How many PRI interfaces and trunks will the system support in relation to the maximum trunk capacity? **6 T1/PRI boards can be connect or a system total of 150 trunks.**

4. DID Interface

Does the proposed system support Direct Inward Dialing? **Yes** How does it work? Are DID trunks available on an analog proposed system's digital T1 or PRI interface? **If the DID trunks are analog an 8x8 analog universal module is required T1/PRI boards are used for TDM trunking and cannot be mixed with Analog** What additional system equipment is required? **VWU-8X8AU-M2 NEW" 8x8 Analog Universal Module**

5. SIP Trunk Interface

Can the proposed system support SIP trunk connection? **Yes** What additional system equipment is required to support SIP trunks? **A SIP Trunk license, 1 per system to support up to 150 SIP trunks**

6. SIP Telephone Interface

Does the proposed system support SIP telephones? **Yes** Do SIP telephones provide the same feature set as proprietary telephones proposed? **No** What additional system equipment is required to support SIP telephones? **Generic IP phone License**

7. Analog Telephone Interface

Does the proposed system support analog telephones? **Yes** Do analog telephones provide the same feature set as proprietary telephones proposed? **Yes** What additional system equipment is required to support analog telephones? **Analog station cards**

H. Unified Communications (UC)

Unified communications helps improve business efficiency by imbedding communications capabilities within commonly used business applications. Describe the UC applications available with the proposed telephone system and any additional hardware or software required to support them.

Every user on the Vertical Wave has access to Unified Communications using the Viewpoint Desktop application this allows for Phone Control, Desktop Softphone, Visual Voicemail, Call Logs and directory and contact integration.

I. Computer Telephony Integration (CTI)

Both desktop CTI applications and system-wide CTI applications must be supported on the proposed telephone system. Desktop CTI would typically be applications running on individual PCs. System-wide CTI applications would typically be applications running on a PC server connected to the telephone system, that all user PCs access through the LAN.

1. Desktop CTI

Describe desktop Computer Telephony Integration (CTI) capabilities available with the proposed telephone system. Elaborate on the hardware interfaces and software necessary to run a computer application with the proposed telephone system. Indicate what PC based software the proposed system presently supports.

We can support integration to many desktop click to dial applications. Most of the CTI applications are incorporated in our Desktop Viewpoint application.

2. System-wide CTI

Describe system-wide CTI capabilities available with the proposed telephone system. Describe any additional software or hardware required to support these capabilities. Is a software developer's kit available for third party custom development?

A system Developers toolkit is available to create a connection applications.

J. Voice over Internet Protocol (VoIP)

In addition to SIP Trunks discussed in the "System Interfaces" section, the proposed business telephone system must support remote user applications that support employees working off-site or at home with the same feature/function capabilities as if they were locally connected extensions in the telephone system.

1. IP Telephone Local Users

Describe how local IP telephones are connected to the Local Area Network (LAN) and the proposed telephone system. Describe the additional hardware/software options required to support these locally connected IP telephones.

No additional hardware or software required, a user license to enable the phone on the system is required.

2. IP Telephone Remote Users

Describe how remote IP telephones are connected to the Wide Area Network (WAN) and the proposed telephone system. Describe the additional hardware/software options, if any, required to support these remotely connected IP telephones.

An OpenVPN server is deployed to provided security and encryption to external phones across the Internet. Also a user license to enable the phone on the system is required.

3. Remote User Setup

Can a remote user install and setup their own IP telephone? **Yes, but not recommended.** What does a remote user need to do to make their IP telephone work? **A User license to enable the phone on the system is required.**

4. Virtual Private Network (VPN)

Is a VPN required to support remote IP telephone communication via the private IP network or the Internet? **Yes** What is gained or lost by using a VPN? **PTP Security** What VPN router is recommended or required? **None**

5. Network Address Translation (NAT)

Does the proposed system support NAT for remote IP telephone communication via the private IP network or the Internet? What are the advantages/disadvantages of NAT vs VPN? **No**

6. Virtual Local Area Network (VLAN)
Does the proposed system support 802.1Q Virtual Local Area Network (VLAN) capabilities? How is VLAN used in the proposed system? **Yes this allows the voice traffic to traverse on a separate Virtual Network from the data for priority routing.**

7. IP Protocols Supported
Which IP protocols does the proposed system use with its IP telephones (MEGACO, MGCP, H.323, SIP, etc.)? What are the advantages/disadvantages?
We use SIP for Voice Communication only.

8. IP Telephone Auto-registration
When either new IP telephones are added to the IP network or existing IP telephones are relocated, does the proposed telephone system provide auto-registration to automatically assign or move the telephone in system programming? **Yes**

9. Powering IP Telephone Sets over Ethernet LAN
Can IP telephones be powered over Ethernet as an alternative to local AC power for each individual telephone? What equipment is required?

10. PC Connection to IP Telephones
Can the proposed IP telephones be used as an Ethernet hub/switch for connection of a PC? **Yes**
How is this connected? **On the phone there is a built in switch port for the computer.**

11. Bandwidth Requirements and CODECs
How much bandwidth on the IP network is required for each IP telephone? **Approximately 80K for G7.11 or 40K for G7.29** If multiple choices, what are the advantages/disadvantages? **7.29 uses more CPU power since it compresses the call to a higher degree to use less bandwidth** What CODECs are supported? **G7.11 or G7.29** Can the proposed system support the use of multiple CODECs simultaneously? (For example, a call originating and terminating within the same LAN segment uses G.711, while another call that traverses the WAN uses G.729a.) **Yes**

12. Quality of Service (QOS)
Discuss how quality of service is handled in the proposed system. What QOS protocols/standards does the proposed system support? **DiffServ 46**

13. IP Telephone Survivability
Can the IP telephones fail over to an alternative or backup system if the primary VoIP system fails? **Yes if so equipped**
Can all the IP telephones fail over to the backup system? **Yes if so equipped**
Will the telephones be able to both make and receive calls from their new location? **Yes if so equipped** Will the trunks be automatically switched to the backup system or does it require manual intervention by the CO trunk provider? **Yes if so equipped using SIP trunks.** Can the telephones automatically fail back to the primary system when it becomes operational again? **Yes if so equipped.** What special equipment or setup is required to enable survivability? **We would need to equip the system with a "Business continuity" License and Redundant Hardware**

14. VoIP Network Readiness Assessment
Describe any network readiness assessment required or recommended to make sure our network will handle the addition of voice traffic over the IP data network. Do you provide this service? If not, who does?

15. IP Interoperability Standards
Indicate in the chart below the IP interoperability standards supported by the proposed telephone system.

	Interoperability Standard:	Support: Yes/No?	Comments or Explantation: (Partial, Future, etc.)
1.	802.11b	Yes	
2.	802.1d	Yes	
3.	802.1p	Yes	
4.	802.1q	Yes	
5.	802.3	Yes	
6.	802.3af	Yes	
7.	CBWFQ	No	
8.	Committed Access Rate	No	
9.	CRTP	NO	
10.	DCL	Yes	
11.	DHCP	Yes	
12.	DiffServ	Yes	
13.	DNS	Yes	
14.	FAX - Group 3	No	
15.	FAX - Group 4	No	
16.	G.711	Yes	
17.	G.723.1	No	
18.	G.726	No	
19.	G.728	No	
20.	G.729	Yes	
21.	G.729a	No	
22.	H.225	No	
23.	H.245	No	
24.	H.323	No	
25.	IP Precedence	Yes	
26.	Ipv6	Yes	

27.	MEGACO	No	
28.	MGCP	Yes	
29.	Policy Based Routing	No	Not Specifically on the phone system, this is a routing protocol typically supported by the network infrastructure
30.	PQWFQ	No	Not Specifically on the phone system, this is a routing protocol typically supported by the network infrastructure
31.	Q.931	No	
32.	Q.SIG	No	
33.	RED	No	
34.	RSVP	Yes	
35.	RTCP	Yes	
36.	RTP	Yes	
37.	RTSP	Yes	
38.	SCCP	Yes	
39.	SIP	Yes	
40.	SNMP	Yes	
41.	T.120	No	
42.	T.37	No	
43.	T.38	Yes	
44.	TAPI	Yes	
45.	TFTP	Yes	
46.	TCP/IP	Yes	
47.	UDP/IP	Yes	
48.	Weighted Fair Queuing	No	
49.	Weighted RED	No	

K. System Features

1. Account Codes

Describe the use of account codes on a voluntary, forced, and forced & verified basis for the proposed system. Indicate the maximum number of digits and the minimum number of digits. Where in the dialing sequence is the code input? **At the End of Dialing or Anytime in Viewpoint** Discuss account codes as they relate to SMDR or call accounting.

2. Contact Center and Automatic Call Distribution (ACD)

Provide a brief overview of Contact Center capabilities. Discuss ACD functional routing capabilities, historical reporting capabilities, multi-media contact functionality, and what options are available. Describe any additional equipment or software required to support these capabilities. **The system Comes fully equipped with Multiple ACD features. Priority, Queuing, Skills based Routing, Automatic Callback in Queue, Messaging. Reports, Real-time Monitoring, Coach, Monitor, Join.**

3. Automatic Off-hook Line Selection

Can telephones automatically select a specific line, line group, or directory number when the handset is lifted or the speaker button is depressed? **Yes** Is it programmable by individual

telephone? **Yes**

4. Automatic Station Relocation

Can a telephone be easily relocated within the proposed system by the system administrator without reprogramming? **Yes.** Specify which features and characteristics are retained and lost in the move. **None**

5. Automatic Number Identification (ANI)

Does the proposed system support Automatic Number Identification, to display the caller's telephone number on the telephone LCD? **Yes** Will it send the ANI digits to an attached computer or voicemail system? **Yes.** What type trunks are required for ANI? **Yes** Can ANI digits be received simultaneously with Dialed Number Identification Service (DNIS) called number digits? **Yes** Does the system capture call history for both abandoned (unanswered) and answered calls for later viewing or speed dialing? **Yes** What additional equipment is required to support these ANI capabilities? **None**

6. Caller ID

Does Caller ID display name, number, or both? **Yes** Is Caller ID supported on both analog and digital trunk lines? **Yes** Is Caller ID supported on IP telephones and analog telephones? **Yes** Does the system capture call history for both abandoned (unanswered) and answered calls for later viewing or speed dialing? **Yes** If a second call rings while on the first call, can the Caller ID display the second call information? **Yes.** Describe the hardware and software requirements, if any, to add Caller ID to the proposed system.

7. Dialed Number Identification Service (DNIS)

Does the proposed system support DNIS? **Yes** Are DNIS digits passed through the system as calls are transferred or forwarded? **Yes.** Is DNIS routing sensitive to day/night modes? **Yes** Can DNIS route calls outside the system? **Yes** Can DNIS digits be received simultaneously with ANI digits? **Yes** What additional equipment, if any, is required to support DNIS? **Yes**

8. Background Music and Music On Hold

What type of music interface is provided or available with the proposed system? **File Based and RCA type plug.** Is additional equipment required? **No** Are there separate interfaces for background music and music on hold? **N/A** How many music source interfaces are supported on the proposed system? **1 external and 9 file based sources** Can individual telephones turn on/off background music playing over telephone set speakers? **N/A** Can they turn it on/off over external page speakers? **No** Do they have volume control? **No**

9. Barge-in/Executive Override

Does the proposed telephone have the capability of monitoring another telephone engaged in a telephone conversation? **Yes** Is the barge-in tone detected? **Yes** By both parties? **No** Describe how barge-in would be controlled by class of service. **Allowed or Disallowed** Can the barge-in tone be activated or deactivated? **Yes**

10. Busy Override Tone

Can a telephone that calls a busy telephone, override a busy signal with a tone burst, indicating a call is waiting? **Yes**

11. Busy Telephone Transfer Ringing

Can a busy telephone optionally provide ringing to an incoming or transferred call when the telephone is busy on an existing call? **Yes** The desire is to use this feature in lieu of camp-on at some telephones, and the concern is to not send a busy tone and transfer the call back to the auto attendant or voice mail from which it just came. **Yes**

12. Call Duration Display

Does the LCD display of the proposed telephone display the amount of time the call has been in progress? **Yes** Is it updated on a real-time basis on the display? **Yes** Can call duration display be turned on/off while on a call? **Yes**

13. Call Forward

Describe the call forward options available from the telephone. Include the options of All Calls, Busy, No Answer, Busy No Answer, Fixed, System-wide default, External, Follow-me, etc. Can the call forward external destination be changed remotely by the user? **Yes** Can call forward be overridden? **Yes**

14. Call Pickup

Can a telephone pickup calls ringing at other telephones? **Yes** Can a telephone pickup calls ringing at other telephones when the telephone number is unknown? **Yes** How many telephone pickup groups are available? **64** How many trunk line pickup groups are available? **N/A** Is a telephone capable of picking up calls from hold, park, and the paging system? **Yes**

15. Call Transfer Options

Can calls be transferred either immediately, without waiting for the destination party to answer, or after announcing the call to the answering party? **Yes** Will a transferred call recall to the transferring telephone if the destination does not answer within a programmable amount of time? **No**

16. Camp-on

Does the telephone user have the ability to send transferred calls to a busy or idle telephone? **Yes** If the recipient's telephone is busy can the telephone user be sent a ringing tone or camp-on tone? Can the frequency that the camp-on tone is heard be programmed? **Yes** Can calls to either idle or busy telephone s recall after a preprogrammed number of seconds? **No**

17. CO Trunk Line Identification

Can individual trunk lines be assigned an alphanumeric identifier that displays at the telephone where the call is ringing? **Yes** How many characters long can the identifier be? **10 digits** How does work in conjunction with ANI or DNIS display? **It can override ANI/DNIS**

18. CO Line/Trunk Groups

How many CO line or trunk groups are supported on the proposed system? **64** How are they accessed? **Either a Key or LCR** Can individual line appearances be programmed on buttons on the telephone for easy trunk line access? **Yes**

19. Conference

A minimum of 8-party conferencing capabilities must be built into the system, with at least 6 parties being external. How many internal and external parties can be on a conference in the proposed system? **40** How many simultaneous conferences can occur? 20Max Can voicemail be included in a conference call to play messages for another party? **No** Can a conference call be split between two outside callers to speak to them separately, and switch between them? **Yes** Is

meet-me conference scheduling available? **Not in the proposed Solution** Is web collaboration an option? **Not in the proposed Solution**

20. Trunk-to-Trunk Connections

Does the proposed system support trunk-to-trunk connections that are left joined from a conference? **Yes** How does this work? **The system looks at the restriction table for Trunks and verify's if the two trunk groups are allowed to Tandem together, if so, the system uses a conference resource and connects the two Parties.** How many such connections can be simultaneously supported on the system? **40 Max** Can analog telephones and voicemail/auto attendant ports also set up trunk-to-trunk conferences? **Yes**

21. Credit Card Calling

Does the proposed system allow "0+" dialing to bypass toll restriction for credit card calls? **Yes** What safeguards are built into the system to help prevent this feature from being used to circumvent toll restriction? **Basic toll-Restriction**

22. Delayed Ringing

Describe the delayed ring assignments that can be programmed into the system to enable calls unanswered at a telephone to ring at other telephones at a later time. **This can be done using the Routing Rules for each user.**

23. Direct Inward System Access (DISA)

Indicate whether the proposed system provides DISA. Specify the maximum number of digits that can be used to password protect DISA. **This is allowed or Denied by each users voicemail COS.** Can the DISA port be turned off in software? **Yes**

24. Disconnect Supervision

What type of disconnect supervision does the proposed system provide, if a holding caller hangs up? **For POTS Line Loop Current Reversal is used.** What type of calls does it work with? **POTS Line Trunks Calls** Is it programmable by trunk line? **No** What additional software or equipment, if any, is required to use this capability? **None**

25. Distinctive Ringing

Can telephone ringing be different tones for incoming line calls and internal calls? **Yes** State the number of different telephone ring settings available with the system. **8** Is the ring setting programmable by the user or system administrator or both? **Both**

26. Do Not Disturb

Discuss the proposed telephones use of Do Not Disturb. How are intercom calls treated versus external calls from an inbound and outbound perspective? **Both call Type go to the Forward Busy Location** Is there any additional messaging that can accompany a Do Not Disturb message that intercom callers might see in their display? **No**

27. Do Not Disturb Override

Can Do Not Disturb be overridden? **No** Does class of service or some other method determine which telephones have the do-not-disturb override abilities? **N/A**

28. Door Phones

Does the proposed system interface with door phones? Are the door phones proprietary or third-party products? **Either** How do they interface with the system? **Proprietary Phones connect to a Digital**

Station port and third party connect to analog ports or use IP licenses Can they be located anywhere in the network? **Only IP Door Phones** Describe the features available from the door phone. **Basic Ringdown to a location**

29. Door Lock Control

Does the proposed system interface with electronic door lock devices to provide remote unlock functions? **No this would be third Party Application** Can a button be programmed on a telephone to remotely unlock the door at the press of a single button? **No** What additional system equipment is required for this capability? **N/A**

30. DSS Buttons with Busy Lamp Field

Are buttons available on the proposed telephones that give auto dialing to other telephones within the system? **Yes.** Do DSS buttons have an LED that can indicate telephone busy/idle status? **Yes.** How many buttons on a telephone can be programmed for "DSS/BLF"**? IP phones can Support 96**

31. Enhanced 911 Operation

Does the proposed system support Enhanced 911 operation to provide locator information to Public Safety 911 Agencies? **Yes** How does this work? **There is a dedicated location in DB programming that is programmed with the callers specific caller-ID, This Caller-ID must be registered with the e911 service with all appropriate location information.** What additional equipment is required? **None**

32. Flexible Button Assignment

Discuss how features are assigned to programmable buttons on the telephone. **Yes Buttons can be programmed at the phone or in DB programming. In the Database Programming Phone buttons can be mapped in groups or individually.** Can most, if not all, features be assigned under feature buttons? **Yes** Which features, if any, cannot be assigned under a feature button? Can individual users program their own feature buttons on their telephone? **Yes**

33. Feature Sequence Buttons

Does the proposed system allow telephone set buttons to be programmed to perform a sequence of operation like a "macro key" on a computer? **Yes, for system speed dial** What type of features, numbers, digit length, etc. can be programmed on these buttons? **System Speed dial** Are they user programmable? **Yes**

34. Flexible Intercom Directory Number Assignments

Can intercom directory numbers be flexibly assigned as any numbers? **Yes, as long as the digit length for each leading digit is the same.** Discuss how intercom directory number assignments are made. What are the available digit lengths? **2-7** Can the intercom directory number assignment match a DID assignment and voice mailbox assignment? **Yes**

35. Flexible Line Ringing Assignments

Can trunk lines be programmed to ring any telephone or group of telephones? **Yes** Describe the programming parameters of a line ringing assignment.

36. Hands-free Intercom

Is a telephone user able to answer an intercom call without lifting the handset? **Yes** Can each telephone be programmed uniquely to use this feature? **Yes**

37. Headset Compatible
Are the proposed telephones capable of connecting a headset? **Yes** What additional equipment or interface is required? **IF DECT or Bluetooth is required a headset adapter need added to the user's telephone. If the headset is wired a headset port is available and a headset feature key is one the phone.**

38. Hold Options
Can a telephone be programmed to either automatically place an existing call on hold or release the existing call when a button is pressed to answer another incoming call? **Yes** Is it programmable by telephone? **No** Can a telephone put a call on exclusive hold so it can only be picked up by that telephone or another phone using directed call pickup? **Yes** Will a holding call recall the telephone after a programmable amount of time? **Yes**

39. Hot Desk
Can any user use a shared office telephone by signing in with his/her own directory number and have the telephone take on their specific identity and programming? **Yes** Explain how this feature works. **When Signing into Viewpoint you must associate the user with the phone**

40. LED Indicators
Describe all the different LED indications available from the proposed telephones. Describe the flash rates and colors used for In Use, Incoming Call **Orange 120ppm flash**, On-Hold **Orange 60ppm flash**, Camp-On **Orange 120ppm flash plus a campo-on tone in the ear**, and Busy Telephone Ringing **None**, etc. conditions.

41. LCD Alphanumeric Messaging
Is the proposed telephone capable of displaying messages on the LCD of another internal calling telephone? **No** How many messages are available by telephone? **None** Can the user customize their messages? **Every user will use viewpoint and the Instant Messaging built into it for user to user messaging.**

42. LCD Feature Prompting
Does the telephone's LCD provide instructions to the user during feature operation? **No.** Can the user press "soft" keys to make selections during feature operation? **With Some Features not all.** Describe how this procedure works.

