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SJC-12545

COMMONWEALTH vs. ERVIN FELIZ.

Suffolk. September 5, 2018. - March 26, 2019.

Present: Gants, C.J., Lenk, Gaziano, Lowy, Budd, Cypher, & Kafker, JJ.

Obscenity, Child pornography. Sex Offender. Global Positioning System Device. Practice, Criminal, Probation. Constitutional Law, Sex offender, Search and seizure. Search and Seizure, Probationer, Expectation of privacy.

Indictments found and returned in the Superior Court Department on March 3, 2015.

A motion in opposition to the imposition of global positioning system monitoring as a condition of probation was heard by Robert B. Gordon, J., and a motion for reconsideration was considered by him.

The Supreme Judicial Court granted an application for direct appellate review.

David R. Rangaviz, Committee for Public Counsel Services, for the defendant.

Cailin M. Campbell, Assistant District Attorney, for the Commonwealth.

Maura Healey, Attorney General, & Sarah M. Joss, Special Assistant Attorney General, for Massachusetts Probation Service, amicus curiae, submitted a brief.

Eric Tennen, for Massachusetts Association for the Treatment of Sexual Abusers & another, amici curiae, submitted a brief.

GAZIANO, J. After pleading guilty to possession and distribution of child pornography, the defendant was sentenced to five concurrent five-year terms of probation, and two concurrent two and one-half year sentences of incarceration, which were suspended for five years. In accordance with the terms of G. L. c. 265, § 47, which requires judges to impose global positioning system (GPS) monitoring as a condition of probation for individuals convicted of most sex offenses, the sentencing judge imposed GPS monitoring as a condition of the defendant's probation. The defendant opposed the condition of GPS monitoring when it was imposed, arguing that mandatory GPS monitoring constituted an unreasonable search in violation of the Fourth Amendment to the United States Constitution and art. 14 of the Massachusetts Declaration of Rights. After an evidentiary hearing, a different Superior Court judge found G. L. c. 265, § 47, facially constitutional, and also rejected the defendant's as-applied challenge. The defendant appealed, and we allowed his petition for direct appellate review.

The defendant argues that, as applied to him, the condition of mandatory GPS monitoring, pursuant to G. L. c. 265, § 47, constitutes an unreasonable search under the Fourth Amendment

and art. 14. We consider this argument in light of the United States Supreme Court's holding that GPS monitoring is a search. See Grady v. North Carolina, 135 S. Ct. 1368, 1370 (2015). We conclude that G. L. c. 256, § 47, is overinclusive in that GPS monitoring will not necessarily constitute a reasonable search for all individuals convicted of a qualifying sex offense.

Article 14 requires an individualized determination of reasonableness in order to conduct more than minimally invasive searches, and GPS monitoring is not a minimally invasive search. To comport with art. 14, prior to imposing GPS monitoring on a given defendant, a judge is required to conduct a balancing test that weighs the Commonwealth's need to impose GPS monitoring against the privacy invasion occasioned by such monitoring.

We conclude that, in the circumstances of this case, the Commonwealth's particularized reasons for imposing GPS monitoring on this defendant do not outweigh the privacy invasion that GPS monitoring entails. Accordingly, as applied to this defendant, GPS monitoring is an unconstitutional search under art. 14.¹

1. Background. a. Prior proceedings. The defendant was arrested in December 2014; he was arraigned in the District

¹ We acknowledge the amicus brief of the Massachusetts Association for the Treatment of Sexual Abusers and the Massachusetts Association of Criminal Defense Lawyers, and the amicus brief of the Massachusetts Probation Service.

Court on charges related to possession and distribution of child pornography and was placed on pretrial release with GPS monitoring. In March 2015, the defendant was indicted on charges of two counts of possession of child pornography, in violation of G. L. c. 272, § 29C, and five counts of distribution of child pornography, in violation of G. L. c. 272, § 29B (a). He was arraigned in the Superior Court in April 2015, and placed on pretrial probation, with conditions, including reporting to a probation officer, in person, once per week. The condition of GPS monitoring was waived at that time, on the defendant's motion, and the GPS device was removed. In April 2016, the defendant pleaded guilty to all of the charges. A Superior Court judge sentenced him to five concurrent five-year terms of probation and two concurrent terms of incarceration of two and one-half years in a house of correction, suspended for five years.²

At the time of his guilty pleas, the defendant was given notice of his obligation to register as a sex offender; registration also was imposed as a condition of probation. As statutorily mandated, see G. L. c. 6, §§ 178C-178P, the

² The judge also ordered that the defendant could apply for early termination of probation after four years of full compliance with the imposed conditions.

defendant thereafter registered as a sex offender, and was classified as a level one offender.³

General Laws c. 265, § 47, mandates that any person placed on probation for numerous enumerated sex offenses⁴ is required to wear a GPS device. See Commonwealth v. Guzman, 469 Mass. 492, 496 (2014) ("G. L. c. 265, § 47, applies to any defendant who has been convicted of a predicate offense and sentenced to a term of probation"). Accordingly, the sentencing judge imposed GPS monitoring as a condition of the defendant's probation. The judge also imposed additional conditions of probation, including that the defendant not reside with anyone under the age of sixteen; not work or hold a job that would involve contact with children under sixteen; and remain 300 feet away from schools, parks, and day care centers.

³ Individuals classified as level one sex offenders have been determined to pose a low risk of reoffending and a low degree of danger to the public. See G. L. c. 6, § 178K (2) (a) ("Where the board determines that the risk of reoffense is low and the degree of dangerousness posed to the public is not such that a public safety interest is served by public availability, it shall give a level [one] designation to the sex offender").

