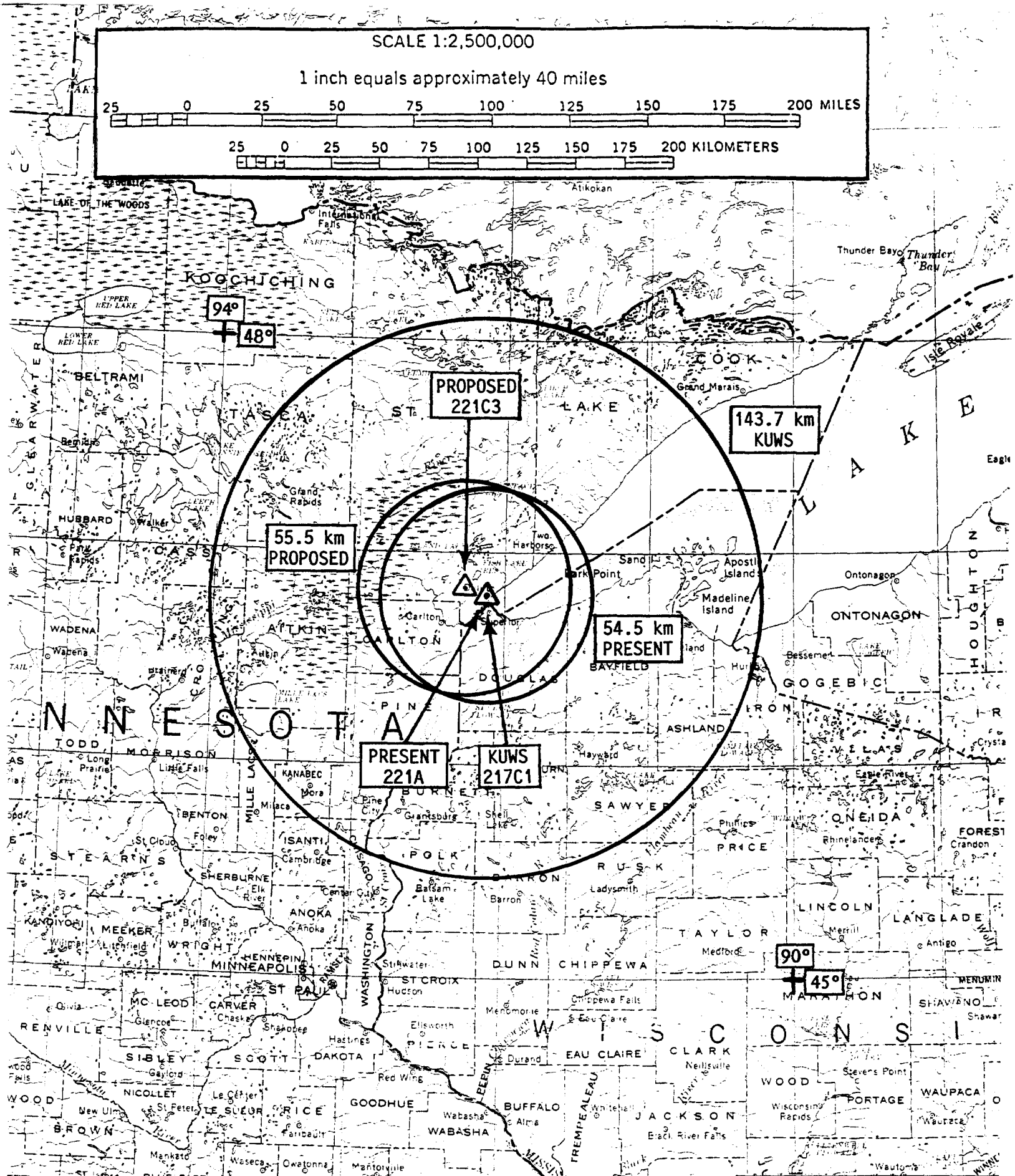
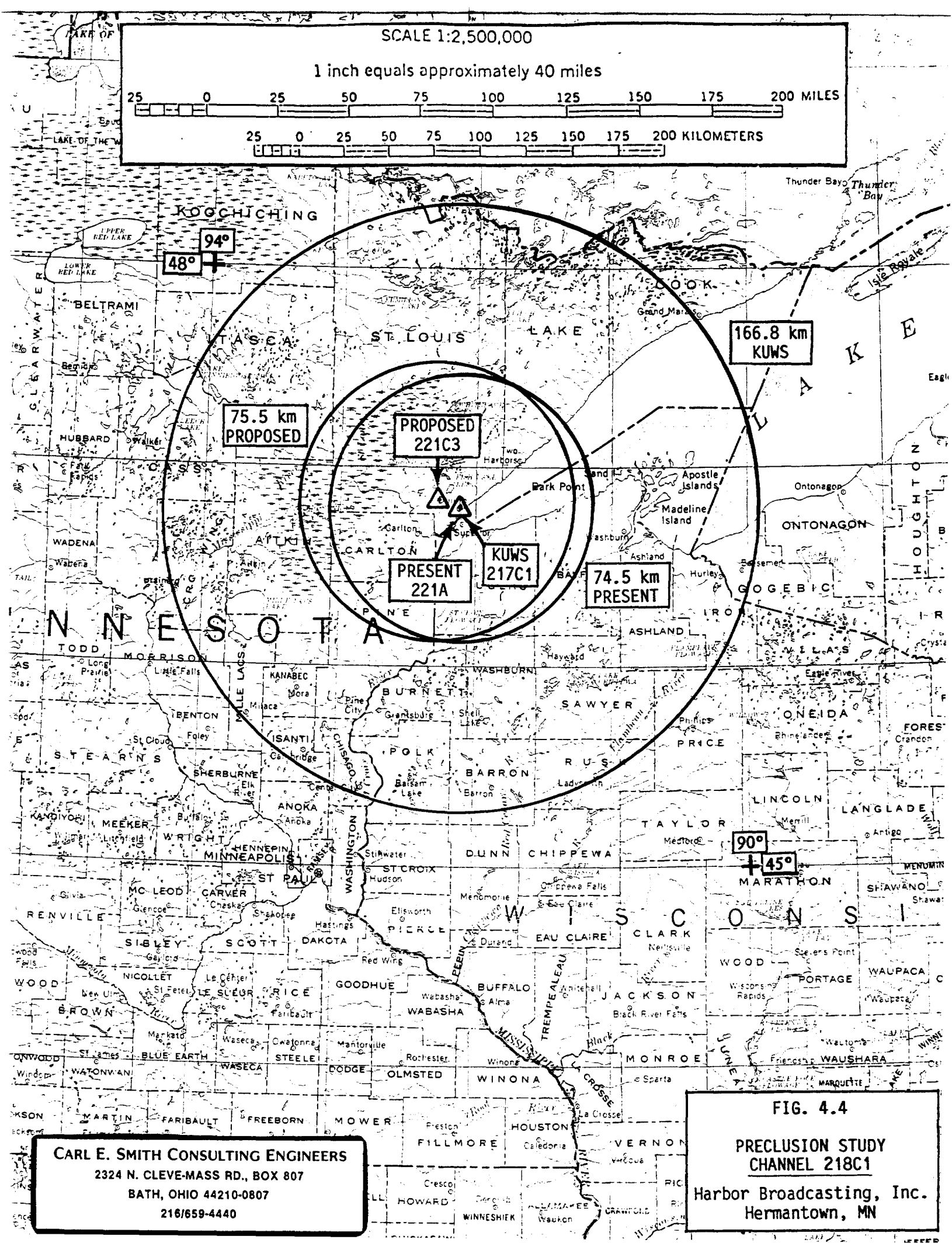

SCALE 1:2,500,000
1 inch equals approximately 40 miles
25 0 25 50 75 100 125 150 175 200 MILES
25 0 25 50 75 100 125 150 175 200 KILOMETERS
94°
48°
90°
45°
PROPOSED 221C3
143.7 km KUWS
55.5 km PROPOSED
54.5 km PRESENT
PRESENT 221A
KUWS 217C1
LAKE SUPERIOR
MINNESOTA
WISCONSIN
KOOCHICHING
BELTRAMI
CASS
HUBBARD
AITKIN
CARLTON
COOK
LAKE
ST. LOUIS
ONTONAGON
GOGEBIC
IRON
ASHLAND
BAYFIELD
DOUGLAS
WADENA
TODD
MORRISON
BENTON
STEARNS
SHERBURNE
ANOKA
MEEKER
WRIGHT
HENNEPIN
MINNEAPOLIS
ST PAUL
CARVER
SCOTT
DAKOTA
MC LEOD
SIBLEY
RENVILLE
NICOLLET
LE SUEUR
RICE
GOODHUE
WABASHA
BUFFALO
BROWN
BLUE EARTH
WASECA
STEELE
DODGE
OLMSTED
WINONA
FILLMORE
HOUSTON
VERNON
MONROE
JACKSON
CLARK
WOOD
PORTAGE
WAUPACA
TAYLOR
LINCOLN
LANGLADE
ONEIDA
PRICE
RUSK
BARRON
POLK
BURNETT
SAWYER
DUNN
CHIPPEWA
EAU CLAIRE
PIERCE
PEPIN
ST CROIX
WASHINGTON
ISANTI
KANABEC
PINE
MILLE LACS
KANDIYOHI
MARATHON
Lake of the Woods
Atikokan
Thunder Bay
Isle Royale
Grand Marais
Duluth
Superior
Ontonagon
Madeline Island
Ashland
Rhinelander
Wausau
Eau Claire
La Crosse
Rochester
Mankato
St. Cloud
Brainerd
Bemidji
Grand Rapids
Hibbing
Virginia
Cloquet
Hayward
Ladysmith
Rice Lake
Menomonie
Chippewa Falls
Hastings
Red Wing
Winona
Preston
Caledonia
Sparta
Medford
Merrill
Antigo
Shawano
Stevens Point
Wisconsin Rapids
Wautoma
Black River Falls
Whitehall
Alma
Durand
Ellsworth
Hudson
Stillwater
Glencoe
Olivia
Litchfield
Willmar
Benson
Montevideo
Ortonville
Windom
Worthington
Fairmont
Albert Lea
Austin
Owatonna
Waseca
New Ulm
St. Peter
Le Center
Faribault
Shakopee
Chaska
Buffalo
Anoka
Elk River
Cambridge
Isanti
Milaca
Mora
Pine City
Grantsburg
Shell Lake
Barron
Balsam Lake
Center City
Stillwater
Hudson
Phillips
Park Point
Sand Island
Two Harbors
Carlton
Wadena
Walker
Leech Lake
Upper Red Lake
Lower Red Lake
Intl Falls
Thunder Bay
Eagle River
Crandon
Rhinelander
Merrill
Wausau
Stevens Point
Wisconsin Rapids
Waupaca
Shawano
Menominee
Marinette
Escanaba
Iron Mountain
Crystal Falls
Ironwood
Bessemer
Hurley
Ontonagon
Houghton
Hancock
Calumet
Eagle Harbor
Copper Harbor
Isle Royale
Grand Marais
Two Harbors
Duluth
Superior
Ashland
Hayward
Ladysmith
Rice Lake
Menomonie
Chippewa Falls
Eau Claire
Durand
Alma
Whitehall
Black River Falls
Wisconsin Rapids
Stevens Point
Wausau
Merrill
Antigo
Medford
Rhinelander
Crandon
Eagle River
Phillips
Park Point
Sand Island
Madeline Island