43. LCD Integrated Directory Dialing
Does the telephone's LCD provide an integrated directory dialing capability for display and speed dialing of names and telephone numbers? **Yes.** Describe how this procedure works. **The user presses the directory key and spells the users full or partial name and system will display all matches**

44. Least Cost Routing (LCR)
Does the proposed system provide full least cost routing that includes individual route plans, time schedules, and telephone LCR classes? **Yes, Except for Time of Day.** How many route plans, time schedules, and telephone LCR classes are available? **64** Describe the internal procedures that take place in the routing of calls. Does LCR conform to all current North American Numbering Plan requirements? **Yes** Does LCR require any additional software or equipment? **No**

45. Lost Call Treatment
Can calls that are not answered with the usual calling patterns be routed to an alternate destination for call handling on the proposed system? **No** Is there a timer for routing calls lost in the system to a specified destination? **N/A**

46. Message Waiting
Can a message waiting light be set on IP and analog telephones on the proposed system? **Yes** How does the user retrieve a message? **Presses the flashing Message key.** How many messages can each telephone store? **One** Can the proposed telephones also display message waiting on the LCD? **No** If a message waiting light cannot be set on an analog telephone, is stutter dial tone supported? **Yes**

47. Microphone Control
Can the proposed telephone's microphone be turned off/on by the press of a button? **Yes** Is a microphone sensitivity control available to compensate for different room noise levels? **Not on the Standard telephone only Conference room phones.**

48. Multiple Directory Number Call Coverage
Describe how multiple appearing directory numbers and flexible ringing patterns can be used for call coverage and group answering applications. **64 phones per ringing group**

49. Multiple Language Choices
Can the proposed system display telephone LCD information in multiple language choices? What languages are supported (minimum requirements English and Spanish)? **Yes,**

50. Networking of Multiple Systems
The proposed telephone system must be capable of networking multiple systems together to work as one large system. This must include the capability to distribute voicemail messages between all locations, answer incoming calls for all locations at the main location, and dial between locations using a coordinated dialing plan. Describe how these needs will be met with the proposed system. **Yes, This can be accomplished using the Wavenet application that networks VMs and system together for ease of dialing and shares numbers for ALL application such as viewpoint.**

51. Night Service
Indicate the number of day and night modes available. State the differences between day and night ringing and answering. Indicate which telephones can place the system in the night mode and which telephones can answer night calls. Can different trunk groups be placed into night service at different times? **Yes.** Can night ringing occur over the paging speakers? **Yes with 3rd party equipment.** Can system switching between day and night modes be programmed for automatic activation by time of day and day of week? **Yes**

52. Off-hook Call Announce
Describe how off-hook call announce is initiated to and received from the telephone. Does the announcement come through the handset or the speaker on the telephone? **N/A** How is control provided over the use of off-hook voice announce? **N/A.** Is additional equipment required to send or receive off-hook call announcements? **N/A** Can availability of this feature be programmed by telephone? **N/A**

53. On-hook Dialing with Hot Dial Pad
Is the telephone user able to dial and monitor an external number before having to lift the handset? **Yes** Is this feature available on all proposed telephone models? **Yes** Do the proposed telephones have a hot dial pad, meaning that it is not necessary for the telephone user to press an intercom or outside line button first to begin on-hook dialing? **Yes**

54. Paging - Internal
Indicate whether the proposed system offers paging through the telephones. Can the ability to receive a page be programmed by individual telephone? **Yes** How many telephones can simultaneously receive paging? **No Limit** How many internal page zones are available? **10**

55. Paging - External
State whether the proposed system offers overhead paging through speakers. **No** Can overhead paging be initiated by each individual user via their telephone? **Yes** How many external page zones are available? **One without additional equipment** What additional equipment is required for these paging capabilities? Third Part Paging equipment

56. Park Zones
Does the proposed system offer park orbit zones? **Yes** How many zones are available system wide? **9** Do individual telephone user have access to the park zones as well as the attendant? **Yes** Can calls be parked at single line telephones as well as IP telephones? **Yes.** How are calls retrieved from Park? **Feature code and Park Zone**

57. Pooled Line Button Access
Can a group of trunk lines be grouped under a single button? **Yes** Is there any limit to the number of lines that can be grouped under a button? **No** How many line groups are available? **32**

58. Private Trunk Lines
Can the proposed telephones support private lines, so that they only ring and can only be answered by that telephone? **Yes**

59. Privacy/Non-Privacy
Can the proposed system be set as either private or non-private? Can CO trunk line buttons be either private or non-private on an individual telephone basis? **Yes** Can privacy/non-privacy be changed at a telephone by pressing a button or dialing a code on a call-by-call basis? **Yes** Can certain users be programmed to override privacy? **Yes**

60. Release/Answer Button
Can a call be disconnected by pressing a Release button? **Yes** Can it also be programmed to release the current call and answer the next at the press of one button? **Yes**

61. Redial Capabilities
Can the proposed telephone store a specified number dialed in memory and offer the telephone user the opportunity to redial the number by pressing a key? **Yes** Can the telephone store the last number dialed in memory and offer the user the opportunity to redial the number by pressing a key? **Yes** Does the proposed system afford the user the ability to automatically redial busy outside telephone numbers at preprogrammed intervals? **No** Does this auto busy redial feature work through Least Cost Routing? **N/A**

62. Ringing Line Preference

Can a telephone be programmed to answer the ringing line by simply depressing the speaker button or lifting the handset? **Yes** Is it programmable by telephone? **Yes**

63. Hunting

Describe the different types of hunting available with the proposed system. **Hunt group are Circular, Linear or Round Robin,** Can a telephone be in more than one hunt group simultaneously? **Yes** How many hunt groups can be defined within the proposed system? **64** Can calls to busy hunt groups camp on? **Yes**

64. Station Message Detail Recording (SMDR)

Can the proposed system output SMDR data on all calls made and received to a printer or call accounting application? **Yes To an Application** What information does the SMDR output contain? **Date, start time of Call, End time of Call, number dialed or Received, Direction of call, in or out; extension number and name of internal party.** What additional system equipment is required for printer connection or call accounting interface? **This is stored in a file that is retrieved by the call accounting Software.**

65. Personal Speed Dial

How many speed dial numbers does the proposed system provide per telephone? **10 per Telephone if using Viewpoint this will grow to over 1000 in contacts.** How many characters per speed dial bin? **20** Can speed dial bins be logically linked to one another? **No** How is the telephone speed dial accessed, by code, by button, or by LCD directory? **By Code** If an LCD internal directory is available, describe its operation. **INTERNAL directory is available in a directory you simply spell a name first or last and the system will present all matches.**

66. System Speed Dial
How many system speed dial numbers does the proposed system provide? **1000** How many characters per speed dial bin? **20** Can speed dial bins be logically linked to one another? **No** How are the system speed dials accessed, by code, by button, or by LCD directory? **By Code** If an LCD internal directory is available, describe its operation. **INTERNAL directory is available in a directory you simply spell a name, first or last, and the system will present all matches.**

67. Telephone Queuing
Can an internal caller to a busy telephone in the proposed system set queuing to automatically call when the busy telephone becomes idle? **No** How is this set? **N/A**

68. Trunk Queuing
Can an internal caller trying to access a busy trunk line or line group set queuing? **No** How does this work? **N/A**

69. Toll Restriction
Describe all the toll restriction alternatives available with the proposed system. **Toll Restiction can be set by a telephone number, a complete phone number, by area code, by office code,** How many levels are available? **32** Does the system conform to current North American Numbering Plan requirements? **Yes**

70. Toll Restriction Override
Can toll restriction be overridden by entering an authorization code? **Yes.** By speed dial? **Yes.** By through dialing, in which a non-restriction telephone can connect a toll restricted telephone? **Yes.**

71. Outgoing Call Restriction
Can selected vs on the proposed system be restricted from making any outgoing calls? **Yes.** Is flexibly programmable by telephone and by trunk line? **Yes.**

72. Tenant Service
Our organization may in the future wish to share the system with another division in our building. Does the proposed system support multi-tenant applications in which each organization can operate their portion of the system as if it were their own separate system? **No** What functions of the system can be kept separate between tenants? **You can separate most dialing by organization** How many tenants are supported? **0**

73. Volume Control
Are individual telephone volume settings available for the handset, speaker, and ringing? **Yes.** How does the telephone user adjust these volume settings? **Depending on Status; Ringing, speaker phone or handset. The volume key adjusts the setting**

74. Voice or Tone Calling Option
Can the proposed system be programmed for either ringing or voice signaling when an internal telephone calls another? **No it is Ring first always, and can be selected by user to voice first.** Can individual telephone users switch between methods?**Yes.**

L. Attendant Console Features

1. Single-screen Call Processing

The attendant console must be quick and simple to use. This means the operator must be able to perform all call processing functions without navigating through a series of menus. Does the proposed attendant console perform all call processing from a single screen? **Yes.**

2. Answer Button with Priority

Can an answer button be used to automatically answer the next call ringing regardless of what line or other button it is ringing in on? **Yes.** How does the proposed attendant console or system determine which call is next if multiple calls are ringing? **In an ordered list on the console screen** Is it just first come first served, or is this programmable by the user to give priority to certain types of calls? **Either.** Does this function also apply to recalls or transferred calls? **Yes.**

3. Incoming Call Identification and Selective Answering

Does the proposed attendant console identify the type of call ringing? **Yes.** Can the operator override the answer button priority to selectively answer a certain call? **Yes.** How is this accomplished? **By selecting the call on the operator console screen via a mouse click and selecting take call.**

4. Answer Prompting by Type of Call

Our operators answer calls differently based upon the type of call or department they are calling. Can the proposed attendant console display information on the screen to tell the operator how to answer based upon the number the caller dialed? **Yes.**

5. Call Transfer Operation

The operator needs a fast and efficient method of transferring calls as their primary function. Describe the methods available for transferring calls with the proposed attendant console. **Simply "Drag" the answered call and "drop" on the users name within the console software.**

6. Attendant Conference Setup

Can the attendant set up a conference call for other telephone users by calling outside parties and then adding internal telephones to the call? **Yes.** How does this work? **"Drag" the users name from the directory and "drop" on the In Progress Conference with the console software.**

7. Auto Dialing

The operator needs the ability to auto dial both internal telephones and external telephone numbers. Can the proposed attendant console provide this capability? **Yes.** Does the console's dialing directory have a search capability by name, partial name, or initial? **Yes. All Three.**

8. Busy Lamp Field (BLF) Display

Does the proposed attendant console display telephone status to indicate if telephones are busy on a call or in Do-not-disturb (DND) mode? **Yes.** Does it display the telephone directory number, name, or both? **Yes.**

9. Call Waiting Count

Our operator sometimes gets overloaded with incoming calls and must request assistance. How does the proposed attendant console tell the operator how many calls are waiting to be answered? **Yes.** Screen display? **Yes.** Audible alarm?**Yes.**

10. Color CRT Display
Attendant applications must use color to distinguish different functions, display areas, status, etc., making them easier to use. Does the proposed attendant console provide a color display to accomplish this? **Yes.**

11. Dial "0" For Attendant
Our telephone users want to just dial "0" to reach the operator. This is easier than looking up the telephone number, especially when transferring calls to the operator. Does the proposed attendant console provide 0 dialing for the operator? **Yes.** What if there are more than one attendant console? **Yes. It will ring the consoles simultaneously.**

12. Dial Outside Number For Telephone User
Can the operator of the proposed attendant console dial an outside telephone number for a telephone user? **Yes.** How does this work? **The operator dials the call and transfers to the users extension.**

13. Direct Station Selection (DSS)
Can the proposed attendant console call a telephone directory number simply by pressing a DSS button? **Yes.** Can these DSS buttons be used to transfer calls to these telephones? **Yes.** How does this work?

14. Directory Display and Dialing
Does the proposed attendant console display a directory of telephone users? **Yes.** Can the directory display names, numbers, or both? **Yes.** Can the directory display be used for DSS calling and call transferring as well as display BLF status? **Yes.** How does this work? **The console screen shows names, Busy status, and DND status in a one line format which is easily viewed by the operator**

15. DTMF Signaling From Dial Pad
The operator needs to be able to interact with outside devices via DTMF signaling. Can DTMF tones be generated from the keyboard of the proposed attendant console? **Yes.**

16. Emergency Calls
Telephone users need a way to get through to the operator immediately even if the operator is busy on an existing call. Does the proposed attendant console provide a way for telephone users to place emergency calls to the operator? **Yes.** How is the operator notified that the call is an emergency call? **A group of extensions are setup in the emergency call group and are notified all emergency call.**

17. Emergency Page
Can the proposed attendant console provide a fast and efficient method to page all telephones and/or over external paging speakers? **Yes.** How is this done? **A 2 digit page code is dialed or a button is pressed.**

18. Feature On-Line Help
Does the proposed attendant console provide on-line user instructions and help information? **Yes.** How is it accessed? **By pressing the F1 key.**

19. Headset Operation
Can a headset be plugged into the proposed attendant console? **Yes.** Does it require any additional or optional interfaces? **Wired headsets do not require and adapter most wireless headset do require an additional adapter.**

20. Hold Button and Display Functions
When the operator puts calls on hold on the proposed attendant console, how are holding calls displayed? **By Caller ID Name Number and by notes if entered by operator** Can one be distinguished from another to know who they are holding for? **Yes, by entering notes** Is a timer available to show how long they have been holding? **Yes.** Will held calls recall and ring after they have been on hold for a programmable amount of time? **Yes.**

21. Incoming Attendant Call Statistics
Can the proposed attendant console or system collect statistics on incoming calls to the operator? **Yes.** What statistics are collected and for what period of time? **A complete call log is available for all operator calls.**

22. Maintenance & Administration From Console
Can routine maintenance and administration functions be performed from the proposed attendant console? **Yes.** What functions can be performed? **N/A**

23. Message Center
Does the proposed attendant console provide a message database in which the operator can enter typed messages for other telephones users? **Yes.** How does the operator notify telephone users that they have a message? **Send IM's to users' desktop and Mobile device** Can messages be displayed on-screen or printed on demand? **Displayed on the mobile screen or Viewpoint desktop.**

24. Multiple Console Operation and Load Sharing
How many attendant consoles can be in simultaneous operation on the proposed system? **As many phones as you have in the system** If more than one console is in operation, how are incoming calls distributed between them? **Linear circular or ALL Ring**

25. Multi-tasking
Is the proposed attendant console a dedicated workstation, or can it also be used for administration and other purposes? **The software resides on CPE computer, This computer can be dedicated or used for other Windows functionality.** What other functions can the console be used for? **The Console is just a Windows based PC.** If the attendant console is a PC-based platform, can other applications run simultaneously in a Windows environment? **Yes.** How will this affect the performance of the attendant console application? **Minimally**

26. Overflow
Can the proposed attendant console re-route ringing calls to another destination if they have not been answered within a designated amount of time? **Yes.** Is the amount of time programmable? **Yes.**

27. Override
The operator often needs to reach telephone users even if they are busy on a call or in Do Not Disturb (DND) mode. Does the proposed attendant console enable the operator to override DND or busy status when calling a telephone? **Yes.**

28. Position Busy Mode
When the operator takes a break or is away from the console, how is it placed into an unattended mode? **Yes.** Where do the calls ring during this unattended mode? **Any Programmed location based on the operator's status as they leave the console.**

29. Split Button
Can the proposed attendant console split the source and destination parties from each other on a conference call? **Yes, as long as the Operator is part of the conference call.** How does this work? **Operator selects party in the conference and Drops the call.**

30. Through Dialing
Some telephones are toll restricted and cannot call long distance unless they go through the operator. Does the proposed console enable the operator to extend otherwise denied trunk line access to telephone users? **Yes.** Can this be done on a selective or call-by-call basis? **Yes.**

31. Transfer Direct to Voice Mail
If the operator knows the requested telephone user is not available, they need to transfer the call directly to the requested party's mailbox rather than to the telephone because it may not be properly forwarded to voice mail. Does the proposed attendant console have the ability to transfer the call directly to an individual mailbox? **Yes.** How does this work? **Drag and Dropping the Call to the user's extension by holding the ALT Key.**

32. Volume Control
Does the proposed attendant console provide independent controls for handset/headset volume and ringing volume? **Yes.** Can the volume be increase while active on a call? **Yes.**

M. Telephone/Endpoint Equipment

1. Telephones, consoles, and accessories
List the different type IP and analog telephones available with the proposed system. Identify which telephones offer a speakerphone capability and which telephones offer a display. Include DSS consoles and other accessories that can be used in conjunction with these telephones. Also describe attendant consoles available for answer position use with the proposed system.

2. IP Softphone

Is a softphone version of the IP telephone available for operation on computers and smart phones? **Yes** What functionality does it provide compared to a desktop IP telephone? **It has the same functionality as the desk phone.** What is required for connection and use of the softphone locally or remotely? **VCC Gateway.**

3. Wireless telephone equipment

Describe wireless telephone equipment that can be used with the proposed system.

4. Fixed Mobile Convergence (FMC)

Describe the FMC application available with the proposed system. FMC is presumed to enable the user of smart cellular telephones to use these devices as PBX extensions both locally via the wireless LAN and remotely via a cellular network, and have the ability to handoff between the WLAN and cellular networks during an active call.

N. Telephone System Feature Summary Chart

The chart that follows summarizes feature availability of the IP business telephone system. Answer with a check mark signifying feature availability as Standard (Std), Optional (Opt.), or Not Available (N/A). The column to the far right is provided for comments if needed.

System Features:	Standard	Optional	Not Available	Comments:
Account Codes - Voluntary	X			
Account Codes - Forced	X			
Account Codes – Verified	X			
Automatic Call Distribution (ACD)		X		If Agent License is purchased
ACD Multiple Group Agent Login		X		If Agent License is purchased
ACD Priority Queuing		X		If Agent License is purchased
ACD Skills-based Routing		X		If Agent License is purchased
Automatic Number Identification (ANI)	X			
Automatic Off-hook Line Selection	X			
Automatic Recall (Hold, Transfer)	X			
Automatic Station Relocation	X			
Background Music Interface			X	
Backgr. Music/MOH Separate Interfaces	X		X	MOH Yes BACKROUND Music No
Background Music Through Telephones			X	
Battery Backup - System		X		
Battery Backup - Memory	X			
Barge-in Override	X			
Busy Override Tone	X			
Busy Station Transfer/Ringing	X			
Call Duration Display	X			
Call Forward - All Calls	X			
Call Forward - Busy	X			
Call Forward - No Answer	X			
Call Forward - Busy/No Answer	X			
Call Forward - Fixed	X			
Call Forward - External & Remote Change	X			
Call Forward - System-wide Default	X			
Call Forward Override	X			

Call Pickup - Directed Telephone	X			
Call Pickup - Telephone Group	X			
Call Pickup - Ringing CO Trunk Line	X			
Call Pickup - Ringing CO Trunk Group	X			
Call Pickup - Holding/Parked	X			
Call Transfer Immediate	X			
Call Transfer with Announcement	X			
Call Transfer with Camp-on	X			
Call Transfer Recall			X	
Call Record to Voice Mail	X			
Call Waiting with Camp-On Tone	X			
Caller ID	X			
Caller ID History	X			
Centrex/PBX Feature Buttons			X	
Centrex Ringing Repeat			X	
Class of Service - Telephone	X			
Class of Service - Traveling			X	
CO Trunk Line Identification	X			
CO Line/Trunk Groups	X			
CTI Desktop TAPI Support	X			
CTI System-wide CSTA Link	X			
Conference	X			
Conference Split	X			
Continuous DTMF Signal Tone	X			
Credit Card Calling ("0+" Dialing)	X			
Delayed Ringing	X			
Dialed Number ID Service (DNIS)	X			
Direct Inward Dialing (DID)	X			
Direct Inward System Access (DISA)	X			
Disconnect Supervision	X			
Distinctive CO/Intercom Ringing	X			
Distinctive Telephone Ringing	X			
Do Not Disturb	X			
Do Not Disturb Override	X			
Door Lock Control	X			
Door Phone Interface	X			
DSS/BLF Buttons	X			
DTMF and Dial Pulse Compatible	X			
DTMF Continuous Tone	X			
Enhanced 911 Operation	X			
Feature Sequence Buttons	X			
Flexible Button Assignment by User	X			
Flexible Extension Numbering	X			
Flexible Line Ringing Assignment	X			
Hands-free Answerback on Intercom	X			
Handset Volume Control	X			
Headset Compatible	X			
Hearing Aid Compatible	X			
Hold - Automatic	X			
Hold - Exclusive	X			
Hold - Recall	X			
Hot Desk	X			
Instant Messaging	X			
Least Cost Routing	X			

Live System Programming	X			
LED Two-Color Indicators	X			
LED Flash Rates By Condition	X			
LED Line in Use (I-Use) Indication	X			
LED Line on Hold (I-Hold) Indication	X			
LCD Alphanumeric System Messages	X			
LCD Alphanumeric Personal Messages	X			
LCD Absence Messaging			X	This is set in Viewpoint Mobile and Viewpoint mobile
LCD Busy Telephone Messaging	X			
LCD Feature Prompting with Soft Keys	X			
Message Waiting – IP Telephones	X			
Message Waiting – Analog Telephones	X			
Message Stutter Dial Tone –Analog phones	X			
Microphone Control Button	X			
Microphone Sensitivity Control			X	
Modular Expansion System Design	X			
Multiple Directory Numbers	X			
Multi-language LCD Display	X			
Multiple FCC Registration (KF,MF,PF)	X			
Networking of Multiple Systems	X			
Network Coordinated Numbering	X			
Network Centralized Attendant Service	X			
Network Centralized Voice Mail	X			
Network Centralized Network SMDR	X			
Network Distributed Network SMDR	X			
Night Service Scheduled Auto Activation	X			
Night Ringing Call Pickup	X			
Night Ring Over External Page	X			
Night Ring Over External Page Zones	X			
Non-blocking Architecture & Dialing	X			
Off-Hook Call Announce	X			
On-hook Dialing with Hot Dialpad	X			
Outgoing Call Restriction	X			
Paging - Internal Telephone Speakers	X			
Paging - Internal Telephone Groups	X			
Paging - External Interface	X			
Paging - External Zones			X	This is dependent on the external page
Park Zones	X			
Personal Admin for Individual Users	X			
Pooled Line Keys	X			
Power Failure Transfer			X	
Presence	X			
Privacy/Non Privacy Option	X			
Privacy Button	X			
Privacy Release Button	X			
Private CO Trunk Lines	X			
PC Programming & Upload/Download	X			Certain actions in programming can be uploaded or download
Redial - Last Number Dialed	X			
Redial - Automatic Busy Redial	X			
Release Key	X			
Release/Answer Key	X			