⁴ General Laws c. 6, § 178C, defines "[s]ex offense" to include "dissemination of visual material of a child in a state of nudity or sexual conduct" and "possession of child pornography."

At sentencing, the defendant signed an order of probation conditions and a GPS equipment liability acceptance form.⁵ In signing the order of probation conditions, the defendant certified that he had "read and understood the above conditions of probation," and would "agree to obey them." The defendant was fitted with a GPS monitoring device in accordance with the terms of probation. On the day he was sentenced, the defendant filed a motion seeking to waive imposition of GPS monitoring as a condition of probation; he argued that the mandatory GPS monitoring requirement of G. L. c. 265, § 47, constitutes an unconstitutional search and seizure under art. 14 and the Fourth Amendment. The Commonwealth opposed the motion.

In February 2017, a different Superior Court judge held a three-day evidentiary hearing to assess the reasonableness of the defendant's statutorily imposed condition of GPS monitoring. The judge heard testimony from the defendant concerning his experience as a probationer subject to GPS monitoring; expert

⁵ The GPS monitoring contract indicates that no exclusion zones were applied to the defendant's GPS device, and that, because he lives in a city, where it is virtually impossible not to be within 300 feet of a park or school when traveling on any city street, the defendant was not precluded from passing by a school or park, but would be considered in violation if he loitered in or near such a location. This is consistent with the probation officer's testimony at the hearing on the defendant's motion to waive GPS monitoring, and the judge's comment that actually issuing an alert every time the defendant passed by a park or school would be impractical and "over-alerting."

testimony, by Commonwealth and defense experts, on social science research on rates of recidivism for contact and noncontact sex offenders; and testimony about the nature of GPS monitoring generally in Massachusetts.⁶

In April 2017, the judge denied the defendant's motion. The defendant filed a timely appeal. In February 2018, the defendant filed a motion for reconsideration, seeking to supplement the record with additional evidence concerning issues experienced with the day-to-day use of the GPS device, and difficulties with connectivity to the central monitoring station. This motion was allowed in part, and denied in part; the motion judge amended his findings of fact to include reference to a subset of additional GPS alerts that the defendant had experienced. In March 2018, the judge issued amended findings and rulings. The defendant appealed to the Appeals Court from the partial denials; the Appeals Court thereafter consolidated the defendant's pending appeals. The defendant also sought direct appellate review before this court. In June 2018, we allowed the defendant's petition for direct appellate review, and transferred the consolidated appeals to this court.

⁶ Six witnesses testified at the hearing, including the defendant, two probation officers, an employee of the electronic monitoring program office, and two expert psychologists.

b. GPS monitoring. We summarize the facts as found by the motion judge, supplemented by uncontested facts in the record and testimony credited by the motion judge that does not contravene the judge's findings. See Commonwealth v. Jones-Pannell, 472 Mass. 429, 431 (2015). We "accept subsidiary findings based partly or wholly on oral testimony, unless clearly erroneous." Commonwealth v. Tremblay, 480 Mass. 645, 646 (2018).

More than 3,900 individuals in the Commonwealth, on probation, pretrial release, and parole, are subject to court-ordered GPS monitoring, some of them pursuant to G. L. c. 265, § 47.

Probationers subject to GPS monitoring in the Commonwealth are fitted either with a one-piece or a two-piece GPS device, usually worn around the ankle. The probation service uses the electronic monitoring program (ELMO) to supervise offenders placed on GPS monitoring. ELMO operates a monitoring center located in Clinton, staffed by probation service employees. ELMO probation service employees work in conjunction with probation officers who are assigned to supervise individuals placed on GPS monitoring.

The GPS devices used by ELMO store information about a wearer's latitude and longitude, gathered via communication with a network of satellites. This information is uploaded through a

cellular telephone network to computers at the ELMO monitoring center that are running third-party monitoring software. The timing of uploads depends on many factors, including connectivity with the satellites used in the GPS component of the system, issues with the cellular telephone service provider, and connectivity and timing issues with the ELMO center. According to the corporation that currently leases GPS devices to the Commonwealth, the location data gathered by its GPS monitoring equipment is ninety percent accurate within thirty feet.⁷ See Commonwealth v. Thissell, 457 Mass. 191, 198 n.15 (2010), citing National Space-Based Positioning, Navigation, and Timing Coordination Office, The Global Positioning System.

A GPS-monitored person's location information continuously is gathered and uploaded to ELMO computer systems. ELMO employees generally review a probationer's location information only when the ELMO monitoring software generates an "alert." Even when no alert is generated, however, ELMO employees are able to look up and retrieve a probationer's historical location data. The alert notifies an ELMO assistant coordinator that one of several issues has arisen with respect to a given GPS device, and prompts the assistant coordinator to address the issue by

⁷ The Commonwealth has not conducted independent testing to assess the accuracy of the GPS monitoring hardware or software that it uses.

attempting to contact the probationer. Any of several kinds of alert may lead to the issuance of an arrest warrant for a probationer, if probation employees are unable to "resolve" the alert in a timely manner.⁸

When a probationer subject to GPS monitoring has been told to stay away from certain addresses, a probation department employee may be able to enter a specific "exclusion zone" into the ELMO monitoring system. If an exclusion zone is entered, the system will trigger an alert when a GPS-monitored individual enters that zone. The system permits entry of exclusion zones by specific addresses. The system does not permit entry of more general exclusion zones, such as "parks" or "schools"; to approximate that type of restriction, the street addresses of the pertinent parks or schools would have to be entered manually.