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216/659-4440

FIG. 4.4

PRECLUSION STUDY
CHANNEL 218C1

Harbor Broadcasting, Inc.
Hermantown, MN

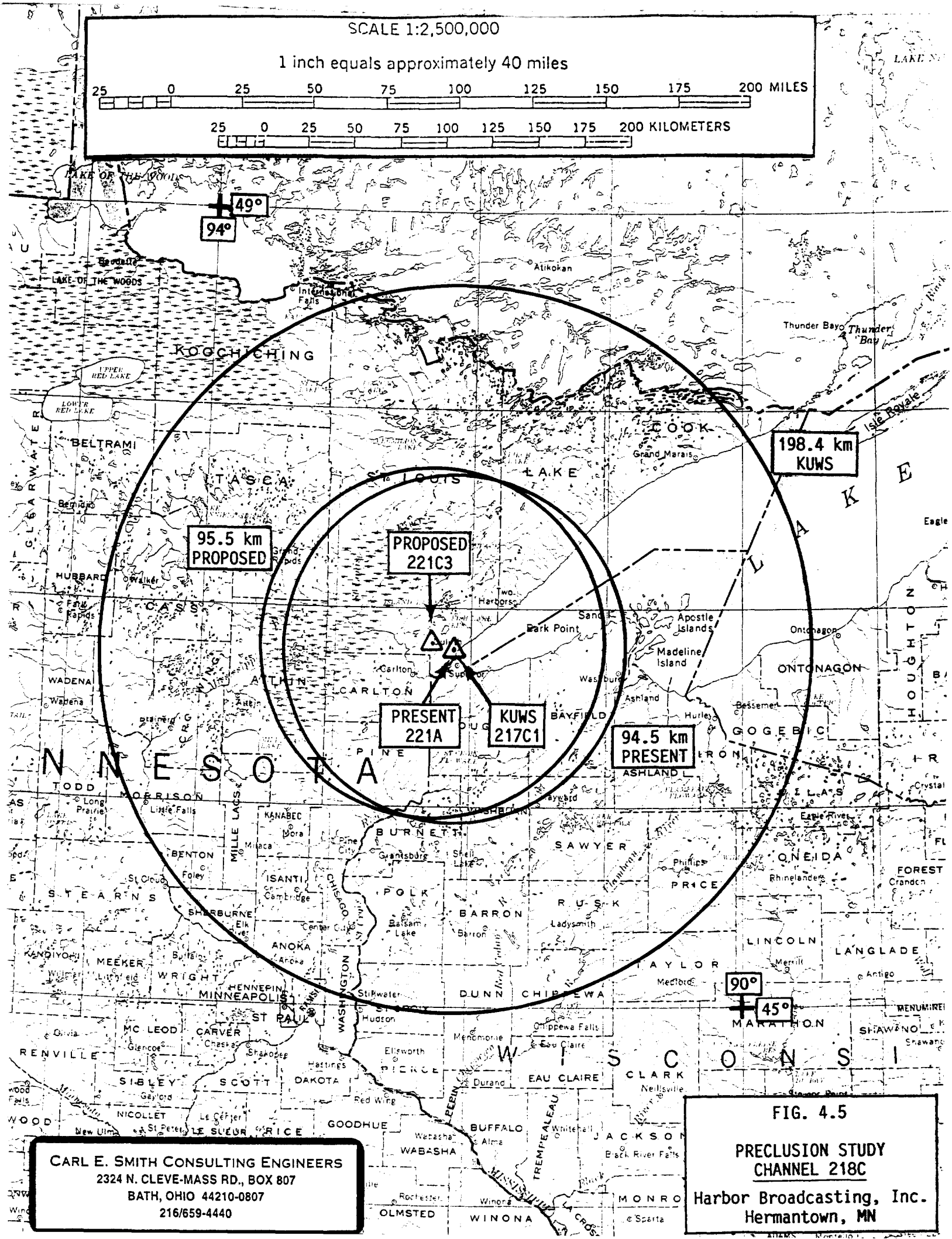

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FIG. 4.5

PRECLUSION STUDY
CHANNEL 218C

Harbor Broadcasting, Inc.
Hermantown, MN

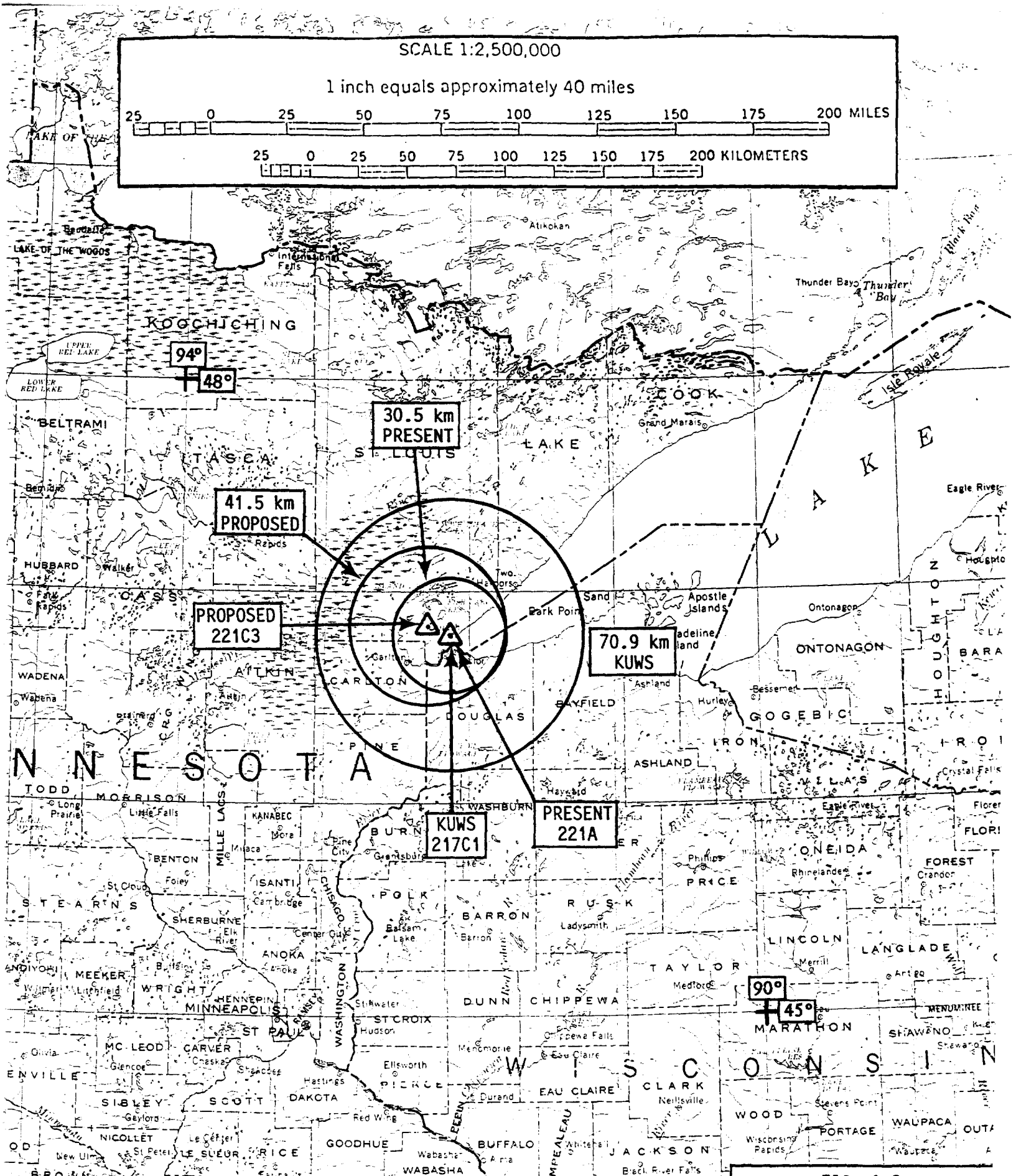

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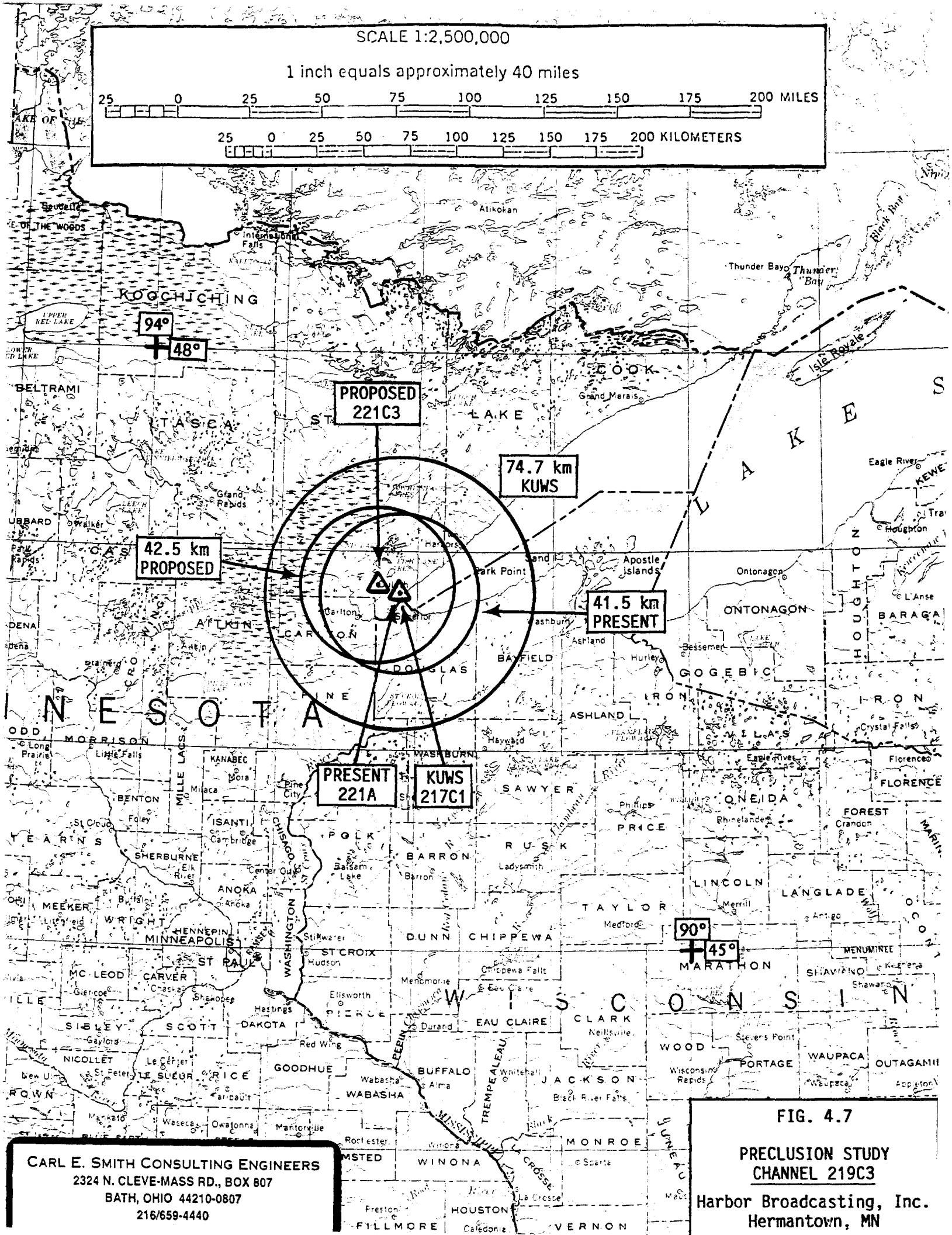