Remote Maintenance/Administration	X			
Ringing Line Preference	X			
Speakerphone	X			
Speed Dial Buttons	X			
Speed Dial Directory Dialing on LCD	X			
Station Hunting - Voice Calls	X			
Station Hunting - Data Calls			X	
Station Message Detail Recording (SMDR)	X			
Station Queuing	X			
Station Speed Dialing	X			
System Speed Dialing	X			
System Fault Finding & Diagnostics	X			
System Alarms	X			
Telephone Set Upward Compatibility	X			
Tenant Service			X	
Through Dialing	X			
Toll Restriction	X			
Toll Restriction Override Codes	X			
Toll Restriction Speed Dial Override	X			
Traffic Measurement & Reporting	X			
Trunk Queuing			X	
Trunk-to-Trunk Connections	X			
Trunk types:				
- Analog Loop-start	X			
- Analog Ground-start	X			
- Analog DID	X			
- Primary Rate Interface (PRI)	X			
- T1 Interface	X			
- SIP Trunks	X			
Uniform Call Distribution (UCD)	X			
Voice Mail Conference	X			
Voice Mail LCD Feature Display/Prompts	X			
Voice or Tone Calling Options	X			
Volume Control - Handset	X			
Volume Control - Ringing	X			
Volume Control - Speaker	X			
Wireless Fixed Mobile Convergence (FMC	X			
Attendant Console Features:				
Answer Button with Priority	X			
Answer Prompting by Type of Call	X			
Attendant Conference Setup	X			
Auto Dialing - Internal Telephones	X			
Auto Dialing - Outgoing Speed Dial	X			
Busy Lamp Field Display	X			
Call Transfer	X			
Call Waiting Count Display	X			
Caller ID/ANI Display	X			
Color CRT Display	X			
Dial "0" For Attendant	X			
Dial Outside Number for Telephone User	X			
Direct Station Selection	X			
Directory Display and Dialing	X			
DTMF Tone Signaling from Dialpad	X			
Emergency Call	X			

Emergency Page			X	
Feature Help On-line	X			
Headset Compatible	X			
Hold Button and Display	X			
Hold Timer Display	X			
Hold/Park and Page Combined			X	
Incoming Call Identification	X			
Incoming Attendant Call Statistics	X			
Multiple Console Operation & Load Share	X			
Keyboard or Mouse Operation	X			
Maint./Admin. from Attendant Console	X			
Message Center	X			
Message Waiting	X			
Multi-tasking	X			
Night Transfer	X			
Overflow	X			
Override	X			
Position Busy Mode	X			
Release Button	X			
Split Button	X			
Selective Answering by Call Type	X			
System Speed Dial Access	X			
Through Dialing	X			
Transfer Direct to Voice Mail Box	X			
Volume Control	X			

V. Voicemail/Unified Messaging Product Requirements

This section presents questions regarding the voicemail and unified messaging requirements of **City of Fraser**. Refer to configuration requirements in Section VI. The pricing should be presented in Section VII.

A. General Requirements

1. System Environmental Requirements

The voicemail/unified messaging capabilities must reside within the telephone system platform and not require any additional equipment or additional environmental requirements beyond that of the proposed telephone system. Describe what is required to support the voicemail/unified messaging capabilities, and additional environmental requirements, if any, for operating temperatures, relative humidity, power considerations, grounding requirements, etc.

2. System Registration

The proposed system must be both UL approved and FCC registered.

B. System Requirements

1. System Expansion

The proposed voicemail/unified messaging must be expandable for future growth. Describe the expansion capabilities by ports, mailboxes, disk storage, etc.

Each wave server is equipped for 1250 Mailbox capacity, Ports are not licensed they can be assigned in software.

3. System Capacities

The proposed system must be able to accommodate the minimum capacities shown below. Please indicate maximum capacities of the proposed system:

Capacity Criteria	Minimum Capacity	Maximum Capacity
Number of voicemail ports	1	32
Number of mailboxes	1	1250
Length of message	1	30 MINUTES
Amount of message storage	0	200 HOURS

C. System Administration

1. Security Features

Describe the security features of the voicemail/unified messaging system.

- Minimum/maximum password length? **The Password can be from 3 to 8 digits.** Who controls the length? **The System Administrator.**
- Can they be viewed by the system administrator? **NO**
- Can passwords be reset? **Yes** By whom? **The System Administrator.**
- Can they be locked after a certain number of invalid attempts? **Yes**
- What notification is provided when a mailbox is locked out due to excessive repeated invalid attempts? It **Verbally tells the user they are locked out to contact the system administrator**
- Can the number of dial-out digits be controlled to help prevent toll fraud? **Yes**

2. Mailbox Options

Describe the mailbox options of the proposed voicemail/unified messaging system.

- Minimum/maximum greeting length? **Greeting can be set from 0 to 5 minutes.**
- Are mailbox users allowed to send messages to mailbox groups? **Yes**
- Are mailbox users allowed to receive reminder/wake-up calls? **No**
- Can each mailbox be set to determine the order of message playback (newest first, oldest first, etc.)? **Yes** Can each type of message have its own playback preference (new, saved, etc.)? **Yes**
- Can each mailbox be limited to a maximum number of messages to avoid excessive storage? **Yes**

3. Internal Maintenance

Can the system be set to automatically purge messages on a system wide basis after a designated amount of time? **Yes.** What is the range of time that can be set? Can the system automatically selectively purge different types of messages (heard, unheard, saved, fax etc.)? **Yes**

4. System Backup

Describe system backup procedures available with the proposed voicemail system. The proposed system must provide an auto backup capability to automatically save the database on a scheduled basis. **The system uses a program call live image to make an image of the system night if required.**

5. Remote Administration

Describe the remote administration capabilities of the proposed system. What monitoring capabilities are provided? **The Wave system is a Single platform system allow for System Administration completed with the same interface as PBX programming.**

6. Reports

Discuss your system's ability to provide reports. Discuss what reports could be used for securing the voice mail system and providing management information. **Reports are not available on Voicemail only as the Voicemail is integrated within the phone system.** Can reports be stored, printed on demand, and emailed? **N/A**

5. Customization Tools

Does the proposed system provide customization capabilities to create feature customization and additional applications? **Yes a System Developer Toolkit is available to create API for the Wave.** Please describe these capabilities and give some examples how these tools can be used.

D. Features

1. Audiotext (Information Only Mailboxes)

Does the proposed system have mailboxes designed only to dispense information without the option for the caller to reply to the message? **Yes** Will the system automatically disconnect the caller after the information has been delivered? **Yes** Could the caller be transferred to another mailbox/extension at the conclusion of the message? **Yes** How many mailboxes can be created to dispense information? **Yes** Is the message length programmable? **Yes**

2. Automated Attendant

The voice mail system is required to have automated attendant as part of its platform. Will the automated attendant offer supervised and unsupervised transfers, which could be automatically changed by time of day, day of week, and holidays? **Yes** If a caller, using the automated attendant, finds they are going into voice mail, what must they do to call another extension or return to the operator? **The system could be programmed to allow the caller to press a Key on the phone that is programmed to send them to another Auto Attendant or Phone**

3. Broadcast Messages

Does the system administrator have the ability to create and deliver system wide messages? **Yes** Does the individual subscriber have that same capability? **Yes** Can that be controlled through class of service? **Yes**

4. Called Identification

Does the proposed system offer the capability of announcing the called party prior to connecting

a call? **Yes**

5. Call Screening

Describe the call screening capabilities of the proposed system. **A caller can listen to a voicemail being let in their Mailbox via The UC application that all user will have called viewpoint. They can then answer the call if they would like to speak to the person leaving a message.**

6. Directory

Indicate whether the proposed system offers a directory of all extension/mailboxes within the system? **Yes** How and when can the directory be accessed? **Via Phone, Viewpoint, Viewpoint Mobile, or Voicemail.** How are the names logged into the directory? **This is picked up from the user name within the system** Describe the procedure undertaken by the system to look for a match. **It searches by First name, or last name, or Both.**

7. Distribution Lists

Indicate whether the proposed system offers group distribution lists. **Yes** How many system-wide lists can be created? **200** How many group distribution lists can be created by an individual subscriber from their mailbox? **10.** Is there any limit to the number of mailboxes that can be included in either distribution list? **No** Can a mailbox be in any number of different group distribution lists both personal and system wide? **Yes**

8. Do Not Disturb

Does the proposed system provide do-not-disturb feature capabilities? **Yes** Describe.
A user can set a Status such as do not Disturb to send all call directly to voicemail. These status are all customizable.

9. Forwarding Messages

Does the proposed system enable the user to forward a message with or without comments to another user or group of users? **Yes** Can the message be re-forwarded by other users upon their receipt? **Yes, if the message has not been tagged as a private Message** Will all the introductory remarks attached to the message be retained? **Yes**

10. Follow-me Call Routing

Can the proposed system forward a call to another extension or an external telephone number before the call is unanswered and transferred to voicemail? **Yes**

11. Caller ID Routing

Can calls be routed, based on caller ID information? **Yes** Is the routing flexible by department and/or individual mailbox? **Yes, every individual user can be give rights to program this feature in their UC interface called Viewpoint.**

12. Greetings

How many different greetings are available per mailbox with the proposed voice mail? **20** Can the greetings be affected by time of day, day of week, holiday, and change automatically? **Yes**

13. Guest Mailboxes
Describe the use of guest mailboxes on the proposed system. Is there a limit to the number of guest mailboxes the system can have? **We are limited to the system max of 1250 for the entire system.** What functionality does the subscriber of the guest mailbox have? **Same as an internal user but can be restricted to few options if needed, such as listen to messages only.** Can the system administrator control subscriber's use of guest mailboxes? **Yes**

14. LCD Feature Prompting with Soft Key Operation
Does the proposed system support LCD feature prompting display of voice mail features? **No** Is soft key functionality provided to facilitate easy operating of these visual control features? **Yes** Does LCD operating replace or supplement voice prompts?

15. Future Delivery Options
Does the proposed system offer the delivery of messages at a preprogrammed time in the future? **No** Can the message be canceled? **No** Is there confirmation back to the sender of the message that the message was sent and received? **No**

16. Message Type
Will the proposed system offer the user the ability to differentiate between regular, urgent, private, fax, etc.? **Yes** Indicate how many different options and priorities of messages a subscriber might receive. **Regular, urgent, private.**

17. Private Messages
Will the proposed system offer the party leaving the message the option to mark it private, so it cannot be forwarded to other users? **Yes**

18. Return Receipt Request
Will the proposed system offer the party leaving the message the option request receipt confirmation so they know the recipient listened to the message?

19. Message Playback Order
Are saved messages separated from new messages enabling the subscriber to not be burdened by listening to both? Will urgent messages be sent to the head of the message queue to ensure expeditious treatment by the subscriber? **Yes**

20. Message Playback Controls – We have multiple ways to listen to VM on the Vertical Wave I have answers these questions separately for viewpoint/Viewpoint Mobile, and over the phone.
Can the user skip messages, pause during messages, speed up or down during messages ? **On the Phone, Yes. Viewpoint, Yes.** Can the user fast forward a predetermined number of seconds ahead or behind? **On the Phone, No. and Viewpoint, Yes.** Can the user replay or cancel the review of messages? **Phone, Yes. Viewpoint, Yes** Can the volume of the message be adjusted during review? **Phone, No. Viewpoint, Yes** Can the user adjust the speed of playback to decrease listening time? **Phone, No. Viewpoint, Yes**

21. Volume Control
Can mailbox users increase/decrease volume while listening to messages? **Phone, No. Viewpoint, Yes**

22. Message Purging
Describe the system's procedure for purging messages. When does purging occur? **Midnight**

23. Message Undelete

Can deleted messages be retrieved? **Phone, No. Viewpoint, Yes** How long after deletion are they accessible? **This is a system setting.** How does this function work?? **The Deleted Voicemails go into the Delted Items folder of Viewpoint.**

24. Recall/Delete Sent Message

Can the proposed system recall and delete messages sent but not yet listened to by the recipient? **No**

25. Message Reply

Will the proposed system enable the user to reply to a message sent within the system by simply depressing a single digit, thus eliminating the need to input the message originator's mailbox number? **Phone, No. Viewpoint, Yes** Does the message have all the same delivery options that a newly created message has, i.e., urgent and confidential **Phone, No. Viewpoint, Yes**

1. Callback

Does the proposed system enable callback of the person who left a message in the user's mailbox? **Phone, No. Viewpoint, Yes** Does this work for both internal and external callers? **Phone, No. Viewpoint, Yes.** What callback options are available?

26. Message Date and Time

Does the proposed voice processing system play the time and date of messages? **Phone, No. Viewpoint, Yes**

27. Message Length Control

Can the system administrator control the length of incoming messages in an effort to manage hard disk space usage? **Yes**

28. Message Notification

Describe the proposed system's message notification capabilities. Can the destination of message notifications be controlled by time of day and day of week?

Each Mailbox has Message notification to Home Phones, Pagers, Cell phones, and email. These can be setup in different Time and Day Schedules and Can Cascade for up to 20 different devices.

29. Message Retrieval Control

What order are messages played when retrieving messages from a user mailbox? **FIFO or LIFO.** Can this be changed? **Yes**

30. Message Waiting Indication

Does the proposed system activate a message waiting light on the mailbox user's telephone? **Yes** Does the LCD display the number of new messages in their mailbox? **Phone, No. Viewpoint, Yes** Is there a delay or is the message delivered immediately? **Immediate**

31. Networking (AMIS)
Describe the networking capabilities of the proposed voice processing system to link multiple voicemail systems. **Yes** Does it use the AMIS or VPIM networking methods? If not, what? **The Vertical Wave uses a Proprietary Voicemail Networking protocol that networks each Wave voicemail together allowing for a store and forward type redundancy, If one location becomes disconnected from the network, messages are Stored on the Sending users Voicemail until which time the offline voicemail is reachable.**

32. Receiving Messages/Message Review
Will the proposed system notify the mailbox user of the total number of messages to be heard upon the request for the password? **Yes** How will the system treat messages that have been listened to but not acted upon? **They become old messages**

33. Recording Telephone Calls in Voicemail box
Can the proposed system record telephone calls in voicemail and store them as messages in a voice mailbox? **Yes** Does the user have start/stop controls? **yes.** Can the recorded calls be listened to and processed as any other voice message? **Yes** Does the record feature also work on conference calls? **Yes**

34. Transfer Direct to Voice Mailbox
Can the proposed system transfer callers directly to a voice mailbox without waiting for the call to ring their telephone and then forward to their mailbox? **Yes**

35. Single Digit Menus
Is there the capability of single digit dialing to specified groups or departments? **Yes** Can multiple menu layers be accessed by single digit selections? **Yes** How many menu layers are offered? **10**

36. Reminder and Wake-up Calls
Does the proposed system enable mailbox users to set reminder or wake-up calls? Can they ring either locally connected telephones or outside telephone numbers? **No.** Can they be either one-time or re-occurring at the user's option? **No**

E. Interactive Voice Response (IVR)

1. Describe the IVR capabilities of the proposed voicemail/unified messaging system. **The system comes equipped with one port of outbound IVR to be used as an appointment reminder or asking several questions for a Survey Application, Additional ports up 5 can be added.**

2. What additional hardware or software is required to support IVR? **Hardware, None. Licenses for additional ports.** Does the IVR application run on the same hardware platform as the voicemail and unified messaging applications? **Yes** Can all of these applications run concurrent on the same hardware platform? **Yes**

3. Does the proposed system provide a programming capability through which custom voice prompt and response entries can be created? **Yes**

4. Can programmed IVR responses be combined with variable responses? For example, "Your order for 6 items will be shipped on October 5". The number 6 and the date are provided by the database, while the phrases "your order for" and "items will be shipped on" would be recordings that the system administrator makes. **Yes**

5. Do you provide complete custom IVR application development services? **Yes** What is provided and how does the program work? **Two hours of IVR configuration is included for a basic IVR Programmed Application, Additional Time is Billed on a project or T+M basis**

F. Unified Messaging

1. Describe the unified messaging capabilities of the proposed voicemail system. **The system at no additional charge with the Vertical Wave UC application called Viewpoint,**

2. Does unified messaging run on the same hardware platform as the voicemail and other applications? **Yes** Can all of these applications run concurrent on the same hardware platform? **Yes**

3. Does unified messaging on the proposed voicemail system support IMAP4 Synchronization? **Yes**

5. Does unified messaging on the proposed voice processing system support other email servers in addition to Outlook? **Yes**

G. Facsimile Services

1. Describe the fax capabilities of the proposed voicemail/unified messaging system. Does it include Fax on Demand? **Not on the internal system, 3rd party applications are available.**

2. What additional software or hardware equipment is required to support these fax capabilities? **Inbound Fax to Email for each user is available. Must be licensed for fax ports.** Does the fax application run on the same hardware platform as the IVR, voicemail and unified messaging applications? **Yes** Can all of these applications run concurrent on the same hardware platform? **Yes**

3. Does the proposed system offer Fax Tone Detection capabilities to automatically route fax calls to the fax machine? **Yes**

H. Feature Summary Chart

The chart that follows summarizes feature availability of the voice processing system. Answer with a check mark signifying feature availability as Standard (Std), Optional (Opt.), or Not Available (N/A). The column to the far right is provided for comments if needed.

Voice Processing System Features:	Standard	Optional	Not Available	Comments:
Audio text			X	
Automated Attendant	X			
Broadcast Messages	X			
Busy Greetings	X			
Callback	X			
Called Identification	X			
Call Screening	X			
Caller ID Call Routing	X			
Directory	X			
Distribution Lists	X			
Do Not Disturb	X			
Follow-me Call Routing	X			
Forwarding Messages	X			
Future Delivery			X	

Guest Mailboxes	X			
LCD Feature Prompting with Soft Keys			X	
Message Type	X			
Message Notification	X			
Message Waiting Indication	X			
Message Date & Time by Request	X			
Message Date & Time	X			
Message Forwarding	X			
Message Length Control	X			
Message Playback Controls	X			
Message Playback Order	X			
Message Purging	X			
Message Reply	X			
Message Retrieval Control	X			
Private Messages	X			
Networking (AMIS)	X			proprietary
Receiving Messages/Message Review	X			
Recall/Delete Sent Message			X	
Record to Voice Mailbox	X			
Return Receipt Request			X	
Reminder and Wake-up Calls			X	
Single-Digit Menus	X			
Transfer Direct to Voice Mailbox	X			
Volume Control			X	

VI. System Requirements

A. Required Capacities of Proposed Business Telephone System

The following are the stated capacities of the system to be installed at 5 City of Fraser buildings.

IP BUSINESS TELEPHONE SYSTEM CONFIGURATION

Proposed Phone Systems should be a Toshiba IPedge System comparable or better

Equipment and Licenses:

Part No.	**Description**	Qty
1700341F1	Adtran fixed port secure access ethernet router -rackmount	1
1703595G1	Adtran 24 Port POE Managed Layer 2 Fast Ethernet	3
1703599G1	Adtran 48 Port POE Managed Layer 2 Fast Ethernet	1
4212908L1	TA 908 - 1-T1,8-FXS,1-DSX-1,10/100 and IP router	1
DELL-770-BBIF	R220 standard size rail kit.	1
I-CP-TRUNK	Trunk License - per channel of SIP, PRI or Analog Gateway	7
I-CP-TRUNK-DISC	IPedge Discount Trunk License	8
I-CP-USR	IPedge User or Endpoint License - per endpoint on server	47
I-EC4UR1-VL	IPedge EC VS (ACD Ready) on Dell R220 R1 with Windows 2012.	1
I-MSG-ADV	Mailbox license including IPMobility for each user and other mailboxes.	56
I-MSG-CH	IPedge Messaging Simultaneous Channel License	17
IP4100-BASE	Wireless SIP DECT 6.0 Base Station for IP4100 Handset	1
IP4100-BATTERY	3.7V 1100mA Li-Ion Battery	2
IP4100-STARTKIT	IP4100-DECT and IP4100-BASE bundle	1

IP5122-SDC-SPC	10-button IP Speakerphone 4-line Backlit LCD, GigE, CO Line Intf.	20
IP5631-SDL-SPC	20-button IP Speakerphone 9-line Backlit LCD, 100Mbps	45
I-UC-CLIENT	UCedge client license	20
LADP2000-3A	IP5000 Power Adapter	1

Software Support/Upgrade Service and Extended Hardware Warranty:

Part No.	Description	Qty
SUS**	5 years Software Support and Upgrade Service for EC R1 (Flat Rate)	
DELL-R220-5PS	Upgrade Dell R220 to five years pro-support	1
EXTNDWAR2YR-5YR	5 Yrs Phone Extended Warranty	1

Installation:

Part No.	Description	Qty
IN-EXISTIPPHON	Install & Program IP telephone phone - existing cable.	65
IN-I-CM-1	1Pedge Install Call Mgr and/or VoIP option	20
IN-I-CP-SIPGW	Inst. SIP Gateway	1
IN-I-CP-SIP-S2	IPedge Install 2 SIP User	4
IN-I-CP-TRUNK	IPedge Install Trunk	15
IN-I-CP-USR	IPedge Setup of one user or station	47
IN-I-MSG-ADV	IPedge Install Adv. Mbox	56
IN-IP4100-BASE	Install and program the IP4100-BASE wireless phone	2
IN-IP4100-DECT	Install and program the IP4100-DECT wireless phone	2
IN-IPTPHONE-PT	Program and license one IP Telephone end point port.	65
IN-I-RAID1-NEW	Installation of RAID1 drive kit for NEW I-EC server.	1
IN-I-SYS-EC	IPedge Install EC base	1

OTHER REQUIREMENTS

- Message waiting lamps on all telephones
- System administration hardware and software
- Hardware and software for modem pooling
- ACD software and hardware. Include capability for reports.
- LCR software
- Battery backup, 2 hours minimum.