⁸ As the motion judge explained,

"Assistant Coordinators are called upon to exercise some level of discretion to determine in the first instance whether the situation presents a bona fide compliance concern. If the probationer cannot be reached, the Assistant Coordinator will contact his Probation Officer. If an alert activates after hours and the Probation Officer cannot be located, an on-call Chief Probation Officer is available to address the matter. Arrest warrants are pursued and issued only if the alert cannot be explained and cleared after a substantial period of time, and that period of time will vary depending upon the nature of the alert."

It is common for a GPS monitoring device to issue alerts related to cellular or satellite connection, as well as the integrity of the device itself. Many alerts occur because of events unrelated to a defendant's efforts to comply with conditions of probation. For instance, when a defendant's device loses its signal connection with the cellular telephone network, an "unable to connect" alert is triggered. If the GPS device is within cellular network coverage, but loses connection to the satellite network, a "motion, no GPS" alert is triggered. If the device becomes cut or broken for any reason, it will trigger a "tampering" alert. While a GPS device is expected to retain a battery charge for approximately twenty-four hours, battery life may decline, and may result in common "charging alerts" when battery life runs low. Each time an alert is triggered, the probationer must communicate with a probation employee to attempt to resolve the issue. If the issue is not resolved, the probationer risks being subject to an arrest warrant and possible arrest.⁹

⁹ According to the probation service's own estimates, on any given day, it is monitoring approximately 5,000 individuals, more than 3,400 of whom are subject to GPS monitoring. On any given day, the approximately fifty probation staff members must respond to approximately 1,700 alerts. Although in some cases this may reflect more than one alert for a given individual, in general, this number is roughly thirty-four percent of the total individuals monitored, and approximately one-half of the total number of individuals subject to GPS monitoring, and includes alerts for GPS monitoring of pretrial probationers; probationers

At the time of the evidentiary hearing, approximately ten months after postconviction monitoring had begun, the defendant had experienced at least thirty-one alerts.¹⁰ A number of these alerts involved power disconnection and the failure of the defendant's GPS device to maintain a satellite connection. The alerts were resolved after periods of time ranging from approximately thirty minutes to six hours, and none of them had resulted in the defendant's arrest.¹¹

convicted of a range of different offenses, including sex offenses; and individuals subject to remote alcohol monitoring.

¹⁰ In February 2018, the defendant submitted evidence to the motion judge that, between September 2016 and February 2018, his GPS monitoring device had issued 166 alerts. Citing the need for "finality of judgments and the efficient use of court resources," the motion judge amended his findings of fact to include only the eighteen additional GPS alerts that had been triggered before the conclusion of the evidentiary hearing in February 2017. The judge did not make any finding that the probation department reports concerning later alerts were in any way unreliable or not credible.

¹¹ The defendant also sought to introduce at the hearing, and included in his record appendix, probation reports of alerts generated during the five months that he was on pretrial GPS monitoring. Because those reports were preconviction, the judge did not consider them at the hearing, and also did not make any determination with respect to their credibility. In its filings in the Superior Court, the Commonwealth agreed that the defendant had been subject to alerts at least three or four times per week during that period, as a result of connectivity issues in the neighborhood where he lives and works. Examination of those reports shows that, on numerous occasions, resolution of the alerts took many hours; the defendant was at times ordered to go outside and walk around in order to obtain a signal; and multiple warrants for his arrest issued when he still was not able to obtain one, while following the

2. Discussion. In this case, the defendant argues that GPS monitoring, imposed pursuant to G. L. c. 265, § 47, constitutes an unreasonable search under the Fourth Amendment and art. 14.

a. Standard of review. We review a challenge to the constitutionality of a statute de novo. See Commonwealth v. McGhee, 472 Mass. 405, 412 (2015). "In accordance with canons of statutory construction, a statute is presumed to be constitutional." Id. See Luk v. Commonwealth, 421 Mass. 415, 431 (1995). "[T]he historic fact of the Legislature's choice," however, "does not relieve us of our constitutional obligation to review the validity of a search and seizure in light of art. 14." Commonwealth v. Blood, 400 Mass. 61, 75 (1987). Generally, "when the constitutionality of a statute is challenged, the question to be decided is whether the statute is unconstitutional as applied in the particular case." United States v. Ferrara, 771 F. Supp. 1266, 1282 (D. Mass. 1991).

b. GPS monitoring as a constitutional search. In 2015, the United States Supreme Court established that "a State . . . conducts a search when it attaches a device to a person's body, without consent, for the purpose of tracking that individual's movements." Grady, 135 S. Ct. at 1370. The petitioner in that

instructions provided by probation. Ultimately, all of the alerts were resolved and the warrants were recalled.

case had been placed on GPS monitoring after being classified as a recidivist sex offender. Id. at 1369. Because only "unreasonable" searches violate the Fourth Amendment, the Court remanded the matter so that the North Carolina court could determine "whether the State's monitoring program is reasonable -- when properly viewed as a search." ¹² Id. at 1371.