FIG. 4.6

PRECLUSION STUDY
CHANNEL 219A

Harbor Broadcasting, Inc.
Hermantown, MN



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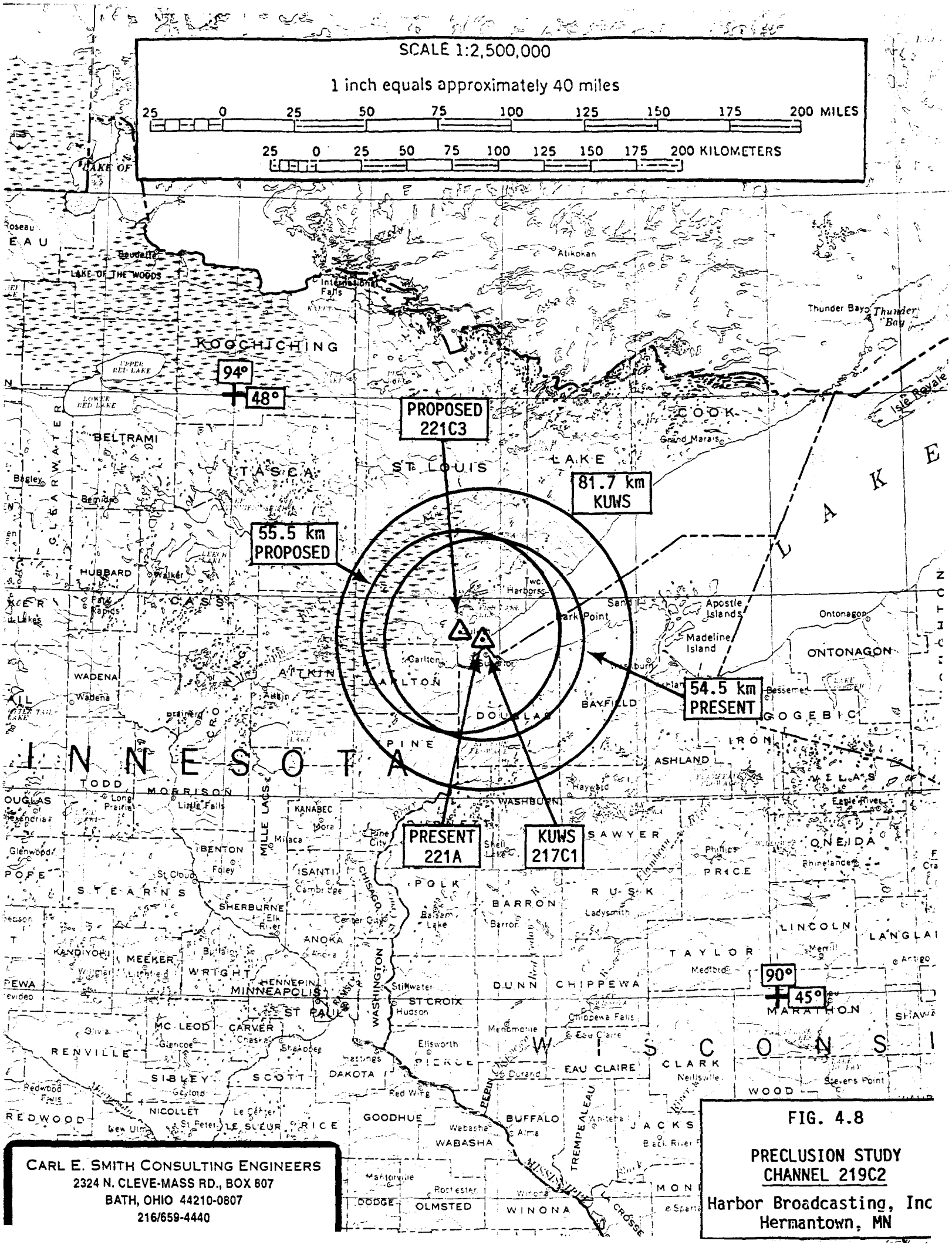
216/659-4440

FIG. 4.7

PRECLUSION STUDY
CHANNEL 219C3

Harbor Broadcasting, Inc.
Hermantown, MN



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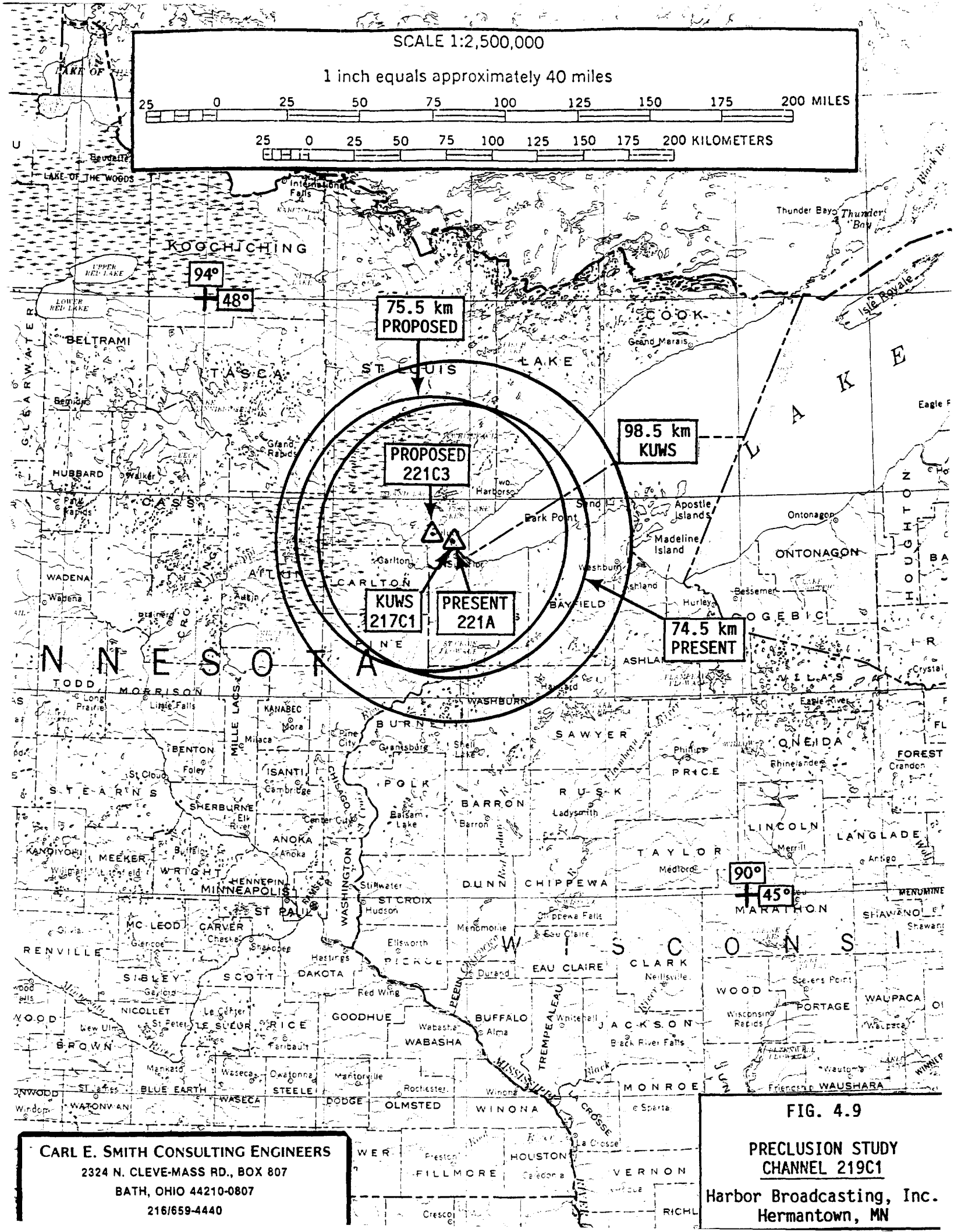
216/659-4440