VII. Pricing

A. Equipment & Installation

Provide full equipment and software listing with component pricing. If applicable, attach a copy of an Auto-Quote. Break out pre-cutover and post-cutover pricing. Break out installation costs as required.

Qty	Description	Unit Sell	Ext Sell
	Vertical Communications Solutions		
1	Media Resource Module B (not available for IP500)	$2,118.60	
1	IP 2500 Mod Conversion Kit	$57.20	
1	Single T1/PRI DNI Module	$878.90	
1	8x8 Analog Universal Module	$850.30	
1	12-Port Digital Station Module	$566.50	
1	IP2500 ISC3 VAM Base System (up to 200 users)	$3,723.50	
1	DECT Cordless Telephone, digital integration	$414.64	
45	Edge 9830 16-Button IP Phone	$237.60	
20	Edge 9840C 24-Button Color IP Phone	$279.40	
1	Wave 5 Pack User License	$550.00	
7	Wave 10 pack User License	$1,100.00	
1	Live Image System License	$385.00	
1	IP 500/2500 Professional System License	$1,133.00	
1	IP500/2500 Wave 5 User Expansion	$372.40	
7	Wave 10 User Expansion - 5 Year Subscription	$744.79	
1	Live Image - 5 Year Subscription	$187.69	
	Network Devices		
3	NetVanta 1234 PoE	$1,106.00	
1	NetVanta 1238 PoE	$1,680.00	
	Miscellaneous		
1	Adtran fixed port secure access ethernet router -rackmount	$1,099.00	
	EQUIPMENT SUB-TOTAL		**$46,528.26**

B. Leasing

Please provide both $1 buy-out and Fair Market Value options.

Investment Option	Term Months	Option	Adv Pmts	Frequency	Maintenance*	Amount
Lease	60	Fair Market Value	1	Monthly payment	Yes	$1,431.51
Lease	60	$1 Buy Out	1	Monthly payment	Yes	$1,531.59
OR						
Cash Purchase		Equipment / Labor		Single purchase	First 12 months	$59,639.51

Investment Option	Term Months	Option	Adv Pmts	Frequency	Maintenance*	Amount
Cash Purchase		Maintenance		Single purchase	5 years	$12,614.55
					Total Cash Purchase (excluding taxes)	**$72,254.06**
* Maintenance includes 24x7 coverage for major equipment failure (8x5 coverage for all else)						

C. Training

End user training will be required. Final pricing should include pre- and post-cutover training costs.

Services		
On-Site Training Days	$700.00	
Total Travel Expenses for Training	$400.00	
Total Hotel Expenses for Training	$600.00	
Total PerDiem for Training	$300.00	
Implementation & design	$8,611.25	
Other labor	$1,800.00	
SERVICES SUB-TOTAL		**$13,111.25**

VIII. Installation Service and Maintenance

1. Explain in detail the installation and warranty coverage, and time period of the warranty.

- Standard warranty
- Extended warranty options

Understand and comply. The Vertical system and associated equipment will be warranted for one year. Vertical standard Vertical technician can be contact between 8:00 am to 5:00 pm Monday Through Friday. The extended warranty that is provided by Vertical will included around the clock coverage twenty four hours (24) a day and seven (7) days a week.

2. After the warranty period, what does your company offer in regards to service arrangements.

After the one year warranty period, Vertical offers maintenance contracts which include major service impairments 24 hours a day 7 days per week, Sunday through Saturday, exclude holidays. Maintenance contract can be purchased from a one to five year increments.

3. What are your standard maintenance hours? What are your optional plans, if any? Cost?

Vertical agrees to service Company's equipment, according to the terms and conditions set forth. There are two plans for maintenance. The first plan includes maintenance coverage from 8:00am to 5:00pm, Monday through Friday. The second maintenance plan includes around the clock coverage from, which is 24 hours a day 7 days a week, Sunday through Saturday, exclude holidays.

4. Does cabling provided under a separate contract (through your company or another) effect maintenance or warranty plans and costs? If so, how?

The company will cover cabling by our contract, but can also be handled by another vender.

5. Break down service costs as follows:

- Per call basis (Service Call without Maintenance Agreement)
- Per call basis (Moves, Add, or Changes without Maintenance Agreement)
- Annual Maintenance Agreement (quote should be for the year immediately following expiration of warranty)
- Multi-year Maintenance Agreement (quote should be for the proposed specified number of

years period immediately following expiration of warranty)

The service calls without the maintenance contract for a technician to visit the current site, the company will be charged $180.00 for the first hour in addition to a $75 administration fee. The additional hours will be $180.00.

Understand and comply. On a per call basis for a move, add or changes the fee is $100.00 per half an hour for a moves, add or changes without a maintenance contract.

Understand and comply. The Annual Maintenance Agreement will be 10% of year two (2) of the maintenance contract.

The multi-year maintenance agreement - year one through 5 is included in the proposal that is attached.

6. Is your maintenance rate based upon a per port charge, a device charge, a combination of the two, percentage of the system price, etc.? If not simply a system total, list each item and its monthly or annual charge.

All maintenance rates are a percentage of the systems price.

7. If the long-term service agreements are subject to price increases, please state the basis on which these increases can be made.

The maintenance contracts are based on one (1) three (3) and five (5) year agreements. On a month to month contract the amounts could be changed based on the type of equipment the customer currently using.

8. Explain in detail how additional equipment added to the basic system will increase service costs.

Any additional equipment that is added to the original sale will be ancillary equipment, and will added to the maintenance agreement

9. How often would service rates be adjusted due to additions to the system?

Vertical will adjust service rate based of cost of living increases.

10. Is preventive maintenance included during the warranty period and while the system is under a maintenance agreement?

- How often is preventive maintenance performed?
- What, specifically, is performed during each preventive maintenance session?

Yes, Preventative maintenance is performed, when an upgrade is required around one time a year. Preventative maintenance includes the software and subscription update

11. Does your company offer a software maintenance plan which assures the user will have the most current version of system features installed?

Vertical does have a software maintenance plan.

12. What are your response times during and after the warranty period? Any differences? Explain.

When equipment is under warranty emergency response time will be two (2) hours of an outage or incidence. It there is a minor issue for the system the response time is within twenty-four (24) hours.

After the maintenance contract has expired, all service calls will be subjected to charge the client labor and administration fee.

13. Service Calls — What are your *response times* for:

- Complete system failure (define a system failure)
- Major service malfunction (define a major failure)
- Minor service malfunction (define a minor failure)
- Telephone outages (define a telephone outage)

Understand and comply. Vertical defines a complete system failure as a loss of communication by the central processing system. Which would include no calls going from inbound or outbound and all the phones are down. A major service malfunction would be considered half or more of the users are not able to have access to their telephone systems. A minor system malfunction would be one or more users are affected and have problems using their phones. A telephone outage is w is a temporary suspension of services.

14. Explain in detail your *service capabilities* on:

- A major problem. (as defined above)
- A minor problem. (as defined above)

Under warranty, Vertical considers these to be major system failures, and are in our capabilities to fix any of this issues listed below:

PBX

- **complete system failure**
- **tie-line group out of services**
- **major system alarm**
- **failure of an entire trunk group**
- **more than 20 percent of stations totally inoperative**
- **attendant position failure**
- **inability to receive incoming calls**
- **inablility to all outside the facility**

Voice – Processing Equipment

- **inability to access the system through the system manager terminal or through at least 75 percent of the telephone ports**
- **inability to access one or more disk drives that store messages or data**
- **loss of system integration**
- **continual system restarts**
- **unscheduled total system outage**
- **reboot failure**
- **inability of system to collect CDR data (if applicable)**
- **inability to access data module through the fax board, voice board, module interface board or service modem**
- **inability to access the host computer via relevant- data module applications**
- **inoperable interface between the voice module and data module**

Any system or equipment issues that do not classify according to the listing above, Vertical considers to be a minor problems, <u>but Vertical will accommodate a customer's request to escalate a minor issue.</u>

15. Is service available 24 hours a day, 7 days per week?

Vertical's standard response time with a customer who has an emergency outage and has a maintenance agreement is 2 hours. The time it takes to resolve the complete system failure will be completely upon the outage.

Standard response – The Company will respond within (24) hours of the report for trouble on minor system failures.

Emergency response- The Company will respond within two (2) hours of the report of trouble on major system failures.

16. What is your guaranteed response time for Move and Change activity? Define exceptions, if any.

Vertical the guarantee response time for a Move and Change in Activity is between three (3) to five (5) business days.

17. Where is your local installation/maintenance office located?

We use certified Journeyman technician around the United States. Our local installation will be in Columbus Ohio.

18. How many installation/maintenance personnel do you have located within the local area that are factory authorized to work on the system(s)?

Vertical, currently has three (3) journeyman technicians in the local area.

19. Do you stock adequate spare parts to meet your service agreement commitments? Explain.

Verticals engineers stock the adequate spare parts to meet all service requirements.

Complete
Interactive
Technologies Inc.
Your Vision our Solution

City of Fraser
33000 Garfield Rd.
Fraser, MI 48026
Attn: City Manager

Dear Richard Haberman,

Complete Interactive Technologies, Inc. appreciates your time and the opportunity to discuss your business communication needs. Our bid is based on the assumption that a Cat5 or greater cable will be present at all Telephone location. The system we are proposing has been out about for 1 year and is a current product. I have included a separate page listing our references. If we are the chosen provider we will be happy to sit down and go over each question or respond to them in writing if you prefer.

Our goal at this meeting is to provide you with a customized solution to meet your telecommunications requirements.

Once again, I appreciate this opportunity to discuss these important business issues so we can develop solutions that will increase your profitability and give you a competitive advantage.

Please feel free to contact me for any additional information.

Thank You,
Michael Weatherly

www.cit-4u.com

COMPANY BACKGROUND

Company Overview: Complete Interactive Technologies, Inc. (CIT) is a full service communications company that specializes in customizing solutions to meet the needs of our customers. Established in 1987, CIT's has experienced a consistent annual growth rate throughout the company history. The corporation is very proud of the growth and success because it is attributed to providing implementation and maintenance solutions, which have exceeded customer requirements. Currently, roughly 80% of CIT's new business is generated through referrals.

Company Philosophy: Complete Interactive Technologies, Inc. believes in an empowerment management approach. Our Project Managers have the authority to make on-site decisions in response to client requirements. Our project managers report directly to the company president. This ensures that any issues can be quickly resolved. *Allowing for customer peace of mind!!* Each project is assigned a project manager and an on-site foreman. The foreman is assigned to remain on-site to coordinate all activities of the installers and technicians. The foreman report directly to the project manager. Finally, all project managers, project foreman and all other key project personnel are available on a 24X7 basis. Complete Interactive Technologies, Inc. utilizes toll-free calling, voice mail, e-mail, pagers and cellular technology to offer our clients flexible communication options.

COMPANY PRODUCTS AND SERVICES

Complete Interactive Technologies, Inc. offers a full line of telecommunications products and services. All field engineers are manufacturer trained and are updated through advanced seminars to maintain their knowledge base. CIT has a company expertise in the following:

Cabling Systems - including:

- 10 GIG Copper & Fiber Solutions
- Category 6 Copper Wiring
- Category 5e Copper Wiring
- Multimedia Cabling Outlets
- Broadband Coaxial Video Cabling
- Fiber Optic Wiring
- Sound Cabling
- 25-Year Performance Warranty
- Certification on Copper and Fiber

Communication Systems - including:

- Hosted Telephone Systems
- Voice over IP (VoIP) Telephony
- Key and Hybrid Key Systems
- Call Accounting and Automated Attendant
- Voice Mail Systems with Unified Messaging
- Call Center Applications
- Nurse Call Integrations
- Computer Telephony Integration

LAN and WAN - Including:

- Wireless Access Points
- Wireless Bridge Installation
- Hub/Switch/Router Installation
- CSU/DSU/Modem Installation

Boardroom A/V Systems - Including:

- Surround Sound
- Overhead and In-Wall Speakers
- Wireless and Handheld Microphones
- Audio and Video Conferencing
- In-Table Cabling
- Multi-Screen Applications
- Projects and Screens

Design Engineering:

- AutoCAD
- Visio
- As-Built
- C-Size Blue Prints
- Custom Designs

- 3D Images

Paging Systems-Including:

- Overhead Paging
- Clock System Integration
- Background Music
- Telephone System Integration
- White Noise Systems
- Conference/Boardroom Integration
- Paging Horns

Security Systems

- Video Surveillance
- Card Access
- Alert and Evacuation Tone Systems
- Door Entry Systems
- Security Management
- Security Cabling
- Wireless Camera System

Video Conferencing Systems-Including:

- Multi-Site Bridged Applications
- Video Cart Applications
- Surround Sound
- Overhead Audio
- Multi-Video Screens - Plasma
- Desktop Applications
- Remote - SOHO - Internet

Video Application Systems

- Video Head-End Applications
- Camera Cart Applications
- Presentation Broadcast
- Customized Channel Broadcast
- Bi-Directional Video
- CCTV and CATV Cabling
- Computer Presentation Broadcast
- Digital Signage
- Educational TV

Carrier Services

- Telephone bill audits and analysis
- SIP Trunking using CIT Dial Tone Plus
- Internets services; Broadband, T1 and Wireless
- Local and Long Distance packages
- Toll Free numbers
- Vanity numbers

TELECOMMUNICATIONS MANAGEMENT
COMPLETE INTERACTIVE TECHNOLOGIES' ROLE

The effective management of a company's telecommunications system enhances every aspect of business operations and performance. But with so many choices available, it can be difficult for company managers to select the products and services, which best match their business' unique requirements.

Complete Interactive Technologies, Inc. analyzes each customer's specific needs and recommends a customized solution designed to maximize cost effectiveness and system performance. In addition to being able to provide local dial tone and long distance service, we have contracted with over ten long distance carriers in order to provide the most competitive and unbiased evaluation possible. Complete Interactive Technologies, Inc. acts as a central contact between the business user and the various telecommunications vendors contributing to the system, allowing the customer to address a range of issues with a single phone call.

Complete Interactive Technologies, Inc. role includes:

- **Local Trunking and Facilities Management** - As an Authorized Agent, Complete Interactive Technologies, Inc. Will engineer the proper trunking facilities and coordinate installation for all voice and data applications. Whenever trunks, lines or data facilities are need Complete Interactive Technologies, Inc. will provide a single point of contact to ensure the integrity of all services.

- **Long Distance Recommendations and Implementation** - ***Complete Interactive Technologies, Inc.*** will provide ongoing negotiation with long distance carriers on the customer's behalf, providing increased savings, enhanced billing features, and efficient, pro-active service. Complete Interactive Technologies, Inc. will also serve as the central coordinator for all billing and service implementation issues, ensuring that all vendors perform to contractual specifications.

- **Customer Service Contact** - Complete Interactive Technologies, Inc. will serve as the primary point of contact for customer service issues, including service interruptions, billing issues and general information. Complete Interactive Technologies, Inc. will assume responsibility for all your equipment and service needs.

TRAINING

At Complete Interactive Technologies, Inc., every system we install is designed with the customer in mind, and is intrinsically easy to use. However, effective implementation and acceptance of any new office system requires a structured, ongoing training program. Complete Interactive Technologies' staff of highly trained customer service representatives' work with each customer to develop a training program designed to maximize the potential of your system and your staff.

How It Works

Prior to installation, the Project Manager (PM) or lead technician assigned to your account will contact you to discuss the scope of the training service and material available, and to work with you to create an effective learning experience for your staff. General user training usually consists of classes at your facility conducted in groups of approximately eight to ten employees who all share similar job duties, or who will be using the same type of telephone. The functionality of the system will be thoroughly discussed, activation of various features will be demonstrated, and employees will receive hands-on operation experience. Each employee will also receive a User Guide to keep for future reference.

- *General Telephone & Voicemail Training* (1classes per day) 1.5 hours
  Suggested class times: 8:30am, or 1:00pm,

- *Administrative Training* (4-6 users) 2.0 hours
  Suggested class time: 4 week post-installation

Your main system operator and back-ups serve as your telephone "front door," and their ability to answer and process incoming calls is critical. These staff members will receive special attention to ensure their complete familiarity and confidence with the system.

On the day of final installation and activation, the PM or lead technician will be on-site to assist operators in processing "live" calls, and will be available to the rest of the staff for questions and follow-up.

CUSTOMER RESPONSIBILITIES

When you purchase a telecommunications system from Complete Interactive Technologies, Inc., we become your technology partners - and the role you play in the successful implementation of the system is a vital one. Open communication and cooperation are critical if the goals of the system are to be achieved as fully as possible.

What You Can Do?

1. Appoint a single source of contact for both system configuration and network
2. Assist in the preparation of a detailed floor plan for the accurate location of each telephone.
3. Assist in the preparation of the software database to ensure proper system functionality.
4. Schedule a time and space necessary for staff training.
5. Require that your staff attend the training sessions.
6. Provide access to your facilities for the installation crew.
7. Ensure that all central equipment can be located in a clean, dry, well-lit and well-ventilated environment.
8. Provide the necessary number of dedicated 110V AC outlets for the central equipment.
9. Provide a UPS if not provided in the quote.
10. Assure that the LAN /WAN are set up for a VOIP deployment prior to installation. (You may elect to contract CIT on a time & material basis to assist with network & site requirements).
11. **Above all,** promote in your staff a sense of enthusiasm about the enhanced productivity and efficiency that will result from the new business tool in which you have just invested.

PROJECT OVERVIEW

In order for your telecommunications system to operate at a maximum level of efficiency and cost effectiveness, the inherent capabilities of the system must be consistent with the expectations of the end user to be served. Accordingly, your voice and data needs must be ascertained prior to the development of the system configuration and recommendation.

Complete Interactive Technologies places a high level of importance on product reliability, general solution architecture, inherent feature capabilities and serviceability. We are very aware that voice and data is the focal point of all businesses, creating a first and lasting impression on customers. Your facility's ability to process calls and information quickly, accurately and with confidence, utilizing a custom designed voice and connectivity solution is vital to your overall success.

The following is a project overview for The ***City of Fraser:***

- Evaluate calling patterns and existing trunking/connectivity. Make recommendations for most effective utilization of resources and bandwidth. Evaluate SIP protocol for future consideration.
- Design a comprehensive VoIP telephony & connectivity solution that incorporates the IP Telephony system.
- Design a managed internet solution.
- Perform an Appneta Network sniffer to assure a reliable VOIP delivery.
- Provide an IP Telephony platform for today's needs and future growth which will allow migration forward (i.e.) software, technology upgrades, modular growth, consolidation, etc. thus protecting The ***City of Fraser*** technology investment.
- Provide Administration Interface that is easily navigated by a non-telephony trained personnel.
- Provide a system that will allow for remote users to be part of the extension plan utilizing IP phones and DID numbers.
- Provide a solution with a strong ACD package (Automated Call Distribution) for maximum traffic flow.
- Utilize Unified Messaging in one user interface for desktop productivity. (i.e. Retrieve Voicemail, Email and Fax for future consideration).
- Deploy PDA/Smart phone mobile applications for users that no longer want to be tied to there desk.
- Deploy Find Me/Follow Me and Presence applications.
- Incorporate Instant Messaging (IM) to all users for efficient internal communication.
- Provide a platform that has the ability to integrate with CRM software solutions such as Salesforce for future consideration.
- Supply custom reporting to ensure user adoption and productivity gains. Sample reports will be made available.
- We will custom design a system using UCD to manage the call flow and optimize staff and we will help design a Call Handling solution which will include things like cascading VM where if a call comes in and they do not respond promptly then it will flow to other

people assuring that the VM is addressed promptly. This will be helpful in key areas and for after hours.

- We will spend as much time on training to limit any future service calls. At Complete Interactive Technologies, Inc. We will take the necessary parties as far as you desire and are comfortable with in training.

Complete Interactive Technologies, Inc. SERVICE LEVEL AGREEMENT

Complete Interactive Technologies, Inc. responds to all service requests in a timely and professional manner, utilizing certified technical personnel. The Complete Communications difference is your guarantee of complete service and maintenance satisfaction. Emergency equipment failures shall be responded to within 2 hours from the time of request for service. Regular service shall be responded to within 24 hours from the time of request for service. Service shall be performed 7 days per week, 24 hours per day and 365 days per year. Service response time is negotiable based on facility type and size.