Following remand, the North Carolina Court of Appeals interpreted Grady to require "case-by-case determinations of reasonableness, now . . . referred to as 'Grady hearings,'" at which the State must provide "sufficient record evidence to support" a finding that GPS monitoring imposed by State statute "is reasonable as applied to this particular defendant" (emphasis in original). See State v. Grady, 817 S.E.2d 18, 23, 26 (N.C. Ct. App. 2018) (Grady II). The court concluded that the State's burden of establishing that GPS monitoring is reasonable includes a requirement (without explanation as to how that is to be accomplished) that the State provide evidence that GPS monitoring actually is effective in protecting the public

¹² Probationers retain a reasonable, albeit diminished, expectation of privacy. See Commonwealth v. Moore, 473 Mass. 481, 482 (2016); Commonwealth v. LaFrance, 402 Mass. 789, 795 (1988). The defendant in State v. Grady, 817 S.E.2d 18, 24 (N.C. Ct. App. 2018), arguably had a higher expectation of privacy because he had completed his sentence and was not on probation. North Carolina's GPS monitoring program applies not only to individuals under State penal supervision, but also to people with a prior conviction who are "not otherwise subject to any direct supervision by State officers." See id.

against recidivism by sex offenders. Id. at 27-28. See State v. Griffin, 818 S.E.2d 336, 338, 342 (N.C. Ct. App. 2018). In assessing reasonableness, the court has looked to evidence regarding a "defendant's current threat of reoffending," Grady II, supra at 26, and has evaluated whether the State presented "evidence concerning its specific interest in monitoring [a given] defendant,"¹³ id. at 27.

¹³ The South Carolina Supreme Court similarly interpreted the decision in Grady v. North Carolina, 135 S. Ct. 1368, 1370 (2015), to require "an individualized inquiry into the reasonableness of the [GPS monitoring] search in every case," because "of the widely varying circumstances that may lead to automatic, mandatory electronic monitoring imposed for [misdemeanor] failure to register" as a sex offender in accordance with the requirements of South Carolina's sex offender registry act. See State v. Ross, 423 S.C. 504, 513 (2018).

Other jurisdictions to have considered the issue have taken varying approaches, often in the context of a more particularized statute requiring monitoring of a specific subset of sex offenders. See, e.g., Belleau v. Wall, 811 F.3d 929, 931, 933-937 (7th Cir. 2016) (imposition of GPS monitoring pursuant to Wis. Stat. § 301.48, requiring sex offenders released from civil commitment to submit to GPS monitoring under specific circumstances, was reasonable where qualifying sex offenses involved sexual contact with children and defendant was recidivist sex offender); Doe No. 1 v. Coupe, 143 A.3d 1266, 1274-1279 (Del. Ch. 2016), aff'd, 158 A.3d 449 (Del. 2017) (applying three-part "special needs" framework to determine that mandatory GPS monitoring of "Tier III," highest risk, sex offenders was reasonable); State v. Kane, 2017 VT 36, ¶¶ 26-31 (GPS monitoring condition was reasonable where monitored individual on probation had removed her son from his legal guardian and transported him across State lines, and probation conditions required probationer to stay away from son's school and residence).

In Guzman, 469 Mass. at 498, we heard a constitutional challenge to G. L. c. 265, § 47, and concluded that the statute does not violate due process. Because the record in Guzman was "too sparse to permit an adequate assessment" of the defendant's claim that GPS monitoring infringed upon his right to be free of unreasonable searches and seizures, we did not address that claim. Id. at 497. Our decision in Guzman does not alter the inquiry we must make in this case, to determine whether imposition of ongoing, mandatory GPS monitoring (searching) of all persons convicted of a sex offense of any type in the Commonwealth is "reasonable" under art. 14 and the Fourth Amendment.¹⁴ In Guzman, supra, we discussed mandatory GPS monitoring, as required by G. L. c. 265, § 47, as a legislatively imposed "punishment[] for a given offense," and, consequently, considered "only whether that mandatory sentence meets the rational basis test." Guzman, supra, citing Commonwealth v. Therriault, 401 Mass. 237, 241-242 (1987). After considering the Legislature's reasons for deciding to impose mandatory GPS monitoring, we concluded that the GPS monitoring requirement of G. L. c. 265, § 47, had a rational basis and therefore did not offend due process. See Guzman,

¹⁴ See People v. Hallak, 310 Mich. App. 555, 578-579, 583 (2015), rev'd on other grounds, 499 Mich. 879 (2016) (assessing Fourth Amendment reasonableness of GPS monitoring apart from classifying GPS monitoring as legislatively imposed sanction).

supra at 500. Because the defendant in Guzman did not raise the issue, we did not address whether "the mandatory imposition of GPS monitoring could in some circumstances constitute a punishment 'disproportionate to the magnitude of the crime' in question." Id. at 497 n.8, quoting Commonwealth v. O'Neal, 369 Mass. 242, 247-248 (1975). We nonetheless have characterized the effects of GPS monitoring pursuant to G. L. c. 265, § 47, as "singularly punitive." See Commonwealth v. Selavka, 469 Mass. 502, 505 n.5 (2014).

c. GPS monitoring as a warrantless search. No probable cause and warrant requirement inheres in G. L. c. 265, § 47. Indeed, GPS monitoring, as here, is imposed on probationers without recourse to probable cause and a search warrant. It has become axiomatic that not all searches require a warrant and probable cause to be "reasonable," and therefore constitutional.¹⁵ See Maryland v. King, 569 U.S. 435, 448 (2013); United States v. Knights, 534 U.S. 112, 118 (2001) ("The touchstone of the Fourth Amendment is reasonableness . . .").

¹⁵ Indeed, the United States Supreme Court has determined that "[a] State's operation of a probation system . . . may justify departures from the usual warrant and probable-cause requirements." See Griffin v. Wisconsin, 483 U.S. 868, 873-874 (1987). See also Skinner v. Railway Labor Executives' Ass'n, 489 U.S. 602, 640 (1989) (Marshall, J., dissenting) (noting that "the searches in . . . Griffin . . . were supported by individualized evidence suggesting the culpability of the persons").