FIG. 4.8

PRECLUSION STUDY
CHANNEL 219C2

Harbor Broadcasting, Inc
Hermantown, MN



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216/659-4440

FIG. 4.9

PRECLUSION STUDY
CHANNEL 219C1

Harbor Broadcasting, Inc.
Hermantown, MN

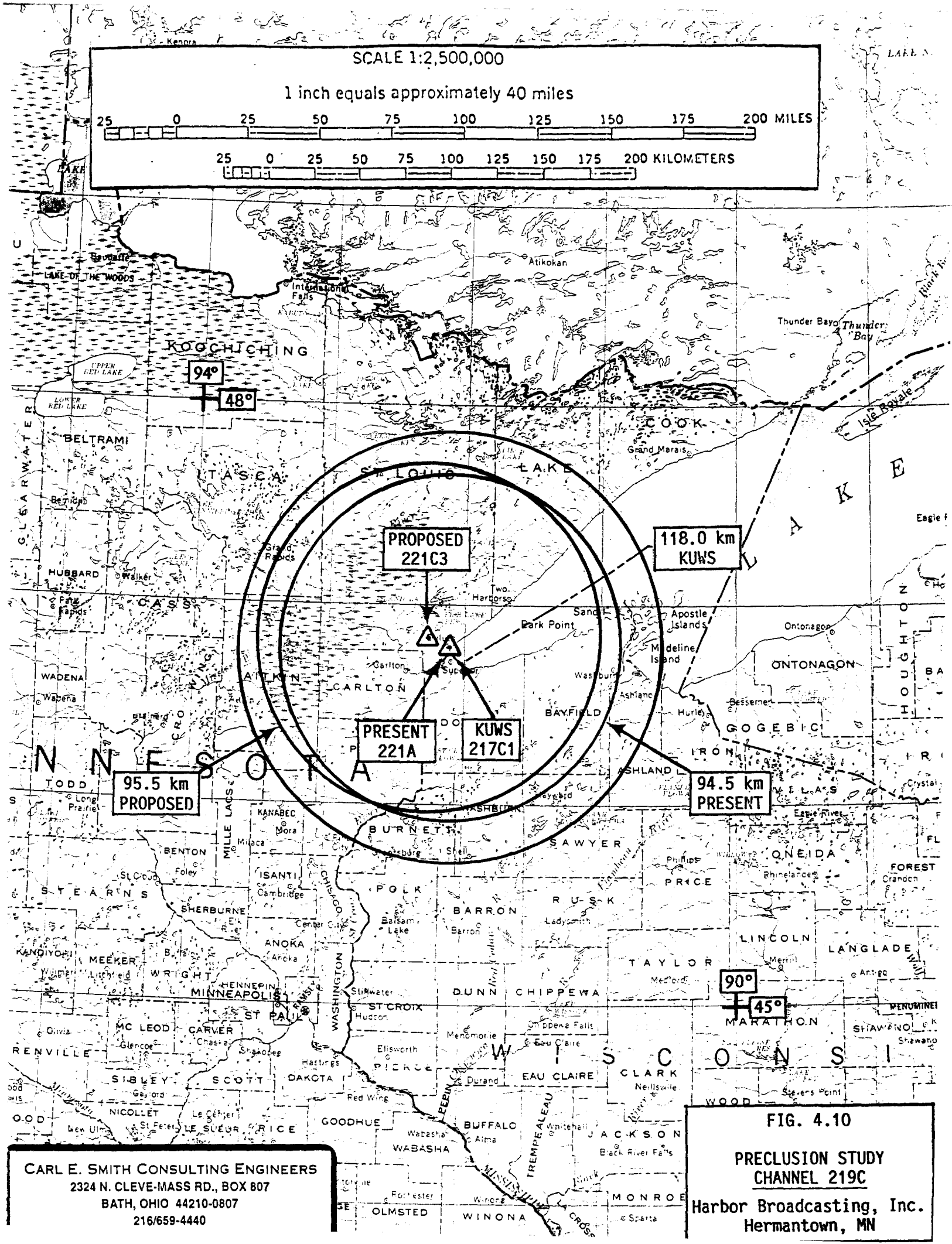

FIG. 4.10

PRECLUSION STUDY
CHANNEL 219C

Harbor Broadcasting, Inc.
Hermantown, MN

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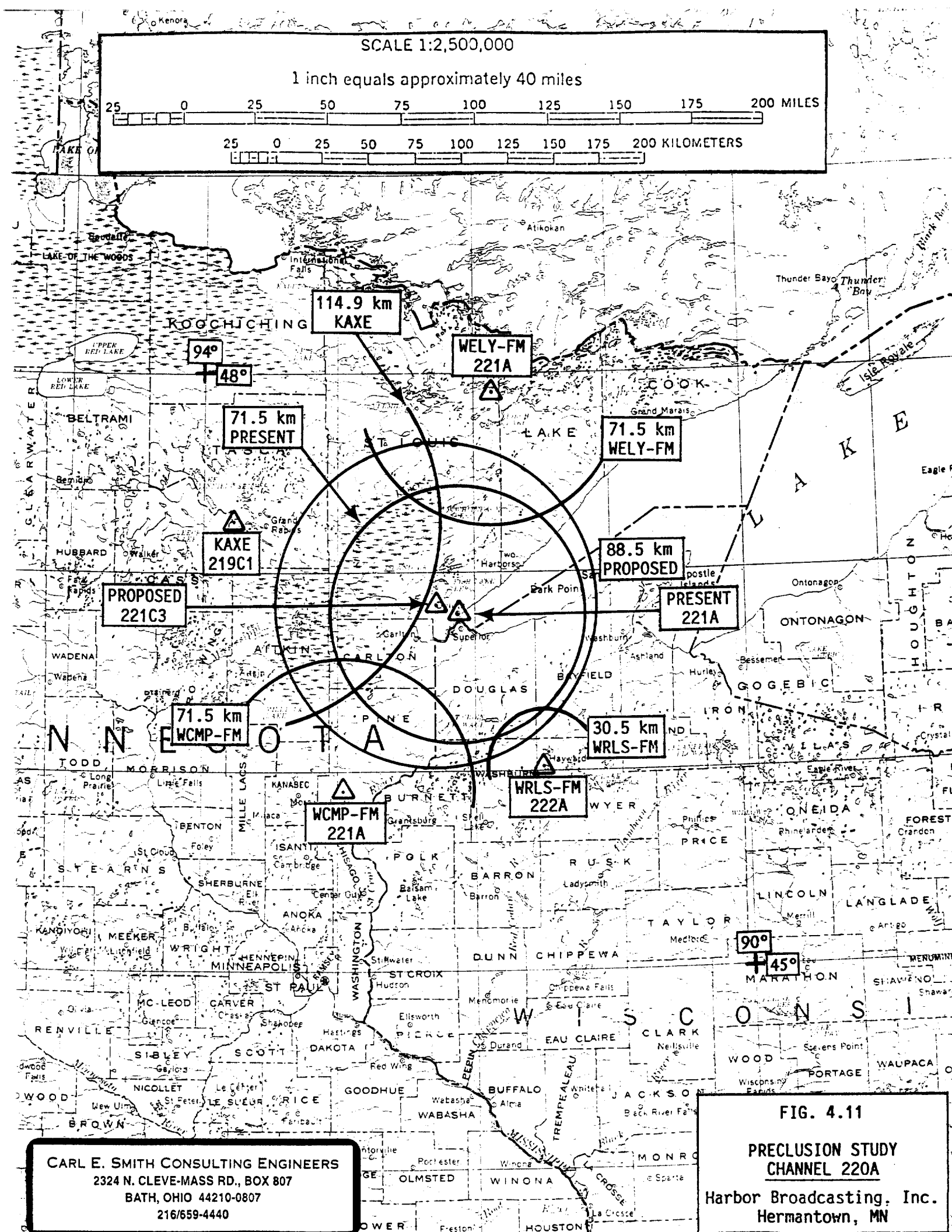
216/659-4440