Return on Investment

ROI Report

Existing Services	
Total Existing Telecommunication Expense	$

Proposed Services Through Complete Interactive Technologies	
Telnet PRI with 140 DID's and unlimited Lata calling	$386.00 (3Yr)
Telnet PRI with 140 DID's and unlimited Lata calling	$361.00 (5Yr)
CTAP	
Total Services	$

Monthly Investment	()

SCHEDULE A FOR SINGLE SITE

Option 1

Panasonic Solution

Hybrid PBX:

KX-NS700 1 Panasonic KX-NS700 IP PBX

KX-NS720 1 Panasonic (NS700)-(KSU) Expansion Unit

KX-NS7130 1 Panasonic (NS700)-(Card) 3-port Expansion Master Card (EXP-M)

Phone System Cards & Licenses:

KX-NS8290 1 Panasonic (NS1000)-(Card) PRI Adaptor

KX-NSM520W 3 Panasonic (NS700/1000)-(License) 20-Channel IP Proprietary Telephone Activation Key (20 IP PT)

KX-NSM510W 1 Panasonic (NS700)-(License) 10-Channel IP Proprietary Telephone Activation Key (10 IP PT)

KX-NSF991W 1 Panasonic (NS700/1000)-(License) Expansion Capacity Activation Key

KX-NS5112 1 Panasonic (NS700)-(Card) VOIP DSP-L Card

KX-NSA210W 2 Panasonic (NS700/1000)-(License) Communication Assistant Pro License - 10 Users

Voice Mail System:

KX-NSU104W 3 Panasonic (NS700/1000)-(License) 4 Channels VM (UM)

KX-NS7136 1 Panasonic (NS700)-(Card) 16GB SD Memory Card

DesktopTelephones:

KX-NT543B 20 Panasonic (NCP/TDE)-(Tph) 3-Line Backlit LCD Display, 24 Flexible CO Buttons-Black

KX-NT546B 45 Panasonic (NCP/TDE)-(Tph) 6-Line Backlit LCD Display, 24 Flexible CO Buttons-Black

Cordless Telephones:

KX-TCA185 2 Panasonic (TDA/TDE) Standard DECT Multi-Cell Wireless Handset w/ 1.8" Color

KX-T0151 2 Panasonic (TDA/TDE)-(MCW) 2-Channel Hybrid IP Cell Station

Call Center Software(Optional)

KX-NSF201W 1 Panasonic (NS700/1000)-(License) Call Center Feature Enhancement

1 Install Kit

Each assembly includes

UOM	Description	Qty.
EA	Tripplite (PS) 12-Outlet Compact Line -Interactive UPS	1
GS752TPSB-100NAS	5 Netgear (ProSafe) 52-port Gigabit Smart Stackable Switch with PoE	

Purchase price.....$44,525.00

60 Month $1.00 Buyout
lease.....$865.57

7 year Panasonic Warranty on the equipment

Panasonic

GREATER FLEXIBILITY

HIGHER QUALITY COMMUNICATION

KX-NS700 UNIFIED COMMUNICATIONS PLATFORM

CONNECTING YOUR FUTURE

REDUCE COSTS

INCREASE SATISFACTION

IMPROVE EFFICIENCY

CHOOSE THE SMART HYBRID PBX SYSTEM THAT CAN GROW THE WAY YOU WANT

Looking to reduce your operational and capital costs through high-quality, flexible communications? Want technology that can increase the return on your investment and the mobility of even the smallest of workforces? The new smart hybrid IP PBX KX-NS700 from Panasonic delivers all of this – and much more.

Designed specifically for small or medium-sized businesses looking to take advantage of Panasonic's reputation for quality technology, without needing a huge budget, the KX-NS700 unified communications solution is a small system with the ability to manage big future growth.

Easy to install and maintain, it is a cost-effective legacy and IP communication system for companies with up to 250 users in a single site that can be flexibly configured and expanded, making it the ideal alternative to cloud-based solutions.

ONE FLEXIBLE SYSTEM MULTIPLE COMMUNICATIONS CAPABILITIES

SMART HYBRID SYSTEM

The system has sufficient capacity for legacy and IP ports, and Expansion Cabinets can be used to expand the system when you want. It can even connect to the Panasonic KX-NS1000 system to create a small, medium and enterprise solution.

CALL CENTRE SOLUTION

The KX-NS700 can support the needs of supervisors in call centres, such as queue announcements, live status monitoring, activity reports, automatic conversation recording and Network Attached Storage (NAS).

ADVANCED, RICH FEATURES

The system starts from only 6 extensions, up to 288 extensions with Expansion Units. It is also a unified communications system which has rich IP features, such as mobile linking, integrated voicemail and e-mail, instant messaging (chat), and presence information.

SIMPLIFIED INSTALLATION AND MAINTENANCE

The installer can easily programme everything related to functions such as PBX and VM, thanks to a built-in web server. Programming can even be carried out remotely.

THE BUSINESS BENEFITS TO YOU

CUT COSTS AND INCREASE ROI

- Expandability to grow with your business
- Backwards compatibility for low-cost integration
- IP networking for cost-effective communications

INCREASE CUSTOMER SATISFACTION

- Wireless solution to answer calls anywhere on your premises
- Mobile phone integration to receive customer calls anywhere
- Voicemail solution to ensure no call is missed

IMPROVE EFFICIENCY

- Built-in DISA to transfer calls without an operator
- Call centre solution for streamlined professional operations
- Communication Assistant for intelligent contact

PROVEN SOLUTIONS FOR A RANGE OF INDUSTRIES

HOSPITALITY

To deliver outstanding customer service in the hospitality sector, your staff need the support of effective and always-available communications technology. The KX-NS700 offers both. Comprehensive system management, PC integration and the flexibility to provide mobile communications throughout your business mean you're able to work more efficiently than ever before and your customers enjoy the most convenient, comfortable experience possible.

HEALTHCARE

In healthcare environments, consistent, clear communications are critical. The KX-NS700 is a solution that allows your staff to access easy-to-use technology and remain in constant contact with other team members and patients or residents, wherever they are. Equally valuable is its ability to integrate with your existing care applications, such as emergency call systems.

OFFICE ENVIRONMENTS

Perfect for supporting office functions across your business, the KX-NS700 incorporates mobile telephony, desk-based phones and highly configurable voicemail systems to ensure that staff stay connected, wherever they're working. Combined, they improve functionality, reduce costs, simplify administration and enhance customer service.

THE COST-SAVING SOLUTION

THE ABILITY TO REDUCE YOUR COSTS AND INCREASE THE ROI ON YOUR COMMUNICATIONS TECHNOLOGY ARE TWO REASONS WHY THE KX-NS700 IS IDEAL FOR A BUSINESS LIKE YOURS. AND THOSE COST ADVANTAGES ARE DELIVERED IN A NUMBER OF WAYS.

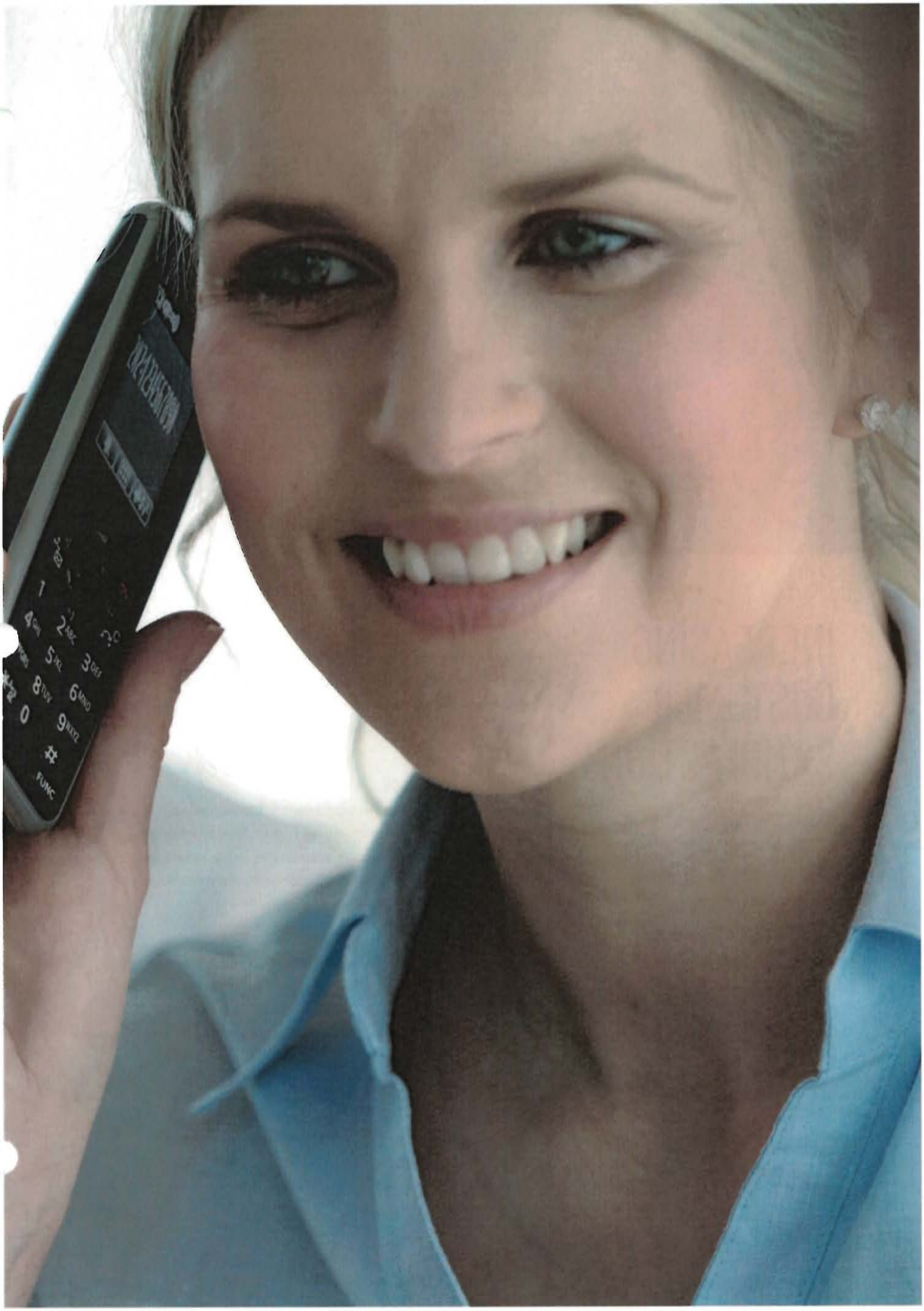
EXPANDABILITY AND BACKWARDS COMPATIBILITY

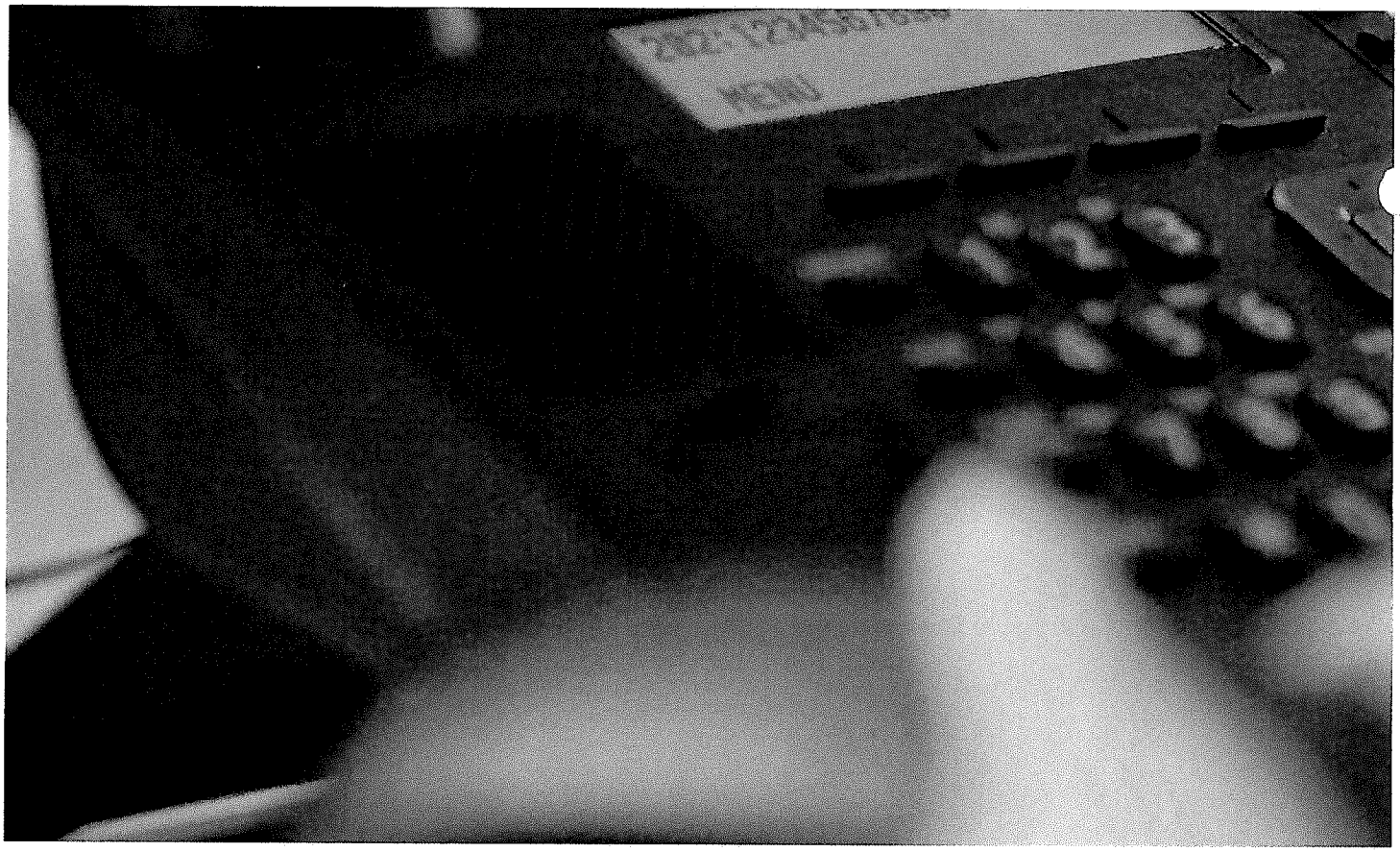
The system is expandable, with optional cards and expansion cabinets. Equally, you can continue to use existing Panasonic Digital Propietary Phones (DPT), Panasonic Analogue Propietary Phones (APT) and Single Line Telephones (SLTs)*. So your initial investment costs only involve the purchase of the system and you can retain your KX-NS700 in the future when you're looking to increase capacity.

IP NETWORKING

You're able to construct a hybrid system that combines IP and legacy lines, and can connect to IP phones in a remote office, further reducing your costs. Equally, VoIP capabilities mean you can talk to remote offices, wherever they might be, without incurring telephone charges.

* Please check compatibility in the relevant spec sheet.





INCREASING CUSTOMER SATISFACTION

A SMARTER COMMUNICATION SYSTEM ALLOWS A BUSINESS TO DELIVER BETTER CUSTOMER SERVICE – LEADING TO INCREASED CUSTOMER SATISFACTION. THE KX-NS700 HAS A RANGE OF FEATURES TO DO EXACTLY THAT.

WIRELESS SOLUTION

Multi-zone wireless connectivity means you can receive calls wherever you are on your premises. So waiting times are reduced and customers speak to the right person at the right time. You can also switch easily between desk phones and portable devices during conversations. Finally, DECT paging allows conversations to be shared among multiple participants.

MOBILE PHONE INTEGRATION

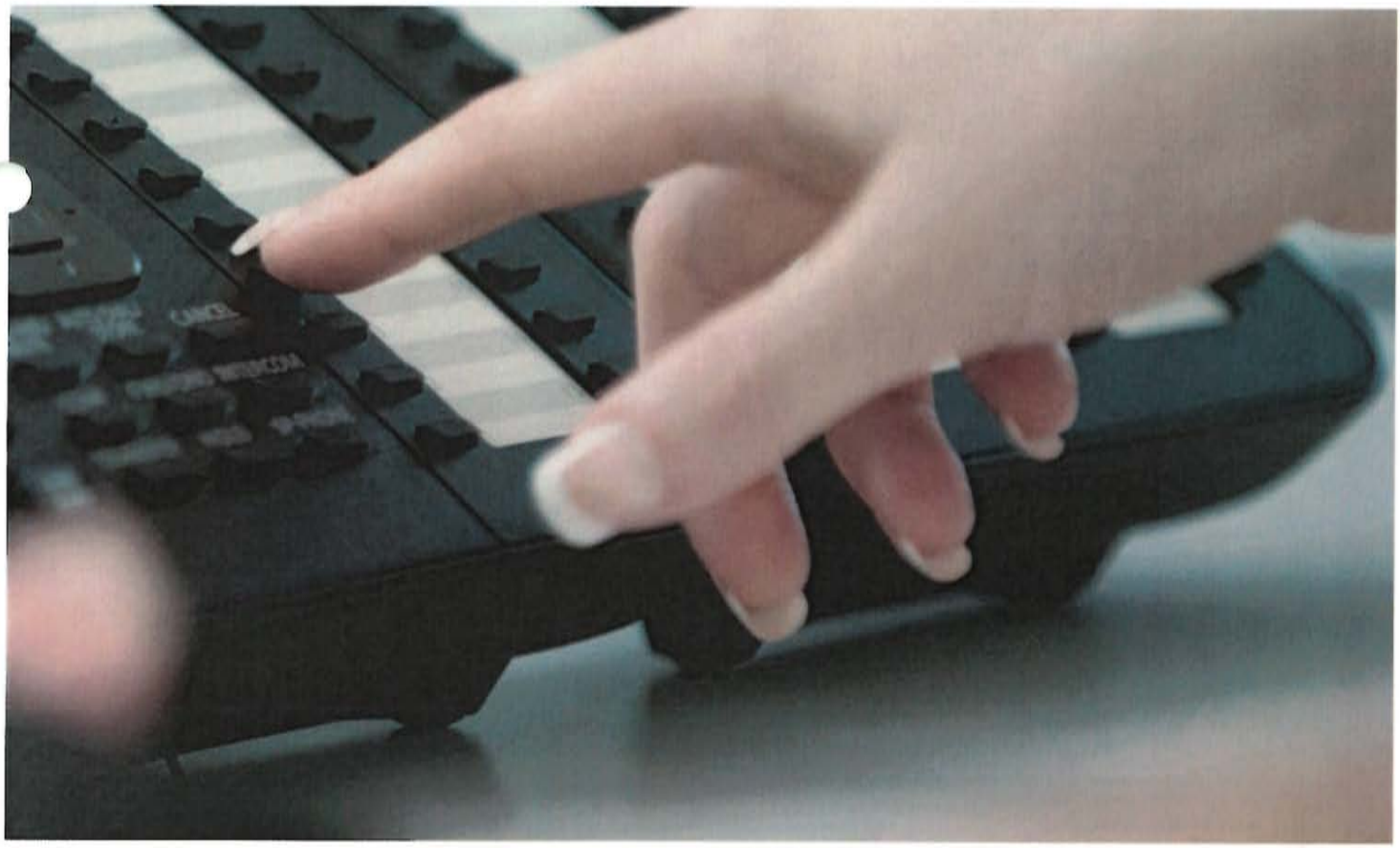
There's no need for you to have multiple contact numbers for people who also use a cellular phone. The KX-NS700 includes features for integrating cellular phones and smartphones with your office communications network, allowing mobile terminals (including smartphones and softphones) to be used just like office extensions – making and receiving calls and using system short-dialling codes from mobile devices.

SIMULTANEOUSLY RECEIVING CALLS WITH GROUPED PHONES

Up to four cellular phones can be assigned as members of an Incoming Call Distribution (ICD) group, and receive calls to the group. Calls to the extension in the office can be received simultaneously on cellular phones. This enables a member of the group to handle calls when the main contact person is away.

VOICEMAIL SOLUTION

The KX-NS7000 allows you to record up to 400 hours of voicemail, and receive email notifications whenever a call is missed or voicemail left. Also, thanks to a Microsoft Outlook plug-in, users can access the contents of their mailboxes in the same way they do for email.



IMPROVING WORK EFFICIENCY

BY STREAMLINING YOUR OPERATIONS AND MAKING COMMUNICATIONS MORE STRAIGHTFORWARD, YOU IMPROVE THE EFFICIENCY OF YOUR BUSINESS IN EVERY ASPECT OF THE WORKING DAY. THE KX-NS700 HAS A NUMBER OF FEATURES DESIGNED TO DRIVE EFFICIENCY AND ENHANCE THE WAY YOU OPERATE.

CALL CENTRE SOLUTION

Whatever the size of your business, using a call centre of similar size can increase the efficiency of your operations. The KX-NS700 includes a call routing function that allows you to connect to a call centre without the need for an external CTI server.

AUTOMATIC VOICE GUIDANCE

By letting callers know where they are in a queue through voice guidance, they can decide whether to wait, leave a message or hang up. This improves their experience of your business and maintains satisfaction at the service they're receiving.

MONITORING CALLERS AND CALL HISTORY REPORTS

To ensure better customer management, your supervisors can monitor the status of live callers, agents and other group members. In this way, they can better understand any on-site problems and improve the operations of your call centre.

COMMUNICATION ASSISTANT (CA)

THIS INTUITIVE PC-BASED APPLICATION SUITE OFFERS A TOOLKIT OF POINT-AND-CLICK FEATURES THAT CAN BE USED WITH OR WITHOUT A SERVER TO IMPROVE THE WAY YOUR COMMUNICATIONS WORK.