The reasonableness of a search is assessed under the "totality of the circumstances, including the nature and purpose of the search and the extent to which the search intrudes upon reasonable privacy expectations." Grady, 135 S. Ct. at 1371. In this case, the question is whether imposition of GPS monitoring on this defendant itself is reasonable, and thus constitutional, under the Fourth Amendment and art. 14,¹⁶ given the government's strong interests both in protecting the public from sexual predators and in rehabilitating convicted sex offenders.

To be sure, we previously have upheld certain programmatic, suspicionless searches as constitutional -- but only when those searches minimally invaded already diminished expectations of privacy. Where we upheld the constitutionality of roadblock seizures intended to locate impaired drivers, for instance, we emphasized that the result we reached did not "open[] the door for suspicionless searches and seizures in other contexts." Commonwealth v. Shields, 402 Mass. 162, 167 (1988). See Landry v. Attorney Gen., 429 Mass. 336, 350 (1999), cert. denied, 528 U.S. 1073 (2000) (upholding mandatory, minimally invasive deoxyribonucleic acid [DNA] searches for identification purposes

¹⁶ This is a question distinct from asking whether discrete searches of data that has been collected by GPS monitoring may be reasonable. See Commonwealth v. Johnson, 481 Mass. , (2019).

as constitutional for convicted persons with low expectations of privacy in their identity). See also Horsemen's Benevolent & Protective Ass'n v. State Racing Comm'n, 403 Mass. 692, 703 (1989). Cf. Guiney v. Police Comm'r of Boston, 411 Mass. 328, 342 (1991).

In sum, when the government seeks to conduct a search that is more than minimally invasive, art. 14 requires an individualized determination of reasonableness. For reasons that we outline infra, GPS monitoring is not a minimally invasive search. Accordingly, art. 14 requires individualized determinations of reasonableness in order to impose GPS monitoring as a condition of probation. Mandatory, blanket imposition of GPS monitoring on probationers, absent individualized determinations of reasonableness, is unconstitutional under the Massachusetts Declaration of Rights.

d. Balancing test to assess constitutional reasonableness. To determine whether it is reasonable for the government to conduct a search absent probable cause, courts conduct a balancing test that weighs "the need to search or seize against the invasion that the search or seizure entails."¹⁷ Commonwealth

¹⁷ In certain narrow circumstances, the United States Supreme Court has upheld suspicionless searches as constitutional under a "closely guarded category" known as the "special needs exception" to the Fourth Amendment. See Chandler v. Miller, 520 U.S. 305, 309 (1997). We have yet to justify

v. Catanzaro, 441 Mass. 46, 56 (2004). See Samson v. California, 547 U.S. 843, 848 (2006), quoting Knights, 534 U.S. at 118-119; New Jersey v. T.L.O., 469 U.S. 325, 341 (1985); Terry v. Ohio, 392 U.S. 1, 22-25 (1968); Commonwealth v. Rodriguez, 472 Mass. 767, 776 (2015); Landry, 429 Mass. at 348, citing Guiney, 411 Mass. at 331-332.

As a probationer, the defendant lawfully may be subjected to reasonable restraints on "freedoms enjoyed by law-abiding citizens." See Knights, 534 U.S. at 119. See also Commonwealth v. Pike, 428 Mass. 393, 402 (1998). Consequently, with respect to the Fourth Amendment and art. 14, the defendant possesses a diminished expectation of privacy relative to the general population. See Knights, supra at 119-120; Commonwealth v. Moore, 473 Mass. 481, 485 (2016).¹⁸ The defendant's status as a probationer informs our assessment of both "the degree to which [a search] intrudes upon an individual's privacy" and "the degree to which it is needed for the promotion of legitimate governmental interests." See Knights, supra at 119.

searches of individuals on the basis of the special needs exception, and decline to do so here.

¹⁸ This court also has interpreted art. 14 to prohibit suspicionless searches of parolees, thus extending the protections of art. 14 beyond those of the Fourth Amendment. Moore, 473 Mass. at 482.

Nonetheless, the government does not have an "unlimited" ability to infringe upon a probationer's still-existing, albeit diminished, expectations of privacy. See Griffin v. Wisconsin, 483 U.S. 868, 875 (1987). "[T]he fact of 'diminished privacy interests does not mean that the Fourth Amendment falls out of the picture entirely.'" Carpenter v. United States, 138 S. Ct. 2206, 2219 (2018), quoting Riley v. California, 573 U.S. 373, 392 (2014). Furthermore, that an individual has been convicted of a crime does not eliminate the person's reasonable expectation of privacy under art. 14. See Commonwealth v. LaFrance, 402 Mass. 789, 794-795 (1988).¹⁹

In light of the foregoing, we consider the extent to which GPS monitoring of this particular defendant advances the Commonwealth's interests in rehabilitation of the probationer and protection of the public, and the extent of the incremental privacy intrusion occasioned by GPS monitoring on the defendant's diminished, but still extant, expectations of privacy as a probationer. See Belleau v. Wall, 811 F.3d 929,

¹⁹ In LaFrance, 402 Mass. at 790, we struck down as unconstitutional a special condition of probation that required a probationer to "[s]ubmit to any search of herself, her properties or any place where she then resides or is situated, with or without a search warrant, by a probation officer or by any law enforcement officer at the direction or by the request of the probation officer." Id. at 791 n.2. We concluded that individual searches of a probationer could be proper under art. 14 if conducted on the basis of reasonable suspicion of wrongdoing. Id. at 792.

934-935 (7th Cir. 2016) (considering "the incremental effect of the challenged statute on the [defendant's] privacy"). Whether the government's interest in imposing GPS monitoring outweighs the privacy intrusion occasioned by GPS monitoring, thus constituting a reasonable search, depends on a constellation of factors. Because reasonableness depends "on the totality of the circumstances," Grady, 135 S. Ct. at 1371, no one factor will be dispositive in every case.