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216/659-4440

FIG. 4.11

PRECLUSION STUDY
CHANNEL 220A

Harbor Broadcasting, Inc.
Hermantown, MN

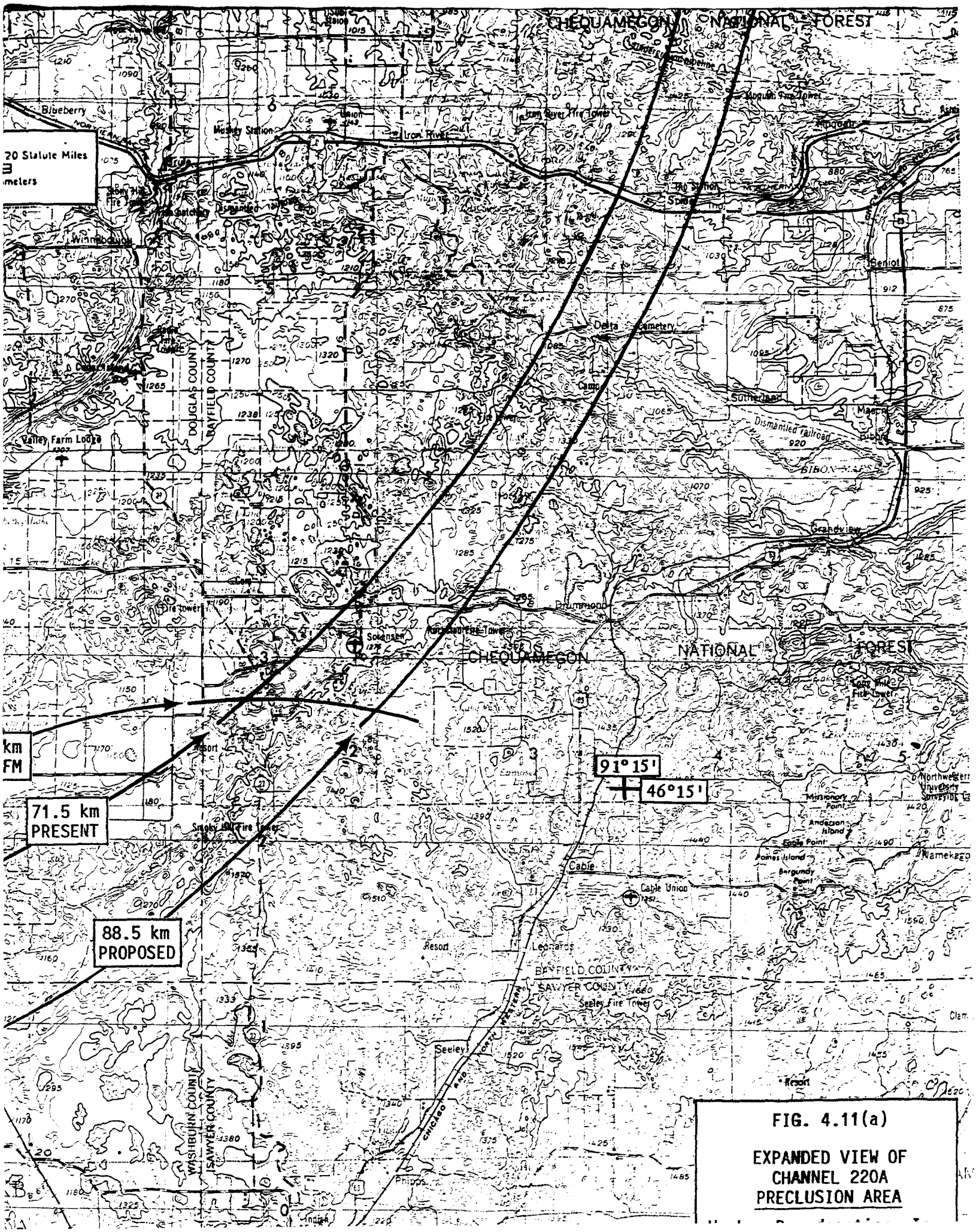
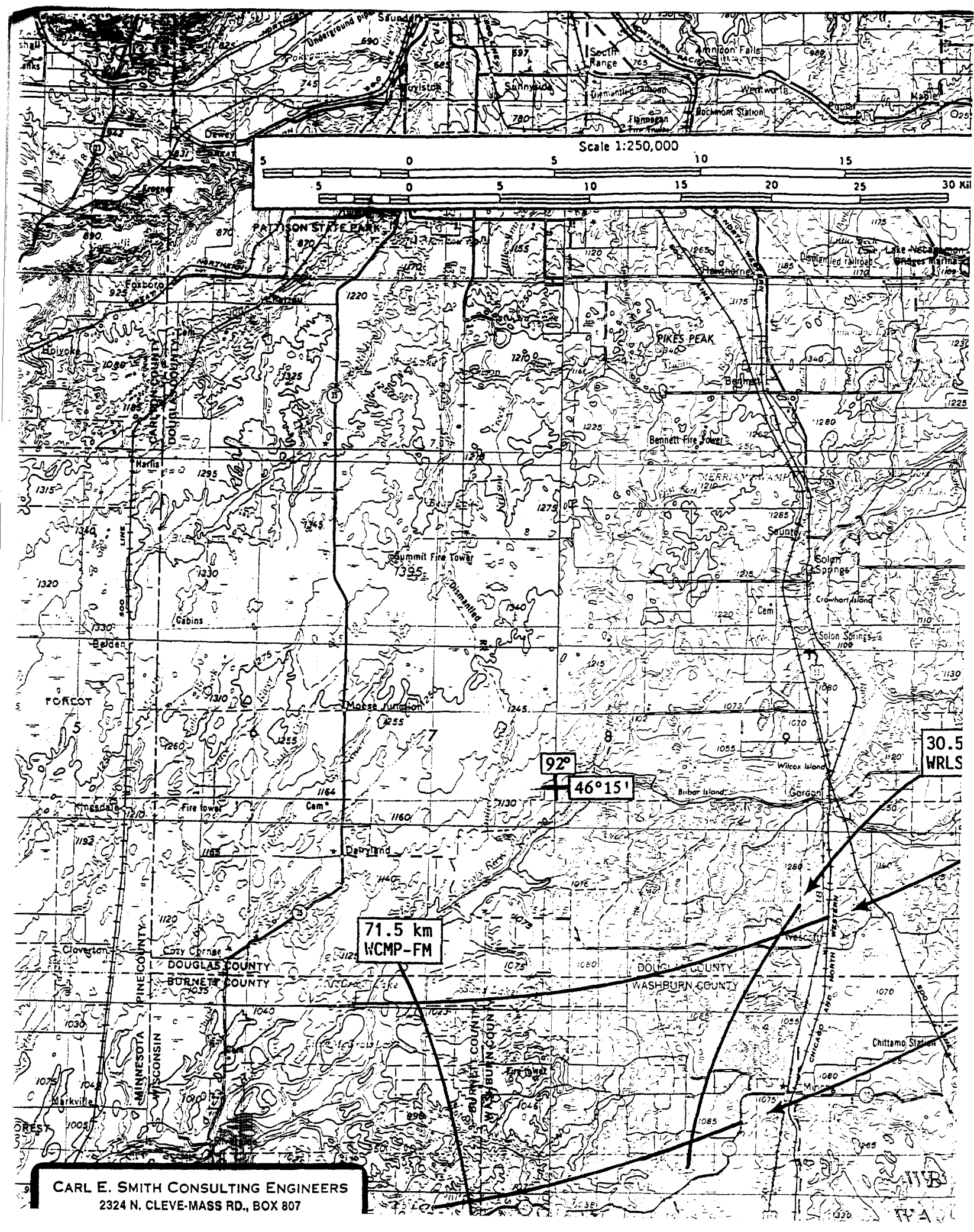
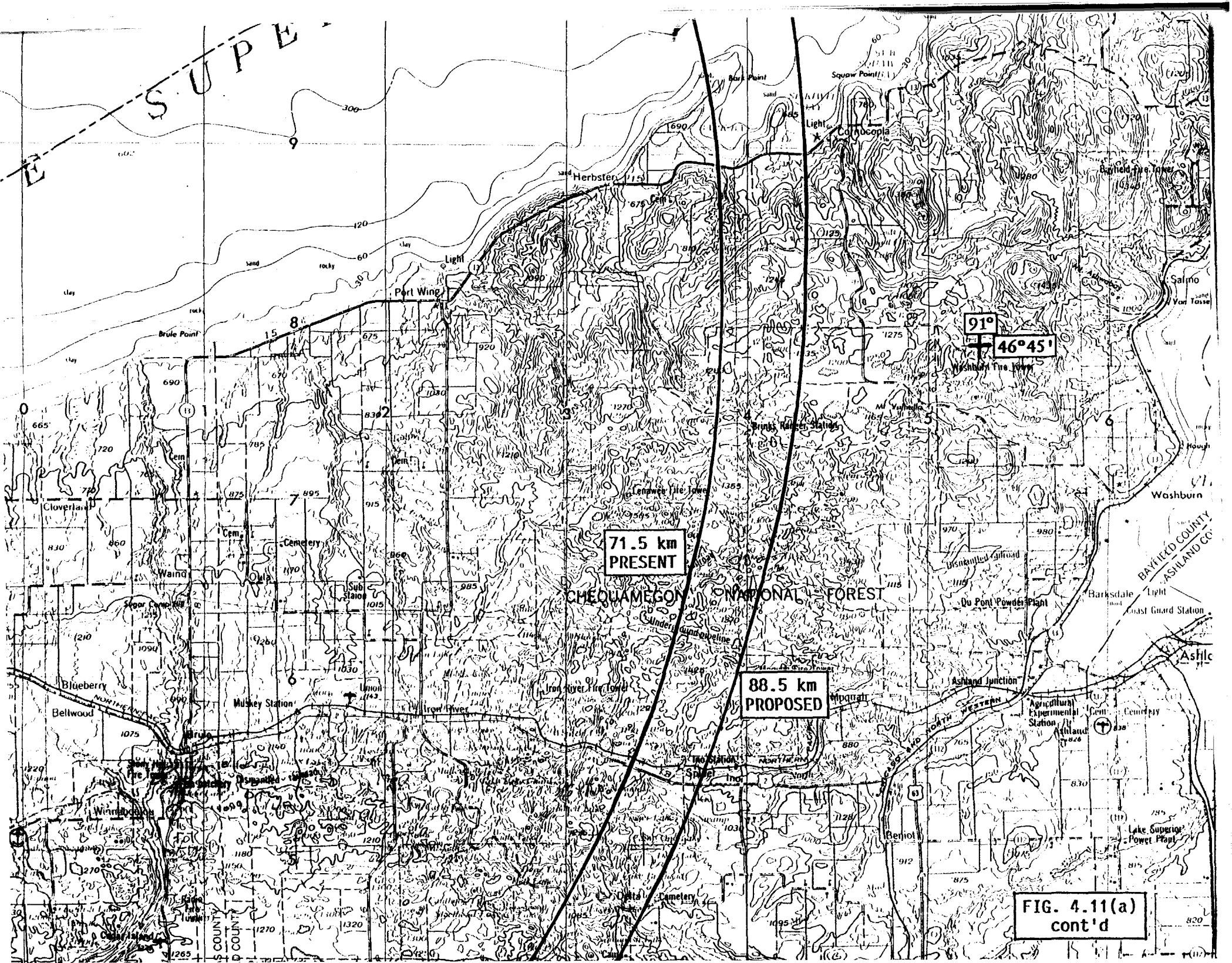
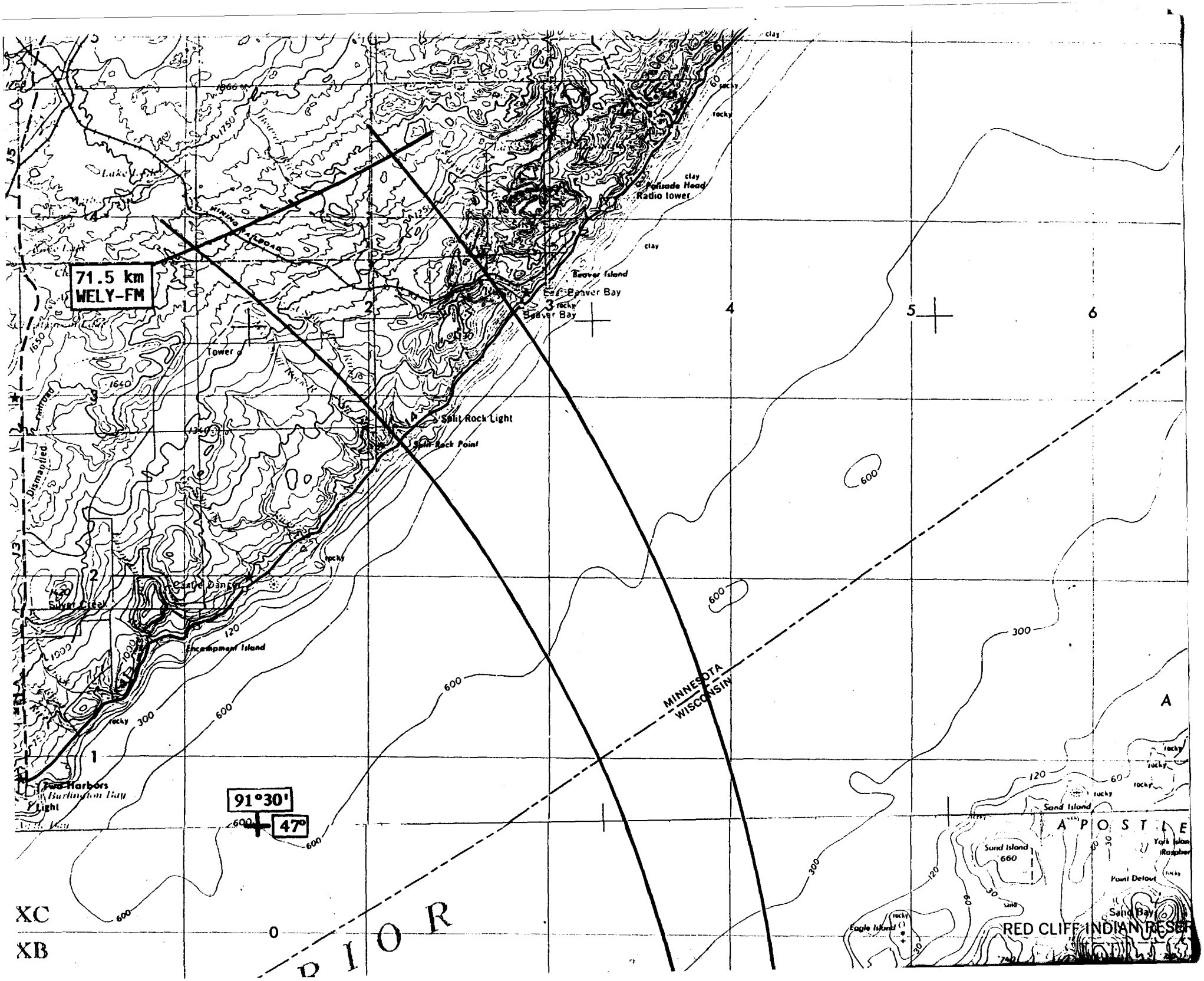