CA BASIC-EXPRESS/CA PRO
FOR PERSONAL PRODUCTIVITY

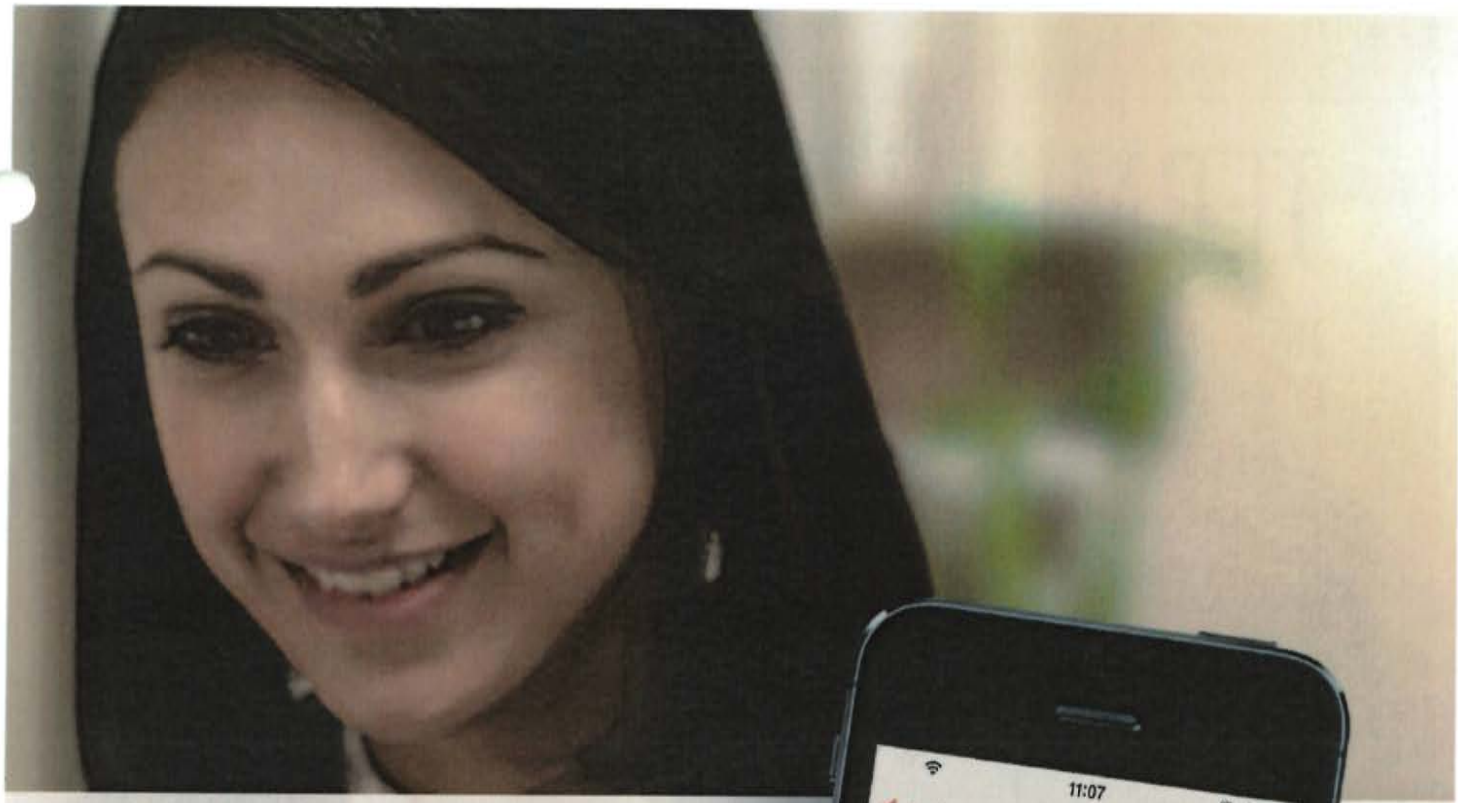
You can easily make calls by simply searching for a desired contact from a customisable contact list. You can also see the phone status and PC status of employees in remote rooms or branches from the PC on your desk.

CA OPERATOR CONSOLE
FOR OPERATORS OR RECEPTIONISTS

You can perform call parking and call transferring with simple drag-and-drop operations in the graphical interface. Multi-site support is also available when using one-look networking.

CA SUPERVISOR
FOR TEAMS OR EXECUTIVE USERS

Supervisors can monitor the performance of set extension groups in real-time with simple mouse operations and manage operators by listening in on telephone conversations and taking over calls.



MICROSOFT EXCHANGE SERVER INTEGRATION

If a CA server is installed on your network, you can integrate a Microsoft Exchange calendar with CA Client. When Microsoft Exchange Server is integrated with the CA Client, your presence will automatically change according to the contents of your Exchange calendar.

LINKING CA WITH YOUR PHONES

CA INTEGRATE (FOLLOW ME)

You can call customers by registering your number and customer numbers in CA. You can then use your mobile phone and home phone as extensions to have conversations with customers. This enables you to communicate with customers both inside and outside of the office without purchasing new phones, as long as you have an environment that supports CA.

CA MOBILE

FOR MOBILE WORKERS

This mobile client provides unified communications functionality – voice call, chat, presence-sharing and desktop integration – with just one application.

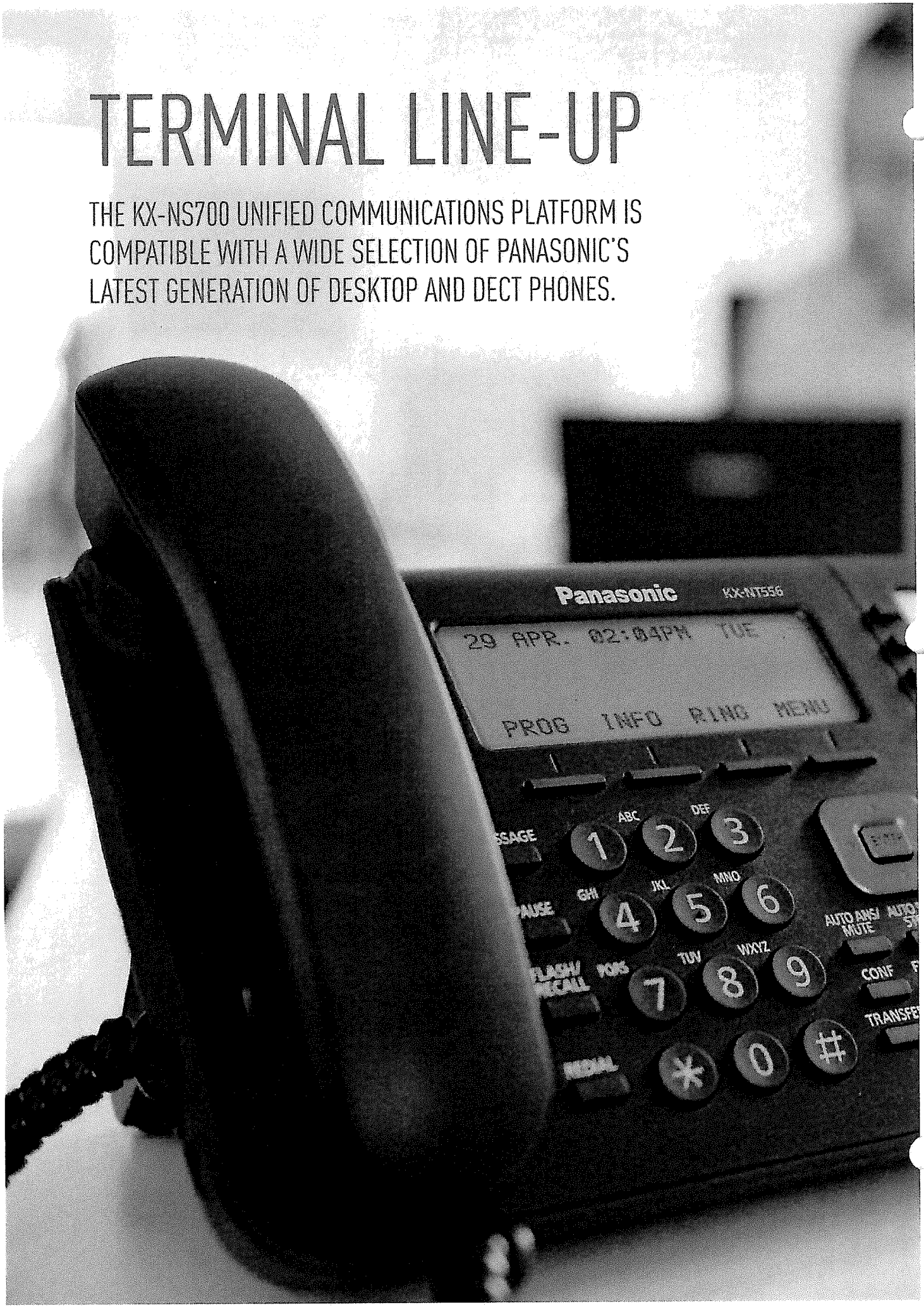
Panasonic CA Mobile Client is available online at the Apple Store and Google Play™.

Download on the App Store

GET IT ON Google play

TERMINAL LINE-UP

THE KX-NS700 UNIFIED COMMUNICATIONS PLATFORM IS COMPATIBLE WITH A WIDE SELECTION OF PANASONIC'S LATEST GENERATION OF DESKTOP AND DECT PHONES.



IP HANDSETS

KX-NT560
Executive IP phone

- 4.4" LCD display with backlighting
- 32 (8x4) freely programmable function keys
- High-quality wideband voice transmission
- Integrated Bluetooth®
- 2x 1Gb Ethernet ports
- Power-over-Ethernet (PoE)
- Eco Mode

KX-NT556/KX-NT553
Executive IP phone

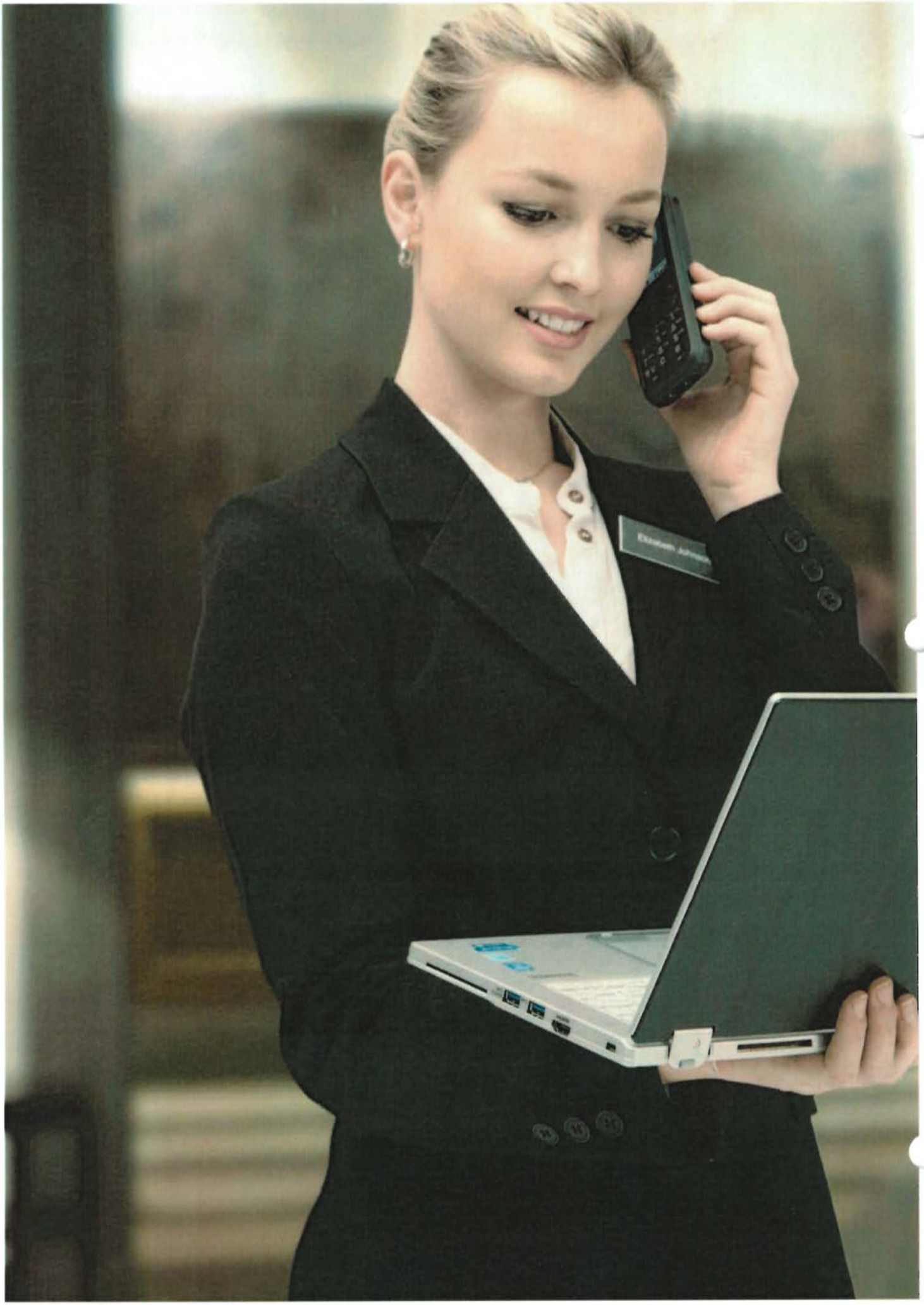
- 6-line backlit LCD display (3 lines for KX-NT553)
- 36 (12x3) KX-NT556/24 (12x2) KX-NT553 self-labelling, flexible CO buttons
- 2x 1Gb Ethernet ports
- Power-over-Ethernet (PoE)
- Eco Mode
- Available in black or white

KX-NT546/KX-NT543
Standard IP phone

- 6-line display with backlighting (3 lines for KX-NT543)
- 24 freely programmable function keys
- High-quality wideband voice transmission
- Plantronics wireless headset Electronic Hook Switch (EHS)-compatible
- 2x 100Mb Ethernet ports
- Power-over-Ethernet (PoE)
- Eco Mode
- Available in black or white

KX-NT551
Standard IP phone

- 1-line backlit LCD display
- 8 flexible CO buttons
- 2x 1Gb Ethernet ports
- Power-over-Ethernet (PoE)
- Eco Mode
- Available in black or white



DIGITAL HANDSETS

KX-DT546/KX-DT543

Premium digital proprietary telephone

- 6-line backlit LCD display (3 lines for KX-DT543)
- 24 freely programmable function keys
- Electronic Hook Switch (EHS)
- Speaker phone, handset and headset with full duplex
- Available in black or white

KX-DT521

Standard digital proprietary telephone

- 1-line graphical LCD with backlighting
- 8 freely programmable function keys
- Speaker phone, handset and headset with full duplex
- Available in black or white

DECT CORDLESS HANDSETS

KX-TCA185

Professional DECT handset for efficient performance

- 1.8" colour LCD
- Noise reduction
- DECT paging
- Vibration

KX-TCA285

Slim and light DECT handset for highly active environments

- 1.8" colour LCD
- Noise reduction
- DECT paging
- Vibration
- Built-in Bluetooth®

KX-TCA385

Tough and durable DECT handset for every environment

- 1.8" colour LCD
- IP65 compliant dust protection and splash resistance
- Noise reduction
- DECT paging
- Vibration
- Built-in Bluetooth®

Panasonic

business.panasonic.eu

KX-NS700 UNIFIED COMMUNICATIONS PLATFORM. CONNECTING YOUR FUTURE.

Ready to take your communications to the next level? Talk to Panasonic today.
For more information on the KX-NS700 business communication solution,
or for a discussion about your communications requirements,
please get in touch using the details below.

Panasonic System Communications Company Europe (PSCEU)
Communication Systems Business Unit
Panasonic House, Willoughby Road
Bracknell, Berkshire RG12 8FP
United Kingdom
+44 (0)207 022 6530

110907-SEP2014-V7-DIGI

II. RFP Instructions

A. Completing the RFP

Each question requires a written response. If you would like to attach documentation to support your answers, please do so. However, the summary answers should stand on their own. The quality of the response to the RFP will be viewed as an example of the vendor's capabilities.

The RFP asks questions about functionality, approach, and pricing. If you require any clarification, provide the questions in writing email to Michele Kwiatkowski @ michelek@micityoffraser.com

Only existing business telephone and voice mail systems will be considered. Telephone or voice mail systems under development, in planning, or at beta test will not be considered. However, vendors can include additional information about future developments or plans under separate attachment.

Quoted prices and discounts should be guaranteed for at least 60 days from the response date.

B. Format, Due Date

Proposals are due **no later than 10:00 am November 3, 2016**. Late responses may not be considered. Submit responses to:

Kelly Dolland
City of Fraser
33000 Garfield Rd
Fraser MI 48026
Phone 586-293-3100
kellyd@micityoffraser.com

All submitted proposals will be considered the property of **City of Fraser**.

All proposals should include copies of product descriptions for the proposed equipment.

This request for proposal was sent to you on hard copy, and on diskette as a Microsoft Word compatible document. **Two (2) copies** of your completed proposal should be submitted on hard copy, and **one (1)** as a Word compatible document on diskette.

Name one person to be the coordinator for your RFP response and for any clarification activities, which might be necessary.

Contact Name:Michael Weatherly
Company:Complete Interactive Technologies,Inc.

Title:Cost Containment Specialist
Address:44265 Groesbeck Clinton Twp. MI 48036
Phone:586-439-2000
Fax:586-439-2001
Email: mike.weatherly@cit-4u.com

C. Contract

The proposal should include a contract for all proposed equipment and services. If the vendor does not wish to submit an actual contract with the proposal, due to different alternatives proposed and pending choices from those alternatives, a sample contract should be submitted with the proposal.

D. Confidentiality

All material supplied to potential bidders by City of Fraser must be treated as confidential and cannot used for any other purpose than the response to this RFP. Information submitted by any bidder will be considered confidential to City of Fraser and will not be used for any other purpose than evaluating vendor responses.

E. Selection Process

A number of factors will influence City of Fraser's decision in selecting the product and the vendor providing it. In addition to cost considerations, proposals will be evaluated on the basis of the following factors:

1. Functionality of standard equipment and features to meet our specific needs
2. Availability of additional optional capabilities to add as needed
3. System growth and expansion
4. Ease of use
5. Ease of System administration
6. Product quality, reliability, and warranty plan
7. A credible commitment by the vendor to the product and to ongoing enhancement of both feature capabilities and service
8. Vendor qualification including:
    a. Overall experience and reputation in the industry
    b. Experience with the proposed system
    c. Service and support resources, including training of vendor installation and maintenance personnel
    d. Verifiable quality of service provided by vendor to area customers

Please note that City of Fraser will select the vendor based upon the best overall solution and value, and is not obligated to select the lowest price bidder.

F. Disclaimer

This RFP does not commit City of Fraser to any specific course of action. City of Fraser reserves the right to not select any vendor or purchase any goods and services resulting from this RFP.

III. Vendor Background

A. Company Information

1. List your company's legal name, address, and telephone number. Include parent company information if applicable. Complete Interactive Technologies, Inc.

2. How long has your company been in business? Since 1987

3. How long has your company or division been providing business telephone systems and related equipment? Since 1987

4. Indicate whether your company is the manufacturer or the distributor of the proposed equipment. If your company is a distributor of the product, describe the terms of your agreement with the manufacturer, the manufacturer's level of support, and what contingencies they have in place should your company fail to continue to support the product for any reason. We are a Authorized Dealer of Panasonic. Panasonic will give you a 7 year warranty on the Equipment from Panasonic. Extended Service contract are available.

5. If your company is a distributor of the product, how long has your company been distributing the specific products being proposed? Since 1987

6. How many employees do you have? 48

7. How many technicians do you have certified on the proposed equipment? 32

9. When were the models of systems you are proposing first installed at customer sites? About 1 year ago the NS 700 became available

- Business telephone system? Panasonic NS-700

- Voice processing system? Panasonic NS-700

B. Manufacturing Quality Certification

Is the manufacturer of the proposed systems ISO 9001 certified as compliant with quality manufacturing standards? Is the manufacturer of the proposed systems ISO 14001 certified as compliant with environmental manufacturing standards? Yes

C. References

Provide a minimum of 3 references for customers with operations similar to ours that use the equipment being proposed. Include contact names, telephone numbers, email, and addresses.(Included in the proposal)

References

1) City of Centerline
   7070 E. 10 Mile Road
   Centerline MI 48015
   586-757-6800
   Dennis Champine City Manager

2) Village of Beverly Hills Public Safety
   18600 West 13 Mile Road
   Beverly Hills, MI 48025
   248-540-3400

3) Arenac County Government Offices
   120 N. Grove Street
   Standish MI 48658
   989-846-9179
   Alex Rosenbrugh

IV. Business Telephone System Product Requirements

A. General Requirements

1. Use the product requirement information listed in this document to provide detailed pricing for the proposed IP business telephone system configuration specified in section VII.

2. Please provide product descriptions and brochures for the proposed IP business telephone system, voice mail system, telephone sets, attendant consoles, and other related equipment.

3. Describe any special environmental considerations with regards to installation of hardware, such as power requirements, minimum and maximum acceptable temperature and humidity ranges, power consumption, heat dissipation, rack mounting space requirements, etc.