We conclude that, in the circumstances here, the Commonwealth's particularized reasons for imposing GPS monitoring on this defendant do not outweigh the privacy intrusion occasioned by the requirement of GPS monitoring. Therefore, imposing GPS monitoring on this defendant would violate the requirements of art. 14.

e. Signing conditions of probation does not alter art. 14 analysis. The fact that the defendant signed a probation contract acceding to a statutorily mandated condition of GPS monitoring does not change our constitutional analysis. See Guiney, 411 Mass. at 341 (consent to search is "virtually meaningless unless the consent requirement [is] 'reasonable'"). See also O'Connor v. Police Comm'r of Boston, 408 Mass. 324, 329 (1990) ("the plaintiff would not be barred from relief if his consent to be the subject of a search and seizure were unreasonably required as a condition of his employment"); United

States v. Lara, 815 F.3d 605, 609 (9th Cir. 2016) ("We have already held that a probationer's acceptance of a search term in a probation agreement does not by itself render lawful an otherwise unconstitutional search of a probationer's person or property").

With respect to GPS monitoring in particular, we previously have described imposition of GPS monitoring under G. L. c. 265, § 47, as taking place without the consent of the monitored person. See Commonwealth v. Cory, 454 Mass. 559, 570 (2009) ("There is no context other than punishment in which the State physically attaches an item to a person, without consent and also without consideration of individual circumstances, that must remain attached for a period of years"). Further, "[t]he coercive quality of the circumstance in which a defendant seeks to avoid incarceration by obtaining probation on certain conditions makes principles of voluntary waiver and consent generally inapplicable." LaFrance, 402 Mass. at 791 n.3.

Thus, where a probationer accedes to a contract of probation that includes statutorily mandated GPS monitoring, or signs a GPS equipment contract to establish that monitoring, the acceptance cannot be viewed as consent, where imposition of GPS monitoring itself does not meet the requirements of art. 14. Accordingly, to determine whether GPS monitoring of a probationer who signed a contract for GPS monitoring is

reasonable, we conduct "the same type of art. 14 analysis that would have been required without the consent." Guiney, 411 Mass. at 341. See Moore, 473 Mass. at 487 n.6 (parole board may not create conditions of release that "contract around" requirements of art. 14, because to do so "inappropriately [would] allow the parole board to compel a parolee, keen to commute his or her sentence, to accept a condition that would unnecessarily and unreasonably limit his or her art. 14 privacy rights").

f. Government interests. "The prevention of sexual exploitation and abuse of children constitutes a government objective of surpassing importance." New York v. Ferber, 458 U.S. 747, 757 (1982). In addition, the Commonwealth has a "vital interest in rehabilitating convicted sex offenders," McKune v. Lile, 536 U.S. 24, 33 (2002), in part because rehabilitation protects the public, by reducing the possibility of future offenses.

As relevant here, the Commonwealth also has a vital "interest in protecting the children exploited by the [child pornography] production process." Ashcroft v. Free Speech Coalition, 535 U.S. 234, 240 (2002). The reproduction and dissemination of child pornography itself harms the children who are depicted and revictimized with each viewing. Paroline v. United States, 572 U.S. 434, 440 (2014), quoting Ferber, 458

U.S. at 759. Therefore, the government's interest remains strong where the sex offense in question is an online, noncontact offense. "[C]hild pornography is 'a permanent record' of the depicted child's abuse, and the 'harm to the child is exacerbated by [its] circulation.'" Paroline, supra, quoting Ferber, supra. Separately, "[t]he demand for child pornography harms children in part because it drives production, which involves child abuse." Paroline, supra at 439-440.

g. Privacy infringement. Probationers who have been convicted of sex offenses are subject to monitoring in numerous ways apart from GPS monitoring.²⁰ Nonetheless, GPS monitoring results in "a far greater intrusion on the defendant's liberty than that associated with traditional probation monitoring." Commonwealth v. Goodwin, 458 Mass. 11, 22 (2010). See Cory, 454 Mass. at 570-571. That probationers subject to GPS monitoring

²⁰ Probation service records about a given probationer "may at all times be inspected by police officials of the towns of the commonwealth." G. L. c. 276, § 90. Probation officers enforce probation conditions through means that may include home visits. In this case, the defendant is required to report to a probation officer in person once every fourteen days, and to provide verification of his current address and income. Like all convicted sex offenders, the defendant was required to register with the Sex Offender Registry Board, G. L. c. 6, § 178D, and to provide it with personal identifying information, including, among other things, his "name[s], aliases used, date and place of birth, sex, race, height, weight, eye and hair color, social security number, home address, any secondary addresses and work address and, if the sex offender works at or attends an institution of higher learning, the name and address of the institution." G. L. c. 6, § 178D (a), (e).

have a more limited entitlement to privacy does not render GPS monitoring minimally invasive when applied to them.

In Landry, 429 Mass. at 350, we determined that subjecting individuals who had been convicted of a crime, and thus possessed "a low expectation of privacy in their identity," to a "minimally invasive [DNA] test," which can provide "an extremely accurate record of identification," constituted a minimal infringement of privacy in the individuals' identity. We further determined that the privacy infringement occasioned by such a test was "outweighed by the strong State interest in preserving a positive recorded identification of convicted persons." Id.