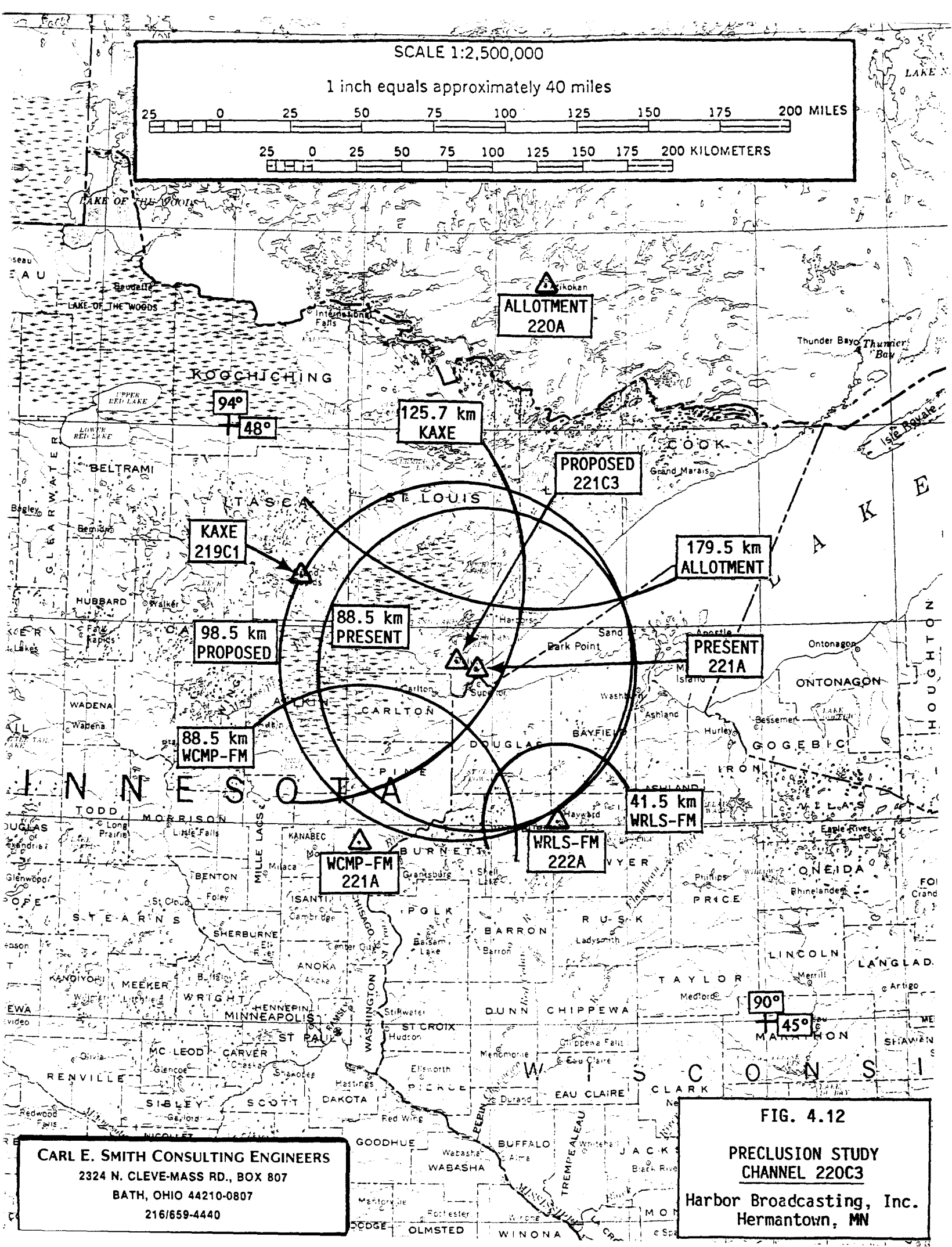
FIG. 4.11(a)

EXPANDED VIEW OF
CHANNEL 220A
PRECLUSION AREA


Scale 1:250,000
5 0 5 10 15
5 0 5 10 15 20 25 30 Kil
71.5 km
WCMP-FM
92°
46°15'
30.5
WRLS
DOUGLAS COUNTY
BURNETT COUNTY
WASHBURN COUNTY
PINE COUNTY
MINNESOTA
WISCONSIN
PATTISON STATE PARK
PIKES PEAK
Bennett Fire Tower
Summit Fire Tower
Moose Junction
Danbury
Markville
Cloverton
Cozy Corner
Solon Springs
Gordon
Wilcox Island
Crowhart Island
Chittamo Station
Lake Nebagamon
Foxboro
Holyoke
Belden
Gabins
Harris
Dewey
Superior
Sunnyside
South Range
Hawthorne
Bennett
Scuntor
Kingsdale
Fire tower
Cem
Dismantled railroad
CARL E. SMITH CONSULTING ENGINEERS
2324 N. CLEVE-MASS RD., BOX 807


71.5 km
PRESENT
88.5 km
PROPOSED
91°
46°45'
CHEQUAMEGON NATIONAL FOREST
Port Wing
Herbster
Cornucopia
Washburn
Ashland
Ashland Junction
Iron River
Mulkey Station
Blueberry
Bellwood
Brule Point
Squaw Point
Bark Point
Light
Cemetery
Iron River Fire Tower
Cenawee Fire Tower
Bayfield Fire Tower
Washburn Fire Tower
Brinks Reiser Station
Du Pont Powder Plant
Barksdale
Coast Guard Station
Agricultural Experimental Station
Lake Superior Power Plant
Underground Pipeline
Sub Station
Union
Waino
Cloverland
Salmo
Van Tassel
Benoit
Spirit Inc
Iron Station
Ashland
BAYFIELD COUNTY
ASHLAND CO
COUNTY
NORTHERN
NORTH WESTERN
FIG. 4.11(a)
cont'd


71.5 km
WELY-FM
91°30'
47°
Palisade Head
Radio tower
Beaver Island
Beaver Bay
Split Rock Light
Split Rock Point
Tower
Silver Creek
Encampment Island
Two Harbors
Burlington Bay
Light
MINNESOTA
WISCONSIN
Sand Island
660
Point Detour
Sand Bay
Eagle Island
RED CLIFF INDIAN RESER
A P O S T L E
XC
XB
R I O R