4. The proposed system must be UL approved and listed. Please state the UL listing compliance of the proposed system.

B. System Requirements

1. System Capacities

The proposed system must be able to accommodate up to 200 users at full capacity. This includes capacity for at least 100 trunk lines and 100 telephones or endpoint devices. List these capacities of the proposed system. Up to 288 Extensions

2. Endpoint Device Configuration Flexibility

The proposed system must be able to configure at its full capacity whether using IP desk telephones, analog telephones, wireless endpoints, or any combination of each. List the maximum capacities using each of these type devices.

3. North American Transmission Standards

The proposed system must have complete compliance with the North American Numbering Plan standards. Describe the attributes of the proposed system as it relates to this. Yes

4. Multiple FCC Registration

The proposed system must be FCC registered. Our organization uses various types of trunk services so the business telephone system must be capable of being classified or tariffed as a Key system, Hybrid system, or PBX system as defined by the FCC. List the types of FCC registration available with the proposed system. Yes

5. Hearing Aid Compatible

All proposed telephone equipment must comply with rules adopted by the Federal Communications Commission that specify all telephones in workplaces of 20 employees or more must be hearing aid compatible. Describe the attributes of the proposed system and telephone sets as it relates to this. Yes

6. Manufacturer's Support
All hardware and software must be the current offering provided by the manufacturer, and that which receives the highest level of support available from the manufacturer. State whether the proposed system is the latest available version of both hardware and software and if not, explain what is being proposed and why. Panasonic includes software upgrades at no cost

7. Mean Time Between Failure
What are the manufacturer's stated "Mean Time Between Failure" statistics for the business telephone system and telephone sets being proposed? Explain the methodology for how these statistics are calculated. Explain any design factors that promote product reliability.

8. Cross Equipment Compatibility
The proposed system shall also be capable of interfacing with a Motorola Positron Viper 911 System, allowing the digital system to be answered along with analog 911 emergency lines on the Viper system. The proposed system will need to be compatible with current Digital Recording System for all lines maintained by a party vendor (DSS).

C. System Architecture

1. Scalability and Expansion
The proposed system must be expandable in design, with little or no loss of original equipment utility resulting from physical or software expansion. Physical capacity must be expandable by the simple addition of equipment or software without losing the original investment. Describe the attributes of the proposed system as it relates to scalable design and expansion.

2. Single or Multiple Site Configurations
The proposed system must be able to function as one integrated system in either single or multiple site distributed configurations. Describe how the proposed system works in this regard.

3. Rack Mounting Options
The proposed system must have a cabinet design that accommodates mounting in a standard 19" rack. Describe the attributes of the proposed system as it relates to cabinet mounting options.

4. Server Requirements
As part of our server consolidation efforts to ease maintenance and control, our IT department seeks to keep the number of servers required to support voice applications to a minimum. Describe the number and type of servers required to support the proposed system.

	Interoperability Standard:	Support: Yes/No?	Comments or Explantation: (Partial, Future, etc.)
1.	802.11b	No	
2.	802.1d	No	
3.	802.1p	No	
4.	802.1q	Yes	
5.	802.3	Yes	
6.	802.3af	Yes	
7.	CBWFQ	No	
8.	Committed Access Rate	No	
9.	CRTP	No	
10.	DCL	No	
11.	DHCP	Yes	
12.	DiffServ	Yes	
13.	DNS	Yes	
14.	FAX - Group 3	Yes	With Fax Board
15.	FAX - Group 4	Yes	With Fax Board
16.	G.711	Yes	
17.	G.723.1	No	
18.	G.726	No	
19.	G.728	No	
20.	G.729	No	
21.	G.729a	Yes	
22.	H.225	No	
23.	H.245	No	
24.	H.323	Yes	
25.	IP Precedence	No	
26.	Ipv6	No	
27.	MEGACO	No	
28.	MGCP	Yes	
29.	Policy Based Routing	No	
30.	PQWFQ	No	
31.	Q.931	Yes	
32.	Q.SIG	Yes	
33.	RED	Yes	
34.	RSVP	No	
35.	RTCP	Yes	
36.	RTP	Yes	
37.	RTSP	Yes	
38.	SCCP	No	
39.	SIP	Yes	

40.	SNMP	Yes	
41.	T.120	No	
42.	T.37	Yes	
43.	T.38	Yes	
44.	TAPI	Yes	
45.	TFTP	Yes	
46.	TCP/IP	Yes	
47.	UDP/IP	Yes	
48.	Weighted Fair Queuing	No	
49.	Weighted RED	No	

K. System Features

1. Account Codes

Describe the use of account codes on a voluntary, forced, and forced & verified basis for the proposed system. Indicate the maximum number of digits and the minimum number of digits. Where in the dialing sequence is the code input? Discuss account codes as they relate to SMDR or call accounting.

2. Contact Center and Automatic Call Distribution (ACD)

Provide a brief overview of Contact Center capabilities. Discuss ACD functional routing capabilities, historical reporting capabilities, multi-media contact functionality, and what options are available. Describe any additional equipment or software required to support these capabilities.

3. Automatic Off-hook Line Selection

Can telephones automatically select a specific line, line group, or directory number when the handset is lifted or the speaker button is depressed? Is it programmable by individual telephone?

4. Automatic Station Relocation

Can a telephone be easily relocated within the proposed system by the system administrator without reprogramming? Specify which features and characteristics are retained and lost in the move.

5. Automatic Number Identification (ANI)

Does the proposed system support Automatic Number Identification, to display the caller's telephone number on the telephone LCD? Will it send the ANI digits to an attached computer or voicemail system? What type trunks are required for ANI? Can ANI digits be received simultaneously with Dialed Number Identification Service (DNIS) called number digits? Does the system capture call history for both abandoned (unanswered) and answered calls for later viewing or speed dialing? What additional equipment is required to support these ANI capabilities?

References

1) City of Centerline
   7070 E. 10 Mile Road
   Centerline MI 48015
   586-757-6800
   Dennis Champine City Manager

2) Village of Beverly Hills Public Safety
   18600 West 13 Mile Road
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   248-540-3400

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   120 N. Grove Street
   Standish MI 48658
   989-846-9179
   Alex Rosenbrugh

System Proposal

Quote Prepared For
Michelle Kwiatkowski
City of Fraser
33000 Garfield Road
Fraser, MI 48026
Phone: (586) 293-3100

Quote Prepared By
Keith Spicer
MichTel
675 Executive Drive
Troy, MI 48098
Phone: 248-636-1100
keith@michtelco.com

Item #	Quantity	Item Description		Unit Price	Price
Monthly Items					
1)		Managed PBX MichTel Monthly PBX Management Requires 36 month term - Proactive PBX Monitoring and Notifications - Moves, Adds, Changes - Software Upgrade Insurance For Year 1 - Configuration Back Up and Troubleshooting Support Included.			$25.00
2)		MichTel Flat Rate SIP Trunks (All taxes and fees included) Unlimited local and long distance calling for all locations			$1,129.95
		(Currently paying $991.80)	**Monthly Total**		$1,154.55
One-Time Items					
3)					
	(Option 1)	3CX PRO Edition 32SC 3CX - PRO Edition 32 Simultaneous Calls Includes 1 year of upgrade insurance			$3,395.00
	(Option 2)	3CX PRO Edition 16SC 3CX - PRO Edition 16 Simultaneous Calls Includes 1 year of upgrade insurance			$1,695.00
5)	64	Yealink T41P - SIP Phone		$130.00	$8,320.00

VoIP Configuration, Installation, Training $4,500.00

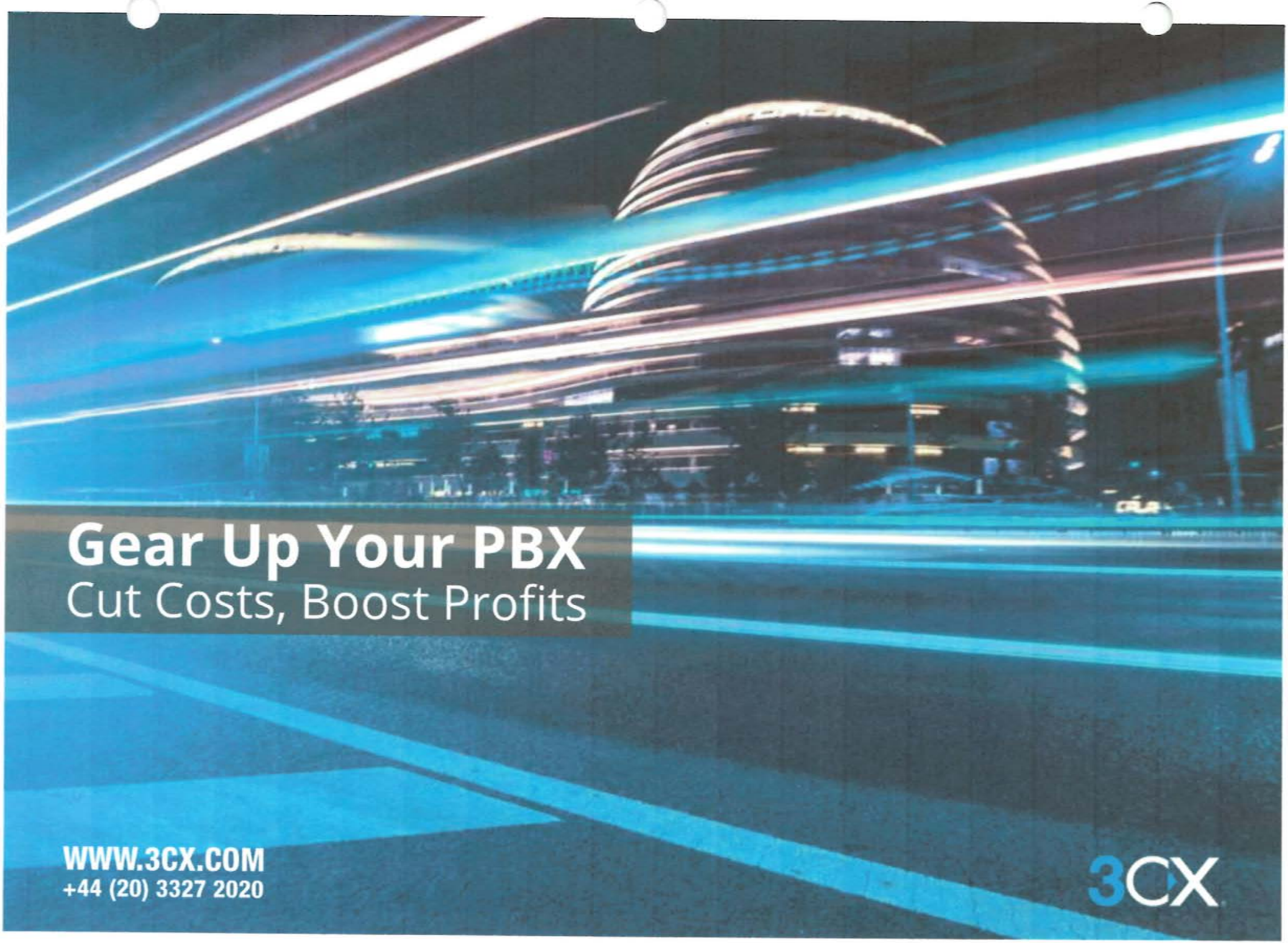
MichTel custom VoIP solution includes:

- Call Flow Assessment and Design
- Create User List
- Apply New 3CX User Key
- Work with Customer, IT Vendor, and Telecom Provider on Installation
- Un-box / Configure / Re-box Phones
- Auto Attendant Configuration
- Extension Configuration
- Ring Group Configuration
- Features Customized
- Project Management
- Documentation as needed
- Pre Deployment Testing
- Remote Installation of hardware / equipment
- 3CX Phone Application Deployed per user
- Testing of the Trunks from the Telecom Provider
- Pre Cutover Training Sessions and Materials
- Work with Telecom Provider to Port numbers over to 3CX (if needed)
- Post Cutover Onsite for Q and A with Users

Option 1			Option 2		
	Sub-Total	$11,715.00		**Sub-Total**	$10,015.00
	Labor	$4,500.00		**Labor**	$4,500.00
	Tax			**Tax**	
	Total	$16,215.00		**Total**	$14,515.00

* Stand alone Desktop / Rack Mounted to Host 3cx System:
Intel® Core™ i3-3210 Processor (3M Cache, 3.20 GHz) / 4GB Memory / 60GB Hard drive

** POE Switches will also be required for each extension / MichTel can provide however Networking Companies usually provide this type of equipment


Gear Up Your PBX
Cut Costs, Boost Profits
WWW.3CX.COM
+44 (20) 3327 2020
3CX

Gear Up Your PBX
Cut Costs, Boost Profits

Evolve Your Communications With 3CX

3CX is a software based PBX that works with SIP standard based IP Phones, SIP trunks and VoIP Gateways to provide a full PBX solution – without the inflated cost and management headaches of an 'old style' PBX. Used by more than 30,000 companies globally, 3CX has been recognized for its innovation and cutting-edge technology.

Take your Extension Anywhere

3CX includes clients for smartphones and Mac or Windows laptops that allow users to use their office extension from anywhere, seamlessly integrated as if they were in the office. Not only are all calls to the office free of charge, but employees can leverage one single number and make a professional impression.

- Take your extension everywhere you go
- All calls are free of charge – slash your mobile phone bills
- Increase productivity – work from anywhere
- One number – Don't give out your personal mobile number

Halve your Telephone Bill and Increase Sales

With 3CX, companies can reduce their telephone costs by up to 80%, by leveraging SIP trunks, WebRTC, free calling to remote extensions and offices and reducing the number of fixed telephony lines. With the CRM integration, agents get a customer name rather than a number.

- Save on call costs by lowering mobile & customer service number bills
- Easily add and remove extensions – no per user license
- Know who's calling with CRM integration -increase customer satisfaction
- Leverage existing hardware, wiring and low cost open standard hardware

Take control of your PBX
Virtualize with Hyper-V & VMWare

vmware READY

Windows Server 2012 Certified

An Easy to Install and Manage PBX

Plug and Play Configuration of Phones, Gateways & SIP Trunks

Plug-in an IP Phone or Gateway to your network and 3CX will automatically configure them, saving you countless hours of configuration time and removing the learning curve. Connect a SIP trunk within minutes with pre-configured templates for most popular SIP trunk providers, including end to end support from 3CX.

- Configuration templates for supported IP Phones, SIP Trunks, Gateways
- No need to figure out complex IP Phone / Gateway or SIP Trunk settings
- Guaranteed interop and support from 3CX for end to end solution
- Inbuilt template for easy configuration of VoIP Providers / SIP Trunks

Easy, Network-Wide Management of IP Phones & Softphones

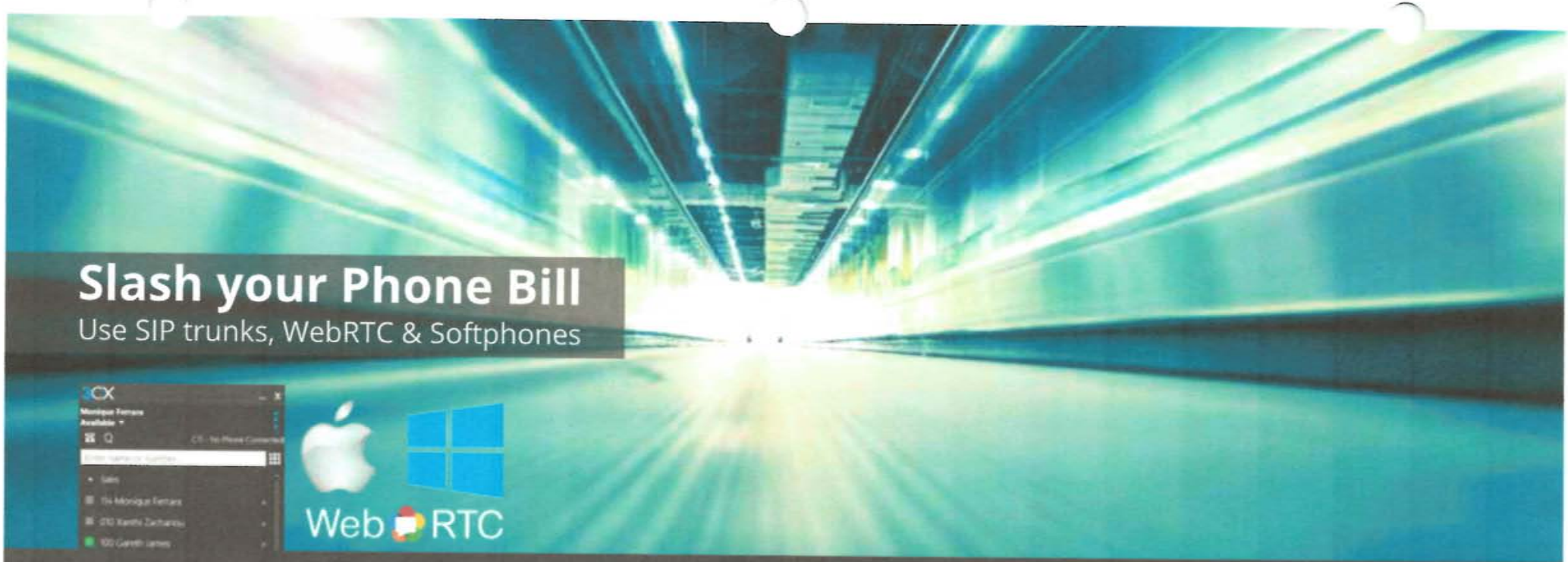
With 3CX you can manage your IP Phones from within the 3CX Management Console. Deploy new firmwares on many phones with a few mouse clicks. Guaranteed interop with supported IP Phones gives you peace of mind when updating your phones. The 3CX clients for smartphones can easily be deployed via email, whilst software updates are automatic, eliminating help desk calls.

- Upgrade IP Phone firmwares from the 3CX Management Console
- Each new IP Phone firmware is tested by 3CX to avoid interop issues
- Reprovision, reboot IP phones remotely
- Configure advanced IP phone options from the console

Virtualize with Hyper V and VMware or Install on Existing Server

The power of 3CX lies in the fact that it is entirely software based. Leverage your existing servers and take full advantage of their power and reliability, without having to add yet another difficult to manage "appliance" to your server room. Get easy backup and redundancy to boot with Hyper V or Vmware!

- Completely software based
- Leverage existing servers
- No need to add another 'black box' appliance to your server room
- Easy backup and redundancy to boot with Hyper-V or Vmware



Slash your Telco and Travel Costs!

Reduce your Phone Bill by 80%

Teleworkers or people working from outside the office can make calls free of charge – saving you significant charges. Connect remote offices by using bridges and all calls between offices are free. International DIDs and IP Telephony allow customers to call you cheaply and increase customer satisfaction.

- Connect remote offices with bridges and eliminate interoffice call charges
- Teleworkers or traveling sales people make free office calls
- Save on monthly call costs using SIP trunks
- Leverage WebRTC & reduce 800 number phone bills

A PBX Which Doesn't Break the Bank

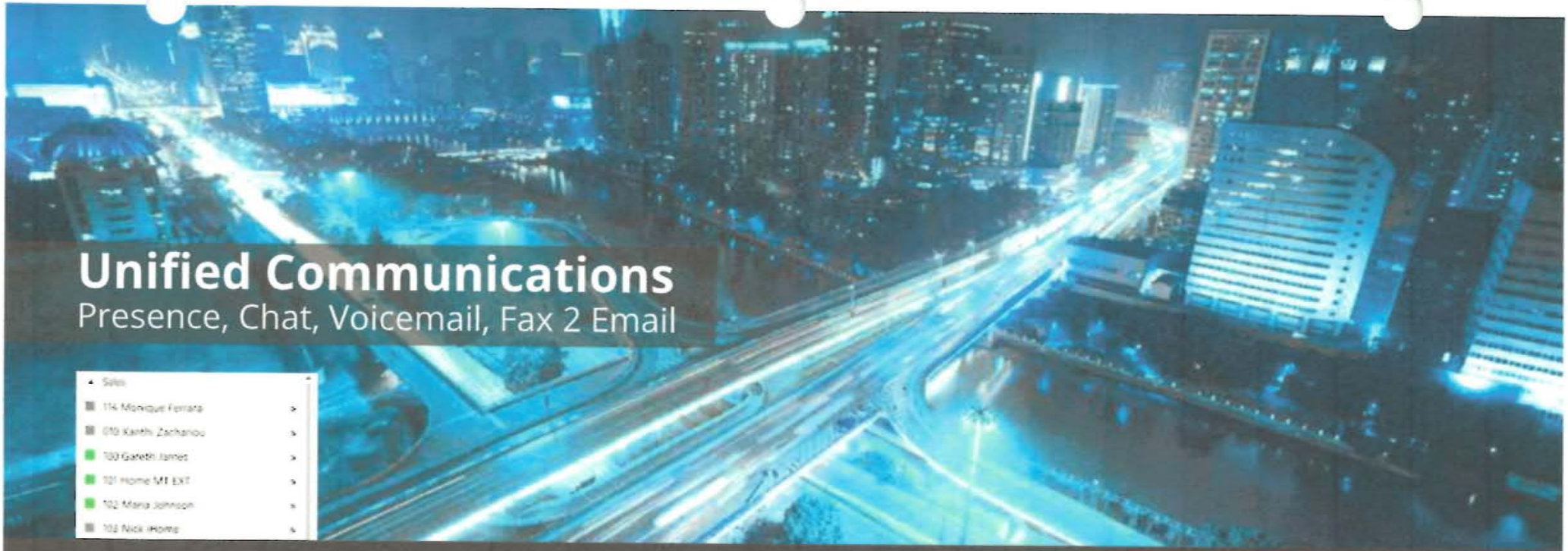
Traditional PBXs or indeed black box appliances are difficult to scale. Add more extensions and you are hit by licensing costs, underpowered hardware or you run out of ports. Not so with 3CX – add extensions, lines, features at no cost and avoid dreaded PBX replacements!