GPS monitoring, however, gathers much more information than the identity-related test at issue in Landry, and gathers this information over a much longer period of time. The experience of accommodating a device that remains attached to the body for a prolonged period of time differs materially from the one-time, minimal physical intrusion occasioned by a properly conducted DNA test. While being monitored using a GPS device, a probationer is subject both to the physical intrusion of the GPS device and the effects of that intrusion. The physically intrusive dimensions of GPS monitoring are relevant to assessing both privacy infringement as well as the "nature" of the GPS

search, see Grady, 135 S. Ct. at 1371, and its "manner of execution." See King, 569 U.S. at 448.

As presently conducted, GPS monitoring intrudes upon the defendant's personal privacy in a number of ways. On several occasions, to regain a lost satellite connection, probation employees have instructed the defendant to walk around outside at various times of day or evening. This has included requiring the defendant to leave his job and walk around outside during work hours, risking potential economic consequences, including loss of employment. He has been telephoned multiple times at work when a signal was lost, and has attempted to arrange for another employee voluntarily to handle his immediate tasks when he was required to be away from his desk attempting to obtain a connection. The motion judge determined that individuals subject to GPS monitoring experience "frequent" charging alerts; that signal and connectivity alerts are "not uncommon"; and that "practical problems and life inconveniences" can "arise as a result" of "limitations of ELMO's alerts system." This level of intrusion on a probationer's person cannot be deemed "minimally invasive."

In addition, GPS tracking amasses "a substantial quantum of intimate information about [a] person." United States v. Jones, 565 U.S. 400, 416 (2012). GPS monitoring gathers vastly more information than otherwise would be collected in accordance with

a defendant's other conditions of probation. As currently in use in the Commonwealth, GPS devices collect one data point of latitude and longitude per minute. In addition to collecting points of latitude and longitude, to determine a precise location, GPS devices collect information about a wearer's speed of travel, such that it is possible to tell if a person is driving, running, or walking. This detailed data is stored for an indefinite amount of time. GPS location data "is detailed, encyclopedic, and effortlessly compiled." Carpenter, 138 S. Ct. at 2216. It is also because this detailed and "encyclopedic" data is stored indefinitely, and because examination practices are subject to change and presently are unregulated by statute, that the continuous collection of detailed location data through GPS monitoring cannot be termed minimally invasive.

As mentioned, we have observed that "[t]he GPS monitoring mandated by G. L. c. 265, § 47, is not like other conditions of probation . . . [in that] the imposition of GPS monitoring is singularly punitive in effect." Selavka, 469 Mass. at 505 n.5. See Cory, 454 Mass. at 560 (retroactive application of GPS monitoring to individuals placed on probation for qualifying sex offenses before G. L. c. 265, § 47, took effect violated ex post facto provisions of Massachusetts and United States Constitutions).

h. Assessing the balance in this case. The government's strong interest in protecting the public from sex offenders forms a critical component of the balancing test to determine whether imposition of GPS monitoring on this particular defendant was reasonable. To comply with art. 14, however, the Commonwealth also must establish how GPS monitoring, when viewed as a search, furthers its interests. The "State must produce a particularized reason for the need for . . . searches and seizures." Landry, 429 Mass. at 348, citing Guiney, 411 Mass. at 331-332. Ultimately, the particularized reasons for a search must "outweigh[] the degree of invasiveness occasioned by [the State's] action." Landry, supra.

In this case, the Commonwealth's particularized reasons for imposing GPS monitoring on this specific defendant, who was convicted of noncontact sex offenses, do not outweigh the privacy intrusion occasioned by GPS monitoring. This defendant has no psychiatric diagnosis indicating a compulsion toward sexually deviant activity; no history of violations of probation or terms of pretrial release; no exclusion zone entered into the ELMO system capable of generating real-time alerts for real-time monitoring; and no geographically proximate victim. The Commonwealth justifies imposition of GPS monitoring on this defendant based on the potential use of GPS data as a tool to investigate commission of sex crimes should they occur, and the

deterrence that comes from a defendant knowing that his precise location can be ascertained if he were to commit future crimes. The Commonwealth, however, has not presented evidence sufficient to indicate that this defendant poses a threat of reoffending, or otherwise of violating the terms of his probation. See Grady II, 817 S.E.2d at 26. Under these circumstances, in the context of this case, GPS monitoring constitutes an unreasonable search under art. 14.

Following an individualized classification hearing that was conducted before the hearing on the defendant's motion for reconsideration, the Sex Offender Registry Board classified the defendant as a level one sex offender. That the defendant was assigned this classification level means that the hearing examiner determined that he posed a low risk of reoffense and a low degree of risk to the public. By contrast, sex offenders designated level two or level three are deemed to pose a moderate or high risk of reoffending and a concomitant degree of risk to the public.

At the time of the hearing on the motion to remove imposition of GPS monitoring, the defendant was thirty-three years old and had no prior record of a sex offense. The motion judge credited testimony by a psychological expert, who previously had evaluated the defendant, that Internet offenders without an antisocial behavioral disorder present a low to

moderate risk of committing a contact sex offense.²¹ The expert's earlier evaluation of the defendant in this case, conducted before the defendant's guilty pleas and sentencing, concluded that, in the expert's opinion, the defendant "would not meet the diagnostic criteria as codified in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition[,] . . . for a mental disorder that is paraphilic in nature." After his evaluation, the expert determined that the defendant was "not a significant sexual offense recidivism risk (contact or non-contact sexual offenses) going forward in time." The Commonwealth's expert testified similarly as to the absence of this type of mental disorder.