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216/659-4440

FIG. 4.12

PRECLUSION STUDY
CHANNEL 220C3

Harbor Broadcasting, Inc.
Hermantown, MN

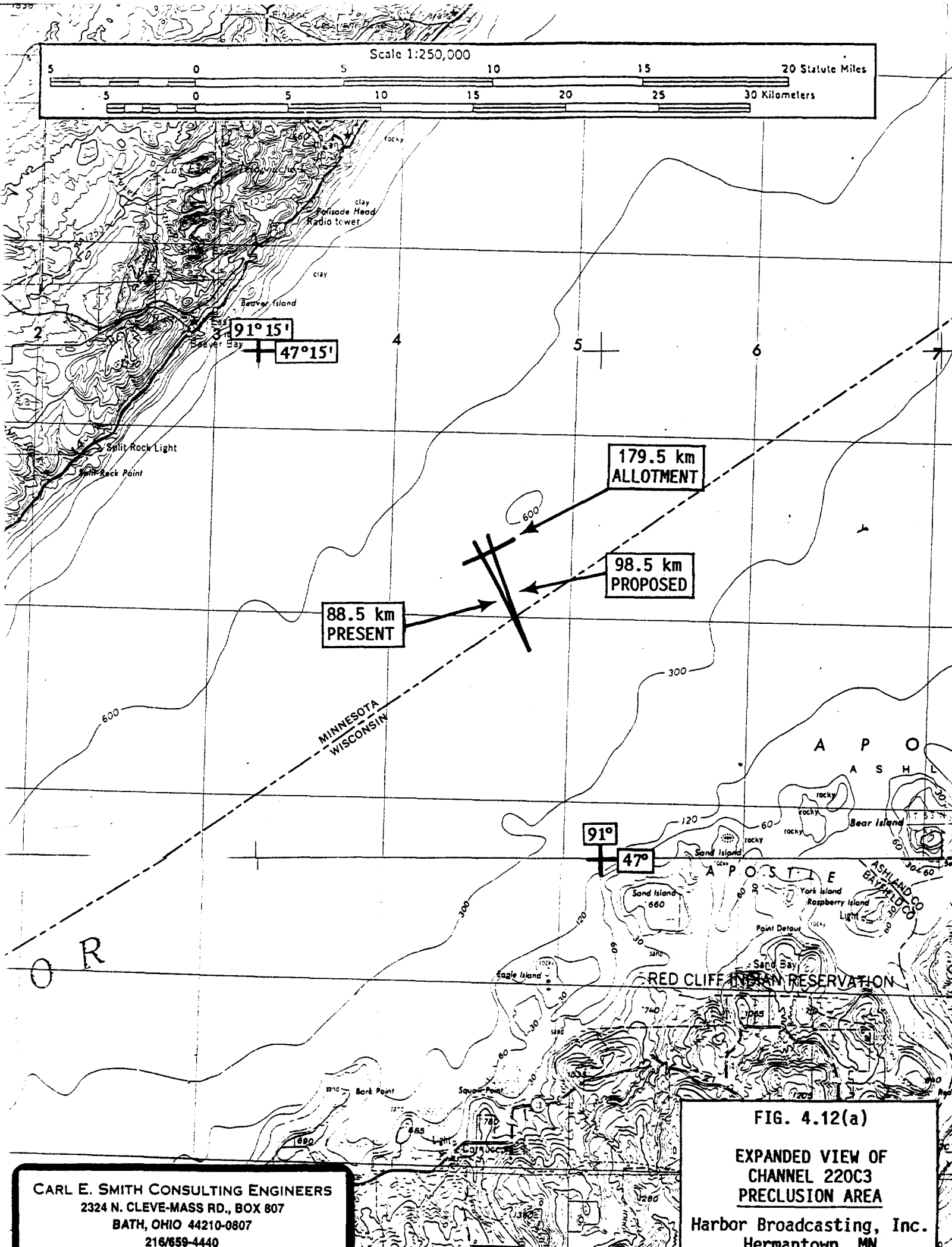
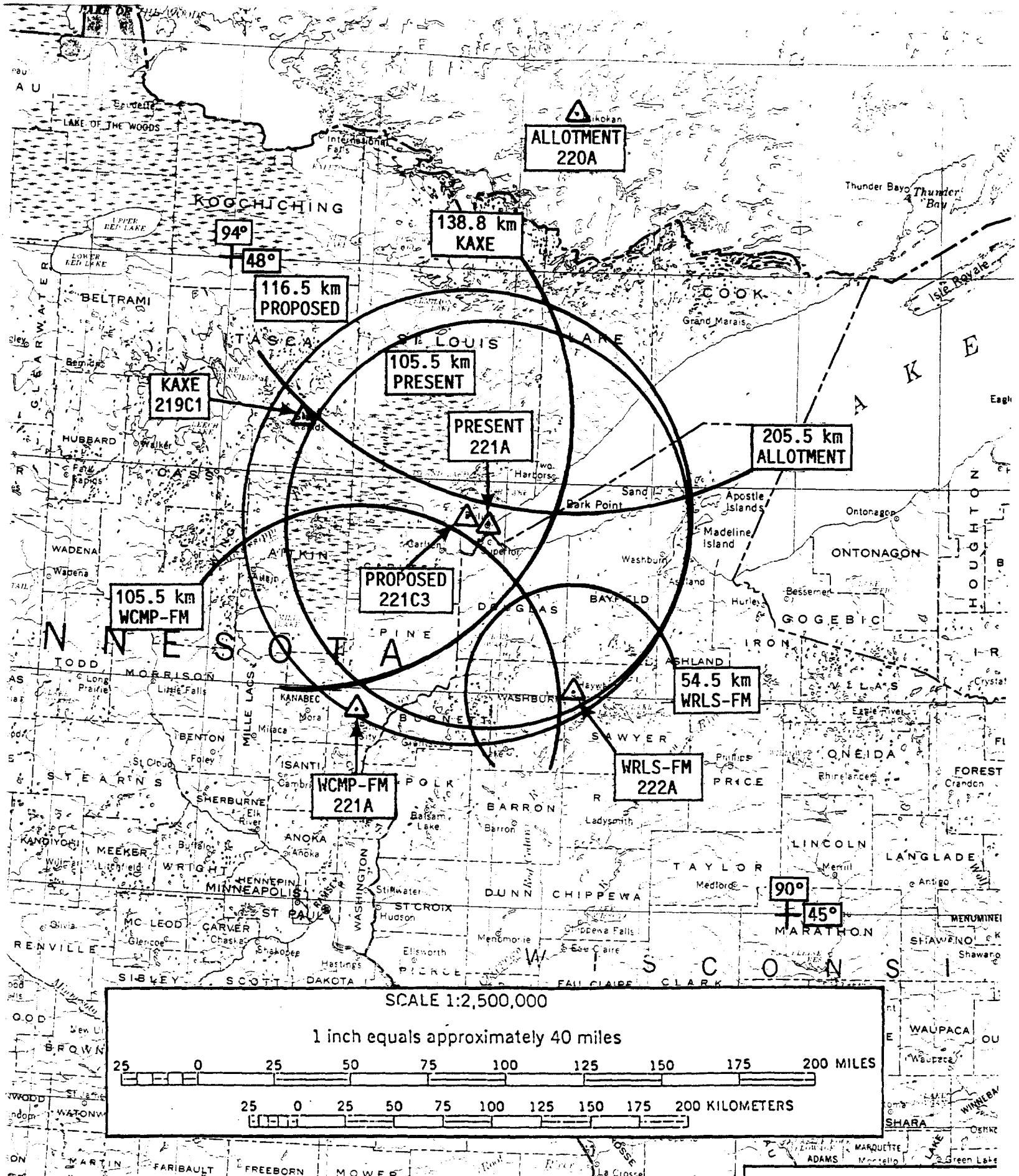


FIG. 4.12(a)