- No per extension licensing
- Scale up to thousands of lines and extensions without extra hardware
- No additional training is required
- Unified Communications features at no additional cost

Cut Travel Costs With Integrated Web Conferencing

3CX's integrated web conferencing solution saves you travel time and money by allowing users to host web meetings and enjoy face-to-face communication wherever they are. Attend meetings around the world with the cutting edge WebRTC technology of 3CX WebMeeting.

- Eliminate expensive Web Conferencing Services
- All 3CX users licensed free of charge
- Save on call conferencing costs
- No monthly subscription fees



Unified Communications

Presence, Chat, Voicemail, Fax 2 Email

Unified Communications Made Easy

See Presence of Colleagues

The ability to view the status of other colleagues ("Presence") is a great time saver avoiding unnecessary call transfers or voice mail tags and makes managing and working with remote employees easier than ever. Need some quiet time to finish a project? Customize your status and prevent any annoying disturbances.

- Eliminate expensive voice mail tags
- Avoid unnecessary call transfers that irritate customers
- Visible from all 3CX clients: Mac, Windows, iOS & Android

Deliver Faxes & Voicemail to Inbox

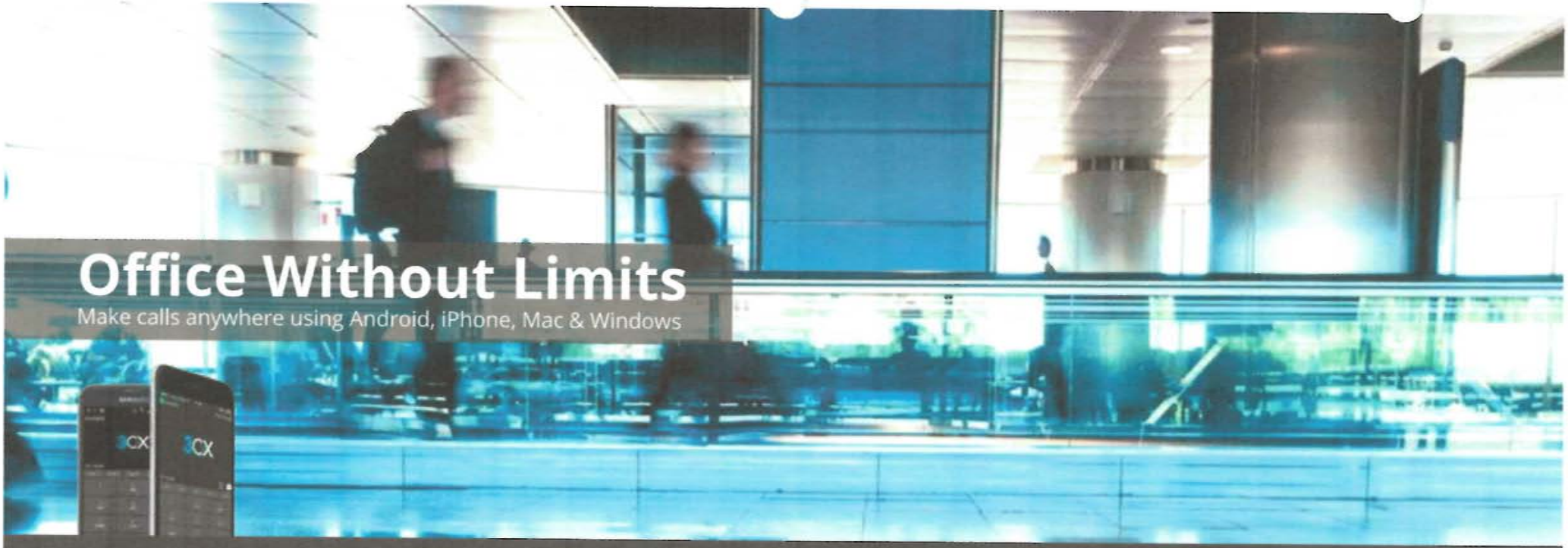
Inbound faxes are converted to PDF and forwarded to users via e-mail, without requiring any fax server software. Likewise voicemails are converted to sound files and forwarded via e-mail.

- Forward voicemails to inbox
- Listen to voicemails without calling in
- Faxes are received as PDF files in your email

Instant Messaging / Text chat

Allow employees to communicate together via text chat, without the need to rely on third party internet messaging systems. 3CX users can send and receive text messages via the 3CX Windows, Mac, iPhone and Android clients from anywhere.

- No need for third party messaging systems
- Send text messages, links and more at no additional cost
- Available on Mac, Windows, iOS and Android



Office Without Limits

Make calls anywhere using Android, iPhone, Mac & Windows

Unparalleled Mobility with 3CX's Leading Android and iOS VoIP Clients

Acclaimed Android and iOS VoIP Clients

3CX features native Android and iOS VoIP clients that are continuously updated and tested and set the standard for mobile phone VoIP clients. With an inbuilt tunnel to avoid remote firewall issues, calling from over 3G or from any Wifi hotspot is extremely reliable. 3CX Android and iOS clients fully support PUSH, allowing the phone to be on standby and save battery life.

- Most advanced and reliable Android & iOS VoIP clients on the market
- No additional licensing costs for softphones
- "PUSH" notifications save mobile battery life
- Inbuilt SIP tunnel/proxy resolves any remote firewall issues

Use Your Extension From Anywhere

With the 3CX VoIP clients for Android and iOS you can take your extension wherever you go. 3CX delivers the one number concept meaning that you no longer have to give out your mobile number. Set your status so your colleagues can see whether or not you are available to take a call.

- Make and receive calls from your smartphone – at no cost
- Set your status to available, away and out of office from your smartphone
- One number concept
- See the presence of your colleagues from anywhere

Easy to Configure and Manage

The 3CX clients for Android and iOS utilise VoIP and are easy to setup and manage. The clients can be automatically provisioned from the 3CX Management Console, reducing help desk calls. Because of the inbuilt tunnel, the 3CX clients work seamlessly across all firewalls, making them even more reliable.

- Remotely configurable via email, no hassle setup
- Easily setup conference calls
- Fully integrated, thus easy to use
- SIP Forking – use all clients simultaneously

Control Your Deskphone From
Your Desktop with Inbuilt Softphone

Powerful, Easy to Use Softphones for Windows and Mac Included

Use Inbuilt Softphone to Make and Receive Calls

With 3CX's softphones for Mac and Windows you can manage your calls from you desktop and make and receive calls via the office phone system from your computer, even whilst out of the office. Using a headset you can even use a 3CX Client as a full deskphone replacement.

- Launch calls on your IP Phone from your desktop with CTI mode
- No additional softphone licensing fees
- Easy to use and manage
- Work seamlessly as if you were in the office and save on call costs

Manage your Calls with the 3CX Switchboard

3CX includes a powerful switchboard function that can be tailored to the way you want to view and manage your phonecalls. With 4 different views to choose from it can cater to any job role.

- Drag and drop calls for quick transfer
- Ideal for Call Centers – includes Wallboard and Q-Manager view
- View the presence of colleagues easily
- Receptionist view allows easy management of incoming calls

Integrates with Office 365, Google, Outlook & Others!

Launch calls directly from your CRM package. Inbound calls are matched to customers based on the caller ID and logged in your CRM system. Accurate call journalling of inbound and outbound calls with call duration allows you to generate insightful reports on customer and agent activities.

- Use Office 365, Google contacts or Internal Phonebook
- Launch calls from your CRM
- Converts cryptical Caller ID to a customer name
- Detailed reports on customer and agent activities, no manual call logging

Web Conferencing

Clientless via WebRTC with 3CX WebMeeting

Integrated, Free Web Conferencing

Hassle Free Web Conferencing with WebRTC

3CX harnesses Google's revolutionary WebRTC technology, which enables video and voice communications to take place through the internet browser, meaning that participants will be able to seamlessly join meetings without the need to download any additional software or plug-ins.

- Clientless
- One-Click Conference
- Interoperability with VoIP and video
- Bandwidth Management and Control

Video Conferencing for All

With 3CX, companies of all sizes can now take advantage of video conferencing as an advanced collaboration and online meeting tool. Avoid paying a monthly subscription fee for each user and implement open standard peripheral hardware for an inexpensive solution. Unlimited users means inefficient and unprofessional account sharing is eliminated.

- Pricing based on number of participants, no per user licensing
- Unlimited users no matter which package you choose
- No per month costs, just one low, yearly payment
- Integrated with 3CX – free for up to 10 participants

Advanced Features for Ultimate Collaboration

Being integrated with 3CX in addition to its rich feature-set and user-friendliness, 3CX WebMeeting improves employees' productivity and collaboration while its WebRTC integration and web-based functionality ensures incredible ease of use. Participants can join without the need to login anywhere and easy setup of ad hoc meetings makes launching conferences a breeze for both participants and organizers.

- Plugin & download free web conferencing
- Remote control and assistance for quick & easy troubleshooting
- Pre-upload PowerPoint & PDFs for crisp, responsive delivery
- Easy to use polling tool for feedback

Features Comparison: Free Edition vs Commercial Editions

General Features	PBX Edition (Free)	Standard	Pro/Enterprise
Extensions	Unlimited	Unlimited	Unlimited
Number of Simultaneous Calls Supported	8	4=>1,024	4=>1,024
Call Logging	•	•	•
Call Reporting		•	•
Call Forward on Busy or No Answer	•	•	•
Call Routing by DID	•	•	•
Auto Attendant / Digital Receptionist	•	•	•
Voicemail/ Music on Hold	•	•	•
Central Phonebook	•	•	•
Call by Name	•	•	•
Call Parking / Pickup		•	•
Call Transfer	•	•	•
Call Queuing		•	•
Call Recording		•	•
MWI – Message Waiting Indicator	•	•	•
Supports Popular SIP Phones	•	•	•
Supports SIP Trunks / Gateways	Single Sip Trunk	•	•
Intercom/ Paging		•	•
Ring Extension & Mobile Simultaneously	•	•	•
Extensive Codec Support (G711, G722, GSM, Speex, iLBC, G729)	No G729	•	•
Automatic Pickup on Busy	•	•	•
Call Recordings Management		•	•

Management and Scalability	PBX Edition (Free)	Standard	Pro/Enterprise
Web-based Management Console	•	•	•
Automated Provisioning of Devices	•	•	•
Real Time Web-based System Status	•	•	•
Integrated Web Server	•	•	•
Easy Backup and Restore	•	•	•
SBC to Configure Remote Extensions	•	•	•
VMware / Hyper-V Compatibility	•	•	•
Connect Remote 3CX PBX Systems (Bridges)		•	•
Scheduled Backup	•	•	•
Scheduled Restore			•
Inbuilt Fail Over Functionality incl. Standby License			Yes / Standby License in Enterprise only

Unified Communications	PBX Edition (Free)	Standard	Pro/Enterprise
Setting Up Conference Calls		•	•
See the Presence of Your Colleagues		•	•
Receive Voice Mail via Email	•	•	•
Receive Faxes via Email as PDF	•	•	•
Integrated Fax Server		•	•
Integrate Offices with 3CX Bridge		•	•
Advanced Forwarding Rules	•	•	•
View Presence of Bridged PBXs			•

Mobility	PBX Edition (Free)	Standard	Pro/Enterprise
Android Client	•	•	•
iOS Client	•	•	•
Windows Phone Client	•	•	•
CTI Support	•	•	•
Seamlessly Create Conference Calls	•	•	•
Users can Configure their Own Extension	•	•	•
Provisioning by Email	•	•	•
Manage 3CXPhone from within the Console	•	•	•
Includes 3CX Tunnel to Avoid NAT Problems	•	•	•

IP Phone Management	PBX Edition (Free)	Standard	Pro/Enterprise
Automatic Plug & Play Phone Provisioning	•	•	•
Manage IP Phones Network Wide from Console	•	•	•
Restart Phones Remotely	•	•	•
Update & Manage Firmware Network Wide	•	•	•

Call Center / Contact Center	PBX Edition (Free)	Standard	Pro/Enterprise
Advanced Queue Strategies			•
Advanced Call Reporting			•
Real Time Queue Statistics			•
Queue Reports			•
Barge In / Listen In / Whisper			•
Query Customer Name Based on Caller ID			•

Continued on the next page

Features Comparison: Free Edition vs Commercial Editions

Call Center / Contact Center	PBX Edition (Free)	Standard	Pro/Enterprise
Ability to Use 3CXPhone API			•
Link Company Directory with LDAP / ODBC			•
Sync Phonebook with Microsoft Exchange			•
Real Time Queue Monitoring			•
Wallboard			•
Switchboard Queue Manager View			•
Call Recordings Search			•
Supervisor can Log Agents In/Out			•
Supports External Agents			•
Callback if queue full			•
CRM Integration / Scripting Interface			•
SLA alerting/reporting			•

Application Integration	PBX Edition (Free)	Standard	Pro/Enterprise
Microsoft Outlook	•	•	•
Office 365 (address book only)		•	•
TAPI		•	•
Office 365			•
Salesforce			•
Microsoft Dynamics			•
Microsoft Exchange 2013 / LDAP / ODBC			•
SugarCRM			•
Google Contacts			•
Exact			•
Zendesk			•
Freshdesk			•
act!			•
Datev			•

Web Conferencing	PBX Edition (Free)	Standard	Pro/Enterprise
Plugin Free - WebRTC	•	•	•
One-click conference	•	•	•
Meeting Recording	•	•	•
Remote Control / Assistance	•	•	•

Web Conferencing (continued)	PBX Edition (Free)	Standard	Pro/Enterprise
Screen Sharing	•	•	•
Unlimited Users	•	•	•
Participants Included	5	10	25

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Yealink
easy VoIP

SIP-T41P

Affordable SIP Phone for clear communications

The SIP-T41P is a feature-rich sip phone for business. The 6-Line IP Phone has been designed by pursuing ease of use in even the tiniest details. Delivering a superb sound quality as well as rich visual experience. With programmable Keys, the IP Phone supports vast productivity-enhancing features. Using standard encryption protocols to perform highly secure remote provisioning and software upgrades.

HD
Optima HD Voice

Paperless

Key Features and Benefits

Revolutionarily new design

Yealink's SIP Phones continue to evolve, the T4 Series have been designed by pursuing ease of use in even the tiniest details, these new design include paper label free design, new foot stand allows two posi-tions for the device, non-slip rubber feet, ergonomic recessed buttons etc.

HD Audio

Yealink Optima HD Voice refers to the combination of software and hardware design as well as the implementation of wideband technology to maximizes the acoustic performance. Coupled with advanced acoustic clarity technology such as full duplex, echo cancellation, Adaptive jitter buffer etc. Creating an amazing face-to-face live experience.

Enhanced Call Management

The SIP-T41P supports vast productivity-enhancing feature such as SCA, BLF List, call forward, call transfer, 3-way conference.Three pages of 6 flexible buttons are shown on the display can be programmed up to 15 various features. Support Yealink YHS32, With EHS36 user can control phone through wireless headset.

Efficient Installation and Provisioning

Integrated IEEE 802.3af Power-over-Ethernet allows easy deployment with centralized powering and backup.The SIP-T41P support the FTP, TFTP, HTTP, and HTTPS protocols for file provisioning and are configured by default to use Trivial File Transfer Protocol (TFTP), supports AES encrypted XML configuration file.

Highly secure transport and interoperability

The Communicator uses SIP over Transport Layer Security (TLS/SSL) to provide service providers the latest technology for enhanced network security. The range is certified compatible with 3CX, Asterisk and BroadSoft Broadworks, ensuring excellent compatibility with leading soft switch suppliers.

- > Revolutionarily new design
- > Yealink Optima HD voice
- > 2.7" 192x64-pixel graphical LCD with backlight
- > Up to 6 SIP accounts
- > Paper label free design
- > PoE support
- > Headset, EHS support
- > Integrated stand with 2 adjustable angles
- > Wall mountable
- > Simple, flexible and secure provisioning options

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Yealink
easy VoIP

SIP-T41P Specifications

Audio Features

> HD voice: HD handset, HD speaker
> Wideband codec: G.722
> Narrowband codec: G.711(A/μ), G.723.1, G.729AB , G.726
> DTMF: In-band, Out-of-band(RFC 2833) and SIP INFO
> Full-duplex hands-free speakerphone with AEC
> VAD, CNG, AEC, PLC, AJB, AGC

Phone Features

> 6 VoIP accounts
> One-touch speed dial, redial
> Call forward, call waiting
> Call transfer, call hold
> Call return, group listening
> Mute, auto answer, DND
> 3-way conference call
> Direct IP call without SIP proxy
> Ring tone selection/import/delete
> Hotline, emergency call
> Set date time manually or automatically
> Dial Plan
> XML Browser
> Action URL/URI
> RTCP-XR (RFC3611) ,VQ-RTCPXR (RFC6035)

Directory

> Local phonebook up to 1000 entries
> Black list
> XML/LDAP remote phonebook
> Intelligent search method
> Phonebook search/import/export
> Call history: dialed/received/missed/forwarded

IP-PBX Features

> Busy Lamp Field (BLF)
> Bridged Line Apperance(BLA)
> Anonymous call, anonymous call rejection
> Hot-desking
> Message Waiting Indicator (MWI)
> Voice mail
> Call park, call pickup
> Intercom, paging
> Music on hold
> Call recording

Display and Indicator

> 2.7" 192x64-pixel graphical LCD with backlight
> LED for call and message waiting indication
> Dual-color (red or green) illuminated LEDs for line status information
> Intuitive user interface with icons and soft keys
> National language selection
> Caller ID with name, number

Feature keys

> 6 line keys with LED
> 6 line keys can be programmed up to 15 various features (3-page view)
> 5 features keys: message, headset, mute, redial, hands-free speakerphone
> 4 context-sensitive "soft" keys
> 6 navigation keys
> 2 volume control keys
> Illuminated mute key
> Illuminated headset key
> Illuminated hands-free speakerphone key

Interface

> 2xRJ45 10/100M Ethernet ports
> 1xRJ9 (4P4C) handset port
> 1xRJ9 (4P4C) headset port
> 1XRJ12 (6P6C) EHS port
> Power over Ethernet (IEEE 802.3af), Class 2

Other Physical Features

> Stand with 2 adjustable angles
> Wall mountable
> External universal AC adapter (optional): AC 100~240V input and DC 5V/1.2A output
> Power consumption (PSU): 1.1-2.3W
> Power consumption (PoE): 1.7-3.2W
> Dimension(W*D*H*T): 212mm*189mm*175mm*54mm
> Operating humidity: 10~95%
> Operating temperature: -10~50°C

Package Features

> Qty/CTN: 5 PCS
> N.W/CTN: 6.3kg
> G.W/CTN: 7.0kg
> Giftbox size: 246mm*223mm*120mm
> Carton Meas: 627mm*256mm*235mm

Management

> Configuration: browser/phone/auto-provision
> Auto provision via FTP/TFTP/HTTP/HTTPS for mass deploy
> Auto-provision with PnP
> BroadSoft device management
> Zero-sp-touch TR-069
> Phone lock for personal privacy protection
> Reset to factory, reboot
> Package tracing export, system log

Network and Security

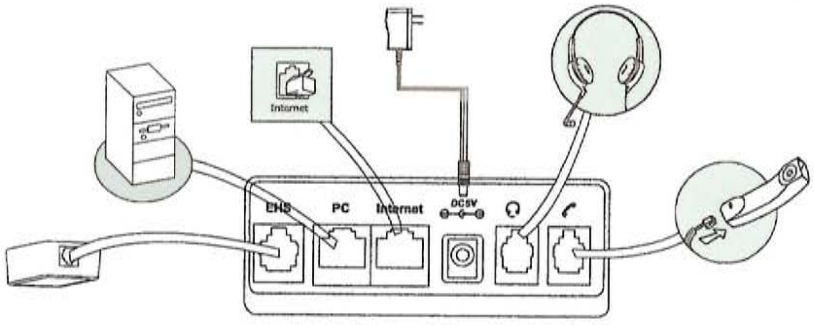
> SIP v1 (RFC2543), v2 (RFC3261)
> Call server redundancy supported
> NAT transverse: STUN mode
> Proxy mode and peer-to-peer SIP link mode
> IP assignment: static/DHCP
> HTTP/HTTPS web server
> Time and date synchronization using SNTP
> UDP/TCP/DNS-SRV(RFC 3263)
> QoS: 802.1p/Q tagging (VLAN), Layer 3 ToS DSCP
> SRTP for voice
> Transport Layer Security (TLS)
> HTTPS certificate manager
> AES encryption for configuration file
> Digest authentication using MD5/MD5-sess
> OpenVPN, IEEE802.1X
> IPv6

Certifications

CE FC REACH ISO 9001

3CX Asterisk® Compatible BROADSOFT

Genesys



Learn More

To find out how Yealink solutions can help your organization, visit us at www.yealink.com or mail to sales@yealink.com

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