Evidence produced at the hearing showed that the defendant spent approximately sixteen months on pretrial supervision. Throughout that time, of which approximately the first five months were spent on GPS monitoring, the defendant did not violate any condition of his pretrial supervision. The

²¹ We observe that some courts in other jurisdictions have considered the question of categorical treatment of all sex offenders as a homogeneous group, for purposes of issues such as treatment, GPS monitoring, and risk of recidivism, and have concluded that a categorical approach may be inappropriate. The United States Court of Appeals for the Ninth Circuit, for example, noted that "failure to distinguish between contact and possession-only offenders . . . may go against the grain of a growing body of empirical literature indicating that there are significant . . . differences between these two groups." United States v. Apodaca, 641 F.3d 1077, 1083 (9th Cir.), cert. denied, 565 U.S. 901 (2011).

defendant's compliance, for sixteen months, with the terms of his pretrial probation would have provided no suggestion at sentencing that he would fail to comply with the terms of probation after being sentenced. When a second hearing was held to assess the reasonableness of the GPS monitoring condition, after the defendant had been on posttrial GPS monitoring for approximately nine months, the defendant had not violated the terms of his probation.

We emphasize that the defendant's circumstances differ substantially from cases in other jurisdictions where GPS monitoring of a sex offender has been upheld as a reasonable search. For instance, in Belleau, 811 F.3d at 931, GPS monitoring was deemed to constitute a reasonable search where a defendant had sexually assaulted young children and was determined to suffer from a mental disorder that made "it likely that [the defendant would] engage in one or more acts of sexual violence" (citation omitted). Statutorily mandated GPS monitoring also has been deemed reasonable where it is applicable only to individuals assigned to the "most severe" risk assessment tier, who have committed crimes such as rape and sexual abuse of a child under age thirteen. See Doe v. Coupe, 143 A.3d 1266, 1270, 1279 (Del. Ch. 2016), aff'd, 158 A.3d 449 (Del. 2017).

The Commonwealth asserts that GPS monitoring facilitates the probationary goals both of rehabilitation and of protection of the public. Rehabilitation of the probationer and protection of the public are "distinct [goals of probation], because a probation condition that protects the public from the defendant may not advance the likelihood of his rehabilitation." Goodwin, 458 Mass. at 15-16. See Eldred, 480 Mass. at 95; Griffin, 483 U.S. at 875. In this case, however, the Commonwealth's purported reasons for imposing GPS monitoring are insufficient. See Landry, 429 Mass. at 348.

The Commonwealth contends that, generally, GPS monitoring can promote compliance with the terms of probation by verifying that a defendant lives at the address he provides to the probation service every fourteen days. GPS monitoring also might verify that the defendant is going to work as he should be, and is completing any rehabilitative programs; it also otherwise might serve as "concrete proof that a probationer is doing well on probation." Although such verification well may be possible in theory, capacity constraints and existing monitoring protocols indicate that GPS monitoring is not currently used in this manner. The motion judge determined that

"[l]aw enforcement is only accessing [GPS] collected information when it might reveal what a probationer was doing during a specific moment in time where there is reason to believe that a sex offender may be involved in a probation violation (viz., when an alert

issues); or, less frequently, when a crime has been committed in a geographic area that suggests a probationer may have been involved" (emphasis in original).

In its amicus brief, the probation service confirms this method of operation, and asserts that it "monitors GPS by investigating and responding to 'alerts.'" Thus, in the circumstances of this case, the Commonwealth has not established how the condition of GPS monitoring assists in the defendant's rehabilitation.²² See T.L.O., 469 U.S. at 341, quoting Terry, 392 U.S. at 20 (to assess whether search is reasonable, we "consider 'whether the . . . action was justified at its inception'; . . . [and] whether the search as actually conducted 'was reasonably related in scope to the circumstances which justified the interference in the first place'").

The Commonwealth asserts also that GPS monitoring "furthers the substantial government interest in protecting the public, especially children." The motion judge described several hypothetical situations in which he believed that GPS monitoring might deter at least some sex offenders, including online noncontact sex offenders, from recidivism. The judge explained that,

²² As the probation service notes, a judge conceivably might impose curfews at progressively later hours over time, using GPS monitoring as an incentive, to serve rehabilitative ends. In this case, however, because the defendant has no curfew, GPS monitoring cannot serve curfew-related rehabilitative purposes.

"because the [ELMO] system is collecting location data in an undifferentiated manner, law enforcement can examine a GPS device's points after a given crime has been committed, and thereby determine if the subject probationer was at the scene at the time of such crime's commission. Thus, while an alert will not necessarily issue in real time whenever a probationer happens to pass within 300 feet of a park, school or day care center -- which would create an obvious problem of over-alerting, given the ubiquity of these venues in the modern city -- the ability of law enforcement to connect a probationer to a particular site post hoc means that GPS is both a useful tool of crime detection and a deterrent to crimes a given probationer might otherwise be tempted to commit" (emphasis in original; footnote omitted).

Where, as here, a defendant's exclusion zones have not been entered into the ELMO monitoring system, however, and where, as the judge found, even if it were feasible, doing so "would create an obvious problem of over-alerting, given the ubiquity of these venues in the modern city," GPS monitoring's deterrent potential appears linked primarily to its possible post hoc investigative use. As stated, the Commonwealth has not put forth sufficient evidence to suggest that this particular defendant would be reasonably likely to violate the terms of his probation absent the deterrent effect of GPS monitoring, or that such post hoc investigative use may become necessary. The absence of evidence demonstrating a risk of recidivism anchored in facts related to this particular defendant tilts the balance against concluding that GPS monitoring is a reasonable search.

In these circumstances, the government interests do not outweigh the privacy infringement occasioned by GPS monitoring.

3. Conclusion. The matter shall be remanded to the Superior Court for entry of a modified order of probation that does not include GPS monitoring.

So ordered.