EXPANDED VIEW OF
CHANNEL 220C3
PRECLUSION AREA

Harbor Broadcasting, Inc.
Hermantown, MN

CARL E. SMITH CONSULTING ENGINEERS
2324 N. CLEVE-MASS RD., BOX 807
BATH, OHIO 44210-0807
216/659-4440



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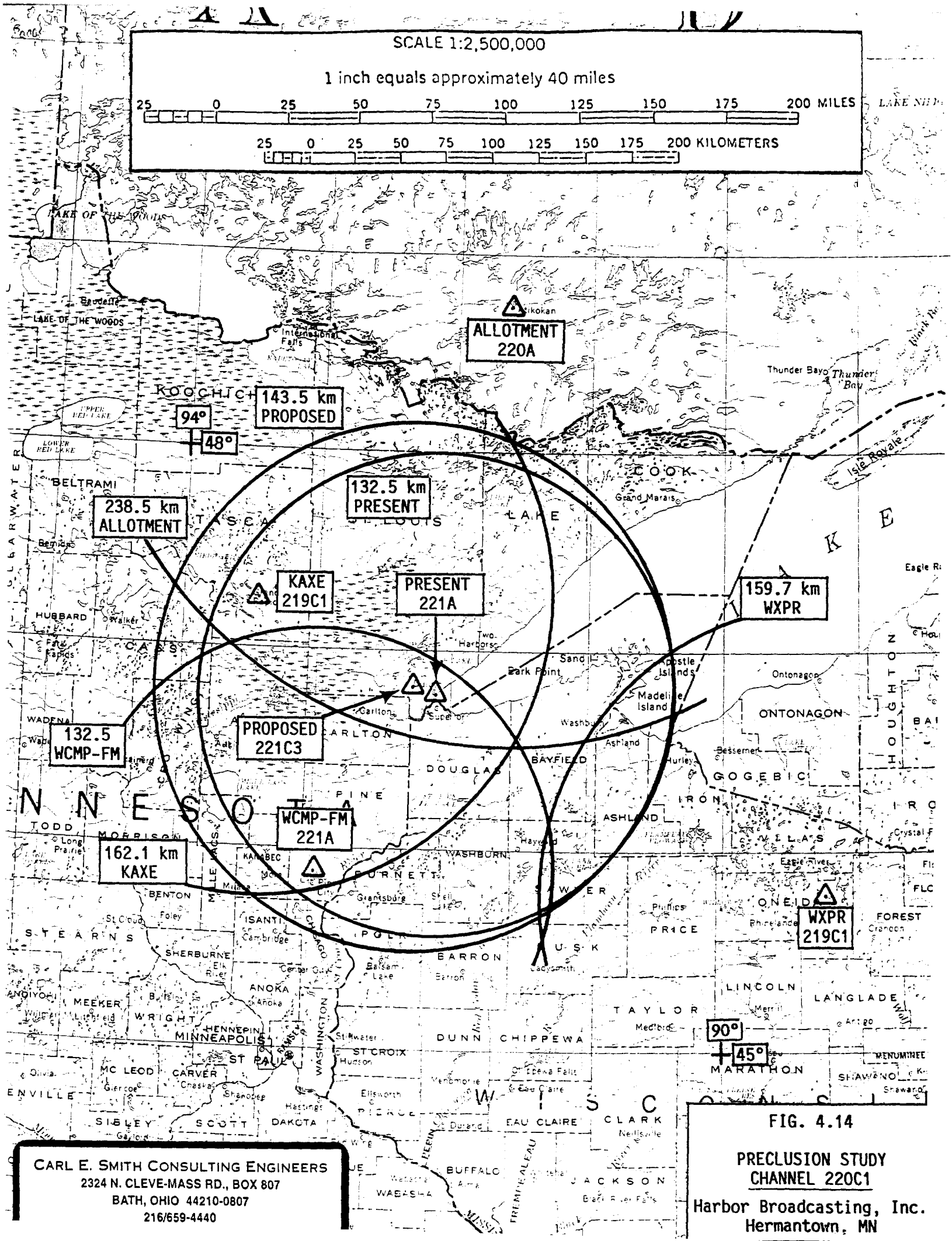
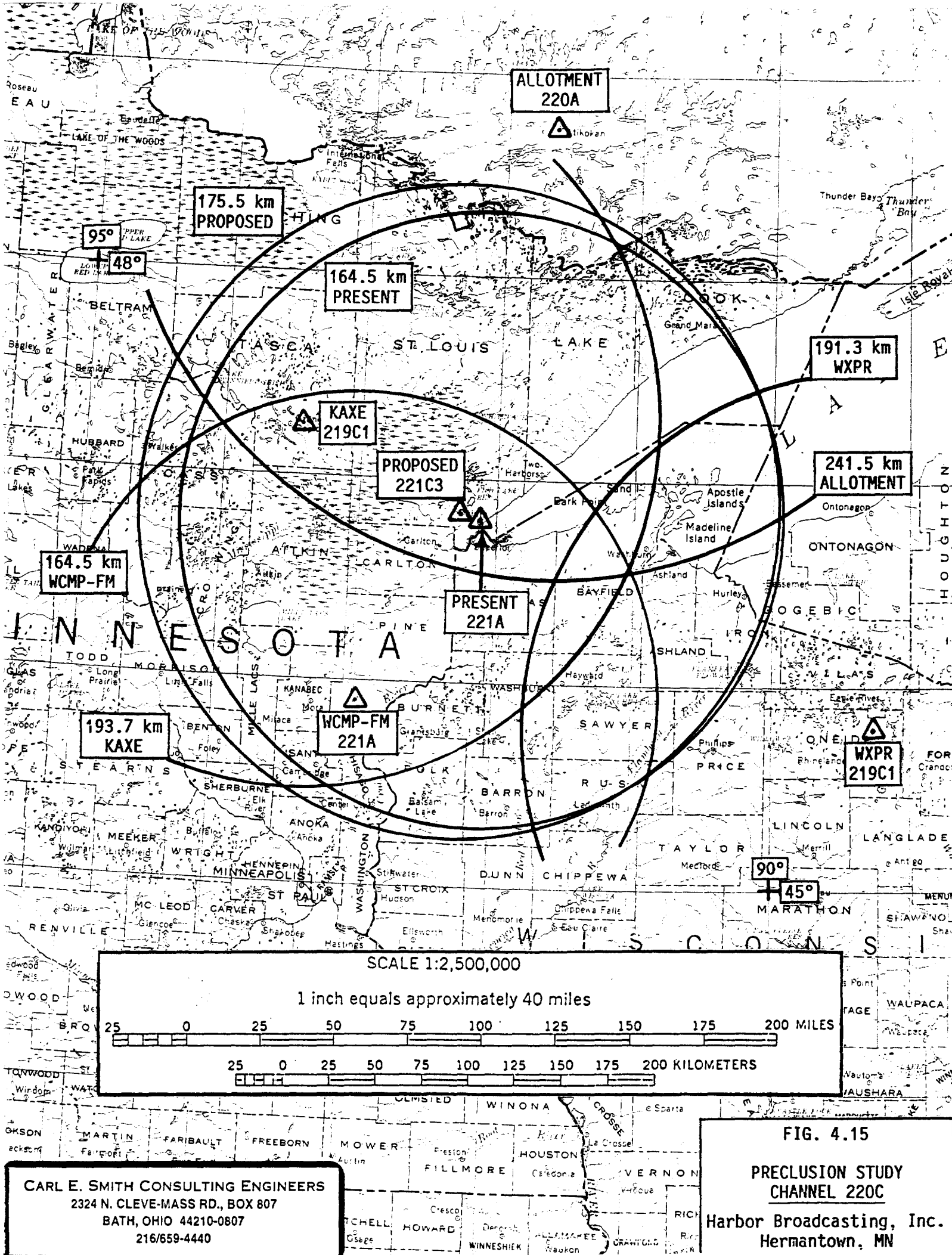
216/659-4440

FIG. 4.13

PRECLUSION STUDY
CHANNEL 220C2

Harbor Broadcasting, Inc.
Hermantown, MN


SCALE 1:2,500,000
1 inch equals approximately 40 miles
25 0 25 50 75 100 125 150 175 200 MILES
25 0 25 50 75 100 125 150 175 200 KILOMETERS
ALLOTMENT 220A
143.5 km PROPOSED
94°
48°
132.5 km PRESENT
238.5 km ALLOTMENT
KAXE 219C1
PRESENT 221A
159.7 km WXPR
132.5 WCMP-FM
PROPOSED 221C3
WCMP-FM 221A
162.1 km KAXE
WXPR 219C1
90°
45°
Thunder Bay
Isle Royale
Grand Marais
Two Harbors
Sand Bark Point
Apostle Islands
Madeline Island
Ontonagon
Ashland
Bessemer
Hurley
Washburn
Superior
Duluth
Eagle River
Rhinelander
Crandon
Marathon
Wausau
Merrill
Antigo
Medford
Park Falls
Walker
Bemidji
International Falls
Fort Frances
Kenora
Dryden
Sioux Lookout
Red Lake
Thief River Falls
Crookston
Grand Forks
Fargo
Moorhead
Detroit Lakes
Alexandria
Fergus Falls
Wadena
Brainerd
Little Falls
Long Prairie
Staples
Pelican Rapids
Granite Falls
Willmar
Benson
Montevideo
Hutchinson
Glencoe
Litchfield
Redwood Falls
New Ulm
Mankato
Fairmont
Albert Lea
Austin
Rochester
Winona
Red Wing
Hastings
Faribault
Northfield
Owatonna
Waseca
Mankato
Le Sueur
Shakopee
Chaska
Chanhassen
Excelsior
Wayzata
Minnetonka
Bloomington
Eden Prairie
Edina
Richfield
Minneapolis
St Paul
Maplewood
White Bear Lake
Stillwater
Hudson
Osceola
Amery
Balsam Lake
Cumberland
Rice Lake
Barron
Chetek
Ladysmith
Phillips
Park Falls
Tomahawk
Rhinelander
Eagle River
Crandon
Antigo
Wausau
Merrill
Medford
Abbotsford
Colby
Marshfield
Stevens Point
Wisconsin Rapids
Mauston
Tomah
La Crosse
Winona
Rochester
Austin
Albert Lea
Mason City
Clear Lake
Forest City
Algona
Fort Dodge
Webster City
Boone
Ames
Nevada
Marshalltown
Grinnell
Newton
Pella
Oskaloosa
Knoxville
Chariton
Centerville
Bloomfield
Fairfield
Mount Pleasant
Burlington
Keokuk
Fort Madison
Muscatine
Davenport
Rock Island
Moline
Galesburg
Monmouth
Macomb
Canton
Pekin
Peoria
Bloomington
Normal
Lincoln
Springfield
Jacksonville
Quincy
Hannibal
Kirksville
Macon
Moberly
Columbia
Jefferson City
Fulton
Mexico
Sedalia
Warrensburg
Lexington
Independence
Kansas City
Liberty
Excelsior Springs
Cameron
St Joseph
Maryville
Bethany
Chillicothe
Trenton
Princeton
Gallatin
Hamilton
Cameron
Kearney
Liberty
Independence
Kansas City
Lee's Summit
Blue Springs
Grain Valley
Oak Grove
Sibley
Concordia
Marshall
Higginsville
Odessa
Lexington
Richmond
Carrollton
Norborne
Tina
Brunswick
Keytesville
Salisbury
Huntsville
Moberly
Mexico
Fulton
Jefferson City
Columbia
Centralia
Sturgeon
Hallsville
Ashland
Harrisburg
Marshall
Slater
Malta Bend
Arrow Rock
Boonville
Glasgow
Fayette
Howard
Keytesville
Brunswick
Carrollton
Norborne
Tina
Richmond
Lexington
Odessa
Higginsville
Sibley
Concordia



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BATH, OHIO 44210-0807
216/659-4440

FIG. 4.15

PRECLUSION STUDY
CHANNEL 220C

Harbor Broadcasting, Inc.
Hermantown, MN

CERTIFICATE OF SERVICE

I hereby certify that I have this 15th day of March, 1996 sent a copy of the foregoing PETITION FOR RULEMAKING by First-Class United States mail, postage prepaid, to the following:

Station WCMP
Pine City Broadcasting Company, Inc.
RR Two
Pine City, MN 55063

Station WELY
BJL Broadcasting Corporation
P.O. Box 630
Ely, MN 55731

Timothy E. Welch